

**LEAKING UNDERGROUND STORAGE TANK
COMPREHENSIVE SITE ASSESSMENT REPORT**

FOR

SITE G480

**MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA**

**NCDENR UST INCIDENT NO. PENDING
RISK CLASSIFICATION: INTERMEDIATE
LAND USE CLASSIFICATION: INDUSTRIAL/COMMERCIAL**

AUGUST 19, 2008

**CONTRACT NO. N62470-05-D-6200
DELIVERY ORDER NO. 0036
CATLIN PROJECT NO. 206-111**



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2000 Guidelines	Groundwater Section Guidelines for Investigation and Remediation of Soil and Groundwater
2001 Guidelines	Guidelines for Assessment and Corrective Action, North Carolina Underground Storage Tank Section (Effective July 1, 2001)
2L GWQS	NCAC T15A:02L Groundwater Quality Standards
ARO	Asheville Regional Office
AS	Air Sparge
AST	Aboveground Storage Tank
BDL	Below Detection Limit
BMDL	Below Method Detection Limit
BN	Base/Neutral (extractables)
BNA	Base/Neutral/Acid (extractables)
BQL	Below Quantitation Limit
BLS	Below Land Surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CAMP	Corrective Action Monitoring Program
CAP	Corrective Action Plan
CATLIN	CATLIN Engineers and Scientists (Formerly RC&A)
CFR	Code of Federal Regulations
Cr	Chromium
CSA	Comprehensive Site Assessment
CNP	Carbon Nitrogen Phosphorous
CPT	Cone Penetrometer Test
DEM	Division of Environmental Management
DIPE	Diisopropyl Ether
DO	Dissolved Oxygen
DOD	Department of Defense
DPT	Direct Push Technology
DWQ	Division of Water Quality
DWM	Division of Waste Management
DTW	Depth to Water
EAD	Environmental Affairs Department
EDB	Ethylene di-bromide
EMD	Environmental Management Division
EPA	Environmental Protection Agency
EPH	Extractable Petroleum Hydrocarbons
EQB	Environmental Quality Branch
Fe	Iron
FID	Flame Ionization Detector
FOD	Foreign Object Debris
FRO	Fayetteville Regional Office
FT	Feet
GCL	Gross Contaminant Level
GIS	Geographic Information System
GPS	Global Positioning System

Guidelines Vol. I	Groundwater Section Guidelines for Investigation and Remediation of Soil and Groundwater, Volume I, Sources Other Than Petroleum Underground Storage Tanks (2001)
Guidelines Vol. II	Groundwater Section Guidelines for Investigation and Remediation of Soil and Groundwater, Volume II, Petroleum Underground Storage Tanks (2001)
HDPE	High Density Polyethylene
I/C	Industrial/Commercial
ID	Identification
I&E	Installations and Environment Department
IGWQS	Interim Groundwater Quality Standards
IPE	Isopropyl Ether
LANTDIV	Atlantic Division
LAW	Law Engineering and Environmental Services
LSA	Limited Site Assessment
LUST	Leaking Underground Storage Tank
m-	meta
m	meter
MADEP	Massachusetts Department of Environmental Protection
MCALF	Marine Corps Auxiliary Landing Field
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
MCOLF	Marine Corps Outlying Landing Field
MDL	Method Detection Limit
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
MRO	Mooresville Regional Office
MSCC	Maximum Soil Contaminant Concentration
MSL	Mean Sea Level
MTBE	Methyl tertiary butyl ether
µg/Kg	Micrograms per Kilogram
µg/L	Micrograms per Liter
NA	Not Analyzed
N/A	Not Applicable
NC	North Carolina
NCAC	North Carolina Administrative Code
NCDENR	North Carolina Department of Environment and Natural Resources
NCDOC	North Carolina Department of Corrections
NCDOT	North Carolina Department of Transportation
NCSP	North Carolina State Plane
NCSPA	North Carolina State Ports Authority
NE	None Established
NM	Not Measured
NMT	No Measurable Thickness
NS	Not Sampled
o-	ortho
OVA	Organic Vapor Analyzer
p-	para

PAH	Polynuclear Aromatic Hydrocarbons
Pb	Lead
PPB	Parts Per Billion
PPM	Parts Per Million
PID	Photo Ionization Detector
PQL	Practical Quantitation Limit
PVC	Polyvinyl chloride
RBCA	Risk-Based Corrective Action
RCRA	Resource Conservation and Recovery Act
Res	Residential
ROI	Radius of Influence
RRO	Raleigh Regional Office
SOW	Scope of Work
STGW	Soil-to-Groundwater
SVE	Soil Vapor Extraction
SVOC	Semi Volatile Organic Compound
TDHF	Toxicologically Defined Hydrocarbons Fractions
TCLP	Toxicity Characteristic Leaching Procedure
TIC	Tentatively Identified Compound
TKN	Total Kjeldahl Nitrogen
TOC	Top of Casing
TPH	Total Petroleum Hydrocarbons
US	United States
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compounds
VPH	Volatile Petroleum Hydrocarbons
WaRO	Washington Regional Office
WiRO	Wilmington Regional Office
WSRO	Winston-Salem Regional Office

LEAKING UNDERGROUND STORAGE TANK COMPREHENSIVE SITE ASSESSMENT REPORT

FOR

***SITE G480* MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA**

AUGUST 19, 2008

EXECUTIVE SUMMARY

Site G480 is north of Building G480, an Explosive Ordnance and Disposal Armory and Office Supply facility, located within Camp Geiger between "E" and "F" Streets. Site G480 is situated within the project limits of Operable Unit 10 (IR Site 35), the site of the former Camp Geiger Fuel Farm (CGFF). Camp Geiger is located in the northwest corner of MCB, Camp Lejeune, North Carolina.

Free-phase product has been historically identified in monitoring well IR35-MW67A dating back to 1998 and during groundwater gauging and sampling activities conducted in the area. The current investigation conducted by CATLIN focused on delineating the free-phase product plume and identifying the extent of petroleum based constituents in the soil and groundwater at the site.

Known releases associated with Building G480 are limited to a 500-gallon capacity UST (UST-G480-1) containing diesel or Number (No.) 2 fuel oil that was abandoned in January 1994. Soil impact was confirmed during the UST removal activities however no groundwater impact was reported associated with the UST. According to investigations conducted in the vicinity of Building G480, a 6-inch diameter pipeline crossed the project site. The pipeline was reportedly used to transfer No. 6 fuel oil and kerosene from the CGFF to UST TC341 at the former Marine Corps Mess Hall Heating Plant located west of site G480.

Dissolved and free-phase petroleum releases have been confirmed during previous assessment and corrective action activities at the TC341 project site located hydraulically up-gradient of the G480 project site. Data presented in a 1994 CAP completed by LAW indicated that the dissolved contaminant plume originating from UST TC341 had migrated eastward beyond the limits of investigation onto the adjacent G480 project site.

The current investigation included the installation of 17 Type II and one Type III groundwater monitoring wells. Soil samples were collected and submitted for laboratory analysis from all monitoring wells installed on the project site. Based on laboratory analytical results, eleven soil samples were identified with detected concentrations of target compounds above the lowest established MSCCs (STGW), but well below the I/C MSCCs. The extent of soils with petroleum impact in excess of current established STGW MSCCs

has not been delineated. However, no soil impact was identified in excess of established I/C MSCCs during this investigation.

A comprehensive groundwater gauging event was conducted on May 20, 2008. Groundwater elevations in the Type II monitoring wells across the site ranged from 4.26 to 10.24 feet (NAVD 88) and depth to water ranged from 8.33 ft. to 4.99 ft. BLS. The generalized groundwater flow trend in the shallow aquifer was determined to be towards the east to east northeast across the subject site at an approximate average linear flow velocity of 0.0268 ft/day.

Measurable free-phase product was identified during the May 20, 2008 comprehensive gauging event in nine groundwater monitoring wells at thicknesses ranging from 0.01 feet to 0.87 feet. Free-phase product has been delineated in this investigation.

Dissolved petroleum constituents were identified in groundwater samples collected during this investigation at concentrations above current applicable 2L GWQS. Review of data compiled during this investigation indicates that the dissolved contaminant plume has been delineated vertically to a depth of less than 30 feet BLS. The dissolved contaminant plume has been generally delineated horizontally to the north and south at the subject site. However, data gaps exist in the dissolved contaminant plume which may need to be addressed in future investigations.

Due to the presence of free-phase product at the subject site, an Intermediate Risk Classification has been assumed for the site. Therefore, the lower of Residential or STGW MSCCs are the applicable regulatory limits for soil contamination and the 2L GWQS are the applicable regulatory limits for groundwater. By reducing the risk classification to a low risk site (i.e. removing free-phase product), the Industrial/Commercial MSCCs would become the applicable regulatory limits for soil contamination and the GCL's would become the applicable regulatory limits for groundwater contamination.

Free-phase product gauging and recovery is conducted at the site on a bi-weekly basis by Osage of Virginia (OSAGE). These activities are recommended to continue until an acceptable remedial action is implemented.

CATLIN recommends proceeding with the completion of a CAP into which the data gaps identified in the dissolved groundwater may be addressed. Additionally, a "fingerprint" analysis of the free-phase product is recommended to assist in providing an appropriate remedial strategy.

This CSA has been completed in accordance with the NCDENR – UST Section, Guidelines for Assessment and Corrective Action effective July 1, 2001.

COMPREHENSIVE SITE ASSESSMENT REPORT

A. SITE IDENTIFICATION

DATE OF REPORT: August 19, 2008
Facility ID: N/A UST Incident Number (if known): Pending
Site Name: Site G480
Site Location: Marine Corps Base, Camp Lejeune
Nearest City/Town: Jacksonville County: Onslow
Risk Classification: Intermediate Land Use Classification: Industrial / Commercial

UST Owner: Commanding Officer / Attn: Director I&E/EMD/EQB
Address: PSC Box 2004, MCB, Camp Lejeune, NC Phone: 910-451-5068
UST Operator: Same as above
Address: Same as above Phone: Same as above
Property Owner: Same as above
Address: Same as above Phone: Same as above
Property Occupant: None
Address: None Phone: Same as above
Consultant/Contractor: CATLIN Engineers and Scientists
220 Old Dairy Road
Address: Wilmington, North Carolina 28405 Phone: (910) 452-5861

Release Information

Date

Discovered: Unknown

Longitude: 77° 77' 06.55" W

Latitude: 34° 44' 20.10" N

Estimated Quantity of Release: Unknown

Cause of Release: Unknown

Source of Release (e.g. Piping/UST):

Unknown. Suspected release from underground piping associated with former Camp Geiger Fuel Farm comingled with release/s from UST TC-341.

Sizes and contents of UST system(s) from which the release occurred:

6-inch diameter line, UST TC341 = unknown capacity

Contents of all reported to be Number 6 Fuel Oil and kerosene.

I, Steven V. Hudson a Professional Engineer/Licensed Geologist (**circle one**) for CATLIN Engineers and Scientists, do certify that the information contained in this report is correct and accurate to the best of my knowledge.



(Please Affix Seal and Signature)

B. INTRODUCTION

1. Purpose of Investigation

This investigation focused on delineation of the free-phase product plume in addition to identifying the extent of petroleum based constituents (free-phase product has historically been identified in monitoring well IR35-MW67A) in the soil and groundwater at the site by accomplishing the following goals:

- Conduct soil and groundwater sampling in the area surrounding monitoring well IR35-MW67A to define the vertical and horizontal extent of petroleum impact to the soil and groundwater
- Assess the potential for exposure to possible subsurface petroleum-related contaminants;
- Determine geologic/hydrogeologic characteristics relative to petroleum hydrocarbon transport; and
- Provide a CSA summarizing the findings and conclusions for the project site.

This CSA document was prepared in general accordance with requirements denoted in the document entitled "*Guidelines for Assessment and Corrective Action*" as released by the NCDENR Division of Waste Management, UST Section, effective July 1, 2001 (2001 Guidelines).

Due to the presence of comingled contaminant plumes, the objective of the CSA is also to provide sufficient data to satisfy the requirements of Section 280.65 of 40 CFR Part 280, *Federal Technical Standards for Underground Storage Tanks*, and Section .0706 of the North Carolina Administration Code Title 15A, Chapter 2, Subchapter 2N (NCAC T15A:02N), *North Carolina Criteria and Standards Applicable to Underground Storage Tanks*.

CATLIN was authorized to perform this subsurface investigation at the subject site by NAVFAC Mid-Atlantic and MCB, Camp Lejeune under Contract Number N62470-01-D-6200, Delivery Order Number 0036.

2. Scope of Work

The initial phase of this investigation was a monitoring well inventory in which CATLIN personnel conducted field reconnaissance to locate existing monitoring wells in the vicinity of the project site. Data pertaining to monitoring well identification, location, diameter, condition, etc. was recorded in the field then compared to data in the Camp Lejeune GIS to allow for preparation of an updated site map. Subsequent to the monitoring well inventory, four existing monitoring wells were gauged to determine depth to groundwater and free-

phase product thickness, where present. A receptor survey was conducted in order to obtain information necessary for the NCDENR to assign a land use classification and to classify risk level of the release. Information generated during the monitoring well inventory, gauging event, and receptor survey was utilized to assist with the proper placement of additional monitoring wells.

Free-phase product was identified during the preliminary groundwater gauging activities. Therefore, installation of the additional Type II monitoring wells was conducted in phases to allow free-phase product, where present, to accumulate and be accurately gauged prior to the installation of additional monitoring wells. Five Type II monitoring wells were installed encircling existing monitoring well IR35-MW67A during the initial phase of drilling conducted by CATLIN personnel in May 2007. Based on the results of the gauging conducted on the initial groundwater monitoring wells, nine additional Type II monitoring wells and one Type III monitoring well were installed at the project site by CATLIN personnel in July 2007. Based on the results from a comprehensive groundwater gauging and sampling event conducted by CATLIN personnel on July 16, 2007, three additional Type II monitoring wells were proposed within the median of the adjacent US Highway 17 Bypass. After obtaining the necessary Right-of-Way Agreement with the NCDOT (See Appendix I) the three additional Type II monitoring wells were installed in May 2008.

One soil sample for laboratory analysis was collected during installation of each monitoring well installed during the two initial phases of drilling of this investigation. No soil samples were submitted for laboratory analysis from the monitoring wells installed within the US Highway 17 Bypass median.

Groundwater was allowed to equilibrate prior to conducting the various groundwater gauging and sampling events that included 24 on-site monitoring wells (both newly installed and existing).

Falling head slug tests were conducted on one Type II monitoring well (USTG480-MW09) and one Type III monitoring well (USTG480-MW15) to assist in determining the hydrogeologic characteristics of the underlying aquifers.

All work was conducted in general accordance with CATLIN's Standard Methods of Investigation included in Appendix A.

3. Area of Interest

Site G480 is located to the immediate north of Building G480 within Camp Geiger between "E" and "F" Streets. Site G480 is situated within the project limits of Operable Unit 10 (OU10) also known as Installation Restoration Site 35 (IR35), the site of the former Camp Geiger Fuel Farm (CGFF). Camp Geiger is located at the northwest corner of MCB, Camp Lejeune, North Carolina (See Figure 1).

C. SITE HISTORY AND SOURCE CHARACTERIZATION

1. Site Operations and History

Building G480 is currently used as an Explosive Ordnance and Disposal Armory and Office Supply. Previous uses of Building G480 are not known. According to Baker Environmental, Inc. (1995), construction of Camp Geiger was completed in 1945. Refer to Table 2 for site owner/operator information.

2. Contaminant Source Inventory

Known releases associated with Building G480 are limited to the 500-gallon capacity UST containing diesel or No. 2 fuel oil (UST G-480-1) that was abandoned by ERC in January 1994. According to investigations conducted in the vicinity, including a CSA by LAW at Building TC-341 in 1994 (Law, 1994), a 6-inch diameter pipeline crossed the G480 project site. The pipeline was used to transfer No. 6 fuel oil and kerosene from the CGFF to UST TC341 at the former Marine Corps Mess Hall Heating Plant located west of site G480. A release from UST TC341 was confirmed in the 1994 CSA. The estimated extent of dissolved contamination based on data presented in the 1994 CSA extended onto the G480 project site. The estimated locations of UST G-480-1 and UST TC341 are presented on Figure 3. The extent of the dissolved contaminant plumes as presented in the 1994 CSA are included in Appendix B.

The CGFF originally consisted of five 10,000 to 15,000-gallon ASTs used to store No. 6 fuel oil. The ASTs were later converted to store unleaded gasoline, diesel fuel, No. 6 fuel oil, and kerosene. The date of conversion is unknown. The CGFF additionally contained infrastructure such as pumping stations, loading/unloading pads, and underground distribution lines necessary to receive and deliver petroleum products. The CGFF fuel farm has been abandoned and demolished.

The 1994 LAW CSA references a demolished Gasoline Station in Building 341 located at the northeast corner of the intersection of Fourth Street and F Street. No information was obtained pertaining to the operation or demolition of the structure. Due to the referenced location of the former Gasoline Station with respect to groundwater flow, petroleum impact originating from the station at the subject site is unlikely. UST Information is presented on Table 1 and contaminant source details are presented on Table 3.

3. Release Incident History

Research of site history uncovered only one confirmed release associated with the subject site. According to the Tank Removal Report prepared by ERC dated February 8, 1994, one 500-gallon capacity UST (UST G-480-1) containing diesel was removed on January, 19 1994. The UST was reportedly located on the west side of Building G480. Analytical results of

soil samples collected beneath the UST indicated the presence of TPH (as kerosene) at concentrations of 630.0 ppm and 830 ppm. Releases from the UST TC-341 and the 6-inch pipeline and associated infrastructure have been confirmed in adjacent areas.

4. Previous Investigations

Other than the UST closure report completed by ERC in 1994, no additional investigations dealing specifically with Site G480 have been conducted. Numerous investigations associated with the former CGFF, IR35/OU10, and Building TC341 have been completed in the vicinity.

5. History of Corrective Actions

Removal of UST G-480-1 was completed by ERC in 1994. Groundwater gauging and free-phase phase product recovery had been conducted in well IR35-MW67A by Shaw since May 2003. A product fingerprint analysis was conducted by Michael Baker Jr., Inc. (Baker) on product recovered from IR35-MW67A. The synthetic distillation analysis of the sample had a carbon number range of C8 to C17 which according to Baker corresponded to kerosene.

Groundwater gauging and free-phase phase product recovery activities have been conducted by OSAGE on a bi-weekly basis since November 2007. Groundwater and free-phase product gauging and recovery data generated by OSAGE is presented in Appendix B. According to data presented in a 1995 Feasibility Study conducted on Site 35 by Baker, soil contamination identified immediately north of Building G480 was excavated and reportedly disposed off site; however, no documentation was available regarding how or where the soil was disposed. As a follow up to the excavation discussed in the Feasibility Study, approximately 10,000 additional tons of contaminated soil were removed from an area northeast of Building G480 within the US Highway 17 Bypass right-of-way.

D. RECEPTOR INFORMATION

As defined by the NCDENR in Section .0102 of NCAC T15A:02L, potential receptors include any human, plant, animal, or structure with the potential to be adversely affected by the release or migration of contaminants. Guidance documents issued by the regulatory agency indicate that structures may include items such as utility lines, basements, and elevator shafts. Although not specifically included in the rule definition (NCAC T15A:02L .0102), regulatory officials also consider potential receptors to include environmental resources such as water supply wells, surface waters, drinking water supplies, and "regions of groundwater that have been identified for planned resource development".

Performance of the potential receptors survey involved not only an evaluation of the presence of potential receptors but also an evaluation of transport mechanisms by

which the contaminants are transported from the source to the receptor. Furthermore, with respect to human receptors, the survey also involved a cursory evaluation of exposure pathways including ingestion, inhalation, and adsorption. As petroleum fuel seeps through the subsurface, adsorption onto soil particles and volatilization into pore spaces occurs. The remaining petroleum fuel moves vertically downward (in the absence of preferred lateral routes of migration) until it reaches the capillary fringe (in the absence of a permeable barrier above the capillary fringe). Petroleum fuel, now in the liquid phase, spreads throughout the capillary fringe and dissolves into the groundwater.

Exposure to contaminated soils is contingent upon site disturbance through construction or remediation activities. Potential receptors can be exposed to petroleum hydrocarbons found in the soil through inhalation of volatilized compounds and dermal contact with contaminated soil. An updated Risk Classification and Land Use Form is included in Appendix J.

1. Water Supply Wells

As illustrated on Figure 1 and listed on Table 4, no potable water supply wells are located within 1,500 feet of the subject site. The nearest water supply well is located approximately 2,200 feet southwest of the release.

2. Public Water Supplies

Public water is provided to buildings within 1,500 feet of the subject site by water mains which carry treated potable water. Potable water is supplied to the site and surrounding areas by the MCB water supply system. Typically, groundwater obtained from the Castle Hayne aquifer is the raw water source for the treatment facilities.

3. Surface Water

According to the Camp Lejeune, USGS Topographic Quadrangle, the nearest named surface water body is Brinson Creek approximately 600 feet northeast of the subject site. Based on a review of the NCDENR DWQ Surface Water Classification, Brinson Creek is classified as SC;NSW whereas the water is classified as tidal salt water (SC) with a supplemental classification as a Nutrient Sensitive Water (NSW). A manmade drainage ditch is located approximately 100 feet east of Building G480. During site reconnaissance the ditch was observed with standing water. The drainage ditch appears to flow to the northeast through a 48 inch diameter drainage pipe under the US Highway 17 Bypass and discharges into wetlands located to the northeast of the Bypass. The surface water bodies are shown on Figures 1 and 2.

4. Wellhead Protection Areas

At the MCB Camp Lejeune, wellhead protection areas defined by 42 USC 300h-7(e) have not, as of this time, been designated by the State. However, MCB Camp Lejeune has identified wellhead protection areas on the base. Based on the most recent Wellhead Protection Plan – 2002 Update, the potential source area is not located within a proposed wellhead protection area.

5. Deep Aquifers in the Coastal Plain Physiographic Region

As identified in the Geologic Map of North Carolina (North Carolina Department of Natural Resources and Community Development, 1985), the subject site lies within the Coastal Plain physiographic province.

The potential source area is located just above an apparent unconfined surficial groundwater aquifer. While there is the potential for recharge by rainfall to the unconfined surficial aquifer at the Base, the surficial aquifer is not used for water supply aboard MCB, Camp Lejeune. Groundwater obtained from the Castle Hayne Aquifer is the raw water source for the MCB, Camp Lejeune potable water treatment facilities.

To determine deep aquifers underlying the subject site, the area was profiled in the "Visual Hydrogeologic Framework" database provided in the NCDENR Division of Water Resources website (VHF website). This is a database of well and soil boring log data from numerous locations across the North Carolina Coastal Plain.

Including the Surficial aquifer there are eleven identified aquifers (seven principal aquifers and four minor aquifers) within the North Carolina Coastal Plain physiographic region. Data from the USGS Test Hole T-15, advanced to the immediate south of the subject site, indicated the following:

Hydrogeologic Units	Approximate Depth (feet)
Surficial Aquifer	0-59
Castle Hayne Confining Unit	59-104
Castle Hayne Aquifer	104-302
Pee Dee Confining Unit	302+

6. Subsurface Structures

With the exception of underground utilities no subsurface structures were identified at the subject site. Building G480 is slab-on-grade construction. See Figure 3 for locations of utilities at the project site.

7. Property Owners and Occupants

MCB, Camp Lejeune has historically and continues to be the property owner and occupant. Refer to Table 2 for property owner and occupant details.

E. REGIONAL GEOLOGY AND HYDROGEOLOGY

1. Regional Geology

The project site lies within the southeastern portion of the Outer Coastal Plain physiographic province of North Carolina. The Outer Coastal Plain, as described by David R. Soller and Hugh H. Mills in *The Geology of the Carolinas* (1991), is the eastern portion of the Coastal Plain where constructional topography is evident or dominant. The Inner Coastal Plain begins at the Fall Line, narrows northerly, and is considered an area of erosional topography. According to Horton and Zullo in *The Geology of the Carolinas* (1991), the Coastal Plain is comprised of a seaward thickening wedge of post-Triassic, primarily unconsolidated, siliclastic sediments and carbonate rocks that extend from the Fall Line to the continental shelf break. Coastal Plain sediments were deposited in a number of different environments including, but not limited to, offshore marine, near-shore marine, lagoonal, and deltaic. The eustatic rise and fall of sea level has resulted in numerous sedimentary packages of transgressive and regressive sequences deposited throughout the Coastal Plain. In Onslow County, the pre-Mesozoic crystalline basement rock, onto which the Coastal Plain was deposited, lies approximately 1,300 feet below mean sea level (MSL). The dominant structural features within the surrounding area of the subject site are the Cape Fear arch, a seaward (southeasterly) plunging anticline and the Albemarle Embayment. The axis of the Cape Fear arch is located roughly 100 miles southwest of the subject site. The Albemarle Embayment lies along the northeastern border of the Cape Fear arch (Horton and Zullo, 1991).

As detailed in the Wellhead Management Program report (Geophex, 1991), geologic units identified beneath the nearby MCB, Camp Lejeune include the Cretaceous Peedee Formation that is composed of sands, clayey sands, and clay. The Peedee Formation does not outcrop anywhere on base and has only been identified from drill-hole data. The Upper Eocene Castle Hayne Formation lies unconformably on the Peedee Formation. The Castle Hayne Formation consists of widespread limestone units that are intermixed with substantial beds of calcareous sands and silty sands. Overlying the Castle Hayne Formation is moldic limestone of the upper Oligocene River Bend Formation. The uppermost limestone unit in much of the nearby area is the lower Miocene Belgrade Formation. The Belgrade rests unconformably on the River Bend or directly on the Castle Hayne Formation where the River Bend is absent. Undifferentiated surficial sediments throughout most of the surrounding area typically overlie the Belgrade.

2. Regional Hydrogeology

As detailed by Cardinell, et al (1993), the area is located in the Coastal Plain physiographic province that contains numerous varieties of coastal environments of deposition. The majority of the underlying sediments were deposited in marine or near-shore environments. The thickness of the sedimentary beds in the area is roughly 1500 feet. Aquifers underlying MCB, Camp Lejeune includes the surficial, Castle Hayne, Beaufort, and Peedee. These aquifers are typically separated by confining units of less permeable materials consisting of beds or groups of clay and silt containing varying amounts of sand (Winner and Coble, 1989). Recharge to Coastal Plain aquifers occurs predominantly through direct surface recharge by rainfall in interstream areas (Cardinell, et al, 1993).

The surficial aquifer consists of sand, clay, sandy clay, and silts. The aquifer ranges in thickness from zero to 73 feet (Cardinell, et al, 1993). The average hydraulic conductivity of the surficial aquifer was estimated by Cardinell, et al (1993) to be about 50 feet per day (ft/d).

The Castle Hayne aquifer includes the Eocene Castle Hayne Formation and Oligocene River Bend Formation. The Castle Hayne aquifer consists of beds of sand, limestone, and cemented/calcareous sand with discontinuous lenses of clay, silt and clay/silt sand mixtures. According to Cardinell, et al (1993), the upper portion of the Castle Hayne aquifer is composed of calcareous sand with interbedded clay and silt beds. The top of the Castle Hayne aquifer was interpreted by Cardinell, et al (1993) to range from 10 to 68 feet below sea level aboard nearby Camp Lejeune and range in thickness from 156 to 400 feet. Numerous studies have been conducted to estimate the hydraulic properties of the Castle Hayne aquifer. A summary of the results as presented by Cardinell, et al (1993) include:

Transmissivity (T) 820 – 24500 [(ft³/d)/ft²]ft
Hydraulic conductivity (K) 14 – 91 ft/d (65 ft/day average)
Storage coefficients (S) 0.0002 – 0.001

The Castle Hayne aquifer is the primary source of potable water aboard MCB, Camp Lejeune.

The Castle Hayne confining unit, where present, is composed primarily of beds of clay, silt, sandy clay/silt, and clayey/silty sand. According to Winner and Coble (1989), the beds belong chiefly to the Belgrade, Pungo River, and Yorktown Formations. The confining unit has an overall average thickness of roughly 14 feet. Winner and Coble (1989) stated that throughout much of the unit, enough sand was contained to allow for significant leakage between the Castle Hayne aquifer and the overlying aquifers. Additionally, Cardinell, et al (1993) concluded through seismic profiling, that paleochannels as well as the New River and its major tributaries incised the unit. No spatially continuous

clay beds were noted from the seismic records above the Castle Hayne aquifer by Cardinell, et al (1993).

F. SITE GEOLOGY AND HYDROGEOLOGY

1. Site Topography

The project site is generally flat and covered by asphalt parking and grass. The topography slopes downward in the wooded area noted to the immediate east of the building due to drainage ditches. A substantial elevation rise exists further to the east of the site in the fill areas associated with the US 17 Bypass.

2. Site Soils and Geology

Representative soil samples were collected from each boring advanced during this investigation to facilitate the installation of groundwater monitoring wells. Soils samples were described in the field utilizing visual/manual techniques as described in ASTM D-2488. The soils were classified in accordance with the Unified Soils Classification System (USCS) and a boring log of each boring was produced. Boring logs are included in Appendix C.

Two geologic cross sections were generated based on the information obtained from monitoring well installation during this investigation. Figure 4 illustrates the plan view of the cross section layouts, and Figures 4A and 4B depict cross sections A-A' and B-B', respectively.

As depicted on the cross sections and within the boring logs, the site is underlain by interbedded sand, silty sand, and clayey sand to a depth of approximately 20 feet. The surficial material is underlain by limestone with varying degrees of weathering.

3. Site Groundwater

A comprehensive groundwater gauging event was conducted on May 20, 2008 by CATLIN personnel. Groundwater gauging was accomplished by using an engineer's tape marked with water and petroleum gauging paste to measure the distance from the top of casing of each monitoring well to the groundwater and/or petroleum/water interface. Groundwater table elevations were then calculated and groundwater table contours were generated. Groundwater elevations in the Type II monitoring wells across the site ranged from 4.26 (USTG480-MW16) to 10.24 (USTTC341-MW17) feet. Depth to water BLS measurements ranged from 8.33 ft. BLS (USTG480-MW11) to 4.99 ft. BLS (USTTC341-MW17). Monitoring well gauging data is included in Table 5. Figure 7 illustrates the water table elevation contours as of May 20, 2008. As depicted on Figure 7 the generalized groundwater flow trend in the shallow aquifer is towards the east to east northeast across the subject site

at an approximate horizontal hydraulic gradient of 0.011 feet per foot. Horizontal hydraulic gradient calculations are provided in Appendix G. Site hydrogeologic characteristics are further discussed in Section J of this report.

G. SOIL SAMPLING RESULTS

Soil samples collected during the installation of the monitoring wells were split in two and placed in plastic zip top bags. One sample was immediately placed on ice and the second was allowed to equilibrate then screened with a PID. One representative soil sample was selected from each monitoring well location installed during the first two phases of drilling for laboratory analysis. Samples were selected based on physical evidence of impact, highest PID reading, or from the first sampled interval above the capillary fringe. During the installation of wells USTG480-MW16 through USTG480-MW18 no soil samples were submitted for laboratory analysis due to the distance of these wells from the source area (approximately 200 feet). Soil samples selected for laboratory analysis were analyzed for volatile organics + IPE + MTBE per EPA Method 8260 with 5030 preparation and base/neutrals/extractables per EPA Method 8270. Boring logs summarizing field data from the monitoring well boring advancement are included in Appendix C.

Soil samples selected for laboratory analysis were placed in laboratory glassware, labeled, placed immediately into a cooler, and transported under proper Chain-of-Custody protocol to SGS/Paradigm Analytical Laboratories, Inc. of Wilmington, North Carolina. All samples were collected in general accordance with CATLIN's Standard Methods of Investigation included in Appendix A. Due to the presence of free-phase product, the site Risk Classification has been assumed to be Intermediate. Therefore, the lowest MSCC for each of the identified petroleum constituents has been used to establish regulatory compliance. Laboratory analytical reports for the selected soil samples are included in Appendix E and are summarized as follows:

EPA METHOD 8260

The following compounds were identified at concentrations above the lowest NCDENR MSCCs: Benzene, n-Butylbenzene, sec-Butylbenzene, Chloromethane, Ethylbenzene, Isopropylbenzene, Methylene Chloride, Naphthalene, n-Propylbenzene, 1,2,4- Trimethylbenzene, 1,3,5 - Trimethylbenzene, and Total Xylenes. All other EPA Method 8260 compounds detected were below the established NCDENR STGW MSCCs and/or reported as BMDL. The soil samples identified with concentrations greater than the lowest MSCCs were primarily located across the north to northeastern portion of the project site. Laboratory results are summarized on Table 6. The estimated extent of EPA Method 8260 constituents above the lowest MSCCs in addition to summarized laboratory data are presented on Figure 6.

EPA METHOD 8270

One or more of the following compounds, Dibenzofuran, 2-Methylnaphthalene, and Naphthalene were detected in soil samples at concentrations that exceeded the lowest NCDENR MSCCs. All other EPA Method 8270 compounds detected were below the established NCDENR MSCCs and/or reported as BMDL. The soil samples identified with concentrations greater than the lowest MSCCs were consistent with those identified with EPA Method 8260 constituents above the lowest MSCCs. Laboratory results are summarized on Table 6A. The estimated extent of EPA Method 8270 constituents above the lowest MSCC in addition to summarized laboratory data are presented on Figure 6A.

MADEP EPH/VPH

As indicated in Tables 6B and 6C and illustrated on Figure 6B, concentrations of MADEP EPH/VPH constituents were identified in ten of the 14 soils samples above the current lowest NCDENR MSCCs for the C9-C22 Aromatics. Four of the samples were additionally identified with concentrations of the C9-C18 Aliphatics in excess of the lowest MSCCs. It should be noted that although soil sample USTG480-MW08 (3-5) was not confirmed to contain detectable levels of C9-C22 Aromatics, the method detection limit of 110 mg/kg is above the lowest MSCC (STGW) of 34 mg/kg. No C19-C36 Aliphatics nor C5-C8 Aliphatics were identified above the lowest MSCCs. Soil samples with MADEP EPH/VPH concentrations identified above the lowest MSCCs were consistent with those identified with EPA Method 8260 and 8270 constituents above the lowest MSCCs.

The estimated areal extent of all soil results in excess of applicable NCDENR MSCCs is presented on Figure 6C.

H. GROUNDWATER SAMPLING RESULTS

On July 16, 2007, depth to water and free-phase product thickness was gauged in all newly installed monitoring wells and six existing groundwater monitoring wells. Groundwater samples were collected from 11 monitoring wells that did not contain measurable free-phase product at the time of gauging. Based on the free-phase product gauging and laboratory results, three additional Type II groundwater monitoring wells were installed in the median of the adjacent US Highway 17 bypass and sampled on May 8, 2008. All groundwater samples were collected in accordance with CATLIN's Standard Methods and Procedures included in Appendix A. After collection, the groundwater samples were placed in laboratory glassware, labeled, placed immediately on ice in a cooler, and transported under proper Chain-of-Custody protocol to SGS/Paradigm Analytical Laboratories of Wilmington, North Carolina and analyzed per EPA Methods 602 and 625 plus TICs in addition to MADEP EPH/VPH. It should be noted that free-phase product was identified during subsequent gauging events in four of the groundwater monitoring wells (USTG480-MW01, USTG480-MW04, USTG480-MW10, and USTG480-MW13) from which samples were obtained. Analytical reports for the groundwater samples analyzed are included in Appendix E and are summarized as follows:

EPA METHOD 602

Concentrations of Benzene were detected in groundwater samples collected from 10 Type II monitoring wells above the 2L GWQS of 1 µg/L at concentrations ranging from 2.28 µg/L (USTG480-MW14) to 173 µg/L (USTG480-MW10). Total Xylenes concentrations of 702 µg/L were identified in the groundwater sample collected from USTG480-MW10. The current 2L GWQS for total Xylenes is 530 µg/L. All other EPA 602 compounds were below the 2L GWQS and/or reported as BQL. Laboratory results are summarized on Table 7 and illustrated on Figure 8.

EPA METHOD 625 Plus TICs

As indicated in Table 7A and illustrated on Figure 8A, EPA Method 625 constituents were detected in nine groundwater samples at concentrations above current 2L GWQS. Naphthalene was reported in eight groundwater samples at concentrations above the current 2L GWQS of 21 µg/L ranging from 328 µg/L (USTG480-MW11) to 1,280 µg/L (USTG480-MW10). Bis(2-ethylhexyl) phthalate was identified in groundwater samples collected from two Type II monitoring wells, USTG480-MW18 and USTTC341-MW14, above the 2L GWQS of 2.5 µg/L at estimated concentrations 2.85 µg/L and 31.0 µg/L, respectively. Phenanthrene was identified at concentrations above the 2L GWQS of 210 µg/L in groundwater samples collected from USTG480-MW05, USTG480-MW10, and USTTC341-MW14 at concentrations of 262 µg/L, 408 µg/L, and 328 µg/L, respectively. All other EPA Method 625 target compounds were below the applicable 2L GWQS or reported as BQL.

MADEP EPH/VPH

Groundwater samples collected from nine of the 14 monitoring wells contained one or more MADEP EPH and/or VPH constituents above current 2L GWQS. The C9-C18 Aliphatics (2L GWQS = 4,200 µg/L) were identified in seven samples at concentrations above the 2L GWQS ranging from 5,180 µg/L (USTG480-MW17) to 142,320 µg/L (USTG480-MW04). The C19-C36 Aliphatics (2L GWQS = 42,000 µg/L) were not identified at concentrations in excess of the 2L GWQS in any of the submitted groundwater samples. The C9-C22 Aromatics (2L GWQS = 210 µg/L) were identified in nine samples at concentrations above the 2L GWQS ranging from 444 µg/L (USTG480-MW18) to 85,820 µg/L (USTG480-MW04). The C5-C8 Aliphatics were identified at concentrations above the 2L GWQS of 420 µg/L in samples USTG480-MW05 (466 µg/L) and USTG480-MW13 (727 µg/L). All other MADEP Aliphatic and Aromatic hydrocarbon fractions were below the 2L GWQS or reported as BQL. Analytical results are summarized on Table 7B and compared to the 2L GWQS on Table 7C and Figure 8B.

I. FREE-PHASE PRODUCT INVESTIGATION/RECOVERY

As previously discussed, a comprehensive gauging event was conducted by CATLIN personnel on May 20, 2008. A measurable thickness of free-phase product

was identified during the gauging event in the following monitoring wells:

WELL ID	FPT (ft)	WELL ID	FPT (ft)
IR35-MW67A	0.79	USTG480-MW07	0.87
USTG480-MW01	0.10	USTG480-MW08	0.14
USTG480-MW02	0.17	USTG480-MW10	0.01
USTG480-MW03	0.82	USTG480-MW13	0.13
USTG480-MW04	0.29		

FPT (ft) = Free-phase Product Thickness in feet

It should be noted that review of historical gauging events conducted by OSAGE as part of the gauging and product recovery activities revealed that monitoring wells USTG480-MW06 and USTG480-MW09 have occasionally been identified with measurable thicknesses of free-phase product. Monitoring well gauging data from the comprehensive gauging event conducted by CATLIN is presented on Table 5 and the estimated extent of free-phase product in addition to the gauged free-phase product thickness is presented on Figure 9. Gauging and free-phase product recovery data generated by OSAGE is included in Appendix B.

J. HYDROGEOLOGIC INVESTIGATION

1. Vertical Gradient Determination

Vertical hydraulic gradients were calculated on Type II/Type III well pairs USTG480-MW03/USTG480-MW15 and USTTC341-MW14/USTTC341-MW15 with resultant vertical hydraulic gradients of -0.0039 and +0.0077. The negative (-) gradient indicates the potential for “upward” and the positive (+) gradient indicates the potential for “downward” groundwater movement. Vertical gradient calculations are provided in Appendix F.

2. Hydraulic Conductivity

Two falling head slug tests were performed at the subject site during this investigation. Slug tests were performed on Type II monitoring well USTG480-MW09 and Type III monitoring well USTG480-MW15 on June 6, 2008. The calculated hydraulic conductivity values were calculated using the Bouwer-Rice Solution Method. A hydraulic conductivity value of 0.00001221 feet per second, or 1.06 feet per day, was calculated for the shallow Type II monitoring well USTG480-MW09. A hydraulic conductivity value of 0.00004433 feet per second, or 3.83 feet per day was calculated for the deep monitoring well USTG480-MW15. Slug test data is included in Appendix G.

3. Rate of Groundwater Linear Flow Velocity

Groundwater travel time or average groundwater linear flow velocity serves as the basis for estimating the rate of contaminant migration at the site.

Groundwater flow rates should represent the maximum rate of contaminant migration with variations among contaminants due to geochemical processes including molecular diffusion, mechanical mixing, sorption-desorption, ion-exchange, hydrolysis, and biodegradation.

However, due to the difficulties in estimating the effects of many of the processes on contaminant migration rates and the desire to produce relatively conservative (higher) estimates, only adsorption processes are incorporated into rate calculations.

The average groundwater linear flow velocity was calculated using a modification of Darcy's Law (Todd, 1980) and is presented in Appendix G. The hydraulic gradient was extrapolated from the calculated groundwater elevations in monitoring wells USTTC341-MW14 and USTG480-MW16. The hydraulic gradient was determined to be 0.011082 feet per foot towards the east northeast. An hydraulic conductivity value of 1.06 feet per day was used in the calculations. An average effective porosity value of 0.437 was estimated from the values for fine-grained sand, silt, and clay. The average groundwater linear flow velocity was determined to be 0.0268 ft/day to the east northeast.

K. GROUNDWATER MODELING

No detailed groundwater modeling was conducted during this investigation. However, the estimated velocities of the petroleum contaminants, Naphthalene and Benzene, were calculated in accordance with the USEPA (1985). As shown in the calculations in Appendix H, the contaminant velocity (V_c) for Naphthalene and Benzene were found to be 0.00078 feet per day and 0.010910, respectively.

L. DISCUSSION

This CSA has been completed in accordance with the NCDENR – UST Section, Guidelines for Assessment and Corrective Action effective July 15, 2008.

The investigation included the installation of 17 Type II and one Type III groundwater monitoring wells. Soil samples were collected and submitted for laboratory analysis from all monitoring wells installed on the project site. Based on laboratory analytical results, eleven soil samples were identified with detected concentration of target compounds above the lowest established MSCCs (STGW), but well below the I/C MSCCs. The extent of soils with petroleum impact in excess of current established STGW MSCCs has not been delineated. However, no soil impact was identified in excess of established I/C MSCCs during this investigation.

A comprehensive groundwater gauging event was conducted on May 20, 2008. Groundwater elevations in the Type II monitoring wells across the site ranged from 4.26 to 10.24 feet (NAVD 88) and depth to water ranged from 8.33 ft. to 4.99 ft. BLS. The generalized groundwater flow trend in the shallow aquifer was determined to be towards the east to east northeast across the subject site at an

approximate average linear flow velocity of 0.0268 ft/day to the east northeast.

Measurable free-phase product was identified during the May 20, 2008 comprehensive gauging event in nine groundwater monitoring wells at thicknesses ranging from 0.01 feet to 0.87 feet. Free-phase product has been delineated in this investigation.

Dissolved petroleum constituents were identified in groundwater samples collected during this investigation at concentrations above current applicable 2L GWQS. Review of data compiled during this investigation indicates that the dissolved contaminant plume has been delineated vertically to a depth of less than 30 feet. The dissolved contaminant plume has been generally delineated horizontally to the north and south at the subject site. However, numerous data gaps exist in the dissolved contaminant plume which will need to be addressed in future investigations.

Based on the General Assembly of North Carolina, Session 2003, Session Law 2003-352, House Bill 897, "...a mixed plume of contamination that results from releases of petroleum from both an underground storage tank and an aboveground storage tank or other source may be cleaned up under the risk-based cleanup rules applicable to releases from petroleum underground storage tanks...". Data presented in the CSA completed by Law in 1993 on the adjacent (up-gradient) TC-341 project site indicated that the contaminant plume originating from UST TC-341 migrated down-gradient across the G480 project site. Therefore, the regulatory framework for the G480 project site may be based on the Risk Based Corrective Actions.

M. PRELIMINARY RECOMMENDATIONS AND CORRECTIVE ACTIONS

Due to presence of free-phase product, an Intermediate Risk Classification has been assumed for Site G480. Therefore, the lower of Residential or STGW MSCCs are the applicable regulatory limits for soil contamination and the 2L GWQS are the applicable regulatory limits for groundwater.

By reducing the risk classification to a low risk site by removal of the free-phase product, the Industrial/Commercial MSCCs would become the applicable regulatory limits for soil contamination and the GCL's would become the applicable regulatory limits for groundwater contamination.

In order to achieve a reduced risk reclassification, CATLIN recommends focusing remedial efforts on the removal of free-phase product. No soil or dissolved groundwater impact was identified during this investigation in excess of established Industrial/Commercial MSCCs or GCLs. Therefore, the remedial goals should be removal of free-phase product then a re-evaluation of the site to determine applicable soil and groundwater clean-up levels. However, the installation of additional groundwater monitoring wells may be necessary to delineate the dissolved petroleum constituent plume.

Based on the identified potential sources, the assumed free-phase product is No. 6 fuel oil mixed with kerosene which appears to have originated from the now abandoned fuel transfer line.

The physical characteristics of the fuel greatly reduce the alternatives for removal or in-situ remediation. In order to recommend an acceptable remedial alternative, a finger print analysis of the recovered fuel should be conducted. Additionally, based on the significant amount of dissolved volatile petroleum constituents identified in the groundwater samples collected at the project site and the "finger print" analysis conducted by Baker, an additional source contaminant may be possible. Although no documentation was uncovered during this investigation, it is possible that additional petroleum products, presumably kerosene, were transferred via the pipeline which may have contributed to the contaminant plume.

The high viscosity of No. 6 fuel oil greatly limits the opportunities for removal via conventional remedial methods. A combination of technologies will likely be necessary to adequately address the remedial goals. Completion of a CAP with the appropriate pilot testing is recommended in order to determine an adequate remediation strategy.

Until such time as an alternative remedial technology is recommended and implemented, the gauging and free-phase product recovery efforts at the project site should continue.

N. LIMITATIONS

The soil and groundwater samples analyzed as part of this investigation only provide isolated data points and may not represent conditions at every location in the project area. Analyses and conclusions of this report, being based on interpolation between data points at the project area, may not be completely representative of all site conditions. Conclusions and recommendations of this investigation and report are based on the best available data in an effort to comply with current regulatory requirements.

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TABLES

TABLE 1
SITE HISTORY - UST SYSTEM INFORMATION

Incident Name and Number: Site G480 - Pending

UST ID Number	Product (gasoline, diesel, jet fuel, etc.)	Capacity (gallons)	Date Installed	Date Permanently Closed (P), or Still in Use* (C) (m/dd/yy)	Was Release Associated With UST System? (Yes / No)
G-480-1	Diesel / #2 Fuel Oil	550	~ 1976	(P) 2/17/1994	Yes
Various**	#6 Fuel Oil	6" Pipeline	~ 1941	(P) Unknown	Yes

* Still in use means not permanently closed.

** Numerous USTs associated with former Camp Geiger Fuel Farm were source of fuel for pipeline

TABLE 2
SITE HISTORY - UST OWNER/OPERATOR INFORMATION

Incident Name and Number: Site G-480 - Pending

Dates of Ownership / Operation	UST ID Number	Name of Owner/ Operator	Address	Telephone Number
~ 1941 - 1994	G-480-1	Commanding Officer Attn: Director I&E/EMD/EQB	PSC Box 20004 Marine Corps Base Camp Lejeune, NC 28542	(910) 451-5068
~ 1941 - Unknown	Various USTs (6" Pipeline)	Commanding Officer Attn: Director I&E/EMD/EQB	PSC Box 20004 Marine Corps Base Camp Lejeune, NC 28542	(910) 451-5068

TABLE 3
CONTAMINANT SOURCE INVENTORY

Incident Name and Number: Site G480 - Pending

SOURCE	PRODUCT TYPE	INSTALLATION DATE	SIZE	STATUS
UST G480-1	Number 2 Fuel Oil or Diesel	1976	500 Gallons	Abandoned
UST TC341	Number 6 Heating Oil	1941	Unknown	Abandoned In Place
Transfer Line	Number 6 Heating Oil	1941	6-Inch Diameter	Abandoned In Place
Camp Geiger Fuel Farm	Gasoline, Diesel, Kerosene, and Number 6 Heating Oil	1941	5 15,000-Gallon ASTs	Demolished
Gas Station Building 341	Gasoline and Diesel	Unknown	Unknown	Demolished

TABLE 4
WATER SUPPLY WELL INFORMATION

Incident Name and Number: Site G480 - Pending

MCB WELL NUMBER	LATITUDE LONGITUDE	TOTAL WELL DEPTH (FT.)	SCREEN INTERVAL	WELL USAGE AND STATUS	APPROXIMATE DISTANCE FROM SITE (FT.)
NC-052	34.7384	70	23 - 70	USGS Test Well	500
	-77.4575				
TC-600	37.7353	70	48-70	Water Supply - Abandoned	2,150
	-77.4574				
TC-700	34.7323	76	27.5 - 76 (OPEN HOLE)	Water Supply - Abandoned	3,000
	-77.4577				
TC-1253	34.7266	250	120 - 170	Water Supply - Active	4,800
	-77.4571				

TABLE 5
MONITORING WELL CONSTRUCTION INFORMATION

Incident Name and Number: Site G480 - Pending

WELL IDENTIFICATION	DATE INSTALLED (m/dd/yy)	DATE WATER LEVEL MEASURED (m/dd/yy)	WELL CASING DEPTH (ft. BLS)	SCREENED INTERVAL (x to y ft. BLS)	BOTTOM OF WELL (ft. BLS)	TOP OF CASING ELEV.* (ft.)	DEPTH TO WATER From Top of Casing (ft.)	GROUND WATER ELEV. *(ft.)	FREE-PHASE PRODUCT THICKNESS (ft.)	COMMENTS
IR35- MW14D	8/20/91	5/20/08	24.5 Inner 20.0 Outer	24.5 - 28.0	28.5	16.51	10.21	6.30	NMT	Existing Permanent Type III Stick-up.
IR35- MW14S	8/20/91	5/20/08	3.5	3.5 - 12.0	12.5	16.55	10.19	6.36	NMT	Existing Permanent Type II Stick-up.
IR35-MW67A	9/17/98	5/20/08	5.0	5.0 - 14.5	15.0	14.17	7.41	7.54	0.79	Existing Permanent Type II Flush Mount.
USTG480- MW01	7/03/07	5/20/08	4.0	4.0 - 13.5	14.0	13.70	6.50	7.30	0.10	Permanent Type II Flush Mount.
USTG480- MW02	5/22/07	5/20/08	4.0	4.0 - 13.5	14.0	13.96	6.90	7.23	0.17	Permanent Type II Flush Mount.
USTG480- MW03	5/16/07	5/20/08	5.0	5.0 - 14.5	15.0	13.79	7.18	7.42	0.82	Permanent Type II Flush Mount.
USTG480- MW04	5/16/07	5/20/08	5.0	5.0 - 14.5	15.0	14.28	6.60	7.97	0.29	Permanent Type II Flush Mount.
USTG480- MW05	5/16/07	5/20/08	3.0	3.0 - 12.5	13.0	14.23	5.79	8.44	NMT	Permanent Type II Flush Mount.
USTG480- MW06	5/22/07	5/20/08	5.0	5.0 - 14.5	15.0	13.24	6.44	6.80	NMT	Permanent Type II Flush Mount.
USTG480- MW07	7/05/07	5/20/08	3.0	3.0 - 12.5	13.0	10.98	5.27	6.57	0.87	Permanent Type II Flush Mount.
USTG480- MW08	7/05/07	5/20/08	3.0	3.0 - 12.5	13.0	12.84	6.52	6.46	0.14	Permanent Type II Flush Mount.
USTG480- MW09	7/03/07	5/20/08	3.0	3.0 - 12.5	13.0	14.68	6.40	8.28	NMT	Permanent Type II Flush Mount.
USTG480- MW10	7/05/07	5/20/08	3.0	3.0 - 12.5	13.0	14.44	6.51	7.94	0.01	Permanent Type II Flush Mount.

* Reference Point for Elevation Measurements (NAVD 88 USFT)

** If free-phase product is present in well, groundwater elevation calculated by: [Top of Casing Elevation - Depth to Water] + [Free-Phase Product Thickness x 0.99 (#6 Fuel Oil)]

ft. BLS = feet below land surface

NMT = No Measurable Thickness

ND = No Data

TABLE 5
MONITORING WELL CONSTRUCTION INFORMATION

Incident Name and Number: Site G480 - Pending

WELL IDENTIFICATION	DATE INSTALLED (m/dd/yy)	DATE WATER LEVEL MEASURED (m/dd/yy)	WELL CASING DEPTH (ft. BLS)	SCREENED INTERVAL (x to y ft. BLS)	BOTTOM OF WELL (ft. BLS)	TOP OF CASING ELEV.* (ft.)	DEPTH TO WATER From Top of Casing (ft.)	GROUND WATER ELEV.* (ft.)	FREE-PHASE PRODUCT THICKNESS (ft.)	COMMENTS
USTG480- MW11	7/10/07	5/20/08	3.0	3.0 - 13.0	13.0	14.31	7.80	6.51	NMT	Permanent Type II Flush Mount.
USTG480- MW12	7/11/07	5/20/08	3.0	3.0 - 13.0	13.0	13.51	6.23	7.28	NMT	Permanent Type II Flush Mount.
USTG480- MW13	7/11/07	5/20/08	3.0	3.0 - 13.0	13.0	12.94	6.72	6.35	0.13	Permanent Type II Flush Mount.
USTG480- MW14	7/11/07	5/20/08	3.0	3.0 - 13.0	13.0	14.76	6.91	7.85	NMT	Permanent Type II Flush Mount.
USTG480- MW15	7/12/07	5/20/08	51.0 Inner 43.0 Outer	51.0 - 56.0	56.0	13.80	6.21	7.59	NMT	Permanent Type III Flush Mount.
USTG480- MW16	5/07/08	5/20/08	5.0	5.0 - 15.0	15.0	10.16	5.90	4.26	NMT	Permanent Type II Flush Mount.
USTG480- MW17	5/07/08	5/20/08	5.0	5.0 - 15.0	15.0	10.08	5.16	4.92	NMT	Permanent Type II Flush Mount.
USTG480- MW18	5/07/08	5/20/08	5.0	5.0 - 15.0	15.0	12.65	6.81	5.84	NMT	Permanent Type II Flush Mount.
USTTC341- MW14	3/08/94	5/20/08	3.0	3.0 - 12.5	13.0	15.36	5.65	9.71	NMT	Existing Permanent Type II Flush Mount.
USTTC341- MW15	3/08/94	5/20/08	25.0 Inner 22.0 Outer	25.0 - 29.5	30.0	15.33	5.77	9.56	NMT	Existing Permanent Type III Flush Mount.
USTTC341- MW17	3/08/94	5/20/08	3.0	3.0 - 12.5	13.0	15.23	4.99	10.24	NMT	Existing Permanent Type II Flush Mount.

* Reference Point for Elevation Measurements (NAVD 88 USFT)

** If free-phase product is present in well, groundwater elevation calculated by: [Top of Casing Elevation - Depth to Water] + [Free-Phase Product Thickness x 0.99 (#6 Fuel Oil)]

ft. BLS = feet below land surface

NMT = No Measurable Thickness

ND = No Data

TABLE 6
SUMMARY OF SOIL LABORATORY RESULTS
EPA METHOD 8260

Incident Name: Site G480

Sample ID	Contaminant of Concern →		Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	Chloromethane	Ethylbenzene	Isopropylbenzene	4-Isopropyltoluene	Methylene chloride	Naphthalene	n-Propylbenzene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total Xylenes	All Other EPA Method 8260 Analytes
	Date Collected	Sample Depth (ft. BLS)																			
Residential MSCC (mg/kg) Industrial/Commercial MSCC (mg/kg) STGW MSCC (mg/kg)			1,564 40,880 2.8	18 164 0.0056	NE NE NE	NE NE NE	626 16,350 4.3	626 16,350 3.3	49 440 0.02	1,560 40,000 4.6	1,564 40,880 1.7	NE NE NE	85 763 0.02	313 8,176 0.58	626 16,350 1.7	3,200 82,000 7.3	NE NE NE	782 20,440 7.5	782 20,440 7.3	3,129 81,760 5	Varies Varies Varies
USTG480-MW01(0-2)	7/3/2007	0-2	0.141	BMDL	BMDL	0.00508 J	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW02 (3-5)	5/22/2007	3-5	BMDL	BMDL*	BMDL	BMDL	0.761	0.309	0.0907 J	0.293	0.253	0.28	BMDL*	1.19	0.516	BMDL	BMDL	1.89	0.781	0.2138 J	BMDL
USTG480-MW02 (3-5) DUP	5/22/2007	3-5	BMDL	BMDL*	BMDL	BMDL	1.33	0.480	0.0751 J	0.318	0.339	0.425	BMDL*	1.92	0.737	BMDL	BMDL	3.03	1.19	0.2293 J	BMDL
USTG480-MW03 (4-6)	5/16/2007	4-6	BMDL	BMDL*	BMDL	BMDL	5.67	2.61	0.385 J	4.07	2.49	2.03	BMDL*	12.5	4.44	BMDL	BMDL	12.6	2.42	2.89	BMDL
USTG480-MW04 (4-6)	5/16/2007	4-6	0.562 J	BMDL*	BMDL	BMDL	0.646	0.268	0.225	0.237	0.344	0.493	BMDL*	1.11	0.412	BMDL	BMDL	0.160 J	BMDL	BMDL	BMDL
USTG480-MW05 (4-6)	5/16/2007	4-6	1.48 J	BMDL*	BMDL	BMDL	7.43	4.12	0.502 J	3.11	3.78	2.59	BMDL*	13.9	7.52	BMDL	BMDL	7.92	1.77	0.817 J	BMDL
USTG480-MW06 (4-6)	5/16/2007	4-6	BMDL	BMDL*	BMDL	BMDL	6.51	2.64	0.620 J	4.98	2.73	3.12	BMDL*	18.6	4.54	BMDL	BMDL	21.4	7.34	8.86	BMDL
USTG480-MW07(0-2)	7/5/2007	0-2	0.0163 J	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW08 (3-5)	7/5/2007	3-5	0.0330 J	0.00305 J	BMDL	0.00567 J	BMDL	BMDL	BMDL	0.0204	0.0029 J	0.0317	BMDL	BMDL	0.00691	BMDL	BMDL	BMDL	0.00289 J	0.0113 J	BMDL
USTG480-MW09 (4-6)	7/3/2007	4-6	BMDL	BMDL*	BMDL	BMDL	6.61	2.75	BMDL*	5.30	2.77	2.21	BMDL*	17.9	5.87	BMDL	BMDL	22.1	7.37	4.529 J	BMDL
USTG480-MW10 (3-5)	7/5/2007	3-5	BMDL	0.0248 J	BMDL	BMDL	2.36	1.07	BMDL	2.09	0.996	1.25	BMDL*	4.65	2.21	BMDL	BMDL	0.542	3.33	0.8465	BMDL
USTG480-MW11 (3-5)	7/10/2007	3-5	0.166 J	BMDL	BMDL	BMDL	0.295	0.188	BMDL	0.0184 J	0.0516 J	0.0459 J	0.282 J	0.606	0.13	0.0126 J	0.0275 J	BMDL	BMDL	BMDL	BMDL
USTG480-MW12 (3-5)	7/11/2007	3-5	0.0161 J	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW13 (3-5)	7/11/2007	3-5	0.167 J	0.00935 J	0.0366 J	BMDL	0.529	0.199	BMDL	0.276	0.152	0.412	0.207 J	0.630	0.314	BMDL	BMDL	1.22	0.354	0.1962 J	BMDL
USTG480-MW14 (3-5)	7/11/2007	3-5	0.0141 J	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW15 (2-4)	7/10/2007	2-4	0.0240 J	BMDL	BMDL	0.00331 J	BMDL	BMDL	BMDL	0.00265 J	BMDL	0.00514	BMDL	0.00385 J	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL

All results in milligrams per kilogram (mg/kg).
Bold results indicate reportable concentrations or concentrations above lowest established MSCC.
BMDL or < = Below Method Detection Limit
BMDL* = Below Method Detection Limit. Method Detection Limit above lowest MSCC

NE = None Established
J = Estimated concentration, below calibration range and above method detection limit
ft. BLS = Feet Below Land Surface
MSCC = Maximum Soil Contaminant Concentration

TABLE 6A
SUMMARY OF SOIL LABORATORY RESULTS
EPA METHOD 8270

Incident Name: Site G480

Sample ID	Contaminant of Concern		Acenaphthene	Anthracene	Dibenzofuran	Fluorene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	All Other EPA Method 8270 Analytes
	Date Collected	Sample Depth (ft. BLS)									
Residential MSCC (mg/kg)			940	4,600	62	620	63	313	469	469	Varies
Industrial/Commercial MSCC (mg/kg)			24,000	122,000	1,635	16,400	1,635	8,176	12,264	12,264	Varies
STGW MSCC (mg/kg)			8.2	1,000	4.7	44	1.7	0.58	60	290	Varies
USTG480-MW01 (0-2)	7/3/2007	0-2	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW02 (3-5)	5/22/2007	3-5	BMDL	BMDL	0.222 J	0.179 J	4.68	1.37	0.300 J	0.0880 J	BMDL
USTG480-MW03 (4-6)	5/16/2007	4-6	BMDL	1.44 J	3.69 J	3.69 J	56.3	12	9.71	BMDL	BMDL
USTG480-MW04 (4-6)	5/16/2007	4-6	1.90 J	9.03	4.14 J	4.42 J	56.1	8.56	8.76	BMDL	BMDL
USTG480-MW05 (4-6)	5/16/2007	4-6	5.38 J	4.43 J	9.38	10.4	116	24.8	22.7	BMDL	BMDL
USTG480-MW06 (4-6)	5/16/2007	4-6	2.63 J	2.02 J	5.39 J	5.73 J	75.0	19.8	11.3	BMDL	BMDL
USTG480-MW07 (0-2)	7/5/2007	0-2	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW08 (3-5)	7/5/2007	3-5	0.060 J	BMDL	BMDL	0.088 J	BMDL	BMDL	0.120 J	BMDL	BMDL
USTG480-MW09 (4-6)	7/3/2007	4-6	2.84 J	1.45 J	5.48 J	5.88 J	75.2	13.9	11.9	BMDL	BMDL
USTG480-MW10 (3-5)	7/5/2007	3-5	1.72 J	1.08 J	3.64	4.01	50.9	8.33	6.47	BMDL	BMDL
USTG480-MW11 (3-5)	7/10/2007	3-5	0.135 J	0.124 J	0.280 J	0.328 J	1.83	0.200 J	0.781	BMDL	BMDL
USTG480-MW12 (3-5)	7/11/2007	3-5	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW13 (3-5)	7/11/2007	3-5	BMDL	0.162 J	0.351	0.439	3.63	0.547	0.862	BMDL	BMDL
USTG480-MW14 (3-5)	7/11/2007	3-5	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW15 (2-4)	7/10/2007	2-4	BMDL	BMDL	BMDL	0.053 J	0.194 J	BMDL	0.113 J	BMDL	BMDL

All results in milligrams per kilogram (mg/kg).

Bold results indicate concentrations above lowest established MSCC.

BMDL = Below Method Detection Limit

NE = None Established

J = Estimated concentration, below calibration range and above method detection limit

ft. BLS = Feet Below Land Surface.

MSCC = Maximum Soil Contaminant Concentration

TABLE 6B
SUMMARY OF SOIL LABORATORY RESULTS
MADEP EPH/VPH

Incident Name: Site G480

Sample ID	Contaminant of Concern →		C9-C18 Aliphatics	C19-C36 Aliphatics	C11-C22 Aromatics	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
	Date Collected	Sample Depth (ft. BLS)						
USTG480-MW01 (0-2)	7/3/2007	0-2	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW02 (3-5)	5/22/2007	3-5	1,100	110	100	BMDL	53	28
USTG480-MW03 (4-6)	5/16/2007	4-6	3,000	BMDL	1,400	14	91	71
USTG480-MW04 (4-6)	5/16/2007	4-6	3,400	BMDL	1,500	BMDL	70	46
USTG480-MW05 (4-6)	5/16/2007	4-6	4,400	270	2,000	41	130	120
USTG480-MW06 (4-6)	5/16/2007	4-6	7,300	480	3,100	75	190	240
USTG480-MW07 (0-2)	7/5/2007	0-2	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW08 (3-5)	7/5/2007	3-5	360	22	100	BMDL	BMDL	BMDL
USTG480-MW09 (4-6)	7/3/2007	4-6	3,200	BMDL	1,900	58.2	232	301
USTG480-MW10 (3-5)	7/5/2007	3-5	3,600	BMDL	1,100	38.6	215	232
USTG480-MW11 (3-5)	7/10/2007	3-5	120	23	57	BMDL	34.0	34.2
USTG480-MW12 (3-5)	7/11/2007	3-5	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW13 (3-5)	7/11/2007	3-5	200	52.0	200	BMDL	50.8	48.4
USTG480-MW14 (3-5)	7/11/2007	3-5	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW15 (2-4)	7/10/2007	2-4	52.0	18.0	BMDL	BMDL	BMDL	BMDL

All results in milligrams per kilogram (mg/kg).

ft. BLS = Feet Below Land Surface.

BMDL = Below Method Detection Limit

TABLE 6C
SUMMARY OF SOIL LABORATORY RESULTS
MADEP EPH/VPH AS COMPARED TO NCDENR MSCCs

Incident Name: Site G480

Sample ID	Contaminant of Concern →		C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C22 Aromatics	C5-C8 Aliphatics
	Date Collected	Sample Depth (ft. BLS)				
Residential MSCC (mg/kg)			9,386	93,860	469	939
Industrial/Commercial MSCC (mg/kg)			245,280	#	12,264	24,528
STGW MSCC (mg/kg)			3,300	##	34	72
USTG480-MW01 (0-2)	7/3/2007	0-2	BMDL	BMDL	BMDL	BMDL
USTG480-MW02 (3-5)	5/22/2007	3-5	1,153	110	128	BMDL
USTG480-MW03 (4-6)	5/16/2007	4-6	3,091	BMDL	1,471	14
USTG480-MW04 (4-6)	5/16/2007	4-6	3,470	BMDL	1,546	BMDL
USTG480-MW05 (4-6)	5/16/2007	4-6	4,530	270	2,120	41
USTG480-MW06 (4-6)	5/16/2007	4-6	7,490	480	3,340	75
USTG480-MW07 (0-2)	7/5/2007	0-2	BMDL	BMDL	BMDL	BMDL
USTG480-MW08 (3-5)	7/5/2007	3-5	<370*	22	<110*	BMDL
USTG480-MW09 (4-6)	7/3/2007	4-6	3,432	BMDL	2,201	58.2
USTG480-MW10 (3-5)	7/5/2007	3-5	3,815	BMDL	1,332	38.6
USTG480-MW11 (3-5)	7/10/2007	3-5	154	23	91.2	BMDL
USTG480-MW12 (3-5)	7/11/2007	3-5	BMDL	BMDL	BMDL	BMDL
USTG480-MW13 (3-5)	7/11/2007	3-5	250.8	52.0	248.4	BMDL
USTG480-MW14 (3-5)	7/11/2007	3-5	BMDL	BMDL	BMDL	BMDL
USTG480-MW15 (2-4)	7/10/2007	2-4	<62.0*	18.0	BMDL	BMDL

All results in milligrams per kilogram (mg/kg).

Bold results indicate concentrations above lowest established MSCC.

ft. BLS = Feet Below Land Surface.

BMDL or < = Below Method Detection Limit

= Health based level > 100%

= Considered Immobile

MSCC = Maximum Soil Contaminant Concentration

* = The value represents the sum of the reported practical quantitation limit of one fraction and the detected concentration of the other fraction.

TABLE 7
SUMMARY OF GROUNDWATER LABORATORY RESULTS
EPA METHOD 602

Incident Name: Site G480

Well ID	Contaminant of Concern →		Benzene	Ethylbenzene	Toluene	Total Xylenes	All Other EPA Method 602 Analytes
	Sample ID	Date Collected					
GCL (µg/L) 2L GWQS (µg/L)			5,000 1	84,500 550	257,500 1,000	87,500 530	Varies Varies
USTG480-MW01	USTG480-MW01	7/16/2007	4.78 J	175	BMDL	<191.67	BMDL
USTG480-MW01	USTG480-MW01 DUP	7/16/2007	5.31 J	176	BMDL	<190.67	BMDL
USTG480-MW04	USTG480-MW04	7/16/2007	57.4	278	14.6	401	BMDL
USTG480-MW05	USTG480-MW05	7/16/2007	13.9	283	BMDL	<81.94	BMDL
USTG480-MW10	USTG480-MW10	7/16/2007	173	431	94.7	702	BMDL
USTG480-MW11	USTG480-MW11	7/16/2007	4.16 J	113	BMDL	<5.82 J	BMDL
USTG480-MW12	USTG480-MW12	7/16/2007	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW13	USTG480-MW13	7/16/2007	94.8	325	BMDL	<194.7	BMDL
USTG480-MW14	USTG480-MW14	7/16/2007	2.28	BMDL	BMDL	BMDL	BMDL
USTG480-MW15	USTG480-MW15	7/16/2007	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW16	USTG480-MW16	5/8/2008	BMDL	BMDL	0.212 J	BMDL	BMDL
USTG480-MW17	USTG480-MW17	5/8/2008	61.5	179	9.84	260.6	BMDL
USTG480-MW18	USTG480-MW18	5/8/2008	BMDL	2.21	0.850 J	<1.517 J	BMDL
USTTC341-MW14	USTTC341-MW14	7/16/2007	9.7	39.2	BMDL	52.052 J	BMDL
USTTC341-MW15	USTTC341-MW15	7/16/2007	BMDL	BMDL	BMDL	BMDL	BMDL

All results in micrograms per liter (µg/L).

Bold results indicate concentrations above 2L GWQS or GCL.

BMDL and < = Below Method Detection Limit

NE = None Established

J = Estimated concentration, below calibration range and above method detection limit

GCL = Gross Contaminant Level

2L GWQS = NCAC T15A:02L Groundwater Quality Standards

TABLE 7A
SUMMARY OF GROUNDWATER LABORATORY RESULTS
EPA METHOD 625

Incident Name: Site G480

Well ID	Contaminant of Concern →		Acenaphthene	Acenaphthylene	Anthracene	Bis(2-ethylhexyl)phthalate	Di-n-octylphthalate	Fluorene	Naphthalene	Phenanthrene	All Other EPA Method 625 Analytes
	Sample ID	Date Collected									
GCL (µg/L) 2L GWQS (µg/L)			2,120 80	1,965 210	2,100 2,100	2,500 2.5	NE 140	950 280	15,500 21	410 210	Varies Varies
USTG480-MW01	USTG480-MW01	7/16/2007	9.50 J	BMDL	BMDL	BMDL	BMDL	18.0 J	376	27.0 J	BMDL
USTG480-MW04	USTG480-MW04	7/16/2007	46.0 J	29.0 J	21.0 J	BMDL	18.0 J	91.0 J	691	187	BMDL
USTG480-MW05	USTG480-MW05	7/16/2007	59.0 J	BMDL	38.0 J	BMDL	BMDL	119	962	262	BMDL
USTG480-MW10	USTG480-MW10	7/16/2007	BMDL	BMDL	68.0 J	BMDL	BMDL	190 J	1,280	408	BMDL
USTG480-MW11	USTG480-MW11	7/16/2007	BMDL	BMDL	BMDL	BMDL	BMDL	8.50 J	328	9.50 J	BMDL
USTG480-MW12	USTG480-MW12	7/16/2007	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW13	USTG480-MW13	7/16/2007	35.0 J	BMDL	19.0 J	BMDL	BMDL	67.0 J	693	156	BMDL
USTG480-MW14	USTG480-MW14	7/16/2007	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW15	USTG480-MW15	7/16/2007	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW16	USTG480-MW16	5/8/2008	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW17	USTG480-MW17	5/8/2008	20.8 J	BMDL	BMDL	BMDL	BMDL	26.6 J	373	46.4 J	BMDL
USTG480-MW18	USTG480-MW18	5/8/2008	2.39 J	BMDL	BMDL	2.85 J	BMDL	2.33 J	9.44	1.71 J	BMDL
USTTC341-MW14	USTTC341-MW14	7/16/2007	63.0 J	BMDL	34.0 J	31.0 J	BMDL	133	645	328	BMDL
USTTC341-MW15	USTTC341-MW15	7/16/2007	BMDL	BMDL	BMDL	1.50 J	BMDL	BMDL	BMDL	BMDL	BMDL

All results in micrograms per liter (µg/L).

Bold results indicate concentrations above 2L GWQS or GCL

BMDL = Below Method Detection Limit

NE = None Established

J = Estimated concentration, below calibration range and above method detection limit

GCL = Gross Contaminant Level

2L GWQS = NCAC T15A:02L Groundwater Quality Standards

TABLE 7B
SUMMARY OF GROUNDWATER LABORATORY RESULTS
MADEP EPH/VPH

Incident Name: Site G480

Well ID	Contaminant of Concern →		C9-C18 Aliphatics	C19-C36 Aliphatics	C11-C22 Aromatics	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
	Sample ID	Date Collected						
USTG480-MW01	USTG480-MW01	7/16/2007	4,300	200	78,000	170	1,300	1,100
USTG480-MW04	USTG480-MW04	7/16/2007	140,000	9,200	83,000	398	2,320	2,820
USTG480-MW05	USTG480-MW05	7/16/2007	49,000	3,400	31,000	466	1,950	2,520
USTG480-MW10	USTG480-MW10	7/16/2007	97,000	13,000	51,000	360	1,340	989
USTG480-MW11	USTG480-MW11	7/16/2007	210	BMDL	1,400	BMDL	477	285
USTG480-MW12	USTG480-MW12	7/16/2007	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW13	USTG480-MW13	7/16/2007	38,000	BMDL	25,000	727	2,210	4,290
USTG480-MW14	USTG480-MW14	7/16/2007	BMDL	BMDL	BMDL	138	BMDL	BMDL
USTG480-MW15	USTG480-MW15	7/16/2007	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW16	USTG480-MW16	5/8/2008	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW17	USTG480-MW17	5/8/2008	3,210	289	6,580	297	1,970	1,700
USTG480-MW18	USTG480-MW18	5/8/2008	112	BMDL	330	BMDL	115	114
USTTC341-MW14	USTTC341-MW14	7/16/2007	140,000	6,800	4,000	418	1,820	3,150
USTTC341-MW15	USTTC341-MW15	7/16/2007	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL

All results in micrograms per liter (µg/L).

BMDL = Below Method Detection Limit

TABLE 7C
SUMMARY OF GROUNDWATER LABORATORY RESULTS
MADEP EPH/VPH AS COMPARED TO NCDENR 2L GWQS

Incident Name: Site G480

Well ID	Contaminant of Concern →		C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C22 Aromatics	C5-C8 Aliphatics
	Sample ID	Date Collected				
2L GWQS (µg/L)			4,200	42,000	210	420
USTG480-MW01	USTG480-MW01	7/16/2007	5,600	200	79,100	170
USTG480-MW04	USTG480-MW04	7/16/2007	142,320	9,200	85,820	398
USTG480-MW05	USTG480-MW05	7/16/2007	50,950	3,400	33,520	466
USTG480-MW10	USTG480-MW10	7/16/2007	98,340	13,000	51,989	360
USTG480-MW11	USTG480-MW11	7/16/2007	687	BMDL	1,685	BMDL
USTG480-MW12	USTG480-MW12	7/16/2007	BMDL	BMDL	BMDL	BMDL
USTG480-MW13	USTG480-MW13	7/16/2007	40,210	BMDL	29,290	727
USTG480-MW14	USTG480-MW14	7/16/2007	BMDL	BMDL	BMDL	138
USTG480-MW15	USTG480-MW15	7/16/2007	BMDL	BMDL	BMDL	BMDL
USTG480-MW16	USTG480-MW16	5/8/2008	BMDL	BMDL	BMDL	BMDL
USTG480-MW17	USTG480-MW17	5/8/2008	5,180	289	8,280	297
USTG480-MW18	USTG480-MW18	5/8/2008	227	BMDL	444	BMDL
USTTC341-MW14	USTTC341-MW14	7/16/2007	141,820	6,800	7,150	418
USTTC341-MW15	USTTC341-MW15	7/16/2007	BMDL	BMDL	BMDL	BMDL

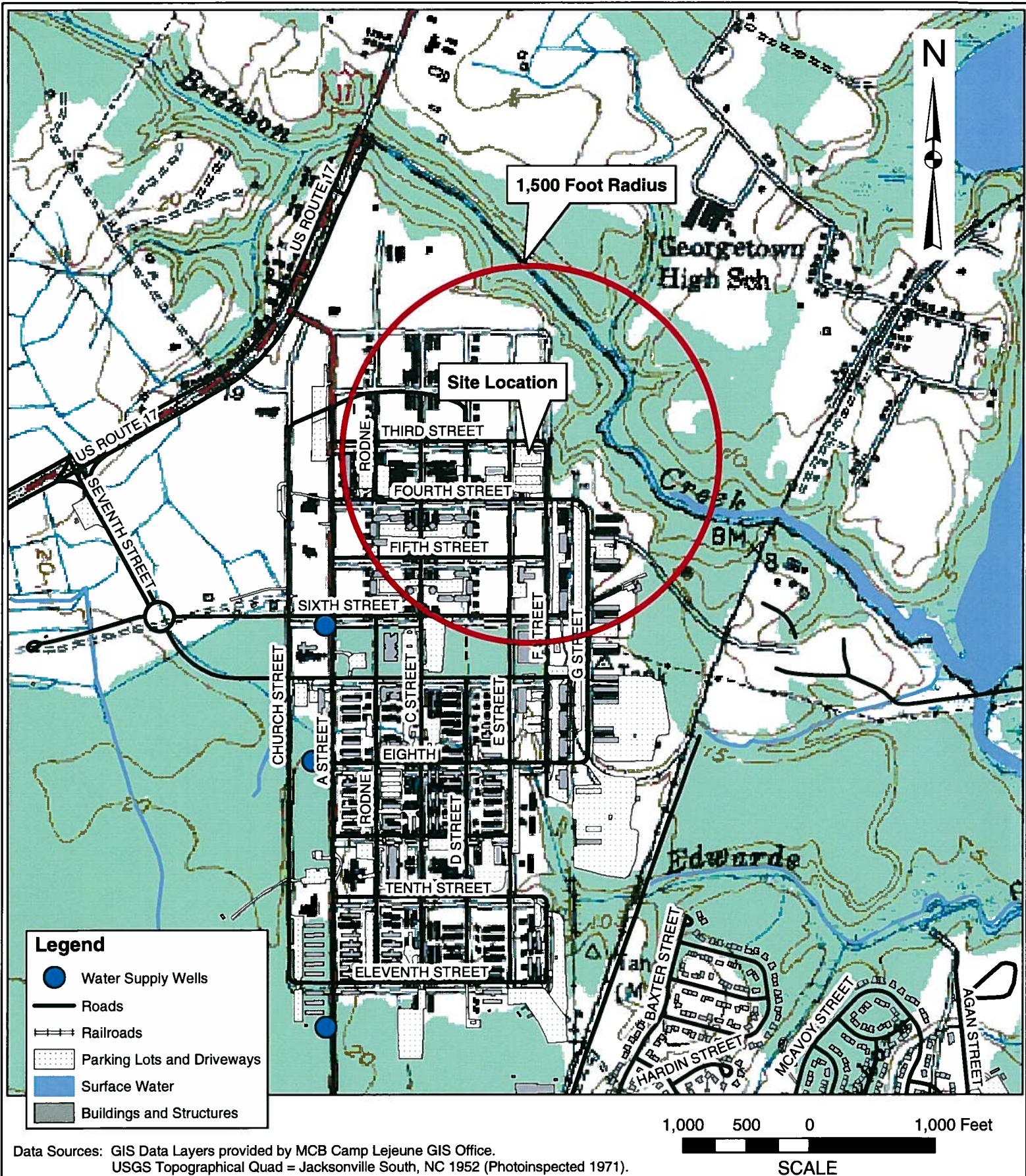
All results in micrograms per liter (µg/L).

Bold results indicate concentrations above 2L GWQS.

2L GWQS = NCAC T15A:02L Groundwater Quality Standards

BMDL = Below Method Detection Limit

FIGURES



PROJECT
COMPREHENSIVE SITE
ASSESSMENT
SITE G480
MARINE CORPS BASE
CAMP LEJEUNE, NC

TITLE

SITE VICINITY AND WATER SUPPLY WELLS

FIGURE

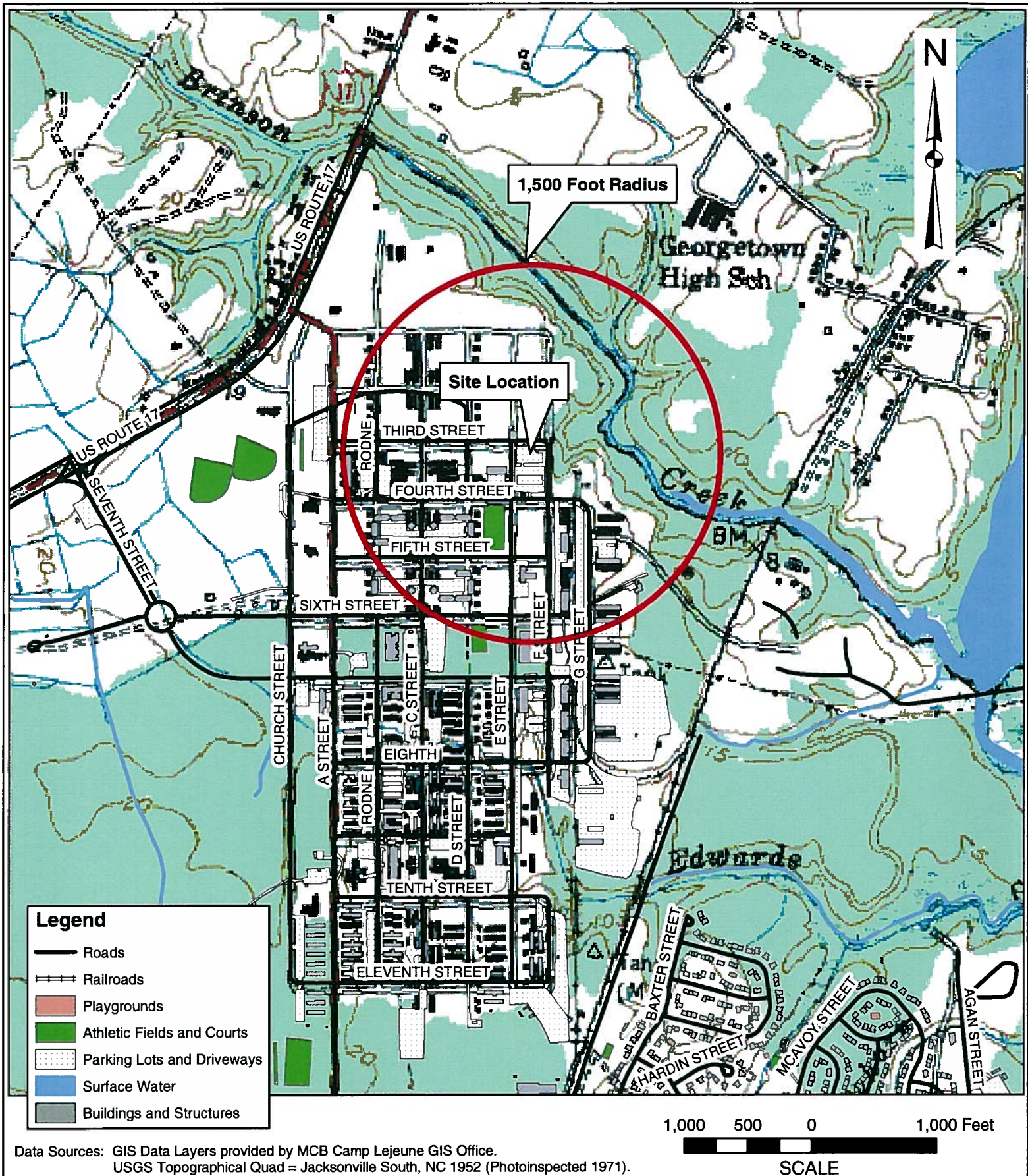
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JOB NO. 206-111 DATE AUG 2008

SCALE AS SHOWN

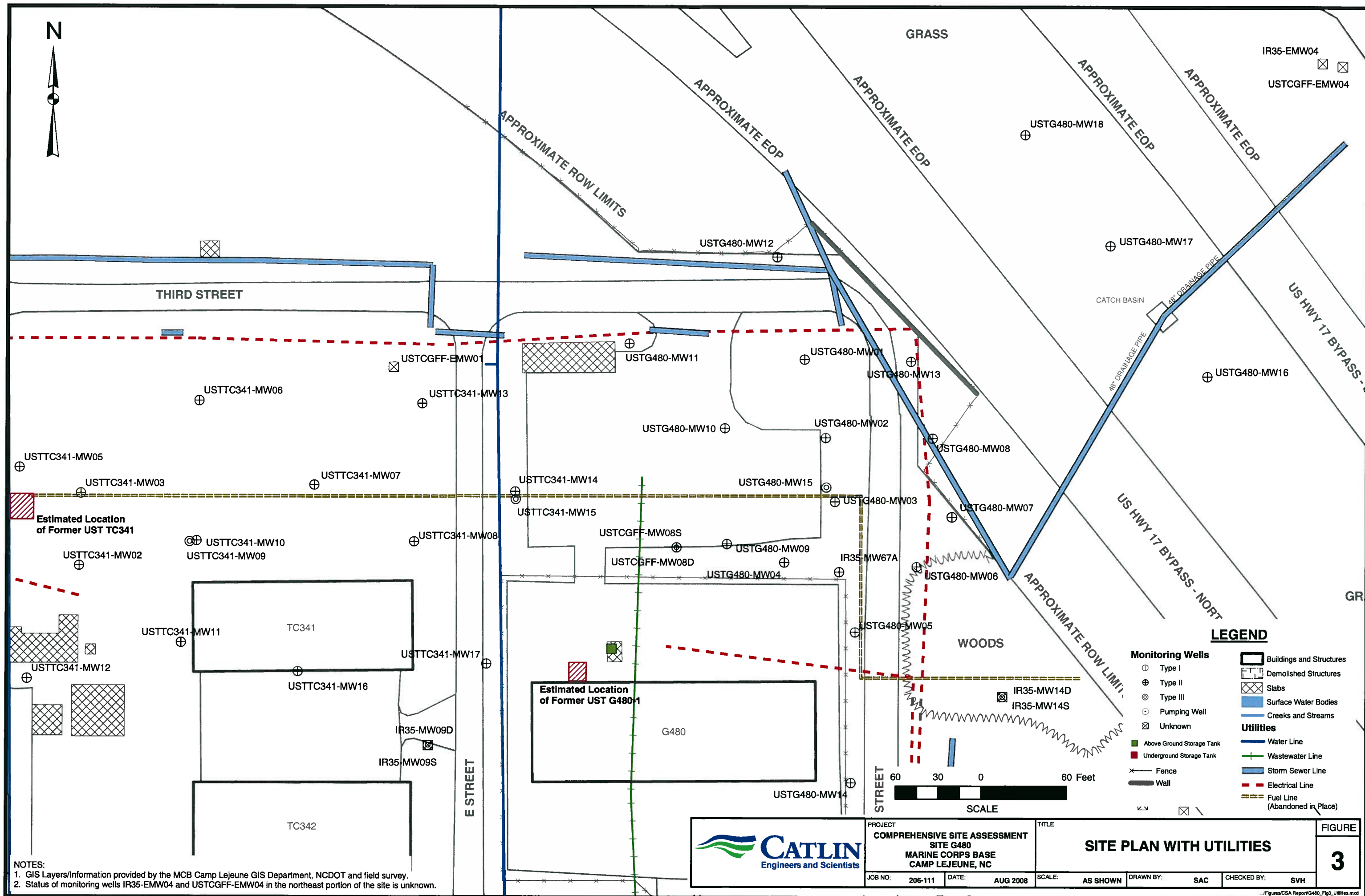
DRAWN BY SAC

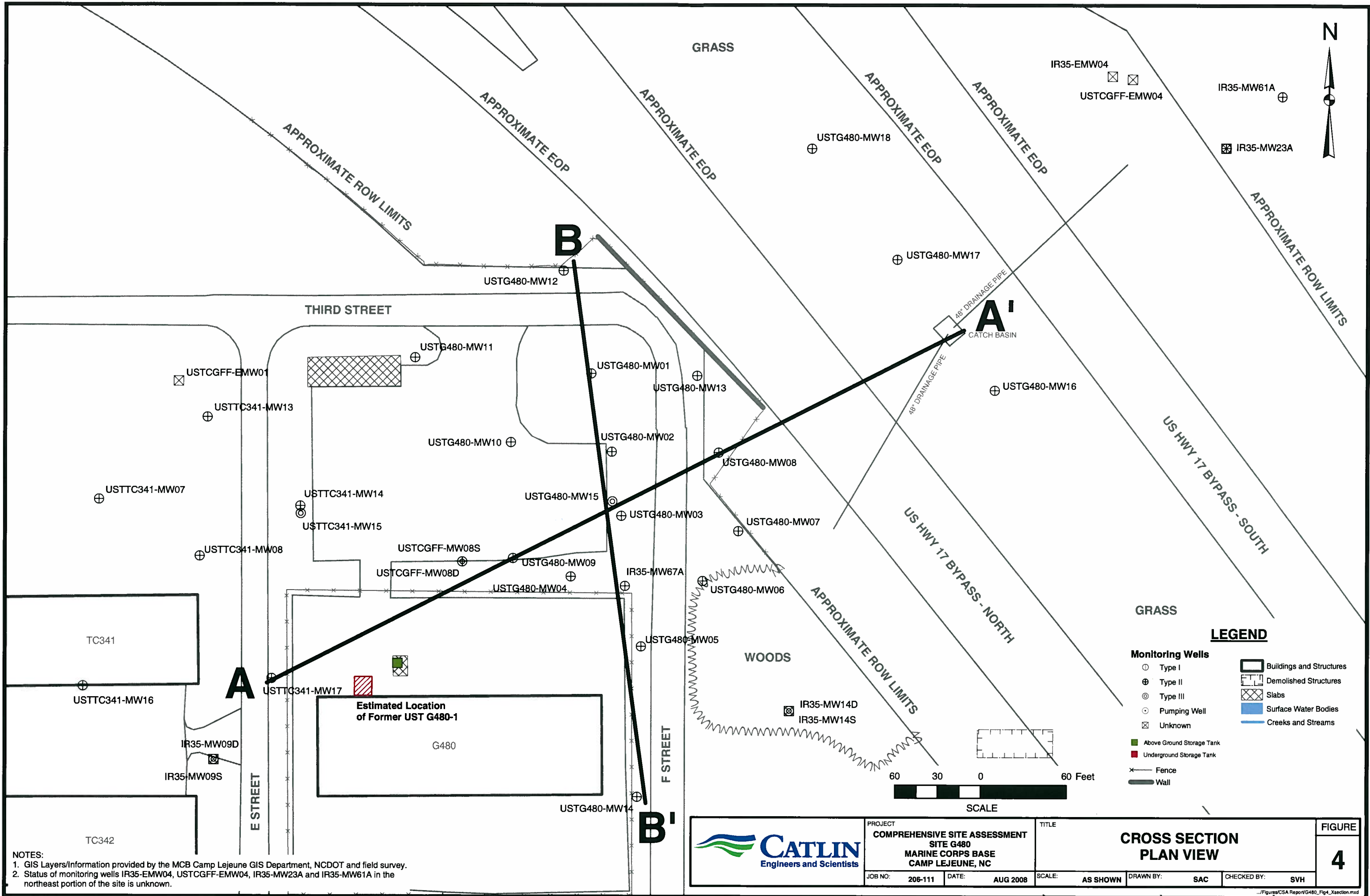
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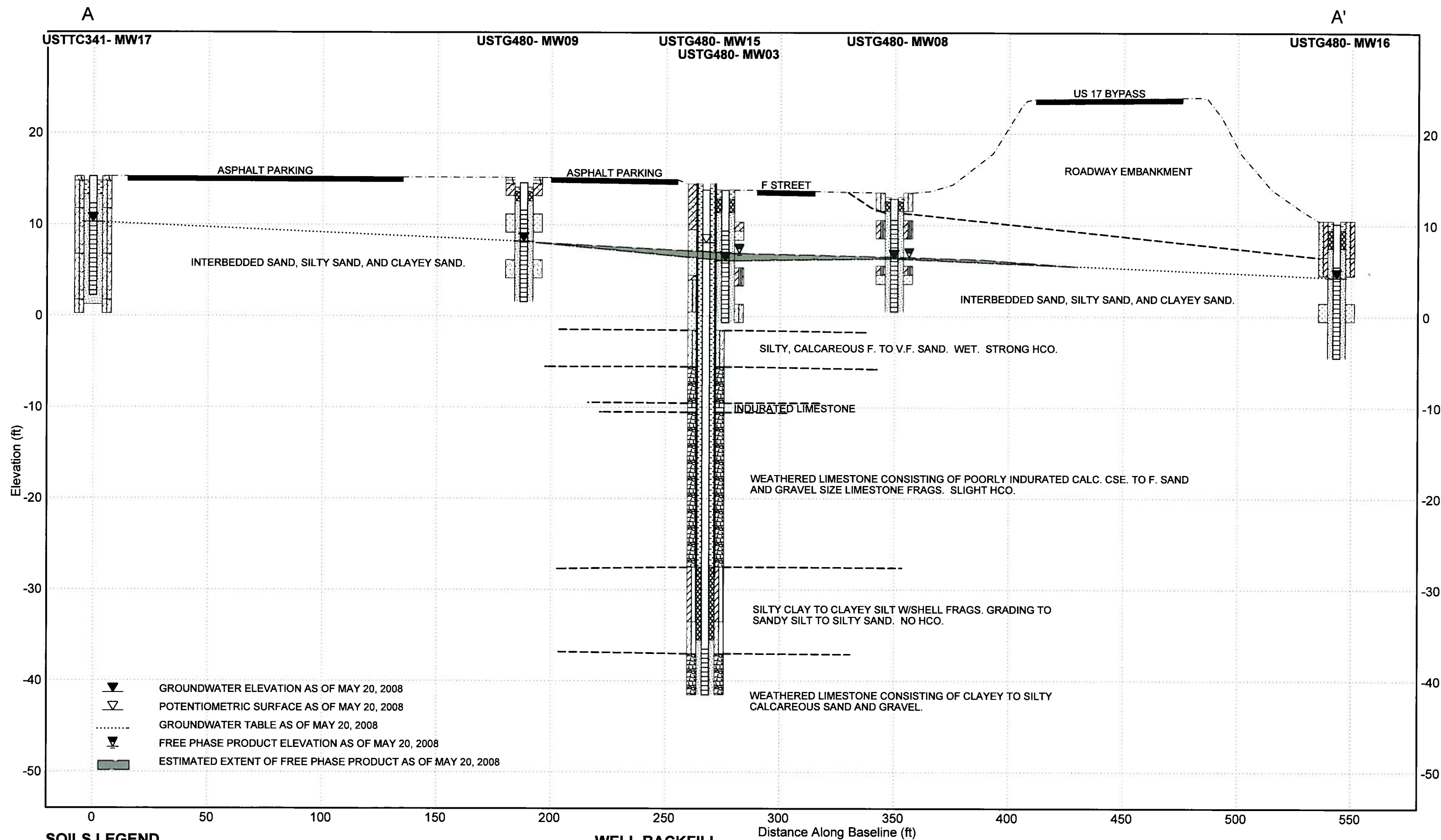


Data Sources: GIS Data Layers provided by MCB Camp Lejeune GIS Office.
USGS Topographical Quad = Jacksonville South, NC 1952 (Photoinspected 1971).

	PROJECT COMPREHENSIVE SITE ASSESSMENT SITE G480 MARINE CORPS BASE CAMP LEJEUNE, NC		TITLE SITE VICINITY WITH PLACES OF PUBLIC ASSEMBLY			FIGURE
	JOB NO. 206-111	DATE AUG 2008	SCALE AS SHOWN	DRAWN BY SAC	CHECKED BY SVH	2







SOILS LEGEND

	(SC) Clayey Sand		(SM) Silty Sand		(SW) Well-graded Sand		Limestone
	(SP) Poorly-graded Sand		Topsoil		(SP-SM) Poorly-graded Sand with Silt		USCS Low Plasticity Silty Clay (SM-ML) SILTY SAND to SANDY SILT
	(SC-SM) Clayey/Silty Sand		(GW) Well-graded Gravel		Weathered Limestone		

WELL BACKFILL

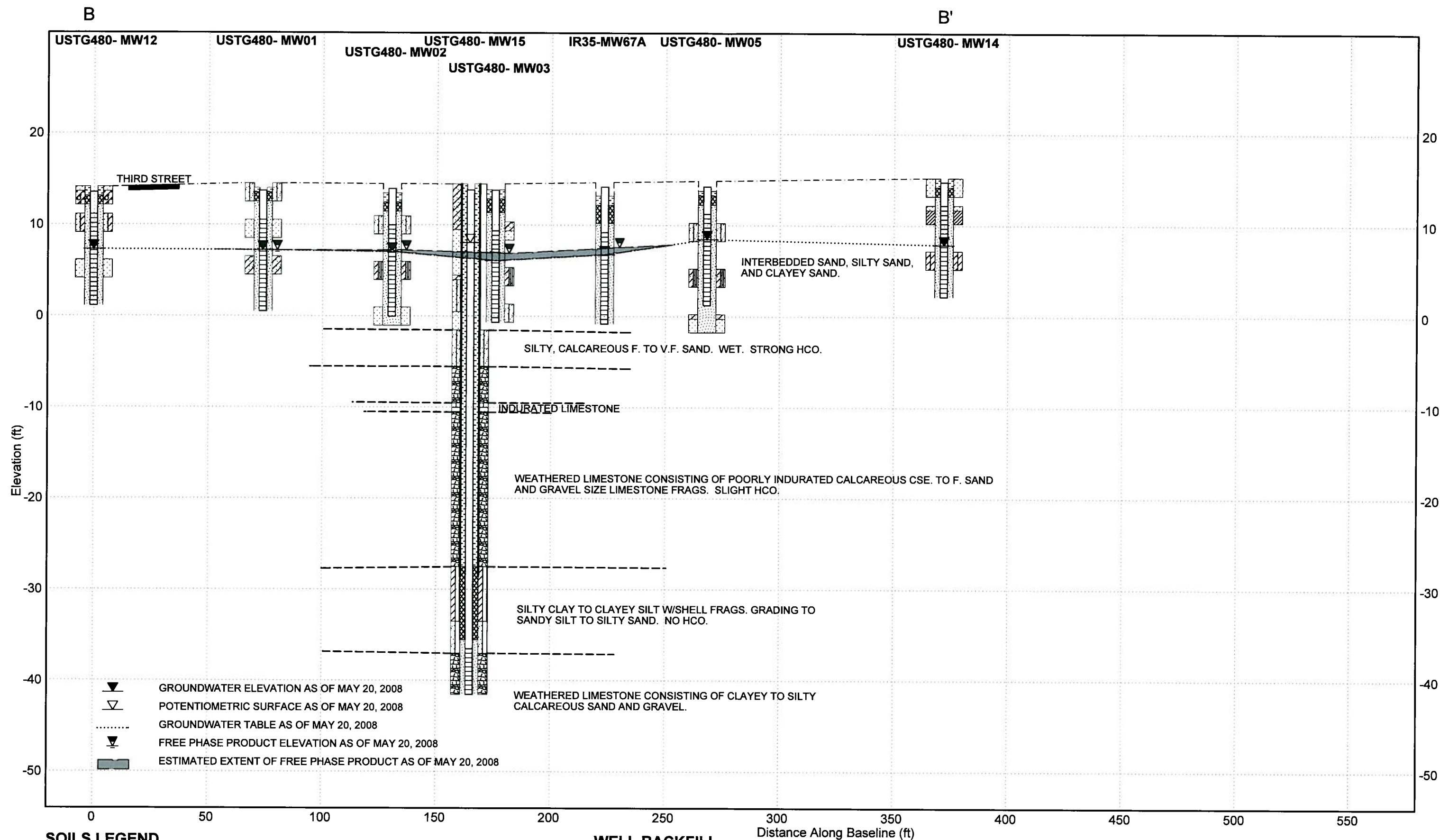
	Portland Cement
	Bentonite Pellets
	#2 Medium Sand



PROJECT		TITLE	
COMPREHENSIVE SITE ASSESSMENT		SITE G480	
MARINE CORPS BASE		CAMP LEJEUNE, NC	
JOB NO.:	206-111	DATE:	AUGUST 2008

SCALE:	VERT: 1"=10'	DRAWN BY:	SVH	CHECKED BY:	MDM
	HORZ: 1"=40'				

FIGURE
4A



SOILS LEGEND

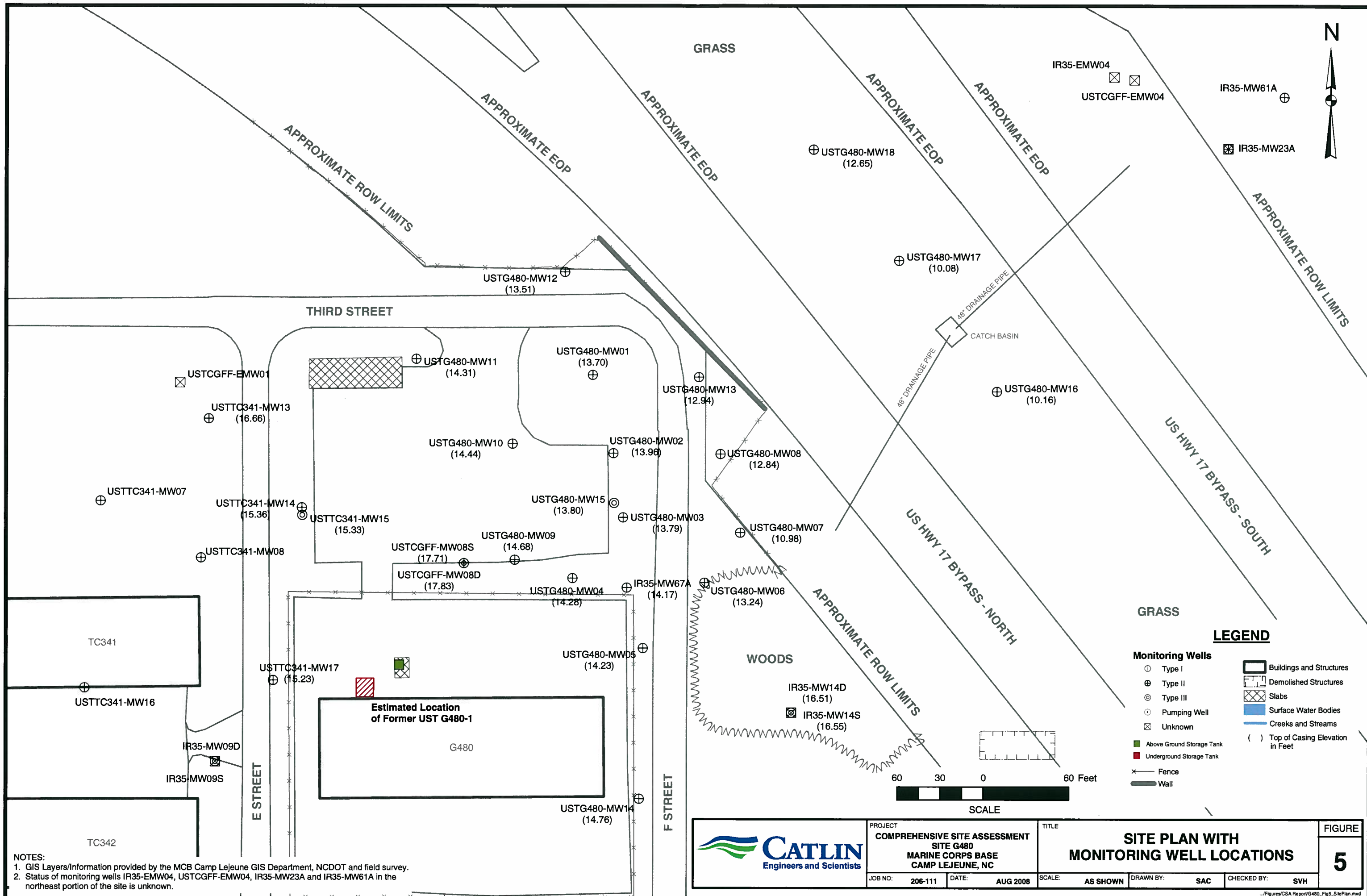
(SM) Silty Sand	(SC-SM) Clayey/Silty Sand (CL) Low to Med. Plasticity Inorganic Clay	(SP-SC) Poorly-graded Sand with Clay (CH) High Plasticity Clay	(SP-SM) Poorly-graded Sand with Silt
(SP) Poorly-graded Sand	USCS Well-graded Gravelly Sand	(SC-CL) Clayey Sand to Sandy Clay	Weathered Limestone
(SC) Clayey Sand			Limestone

WELL BACKFILL

Portland Cement	Bentonite Pellets	#2 Medium Sand



PROJECT COMPREHENSIVE SITE ASSESSMENT SITE G480 MARINE CORPS BASE CAMP LEJEUNE, NC		TITLE CROSS SECTION B - B'		FIGURE 4B
JOB NO.: 206-111	DATE: AUGUST 2008	SCALE: VERT: 1"=10' HORZ: 1"=40'	DRAWN BY: SVH	
			CHECKED BY: MDM	



PROJECT
**COMPREHENSIVE SITE ASSESSMENT
SITE G480
MARINE CORPS BASE
CAMP LEJEUNE, NC**

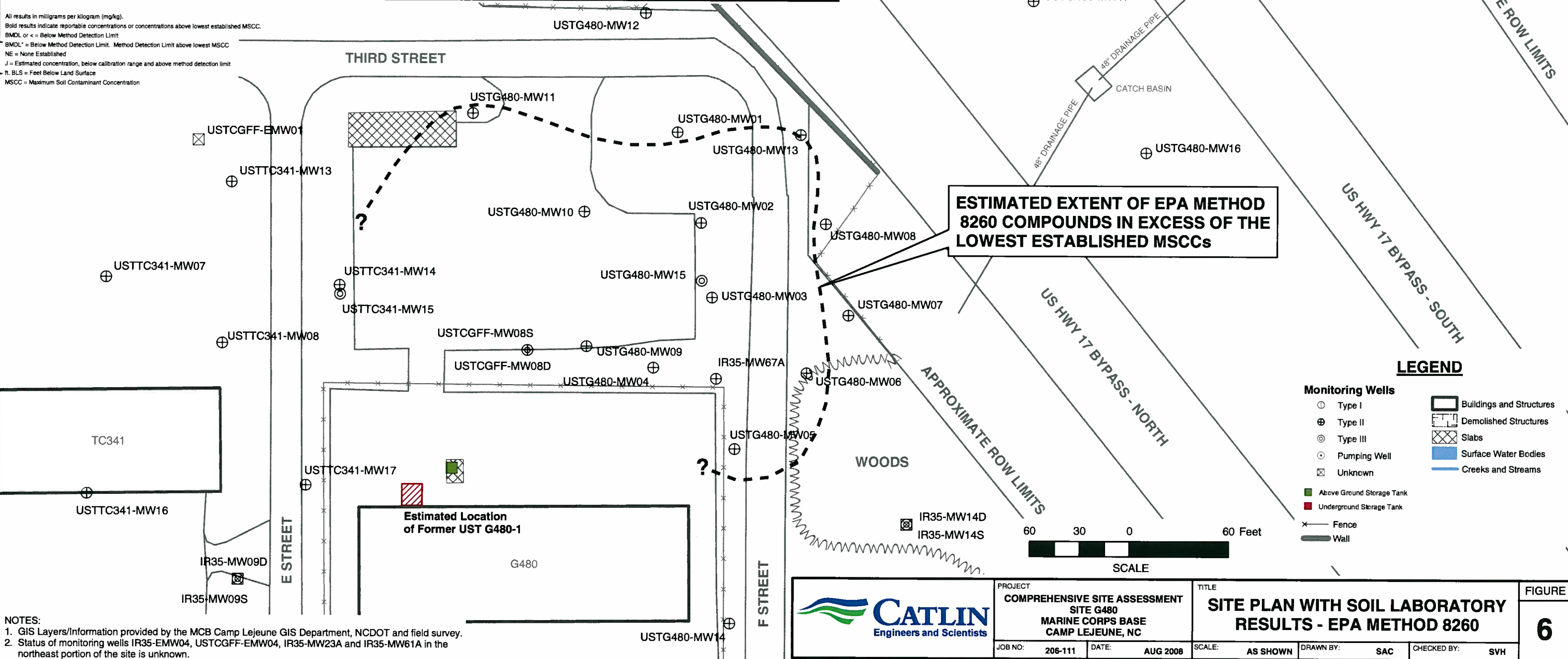
TITLE
**SITE PLAN WITH
MONITORING WELL LOCATIONS**

FIGURE
5

JOB NO: 206-111 DATE: AUG 2008 SCALE: AS SHOWN DRAWN BY: SAC CHECKED BY: SVH

Sample ID	Contaminant of Concern		Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	Chloromethane	Ethylbenzene	Isopropylbenzene	4-Isopropyltoluene	Methylene chloride	Naphthalene	n-Propylbenzene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total Xylenes	All Other EPA Method 8260 Analytes
	Date Collected	Sample Depth (ft. BLS)																			
Residential MSCC (mg/kg)			1,564	18	NE	NE	626	626	49	1,560	1,564	NE	85	313	626	3,200	NE	782	782	3,129	Varies
Industrial/Commercial MSCC (mg/kg)			40,880	164	NE	NE	16,350	16,350	440	40,000	40,880	NE	763	8,176	16,350	82,000	NE	20,440	20,440	81,760	Varies
STGW MSCC (mg/kg)			2.8	0.0056	NE	NE	4.3	3.3	0.02	4.6	1.7	NE	0.02	0.58	1.7	7.3	NE	7.5	7.3	5	Varies
USTG480-MW01(0-2)	7/3/2007	0-2	0.141	BMDL	BMDL	0.00508 J	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW02 (3-5)	5/22/2007	3-5	BMDL	BMDL	BMDL	BMDL	0.781	0.309	0.0907 J	0.293	0.253	0.28	BMDL	1.19	0.516	BMDL	BMDL	1.89	0.781	0.2138 J	BMDL
USTG480-MW02 (3-5) DUP	5/22/2007	3-5	BMDL	BMDL	BMDL	BMDL	1.33	0.480	0.0751 J	0.318	0.339	0.425	BMDL	1.92	0.737	BMDL	BMDL	3.03	1.19	0.2293 J	BMDL
USTG480-MW03 (4-6)	5/16/2007	4-6	BMDL	BMDL	BMDL	BMDL	5.67	2.61	0.385 J	4.07	2.49	2.03	BMDL	12.5	4.44	BMDL	BMDL	12.6	2.42	2.89	BMDL
USTG480-MW04 (4-6)	5/16/2007	4-6	0.562 J	BMDL	BMDL	BMDL	0.646	0.268	0.225	0.237	0.344	0.493	BMDL	1.11	0.412	BMDL	BMDL	0.160 J	BMDL	BMDL	BMDL
USTG480-MW05 (4-6)	5/16/2007	4-6	1.48 J	BMDL	BMDL	BMDL	7.43	4.12	0.502 J	3.11	3.78	2.59	BMDL	13.9	7.52	BMDL	BMDL	7.92	1.77	0.817 J	BMDL
USTG480-MW06 (4-6)	5/16/2007	4-6	BMDL	BMDL	BMDL	BMDL	6.51	2.64	0.620 J	4.98	2.73	3.12	BMDL	18.6	4.54	BMDL	BMDL	21.4	7.34	8.86	BMDL
USTG480-MW07(0-2)	7/5/2007	0-2	0.0163 J	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW08 (3-5)	7/5/2007	3-5	0.0330 J	0.00305 J	BMDL	0.00567 J	BMDL	BMDL	BMDL	0.0204	0.0029 J	0.0317	BMDL	BMDL	0.00691	BMDL	BMDL	BMDL	0.00289 J	0.0113 J	BMDL
USTG480-MW09 (4-6)	7/3/2007	4-6	BMDL	BMDL	BMDL	BMDL	6.61	2.75	BMDL	5.30	2.77	2.21	BMDL	17.9	5.87	BMDL	BMDL	22.1	7.37	4.529 J	BMDL
USTG480-MW10 (3-5)	7/5/2007	3-5	BMDL	0.0248 J	BMDL	BMDL	2.36	1.07	BMDL	2.09	0.996	1.25	BMDL	4.65	2.21	BMDL	BMDL	0.542	3.33	0.8465	BMDL
USTG480-MW11 (3-5)	7/10/2007	3-5	0.186 J	BMDL	BMDL	BMDL	0.295	0.188	BMDL	0.0184 J	0.0516 J	0.0459 J	0.282 J	0.606	0.13	0.0126 J	0.0275 J	BMDL	BMDL	BMDL	BMDL
USTG480-MW12 (3-5)	7/11/2007	3-5	0.0181 J	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW13 (3-5)	7/11/2007	3-5	0.167 J	0.00935 J	0.0366 J	BMDL	0.529	0.199	BMDL	0.276	0.152	0.412	0.207 J	0.630	0.314	BMDL	BMDL	1.22	0.354	0.1982 J	BMDL
USTG480-MW14 (3-5)	7/11/2007	3-5	0.0141 J	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW15 (2-4)	7/10/2007	2-4	0.0240 J	BMDL	BMDL	0.00331 J	BMDL	BMDL	BMDL	0.00285 J	BMDL	0.00514	BMDL	0.00385 J	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL

All results in milligrams per kilogram (mg/kg).
Bold results indicate reportable concentrations or concentrations above lowest established MSCC.
BMDL or < = Below Method Detection Limit.
BMDL* = Below Method Detection Limit. Method Detection Limit above lowest MSCC.
NE = None Established
J = Estimated concentration, below calibration range and above method detection limit
ft. BLS = Feet Below Land Surface
MSCC = Maximum Soil Contaminant Concentration



NOTES:
1. GIS Layers/Information provided by the MCB Camp Lejeune GIS Department, NCDOT and field survey.
2. Status of monitoring wells IR35-EMW04, USTCGFF-EMW04, IR35-MW23A and IR35-MW61A in the northeast portion of the site is unknown.



PROJECT
COMPREHENSIVE SITE ASSESSMENT
SITE G480
MARINE CORPS BASE
CAMP LEJEUNE, NC

TITLE
SITE PLAN WITH SOIL LABORATORY RESULTS - EPA METHOD 8260

FIGURE
6

JOB NO: 206-111

DATE: AUG 2008

SCALE: AS SHOWN

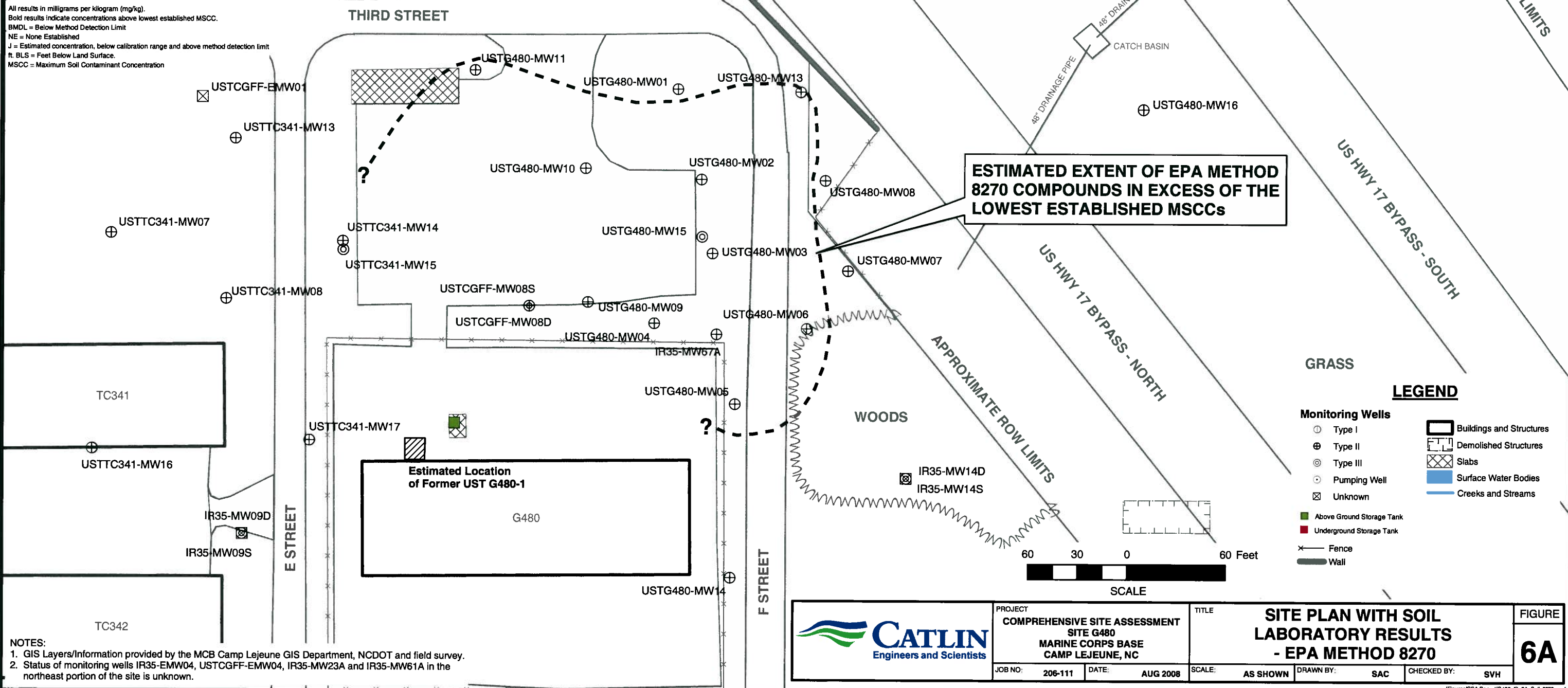
DRAWN BY: SAC

CHECKED BY: SVH

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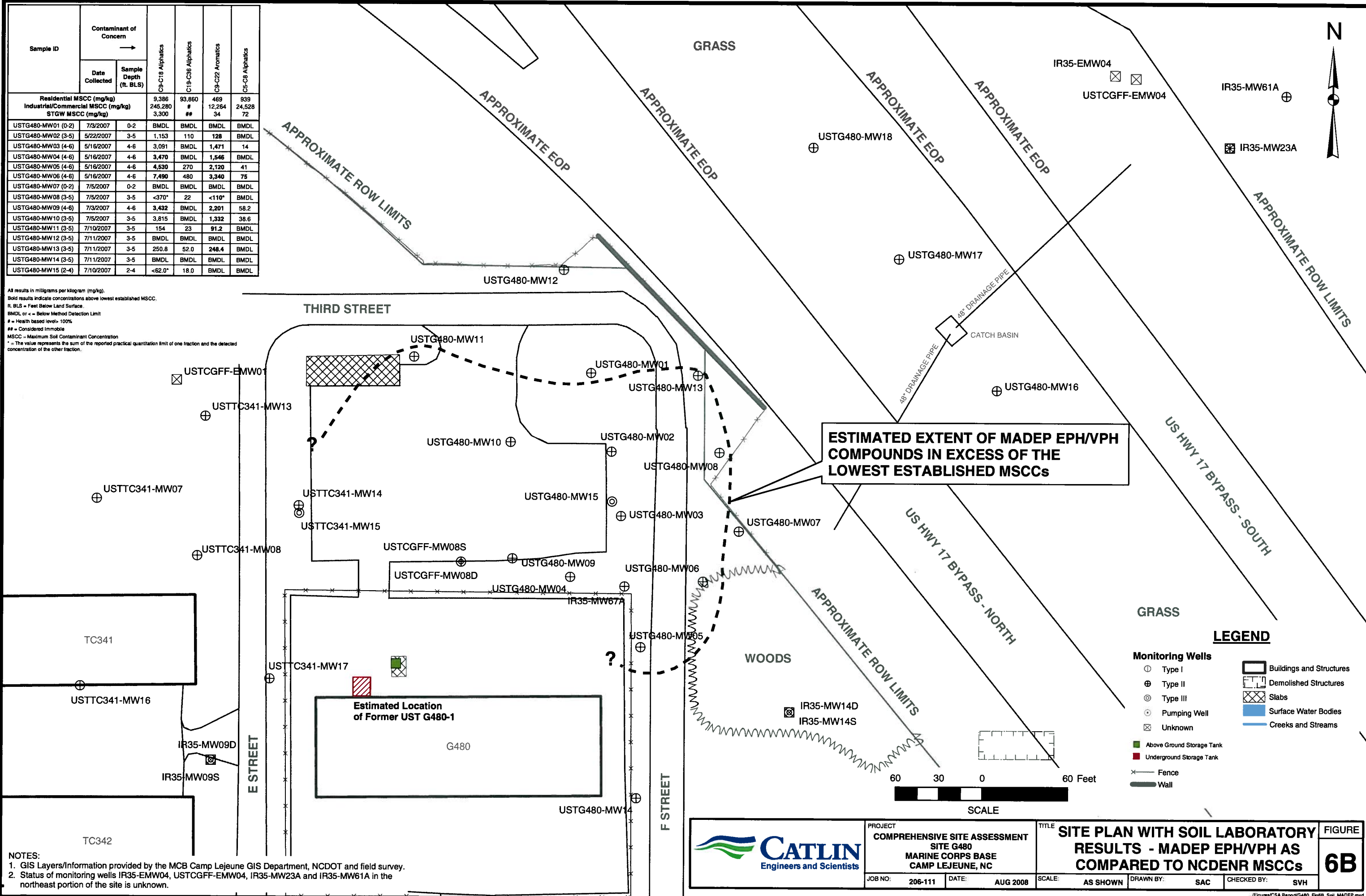
Sample ID	Contaminant of Concern		Acenaphthene	Anthracene	Dibenzofuran	Fluorene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	All Other EPA Method 8270 Analytes
	Date Collected	Sample Depth (ft. BLS)									
Residential MSCC (mg/kg)			940	4,600	62	620	63	313	469	469	Varies
Industrial/Commercial MSCC (mg/kg)			24,000	122,000	1,635	16,400	1,635	8,176	12,264	12,264	Varies
STGW MSCC (mg/kg)			8.2	1,000	4.7	44	1.7	0.58	60	290	Varies
USTG480-MW01 (0-2)	7/3/2007	0-2	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW02 (3-5)	5/22/2007	3-5	BMDL	BMDL	0.222 J	0.179 J	4.68	1.37	0.300 J	0.0880 J	BMDL
USTG480-MW03 (4-6)	5/16/2007	4-6	BMDL	1.44 J	3.69 J	3.69 J	56.3	12	9.71	BMDL	BMDL
USTG480-MW04 (4-6)	5/16/2007	4-6	1.90 J	9.03	4.14 J	4.42 J	56.1	8.56	8.76	BMDL	BMDL
USTG480-MW05 (4-6)	5/16/2007	4-6	5.38 J	4.43 J	9.38	10.4	116	24.8	22.7	BMDL	BMDL
USTG480-MW06 (4-6)	5/16/2007	4-6	2.63 J	2.02 J	5.39 J	5.73 J	75.0	19.8	11.3	BMDL	BMDL
USTG480-MW07 (0-2)	7/5/2007	0-2	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW08 (3-5)	7/5/2007	3-5	0.060 J	BMDL	BMDL	0.088 J	BMDL	BMDL	0.120 J	BMDL	BMDL
USTG480-MW09 (4-6)	7/3/2007	4-6	2.84 J	1.45 J	5.48 J	5.88 J	75.2	13.9	11.9	BMDL	BMDL
USTG480-MW10 (3-5)	7/5/2007	3-5	1.72 J	1.08 J	3.64	4.01	50.9	8.33	6.47	BMDL	BMDL
USTG480-MW11 (3-5)	7/10/2007	3-5	0.135 J	0.124 J	0.280 J	0.328 J	1.83	0.200 J	0.781	BMDL	BMDL
USTG480-MW12 (3-5)	7/11/2007	3-5	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW13 (3-5)	7/11/2007	3-5	BMDL	0.162 J	0.351	0.439	3.63	0.547	0.862	BMDL	BMDL
USTG480-MW14 (3-5)	7/11/2007	3-5	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW15 (2-4)	7/10/2007	2-4	BMDL	BMDL	BMDL	0.053 J	0.194 J	BMDL	0.113 J	BMDL	BMDL

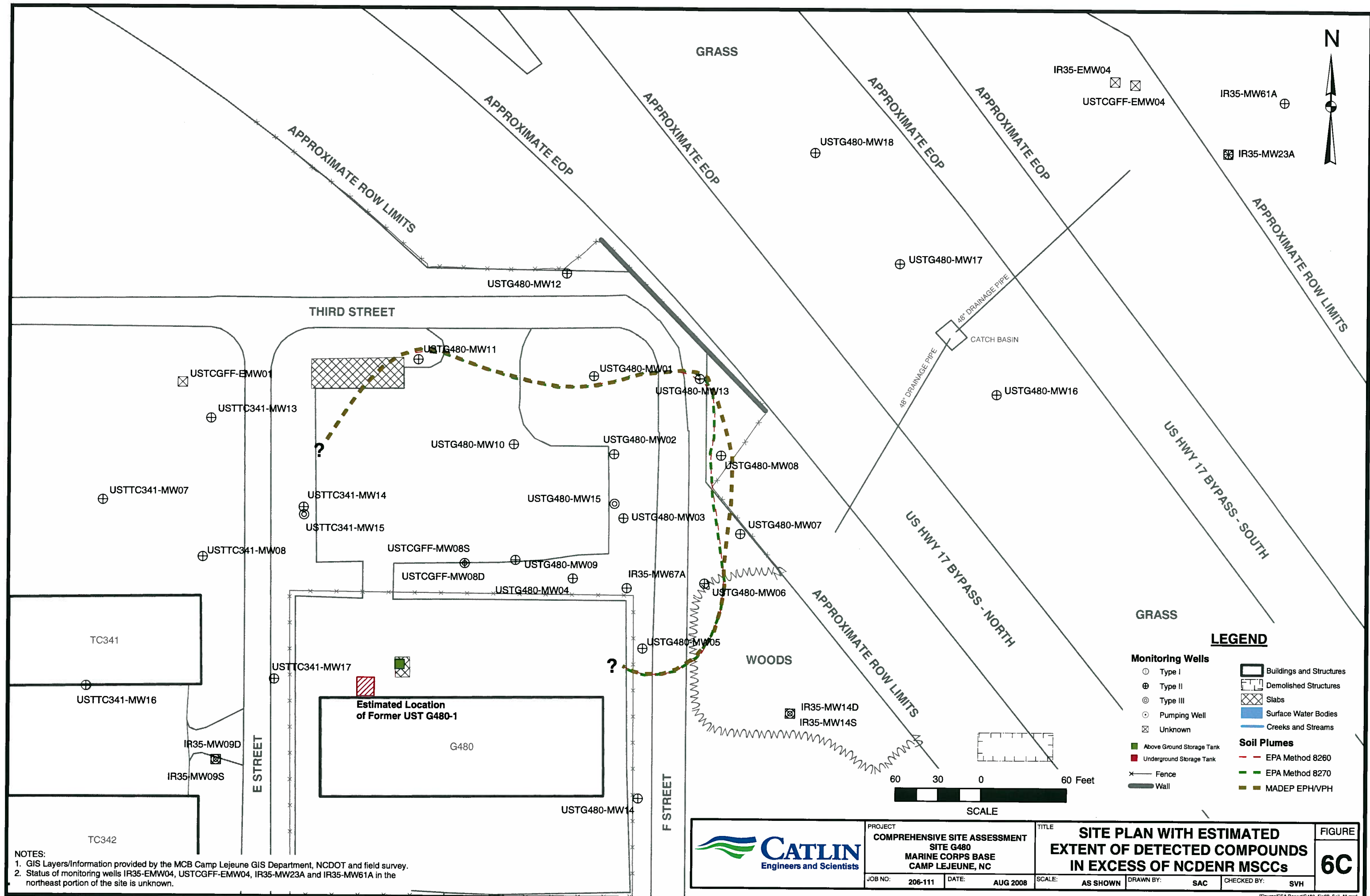
All results in milligrams per kilogram (mg/kg).
 Bold results indicate concentrations above lowest established MSCC.
 BMDL = Below Method Detection Limit
 NE = None Established
 J = Estimated concentration, below calibration range and above method detection limit
 ft. BLS = Feet Below Land Surface.
 MSCC = Maximum Soil Contaminant Concentration

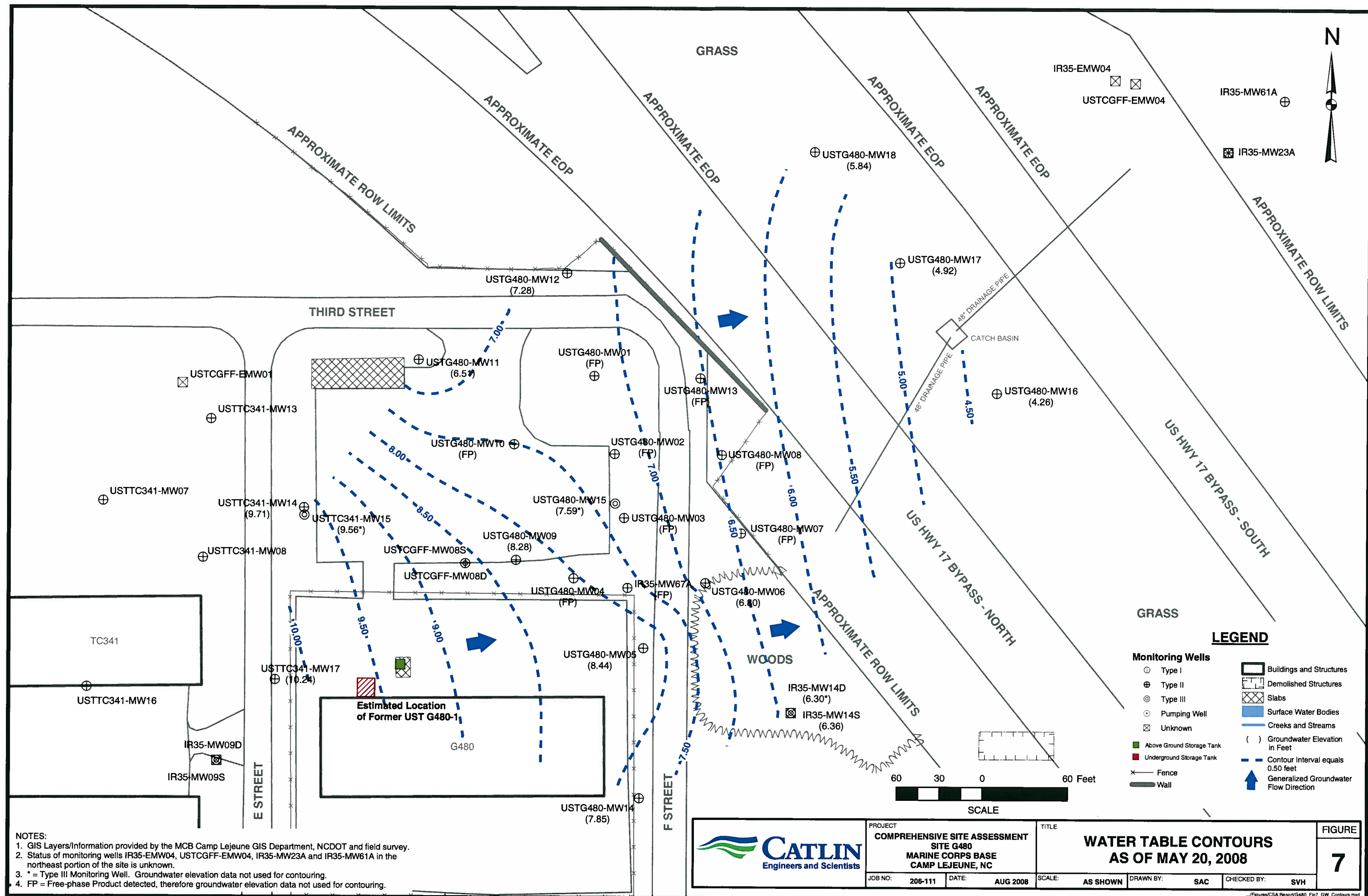


Sample ID	Contaminant of Concern		C9-C18 Aliphatics	C9-C16 Aliphatics	C9-C22 Aromatics	C9-C9 Aliphatics
	Date Collected	Sample Depth (ft. BLS)				
Residential MSCC (mg/kg)			9,386	93,850	469	939
Industrial/Commercial MSCC (mg/kg)			245,280	#	12,264	24,528
STGW MSCC (mg/kg)			3,300	#	34	72
USTG480-MW01 (0-2)	7/3/2007	0-2	BMDL	BMDL	BMDL	BMDL
USTG480-MW02 (3-5)	5/22/2007	3-5	1,153	110	128	BMDL
USTG480-MW03 (4-6)	5/16/2007	4-6	3,091	BMDL	1,471	14
USTG480-MW04 (4-6)	5/16/2007	4-6	3,470	BMDL	1,546	BMDL
USTG480-MW05 (4-6)	5/16/2007	4-6	4,530	270	2,120	41
USTG480-MW06 (4-6)	5/16/2007	4-6	7,490	480	3,340	75
USTG480-MW07 (0-2)	7/5/2007	0-2	BMDL	BMDL	BMDL	BMDL
USTG480-MW08 (3-5)	7/5/2007	3-5	<370*	22	<110*	BMDL
USTG480-MW09 (4-6)	7/3/2007	4-6	3,432	BMDL	2,201	58.2
USTG480-MW10 (3-5)	7/5/2007	3-5	3,615	BMDL	1,332	38.6
USTG480-MW11 (3-5)	7/10/2007	3-5	154	23	91.2	BMDL
USTG480-MW12 (3-5)	7/11/2007	3-5	BMDL	BMDL	BMDL	BMDL
USTG480-MW13 (3-5)	7/11/2007	3-5	250.8	52.0	248.4	BMDL
USTG480-MW14 (3-5)	7/11/2007	3-5	BMDL	BMDL	BMDL	BMDL
USTG480-MW15 (2-4)	7/10/2007	2-4	<62.0*	18.0	BMDL	BMDL

All results in milligrams per kilogram (mg/kg).
 Bold results indicate concentrations above lowest established MSCC.
 ft. BLS = Feet Below Land Surface.
 BMDL or < = Below Method Detection Limit
 # = Health based level- 100%
 ## = Considered Immobile
 MSCC = Maximum Soil Contaminant Concentration
 * = The value represents the sum of the reported practical quantitation limit of one fraction and the detected concentration of the other fraction.

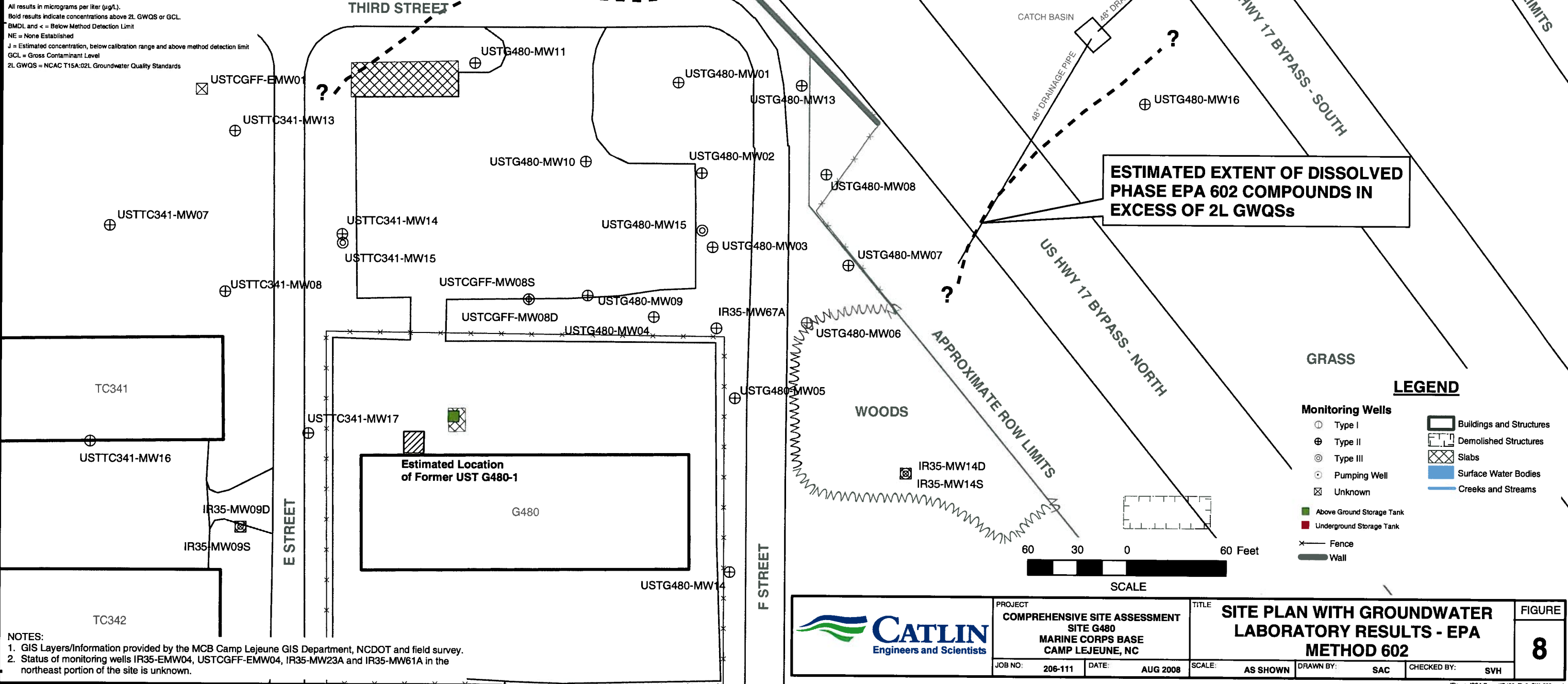






Well ID	Contaminant of Concern		Benzene	Ethylbenzene	Toluene	Total Xylenes
	Sample ID	Date Collected				
GCL (µg/L)			5,000	84,500	257,500	87,500
2L GWQS (µg/L)			1	550	1,000	530
USTG480-MW01	USTG480-MW01	7/16/2007	4.78 J	175	BMDL	<191.67
USTG480-MW01	USTG480-MW01 DUP	7/16/2007	5.31 J	176	BMDL	<190.67
USTG480-MW04	USTG480-MW04	7/16/2007	57.4	278	14.6	401
USTG480-MW05	USTG480-MW05	7/16/2007	13.9	283	BMDL	<81.94
USTG480-MW10	USTG480-MW10	7/16/2007	173	431	94.7	702
USTG480-MW11	USTG480-MW11	7/16/2007	4.16 J	113	BMDL	<5.82 J
USTG480-MW12	USTG480-MW12	7/16/2007	BMDL	BMDL	BMDL	BMDL
USTG480-MW13	USTG480-MW13	7/16/2007	94.8	325	BMDL	<194.7
USTG480-MW14	USTG480-MW14	7/16/2007	2.28	BMDL	BMDL	BMDL
USTG480-MW15	USTG480-MW15	7/16/2007	BMDL	BMDL	BMDL	BMDL
USTG480-MW16	USTG480-MW16	5/8/2008	BMDL	BMDL	0.212 J	BMDL
USTG480-MW17	USTG480-MW17	5/8/2008	61.5	179	9.84	260.6
USTG480-MW18	USTG480-MW18	5/8/2008	BMDL	2.21	0.850 J	<1.517 J
USTTC341-MW14	USTTC341-MW14	7/16/2007	9.7	39.2	BMDL	52.052 J
USTTC341-MW15	USTTC341-MW15	7/16/2007	BMDL	BMDL	BMDL	BMDL

All results in micrograms per liter (µg/L).
 Bold results indicate concentrations above 2L GWQS or GCL.
 BMDL and < = Below Method Detection Limit
 NE = None Established
 J = Estimated concentration, below calibration range and above method detection limit
 GCL = Gross Contaminant Level
 2L GWQS = NCAC T15A:02L Groundwater Quality Standards



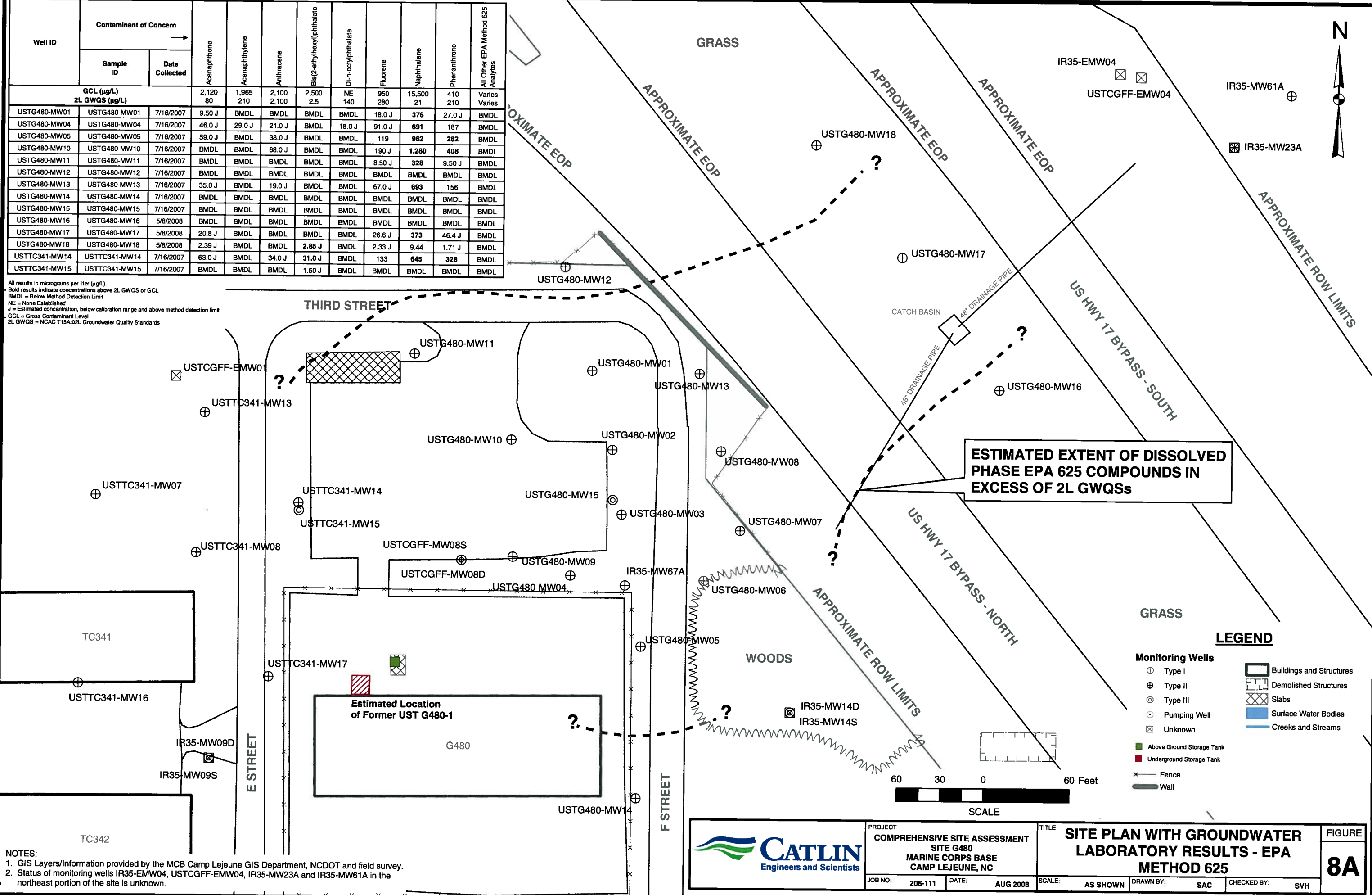
PROJECT		TITLE	
COMPREHENSIVE SITE ASSESSMENT		SITE G480	
		MARINE CORPS BASE	
		CAMP LEJEUNE, NC	
JOB NO:	206-111	DATE:	AUG 2008

SCALE:		DRAWN BY:		CHECKED BY:	
AS SHOWN		SAC		SVH	

FIGURE
8

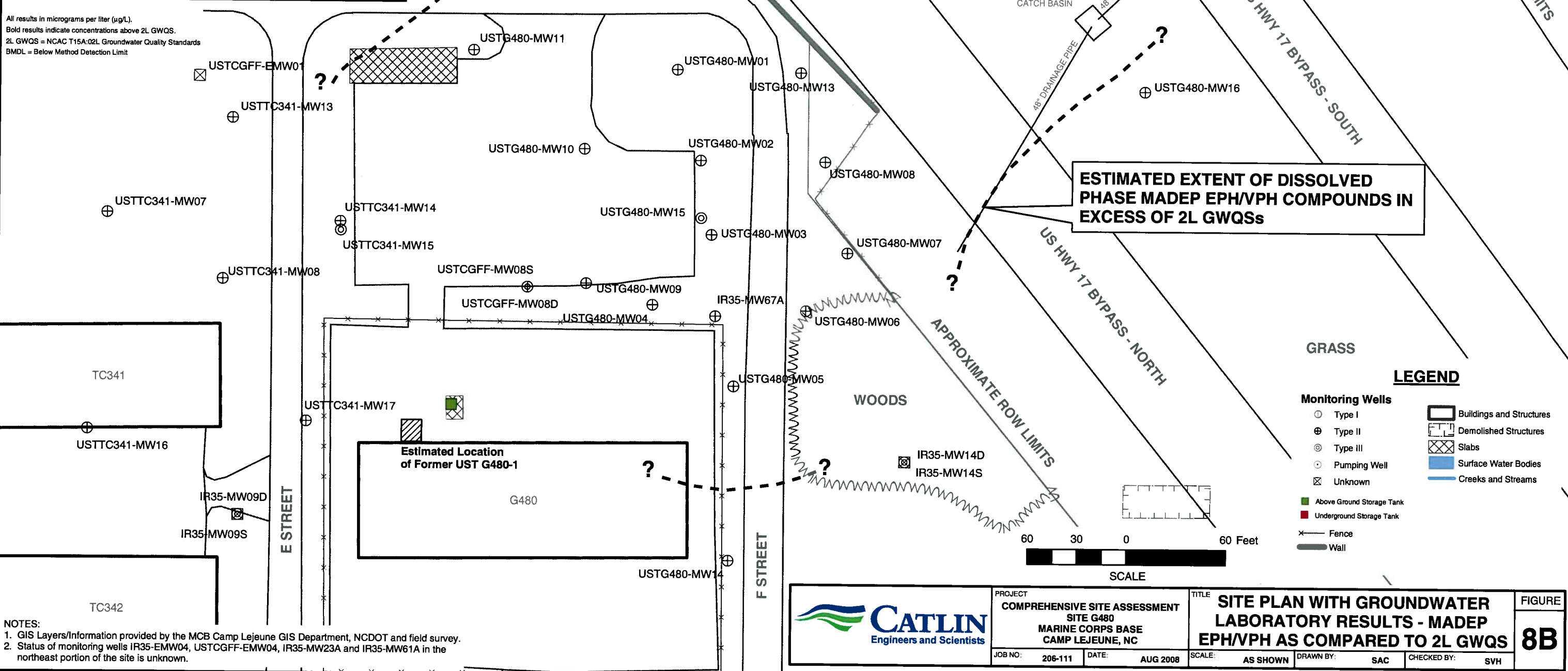
Well ID	Contaminant of Concern			Acenaphthene	Acenaphthylene	Anthracene	Ba(2-ethylhexyl)phthalate	Di-n-octylphthalate	Fluorene	Naphthalene	Phenanthrene	All Other EPA Method 625 Analytes
	Sample ID	Date Collected										
	GCL (µg/L)			2,120	1,965	2,100	2,500	NE	950	15,500	410	Varies
	2L GWQS (µg/L)			80	210	2,100	2.5	140	280	21	210	Varies
USTG480-MW01	USTG480-MW01	7/16/2007	9.50 J	BMDL	BMDL	BMDL	BMDL	BMDL	18.0 J	376	27.0 J	BMDL
USTG480-MW04	USTG480-MW04	7/16/2007	46.0 J	29.0 J	21.0 J	BMDL	18.0 J	91.0 J	691	187	BMDL	BMDL
USTG480-MW05	USTG480-MW05	7/16/2007	59.0 J	BMDL	38.0 J	BMDL	BMDL	119	962	262	BMDL	BMDL
USTG480-MW10	USTG480-MW10	7/16/2007	BMDL	BMDL	68.0 J	BMDL	BMDL	190 J	1,280	408	BMDL	BMDL
USTG480-MW11	USTG480-MW11	7/16/2007	BMDL	BMDL	BMDL	BMDL	BMDL	8.50 J	328	9.50 J	BMDL	BMDL
USTG480-MW12	USTG480-MW12	7/16/2007	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW13	USTG480-MW13	7/16/2007	35.0 J	BMDL	19.0 J	BMDL	BMDL	67.0 J	693	156	BMDL	BMDL
USTG480-MW14	USTG480-MW14	7/16/2007	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW15	USTG480-MW15	7/16/2007	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW16	USTG480-MW16	5/8/2008	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
USTG480-MW17	USTG480-MW17	5/8/2008	20.8 J	BMDL	BMDL	BMDL	BMDL	26.6 J	373	46.4 J	BMDL	BMDL
USTG480-MW18	USTG480-MW18	5/8/2008	2.39 J	BMDL	BMDL	2.85 J	BMDL	2.33 J	9.44	1.71 J	BMDL	BMDL
USTTC341-MW14	USTTC341-MW14	7/16/2007	63.0 J	BMDL	34.0 J	31.0 J	BMDL	133	645	328	BMDL	BMDL
USTTC341-MW15	USTTC341-MW15	7/16/2007	BMDL	BMDL	BMDL	1.50 J	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL

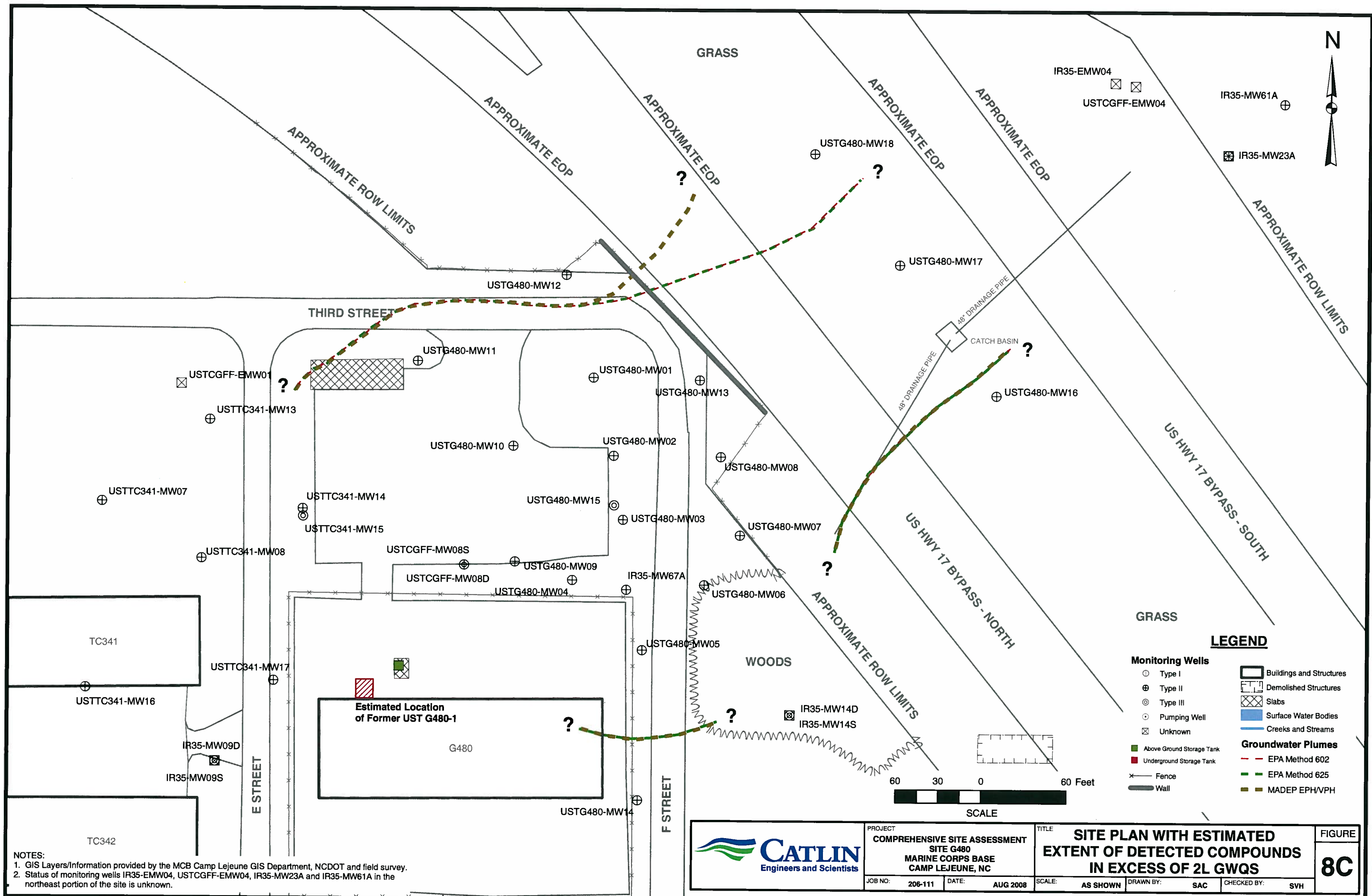
All results in micrograms per liter (µg/L).
 Bold results indicate concentrations above 2L GWQS or GCL.
 BMDL = Below Method Detection Limit
 NE = None Established
 J = Estimated concentration, below calibration range and above method detection limit
 GCL = Gross Contaminant Level
 2L GWQS = NCAC T15A.02L Groundwater Quality Standards



Well ID	Contaminant of Concern		C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C22 Aromatics	C5-C8 Aliphatics
	Sample ID	Date Collected				
2L GWQS (µg/L)			4,200	42,000	210	420
USTG480-MW01	USTG480-MW01	7/16/2007	5,600	200	79,100	170
USTG480-MW04	USTG480-MW04	7/16/2007	142,320	9,200	85,820	398
USTG480-MW05	USTG480-MW05	7/16/2007	50,950	3,400	33,520	466
USTG480-MW10	USTG480-MW10	7/16/2007	98,340	13,000	51,989	360
USTG480-MW11	USTG480-MW11	7/16/2007	687	BMDL	1,685	BMDL
USTG480-MW12	USTG480-MW12	7/16/2007	BMDL	BMDL	BMDL	BMDL
USTG480-MW13	USTG480-MW13	7/16/2007	40,210	BMDL	29,290	727
USTG480-MW14	USTG480-MW14	7/16/2007	BMDL	BMDL	BMDL	138
USTG480-MW15	USTG480-MW15	7/16/2007	BMDL	BMDL	BMDL	BMDL
USTG480-MW16	USTG480-MW16	5/8/2008	BMDL	BMDL	BMDL	BMDL
USTG480-MW17	USTG480-MW17	5/8/2008	5,180	289	8,280	297
USTG480-MW18	USTG480-MW18	5/8/2008	227	BMDL	444	BMDL
USTTC341-MW14	USTTC341-MW14	7/16/2007	141,820	6,800	7,150	418
USTTC341-MW15	USTTC341-MW15	7/16/2007	BMDL	BMDL	BMDL	BMDL

All results in micrograms per liter (µg/L).
 Bold results indicate concentrations above 2L GWQS.
 2L GWQS = NCAC T15A.02L Groundwater Quality Standards
 BMDL = Below Method Detection Limit





NOTES:
1. GIS Layers/Information provided by the MCB Camp Lejeune GIS Department, NCDOT and field survey.
2. Status of monitoring wells IR35-EMW04, USTCGFF-EMW04, IR35-MW23A and IR35-MW61A in the northeast portion of the site is unknown.

 CATLIN Engineers and Scientists	PROJECT COMPREHENSIVE SITE ASSESSMENT SITE G480 MARINE CORPS BASE CAMP LEJEUNE, NC	TITLE SITE PLAN WITH ESTIMATED EXTENT OF DETECTED COMPOUNDS IN EXCESS OF 2L GWQS	FIGURE 8C
	JOB NO: 206-111	DATE: AUG 2008	SCALE: AS SHOWN
	DRAWN BY: SAC	CHECKED BY: SVH	

APPENDICES

APPENDIX A

CATLIN

STANDARD METHODS OF INVESTIGATION

CATLIN STANDARD METHODS OF INVESTIGATION

(REVISED APRIL 2002)

1.0 DATA COLLECTION

1.1 BACKGROUND DATA

Background data and history information relevant to the site investigation is generated through numerous sources. These sources may include, but are not limited to, the following:

- Conversations with the client and regulatory officials involved with the incident.
- Review of pertinent regulatory correspondence.
- Review of previous and existing reports and other technical data.
- Review of available historical records.

1.2 SURVEYS AND POTENTIAL RECEPTOR DATA

Physical survey and potential receptor data are collected in accordance with the intended level of investigation. In general, the purpose is to collect sufficient information for site assessment and corrective action planning.

Individual receptors are identified and evaluated in the context of their potential for contaminant impact. Potential receptors of contamination can include surface water bodies, groundwater supply wells, wellhead protection areas, and subsurface building structures.

1.2.1 Horizontal Survey

Horizontal survey data was generated using a combination of accepted traditional field surveying and geographical positioning system (GPS) techniques incorporated into existing maps. All horizontal measurements were recorded in meters and referenced to the Universal Transverse Mercator (UTM) coordinate system and North American Datum 1983 (NAD 83) Continental United States (Conus) project datum.

1.2.2 Vertical Survey

A vertical survey is conducted at the site typically within an accuracy of 0.01 foot. The North American Vertical Datum 1988 (NAVD 88) datum plane as established with a survey grade geographical positioning

system (GPS) was used determining the elevation of existing monitoring wells used as temporary benchmarks (TBM). The vertical survey includes such points as top of all well casings, selected ground shots, important utility inverts, utility fluid levels, important surface water levels, and other items determined to be significant.

1.3 DRILLING AND MONITORING WELL/PIEZOMETER INSTALLATION

Necessary permits are applied for and obtained in accordance with federal, state, and local requirements prior to drilling or well construction activities. Additionally, the well locations are scanned for underground utilities prior to conducting intrusive subsurface activities. Wells are installed under applicable licensing requirements, and are designed and constructed in accordance with accepted standards and practices. Any wells purposely installed at off-site locations are permitted through appropriate right-of-entry agreements with all necessary property owners and/or their agents.

1.3.1 Drilling Methods and Subsurface Data Collection

Drilling is accomplished utilizing one or more of the following methods:

Auger Drilling

Auger drilling is the preferred, most often used method of subsurface investigation and is accomplished using a vehicle or trailer mounted drill rig. Continuous flight auger types used vary upon the site and situation; ranging from the 4-inch outside diameter solid stem to the 12-inch outside diameter hollow stem.

Auger type is selected based upon appropriateness and/or site-specific requirements.

Hand Augering

Hand augering is utilized when economically and scientifically feasible, or when no other method is suitable. Hand augers typically produce three-inch diameter holes and are generally limited to depths of less than 15 feet.

Direct Push

Direct push methods of subsurface investigation are used generally for soil screening purposes or collection of groundwater samples where permanent wells are not viable.

Other Methods

Other drilling methods, such as mud and air rotary, rock coring, cable tool, and large bucket augering are used when site conditions or project requirements dictate.

Regardless of the drilling method used, the drill rig(s) and all drilling tools are thoroughly cleaned between boreholes to prevent cross introduction of contaminants. Split spoon samples are collected and field-described at intervals of five feet or less, and cuttings are continuously monitored for organic vapors. Drill cuttings are containerized for off-site disposal or are spread on the ground surface in proximity to the well or boring in accordance with North Carolina Department of Environment and Natural Resources (NCDENR) requirements. A geologist or engineer, trained in using visual/manual techniques, is always present during drilling and is responsible for subsurface contaminant and geologic data collection. Soils are classified in general agreement with the Unified Soils Classification System (USCS).

1.3.2 Hydropunch Installation

Hydropunch penetrometers (Hydropunches) are used to delineate the spatial extent of dissolved and free-phase phase plumes. Soil borings are advanced to the appropriate depth and then the Hydropunch is advanced through the soil boring into undisturbed material. Groundwater samples are collected by pulling back on the body of the Hydropunch and allowing the groundwater to enter the screened portion of the sample chamber. Samples are retrieved using a decontaminated Teflon bailer or peristaltic pump.

1.3.3 Well Installation

Wells are typically constructed of threaded PVC casing and screen. No glues or cements are used in joining PVC components. Well diameter, slot sizes, and protective covers vary depending upon site-specific conditions or situation-specific requirements.

1.3.4 Well Development

Wells are developed by over-pumping or surging using appropriate pumps, blocks, or bailers. Through development, unwanted fine materials are removed from the natural formation surrounding the well. Well development will be performed no sooner than 24-hours after grouting is completed for the Type III wells. Water generated during development is containerized and properly disposed or is discharged onto the ground in proximity of the well in accordance with NCDENR requirements.

1.4 HYDROGEOLOGIC DATA COLLECTION

Data used to help characterize hydrogeologic conditions at a site are obtained through various procedures including, but not necessarily limited to, those described below:

1.4.1 Regional Geology

Information pertaining to the regional geologic framework is compiled from existing publications, maps, and scientific papers.

1.4.2 Site Geology

Shallow site geology is generally determined from field descriptions and borehole samples. Interpretations with regard to hydrogeologically important contacts, zones, fractures, faults, cleavage, and facies changes are made when possible.

1.4.3 Groundwater Occurrence and Characteristics

Groundwater data is obtained utilizing a number of methods and procedures, not limited to the general list below:

Well Water Levels

After well development, wells are allowed to stabilize for a minimum of 24 hours prior to measuring. Water level and free-phase product thickness (where applicable) measurements are performed using an electronic interface probe or steel tape with water/product finding pastes.

The specific gravity of any accumulated product is determined and used to calculate true hydraulic grade from measured water levels. This information is combined with vertical survey data to determine relative potentiometric surface elevations for all wells.

Aquifer Testing

Various aquifer tests may be used to make determinations of hydraulic conductivity. Slug or pumping tests are often used to characterize site hydrogeologic conditions and to develop remedial action alternatives utilizing appropriate pumping technologies.

Other Methods

Other methods may be deemed appropriate for determining various groundwater characteristics. These other methods may include nested well configurations and/or clustered piezometer installations; sieve or pipette analysis; fracture trace analysis; computer modeling; and geophysical logging.

1.5 PETROLEUM HYDROCARBON DATA COLLECTION

1.5.1 Collection Methods

Petroleum hydrocarbon data is obtained through various methods including, but not limited to, the following:

Field Analysis

- Direct thickness measurement of phase separated components using tapes and/or probes.
- Manual vapor analysis using a photoionization detector (PID) or flame ionization detector (FID).
- Detectable odor and visual observation.

Laboratory Analysis

- Laboratory analysis of phase-separated products.
- Laboratory vapor, soil, and groundwater analysis using appropriate EPA Methods.

1.5.2 Field Sampling

Field sampling procedures are performed in accordance with recommended protocol, accepted industry standards, and under appropriate chain-of-custody procedures. Generally, sampling procedures are as follows:

Product Samples

Product samples are obtained using clean equipment and containers. Each is shipped to the analytical laboratory in protective containers.

Soil Samples

Soil samples are immediately packed into clean containers, and refrigerated for shipment to the analytical laboratory.

Groundwater Samples

Groundwater samples are collected in accordance with the following procedures:

- Creeks/Lakes/Etc.

Grab samples are obtained.

- Domestic Wells

Wells are pumped for a time sufficient to completely purge the well and any pressure or holding tanks prior to sampling.

- Monitoring Wells

Water level measurements are made and well volumes calculated for each well.

Three well volumes are removed from each well using a thoroughly cleaned Teflon bailer or appropriate purging pump. If it is not possible to remove three volumes, due to very low yields, a minimum of one volume is removed prior to obtaining a sample.

Where analysis for metals is required, wells are typically sampled utilizing low flow techniques, which reduce turbidity and the potential for matrix interference.

Samples are collected and containerized in a manner that minimizes agitation and contact with the air.

Sampling records are field prepared.

Samples are labeled and proper chain of custody documents are maintained.

Samples are promptly protectively packed, refrigerated, and shipped to the analytical laboratory for analysis.

2.0 DATA EVALUATION

Data obtained as a result of the site investigation is compiled and evaluated and a report is prepared for client review and distribution to the appropriate agencies. Generally, specific data are evaluated as follows:

- Background data are evaluated in context with the suspected or confirmed problem.
- Survey data are utilized to develop site maps and to evaluate contaminant receptors.
- Well construction records are compiled and presented as part of the report. As-built information is used in combination with other data to evaluate subsurface conditions and monitoring well screen settings as they relate to the investigation.
- Subsurface drilling logs are used to develop geologic cross-sections, fence diagrams, isopachs, structure contours, or other constructions. Regional geologic data are used to obtain an overall framework.
- Hydrogeologic data are used to develop contour maps, flow nets and other constructions. The data is also used to calculate various hydrogeologic parameters that describe aquifer characteristics.
- Hydrocarbon data are utilized to develop various plume geometry and isoconcentration maps.

All data are compiled and utilized for making specific recommendations with regard to remedial action alternate.

APPENDIX B

HISTORICAL DATA, FREE-PHASE PRODUCT GAUGING INFORMATION, AND FREE-PHASE PRODUCT RECOVERY DATA



FREE PRODUCT RECOVERY

OSAGE PROJECT: G-480 - CTO 0011

LOGGED BY: Theresa Ellerman

OSAGE PROJECT # : **N40085-06-D-7006 - 0011**

DATE: 8-Feb-08 Friday

CLIENT'S NAME: NAVFAC MID LANT

FACILITY ID: G-480

INCIDENT NUMBER AND NAME: N/A

RECOVERY METHOD: Peristaltic Pump/tubing[illegible]



FREE PRODUCT RECOVERY

OSAGE PROJECT: G-480 - CTO 0011

LOGGED BY: Theresa Ellerman

OSAGE PROJECT # : N40085-06-D-7006 - 0011

DATE: 22-Feb-08 Friday

CLIENT'S NAME: NAVFAC MID LANT

FACILITY ID: G-480

INCIDENT NUMBER AND NAME: N/A

RECOVERY METHOD: Peristaltic Pump/tubing

[illegible]



FREE PRODUCT RECOVERY

OSAGE PROJECT: G-480 - CTO 0011

LOGGED BY: Theresa Ellerman

OSAGE PROJECT # : N40085-06-D-7006 - 0011

DATE: 13-Mar-08 Thursday

CLIENT'S NAME: NAVFAC MID LANT

FACILITY ID: G-480

INCIDENT NUMBER AND NAME: N/A

RECOVERY METHOD: Peristaltic Pump/tubing

[illegible]



FREE PRODUCT RECOVERY

OSAGE PROJECT: G-480 - CTO 0011

LOGGED BY: Theresa Ellerman

OSAGE PROJECT # : N40085-06-D-7006 - 0011

DATE: 27-Mar-08 Thursday

CLIENT'S NAME: NAVFAC MID LANT

FACILITY ID: G-480

INCIDENT NUMBER AND NAME: N/A

RECOVERY METHOD: Peristaltic Pump/tubing

[illegible]



FREE PRODUCT RECOVERY

OSAGE PROJECT: G-480 - CTO 0011

LOGGED BY: Theresa Ellerman

OSAGE PROJECT # : N40085-06-D-7006 - 0011

DATE: 10-Apr-08 Thursday

CLIENT'S NAME: NAVFAC MID LANT

FACILITY ID: G-480

INCIDENT NUMBER AND NAME: N/A

RECOVERY METHOD: Peristaltic Pump/tubing

[illegible]



FREE PRODUCT RECOVERY

OSAGE PROJECT: G-480 - CTO 0011

LOGGED BY: Theresa Ellerman

OSAGE PROJECT # : N40085-06-D-7006 - 0011

DATE: 24-Apr-08 Thursday

CLIENT'S NAME: NAVFAC MID LANT

FACILITY ID: G-480

INCIDENT NUMBER AND NAME: N/A

RECOVERY METHOD: Peristaltic Pump/tubing[illegible]



FREE PRODUCT RECOVERY

OSAGE PROJECT: G-480 - CTO 0011

LOGGED BY: Theresa Ellerman

OSAGE PROJECT # : N40085-06-D-7006 - 0011

DATE: 14-May-08 Wednesday

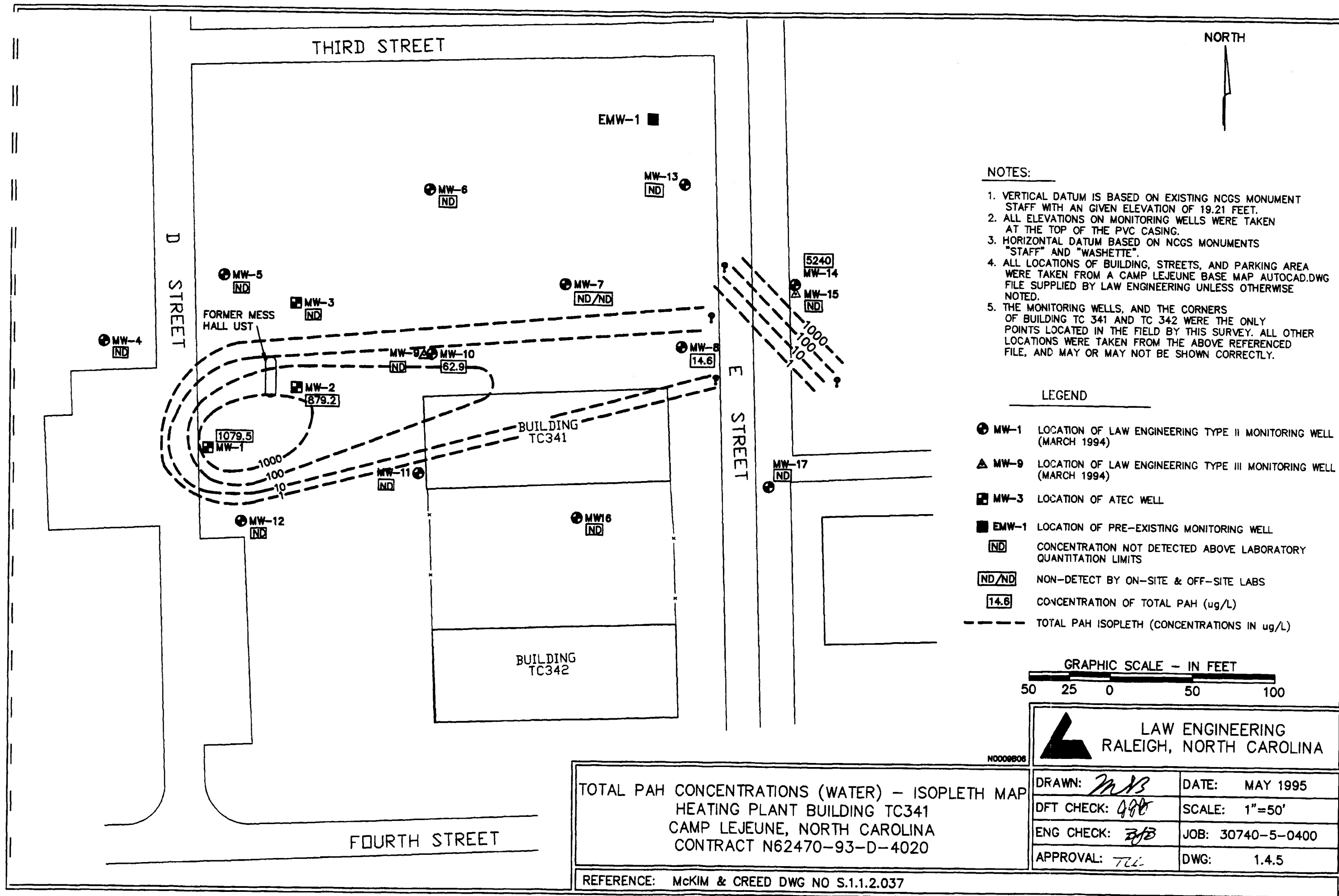
CLIENT'S NAME: NAVFAC MID LANT

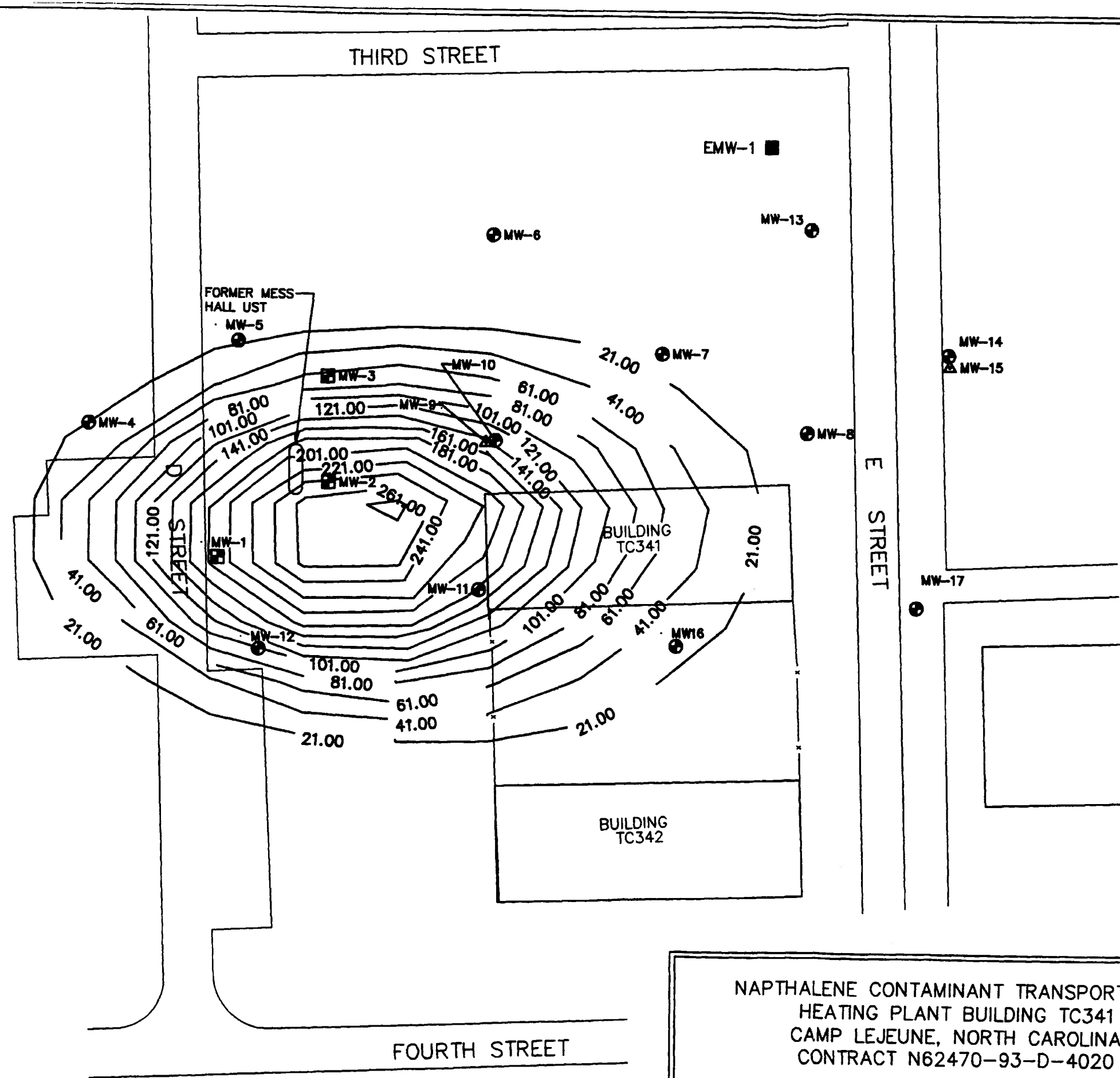
FACILITY ID: G-480

INCIDENT NUMBER AND NAME: N/A

RECOVERY METHOD: Peristaltic Pump/tubing

[illegible]



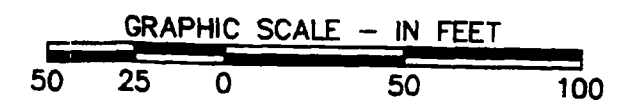


NOTES:

1. VERTICAL DATUM IS BASED ON EXISTING NCGS MONUMENT STAFF WITH AN GIVEN ELEVATION OF 19.21 FEET.
2. ALL ELEVATIONS ON MONITORING WELLS WERE TAKEN AT THE TOP OF THE PVC CASING.
3. HORIZONTAL DATUM BASED ON NCGS MONUMENTS "STAFF" AND "WASHETTE".
4. ALL LOCATIONS OF BUILDING, STREETS, AND PARKING AREA WERE TAKEN FROM A CAMP LEJEUNE BASE MAP AUTOCAD.DWG FILE SUPPLIED BY LAW ENGINEERING UNLESS OTHERWISE NOTED.
5. THE MONITORING WELLS, AND THE CORNERS OF BUILDING TC 341 AND TC 342 WERE THE ONLY POINTS LOCATED IN THE FIELD BY THIS SURVEY. ALL OTHER LOCATIONS WERE TAKEN FROM THE ABOVE REFERENCED FILE, AND MAY OR MAY NOT BE SHOWN CORRECTLY.
6. MODEL SIMULATION TIME IS 20 YEARS.

LEGEND

- MW-1 LOCATION OF LAW ENGINEERING TYPE II MONITORING WELL (MARCH 1994)
- ▲ MW-9 LOCATION OF LAW ENGINEERING TYPE III MONITORING WELL (MARCH 1994)
- MW-3 LOCATION OF ATEC WELL
- EMW-1 LOCATION OF PRE-EXISTING MONITORING WELL



LAW ENGINEERING
RALEIGH, NORTH CAROLINA

N0008T02

NAPHTHALENE CONTAMINANT TRANSPORT MAP
HEATING PLANT BUILDING TC341
CAMP LEJEUNE, NORTH CAROLINA
CONTRACT N62470-93-D-4020

REFERENCE: McKIM & CREED DWG NO S.1.1.2.037

DRAWN: <i>WBJ</i>	DATE: MAY 1995
DFT CHECK: <i>MB</i>	SCALE: 1"=50'
ENG CHECK: <i>RJB</i>	JOB: 30740-5-0400
APPROVAL: <i>TCL</i>	DWG: 5.2

APPENDIX C

BORING LOGS, MONITORING WELL CONSTRUCTION DETAILS, AND NORTH CAROLINA WELL CONSTRUCTION RECORDS

SHEET 1 OF 1

 Portland Cement  Bentonite Pellets  #2 Medium Sand

WELL LOG

CATLIN
ENGINEERS and SCIENTISTS
206-111
Wilmington, NC

SHEET 1 OF 1

PROJECT NO.: 206-111	STATE: N.C.	COUNTY: Onslow	LOCATION: MCB, Camp Geiger
PROJECT NAME: SITE G480		LOGGED BY: Tom Stetler	WELL ID: USTG480-MW02
		DRILLER: Bobbie D. Fowler	
NORTHING: 3846850.6	EASTING: 275533.1	CREW: Anthony Chance	
SYSTEM: UTM NAD83 (m)		BORING LOCATION:	T.O.C. ELEV.: 15.07
DRILL MACHINE: Diedrich D-50	METHOD: HSA	0 HOUR DTW: 7.6	TOTAL DEPTH: 15.0
START DATE: 5/22/07	FINISH DATE: 5/22/07	24 HOUR DTW:	WELL DEPTH: 14.0

DEPTH	BLOW COUNT				OVA (ppm)	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION	WELL DETAIL
	6in	6in	6in	6in								
									0.0	LAND SURFACE	15.1	0.0
												1.5
												2.5
3.0									3.0		12.1	
	3	7	7	9	1635	UST G480 -MW02 (3-5)*	SM			Lt. brownish gray, SILTY, f. SAND. Trace clay in top of sample. Slight HCO.		
									5.0		10.1	
8.0									8.0		7.1	
	2	5	5	5	>3982		SC/ SM			Gray to lt. brown, SILTY/CLAYEY, f. SAND. Poorly sorted. Strong HCO w/sheen on spoon.		
									10.0		5.1	
13.0									13.0		2.1	
	1	1	0	1	1276		SP			Gray to orange brown, f. SAND w/trace silt. Slight HCO.		13.5
									15.0		0.1	14.0
										Boring Terminated at Elevation 0.1 ft * Duplicate Taken		15.0

CATLIN BORING LOG 206-111 SITE G480 GPL TEST GDT 5/25/07



Portland Cement



Bentonite Pellets



#2 Medium Sand



Non RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources - Division of Water Quality

WELL CONTRACTOR CERTIFICATION #: 2869

1. WELL CONTRACTOR:

Bobbie D. Fowler

Well Contractor (Individual) Name

CATLIN Engineers and Scientists

Well Contractor Company Name

STREET ADDRESS 220 Old Dairy Road

Wilmington North Carolina 28405

City or Town State Zip Code

(910) - 452-5861

Area code - Phone number

2. WELL INFORMATION

SITE WELL ID #(if applicable): USTG480- MW03

STATE WELL PERMIT #(if applicable): N/A

DWQ or OTHER PERMIT # (if applicable): N/A

WELL USE (Check Applicable Box): Monitoring ☒ Municipal/Public ☐

Industrial/Commercial ☐ Agricultural ☐ Recovery ☐ Injection ☐

Irrigation ☐ Other ☐ (list use):

DATE DRILLED: 05/16/2007

TIME COMPLETED: 11:30 AM ☒ PM ☐

3. WELL LOCATION:

CITY: MCB, Camp Geiger COUNTY: Onslow

2nd & F Street,

(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING

Slope ☐ Valley ☐ Flat ☒ Ridge ☐ Other: _____

NORTHING: 3,846,837.0

EASTING: 275,535.2

UTM NAD83 (m)

Latitude/longitude source: ☒ GPS ☐ Topo. map

(Location of well must be shown on a USGS topo map and attached to this form if not using a GPS.)

4. FACILITY - is the name of the business where the well is located.

FACILITY ID #(if applicable) N/A

NAME OF FACILITY:

STREET ADDRESS: 2nd & F Street

MCB, Camp Geiger NC

City or Town State Zip Code

CONTACT PERSON: Mr. Andrew Smith

STREET ADDRESS: Attn: I&E/ EMD/ EQB/ PSC Box 20004

Camp Lejeune NC 28542-0004

City or Town State Zip Code

(910)- 451-9017

Area code - Phone number

5. WELL DETAILS:

a. TOTAL DEPTH: 15

b. DOES WELL REPLACE EXISTING WELL? YES ☐ NO ☒

c. WATER LEVEL Below Top of Casing: 7.50* FT.

(Use "+" if Above Top of Casing)

d. TOP OF CASING IS 0 FT. Above Land Surface*

* Top of casing terminated at/or below land surface requires a variance in accordance with 15A NCAC 2C.0118

e. YIELD (gpm): N/A METHOD OF TEST: N/A

f. DISINFECTION: Type N/A Amount: N/A

g. WATER ZONES (depth):

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

6. CASING:

Depth	Diameter	Thickness/Weight	Material
From 0 To 5 ft.	2"	Sch. 40	PVC
From _____ To _____ ft.	_____	_____	_____
From _____ To _____ ft.	_____	_____	_____

7. GROUT:

Depth	Material	Method
From 0.5 To 1.5 Ft.	Portland Cement	Surface Pour
From 1.5 To 3 Ft.	Bent. Pellets	Surface Pour
From _____ To _____ Ft.	_____	_____

8. SCREEN:

Depth	Diameter	Slot Size	Material
From 5 To 14.5 Ft.	2 in.	Slot .010in.	PVC
From _____ To _____ Ft.	_____ in.	_____ in.	_____
From _____ To _____ Ft.	_____ in.	_____ in.	_____

9. SAND/GRAVEL PACK:

Depth	Size	Material
From 3 To 15 Ft.	#2 Medium	Torpedo Sand
From _____ To _____ Ft.	_____	_____
From _____ To _____ Ft.	_____	_____

10. DRILLING LOG

From To Formation Description

SEE ATTACHED

11. REMARKS:

Permanent Type II Flush Mount.

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Bobbie D. Fowler
SIGNATURE OF CERTIFIED WELL CONTRACTOR

6-4-07
DATE

Bobbie D. Fowler
PRINTED NAME OF PERSON CONSTRUCTING THE WELL

WELL LOG

CATLIN
ENGINEERS and SCIENTISTS
206-111
Wilmington, NC

SHEET 1 OF 1

PROJECT NO.: 206-111	STATE: N.C.	COUNTY: Onslow	LOCATION: MCB, Camp Geiger
PROJECT NAME: SITE G480		LOGGED BY: Tom Stetler	WELL ID: USTG480-MW03
NORTHING: 3846837.0		EASTING: 275535.2	CREW: Anthony Chance
SYSTEM: UTM NAD83 (m)		BORING LOCATION:	T.O.C. ELEV.: 14.90
DRILL MACHINE: Diedrich D-50	METHOD: HSA	0 HOUR DTW: 7.50*	TOTAL DEPTH: 15.0
START DATE: 5/16/07	FINISH DATE: 5/16/07	24 HOUR DTW:	WELL DEPTH: 15.0

DEPTH	BLOW COUNT				OVA (ppm)	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION	WELL DETAIL
6in	6in	6in	6in									
									0.0	LAND SURFACE	14.9	0.0
												1.5
												3.0
4.0									4.0		10.9	
	2	5	8	9	>3395	UST G480-MW03 (4-6)	SC		5.0	Brown to drk. brown, CLAYEY, f. SAND. Strong HCO.	9.9	5.0
							SP		6.0	Lt. brown, f. SAND w/trace med. grains. Strong HCO.	8.9	
9.0									9.0		5.9	
	2	5	9	9	>3395		SC/SM		11.0	Orange brown, SILTY, f. SAND w/interbedded clayey sand. Strong HCO.	3.9	
13.0									13.0		1.9	
	0	1	1	1	115.6		SM			Dark greenish gray, SILTY, f. SAND. Strong HCO.		
									15.0		-0.1	
										Boring Terminated at Elevation -0.1 ft * = 0.70ft. Product		15.0

 Portland Cement
  Bentonite Pellets
  #2 Medium Sand

CATLIN BORING LOG 206-111 SITE G480.GPJ TEST GDT 5/25/07

WELL LOG

CATLIN
ENGINEERS and SCIENTISTS
206-111
Wilmington, NC

SHEET 1 OF 1

PROJECT NO.: 206-111	STATE: N.C.	COUNTY: Onslow	LOCATION: MCB, Camp Geiger
PROJECT NAME: SITE G480		LOGGED BY: Tom Stetler	WELL ID: USTG480-MW04
		DRILLER: Bobbie D. Fowler	
NORTHING: 3846824.0	EASTING: 275524.4	CREW: Anthony Chance	
SYSTEM: UTM NAD83 (m)		BORING LOCATION:	T.O.C. ELEV.: 15.39
DRILL MACHINE: Diedrich D-50	METHOD: HSA	0 HOUR DTW: 7.0	TOTAL DEPTH: 15.0
START DATE: 5/16/07	FINISH DATE: 5/16/07	24 HOUR DTW:	WELL DEPTH: 15.0

DEPTH	BLOW COUNT				OVA (ppm)	LAB.	U S C S	L O G	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION	WELL DETAIL
	6in	6in	6in	6in								
									0.0	LAND SURFACE	15.4	0.0
4.0	1	1	3	4	>3395	UST G480-MW04 (4-6)	SC/SM		4.0	Brown, interbedded CLAYEY, f. SAND and SILTY, f. SAND. Thin layers layers high plasticity clay. Strong HCO.	11.4	2" Sch. 40 PVC
									6.0		9.4	
9.0	2	4	5	6	>3395		SW		9.0	Lt. brown, cse. to f. SAND w/some silt. Poorly sorted. Strong HCO.	6.4	2" Slot .010 Sch. 40 PVC
									11.0		4.4	
13.0	2	2	2	2	>3395		SP		13.0	Lt. brown to orange brown, f. SAND w/trace silt. Well sorted. Strong HCO.	2.4	
									15.0		0.4	
										Boring Terminated at Elevation 0.4 ft		15.0



Portland Cement



Bentonite Pellets



#2 Medium Sand

CATLIN BORING LOG 206-111 SITE G480.GPJ TEST.GDT 5/25/07



Non RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources - Division of Water Quality

WELL CONTRACTOR CERTIFICATION #: 2869

1. WELL CONTRACTOR:

Bobbie D. Fowler

Well Contractor (Individual) Name

CATLIN Engineers and Scientists

Well Contractor Company Name

STREET ADDRESS 220 Old Dairy Road

Wilmington North Carolina 28405

City or Town State Zip Code

(910) - 452-5861

Area code - Phone number

2. WELL INFORMATION

SITE WELL ID #(if applicable): USTG480- MW05

STATE WELL PERMIT #(if applicable): N/A

DWQ or OTHER PERMIT # (if applicable): N/A

WELL USE (Check Applicable Box): Monitoring ☒ Municipal/Public ☐

Industrial/Commercial ☐ Agricultural ☐ Recovery ☐ Injection ☐

Irrigation ☐ Other ☐ (list use):

DATE DRILLED: 05/16/2007

TIME COMPLETED: 14:30 AM ☐ PM ☒

3. WELL LOCATION:

CITY: MCB, Camp Geiger COUNTY: Onslow

2nd & F Street

(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING

Slope ☐ Valley ☐ Flat ☒ Ridge ☐ Other:

NORTHING: 3,846,809.1

EASTING: 275,539.5

UTM NAD83 (m)

May be in degrees,
minutes, seconds, or
in a decimal format

Latitude/longitude source: ☒ GPS ☐ Topo. map

(Location of well must be shown on a USGS topo map and
attached to this form if not using a GPS.)

4. FACILITY - is the name of the business where the well is located.

FACILITY ID #(if applicable) N/A

NAME OF FACILITY:

STREET ADDRESS: 2nd & F Street

MCB, Camp Geiger NC

City or Town State Zip Code

CONTACT PERSON: Mr. Andrew Smith

STREET ADDRESS: Attn: I&E/ EMD/ EQB/ PSC Box 20004

Camp Lejeune NC 28542-0004

City or Town State Zip Code

(910)- 451-9017

Area code - Phone number

5. WELL DETAILS:

a. TOTAL DEPTH: 13

b. DOES WELL REPLACE EXISTING WELL? YES ☐ NO ☒

c. WATER LEVEL Below Top of Casing: 6.68 FT.

(Use "+" if Above Top of Casing)

d. TOP OF CASING IS 0 FT. Above Land Surface*

* Top of casing terminated at/or below land surface requires
a variance in accordance with 15A NCAC 2C.0118

e. YIELD (gpm): N/A METHOD OF TEST: N/A

f. DISINFECTION: Type N/A Amount: N/A

g. WATER ZONES (depth):

From To From To

From To From To

From To From To

6. CASING:

Depth	Diameter	Thickness/ Weight	Material
From 0 To 3 ft.	2"	Sch. 40	PVC
From To ft.			
From To ft.			

7. GROUT:

Depth	Material	Method
From 0.5 To 1 Ft.	Portland Cement	Surface Pour
From 1 To 2 Ft.	Bent. Pellets	Surface Pour
From To Ft.		

8. SCREEN:

Depth	Diameter	Slot Size	Material
From 3 To 12.5 Ft.	2 in.	Slot .010in.	PVC
From To Ft.	in.	in.	
From To Ft.	in.	in.	

9. SAND/GRAVEL PACK:

Depth	Size	Material
From 2 To 16 Ft.	#2 Medium	Torpedo Sand
From To Ft.		
From To Ft.		

10. DRILLING LOG

From To Formation Description

SEE
ATTACHED

11. REMARKS:

Permanent Type II Flush Mount.

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH
15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS
RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Bobbie D. Fowler 6-4-07
SIGNATURE OF CERTIFIED WELL CONTRACTOR DATE

Bobbie D. Fowler
PRINTED NAME OF PERSON CONSTRUCTING THE WELL

WELL LOG

CATLIN
ENGINEERS and SCIENTISTS
206-111
Wilmington, NC

SHEET 1 OF 1

PROJECT NO.: 206-111	STATE: N.C.	COUNTY: Onslow	LOCATION: MCB, Camp Geiger
PROJECT NAME: SITE G480	LOGGED BY: Tom Stetler	WELL ID: USTG480-MW05	
	DRILLER: Bobbie D. Fowler		
NORTHING: 3846809.1	EASTING: 275539.5	CREW: Anthony Chance	
SYSTEM: UTM NAD83 (m)	BORING LOCATION:	T.O.C. ELEV.: 15.34	
DRILL MACHINE: Diedrich D-50	METHOD: HSA	0 HOUR DTW: 6.7	TOTAL DEPTH: 16.0
START DATE: 5/16/07	FINISH DATE: 5/16/07	24 HOUR DTW:	WELL DEPTH: 13.0

DEPTH	BLOW COUNT				OVA (ppm)	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION	WELL DETAIL
6in	6in	6in	6in									
									0.0	LAND SURFACE	15.3	0.0
												2" Sch. 40 PVC
												1.0
												2.0
												3.0
4.0									4.0		11.3	
	3	3	5	5	>3395	UST G480-MW05 (4-6)	SM			Dark brownish gray, SILTY, f. SAND. Strong HCO.		
									6.0		9.3	
												2" Slot 010 Sch. 40 PVC
9.0									9.0		6.3	
	2	2	2	4	1438		SC/SM			Lt. brownish gray, SILTY/CLAYEY, f. SAND. Poorly sorted. Strong HCO.		
									11.0		4.3	
												12.5
14.0									14.0		1.3	
	2	4	5	2	2170		CL		14.5	Dark brown, SANDY CLAY. Med. to low plasticity.	0.8	
							SP			Lt. orange brown, f. SAND. Strong HCO.		
									16.0		-0.7	
										Boring Terminated at Elevation -0.7 ft		16.0

CATLIN BORING LOG 206-111 SITE G480.GPA TEST.GDT 5/25/07

 Portland Cement
  Bentonite Pellets
  #2 Medium Sand

WELL LOG

CATLIN
ENGINEERS and SCIENTISTS
206-111
Wilmington, NC

SHEET 1 OF 1

PROJECT NO.: 206-111	STATE: N.C.	COUNTY: Onslow	LOCATION: MCB, Camp Geiger
PROJECT NAME: SITE G480		LOGGED BY: Tom Stetler	WELL ID: USTG480-MW06
		DRILLER: Bobbie D. Fowler	
NORTHING: 3846823.1	EASTING: 275552.6	CREW: Anthony Chance	
SYSTEM: UTM NAD83 (m)		BORING LOCATION:	T.O.C. ELEV.: 14.35
DRILL MACHINE: Diedrich D-50	METHOD: HSA	0 HOUR DTW: 7.4	TOTAL DEPTH: 16.0
START DATE: 5/16/07	FINISH DATE: 5/22/07	24 HOUR DTW:	WELL DEPTH: 15.0

DEPTH	BLOW COUNT				OVA (ppm)	LAB.	U S C S	L O G	SOIL AND ROCK DESCRIPTION		ELEVATION	WELL DETAIL
	6in	6in	6in	6in								
									0.0 LAND SURFACE	14.4	0.0	
4.0									4.0	10.4		
	1	6	8	9	>3395	UST G480 -MW06 (4-6)	SC/ CL		Brown, SANDY CLAY to CLAYEY, f. SAND. Strong HCO.	4.8	9.6	
							SW		Lt. gray, f. SAND w/trace silt and med. cse. sand. Poorly sorted. Strong HCO.	6.0	8.4	
9.0									9.0	5.4		
	1	1	4	8	2040		SP/ SC		Interbedded gray, f. SAND and CLAYEY, f. SAND. Strong HCO.	11.0	3.4	
14.0									14.0	0.4		
	1	1	1	1	1761		SP		Lt. brown, f. SAND w/trace silt. Strong HCO.	16.0	-1.7	
									Boring Terminated at Elevation -1.7 ft			

Portland Cement
 Bentonite Pellets
 #2 Medium Sand

CATLIN BORING LOG 206-111 SITE G480.GPJ TEST GDT 5/25/07

SHEET 1 OF 1

 Portland Cement  Bentonite Pellets  #2 Medium Sand



Non RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources - Division of Water Quality

WELL CONTRACTOR CERTIFICATION #: 2869

1. WELL CONTRACTOR:

Bobbie D. Fowler

Well Contractor (Individual) Name

CATLIN Engineers and Scientists

Well Contractor Company Name

STREET ADDRESS 220 Old Dairy Road

Wilmington North Carolina 28405

City or Town State Zip Code

(910) - 452-5861

Area code - Phone number

2. WELL INFORMATION

SITE WELL ID #(if applicable): USTG480- MW08

STATE WELL PERMIT #(if applicable): N/A

DWQ or OTHER PERMIT # (if applicable): N/A

WELL USE (Check Applicable Box): Monitoring ☒ Municipal/Public ☐

Industrial/Commercial ☐ Agricultural ☐ Recovery ☐ Injection ☐

Irrigation ☐ Other ☐ (list use):

DATE DRILLED: 07/05/2007

TIME COMPLETED: 11:30 AM ☒ PM ☐

3. WELL LOCATION:

CITY: MCB, Camp Geiger COUNTY: Onslow

2nd & F Street,

(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING

Slope ☐ Valley ☐ Flat ☒ Ridge ☐ Other: _____

NORTHING: 3,846,850.5

EASTING: 275,556.0

UTM NAD83 (m)

May be in degrees,
minutes, seconds, or
in a decimal format

Latitude/longitude source: ☒ GPS ☐ Topo. map

(Location of well must be shown on a USGS topo map and
attached to this form if not using a GPS.)

4. FACILITY - is the name of the business where the well is located.

FACILITY ID #(if applicable) N/A

NAME OF FACILITY: Site G480

STREET ADDRESS: 2nd & F Street

MCB, Camp Geiger NC

City or Town State Zip Code

CONTACT PERSON: Mr. Andrew Smith

STREET ADDRESS: Attn: I&E/ EMD/ EQB/ PSC Box 20004

Camp Lejeune NC 28542-0004

City or Town State Zip Code

(910)- 451-9017

Area code - Phone number

5. WELL DETAILS:

a. TOTAL DEPTH: 13

b. DOES WELL REPLACE EXISTING WELL? YES ☐ NO ☒

c. WATER LEVEL Below Top of Casing: 7.82 FT.

(Use "+" if Above Top of Casing)

d. TOP OF CASING IS -0.69 FT. Above Land Surface*

* Top of casing terminated at/or below land surface requires
a variance in accordance with 15A NCAC 2C.0118

e. YIELD (gpm): N/A METHOD OF TEST: N/A

f. DISINFECTION: Type N/A Amount: N/A

g. WATER ZONES (depth):

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

6. CASING:

Depth	Diameter	Thickness/ Weight	Material
From 0.69 To 3 ft.	2"	Sch. 40	PVC
From _____ To _____ ft.	"		
From _____ To _____ ft.	"		

7. GROUT:

Depth	Material	Method
From 0.5 To 1 Ft.	Portland Cement	Surface Pour
From 1 To 2 Ft.	Bent. Pellets	Surface Pour
From _____ To _____ Ft.		

8. SCREEN:

Depth	Diameter	Slot Size	Material
From 3 To 12.5 Ft.	2 in.	Slot .010in.	PVC
From _____ To _____ Ft.	in.	in.	
From _____ To _____ Ft.	in.	in.	

9. SAND/GRAVEL PACK:

Depth	Size	Material
From 2 To 13 Ft.	#2 Medium	Torpedo Sand
From _____ To _____ Ft.		
From _____ To _____ Ft.		

10. DRILLING LOG

From _____ To _____ Formation Description

SEE
ATTACHED

11. REMARKS:

Permanent Type II Flush Mount.

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH
15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS
RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Bobbie D. Fowler 8-3-07
SIGNATURE OF CERTIFIED WELL CONTRACTOR DATE

Bobbie D. Fowler
PRINTED NAME OF PERSON CONSTRUCTING THE WELL

 Portland Cement Bentonite Pellets #2 Medium Sand

WELL LOG

CATLIN
ENGINEERS and SCIENTISTS
206-111
Wilmington, NC

SHEET 1 OF 1

PROJECT NO.: 206-111	STATE: N.C.	COUNTY: Onslow	LOCATION: MCB, Camp Geiger
PROJECT NAME: SITE G480		LOGGED BY: Tom Stetler	WELL ID: USTG480-MW09
		DRILLER: Bobbie D. Fowler	
NORTHING: 3846827.9	EASTING: 275512.1	CREW: Anthony Chance	
SYSTEM: UTM NAD83 (m)		BORING LOCATION:	T.O.C. ELEV.:
DRILL MACHINE: Diedrich D-50	METHOD: HSA	0 HOUR DTW: 7.6	TOTAL DEPTH: 13.0
START DATE: 7/3/07	FINISH DATE: 7/3/07	24 HOUR DTW: 7.6	WELL DEPTH: 13.0

DEPTH	BLOW COUNT				OVA (ppm)	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	WELL DETAIL
	6in	6in	6in	6in							
0.0									0.0	LAND SURFACE	0.0
									0.3	Topsoil	
									0.7	Deteriorated ASPHALT "rubble".	
	8	12	10	8	1217		SC		2.0	Brown, CLAYEY, f. to v.f. SAND. Mod. HCO.	1.0
											2.0
											3.0
4.0									4.0		
	5	6	8	11	>3923	USTG480-MW09 (4-6)	SP		6.0	Lt. brown, well sorted f. to v.f. SAND. Strong HCO.	
									9.0		
9.0											
	2	2	3	3	>3923		SW		11.0	Grayish brown, moderately sorted f. to med. SAND w/trace clay. Strong HCO.	
											12.5
											13.0
										Boring Terminated at Depth 13.0 ft	13.0

 Portland Cement
  Bentonite Pellets
  #2 Medium Sand

CATLIN BORING LOG 206-111 SITE G480.GPJ TEST.GDT 7/24/07



Non RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources - Division of Water Quality

WELL CONTRACTOR CERTIFICATION #: 2869

1. WELL CONTRACTOR:

Bobbie D. Fowler

Well Contractor (Individual) Name

CATLIN Engineers and Scientists

Well Contractor Company Name

STREET ADDRESS 220 Old Dairy Road

Wilmington North Carolina 28405

City or Town State Zip Code

(910) - 452-5861

Area code - Phone number

2. WELL INFORMATION

SITE WELL ID #(if applicable): USTG480- MW10

STATE WELL PERMIT #(if applicable): N/A

DWQ or OTHER PERMIT # (if applicable): N/A

WELL USE (Check Applicable Box): Monitoring ☒ Municipal/Public ☐

Industrial/Commercial ☐ Agricultural ☐ Recovery ☐ Injection ☐

Irrigation ☐ Other ☐ (list use):

DATE DRILLED: 07/05/2007

TIME COMPLETED: 10:30 AM ☒ PM ☐

3. WELL LOCATION:

CITY: MCB, Camp Geiger COUNTY: Onslow

2nd & F Street,

(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING

Slope ☐ Valley ☐ Flat ☒ Ridge ☐ Other: _____

NORTHING: 3,846,852.7

EASTING: 275,511.7

UTM NAD83 (m)

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source: ☒ GPS ☐ Topo. map

(Location of well must be shown on a USGS topo map and attached to this form if not using a GPS.)

4. FACILITY - is the name of the business where the well is located.

FACILITY ID #(if applicable) N/A

NAME OF FACILITY: Site G480

STREET ADDRESS: 2nd & F Street

MCB, Camp Geiger NC

City or Town State Zip Code

CONTACT PERSON: Mr. Andrew Smith

STREET ADDRESS: Attn: I&E/ EMD/ EQB/ PSC Box 20004

Camp Lejeune NC 28542-0004

City or Town State Zip Code

(910)- 451-9017

Area code - Phone number

5. WELL DETAILS:

a. TOTAL DEPTH: 13

b. DOES WELL REPLACE EXISTING WELL? YES ☐ NO ☒

c. WATER LEVEL Below Top of Casing: 7.45 FT.

(Use "+" if Above Top of Casing)

d. TOP OF CASING IS -0.58 FT. Above Land Surface*

* Top of casing terminated at/or below land surface requires a variance in accordance with 15A NCAC 2C.0118

e. YIELD (gpm): N/A METHOD OF TEST: N/A

f. DISINFECTION: Type N/A Amount: N/A

g. WATER ZONES (depth):

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

6. CASING:

Depth	Diameter	Thickness/Weight	Material
From 0.58 To 3 ft.	2"	Sch. 40	PVC
From _____ To _____ ft.	"		
From _____ To _____ ft.	"		

7. GROUT:

Depth	Material	Method
From 0.5 To 1 Ft.	Portland Cement	Surface Pour
From 1 To 2 Ft.	Bent. Pellets	Surface Pour
From _____ To _____ Ft.		

8. SCREEN:

Depth	Diameter	Slot Size	Material
From 3 To 12.5 Ft.	2 in.	Slot .010in.	PVC
From _____ To _____ Ft.	in.	in.	
From _____ To _____ Ft.	in.	in.	

9. SAND/GRAVEL PACK:

Depth	Size	Material
From 2 To 13 Ft.	#2 Medium	Torpedo Sand
From _____ To _____ Ft.		
From _____ To _____ Ft.		

10. DRILLING LOG

From To Formation Description

SEE ATTACHED

11. REMARKS:

Permanent Type II Flush Mount.

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Bobbie D. Fowler
SIGNATURE OF CERTIFIED WELL CONTRACTOR

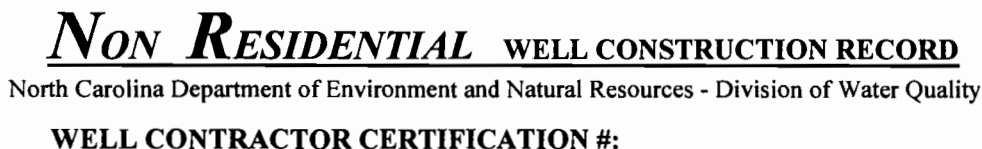
8-3-07
DATE

Bobbie D. Fowler
PRINTED NAME OF PERSON CONSTRUCTING THE WELL

SHEET 1 OF 1

 Portland Cement
  Bentonite Pellets
  #2 Medium Sand

CATLIN BORING LOG 206-111 SITE G480 GPJ TEST GDI 7/24/07



d. TOP OF CASING IS -0.6 **FT. Above Land Surface***
 * Top of casing terminated at/or below land surface requires
 a variance in accordance with 15A NCAC 2C.0118

e. YIELD (gpm): N/A **METHOD OF TEST:** N/A

f. DISINFECTION: Type N/A Amount: N/A

g. WATER ZONES (depth):
 From _____ To _____ From _____ To _____
 From _____ To _____ From _____ To _____
 From _____ To _____ From _____ To _____

6. CASING:

Depth	Diameter	Thickness/ Weight	Material
From <u>0.6</u> To <u>3</u> ft.	<u>2"</u>	<u>Sch. 40</u>	<u>PVC</u>
From _____ To _____ ft.	<u>"</u>	_____	_____
From _____ To _____ ft.	<u>"</u>	_____	_____

7. GROUT:

Depth	Material	Method
From <u>0</u> To <u>1</u> Ft.	<u>Portland Cement</u>	<u>Surface Pour</u>
From <u>1</u> To <u>2</u> Ft.	<u>Bent. Pellets</u>	<u>Surface Pour</u>
From _____ To _____ Ft.	_____	_____

8. SCREEN:

Depth	Diameter	Slot Size	Material
From <u>3</u> To <u>13</u> Ft.	<u>2 in.</u>	<u>Slot .010in.</u>	<u>PVC</u>
From _____ To _____ Ft.	_____ in.	_____ in.	_____
From _____ To _____ Ft.	_____ in.	_____ in.	_____

9. SAND/GRAVEL PACK:

Depth	Size	Material
From <u>2</u> To <u>13</u> Ft.	<u>#2 Medium</u>	<u>Torpedo Sand</u>
From _____ To _____ Ft.	_____	_____
From _____ To _____ Ft.	_____	_____

10. DRILLING LOG

From	To	Formation Description
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**SEE
ATTACHED**

11. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH
 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS
 RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

 SIGNATURE OF CERTIFIED WELL CONTRACTOR

 DATE

John Wood
 PRINTED NAME OF PERSON CONSTRUCTING THE WELL

SHEET 1 OF 1

 Portland Cement Bentonite Pellets #2 Medium Sand

CATLIN BORING LOG 206-111 SITE G480.GPJ TEST.GDT 7/24/07

SHEET 1 OF 1

 Portland Cement  Bentonite Pellets  #2 Medium Sand



Non RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources - Division of Water Quality

WELL CONTRACTOR CERTIFICATION #:

1. WELL CONTRACTOR:

John Wood

Well Contractor (Individual) Name

CATLIN Engineers and Scientists

Well Contractor Company Name

STREET ADDRESS 220 Old Dairy Road

Wilmington North Carolina 28405

City or Town State Zip Code

(910) - 452-5861

Area code - Phone number

2. WELL INFORMATION

SITE WELL ID #(if applicable): USTG480- MW14

STATE WELL PERMIT #(if applicable): N/A

DWQ or OTHER PERMIT # (if applicable): N/A

WELL USE (Check Applicable Box): Monitoring ☒ Municipal/Public ☐

Industrial/Commercial ☐ Agricultural ☐ Recovery ☐ Injection ☐

Irrigation ☐ Other ☐ (list use):

DATE DRILLED: 07/11/2007

TIME COMPLETED: 16:00 AM ☐ PM ☒

3. WELL LOCATION:

CITY: MCB, Camp Geiger COUNTY: Onslow

2nd & F Street,

(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING

Slope ☐ Valley ☐ Flat ☒ Ridge ☐ Other: _____

NORTHING: 3,846,777.0

EASTING: 275,538.6

UTM NAD83 (m)

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source: ☒ GPS ☐ Topo. map

(Location of well must be shown on a USGS topo map and attached to this form if not using a GPS.)

4. FACILITY - is the name of the business where the well is located.

FACILITY ID #(if applicable) N/A

NAME OF FACILITY: Site G480

STREET ADDRESS: 2nd & F Street

MCB, Camp Geiger NC

City or Town State Zip Code

CONTACT PERSON: Mr. Andrew Smith

STREET ADDRESS: Attn: I&E/ EMD/ EQB/ PSC Box 20004

Camp Lejeune NC 28542-0004

City or Town State Zip Code

(910)- 451-9017

Area code - Phone number

5. WELL DETAILS:

a. TOTAL DEPTH: 13

b. DOES WELL REPLACE EXISTING WELL? YES ☐ NO ☒

c. WATER LEVEL Below Top of Casing: 7.98 FT.

(Use "+" if Above Top of Casing)

d. TOP OF CASING IS -0.43 FT. Above Land Surface*

* Top of casing terminated at/or below land surface requires a variance in accordance with 15A NCAC 2C.0118

e. YIELD (gpm): N/A METHOD OF TEST: N/A

f. DISINFECTION: Type N/A Amount: N/A

g. WATER ZONES (depth):

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

6. CASING:

Depth	Diameter	Thickness/Weight	Material
From 0.43 To 3 ft.	2"	Sch. 40	PVC
From _____ To _____ ft.	"		
From _____ To _____ ft.	"		

7. GROUT:

Depth	Material	Method
From 0 To 1 Ft.	Portland Cement	Surface Pour
From 1 To 2 Ft.	Bent. Pellets	Surface Pour
From _____ To _____ Ft.		

8. SCREEN:

Depth	Diameter	Slot Size	Material
From 3 To 13 Ft.	2 in.	Slot .010in.	PVC
From _____ To _____ Ft.	in.	in.	
From _____ To _____ Ft.	in.	in.	

9. SAND/GRAVEL PACK:

Depth	Size	Material
From 2 To 13 Ft.	#2 Medium	Torpedo Sand
From _____ To _____ Ft.		
From _____ To _____ Ft.		

10. DRILLING LOG

From	To	Formation Description
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

SEE
ATTACHED

11. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR

DATE

John Wood

PRINTED NAME OF PERSON CONSTRUCTING THE WELL

SHEET 1 OF 1

 Portland Cement  Bentonite Pellets  #2 Medium Sand

CATLIN BORING LOG 206-111 SITE G480.GPJ TEST GDT 7/24/07

WELL LOG

CATLIN
ENGINEERS and SCIENTISTS
206-111
Wilmington, NC

SHEET 1 OF 3

PROJECT NO.: 206-111	STATE: N.C.	COUNTY: Onslow	LOCATION: MCB, Camp Geiger
PROJECT NAME: SITE G480	LOGGED BY: Tom Stetler	WELL ID: USTG480-MW15	
NORTHING: 3846840.0	EASTING: 275533.3	DRILLER: Bobbie D. Fowler	
		CREW: Anthony Chance	
SYSTEM: UTM NAD83 (m)	BORING LOCATION: Next to MW03	T.O.C. ELEV.: 14.91	
DRILL MACHINE: Diedrich D-50	METHOD: HSA/MR	0 HOUR DTW: NM	TOTAL DEPTH: 56.0
START DATE: 7/10/07	FINISH DATE: 7/12/07	24 HOUR DTW: 7.5	WELL DEPTH: 56.0

DEPTH	BLOW COUNT				OVA (ppm)	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION	WELL DETAIL
6in	6in	6in	6in									
0.0									0.0	LAND SURFACE	15.6	0.0
3	8	9	8	12.3								
2.0												
5	6	7	6	87.0	USTG480-MW15 (2-4)	SC				Brown, SILTY to CLAYEY f. to v.f. SAND. Moist. Slight HCO.		
4.0												
2	3	4	6	579.1					5.0		10.6	
6.0												
5	5	4	3	688.0		SP				Lt. grayish brown, med. to v.f. SAND. Tr. silt. Wet with product between 6 and 8' BLS. Saturated at 10' BLS. Strong HCO.		
8.0												
2	3	2	1	2020.0								
10.0									10.0		5.6	
4	7	5	6	925.0		SC			10.5	Same as above, but high clay component.	5.1	
12.0												
3	5	5	6	921.0		SP/SM				Orange-brown grading downward to lt. brown, SILTY v.f. SAND. Only tr. silt. Pronounced change in color from above. Wet. Strong HCO.		
14.0									14.0		1.6	
2	2	1	2	378.1		SP				Lt. grayish brown, v.f. SAND. Saturated. Strong HCO.		
16.0									16.0		-0.4	
0	0	3	7	15.0								
18.0												
6	8	9	15	13.8		SM				Gray, SILTY, calcareous f. to v.f. SAND. Wet. Strong HCO.		
									20.0		-4.4	

CATLIN BORING LOG 206-111 SITE G480.GPJ TEST GDT 7/24/07

 Portland Cement
  Bentonite Pellets
  #2 Medium Sand

WELL LOG

CATLIN
ENGINEERS and SCIENTISTS
206-111
Wilmington, NC

SHEET 2 OF 3

PROJECT NO.: 206-111	STATE: N.C.	COUNTY: Onslow	LOCATION: MCB, Camp Geiger
PROJECT NAME: SITE G480	LOGGED BY: Tom Stetler	WELL ID: USTG480-MW15	
NORTHING: 3846840.0	EASTING: 275533.3	DRILLER: Bobbie D. Fowler	
SYSTEM: UTM NAD83 (m)	BORING LOCATION: Next to MW03	CREW: Anthony Chance	
DRILL MACHINE: Diedrich D-50	METHOD: HSA/MR	0 HOUR DTW: NM	T.O.C. ELEV.: 14.91
START DATE: 7/10/07	FINISH DATE: 7/12/07	24 HOUR DTW: 7.5	TOTAL DEPTH: 56.0
			WELL DEPTH: 56.0

DEPTH	BLOW COUNT				OVA (ppm)	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION	WELL DETAIL
6in	6in	6in	6in									
20.0												
18	16	16	21	18.7								
22.0												
18	19	20	30	14.4								
24.0	50/6"			8.4					24.0		-8.4	
										No return. Assumed LIMESTONE cap rock at 24.5' BLS.	-9.4	
26.0									25.0			
29	19	22	23	10.6								
28.0												
19	18	15	23	27.4								
30.0												
26	20	15	23	29.7								
32.0												
16	38	21	18	21.9								
34.0												
11	14	20	17	24.2								
36.0												
14	17	16	17	24.2								
38.0												
13	15	16	13	26.8								
40.0												
15	17	12	14	15.8								

 Portland Cement
  Bentonite Pellets
  #2 Medium Sand

CATLIN BORING LOG 206-111 SITE G480.GPJ TEST GDI 7/24/07

WELL LOG

CATLIN
ENGINEERS and SCIENTISTS
206-111
Wilmington, NC

SHEET 3 OF 3

PROJECT NO.: 206-111	STATE: N.C.	COUNTY: Onslow	LOCATION: MCB, Camp Geiger
PROJECT NAME: SITE G480	LOGGED BY: Tom Stetler	WELL ID: USTG480-MW15	
NORTHING: 3846840.0	EASTING: 275533.3	DRILLER: Bobbie D. Fowler	
		CREW: Anthony Chance	
SYSTEM: UTM NAD83 (m)	BORING LOCATION: Next to MW03	T.O.C. ELEV.: 14.91	
DRILL MACHINE: Diedrich D-50	METHOD: HSA/MR	0 HOUR DTW: NM	TOTAL DEPTH: 56.0
START DATE: 7/10/07	FINISH DATE: 7/12/07	24 HOUR DTW: 7.5	WELL DEPTH: 56.0

DEPTH	BLOW COUNT				OVA (ppm)	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION	WELL DETAIL
	6in	6in	6in	6in								
42.0									42.0		-26.4	42.0
	6	7	8	12	1.9							43.0
44.0												
	3	4	6	6	2.5		CL/ML			Greenish-gray, SILTY CLAY to CLAYEY SILT. Moist. Low plasticity. No HCO. Tr. white shell fragments.		
46.0												
	3	4	5	6	2.7							
48.0									48.0		-32.4	
	3	5	5	7	2.4		SM/ML			Same as above, but higher component of v.f. SAND. Greenish-gray, low plasticity SANDY SILT to SILTY SAND. Moist to wet. No HCO.		50.0
50.0												
	3	7	16	32	0.0				51.5		-35.9	51.0
52.0												
	16	29	17	30	0.0		GW/SW			Gray, v. poorly sorted, CLAYEY to SILTY calcareous SAND and GRAVELS. Poorly indurated LIMESTONE. 54-56' BLS interval from drill cuttings.		
54.0												
					NM				56.0		-40.4	56.0
										Boring Terminated at Elevation -40.4 ft		

Portland Cement
 Bentonite Pellets
 #2 Medium Sand

CATLIN BORING LOG 206-111 SITE G480.GPJ TEST GDI 7/24/07



Non RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources - Division of Water Quality

WELL CONTRACTOR CERTIFICATION #: 2869

1. WELL CONTRACTOR:

Bobbie D. Fowler

Well Contractor (Individual) Name

CATLIN Engineers and Scientists

Well Contractor Company Name

STREET ADDRESS 220 Old Dairy Road

Wilmington North Carolina 28405

City or Town State Zip Code

(910) - 452-5861

Area code - Phone number

2. WELL INFORMATION

SITE WELL ID #(if applicable): USTG480- MW16

STATE WELL PERMIT #(if applicable): N/A

DWQ or OTHER PERMIT #(if applicable): N/A

WELL USE (Check Applicable Box): Monitoring ☒ Municipal/Public ☐

Industrial/Commercial ☐ Agricultural ☐ Recovery ☐ Injection ☐

Irrigation ☐ Other ☐ (list use):

DATE DRILLED: 5/17/08

TIME COMPLETED: 10:00 AM ☒ PM ☐

3. WELL LOCATION:

CITY: MCB, Camp Geiger COUNTY: Onslow

2nd & F Street,

(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING

Slope ☐ Valley ☐ Flat ☒ Ridge ☐ Other: _____

NORTHING: 3,846,863.8

EASTING: 275,614.7

UTM NAD83 (m)

May be in degrees,
minutes, seconds, or
in a decimal format

Latitude/longitude source: ☒ GPS ☐ Topo. map

(Location of well must be shown on a USGS topo map and
attached to this form if not using a GPS.)

4. FACILITY - is the name of the business where the well is located.

FACILITY ID #(if applicable) N/A

NAME OF FACILITY: Site G480

STREET ADDRESS: 2nd & F Street

MCB, Camp Geiger NC

City or Town State Zip Code

CONTACT PERSON: Mr. Andrew Smith

STREET ADDRESS: Attn: I&E/ EMD/ EQB/ PSC Box 20004

Camp Lejeune NC 28542-0004

City or Town State Zip Code

(910)- 451-9017

Area code - Phone number

5. WELL DETAILS:

a. TOTAL DEPTH: 15

b. DOES WELL REPLACE EXISTING WELL? YES ☐ NO ☒

c. WATER LEVEL Below Top of Casing: _____ FT.

(Use "+" if Above Top of Casing)

d. TOP OF CASING IS -0.32 FT. Above Land Surface*

* Top of casing terminated at/or below land surface requires
a variance in accordance with 15A NCAC 2C.0118

e. YIELD (gpm): N/A METHOD OF TEST: N/A

f. DISINFECTION: Type N/A Amount: N/A

g. WATER ZONES (depth):

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

6. CASING:

Depth	Diameter	Thickness/ Weight	Material
From 0.32 To 5 ft.	2"	Sch. 40	PVC
From _____ To _____ ft.	"		
From _____ To _____ ft.	"		

7. GROUT:

Depth	Material	Method
From 0 To 1 Ft.	Portland Cement	Surface Pour
From 1 To 3 Ft.	Bent. Pellets	Surface Pour
From _____ To _____ Ft.		

8. SCREEN:

Depth	Diameter	Slot Size	Material
From 5 To 15 Ft.	2 in.	Slot .010in.	PVC
From _____ To _____ Ft.	in.	in.	
From _____ To _____ Ft.	in.	in.	

9. SAND/GRAVEL PACK:

Depth	Size	Material
From 3 To 15 Ft.	#2 Medium	Torpedo Sand
From _____ To _____ Ft.		
From _____ To _____ Ft.		

10. DRILLING LOG

From To Formation Description

SEE
ATTACHED

11. REMARKS:

Permanent Type II Flush Mount.

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH
15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS
RECORD HAS BEEN PROVIDED TO THE WELL OWNER

Bobbie D. Fowler
SIGNATURE OF CERTIFIED WELL CONTRACTOR

5-21-08
DATE

Bobbie D. Fowler

PRINTED NAME OF PERSON CONSTRUCTING THE WELL

SHEET 1 OF 1

 Portland Cement Bentonite Pellets #2 Medium Sand

CATLIN BORING LOG 206-111 SITE G480 GPJ CATLIN.GDT 5/23/08



Non RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources - Division of Water Quality

WELL CONTRACTOR CERTIFICATION #: 2869

1. WELL CONTRACTOR:

Bobbie D. Fowler

Well Contractor (Individual) Name

CATLIN Engineers and Scientists

Well Contractor Company Name

STREET ADDRESS 220 Old Dairy Road

Wilmington North Carolina 28405

City or Town State Zip Code

(910) - 452-5861

Area code - Phone number

2. WELL INFORMATION

SITE WELL ID #(if applicable): USTG480- MW17

STATE WELL PERMIT #(if applicable): N/A

DWQ or OTHER PERMIT # (if applicable): N/A

WELL USE (Check Applicable Box): Monitoring ☒ Municipal/Public ☐

Industrial/Commercial ☐ Agricultural ☐ Recovery ☐ Injection ☐

Irrigation ☐ Other ☐ (list use):

DATE DRILLED: 5-7-08

TIME COMPLETED: 12:00 AM ☐ PM ☒

3. WELL LOCATION:

CITY: MCB, Camp Geiger COUNTY: Onslow

2nd & F Street

(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING

Slope ☐ Valley ☐ Flat ☒ Ridge ☐ Other:

NORTHING: 3,846,891.7

EASTING: 275,593.9

UTM NAD83 (m)

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source: ☒ GPS ☐ Topo. map

(Location of well must be shown on a USGS topo map and attached to this form if not using a GPS.)

4. FACILITY - is the name of the business where the well is located

FACILITY ID #(if applicable) N/A

NAME OF FACILITY: Site G480

STREET ADDRESS: 2nd & F Street

MCB, Camp Geiger NC

City or Town State Zip Code

CONTACT PERSON: Mr. Andrew Smith

STREET ADDRESS: Attn: I&E/ EMD/ EQB/ PSC Box 20004

Camp Lejeune NC 28542-0004

City or Town State Zip Code

(910)- 451-9017

Area code - Phone number

5. WELL DETAILS:

a. TOTAL DEPTH: 15

b. DOES WELL REPLACE EXISTING WELL? YES ☐ NO ☒

c. WATER LEVEL Below Top of Casing: FT.

(Use "+" if Above Top of Casing)

d. TOP OF CASING IS -0.29 FT. Above Land Surface*

* Top of casing terminated at/or below land surface requires a variance in accordance with 15A NCAC 2C.0118

e. YIELD (gpm): N/A METHOD OF TEST: N/A

f. DISINFECTION: Type N/A Amount: N/A

g. WATER ZONES (depth):

From To From To

From To From To

From To From To

6. CASING:

Depth	Diameter	Thickness/Weight	Material
From 0.29 To 5 ft.	2"	Sch. 40	PVC
From To ft.	"		
From To ft.	"		

7. GROUT:

Depth	Material	Method
From 0 To 1 Ft.	Portland Cement	Surface Pour
From 1 To 3 Ft.	Bent. Pellets	Surface Pour
From To Ft.		

8. SCREEN:

Depth	Diameter	Slot Size	Material
From 5 To 15 Ft.	2 in.	Slot .010in.	PVC
From To Ft.	in.	in.	
From To Ft.	in.	in.	

9. SAND/GRAVEL PACK:

Depth	Size	Material
From 3 To 15 Ft.	#2 Medium	Torpedo Sand
From To Ft.		
From To Ft.		

10. DRILLING LOG

From To Formation Description

SEE ATTACHED

11. REMARKS:

Permanent Type II Flush Mount.

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER

Bobbie D. Fowler 5-21-08
SIGNATURE OF CERTIFIED WELL CONTRACTOR DATE

Bobbie D. Fowler
PRINTED NAME OF PERSON CONSTRUCTING THE WELL

CATLIN BORING LOG 206-111 SITE G480.GPJ CATLIN.GDT 5/23/08

 #2 Medium Sand

APPENDIX D

MONITORING WELL SAMPLING RECORDS

APPENDIX D

MONITORING WELL SAMPLING RECORDS

Comprehensive Site Assessment
Site G480Marine Corps Base
Camp Lejeune, NC

WELL IDENTIFICATION	USTG480-MW01	USTG480-MW04	USTG480-MW05	USTG480-MW10	USTG480-MW11
DATE SAMPLED	07/16/07	07/16/07	07/16/07	07/16/07	07/16/07
TIME SAMPLED	01:20	15:00	14:10	12:45	11:20
SAMPLED BY	T. Stetler	T. Stetler	T. Stetler	T. Stetler	T. Stetler
WELL DIAMETER	2"	2"	2"	2"	2"
WELL DEPTH - (A)*	14	15	13	13	13
DEPTH TO WATER - (B)	7.58'	7.55'	7.43'	6.59'	7.25'
(A-B) FT. WATER IN WELL - (C)	5.61	7.05	5.17	5.83	5.22
VOLUME PER FT. - (D)	0.163 gal.	0.163 gal.	0.163 gal.	0.163 gal.	0.163 gal.
(CxD) ONE WELL VOLUME - (E)	0.91 gal.	1.15 gal.	0.84 gal.	0.95 gal.	0.85 gal.
(3xE) THREE WELL VOLUMES - (F)	2.73 gal.	3.45 gal.	2.52 gal.	2.85 gal.	2.55 gal.
BAILER VOLUME** - (G)	0.24 gal.	0.24 gal.	0.24 gal.	0.24 gal.	0.24 gal.
(F/G) BAILS REQUIRED**	11.4	14.4	10.5	11.9	10.6
AMOUNT REMOVED	20 bails	20 bails	20 bails	20 bails	20 bails
TURBIDITY (clear, slight, moderate, high)	MODERATE	MODERATE	MODERATE	HIGH	HIGH
ANALYSIS and / or COMMENTS	Duplicate				
	Taken				

WELL VOLUMES gal/ft

1" WELL = 0.045
 2" WELL = 0.163
 4" WELL = 0.661
 6" WELL = 1.501

BAILER VOLUMES gal/bail

3' x 1.5" = 0.24
 4' x 1.5" = 0.37

* - Includes adjustment of casing height/depth.

** - An entry of "PUMP" indicates that bailers were not used to develop/purge the well and that a pump was used to remove the volume indicated.

APPENDIX D

MONITORING WELL SAMPLING RECORDS

Comprehensive Site Assessment
Site G480

Marine Corps Base
Camp Lejeune, NC

WELL IDENTIFICATION	USTG480-MW12	USTG480-MW13	USTG480-MW14	USTG480-MW15	USTG480-MW16
DATE SAMPLED	07/16/07	07/16/07	07/16/07	07/16/07	05/07/08
TIME SAMPLED	11:35	13:40	12:10	15:45	13:30
SAMPLED BY	T. Stetler	T. Stetler	T. Stetler	T. Stetler	J. Heter
WELL DIAMETER	2"	2"	2"	2"	2"
WELL DEPTH - (A)*	13	13	13	56	15
DEPTH TO WATER - (B)	7.32'	7.59'	7.98'	7.46'	7.00'
(A-B) FT. WATER IN WELL - (C)	5.08	4.94	4.59	47.89	7.69
VOLUME PER FT. - (D)	0.163 gal.	0.163 gal.	0.163 gal.	0.163 gal.	0.163 gal.
(CxD) ONE WELL VOLUME - (E)	0.83 gal.	0.81 gal.	0.75 gal.	7.81 gal.	1.25 gal.
(3xE) THREE WELL VOLUMES - (F)	2.49 gal.	2.43 gal.	2.25 gal.	23.43 gal.	3.75 gal.
BAILER VOLUME** - (G)	0.24 gal.	0.24 gal.	0.24 gal.	PUMP	0.24 gal.
(F/G) BAILS REQUIRED**	10.4	10.1	9.4	N/A	15.6
AMOUNT REMOVED	20 bails	20 bails	15 bails	25 gal.	21 bails
TURBIDITY (clear, slight, moderate, high)	MODERATE	MODERATE	HIGH	CLEAR	SLIGHT
ANALYSIS and / or COMMENTS					

WELL VOLUMES gal/ft

1" WELL = 0.045

2" WELL = 0.163

4" WELL = 0.661

6" WELL = 1.501

BAILER VOLUMES gal/bail

3' x 1.5" = 0.24

4' x 1.5" = 0.37

* - Includes adjustment of casing height/depth.

** - An entry of "PUMP" indicates that bailers were not used to develop/purge the well and that a pump was used to remove the volume indicated.

APPENDIX D

MONITORING WELL SAMPLING RECORDS

Comprehensive Site Assessment
Site G480Marine Corps Base
Camp Lejeune, NC

WELL IDENTIFICATION	USTG480-MW17	USTG480-MW18	USTTC341-MW14	USTTC341-MW15	
DATE SAMPLED	05/07/08	05/07/08	07/16/07	07/16/07	
TIME SAMPLED	13:00	11:45	10:30	10:50	
SAMPLED BY	J. Heter	J. Heter	T. Stetler	T. Stetler	
WELL DIAMETER	2"	2"	2"	2"	
WELL DEPTH - (A)*	15	15	13	30	
DEPTH TO WATER - (B)	5.18'	7.03'	7.15'	7.18'	
(A-B) FT. WATER IN WELL - (C)	9.54	7.79	5.85	22.82	
VOLUME PER FT. - (D)	0.163 gal.	0.163 gal.	0.163 gal.	0.163 gal.	
(CxD) ONE WELL VOLUME - (E)	1.56 gal.	1.27 gal.	0.95 gal.	3.72 gal.	
(3xE) THREE WELL VOLUMES - (F)	4.68 gal.	3.81 gal.	2.85 gal.	11.16 gal.	
BAILER VOLUME** - (G)	0.24 gal.	0.24 gal.	0.24 gal.	0.24 gal.	
(F/G) BAILS REQUIRED**	19.5	15.9	11.9	46.5	
AMOUNT REMOVED	25 bails	17 bails	7 bails	50 bails	
TURBIDITY (clear, slight, moderate, high)	SLIGHT	SLIGHT	CLEAR	SLIGHT	
ANALYSIS and / or COMMENTS			Bailed dry		

WELL VOLUMES gal/ft

1" WELL = 0.045

2" WELL = 0.163

4" WELL = 0.661

6" WELL = 1.501

BAILER VOLUMES gal/bail

3' x 1.5" = 0.24

4' x 1.5" = 0.37

* - Includes adjustment of casing height/depth.

** - An entry of "PUMP" indicates that bailers were not used to develop/purge the well and that a pump was used to remove the volume indicated.

APPENDIX E

**LABORATORY REPORTS AND
CHAIN-OF-CUSTODY DOCUMENTATION**



Mr. Steve Hudson
Richard Catlin & Associates
P.O. Box 10279
Wilmington NC 28404-0279

Report Number: G128-1957

Client Project: Site G480 CSA

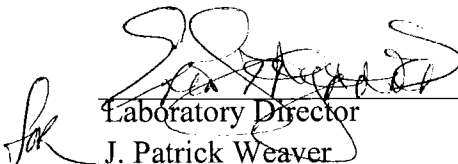
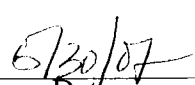
Dear Mr. Hudson:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call SGS/Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS/Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
SGS/Paradigm Analytical Laboratories, Inc.

 
Laboratory Director Date
J. Patrick Weaver

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW03(4-6)

Client Project ID: Site G480 CSA

Lab Sample ID: G128-1957-1D

Lab Project ID: G128-1957

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 5/16/2007 10:40

Date Received: 5/17/2007

Matrix: Soil

Sample Amount: 5.98 g

%Solids: 90.2

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	11.6	0.505	500	5/27/2007	
Benzene	BQL	0.463	0.0987	500	5/27/2007	
Bromobenzene	BQL	0.463	0.137	500	5/27/2007	
Bromochloromethane	BQL	0.463	0.0968	500	5/27/2007	
Bromodichloromethane	BQL	0.463	0.0908	500	5/27/2007	
Bromoform	BQL	0.463	0.0922	500	5/27/2007	
Bromomethane	BQL	0.463	0.182	500	5/27/2007	
2-Butanone	BQL	11.6	0.709	500	5/27/2007	
n-Butylbenzene	5.67	0.463	0.227	500	5/27/2007	
sec-Butylbenzene	2.61	0.463	0.200	500	5/27/2007	
tert-Butylbenzene	BQL	0.463	0.181	500	5/27/2007	
Carbon disulfide	BQL	0.463	0.0927	500	5/27/2007	
Carbon tetrachloride	BQL	0.463	0.128	500	5/27/2007	
Chlorobenzene	BQL	0.463	0.134	500	5/27/2007	
Chloroethane	BQL	0.463	0.263	500	5/27/2007	
Chloroform	BQL	0.463	0.0945	500	5/27/2007	
Chloromethane	0.385	0.463	0.126	500	5/27/2007	J
2-Chlorotoluene	BQL	0.463	0.149	500	5/27/2007	
4-Chlorotoluene	BQL	0.463	0.170	500	5/27/2007	
Dibromochloromethane	BQL	0.463	0.111	500	5/27/2007	
1,2-Dibromo-3-chloropropane	BQL	2.32	1.99	500	5/27/2007	
Dibromomethane	BQL	0.463	0.145	500	5/27/2007	
1,2-Dibromoethane (EDB)	BQL	0.463	0.117	500	5/27/2007	
1,2-Dichlorobenzene	BQL	0.463	0.173	500	5/27/2007	
1,3-Dichlorobenzene	BQL	0.463	0.169	500	5/27/2007	
1,4-Dichlorobenzene	BQL	0.463	0.186	500	5/27/2007	
trans-1,4-Dichloro-2-butene	BQL	2.32	1.97	500	5/27/2007	
1,1-Dichloroethane	BQL	0.463	0.110	500	5/27/2007	
1,1-Dichloroethene	BQL	0.463	0.0857	500	5/27/2007	
1,2-Dichloroethane	BQL	0.463	0.0973	500	5/27/2007	
cis-1,2-Dichloroethene	BQL	0.463	0.0899	500	5/27/2007	
trans-1,2-dichloroethene	BQL	0.463	0.0945	500	5/27/2007	
1,2-Dichloropropane	BQL	0.463	0.0982	500	5/27/2007	
1,3-Dichloropropane	BQL	0.463	0.106	500	5/27/2007	
2,2-Dichloropropane	BQL	0.463	0.106	500	5/27/2007	
1,1-Dichloropropene	BQL	0.463	0.107	500	5/27/2007	
cis-1,3-Dichloropropene	BQL	0.463	0.112	500	5/27/2007	
trans-1,3-Dichloropropene	BQL	0.463	0.108	500	5/27/2007	
Dichlorodifluoromethane	BQL	2.32	0.0996	500	5/27/2007	
Diisopropyl ether (DIPE)	BQL	0.463	0.131	500	5/27/2007	
Ethylbenzene	4.07	0.463	0.130	500	5/27/2007	
Hexachlorobutadiene	BQL	0.463	0.302	500	5/27/2007	

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW03(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-1D
Lab Project ID: G128-1957
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 5/16/2007 10:40
Date Received: 5/17/2007
Matrix: Soil
Sample Amount: 5.98 g
%Solids: 90.2

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	2.32	0.551	500	5/27/2007	
Iodomethane	BQL	0.463	0.0723	500	5/27/2007	
Isopropylbenzene	2.49	0.463	0.146	500	5/27/2007	
4-Isopropyltoluene	2.03	0.463	0.202	500	5/27/2007	
Methylene chloride	BQL	2.32	0.139	500	5/27/2007	
4-Methyl-2-pentanone	BQL	2.32	0.639	500	5/27/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.463	0.0968	500	5/27/2007	
Naphthalene	12.5	0.463	0.243	500	5/27/2007	
n-Propyl benzene	4.44	0.463	0.176	500	5/27/2007	
Styrene	BQL	0.463	0.149	500	5/27/2007	
1,1,1,2-Tetrachloroethane	BQL	0.463	0.128	500	5/27/2007	
1,1,2,2-Tetrachloroethane	BQL	0.463	0.152	500	5/27/2007	
Tetrachloroethene	BQL	0.463	0.105	500	5/27/2007	
Toluene	BQL	0.463	0.103	500	5/27/2007	
1,2,3-Trichlorobenzene	BQL	0.463	0.318	500	5/27/2007	
1,2,4-Trichlorobenzene	BQL	0.463	0.276	500	5/27/2007	
Trichloroethene	BQL	0.463	0.0968	500	5/27/2007	
1,1,1-Trichloroethane	BQL	0.463	0.119	500	5/27/2007	
1,1,2-Trichloroethane	BQL	0.463	0.129	500	5/27/2007	
Trichlorofluoromethane	BQL	0.463	0.0936	500	5/27/2007	
1,2,3-Trichloropropane	BQL	0.463	0.686	500	5/27/2007	
1,2,4-Trimethylbenzene	12.6	0.463	0.191	500	5/27/2007	
1,3,5-Trimethylbenzene	2.42	0.463	0.175	500	5/27/2007	
Vinyl chloride	BQL	0.463	0.102	500	5/27/2007	
m-,p-Xylene	1.73	0.927	0.281	500	5/27/2007	
o-Xylene	1.16	0.463	0.159	500	5/27/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.01	0.0081	81		
Toluene-d8		0.01	0.00963	96		
4-Bromofluorobenzene		0.01	0.00861	86		

Comments:**Flags:**

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: gmc

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW04(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-2D
Lab Project ID: G128-1957
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 5/16/2007 11:20
Date Received: 5/17/2007
Matrix: Soil
Sample Amount: 6.68 g
%Solids: 87.1

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.562	4.30	0.187	200	5/27/2007	J
Benzene	BQL	0.172	0.0366	200	5/27/2007	
Bromobenzene	BQL	0.172	0.0507	200	5/27/2007	
Bromochloromethane	BQL	0.172	0.0359	200	5/27/2007	
Bromodichloromethane	BQL	0.172	0.0337	200	5/27/2007	
Bromoform	BQL	0.172	0.0342	200	5/27/2007	
Bromomethane	BQL	0.172	0.0674	200	5/27/2007	
2-Butanone	BQL	4.30	0.263	200	5/27/2007	
n-Butylbenzene	0.646	0.172	0.0842	200	5/27/2007	
sec-Butylbenzene	0.268	0.172	0.0742	200	5/27/2007	
tert-Butylbenzene	BQL	0.172	0.0672	200	5/27/2007	
Carbon disulfide	BQL	0.172	0.0344	200	5/27/2007	
Carbon tetrachloride	BQL	0.172	0.0476	200	5/27/2007	
Chlorobenzene	BQL	0.172	0.0498	200	5/27/2007	
Chloroethane	BQL	0.172	0.0976	200	5/27/2007	
Chloroform	BQL	0.172	0.0350	200	5/27/2007	
Chloromethane	0.225	0.172	0.0466	200	5/27/2007	
2-Chlorotoluene	BQL	0.172	0.0552	200	5/27/2007	
4-Chlorotoluene	BQL	0.172	0.0631	200	5/27/2007	
Dibromochloromethane	BQL	0.172	0.0411	200	5/27/2007	
1,2-Dibromo-3-chloropropane	BQL	0.859	0.739	200	5/27/2007	
Dibromomethane	BQL	0.172	0.0536	200	5/27/2007	
1,2-Dibromoethane (EDB)	BQL	0.172	0.0433	200	5/27/2007	
1,2-Dichlorobenzene	BQL	0.172	0.0643	200	5/27/2007	
1,3-Dichlorobenzene	BQL	0.172	0.0625	200	5/27/2007	
1,4-Dichlorobenzene	BQL	0.172	0.0689	200	5/27/2007	
trans-1,4-Dichloro-2-butene	BQL	0.859	0.730	200	5/27/2007	
1,1-Dichloroethane	BQL	0.172	0.0407	200	5/27/2007	
1,1-Dichloroethene	BQL	0.172	0.0318	200	5/27/2007	
1,2-Dichloroethane	BQL	0.172	0.0361	200	5/27/2007	
cis-1,2-Dichloroethene	BQL	0.172	0.0333	200	5/27/2007	
trans-1,2-dichloroethene	BQL	0.172	0.0350	200	5/27/2007	
1,2-Dichloropropane	BQL	0.172	0.0364	200	5/27/2007	
1,3-Dichloropropane	BQL	0.172	0.0392	200	5/27/2007	
2,2-Dichloropropane	BQL	0.172	0.0393	200	5/27/2007	
1,1-Dichloropropene	BQL	0.172	0.0397	200	5/27/2007	
cis-1,3-Dichloropropene	BQL	0.172	0.0416	200	5/27/2007	
trans-1,3-Dichloropropene	BQL	0.172	0.0402	200	5/27/2007	
Dichlorodifluoromethane	BQL	0.859	0.0369	200	5/27/2007	
Diisopropyl ether (DIPE)	BQL	0.172	0.0485	200	5/27/2007	
Ethylbenzene	0.237	0.172	0.0481	200	5/27/2007	
Hexachlorobutadiene	BQL	0.172	0.112	200	5/27/2007	

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW04(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-2D
Lab Project ID: G128-1957
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 5/16/2007 11:20
Date Received: 5/17/2007
Matrix: Soil
Sample Amount: 6.68 g
%Solids: 87.1

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.859	0.204	200	5/27/2007	
Iodomethane	BQL	0.172	0.0268	200	5/27/2007	
Isopropylbenzene	0.344	0.172	0.0543	200	5/27/2007	
4-Isopropyltoluene	0.493	0.172	0.0749	200	5/27/2007	
Methylene chloride	BQL	0.859	0.0515	200	5/27/2007	
4-Methyl-2-pentanone	BQL	0.859	0.237	200	5/27/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.172	0.0359	200	5/27/2007	
Naphthalene	1.11	0.172	0.0900	200	5/27/2007	
n-Propyl benzene	0.412	0.172	0.0653	200	5/27/2007	
Styrene	BQL	0.172	0.0553	200	5/27/2007	
1,1,1,2-Tetrachloroethane	BQL	0.172	0.0476	200	5/27/2007	
1,1,2,2-Tetrachloroethane	BQL	0.172	0.0565	200	5/27/2007	
Tetrachloroethene	BQL	0.172	0.0388	200	5/27/2007	
Toluene	BQL	0.172	0.0383	200	5/27/2007	
1,2,3-Trichlorobenzene	BQL	0.172	0.118	200	5/27/2007	
1,2,4-Trichlorobenzene	BQL	0.172	0.102	200	5/27/2007	
Trichloroethene	BQL	0.172	0.0359	200	5/27/2007	
1,1,1-Trichloroethane	BQL	0.172	0.0440	200	5/27/2007	
1,1,2-Trichloroethane	BQL	0.172	0.0479	200	5/27/2007	
Trichlorofluoromethane	BQL	0.172	0.0347	200	5/27/2007	
1,2,3-Trichloropropane	BQL	0.172	0.254	200	5/27/2007	
1,2,4-Trimethylbenzene	0.160	0.172	0.0710	200	5/27/2007	J
1,3,5-Trimethylbenzene	BQL	0.172	0.0649	200	5/27/2007	
Vinyl chloride	BQL	0.172	0.0380	200	5/27/2007	
m-,p-Xylene	BQL	0.344	0.104	200	5/27/2007	
o-Xylene	BQL	0.172	0.0591	200	5/27/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.01	0.00874	87		
Toluene-d8		0.01	0.00959	96		
4-Bromofluorobenzene		0.01	0.00909	91		

Comments:**Flags:**

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: luc

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: UST480-MW05(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-3D
Lab Project ID: G128-1957
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 5/16/2007 13:05
Date Received: 5/17/2007
Matrix: Soil
Sample Amount: 6.56 g
%Solids: 84.5

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	1.48	14.4	0.629	640	5/27/2007	J
Benzene	BQL	0.577	0.123	640	5/27/2007	
Bromobenzene	BQL	0.577	0.170	640	5/27/2007	
Bromochloromethane	BQL	0.577	0.121	640	5/27/2007	
Bromodichloromethane	BQL	0.577	0.113	640	5/27/2007	
Bromoform	BQL	0.577	0.115	640	5/27/2007	
Bromomethane	BQL	0.577	0.226	640	5/27/2007	
2-Butanone	BQL	14.4	0.883	640	5/27/2007	
n-Butylbenzene	7.43	0.577	0.283	640	5/27/2007	
sec-Butylbenzene	4.12	0.577	0.249	640	5/27/2007	
tert-Butylbenzene	BQL	0.577	0.226	640	5/27/2007	
Carbon disulfide	BQL	0.577	0.115	640	5/27/2007	
Carbon tetrachloride	BQL	0.577	0.160	640	5/27/2007	
Chlorobenzene	BQL	0.577	0.167	640	5/27/2007	
Chloroethane	BQL	0.577	0.328	640	5/27/2007	
Chloroform	BQL	0.577	0.118	640	5/27/2007	
Chloromethane	0.502	0.577	0.156	640	5/27/2007	J
2-Chlorotoluene	BQL	0.577	0.185	640	5/27/2007	
4-Chlorotoluene	BQL	0.577	0.212	640	5/27/2007	
Dibromochloromethane	BQL	0.577	0.138	640	5/27/2007	
1,2-Dibromo-3-chloropropane	BQL	2.89	2.48	640	5/27/2007	
Dibromomethane	BQL	0.577	0.180	640	5/27/2007	
1,2-Dibromoethane (EDB)	BQL	0.577	0.145	640	5/27/2007	
1,2-Dichlorobenzene	BQL	0.577	0.216	640	5/27/2007	
1,3-Dichlorobenzene	BQL	0.577	0.210	640	5/27/2007	
1,4-Dichlorobenzene	BQL	0.577	0.231	640	5/27/2007	
trans-1,4-Dichloro-2-butene	BQL	2.89	2.45	640	5/27/2007	
1,1-Dichloroethane	BQL	0.577	0.137	640	5/27/2007	
1,1-Dichloroethene	BQL	0.577	0.107	640	5/27/2007	
1,2-Dichloroethane	BQL	0.577	0.121	640	5/27/2007	
cis-1,2-Dichloroethene	BQL	0.577	0.112	640	5/27/2007	
trans-1,2-dichloroethene	BQL	0.577	0.118	640	5/27/2007	
1,2-Dichloropropane	BQL	0.577	0.122	640	5/27/2007	
1,3-Dichloropropane	BQL	0.577	0.132	640	5/27/2007	
2,2-Dichloropropane	BQL	0.577	0.132	640	5/27/2007	
1,1-Dichloropropene	BQL	0.577	0.133	640	5/27/2007	
cis-1,3-Dichloropropene	BQL	0.577	0.140	640	5/27/2007	
trans-1,3-Dichloropropene	BQL	0.577	0.135	640	5/27/2007	
Dichlorodifluoromethane	BQL	2.89	0.124	640	5/27/2007	
Diisopropyl ether (DIPE)	BQL	0.577	0.163	640	5/27/2007	
Ethylbenzene	3.11	0.577	0.162	640	5/27/2007	
Hexachlorobutadiene	BQL	0.577	0.376	640	5/27/2007	

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: UST480-MW05(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-3D
Lab Project ID: G128-1957
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 5/16/2007 13:05
Date Received: 5/17/2007
Matrix: Soil
Sample Amount: 6.56 g
%Solids: 84.5

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	2.89	0.687	640	5/27/2007	
Iodomethane	BQL	0.577	0.0901	640	5/27/2007	
Isopropylbenzene	3.78	0.577	0.182	640	5/27/2007	
4-Isopropyltoluene	2.59	0.577	0.252	640	5/27/2007	
Methylene chloride	BQL	2.89	0.173	640	5/27/2007	
4-Methyl-2-pentanone	BQL	2.89	0.797	640	5/27/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.577	0.121	640	5/27/2007	
Naphthalene	13.9	0.577	0.302	640	5/27/2007	
n-Propyl benzene	7.52	0.577	0.219	640	5/27/2007	
Styrene	BQL	0.577	0.186	640	5/27/2007	
1,1,1,2-Tetrachloroethane	BQL	0.577	0.160	640	5/27/2007	
1,1,2,2-Tetrachloroethane	BQL	0.577	0.190	640	5/27/2007	
Tetrachloroethene	BQL	0.577	0.130	640	5/27/2007	
Toluene	BQL	0.577	0.129	640	5/27/2007	
1,2,3-Trichlorobenzene	BQL	0.577	0.397	640	5/27/2007	
1,2,4-Trichlorobenzene	BQL	0.577	0.344	640	5/27/2007	
Trichloroethene	BQL	0.577	0.121	640	5/27/2007	
1,1,1-Trichloroethane	BQL	0.577	0.148	640	5/27/2007	
1,1,2-Trichloroethane	BQL	0.577	0.161	640	5/27/2007	
Trichlorofluoromethane	BQL	0.577	0.117	640	5/27/2007	
1,2,3-Trichloropropane	BQL	0.577	0.854	640	5/27/2007	
1,2,4-Trimethylbenzene	7.92	0.577	0.238	640	5/27/2007	
1,3,5-Trimethylbenzene	1.77	0.577	0.218	640	5/27/2007	
Vinyl chloride	BQL	0.577	0.128	640	5/27/2007	
m-,p-Xylene	0.618	1.15	0.350	640	5/27/2007	J
o-Xylene	BQL	0.577	0.199	640	5/27/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.01	0.00722	72		
Toluene-d8		0.01	0.0101	101		
4-Bromofluorobenzene		0.01	0.00999	100		

Comments:**Flags:**

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By:

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW06(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-4D
Lab Project ID: G128-1957
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 5/16/2007 14:05
Date Received: 5/17/2007
Matrix: Soil
Sample Amount: 5.74 g
%Solids: 91.4

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	29.8	1.30	1250	5/27/2007	
Benzene	BQL	1.19	0.254	1250	5/27/2007	
Bromobenzene	BQL	1.19	0.352	1250	5/27/2007	
Bromochloromethane	BQL	1.19	0.249	1250	5/27/2007	
Bromodichloromethane	BQL	1.19	0.234	1250	5/27/2007	
Bromoform	BQL	1.19	0.237	1250	5/27/2007	
Bromomethane	BQL	1.19	0.467	1250	5/27/2007	
2-Butanone	BQL	29.8	1.82	1250	5/27/2007	
n-Butylbenzene	6.51	1.19	0.584	1250	5/27/2007	
sec-Butylbenzene	2.64	1.19	0.515	1250	5/27/2007	
tert-Butylbenzene	BQL	1.19	0.466	1250	5/27/2007	
Carbon disulfide	BQL	1.19	0.238	1250	5/27/2007	
Carbon tetrachloride	BQL	1.19	0.330	1250	5/27/2007	
Chlorobenzene	BQL	1.19	0.346	1250	5/27/2007	
Chloroethane	BQL	1.19	0.677	1250	5/27/2007	
Chloroform	BQL	1.19	0.243	1250	5/27/2007	
Chloromethane	0.620	1.19	0.323	1250	5/27/2007	J
2-Chlorotoluene	BQL	1.19	0.382	1250	5/27/2007	
4-Chlorotoluene	BQL	1.19	0.437	1250	5/27/2007	
Dibromochloromethane	BQL	1.19	0.285	1250	5/27/2007	
1,2-Dibromo-3-chloropropane	BQL	5.96	5.12	1250	5/27/2007	
Dibromomethane	BQL	1.19	0.372	1250	5/27/2007	
1,2-Dibromoethane (EDB)	BQL	1.19	0.300	1250	5/27/2007	
1,2-Dichlorobenzene	BQL	1.19	0.446	1250	5/27/2007	
1,3-Dichlorobenzene	BQL	1.19	0.434	1250	5/27/2007	
1,4-Dichlorobenzene	BQL	1.19	0.478	1250	5/27/2007	
trans-1,4-Dichloro-2-butene	BQL	5.96	5.06	1250	5/27/2007	
1,1-Dichloroethane	BQL	1.19	0.282	1250	5/27/2007	
1,1-Dichloroethene	BQL	1.19	0.220	1250	5/27/2007	
1,2-Dichloroethane	BQL	1.19	0.250	1250	5/27/2007	
cis-1,2-Dichloroethene	BQL	1.19	0.231	1250	5/27/2007	
trans-1,2-dichloroethene	BQL	1.19	0.243	1250	5/27/2007	
1,2-Dichloropropane	BQL	1.19	0.253	1250	5/27/2007	
1,3-Dichloropropane	BQL	1.19	0.272	1250	5/27/2007	
2,2-Dichloropropane	BQL	1.19	0.273	1250	5/27/2007	
1,1-Dichloropropene	BQL	1.19	0.275	1250	5/27/2007	
cis-1,3-Dichloropropene	BQL	1.19	0.288	1250	5/27/2007	
trans-1,3-Dichloropropene	BQL	1.19	0.279	1250	5/27/2007	
Dichlorodifluoromethane	BQL	5.96	0.256	1250	5/27/2007	
Diisopropyl ether (DIPE)	BQL	1.19	0.336	1250	5/27/2007	
Ethylbenzene	4.98	1.19	0.334	1250	5/27/2007	
Hexachlorobutadiene	BQL	1.19	0.777	1250	5/27/2007	

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW06(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-4D
Lab Project ID: G128-1957
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 5/16/2007 14:05
Date Received: 5/17/2007
Matrix: Soil
Sample Amount: 5.74 g
%Solids: 91.4

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	5.96	1.42	1250	5/27/2007	
Iodomethane	BQL	1.19	0.186	1250	5/27/2007	
Isopropylbenzene	2.73	1.19	0.376	1250	5/27/2007	
4-Isopropyltoluene	3.12	1.19	0.519	1250	5/27/2007	
Methylene chloride	BQL	5.96	0.357	1250	5/27/2007	
4-Methyl-2-pentanone	BQL	5.96	1.64	1250	5/27/2007	
Methyl-tert-butyl ether (MTBE)	BQL	1.19	0.249	1250	5/27/2007	
Naphthalene	18.6	1.19	0.624	1250	5/27/2007	
n-Propyl benzene	4.54	1.19	0.453	1250	5/27/2007	
Styrene	BQL	1.19	0.384	1250	5/27/2007	
1,1,1,2-Tetrachloroethane	BQL	1.19	0.330	1250	5/27/2007	
1,1,2,2-Tetrachloroethane	BQL	1.19	0.392	1250	5/27/2007	
Tetrachloroethene	BQL	1.19	0.269	1250	5/27/2007	
Toluene	BQL	1.19	0.266	1250	5/27/2007	
1,2,3-Trichlorobenzene	BQL	1.19	0.819	1250	5/27/2007	
1,2,4-Trichlorobenzene	BQL	1.19	0.710	1250	5/27/2007	
Trichloroethene	BQL	1.19	0.249	1250	5/27/2007	
1,1,1-Trichloroethane	BQL	1.19	0.305	1250	5/27/2007	
1,1,2-Trichloroethane	BQL	1.19	0.332	1250	5/27/2007	
Trichlorofluoromethane	BQL	1.19	0.241	1250	5/27/2007	
1,2,3-Trichloropropane	BQL	1.19	1.76	1250	5/27/2007	
1,2,4-Trimethylbenzene	21.4	1.19	0.492	1250	5/27/2007	
1,3,5-Trimethylbenzene	7.34	1.19	0.450	1250	5/27/2007	
Vinyl chloride	BQL	1.19	0.263	1250	5/27/2007	
m-,p-Xylene	7.33	2.38	0.722	1250	5/27/2007	
o-Xylene	1.53	1.19	0.410	1250	5/27/2007	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	0.01	0.00729	73
Toluene-d8	0.01	0.00986	99
4-Bromofluorobenzene	0.01	0.01	100

Comments:**Flags:**

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: Jm

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: VBLK3052707B
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected:
Date Received:
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	1250	54.5	50	5/27/2007	
Benzene	BQL	50.0	10.7	50	5/27/2007	
Bromobenzene	BQL	50.0	14.8	50	5/27/2007	
Bromochloromethane	BQL	50.0	10.5	50	5/27/2007	
Bromodichloromethane	BQL	50.0	9.80	50	5/27/2007	
Bromoform	BQL	50.0	9.95	50	5/27/2007	
Bromomethane	BQL	50.0	19.6	50	5/27/2007	
2-Butanone	BQL	1250	76.5	50	5/27/2007	
n-Butylbenzene	BQL	50.0	24.5	50	5/27/2007	
sec-Butylbenzene	BQL	50.0	21.6	50	5/27/2007	
tert-Butylbenzene	BQL	50.0	19.6	50	5/27/2007	
Carbon disulfide	BQL	50.0	10.0	50	5/27/2007	
Carbon tetrachloride	BQL	50.0	13.9	50	5/27/2007	
Chlorobenzene	BQL	50.0	14.5	50	5/27/2007	
Chloroethane	BQL	50.0	28.4	50	5/27/2007	
Chloroform	BQL	50.0	10.2	50	5/27/2007	
Chloromethane	BQL	50.0	13.6	50	5/27/2007	
2-Chlorotoluene	BQL	50.0	16.1	50	5/27/2007	
4-Chlorotoluene	BQL	50.0	18.4	50	5/27/2007	
Dibromochloromethane	BQL	50.0	12.0	50	5/27/2007	
1,2-Dibromo-3-chloropropane	BQL	250	215	50	5/27/2007	
Dibromomethane	BQL	50.0	15.6	50	5/27/2007	
1,2-Dibromoethane (EDB)	BQL	50.0	12.6	50	5/27/2007	
1,2-Dichlorobenzene	BQL	50.0	18.7	50	5/27/2007	
1,3-Dichlorobenzene	BQL	50.0	18.2	50	5/27/2007	
1,4-Dichlorobenzene	BQL	50.0	20.0	50	5/27/2007	
trans-1,4-Dichloro-2-butene	BQL	250	213	50	5/27/2007	
1,1-Dichloroethane	BQL	50.0	11.9	50	5/27/2007	
1,1-Dichloroethene	BQL	50.0	9.25	50	5/27/2007	
1,2-Dichloroethane	BQL	50.0	10.5	50	5/27/2007	
cis-1,2-Dichloroethene	BQL	50.0	9.70	50	5/27/2007	
trans-1,2-dichloroethene	BQL	50.0	10.2	50	5/27/2007	
1,2-Dichloropropane	BQL	50.0	10.6	50	5/27/2007	
1,3-Dichloropropane	BQL	50.0	11.4	50	5/27/2007	
2,2-Dichloropropane	BQL	50.0	11.5	50	5/27/2007	
1,1-Dichloropropene	BQL	50.0	11.6	50	5/27/2007	
cis-1,3-Dichloropropene	BQL	50.0	12.1	50	5/27/2007	
trans-1,3-Dichloropropene	BQL	50.0	11.7	50	5/27/2007	
Dichlorodifluoromethane	BQL	250	10.8	50	5/27/2007	
Diisopropyl ether (DIPE)	BQL	50.0	14.1	50	5/27/2007	
Ethylbenzene	BQL	50.0	14.0	50	5/27/2007	
Hexachlorobutadiene	BQL	50.0	32.6	50	5/27/2007	

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: VBLK3052707B
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected:
Date Received:
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	250	59.5	50	5/27/2007	
Iodomethane	BQL	50.0	7.80	50	5/27/2007	
Isopropylbenzene	BQL	50.0	15.8	50	5/27/2007	
4-Isopropyltoluene	BQL	50.0	21.8	50	5/27/2007	
Methylene chloride	BQL	250	15.0	50	5/27/2007	
4-Methyl-2-pentanone	BQL	250	69.0	50	5/27/2007	
Methyl-tert-butyl ether (MTBE)	BQL	50.0	10.5	50	5/27/2007	
Naphthalene	BQL	50.0	26.2	50	5/27/2007	
n-Propyl benzene	BQL	50.0	19.0	50	5/27/2007	
Styrene	BQL	50.0	16.1	50	5/27/2007	
1,1,1,2-Tetrachloroethane	BQL	50.0	13.9	50	5/27/2007	
1,1,2,2-Tetrachloroethane	BQL	50.0	16.4	50	5/27/2007	
Tetrachloroethene	BQL	50.0	11.3	50	5/27/2007	
Toluene	BQL	50.0	11.1	50	5/27/2007	
1,2,3-Trichlorobenzene	BQL	50.0	34.4	50	5/27/2007	
1,2,4-Trichlorobenzene	BQL	50.0	29.8	50	5/27/2007	
Trichloroethene	BQL	50.0	10.5	50	5/27/2007	
1,1,1-Trichloroethane	BQL	50.0	12.8	50	5/27/2007	
1,1,2-Trichloroethane	BQL	50.0	13.9	50	5/27/2007	
Trichlorofluoromethane	BQL	50.0	10.1	50	5/27/2007	
1,2,3-Trichloropropane	BQL	50.0	74.0	50	5/27/2007	
1,2,4-Trimethylbenzene	BQL	50.0	20.7	50	5/27/2007	
1,3,5-Trimethylbenzene	BQL	50.0	18.9	50	5/27/2007	
Vinyl chloride	BQL	50.0	11.1	50	5/27/2007	
m-,p-Xylene	BQL	100	30.3	50	5/27/2007	
o-Xylene	BQL	50.0	17.2	50	5/27/2007	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	7.68	77
Toluene-d8	10	9.93	99
4-Bromofluorobenzene	10	10.8	108

Comments:**Flags:**

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: 



LABORATORY CONTROL SAMPLE VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: SGS Environmental

Lab Code: NC00919

Case No.:

SAS No.:

SDG No:

Matrix: (soil/water) Water

Lab Sample ID: LCS3052707a

Sample wt/vol: 5.00 (mL)

Lab File ID: 0527304.D

Level: (low/med) NA

% Moisture: not dec. NA

Date Analyzed: 2007-05-27 11:44

GC Column: DB-624 ID: 0.2 (mm)

Dilution Factor: 1

Soil Extract Volume: NA

Soil Aliquot Volume: NA

CAS NO.	COMPOUND	SPIKE AMT (µg/L)	SAMP CONC (µg/L)	% REC #	QC LIMITS
71-43-2	benzene	5.00	5.04	101	77.4-123
108-90-7	chlorobenzene	5.00	6.04	121	72.5-128
75-35-4	1,1-dichloroethene	5.00	5.65	113	71.7-128
108-88-3	toluene	5.00	5.47	109	75.9-124
79-01-6	trichloroethene	5.00	5.30	106	77.9-122

System Monitoring Compound Results

		Spike Added (µg/L)	Spike Result (µg/L)	Percent Rec. (%)	Percent Recovery (%)
460-00-4	4-Bromofluorobenzene	10	9.84	98.0	84.7 - 115
17060-07-0	1,2-Dichloroethane-d4	10	7.92	79.0	63.5 - 140
2037-26-5	Toluene-d8	10	10.0	102	81.8 - 117



SGS ENVIRONMENTAL SERVICES, INC.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Contract:

Lab Code: NC00919

Case No.:

SAS No.:

SDG No.:

LCS: LCS3052707A

Filename: 0527304.D

Date Analyzed: 05/27/07 11:44 Dilution: 1

LCSD: LCS3052707B

Filename: 0527305.D

Date Analyzed: 05/27/07 12:14 Matrix: Water

COMPOUND	LCS SPIKE (µg/L)	LCS CONC (µg/L)	LCS % REC #	LCSD SPIKE (µg/L)	LCSD CONC (µg/L)	LCSD % REC #	% RPD	QC LIMITS	
								RPD	REC
benzene	5.00	5.04	101	5.00	5.09	102	0.987	30	77.4-123
chlorobenzene	5.00	6.04	121	5.00	6.18	124	2.29	30	72.5-128
1,1-dichloroethene	5.00	5.65	113	5.00	5.60	112	0.889	30	71.7-128
toluene	5.00	5.47	109	5.00	5.35	107	2.22	30	75.9-124
trichloroethene	5.00	5.30	106	5.00	5.26	105	0.758	30	77.9-122

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:



SGS ENVIRONMENTAL SERVICES, INC.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Contract:

Lab Code: NC00919

Case No.:

SAS No.:

SDG No.:

Matrix Spike - EPA Sample No.: g100-935-1a

Dilution: 10

Filenames: 0527309.D, 0527322.D, 0527323.D

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
benzene	BQL	50.0	50.5	101	50.0	49.1	98.2	2.81	30	61.6-135
chlorobenzene	BQL	50.0	63.1	126*	50.0	64.9	130*	2.81	30	77.2-118
1,1-dichloroethene	BQL	50.0	60.3	120	50.0	58.4	117	3.20	30	64.4-130
toluene	BQL	50.0	54.3	109	50.0	51.9	104	4.52	30	66.4-128
trichloroethene	BQL	50.0	56.1	112	50.0	52.0	104	7.58	30	84.9-136

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW03(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-1H
Lab Project ID: G128-1957
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 5/16/2007 10:40
Date Received: 5/17/2007
Date Extracted: 5/18/2007
Matrix: Soil
% Solids: 90.24

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	6.84	0.978	20	5/22/2007	
Acenaphthylene	BQL	6.84	0.909	20	5/22/2007	
Anthracene	1.44	6.84	0.991	20	5/22/2007	J
Benzo[a]anthracene	BQL	6.84	1.18	20	5/22/2007	
Benzo[a]pyrene	BQL	6.84	1.05	20	5/22/2007	
Benzo[b]fluoranthene	BQL	6.84	1.20	20	5/22/2007	
Benzo[g,h,i]perylene	BQL	6.84	1.86	20	5/22/2007	
Benzo[k]fluoranthene	BQL	6.84	1.32	20	5/22/2007	
Benzoic Acid	BQL	13.7	13.7	20	5/22/2007	
Bis(2-chloroethoxy)methane	BQL	6.84	1.02	20	5/22/2007	
Bis(2-chloroethyl)ether	BQL	6.84	0.827	20	5/22/2007	
Bis(2-chloroisopropyl)ether	BQL	6.84	0.855	20	5/22/2007	
Bis(2-ethylhexyl)phthalate	BQL	6.84	0.916	20	5/22/2007	
4-bromophenyl phenyl ether	BQL	6.84	1.16	20	5/22/2007	
Butylbenzylphthalate	BQL	6.84	1.05	20	5/22/2007	
2-Chloronaphthalene	BQL	6.84	1.07	20	5/22/2007	
2-Chlorophenol	BQL	6.84	2.14	20	5/22/2007	
4-Chloro-3-methylphenol	BQL	6.84	2.13	20	5/22/2007	
4-Chloroaniline	BQL	34.2	5.21	20	5/22/2007	
4-Chlorophenyl phenyl ether	BQL	6.84	1.00	20	5/22/2007	
Chrysene	BQL	6.84	0.738	20	5/22/2007	
Dibenzo[a,h]anthracene	BQL	6.84	1.91	20	5/22/2007	
Dibenzofuran	3.69	6.84	1.24	20	5/22/2007	J
Di-n-Butylphthalate	BQL	6.84	0.814	20	5/22/2007	
1,2-Dichlorobenzene	BQL	6.84	0.759	20	5/22/2007	
1,3-Dichlorobenzene	BQL	6.84	0.745	20	5/22/2007	
1,4-Dichlorobenzene	BQL	6.84	0.772	20	5/22/2007	
3,3'-Dichlorobenzidine	BQL	13.7	1.72	20	5/22/2007	
2,4-Dichlorophenol	BQL	6.84	2.46	20	5/22/2007	
Diethylphthalate	BQL	6.84	0.882	20	5/22/2007	
Dimethylphthalate	BQL	6.84	0.827	20	5/22/2007	
2,4-Dimethylphenol	BQL	6.84	4.89	20	5/22/2007	
Di-n-octylphthalate	BQL	6.84	1.13	20	5/22/2007	
4,6-Dinitro-2-methylphenol	BQL	34.2	4.03	20	5/22/2007	
2,4-Dinitrophenol	BQL	34.2	15.1	20	5/22/2007	
2,4-Dinitrotoluene	BQL	6.84	0.889	20	5/22/2007	
2,6-Dinitrotoluene	BQL	6.84	1.24	20	5/22/2007	
Diphenylamine *	BQL	6.84	0.670	20	5/22/2007	
Fluoranthene	BQL	6.84	0.957	20	5/22/2007	
Fluorene	3.69	6.84	0.848	20	5/22/2007	J
Hexachlorobenzene	BQL	6.84	1.05	20	5/22/2007	
Hexachlorobutadiene	BQL	6.84	1.09	20	5/22/2007	
Hexachlorocyclopentadiene	BQL	13.7	0.704	20	5/22/2007	
Hexachloroethane	BQL	6.84	0.615	20	5/22/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW03(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-1H
Lab Project ID: G128-1957
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 5/16/2007 10:40
Date Received: 5/17/2007
Date Extracted: 5/18/2007
Matrix: Soil
% Solids: 90.24

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Indeno(1,2,3-c,d)pyrene	BQL	6.84	1.75	20	5/22/2007	
Isophorone	BQL	6.84	1.00	20	5/22/2007	
2-Methylnaphthalene	56.3	6.84	2.00	20	5/22/2007	
2-Methylphenol	BQL	6.84	2.41	20	5/22/2007	
3- & 4-Methylphenol	BQL	6.84	2.32	20	5/22/2007	
Naphthalene	12.0	6.84	0.554	20	5/22/2007	
2-Nitroaniline	BQL	6.84	1.07	20	5/22/2007	
3-Nitroaniline	BQL	34.2	7.04	20	5/22/2007	
4-Nitroaniline	BQL	34.2	2.11	20	5/22/2007	
Nitrobenzene	BQL	6.84	0.923	20	5/22/2007	
2-Nitrophenol	BQL	6.84	2.12	20	5/22/2007	
4-Nitrophenol	BQL	34.2	1.89	20	5/22/2007	
N-Nitrosodi-n-propylamine	BQL	6.84	0.868	20	5/22/2007	
Pentachlorophenol	BQL	34.2	1.78	20	5/22/2007	
Phenanthrene	9.71	6.84	0.779	20	5/22/2007	
Phenol	BQL	6.84	1.87	20	5/22/2007	
Pyrene	BQL	6.84	1.31	20	5/22/2007	
1,2,4-Trichlorobenzene	BQL	6.84	0.855	20	5/22/2007	
2,4,5-Trichlorophenol	BQL	6.84	2.65	20	5/22/2007	
2,4,6-Trichlorophenol	BQL	6.84	2.43	20	5/22/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		0.5	NA	NA		
2-Fluorophenol		0.5	NA	NA		
Nitrobenzene-d5		0.5	NA	NA		
Phenol-d6		0.5	NA	NA		
2,4,6-Tribromophenol		0.5	NA	NA		
4-Terphenyl-d14		0.5	NA	NA		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.
NA = Surrogate diluted out.

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: _____

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW04(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-2H
Lab Project ID: G128-1957
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 5/16/2007 11:20
Date Received: 5/17/2007
Date Extracted: 5/18/2007
Matrix: Soil
% Solids: 87.13

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	1.90	6.79	0.971	20	5/22/2007	J
Acenaphthylene	BQL	6.79	0.903	20	5/22/2007	
Anthracene	9.03	6.79	0.985	20	5/22/2007	
Benzo[a]anthracene	BQL	6.79	1.18	20	5/22/2007	
Benzo[a]pyrene	BQL	6.79	1.04	20	5/22/2007	
Benzo[b]fluoranthene	BQL	6.79	1.19	20	5/22/2007	
Benzo[g,h,i]perylene	BQL	6.79	1.85	20	5/22/2007	
Benzo[k]fluoranthene	BQL	6.79	1.31	20	5/22/2007	
Benzoic Acid	BQL	13.6	13.6	20	5/22/2007	
Bis(2-chloroethoxy)methane	BQL	6.79	1.01	20	5/22/2007	
Bis(2-chloroethyl)ether	BQL	6.79	0.822	20	5/22/2007	
Bis(2-chloroisopropyl)ether	BQL	6.79	0.849	20	5/22/2007	
Bis(2-ethylhexyl)phthalate	BQL	6.79	0.910	20	5/22/2007	
4-bromophenyl phenyl ether	BQL	6.79	1.15	20	5/22/2007	
Butylbenzylphthalate	BQL	6.79	1.05	20	5/22/2007	
2-Chloronaphthalene	BQL	6.79	1.07	20	5/22/2007	
2-Chlorophenol	BQL	6.79	2.13	20	5/22/2007	
4-Chloro-3-methylphenol	BQL	6.79	2.12	20	5/22/2007	
4-Chloroaniline	BQL	34.0	5.18	20	5/22/2007	
4-Chlorophenyl phenyl ether	BQL	6.79	0.999	20	5/22/2007	
Chrysene	BQL	6.79	0.734	20	5/22/2007	
Dibenzo[a,h]anthracene	BQL	6.79	1.90	20	5/22/2007	
Dibenzofuran	4.14	6.79	1.24	20	5/22/2007	J
Di-n-Butylphthalate	BQL	6.79	0.808	20	5/22/2007	
1,2-Dichlorobenzene	BQL	6.79	0.754	20	5/22/2007	
1,3-Dichlorobenzene	BQL	6.79	0.740	20	5/22/2007	
1,4-Dichlorobenzene	BQL	6.79	0.768	20	5/22/2007	
3,3'-Dichlorobenzidine	BQL	13.6	1.71	20	5/22/2007	
2,4-Dichlorophenol	BQL	6.79	2.45	20	5/22/2007	
Diethylphthalate	BQL	6.79	0.876	20	5/22/2007	
Dimethylphthalate	BQL	6.79	0.822	20	5/22/2007	
2,4-Dimethylphenol	BQL	6.79	4.86	20	5/22/2007	
Di-n-octylphthalate	BQL	6.79	1.12	20	5/22/2007	
4,6-Dinitro-2-methylphenol	BQL	34.0	4.00	20	5/22/2007	
2,4-Dinitrophenol	BQL	34.0	15.0	20	5/22/2007	
2,4-Dinitrotoluene	BQL	6.79	0.883	20	5/22/2007	
2,6-Dinitrotoluene	BQL	6.79	1.24	20	5/22/2007	
Diphenylamine *	BQL	6.79	0.666	20	5/22/2007	
Fluoranthene	BQL	6.79	0.951	20	5/22/2007	
Fluorene	4.42	6.79	0.842	20	5/22/2007	J
Hexachlorobenzene	BQL	6.79	1.05	20	5/22/2007	
Hexachlorobutadiene	BQL	6.79	1.09	20	5/22/2007	
Hexachlorocyclopentadiene	BQL	13.6	0.700	20	5/22/2007	
Hexachloroethane	BQL	6.79	0.611	20	5/22/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW04(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-2H
Lab Project ID: G128-1957
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 5/16/2007 11:20
Date Received: 5/17/2007
Date Extracted: 5/18/2007
Matrix: Soil
% Solids: 87.13

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Indeno(1,2,3-c,d)pyrene	BQL	6.79	1.74	20	5/22/2007	
Isophorone	BQL	6.79	0.999	20	5/22/2007	
2-Methylnaphthalene	56.1	6.79	1.98	20	5/22/2007	
2-Methylphenol	BQL	6.79	2.39	20	5/22/2007	
3- & 4-Methylphenol	BQL	6.79	2.30	20	5/22/2007	
Naphthalene	8.56	6.79	0.550	20	5/22/2007	
2-Nitroaniline	BQL	6.79	1.07	20	5/22/2007	
3-Nitroaniline	BQL	34.0	7.00	20	5/22/2007	
4-Nitroaniline	BQL	34.0	2.09	20	5/22/2007	
Nitrobenzene	BQL	6.79	0.917	20	5/22/2007	
2-Nitrophenol	BQL	6.79	2.11	20	5/22/2007	
4-Nitrophenol	BQL	34.0	1.88	20	5/22/2007	
N-Nitrosodi-n-propylamine	BQL	6.79	0.863	20	5/22/2007	
Pentachlorophenol	BQL	34.0	1.77	20	5/22/2007	
Phenanthrene	8.76	6.79	0.774	20	5/22/2007	
Phenol	BQL	6.79	1.86	20	5/22/2007	
Pyrene	BQL	6.79	1.30	20	5/22/2007	
1,2,4-Trichlorobenzene	BQL	6.79	0.849	20	5/22/2007	
2,4,5-Trichlorophenol	BQL	6.79	2.63	20	5/22/2007	
2,4,6-Trichlorophenol	BQL	6.79	2.42	20	5/22/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		0.5	NA	NA		
2-Fluorophenol		0.5	NA	NA		
Nitrobenzene-d5		0.5	NA	NA		
Phenol-d6		0.5	NA	NA		
2,4,6-Tribromophenol		0.5	NA	NA		
4-Terphenyl-d14		0.5	NA	NA		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.
NA = Surrogate diluted out.

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: _____

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: UST480-MW05(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-3H
Lab Project ID: G128-1957
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 5/16/2007 13:05
Date Received: 5/17/2007
Date Extracted: 5/18/2007
Matrix: Soil
% Solids: 84.5

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	5.38	7.27	1.04	20	5/22/2007	J
Acenaphthylene	BQL	7.27	0.967	20	5/22/2007	
Anthracene	4.43	7.27	1.05	20	5/22/2007	J
Benzo[a]anthracene	BQL	7.27	1.26	20	5/22/2007	
Benzo[a]pyrene	BQL	7.27	1.11	20	5/22/2007	
Benzo[b]fluoranthene	BQL	7.27	1.27	20	5/22/2007	
Benzo[g,h,i]perylene	BQL	7.27	1.98	20	5/22/2007	
Benzo[k]fluoranthene	BQL	7.27	1.40	20	5/22/2007	
Benzoic Acid	BQL	14.5	14.5	20	5/22/2007	
Bis(2-chloroethoxy)methane	BQL	7.27	1.08	20	5/22/2007	
Bis(2-chloroethyl)ether	BQL	7.27	0.880	20	5/22/2007	
Bis(2-chloroisopropyl)ether	BQL	7.27	0.909	20	5/22/2007	
Bis(2-ethylhexyl)phthalate	BQL	7.27	0.974	20	5/22/2007	
4-bromophenyl phenyl ether	BQL	7.27	1.23	20	5/22/2007	
Butylbenzylphthalate	BQL	7.27	1.12	20	5/22/2007	
2-Chloronaphthalene	BQL	7.27	1.14	20	5/22/2007	
2-Chlorophenol	BQL	7.27	2.28	20	5/22/2007	
4-Chloro-3-methylphenol	BQL	7.27	2.27	20	5/22/2007	
4-Chloroaniline	BQL	36.3	5.54	20	5/22/2007	
4-Chlorophenyl phenyl ether	BQL	7.27	1.07	20	5/22/2007	
Chrysene	BQL	7.27	0.785	20	5/22/2007	
Dibenzo[a,h]anthracene	BQL	7.27	2.04	20	5/22/2007	
Dibenzofuran	9.38	7.27	1.32	20	5/22/2007	
Di-n-Butylphthalate	BQL	7.27	0.865	20	5/22/2007	
1,2-Dichlorobenzene	BQL	7.27	0.807	20	5/22/2007	
1,3-Dichlorobenzene	BQL	7.27	0.792	20	5/22/2007	
1,4-Dichlorobenzene	BQL	7.27	0.821	20	5/22/2007	
3,3'-Dichlorobenzidine	BQL	14.5	1.83	20	5/22/2007	
2,4-Dichlorophenol	BQL	7.27	2.62	20	5/22/2007	
Diethylphthalate	BQL	7.27	0.938	20	5/22/2007	
Dimethylphthalate	BQL	7.27	0.880	20	5/22/2007	
2,4-Dimethylphenol	BQL	7.27	5.20	20	5/22/2007	
Di-n-octylphthalate	BQL	7.27	1.20	20	5/22/2007	
4,6-Dinitro-2-methylphenol	BQL	36.3	4.28	20	5/22/2007	
2,4-Dinitrophenol	BQL	36.3	16.0	20	5/22/2007	
2,4-Dinitrotoluene	BQL	7.27	0.945	20	5/22/2007	
2,6-Dinitrotoluene	BQL	7.27	1.32	20	5/22/2007	
Diphenylamine *	BQL	7.27	0.712	20	5/22/2007	
Fluoranthene	BQL	7.27	1.02	20	5/22/2007	
Fluorene	10.4	7.27	0.901	20	5/22/2007	
Hexachlorobenzene	BQL	7.27	1.12	20	5/22/2007	
Hexachlorobutadiene	BQL	7.27	1.16	20	5/22/2007	
Hexachlorocyclopentadiene	BQL	14.5	0.749	20	5/22/2007	
Hexachloroethane	BQL	7.27	0.654	20	5/22/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: UST480-MW05(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-3H
Lab Project ID: G128-1957
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 5/16/2007 13:05
Date Received: 5/17/2007
Date Extracted: 5/18/2007
Matrix: Soil
% Solids: 84.5

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Indeno(1,2,3-c,d)pyrene	BQL	7.27	1.86	20	5/22/2007	
Isophorone	BQL	7.27	1.07	20	5/22/2007	
2-Methylnaphthalene	116	7.27	2.12	20	5/22/2007	
2-Methylphenol	BQL	7.27	2.56	20	5/22/2007	
3- & 4-Methylphenol	BQL	7.27	2.46	20	5/22/2007	
Naphthalene	24.8	7.27	0.589	20	5/22/2007	
2-Nitroaniline	BQL	7.27	1.14	20	5/22/2007	
3-Nitroaniline	BQL	36.3	7.49	20	5/22/2007	
4-Nitroaniline	BQL	36.3	2.24	20	5/22/2007	
Nitrobenzene	BQL	7.27	0.981	20	5/22/2007	
2-Nitrophenol	BQL	7.27	2.25	20	5/22/2007	
4-Nitrophenol	BQL	36.3	2.01	20	5/22/2007	
N-Nitrosodi-n-propylamine	BQL	7.27	0.923	20	5/22/2007	
Pentachlorophenol	BQL	36.3	1.90	20	5/22/2007	
Phenanthrene	22.7	7.27	0.829	20	5/22/2007	
Phenol	BQL	7.27	1.99	20	5/22/2007	
Pyrene	BQL	7.27	1.40	20	5/22/2007	
1,2,4-Trichlorobenzene	BQL	7.27	0.909	20	5/22/2007	
2,4,5-Trichlorophenol	BQL	7.27	2.81	20	5/22/2007	
2,4,6-Trichlorophenol	BQL	7.27	2.59	20	5/22/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		0.5	NA	NA		
2-Fluorophenol		0.5	NA	NA		
Nitrobenzene-d5		0.5	NA	NA		
Phenol-d6		0.5	NA	NA		
2,4,6-Tribromophenol		0.5	NA	NA		
4-Terphenyl-d14		0.5	NA	NA		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.
NA = Surrogate diluted out.

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: _____

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW06(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-4H
Lab Project ID: G128-1957
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 5/16/2007 14:05
Date Received: 5/17/2007
Date Extracted: 5/18/2007
Matrix: Soil
% Solids: 91.39

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	2.63	6.74	0.963	20	5/22/2007	J
Acenaphthylene	BQL	6.74	0.896	20	5/22/2007	
Anthracene	2.02	6.74	0.977	20	5/22/2007	J
Benzo[a]anthracene	BQL	6.74	1.17	20	5/22/2007	
Benzo[a]pyrene	BQL	6.74	1.03	20	5/22/2007	
Benzo[b]fluoranthene	BQL	6.74	1.18	20	5/22/2007	
Benzo[g,h,i]perylene	BQL	6.74	1.83	20	5/22/2007	
Benzo[k]fluoranthene	BQL	6.74	1.30	20	5/22/2007	
Benzoic Acid	BQL	13.5	13.5	20	5/22/2007	
Bis(2-chloroethoxy)methane	BQL	6.74	1.00	20	5/22/2007	
Bis(2-chloroethyl)ether	BQL	6.74	0.815	20	5/22/2007	
Bis(2-chloroisopropyl)ether	BQL	6.74	0.842	20	5/22/2007	
Bis(2-ethylhexyl)phthalate	BQL	6.74	0.903	20	5/22/2007	
4-bromophenyl phenyl ether	BQL	6.74	1.14	20	5/22/2007	
Butylbenzylphthalate	BQL	6.74	1.04	20	5/22/2007	
2-Chloronaphthalene	BQL	6.74	1.06	20	5/22/2007	
2-Chlorophenol	BQL	6.74	2.11	20	5/22/2007	
4-Chloro-3-methylphenol	BQL	6.74	2.10	20	5/22/2007	
4-Chloroaniline	BQL	33.7	5.13	20	5/22/2007	
4-Chlorophenyl phenyl ether	BQL	6.74	0.990	20	5/22/2007	
Chrysene	BQL	6.74	0.728	20	5/22/2007	
Dibenzo[a,h]anthracene	BQL	6.74	1.89	20	5/22/2007	
Dibenzofuran	5.39	6.74	1.23	20	5/22/2007	J
Di-n-Butylphthalate	BQL	6.74	0.802	20	5/22/2007	
1,2-Dichlorobenzene	BQL	6.74	0.748	20	5/22/2007	
1,3-Dichlorobenzene	BQL	6.74	0.734	20	5/22/2007	
1,4-Dichlorobenzene	BQL	6.74	0.761	20	5/22/2007	
3,3'-Dichlorobenzidine	BQL	13.5	1.70	20	5/22/2007	
2,4-Dichlorophenol	BQL	6.74	2.43	20	5/22/2007	
Diethylphthalate	BQL	6.74	0.869	20	5/22/2007	
Dimethylphthalate	BQL	6.74	0.815	20	5/22/2007	
2,4-Dimethylphenol	BQL	6.74	4.82	20	5/22/2007	
Di-n-octylphthalate	BQL	6.74	1.11	20	5/22/2007	
4,6-Dinitro-2-methylphenol	BQL	33.7	3.97	20	5/22/2007	
2,4-Dinitrophenol	BQL	33.7	14.8	20	5/22/2007	
2,4-Dinitrotoluene	BQL	6.74	0.876	20	5/22/2007	
2,6-Dinitrotoluene	BQL	6.74	1.23	20	5/22/2007	
Diphenylamine *	BQL	6.74	0.660	20	5/22/2007	
Fluoranthene	BQL	6.74	0.943	20	5/22/2007	
Fluorene	5.73	6.74	0.835	20	5/22/2007	J
Hexachlorobenzene	BQL	6.74	1.04	20	5/22/2007	
Hexachlorobutadiene	BQL	6.74	1.08	20	5/22/2007	
Hexachlorocyclopentadiene	BQL	13.5	0.694	20	5/22/2007	
Hexachloroethane	BQL	6.74	0.606	20	5/22/2007	
Indeno(1,2,3-c,d)pyrene	BQL	6.74	1.72	20	5/22/2007	
Isophorone	BQL	6.74	0.990	20	5/22/2007	
2-Methylnaphthalene	75.0	6.74	1.97	20	5/22/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW06(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1957-4H
Lab Project ID: G128-1957
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 5/16/2007 14:05
Date Received: 5/17/2007
Date Extracted: 5/18/2007
Matrix: Soil
% Solids: 91.39

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
2-Methylphenol	BQL	6.74	2.37	20	5/22/2007	
3- & 4-Methylphenol	BQL	6.74	2.28	20	5/22/2007	
Naphthalene	19.8	6.74	0.546	20	5/22/2007	
2-Nitroaniline	BQL	6.74	1.06	20	5/22/2007	
3-Nitroaniline	BQL	33.7	6.94	20	5/22/2007	
4-Nitroaniline	BQL	33.7	2.08	20	5/22/2007	
Nitrobenzene	BQL	6.74	0.910	20	5/22/2007	
2-Nitrophenol	BQL	6.74	2.09	20	5/22/2007	
4-Nitrophenol	BQL	33.7	1.87	20	5/22/2007	
N-Nitrosodi-n-propylamine	BQL	6.74	0.856	20	5/22/2007	
Pentachlorophenol	BQL	33.7	1.76	20	5/22/2007	
Phenanthrene	11.3	6.74	0.768	20	5/22/2007	
Phenol	BQL	6.74	1.85	20	5/22/2007	
Pyrene	BQL	6.74	1.29	20	5/22/2007	
1,2,4-Trichlorobenzene	BQL	6.74	0.842	20	5/22/2007	
2,4,5-Trichlorophenol	BQL	6.74	2.61	20	5/22/2007	
2,4,6-Trichlorophenol	BQL	6.74	2.40	20	5/22/2007	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	0.5	NA	NA
2-Fluorophenol	0.5	NA	NA
Nitrobenzene-d5	0.5	NA	NA
Phenol-d6	0.5	NA	125
2,4,6-Tribromophenol	0.5	NA	NA
4-Terphenyl-d14	0.5	NA	NA

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.
NA = Surrogate diluted out.

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: _____

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: PB8191
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: EAW
Date Collected:
Date Received:
Date Extracted: 5/18/2007
Matrix: SOIL
% Solids: 100

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	313	44.7	1	5/21/2007	
Acenaphthylene	BQL	313	41.6	1	5/21/2007	
Anthracene	BQL	313	45.3	1	5/21/2007	
Benzo[a]anthracene	BQL	313	54.1	1	5/21/2007	
Benzo[a]pyrene	BQL	313	47.8	1	5/21/2007	
Benzo[b]fluoranthene	BQL	313	54.7	1	5/21/2007	
Benzo[g,h,i]perylene	BQL	313	85.0	1	5/21/2007	
Benzo[k]fluoranthene	BQL	313	60.3	1	5/21/2007	
Benzoic Acid	BQL	625	625	1	5/21/2007	
Bis(2-chloroethoxy)methane	BQL	313	46.6	1	5/21/2007	
Bis(2-chloroethyl)ether	BQL	313	37.8	1	5/21/2007	
Bis(2-chloroisopropyl)ether	BQL	313	39.1	1	5/21/2007	
Bis(2-ethylhexyl)phthalate	BQL	313	41.9	1	5/21/2007	
4-bromophenyl phenyl ether	BQL	313	52.8	1	5/21/2007	
Butylbenzylphthalate	BQL	313	48.1	1	5/21/2007	
2-Chloronaphthalene	BQL	313	49.1	1	5/21/2007	
2-Chlorophenol	BQL	313	97.8	1	5/21/2007	
4-Chloro-3-methylphenol	BQL	313	97.5	1	5/21/2007	
4-Chloroaniline	BQL	1560	238	1	5/21/2007	
4-Chlorophenyl phenyl ether	BQL	313	45.9	1	5/21/2007	
Chrysene	BQL	313	33.8	1	5/21/2007	
Dibenzo[a,h]anthracene	BQL	313	87.5	1	5/21/2007	
Dibenzofuran	BQL	313	56.9	1	5/21/2007	
Di-n-Butylphthalate	BQL	313	37.2	1	5/21/2007	
1,2-Dichlorobenzene	BQL	313	34.7	1	5/21/2007	
1,3-Dichlorobenzene	BQL	313	34.1	1	5/21/2007	
1,4-Dichlorobenzene	BQL	313	35.3	1	5/21/2007	
3,3'-Dichlorobenzidine	BQL	625	78.8	1	5/21/2007	
2,4-Dichlorophenol	BQL	313	113	1	5/21/2007	
Diethylphthalate	BQL	313	40.3	1	5/21/2007	
Dimethylphthalate	BQL	313	37.8	1	5/21/2007	
2,4-Dimethylphenol	BQL	313	223	1	5/21/2007	
Di-n-octylphthalate	BQL	313	51.6	1	5/21/2007	
4,6-Dinitro-2-methylphenol	BQL	1560	184	1	5/21/2007	
2,4-Dinitrophenol	BQL	1560	688	1	5/21/2007	
2,4-Dinitrotoluene	BQL	313	40.6	1	5/21/2007	
2,6-Dinitrotoluene	BQL	313	56.9	1	5/21/2007	
Diphenylamine *	BQL	313	30.6	1	5/21/2007	
Fluoranthene	BQL	313	43.7	1	5/21/2007	
Fluorene	BQL	313	38.8	1	5/21/2007	
Hexachlorobenzene	BQL	313	48.1	1	5/21/2007	
Hexachlorobutadiene	BQL	313	50.0	1	5/21/2007	
Hexachlorocyclopentadiene	BQL	625	32.2	1	5/21/2007	
Hexachloroethane	BQL	313	28.1	1	5/21/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: PB8191
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: EAW
Date Collected:
Date Received:
Date Extracted: 5/18/2007
Matrix: SOIL
% Solids: 100

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Indeno(1,2,3-c,d)pyrene	BQL	313	80.0	1	5/21/2007	
Isophorone	BQL	313	45.9	1	5/21/2007	
2-Methylnaphthalene	BQL	313	91.2	1	5/21/2007	
2-Methylphenol	BQL	313	110	1	5/21/2007	
3- & 4-Methylphenol	BQL	313	106	1	5/21/2007	
Naphthalene	BQL	313	25.3	1	5/21/2007	
2-Nitroaniline	BQL	313	49.1	1	5/21/2007	
3-Nitroaniline	BQL	1560	322	1	5/21/2007	
4-Nitroaniline	BQL	1560	96.3	1	5/21/2007	
Nitrobenzene	BQL	313	42.2	1	5/21/2007	
2-Nitrophenol	BQL	313	96.9	1	5/21/2007	
4-Nitrophenol	BQL	1560	86.6	1	5/21/2007	
N-Nitrosodi-n-propylamine	BQL	313	39.7	1	5/21/2007	
Pentachlorophenol	BQL	1560	81.6	1	5/21/2007	
Phenanthrene	BQL	313	35.6	1	5/21/2007	
Phenol	BQL	313	85.6	1	5/21/2007	
Pyrene	BQL	313	60.0	1	5/21/2007	
1,2,4-Trichlorobenzene	BQL	313	39.1	1	5/21/2007	
2,4,5-Trichlorophenol	BQL	313	121	1	5/21/2007	
2,4,6-Trichlorophenol	BQL	313	111	1	5/21/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	9.7	97		
2-Fluorophenol		10	9.6	96		
Nitrobenzene-d5		10	9.6	96		
Phenol-d6		10	10.9	109		
2,4,6-Tribromophenol		10	10.5	105		
4-Terphenyl-d14		10	10.3	103		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: _____

Results For Matrix Spike / Matrix Spike Duplicate and Laboratory Control Standard (MS/MSD/LCS) by GCMS

Client Sample ID: Batch QC

Client Project ID:

Lab Sample ID: Batch-8191-MS/MSD/LCS

Lab Project ID: G128-1957-4H

Matrix: SOIL

Prep Method: 3541

Date Collected:

Date Received:

Date Extracted: 05/21/07

Date Analyzed: 05/22/07

Analyzed By: EAW

Dilution: 20

	Sample Amount (µg/kg)	MS Spike (µg/kg)	MS Conc. (µg/kg)	MS Spike % Rec.	MSD Spike (µg/kg)	MSD Conc. (µg/kg)	MSD Conc. % Rec.	RPD	QC Limits	
									RPD	% Rec.
Acenaphthylene	BQL	3400	4030	N/A	3330	3780	N/A	N/A	30	79.0-141
4-Chloro-3-methylphenol	BQL	3400	816	N/A	3330	867	N/A	N/A	30	40.0-133
2-Chlorophenol	BQL	3400	2860	N/A	3330	2870	N/A	N/A	30	40.0-120
1,4-Dichlorobenzene	BQL	3400	3200	N/A	3330	3470	N/A	N/A	30	56.0-95.0
2,4-Dinitrotoluene	BQL	3400	6330	N/A	3330	7000	N/A	N/A	30	48.0-121
N-Nitrosodi-n-propylamine	BQL	3400	4760	N/A	3330	4330	N/A	N/A	30	70.0-119
4-Nitrophenol	BQL	3400	11000	N/A	3330	15100	N/A	N/A	30	40.0-147
Pentachlorophenol	BQL	3400	8100	N/A	3330	8670	N/A	N/A	30	40.0-122
Phenol	BQL	3400	2180	N/A	3330	2530	N/A	N/A	30	40.0-127
Pyrene	BQL	3400	3810	N/A	3330	3660	N/A	N/A	30	56.0-123
1,2,4-Trichlorobenzene	BQL	3400	3610	N/A	3330	3600	N/A	N/A	30	65.0-105

	Spiked Amount (µg/kg)	LCS Conc. (µg/kg)	LCS Spike %	QC Limits
				% Rec.
Acenaphthylene	3125	3000	95.9	80.9-143
4-Chloro-3-methylphenol	3125	3250	104	83.9-124
2-Chlorophenol	3125	2860	91.6	80.3-119
1,4-Dichlorobenzene	3125	2710	86.6	76.3-118
2,4-Dinitrotoluene	3125	2890	92.4	80.6-126
N-Nitrosodi-n-propylamine	3125	3140	101	80.3-131
4-Nitrophenol	3125	2790	89.4	60.0-145
Pentachlorophenol	3125	2830	90.5	36.4-114
Phenol	3125	3390	109	74.3-117
Pyrene	3125	2370	75.8	74.7-141
1,2,4-Trichlorobenzene	3125	2780	89.0	74.1-120

Comments:

Concentrations reflect the spiked sample amounts.

Flags:

* = Out of limits.

NA = Not applicable, Surrogate diluted out.

Reviewed By: _____

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW03(4-6)
Sample Matrix	Soil
Date Collected	05/16/07
Date Received	05/17/07
Date Extracted	05/18/07
Date Analyzed	05/22/07
Dry Weight	90.2
Dilution Factor	20:5
C ₉ -C ₁₈ Aliphatics*	3000 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 200 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	1400 (mg/Kg)
Aliphatic Surrogate % Recovery	NA
Aromatic Surrogate % Recovery	N/A
Fractionation Surrogate 1 % Recovery	N/A

Comments:

* = Excludes any surrogates or internal standards.

NA = Non-applicable, surrogate diluted out.

Lab info: G128-1957-11

Reviewed By: _____

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW04(4-6)
Sample Matrix	Soil
Date Collected	05/16/07
Date Received	05/17/07
Date Extracted	05/18/07
Date Analyzed	05/22/07
Dry Weight	87.1
Dilution Factor	20:5
C ₉ -C ₁₈ Aliphatics*	3400 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 200 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	1500 (mg/Kg)
Aliphatic Surrogate % Recovery	NA
Aromatic Surrogate % Recovery	N/A
Fractionation Surrogate 1 % Recovery	N/A

Comments:

* = Excludes any surrogates or internal standards.

NA = Non-applicable, surrogate diluted out.

Lab info: G128-1957-2K

Reviewed By: _____

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	UST480-MW05(4-6)
Sample Matrix	Soil
Date Collected	05/16/07
Date Received	05/17/07
Date Extracted	05/18/07
Date Analyzed	05/22/07
Dry Weight	84.5
Dilution Factor	20:5
C ₉ -C ₁₈ Aliphatics*	4400 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	270 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	2000 (mg/Kg)
Aliphatic Surrogate % Recovery	NA
Aromatic Surrogate % Recovery	N/A
Fractionation Surrogate 1 % Recovery	N/A

Comments:

* = Excludes any surrogates or internal standards.

NA = Non-applicable, surrogate diluted out.

Lab info: G128-1957-3I

Reviewed By: _____

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW06(4-6)
Sample Matrix	Soil
Date Collected	05/16/07
Date Received	05/17/07
Date Extracted	05/18/07
Date Analyzed	05/22/07
Dry Weight	91.4
Dilution Factor	20:5
C ₉ -C ₁₈ Aliphatics*	7300 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	480 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	3100 (mg/Kg)
Aliphatic Surrogate % Recovery	NA
Aromatic Surrogate % Recovery	N/A
Fractionation Surrogate 1 % Recovery	N/A

Comments:

* = Excludes any surrogates or internal standards.

NA = Non-applicable, surrogate diluted out.

Lab info: G128-1957-4K

Reviewed By: _____

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 05/09/07

Calibration Ranges and Limits

Range	MDL (10/2006) (µg/L)	ML (µg/L)	RL (µg/L) (mg/Kg)	
C ₉ -C ₁₈ Aliphatics	28.10	89.4	100	10
C ₁₉ -C ₃₆ Aliphatics	36.50	116	100	10
C ₁₁ -C ₂₂ Aromatics	27.60	87.8	100	10

Calibration Concentration Levels

Range	Levels (µg/mL)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	13.70	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	14.2	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	5.9	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 05/22/07

Calibration Check

Range	Levels (µg/mL)	RPD
C ₉ -C ₁₈ Aliphatics	120	23.9
C ₁₉ -C ₃₆ Aliphatics	160	24.6
C ₁₁ -C ₂₂ Aromatics	340	17.0

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit

RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW03(4-6)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/16/07
Date Received	05/17/07
Date Extracted	05/16/07
Date Analyzed	05/24/07
Dry Weight	90
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	14 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	91 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	71 (mg/Kg)
Surrogate % Recovery - PID	220***
Surrogate % Recovery - FID	460***

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

***= High surrogate recovery due to matrix interference

Lab Info: g128-1957-1e

Reviewed By: _____

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW04(4-6)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/16/07
Date Received	05/17/07
Date Extracted	05/16/07
Date Analyzed	05/24/07
Dry Weight	87
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	70 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	46 (mg/Kg)
Surrogate % Recovery - PID	160***
Surrogate % Recovery - FID	300***

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

***= High surrogate recovery due to matrix interference

Lab Info: g128-1957-2e

Reviewed By: _____

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	UST480-MW05(4-6)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/16/07
Date Received	05/17/07
Date Extracted	05/16/07
Date Analyzed	05/24/07
Dry Weight	85
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	41 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	130 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	120 (mg/Kg)
Surrogate % Recovery - PID	350***
Surrogate % Recovery - FID	520***

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

***= High surrogate recovery due to matrix interference

Lab Info: g128-1957-3e

Reviewed By: _____

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW06(4-6)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/16/07
Date Received	05/17/07
Date Extracted	05/16/07
Date Analyzed	05/24/07
Dry Weight	91
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	75 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	190 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	240 (mg/Kg)
Surrogate % Recovery - PID	440***
Surrogate % Recovery - FID	790***

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

***= High surrogate recovery due to matrix interference

Lab Info: g128-1957-4e

Reviewed By: _____

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 05/21/07

PID Initial Calibration Date: 05/21/07

Calibration Ranges and Limits

Range	MDL (10/5/2006) (µg/L)	ML (µg/L)	RL (µg/L) (mg/Kg)
C ₅ -C ₈ Aliphatics	33.1	105	100 10
C ₉ -C ₁₂ Aliphatics	30.9	98.3	100 10
C ₉ -C ₁₀ Aromatics	27.7	88.1	100 10

Calibration Concentration Levels

Range	Levels (µg/L)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	40	05.3	Calibration Factor
	1000		
	2000		
	3000		
	4000		
C ₉ -C ₁₂ Aliphatics	10	0.99	Linear Regression
	250		
	500		
	750		
	1000		
C ₉ -C ₁₀ Aromatics	10	1.00	Linear Regression
	250		
	500		
	750		
	1000		

Calibration Check Date: 05/24/07

Calibration Check

Range	Levels (mg/Kg)	(µg/L)	RPD
C ₅ -C ₈ Aliphatics	2000	200	15.7
C ₉ -C ₁₂ Aliphatics	500	50	12.0
C ₉ -C ₁₀ Aromatics	500	50	9.5

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 05/21/07

PID Initial Calibration Date: 05/21/07

Calibration Ranges and Limits

Range	MDL (10/5/2006) (µg/L)	ML (µg/L)	RL (µg/L) (mg/Kg)
C ₅ -C ₈ Aliphatics	33.1	105	100 10
C ₉ -C ₁₂ Aliphatics	30.9	98.3	100 10
C ₉ -C ₁₀ Aromatics	27.7	88.1	100 10

Calibration Concentration Levels

Range	Levels (µg/L)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	40	05.3	Calibration Factor
	1000		
	2000		
	3000		
	4000		
C ₉ -C ₁₂ Aliphatics	10	0.99	Linear Regression
	250		
	500		
	750		
	1000		
C ₉ -C ₁₀ Aromatics	10	1.00	Linear Regression
	250		
	500		
	750		
	1000		

Calibration Check Date: 05/23/07

Calibration Check

Range	Levels (mg/Kg) (µg/L)	RPD
C ₅ -C ₈ Aliphatics	2000 200	13.9
C ₉ -C ₁₂ Aliphatics	500 50	3.5
C ₉ -C ₁₀ Aromatics	500 50	5.3

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve



List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

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Mr. Steve Hudson
Richard Catlin & Associates
P.O. Box 10279
Wilmington NC 28404-0279

Report Number: G128-1958
Client Project: Site G480 CSA

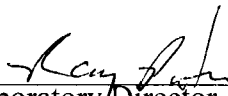
Dear Mr. Hudson:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call SGS/Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS/Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
SGS/Paradigm Analytical Laboratories, Inc.


Laboratory Director
J. Patrick Weaver

6/6/2007
Date



List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW02 (3-5)

Client Project ID: Site G480 CSA

Lab Sample ID: G128-1958-1E

Lab Project ID: G128-1958

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 5/22/2007 12:30

Date Received: 5/22/2007

Matrix: Soil

Sample Amount: 5.52 g

%Solids: 90.9

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	2.49	0.109	100	5/25/2007	
Benzene	BQL	0.0997	0.0212	100	5/25/2007	
Bromobenzene	BQL	0.0997	0.0294	100	5/25/2007	
Bromochloromethane	BQL	0.0997	0.0208	100	5/25/2007	
Bromodichloromethane	BQL	0.0997	0.0195	100	5/25/2007	
Bromoform	BQL	0.0997	0.0198	100	5/25/2007	
Bromomethane	BQL	0.0997	0.0391	100	5/25/2007	
2-Butanone	BQL	2.49	0.153	100	5/25/2007	
n-Butylbenzene	0.761	0.0997	0.0488	100	5/25/2007	
sec-Butylbenzene	0.309	0.0997	0.0431	100	5/25/2007	
tert-Butylbenzene	BQL	0.0997	0.0390	100	5/25/2007	
Carbon disulfide	BQL	0.0997	0.0199	100	5/25/2007	
Carbon tetrachloride	BQL	0.0997	0.0276	100	5/25/2007	
Chlorobenzene	BQL	0.0997	0.0289	100	5/25/2007	
Chloroethane	BQL	0.0997	0.0566	100	5/25/2007	
Chloroform	BQL	0.0997	0.0203	100	5/25/2007	
Chloromethane	0.0907	0.0997	0.0270	100	5/25/2007	J
2-Chlorotoluene	BQL	0.0997	0.0320	100	5/25/2007	
4-Chlorotoluene	BQL	0.0997	0.0366	100	5/25/2007	
Dibromochloromethane	BQL	0.0997	0.0238	100	5/25/2007	
1,2-Dibromo-3-chloropropane	BQL	0.498	0.429	100	5/25/2007	
Dibromomethane	BQL	0.0997	0.0311	100	5/25/2007	
1,2-Dibromoethane (EDB)	BQL	0.0997	0.0251	100	5/25/2007	
1,2-Dichlorobenzene	BQL	0.0997	0.0373	100	5/25/2007	
1,3-Dichlorobenzene	BQL	0.0997	0.0363	100	5/25/2007	
1,4-Dichlorobenzene	BQL	0.0997	0.0400	100	5/25/2007	
trans-1,4-Dichloro-2-butene	BQL	0.498	0.424	100	5/25/2007	
1,1-Dichloroethane	BQL	0.0997	0.0236	100	5/25/2007	
1,1-Dichloroethene	BQL	0.0997	0.0184	100	5/25/2007	
1,2-Dichloroethane	BQL	0.0997	0.0209	100	5/25/2007	
cis-1,2-Dichloroethene	BQL	0.0997	0.0193	100	5/25/2007	
trans-1,2-dichloroethene	BQL	0.0997	0.0203	100	5/25/2007	
1,2-Dichloropropane	BQL	0.0997	0.0211	100	5/25/2007	
1,3-Dichloropropane	BQL	0.0997	0.0227	100	5/25/2007	
2,2-Dichloropropane	BQL	0.0997	0.0228	100	5/25/2007	
1,1-Dichloropropene	BQL	0.0997	0.0230	100	5/25/2007	
cis-1,3-Dichloropropene	BQL	0.0997	0.0241	100	5/25/2007	
trans-1,3-Dichloropropene	BQL	0.0997	0.0233	100	5/25/2007	
Dichlorodifluoromethane	BQL	0.498	0.0214	100	5/25/2007	
Diisopropyl ether (DIPE)	BQL	0.0997	0.0281	100	5/25/2007	
Ethylbenzene	0.293	0.0997	0.0279	100	5/25/2007	
Hexachlorobutadiene	BQL	0.0997	0.0650	100	5/25/2007	

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW02 (3-5)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1958-1E
Lab Project ID: G128-1958
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 5/22/2007 12:30
Date Received: 5/22/2007
Matrix: Soil
Sample Amount: 5.52 g
%Solids: 90.9

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.498	0.119	100	5/25/2007	
Iodomethane	BQL	0.0997	0.0156	100	5/25/2007	
Isopropylbenzene	0.253	0.0997	0.0315	100	5/25/2007	
4-Isopropyltoluene	0.280	0.0997	0.0435	100	5/25/2007	
Methylene chloride	BQL	0.498	0.0299	100	5/25/2007	
4-Methyl-2-pentanone	BQL	0.498	0.138	100	5/25/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.0997	0.0208	100	5/25/2007	
Naphthalene	1.19	0.0997	0.0522	100	5/25/2007	
n-Propyl benzene	0.516	0.0997	0.0379	100	5/25/2007	
Styrene	BQL	0.0997	0.0321	100	5/25/2007	
1,1,1,2-Tetrachloroethane	BQL	0.0997	0.0276	100	5/25/2007	
1,1,2,2-Tetrachloroethane	BQL	0.0997	0.0328	100	5/25/2007	
Tetrachloroethene	BQL	0.0997	0.0225	100	5/25/2007	
Toluene	BQL	0.0997	0.0222	100	5/25/2007	
1,2,3-Trichlorobenzene	BQL	0.0997	0.0685	100	5/25/2007	
1,2,4-Trichlorobenzene	BQL	0.0997	0.0594	100	5/25/2007	
Trichloroethene	BQL	0.0997	0.0208	100	5/25/2007	
1,1,1-Trichloroethane	BQL	0.0997	0.0255	100	5/25/2007	
1,1,2-Trichloroethane	BQL	0.0997	0.0278	100	5/25/2007	
Trichlorofluoromethane	BQL	0.0997	0.0201	100	5/25/2007	
1,2,3-Trichloropropane	BQL	0.0997	0.148	100	5/25/2007	
1,2,4-Trimethylbenzene	1.89	0.0997	0.0412	100	5/25/2007	
1,3,5-Trimethylbenzene	0.781	0.0997	0.0377	100	5/25/2007	
Vinyl chloride	BQL	0.0997	0.0220	100	5/25/2007	
m-,p-Xylene	0.151	0.199	0.0604	100	5/25/2007	J
o-Xylene	0.0628	0.0997	0.0343	100	5/25/2007	J
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.01	0.0076	76		
Toluene-d8		0.01	0.00998	100		
4-Bromofluorobenzene		0.01	0.00966	97		

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By: 

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW02 (3-5)DUP

Client Project ID: Site G480 CSA

Lab Sample ID: G128-1958-2E

Lab Project ID: G128-1958

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 5/22/2007 12:30

Date Received: 5/22/2007

Matrix: Soil

Sample Amount: 5.7 g

%Solids: 89.9

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	2.44	0.106	100	5/25/2007	
Benzene	BQL	0.0976	0.0208	100	5/25/2007	
Bromobenzene	BQL	0.0976	0.0288	100	5/25/2007	
Bromochloromethane	BQL	0.0976	0.0204	100	5/25/2007	
Bromodichloromethane	BQL	0.0976	0.0191	100	5/25/2007	
Bromoform	BQL	0.0976	0.0194	100	5/25/2007	
Bromomethane	BQL	0.0976	0.0382	100	5/25/2007	
2-Butanone	BQL	2.44	0.149	100	5/25/2007	
n-Butylbenzene	1.33	0.0976	0.0478	100	5/25/2007	
sec-Butylbenzene	0.480	0.0976	0.0422	100	5/25/2007	
tert-Butylbenzene	BQL	0.0976	0.0382	100	5/25/2007	
Carbon disulfide	BQL	0.0976	0.0195	100	5/25/2007	
Carbon tetrachloride	BQL	0.0976	0.0270	100	5/25/2007	
Chlorobenzene	BQL	0.0976	0.0283	100	5/25/2007	
Chloroethane	BQL	0.0976	0.0554	100	5/25/2007	
Chloroform	BQL	0.0976	0.0199	100	5/25/2007	
Chloromethane	0.0751	0.0976	0.0264	100	5/25/2007	J
2-Chlorotoluene	BQL	0.0976	0.0313	100	5/25/2007	
4-Chlorotoluene	BQL	0.0976	0.0358	100	5/25/2007	
Dibromochloromethane	BQL	0.0976	0.0233	100	5/25/2007	
1,2-Dibromo-3-chloropropane	BQL	0.488	0.420	100	5/25/2007	
Dibromomethane	BQL	0.0976	0.0304	100	5/25/2007	
1,2-Dibromoethane (EDB)	BQL	0.0976	0.0246	100	5/25/2007	
1,2-Dichlorobenzene	BQL	0.0976	0.0365	100	5/25/2007	
1,3-Dichlorobenzene	BQL	0.0976	0.0355	100	5/25/2007	
1,4-Dichlorobenzene	BQL	0.0976	0.0391	100	5/25/2007	
trans-1,4-Dichloro-2-butene	BQL	0.488	0.415	100	5/25/2007	
1,1-Dichloroethane	BQL	0.0976	0.0231	100	5/25/2007	
1,1-Dichloroethene	BQL	0.0976	0.0181	100	5/25/2007	
1,2-Dichloroethane	BQL	0.0976	0.0205	100	5/25/2007	
cis-1,2-Dichloroethene	BQL	0.0976	0.0189	100	5/25/2007	
trans-1,2-dichloroethene	BQL	0.0976	0.0199	100	5/25/2007	
1,2-Dichloropropane	BQL	0.0976	0.0207	100	5/25/2007	
1,3-Dichloropropane	BQL	0.0976	0.0222	100	5/25/2007	
2,2-Dichloropropane	BQL	0.0976	0.0223	100	5/25/2007	
1,1-Dichloropropene	BQL	0.0976	0.0225	100	5/25/2007	
cis-1,3-Dichloropropene	BQL	0.0976	0.0236	100	5/25/2007	
trans-1,3-Dichloropropene	BQL	0.0976	0.0228	100	5/25/2007	
Dichlorodifluoromethane	BQL	0.488	0.0210	100	5/25/2007	
Diisopropyl ether (DIPE)	BQL	0.0976	0.0275	100	5/25/2007	
Ethylbenzene	0.318	0.0976	0.0273	100	5/25/2007	
Hexachlorobutadiene	BQL	0.0976	0.0636	100	5/25/2007	

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW02 (3-5)DUP
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1958-2E
Lab Project ID: G128-1958
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 5/22/2007 12:30
Date Received: 5/22/2007
Matrix: Soil
Sample Amount: 5.7 g
%Solids: 89.9

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.488	0.116	100	5/25/2007	
Iodomethane	BQL	0.0976	0.0152	100	5/25/2007	
Isopropylbenzene	0.339	0.0976	0.0308	100	5/25/2007	
4-Isopropyltoluene	0.425	0.0976	0.0425	100	5/25/2007	
Methylene chloride	BQL	0.488	0.0293	100	5/25/2007	
4-Methyl-2-pentanone	BQL	0.488	0.135	100	5/25/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.0976	0.0204	100	5/25/2007	
Naphthalene	1.92	0.0976	0.0511	100	5/25/2007	
n-Propyl benzene	0.737	0.0976	0.0371	100	5/25/2007	
Styrene	BQL	0.0976	0.0314	100	5/25/2007	
1,1,1,2-Tetrachloroethane	BQL	0.0976	0.0270	100	5/25/2007	
1,1,2,2-Tetrachloroethane	BQL	0.0976	0.0321	100	5/25/2007	
Tetrachloroethene	BQL	0.0976	0.0221	100	5/25/2007	
Toluene	BQL	0.0976	0.0218	100	5/25/2007	
1,2,3-Trichlorobenzene	BQL	0.0976	0.0670	100	5/25/2007	
1,2,4-Trichlorobenzene	BQL	0.0976	0.0582	100	5/25/2007	
Trichloroethene	BQL	0.0976	0.0204	100	5/25/2007	
1,1,1-Trichloroethane	BQL	0.0976	0.0250	100	5/25/2007	
1,1,2-Trichloroethane	BQL	0.0976	0.0272	100	5/25/2007	
Trichlorofluoromethane	BQL	0.0976	0.0197	100	5/25/2007	
1,2,3-Trichloropropane	BQL	0.0976	0.144	100	5/25/2007	
1,2,4-Trimethylbenzene	3.03	0.0976	0.0403	100	5/25/2007	
1,3,5-Trimethylbenzene	1.19	0.0976	0.0369	100	5/25/2007	
Vinyl chloride	BQL	0.0976	0.0216	100	5/25/2007	
m-,p-Xylene	0.159	0.195	0.0591	100	5/25/2007	J
o-Xylene	0.0703	0.0976	0.0336	100	5/25/2007	J
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.01	0.0112	112		
Toluene-d8		0.01	0.0106	106		
4-Bromofluorobenzene		0.01	0.0112	112		

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By: 

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: Trip Blank
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1958-3B
Lab Project ID: G128-1958
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 5/22/2007 0:00
Date Received: 5/22/2007
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	1.25	0.0545	50	5/25/2007	
Benzene	BQL	0.0500	0.0107	50	5/25/2007	
Bromobenzene	BQL	0.0500	0.0148	50	5/25/2007	
Bromochloromethane	BQL	0.0500	0.0105	50	5/25/2007	
Bromodichloromethane	BQL	0.0500	0.00980	50	5/25/2007	
Bromoform	BQL	0.0500	0.00995	50	5/25/2007	
Bromomethane	BQL	0.0500	0.0196	50	5/25/2007	
2-Butanone	BQL	1.25	0.0765	50	5/25/2007	
n-Butylbenzene	BQL	0.0500	0.0245	50	5/25/2007	
sec-Butylbenzene	BQL	0.0500	0.0216	50	5/25/2007	
tert-Butylbenzene	BQL	0.0500	0.0196	50	5/25/2007	
Carbon disulfide	BQL	0.0500	0.0100	50	5/25/2007	
Carbon tetrachloride	BQL	0.0500	0.0139	50	5/25/2007	
Chlorobenzene	BQL	0.0500	0.0145	50	5/25/2007	
Chloroethane	BQL	0.0500	0.0284	50	5/25/2007	
Chloroform	BQL	0.0500	0.0102	50	5/25/2007	
Chloromethane	0.0625	0.0500	0.0136	50	5/25/2007	
2-Chlorotoluene	BQL	0.0500	0.0161	50	5/25/2007	
4-Chlorotoluene	BQL	0.0500	0.0184	50	5/25/2007	
Dibromochloromethane	BQL	0.0500	0.0120	50	5/25/2007	
1,2-Dibromo-3-chloropropane	BQL	0.250	0.215	50	5/25/2007	
Dibromomethane	BQL	0.0500	0.0156	50	5/25/2007	
1,2-Dibromoethane (EDB)	BQL	0.0500	0.0126	50	5/25/2007	
1,2-Dichlorobenzene	BQL	0.0500	0.0187	50	5/25/2007	
1,3-Dichlorobenzene	BQL	0.0500	0.0182	50	5/25/2007	
1,4-Dichlorobenzene	BQL	0.0500	0.0200	50	5/25/2007	
trans-1,4-Dichloro-2-butene	BQL	0.250	0.213	50	5/25/2007	
1,1-Dichloroethane	BQL	0.0500	0.0119	50	5/25/2007	
1,1-Dichloroethene	BQL	0.0500	0.00925	50	5/25/2007	
1,2-Dichloroethane	BQL	0.0500	0.0105	50	5/25/2007	
cis-1,2-Dichloroethene	BQL	0.0500	0.00970	50	5/25/2007	
trans-1,2-dichloroethene	BQL	0.0500	0.0102	50	5/25/2007	
1,2-Dichloropropane	BQL	0.0500	0.0106	50	5/25/2007	
1,3-Dichloropropane	BQL	0.0500	0.0114	50	5/25/2007	
2,2-Dichloropropane	BQL	0.0500	0.0115	50	5/25/2007	
1,1-Dichloropropene	BQL	0.0500	0.0116	50	5/25/2007	
cis-1,3-Dichloropropene	BQL	0.0500	0.0121	50	5/25/2007	
trans-1,3-Dichloropropene	BQL	0.0500	0.0117	50	5/25/2007	
Dichlorodifluoromethane	BQL	0.250	0.0108	50	5/25/2007	
Diisopropyl ether (DIPE)	BQL	0.0500	0.0141	50	5/25/2007	
Ethylbenzene	BQL	0.0500	0.0140	50	5/25/2007	
Hexachlorobutadiene	BQL	0.0500	0.0326	50	5/25/2007	

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: Trip Blank
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1958-3B
Lab Project ID: G128-1958
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 5/22/2007 0:00
Date Received: 5/22/2007
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.250	0.0595	50	5/25/2007	
Iodomethane	BQL	0.0500	0.00780	50	5/25/2007	
Isopropylbenzene	BQL	0.0500	0.0158	50	5/25/2007	
4-Isopropyltoluene	BQL	0.0500	0.0218	50	5/25/2007	
Methylene chloride	0.0220	0.250	0.0150	50	5/25/2007	J
4-Methyl-2-pentanone	BQL	0.250	0.0690	50	5/25/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.0500	0.0105	50	5/25/2007	
Naphthalene	BQL	0.0500	0.0262	50	5/25/2007	
n-Propyl benzene	BQL	0.0500	0.0190	50	5/25/2007	
Styrene	BQL	0.0500	0.0161	50	5/25/2007	
1,1,1,2-Tetrachloroethane	BQL	0.0500	0.0139	50	5/25/2007	
1,1,2,2-Tetrachloroethane	BQL	0.0500	0.0164	50	5/25/2007	
Tetrachloroethene	BQL	0.0500	0.0113	50	5/25/2007	
Toluene	BQL	0.0500	0.0111	50	5/25/2007	
1,2,3-Trichlorobenzene	BQL	0.0500	0.0344	50	5/25/2007	
1,2,4-Trichlorobenzene	BQL	0.0500	0.0298	50	5/25/2007	
Trichloroethene	BQL	0.0500	0.0105	50	5/25/2007	
1,1,1-Trichloroethane	BQL	0.0500	0.0128	50	5/25/2007	
1,1,2-Trichloroethane	BQL	0.0500	0.0139	50	5/25/2007	
Trichlorofluoromethane	BQL	0.0500	0.0101	50	5/25/2007	
1,2,3-Trichloropropane	BQL	0.0500	0.0740	50	5/25/2007	
1,2,4-Trimethylbenzene	BQL	0.0500	0.0206	50	5/25/2007	
1,3,5-Trimethylbenzene	BQL	0.0500	0.0189	50	5/25/2007	
Vinyl chloride	BQL	0.0500	0.0111	50	5/25/2007	
m-,p-Xylene	BQL	0.100	0.0303	50	5/25/2007	
o-Xylene	BQL	0.0500	0.0172	50	5/25/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.01	0.0107	106		
Toluene-d8		0.01	0.01	100		
4-Bromofluorobenzene		0.01	0.0105	105		

Comments:**Flags:**

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: RM



LABORATORY CONTROL SAMPLE VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: SGS Environmental

Lab Code: NC00919

Case No.:

SAS No.:

SDG No:

Matrix: (soil/water) Water

Lab Sample ID: LCS3052507a

Sample wt/vol: 5.00 (mL)

Lab File ID: 0525304.D

Level: (low/med) NA

% Moisture: not dec. NA

Date Analyzed: 2007-05-25 13:52

GC Column: DB-624 ID: 0.2 (mm)

Dilution Factor: 1

Soil Extract Volume: NA

Soil Aliquot Volume: NA

CAS NO.	COMPOUND	SPIKE AMT (µg/L)	SAMP CONC (µg/L)	% REC #	QC LIMITS
71-43-2	benzene	5.00	4.71	94.2	77.4-123
108-90-7	chlorobenzene	5.00	5.08	102	72.5-128
75-35-4	1,1-dichloroethene	5.00	4.91	98.2	71.7-128
108-88-3	toluene	5.00	5.03	101	75.9-124
79-01-6	trichloroethene	5.00	5.07	101	77.9-122

System Monitoring Compound Results

		Spike Added (µg/L)	Spike Result (µg/L)	Percent Rec. (%)	Percent Recovery (%)
460-00-4	4-Bromofluorobenzene	10	10.0	105	84.7 - 115
17060-07-0	1,2-Dichloroethane-d4	10	10.0	105	63.5 - 140
2037-26-5	Toluene-d8	10	10.0	100	81.8 - 117



SGS ENVIRONMENTAL SERVICES, INC.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Contract:

Lab Code: NC00919

Case No.:

SAS No.:

SDG No.:

LCS: LCS3052507A

Filename: 0525304.D

Date Analyzed: 05/25/07 13:52 Dilution: 1

LCSD: LCS3052507B

Filename: 0525305.D

Date Analyzed: 05/25/07 14:23 Matrix: Water

COMPOUND	LCS SPIKE (µg/L)	LCS CONC (µg/L)	LCS % REC #	LCSD SPIKE (µg/L)	LCSD CONC (µg/L)	LCSD % REC #	% RPD	QC LIMITS	
								RPD	REC
benzene	5.00	4.71	94.2	5.00	5.39	108	13.5	30	77.4-123
chlorobenzene	5.00	5.08	102	5.00	5.64	113	10.4	30	72.5-128
1,1-dichloroethene	5.00	4.91	98.2	5.00	5.24	105	6.50	30	71.7-128
toluene	5.00	5.03	101	5.00	5.52	110	9.29	30	75.9-124
trichloroethene	5.00	5.07	101	5.00	5.21	104	2.72	30	77.9-122

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:



SGS ENVIRONMENTAL SERVICES, INC.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Contract:

Lab Code: NC00919

Case No.:

SAS No.:

SDG No.:

Matrix Spike - EPA Sample No.: g100-929-9a

Dilution: 10

FileNames: 0525312.D, 0525322.D, 0525323.D

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
benzene	BQL	50.0	53.8	108	50.0	49.9	99.8	7.52	30	61.6-135
chlorobenzene	BQL	50.0	52.7	105	50.0	59.7	119*	12.4	30	77.2-118
1,1-dichloroethene	BQL	50.0	53.8	108	50.0	53.5	107	0.559	30	64.4-130
toluene	BQL	50.0	54.2	108	50.0	54.3	108	0.184	30	66.4-128
trichloroethene	BQL	50.0	52.0	104	50.0	50.6	101	2.73	30	84.9-136

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW02 (3-5)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1958-1G
Lab Project ID: G128-1958
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 5/22/2007 12:30
Date Received: 5/22/2007
Date Extracted: 5/25/2007
Matrix: Soil
% Solids: 90.87

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.326	0.047	1	5/31/2007	
Acenaphthylene	BQL	0.326	0.043	1	5/31/2007	
Anthracene	BQL	0.326	0.047	1	5/31/2007	
Benzo[a]anthracene	BQL	0.326	0.056	1	5/31/2007	
Benzo[a]pyrene	BQL	0.326	0.050	1	5/31/2007	
Benzo[b]fluoranthene	BQL	0.326	0.057	1	5/31/2007	
Benzo[g,h,i]perylene	BQL	0.326	0.089	1	5/31/2007	
Benzo[k]fluoranthene	BQL	0.326	0.063	1	5/31/2007	
Benzoic Acid	BQL	0.652	0.652	1	5/31/2007	
Bis(2-chloroethoxy)methane	BQL	0.326	0.049	1	5/31/2007	
Bis(2-chloroethyl)ether	BQL	0.326	0.040	1	5/31/2007	
Bis(2-chloroisopropyl)ether	BQL	0.326	0.041	1	5/31/2007	
Bis(2-ethylhexyl)phthalate	BQL	0.326	0.044	1	5/31/2007	
4-bromophenyl phenyl ether	BQL	0.326	0.055	1	5/31/2007	
Butylbenzylphthalate	BQL	0.326	0.050	1	5/31/2007	
2-Chloronaphthalene	BQL	0.326	0.051	1	5/31/2007	
2-Chlorophenol	BQL	0.326	0.102	1	5/31/2007	
4-Chloro-3-methylphenol	BQL	0.326	0.102	1	5/31/2007	
4-Chloroaniline	BQL	1.63	0.248	1	5/31/2007	
4-Chlorophenyl phenyl ether	BQL	0.326	0.048	1	5/31/2007	
Chrysene	BQL	0.326	0.035	1	5/31/2007	
Dibenzo[a,h]anthracene	BQL	0.326	0.091	1	5/31/2007	
Dibenzofuran	0.222	0.326	0.059	1	5/31/2007	J
Di-n-Butylphthalate	BQL	0.326	0.039	1	5/31/2007	
1,2-Dichlorobenzene	BQL	0.326	0.036	1	5/31/2007	
1,3-Dichlorobenzene	BQL	0.326	0.036	1	5/31/2007	
1,4-Dichlorobenzene	BQL	0.326	0.037	1	5/31/2007	
3,3'-Dichlorobenzidine	BQL	0.652	0.082	1	5/31/2007	
2,4-Dichlorophenol	BQL	0.326	0.117	1	5/31/2007	
Diethylphthalate	BQL	0.326	0.042	1	5/31/2007	
Dimethylphthalate	BQL	0.326	0.040	1	5/31/2007	
2,4-Dimethylphenol	BQL	0.326	0.233	1	5/31/2007	
Di-n-octylphthalate	BQL	0.326	0.054	1	5/31/2007	
4,6-Dinitro-2-methylphenol	BQL	1.63	0.192	1	5/31/2007	
2,4-Dinitrophenol	BQL	1.63	0.718	1	5/31/2007	
2,4-Dinitrotoluene	BQL	0.326	0.042	1	5/31/2007	
2,6-Dinitrotoluene	BQL	0.326	0.059	1	5/31/2007	
Diphenylamine *	BQL	0.326	0.032	1	5/31/2007	
Fluoranthene	BQL	0.326	0.046	1	5/31/2007	
Fluorene	0.179	0.326	0.040	1	5/31/2007	J
Hexachlorobenzene	BQL	0.326	0.050	1	5/31/2007	
Hexachlorobutadiene	BQL	0.326	0.052	1	5/31/2007	
Hexachlorocyclopentadiene	BQL	0.652	0.034	1	5/31/2007	
Hexachloroethane	BQL	0.326	0.029	1	5/31/2007	
Indeno(1,2,3-c,d)pyrene	BQL	0.326	0.084	1	5/31/2007	
Isophorone	BQL	0.326	0.048	1	5/31/2007	
2-Methylnaphthalene	4.68	0.326	0.095	1	5/31/2007	
2-Methylphenol	BQL	0.326	0.115	1	5/31/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW02 (3-5)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1958-1G
Lab Project ID: G128-1958
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 5/22/2007 12:30
Date Received: 5/22/2007
Date Extracted: 5/25/2007
Matrix: Soil
% Solids: 90.87

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	0.326	0.111	1	5/31/2007	
Naphthalene	1.37	0.326	0.026	1	5/31/2007	
2-Nitroaniline	BQL	0.326	0.051	1	5/31/2007	
3-Nitroaniline	BQL	1.63	0.336	1	5/31/2007	
4-Nitroaniline	BQL	1.63	0.100	1	5/31/2007	
Nitrobenzene	BQL	0.326	0.044	1	5/31/2007	
2-Nitrophenol	BQL	0.326	0.101	1	5/31/2007	
4-Nitrophenol	BQL	1.63	0.090	1	5/31/2007	
N-Nitrosodi-n-propylamine	BQL	0.326	0.041	1	5/31/2007	
Pentachlorophenol	BQL	1.63	0.085	1	5/31/2007	
Phenanthrene	0.300	0.326	0.037	1	5/31/2007	J
Phenol	BQL	0.326	0.089	1	5/31/2007	
Pyrene	0.088	0.326	0.063	1	5/31/2007	J
1,2,4-Trichlorobenzene	BQL	0.326	0.041	1	5/31/2007	
2,4,5-Trichlorophenol	BQL	0.326	0.126	1	5/31/2007	
2,4,6-Trichlorophenol	BQL	0.326	0.116	1	5/31/2007	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.7	97
2-Fluorophenol	10	11.2	112
Nitrobenzene-d5	10	10.9	109
Phenol-d6	10	11.5	115
2,4,6-Tribromophenol	10	10.9	109
4-Terphenyl-d14	10	13.4	134

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: PB8233
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: EAW
Date Collected:
Date Received:
Date Extracted: 5/25/2007
Matrix: SOIL
% Solids: 100

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	313	44.7	1	6/5/2007	
Acenaphthylene	BQL	313	41.6	1	6/5/2007	
Anthracene	BQL	313	45.3	1	6/5/2007	
Benzo[a]anthracene	BQL	313	54.1	1	6/5/2007	
Benzo[a]pyrene	BQL	313	47.8	1	6/5/2007	
Benzo[b]fluoranthene	BQL	313	54.7	1	6/5/2007	
Benzo[g,h,i]perylene	BQL	313	85.0	1	6/5/2007	
Benzo[k]fluoranthene	BQL	313	60.3	1	6/5/2007	
Benzoic Acid	BQL	625	625	1	6/5/2007	
Bis(2-chloroethoxy)methane	BQL	313	46.6	1	6/5/2007	
Bis(2-chloroethyl)ether	BQL	313	37.8	1	6/5/2007	
Bis(2-chloroisopropyl)ether	BQL	313	39.1	1	6/5/2007	
Bis(2-ethylhexyl)phthalate	BQL	313	41.9	1	6/5/2007	
4-bromophenyl phenyl ether	BQL	313	52.8	1	6/5/2007	
Butylbenzylphthalate	BQL	313	48.1	1	6/5/2007	
2-Chloronaphthalene	BQL	313	49.1	1	6/5/2007	
2-Chlorophenol	BQL	313	97.8	1	6/5/2007	
4-Chloro-3-methylphenol	BQL	313	97.5	1	6/5/2007	
4-Chloroaniline	BQL	1560	238	1	6/5/2007	
4-Chlorophenyl phenyl ether	BQL	313	45.9	1	6/5/2007	
Chrysene	BQL	313	33.8	1	6/5/2007	
Dibenzo[a,h]anthracene	BQL	313	87.5	1	6/5/2007	
Dibenzofuran	BQL	313	56.9	1	6/5/2007	
Di-n-Butylphthalate	BQL	313	37.2	1	6/5/2007	
1,2-Dichlorobenzene	BQL	313	34.7	1	6/5/2007	
1,3-Dichlorobenzene	BQL	313	34.1	1	6/5/2007	
1,4-Dichlorobenzene	BQL	313	35.3	1	6/5/2007	
3,3'-Dichlorobenzidine	BQL	625	78.8	1	6/5/2007	
2,4-Dichlorophenol	BQL	313	113	1	6/5/2007	
Diethylphthalate	BQL	313	40.3	1	6/5/2007	
Dimethylphthalate	BQL	313	37.8	1	6/5/2007	
2,4-Dimethylphenol	BQL	313	223	1	6/5/2007	
Di-n-octylphthalate	BQL	313	51.6	1	6/5/2007	
4,6-Dinitro-2-methylphenol	BQL	1560	184	1	6/5/2007	
2,4-Dinitrophenol	BQL	1560	688	1	6/5/2007	
2,4-Dinitrotoluene	BQL	313	40.6	1	6/5/2007	
2,6-Dinitrotoluene	BQL	313	56.9	1	6/5/2007	
Diphenylamine *	BQL	313	30.6	1	6/5/2007	
Fluoranthene	BQL	313	43.7	1	6/5/2007	
Fluorene	BQL	313	38.8	1	6/5/2007	
Hexachlorobenzene	BQL	313	48.1	1	6/5/2007	
Hexachlorobutadiene	BQL	313	50.0	1	6/5/2007	
Hexachlorocyclopentadiene	BQL	625	32.2	1	6/5/2007	
Hexachloroethane	BQL	313	28.1	1	6/5/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: PB8233
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: EAW
Date Collected:
Date Received:
Date Extracted: 5/25/2007
Matrix: SOIL
% Solids: 100

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Indeno(1,2,3-c,d)pyrene	BQL	313	80.0	1	6/5/2007	
Isophorone	BQL	313	45.9	1	6/5/2007	
2-Methylnaphthalene	BQL	313	91.2	1	6/5/2007	
2-Methylphenol	BQL	313	110	1	6/5/2007	
3- & 4-Methylphenol	BQL	313	106	1	6/5/2007	
Naphthalene	BQL	313	25.3	1	6/5/2007	
2-Nitroaniline	BQL	313	49.1	1	6/5/2007	
3-Nitroaniline	BQL	1560	322	1	6/5/2007	
4-Nitroaniline	BQL	1560	96.3	1	6/5/2007	
Nitrobenzene	BQL	313	42.2	1	6/5/2007	
2-Nitrophenol	BQL	313	96.9	1	6/5/2007	
4-Nitrophenol	BQL	1560	86.6	1	6/5/2007	
N-Nitrosodi-n-propylamine	BQL	313	39.7	1	6/5/2007	
Pentachlorophenol	BQL	1560	81.6	1	6/5/2007	
Phenanthrene	BQL	313	35.6	1	6/5/2007	
Phenol	BQL	313	85.6	1	6/5/2007	
Pyrene	BQL	313	60.0	1	6/5/2007	
1,2,4-Trichlorobenzene	BQL	313	39.1	1	6/5/2007	
2,4,5-Trichlorophenol	BQL	313	121	1	6/5/2007	
2,4,6-Trichlorophenol	BQL	313	111	1	6/5/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	9.6	96		
2-Fluorophenol		10	10.2	102		
Nitrobenzene-d5		10	9.9	99		
Phenol-d6		10	10.2	102		
2,4,6-Tribromophenol		10	10.1	101		
4-Terphenyl-d14		10	14.1	140		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By:



Results For Matrix Spike / Matrix Spike Duplicate and Laboratory Control Standard (MS/MSD/LCS) by GCMS

Client Sample ID: Batch QC

Date Collected:

Client Project ID:

Date Received:

Lab Sample ID: Batch-8233-MS/MSD/LCS

Date Extracted: 05/25/07

Lab Project ID: G135-421-8N

Date Analyzed: 06/05/07

Matrix: SOIL

Analyzed By: EAW

Prep Method: 3541

Dilution: 1

	Sample Amount (µg/kg)	MS Spike (µg/kg)	MS Conc. (µg/kg)	MS Spike % Rec.	MSD Spike (µg/kg)	MSD Conc. (µg/kg)	MSD Conc. % Rec.	RPD	QC Limits	
									RPD	% Rec.
Acenaphthylene	BQL	3450	3310	95.9	3660	3490	95.4	0.523	30	79.0-141
4-Chloro-3-methylphenol	BQL	3450	3800	110	3660	4050	111.0	0.543	30	40.0-133
2-Chlorophenol	BQL	3450	3560	103	3660	3800	104.0	0.773	30	40.0-120
1,4-Dichlorobenzene	BQL	3450	3100	89.8	3660	3360	91.9	2.31	30	56.0-95.0
2,4-Dinitrotoluene	BQL	3450	3120	90.4	3660	3260	89.1	1.45	30	48.0-121
N-Nitrosodi-n-propylamine	BQL	3450	3460	100	3660	3690	101.0	0.497	30	70.0-119
4-Nitrophenol	BQL	3450	4240	123	3660	4400	120.0	2.14	30	40.0-147
Pentachlorophenol	BQL	3450	3540	102	3660	3680	101.0	1.77	30	40.0-122
Phenol	BQL	3450	3660	106	3660	3890	106.0	0.377	30	40.0-127
Pyrene	BQL	3450	3860	112	3660	4170	114.0	2.13	30	56.0-123
1,2,4-Trichlorobenzene	BQL	3450	3120	90.5	3660	3340	91.3	0.880	30	65.0-105

	Spiked Amount (µg/kg)	LCS Conc. (µg/kg)	LCS Spike %	QC Limits % Rec.
Acenaphthylene	3125	3210	103	80.9-143
4-Chloro-3-methylphenol	3125	3740	120	83.9-124
2-Chlorophenol	3125	3510	112	80.3-119
1,4-Dichlorobenzene	3125	3200	102	76.3-118
2,4-Dinitrotoluene	3125	3020	96.7	80.6-126
N-Nitrosodi-n-propylamine	3125	3440	110	80.3-131
4-Nitrophenol	3125	3990	128	60.0-145
Pentachlorophenol	3125	3440	110	36.4-114
Phenol	3125	3620	116	74.3-117
Pyrene	3125	3540	113	74.7-141
1,2,4-Trichlorobenzene	3125	3140	101	74.1-120

Comments:

Concentrations reflect the spiked sample amounts.

Flags:

* = Out of limits.

NA = Not applicable.

Reviewed By: RL

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW02 (3-5)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/22/07
Date Received	05/22/07
Date Extracted	05/22/07
Date Analyzed	05/24/07
Dry Weight	91
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 mg/Kg
C ₉ -C ₁₂ Aliphatics**	53 mg/Kg
C ₉ -C ₁₀ Aromatics**	28 mg/Kg
Surrogate % Recovery - PID	140 ***
Surrogate % Recovery - FID	290 ***

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

*** = High surrogate recovery due to matrix interference

Lab Info: g128-1958-1e

Reviewed By: CD

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 05/21/07

PID Initial Calibration Date: 05/21/07

Calibration Ranges and Limits

Range	MDL (10/5/2006) (µg/L)	ML (µg/L)	RL (µg/L) (mg/Kg)
C ₅ -C ₈ Aliphatics	33.1	105	100 10
C ₉ -C ₁₂ Aliphatics	30.9	98.3	100 10
C ₉ -C ₁₀ Aromatics	27.7	88.1	100 10

Calibration Concentration Levels

Range	Levels (µg/L)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	40	05.3	Calibration Factor
	1000		
	2000		
	3000		
	4000		
C ₉ -C ₁₂ Aliphatics	10	0.99	Linear Regression
	250		
	500		
	750		
	1000		
C ₉ -C ₁₀ Aromatics	10	1.00	Linear Regression
	250		
	500		
	750		
	1000		

Calibration Check Date: 05/24/07

Calibration Check

Range	Levels (µg/L) (mg/Kg)	RPD
C ₅ -C ₈ Aliphatics	2000 200	15.7
C ₉ -C ₁₂ Aliphatics	500 50	12.0
C ₉ -C ₁₀ Aromatics	500 50	9.5

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW02 (3-5)
Sample Matrix	Soil
Date Collected	05/22/07
Date Received	05/22/07
Date Extracted	05/25/07
Date Analyzed	05/29/07
Dry Weight	90.9
Dilution Factor	5:1
C ₉ -C ₁₈ Aliphatics*	1100 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	110 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	100 (mg/Kg)
Aliphatic Surrogate % Recovery	N/A
Aromatic Surrogate % Recovery	54
Fractionation Surrogate 1 % Recovery	43

Comments:

* = Excludes any surrogates or internal standards.

NA = Non-applicable, surrogate diluted out.

Lab info: G128-1958-1H

Reviewed By: 

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 05/09/07

Calibration Ranges and Limits

Range	MDL (10/2006) (µg/L)	ML (µg/L)	RL (µg/L) (mg/Kg)	
C ₉ -C ₁₈ Aliphatics	28.10	89.4	100	10
C ₁₉ -C ₃₆ Aliphatics	36.50	116	100	10
C ₁₁ -C ₂₂ Aromatics	27.60	87.8	100	10

Calibration Concentration Levels

Range	Levels (µg/mL)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	13.70	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	14.2	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	5.9	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 05/29/07

Calibration Check

Range	Levels (µg/mL)	RPD
C ₉ -C ₁₈ Aliphatics	120	9.3
C ₁₉ -C ₃₆ Aliphatics	160	9.3
C ₁₁ -C ₂₂ Aromatics	340	13.8

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit

RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve



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0741

1 CLIENT: CATLIN					SGS Reference: G128-1958										PAGE 1 OF 1						
CONTACT: Steve Hudson PHONE NO: (910) 452 5861					No CONTAINERS	SAMPLE TYPE C= COMP G= GRAB	Preservatives Used Analysis Required ③	8260 + IPE + TCE	8270 + TCE	EPH	VPH										
PROJECT: SLE G480 CSA SITE/PWSID#:																					
REPORTS TO: E-MAIL:																					
INVOICE TO: QUOTE # DOD 101																					
FAX NO: (910) 452-7563																					
P.O. NUMBER 270517-2																					
2																					
LAB NO.	SAMPLE IDENTIFICATION				DATE	TIME	MATRIX	REMARKS													
	USTG480 (MW03) (3-5')				5-22-07	12:30	S	G	✓	✓	✓	✓	Summary EDD format								
	USTG480-MW03(3-5) DUP				5-22-07	12:30	S	G	✓				Hot								
	please change well name (mw03) to MW02 TDS																				
5																					
Collected/Relinquished By: (1)		Date	Time	Received By:	Date	Time	Shipping Carrier:				Samples Received Cold? (Circle) YES NO										
T. J. H.		5-22-07	4:25P	[Signature]	5/22/07	4:25P	[Signature]				Temperature [C]: _____ F: _____										
Relinquished By: (2)		Date	Time	Received By:	Date	Time	Shipping Ticket No:				Chain of Custody Seal: (Circle)										
											INTACT BROKEN ABSENT										
Relinquished By: (3)		Date	Time	Received By:	Date	Time	Special Deliverable Requirements:				Special Instructions:										
Relinquished By: (4)		Date	Time	Received By:	Date	Time	Requested Turnaround Time:														
							☐ RUSH ☐ STD				Date Needed										

N.C. CERTIFICATION #481

21 of 21



Mr. Steve Hudson
Richard Catlin & Associates
P.O. Box 10279
Wilmington NC 28404-0279

Report Number: G128-1983

Client Project: Site G480

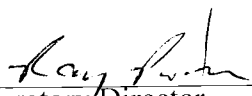
Dear Mr. Hudson:

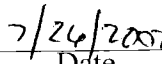
Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call SGS/Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS/Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
SGS/Paradigm Analytical Laboratories, Inc.


Laboratory/Director
J. Patrick Weaver


Date

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW11(3-5)

Client Project ID: Site G480

Lab Sample ID: G128-1983-1E

Lab Project ID: G128-1983

Report Basis: Dry Weight

Analyzed By: RSB

Date Collected: 7/10/2007 14:30

Date Received: 7/13/2007

Matrix: Soil

Sample Amount: 5 g

%Solids: 87.2

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.166	2.87	0.125	100	7/20/2007	J
Benzene	BQL	0.115	0.00918	100	7/20/2007	
Bromobenzene	BQL	0.115	0.0164	100	7/20/2007	
Bromochloromethane	BQL	0.115	0.0299	100	7/20/2007	
Bromodichloromethane	BQL	0.115	0.0168	100	7/20/2007	
Bromoform	BQL	0.115	0.0316	100	7/20/2007	
Bromomethane	BQL	0.115	0.0299	100	7/20/2007	
2-Butanone	BQL	2.87	0.176	100	7/20/2007	
n-Butylbenzene	0.295	0.115	0.0120	100	7/20/2007	
sec-Butylbenzene	0.188	0.115	0.0134	100	7/20/2007	
tert-Butylbenzene	BQL	0.115	0.0147	100	7/20/2007	
Carbon disulfide	BQL	0.115	0.00723	100	7/20/2007	
Carbon tetrachloride	BQL	0.115	0.0117	100	7/20/2007	
Chlorobenzene	BQL	0.115	0.00826	100	7/20/2007	
Chloroethane	BQL	0.115	0.0652	100	7/20/2007	
Chloroform	BQL	0.115	0.0139	100	7/20/2007	
Chloromethane	BQL	0.115	0.0236	100	7/20/2007	
2-Chlorotoluene	BQL	0.115	0.0126	100	7/20/2007	
4-Chlorotoluene	BQL	0.115	0.0123	100	7/20/2007	
Dibromochloromethane	BQL	0.115	0.0142	100	7/20/2007	
1,2-Dibromo-3-chloropropane	BQL	0.574	0.103	100	7/20/2007	
Dibromomethane	BQL	0.115	0.0228	100	7/20/2007	
1,2-Dibromoethane (EDB)	BQL	0.115	0.0138	100	7/20/2007	
1,2-Dichlorobenzene	BQL	0.115	0.0133	100	7/20/2007	
1,3-Dichlorobenzene	BQL	0.115	0.0199	100	7/20/2007	
1,4-Dichlorobenzene	BQL	0.115	0.0180	100	7/20/2007	
trans-1,4-Dichloro-2-butene	BQL	0.574	0.0906	100	7/20/2007	
1,1-Dichloroethane	BQL	0.115	0.0101	100	7/20/2007	
1,1-Dichloroethene	BQL	0.115	0.0234	100	7/20/2007	
1,2-Dichloroethane	BQL	0.115	0.0151	100	7/20/2007	
cis-1,2-Dichloroethene	BQL	0.115	0.00402	100	7/20/2007	
trans-1,2-dichloroethene	BQL	0.115	0.0181	100	7/20/2007	
1,2-Dichloropropane	BQL	0.115	0.0110	100	7/20/2007	
1,3-Dichloropropane	BQL	0.115	0.0186	100	7/20/2007	
2,2-Dichloropropane	BQL	0.115	0.0208	100	7/20/2007	
1,1-Dichloropropene	BQL	0.115	0.0139	100	7/20/2007	
cis-1,3-Dichloropropene	BQL	0.115	0.0139	100	7/20/2007	
trans-1,3-Dichloropropene	BQL	0.115	0.0125	100	7/20/2007	
Dichlorodifluoromethane	BQL	0.574	0.0291	100	7/20/2007	
Diisopropyl ether (DIPE)	BQL	0.115	0.00975	100	7/20/2007	
Ethylbenzene	0.0184	0.115	0.0127	100	7/20/2007	J
Hexachlorobutadiene	BQL	0.115	0.0263	100	7/20/2007	

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW11(3-5)

Client Project ID: Site G480

Lab Sample ID: G128-1983-1E

Lab Project ID: G128-1983

Report Basis: Dry Weight

Analyzed By: RSB

Date Collected: 7/10/2007 14:30

Date Received: 7/13/2007

Matrix: Soil

Sample Amount: 5 g

%Solids: 87.2

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.574	0.0998	100	7/20/2007	
Iodomethane	BQL	0.115	0.00906	100	7/20/2007	
Isopropylbenzene	0.0516	0.115	0.0146	100	7/20/2007	J
4-Isopropyltoluene	0.0459	0.115	0.0142	100	7/20/2007	J
Methylene chloride	0.282	0.574	0.0228	100	7/20/2007	J
4-Methyl-2-pentanone	BQL	0.574	0.119	100	7/20/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.115	0.0158	100	7/20/2007	
Naphthalene	0.606	0.115	0.0199	100	7/20/2007	
n-Propyl benzene	0.130	0.115	0.0138	100	7/20/2007	
Styrene	BQL	0.115	0.0125	100	7/20/2007	
1,1,1,2-Tetrachloroethane	BQL	0.115	0.0143	100	7/20/2007	
1,1,2,2-Tetrachloroethane	BQL	0.115	0.0215	100	7/20/2007	
Tetrachloroethene	BQL	0.115	0.0129	100	7/20/2007	
Toluene	0.0126	0.115	0.0104	100	7/20/2007	J
1,2,3-Trichlorobenzene	0.0275	0.115	0.0202	100	7/20/2007	J
1,2,4-Trichlorobenzene	BQL	0.115	0.00826	100	7/20/2007	
Trichloroethene	BQL	0.115	0.00998	100	7/20/2007	
1,1,1-Trichloroethane	BQL	0.115	0.0127	100	7/20/2007	
1,1,2-Trichloroethane	BQL	0.115	0.0201	100	7/20/2007	
Trichlorofluoromethane	BQL	0.115	0.0283	100	7/20/2007	
1,2,3-Trichloropropane	BQL	0.115	0.0233	100	7/20/2007	
1,2,4-Trimethylbenzene	BQL	0.115	0.0139	100	7/20/2007	
1,3,5-Trimethylbenzene	BQL	0.115	0.0122	100	7/20/2007	
Vinyl chloride	BQL	0.115	0.0350	100	7/20/2007	
m-,p-Xylene	BQL	0.229	0.0247	100	7/20/2007	
o-Xylene	BQL	0.115	0.0126	100	7/20/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.01	0.00909	91		
Toluene-d8		0.01	0.0103	103		
4-Bromofluorobenzene		0.01	0.0102	102		

Comments:**Flags:**

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: RSB

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTG480-MW12(3-5)

Client Project ID: Site G480

Lab Sample ID G128-1983-2C

Lab Project ID: G128-1983

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 07-11-2007 11:00

Date Received: 7/13/2007

Matrix: Soil

Sample Amount: 4.78 g

%Solids: 85.3

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.0161	0.0612	0.00360	1	7/19/2007	J
Benzene	BQL	0.00612	0.00349	1	7/19/2007	
Bromobenzene	BQL	0.00612	0.00301	1	7/19/2007	
Bromochloromethane	BQL	0.00612	0.00357	1	7/19/2007	
Bromodichloromethane	BQL	0.00612	0.00348	1	7/19/2007	
Bromoform	BQL	0.00612	0.00296	1	7/19/2007	
Bromomethane	BQL	0.00612	0.00513	1	7/19/2007	
2-Butanone	BQL	0.0306	0.00352	1	7/19/2007	
n-Butylbenzene	BQL	0.00612	0.00410	1	7/19/2007	
sec-Butylbenzene	BQL	0.00612	0.00428	1	7/19/2007	
tert-Butylbenzene	BQL	0.00612	0.00425	1	7/19/2007	
Carbon disulfide	BQL	0.00612	0.00322	1	7/19/2007	
Carbon tetrachloride	BQL	0.00612	0.00423	1	7/19/2007	
Chlorobenzene	BQL	0.00612	0.00307	1	7/19/2007	
Chloroethane	BQL	0.00612	0.00384	1	7/19/2007	
Chloroform	BQL	0.00612	0.00307	1	7/19/2007	
Chloromethane	BQL	0.00612	0.00295	1	7/19/2007	
2-Chlorotoluene	BQL	0.00612	0.00365	1	7/19/2007	
4-Chlorotoluene	BQL	0.00612	0.00340	1	7/19/2007	
Dibromochloromethane	BQL	0.00612	0.00274	1	7/19/2007	
1,2-Dibromo-3-chloropropane	BQL	0.00612	0.0130	1	7/19/2007	
Dibromomethane	BQL	0.00612	0.00367	1	7/19/2007	
1,2-Dibromoethane (EDB)	BQL	0.00612	0.00285	1	7/19/2007	
1,2-Dichlorobenzene	BQL	0.00612	0.00295	1	7/19/2007	
1,3-Dichlorobenzene	BQL	0.00612	0.00286	1	7/19/2007	
1,4-Dichlorobenzene	BQL	0.00612	0.00301	1	7/19/2007	
trans-1,4-Dichloro-2-butene	BQL	0.00612	0.0131	1	7/19/2007	
1,1-Dichloroethane	BQL	0.00612	0.00352	1	7/19/2007	
1,1-Dichloroethene	BQL	0.00612	0.00471	1	7/19/2007	
1,2-Dichloroethane	BQL	0.00612	0.00351	1	7/19/2007	
cis-1,2-Dichloroethene	BQL	0.00612	0.00301	1	7/19/2007	
trans-1,2-dichloroethene	BQL	0.00612	0.00398	1	7/19/2007	
1,2-Dichloropropane	BQL	0.00612	0.00313	1	7/19/2007	
1,3-Dichloropropane	BQL	0.00612	0.00280	1	7/19/2007	
2,2-Dichloropropane	BQL	0.00612	0.00389	1	7/19/2007	
1,1-Dichloropropene	BQL	0.00612	0.00442	1	7/19/2007	
cis-1,3-Dichloropropene	BQL	0.00612	0.00340	1	7/19/2007	
trans-1,3-Dichloropropene	BQL	0.00612	0.00346	1	7/19/2007	
Dichlorodifluoromethane	BQL	0.00612	0.00456	1	7/19/2007	
Diisopropyl ether (DIPE)	BQL	0.00612	0.00290	1	7/19/2007	
Ethylbenzene	BQL	0.00612	0.00372	1	7/19/2007	
Hexachlorobutadiene	BQL	0.00612	0.00483	1	7/19/2007	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTG480-MW12(3-5)

Client Project ID: Site G480

Lab Sample ID G128-1983-2C

Lab Project ID: G128-1983

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 07-11-2007 11:00

Date Received: 7/13/2007

Matrix: Soil

Sample Amount: 4.78 g

%Solids: 85.3

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.00612	0.00267	1	7/19/2007	
Iodomethane	BQL	0.00612	0.00569	1	7/19/2007	
Isopropylbenzene	BQL	0.00612	0.00394	1	7/19/2007	
4-Isopropyltoluene	BQL	0.00612	0.00416	1	7/19/2007	
Methylene chloride	BQL	0.0245	0.00350	1	7/19/2007	
4-Methyl-2-pentanone	BQL	0.00612	0.00283	1	7/19/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.00612	0.00311	1	7/19/2007	
Naphthalene	BQL	0.00612	0.00246	1	7/19/2007	
n-Propyl benzene	BQL	0.00612	0.00393	1	7/19/2007	
Styrene	BQL	0.00612	0.00438	1	7/19/2007	
1,1,1,2-Tetrachloroethane	BQL	0.00612	0.00333	1	7/19/2007	
1,1,2,2-Tetrachloroethane	BQL	0.00612	0.00301	1	7/19/2007	
Tetrachloroethene	BQL	0.00612	0.00385	1	7/19/2007	
Toluene	BQL	0.00612	0.00362	1	7/19/2007	
1,2,3-Trichlorobenzene	BQL	0.00612	0.00268	1	7/19/2007	
1,2,4-Trichlorobenzene	BQL	0.00612	0.00274	1	7/19/2007	
Trichloroethene	BQL	0.00612	0.00382	1	7/19/2007	
1,1,1-Trichloroethane	BQL	0.00612	0.00422	1	7/19/2007	
1,1,2-Trichloroethane	BQL	0.00612	0.00316	1	7/19/2007	
Trichlorofluoromethane	BQL	0.00612	0.00505	1	7/19/2007	
1,2,3-Trichloropropane	BQL	0.00612	0.00324	1	7/19/2007	
1,2,4-Trimethylbenzene	BQL	0.00612	0.00343	1	7/19/2007	
1,3,5-Trimethylbenzene	BQL	0.00612	0.00365	1	7/19/2007	
Vinyl chloride	BQL	0.00612	0.00404	1	7/19/2007	
m-,p-Xylene	BQL	0.0122	0.00694	1	7/19/2007	
o-Xylene	BQL	0.00612	0.00343	1	7/19/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.05	0.0491	98		
Toluene-d8		0.05	0.0509	102		
4-Bromofluorobenzene		0.05	0.0503	101		

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By: gvl

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW13(3-5)

Client Project ID: Site G480

Lab Sample ID: G128-1983-3E

Lab Project ID: G128-1983

Report Basis: Dry Weight

Analyzed By: RSB

Date Collected: 7/11/2007 14:30

Date Received: 7/13/2007

Matrix: Soil

Sample Amount: 5.3 g

%Solids: 88.8

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.167	2.13	0.0927	80	7/20/2007	J
Benzene	0.00935	0.0850	0.00680	80	7/20/2007	J
Bromobenzene	BQL	0.0850	0.0122	80	7/20/2007	
Bromochloromethane	BQL	0.0850	0.0222	80	7/20/2007	
Bromodichloromethane	BQL	0.0850	0.0124	80	7/20/2007	
Bromoform	BQL	0.0850	0.0234	80	7/20/2007	
Bromomethane	0.0366	0.0850	0.0222	80	7/20/2007	J
2-Butanone	BQL	2.13	0.130	80	7/20/2007	
n-Butylbenzene	0.529	0.0850	0.00893	80	7/20/2007	
sec-Butylbenzene	0.199	0.0850	0.00995	80	7/20/2007	
tert-Butylbenzene	BQL	0.0850	0.0109	80	7/20/2007	
Carbon disulfide	BQL	0.0850	0.00536	80	7/20/2007	
Carbon tetrachloride	BQL	0.0850	0.00867	80	7/20/2007	
Chlorobenzene	BQL	0.0850	0.00612	80	7/20/2007	
Chloroethane	BQL	0.0850	0.0483	80	7/20/2007	
Chloroform	BQL	0.0850	0.0103	80	7/20/2007	
Chloromethane	BQL	0.0850	0.0175	80	7/20/2007	
2-Chlorotoluene	BQL	0.0850	0.00935	80	7/20/2007	
4-Chlorotoluene	BQL	0.0850	0.00910	80	7/20/2007	
Dibromochloromethane	BQL	0.0850	0.0105	80	7/20/2007	
1,2-Dibromo-3-chloropropane	BQL	0.425	0.0765	80	7/20/2007	
Dibromomethane	BQL	0.0850	0.0169	80	7/20/2007	
1,2-Dibromoethane (EDB)	BQL	0.0850	0.0102	80	7/20/2007	
1,2-Dichlorobenzene	BQL	0.0850	0.00986	80	7/20/2007	
1,3-Dichlorobenzene	BQL	0.0850	0.0147	80	7/20/2007	
1,4-Dichlorobenzene	BQL	0.0850	0.0133	80	7/20/2007	
trans-1,4-Dichloro-2-butene	BQL	0.425	0.0672	80	7/20/2007	
1,1-Dichloroethane	BQL	0.0850	0.00748	80	7/20/2007	
1,1-Dichloroethene	BQL	0.0850	0.0173	80	7/20/2007	
1,2-Dichloroethane	BQL	0.0850	0.0112	80	7/20/2007	
cis-1,2-Dichloroethene	BQL	0.0850	0.00298	80	7/20/2007	
trans-1,2-dichloroethene	BQL	0.0850	0.0134	80	7/20/2007	
1,2-Dichloropropane	BQL	0.0850	0.00816	80	7/20/2007	
1,3-Dichloropropane	BQL	0.0850	0.0138	80	7/20/2007	
2,2-Dichloropropane	BQL	0.0850	0.0154	80	7/20/2007	
1,1-Dichloropropene	BQL	0.0850	0.0103	80	7/20/2007	
cis-1,3-Dichloropropene	BQL	0.0850	0.0103	80	7/20/2007	
trans-1,3-Dichloropropene	BQL	0.0850	0.00927	80	7/20/2007	
Dichlorodifluoromethane	BQL	0.425	0.0216	80	7/20/2007	
Diisopropyl ether (DIPE)	BQL	0.0850	0.00723	80	7/20/2007	
Ethylbenzene	0.276	0.0850	0.00944	80	7/20/2007	
Hexachlorobutadiene	BQL	0.0850	0.0195	80	7/20/2007	

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW13(3-5)

Client Project ID: Site G480

Lab Sample ID: G128-1983-3E

Lab Project ID: G128-1983

Report Basis: Dry Weight

Analyzed By: RSB

Date Collected: 7/11/2007 14:30

Date Received: 7/13/2007

Matrix: Soil

Sample Amount: 5.3 g

%Solids: 88.8

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.425	0.0740	80	7/20/2007	
Iodomethane	BQL	0.0850	0.00672	80	7/20/2007	
Isopropylbenzene	0.152	0.0850	0.0108	80	7/20/2007	
4-Isopropyltoluene	0.412	0.0850	0.0105	80	7/20/2007	
Methylene chloride	0.207	0.425	0.0169	80	7/20/2007	J
4-Methyl-2-pentanone	BQL	0.425	0.0884	80	7/20/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.0850	0.0117	80	7/20/2007	
Naphthalene	0.630	0.0850	0.0147	80	7/20/2007	
n-Propyl benzene	0.314	0.0850	0.0102	80	7/20/2007	
Styrene	BQL	0.0850	0.00927	80	7/20/2007	
1,1,1,2-Tetrachloroethane	BQL	0.0850	0.0106	80	7/20/2007	
1,1,2,2-Tetrachloroethane	BQL	0.0850	0.0159	80	7/20/2007	
Tetrachloroethene	BQL	0.0850	0.00952	80	7/20/2007	
Toluene	BQL	0.0850	0.00774	80	7/20/2007	
1,2,3-Trichlorobenzene	BQL	0.0850	0.0150	80	7/20/2007	
1,2,4-Trichlorobenzene	BQL	0.0850	0.00612	80	7/20/2007	
Trichloroethene	BQL	0.0850	0.00740	80	7/20/2007	
1,1,1-Trichloroethane	BQL	0.0850	0.00944	80	7/20/2007	
1,1,2-Trichloroethane	BQL	0.0850	0.0149	80	7/20/2007	
Trichlorofluoromethane	BQL	0.0850	0.0210	80	7/20/2007	
1,2,3-Trichloropropane	BQL	0.0850	0.0173	80	7/20/2007	
1,2,4-Trimethylbenzene	1.22	0.0850	0.0103	80	7/20/2007	
1,3,5-Trimethylbenzene	0.354	0.0850	0.00901	80	7/20/2007	
Vinyl chloride	BQL	0.0850	0.0259	80	7/20/2007	
m-,p-Xylene	0.180	0.170	0.0183	80	7/20/2007	
o-Xylene	0.0162	0.0850	0.00935	80	7/20/2007	J
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.01	0.0105	105		
Toluene-d8		0.01	0.0105	105		
4-Bromofluorobenzene		0.01	0.0111	110		

Comments:**Flags:**

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: RSB

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTG480-MW14(3-5)

Client Project ID: Site G480

Lab Sample ID G128-1983-4C

Lab Project ID: G128-1983

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 07-11-2007 16:10

Date Received: 7/13/2007

Matrix: Soil

Sample Amount: 6.30 g

%Solids: 83.8

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.0141	0.0473	0.00278	1	7/19/2007	J
Benzene	BQL	0.00473	0.00270	1	7/19/2007	
Bromobenzene	BQL	0.00473	0.00233	1	7/19/2007	
Bromochloromethane	BQL	0.00473	0.00276	1	7/19/2007	
Bromodichloromethane	BQL	0.00473	0.00269	1	7/19/2007	
Bromoform	BQL	0.00473	0.00229	1	7/19/2007	
Bromomethane	BQL	0.00473	0.00397	1	7/19/2007	
2-Butanone	BQL	0.0237	0.00273	1	7/19/2007	
n-Butylbenzene	BQL	0.00473	0.00317	1	7/19/2007	
sec-Butylbenzene	BQL	0.00473	0.00331	1	7/19/2007	
tert-Butylbenzene	BQL	0.00473	0.00329	1	7/19/2007	
Carbon disulfide	BQL	0.00473	0.00249	1	7/19/2007	
Carbon tetrachloride	BQL	0.00473	0.00328	1	7/19/2007	
Chlorobenzene	BQL	0.00473	0.00238	1	7/19/2007	
Chloroethane	BQL	0.00473	0.00297	1	7/19/2007	
Chloroform	BQL	0.00473	0.00238	1	7/19/2007	
Chloromethane	BQL	0.00473	0.00228	1	7/19/2007	
2-Chlorotoluene	BQL	0.00473	0.00282	1	7/19/2007	
4-Chlorotoluene	BQL	0.00473	0.00263	1	7/19/2007	
Dibromochloromethane	BQL	0.00473	0.00212	1	7/19/2007	
1,2-Dibromo-3-chloropropane	BQL	0.00473	0.0100	1	7/19/2007	
Dibromomethane	BQL	0.00473	0.00284	1	7/19/2007	
1,2-Dibromoethane (EDB)	BQL	0.00473	0.00221	1	7/19/2007	
1,2-Dichlorobenzene	BQL	0.00473	0.00228	1	7/19/2007	
1,3-Dichlorobenzene	BQL	0.00473	0.00222	1	7/19/2007	
1,4-Dichlorobenzene	BQL	0.00473	0.00233	1	7/19/2007	
trans-1,4-Dichloro-2-butene	BQL	0.00473	0.0101	1	7/19/2007	
1,1-Dichloroethane	BQL	0.00473	0.00273	1	7/19/2007	
1,1-Dichloroethene	BQL	0.00473	0.00364	1	7/19/2007	
1,2-Dichloroethane	BQL	0.00473	0.00272	1	7/19/2007	
cis-1,2-Dichloroethene	BQL	0.00473	0.00233	1	7/19/2007	
trans-1,2-dichloroethene	BQL	0.00473	0.00308	1	7/19/2007	
1,2-Dichloropropane	BQL	0.00473	0.00242	1	7/19/2007	
1,3-Dichloropropane	BQL	0.00473	0.00217	1	7/19/2007	
2,2-Dichloropropane	BQL	0.00473	0.00301	1	7/19/2007	
1,1-Dichloropropene	BQL	0.00473	0.00342	1	7/19/2007	
cis-1,3-Dichloropropene	BQL	0.00473	0.00263	1	7/19/2007	
trans-1,3-Dichloropropene	BQL	0.00473	0.00268	1	7/19/2007	
Dichlorodifluoromethane	BQL	0.00473	0.00353	1	7/19/2007	
Diisopropyl ether (DIPE)	BQL	0.00473	0.00224	1	7/19/2007	
Ethylbenzene	BQL	0.00473	0.00288	1	7/19/2007	
Hexachlorobutadiene	BQL	0.00473	0.00374	1	7/19/2007	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTG480-MW14(3-5)

Client Project ID: Site G480

Lab Sample ID G128-1983-4C

Lab Project ID: G128-1983

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 07-11-2007 16:10

Date Received: 7/13/2007

Matrix: Soil

Sample Amount: 6.30 g

%Solids: 83.8

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.00473	0.00206	1	7/19/2007	
Iodomethane	BQL	0.00473	0.00440	1	7/19/2007	
Isopropylbenzene	BQL	0.00473	0.00305	1	7/19/2007	
4-Isopropyltoluene	BQL	0.00473	0.00322	1	7/19/2007	
Methylene chloride	BQL	0.0189	0.00271	1	7/19/2007	
4-Methyl-2-pentanone	BQL	0.00473	0.00219	1	7/19/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.00473	0.00240	1	7/19/2007	
Naphthalene	BQL	0.00473	0.00190	1	7/19/2007	
n-Propyl benzene	BQL	0.00473	0.00304	1	7/19/2007	
Styrene	BQL	0.00473	0.00339	1	7/19/2007	
1,1,1,2-Tetrachloroethane	BQL	0.00473	0.00258	1	7/19/2007	
1,1,2,2-Tetrachloroethane	BQL	0.00473	0.00233	1	7/19/2007	
Tetrachloroethene	BQL	0.00473	0.00298	1	7/19/2007	
Toluene	BQL	0.00473	0.00280	1	7/19/2007	
1,2,3-Trichlorobenzene	BQL	0.00473	0.00207	1	7/19/2007	
1,2,4-Trichlorobenzene	BQL	0.00473	0.00212	1	7/19/2007	
Trichloroethene	BQL	0.00473	0.00295	1	7/19/2007	
1,1,1-Trichloroethane	BQL	0.00473	0.00327	1	7/19/2007	
1,1,2-Trichloroethane	BQL	0.00473	0.00244	1	7/19/2007	
Trichlorofluoromethane	BQL	0.00473	0.00391	1	7/19/2007	
1,2,3-Trichloropropane	BQL	0.00473	0.00251	1	7/19/2007	
1,2,4-Trimethylbenzene	BQL	0.00473	0.00265	1	7/19/2007	
1,3,5-Trimethylbenzene	BQL	0.00473	0.00282	1	7/19/2007	
Vinyl chloride	BQL	0.00473	0.00312	1	7/19/2007	
m-,p-Xylene	BQL	0.00947	0.00537	1	7/19/2007	
o-Xylene	BQL	0.00473	0.00265	1	7/19/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.05	0.0504	101		
Toluene-d8		0.05	0.0499	100		
4-Bromofluorobenzene		0.05	0.045	90		

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By: Rp

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTG480-MW15(2-4)

Client Project ID: Site G480

Lab Sample ID G128-1983-5B

Lab Project ID: G128-1983

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 07-10-2007 10:30

Date Received: 7/13/2007

Matrix: Soil

Sample Amount: 6.98 g

%Solids: 86.4

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.0240	0.0414	0.00244	1	7/19/2007	J
Benzene	BQL	0.00414	0.00236	1	7/19/2007	
Bromobenzene	BQL	0.00414	0.00204	1	7/19/2007	
Bromochloromethane	BQL	0.00414	0.00242	1	7/19/2007	
Bromodichloromethane	BQL	0.00414	0.00235	1	7/19/2007	
Bromoform	BQL	0.00414	0.00201	1	7/19/2007	
Bromomethane	BQL	0.00414	0.00347	1	7/19/2007	
2-Butanone	0.00331	0.0207	0.00239	1	7/19/2007	J
n-Butylbenzene	BQL	0.00414	0.00278	1	7/19/2007	
sec-Butylbenzene	BQL	0.00414	0.00290	1	7/19/2007	
tert-Butylbenzene	BQL	0.00414	0.00288	1	7/19/2007	
Carbon disulfide	BQL	0.00414	0.00218	1	7/19/2007	
Carbon tetrachloride	BQL	0.00414	0.00287	1	7/19/2007	
Chlorobenzene	BQL	0.00414	0.00208	1	7/19/2007	
Chloroethane	BQL	0.00414	0.00260	1	7/19/2007	
Chloroform	BQL	0.00414	0.00208	1	7/19/2007	
Chloromethane	BQL	0.00414	0.00200	1	7/19/2007	
2-Chlorotoluene	BQL	0.00414	0.00247	1	7/19/2007	
4-Chlorotoluene	BQL	0.00414	0.00230	1	7/19/2007	
Dibromochloromethane	BQL	0.00414	0.00186	1	7/19/2007	
1,2-Dibromo-3-chloropropane	BQL	0.00414	0.00879	1	7/19/2007	
Dibromomethane	BQL	0.00414	0.00249	1	7/19/2007	
1,2-Dibromoethane (EDB)	BQL	0.00414	0.00193	1	7/19/2007	
1,2-Dichlorobenzene	BQL	0.00414	0.00200	1	7/19/2007	
1,3-Dichlorobenzene	BQL	0.00414	0.00194	1	7/19/2007	
1,4-Dichlorobenzene	BQL	0.00414	0.00204	1	7/19/2007	
trans-1,4-Dichloro-2-butene	BQL	0.00414	0.00887	1	7/19/2007	
1,1-Dichloroethane	BQL	0.00414	0.00239	1	7/19/2007	
1,1-Dichloroethene	BQL	0.00414	0.00319	1	7/19/2007	
1,2-Dichloroethane	BQL	0.00414	0.00238	1	7/19/2007	
cis-1,2-Dichloroethene	BQL	0.00414	0.00204	1	7/19/2007	
trans-1,2-dichloroethene	BQL	0.00414	0.00269	1	7/19/2007	
1,2-Dichloropropane	BQL	0.00414	0.00212	1	7/19/2007	
1,3-Dichloropropane	BQL	0.00414	0.00190	1	7/19/2007	
2,2-Dichloropropane	BQL	0.00414	0.00264	1	7/19/2007	
1,1-Dichloropropene	BQL	0.00414	0.00299	1	7/19/2007	
cis-1,3-Dichloropropene	BQL	0.00414	0.00230	1	7/19/2007	
trans-1,3-Dichloropropene	BQL	0.00414	0.00235	1	7/19/2007	
Dichlorodifluoromethane	BQL	0.00414	0.00309	1	7/19/2007	
Diisopropyl ether (DIPE)	BQL	0.00414	0.00196	1	7/19/2007	
Ethylbenzene	0.00266	0.00414	0.00252	1	7/19/2007	J
Hexachlorobutadiene	BQL	0.00414	0.00327	1	7/19/2007	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTG480-MW15(2-4)
Client Project ID: Site G480
Lab Sample ID G128-1983-5B
Lab Project ID: G128-1983
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 07-10-2007 10:30
Date Received: 7/13/2007
Matrix: Soil
Sample Amount: 6.98 g
%Solids: 86.4

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.00414	0.00181	1	7/19/2007	
Iodomethane	BQL	0.00414	0.00385	1	7/19/2007	
Isopropylbenzene	BQL	0.00414	0.00267	1	7/19/2007	
4-Isopropyltoluene	0.00514	0.00414	0.00282	1	7/19/2007	
Methylene chloride	BQL	0.0166	0.00237	1	7/19/2007	
4-Methyl-2-pentanone	BQL	0.00414	0.00191	1	7/19/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.00414	0.00211	1	7/19/2007	
Naphthalene	0.00385	0.00414	0.00167	1	7/19/2007	J
n-Propyl benzene	BQL	0.00414	0.00266	1	7/19/2007	
Styrene	BQL	0.00414	0.00297	1	7/19/2007	
1,1,1,2-Tetrachloroethane	BQL	0.00414	0.00225	1	7/19/2007	
1,1,2,2-Tetrachloroethane	BQL	0.00414	0.00204	1	7/19/2007	
Tetrachloroethene	BQL	0.00414	0.00261	1	7/19/2007	
Toluene	BQL	0.00414	0.00245	1	7/19/2007	
1,2,3-Trichlorobenzene	BQL	0.00414	0.00182	1	7/19/2007	
1,2,4-Trichlorobenzene	BQL	0.00414	0.00186	1	7/19/2007	
Trichloroethene	BQL	0.00414	0.00259	1	7/19/2007	
1,1,1-Trichloroethane	BQL	0.00414	0.00286	1	7/19/2007	
1,1,2-Trichloroethane	BQL	0.00414	0.00214	1	7/19/2007	
Trichlorofluoromethane	BQL	0.00414	0.00342	1	7/19/2007	
1,2,3-Trichloropropane	BQL	0.00414	0.00220	1	7/19/2007	
1,2,4-Trimethylbenzene	BQL	0.00414	0.00232	1	7/19/2007	
1,3,5-Trimethylbenzene	BQL	0.00414	0.00247	1	7/19/2007	
Vinyl chloride	BQL	0.00414	0.00274	1	7/19/2007	
m-,p-Xylene	BQL	0.00829	0.00470	1	7/19/2007	
o-Xylene	BQL	0.00414	0.00232	1	7/19/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.05	0.0481	96		
Toluene-d8		0.05	0.0515	103		
4-Bromofluorobenzene		0.05	0.0524	105		

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By: JW

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: TRIP BLANK
Client Project ID: Site G480
Lab Sample ID: G128-1983-7A
Lab Project ID: G128-1983
Report Basis: Dry Weight

Analyzed By: RSB
Date Collected: 7/11/2007 0:00
Date Received: 7/13/2007
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.200	1.25	0.0545	50	7/24/2007	J
Benzene	BQL	0.0500	0.00400	50	7/24/2007	
Bromobenzene	BQL	0.0500	0.00715	50	7/24/2007	
Bromochloromethane	BQL	0.0500	0.0130	50	7/24/2007	
Bromodichloromethane	BQL	0.0500	0.00730	50	7/24/2007	
Bromoform	BQL	0.0500	0.0138	50	7/24/2007	
Bromomethane	BQL	0.0500	0.0130	50	7/24/2007	
2-Butanone	BQL	1.25	0.0765	50	7/24/2007	
n-Butylbenzene	BQL	0.0500	0.00525	50	7/24/2007	
sec-Butylbenzene	BQL	0.0500	0.00585	50	7/24/2007	
tert-Butylbenzene	BQL	0.0500	0.00640	50	7/24/2007	
Carbon disulfide	BQL	0.0500	0.00315	50	7/24/2007	
Carbon tetrachloride	BQL	0.0500	0.00510	50	7/24/2007	
Chlorobenzene	BQL	0.0500	0.00360	50	7/24/2007	
Chloroethane	BQL	0.0500	0.0284	50	7/24/2007	
Chloroform	BQL	0.0500	0.00605	50	7/24/2007	
Chloromethane	BQL	0.0500	0.0103	50	7/24/2007	
2-Chlorotoluene	BQL	0.0500	0.00550	50	7/24/2007	
4-Chlorotoluene	BQL	0.0500	0.00535	50	7/24/2007	
Dibromochloromethane	BQL	0.0500	0.00620	50	7/24/2007	
1,2-Dibromo-3-chloropropane	BQL	0.250	0.0450	50	7/24/2007	
Dibromomethane	BQL	0.0500	0.00995	50	7/24/2007	
1,2-Dibromoethane (EDB)	BQL	0.0500	0.00600	50	7/24/2007	
1,2-Dichlorobenzene	BQL	0.0500	0.00580	50	7/24/2007	
1,3-Dichlorobenzene	BQL	0.0500	0.00865	50	7/24/2007	
1,4-Dichlorobenzene	BQL	0.0500	0.00785	50	7/24/2007	
trans-1,4-Dichloro-2-butene	BQL	0.250	0.0395	50	7/24/2007	
1,1-Dichloroethane	BQL	0.0500	0.00440	50	7/24/2007	
1,1-Dichloroethene	BQL	0.0500	0.0102	50	7/24/2007	
1,2-Dichloroethane	BQL	0.0500	0.00660	50	7/24/2007	
cis-1,2-Dichloroethene	BQL	0.0500	0.00175	50	7/24/2007	
trans-1,2-dichloroethene	BQL	0.0500	0.00790	50	7/24/2007	
1,2-Dichloropropane	BQL	0.0500	0.00480	50	7/24/2007	
1,3-Dichloropropane	BQL	0.0500	0.00810	50	7/24/2007	
2,2-Dichloropropane	BQL	0.0500	0.00905	50	7/24/2007	
1,1-Dichloropropene	BQL	0.0500	0.00605	50	7/24/2007	
cis-1,3-Dichloropropene	BQL	0.0500	0.00605	50	7/24/2007	
trans-1,3-Dichloropropene	BQL	0.0500	0.00545	50	7/24/2007	
Dichlorodifluoromethane	BQL	0.250	0.0127	50	7/24/2007	
Diisopropyl ether (DIPE)	BQL	0.0500	0.00425	50	7/24/2007	
Ethylbenzene	BQL	0.0500	0.00555	50	7/24/2007	
Hexachlorobutadiene	BQL	0.0500	0.0115	50	7/24/2007	

Results for Volatiles
by GCMS 8260B/5035

Client Sample ID: TRIP BLANK
Client Project ID: Site G480
Lab Sample ID: G128-1983-7A
Lab Project ID: G128-1983
Report Basis: Dry Weight

Analyzed By: RSB
Date Collected: 7/11/2007 0:00
Date Received: 7/13/2007
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.250	0.0435	50	7/24/2007	
Iodomethane	BQL	0.0500	0.00395	50	7/24/2007	
Isopropylbenzene	BQL	0.0500	0.00635	50	7/24/2007	
4-Isopropyltoluene	BQL	0.0500	0.00620	50	7/24/2007	
Methylene chloride	0.159	0.250	0.00995	50	7/24/2007	J
4-Methyl-2-pentanone	BQL	0.250	0.0520	50	7/24/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.0500	0.00690	50	7/24/2007	
Naphthalene	BQL	0.0500	0.00865	50	7/24/2007	
n-Propyl benzene	BQL	0.0500	0.00600	50	7/24/2007	
Styrene	BQL	0.0500	0.00545	50	7/24/2007	
1,1,1,2-Tetrachloroethane	BQL	0.0500	0.00625	50	7/24/2007	
1,1,2,2-Tetrachloroethane	BQL	0.0500	0.00935	50	7/24/2007	
Tetrachloroethene	BQL	0.0500	0.00560	50	7/24/2007	
Toluene	BQL	0.0500	0.00455	50	7/24/2007	
1,2,3-Trichlorobenzene	BQL	0.0500	0.00880	50	7/24/2007	
1,2,4-Trichlorobenzene	BQL	0.0500	0.00360	50	7/24/2007	
Trichloroethene	BQL	0.0500	0.00435	50	7/24/2007	
1,1,1-Trichloroethane	BQL	0.0500	0.00555	50	7/24/2007	
1,1,2-Trichloroethane	BQL	0.0500	0.00875	50	7/24/2007	
Trichlorofluoromethane	BQL	0.0500	0.0124	50	7/24/2007	
1,2,3-Trichloropropane	BQL	0.0500	0.0102	50	7/24/2007	
1,2,4-Trimethylbenzene	BQL	0.0500	0.00605	50	7/24/2007	
1,3,5-Trimethylbenzene	BQL	0.0500	0.00530	50	7/24/2007	
Vinyl chloride	BQL	0.0500	0.0153	50	7/24/2007	
m-,p-Xylene	BQL	0.100	0.0108	50	7/24/2007	
o-Xylene	BQL	0.0500	0.00550	50	7/24/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.01	0.0104	104		
Toluene-d8		0.01	0.0104	104		
4-Bromofluorobenzene		0.01	0.0112	112		

Comments:

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: RSB

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID VBLK9071907B
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected:
Date Received:
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	50.0	2.94	1	7/19/2007	
Benzene	BQL	5.00	2.85	1	7/19/2007	
Bromobenzene	BQL	5.00	2.46	1	7/19/2007	
Bromochloromethane	BQL	5.00	2.92	1	7/19/2007	
Bromodichloromethane	BQL	5.00	2.84	1	7/19/2007	
Bromoform	BQL	5.00	2.42	1	7/19/2007	
Bromomethane	BQL	5.00	4.19	1	7/19/2007	
2-Butanone	BQL	25.0	2.88	1	7/19/2007	
n-Butylbenzene	BQL	5.00	3.35	1	7/19/2007	
sec-Butylbenzene	BQL	5.00	3.50	1	7/19/2007	
tert-Butylbenzene	BQL	5.00	3.47	1	7/19/2007	
Carbon disulfide	BQL	5.00	2.63	1	7/19/2007	
Carbon tetrachloride	BQL	5.00	3.46	1	7/19/2007	
Chlorobenzene	BQL	5.00	2.51	1	7/19/2007	
Chloroethane	BQL	5.00	3.14	1	7/19/2007	
Chloroform	BQL	5.00	2.51	1	7/19/2007	
Chloromethane	BQL	5.00	2.41	1	7/19/2007	
2-Chlorotoluene	BQL	5.00	2.98	1	7/19/2007	
4-Chlorotoluene	BQL	5.00	2.78	1	7/19/2007	
Dibromochloromethane	BQL	5.00	2.24	1	7/19/2007	
1,2-Dibromo-3-chloropropane	BQL	5.00	10.6	1	7/19/2007	
Dibromomethane	BQL	5.00	3.00	1	7/19/2007	
1,2-Dibromoethane (EDB)	BQL	5.00	2.33	1	7/19/2007	
1,2-Dichlorobenzene	BQL	5.00	2.41	1	7/19/2007	
1,3-Dichlorobenzene	BQL	5.00	2.34	1	7/19/2007	
1,4-Dichlorobenzene	BQL	5.00	2.46	1	7/19/2007	
trans-1,4-Dichloro-2-butene	BQL	5.00	10.7	1	7/19/2007	
1,1-Dichloroethane	BQL	5.00	2.88	1	7/19/2007	
1,1-Dichloroethene	BQL	5.00	3.85	1	7/19/2007	
1,2-Dichloroethane	BQL	5.00	2.87	1	7/19/2007	
cis-1,2-Dichloroethene	BQL	5.00	2.46	1	7/19/2007	
trans-1,2-dichloroethene	BQL	5.00	3.25	1	7/19/2007	
1,2-Dichloropropane	BQL	5.00	2.56	1	7/19/2007	
1,3-Dichloropropane	BQL	5.00	2.29	1	7/19/2007	
2,2-Dichloropropane	BQL	5.00	3.18	1	7/19/2007	
1,1-Dichloropropene	BQL	5.00	3.61	1	7/19/2007	
cis-1,3-Dichloropropene	BQL	5.00	2.78	1	7/19/2007	
trans-1,3-Dichloropropene	BQL	5.00	2.83	1	7/19/2007	
Dichlorodifluoromethane	BQL	5.00	3.73	1	7/19/2007	
Diisopropyl ether (DIPE)	BQL	5.00	2.37	1	7/19/2007	
Ethylbenzene	BQL	5.00	3.04	1	7/19/2007	
Hexachlorobutadiene	BQL	5.00	3.95	1	7/19/2007	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID VBLK9071907B
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected:
Date Received:
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	5.00	2.18	1	7/19/2007	
Iodomethane	BQL	5.00	4.65	1	7/19/2007	
Isopropylbenzene	BQL	5.00	3.22	1	7/19/2007	
4-Isopropyltoluene	BQL	5.00	3.40	1	7/19/2007	
Methylene chloride	BQL	20.0	2.86	1	7/19/2007	
4-Methyl-2-pentanone	BQL	5.00	2.31	1	7/19/2007	
Methyl-tert-butyl ether (MTBE)	BQL	5.00	2.54	1	7/19/2007	
Naphthalene	BQL	5.00	2.01	1	7/19/2007	
n-Propyl benzene	BQL	5.00	3.21	1	7/19/2007	
Styrene	BQL	5.00	3.58	1	7/19/2007	
1,1,1,2-Tetrachloroethane	BQL	5.00	2.72	1	7/19/2007	
1,1,2,2-Tetrachloroethane	BQL	5.00	2.46	1	7/19/2007	
Tetrachloroethene	BQL	5.00	3.15	1	7/19/2007	
Toluene	BQL	5.00	2.96	1	7/19/2007	
1,2,3-Trichlorobenzene	BQL	5.00	2.19	1	7/19/2007	
1,2,4-Trichlorobenzene	BQL	5.00	2.24	1	7/19/2007	
Trichloroethene	BQL	5.00	3.12	1	7/19/2007	
1,1,1-Trichloroethane	BQL	5.00	3.45	1	7/19/2007	
1,1,2-Trichloroethane	BQL	5.00	2.58	1	7/19/2007	
Trichlorofluoromethane	BQL	5.00	4.13	1	7/19/2007	
1,2,3-Trichloropropane	BQL	5.00	2.65	1	7/19/2007	
1,2,4-Trimethylbenzene	BQL	5.00	2.80	1	7/19/2007	
1,3,5-Trimethylbenzene	BQL	5.00	2.98	1	7/19/2007	
Vinyl chloride	BQL	5.00	3.30	1	7/19/2007	
m-,p-Xylene	BQL	10.0	5.67	1	7/19/2007	
o-Xylene	BQL	5.00	2.80	1	7/19/2007	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	43.1	86
Toluene-d8	50	49.5	99
4-Bromofluorobenzene	50	52.9	106

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By: R



SGS ENVIRONMENTAL SERVICES, INC.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Contract:

Lab Code: NC00919

Case No.:

SAS No.:

SDG No.:

LCS: LCS9071907B

Filename: 0719905.D

Date Analyzed: 07/19/07 10:26 Dilution: 1

LCSD: LCS9071907C

Filename: 0719906.D

Date Analyzed: 07/19/07 10:52 Matrix: Soil

COMPOUND	LCS SPIKE (µg/kg)	LCS CONC (µg/kg)	LCS % REC #	LCSD SPIKE (µg/kg)	LCSD CONC (µg/kg)	LCSD % REC #	% RPD	QC LIMITS	
								RPD	REC
benzene	30.0	27.8	92.9	30.0	27.0	90.1	2.99	30	77.6-122
chlorobenzene	30.0	35.6	119	30.0	35.2	117	1.10	30	75.3-125
1,1-dichloroethene	30.0	31.6	105	30.0	31.1	104	1.40	30	78.5-121
toluene	30.0	33.1	110	30.0	31.8	106	3.94	30	75.7-124
trichloroethene	30.0	30.5	102	30.0	30.9	103	1.30	30	60.8-139

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____



SGS ENVIRONMENTAL SERVICES, INC.

SGS Environmental Services

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:SGS Environmental

Contract:

Lab Code:NC00919

Case No.:

SAS No.:

SDG No.:

Matrix Spike - EPA Sample No.g679-160-1b

Dilution:1

FileNames:0719910.D, 0719920.D, 0719921.D

COMPOUND	SAMPLE CONC (µg/kg)	MS SPIKE (µg/kg)	MS CONC (µg/kg)	MS % REC #	MSD SPIKE (µg/kg)	MSD CONC (µg/kg)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
benzene	BQL	37.1	27.8	75.1	37.1	23.8	64.3*	15.4	30	74.8-133
chlorobenzene	BQL	37.1	32.1	86.6	37.1	25.8	69.5	21.9	30	66.3-135
1,1-dichloroethene	BQL	37.1	32.7	88.2	37.1	28.3	76.3	14.5	30	72.0-135
toluene	4.15	37.1	30.0	80.9	37.1	24.4	65.9*	20.5	30	66.4-128
trichloroethene	BQL	37.1	29.2	78.9*	37.1	23.8	64.2*	20.5	30	84.9-136

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: VBLK3072007B
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: RSB
Date Collected:
Date Received:
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	1250	54.5	50	7/20/2007	
Benzene	BQL	50.0	4.00	50	7/20/2007	
Bromobenzene	BQL	50.0	7.15	50	7/20/2007	
Bromochloromethane	BQL	50.0	13.0	50	7/20/2007	
Bromodichloromethane	BQL	50.0	7.30	50	7/20/2007	
Bromoform	BQL	50.0	13.8	50	7/20/2007	
Bromomethane	BQL	50.0	13.0	50	7/20/2007	
2-Butanone	BQL	1250	76.5	50	7/20/2007	
n-Butylbenzene	BQL	50.0	5.25	50	7/20/2007	
sec-Butylbenzene	BQL	50.0	5.85	50	7/20/2007	
tert-Butylbenzene	BQL	50.0	6.40	50	7/20/2007	
Carbon disulfide	BQL	50.0	3.15	50	7/20/2007	
Carbon tetrachloride	BQL	50.0	5.10	50	7/20/2007	
Chlorobenzene	BQL	50.0	3.60	50	7/20/2007	
Chloroethane	BQL	50.0	28.4	50	7/20/2007	
Chloroform	BQL	50.0	6.05	50	7/20/2007	
Chloromethane	BQL	50.0	10.3	50	7/20/2007	
2-Chlorotoluene	BQL	50.0	5.50	50	7/20/2007	
4-Chlorotoluene	BQL	50.0	5.35	50	7/20/2007	
Dibromochloromethane	BQL	50.0	6.20	50	7/20/2007	
1,2-Dibromo-3-chloropropane	BQL	250	45.0	50	7/20/2007	
Dibromomethane	BQL	50.0	9.95	50	7/20/2007	
1,2-Dibromoethane (EDB)	BQL	50.0	6.00	50	7/20/2007	
1,2-Dichlorobenzene	BQL	50.0	5.80	50	7/20/2007	
1,3-Dichlorobenzene	BQL	50.0	8.65	50	7/20/2007	
1,4-Dichlorobenzene	BQL	50.0	7.85	50	7/20/2007	
trans-1,4-Dichloro-2-butene	BQL	250	39.5	50	7/20/2007	
1,1-Dichloroethane	BQL	50.0	4.40	50	7/20/2007	
1,1-Dichloroethene	BQL	50.0	10.2	50	7/20/2007	
1,2-Dichloroethane	BQL	50.0	6.60	50	7/20/2007	
cis-1,2-Dichloroethene	BQL	50.0	1.75	50	7/20/2007	
trans-1,2-dichloroethene	BQL	50.0	7.90	50	7/20/2007	
1,2-Dichloropropane	BQL	50.0	4.80	50	7/20/2007	
1,3-Dichloropropane	BQL	50.0	8.10	50	7/20/2007	
2,2-Dichloropropane	BQL	50.0	9.05	50	7/20/2007	
1,1-Dichloropropene	BQL	50.0	6.05	50	7/20/2007	
cis-1,3-Dichloropropene	BQL	50.0	6.05	50	7/20/2007	
trans-1,3-Dichloropropene	BQL	50.0	5.45	50	7/20/2007	
Dichlorodifluoromethane	BQL	250	12.7	50	7/20/2007	
Diisopropyl ether (DIPE)	BQL	50.0	4.25	50	7/20/2007	
Ethylbenzene	BQL	50.0	5.55	50	7/20/2007	
Hexachlorobutadiene	BQL	50.0	11.5	50	7/20/2007	

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: VBLK3072007B
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: RSB
Date Collected:
Date Received:
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	250	43.5	50	7/20/2007	
Iodomethane	BQL	50.0	3.95	50	7/20/2007	
Isopropylbenzene	BQL	50.0	6.35	50	7/20/2007	
4-Isopropyltoluene	BQL	50.0	6.20	50	7/20/2007	
Methylene chloride	BQL	250	9.95	50	7/20/2007	
4-Methyl-2-pentanone	BQL	250	52.0	50	7/20/2007	
Methyl-tert-butyl ether (MTBE)	BQL	50.0	6.90	50	7/20/2007	
Naphthalene	BQL	50.0	8.65	50	7/20/2007	
n-Propyl benzene	BQL	50.0	6.00	50	7/20/2007	
Styrene	BQL	50.0	5.45	50	7/20/2007	
1,1,1,2-Tetrachloroethane	BQL	50.0	6.25	50	7/20/2007	
1,1,2,2-Tetrachloroethane	BQL	50.0	9.35	50	7/20/2007	
Tetrachloroethene	BQL	50.0	5.60	50	7/20/2007	
Toluene	BQL	50.0	4.55	50	7/20/2007	
1,2,3-Trichlorobenzene	BQL	50.0	8.80	50	7/20/2007	
1,2,4-Trichlorobenzene	BQL	50.0	3.60	50	7/20/2007	
Trichloroethene	BQL	50.0	4.35	50	7/20/2007	
1,1,1-Trichloroethane	BQL	50.0	5.55	50	7/20/2007	
1,1,2-Trichloroethane	BQL	50.0	8.75	50	7/20/2007	
Trichlorofluoromethane	BQL	50.0	12.4	50	7/20/2007	
1,2,3-Trichloropropane	BQL	50.0	10.2	50	7/20/2007	
1,2,4-Trimethylbenzene	BQL	50.0	6.05	50	7/20/2007	
1,3,5-Trimethylbenzene	BQL	50.0	5.30	50	7/20/2007	
Vinyl chloride	BQL	50.0	15.3	50	7/20/2007	
m-,p-Xylene	BQL	100	10.8	50	7/20/2007	
o-Xylene	BQL	50.0	5.50	50	7/20/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	10.5	105		
Toluene-d8		10	9.89	99		
4-Bromofluorobenzene		10	10	100		

Comments:**Flags:**

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: RSB



SGS ENVIRONMENTAL SERVICES, INC.

SGS Environmental Services

LABORATORY CONTROL SAMPLE VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: SGS Environmental

Lab Code: NC00919

Case No.:

SAS No.:

SDG No:

Matrix: (soil/water) Water

Lab Sample ID: LCS3072007a

Sample wt/vol: 5.00 (mL)

Lab File ID: 0720304.D

Level: (low/med) NA

% Moisture: not dec. NA

Date Analyzed: 2007-07-20 08:12

GC Column: DB-624 ID: 0.2 (mm)

Dilution Factor: 1

Soil Extract Volume: NA

Soil Aliquot Volume: NA

CAS NO.	COMPOUND	SPIKE AMT (µg/L)	SAMP CONC (µg/L)	% REC #	QC LIMITS
71-43-2	benzene	5.00	5.44	109	77.4-123
108-90-7	chlorobenzene	5.00	5.23	105	72.5-128
75-35-4	1,1-dichloroethene	5.00	5.14	103	71.7-128
108-88-3	toluene	5.00	5.40	108	75.9-124
79-01-6	trichloroethene	5.00	5.58	112	77.9-122

System Monitoring Compound Results

		Spike Added (µg/L)	Spike Result (µg/L)	Percent Rec. (%)	Percent Recovery (%)
460-00-4	4-Bromofluorobenzene	10	9.99	100	84.7 - 115
17060-07-0	1,2-Dichloroethane-d4	10	10.0	105	63.5 - 140
2037-26-5	Toluene-d8	10	9.99	100	81.8 - 117



SGS ENVIRONMENTAL SERVICES, INC.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Contract:

Lab Code: NC00919

Case No.:

SAS No.:

SDG No.:

Matrix Spike - EPA Sample No.: g132-1790-36F

Dilution: 2500

Filenames: 0720320.D, 0720321.D, 0720322.D

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
benzene	BQL	12500	13400	107	12500	13000	104	3.23	30	61.6-135
chlorobenzene	BQL	12500	13400	107	12500	12800	103	4.38	30	77.2-118
1,1-dichloroethene	BQL	12500	13300	106	12500	12500	100	6.20	30	64.4-130
toluene	52900	12500	16700	134*	12500	14900	119	11.7	30	66.4-128
trichloroethene	BQL	12500	12900	103	12500	12800	102	0.974	30	84.9-136

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: VBLK3072407B
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: RSB
Date Collected:
Date Received:
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	1250	54.5	50	7/24/2007	
Benzene	BQL	50.0	4.00	50	7/24/2007	
Bromobenzene	BQL	50.0	7.15	50	7/24/2007	
Bromochloromethane	BQL	50.0	13.0	50	7/24/2007	
Bromodichloromethane	BQL	50.0	7.30	50	7/24/2007	
Bromoform	BQL	50.0	13.8	50	7/24/2007	
Bromomethane	BQL	50.0	13.0	50	7/24/2007	
2-Butanone	BQL	1250	76.5	50	7/24/2007	
n-Butylbenzene	BQL	50.0	5.25	50	7/24/2007	
sec-Butylbenzene	BQL	50.0	5.85	50	7/24/2007	
tert-Butylbenzene	BQL	50.0	6.40	50	7/24/2007	
Carbon disulfide	BQL	50.0	3.15	50	7/24/2007	
Carbon tetrachloride	BQL	50.0	5.10	50	7/24/2007	
Chlorobenzene	BQL	50.0	3.60	50	7/24/2007	
Chloroethane	BQL	50.0	28.4	50	7/24/2007	
Chloroform	BQL	50.0	6.05	50	7/24/2007	
Chloromethane	BQL	50.0	10.3	50	7/24/2007	
2-Chlorotoluene	BQL	50.0	5.50	50	7/24/2007	
4-Chlorotoluene	BQL	50.0	5.35	50	7/24/2007	
Dibromochloromethane	BQL	50.0	6.20	50	7/24/2007	
1,2-Dibromo-3-chloropropane	BQL	250	45.0	50	7/24/2007	
Dibromomethane	BQL	50.0	9.95	50	7/24/2007	
1,2-Dibromoethane (EDB)	BQL	50.0	6.00	50	7/24/2007	
1,2-Dichlorobenzene	BQL	50.0	5.80	50	7/24/2007	
1,3-Dichlorobenzene	BQL	50.0	8.65	50	7/24/2007	
1,4-Dichlorobenzene	BQL	50.0	7.85	50	7/24/2007	
trans-1,4-Dichloro-2-butene	BQL	250	39.5	50	7/24/2007	
1,1-Dichloroethane	BQL	50.0	4.40	50	7/24/2007	
1,1-Dichloroethene	BQL	50.0	10.2	50	7/24/2007	
1,2-Dichloroethane	BQL	50.0	6.60	50	7/24/2007	
cis-1,2-Dichloroethene	BQL	50.0	1.75	50	7/24/2007	
trans-1,2-dichloroethene	BQL	50.0	7.90	50	7/24/2007	
1,2-Dichloropropane	BQL	50.0	4.80	50	7/24/2007	
1,3-Dichloropropane	BQL	50.0	8.10	50	7/24/2007	
2,2-Dichloropropane	BQL	50.0	9.05	50	7/24/2007	
1,1-Dichloropropene	BQL	50.0	6.05	50	7/24/2007	
cis-1,3-Dichloropropene	BQL	50.0	6.05	50	7/24/2007	
trans-1,3-Dichloropropene	BQL	50.0	5.45	50	7/24/2007	
Dichlorodifluoromethane	BQL	250	12.7	50	7/24/2007	
Diisopropyl ether (DIPE)	BQL	50.0	4.25	50	7/24/2007	
Ethylbenzene	BQL	50.0	5.55	50	7/24/2007	
Hexachlorobutadiene	BQL	50.0	11.5	50	7/24/2007	

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: VBLK3072407B
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: RSB
Date Collected:
Date Received:
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	250	43.5	50	7/24/2007	
Iodomethane	BQL	50.0	3.95	50	7/24/2007	
Isopropylbenzene	BQL	50.0	6.35	50	7/24/2007	
4-Isopropyltoluene	BQL	50.0	6.20	50	7/24/2007	
Methylene chloride	BQL	250	9.95	50	7/24/2007	
4-Methyl-2-pentanone	BQL	250	52.0	50	7/24/2007	
Methyl-tert-butyl ether (MTBE)	BQL	50.0	6.90	50	7/24/2007	
Naphthalene	BQL	50.0	8.65	50	7/24/2007	
n-Propyl benzene	BQL	50.0	6.00	50	7/24/2007	
Styrene	BQL	50.0	5.45	50	7/24/2007	
1,1,1,2-Tetrachloroethane	BQL	50.0	6.25	50	7/24/2007	
1,1,2,2-Tetrachloroethane	BQL	50.0	9.35	50	7/24/2007	
Tetrachloroethene	BQL	50.0	5.60	50	7/24/2007	
Toluene	BQL	50.0	4.55	50	7/24/2007	
1,2,3-Trichlorobenzene	BQL	50.0	8.80	50	7/24/2007	
1,2,4-Trichlorobenzene	BQL	50.0	3.60	50	7/24/2007	
Trichloroethene	BQL	50.0	4.35	50	7/24/2007	
1,1,1-Trichloroethane	BQL	50.0	5.55	50	7/24/2007	
1,1,2-Trichloroethane	BQL	50.0	8.75	50	7/24/2007	
Trichlorofluoromethane	BQL	50.0	12.4	50	7/24/2007	
1,2,3-Trichloropropane	BQL	50.0	10.2	50	7/24/2007	
1,2,4-Trimethylbenzene	BQL	50.0	6.05	50	7/24/2007	
1,3,5-Trimethylbenzene	BQL	50.0	5.30	50	7/24/2007	
Vinyl chloride	BQL	50.0	15.3	50	7/24/2007	
m-,p-Xylene	BQL	100	10.8	50	7/24/2007	
o-Xylene	BQL	50.0	5.50	50	7/24/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	10.8	108		
Toluene-d8		10	9.94	99		
4-Bromofluorobenzene		10	10.3	103		

Comments:**Flags:**

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: RSB



LABORATORY CONTROL SAMPLE VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: SGS Environmental

Lab Code: NC00919

Case No.:

SAS No.:

SDG No:

Matrix: (soil/water) Water

Lab Sample ID: LCS3072407a

Sample wt/vol: 5.00 (mL)

Lab File ID: 0724304.D

Level: (low/med) NA

% Moisture: not dec. NA

Date Analyzed: 2007-07-24 10:17

GC Column: DB-624 ID: 0.2 (mm)

Dilution Factor: 1

Soil Extract Volume: NA

Soil Aliquot Volume: NA

CAS NO.	COMPOUND	SPIKE AMT (µg/L)	SAMP CONC (µg/L)	% REC	#	QC LIMITS
71-43-2	benzene	5.00	4.41	88.2		77.4-123
108-90-7	chlorobenzene	5.00	4.36	87.2		72.5-128
75-35-4	1,1-dichloroethene	5.00	4.26	85.2		71.7-128
108-88-3	toluene	5.00	4.56	91.2		75.9-124
79-01-6	trichloroethene	5.00	4.52	90.4		77.9-122

System Monitoring Compound Results

		Spike Added (µg/L)	Spike Result (µg/L)	Percent Rec. (%)	Percent Recovery (%)
460-00-4	4-Bromofluorobenzene	10	10.0	104	84.7 - 115
17060-07-0	1,2-Dichloroethane-d4	10	11.0	108	63.5 - 140
2037-26-5	Toluene-d8	10	10.0	101	81.8 - 117



SGS ENVIRONMENTAL SERVICES, INC.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Contract:

Lab Code: NC00919

Case No.:

SAS No.:

SDG No.:

Matrix Spike - EPA Sample No.: g905-3-8a

Dilution: 100

FileNames: 0724321.D, 0724323.D, 0724324.D

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
benzene	BQL	500	522	104	500	505	101	3.31	30	61.6-135
chlorobenzene	BQL	500	507	101	500	504	101	0.593	30	77.2-118
1,1-dichloroethene	BQL	500	493	98.6	500	474	94.8	3.93	30	64.4-130
toluene	BQL	500	533	107	500	517	103	3.05	30	66.4-128
trichloroethene	BQL	500	533	107	500	514	103	3.63	30	84.9-136

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW11(3-5)
Client Project ID: Site G480
Lab Sample ID: G128-1983-1G
Lab Project ID: G128-1983
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/10/2007 14:30
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Matrix: Soil
% Solids: 87.15

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	0.135	0.346	0.049	1	7/17/2007	J
Acenaphthylene	BQL	0.346	0.046	1	7/17/2007	
Anthracene	0.124	0.346	0.050	1	7/17/2007	J
Benzo[a]anthracene	BQL	0.346	0.060	1	7/17/2007	
Benzo[a]pyrene	BQL	0.346	0.053	1	7/17/2007	
Benzo[b]fluoranthene	BQL	0.346	0.061	1	7/17/2007	
Benzo[g,h,i]perylene	BQL	0.346	0.094	1	7/17/2007	
Benzo[k]fluoranthene	BQL	0.346	0.067	1	7/17/2007	
Benzoic Acid	BQL	0.691	0.691	1	7/17/2007	
Bis(2-chloroethoxy)methane	BQL	0.346	0.052	1	7/17/2007	
Bis(2-chloroethyl)ether	BQL	0.346	0.042	1	7/17/2007	
Bis(2-chloroisopropyl)ether	BQL	0.346	0.043	1	7/17/2007	
Bis(2-ethylhexyl)phthalate	BQL	0.346	0.046	1	7/17/2007	
4-bromophenyl phenyl ether	BQL	0.346	0.058	1	7/17/2007	
Butylbenzylphthalate	BQL	0.346	0.053	1	7/17/2007	
2-Chloronaphthalene	BQL	0.346	0.054	1	7/17/2007	
2-Chlorophenol	BQL	0.346	0.108	1	7/17/2007	
4-Chloro-3-methylphenol	BQL	0.346	0.108	1	7/17/2007	
4-Chloroaniline	BQL	1.73	0.263	1	7/17/2007	
4-Chlorophenyl phenyl ether	BQL	0.346	0.051	1	7/17/2007	
Chrysene	BQL	0.346	0.037	1	7/17/2007	
Dibenzo[a,h]anthracene	BQL	0.346	0.097	1	7/17/2007	
Dibenzofuran	0.280	0.346	0.063	1	7/17/2007	J
Di-n-Butylphthalate	BQL	0.346	0.041	1	7/17/2007	
1,2-Dichlorobenzene	BQL	0.346	0.038	1	7/17/2007	
1,3-Dichlorobenzene	BQL	0.346	0.038	1	7/17/2007	
1,4-Dichlorobenzene	BQL	0.346	0.039	1	7/17/2007	
3,3'-Dichlorobenzidine	BQL	0.691	0.087	1	7/17/2007	
2,4-Dichlorophenol	BQL	0.346	0.124	1	7/17/2007	
Diethylphthalate	BQL	0.346	0.045	1	7/17/2007	
Dimethylphthalate	BQL	0.346	0.042	1	7/17/2007	
2,4-Dimethylphenol	BQL	0.346	0.247	1	7/17/2007	
Di-n-octylphthalate	BQL	0.346	0.057	1	7/17/2007	
4,6-Dinitro-2-methylphenol	BQL	1.73	0.204	1	7/17/2007	
2,4-Dinitrophenol	BQL	1.73	0.761	1	7/17/2007	
2,4-Dinitrotoluene	BQL	0.346	0.045	1	7/17/2007	
2,6-Dinitrotoluene	BQL	0.346	0.063	1	7/17/2007	
Diphenylamine *	BQL	0.346	0.034	1	7/17/2007	
Fluoranthene	BQL	0.346	0.048	1	7/17/2007	
Fluorene	0.328	0.346	0.043	1	7/17/2007	J
Hexachlorobenzene	BQL	0.346	0.053	1	7/17/2007	
Hexachlorobutadiene	BQL	0.346	0.055	1	7/17/2007	
Hexachlorocyclopentadiene	BQL	0.691	0.036	1	7/17/2007	
Hexachloroethane	BQL	0.346	0.031	1	7/17/2007	
Indeno(1,2,3-c,d)pyrene	BQL	0.346	0.089	1	7/17/2007	
Isophorone	BQL	0.346	0.051	1	7/17/2007	
2-Methylnaphthalene	1.83	0.346	0.101	1	7/17/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW11(3-5)
Client Project ID: Site G480
Lab Sample ID: G128-1983-1G
Lab Project ID: G128-1983
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/10/2007 14:30
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Matrix: Soil
% Solids: 87.15

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
2-Methylphenol	BQL	0.346	0.122	1	7/17/2007	
3- & 4-Methylphenol	BQL	0.346	0.117	1	7/17/2007	
Naphthalene	0.200	0.346	0.028	1	7/17/2007	J
2-Nitroaniline	BQL	0.346	0.054	1	7/17/2007	
3-Nitroaniline	BQL	1.73	0.356	1	7/17/2007	
4-Nitroaniline	BQL	1.73	0.106	1	7/17/2007	
Nitrobenzene	BQL	0.346	0.047	1	7/17/2007	
2-Nitrophenol	BQL	0.346	0.107	1	7/17/2007	
4-Nitrophenol	BQL	1.73	0.096	1	7/17/2007	
N-Nitrosodi-n-propylamine	BQL	0.346	0.044	1	7/17/2007	
Pentachlorophenol	BQL	1.73	0.090	1	7/17/2007	
Phenanthrene	0.781	0.346	0.039	1	7/17/2007	
Phenol	BQL	0.346	0.095	1	7/17/2007	
Pyrene	BQL	0.346	0.066	1	7/17/2007	
1,2,4-Trichlorobenzene	BQL	0.346	0.043	1	7/17/2007	
2,4,5-Trichlorophenol	BQL	0.346	0.134	1	7/17/2007	
2,4,6-Trichlorophenol	BQL	0.346	0.123	1	7/17/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	8	80		
2-Fluorophenol		10	9.2	92		
Nitrobenzene-d5		10	9.7	97		
Phenol-d6		10	9.4	94		
2,4,6-Tribromophenol		10	9	90		
4-Terphenyl-d14		10	9.2	92		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: Pr

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW11(3-5)
Client Project ID: Site G480
Lab Sample ID: G128-1983-1G
Lab Project ID: G128-1983
Sample Wt/Vol: 33.21 g
Dilution: 1

Analyzed By: EAW
Date Collected: 7/10/2007 14:30
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Date Analyzed: 7/17/2007
Matrix: Soil
% Solids: 87.2

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown	11.09			3500
2	Naphthalene, 1,6-dimethyl-	10.88	000575-43-9	97	2860
3	Pentadecane, 2,6,10,14-tetramethyl-	13.03	001921-70-6	98	2450
4	Unknown	11.27			2350
5	Amide, Unknown	17.26			2340
6	Naphthalene, 1,4,6-trimethyl-	11.95	002131-42-2	97	2080
7	Naphthalene, 1-ethyl-	10.65	001127-76-0	95	2030
8	Naphthalene, 2,7-dimethyl-	10.92	000582-16-1	97	2020
9	Naphthalene, 2-(1-methylethyl)-	11.62	002027-17-0	91	1730
10	Naphthalene, 2,7-dimethyl-	10.75	000582-16-1	97	1530

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: SA

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW12(3-5)
Client Project ID: Site G480
Lab Sample ID: G128-1983-2G
Lab Project ID: G128-1983
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/11/2007 11:00
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Matrix: Soil
% Solids: 85.3

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.363	0.052	1	7/17/2007	
Acenaphthylene	BQL	0.363	0.048	1	7/17/2007	
Anthracene	BQL	0.363	0.053	1	7/17/2007	
Benzo[a]anthracene	BQL	0.363	0.063	1	7/17/2007	
Benzo[a]pyrene	BQL	0.363	0.056	1	7/17/2007	
Benzo[b]fluoranthene	BQL	0.363	0.064	1	7/17/2007	
Benzo[g,h,i]perylene	BQL	0.363	0.099	1	7/17/2007	
Benzo[k]fluoranthene	BQL	0.363	0.070	1	7/17/2007	
Benzoic Acid	BQL	0.725	0.725	1	7/17/2007	
Bis(2-chloroethoxy)methane	BQL	0.363	0.054	1	7/17/2007	
Bis(2-chloroethyl)ether	BQL	0.363	0.044	1	7/17/2007	
Bis(2-chloroisopropyl)ether	BQL	0.363	0.045	1	7/17/2007	
Bis(2-ethylhexyl)phthalate	BQL	0.363	0.049	1	7/17/2007	
4-bromophenyl phenyl ether	BQL	0.363	0.061	1	7/17/2007	
Butylbenzylphthalate	BQL	0.363	0.056	1	7/17/2007	
2-Chloronaphthalene	BQL	0.363	0.057	1	7/17/2007	
2-Chlorophenol	BQL	0.363	0.114	1	7/17/2007	
4-Chloro-3-methylphenol	BQL	0.363	0.113	1	7/17/2007	
4-Chloroaniline	BQL	1.81	0.276	1	7/17/2007	
4-Chlorophenyl phenyl ether	BQL	0.363	0.053	1	7/17/2007	
Chrysene	BQL	0.363	0.039	1	7/17/2007	
Dibenzo[a,h]anthracene	BQL	0.363	0.102	1	7/17/2007	
Dibenzofuran	BQL	0.363	0.066	1	7/17/2007	
Di-n-Butylphthalate	BQL	0.363	0.043	1	7/17/2007	
1,2-Dichlorobenzene	BQL	0.363	0.040	1	7/17/2007	
1,3-Dichlorobenzene	BQL	0.363	0.040	1	7/17/2007	
1,4-Dichlorobenzene	BQL	0.363	0.041	1	7/17/2007	
3,3'-Dichlorobenzidine	BQL	0.725	0.091	1	7/17/2007	
2,4-Dichlorophenol	BQL	0.363	0.131	1	7/17/2007	
Diethylphthalate	BQL	0.363	0.047	1	7/17/2007	
Dimethylphthalate	BQL	0.363	0.044	1	7/17/2007	
2,4-Dimethylphenol	BQL	0.363	0.259	1	7/17/2007	
Di-n-octylphthalate	BQL	0.363	0.060	1	7/17/2007	
4,6-Dinitro-2-methylphenol	BQL	1.81	0.214	1	7/17/2007	
2,4-Dinitrophenol	BQL	1.81	0.799	1	7/17/2007	
2,4-Dinitrotoluene	BQL	0.363	0.047	1	7/17/2007	
2,6-Dinitrotoluene	BQL	0.363	0.066	1	7/17/2007	
Diphenylamine *	BQL	0.363	0.036	1	7/17/2007	
Fluoranthene	BQL	0.363	0.051	1	7/17/2007	
Fluorene	BQL	0.363	0.045	1	7/17/2007	
Hexachlorobenzene	BQL	0.363	0.056	1	7/17/2007	
Hexachlorobutadiene	BQL	0.363	0.058	1	7/17/2007	
Hexachlorocyclopentadiene	BQL	0.725	0.037	1	7/17/2007	
Hexachloroethane	BQL	0.363	0.033	1	7/17/2007	
Indeno(1,2,3-c,d)pyrene	BQL	0.363	0.093	1	7/17/2007	
Isophorone	BQL	0.363	0.053	1	7/17/2007	
2-Methylnaphthalene	BQL	0.363	0.106	1	7/17/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW12(3-5)
Client Project ID: Site G480
Lab Sample ID: G128-1983-2G
Lab Project ID: G128-1983
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/11/2007 11:00
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Matrix: Soil
% Solids: 85.3

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
2-Methylphenol	BQL	0.363	0.128	1	7/17/2007	
3- & 4-Methylphenol	BQL	0.363	0.123	1	7/17/2007	
Naphthalene	BQL	0.363	0.029	1	7/17/2007	
2-Nitroaniline	BQL	0.363	0.057	1	7/17/2007	
3-Nitroaniline	BQL	1.81	0.374	1	7/17/2007	
4-Nitroaniline	BQL	1.81	0.112	1	7/17/2007	
Nitrobenzene	BQL	0.363	0.049	1	7/17/2007	
2-Nitrophenol	BQL	0.363	0.112	1	7/17/2007	
4-Nitrophenol	BQL	1.81	0.100	1	7/17/2007	
N-Nitrosodi-n-propylamine	BQL	0.363	0.046	1	7/17/2007	
Pentachlorophenol	BQL	1.81	0.095	1	7/17/2007	
Phenanthrene	BQL	0.363	0.041	1	7/17/2007	
Phenol	BQL	0.363	0.099	1	7/17/2007	
Pyrene	BQL	0.363	0.070	1	7/17/2007	
1,2,4-Trichlorobenzene	BQL	0.363	0.045	1	7/17/2007	
2,4,5-Trichlorophenol	BQL	0.363	0.140	1	7/17/2007	
2,4,6-Trichlorophenol	BQL	0.363	0.129	1	7/17/2007	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	7.7	77
2-Fluorophenol	10	8.5	85
Nitrobenzene-d5	10	8.5	85
Phenol-d6	10	8.7	87
2,4,6-Tribromophenol	10	8.1	81
4-Terphenyl-d14	10	8.5	85

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: EA

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW12(3-5)
Client Project ID: Site G480
Lab Sample ID: G128-1983-2G
Lab Project ID: G128-1983
Sample Wt/Vol: 32.32 g
Dilution: 1

Analyzed By: EAW
Date Collected: 7/11/2007 11:00
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Date Analyzed: 7/17/2007
Matrix: Soil
% Solids: 85.3

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/KG)
1	Unknown	17.25			1210
2	Unknown	11.96			195
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: KWJ

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW13(3-5)
Client Project ID: Site G480
Lab Sample ID: G128-1983-3G
Lab Project ID: G128-1983
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/11/2007 14:30
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Matrix: Soil
% Solids: 88.78

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.338	0.048	1	7/17/2007	
Acenaphthylene	BQL	0.338	0.045	1	7/17/2007	
Anthracene	0.162	0.338	0.049	1	7/17/2007	J
Benzo[a]anthracene	BQL	0.338	0.058	1	7/17/2007	
Benzo[a]pyrene	BQL	0.338	0.052	1	7/17/2007	
Benzo[b]fluoranthene	BQL	0.338	0.059	1	7/17/2007	
Benzo[g,h,i]perylene	BQL	0.338	0.092	1	7/17/2007	
Benzo[k]fluoranthene	BQL	0.338	0.065	1	7/17/2007	
Benzoic Acid	BQL	0.676	0.676	1	7/17/2007	
Bis(2-chloroethoxy)methane	BQL	0.338	0.050	1	7/17/2007	
Bis(2-chloroethyl)ether	BQL	0.338	0.041	1	7/17/2007	
Bis(2-chloroisopropyl)ether	BQL	0.338	0.042	1	7/17/2007	
Bis(2-ethylhexyl)phthalate	BQL	0.338	0.045	1	7/17/2007	
4-bromophenyl phenyl ether	BQL	0.338	0.057	1	7/17/2007	
Butylbenzylphthalate	BQL	0.338	0.052	1	7/17/2007	
2-Chloronaphthalene	BQL	0.338	0.053	1	7/17/2007	
2-Chlorophenol	BQL	0.338	0.106	1	7/17/2007	
4-Chloro-3-methylphenol	BQL	0.338	0.105	1	7/17/2007	
4-Chloroaniline	BQL	1.69	0.257	1	7/17/2007	
4-Chlorophenyl phenyl ether	BQL	0.338	0.050	1	7/17/2007	
Chrysene	BQL	0.338	0.037	1	7/17/2007	
Dibenzo[a,h]anthracene	BQL	0.338	0.095	1	7/17/2007	
Dibenzofuran	0.351	0.338	0.062	1	7/17/2007	
Di-n-Butylphthalate	BQL	0.338	0.040	1	7/17/2007	
1,2-Dichlorobenzene	BQL	0.338	0.038	1	7/17/2007	
1,3-Dichlorobenzene	BQL	0.338	0.037	1	7/17/2007	
1,4-Dichlorobenzene	BQL	0.338	0.038	1	7/17/2007	
3,3'-Dichlorobenzidine	BQL	0.676	0.085	1	7/17/2007	
2,4-Dichlorophenol	BQL	0.338	0.122	1	7/17/2007	
Diethylphthalate	BQL	0.338	0.044	1	7/17/2007	
Dimethylphthalate	BQL	0.338	0.041	1	7/17/2007	
2,4-Dimethylphenol	BQL	0.338	0.242	1	7/17/2007	
Di-n-octylphthalate	BQL	0.338	0.056	1	7/17/2007	
4,6-Dinitro-2-methylphenol	BQL	1.69	0.199	1	7/17/2007	
2,4-Dinitrophenol	BQL	1.69	0.744	1	7/17/2007	
2,4-Dinitrotoluene	BQL	0.338	0.044	1	7/17/2007	
2,6-Dinitrotoluene	BQL	0.338	0.062	1	7/17/2007	
Diphenylamine *	BQL	0.338	0.033	1	7/17/2007	
Fluoranthene	BQL	0.338	0.047	1	7/17/2007	
Fluorene	0.439	0.338	0.042	1	7/17/2007	
Hexachlorobenzene	BQL	0.338	0.052	1	7/17/2007	
Hexachlorobutadiene	BQL	0.338	0.054	1	7/17/2007	
Hexachlorocyclopentadiene	BQL	0.676	0.035	1	7/17/2007	
Hexachloroethane	BQL	0.338	0.030	1	7/17/2007	
Indeno(1,2,3-c,d)pyrene	BQL	0.338	0.087	1	7/17/2007	
Isophorone	BQL	0.338	0.050	1	7/17/2007	
2-Methylnaphthalene	3.63	0.338	0.099	1	7/17/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW13(3-5)
Client Project ID: Site G480
Lab Sample ID: G128-1983-3G
Lab Project ID: G128-1983
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/11/2007 14:30
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Matrix: Soil
% Solids: 88.78

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
2-Methylphenol	BQL	0.338	0.119	1	7/17/2007	
3- & 4-Methylphenol	BQL	0.338	0.115	1	7/17/2007	
Naphthalene	0.547	0.338	0.027	1	7/17/2007	
2-Nitroaniline	BQL	0.338	0.053	1	7/17/2007	
3-Nitroaniline	BQL	1.69	0.348	1	7/17/2007	
4-Nitroaniline	BQL	1.69	0.104	1	7/17/2007	
Nitrobenzene	BQL	0.338	0.046	1	7/17/2007	
2-Nitrophenol	BQL	0.338	0.105	1	7/17/2007	
4-Nitrophenol	BQL	1.69	0.094	1	7/17/2007	
N-Nitrosodi-n-propylamine	BQL	0.338	0.043	1	7/17/2007	
Pentachlorophenol	BQL	1.69	0.088	1	7/17/2007	
Phenanthrene	0.862	0.338	0.039	1	7/17/2007	
Phenol	BQL	0.338	0.093	1	7/17/2007	
Pyrene	BQL	0.338	0.065	1	7/17/2007	
1,2,4-Trichlorobenzene	BQL	0.338	0.042	1	7/17/2007	
2,4,5-Trichlorophenol	BQL	0.338	0.131	1	7/17/2007	
2,4,6-Trichlorophenol	BQL	0.338	0.120	1	7/17/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	7.6	76		
2-Fluorophenol		10	9.2	92		
Nitrobenzene-d5		10	10.9	109		
Phenol-d6		10	9.4	94		
2,4,6-Tribromophenol		10	9.2	92		
4-Terphenyl-d14		10	9.1	91		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: EL

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW13(3-5)
Client Project ID: Site G480
Lab Sample ID: G128-1983-3G
Lab Project ID: G128-1983
Sample Wt/Vol: 33.34 g
Dilution: 1

Analyzed By: EAW
Date Collected: 7/11/2007 14:30
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Date Analyzed: 7/17/2007
Matrix: Soil
% Solids: 88.8

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/KG)
1	Undecane	7.65	001120-21-4	97	6840
2	Decane	6.51	000124-18-5	97	4000
3	Naphthalene, decahydro-, trans-	7.26	000493-02-7	90	2420
4	Unknown	17.26			2250
5	Tetradecane	10.60	000629-59-4	98	2030
6	Docosane	16.31	000629-97-0	97	1970
7	Heptadecane	13.04	000629-78-7	90	1880
8	Tridecane	9.68	000629-50-5	96	1790
9	Unknown	7.20			1720
10	Decane, 3-methyl-	7.32	013151-34-3	97	1670

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: JZV

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW14(3-5)
Client Project ID: Site G480
Lab Sample ID: G128-1983-4G
Lab Project ID: G128-1983
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/11/2007 16:10
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Matrix: Soil
% Solids: 83.83

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.359	0.051	1	7/17/2007	
Acenaphthylene	BQL	0.359	0.048	1	7/17/2007	
Anthracene	BQL	0.359	0.052	1	7/17/2007	
Benzo[a]anthracene	BQL	0.359	0.062	1	7/17/2007	
Benzo[a]pyrene	BQL	0.359	0.055	1	7/17/2007	
Benzo[b]fluoranthene	BQL	0.359	0.063	1	7/17/2007	
Benzo[g,h,i]perylene	BQL	0.359	0.098	1	7/17/2007	
Benzo[k]fluoranthene	BQL	0.359	0.069	1	7/17/2007	
Benzoic Acid	BQL	0.718	0.718	1	7/17/2007	
Bis(2-chloroethoxy)methane	BQL	0.359	0.054	1	7/17/2007	
Bis(2-chloroethyl)ether	BQL	0.359	0.043	1	7/17/2007	
Bis(2-chloroisopropyl)ether	BQL	0.359	0.045	1	7/17/2007	
Bis(2-ethylhexyl)phthalate	BQL	0.359	0.048	1	7/17/2007	
4-bromophenyl phenyl ether	BQL	0.359	0.061	1	7/17/2007	
Butylbenzylphthalate	BQL	0.359	0.055	1	7/17/2007	
2-Chloronaphthalene	BQL	0.359	0.056	1	7/17/2007	
2-Chlorophenol	BQL	0.359	0.112	1	7/17/2007	
4-Chloro-3-methylphenol	BQL	0.359	0.112	1	7/17/2007	
4-Chloroaniline	BQL	1.79	0.273	1	7/17/2007	
4-Chlorophenyl phenyl ether	BQL	0.359	0.053	1	7/17/2007	
Chrysene	BQL	0.359	0.039	1	7/17/2007	
Dibenzo[a,h]anthracene	BQL	0.359	0.100	1	7/17/2007	
Dibenzofuran	BQL	0.359	0.065	1	7/17/2007	
Di-n-Butylphthalate	BQL	0.359	0.043	1	7/17/2007	
1,2-Dichlorobenzene	BQL	0.359	0.040	1	7/17/2007	
1,3-Dichlorobenzene	BQL	0.359	0.039	1	7/17/2007	
1,4-Dichlorobenzene	BQL	0.359	0.041	1	7/17/2007	
3,3'-Dichlorobenzidine	BQL	0.718	0.090	1	7/17/2007	
2,4-Dichlorophenol	BQL	0.359	0.129	1	7/17/2007	
Diethylphthalate	BQL	0.359	0.046	1	7/17/2007	
Dimethylphthalate	BQL	0.359	0.043	1	7/17/2007	
2,4-Dimethylphenol	BQL	0.359	0.257	1	7/17/2007	
Di-n-octylphthalate	BQL	0.359	0.059	1	7/17/2007	
4,6-Dinitro-2-methylphenol	BQL	1.79	0.211	1	7/17/2007	
2,4-Dinitrophenol	BQL	1.79	0.790	1	7/17/2007	
2,4-Dinitrotoluene	BQL	0.359	0.047	1	7/17/2007	
2,6-Dinitrotoluene	BQL	0.359	0.065	1	7/17/2007	
Diphenylamine *	BQL	0.359	0.035	1	7/17/2007	
Fluoranthene	BQL	0.359	0.050	1	7/17/2007	
Fluorene	BQL	0.359	0.045	1	7/17/2007	
Hexachlorobenzene	BQL	0.359	0.055	1	7/17/2007	
Hexachlorobutadiene	BQL	0.359	0.057	1	7/17/2007	
Hexachlorocyclopentadiene	BQL	0.718	0.037	1	7/17/2007	
Hexachloroethane	BQL	0.359	0.032	1	7/17/2007	
Indeno(1,2,3-c,d)pyrene	BQL	0.359	0.092	1	7/17/2007	
Isophorone	BQL	0.359	0.053	1	7/17/2007	
2-Methylnaphthalene	BQL	0.359	0.105	1	7/17/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW14(3-5)
Client Project ID: Site G480
Lab Sample ID: G128-1983-4G
Lab Project ID: G128-1983
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/11/2007 16:10
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Matrix: Soil
% Solids: 83.83

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
2-Methylphenol	BQL	0.359	0.126	1	7/17/2007	
3- & 4-Methylphenol	BQL	0.359	0.122	1	7/17/2007	
Naphthalene	BQL	0.359	0.029	1	7/17/2007	
2-Nitroaniline	BQL	0.359	0.056	1	7/17/2007	
3-Nitroaniline	BQL	1.79	0.370	1	7/17/2007	
4-Nitroaniline	BQL	1.79	0.111	1	7/17/2007	
Nitrobenzene	BQL	0.359	0.048	1	7/17/2007	
2-Nitrophenol	BQL	0.359	0.111	1	7/17/2007	
4-Nitrophenol	BQL	1.79	0.099	1	7/17/2007	
N-Nitrosodi-n-propylamine	BQL	0.359	0.046	1	7/17/2007	
Pentachlorophenol	BQL	1.79	0.094	1	7/17/2007	
Phenanthrene	BQL	0.359	0.041	1	7/17/2007	
Phenol	BQL	0.359	0.098	1	7/17/2007	
Pyrene	BQL	0.359	0.069	1	7/17/2007	
1,2,4-Trichlorobenzene	BQL	0.359	0.045	1	7/17/2007	
2,4,5-Trichlorophenol	BQL	0.359	0.139	1	7/17/2007	
2,4,6-Trichlorophenol	BQL	0.359	0.128	1	7/17/2007	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.2	82
2-Fluorophenol	10	8.8	88
Nitrobenzene-d5	10	8.8	88
Phenol-d6	10	9	90
2,4,6-Tribromophenol	10	8.5	85
4-Terphenyl-d14	10	9	90

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: EW

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW14(3-5)
Client Project ID: Site G480
Lab Sample ID: G128-1983-4G
Lab Project ID: G128-1983
Sample Wt/Vol: 33.24 g
Dilution: 1

Analyzed By: EAW
Date Collected: 7/11/2007 16:10
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Date Analyzed: 7/17/2007
Matrix: Soil
% Solids: 83.8

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/KG)
1	9-Octadecenamide, (Z)-	17.25	000301-02-0	83	1050
2	Unknown	11.96			202
3	Alkene, Unknown	7.40			154
4					
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: RW

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW15(2-4)
Client Project ID: Site G480
Lab Sample ID: G128-1983-5G
Lab Project ID: G128-1983
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/10/2007 10:30
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Matrix: Soil
% Solids: 86.41

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.353	0.050	1	7/17/2007	
Acenaphthylene	BQL	0.353	0.047	1	7/17/2007	
Anthracene	BQL	0.353	0.051	1	7/17/2007	
Benzo[a]anthracene	BQL	0.353	0.061	1	7/17/2007	
Benzo[a]pyrene	BQL	0.353	0.054	1	7/17/2007	
Benzo[b]fluoranthene	BQL	0.353	0.062	1	7/17/2007	
Benzo[g,h,i]perylene	BQL	0.353	0.096	1	7/17/2007	
Benzo[k]fluoranthene	BQL	0.353	0.068	1	7/17/2007	
Benzoic Acid	BQL	0.705	0.705	1	7/17/2007	
Bis(2-chloroethoxy)methane	BQL	0.353	0.053	1	7/17/2007	
Bis(2-chloroethyl)ether	BQL	0.353	0.043	1	7/17/2007	
Bis(2-chloroisopropyl)ether	BQL	0.353	0.044	1	7/17/2007	
Bis(2-ethylhexyl)phthalate	BQL	0.353	0.047	1	7/17/2007	
4-bromophenyl phenyl ether	BQL	0.353	0.060	1	7/17/2007	
Butylbenzylphthalate	BQL	0.353	0.054	1	7/17/2007	
2-Chloronaphthalene	BQL	0.353	0.055	1	7/17/2007	
2-Chlorophenol	BQL	0.353	0.110	1	7/17/2007	
4-Chloro-3-methylphenol	BQL	0.353	0.110	1	7/17/2007	
4-Chloroaniline	BQL	1.76	0.269	1	7/17/2007	
4-Chlorophenyl phenyl ether	BQL	0.353	0.052	1	7/17/2007	
Chrysene	BQL	0.353	0.038	1	7/17/2007	
Dibenzo[a,h]anthracene	BQL	0.353	0.099	1	7/17/2007	
Dibenzofuran	BQL	0.353	0.064	1	7/17/2007	
Di-n-Butylphthalate	BQL	0.353	0.042	1	7/17/2007	
1,2-Dichlorobenzene	BQL	0.353	0.039	1	7/17/2007	
1,3-Dichlorobenzene	BQL	0.353	0.038	1	7/17/2007	
1,4-Dichlorobenzene	BQL	0.353	0.040	1	7/17/2007	
3,3'-Dichlorobenzidine	BQL	0.705	0.089	1	7/17/2007	
2,4-Dichlorophenol	BQL	0.353	0.127	1	7/17/2007	
Diethylphthalate	BQL	0.353	0.046	1	7/17/2007	
Dimethylphthalate	BQL	0.353	0.043	1	7/17/2007	
2,4-Dimethylphenol	BQL	0.353	0.252	1	7/17/2007	
Di-n-octylphthalate	BQL	0.353	0.058	1	7/17/2007	
4,6-Dinitro-2-methylphenol	BQL	1.76	0.208	1	7/17/2007	
2,4-Dinitrophenol	BQL	1.76	0.777	1	7/17/2007	
2,4-Dinitrotoluene	BQL	0.353	0.046	1	7/17/2007	
2,6-Dinitrotoluene	BQL	0.353	0.064	1	7/17/2007	
Diphenylamine *	BQL	0.353	0.035	1	7/17/2007	
Fluoranthene	BQL	0.353	0.049	1	7/17/2007	
Fluorene	0.053	0.353	0.044	1	7/17/2007	J
Hexachlorobenzene	BQL	0.353	0.054	1	7/17/2007	
Hexachlorobutadiene	BQL	0.353	0.056	1	7/17/2007	
Hexachlorocyclopentadiene	BQL	0.705	0.036	1	7/17/2007	
Hexachloroethane	BQL	0.353	0.032	1	7/17/2007	
Indeno(1,2,3-c,d)pyrene	BQL	0.353	0.090	1	7/17/2007	
Isophorone	BQL	0.353	0.052	1	7/17/2007	
2-Methylnaphthalene	0.194	0.353	0.103	1	7/17/2007	J

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW15(2-4)
Client Project ID: Site G480
Lab Sample ID: G128-1983-5G
Lab Project ID: G128-1983
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/10/2007 10:30
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Matrix: Soil
% Solids: 86.41

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
2-Methylphenol	BQL	0.353	0.124	1	7/17/2007	
3- & 4-Methylphenol	BQL	0.353	0.120	1	7/17/2007	
Naphthalene	BQL	0.353	0.029	1	7/17/2007	
2-Nitroaniline	BQL	0.353	0.055	1	7/17/2007	
3-Nitroaniline	BQL	1.76	0.363	1	7/17/2007	
4-Nitroaniline	BQL	1.76	0.109	1	7/17/2007	
Nitrobenzene	BQL	0.353	0.048	1	7/17/2007	
2-Nitrophenol	BQL	0.353	0.109	1	7/17/2007	
4-Nitrophenol	BQL	1.76	0.098	1	7/17/2007	
N-Nitrosodi-n-propylamine	BQL	0.353	0.045	1	7/17/2007	
Pentachlorophenol	BQL	1.76	0.092	1	7/17/2007	
Phenanthrene	0.113	0.353	0.040	1	7/17/2007	J
Phenol	BQL	0.353	0.097	1	7/17/2007	
Pyrene	BQL	0.353	0.068	1	7/17/2007	
1,2,4-Trichlorobenzene	BQL	0.353	0.044	1	7/17/2007	
2,4,5-Trichlorophenol	BQL	0.353	0.137	1	7/17/2007	
2,4,6-Trichlorophenol	BQL	0.353	0.126	1	7/17/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	8.1	81		
2-Fluorophenol		10	9	90		
Nitrobenzene-d5		10	9.5	95		
Phenol-d6		10	9.2	92		
2,4,6-Tribromophenol		10	9	90		
4-Terphenyl-d14		10	9.6	96		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: Dr?

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW15(2-4)
Client Project ID: Site G480
Lab Sample ID: G128-1983-5G
Lab Project ID: G128-1983
Sample Wt/Vol: 32.81 g
Dilution: 1

Analyzed By: EAW
Date Collected: 7/10/2007 10:30
Date Received: 7/13/2007
Date Extracted: 7/16/2007
Date Analyzed: 7/17/2007
Matrix: Soil
% Solids: 86.4

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/KG)
1	Tetradecane	10.57	000629-59-4	98	7830
2	Decane, 5-propyl-	11.09	017312-62-8	91	3250
3	Unknown	11.27			2920
4	Tridecane	9.66	000629-50-5	97	2670
5	Alkane, Unknown	11.94			2430
6	Undecane	7.64	001120-21-4	97	2190
7	Heptadecane	13.01	000629-78-7	95	2110
8	Unknown	10.94			1900
9	Unknown	11.18			1760
10	Pentadecane, 2,6,10,14-tetramethyl-	13.03	001921-70-6	93	1750

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: EW

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: PB8634
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: EAW
Date Collected:
Date Received:
Date Extracted: 7/16/2007
Matrix: SOIL
% Solids: 100

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	313	44.7	1	7/17/2007	
Acenaphthylene	BQL	313	41.6	1	7/17/2007	
Anthracene	BQL	313	45.3	1	7/17/2007	
Benzo[a]anthracene	BQL	313	54.1	1	7/17/2007	
Benzo[a]pyrene	BQL	313	47.8	1	7/17/2007	
Benzo[b]fluoranthene	BQL	313	54.7	1	7/17/2007	
Benzo[g,h,i]perylene	BQL	313	85.0	1	7/17/2007	
Benzo[k]fluoranthene	BQL	313	60.3	1	7/17/2007	
Benzoic Acid	BQL	625	625	1	7/17/2007	
Bis(2-chloroethoxy)methane	BQL	313	46.6	1	7/17/2007	
Bis(2-chloroethyl)ether	BQL	313	37.8	1	7/17/2007	
Bis(2-chloroisopropyl)ether	BQL	313	39.1	1	7/17/2007	
Bis(2-ethylhexyl)phthalate	BQL	313	41.9	1	7/17/2007	
4-bromophenyl phenyl ether	BQL	313	52.8	1	7/17/2007	
Butylbenzylphthalate	BQL	313	48.1	1	7/17/2007	
2-Chloronaphthalene	BQL	313	49.1	1	7/17/2007	
2-Chlorophenol	BQL	313	97.8	1	7/17/2007	
4-Chloro-3-methylphenol	BQL	313	97.5	1	7/17/2007	
4-Chloroaniline	BQL	1560	238	1	7/17/2007	
4-Chlorophenyl phenyl ether	BQL	313	45.9	1	7/17/2007	
Chrysene	BQL	313	33.8	1	7/17/2007	
Dibenzo[a,h]anthracene	BQL	313	87.5	1	7/17/2007	
Dibenzofuran	BQL	313	56.9	1	7/17/2007	
Di-n-Butylphthalate	BQL	313	37.2	1	7/17/2007	
1,2-Dichlorobenzene	BQL	313	34.7	1	7/17/2007	
1,3-Dichlorobenzene	BQL	313	34.1	1	7/17/2007	
1,4-Dichlorobenzene	BQL	313	35.3	1	7/17/2007	
3,3'-Dichlorobenzidine	BQL	625	78.8	1	7/17/2007	
2,4-Dichlorophenol	BQL	313	113	1	7/17/2007	
Diethylphthalate	BQL	313	40.3	1	7/17/2007	
Dimethylphthalate	BQL	313	37.8	1	7/17/2007	
2,4-Dimethylphenol	BQL	313	223	1	7/17/2007	
Di-n-octylphthalate	BQL	313	51.6	1	7/17/2007	
4,6-Dinitro-2-methylphenol	BQL	1560	184	1	7/17/2007	
2,4-Dinitrophenol	BQL	1560	688	1	7/17/2007	
2,4-Dinitrotoluene	BQL	313	40.6	1	7/17/2007	
2,6-Dinitrotoluene	BQL	313	56.9	1	7/17/2007	
Diphenylamine *	BQL	313	30.6	1	7/17/2007	
Fluoranthene	BQL	313	43.7	1	7/17/2007	
Fluorene	BQL	313	38.8	1	7/17/2007	
Hexachlorobenzene	BQL	313	48.1	1	7/17/2007	
Hexachlorobutadiene	BQL	313	50.0	1	7/17/2007	
Hexachlorocyclopentadiene	BQL	625	32.2	1	7/17/2007	
Hexachloroethane	BQL	313	28.1	1	7/17/2007	
Indeno(1,2,3-c,d)pyrene	BQL	313	80.0	1	7/17/2007	
Isophorone	BQL	313	45.9	1	7/17/2007	
2-Methylnaphthalene	BQL	313	91.2	1	7/17/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: PB8634
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: EAW
Date Collected:
Date Received:
Date Extracted: 7/16/2007
Matrix: SOIL
% Solids: 100

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
2-Methylphenol	BQL	313	110	1	7/17/2007	
3- & 4-Methylphenol	BQL	313	106	1	7/17/2007	
Naphthalene	BQL	313	25.3	1	7/17/2007	
2-Nitroaniline	BQL	313	49.1	1	7/17/2007	
3-Nitroaniline	BQL	1560	322	1	7/17/2007	
4-Nitroaniline	BQL	1560	96.3	1	7/17/2007	
Nitrobenzene	BQL	313	42.2	1	7/17/2007	
2-Nitrophenol	BQL	313	96.9	1	7/17/2007	
4-Nitrophenol	BQL	1560	86.6	1	7/17/2007	
N-Nitrosodi-n-propylamine	BQL	313	39.7	1	7/17/2007	
Pentachlorophenol	BQL	1560	81.6	1	7/17/2007	
Phenanthrene	BQL	313	35.6	1	7/17/2007	
Phenol	BQL	313	85.6	1	7/17/2007	
Pyrene	BQL	313	60.0	1	7/17/2007	
1,2,4-Trichlorobenzene	BQL	313	39.1	1	7/17/2007	
2,4,5-Trichlorophenol	BQL	313	121	1	7/17/2007	
2,4,6-Trichlorophenol	BQL	313	111	1	7/17/2007	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.6	96
2-Fluorophenol	10	9.1	91
Nitrobenzene-d5	10	9.7	97
Phenol-d6	10	9.5	95
2,4,6-Tribromophenol	10	9.4	94
4-Terphenyl-d14	10	10.8	108

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 210

Results For Matrix Spike / Matrix Spike Duplicate and Laboratory Control Standard (MS/MSD/LCS) by GCMS

Client Sample ID: Batch QC

Client Project ID:

Lab Sample ID: Batch-8634-MS/MSD/LCS

Lab Project ID: G128-1983-4G

Matrix: SOIL

Prep Method: 3540

Date Collected:

Date Received:

Date Extracted: 07/16/07

Date Analyzed: 07/17/07

Analyzed By: EAW

Dilution: 1

	Sample Amount (µg/kg)	MS Spike (µg/kg)	MS Conc. (µg/kg)	MS Spike % Rec.	MSD Spike (µg/kg)	MSD Conc. (µg/kg)	MSD Conc. % Rec.	RPD	QC Limits	
									RPD	% Rec.
Acenaphthylene	BQL	3550	3680	104	3690	3690	100.0	3.73	30	73.0-140
4-Chloro-3-methylphenol	BQL	3550	3770	106	3690	3810	103.0	2.86	30	80.0-115
2-Chlorophenol	BQL	3550	3280	92.3	3690	3320	90.0	2.52	30	77.1-111
1,4-Dichlorobenzene	BQL	3550	3160	89.1	3690	3160	85.5	4.12	30	70.6-117
2,4-Dinitrotoluene	BQL	3550	3490	98.4	3690	3530	95.7	2.78	30	67.6-136
N-Nitrosodi-n-propylamine	BQL	3550	3300	93.0	3690	3360	90.9	2.28	30	74.3-133
4-Nitrophenol	BQL	3550	3710	104	3690	3630	98.2	6.12	30	56.8-133
Pentachlorophenol	BQL	3550	3190	89.8	3690	3270	88.6	1.35	30	29.2-108
Phenol	BQL	3550	3400	95.9	3690	3440	93.2	2.86	30	71.2-120
Pyrene	BQL	3550	3340	94.2	3690	3390	91.7	2.69	30	68.5-140
1,2,4-Trichlorobenzene	BQL	3550	3190	89.9	3690	3200	86.8	3.51	30	68.9-119

	Spiked Amount (µg/kg)	LCS Conc. (µg/kg)	LCS Spike %	QC Limits % Rec.
Acenaphthylene	3125	3380	108	52.1-146
4-Chloro-3-methylphenol	3125	3320	106	51.1-135
2-Chlorophenol	3125	2960	94.7	43.7-128
1,4-Dichlorobenzene	3125	2900	92.8	30.0-110
2,4-Dinitrotoluene	3125	3200	102	56.3-144
N-Nitrosodi-n-propylamine	3125	3050	97.7	55.9-143
4-Nitrophenol	3125	3180	102	47.9-148
Pentachlorophenol	3125	2870	91.8	55.9-143
Phenol	3125	3080	98.6	48.0-124
Pyrene	3125	3100	99.2	29.9-186
1,2,4-Trichlorobenzene	3125	2880	92.3	43.1-124

Comments:

Concentrations reflect the spiked sample amounts.

Flags:

* = Out of limits.

NA = Not applicable.

Reviewed By: g21

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW11(3-5)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	07/10/07
Date Received	07/13/07
Date Extracted	07/18/07
Date Analyzed	07/18/07 11:36 - 07/18/07 11:36
Dry Weight	87.2
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₂ Aliphatics**	34.0 mg/Kg
C ₉ -C ₁₀ Aromatics**	34.2 mg/Kg
Surrogate % Recovery - PID	102
Surrogate % Recovery - FID	103

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** =

Lab Info: g128-1983-1e	Lab Info: g128-1983-1e
FID Info: VP071807/008F0101.D	PID Info: VP071807/008R0101.D

Reviewed By: JSV

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW12(3-5)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	07/11/07
Date Received	07/13/07
Date Extracted	07/18/07
Date Analyzed	07/18/07 13:56 - 07/18/07 13:56
Dry Weight	85.3
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₂ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₀ Aromatics**	< 10.0 mg/Kg
Surrogate % Recovery - PID	91.2
Surrogate % Recovery - FID	86.4

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** =

Lab Info: g128-1983-2f	Lab Info: g128-1983-2f
FID Info: VP071807/013F0101.D	PID Info: VP071807/013R0101.D

Reviewed By: Pw

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW13(3-5)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	07/11/07
Date Received	07/13/07
Date Extracted	07/16/07
Date Analyzed	07/18/07 14:52 - 07/18/07 14:52
Dry Weight	88.8
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₂ Aliphatics**	50.8 mg/Kg
C ₉ -C ₁₀ Aromatics**	48.4 mg/Kg
Surrogate % Recovery - PID	105
Surrogate % Recovery - FID	111

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-1983-3f	Lab Info: g128-1983-3f
FID Info: VP071807/015F0101.D	PID Info: VP071807/015R0101.D

Reviewed By: PS?

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW14(3-5)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	07/11/07
Date Received	07/13/07
Date Extracted	07/16/07
Date Analyzed	07/18/07 14:24 - 07/18/07 14:24
Dry Weight	83.8
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₂ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₀ Aromatics**	< 10.0 mg/Kg
Surrogate % Recovery - PID	97.1
Surrogate % Recovery - FID	90.6

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-1983-4f	Lab Info: g128-1983-4f
FID Info: VP071807/014F0101.D	PID Info: VP071807/014R0101.D

Reviewed By: 3w

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW15(2-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	07/10/07
Date Received	07/13/07
Date Extracted	07/16/07
Date Analyzed	07/18/07 12:32 - 07/18/07 12:32
Dry Weight	86.4
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₂ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₀ Aromatics**	< 10.0 mg/Kg
Surrogate % Recovery - PID	88.5
Surrogate % Recovery - FID	85.1

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** =

Lab Info: g128-1983-5e	Lab Info: g128-1983-5e
FID Info: VP071807/010F0101.D	PID Info: VP071807/010R0101.D

Reviewed By: SP

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**

Client Name: _____

Project Name: _____

Sample Information and Analytical Results	
Sample Identification	vblk4071807a
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	
Date Received	
Date Extracted	
Date Analyzed	07/18/07 10:40 - 07/18/07 10:40
Dry Weight	100
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₂ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₀ Aromatics**	< 10.0 mg/Kg
Surrogate % Recovery - PID	99.3
Surrogate % Recovery - FID	92.6

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** =

Lab Info: vblk4071807a	Lab Info: vblk4071807a
FID Info: VP071807/006F0101.D	PID Info: VP071807/006R0101.D

Reviewed By: 47

**LABORATORY CONTROL SPIKE RESULTS**
by Method VPH

SGS Environmental Services, Inc.

Lab Sample ID: LCS4071807A
Lab Project ID: Batch QC
Report Basis: Dry

Analyzed By:
Matrix: Soil
Percent Solids: 100 %

Analytical QC Results Summary

Analyte	Expected Amount mg/Kg	Measured Amount mg/Kg	Percent Recovery (%)	Lower Limit (%)	Upper Limit (%)	Qualifier
C5-C8 Aliphatics		24.1				
C9-C12 Aliphatics		8.19				
C9-C10 Aromatics		11.8				
Total VPH	40.0	44.0	110	70.0	130	

Surrogate Standards	Expected Amount mg/Kg	Measured Amount mg/Kg	Percent Recovery (%)	Lower Limit (%)	Upper Limit (%)	Qualifier
Surrogate - PID	100	107	107	70.0	130	
Surrogate - FID	100	97.5	97.5	70.0	130	

Reviewed By: 1247

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULTS**
by Method VPH

SGS Environmental Services, Inc.

Lab Sample ID: g128-1983-5e
MS Sample ID: g128-1983-5e
MSD Sample ID: g128-1983-5e
Lab Project ID: Batch QC
Report Basis: Dry

Analyzed By: DVG
Matrix: Soil
Percent Solids: 86.4 %

Matrix Spike Results Summary

Analyte	Sample Amount mg/Kg	Spiked Amount mg/Kg	Measured Amount mg/Kg	Percent Recovery (%)	Lower Limit (%)	Upper Limit (%)	Qualifier
C5-C8 Aliphatics	1.130	-	23.20	-	-	-	
C9-C12 Aliphatics	5.350	-	13.60	-	-	-	
C9-C10 Aromatics	9.960	-	11.00	-	-	-	
Total VPH	16.400	32.6	47.8	96.5	70	130	

Matrix Spike Duplicate Results Summary

Analyte	Spiked Amount mg/Kg	Measured Amount mg/Kg	Percent Recovery (%)	Lower Limit (%)	Upper Limit (%)	Qualifier
C5-C8 Aliphatics	-	22.10	-	-	-	
C9-C12 Aliphatics	-	16.50	-	-	-	
C9-C10 Aromatics	-	12.60	-	-	-	
Total VPH	32.6	51.2	107.0	70	130	

Analyte	MS Amount mg/Kg	MSD Amount mg/Kg	RPD Value (%)	RPD Limit (%)	Qualifier
C5-C8 Aliphatics	-	-	-	-	
C9-C12 Aliphatics	-	-	-	-	
C9-C10 Aromatics	-	-	-	-	
Total VPH	47.8	51.2	7	20	

Reviewed By: SLJ

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 07/16/07

PID Initial Calibration Date: 07/16/07

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	33.1	0.265	105	0.842	100	10
C ₉ -C ₁₂ Aliphatics	30.9	0.247	98.3	0.786	100	10
C ₉ -C ₁₀ Aromatics	27.7	0.222	88.1	0.705	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	3.23	Calibration Factor
	250	20		
	500	40		
	750	60		
	1000	80		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	250	20		
	500	40		
	750	60		
	1000	80		
C ₉ -C ₁₀ Aromatics	10	0.8	22.81	Calibration Factor
	250	20		
	500	40		
	750	60		
	1000	80		

Calibration Check Date: 07/18/07

Filename: VP071807/002F0101.d

Calibration Check

Range	Levels (mg/Kg)	(µg/L)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	500	4	8.1	±25%
C ₉ -C ₁₂ Aliphatics	500	4	2.7	±25%
C ₉ -C ₁₀ Aromatics	500	4	17.3	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW11(3-5)
Sample Matrix	Soil
Date Collected	07/10/07
Date Received	07/13/07
Date Extracted	07/17/07
Date Analyzed	07/18/07
Dry Weight	87.2
Dilution Factor	1:1
C ₉ -C ₁₈ Aliphatics*	120 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	23 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	57 (mg/Kg)
Aliphatic Surrogate % Recovery	84
Aromatic Surrogate % Recovery	81
Fractionation Surrogate 1 % Recovery	69

Comments:

* = Excludes any surrogates or internal standards.

Lab info: G128-1983-1H

Reviewed By: RV

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW12(3-5)
Sample Matrix	Soil
Date Collected	07/11/07
Date Received	07/13/07
Date Extracted	07/17/07
Date Analyzed	07/17/07
Dry Weight	85.3
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	100
Aromatic Surrogate % Recovery	96

Comments:

* = Excludes any surrogates or internal standards.
Sample did not require fractionation.

Lab info: G128-1983-2H

Reviewed By: rw

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW13(3-5)
Sample Matrix	Soil
Date Collected	07/11/07
Date Received	07/13/07
Date Extracted	07/17/07
Date Analyzed	07/18/07
Dry Weight	88.8
Dilution Factor	2:1
C ₉ -C ₁₈ Aliphatics*	200 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	52 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	200 (mg/Kg)
Aliphatic Surrogate % Recovery	42
Aromatic Surrogate % Recovery	88
Fractionation Surrogate 1 % Recovery	75

Comments:

* = Excludes any surrogates or internal standards.

Lab info: G128-1983-3H

Reviewed By: PN

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW14(3-5)
Sample Matrix	Soil
Date Collected	07/11/07
Date Received	07/13/07
Date Extracted	07/17/07
Date Analyzed	07/17/07
Dry Weight	83.8
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	93
Aromatic Surrogate % Recovery	90

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G128-1983-4J

Reviewed By: RW

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW15(2-4)
Sample Matrix	Soil
Date Collected	07/10/07
Date Received	07/13/07
Date Extracted	07/17/07
Date Analyzed	07/18/07
Dry Weight	86.4
Dilution Factor	1:1
C ₉ -C ₁₈ Aliphatics*	52 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	18 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	75
Aromatic Surrogate % Recovery	80
Fractionation Surrogate 1 % Recovery	73

Comments:

* = Excludes any surrogates or internal standards.

Lab info: G128-1983-5H

Reviewed By: SG



Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 05/09/07

Calibration Ranges and Limits

Range	MDL (10/2006) (µg/L)	ML (µg/L)	RL (µg/L) (mg/Kg)	
C ₉ -C ₁₈ Aliphatics	28.10	89.4	100	10
C ₁₉ -C ₃₆ Aliphatics	36.50	116	100	10
C ₁₁ -C ₂₂ Aromatics	27.60	87.8	100	10

Calibration Concentration Levels

Range	Levels (µg/mL)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	13.70	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	14.2	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	5.9	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 07/17/07

Calibration Check

Range	Levels (µg/mL)	RPD
C ₉ -C ₁₈ Aliphatics	120	-13.0
C ₁₉ -C ₃₆ Aliphatics	160	-9.3
C ₁₁ -C ₂₂ Aromatics	340	-4.4

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit

RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve



Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 05/09/07

Calibration Ranges and Limits

Range	MDL (10/2006) (µg/L)	ML (µg/L)	RL (µg/L)	RL (mg/Kg)
C ₉ -C ₁₈ Aliphatics	28.10	89.4	100	10
C ₁₉ -C ₃₆ Aliphatics	36.50	116	100	10
C ₁₁ -C ₂₂ Aromatics	27.60	87.8	100	10

Calibration Concentration Levels

Range	Levels (µg/mL)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	13.70	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	14.2	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	5.9	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 07/18/07

Calibration Check

Range	Levels (µg/mL)	RPD
C ₉ -C ₁₈ Aliphatics	120	3.8
C ₁₉ -C ₃₆ Aliphatics	160	5.4
C ₁₁ -C ₂₂ Aromatics	340	-6.7

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

**Results for Total Petroleum Hydrocarbons**
by GC/FID 8015

Client Sample ID: G480 WASTE COMPOSITE

Client Project ID: Site G480

Lab Sample ID: G128-1983-6

Lab Project ID: G128-1983

Report Basis: Dry Weight

Analyzed By: DVG

Date Collected: 7/13/2007 10:10

Date Received: 7/13/2007

Matrix: Soil

Solids 83.81

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	293	23.9	5035	5	07/17/07
Diesel Range Organics	5930	733	3541	100	07/20/07

Comments:

Flags:

Reviewed By: 
TPH.XLS

**Results for Total Petroleum Hydrocarbons**
by GC/FID 8015

Client Sample ID: Method Blank

Client Project ID:

Lab Sample ID: PB8669

Lab Project ID:

Analyzed By: BWS

Date Collected:

Date Received:

Matrix: SOIL

Analyte	Result ug/L	RL ug/L	Prep Method	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.25	3510	1	07/20/07

Comments:

Flags:

Reviewed By: RW
TPH.XLS

**QC Results for Total Petroleum Hydrocarbons**
by GC/FID

Client Sample ID: Batch QC
Lab Sample ID: G128-1988-4H
Batch ID: 8669

Analyzed By: BWS
Matrix: Soil
Solids 84.46

MS/MSD

Analyte units	Sample MG/KG	Spiked MG/KG	MS MG/KG	REC %	Spiked MG/KG	MSD MG/KG	REC %	RPD %
DRO	33.8	70.6	89.4	78.8	70.6	103	98	21.7

LCS

Analyte units	Spiked MG/KG	Result MG/KG	REC %	LIMITS	
				Lower	Upper
DRO	62.5	53.9	86.2	40	140

Comments:

Reviewed By: _____

**QC Results for Total Petroleum Hydrocarbons**
by GC/FID

Client Sample ID: Batch QC

Lab Sample ID: g128-1983-6d

LCS ID: LCS4071707A / VP071707

Analyzed By: DVG

Matrix: Soil

Solids 83.81

MS/MSD

Analyte	Sample MG/KG	Spiked MG/KG	MS MG/KG	REC %	Spiked MG/KG	MSD MG/KG	REC % (70-130)	RPD %
GRO	288	239	550	110	239	550	110	0

LCS

Analyte	Spiked MG/KG	Result MG/KG	REC %	LIMITS	
				Lower	Upper
GRO	40	39	97.5	70	130

Comments:Reviewed By: DVG



Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: VBLK4071707A
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: DVG
Date Collected:
Date Received:
Matrix: Soil
Solids 100.00

Analyte	Result mg/kg	RL mg/kg	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	6.00	5035	1	07/17/07

Comments:

Flags:



List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

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SGS

SGS ENVIRONMENTAL SERVICES, INC.

1 CLIENT: Catlin CONTACT: Steve Hudson PHONE NO.: (910) 452-5861 PROJECT: Site G480 SITE/PWSID#: REPORTS TO: Steve Hudson E-MAIL: INVOICE TO: Sheila @ Catlin QUOTE # DOD 101 P.O. NUMBER 270712-8						SGS Reference: 128-1983 PAGE 1 OF 1																							
						CONTAINERS																							
LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No	SAMPLE TYPE	Preservatives Used	Analysis Required										REMARKS											
							C= COMP G= GRAB	(3)	EPA 8260 + PCBs + MTBE	EPA 8270 + THCS	MADEP EPH	MADEP VPH	TPH GRAB/DRO (3550/5630)																
	USTG480-MW11 (3-5)	7-10-07	14:30	S	6	G		✓	✓	✓	✓																		
	USTG480-MW12 (3-5)	7-11-07	11:00a	S	6	G		✓	✓	✓	✓														- Lejeune Summary EDD format				
	USTG480-MW13 (3-5)	7-11-07	14:30	S	6	G		✓	✓	✓	✓																		
	USTG480-MW14 (3-5)	7-11-07	16:10	S	6	G		✓	✓	✓	✓																		
	USTG480-MW15 (2-4)	7-10-07	10:30a	S	6	G		✓	✓	✓	✓																		
	G480 waste composite	7-13-07	10:10a	S	4	C						✓																	
	Trip blank							✓																					
5						4																							
Collected/Relinquished By: (1) <i>Tom Blot</i>		Date 7-13-07	Time 15:25	Received By: <i>Ming</i>		Date 7/14/07	Time 5:25	Shipping Carrier:				Samples Received Cold? (Circle) YES NO																	
Relinquished By: (2)		Date	Time	Received By:		Date	Time	Shipping Ticket No:				Temperature [C]: 16.0 i _____																	
Relinquished By: (3)		Date	Time	Received By:		Date	Time	Special Deliverable Requirements:				Chain of Custody Seal: (Circle) INTACT BROKEN <u>ABSENT</u>																	
Relinquished By: (4)		Date	Time	Received By:		Date	Time	Special Instructions:																					
								Requested Turnaround Time: ☐ RUSH ☒ STD Date Needed																					



Mr. Steve Hudson
Richard Catlin & Associates
P.O. Box 10279
Wilmington NC 28404-0279

Report Number: G128-1977
Client Project: Site G480 CSA

Dear Mr. Hudson:

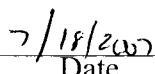
Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call SGS/Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS/Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
SGS/Paradigm Analytical Laboratories, Inc.


Laboratory Director
J. Patrick Weaver


Date

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTG480-MW01(0-2)
Client Project ID: Site G480 CSA
Lab Sample ID G128-1977-1C
Lab Project ID: G128-1977
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 07-03-2007 13:30
Date Received: 7/5/2007
Matrix: Soil
Sample Amount: 4.88 g
%Solids: 94.6

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.141	0.0541	0.00318	1	7/9/2007	
Benzene	BQL	0.00541	0.00308	1	7/9/2007	
Bromobenzene	BQL	0.00541	0.00266	1	7/9/2007	
Bromochloromethane	BQL	0.00541	0.00316	1	7/9/2007	
Bromodichloromethane	BQL	0.00541	0.00307	1	7/9/2007	
Bromoform	BQL	0.00541	0.00262	1	7/9/2007	
Bromomethane	BQL	0.00541	0.00453	1	7/9/2007	
2-Butanone	0.00508	0.0270	0.00311	1	7/9/2007	J
n-Butylbenzene	BQL	0.00541	0.00362	1	7/9/2007	
sec-Butylbenzene	BQL	0.00541	0.00378	1	7/9/2007	
tert-Butylbenzene	BQL	0.00541	0.00375	1	7/9/2007	
Carbon disulfide	BQL	0.00541	0.00284	1	7/9/2007	
Carbon tetrachloride	BQL	0.00541	0.00374	1	7/9/2007	
Chlorobenzene	BQL	0.00541	0.00271	1	7/9/2007	
Chloroethane	BQL	0.00541	0.00339	1	7/9/2007	
Chloroform	BQL	0.00541	0.00271	1	7/9/2007	
Chloromethane	BQL	0.00541	0.00261	1	7/9/2007	
2-Chlorotoluene	BQL	0.00541	0.00322	1	7/9/2007	
4-Chlorotoluene	BQL	0.00541	0.00301	1	7/9/2007	
Dibromochloromethane	BQL	0.00541	0.00242	1	7/9/2007	
1,2-Dibromo-3-chloropropane	BQL	0.00541	0.0115	1	7/9/2007	
Dibromomethane	BQL	0.00541	0.00324	1	7/9/2007	
1,2-Dibromoethane (EDB)	BQL	0.00541	0.00252	1	7/9/2007	
1,2-Dichlorobenzene	BQL	0.00541	0.00261	1	7/9/2007	
1,3-Dichlorobenzene	BQL	0.00541	0.00253	1	7/9/2007	
1,4-Dichlorobenzene	BQL	0.00541	0.00266	1	7/9/2007	
trans-1,4-Dichloro-2-butene	BQL	0.00541	0.0116	1	7/9/2007	
1,1-Dichloroethane	BQL	0.00541	0.00311	1	7/9/2007	
1,1-Dichloroethene	BQL	0.00541	0.00416	1	7/9/2007	
1,2-Dichloroethane	BQL	0.00541	0.00310	1	7/9/2007	
cis-1,2-Dichloroethene	BQL	0.00541	0.00266	1	7/9/2007	
trans-1,2-dichloroethene	BQL	0.00541	0.00351	1	7/9/2007	
1,2-Dichloropropane	BQL	0.00541	0.00277	1	7/9/2007	
1,3-Dichloropropane	BQL	0.00541	0.00248	1	7/9/2007	
2,2-Dichloropropane	BQL	0.00541	0.00344	1	7/9/2007	
1,1-Dichloropropene	BQL	0.00541	0.00390	1	7/9/2007	
cis-1,3-Dichloropropene	BQL	0.00541	0.00301	1	7/9/2007	
trans-1,3-Dichloropropene	BQL	0.00541	0.00306	1	7/9/2007	
Dichlorodifluoromethane	BQL	0.00541	0.00403	1	7/9/2007	
Diisopropyl ether (DIPE)	BQL	0.00541	0.00256	1	7/9/2007	
Ethylbenzene	BQL	0.00541	0.00329	1	7/9/2007	
Hexachlorobutadiene	BQL	0.00541	0.00427	1	7/9/2007	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTG480-MW01(0-2)
Client Project ID: Site G480 CSA
Lab Sample ID G128-1977-1C
Lab Project ID: G128-1977
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 07-03-2007 13:30
Date Received: 7/5/2007
Matrix: Soil
Sample Amount: 4.88 g
%Solids: 94.6

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.00541	0.00236	1	7/9/2007	
Iodomethane	BQL	0.00541	0.00503	1	7/9/2007	
Isopropylbenzene	BQL	0.00541	0.00348	1	7/9/2007	
4-Isopropyltoluene	BQL	0.00541	0.00368	1	7/9/2007	
Methylene chloride	BQL	0.0216	0.00309	1	7/9/2007	
4-Methyl-2-pentanone	BQL	0.00541	0.00250	1	7/9/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.00541	0.00275	1	7/9/2007	
Naphthalene	BQL	0.00541	0.00217	1	7/9/2007	
n-Propyl benzene	BQL	0.00541	0.00347	1	7/9/2007	
Styrene	BQL	0.00541	0.00387	1	7/9/2007	
1,1,1,2-Tetrachloroethane	BQL	0.00541	0.00294	1	7/9/2007	
1,1,2,2-Tetrachloroethane	BQL	0.00541	0.00266	1	7/9/2007	
Tetrachloroethene	BQL	0.00541	0.00341	1	7/9/2007	
Toluene	BQL	0.00541	0.00320	1	7/9/2007	
1,2,3-Trichlorobenzene	BQL	0.00541	0.00237	1	7/9/2007	
1,2,4-Trichlorobenzene	BQL	0.00541	0.00242	1	7/9/2007	
Trichloroethene	BQL	0.00541	0.00337	1	7/9/2007	
1,1,1-Trichloroethane	BQL	0.00541	0.00373	1	7/9/2007	
1,1,2-Trichloroethane	BQL	0.00541	0.00279	1	7/9/2007	
Trichlorofluoromethane	BQL	0.00541	0.00447	1	7/9/2007	
1,2,3-Trichloropropane	BQL	0.00541	0.00287	1	7/9/2007	
1,2,4-Trimethylbenzene	BQL	0.00541	0.00303	1	7/9/2007	
1,3,5-Trimethylbenzene	BQL	0.00541	0.00322	1	7/9/2007	
Vinyl chloride	BQL	0.00541	0.00357	1	7/9/2007	
m-,p-Xylene	BQL	0.0108	0.00613	1	7/9/2007	
o-Xylene	BQL	0.00541	0.00303	1	7/9/2007	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	0.05	0.0576	115
Toluene-d8	0.05	0.0487	97
4-Bromofluorobenzene	0.05	0.0478	96

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By:

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTG480-MW07(0-2)

Client Project ID: Site G480 CSA

Lab Sample ID G128-1977-2C

Lab Project ID: G128-1977

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 07-05-2007 12:45

Date Received: 7/5/2007

Matrix: Soil

Sample Amount: 6.07 g

%Solids: 91.8

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.0163	0.0448	0.00263	1	7/9/2007	J
Benzene	BQL	0.00448	0.00255	1	7/9/2007	
Bromobenzene	BQL	0.00448	0.00220	1	7/9/2007	
Bromochloromethane	BQL	0.00448	0.00262	1	7/9/2007	
Bromodichloromethane	BQL	0.00448	0.00255	1	7/9/2007	
Bromoform	BQL	0.00448	0.00217	1	7/9/2007	
Bromomethane	BQL	0.00448	0.00376	1	7/9/2007	
2-Butanone	BQL	0.0224	0.00258	1	7/9/2007	
n-Butylbenzene	BQL	0.00448	0.00300	1	7/9/2007	
sec-Butylbenzene	BQL	0.00448	0.00314	1	7/9/2007	
tert-Butylbenzene	BQL	0.00448	0.00311	1	7/9/2007	
Carbon disulfide	BQL	0.00448	0.00236	1	7/9/2007	
Carbon tetrachloride	BQL	0.00448	0.00310	1	7/9/2007	
Chlorobenzene	BQL	0.00448	0.00225	1	7/9/2007	
Chloroethane	BQL	0.00448	0.00281	1	7/9/2007	
Chloroform	BQL	0.00448	0.00225	1	7/9/2007	
Chloromethane	BQL	0.00448	0.00216	1	7/9/2007	
2-Chlorotoluene	BQL	0.00448	0.00267	1	7/9/2007	
4-Chlorotoluene	BQL	0.00448	0.00249	1	7/9/2007	
Dibromochloromethane	BQL	0.00448	0.00201	1	7/9/2007	
1,2-Dibromo-3-chloropropane	BQL	0.00448	0.00950	1	7/9/2007	
Dibromomethane	BQL	0.00448	0.00269	1	7/9/2007	
1,2-Dibromoethane (EDB)	BQL	0.00448	0.00209	1	7/9/2007	
1,2-Dichlorobenzene	BQL	0.00448	0.00216	1	7/9/2007	
1,3-Dichlorobenzene	BQL	0.00448	0.00210	1	7/9/2007	
1,4-Dichlorobenzene	BQL	0.00448	0.00220	1	7/9/2007	
trans-1,4-Dichloro-2-butene	BQL	0.00448	0.00959	1	7/9/2007	
1,1-Dichloroethane	BQL	0.00448	0.00258	1	7/9/2007	
1,1-Dichloroethene	BQL	0.00448	0.00345	1	7/9/2007	
1,2-Dichloroethane	BQL	0.00448	0.00257	1	7/9/2007	
cis-1,2-Dichloroethene	BQL	0.00448	0.00220	1	7/9/2007	
trans-1,2-dichloroethene	BQL	0.00448	0.00291	1	7/9/2007	
1,2-Dichloropropane	BQL	0.00448	0.00229	1	7/9/2007	
1,3-Dichloropropane	BQL	0.00448	0.00205	1	7/9/2007	
2,2-Dichloropropane	BQL	0.00448	0.00285	1	7/9/2007	
1,1-Dichloropropene	BQL	0.00448	0.00324	1	7/9/2007	
cis-1,3-Dichloropropene	BQL	0.00448	0.00249	1	7/9/2007	
trans-1,3-Dichloropropene	BQL	0.00448	0.00254	1	7/9/2007	
Dichlorodifluoromethane	BQL	0.00448	0.00334	1	7/9/2007	
Diisopropyl ether (DIPE)	BQL	0.00448	0.00212	1	7/9/2007	
Ethylbenzene	BQL	0.00448	0.00272	1	7/9/2007	
Hexachlorobutadiene	BQL	0.00448	0.00354	1	7/9/2007	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTG480-MW07(0-2)
Client Project ID: Site G480 CSA
Lab Sample ID G128-1977-2C
Lab Project ID: G128-1977
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 07-05-2007 12:45
Date Received: 7/5/2007
Matrix: Soil
Sample Amount: 6.07 g
%Solids: 91.8

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.00448	0.00195	1	7/9/2007	
Iodomethane	BQL	0.00448	0.00417	1	7/9/2007	
Isopropylbenzene	BQL	0.00448	0.00289	1	7/9/2007	
4-Isopropyltoluene	BQL	0.00448	0.00305	1	7/9/2007	
Methylene chloride	BQL	0.0179	0.00256	1	7/9/2007	
4-Methyl-2-pentanone	BQL	0.00448	0.00207	1	7/9/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.00448	0.00228	1	7/9/2007	
Naphthalene	BQL	0.00448	0.00180	1	7/9/2007	
n-Propyl benzene	BQL	0.00448	0.00288	1	7/9/2007	
Styrene	BQL	0.00448	0.00321	1	7/9/2007	
1,1,1,2-Tetrachloroethane	BQL	0.00448	0.00244	1	7/9/2007	
1,1,2,2-Tetrachloroethane	BQL	0.00448	0.00220	1	7/9/2007	
Tetrachloroethene	BQL	0.00448	0.00282	1	7/9/2007	
Toluene	BQL	0.00448	0.00265	1	7/9/2007	
1,2,3-Trichlorobenzene	BQL	0.00448	0.00196	1	7/9/2007	
1,2,4-Trichlorobenzene	BQL	0.00448	0.00201	1	7/9/2007	
Trichloroethene	BQL	0.00448	0.00280	1	7/9/2007	
1,1,1-Trichloroethane	BQL	0.00448	0.00309	1	7/9/2007	
1,1,2-Trichloroethane	BQL	0.00448	0.00231	1	7/9/2007	
Trichlorofluoromethane	BQL	0.00448	0.00370	1	7/9/2007	
1,2,3-Trichloropropane	BQL	0.00448	0.00237	1	7/9/2007	
1,2,4-Trimethylbenzene	BQL	0.00448	0.00251	1	7/9/2007	
1,3,5-Trimethylbenzene	BQL	0.00448	0.00267	1	7/9/2007	
Vinyl chloride	BQL	0.00448	0.00296	1	7/9/2007	
m-,p-Xylene	BQL	0.00896	0.00508	1	7/9/2007	
o-Xylene	BQL	0.00448	0.00251	1	7/9/2007	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	0.05	0.0586	117
Toluene-d8	0.05	0.0481	96
4-Bromofluorobenzene	0.05	0.046	92

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By: WJ

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTG480-MW08(3-5)

Client Project ID: Site G480 CSA

Lab Sample ID G128-1977-3C

Lab Project ID: G128-1977

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 07-05-2007 10:50

Date Received: 7/5/2007

Matrix: Soil

Sample Amount: 6.55 g

%Solids: 87.3

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.0330	0.0437	0.00257	1	7/9/2007	J
Benzene	0.00305	0.00437	0.00249	1	7/9/2007	J
Bromobenzene	BQL	0.00437	0.00215	1	7/9/2007	
Bromochloromethane	BQL	0.00437	0.00255	1	7/9/2007	
Bromodichloromethane	BQL	0.00437	0.00248	1	7/9/2007	
Bromoform	BQL	0.00437	0.00212	1	7/9/2007	
Bromomethane	BQL	0.00437	0.00366	1	7/9/2007	
2-Butanone	0.00567	0.0219	0.00252	1	7/9/2007	J
n-Butylbenzene	BQL	0.00437	0.00293	1	7/9/2007	
sec-Butylbenzene	BQL	0.00437	0.00306	1	7/9/2007	
tert-Butylbenzene	BQL	0.00437	0.00303	1	7/9/2007	
Carbon disulfide	BQL	0.00437	0.00230	1	7/9/2007	
Carbon tetrachloride	BQL	0.00437	0.00303	1	7/9/2007	
Chlorobenzene	BQL	0.00437	0.00219	1	7/9/2007	
Chloroethane	BQL	0.00437	0.00275	1	7/9/2007	
Chloroform	BQL	0.00437	0.00219	1	7/9/2007	
Chloromethane	BQL	0.00437	0.00211	1	7/9/2007	
2-Chlorotoluene	BQL	0.00437	0.00261	1	7/9/2007	
4-Chlorotoluene	BQL	0.00437	0.00243	1	7/9/2007	
Dibromochloromethane	BQL	0.00437	0.00196	1	7/9/2007	
1,2-Dibromo-3-chloropropane	BQL	0.00437	0.00927	1	7/9/2007	
Dibromomethane	BQL	0.00437	0.00262	1	7/9/2007	
1,2-Dibromoethane (EDB)	BQL	0.00437	0.00204	1	7/9/2007	
1,2-Dichlorobenzene	BQL	0.00437	0.00211	1	7/9/2007	
1,3-Dichlorobenzene	BQL	0.00437	0.00205	1	7/9/2007	
1,4-Dichlorobenzene	BQL	0.00437	0.00215	1	7/9/2007	
trans-1,4-Dichloro-2-butene	BQL	0.00437	0.00936	1	7/9/2007	
1,1-Dichloroethane	BQL	0.00437	0.00252	1	7/9/2007	
1,1-Dichloroethene	BQL	0.00437	0.00337	1	7/9/2007	
1,2-Dichloroethane	BQL	0.00437	0.00251	1	7/9/2007	
cis-1,2-Dichloroethene	BQL	0.00437	0.00215	1	7/9/2007	
trans-1,2-dichloroethene	BQL	0.00437	0.00284	1	7/9/2007	
1,2-Dichloropropane	BQL	0.00437	0.00224	1	7/9/2007	
1,3-Dichloropropane	BQL	0.00437	0.00200	1	7/9/2007	
2,2-Dichloropropane	BQL	0.00437	0.00278	1	7/9/2007	
1,1-Dichloropropene	BQL	0.00437	0.00316	1	7/9/2007	
cis-1,3-Dichloropropene	BQL	0.00437	0.00243	1	7/9/2007	
trans-1,3-Dichloropropene	BQL	0.00437	0.00247	1	7/9/2007	
Dichlorodifluoromethane	BQL	0.00437	0.00326	1	7/9/2007	
Diisopropyl ether (DIPE)	BQL	0.00437	0.00207	1	7/9/2007	
Ethylbenzene	0.0204	0.00437	0.00266	1	7/9/2007	
Hexachlorobutadiene	BQL	0.00437	0.00345	1	7/9/2007	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTG480-MW08(3-5)
Client Project ID: Site G480 CSA
Lab Sample ID G128-1977-3C
Lab Project ID: G128-1977
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 07-05-2007 10:50
Date Received: 7/5/2007
Matrix: Soil
Sample Amount: 6.55 g
%Solids: 87.3

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.00437	0.00191	1	7/9/2007	
Iodomethane	BQL	0.00437	0.00407	1	7/9/2007	
Isopropylbenzene	0.00289	0.00437	0.00282	1	7/9/2007	J
4-Isopropyltoluene	0.0317	0.00437	0.00297	1	7/9/2007	
Methylene chloride	BQL	0.0175	0.00250	1	7/9/2007	
4-Methyl-2-pentanone	BQL	0.00437	0.00202	1	7/9/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.00437	0.00222	1	7/9/2007	
Naphthalene	BQL	0.00437	0.00176	1	7/9/2007	
n-Propyl benzene	0.00691	0.00437	0.00281	1	7/9/2007	
Styrene	BQL	0.00437	0.00313	1	7/9/2007	
1,1,1,2-Tetrachloroethane	BQL	0.00437	0.00238	1	7/9/2007	
1,1,2,2-Tetrachloroethane	BQL	0.00437	0.00215	1	7/9/2007	
Tetrachloroethene	BQL	0.00437	0.00275	1	7/9/2007	
Toluene	BQL	0.00437	0.00259	1	7/9/2007	
1,2,3-Trichlorobenzene	BQL	0.00437	0.00191	1	7/9/2007	
1,2,4-Trichlorobenzene	BQL	0.00437	0.00196	1	7/9/2007	
Trichloroethene	BQL	0.00437	0.00273	1	7/9/2007	
1,1,1-Trichloroethane	BQL	0.00437	0.00302	1	7/9/2007	
1,1,2-Trichloroethane	BQL	0.00437	0.00226	1	7/9/2007	
Trichlorofluoromethane	BQL	0.00437	0.00361	1	7/9/2007	
1,2,3-Trichloropropane	BQL	0.00437	0.00232	1	7/9/2007	
1,2,4-Trimethylbenzene	BQL	0.00437	0.00245	1	7/9/2007	
1,3,5-Trimethylbenzene	0.00289	0.00437	0.00261	1	7/9/2007	J
Vinyl chloride	BQL	0.00437	0.00289	1	7/9/2007	
m-,p-Xylene	0.00843	0.00874	0.00496	1	7/9/2007	J
o-Xylene	0.00288	0.00437	0.00245	1	7/9/2007	J
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.05	0.0575	115		
Toluene-d8		0.05	0.048	96		
4-Bromofluorobenzene		0.05	0.0478	96		

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By: RW

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW09(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-4E
Lab Project ID: G128-1977
Report Basis: Dry Weight

Analyzed By: CLP
Date Collected: 7/3/2007 11:20
Date Received: 7/5/2007
Matrix: Soil
Sample Amount: 5.49 g
%Solids: 92.9

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	24.5	1.07	1000	7/13/2007	
Benzene	BQL	0.980	0.209	1000	7/13/2007	
Bromobenzene	BQL	0.980	0.289	1000	7/13/2007	
Bromochloromethane	BQL	0.980	0.205	1000	7/13/2007	
Bromodichloromethane	BQL	0.980	0.192	1000	7/13/2007	
Bromoform	BQL	0.980	0.195	1000	7/13/2007	
Bromomethane	BQL	0.980	0.384	1000	7/13/2007	
2-Butanone	BQL	24.5	1.50	1000	7/13/2007	
n-Butylbenzene	6.61	0.980	0.480	1000	7/13/2007	
sec-Butylbenzene	2.75	0.980	0.423	1000	7/13/2007	
tert-Butylbenzene	BQL	0.980	0.383	1000	7/13/2007	
Carbon disulfide	BQL	0.980	0.196	1000	7/13/2007	
Carbon tetrachloride	BQL	0.980	0.271	1000	7/13/2007	
Chlorobenzene	BQL	0.980	0.284	1000	7/13/2007	
Chloroethane	BQL	0.980	0.557	1000	7/13/2007	
Chloroform	BQL	0.980	0.200	1000	7/13/2007	
Chloromethane	BQL	0.980	0.266	1000	7/13/2007	
2-Chlorotoluene	BQL	0.980	0.315	1000	7/13/2007	
4-Chlorotoluene	BQL	0.980	0.360	1000	7/13/2007	
Dibromochloromethane	BQL	0.980	0.234	1000	7/13/2007	
1,2-Dibromo-3-chloropropane	BQL	4.90	4.21	1000	7/13/2007	
Dibromomethane	BQL	0.980	0.306	1000	7/13/2007	
1,2-Dibromoethane (EDB)	BQL	0.980	0.247	1000	7/13/2007	
1,2-Dichlorobenzene	BQL	0.980	0.367	1000	7/13/2007	
1,3-Dichlorobenzene	BQL	0.980	0.357	1000	7/13/2007	
1,4-Dichlorobenzene	BQL	0.980	0.393	1000	7/13/2007	
trans-1,4-Dichloro-2-butene	BQL	4.90	4.17	1000	7/13/2007	
1,1-Dichloroethane	BQL	0.980	0.232	1000	7/13/2007	
1,1-Dichloroethene	BQL	0.980	0.181	1000	7/13/2007	
1,2-Dichloroethane	BQL	0.980	0.206	1000	7/13/2007	
cis-1,2-Dichloroethene	BQL	0.980	0.190	1000	7/13/2007	
trans-1,2-dichloroethene	BQL	0.980	0.200	1000	7/13/2007	
1,2-Dichloropropane	BQL	0.980	0.208	1000	7/13/2007	
1,3-Dichloropropane	BQL	0.980	0.223	1000	7/13/2007	
2,2-Dichloropropane	BQL	0.980	0.224	1000	7/13/2007	
1,1-Dichloropropene	BQL	0.980	0.226	1000	7/13/2007	
cis-1,3-Dichloropropene	BQL	0.980	0.237	1000	7/13/2007	
trans-1,3-Dichloropropene	BQL	0.980	0.229	1000	7/13/2007	
Dichlorodifluoromethane	BQL	4.90	0.211	1000	7/13/2007	
Diisopropyl ether (DIPE)	BQL	0.980	0.276	1000	7/13/2007	
Ethylbenzene	5.30	0.980	0.274	1000	7/13/2007	
Hexachlorobutadiene	BQL	0.980	0.639	1000	7/13/2007	

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW09(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-4E
Lab Project ID: G128-1977
Report Basis: Dry Weight

Analyzed By: CLP
Date Collected: 7/3/2007 11:20
Date Received: 7/5/2007
Matrix: Soil
Sample Amount: 5.49 g
%Solids: 92.9

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	4.90	1.17	1000	7/13/2007	
Iodomethane	BQL	0.980	0.153	1000	7/13/2007	
Isopropylbenzene	2.77	0.980	0.310	1000	7/13/2007	
4-Isopropyltoluene	2.21	0.980	0.427	1000	7/13/2007	
Methylene chloride	BQL	4.90	0.294	1000	7/13/2007	
4-Methyl-2-pentanone	BQL	4.90	1.35	1000	7/13/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.980	0.205	1000	7/13/2007	
Naphthalene	17.9	0.980	0.514	1000	7/13/2007	
n-Propyl benzene	5.87	0.980	0.372	1000	7/13/2007	
Styrene	BQL	0.980	0.316	1000	7/13/2007	
1,1,1,2-Tetrachloroethane	BQL	0.980	0.271	1000	7/13/2007	
1,1,2,2-Tetrachloroethane	BQL	0.980	0.322	1000	7/13/2007	
Tetrachloroethene	BQL	0.980	0.221	1000	7/13/2007	
Toluene	BQL	0.980	0.219	1000	7/13/2007	
1,2,3-Trichlorobenzene	BQL	0.980	0.673	1000	7/13/2007	
1,2,4-Trichlorobenzene	BQL	0.980	0.584	1000	7/13/2007	
Trichloroethene	BQL	0.980	0.205	1000	7/13/2007	
1,1,1-Trichloroethane	BQL	0.980	0.251	1000	7/13/2007	
1,1,2-Trichloroethane	BQL	0.980	0.273	1000	7/13/2007	
Trichlorofluoromethane	BQL	0.980	0.198	1000	7/13/2007	
1,2,3-Trichloropropane	BQL	0.980	1.45	1000	7/13/2007	
1,2,4-Trimethylbenzene	22.1	0.980	0.405	1000	7/13/2007	
1,3,5-Trimethylbenzene	7.37	0.980	0.370	1000	7/13/2007	
Vinyl chloride	BQL	0.980	0.217	1000	7/13/2007	
m-,p-Xylene	3.97	1.96	0.594	1000	7/13/2007	
o-Xylene	0.559	0.980	0.337	1000	7/13/2007	J
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.01	0.00907	91		
Toluene-d8		0.01	0.0102	102		
4-Bromofluorobenzene		0.01	0.00973	97		

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By:

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW10(3-5)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-5E
Lab Project ID: G128-1977
Report Basis: Dry Weight

Analyzed By: CLP
Date Collected: 7/5/2007 10:10
Date Received: 7/5/2007
Matrix: Soil
Sample Amount: 5.42 g
%Solids: 89.3

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	2.58	0.113	100	7/13/2007	
Benzene	0.0248	0.103	0.0220	100	7/13/2007	J
Bromobenzene	BQL	0.103	0.0305	100	7/13/2007	
Bromochloromethane	BQL	0.103	0.0216	100	7/13/2007	
Bromodichloromethane	BQL	0.103	0.0202	100	7/13/2007	
Bromoform	BQL	0.103	0.0206	100	7/13/2007	
Bromomethane	BQL	0.103	0.0405	100	7/13/2007	
2-Butanone	BQL	2.58	0.158	100	7/13/2007	
n-Butylbenzene	2.36	0.103	0.0506	100	7/13/2007	
sec-Butylbenzene	1.07	0.103	0.0446	100	7/13/2007	
tert-Butylbenzene	BQL	0.103	0.0404	100	7/13/2007	
Carbon disulfide	BQL	0.103	0.0207	100	7/13/2007	
Carbon tetrachloride	BQL	0.103	0.0286	100	7/13/2007	
Chlorobenzene	BQL	0.103	0.0299	100	7/13/2007	
Chloroethane	BQL	0.103	0.0587	100	7/13/2007	
Chloroform	BQL	0.103	0.0211	100	7/13/2007	
Chloromethane	BQL	0.103	0.0280	100	7/13/2007	
2-Chlorotoluene	BQL	0.103	0.0331	100	7/13/2007	
4-Chlorotoluene	BQL	0.103	0.0379	100	7/13/2007	
Dibromochloromethane	BQL	0.103	0.0247	100	7/13/2007	
1,2-Dibromo-3-chloropropane	BQL	0.516	0.444	100	7/13/2007	
Dibromomethane	BQL	0.103	0.0322	100	7/13/2007	
1,2-Dibromoethane (EDB)	BQL	0.103	0.0260	100	7/13/2007	
1,2-Dichlorobenzene	BQL	0.103	0.0386	100	7/13/2007	
1,3-Dichlorobenzene	BQL	0.103	0.0376	100	7/13/2007	
1,4-Dichlorobenzene	BQL	0.103	0.0414	100	7/13/2007	
trans-1,4-Dichloro-2-butene	BQL	0.516	0.439	100	7/13/2007	
1,1-Dichloroethane	BQL	0.103	0.0245	100	7/13/2007	
1,1-Dichloroethene	BQL	0.103	0.0191	100	7/13/2007	
1,2-Dichloroethane	BQL	0.103	0.0217	100	7/13/2007	
cis-1,2-Dichloroethene	BQL	0.103	0.0200	100	7/13/2007	
trans-1,2-dichloroethene	BQL	0.103	0.0211	100	7/13/2007	
1,2-Dichloropropane	BQL	0.103	0.0219	100	7/13/2007	
1,3-Dichloropropane	BQL	0.103	0.0235	100	7/13/2007	
2,2-Dichloropropane	BQL	0.103	0.0236	100	7/13/2007	
1,1-Dichloropropene	BQL	0.103	0.0239	100	7/13/2007	
cis-1,3-Dichloropropene	BQL	0.103	0.0250	100	7/13/2007	
trans-1,3-Dichloropropene	BQL	0.103	0.0242	100	7/13/2007	
Dichlorodifluoromethane	BQL	0.516	0.0222	100	7/13/2007	
Diisopropyl ether (DIPE)	BQL	0.103	0.0291	100	7/13/2007	
Ethylbenzene	2.09	0.103	0.0289	100	7/13/2007	
Hexachlorobutadiene	BQL	0.103	0.0673	100	7/13/2007	

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTG480-MW10(3-5)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-5E
Lab Project ID: G128-1977
Report Basis: Dry Weight

Analyzed By: CLP
Date Collected: 7/5/2007 10:10
Date Received: 7/5/2007
Matrix: Soil
Sample Amount: 5.42 g
%Solids: 89.3

Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.516	0.123	100	7/13/2007	
Iodomethane	BQL	0.103	0.0161	100	7/13/2007	
Isopropylbenzene	0.996	0.103	0.0326	100	7/13/2007	
4-Isopropyltoluene	1.25	0.103	0.0450	100	7/13/2007	
Methylene chloride	BQL	0.516	0.0310	100	7/13/2007	
4-Methyl-2-pentanone	BQL	0.516	0.143	100	7/13/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.103	0.0216	100	7/13/2007	
Naphthalene	4.65	0.103	0.0541	100	7/13/2007	
n-Propyl benzene	2.21	0.103	0.0392	100	7/13/2007	
Styrene	BQL	0.103	0.0333	100	7/13/2007	
1,1,1,2-Tetrachloroethane	BQL	0.103	0.0286	100	7/13/2007	
1,1,2,2-Tetrachloroethane	BQL	0.103	0.0340	100	7/13/2007	
Tetrachloroethene	BQL	0.103	0.0233	100	7/13/2007	
Toluene	BQL	0.103	0.0230	100	7/13/2007	
1,2,3-Trichlorobenzene	BQL	0.103	0.0709	100	7/13/2007	
1,2,4-Trichlorobenzene	BQL	0.103	0.0615	100	7/13/2007	
Trichloroethene	BQL	0.103	0.0216	100	7/13/2007	
1,1,1-Trichloroethane	BQL	0.103	0.0264	100	7/13/2007	
1,1,2-Trichloroethane	BQL	0.103	0.0288	100	7/13/2007	
Trichlorofluoromethane	BQL	0.103	0.0209	100	7/13/2007	
1,2,3-Trichloropropane	BQL	0.103	0.153	100	7/13/2007	
1,2,4-Trimethylbenzene	0.542	0.103	0.0427	100	7/13/2007	
1,3,5-Trimethylbenzene	3.33	0.103	0.0390	100	7/13/2007	
Vinyl chloride	BQL	0.103	0.0228	100	7/13/2007	
m-,p-Xylene	0.811	0.207	0.0626	100	7/13/2007	
o-Xylene	BQL	0.103	0.0355	100	7/13/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.01	0.00862	86		
Toluene-d8		0.01	0.0106	106		
4-Bromofluorobenzene		0.01	0.0103	103		

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By: rw

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: Trip Blank
Client Project ID: Site G480 CSA
Lab Sample ID G128-1977-6A
Lab Project ID: G128-1977
Report Basis: 0.0

Analyzed By: MJC
Date Collected: 07-03-2007 00:00
Date Received: 7/5/2007
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	0.0500	0.00294	1	7/9/2007	
Benzene	BQL	0.00500	0.00285	1	7/9/2007	
Bromobenzene	BQL	0.00500	0.00246	1	7/9/2007	
Bromochloromethane	BQL	0.00500	0.00292	1	7/9/2007	
Bromodichloromethane	BQL	0.00500	0.00284	1	7/9/2007	
Bromoform	BQL	0.00500	0.00242	1	7/9/2007	
Bromomethane	BQL	0.00500	0.00419	1	7/9/2007	
2-Butanone	BQL	0.0250	0.00288	1	7/9/2007	
n-Butylbenzene	BQL	0.00500	0.00335	1	7/9/2007	
sec-Butylbenzene	BQL	0.00500	0.00350	1	7/9/2007	
tert-Butylbenzene	BQL	0.00500	0.00347	1	7/9/2007	
Carbon disulfide	BQL	0.00500	0.00263	1	7/9/2007	
Carbon tetrachloride	BQL	0.00500	0.00346	1	7/9/2007	
Chlorobenzene	BQL	0.00500	0.00251	1	7/9/2007	
Chloroethane	BQL	0.00500	0.00314	1	7/9/2007	
Chloroform	BQL	0.00500	0.00251	1	7/9/2007	
Chloromethane	BQL	0.00500	0.00241	1	7/9/2007	
2-Chlorotoluene	BQL	0.00500	0.00298	1	7/9/2007	
4-Chlorotoluene	BQL	0.00500	0.00278	1	7/9/2007	
Dibromochloromethane	BQL	0.00500	0.00224	1	7/9/2007	
1,2-Dibromo-3-chloropropane	BQL	0.00500	0.0106	1	7/9/2007	
Dibromomethane	BQL	0.00500	0.00300	1	7/9/2007	
1,2-Dibromoethane (EDB)	BQL	0.00500	0.00233	1	7/9/2007	
1,2-Dichlorobenzene	BQL	0.00500	0.00241	1	7/9/2007	
1,3-Dichlorobenzene	BQL	0.00500	0.00234	1	7/9/2007	
1,4-Dichlorobenzene	BQL	0.00500	0.00246	1	7/9/2007	
trans-1,4-Dichloro-2-butene	BQL	0.00500	0.0107	1	7/9/2007	
1,1-Dichloroethane	BQL	0.00500	0.00288	1	7/9/2007	
1,1-Dichloroethene	BQL	0.00500	0.00385	1	7/9/2007	
1,2-Dichloroethane	BQL	0.00500	0.00287	1	7/9/2007	
cis-1,2-Dichloroethene	BQL	0.00500	0.00246	1	7/9/2007	
trans-1,2-dichloroethene	BQL	0.00500	0.00325	1	7/9/2007	
1,2-Dichloropropane	BQL	0.00500	0.00256	1	7/9/2007	
1,3-Dichloropropane	BQL	0.00500	0.00229	1	7/9/2007	
2,2-Dichloropropane	BQL	0.00500	0.00318	1	7/9/2007	
1,1-Dichloropropene	BQL	0.00500	0.00361	1	7/9/2007	
cis-1,3-Dichloropropene	BQL	0.00500	0.00278	1	7/9/2007	
trans-1,3-Dichloropropene	BQL	0.00500	0.00283	1	7/9/2007	
Dichlorodifluoromethane	BQL	0.00500	0.00373	1	7/9/2007	
Diisopropyl ether (DIPE)	BQL	0.00500	0.00237	1	7/9/2007	
Ethylbenzene	BQL	0.00500	0.00304	1	7/9/2007	
Hexachlorobutadiene	BQL	0.00500	0.00395	1	7/9/2007	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: Trip Blank
Client Project ID: Site G480 CSA
Lab Sample ID G128-1977-6A
Lab Project ID: G128-1977
Report Basis: 0.0

Analyzed By: MJC
Date Collected: 07-03-2007 00:00
Date Received: 7/5/2007
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	0.00500	0.00218	1	7/9/2007	
Iodomethane	BQL	0.00500	0.00465	1	7/9/2007	
Isopropylbenzene	BQL	0.00500	0.00322	1	7/9/2007	
4-Isopropyltoluene	BQL	0.00500	0.00340	1	7/9/2007	
Methylene chloride	BQL	0.0200	0.00286	1	7/9/2007	
4-Methyl-2-pentanone	BQL	0.00500	0.00231	1	7/9/2007	
Methyl-tert-butyl ether (MTBE)	BQL	0.00500	0.00254	1	7/9/2007	
Naphthalene	BQL	0.00500	0.00201	1	7/9/2007	
n-Propyl benzene	BQL	0.00500	0.00321	1	7/9/2007	
Styrene	BQL	0.00500	0.00358	1	7/9/2007	
1,1,1,2-Tetrachloroethane	BQL	0.00500	0.00272	1	7/9/2007	
1,1,2,2-Tetrachloroethane	BQL	0.00500	0.00246	1	7/9/2007	
Tetrachloroethene	BQL	0.00500	0.00315	1	7/9/2007	
Toluene	BQL	0.00500	0.00296	1	7/9/2007	
1,2,3-Trichlorobenzene	BQL	0.00500	0.00219	1	7/9/2007	
1,2,4-Trichlorobenzene	BQL	0.00500	0.00224	1	7/9/2007	
Trichloroethene	BQL	0.00500	0.00312	1	7/9/2007	
1,1,1-Trichloroethane	BQL	0.00500	0.00345	1	7/9/2007	
1,1,2-Trichloroethane	BQL	0.00500	0.00258	1	7/9/2007	
Trichlorofluoromethane	BQL	0.00500	0.00413	1	7/9/2007	
1,2,3-Trichloropropane	BQL	0.00500	0.00265	1	7/9/2007	
1,2,4-Trimethylbenzene	BQL	0.00500	0.00280	1	7/9/2007	
1,3,5-Trimethylbenzene	BQL	0.00500	0.00298	1	7/9/2007	
Vinyl chloride	BQL	0.00500	0.00330	1	7/9/2007	
m-,p-Xylene	BQL	0.0100	0.00567	1	7/9/2007	
o-Xylene	BQL	0.00500	0.00280	1	7/9/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.05	0.0573	115		
Toluene-d8		0.05	0.0478	96		
4-Bromofluorobenzene		0.05	0.0481	96		

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By:

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: VBLK1071307B
Lab Project ID:

Analyzed By: CLP
Date Collected:
Date Received:
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	1.09	1	7/13/2007	
Benzene	BQL	1.00	0.213	1	7/13/2007	
Bromobenzene	BQL	1.00	0.295	1	7/13/2007	
Bromochloromethane	BQL	1.00	0.209	1	7/13/2007	
Bromodichloromethane	BQL	1.00	0.196	1	7/13/2007	
Bromoform	BQL	1.00	0.199	1	7/13/2007	
Bromomethane	BQL	1.00	0.392	1	7/13/2007	
2-Butanone	BQL	25.0	1.53	1	7/13/2007	
n-Butylbenzene	BQL	1.00	0.490	1	7/13/2007	
sec-Butylbenzene	BQL	1.00	0.432	1	7/13/2007	
tert-Butylbenzene	BQL	1.00	0.391	1	7/13/2007	
Carbon disulfide	BQL	1.00	0.200	1	7/13/2007	
Carbon tetrachloride	BQL	1.00	0.277	1	7/13/2007	
Chlorobenzene	BQL	1.00	0.290	1	7/13/2007	
Chloroethane	BQL	1.00	0.568	1	7/13/2007	
Chloroform	BQL	1.00	0.204	1	7/13/2007	
Chloromethane	BQL	1.00	0.271	1	7/13/2007	
2-Chlorotoluene	BQL	1.00	0.321	1	7/13/2007	
4-Chlorotoluene	BQL	1.00	0.367	1	7/13/2007	
Dibromochloromethane	BQL	1.00	0.239	1	7/13/2007	
1,2-Dibromo-3-chloropropane	BQL	5.00	4.30	1	7/13/2007	
Dibromomethane	BQL	1.00	0.312	1	7/13/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.252	1	7/13/2007	
1,2-Dichlorobenzene	BQL	1.00	0.374	1	7/13/2007	
1,3-Dichlorobenzene	BQL	1.00	0.364	1	7/13/2007	
1,4-Dichlorobenzene	BQL	1.00	0.401	1	7/13/2007	
trans-1,4-Dichloro-2-butene	BQL	5.00	4.25	1	7/13/2007	
1,1-Dichloroethane	BQL	1.00	0.237	1	7/13/2007	
1,1-Dichloroethene	BQL	1.00	0.185	1	7/13/2007	
1,2-Dichloroethane	BQL	1.00	0.210	1	7/13/2007	
cis-1,2-Dichloroethene	BQL	1.00	0.194	1	7/13/2007	
trans-1,2-dichloroethene	BQL	1.00	0.204	1	7/13/2007	
1,2-Dichloropropane	BQL	1.00	0.212	1	7/13/2007	
1,3-Dichloropropane	BQL	1.00	0.228	1	7/13/2007	
2,2-Dichloropropane	BQL	1.00	0.229	1	7/13/2007	
1,1-Dichloropropene	BQL	1.00	0.231	1	7/13/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.242	1	7/13/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.234	1	7/13/2007	
Dichlorodifluoromethane	BQL	5.00	0.215	1	7/13/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.282	1	7/13/2007	
Ethylbenzene	BQL	1.00	0.280	1	7/13/2007	
Hexachlorobutadiene	BQL	1.00	0.652	1	7/13/2007	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: VBLK1071307B
Lab Project ID:

Analyzed By: CLP
Date Collected:
Date Received:
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	5.00	1.19	1	7/13/2007	
Iodomethane	BQL	1.00	0.156	1	7/13/2007	
Isopropylbenzene	BQL	1.00	0.316	1	7/13/2007	
4-Isopropyltoluene	BQL	1.00	0.436	1	7/13/2007	
Methylene chloride	BQL	5.00	0.300	1	7/13/2007	
4-Methyl-2-pentanone	BQL	5.00	1.38	1	7/13/2007	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.209	1	7/13/2007	
Naphthalene	BQL	1.00	0.524	1	7/13/2007	
n-Propyl benzene	BQL	1.00	0.380	1	7/13/2007	
Styrene	BQL	1.00	0.322	1	7/13/2007	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.277	1	7/13/2007	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.329	1	7/13/2007	
Tetrachloroethene	BQL	1.00	0.226	1	7/13/2007	
Toluene	BQL	1.00	0.223	1	7/13/2007	
1,2,3-Trichlorobenzene	BQL	1.00	0.687	1	7/13/2007	
1,2,4-Trichlorobenzene	BQL	1.00	0.596	1	7/13/2007	
Trichloroethene	BQL	1.00	0.209	1	7/13/2007	
1,1,1-Trichloroethane	BQL	1.00	0.256	1	7/13/2007	
1,1,2-Trichloroethane	BQL	1.00	0.279	1	7/13/2007	
Trichlorofluoromethane	BQL	1.00	0.202	1	7/13/2007	
1,2,3-Trichloropropane	BQL	1.00	1.48	1	7/13/2007	
1,2,4-Trimethylbenzene	BQL	1.00	0.413	1	7/13/2007	
1,3,5-Trimethylbenzene	BQL	1.00	0.378	1	7/13/2007	
Vinyl chloride	BQL	1.00	0.221	1	7/13/2007	
m-,p-Xylene	BQL	2.00	0.606	1	7/13/2007	
o-Xylene	BQL	1.00	0.344	1	7/13/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	9.24	92		
Toluene-d8		10	9.99	100		
4-Bromofluorobenzene		10	9.87	99		

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By: flw



SGS ENVIRONMENTAL SERVICES, INC.

SGS Environmental Services

LABORATORY CONTROL SAMPLE VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: SGS Environmental

Lab Code: NC00919

Case No.:

SAS No.:

SDG No:

Matrix: (soil/water) Soil

Lab Sample ID: LCS9070907a

Sample wt/vol: 5.00 (g)

Lab File ID: 0709904.D

Level: (low/med) low

% Moisture: not dec.

Date Analyzed: 2007-07-09 12:15

GC Column: DB-624 ID: 0.2 (mm)

Dilution Factor: 1

Soil Extract Volume: NA

Soil Aliquot Volume: NA

CAS NO.	COMPOUND	SPIKE AMT (µg/Kg)	SAMP CONC (µg/Kg)	% REC #	QC LIMITS
71-43-2	benzene	30.0	28.8	96.1	77.6-122
108-90-7	chlorobenzene	30.0	33.9	113	75.3-125
75-35-4	1,1-dichloroethene	30.0	30.2	101	78.5-121
108-88-3	toluene	30.0	31.2	104	75.7-124
79-01-6	trichloroethene	30.0	29.0	96.6	60.8-139

System Monitoring Compound Results

		Spike Added (µg/Kg)	Spike Result (µg/Kg)	Percent Rec. (%)	Percent Recovery (%)
460-00-4	4-Bromofluorobenzene	50	53.0	106	49.1 - 151
17060-07-0	1,2-Dichloroethane-d4	50	46.0	93.0	37.8 - 170
2037-26-5	Toluene-d8	50	49.0	99.0	58.8 - 144



SGS ENVIRONMENTAL SERVICES, INC.

SGS Environmental Services

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Contract:

Lab Code: NC00919

Case No.:

SAS No.:

SDG No.:

Matrix Spike - EPA Sample No. g197-143-11c

Dilution: 1

File names: 0709912.D, 0709926.D, 0709927.D

COMPOUND	SAMPLE CONC (µg/kg)	MS SPIKE (µg/kg)	MS CONC (µg/kg)	MS % REC #	MSD SPIKE (µg/kg)	MSD CONC (µg/kg)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
benzene	BQL	27.3	24.3	89.0	27.3	23.5	86.1	3.39	30	74.8-133
chlorobenzene	BQL	27.3	23.8	87.0	27.3	22.4	82.2	5.71	30	66.3-135
1,1-dichloroethene	BQL	27.3	25.2	92.1	27.3	24.7	90.4	1.94	30	72.0-135
toluene	BQL	27.3	23.8	87.0	27.3	22.9	84.0	3.51	30	70.5-138
trichloroethene	BQL	27.3	22.9	83.9	27.3	22.1	81.0	3.48	30	60.7-152

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID VBLK9070907B
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected:
Date Received:
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	50.0	2.94	1	7/9/2007	
Benzene	BQL	5.00	2.85	1	7/9/2007	
Bromobenzene	BQL	5.00	2.46	1	7/9/2007	
Bromochloromethane	BQL	5.00	2.92	1	7/9/2007	
Bromodichloromethane	BQL	5.00	2.84	1	7/9/2007	
Bromoform	BQL	5.00	2.42	1	7/9/2007	
Bromomethane	BQL	5.00	4.19	1	7/9/2007	
2-Butanone	BQL	25.0	2.88	1	7/9/2007	
n-Butylbenzene	BQL	5.00	3.35	1	7/9/2007	
sec-Butylbenzene	BQL	5.00	3.50	1	7/9/2007	
tert-Butylbenzene	BQL	5.00	3.47	1	7/9/2007	
Carbon disulfide	BQL	5.00	2.63	1	7/9/2007	
Carbon tetrachloride	BQL	5.00	3.46	1	7/9/2007	
Chlorobenzene	BQL	5.00	2.51	1	7/9/2007	
Chloroethane	BQL	5.00	3.14	1	7/9/2007	
Chloroform	BQL	5.00	2.51	1	7/9/2007	
Chloromethane	BQL	5.00	2.41	1	7/9/2007	
2-Chlorotoluene	BQL	5.00	2.98	1	7/9/2007	
4-Chlorotoluene	BQL	5.00	2.78	1	7/9/2007	
Dibromochloromethane	BQL	5.00	2.24	1	7/9/2007	
1,2-Dibromo-3-chloropropane	BQL	5.00	10.6	1	7/9/2007	
Dibromomethane	BQL	5.00	3.00	1	7/9/2007	
1,2-Dibromoethane (EDB)	BQL	5.00	2.33	1	7/9/2007	
1,2-Dichlorobenzene	BQL	5.00	2.41	1	7/9/2007	
1,3-Dichlorobenzene	BQL	5.00	2.34	1	7/9/2007	
1,4-Dichlorobenzene	BQL	5.00	2.46	1	7/9/2007	
trans-1,4-Dichloro-2-butene	BQL	5.00	10.7	1	7/9/2007	
1,1-Dichloroethane	BQL	5.00	2.88	1	7/9/2007	
1,1-Dichloroethene	BQL	5.00	3.85	1	7/9/2007	
1,2-Dichloroethane	BQL	5.00	2.87	1	7/9/2007	
cis-1,2-Dichloroethene	BQL	5.00	2.46	1	7/9/2007	
trans-1,2-dichloroethene	BQL	5.00	3.25	1	7/9/2007	
1,2-Dichloropropane	BQL	5.00	2.56	1	7/9/2007	
1,3-Dichloropropane	BQL	5.00	2.29	1	7/9/2007	
2,2-Dichloropropane	BQL	5.00	3.18	1	7/9/2007	
1,1-Dichloropropene	BQL	5.00	3.61	1	7/9/2007	
cis-1,3-Dichloropropene	BQL	5.00	2.78	1	7/9/2007	
trans-1,3-Dichloropropene	BQL	5.00	2.83	1	7/9/2007	
Dichlorodifluoromethane	BQL	5.00	3.73	1	7/9/2007	
Diisopropyl ether (DIPE)	BQL	5.00	2.37	1	7/9/2007	
Ethylbenzene	BQL	5.00	3.04	1	7/9/2007	
Hexachlorobutadiene	BQL	5.00	3.95	1	7/9/2007	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID VBLK9070907B
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected:
Date Received:
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
2-Hexanone	BQL	5.00	2.18	1	7/9/2007	
Iodomethane	BQL	5.00	4.65	1	7/9/2007	
Isopropylbenzene	BQL	5.00	3.22	1	7/9/2007	
4-Isopropyltoluene	BQL	5.00	3.40	1	7/9/2007	
Methylene chloride	18.7	20.0	2.86	1	7/9/2007	J
4-Methyl-2-pentanone	BQL	5.00	2.31	1	7/9/2007	
Methyl-tert-butyl ether (MTBE)	BQL	5.00	2.54	1	7/9/2007	
Naphthalene	BQL	5.00	2.01	1	7/9/2007	
n-Propyl benzene	BQL	5.00	3.21	1	7/9/2007	
Styrene	BQL	5.00	3.58	1	7/9/2007	
1,1,1,2-Tetrachloroethane	BQL	5.00	2.72	1	7/9/2007	
1,1,2,2-Tetrachloroethane	BQL	5.00	2.46	1	7/9/2007	
Tetrachloroethene	BQL	5.00	3.15	1	7/9/2007	
Toluene	BQL	5.00	2.96	1	7/9/2007	
1,2,3-Trichlorobenzene	BQL	5.00	2.19	1	7/9/2007	
1,2,4-Trichlorobenzene	BQL	5.00	2.24	1	7/9/2007	
Trichloroethene	BQL	5.00	3.12	1	7/9/2007	
1,1,1-Trichloroethane	BQL	5.00	3.45	1	7/9/2007	
1,1,2-Trichloroethane	BQL	5.00	2.58	1	7/9/2007	
Trichlorofluoromethane	BQL	5.00	4.13	1	7/9/2007	
1,2,3-Trichloropropane	BQL	5.00	2.65	1	7/9/2007	
1,2,4-Trimethylbenzene	BQL	5.00	2.80	1	7/9/2007	
1,3,5-Trimethylbenzene	BQL	5.00	2.98	1	7/9/2007	
Vinyl chloride	BQL	5.00	3.30	1	7/9/2007	
m-,p-Xylene	BQL	10.0	5.67	1	7/9/2007	
o-Xylene	BQL	5.00	2.80	1	7/9/2007	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		50	48.7	97		
Toluene-d8		50	48.2	96		
4-Bromofluorobenzene		50	49.2	98		

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By:



SGS ENVIRONMENTAL SERVICES, INC.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Contract:

Lab Code: NC00919

Case No.:

SAS No.:

SDG No.:

Matrix Spike - EPA Sample No.: g128-1977-4e

Dilution: 1000

Filename: 0713121.D, 0713123.D, 0713124.D

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
benzene	BQL	5000	5850	117	5000	6170	123	5.32	30	61.6-135
chlorobenzene	BQL	5000	5550	111	5000	5490	110	1.09	30	77.2-118
1,1-dichloroethene	BQL	5000	4970	99.4	5000	5270	105	5.86	30	64.4-130
toluene	BQL	5000	5570	111	5000	5870	117	5.24	30	66.4-128
trichloroethene	BQL	5000	5360	107	5000	5660	113	5.44	30	84.9-136

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:



SGS ENVIRONMENTAL SERVICES, INC.

SGS Environmental Services

LABORATORY CONTROL SAMPLE VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: SGS Environmental

Lab Code: NC00919

Case No.:

SAS No.:

SDG No:

Matrix: (soil/water) Water

Lab Sample ID: LCS1071307a

Sample wt/vol: 5.00 (mL)

Lab File ID: 0713105.D

Level: (low/med) NA

% Moisture: not dec. NA

Date Analyzed: 2007-07-13 11:08

GC Column: DB-624 ID: 0.2 (mm)

Dilution Factor: 1

Soil Extract Volume: NA

Soil Aliquot Volume: NA

CAS NO.	COMPOUND	SPIKE AMT (µg/L)	SAMP CONC (µg/L)	% REC #	QC LIMITS
71-43-2	benzene	5.00	5.51	110	77.4-123
108-90-7	chlorobenzene	5.00	5.29	106	72.5-128
75-35-4	1,1-dichloroethene	5.00	5.03	101	71.7-128
108-88-3	toluene	5.00	5.39	108	75.9-124
79-01-6	trichloroethene	5.00	5.19	104	77.9-122

System Monitoring Compound Results

		Spike Added (µg/L)	Spike Result (µg/L)	Percent Rec. (%)	Percent Recovery (%)
460-00-4	4-Bromofluorobenzene	10	9.91	99.0	84.7 - 115
17060-07-0	1,2-Dichloroethane-d4	10	9.31	93.0	63.5 - 140
2037-26-5	Toluene-d8	10	9.94	99.0	81.8 - 117

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW01(0-2)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-1G
Lab Project ID: G128-1977
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/3/2007 13:30
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Matrix: Soil
% Solids: 94.57

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.327	0.047	1	7/13/2007	
Acenaphthylene	BQL	0.327	0.044	1	7/13/2007	
Anthracene	BQL	0.327	0.047	1	7/13/2007	
Benzo[a]anthracene	BQL	0.327	0.057	1	7/13/2007	
Benzo[a]pyrene	BQL	0.327	0.050	1	7/13/2007	
Benzo[b]fluoranthene	BQL	0.327	0.057	1	7/13/2007	
Benzo[g,h,i]perylene	BQL	0.327	0.089	1	7/13/2007	
Benzo[k]fluoranthene	BQL	0.327	0.063	1	7/13/2007	
Benzoic Acid	BQL	0.654	0.654	1	7/13/2007	
Bis(2-chloroethoxy)methane	BQL	0.327	0.049	1	7/13/2007	
Bis(2-chloroethyl)ether	BQL	0.327	0.040	1	7/13/2007	
Bis(2-chloroisopropyl)ether	BQL	0.327	0.041	1	7/13/2007	
Bis(2-ethylhexyl)phthalate	BQL	0.327	0.044	1	7/13/2007	
4-bromophenyl phenyl ether	BQL	0.327	0.055	1	7/13/2007	
Butylbenzylphthalate	BQL	0.327	0.050	1	7/13/2007	
2-Chloronaphthalene	BQL	0.327	0.051	1	7/13/2007	
2-Chlorophenol	BQL	0.327	0.102	1	7/13/2007	
4-Chloro-3-methylphenol	BQL	0.327	0.102	1	7/13/2007	
4-Chloroaniline	BQL	1.63	0.249	1	7/13/2007	
4-Chlorophenyl phenyl ether	BQL	0.327	0.048	1	7/13/2007	
Chrysene	BQL	0.327	0.035	1	7/13/2007	
Dibenzo[a,h]anthracene	BQL	0.327	0.092	1	7/13/2007	
Dibenzofuran	BQL	0.327	0.060	1	7/13/2007	
Di-n-Butylphthalate	BQL	0.327	0.039	1	7/13/2007	
1,2-Dichlorobenzene	BQL	0.327	0.036	1	7/13/2007	
1,3-Dichlorobenzene	BQL	0.327	0.036	1	7/13/2007	
1,4-Dichlorobenzene	BQL	0.327	0.037	1	7/13/2007	
3,3'-Dichlorobenzidine	BQL	0.654	0.082	1	7/13/2007	
2,4-Dichlorophenol	BQL	0.327	0.118	1	7/13/2007	
Diethylphthalate	BQL	0.327	0.042	1	7/13/2007	
Dimethylphthalate	BQL	0.327	0.040	1	7/13/2007	
2,4-Dimethylphenol	BQL	0.327	0.234	1	7/13/2007	
Di-n-octylphthalate	BQL	0.327	0.054	1	7/13/2007	
4,6-Dinitro-2-methylphenol	BQL	1.63	0.193	1	7/13/2007	
2,4-Dinitrophenol	BQL	1.63	0.720	1	7/13/2007	
2,4-Dinitrotoluene	BQL	0.327	0.043	1	7/13/2007	
2,6-Dinitrotoluene	BQL	0.327	0.060	1	7/13/2007	
Diphenylamine *	BQL	0.327	0.032	1	7/13/2007	
Fluoranthene	BQL	0.327	0.046	1	7/13/2007	
Fluorene	BQL	0.327	0.041	1	7/13/2007	
Hexachlorobenzene	BQL	0.327	0.050	1	7/13/2007	
Hexachlorobutadiene	BQL	0.327	0.052	1	7/13/2007	
Hexachlorocyclopentadiene	BQL	0.654	0.034	1	7/13/2007	
Hexachloroethane	BQL	0.327	0.029	1	7/13/2007	
Indeno(1,2,3-c,d)pyrene	BQL	0.327	0.084	1	7/13/2007	
Isophorone	BQL	0.327	0.048	1	7/13/2007	
2-Methylnaphthalene	BQL	0.327	0.095	1	7/13/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW01(0-2)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-1G
Lab Project ID: G128-1977
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/3/2007 13:30
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Matrix: Soil
% Solids: 94.57

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
2-Methylphenol	BQL	0.327	0.115	1	7/13/2007	
3- & 4-Methylphenol	BQL	0.327	0.111	1	7/13/2007	
Naphthalene	BQL	0.327	0.027	1	7/13/2007	
2-Nitroaniline	BQL	0.327	0.051	1	7/13/2007	
3-Nitroaniline	BQL	1.63	0.337	1	7/13/2007	
4-Nitroaniline	BQL	1.63	0.101	1	7/13/2007	
Nitrobenzene	BQL	0.327	0.044	1	7/13/2007	
2-Nitrophenol	BQL	0.327	0.101	1	7/13/2007	
4-Nitrophenol	BQL	1.63	0.091	1	7/13/2007	
N-Nitrosodi-n-propylamine	BQL	0.327	0.042	1	7/13/2007	
Pentachlorophenol	BQL	1.63	0.085	1	7/13/2007	
Phenanthrene	BQL	0.327	0.037	1	7/13/2007	
Phenol	BQL	0.327	0.090	1	7/13/2007	
Pyrene	BQL	0.327	0.063	1	7/13/2007	
1,2,4-Trichlorobenzene	BQL	0.327	0.041	1	7/13/2007	
2,4,5-Trichlorophenol	BQL	0.327	0.126	1	7/13/2007	
2,4,6-Trichlorophenol	BQL	0.327	0.116	1	7/13/2007	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.4	94
2-Fluorophenol	10	8.7	87
Nitrobenzene-d5	10	9.4	94
Phenol-d6	10	9.1	91
2,4,6-Tribromophenol	10	9.5	95
4-Terphenyl-d14	10	12.6	126

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: EAW

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW01(0-2)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-1G
Lab Project ID: G128-1977
Sample Wt/Vol: 32.35 g
Dilution: 1

Analyzed By: EAW
Date Collected: 7/3/2007 13:30
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Date Analyzed: 7/13/2007
Matrix: Soil
% Solids: 94.6

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/KG)
1	Amide, Unknown	17.84			5730
2	Unknown	24.62			2350
3	Unknown	23.54			1660
4	.alpha.-Pinene	6.29	000080-56-8	95	418
5	Unknown	12.53			382
6	Alcohol, Unknown	19.58			377
7	Unknown	17.23			158
8	Unknown	18.56			148
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: *ER*

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW07(0-2)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-2G
Lab Project ID: G128-1977
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/5/2007 12:45
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Matrix: Soil
% Solids: 91.76

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.329	0.047	1	7/13/2007	
Acenaphthylene	BQL	0.329	0.044	1	7/13/2007	
Anthracene	BQL	0.329	0.048	1	7/13/2007	
Benzo[a]anthracene	BQL	0.329	0.057	1	7/13/2007	
Benzo[a]pyrene	BQL	0.329	0.050	1	7/13/2007	
Benzo[b]fluoranthene	BQL	0.329	0.058	1	7/13/2007	
Benzo[g,h,i]perylene	BQL	0.329	0.090	1	7/13/2007	
Benzo[k]fluoranthene	BQL	0.329	0.064	1	7/13/2007	
Benzoic Acid	BQL	0.659	0.659	1	7/13/2007	
Bis(2-chloroethoxy)methane	BQL	0.329	0.049	1	7/13/2007	
Bis(2-chloroethyl)ether	BQL	0.329	0.040	1	7/13/2007	
Bis(2-chloroisopropyl)ether	BQL	0.329	0.041	1	7/13/2007	
Bis(2-ethylhexyl)phthalate	BQL	0.329	0.044	1	7/13/2007	
4-bromophenyl phenyl ether	BQL	0.329	0.056	1	7/13/2007	
Butylbenzylphthalate	BQL	0.329	0.051	1	7/13/2007	
2-Chloronaphthalene	BQL	0.329	0.052	1	7/13/2007	
2-Chlorophenol	BQL	0.329	0.103	1	7/13/2007	
4-Chloro-3-methylphenol	BQL	0.329	0.103	1	7/13/2007	
4-Chloroaniline	BQL	1.65	0.251	1	7/13/2007	
4-Chlorophenyl phenyl ether	BQL	0.329	0.048	1	7/13/2007	
Chrysene	BQL	0.329	0.036	1	7/13/2007	
Dibenzo[a,h]anthracene	BQL	0.329	0.092	1	7/13/2007	
Dibenzofuran	BQL	0.329	0.060	1	7/13/2007	
Di-n-Butylphthalate	BQL	0.329	0.039	1	7/13/2007	
1,2-Dichlorobenzene	BQL	0.329	0.037	1	7/13/2007	
1,3-Dichlorobenzene	BQL	0.329	0.036	1	7/13/2007	
1,4-Dichlorobenzene	BQL	0.329	0.037	1	7/13/2007	
3,3'-Dichlorobenzidine	BQL	0.659	0.083	1	7/13/2007	
2,4-Dichlorophenol	BQL	0.329	0.119	1	7/13/2007	
Diethylphthalate	BQL	0.329	0.043	1	7/13/2007	
Dimethylphthalate	BQL	0.329	0.040	1	7/13/2007	
2,4-Dimethylphenol	BQL	0.329	0.235	1	7/13/2007	
Di-n-octylphthalate	BQL	0.329	0.054	1	7/13/2007	
4,6-Dinitro-2-methylphenol	BQL	1.65	0.194	1	7/13/2007	
2,4-Dinitrophenol	BQL	1.65	0.725	1	7/13/2007	
2,4-Dinitrotoluene	BQL	0.329	0.043	1	7/13/2007	
2,6-Dinitrotoluene	BQL	0.329	0.060	1	7/13/2007	
Diphenylamine *	BQL	0.329	0.032	1	7/13/2007	
Fluoranthene	BQL	0.329	0.046	1	7/13/2007	
Fluorene	BQL	0.329	0.041	1	7/13/2007	
Hexachlorobenzene	BQL	0.329	0.051	1	7/13/2007	
Hexachlorobutadiene	BQL	0.329	0.053	1	7/13/2007	
Hexachlorocyclopentadiene	BQL	0.659	0.034	1	7/13/2007	
Hexachloroethane	BQL	0.329	0.030	1	7/13/2007	
Indeno(1,2,3-c,d)pyrene	BQL	0.329	0.084	1	7/13/2007	
Isophorone	BQL	0.329	0.048	1	7/13/2007	
2-Methylnaphthalene	BQL	0.329	0.096	1	7/13/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW07(0-2)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-2G
Lab Project ID: G128-1977
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/5/2007 12:45
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Matrix: Soil
% Solids: 91.76

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
2-Methylphenol	BQL	0.329	0.116	1	7/13/2007	
3- & 4-Methylphenol	BQL	0.329	0.112	1	7/13/2007	
Naphthalene	BQL	0.329	0.027	1	7/13/2007	
2-Nitroaniline	BQL	0.329	0.052	1	7/13/2007	
3-Nitroaniline	BQL	1.65	0.339	1	7/13/2007	
4-Nitroaniline	BQL	1.65	0.101	1	7/13/2007	
Nitrobenzene	BQL	0.329	0.045	1	7/13/2007	
2-Nitrophenol	BQL	0.329	0.102	1	7/13/2007	
4-Nitrophenol	BQL	1.65	0.091	1	7/13/2007	
N-Nitrosodi-n-propylamine	BQL	0.329	0.042	1	7/13/2007	
Pentachlorophenol	BQL	1.65	0.086	1	7/13/2007	
Phenanthrene	BQL	0.329	0.038	1	7/13/2007	
Phenol	BQL	0.329	0.090	1	7/13/2007	
Pyrene	BQL	0.329	0.063	1	7/13/2007	
1,2,4-Trichlorobenzene	BQL	0.329	0.041	1	7/13/2007	
2,4,5-Trichlorophenol	BQL	0.329	0.127	1	7/13/2007	
2,4,6-Trichlorophenol	BQL	0.329	0.117	1	7/13/2007	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.1	91
2-Fluorophenol	10	9	90
Nitrobenzene-d5	10	9.1	91
Phenol-d6	10	9.2	92
2,4,6-Tribromophenol	10	8.9	89
4-Terphenyl-d14	10	11	110

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: Rv

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW07(0-2)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-2G
Lab Project ID: G128-1977
Sample Wt/Vol: 33.09 g
Dilution: 1

Analyzed By: EAW
Date Collected: 7/5/2007 12:45
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Date Analyzed: 7/13/2007
Matrix: Soil
% Solids: 91.8

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/KG)
1	Unknown	17.84			2600
2	Unknown	5.11			1560
3	Unknown	12.53			336
4	Unknown	24.02			233
5	Alkane, Unknown	13.59			205
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: RV1

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW08(3-5)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-3G
Lab Project ID: G128-1977
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/5/2007 10:50
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Matrix: Soil
% Solids: 87.31

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	0.060	0.353	0.051	1	7/13/2007	J
Acenaphthylene	BQL	0.353	0.047	1	7/13/2007	
Anthracene	BQL	0.353	0.051	1	7/13/2007	
Benzo[a]anthracene	BQL	0.353	0.061	1	7/13/2007	
Benzo[a]pyrene	BQL	0.353	0.054	1	7/13/2007	
Benzo[b]fluoranthene	BQL	0.353	0.062	1	7/13/2007	
Benzo[g,h,i]perylene	BQL	0.353	0.096	1	7/13/2007	
Benzo[k]fluoranthene	BQL	0.353	0.068	1	7/13/2007	
Benzoic Acid	BQL	0.707	0.707	1	7/13/2007	
Bis(2-chloroethoxy)methane	BQL	0.353	0.053	1	7/13/2007	
Bis(2-chloroethyl)ether	BQL	0.353	0.043	1	7/13/2007	
Bis(2-chloroisopropyl)ether	BQL	0.353	0.044	1	7/13/2007	
Bis(2-ethylhexyl)phthalate	BQL	0.353	0.047	1	7/13/2007	
4-bromophenyl phenyl ether	BQL	0.353	0.060	1	7/13/2007	
Butylbenzylphthalate	BQL	0.353	0.054	1	7/13/2007	
2-Chloronaphthalene	BQL	0.353	0.056	1	7/13/2007	
2-Chlorophenol	BQL	0.353	0.111	1	7/13/2007	
4-Chloro-3-methylphenol	BQL	0.353	0.110	1	7/13/2007	
4-Chloroaniline	BQL	1.77	0.269	1	7/13/2007	
4-Chlorophenyl phenyl ether	BQL	0.353	0.052	1	7/13/2007	
Chrysene	BQL	0.353	0.038	1	7/13/2007	
Dibenzo[a,h]anthracene	BQL	0.353	0.099	1	7/13/2007	
Dibenzofuran	BQL	0.353	0.064	1	7/13/2007	
Di-n-Butylphthalate	BQL	0.353	0.042	1	7/13/2007	
1,2-Dichlorobenzene	BQL	0.353	0.039	1	7/13/2007	
1,3-Dichlorobenzene	BQL	0.353	0.039	1	7/13/2007	
1,4-Dichlorobenzene	BQL	0.353	0.040	1	7/13/2007	
3,3'-Dichlorobenzidine	BQL	0.707	0.089	1	7/13/2007	
2,4-Dichlorophenol	BQL	0.353	0.127	1	7/13/2007	
Diethylphthalate	BQL	0.353	0.046	1	7/13/2007	
Dimethylphthalate	BQL	0.353	0.043	1	7/13/2007	
2,4-Dimethylphenol	BQL	0.353	0.253	1	7/13/2007	
Di-n-octylphthalate	BQL	0.353	0.058	1	7/13/2007	
4,6-Dinitro-2-methylphenol	BQL	1.77	0.208	1	7/13/2007	
2,4-Dinitrophenol	BQL	1.77	0.778	1	7/13/2007	
2,4-Dinitrotoluene	BQL	0.353	0.046	1	7/13/2007	
2,6-Dinitrotoluene	BQL	0.353	0.064	1	7/13/2007	
Diphenylamine *	BQL	0.353	0.035	1	7/13/2007	
Fluoranthene	BQL	0.353	0.050	1	7/13/2007	
Fluorene	0.088	0.353	0.044	1	7/13/2007	J
Hexachlorobenzene	BQL	0.353	0.054	1	7/13/2007	
Hexachlorobutadiene	BQL	0.353	0.057	1	7/13/2007	
Hexachlorocyclopentadiene	BQL	0.707	0.036	1	7/13/2007	
Hexachloroethane	BQL	0.353	0.032	1	7/13/2007	
Indeno(1,2,3-c,d)pyrene	BQL	0.353	0.090	1	7/13/2007	
Isophorone	BQL	0.353	0.052	1	7/13/2007	
2-Methylnaphthalene	BQL	0.353	0.103	1	7/13/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW08(3-5)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-3G
Lab Project ID: G128-1977
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/5/2007 10:50
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Matrix: Soil
% Solids: 87.31

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
2-Methylphenol	BQL	0.353	0.124	1	7/13/2007	
3- & 4-Methylphenol	BQL	0.353	0.120	1	7/13/2007	
Naphthalene	BQL	0.353	0.029	1	7/13/2007	
2-Nitroaniline	BQL	0.353	0.056	1	7/13/2007	
3-Nitroaniline	BQL	1.77	0.364	1	7/13/2007	
4-Nitroaniline	BQL	1.77	0.109	1	7/13/2007	
Nitrobenzene	BQL	0.353	0.048	1	7/13/2007	
2-Nitrophenol	BQL	0.353	0.110	1	7/13/2007	
4-Nitrophenol	BQL	1.77	0.098	1	7/13/2007	
N-Nitrosodi-n-propylamine	BQL	0.353	0.045	1	7/13/2007	
Pentachlorophenol	BQL	1.77	0.092	1	7/13/2007	
Phenanthrene	0.120	0.353	0.040	1	7/13/2007	J
Phenol	BQL	0.353	0.097	1	7/13/2007	
Pyrene	BQL	0.353	0.068	1	7/13/2007	
1,2,4-Trichlorobenzene	BQL	0.353	0.044	1	7/13/2007	
2,4,5-Trichlorophenol	BQL	0.353	0.137	1	7/13/2007	
2,4,6-Trichlorophenol	BQL	0.353	0.126	1	7/13/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	10.3	103		
2-Fluorophenol		10	8.9	89		
Nitrobenzene-d5		10	9.5	95		
Phenol-d6		10	9.2	92		
2,4,6-Tribromophenol		10	10.5	105		
4-Terphenyl-d14		10	12.5	125		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: JW

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW08(3-5)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-3G
Lab Project ID: G128-1977
Sample Wt/Vol: 32.42 g
Dilution: 1

Analyzed By: EAW
Date Collected: 7/5/2007 10:50
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Date Analyzed: 7/13/2007
Matrix: Soil
% Solids: 87.3

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/KG)
1	Amide, Unknown	17.84			3430
2	Undecane	8.20	001120-21-4	95	2780
3	Pentadecane, 2,6,10,14-tetramethyl-	13.61	001921-70-6	94	2720
4	Heptadecane	13.59	000629-78-7	97	2690
5	Tridecane	10.23	000629-50-5	97	2670
6	Docosane	16.89	000629-97-0	93	2580
7	Pentadecane	14.31	000629-62-9	97	2070
8	Alkane, Unknown	9.95			2000
9	Nonadecane	15.00	000629-92-5	98	1570
10	Tetradecane	11.14	000629-59-4	96	1350

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by:

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW09(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-4G
Lab Project ID: G128-1977
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/3/2007 11:20
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Matrix: Soil
% Solids: 92.93

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	2.84	6.60	0.944	20	7/16/2007	J
Acenaphthylene	BQL	6.60	0.878	20	7/16/2007	
Anthracene	1.45	6.60	0.957	20	7/16/2007	J
Benzo[a]anthracene	BQL	6.60	1.14	20	7/16/2007	
Benzo[a]pyrene	BQL	6.60	1.01	20	7/16/2007	
Benzo[b]fluoranthene	BQL	6.60	1.16	20	7/16/2007	
Benzo[g,h,i]perylene	BQL	6.60	1.80	20	7/16/2007	
Benzo[k]fluoranthene	BQL	6.60	1.27	20	7/16/2007	
Benzoic Acid	BQL	13.2	13.2	20	7/16/2007	
Bis(2-chloroethoxy)methane	BQL	6.60	0.984	20	7/16/2007	
Bis(2-chloroethyl)ether	BQL	6.60	0.799	20	7/16/2007	
Bis(2-chloroisopropyl)ether	BQL	6.60	0.825	20	7/16/2007	
Bis(2-ethylhexyl)phthalate	BQL	6.60	0.885	20	7/16/2007	
4-bromophenyl phenyl ether	BQL	6.60	1.12	20	7/16/2007	
Butylbenzylphthalate	BQL	6.60	1.02	20	7/16/2007	
2-Chloronaphthalene	BQL	6.60	1.04	20	7/16/2007	
2-Chlorophenol	BQL	6.60	2.07	20	7/16/2007	
4-Chloro-3-methylphenol	BQL	6.60	2.06	20	7/16/2007	
4-Chloroaniline	BQL	33.0	5.03	20	7/16/2007	
4-Chlorophenyl phenyl ether	BQL	6.60	0.970	20	7/16/2007	
Chrysene	BQL	6.60	0.713	20	7/16/2007	
Dibenzo[a,h]anthracene	BQL	6.60	1.85	20	7/16/2007	
Dibenzofuran	5.48	6.60	1.20	20	7/16/2007	J
Di-n-Butylphthalate	BQL	6.60	0.786	20	7/16/2007	
1,2-Dichlorobenzene	BQL	6.60	0.733	20	7/16/2007	
1,3-Dichlorobenzene	BQL	6.60	0.720	20	7/16/2007	
1,4-Dichlorobenzene	BQL	6.60	0.746	20	7/16/2007	
3,3'-Dichlorobenzidine	BQL	13.2	1.66	20	7/16/2007	
2,4-Dichlorophenol	BQL	6.60	2.38	20	7/16/2007	
Diethylphthalate	BQL	6.60	0.852	20	7/16/2007	
Dimethylphthalate	BQL	6.60	0.799	20	7/16/2007	
2,4-Dimethylphenol	BQL	6.60	4.72	20	7/16/2007	
Di-n-octylphthalate	BQL	6.60	1.09	20	7/16/2007	
4,6-Dinitro-2-methylphenol	BQL	33.0	3.89	20	7/16/2007	
2,4-Dinitrophenol	BQL	33.0	14.5	20	7/16/2007	
2,4-Dinitrotoluene	BQL	6.60	0.858	20	7/16/2007	
2,6-Dinitrotoluene	BQL	6.60	1.20	20	7/16/2007	
Diphenylamine *	BQL	6.60	0.647	20	7/16/2007	
Fluoranthene	BQL	6.60	0.924	20	7/16/2007	
Fluorene	5.88	6.60	0.819	20	7/16/2007	J
Hexachlorobenzene	BQL	6.60	1.02	20	7/16/2007	
Hexachlorobutadiene	BQL	6.60	1.06	20	7/16/2007	
Hexachlorocyclopentadiene	BQL	13.2	0.680	20	7/16/2007	
Hexachloroethane	BQL	6.60	0.594	20	7/16/2007	
Indeno(1,2,3-c,d)pyrene	BQL	6.60	1.69	20	7/16/2007	
Isophorone	BQL	6.60	0.970	20	7/16/2007	
2-Methylnaphthalene	75.2	6.60	1.93	20	7/16/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW09(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-4G
Lab Project ID: G128-1977
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/3/2007 11:20
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Matrix: Soil
% Solids: 92.93

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
2-Methylphenol	BQL	6.60	2.32	20	7/16/2007	
3- & 4-Methylphenol	BQL	6.60	2.24	20	7/16/2007	
Naphthalene	13.9	6.60	0.535	20	7/16/2007	
2-Nitroaniline	BQL	6.60	1.04	20	7/16/2007	
3-Nitroaniline	BQL	33.0	6.80	20	7/16/2007	
4-Nitroaniline	BQL	33.0	2.03	20	7/16/2007	
Nitrobenzene	BQL	6.60	0.891	20	7/16/2007	
2-Nitrophenol	BQL	6.60	2.05	20	7/16/2007	
4-Nitrophenol	BQL	33.0	1.83	20	7/16/2007	
N-Nitrosodi-n-propylamine	BQL	6.60	0.838	20	7/16/2007	
Pentachlorophenol	BQL	33.0	1.72	20	7/16/2007	
Phenanthrene	11.9	6.60	0.753	20	7/16/2007	
Phenol	BQL	6.60	1.81	20	7/16/2007	
Pyrene	BQL	6.60	1.27	20	7/16/2007	
1,2,4-Trichlorobenzene	BQL	6.60	0.825	20	7/16/2007	
2,4,5-Trichlorophenol	BQL	6.60	2.55	20	7/16/2007	
2,4,6-Trichlorophenol	BQL	6.60	2.35	20	7/16/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		0.5	NA	NA		
2-Fluorophenol		0.5	NA	NA		
Nitrobenzene-d5		0.5	NA	NA		
Phenol-d6		0.5	NA	NA		
2,4,6-Tribromophenol		0.5	NA	NA		
4-Terphenyl-d14		0.5	NA	NA		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

NA = Not Applicable, surrogate diluted out

Reviewed By: SLV

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW09(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-4G
Lab Project ID: G128-1977
Sample Wt/Vol: 32.60 g
Dilution: 20

Analyzed By: EAW
Date Collected: 7/3/2007 11:20
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Date Analyzed: 7/16/2007
Matrix: Soil
% Solids: 92.9

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/KG)
1	Undecane	8.17	001120-21-4	97	176000
2	Heptadecane	13.55	000629-78-7	97	172000
3	Decane	7.03	000124-18-5	93	149000
4	Eicosane	14.27	000112-95-8	91	128000
5	Alkane, Unknown	13.57			108000
6	Nonadecane	14.96	000629-92-5	98	104000
7	Tridecane	10.19	000629-50-5	95	84300
8	Eicosane	15.62	000112-95-8	98	70900
9	Unknown	7.48			59200
10	Alkane, Unknown	9.92			50700

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: R21

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW09(4-6)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-4G
Lab Project ID: G128-1977
Sample Wt/Vol: 32.60 g
Dilution: 1

Analyzed By: EAW
Date Collected: 7/3/2007 11:20
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Date Analyzed: 7/16/2007
Matrix: Soil
% Solids: 92.9

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/KG)
1	Undecane	8.17	001120-21-4	97	8820
2	Heptadecane	13.55	000629-78-7	97	8600
3	Decane	7.03	000124-18-5	93	7450
4	Eicosane	14.27	000112-95-8	91	6390
5	Alkane, Unknown	13.57			5400
6	Nonadecane	14.96	000629-92-5	98	5220
7	Tridecane	10.19	000629-50-5	95	4220
8	Eicosane	15.62	000112-95-8	98	3540
9	Unknown	7.48			2960
10	Alkane, Unknown	9.92			2540

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: RW

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW10(3-5)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-5G
Lab Project ID: G128-1977
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/5/2007 10:10
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Matrix: Soil
% Solids: 89.33

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	1.72	3.37	0.482	10	7/16/2007	J
Acenaphthylene	BQL	3.37	0.448	10	7/16/2007	
Anthracene	1.08	3.37	0.489	10	7/16/2007	J
Benzo[a]anthracene	BQL	3.37	0.583	10	7/16/2007	
Benzo[a]pyrene	BQL	3.37	0.516	10	7/16/2007	
Benzo[b]fluoranthene	BQL	3.37	0.590	10	7/16/2007	
Benzo[g,h,i]perylene	BQL	3.37	0.917	10	7/16/2007	
Benzo[k]fluoranthene	BQL	3.37	0.651	10	7/16/2007	
Benzoic Acid	BQL	6.74	6.74	10	7/16/2007	
Bis(2-chloroethoxy)methane	BQL	3.37	0.502	10	7/16/2007	
Bis(2-chloroethyl)ether	BQL	3.37	0.408	10	7/16/2007	
Bis(2-chloroisopropyl)ether	BQL	3.37	0.421	10	7/16/2007	
Bis(2-ethylhexyl)phthalate	BQL	3.37	0.452	10	7/16/2007	
4-bromophenyl phenyl ether	BQL	3.37	0.570	10	7/16/2007	
Butylbenzylphthalate	BQL	3.37	0.519	10	7/16/2007	
2-Chloronaphthalene	BQL	3.37	0.529	10	7/16/2007	
2-Chlorophenol	BQL	3.37	1.06	10	7/16/2007	
4-Chloro-3-methylphenol	BQL	3.37	1.05	10	7/16/2007	
4-Chloroaniline	BQL	16.9	2.57	10	7/16/2007	
4-Chlorophenyl phenyl ether	BQL	3.37	0.496	10	7/16/2007	
Chrysene	BQL	3.37	0.364	10	7/16/2007	
Dibenzo[a,h]anthracene	BQL	3.37	0.944	10	7/16/2007	
Dibenzofuran	3.64	3.37	0.614	10	7/16/2007	
Di-n-Butylphthalate	BQL	3.37	0.401	10	7/16/2007	
1,2-Dichlorobenzene	BQL	3.37	0.374	10	7/16/2007	
1,3-Dichlorobenzene	BQL	3.37	0.368	10	7/16/2007	
1,4-Dichlorobenzene	BQL	3.37	0.381	10	7/16/2007	
3,3'-Dichlorobenzidine	BQL	6.74	0.850	10	7/16/2007	
2,4-Dichlorophenol	BQL	3.37	1.21	10	7/16/2007	
Diethylphthalate	BQL	3.37	0.435	10	7/16/2007	
Dimethylphthalate	BQL	3.37	0.408	10	7/16/2007	
2,4-Dimethylphenol	BQL	3.37	2.41	10	7/16/2007	
Di-n-octylphthalate	BQL	3.37	0.556	10	7/16/2007	
4,6-Dinitro-2-methylphenol	BQL	16.9	1.99	10	7/16/2007	
2,4-Dinitrophenol	BQL	16.9	7.42	10	7/16/2007	
2,4-Dinitrotoluene	BQL	3.37	0.438	10	7/16/2007	
2,6-Dinitrotoluene	BQL	3.37	0.614	10	7/16/2007	
Diphenylamine *	BQL	3.37	0.330	10	7/16/2007	
Fluoranthene	BQL	3.37	0.472	10	7/16/2007	
Fluorene	4.01	3.37	0.418	10	7/16/2007	
Hexachlorobenzene	BQL	3.37	0.519	10	7/16/2007	
Hexachlorobutadiene	BQL	3.37	0.539	10	7/16/2007	
Hexachlorocyclopentadiene	BQL	6.74	0.347	10	7/16/2007	
Hexachloroethane	BQL	3.37	0.303	10	7/16/2007	
Indeno(1,2,3-c,d)pyrene	BQL	3.37	0.863	10	7/16/2007	
Isophorone	BQL	3.37	0.496	10	7/16/2007	
2-Methylnaphthalene	50.9	3.37	0.985	10	7/16/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTG480-MW10(3-5)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-5G
Lab Project ID: G128-1977
Report Basis: Dry weight

Analyzed By: EAW
Date Collected: 7/5/2007 10:10
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Matrix: Soil
% Solids: 89.33

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
2-Methylphenol	BQL	3.37	1.19	10	7/16/2007	
3- & 4-Methylphenol	BQL	3.37	1.14	10	7/16/2007	
Naphthalene	8.33	3.37	0.273	10	7/16/2007	
2-Nitroaniline	BQL	3.37	0.529	10	7/16/2007	
3-Nitroaniline	BQL	16.9	3.47	10	7/16/2007	
4-Nitroaniline	BQL	16.9	1.04	10	7/16/2007	
Nitrobenzene	BQL	3.37	0.455	10	7/16/2007	
2-Nitrophenol	BQL	3.37	1.05	10	7/16/2007	
4-Nitrophenol	BQL	16.9	0.934	10	7/16/2007	
N-Nitrosodi-n-propylamine	BQL	3.37	0.428	10	7/16/2007	
Pentachlorophenol	BQL	16.9	0.880	10	7/16/2007	
Phenanthrene	6.47	3.37	0.384	10	7/16/2007	
Phenol	BQL	3.37	0.924	10	7/16/2007	
Pyrene	BQL	3.37	0.647	10	7/16/2007	
1,2,4-Trichlorobenzene	BQL	3.37	0.421	10	7/16/2007	
2,4,5-Trichlorophenol	BQL	3.37	1.30	10	7/16/2007	
2,4,6-Trichlorophenol	BQL	3.37	1.20	10	7/16/2007	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	1	NA	NA
2-Fluorophenol	1	NA	NA
Nitrobenzene-d5	1	NA	NA
Phenol-d6	1	NA	NA
2,4,6-Tribromophenol	1	NA	NA
4-Terphenyl-d14	1	NA	NA

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

NA = Not Applicable, surrogate diluted out

Reviewed By: *EW*

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW10(3-5)
Client Project ID: Site G480 CSA
Lab Sample ID: G128-1977-5G
Lab Project ID: G128-1977
Sample Wt/Vol: 33.20 g
Dilution: 10

Analyzed By: EAW
Date Collected: 7/5/2007 10:10
Date Received: 7/5/2007
Date Extracted: 7/10/2007
Date Analyzed: 7/16/2007
Matrix: Soil
% Solids: 89.3

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/KG)
1	Unknown	9.93			61500
2	Undecane, 2,6-dimethyl-	9.35	017301-23-4	95	36200
3	Undecane	8.17	001120-21-4	97	34900
4	Unknown	7.48			30700
5	Undecane	11.63			30400
6	Pentadecane, 2,6,10,14-tetramethyl-	13.58	001921-70-6	98	30100
7	Decane	7.03	000124-18-5	90	28400
8	Unknown	8.62			26900
9	Tridecane	10.19	000629-50-5	93	24200
10	Unknown	8.85			23900

Comment:

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Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: *EW*

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: PB8596
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: EAW
Date Collected:
Date Received:
Date Extracted: 7/10/2007
Matrix: SOIL
% Solids: 100

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	313	44.7	1	7/13/2007	
Acenaphthylene	BQL	313	41.6	1	7/13/2007	
Anthracene	BQL	313	45.3	1	7/13/2007	
Benzo[a]anthracene	BQL	313	54.1	1	7/13/2007	
Benzo[a]pyrene	BQL	313	47.8	1	7/13/2007	
Benzo[b]fluoranthene	BQL	313	54.7	1	7/13/2007	
Benzo[g,h,i]perylene	BQL	313	85.0	1	7/13/2007	
Benzo[k]fluoranthene	BQL	313	60.3	1	7/13/2007	
Benzoic Acid	BQL	625	625	1	7/13/2007	
Bis(2-chloroethoxy)methane	BQL	313	46.6	1	7/13/2007	
Bis(2-chloroethyl)ether	BQL	313	37.8	1	7/13/2007	
Bis(2-chloroisopropyl)ether	BQL	313	39.1	1	7/13/2007	
Bis(2-ethylhexyl)phthalate	BQL	313	41.9	1	7/13/2007	
4-bromophenyl phenyl ether	BQL	313	52.8	1	7/13/2007	
Butylbenzylphthalate	BQL	313	48.1	1	7/13/2007	
2-Chloronaphthalene	BQL	313	49.1	1	7/13/2007	
2-Chlorophenol	BQL	313	97.8	1	7/13/2007	
4-Chloro-3-methylphenol	BQL	313	97.5	1	7/13/2007	
4-Chloroaniline	BQL	1560	238	1	7/13/2007	
4-Chlorophenyl phenyl ether	BQL	313	45.9	1	7/13/2007	
Chrysene	BQL	313	33.8	1	7/13/2007	
Dibenzo[a,h]anthracene	BQL	313	87.5	1	7/13/2007	
Dibenzofuran	BQL	313	56.9	1	7/13/2007	
Di-n-Butylphthalate	BQL	313	37.2	1	7/13/2007	
1,2-Dichlorobenzene	BQL	313	34.7	1	7/13/2007	
1,3-Dichlorobenzene	BQL	313	34.1	1	7/13/2007	
1,4-Dichlorobenzene	BQL	313	35.3	1	7/13/2007	
3,3'-Dichlorobenzidine	BQL	625	78.8	1	7/13/2007	
2,4-Dichlorophenol	BQL	313	113	1	7/13/2007	
Diethylphthalate	BQL	313	40.3	1	7/13/2007	
Dimethylphthalate	BQL	313	37.8	1	7/13/2007	
2,4-Dimethylphenol	BQL	313	223	1	7/13/2007	
Di-n-octylphthalate	BQL	313	51.6	1	7/13/2007	
4,6-Dinitro-2-methylphenol	BQL	1560	184	1	7/13/2007	
2,4-Dinitrophenol	BQL	1560	688	1	7/13/2007	
2,4-Dinitrotoluene	BQL	313	40.6	1	7/13/2007	
2,6-Dinitrotoluene	BQL	313	56.9	1	7/13/2007	
Diphenylamine *	BQL	313	30.6	1	7/13/2007	
Fluoranthene	BQL	313	43.7	1	7/13/2007	
Fluorene	BQL	313	38.8	1	7/13/2007	
Hexachlorobenzene	BQL	313	48.1	1	7/13/2007	
Hexachlorobutadiene	BQL	313	50.0	1	7/13/2007	
Hexachlorocyclopentadiene	BQL	625	32.2	1	7/13/2007	
Hexachloroethane	BQL	313	28.1	1	7/13/2007	
Indeno(1,2,3-c,d)pyrene	BQL	313	80.0	1	7/13/2007	
Isophorone	BQL	313	45.9	1	7/13/2007	
2-Methylnaphthalene	BQL	313	91.2	1	7/13/2007	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: PB8596
Lab Project ID:
Report Basis: Dry Weight

Analyzed By: EAW
Date Collected:
Date Received:
Date Extracted: 7/10/2007
Matrix: SOIL
% Solids: 100

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
2-Methylphenol	BQL	313	110	1	7/13/2007	
3- & 4-Methylphenol	BQL	313	106	1	7/13/2007	
Naphthalene	BQL	313	25.3	1	7/13/2007	
2-Nitroaniline	BQL	313	49.1	1	7/13/2007	
3-Nitroaniline	BQL	1560	322	1	7/13/2007	
4-Nitroaniline	BQL	1560	96.3	1	7/13/2007	
Nitrobenzene	BQL	313	42.2	1	7/13/2007	
2-Nitrophenol	BQL	313	96.9	1	7/13/2007	
4-Nitrophenol	BQL	1560	86.6	1	7/13/2007	
N-Nitrosodi-n-propylamine	BQL	313	39.7	1	7/13/2007	
Pentachlorophenol	BQL	1560	81.6	1	7/13/2007	
Phenanthrene	BQL	313	35.6	1	7/13/2007	
Phenol	BQL	313	85.6	1	7/13/2007	
Pyrene	BQL	313	60.0	1	7/13/2007	
1,2,4-Trichlorobenzene	BQL	313	39.1	1	7/13/2007	
2,4,5-Trichlorophenol	BQL	313	121	1	7/13/2007	
2,4,6-Trichlorophenol	BQL	313	111	1	7/13/2007	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.3	93
2-Fluorophenol	10	9.1	91
Nitrobenzene-d5	10	9.6	96
Phenol-d6	10	9.5	95
2,4,6-Tribromophenol	10	9	90
4-Terphenyl-d14	10	11.9	119

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: EW



Results For Matrix Spike / Matrix Spike Duplicate and Laboratory Control Standard (MS/MSD/LCS)
by GCMS

Client Sample ID: Batch QC

Date Collected:

Client Project ID:

Date Received:

Lab Sample ID: Batch-8596-MS/MSD/LCS

Date Extracted: 07/10/07

Lab Project ID: G128-1977-1G

Date Analyzed: 07/13/07

Matrix: SOIL

Analyzed By: EAW

Prep Method: 3541

Dilution: 1

	Sample Amount (µg/kg)	MS Spike (µg/kg)	MS Conc. (µg/kg)	MS Spike % Rec.	MSD Spike (µg/kg)	MSD Conc. (µg/kg)	MSD Conc. % Rec.	RPD	QC Limits	
									RPD	% Rec.
Acenaphthylene	BQL	3270	3700	113	3270	3680	113.0	0.531	30	79.0-141
4-Chloro-3-methylphenol	BQL	3270	3440	105	3270	3410	104.0	0.668	30	40.0-133
2-Chlorophenol	BQL	3270	3010	92.1	3270	2940	90.0	2.31	30	40.0-120
1,4-Dichlorobenzene	BQL	3270	3370	103*	3270	3250	99.3*	3.66	30	56.0-95.0
2,4-Dinitrotoluene	BQL	3270	3330	102	3270	3290	101.0	0.987	30	48.0-121
N-Nitrosodi-n-propylamine	BQL	3270	3300	101	3270	3270	100.0	0.895	30	70.0-119
4-Nitrophenol	BQL	3270	3240	99.0	3270	3160	96.6	2.45	30	40.0-147
Pentachlorophenol	BQL	3270	2650	81.0	3270	2710	82.9	2.32	30	40.0-122
Phenol	BQL	3270	3080	94.2	3270	3020	92.3	2.04	30	40.0-127
Pyrene	BQL	3270	4280	131*	3270	4400	135*	2.79	30	56.0-123
1,2,4-Trichlorobenzene	BQL	3270	3370	103	3270	3310	101.0	1.76	30	65.0-105

	Spiked Amount (µg/kg)	LCS Conc. (µg/kg)	LCS Spike %	QC Limits % Rec.
Acenaphthylene	3125	3460	111	52.1-146
4-Chloro-3-methylphenol	3125	3210	103	51.1-135
2-Chlorophenol	3125	2820	90.2	43.7-128
1,4-Dichlorobenzene	3125	3140	100	30.0-110
2,4-Dinitrotoluene	3125	3130	100	56.3-144
N-Nitrosodi-n-propylamine	3125	3110	99.6	55.9-143
4-Nitrophenol	3125	2990	95.7	47.9-148
Pentachlorophenol	3125	2360	75.5	55.9-143
Phenol	3125	2930	93.7	48.0-124
Pyrene	3125	3750	120	29.9-186
1,2,4-Trichlorobenzene	3125	3160	101	43.1-124

Comments:

Concentrations reflect the spiked sample amounts.

Flags:

* = Out of limits.

NA = Not applicable.

Reviewed By: EW

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW01(0-2)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	07/03/07
Date Received	07/05/07
Date Extracted	07/09/07
Date Analyzed	07/09/07 21:08 - 07/09/07 21:08
Dry Weight	94.6
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₂ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₀ Aromatics**	< 10.0 mg/Kg
Surrogate % Recovery - PID	73.5
Surrogate % Recovery - FID	79.8

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-1977-1e	Lab Info: g128-1977-1e
FID Info: VP070907/028F0101.D	PID Info: VP070907/028R0101.D

Reviewed By: EW

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW07(0-2)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	07/05/07
Date Received	07/05/07
Date Extracted	07/09/07
Date Analyzed	07/09/07 21:36 - 07/09/07 21:36
Dry Weight	91.8
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₂ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₀ Aromatics**	< 10.0 mg/Kg
Surrogate % Recovery - PID	75.2
Surrogate % Recovery - FID	79.9

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-1977-2e	Lab Info: g128-1977-2e
FID Info: VP070907/029F0101.D	PID Info: VP070907/029R0101.D

Reviewed By: SL

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW08(3-5)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	07/05/07
Date Received	07/05/07
Date Extracted	07/09/07
Date Analyzed	07/09/07 22:05 - 07/09/07 22:05
Dry Weight	87.3
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₂ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₀ Aromatics**	< 10.0 mg/Kg
Surrogate % Recovery - PID	78.2
Surrogate % Recovery - FID	83.8

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-1977-3e	Lab Info: g128-1977-3e
FID Info: VP070907/030F0101.D	PID Info: VP070907/030R0101.D

Reviewed By: RL

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW09(4-6)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	07/03/07
Date Received	07/05/07
Date Extracted	07/09/07
Date Analyzed	07/10/07 14:35 - 07/10/07 14:35
Dry Weight	92.9
Dilution Factor	2 - 2
C ₅ -C ₈ Aliphatics**	58.2 mg/Kg
C ₉ -C ₁₂ Aliphatics**	232 mg/Kg
C ₉ -C ₁₀ Aromatics**	301 mg/Kg
Surrogate % Recovery - PID	219 ***
Surrogate % Recovery - FID	225 ***

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

*** = High surrogate recovery due to matrix interference.

Lab Info: g128-1977-4e	Lab Info: g128-1977-4e
FID Info: VP071007/014F0101.D	PID Info: VP071007/014R0101.D

Reviewed By: Dw

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW10(3-5)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	07/05/07
Date Received	07/05/07
Date Extracted	07/09/07
Date Analyzed	07/11/07 05:52 - 07/11/07 05:52
Dry Weight	89.3
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	38.6 mg/Kg
C ₉ -C ₁₂ Aliphatics**	215 mg/Kg
C ₉ -C ₁₀ Aromatics**	232 mg/Kg
Surrogate % Recovery - PID	135 ***
Surrogate % Recovery - FID	157 ***

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

*** = High surrogate recovery due to matrix interference.

Lab Info: g128-1977-5e	Lab Info: g128-1977-5e
FID Info: VP071007/046F0101.D	PID Info: VP071007/046R0101.D

Reviewed By: SVJ

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 07/02/07

PID Initial Calibration Date: 07/02/07

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	33.1	0.265	105	0.842	100	10
C ₉ -C ₁₂ Aliphatics	30.9	0.247	98.3	0.786	100	10
C ₉ -C ₁₀ Aromatics	27.7	0.222	88.1	0.705	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	6.10	Calibration Factor
	250	20		
	500	40		
	750	60		
	1000	80		
C ₉ -C ₁₂ Aliphatics	10	0.8	8.17	Calibration Factor
	250	20		
	500	40		
	750	60		
	1000	80		
C ₉ -C ₁₀ Aromatics	10	0.8	11.84	Calibration Factor
	250	20		
	500	40		
	750	60		
	1000	80		

Calibration Check Date: 07/10/07

Filename: VP071007/002F0101.d

Calibration Check

Range	Levels (mg/Kg)	(µg/L)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	500	4	-7.2	±25%
C ₉ -C ₁₂ Aliphatics	500	4	0.0	±25%
C ₉ -C ₁₀ Aromatics	500	4	10.4	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 07/02/07

PID Initial Calibration Date: 07/02/07

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	33.1	0.265	105	0.842	100	10
C ₉ -C ₁₂ Aliphatics	30.9	0.247	98.3	0.786	100	10
C ₉ -C ₁₀ Aromatics	27.7	0.222	88.1	0.705	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	6.10	Calibration Factor
	250	20		
	500	40		
	750	60		
	1000	80		
C ₉ -C ₁₂ Aliphatics	10	0.8	8.17	Calibration Factor
	250	20		
	500	40		
	750	60		
	1000	80		
C ₉ -C ₁₀ Aromatics	10	0.8	11.84	Calibration Factor
	250	20		
	500	40		
	750	60		
	1000	80		

Calibration Check Date: 07/10/07

Filename: VP071007/036F0101.d

Calibration Check

Range	Levels (mg/Kg)	(µg/L)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	500	4	-13.3	±25%
C ₉ -C ₁₂ Aliphatics	500	4	10.2	±25%
C ₉ -C ₁₀ Aromatics	500	4	12.6	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULTS**
by Method VPH

SGS Environmental Services, Inc.

Lab Sample ID: g161-2606-4c
MS Sample ID: g161-2606-4c
MSD Sample ID: g161-2606-4c
Lab Project ID: Batch QC
Report Basis: Dry

Analyzed By: DVG
Matrix: Soil
Percent Solids: 92.0 %

Matrix Spike Results Summary

Analyte	Sample Amount mg/Kg	Spiked Amount mg/Kg	Measured Amount mg/Kg	Percent Recovery (%)	Lower Limit (%)	Upper Limit (%)	Qualifier
C5-C8 Aliphatics	0.000	-	27.10	-	-	-	
C9-C12 Aliphatics	0.000	-	12.80	-	-	-	
C9-C10 Aromatics	0.000	-	3.57	-	-	-	
Total VPH	0.000	48.4	43.5	101.0	70	130	

Matrix Spike Duplicate Results Summary

Analyte	Spiked Amount mg/Kg	Measured Amount mg/Kg	Percent Recovery (%)	Lower Limit (%)	Upper Limit (%)	Qualifier
C5-C8 Aliphatics	-	26.90	-	-	-	
C9-C12 Aliphatics	-	12.40	-	-	-	
C9-C10 Aromatics	-	3.23	-	-	-	
Total VPH	48.4	42.5	98.7	70	130	

Analyte	MS Amount mg/Kg	MSD Amount mg/Kg	RPD Value (%)	RPD Limit (%)	Qualifier
C5-C8 Aliphatics	-	-	-	-	
C9-C12 Aliphatics	-	-	-	-	
C9-C10 Aromatics	-	-	-	-	
Total VPH	43.5	42.5	2	20	

Reviewed By:

**LABORATORY CONTROL SPIKE RESULTS**
by Method VPH

SGS Environmental Services, Inc.

Lab Sample ID:	LCS4071007A	Analyzed By:	
Lab Project ID:	Batch QC	Matrix:	Soil
Report Basis:	Dry	Percent Solids:	100 %

Analytical QC Results Summary

Analyte	Expected Amount mg/Kg	Measured Amount mg/Kg	Percent Recovery (%)	Lower Limit (%)	Upper Limit (%)	Qualifier
C5-C8 Aliphatics		20.5				
C9-C12 Aliphatics		10.2				
C9-C10 Aromatics		5.27				
Total VPH	40.0	36.0	90.0	70.0	130	

Surrogate Standards	Expected Amount mg/Kg	Measured Amount mg/Kg	Percent Recovery (%)	Lower Limit (%)	Upper Limit (%)	Qualifier
Surrogate - PID	100	109	109	70.0	130	
Surrogate - FID	100	110	110	70.0	130	

Reviewed By:

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**

Client Name: _____

Project Name: _____

Sample Information and Analytical Results	
Sample Identification	vblk4071007a
Sample Matrix	Soil
Collection Option (for Soil)*	NA
Date Collected	
Date Received	
Date Extracted	
Date Analyzed	07/10/07 10:45 - 07/10/07 10:45
Dry Weight	100
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₂ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₀ Aromatics**	< 10.0 mg/Kg
Surrogate % Recovery - PID	102
Surrogate % Recovery - FID	105

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: vblk4071007a	Lab Info: vblk4071007a
FID Info: VP071007/006F0101.D	PID Info: VP071007/006R0101.D

Reviewed By: De1

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 07/02/07

PID Initial Calibration Date: 07/02/07

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	33.1	0.265	105	0.842	100	10
C ₉ -C ₁₂ Aliphatics	30.9	0.247	98.3	0.786	100	10
C ₉ -C ₁₀ Aromatics	27.7	0.222	88.1	0.705	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	6.10	Calibration Factor
	250	20		
	500	40		
	750	60		
	1000	80		
C ₉ -C ₁₂ Aliphatics	10	0.8	8.17	Calibration Factor
	250	20		
	500	40		
	750	60		
	1000	80		
C ₉ -C ₁₀ Aromatics	10	0.8	11.84	Calibration Factor
	250	20		
	500	40		
	750	60		
	1000	80		

Calibration Check Date: 07/09/07

Filename: VP070907/002F0101.d

Calibration Check

Range	Levels (mg/Kg)	(µg/L)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	500	4	-6.1	±25%
C ₉ -C ₁₂ Aliphatics	500	4	-0.8	±25%
C ₉ -C ₁₀ Aromatics	500	4	2.7	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: _____

Project Name: _____

Sample Information and Analytical Results	
Sample Identification	vblk4070907a
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	
Date Received	
Date Extracted	
Date Analyzed	07/09/07 10:37 - 07/09/07 10:37
Dry Weight	100
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₂ Aliphatics**	< 10.0 mg/Kg
C ₉ -C ₁₀ Aromatics**	< 10.0 mg/Kg
Surrogate % Recovery - PID	101
Surrogate % Recovery - FID	104

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: vblk4070907a	Lab Info: vblk4070907a
FID Info: VP070907/006F0101.D	PID Info: VP070907/006R0101.D

Reviewed By: R2

**LABORATORY CONTROL SPIKE RESULTS**
by Method VPH

SGS Environmental Services, Inc.

Lab Sample ID:	LCS4070907A	Analyzed By:	
Lab Project ID:	Batch QC	Matrix:	Soil
Report Basis:	Dry	Percent Solids:	100 %

Analytical QC Results Summary

Analyte	Expected Amount mg/Kg	Measured Amount mg/Kg	Percent Recovery (%)	Lower Limit (%)	Upper Limit (%)	Qualifier
C5-C8 Aliphatics		22.3				
C9-C12 Aliphatics		9.59				
C9-C10 Aromatics		4.73				
Total VPH	40.0	36.6	91.5	70.0	130	

Surrogate Standards	Expected Amount mg/Kg	Measured Amount mg/Kg	Percent Recovery (%)	Lower Limit (%)	Upper Limit (%)	Qualifier
Surrogate - PID	100	102	102	70.0	130	
Surrogate - FID	100	104	104	70.0	130	

Reviewed By: W

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULTS**
by Method VPH

SGS Environmental Services, Inc.

Lab Sample ID: g520-226-4a
MS Sample ID: g520-226-4a
MSD Sample ID: g520-226-4a
Lab Project ID: Batch QC
Report Basis: Dry

Analyzed By: DVG
Matrix: Soil
Percent Solids: 73.2 %

Matrix Spike Results Summary

Analyte	Sample Amount mg/Kg	Spiked Amount mg/Kg	Measured Amount mg/Kg	Percent Recovery (%)	Lower Limit (%)	Upper Limit (%)	Qualifier
C5-C8 Aliphatics	0.000	-	35.90	-	-	-	
C9-C12 Aliphatics	0.000	-	16.30	-	-	-	
C9-C10 Aromatics	0.000	-	5.14	-	-	-	
Total VPH	0.000	75.9	57.3	82.9	70	130	

Matrix Spike Duplicate Results Summary

Analyte	Spiked Amount mg/Kg	Measured Amount mg/Kg	Percent Recovery (%)	Lower Limit (%)	Upper Limit (%)	Qualifier
C5-C8 Aliphatics	-	39.30	-	-	-	
C9-C12 Aliphatics	-	18.80	-	-	-	
C9-C10 Aromatics	-	6.31	-	-	-	
Total VPH	75.9	64.3	92.1	70	130	

Analyte	MS Amount mg/Kg	MSD Amount mg/Kg	RPD Value (%)	RPD Limit (%)	Qualifier
C5-C8 Aliphatics	-	-	-	-	
C9-C12 Aliphatics	-	-	-	-	
C9-C10 Aromatics	-	-	-	-	
Total VPH	57.3	64.3	12	20	

Reviewed By: rw

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW01(0-2)
Sample Matrix	Soil
Date Collected	07/03/07
Date Received	07/05/07
Date Extracted	07/10/07
Date Analyzed	07/10/07
Dry Weight	94.6
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	110
Aromatic Surrogate % Recovery	110

Comments:

* = Excludes any surrogates or internal standards.
Sample did not require fractionation.

Lab info: G128-1977-1J

Reviewed By: 12-21

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW07(0-2)
Sample Matrix	Soil
Date Collected	07/05/07
Date Received	07/05/07
Date Extracted	07/10/07
Date Analyzed	07/10/07
Dry Weight	91.8
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	100
Aromatic Surrogate % Recovery	100

Comments:

* = Excludes any surrogates or internal standards.
Sample did not require fractionation.

Lab info: G128-1977-2H

Reviewed By: EV

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW08(3-5)
Sample Matrix	Soil
Date Collected	07/05/07
Date Received	07/05/07
Date Extracted	07/10/07
Date Analyzed	07/10/07
Dry Weight	87.3
Dilution Factor	2:1
C ₉ -C ₁₈ Aliphatics*	360 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	22 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	100 (mg/Kg)
Aliphatic Surrogate % Recovery	104
Aromatic Surrogate % Recovery	94
Fractionation Surrogate 1 % Recovery	81

Comments:

* = Excludes any surrogates or internal standards.

Lab info: G128-1977-3H

Reviewed By: SM

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW09(4-6)
Sample Matrix	Soil
Date Collected	07/03/07
Date Received	07/05/07
Date Extracted	07/10/07
Date Analyzed	07/10/07
Dry Weight	92.9
Dilution Factor	50:10
C ₉ -C ₁₈ Aliphatics*	3200 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 500 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	1900 (mg/Kg)
Aliphatic Surrogate % Recovery	NA
Aromatic Surrogate % Recovery	NA
Fractionation Surrogate 1 % Recovery	NA

Comments:

* = Excludes any surrogates or internal standards.

NA = Non-applicable, surrogate diluted out.

Lab info: G128-1977-4H

Reviewed By: RM

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480 CSA

Sample Information and Analytical Results	
Sample Identification	USTG480-MW10(3-5)
Sample Matrix	Soil
Date Collected	07/05/07
Date Received	07/05/07
Date Extracted	07/10/07
Date Analyzed	07/10/07
Dry Weight	89.3
Dilution Factor	20:5
C ₉ -C ₁₈ Aliphatics*	3600 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 200 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	1100 (mg/Kg)
Aliphatic Surrogate % Recovery	NA
Aromatic Surrogate % Recovery	N/A
Fractionation Surrogate 1 % Recovery	N/A

Comments:

* = Excludes any surrogates or internal standards.

NA = Non-applicable, surrogate diluted out.

Lab info: G128-1977-5H

Reviewed By: FR?

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 05/09/07

Calibration Ranges and Limits

Range	MDL (10/2006) (µg/L)	ML (µg/L)	RL (µg/L) (mg/Kg)
C ₉ -C ₁₈ Aliphatics	28.10	89.4	100 10
C ₁₉ -C ₃₆ Aliphatics	36.50	116	100 10
C ₁₁ -C ₂₂ Aromatics	27.60	87.8	100 10

Calibration Concentration Levels

Range	Levels (µg/mL)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	13.70	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	14.2	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	5.9	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 07/10/07

Calibration Check

Range	Levels (µg/mL)	RPD
C ₉ -C ₁₈ Aliphatics	120	9.0
C ₁₉ -C ₃₆ Aliphatics	160	1.2
C ₁₁ -C ₂₂ Aromatics	340	-10.0

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit

RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve



List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

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N.C. CERTIFICATION #481

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☐ 200 W. Potter Drive **Anchorage, AK 99518** Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 5500 Business Drive **Wilmington, NC 28405** Tel: (910) 350-1903 Fax: (910) 350-1557

☐ 1270 Greenbrier Street **Charleston, WV 25311** Tel: (304) 346-0725 Fax: (304) 346-0761

White - Retained by Lab
Yellow - Returned with Report
Pink - Retained by Sampler



Mr. Steve Hudson
Richard Catlin & Associates
P.O. Box 10279
Wilmington NC 28404-0279

Report Number: G128-1984

Client Project: Site G480

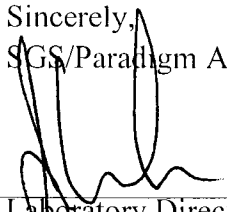
Dear Mr. Hudson:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call SGS/Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS/Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
SGS/Paradigm Analytical Laboratories, Inc.



Laboratory Director
J. Patrick Weaver

7/31/2007

Date



List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

**Results for Volatiles**

by GC 602

Client Sample ID: USTTC341-MW14

Analyzed By: RSB

Client Project ID: Site G480

Date Collected: 7/16/2007 10:30

Lab Sample ID: G128-1984-1F

Date Received: 7/17/2007

Lab Project ID: G128-1984

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	9.70	1.00	0.183	1	7/19/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	7/19/2007	
Ethylbenzene	39.2	1.00	0.181	1	7/19/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	7/19/2007	
Toluene	BQL	1.00	0.157	1	7/19/2007	
m/p-Xylene	51.2	2.00	0.481	1	7/19/2007	
o-Xylene	0.852	2.00	0.584	1	7/19/2007	J

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.7	107

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: USTTC341-MW15

Analyzed By: RSB

Client Project ID: Site G480

Date Collected: 7/16/2007 10:50

Lab Sample ID: G128-1984-2F

Date Received: 7/17/2007

Lab Project ID: G128-1984

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	7/19/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	7/19/2007	
Ethylbenzene	BQL	1.00	0.181	1	7/19/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	7/19/2007	
Toluene	BQL	1.00	0.157	1	7/19/2007	
m/p-Xylene	BQL	2.00	0.481	1	7/19/2007	
o-Xylene	BQL	2.00	0.584	1	7/19/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.2	103

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: USTG480-MW01

Analyzed By: RSB

Client Project ID: Site G480

Date Collected: 7/16/2007 13:20

Lab Sample ID: G128-1984-3F

Date Received: 7/17/2007

Lab Project ID: G128-1984

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	4.78	8.00	1.46	8	7/19/2007	J
Diisopropyl ether (DIPE)	BQL	8.00	1.83	8	7/19/2007	
Ethylbenzene	175	8.00	1.45	8	7/19/2007	
Methyl-tert butyl ether (MTBE)	BQL	16.0	2.87	8	7/19/2007	
Toluene	BQL	8.00	1.26	8	7/19/2007	
m/p-Xylene	187	16.0	3.85	8	7/19/2007	
o-Xylene	BQL	16.0	4.67	8	7/19/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.4	104

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: USTG480-MW01 DUP

Analyzed By: RSB

Client Project ID: Site G480

Date Collected: 7/16/2007 13:20

Lab Sample ID: G128-1984-4B

Date Received: 7/17/2007

Lab Project ID: G128-1984

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	5.31	8.00	1.46	8	7/19/2007	J
Diisopropyl ether (DIPE)	BQL	8.00	1.83	8	7/19/2007	
Ethylbenzene	176	8.00	1.45	8	7/19/2007	
Methyl-tert butyl ether (MTBE)	BQL	16.0	2.87	8	7/19/2007	
Toluene	BQL	8.00	1.26	8	7/19/2007	
m/p-Xylene	186	16.0	3.85	8	7/19/2007	
o-Xylene	BQL	16.0	4.67	8	7/19/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.1	103

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: USTG480-MW04

Analyzed By: RSB

Client Project ID: Site G480

Date Collected: 7/16/2007 15:00

Lab Sample ID: G128-1984-5F

Date Received: 7/17/2007

Lab Project ID: G128-1984

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	57.4	10.0	1.83	10	7/19/2007	
Diisopropyl ether (DIPE)	BQL	10.0	2.29	10	7/19/2007	
Ethylbenzene	278	10.0	1.81	10	7/19/2007	
Methyl-tert butyl ether (MTBE)	BQL	20.0	3.59	10	7/19/2007	
Toluene	14.6	10.0	1.57	10	7/19/2007	
m/p-Xylene	299	20.0	4.81	10	7/19/2007	
o-Xylene	102	20.0	5.84	10	7/19/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	39.9	99.7

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: USTG480-MW05

Analyzed By: RSB

Client Project ID: Site G480

Date Collected: 7/16/2007 14:10

Lab Sample ID: G128-1984-6F

Date Received: 7/17/2007

Lab Project ID: G128-1984

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	13.9	10.0	1.83	10	7/19/2007	
Diisopropyl ether (DIPE)	BQL	10.0	2.29	10	7/19/2007	
Ethylbenzene	283	10.0	1.81	10	7/19/2007	
Methyl-tert butyl ether (MTBE)	BQL	20.0	3.59	10	7/19/2007	
Toluene	BQL	10.0	1.57	10	7/19/2007	
m/p-Xylene	76.1	20.0	4.81	10	7/19/2007	
o-Xylene	BQL	20.0	5.84	10	7/19/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.8	104

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: USTG480-MW10

Analyzed By: RSB

Client Project ID: Site G480

Date Collected: 7/16/2007 12:45

Lab Sample ID: G128-1984-7F

Date Received: 7/17/2007

Lab Project ID: G128-1984

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	173	20.0	3.66	20	7/20/2007	
Diisopropyl ether (DIPE)	BQL	20.0	4.58	20	7/20/2007	
Ethylbenzene	431	20.0	3.62	20	7/20/2007	
Methyl-tert butyl ether (MTBE)	BQL	40.0	7.18	20	7/20/2007	
Toluene	94.7	20.0	3.14	20	7/20/2007	
m/p-Xylene	556	40.0	9.62	20	7/20/2007	
o-Xylene	146	40.0	11.7	20	7/20/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.3	103

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: USTG480-MW11

Analyzed By: RSB

Client Project ID: Site G480

Date Collected: 7/16/2007 11:20

Lab Sample ID: G128-1984-8F

Date Received: 7/17/2007

Lab Project ID: G128-1984

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	4.16	5.00	0.915	5	7/20/2007	J
Diisopropyl ether (DIPE)	BQL	5.00	1.15	5	7/20/2007	
Ethylbenzene	113	5.00	0.905	5	7/20/2007	
Methyl-tert butyl ether (MTBE)	BQL	10.0	1.8	5	7/20/2007	
Toluene	BQL	5.00	0.785	5	7/20/2007	
m/p-Xylene	2.90	10.0	2.41	5	7/20/2007	J
o-Xylene	BQL	10.0	2.92	5	7/20/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.6	104

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

GC-VOA_WA

**Results for Volatiles**

by GC 602

Client Sample ID: USTG480-MW12

Analyzed By: RSB

Client Project ID: Site G480

Date Collected: 7/16/2007 11:35

Lab Sample ID: G128-1984-9F

Date Received: 7/17/2007

Lab Project ID: G128-1984

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	7/19/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	7/19/2007	
Ethylbenzene	BQL	1.00	0.181	1	7/19/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	7/19/2007	
Toluene	BQL	1.00	0.157	1	7/19/2007	
m/p-Xylene	BQL	2.00	0.481	1	7/19/2007	
o-Xylene	BQL	2.00	0.584	1	7/19/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.8	102

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: USTG480-MW13

Analyzed By: RSB

Client Project ID: Site G480

Date Collected: 7/16/2007 13:40

Lab Sample ID: G128-1984-10D

Date Received: 7/17/2007

Lab Project ID: G128-1984

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	94.8	20.0	3.66	20	7/20/2007	
Diisopropyl ether (DIPE)	BQL	20.0	4.58	20	7/20/2007	
Ethylbenzene	325	20.0	3.62	20	7/20/2007	
Methyl-tert butyl ether (MTBE)	BQL	40.0	7.18	20	7/20/2007	
Toluene	BQL	20.0	3.14	20	7/20/2007	
m/p-Xylene	183	40.0	9.62	20	7/20/2007	
o-Xylene	BQL	40.0	11.7	20	7/20/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.6	101

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

GO-VOA-WA

**Results for Volatiles**

by GC 602

Client Sample ID: USTG480-MW14

Analyzed By: RSB

Client Project ID: Site G480

Date Collected: 7/16/2007 12:10

Lab Sample ID: G128-1984-11F

Date Received: 7/17/2007

Lab Project ID: G128-1984

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	2.28	1.00	0.183	1	7/19/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	7/19/2007	
Ethylbenzene	BQL	1.00	0.181	1	7/19/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	7/19/2007	
Toluene	BQL	1.00	0.157	1	7/19/2007	
m/p-Xylene	BQL	2.00	0.481	1	7/19/2007	
o-Xylene	BQL	2.00	0.584	1	7/19/2007	

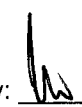
Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	39.8	99.4

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

GC-VOA_WA

**Results for Volatiles**

by GC 602

Client Sample ID: USTG480-MW15

Analyzed By: RSB

Client Project ID: Site G480

Date Collected: 7/16/2007 15:45

Lab Sample ID: G128-1984-12G

Date Received: 7/17/2007

Lab Project ID: G128-1984

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	7/20/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	7/20/2007	
Ethylbenzene	BQL	1.00	0.181	1	7/20/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	7/20/2007	
Toluene	BQL	1.00	0.157	1	7/20/2007	
m/p-Xylene	BQL	2.00	0.481	1	7/20/2007	
o-Xylene	BQL	2.00	0.584	1	7/20/2007	

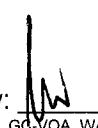
Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.4	101

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

GG-VOA_WA

**Results for Volatiles**

by GC 602

Client Sample ID: Trip Blank

Analyzed By: RSB

Client Project ID: Site G480

Date Collected: 7/16/2007 0:00

Lab Sample ID: G128-1984-13A

Date Received: 7/17/2007

Lab Project ID: G128-1984

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	7/19/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	7/19/2007	
Ethylbenzene	BQL	1.00	0.181	1	7/19/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	7/19/2007	
Toluene	BQL	1.00	0.157	1	7/19/2007	
m/p-Xylene	BQL	2.00	0.481	1	7/19/2007	
o-Xylene	BQL	2.00	0.584	1	7/19/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.6	102

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTTC341-MW14
Client Project ID: Site G480
Lab Sample ID: G128-1984-1H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 10:30
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	63.0	100	12.2	10	7/20/2007	J
Acenaphthylene	BQL	100	11.2	10	7/20/2007	
Anthracene	34.0	100	17.5	10	7/20/2007	J
Benzo[a]anthracene	BQL	100	13.6	10	7/20/2007	
Benzo[a]pyrene	BQL	100	12.7	10	7/20/2007	
Benzo[b]fluoranthene	BQL	100	14.3	10	7/20/2007	
Benzo[g,h,i]perylene	BQL	100	45.7	10	7/20/2007	
Benzo[k]fluoranthene	BQL	100	10.9	10	7/20/2007	
Bis(2-chloroethoxy)methane	BQL	100	11.1	10	7/20/2007	
Bis(2-chloroethyl)ether	BQL	100	10.9	10	7/20/2007	
Bis(2-chloroisopropyl)ether	BQL	100	15.7	10	7/20/2007	
Bis(2-ethylhexyl)phthalate	31.0	100	13.3	10	7/20/2007	J
4-bromophenyl phenyl ether	BQL	100	19.9	10	7/20/2007	
Butylbenzylphthalate	BQL	100	15.3	10	7/20/2007	
2-Chloronaphthalene	BQL	100	12.5	10	7/20/2007	
2-Chlorophenol	BQL	100	42.2	10	7/20/2007	
4-Chloro-3-methylphenol	BQL	100	32.6	10	7/20/2007	
4-Chlorophenyl phenyl ether	BQL	100	14.2	10	7/20/2007	
Chrysene	BQL	100	11.1	10	7/20/2007	
Dibenzo[a,h]anthracene	BQL	100	48.7	10	7/20/2007	
Di-n-Butylphthalate	BQL	100	16.5	10	7/20/2007	
3,3'-Dichlorobenzidine	BQL	200	41.0	10	7/20/2007	
2,4-Dichlorophenol	BQL	100	37.5	10	7/20/2007	
Diethylphthalate	BQL	100	14.8	10	7/20/2007	
Dimethylphthalate	BQL	100	10.4	10	7/20/2007	
2,4-Dimethylphenol	BQL	100	92.5	10	7/20/2007	
Di-n-octylphthalate	BQL	100	11.6	10	7/20/2007	
4,6-Dinitro-2-methylphenol	BQL	500	37.1	10	7/20/2007	
2,4-Dinitrophenol	BQL	500	42.0	10	7/20/2007	
2,4-Dinitrotoluene	BQL	100	15.2	10	7/20/2007	
2,6-Dinitrotoluene	BQL	100	14.1	10	7/20/2007	
Diphenylamine *	BQL	100	15.3	10	7/20/2007	
Fluoranthene	BQL	100	14.1	10	7/20/2007	
Fluorene	133	100	12.2	10	7/20/2007	
Hexachlorobenzene	BQL	100	12.2	10	7/20/2007	
Hexachlorobutadiene	BQL	100	15.8	10	7/20/2007	
Hexachlorocyclopentadiene	BQL	200	200	10	7/20/2007	
Hexachloroethane	BQL	100	15.8	10	7/20/2007	
Indeno(1,2,3-c,d)pyrene	BQL	100	45.7	10	7/20/2007	
Isophorone	BQL	100	12.7	10	7/20/2007	
Naphthalene	645	100	10.8	10	7/20/2007	
Nitrobenzene	BQL	100	13.2	10	7/20/2007	
2-Nitrophenol	BQL	100	35.2	10	7/20/2007	
4-Nitrophenol	BQL	500	31.7	10	7/20/2007	
N-Nitrosodi-n-propylamine	BQL	100	18.7	10	7/20/2007	
Pentachlorophenol	BQL	500	28.3	10	7/20/2007	
Phenanthrene	328	100	13.8	10	7/20/2007	

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTTC341-MW14
Client Project ID: Site G480
Lab Sample ID: G128-1984-1H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 10:30
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	100	33.8	10	7/20/2007	
Pyrene	BQL	100	20.8	10	7/20/2007	
1,2,4-Trichlorobenzene	BQL	100	13.3	10	7/20/2007	
2,4,6-Trichlorophenol	BQL	100	29.2	10	7/20/2007	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	1	NA	NA
2-Fluorophenol	1	NA	NA
Nitrobenzene-d5	1	NA	NA
Phenol-d6	1	NA	NA
2,4,6-Tribromophenol	1	NA	NA
4-Terphenyl-d14	1	NA	NA

Comments:

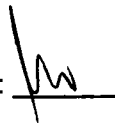
* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

NA = Not Applicable, surrogate diluted out

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTTC341-MW14
Client Project ID: Site G480
Lab Sample ID: G128-1984-1H
Lab Project ID: G128-1984
Sample Wt/Vol: 500 ML
Dilution: 10

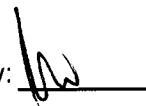
Analyzed By: EAW
Date Collected: 7/16/2007 10:30
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Date Analyzed: 7/20/2007
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Alkane, Unknown	11.63			5960
2	3-Methyl-4-(methoxycarbonyl)hexa-2,4-dien	13.13	000000-00-0	90	5520
3	Naphthalene, 2,3-dimethyl-	11.45	000581-40-8	98	4530
4	Naphthalene, 1,7-dimethyl-	11.33	000575-37-1	97	3620
5	Pentadecane, 2,6,10,14-tetramethyl-	13.57	001921-70-6	99	3490
6	Naphthalene, 2,3,6-trimethyl-	12.39	000829-26-5	98	3170
7	Naphthalene, 2-(1-methylethyl)-	12.17	002027-17-0	94	2800
8	Unknown	12.10			2790
9	Naphthalene, 2,3,6-trimethyl-	12.64	000829-26-5	97	2750
10	Naphthalene, 1,7-dimethyl-	11.48	000575-37-1	98	2680

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTTC341-MW15
Client Project ID: Site G480
Lab Sample ID: G128-1984-2H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 10:50
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	7/20/2007	
Acenaphthylene	BQL	10.0	1.12	1	7/20/2007	
Anthracene	BQL	10.0	1.75	1	7/20/2007	
Benzo[a]anthracene	BQL	10.0	1.36	1	7/20/2007	
Benzo[a]pyrene	BQL	10.0	1.27	1	7/20/2007	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	7/20/2007	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	7/20/2007	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	7/20/2007	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	7/20/2007	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	7/20/2007	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	7/20/2007	
Bis(2-ethylhexyl)phthalate	1.50	10.0	1.33	1	7/20/2007	J
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	7/20/2007	
Butylbenzylphthalate	BQL	10.0	1.53	1	7/20/2007	
2-Chloronaphthalene	BQL	10.0	1.25	1	7/20/2007	
2-Chlorophenol	BQL	10.0	4.22	1	7/20/2007	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	7/20/2007	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	7/20/2007	
Chrysene	BQL	10.0	1.11	1	7/20/2007	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	7/20/2007	
Di-n-Butylphthalate	BQL	10.0	1.65	1	7/20/2007	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	7/20/2007	
2,4-Dichlorophenol	BQL	10.0	3.75	1	7/20/2007	
Diethylphthalate	BQL	10.0	1.48	1	7/20/2007	
Dimethylphthalate	BQL	10.0	1.04	1	7/20/2007	
2,4-Dimethylphenol	BQL	10.0	9.25	1	7/20/2007	
Di-n-octylphthalate	BQL	10.0	1.16	1	7/20/2007	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	7/20/2007	
2,4-Dinitrophenol	BQL	50.0	4.20	1	7/20/2007	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	7/20/2007	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	7/20/2007	
Diphenylamine *	BQL	10.0	1.53	1	7/20/2007	
Fluoranthene	BQL	10.0	1.41	1	7/20/2007	
Fluorene	BQL	10.0	1.22	1	7/20/2007	
Hexachlorobenzene	BQL	10.0	1.22	1	7/20/2007	
Hexachlorobutadiene	BQL	10.0	1.58	1	7/20/2007	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	7/20/2007	
Hexachloroethane	BQL	10.0	1.58	1	7/20/2007	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	7/20/2007	
Isophorone	BQL	10.0	1.27	1	7/20/2007	
Naphthalene	BQL	10.0	1.08	1	7/20/2007	
Nitrobenzene	BQL	10.0	1.32	1	7/20/2007	
2-Nitrophenol	BQL	10.0	3.52	1	7/20/2007	
4-Nitrophenol	BQL	50.0	3.17	1	7/20/2007	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	7/20/2007	
Pentachlorophenol	BQL	50.0	2.83	1	7/20/2007	
Phenanthrene	BQL	10.0	1.38	1	7/20/2007	

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTTC341-MW15
Client Project ID: Site G480
Lab Sample ID: G128-1984-2H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 10:50
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	10.0	3.38	1	7/20/2007	
Pyrene	BQL	10.0	2.08	1	7/20/2007	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	7/20/2007	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	7/20/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	8.5	85		
2-Fluorophenol		10	8.4	84		
Nitrobenzene-d5		10	9	90		
Phenol-d6		10	7.9	79		
2,4,6-Tribromophenol		10	9.8	98		
4-Terphenyl-d14		10	11.6	116		

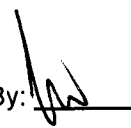
Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTTC341-MW15
Client Project ID: Site G480
Lab Sample ID: G128-1984-2H
Lab Project ID: G128-1984
Sample Wt/Vol: 500 ML
Dilution: 1

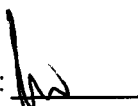
Analyzed By: EAW
Date Collected: 7/16/2007 10:50
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Date Analyzed: 7/20/2007
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Unknown	5.09	000105-60-2	91	9.37
2	Caprolactam	9.83			8.84
3	Unknown	12.52			6.4
4	Unknown	5.29			6.25
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTG480-MW01
Client Project ID: Site G480
Lab Sample ID: G128-1984-3H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 13:20
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	9.50	50.0	6.10	5	7/20/2007	J
Acenaphthylene	BQL	50.0	5.60	5	7/20/2007	
Anthracene	BQL	50.0	8.75	5	7/20/2007	
Benzo[a]anthracene	BQL	50.0	6.80	5	7/20/2007	
Benzo[a]pyrene	BQL	50.0	6.35	5	7/20/2007	
Benzo[b]fluoranthene	BQL	50.0	7.15	5	7/20/2007	
Benzo[g,h,i]perylene	BQL	50.0	22.9	5	7/20/2007	
Benzo[k]fluoranthene	BQL	50.0	5.45	5	7/20/2007	
Bis(2-chloroethoxy)methane	BQL	50.0	5.55	5	7/20/2007	
Bis(2-chloroethyl)ether	BQL	50.0	5.45	5	7/20/2007	
Bis(2-chloroisopropyl)ether	BQL	50.0	7.85	5	7/20/2007	
Bis(2-ethylhexyl)phthalate	BQL	50.0	6.65	5	7/20/2007	
4-bromophenyl phenyl ether	BQL	50.0	9.95	5	7/20/2007	
Butylbenzylphthalate	BQL	50.0	7.65	5	7/20/2007	
2-Chloronaphthalene	BQL	50.0	6.25	5	7/20/2007	
2-Chlorophenol	BQL	50.0	21.1	5	7/20/2007	
4-Chloro-3-methylphenol	BQL	50.0	16.3	5	7/20/2007	
4-Chlorophenyl phenyl ether	BQL	50.0	7.10	5	7/20/2007	
Chrysene	BQL	50.0	5.55	5	7/20/2007	
Dibenzo[a,h]anthracene	BQL	50.0	24.4	5	7/20/2007	
Di-n-Butylphthalate	BQL	50.0	8.25	5	7/20/2007	
3,3'-Dichlorobenzidine	BQL	100	20.5	5	7/20/2007	
2,4-Dichlorophenol	BQL	50.0	18.7	5	7/20/2007	
Diethylphthalate	BQL	50.0	7.40	5	7/20/2007	
Dimethylphthalate	BQL	50.0	5.20	5	7/20/2007	
2,4-Dimethylphenol	BQL	50.0	46.2	5	7/20/2007	
Di-n-octylphthalate	BQL	50.0	5.80	5	7/20/2007	
4,6-Dinitro-2-methylphenol	BQL	250	18.6	5	7/20/2007	
2,4-Dinitrophenol	BQL	250	21.0	5	7/20/2007	
2,4-Dinitrotoluene	BQL	50.0	7.60	5	7/20/2007	
2,6-Dinitrotoluene	BQL	50.0	7.05	5	7/20/2007	
Diphenylamine *	BQL	50.0	7.65	5	7/20/2007	
Fluoranthene	BQL	50.0	7.05	5	7/20/2007	
Fluorene	18.0	50.0	6.10	5	7/20/2007	J
Hexachlorobenzene	BQL	50.0	6.10	5	7/20/2007	
Hexachlorobutadiene	BQL	50.0	7.90	5	7/20/2007	
Hexachlorocyclopentadiene	BQL	100	100	5	7/20/2007	
Hexachloroethane	BQL	50.0	7.90	5	7/20/2007	
Indeno(1,2,3-c,d)pyrene	BQL	50.0	22.9	5	7/20/2007	
Isophorone	BQL	50.0	6.35	5	7/20/2007	
Naphthalene	376	50.0	5.40	5	7/20/2007	
Nitrobenzene	BQL	50.0	6.60	5	7/20/2007	
2-Nitrophenol	BQL	50.0	17.6	5	7/20/2007	
4-Nitrophenol	BQL	250	15.8	5	7/20/2007	
N-Nitrosodi-n-propylamine	BQL	50.0	9.35	5	7/20/2007	
Pentachlorophenol	BQL	250	14.1	5	7/20/2007	
Phenanthrene	27.0	50.0	6.90	5	7/20/2007	J

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW01
Client Project ID: Site G480
Lab Sample ID: G128-1984-3H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 13:20
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	50.0	16.9	5	7/20/2007	
Pyrene	BQL	50.0	10.4	5	7/20/2007	
1,2,4-Trichlorobenzene	BQL	50.0	6.65	5	7/20/2007	
2,4,6-Trichlorophenol	BQL	50.0	14.6	5	7/20/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		2	1.6	81		
2-Fluorophenol		2	1.6	82		
Nitrobenzene-d5		2	1.6	78		
Phenol-d6		2	1.4	69		
2,4,6-Tribromophenol		2	1.7	83		
4-Terphenyl-d14		2	1.8	91		

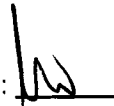
Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW01
Client Project ID: Site G480
Lab Sample ID: G128-1984-3H
Lab Project ID: G128-1984
Sample Wt/Vol: 500 ML
Dilution: 5

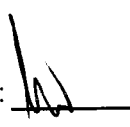
Analyzed By: EAW
Date Collected: 7/16/2007 13:20
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Date Analyzed: 7/20/2007
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	1,2,4-Trimethylbenzene	7.01	000095-36-3	96	487
2	Pentadecane, 2,6,10,14-tetramethyl-	13.56	001921-70-6	96	445
3	Naphthalene, 2,3-dimethyl-	11.62	000581-40-8	86	251
4	Ethylbenzene	5.32	000100-41-4	94	206
5	Aromatic, Unknown	7.51			199
6	Naphthalene, 2,3-dimethyl-	11.43	000581-40-8	98	198
7	Alkane, Unknown	9.91			189
8	Unknown	13.12			177
9	Benzene, 1-ethyl-3-methyl-	7.34	000620-14-4	91	174
10	Benzene, 4-ethyl-1,2-dimethyl-	7.73	000934-80-5	95	163

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW04
Client Project ID: Site G480
Lab Sample ID: G128-1984-5H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 15:00
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	46.0	100	12.2	10	7/20/2007	J
Acenaphthylene	29.0	100	11.2	10	7/20/2007	J
Anthracene	21.0	100	17.5	10	7/20/2007	J
Benzo[a]anthracene	BQL	100	13.6	10	7/20/2007	
Benzo[a]pyrene	BQL	100	12.7	10	7/20/2007	
Benzo[b]fluoranthene	BQL	100	14.3	10	7/20/2007	
Benzo[g,h,i]perylene	BQL	100	45.7	10	7/20/2007	
Benzo[k]fluoranthene	BQL	100	10.9	10	7/20/2007	
Bis(2-chloroethoxy)methane	BQL	100	11.1	10	7/20/2007	
Bis(2-chloroethyl)ether	BQL	100	10.9	10	7/20/2007	
Bis(2-chloroisopropyl)ether	BQL	100	15.7	10	7/20/2007	
Bis(2-ethylhexyl)phthalate	BQL	100	13.3	10	7/20/2007	
4-bromophenyl phenyl ether	BQL	100	19.9	10	7/20/2007	
Butylbenzylphthalate	BQL	100	15.3	10	7/20/2007	
2-Chloronaphthalene	BQL	100	12.5	10	7/20/2007	
2-Chlorophenol	BQL	100	42.2	10	7/20/2007	
4-Chloro-3-methylphenol	BQL	100	32.6	10	7/20/2007	
4-Chlorophenyl phenyl ether	BQL	100	14.2	10	7/20/2007	
Chrysene	BQL	100	11.1	10	7/20/2007	
Dibenzo[a,h]anthracene	BQL	100	48.7	10	7/20/2007	
Di-n-Butylphthalate	BQL	100	16.5	10	7/20/2007	
3,3'-Dichlorobenzidine	BQL	200	41.0	10	7/20/2007	
2,4-Dichlorophenol	BQL	100	37.5	10	7/20/2007	
Diethylphthalate	BQL	100	14.8	10	7/20/2007	
Dimethylphthalate	BQL	100	10.4	10	7/20/2007	
2,4-Dimethylphenol	BQL	100	92.5	10	7/20/2007	
Di-n-octylphthalate	18.0	100	11.6	10	7/20/2007	J
4,6-Dinitro-2-methylphenol	BQL	500	37.1	10	7/20/2007	
2,4-Dinitrophenol	BQL	500	42.0	10	7/20/2007	
2,4-Dinitrotoluene	BQL	100	15.2	10	7/20/2007	
2,6-Dinitrotoluene	BQL	100	14.1	10	7/20/2007	
Diphenylamine *	BQL	100	15.3	10	7/20/2007	
Fluoranthene	BQL	100	14.1	10	7/20/2007	
Fluorene	91.0	100	12.2	10	7/20/2007	J
Hexachlorobenzene	BQL	100	12.2	10	7/20/2007	
Hexachlorobutadiene	BQL	100	15.8	10	7/20/2007	
Hexachlorocyclopentadiene	BQL	200	200	10	7/20/2007	
Hexachloroethane	BQL	100	15.8	10	7/20/2007	
Indeno(1,2,3-c,d)pyrene	BQL	100	45.7	10	7/20/2007	
Isophorone	BQL	100	12.7	10	7/20/2007	
Naphthalene	691	100	10.8	10	7/20/2007	
Nitrobenzene	BQL	100	13.2	10	7/20/2007	
2-Nitrophenol	BQL	100	35.2	10	7/20/2007	
4-Nitrophenol	BQL	500	31.7	10	7/20/2007	
N-Nitrosodi-n-propylamine	BQL	100	18.7	10	7/20/2007	
Pentachlorophenol	BQL	500	28.3	10	7/20/2007	
Phenanthrene	187	100	13.8	10	7/20/2007	

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW04
Client Project ID: Site G480
Lab Sample ID: G128-1984-5H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 15:00
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	100	33.8	10	7/20/2007	
Pyrene	BQL	100	20.8	10	7/20/2007	
1,2,4-Trichlorobenzene	BQL	100	13.3	10	7/20/2007	
2,4,6-Trichlorophenol	BQL	100	29.2	10	7/20/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		1	NA	NA		
2-Fluorophenol		1	NA	NA		
Nitrobenzene-d5		1	NA	NA		
Phenol-d6		1	NA	NA		
2,4,6-Tribromophenol		1	NA	NA		
4-Terphenyl-d14		1	NA	NA		

Comments:

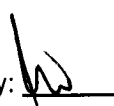
* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

NA = Not Applicable, Surrogate diluted out.

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW04
Client Project ID: Site G480
Lab Sample ID: G128-1984-5H
Lab Project ID: G128-1984
Sample Wt/Vol: 500 ML
Dilution: 10

Analyzed By: EAW
Date Collected: 7/16/2007 15:00
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Date Analyzed: 7/20/2007
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Decane	7.02	000124-18-5	92	2390
2	Undecane	8.17	001120-21-4	97	2140
3	Heptadecane	13.54	000629-78-7	97	1890
4	Tridecane	10.19	000629-50-5	95	1290
5	Octadecane	14.27	000593-45-3	97	1260
6	Pentadecane, 2,6,10,14-tetramethyl-	13.56	001921-70-6	95	1040
7	Nonadecane	14.96	000629-92-5	98	961
8	Alkane, Unknown	9.92			830
9	Benzene, 1,4-diethyl-	7.73	000105-05-5	95	668
10	Eicosane	15.62	000112-95-8	98	655

Comment:

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Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTG480-MW05
Client Project ID: Site G480
Lab Sample ID: G128-1984-6H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 14:10
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	59.0	100	12.2	10	7/20/2007	J
Acenaphthylene	BQL	100	11.2	10	7/20/2007	
Anthracene	38.0	100	17.5	10	7/20/2007	J
Benzo[a]anthracene	BQL	100	13.6	10	7/20/2007	
Benzo[a]pyrene	BQL	100	12.7	10	7/20/2007	
Benzo[b]fluoranthene	BQL	100	14.3	10	7/20/2007	
Benzo[g,h,i]perylene	BQL	100	45.7	10	7/20/2007	
Benzo[k]fluoranthene	BQL	100	10.9	10	7/20/2007	
Bis(2-chloroethoxy)methane	BQL	100	11.1	10	7/20/2007	
Bis(2-chloroethyl)ether	BQL	100	10.9	10	7/20/2007	
Bis(2-chloroisopropyl)ether	BQL	100	15.7	10	7/20/2007	
Bis(2-ethylhexyl)phthalate	BQL	100	13.3	10	7/20/2007	
4-bromophenyl phenyl ether	BQL	100	19.9	10	7/20/2007	
Butylbenzylphthalate	BQL	100	15.3	10	7/20/2007	
2-Chloronaphthalene	BQL	100	12.5	10	7/20/2007	
2-Chlorophenol	BQL	100	42.2	10	7/20/2007	
4-Chloro-3-methylphenol	BQL	100	32.6	10	7/20/2007	
4-Chlorophenyl phenyl ether	BQL	100	14.2	10	7/20/2007	
Chrysene	BQL	100	11.1	10	7/20/2007	
Dibenzo[a,h]anthracene	BQL	100	48.7	10	7/20/2007	
Di-n-Butylphthalate	BQL	100	16.5	10	7/20/2007	
3,3'-Dichlorobenzidine	BQL	200	41.0	10	7/20/2007	
2,4-Dichlorophenol	BQL	100	37.5	10	7/20/2007	
Diethylphthalate	BQL	100	14.8	10	7/20/2007	
Dimethylphthalate	BQL	100	10.4	10	7/20/2007	
2,4-Dimethylphenol	BQL	100	92.5	10	7/20/2007	
Di-n-octylphthalate	BQL	100	11.6	10	7/20/2007	
4,6-Dinitro-2-methylphenol	BQL	500	37.1	10	7/20/2007	
2,4-Dinitrophenol	BQL	500	42.0	10	7/20/2007	
2,4-Dinitrotoluene	BQL	100	15.2	10	7/20/2007	
2,6-Dinitrotoluene	BQL	100	14.1	10	7/20/2007	
Diphenylamine *	BQL	100	15.3	10	7/20/2007	
Fluoranthene	BQL	100	14.1	10	7/20/2007	
Fluorene	119	100	12.2	10	7/20/2007	
Hexachlorobenzene	BQL	100	12.2	10	7/20/2007	
Hexachlorobutadiene	BQL	100	15.8	10	7/20/2007	
Hexachlorocyclopentadiene	BQL	200	200	10	7/20/2007	
Hexachloroethane	BQL	100	15.8	10	7/20/2007	
Indeno(1,2,3-c,d)pyrene	BQL	100	45.7	10	7/20/2007	
Isophorone	BQL	100	12.7	10	7/20/2007	
Naphthalene	962	100	10.8	10	7/20/2007	
Nitrobenzene	BQL	100	13.2	10	7/20/2007	
2-Nitrophenol	BQL	100	35.2	10	7/20/2007	
4-Nitrophenol	BQL	500	31.7	10	7/20/2007	
N-Nitrosodi-n-propylamine	BQL	100	18.7	10	7/20/2007	
Pentachlorophenol	BQL	500	28.3	10	7/20/2007	
Phenanthrene	262	100	13.8	10	7/20/2007	

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW05
Client Project ID: Site G480
Lab Sample ID: G128-1984-6H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 14:10
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	100	33.8	10	7/20/2007	
Pyrene	BQL	100	20.8	10	7/20/2007	
1,2,4-Trichlorobenzene	BQL	100	13.3	10	7/20/2007	
2,4,6-Trichlorophenol	BQL	100	29.2	10	7/20/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		1	NA	NA		
2-Fluorophenol		1	NA	NA		
Nitrobenzene-d5		1	NA	NA		
Phenol-d6		1	NA	NA		
2,4,6-Tribromophenol		1	NA	NA		
4-Terphenyl-d14		1	NA	NA		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

NA = Not Applicable, Surrogate diluted out.

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW05
Client Project ID: Site G480
Lab Sample ID: G128-1984-6H
Lab Project ID: G128-1984
Sample Wt/Vol: 500 ML
Dilution: 10

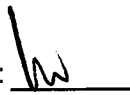
Analyzed By: EAW
Date Collected: 7/16/2007 14:10
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Date Analyzed: 7/20/2007
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Pentadecane, 2,6,10,14-tetramethyl-	13.57	001921-70-6	98	2290
2	Unknown	11.62			993
3	Alkane, Unknown	7.48			984
4	Alkane, Unknown	13.13			974
5	Benzene, 1,3,5-trimethyl-	7.01	000108-67-8	97	973
6	Decane, 2,6,7-trimethyl-	9.92			890
7	Naphthalene, 2,3-dimethyl-	11.44	000581-40-8	98	816
8	Naphthalene, 2,6-dimethyl-	11.32	000581-42-0	98	762
9	Benzene, 1-ethyl-3-methyl-	7.35	000620-14-4	94	616
10	Alkane, Unknown	7.84			584

Comment:

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Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW10
Client Project ID: Site G480
Lab Sample ID: G128-1984-7H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 12:45
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	200	24.4	20	7/24/2007	
Acenaphthylene	BQL	200	22.4	20	7/24/2007	
Anthracene	68.0	200	35.0	20	7/24/2007	J
Benzo[a]anthracene	BQL	200	27.2	20	7/24/2007	
Benzo[a]pyrene	BQL	200	25.4	20	7/24/2007	
Benzo[b]fluoranthene	BQL	200	28.6	20	7/24/2007	
Benzo[g,h,i]perylene	BQL	200	91.4	20	7/24/2007	
Benzo[k]fluoranthene	BQL	200	21.8	20	7/24/2007	
Bis(2-chloroethoxy)methane	BQL	200	22.2	20	7/24/2007	
Bis(2-chloroethyl)ether	BQL	200	21.8	20	7/24/2007	
Bis(2-chloroisopropyl)ether	BQL	200	31.4	20	7/24/2007	
Bis(2-ethylhexyl)phthalate	BQL	200	26.6	20	7/24/2007	
4-bromophenyl phenyl ether	BQL	200	39.8	20	7/24/2007	
Butylbenzylphthalate	BQL	200	30.6	20	7/24/2007	
2-Chloronaphthalene	BQL	200	25.0	20	7/24/2007	
2-Chlorophenol	BQL	200	84.4	20	7/24/2007	
4-Chloro-3-methylphenol	BQL	200	65.2	20	7/24/2007	
4-Chlorophenyl phenyl ether	BQL	200	28.4	20	7/24/2007	
Chrysene	BQL	200	22.2	20	7/24/2007	
Dibenzo[a,h]anthracene	BQL	200	97.4	20	7/24/2007	
Di-n-Butylphthalate	BQL	200	33.0	20	7/24/2007	
3,3'-Dichlorobenzidine	BQL	400	82.0	20	7/24/2007	
2,4-Dichlorophenol	BQL	200	75.0	20	7/24/2007	
Diethylphthalate	BQL	200	29.6	20	7/24/2007	
Dimethylphthalate	BQL	200	20.8	20	7/24/2007	
2,4-Dimethylphenol	BQL	200	185	20	7/24/2007	
Di-n-octylphthalate	BQL	200	23.2	20	7/24/2007	
4,6-Dinitro-2-methylphenol	BQL	1000	74.2	20	7/24/2007	
2,4-Dinitrophenol	BQL	1000	84.0	20	7/24/2007	
2,4-Dinitrotoluene	BQL	200	30.4	20	7/24/2007	
2,6-Dinitrotoluene	BQL	200	28.2	20	7/24/2007	
Diphenylamine *	BQL	200	30.6	20	7/24/2007	
Fluoranthene	BQL	200	28.2	20	7/24/2007	
Fluorene	190	200	24.4	20	7/24/2007	J
Hexachlorobenzene	BQL	200	24.4	20	7/24/2007	
Hexachlorobutadiene	BQL	200	31.6	20	7/24/2007	
Hexachlorocyclopentadiene	BQL	400	400	20	7/24/2007	
Hexachloroethane	BQL	200	31.6	20	7/24/2007	
Indeno(1,2,3-c,d)pyrene	BQL	200	91.4	20	7/24/2007	
Isophorone	BQL	200	25.4	20	7/24/2007	
Naphthalene	1280	200	21.6	20	7/24/2007	
Nitrobenzene	BQL	200	26.4	20	7/24/2007	
2-Nitrophenol	BQL	200	70.4	20	7/24/2007	
4-Nitrophenol	BQL	1000	63.4	20	7/24/2007	
N-Nitrosodi-n-propylamine	BQL	200	37.4	20	7/24/2007	
Pentachlorophenol	BQL	1000	56.6	20	7/24/2007	
Phenanthrene	408	200	27.6	20	7/24/2007	

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW10
Client Project ID: Site G480
Lab Sample ID: G128-1984-7H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 12:45
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	200	67.6	20	7/24/2007	
Pyrene	BQL	200	41.6	20	7/24/2007	
1,2,4-Trichlorobenzene	BQL	200	26.6	20	7/24/2007	
2,4,6-Trichlorophenol	BQL	200	58.4	20	7/24/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		0.5	NA	NA		
2-Fluorophenol		0.5	NA	NA		
Nitrobenzene-d5		0.5	NA	NA		
Phenol-d6		0.5	NA	NA		
2,4,6-Tribromophenol		0.5	NA	NA		
4-Terphenyl-d14		0.5	NA	NA		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

NA = Not Applicable, surrogate diluted out

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW10
Client Project ID: Site G480
Lab Sample ID: G128-1984-7H
Lab Project ID: G128-1984
Sample Wt/Vol: 500 ML
Dilution: 20

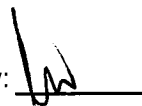
Analyzed By: EAW
Date Collected: 7/16/2007 12:45
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Date Analyzed: 7/24/2007
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Undecane	7.50	001120-21-4	94	9310
2	Decane	6.36	000124-18-5	95	7270
3	Pentadecane	11.29	000629-62-9	95	4110
4	Tetradecane	10.43	000629-59-4	97	4080
5	Unknown	11.40			2300
6	Tridecane	9.52	000629-50-5	96	2220
7	Dodecane	8.55	000112-40-3	94	2220
8	Unknown	6.81			1990
9	Benzene, 1,2,3-trimethyl-	6.65	000526-73-8	90	1750
10	Heptadecane	12.85	000629-78-7	95	1680

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW11
Client Project ID: Site G480
Lab Sample ID: G128-1984-8H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 11:20
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	50.0	6.10	5	7/20/2007	
Acenaphthylene	BQL	50.0	5.60	5	7/20/2007	
Anthracene	BQL	50.0	8.75	5	7/20/2007	
Benzo[a]anthracene	BQL	50.0	6.80	5	7/20/2007	
Benzo[a]pyrene	BQL	50.0	6.35	5	7/20/2007	
Benzo[b]fluoranthene	BQL	50.0	7.15	5	7/20/2007	
Benzo[g,h,i]perylene	BQL	50.0	22.9	5	7/20/2007	
Benzo[k]fluoranthene	BQL	50.0	5.45	5	7/20/2007	
Bis(2-chloroethoxy)methane	BQL	50.0	5.55	5	7/20/2007	
Bis(2-chloroethyl)ether	BQL	50.0	5.45	5	7/20/2007	
Bis(2-chloroisopropyl)ether	BQL	50.0	7.85	5	7/20/2007	
Bis(2-ethylhexyl)phthalate	BQL	50.0	6.65	5	7/20/2007	
4-bromophenyl phenyl ether	BQL	50.0	9.95	5	7/20/2007	
Butylbenzylphthalate	BQL	50.0	7.65	5	7/20/2007	
2-Chloronaphthalene	BQL	50.0	6.25	5	7/20/2007	
2-Chlorophenol	BQL	50.0	21.1	5	7/20/2007	
4-Chloro-3-methylphenol	BQL	50.0	16.3	5	7/20/2007	
4-Chlorophenyl phenyl ether	BQL	50.0	7.10	5	7/20/2007	
Chrysene	BQL	50.0	5.55	5	7/20/2007	
Dibenzo[a,h]anthracene	BQL	50.0	24.4	5	7/20/2007	
Di-n-Butylphthalate	BQL	50.0	8.25	5	7/20/2007	
3,3'-Dichlorobenzidine	BQL	100	20.5	5	7/20/2007	
2,4-Dichlorophenol	BQL	50.0	18.7	5	7/20/2007	
Diethylphthalate	BQL	50.0	7.40	5	7/20/2007	
Dimethylphthalate	BQL	50.0	5.20	5	7/20/2007	
2,4-Dimethylphenol	BQL	50.0	46.2	5	7/20/2007	
Di-n-octylphthalate	BQL	50.0	5.80	5	7/20/2007	
4,6-Dinitro-2-methylphenol	BQL	250	18.6	5	7/20/2007	
2,4-Dinitrophenol	BQL	250	21.0	5	7/20/2007	
2,4-Dinitrotoluene	BQL	50.0	7.60	5	7/20/2007	
2,6-Dinitrotoluene	BQL	50.0	7.05	5	7/20/2007	
Diphenylamine *	BQL	50.0	7.65	5	7/20/2007	
Fluoranthene	BQL	50.0	7.05	5	7/20/2007	
Fluorene	8.50	50.0	6.10	5	7/20/2007	J
Hexachlorobenzene	BQL	50.0	6.10	5	7/20/2007	
Hexachlorobutadiene	BQL	50.0	7.90	5	7/20/2007	
Hexachlorocyclopentadiene	BQL	100	100	5	7/20/2007	
Hexachloroethane	BQL	50.0	7.90	5	7/20/2007	
Indeno(1,2,3-c,d)pyrene	BQL	50.0	22.9	5	7/20/2007	
Isophorone	BQL	50.0	6.35	5	7/20/2007	
Naphthalene	328	50.0	5.40	5	7/20/2007	
Nitrobenzene	BQL	50.0	6.60	5	7/20/2007	
2-Nitrophenol	BQL	50.0	17.6	5	7/20/2007	
4-Nitrophenol	BQL	250	15.8	5	7/20/2007	
N-Nitrosodi-n-propylamine	BQL	50.0	9.35	5	7/20/2007	
Pentachlorophenol	BQL	250	14.1	5	7/20/2007	
Phenanthrene	9.50	50.0	6.90	5	7/20/2007	J

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW11
Client Project ID: Site G480
Lab Sample ID: G128-1984-8H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 11:20
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	50.0	16.9	5	7/20/2007	
Pyrene	BQL	50.0	10.4	5	7/20/2007	
1,2,4-Trichlorobenzene	BQL	50.0	6.65	5	7/20/2007	
2,4,6-Trichlorophenol	BQL	50.0	14.6	5	7/20/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		2	1.4	73		
2-Fluorophenol		2	1.5	76		
Nitrobenzene-d5		2	1.4	73		
Phenol-d6		2	1.3	64		
2,4,6-Tribromophenol		2	1.8	90		
4-Terphenyl-d14		2	1.8	90		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW11
Client Project ID: Site G480
Lab Sample ID: G128-1984-8H
Lab Project ID: G128-1984
Sample Wt/Vol: 500 ML
Dilution: 5

Analyzed By: EAW
Date Collected: 7/16/2007 11:20
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Date Analyzed: 7/20/2007
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Aromatic, Unknown	8.79			113
2	Naphthalene, 2,3-dimethyl-	11.43	000581-40-8	98	92.1
3	Naphthalene, 2,6-dimethyl-	11.31	000581-42-0	98	79.2
4	Ethylbenzene	5.31	000100-41-4	91	75.6
5	Benzo[c]thiophene	9.29	000270-82-6	91	68
6	Naphthalene, 1,6-dimethyl-	11.47	000575-43-9	97	66.2
7	Naphthalene, 1,3-dimethyl-	11.61	000575-41-7	97	54
8	Aromatic, Unknown	7.51			51.1
9	Aromatic, Unknown	6.51			32.8
10	Naphthalene, 1-ethyl-	11.20	001127-76-0	95	32.8

Comment:

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Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW12
Client Project ID: Site G480
Lab Sample ID: G128-1984-9H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 11:35
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	7/20/2007	
Acenaphthylene	BQL	10.0	1.12	1	7/20/2007	
Anthracene	BQL	10.0	1.75	1	7/20/2007	
Benzo[a]anthracene	BQL	10.0	1.36	1	7/20/2007	
Benzo[a]pyrene	BQL	10.0	1.27	1	7/20/2007	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	7/20/2007	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	7/20/2007	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	7/20/2007	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	7/20/2007	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	7/20/2007	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	7/20/2007	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	7/20/2007	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	7/20/2007	
Butylbenzylphthalate	BQL	10.0	1.53	1	7/20/2007	
2-Chloronaphthalene	BQL	10.0	1.25	1	7/20/2007	
2-Chlorophenol	BQL	10.0	4.22	1	7/20/2007	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	7/20/2007	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	7/20/2007	
Chrysene	BQL	10.0	1.11	1	7/20/2007	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	7/20/2007	
Di-n-Butylphthalate	BQL	10.0	1.65	1	7/20/2007	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	7/20/2007	
2,4-Dichlorophenol	BQL	10.0	3.75	1	7/20/2007	
Diethylphthalate	BQL	10.0	1.48	1	7/20/2007	
Dimethylphthalate	BQL	10.0	1.04	1	7/20/2007	
2,4-Dimethylphenol	BQL	10.0	9.25	1	7/20/2007	
Di-n-octylphthalate	BQL	10.0	1.16	1	7/20/2007	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	7/20/2007	
2,4-Dinitrophenol	BQL	50.0	4.20	1	7/20/2007	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	7/20/2007	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	7/20/2007	
Diphenylamine *	BQL	10.0	1.53	1	7/20/2007	
Fluoranthene	BQL	10.0	1.41	1	7/20/2007	
Fluorene	BQL	10.0	1.22	1	7/20/2007	
Hexachlorobenzene	BQL	10.0	1.22	1	7/20/2007	
Hexachlorobutadiene	BQL	10.0	1.58	1	7/20/2007	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	7/20/2007	
Hexachloroethane	BQL	10.0	1.58	1	7/20/2007	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	7/20/2007	
Isophorone	BQL	10.0	1.27	1	7/20/2007	
Naphthalene	BQL	10.0	1.08	1	7/20/2007	
Nitrobenzene	BQL	10.0	1.32	1	7/20/2007	
2-Nitrophenol	BQL	10.0	3.52	1	7/20/2007	
4-Nitrophenol	BQL	50.0	3.17	1	7/20/2007	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	7/20/2007	
Pentachlorophenol	BQL	50.0	2.83	1	7/20/2007	
Phenanthrene	BQL	10.0	1.38	1	7/20/2007	

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW12
Client Project ID: Site G480
Lab Sample ID: G128-1984-9H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 11:35
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	10.0	3.38	1	7/20/2007	
Pyrene	BQL	10.0	2.08	1	7/20/2007	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	7/20/2007	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	7/20/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	7.9	79		
2-Fluorophenol		10	7.7	77		
Nitrobenzene-d5		10	8.6	86		
Phenol-d6		10	7.5	75		
2,4,6-Tribromophenol		10	10.4	104		
4-Terphenyl-d14		10	9.7	97		

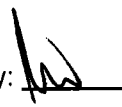
Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW12
Client Project ID: Site G480
Lab Sample ID: G128-1984-9H
Lab Project ID: G128-1984
Sample Wt/Vol: 500 ML
Dilution: 1

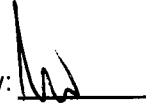
Analyzed By: EAW
Date Collected: 7/16/2007 11:35
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Date Analyzed: 7/20/2007
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Unknown	5.09			8.86
2	Unknown	12.51			7.91
3	Aromatic, Unknown	7.51			5.87
4					
5					
6					
7					
8					
9					
10					

Comment:

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Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW13
Client Project ID: Site G480
Lab Sample ID: G128-1984-10H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 13:40
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	35.0	100	12.2	10	7/21/2007	J
Acenaphthylene	BQL	100	11.2	10	7/21/2007	
Anthracene	19.0	100	17.5	10	7/21/2007	J
Benzo[a]anthracene	BQL	100	13.6	10	7/21/2007	
Benzo[a]pyrene	BQL	100	12.7	10	7/21/2007	
Benzo[b]fluoranthene	BQL	100	14.3	10	7/21/2007	
Benzo[g,h,i]perylene	BQL	100	45.7	10	7/21/2007	
Benzo[k]fluoranthene	BQL	100	10.9	10	7/21/2007	
Bis(2-chloroethoxy)methane	BQL	100	11.1	10	7/21/2007	
Bis(2-chloroethyl)ether	BQL	100	10.9	10	7/21/2007	
Bis(2-chloroisopropyl)ether	BQL	100	15.7	10	7/21/2007	
Bis(2-ethylhexyl)phthalate	BQL	100	13.3	10	7/21/2007	
4-bromophenyl phenyl ether	BQL	100	19.9	10	7/21/2007	
Butylbenzylphthalate	BQL	100	15.3	10	7/21/2007	
2-Chloronaphthalene	BQL	100	12.5	10	7/21/2007	
2-Chlorophenol	BQL	100	42.2	10	7/21/2007	
4-Chloro-3-methylphenol	BQL	100	32.6	10	7/21/2007	
4-Chlorophenyl phenyl ether	BQL	100	14.2	10	7/21/2007	
Chrysene	BQL	100	11.1	10	7/21/2007	
Dibenzo[a,h]anthracene	BQL	100	48.7	10	7/21/2007	
Di-n-Butylphthalate	BQL	100	16.5	10	7/21/2007	
3,3'-Dichlorobenzidine	BQL	200	41.0	10	7/21/2007	
2,4-Dichlorophenol	BQL	100	37.5	10	7/21/2007	
Diethylphthalate	BQL	100	14.8	10	7/21/2007	
Dimethylphthalate	BQL	100	10.4	10	7/21/2007	
2,4-Dimethylphenol	BQL	100	92.5	10	7/21/2007	
Di-n-octylphthalate	BQL	100	11.6	10	7/21/2007	
4,6-Dinitro-2-methylphenol	BQL	500	37.1	10	7/21/2007	
2,4-Dinitrophenol	BQL	500	42.0	10	7/21/2007	
2,4-Dinitrotoluene	BQL	100	15.2	10	7/21/2007	
2,6-Dinitrotoluene	BQL	100	14.1	10	7/21/2007	
Diphenylamine *	BQL	100	15.3	10	7/21/2007	
Fluoranthene	BQL	100	14.1	10	7/21/2007	
Fluorene	67.0	100	12.2	10	7/21/2007	J
Hexachlorobenzene	BQL	100	12.2	10	7/21/2007	
Hexachlorobutadiene	BQL	100	15.8	10	7/21/2007	
Hexachlorocyclopentadiene	BQL	200	200	10	7/21/2007	
Hexachloroethane	BQL	100	15.8	10	7/21/2007	
Indeno(1,2,3-c,d)pyrene	BQL	100	45.7	10	7/21/2007	
Isophorone	BQL	100	12.7	10	7/21/2007	
Naphthalene	693	100	10.8	10	7/21/2007	
Nitrobenzene	BQL	100	13.2	10	7/21/2007	
2-Nitrophenol	BQL	100	35.2	10	7/21/2007	
4-Nitrophenol	BQL	500	31.7	10	7/21/2007	
N-Nitrosodi-n-propylamine	BQL	100	18.7	10	7/21/2007	
Pentachlorophenol	BQL	500	28.3	10	7/21/2007	
Phenanthrene	156	100	13.8	10	7/21/2007	

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW13
Client Project ID: Site G480
Lab Sample ID: G128-1984-10H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 13:40
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	100	33.8	10	7/21/2007	
Pyrene	BQL	100	20.8	10	7/21/2007	
1,2,4-Trichlorobenzene	BQL	100	13.3	10	7/21/2007	
2,4,6-Trichlorophenol	BQL	100	29.2	10	7/21/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		1	NA	NA		
2-Fluorophenol		1	NA	NA		
Nitrobenzene-d5		1	NA	NA		
Phenol-d6		1	NA	NA		
2,4,6-Tribromophenol		1	NA	NA		
4-Terphenyl-d14		1	NA	NA		

Comments:

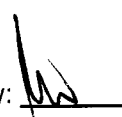
* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

NA = Not Applicable, Surrogate diluted out.

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW13
Client Project ID: Site G480
Lab Sample ID: G128-1984-10H
Lab Project ID: G128-1984
Sample Wt/Vol: 500 ML
Dilution: 10

Analyzed By: EAW
Date Collected: 7/16/2007 13:40
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Date Analyzed: 7/20/2007
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	1,2,4-Trimethylbenzene	7.01	000095-36-3	96	1120
2	Alkane, Unknown	9.92			688
3	Benzene, 1,3-diethyl-	7.73	000141-93-5	93	470
4	Benzene, 1,2,3-trimethyl-	7.35	000526-73-8	94	459
5	Naphthalene, 2,6-dimethyl-	11.32	000581-42-0	98	451
6	Undecane, 2,6-dimethyl-	9.34	017301-23-4	97	374
7	Ethylbenzene	5.31	000100-41-4	94	366
8	Alkane, Unknown	7.84			326
9	Unknown	8.79			319
10	Aromatic, Unknown	8.45			288

Comment:

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Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW14
Client Project ID: Site G480
Lab Sample ID: G128-1984-11H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 12:10
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	7/20/2007	
Acenaphthylene	BQL	10.0	1.12	1	7/20/2007	
Anthracene	BQL	10.0	1.75	1	7/20/2007	
Benzo[a]anthracene	BQL	10.0	1.36	1	7/20/2007	
Benzo[a]pyrene	BQL	10.0	1.27	1	7/20/2007	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	7/20/2007	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	7/20/2007	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	7/20/2007	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	7/20/2007	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	7/20/2007	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	7/20/2007	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	7/20/2007	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	7/20/2007	
Butylbenzylphthalate	BQL	10.0	1.53	1	7/20/2007	
2-Chloronaphthalene	BQL	10.0	1.25	1	7/20/2007	
2-Chlorophenol	BQL	10.0	4.22	1	7/20/2007	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	7/20/2007	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	7/20/2007	
Chrysene	BQL	10.0	1.11	1	7/20/2007	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	7/20/2007	
Di-n-Butylphthalate	BQL	10.0	1.65	1	7/20/2007	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	7/20/2007	
2,4-Dichlorophenol	BQL	10.0	3.75	1	7/20/2007	
Diethylphthalate	BQL	10.0	1.48	1	7/20/2007	
Dimethylphthalate	BQL	10.0	1.04	1	7/20/2007	
2,4-Dimethylphenol	BQL	10.0	9.25	1	7/20/2007	
Di-n-octylphthalate	BQL	10.0	1.16	1	7/20/2007	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	7/20/2007	
2,4-Dinitrophenol	BQL	50.0	4.20	1	7/20/2007	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	7/20/2007	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	7/20/2007	
Diphenylamine *	BQL	10.0	1.53	1	7/20/2007	
Fluoranthene	BQL	10.0	1.41	1	7/20/2007	
Fluorene	BQL	10.0	1.22	1	7/20/2007	
Hexachlorobenzene	BQL	10.0	1.22	1	7/20/2007	
Hexachlorobutadiene	BQL	10.0	1.58	1	7/20/2007	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	7/20/2007	
Hexachloroethane	BQL	10.0	1.58	1	7/20/2007	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	7/20/2007	
Isophorone	BQL	10.0	1.27	1	7/20/2007	
Naphthalene	BQL	10.0	1.08	1	7/20/2007	
Nitrobenzene	BQL	10.0	1.32	1	7/20/2007	
2-Nitrophenol	BQL	10.0	3.52	1	7/20/2007	
4-Nitrophenol	BQL	50.0	3.17	1	7/20/2007	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	7/20/2007	
Pentachlorophenol	BQL	50.0	2.83	1	7/20/2007	
Phenanthrene	BQL	10.0	1.38	1	7/20/2007	

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW14
Client Project ID: Site G480
Lab Sample ID: G128-1984-11H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 12:10
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	10.0	3.38	1	7/20/2007	
Pyrene	BQL	10.0	2.08	1	7/20/2007	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	7/20/2007	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	7/20/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	7.8	78		
2-Fluorophenol		10	7.3	73		
Nitrobenzene-d5		10	7.9	79		
Phenol-d6		10	7	70		
2,4,6-Tribromophenol		10	9.2	92		
4-Terphenyl-d14		10	7.3	73		

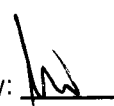
Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW14
Client Project ID: Site G480
Lab Sample ID: G128-1984-11H
Lab Project ID: G128-1984
Sample Wt/Vol: 500 ML
Dilution: 1

Analyzed By: EAW
Date Collected: 7/16/2007 12:10
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Date Analyzed: 7/20/2007
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Methenamine	9.71	000100-97-0	91	54.6
2	Amine, Unknown	9.67			10.3
3	Unknown	12.52			8.14
4	Unknown	5.09			7.02
5	Ketone, Unknown	9.84			6.56
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW15
Client Project ID: Site G480
Lab Sample ID: G128-1984-12H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 15:45
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	7/20/2007	
Acenaphthylene	BQL	10.0	1.12	1	7/20/2007	
Anthracene	BQL	10.0	1.75	1	7/20/2007	
Benzo[a]anthracene	BQL	10.0	1.36	1	7/20/2007	
Benzo[a]pyrene	BQL	10.0	1.27	1	7/20/2007	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	7/20/2007	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	7/20/2007	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	7/20/2007	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	7/20/2007	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	7/20/2007	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	7/20/2007	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	7/20/2007	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	7/20/2007	
Butylbenzylphthalate	BQL	10.0	1.53	1	7/20/2007	
2-Chloronaphthalene	BQL	10.0	1.25	1	7/20/2007	
2-Chlorophenol	BQL	10.0	4.22	1	7/20/2007	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	7/20/2007	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	7/20/2007	
Chrysene	BQL	10.0	1.11	1	7/20/2007	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	7/20/2007	
Di-n-Butylphthalate	BQL	10.0	1.65	1	7/20/2007	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	7/20/2007	
2,4-Dichlorophenol	BQL	10.0	3.75	1	7/20/2007	
Diethylphthalate	BQL	10.0	1.48	1	7/20/2007	
Dimethylphthalate	BQL	10.0	1.04	1	7/20/2007	
2,4-Dimethylphenol	BQL	10.0	9.25	1	7/20/2007	
Di-n-octylphthalate	BQL	10.0	1.16	1	7/20/2007	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	7/20/2007	
2,4-Dinitrophenol	BQL	50.0	4.20	1	7/20/2007	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	7/20/2007	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	7/20/2007	
Diphenylamine *	BQL	10.0	1.53	1	7/20/2007	
Fluoranthene	BQL	10.0	1.41	1	7/20/2007	
Fluorene	BQL	10.0	1.22	1	7/20/2007	
Hexachlorobenzene	BQL	10.0	1.22	1	7/20/2007	
Hexachlorobutadiene	BQL	10.0	1.58	1	7/20/2007	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	7/20/2007	
Hexachloroethane	BQL	10.0	1.58	1	7/20/2007	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	7/20/2007	
Isophorone	BQL	10.0	1.27	1	7/20/2007	
Naphthalene	BQL	10.0	1.08	1	7/20/2007	
Nitrobenzene	BQL	10.0	1.32	1	7/20/2007	
2-Nitrophenol	BQL	10.0	3.52	1	7/20/2007	
4-Nitrophenol	BQL	50.0	3.17	1	7/20/2007	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	7/20/2007	
Pentachlorophenol	BQL	50.0	2.83	1	7/20/2007	
Phenanthrene	BQL	10.0	1.38	1	7/20/2007	

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW15
Client Project ID: Site G480
Lab Sample ID: G128-1984-12H
Lab Project ID: G128-1984

Analyzed By: EAW
Date Collected: 7/16/2007 15:45
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	10.0	3.38	1	7/20/2007	
Pyrene	BQL	10.0	2.08	1	7/20/2007	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	7/20/2007	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	7/20/2007	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	7.5	75		
2-Fluorophenol		10	7.1	71		
Nitrobenzene-d5		10	7.8	78		
Phenol-d6		10	6.9	69		
2,4,6-Tribromophenol		10	8.7	87		
4-Terphenyl-d14		10	11.7	117		

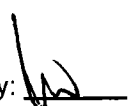
Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW15
Client Project ID: Site G480
Lab Sample ID: G128-1984-12H
Lab Project ID: G128-1984
Sample Wt/Vol: 500 ML
Dilution: 1

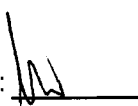
Analyzed By: EAW
Date Collected: 7/16/2007 15:45
Date Received: 7/17/2007
Date Extracted: 7/18/2007
Date Analyzed: 7/20/2007
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Unknown	6.42			13
2	Unknown	5.09			8.26
3	Unknown	12.52			7.56
4					
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

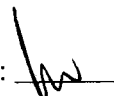
Sample Information and Analytical Results	
Sample Identification	USTTC341-MW14
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/18/07 19:04 - 07/18/07 19:04
Date Analyzed	07/18/07 19:04 - 07/18/07 19:04
Dry Weight	NA
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	418 µg/L
C ₉ -C ₁₂ Aliphatics**	1820 µg/L
C ₉ -C ₁₀ Aromatics**	3150 µg/L
Surrogate % Recovery - PID	199 ***
Surrogate % Recovery - FID	187 ***

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

*** = High surrogate recovery due to matrix interference.

Lab Info: g128-1984-1e	Lab Info: g128-1984-1e
FID Info: VP071807/024F0101.D	PID Info: VP071807/024R0101.D

Reviewed By: 

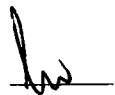
**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTTC341-MW15
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/18/07 19:31 - 07/18/07 19:31
Date Analyzed	07/18/07 19:31 - 07/18/07 19:31
Dry Weight	NA
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 µg/L
C ₉ -C ₁₂ Aliphatics**	< 10.0 µg/L
C ₉ -C ₁₀ Aromatics**	< 10.0 µg/L
Surrogate % Recovery - PID	109
Surrogate % Recovery - FID	104

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-1984-2e	Lab Info: g128-1984-2e
FID Info: VP071807/025F0101.D	PID Info: VP071807/025R0101.D

Reviewed By: 

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW01
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/18/07 19:59 - 07/18/07 19:59
Date Analyzed	07/18/07 19:59 - 07/18/07 19:59
Dry Weight	NA
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	170 µg/L
C ₉ -C ₁₂ Aliphatics**	1300 µg/L
C ₉ -C ₁₀ Aromatics**	1100 µg/L
Surrogate % Recovery - PID	129
Surrogate % Recovery - FID	124

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-1984-3e	Lab Info: g128-1984-3e
FID Info: VP071807/026F0101.D	PID Info: VP071807/026R0101.D

Reviewed By: 

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW04
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/18/07 20:27 - 07/18/07 20:27
Date Analyzed	07/18/07 20:27 - 07/18/07 20:27
Dry Weight	NA
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	398 µg/L
C ₉ -C ₁₂ Aliphatics**	2320 µg/L
C ₉ -C ₁₀ Aromatics**	2820 µg/L
Surrogate % Recovery - PID	224 ***
Surrogate % Recovery - FID	209 ***

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

*** = High surrogate recovery due to matrix interference.

Lab Info: g128-1984-5e	Lab Info: g128-1984-5e
FID Info: VP071807/027F0101.D	PID Info: VP071807/027R0101.D

Reviewed By: AW

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW05
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/18/07 20:55 - 07/18/07 20:55
Date Analyzed	07/18/07 20:55 - 07/18/07 20:55
Dry Weight	NA
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	466 µg/L
C ₉ -C ₁₂ Aliphatics**	1950 µg/L
C ₉ -C ₁₀ Aromatics**	2520 µg/L
Surrogate % Recovery - PID	197 ***
Surrogate % Recovery - FID	180 ***

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

*** = High surrogate recovery due to matrix interference.

Lab Info: g128-1984-6e	Lab Info: g128-1984-6e
FID Info: VP071807/028F0101.D	PID Info: VP071807/028R0101.D

Reviewed By:

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW10
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07 14:28 - 07/19/07 14:28
Date Analyzed	07/19/07 14:28 - 07/19/07 14:28
Dry Weight	NA
Dilution Factor	2 - 2
C ₅ -C ₈ Aliphatics**	360 µg/L
C ₉ -C ₁₂ Aliphatics**	1340 µg/L
C ₉ -C ₁₀ Aromatics**	989 µg/L
Surrogate % Recovery - PID	142 ***
Surrogate % Recovery - FID	137 ***

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

*** = High surrogate recovery due to matrix interference.

Lab Info: g128-1984-7d	Lab Info: g128-1984-7d
FID Info: VP071907/014F0101.D	PID Info: VP071907/014R0101.D

Reviewed By: 

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW11
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07 16:20 - 07/19/07 16:20
Date Analyzed	07/19/07 16:20 - 07/19/07 16:20
Dry Weight	NA
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 µg/L
C ₉ -C ₁₂ Aliphatics**	477 µg/L
C ₉ -C ₁₀ Aromatics**	285 µg/L
Surrogate % Recovery - PID	117
Surrogate % Recovery - FID	120

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** =

Lab Info: g128-1984-8g	Lab Info: g128-1984-8g
FID Info: VP071907/018F0101.D	PID Info: VP071907/018R0101.D

Reviewed By: 

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW12
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07 14:00 - 07/19/07 14:00
Date Analyzed	07/19/07 14:00 - 07/19/07 14:00
Dry Weight	NA
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 µg/L
C ₉ -C ₁₂ Aliphatics**	< 10.0 µg/L
C ₉ -C ₁₀ Aromatics**	< 10.0 µg/L
Surrogate % Recovery - PID	107
Surrogate % Recovery - FID	103

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-1984-9d	Lab Info: g128-1984-9d
FID Info: VP071907/013F0101.D	PID Info: VP071907/013R0101.D

Reviewed By: 

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW13
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/18/07 22:45 - 07/18/07 22:45
Date Analyzed	07/18/07 22:45 - 07/18/07 22:45
Dry Weight	NA
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	727 µg/L
C ₉ -C ₁₂ Aliphatics**	2210 µg/L
C ₉ -C ₁₀ Aromatics**	4290 µg/L
Surrogate % Recovery - PID	241 ***
Surrogate % Recovery - FID	215 ***

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

*** = High surrogate recovery due to matrix interference.

Lab Info: g128-1984-10e	Lab Info: g128-1984-10e
FID Info: VP071807/032F0101.D	PID Info: VP071807/032R0101.D

Reviewed By: 

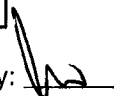
**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW14
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07 16:48 - 07/19/07 16:48
Date Analyzed	07/19/07 16:48 - 07/19/07 16:48
Dry Weight	NA
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	138 µg/L
C ₉ -C ₁₂ Aliphatics**	< 10.0 µg/L
C ₉ -C ₁₀ Aromatics**	< 10.0 µg/L
Surrogate % Recovery - PID	107
Surrogate % Recovery - FID	101

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-1984-11g	Lab Info: g128-1984-11g
FID Info: VP071907/019F0101.D	PID Info: VP071907/019R0101.D

Reviewed By: 

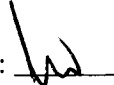
**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW15
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07 13:32 - 07/19/07 13:32
Date Analyzed	07/19/07 13:32 - 07/19/07 13:32
Dry Weight	NA
Dilution Factor	1 - 1
C ₅ -C ₈ Aliphatics**	< 10.0 µg/L
C ₉ -C ₁₂ Aliphatics**	< 10.0 µg/L
C ₉ -C ₁₀ Aromatics**	< 10.0 µg/L
Surrogate % Recovery - PID	107
Surrogate % Recovery - FID	100

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-1984-12d	Lab Info: g128-1984-12d
FID Info: VP071907/012F0101.D	PID Info: VP071907/012R0101.D

Reviewed By: 

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 07/16/07

PID Initial Calibration Date: 07/16/07

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	33.1	0.265	105	0.842	100	10
C ₉ -C ₁₂ Aliphatics	30.9	0.247	98.3	0.786	100	10
C ₉ -C ₁₀ Aromatics	27.7	0.222	88.1	0.705	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	3.23	Calibration Factor
	250	20		
	500	40		
	750	60		
	1000	80		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	250	20		
	500	40		
	750	60		
	1000	80		
C ₉ -C ₁₀ Aromatics	10	0.8	22.81	Calibration Factor
	250	20		
	500	40		
	750	60		
	1000	80		

Calibration Check Date: 07/19/07

Filename: VP071907/002F0101.d

Calibration Check

Range	Levels		%Difference if CF %Drift if LR	Limits
	(µg/L)	(mg/Kg)		
C ₅ -C ₈ Aliphatics	500	4	-1.6	±25%
C ₉ -C ₁₂ Aliphatics	500	4	-0.1	±25%
C ₉ -C ₁₀ Aromatics	500	4	5.2	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

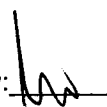
Sample Information and Analytical Results	
Sample Identification	USTTC341-MW14
Sample Matrix	Water
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07
Date Analyzed	07/24/07
Dry Weight	
Dilution Factor	50:1
C ₉ -C ₁₈ Aliphatics*	140000 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	6800 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	4000 (ug/L)
Aliphatic Surrogate % Recovery	NA
Aromatic Surrogate % Recovery	81
Fractionation Surrogate 1 % Recovery	86

Comments:

* = Excludes any surrogates or internal standards.

NA = Non-applicable, surrogate diluted out.

Lab info: G128-1984-11

Reviewed By: 

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTTC341-MW15
Sample Matrix	Water
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07
Date Analyzed	07/20/07
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	75
Aromatic Surrogate % Recovery	86

Comments:

* = Excludes any surrogates or internal standards.
Sample did not require fractionation.

Lab info: G128-1984-2I

Reviewed By: 

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

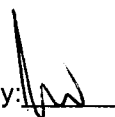
Sample Information and Analytical Results	
Sample Identification	USTG480-MW01
Sample Matrix	Water
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07
Date Analyzed	07/24/07
Dry Weight	
Dilution Factor	1:10
C ₉ -C ₁₈ Aliphatics*	4300 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	200 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	78000 (ug/L)
Aliphatic Surrogate % Recovery	46
Aromatic Surrogate % Recovery	NA
Fractionation Surrogate 1 % Recovery	NA

Comments:

* = Excludes any surrogates or internal standards.

NA = Non-applicable, surrogate diluted out.

Lab info: G128-1984-3I

Reviewed By: 

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

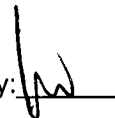
Sample Information and Analytical Results	
Sample Identification	USTG480-MW04
Sample Matrix	Water
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07
Date Analyzed	07/24/07
Dry Weight	
Dilution Factor	50:10
C ₉ -C ₁₈ Aliphatics*	140000 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	9200 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	83000 (ug/L)
Aliphatic Surrogate % Recovery	NA
Aromatic Surrogate % Recovery	NA
Fractionation Surrogate 1 % Recovery	NA

Comments:

* = Excludes any surrogates or internal standards.

NA = Non-applicable, surrogate diluted out.

Lab info: G128-1984-5I

Reviewed By: 

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW05
Sample Matrix	Water
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07
Date Analyzed	07/23/07
Dry Weight	
Dilution Factor	20:5
C ₉ -C ₁₈ Aliphatics*	49000 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	3400 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	31000 (ug/L)
Aliphatic Surrogate % Recovery	NA
Aromatic Surrogate % Recovery	N/A
Fractionation Surrogate 1 % Recovery	N/A

Comments:

* = Excludes any surrogates or internal standards.

NA = Non-applicable, surrogate diluted out.

Lab info: G128-1984-6I

Reviewed By: 

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW10
Sample Matrix	Water
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07
Date Analyzed	07/23/07
Dry Weight	
Dilution Factor	20:5
C ₉ -C ₁₈ Aliphatics*	97000 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	13000 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	51000 (ug/L)
Aliphatic Surrogate % Recovery	NA
Aromatic Surrogate % Recovery	N/A
Fractionation Surrogate 1 % Recovery	N/A

Comments:

* = Excludes any surrogates or internal standards.

NA = Non-applicable, surrogate diluted out.

Lab info: G128-1984-7I

Reviewed By: 

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW11
Sample Matrix	Water
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07
Date Analyzed	07/24/07
Dry Weight	
Dilution Factor	1:1
C ₉ -C ₁₈ Aliphatics*	210 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	1400 (ug/L)
Aliphatic Surrogate % Recovery	43
Aromatic Surrogate % Recovery	66
Fractionation Surrogate 1 % Recovery	82

Comments:

* = Excludes any surrogates or internal standards.

Lab info: G128-1984-8I

Reviewed By: 

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

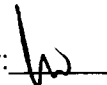
Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW12
Sample Matrix	Water
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07
Date Analyzed	07/23/07
Dry Weight	
Dilution Factor	1:1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	56
Aromatic Surrogate % Recovery	71
Fractionation Surrogate 1 % Recovery	77

Comments:

* = Excludes any surrogates or internal standards.

Lab info: G128-1984-9I

Reviewed By: 

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW13
Sample Matrix	Water
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07
Date Analyzed	07/23/07
Dry Weight	
Dilution Factor	20:5
C ₉ -C ₁₈ Aliphatics*	38000 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 2000 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	25000 (ug/L)
Aliphatic Surrogate % Recovery	NA
Aromatic Surrogate % Recovery	N/A
Fractionation Surrogate 1 % Recovery	N/A

Comments:

* = Excludes any surrogates or internal standards.

NA = Non-applicable, surrogate diluted out.

Lab info: G128-1984-101

Reviewed By: hs

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW14
Sample Matrix	Water
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07
Date Analyzed	07/24/07
Dry Weight	
Dilution Factor	1:1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	45
Aromatic Surrogate % Recovery	56
Fractionation Surrogate 1 % Recovery	80

Comments:

* = Excludes any surrogates or internal standards.

Lab info: G128-1984-11J

Reviewed By: 

**EPH (Aliphatics/Aromatics) Results**

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: Site G480

Sample Information and Analytical Results	
Sample Identification	USTG480-MW15
Sample Matrix	Water
Date Collected	07/16/07
Date Received	07/17/07
Date Extracted	07/19/07
Date Analyzed	07/20/07
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	100
Aromatic Surrogate % Recovery	92

Comments:

* = Excludes any surrogates or internal standards.
Sample did not require fractionation.

Lab info: G128-1984-12K

Reviewed By: 



EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 05/09/07

Calibration Ranges and Limits

Range	MDL (10/2006) (µg/L)	ML (µg/L)	RL (µg/L) (mg/Kg)
C ₉ -C ₁₈ Aliphatics	28.10	89.4	100 10
C ₁₉ -C ₃₆ Aliphatics	36.50	116	100 10
C ₁₁ -C ₂₂ Aromatics	27.60	87.8	100 10

Calibration Concentration Levels

Range	Levels (µg/mL)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	13.70	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	14.2	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	5.9	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 07/20/07

Calibration Check

Range	Levels (µg/mL)	RPD
C ₉ -C ₁₈ Aliphatics	120	14.6
C ₁₉ -C ₃₆ Aliphatics	160	11.5
C ₁₁ -C ₂₂ Aromatics	340	-8.7

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve



EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 05/09/07

Calibration Ranges and Limits

Range	MDL (10/2006) (µg/L)	ML (µg/L)	RL (µg/L) (mg/Kg)
C ₉ -C ₁₈ Aliphatics	28.10	89.4	100 10
C ₁₉ -C ₃₆ Aliphatics	36.50	116	100 10
C ₁₁ -C ₂₂ Aromatics	27.60	87.8	100 10

Calibration Concentration Levels

Range	Levels (µg/mL)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	13.70	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	14.2	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	5.9	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 07/23/07

Calibration Check

Range	Levels (µg/mL)	RPD
C ₉ -C ₁₈ Aliphatics	120	13.0
C ₁₉ -C ₃₆ Aliphatics	160	10.2
C ₁₁ -C ₂₂ Aromatics	340	-11.5

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve



EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 05/09/07

Calibration Ranges and Limits

Range	MDL (10/2006) (µg/L)	ML (µg/L)	RL (µg/L) (mg/Kg)
C ₉ -C ₁₈ Aliphatics	28.10	89.4	100 10
C ₁₉ -C ₃₆ Aliphatics	36.50	116	100 10
C ₁₁ -C ₂₂ Aromatics	27.60	87.8	100 10

Calibration Concentration Levels

Range	Levels (µg/mL)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	13.70	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	14.2	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	5.9	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 07/24/07

Calibration Check

Range	Levels (µg/mL)	RPD
C ₉ -C ₁₈ Aliphatics	120	2.8
C ₁₉ -C ₃₆ Aliphatics	160	1.8
C ₁₁ -C ₂₂ Aromatics	340	-14.8

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve



Steve Hudson
Richard Catlin & Associates
P.O. Box 10279
Wilmington, NC 28404-0279

Report Number: G128-2187

Client Project: G480

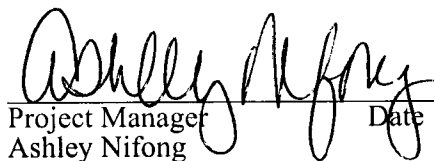
Dear Steve Hudson,

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call SGS Environmental Services at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS Environmental Services for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
SGS Environmental Services, Inc.

 5/19/08
Project Manager Date
Ashley Nifong



List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

**Results for Volatiles**

by GC 602

Client Sample ID: USTG480-MW16

Analyzed By: RSB

Client Project ID: G480

Date Collected: 5/8/2008 13:30

Lab Sample ID: G128-2187-1A

Date Received: 5/9/2008

Lab Project ID: G128-2187

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	5/13/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	5/13/2008	
Ethylbenzene	BQL	1.00	0.181	1	5/13/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	5/13/2008	
Toluene	0.212	1.00	0.157	1	5/13/2008	J
m/p-Xylene	BQL	2.00	0.481	1	5/13/2008	
o-Xylene	BQL	2.00	0.584	1	5/13/2008	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.3	103

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: USTG480-MW17

Analyzed By: RSB

Client Project ID: G480

Date Collected: 5/8/2008 13:00

Lab Sample ID: G128-2187-2A

Date Received: 5/9/2008

Lab Project ID: G128-2187

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	61.5	8.00	1.46	8	5/13/2008	
Diisopropyl ether (DIPE)	BQL	8.00	1.83	8	5/13/2008	
Ethylbenzene	179	8.00	1.45	8	5/13/2008	
Methyl-tert butyl ether (MTBE)	BQL	16.0	2.87	8	5/13/2008	
Toluene	9.84	8.00	1.26	8	5/13/2008	
m/p-Xylene	242	16.0	3.85	8	5/13/2008	
o-Xylene	18.6	16.0	4.67	8	5/13/2008	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.4	104

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: USTG480-MW18

Analyzed By: RSB

Client Project ID: G480

Date Collected: 5/8/2008 11:45

Lab Sample ID: G128-2187-3A

Date Received: 5/9/2008

Lab Project ID: G128-2187

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	5/13/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	5/13/2008	
Ethylbenzene	2.21	1.00	0.181	1	5/13/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	5/13/2008	
Toluene	0.850	1.00	0.157	1	5/13/2008	J
m/p-Xylene	0.933	2.00	0.481	1	5/13/2008	J
o-Xylene	BQL	2.00	0.584	1	5/13/2008	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.3	103

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW16
Client Project ID: G480
Lab Sample ID: G128-2187-1I
Lab Project ID: G128-2187

Analyzed By: DES
Date Collected: 5/8/2008 13:30
Date Received: 5/9/2008
Date Extracted: 5/14/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.26	0.641	1	5/16/2008	
Acenaphthylene	BQL	5.26	0.589	1	5/16/2008	
Anthracene	BQL	5.26	0.920	1	5/16/2008	
Benzo[a]anthracene	BQL	5.26	0.715	1	5/16/2008	
Benzo[a]pyrene	BQL	5.26	0.668	1	5/16/2008	
Benzo[b]fluoranthene	BQL	5.26	0.752	1	5/16/2008	
Benzo[g,h,i]perylene	BQL	5.26	2.40	1	5/16/2008	
Benzo[k]fluoranthene	BQL	5.26	0.573	1	5/16/2008	
Bis(2-chloroethoxy)methane	BQL	5.26	0.584	1	5/16/2008	
Bis(2-chloroethyl)ether	BQL	5.26	0.573	1	5/16/2008	
Bis(2-chloroisopropyl)ether	BQL	5.26	0.825	1	5/16/2008	
Bis(2-ethylhexyl)phthalate	BQL	5.26	0.699	1	5/16/2008	
4-bromophenyl phenyl ether	BQL	5.26	1.05	1	5/16/2008	
Butylbenzylphthalate	BQL	5.26	0.804	1	5/16/2008	
2-Chloronaphthalene	BQL	5.26	0.657	1	5/16/2008	
2-Chlorophenol	BQL	5.26	2.22	1	5/16/2008	
4-Chloro-3-methylphenol	BQL	5.26	1.71	1	5/16/2008	
4-Chlorophenyl phenyl ether	BQL	5.26	0.747	1	5/16/2008	
Chrysene	BQL	5.26	0.584	1	5/16/2008	
Dibenzo[a,h]anthracene	BQL	5.26	2.56	1	5/16/2008	
Di-n-Butylphthalate	BQL	5.26	0.868	1	5/16/2008	
3,3'-Dichlorobenzidine	BQL	10.5	2.16	1	5/16/2008	
2,4-Dichlorophenol	BQL	5.26	1.97	1	5/16/2008	
Diethylphthalate	BQL	5.26	0.778	1	5/16/2008	
Dimethylphthalate	BQL	5.26	0.547	1	5/16/2008	
2,4-Dimethylphenol	BQL	5.26	4.86	1	5/16/2008	
Di-n-octylphthalate	BQL	5.26	0.610	1	5/16/2008	
4,6-Dinitro-2-methylphenol	BQL	26.3	1.95	1	5/16/2008	
2,4-Dinitrophenol	BQL	26.3	2.21	1	5/16/2008	
2,4-Dinitrotoluene	BQL	5.26	0.799	1	5/16/2008	
2,6-Dinitrotoluene	BQL	5.26	0.741	1	5/16/2008	
Diphenylamine *	BQL	5.26	0.804	1	5/16/2008	
Fluoranthene	BQL	5.26	0.741	1	5/16/2008	
Fluorene	BQL	5.26	0.641	1	5/16/2008	
Hexachlorobenzene	BQL	5.26	0.641	1	5/16/2008	
Hexachlorobutadiene	BQL	5.26	0.831	1	5/16/2008	
Hexachlorocyclopentadiene	BQL	10.5	10.5	1	5/16/2008	
Hexachloroethane	BQL	5.26	0.831	1	5/16/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.26	2.40	1	5/16/2008	
Isophorone	BQL	5.26	0.668	1	5/16/2008	
Naphthalene	BQL	5.26	0.568	1	5/16/2008	
Nitrobenzene	BQL	5.26	0.694	1	5/16/2008	
2-Nitrophenol	BQL	5.26	1.85	1	5/16/2008	
4-Nitrophenol	BQL	26.3	1.67	1	5/16/2008	
N-Nitrosodi-n-propylamine	BQL	5.26	0.983	1	5/16/2008	
Pentachlorophenol	BQL	26.3	1.49	1	5/16/2008	
Phenanthrene	BQL	5.26	0.726	1	5/16/2008	

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW16
Client Project ID: G480
Lab Sample ID: G128-2187-11
Lab Project ID: G128-2187

Analyzed By: DES
Date Collected: 5/8/2008 13:30
Date Received: 5/9/2008
Date Extracted: 5/14/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.26	1.78	1	5/16/2008	
Pyrene	BQL	5.26	1.09	1	5/16/2008	
1,2,4-Trichlorobenzene	BQL	5.26	0.699	1	5/16/2008	
2,4,6-Trichlorophenol	BQL	5.26	1.54	1	5/16/2008	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	9.3	93		
2-Fluorophenol		10	6.9	69		
Nitrobenzene-d5		10	10.4	104		
Phenol-d6		10	9.6	96		
2,4,6-Tribromophenol		10	11.2	112		
4-Terphenyl-d14		10	9.2	92		

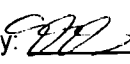
Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW16
Client Project ID: G480
Lab Sample ID: G128-2187-11
Lab Project ID: G128-2187
Sample Wt/Vol: 951 ML
Dilution: 1

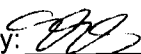
Analyzed By: DES
Date Collected: 5/8/2008 13:30
Date Received: 5/9/2008
Date Extracted: 5/14/2008
Date Analyzed: 5/16/2008
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	No library search compounds detected.				
2					
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW17
Client Project ID: G480
Lab Sample ID: G128-2187-2I
Lab Project ID: G128-2187

Analyzed By: DES
Date Collected: 5/8/2008 13:00
Date Received: 5/9/2008
Date Extracted: 5/14/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	20.8	52.1	6.35	10	5/16/2008	J
Acenaphthylene	BQL	52.1	5.83	10	5/16/2008	
Anthracene	BQL	52.1	9.11	10	5/16/2008	
Benzo[a]anthracene	BQL	52.1	7.08	10	5/16/2008	
Benzo[a]pyrene	BQL	52.1	6.61	10	5/16/2008	
Benzo[b]fluoranthene	BQL	52.1	7.45	10	5/16/2008	
Benzo[g,h,i]perylene	BQL	52.1	23.8	10	5/16/2008	
Benzo[k]fluoranthene	BQL	52.1	5.68	10	5/16/2008	
Bis(2-chloroethoxy)methane	BQL	52.1	5.78	10	5/16/2008	
Bis(2-chloroethyl)ether	BQL	52.1	5.68	10	5/16/2008	
Bis(2-chloroisopropyl)ether	BQL	52.1	8.18	10	5/16/2008	
Bis(2-ethylhexyl)phthalate	BQL	52.1	6.93	10	5/16/2008	
4-bromophenyl phenyl ether	BQL	52.1	10.4	10	5/16/2008	
Butylbenzylphthalate	BQL	52.1	7.97	10	5/16/2008	
2-Chloronaphthalene	BQL	52.1	6.51	10	5/16/2008	
2-Chlorophenol	BQL	52.1	22.0	10	5/16/2008	
4-Chloro-3-methylphenol	BQL	52.1	17.0	10	5/16/2008	
4-Chlorophenyl phenyl ether	BQL	52.1	7.40	10	5/16/2008	
Chrysene	BQL	52.1	5.78	10	5/16/2008	
Dibenzo[a,h]anthracene	BQL	52.1	25.4	10	5/16/2008	
Di-n-Butylphthalate	BQL	52.1	8.59	10	5/16/2008	
3,3'-Dichlorobenzidine	BQL	104	21.4	10	5/16/2008	
2,4-Dichlorophenol	BQL	52.1	19.5	10	5/16/2008	
Diethylphthalate	BQL	52.1	7.71	10	5/16/2008	
Dimethylphthalate	BQL	52.1	5.42	10	5/16/2008	
2,4-Dimethylphenol	BQL	52.1	48.2	10	5/16/2008	
Di-n-octylphthalate	BQL	52.1	6.04	10	5/16/2008	
4,6-Dinitro-2-methylphenol	BQL	260	19.3	10	5/16/2008	
2,4-Dinitrophenol	BQL	260	21.9	10	5/16/2008	
2,4-Dinitrotoluene	BQL	52.1	7.92	10	5/16/2008	
2,6-Dinitrotoluene	BQL	52.1	7.34	10	5/16/2008	
Diphenylamine *	BQL	52.1	7.97	10	5/16/2008	
Fluoranthene	BQL	52.1	7.34	10	5/16/2008	
Fluorene	26.6	52.1	6.35	10	5/16/2008	J
Hexachlorobenzene	BQL	52.1	6.35	10	5/16/2008	
Hexachlorobutadiene	BQL	52.1	8.23	10	5/16/2008	
Hexachlorocyclopentadiene	BQL	104	104	10	5/16/2008	
Hexachloroethane	BQL	52.1	8.23	10	5/16/2008	
Indeno(1,2,3-c,d)pyrene	BQL	52.1	23.8	10	5/16/2008	
Isophorone	BQL	52.1	6.61	10	5/16/2008	
Naphthalene	373	52.1	5.63	10	5/16/2008	
Nitrobenzene	BQL	52.1	6.88	10	5/16/2008	
2-Nitrophenol	BQL	52.1	18.3	10	5/16/2008	
4-Nitrophenol	BQL	260	16.5	10	5/16/2008	
N-Nitrosodi-n-propylamine	BQL	52.1	9.74	10	5/16/2008	
Pentachlorophenol	BQL	260	14.7	10	5/16/2008	
Phenanthrene	46.4	52.1	7.19	10	5/16/2008	J

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW17
Client Project ID: G480
Lab Sample ID: G128-2187-2I
Lab Project ID: G128-2187

Analyzed By: DES
Date Collected: 5/8/2008 13:00
Date Received: 5/9/2008
Date Extracted: 5/14/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	52.1	17.6	10	5/16/2008	
Pyrene	BQL	52.1	10.8	10	5/16/2008	
1,2,4-Trichlorobenzene	BQL	52.1	6.93	10	5/16/2008	
2,4,6-Trichlorophenol	BQL	52.1	15.2	10	5/16/2008	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		1	NA	NA		
2-Fluorophenol		1	NA	NA		
Nitrobenzene-d5		1	NA	NA		
Phenol-d6		1	NA	NA		
2,4,6-Tribromophenol		1	NA	NA		
4-Terphenyl-d14		1	NA	NA		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW17
Client Project ID: G480
Lab Sample ID: G128-2187-2I
Lab Project ID: G128-2187
Sample Wt/Vol: 951 ML
Dilution: 10

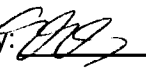
Analyzed By: DES
Date Collected: 5/8/2008 13:00
Date Received: 5/9/2008
Date Extracted: 5/14/2008
Date Analyzed: 5/16/2008
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Heptadecane, 2,6-dimethyl-	8.05	054105-67-8	91	691
2	Naphthalene, 1,7-dimethyl-	6.62	000575-37-1	96	410
3	Alkane, Unknown	5.67			367
4	Naphthalene, 1,3-dimethyl-	6.70	000575-41-7	97	358
5	Tridecane	5.85	000629-50-5	93	333
6	Unknown	4.98			313
7	Hexadecane, 2,6,10,14-tetramethyl-	8.55	000638-36-8	91	301
8	Alkane, Unknown	6.78			292
9	Unknown	7.77			287
10	Unknown	5.53			252

Comment:

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Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW18
Client Project ID: G480
Lab Sample ID: G128-2187-3I
Lab Project ID: G128-2187

Analyzed By: DES
Date Collected: 5/8/2008 11:45
Date Received: 5/9/2008
Date Extracted: 5/14/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	2.39	5.19	0.633	1	5/16/2008	J
Acenaphthylene	BQL	5.19	0.581	1	5/16/2008	
Anthracene	BQL	5.19	0.908	1	5/16/2008	
Benzo[a]anthracene	BQL	5.19	0.705	1	5/16/2008	
Benzo[a]pyrene	BQL	5.19	0.659	1	5/16/2008	
Benzo[b]fluoranthene	BQL	5.19	0.742	1	5/16/2008	
Benzo[g,h,i]perylene	BQL	5.19	2.37	1	5/16/2008	
Benzo[k]fluoranthene	BQL	5.19	0.565	1	5/16/2008	
Bis(2-chloroethoxy)methane	BQL	5.19	0.576	1	5/16/2008	
Bis(2-chloroethyl)ether	BQL	5.19	0.565	1	5/16/2008	
Bis(2-chloroisopropyl)ether	BQL	5.19	0.814	1	5/16/2008	
Bis(2-ethylhexyl)phthalate	2.85	5.19	0.690	1	5/16/2008	J
4-bromophenyl phenyl ether	BQL	5.19	1.03	1	5/16/2008	
Butylbenzylphthalate	BQL	5.19	0.794	1	5/16/2008	
2-Chloronaphthalene	BQL	5.19	0.648	1	5/16/2008	
2-Chlorophenol	BQL	5.19	2.19	1	5/16/2008	
4-Chloro-3-methylphenol	BQL	5.19	1.69	1	5/16/2008	
4-Chlorophenyl phenyl ether	BQL	5.19	0.737	1	5/16/2008	
Chrysene	BQL	5.19	0.576	1	5/16/2008	
Dibenzo[a,h]anthracene	BQL	5.19	2.53	1	5/16/2008	
Di-n-Butylphthalate	BQL	5.19	0.856	1	5/16/2008	
3,3'-Dichlorobenzidine	BQL	10.4	2.13	1	5/16/2008	
2,4-Dichlorophenol	BQL	5.19	1.95	1	5/16/2008	
Diethylphthalate	BQL	5.19	0.768	1	5/16/2008	
Dimethylphthalate	BQL	5.19	0.539	1	5/16/2008	
2,4-Dimethylphenol	BQL	5.19	4.80	1	5/16/2008	
Di-n-octylphthalate	BQL	5.19	0.602	1	5/16/2008	
4,6-Dinitro-2-methylphenol	BQL	25.9	1.92	1	5/16/2008	
2,4-Dinitrophenol	BQL	25.9	2.18	1	5/16/2008	
2,4-Dinitrotoluene	BQL	5.19	0.788	1	5/16/2008	
2,6-Dinitrotoluene	BQL	5.19	0.731	1	5/16/2008	
Diphenylamine *	BQL	5.19	0.794	1	5/16/2008	
Fluoranthene	BQL	5.19	0.731	1	5/16/2008	
Fluorene	2.33	5.19	0.633	1	5/16/2008	J
Hexachlorobenzene	BQL	5.19	0.633	1	5/16/2008	
Hexachlorobutadiene	BQL	5.19	0.820	1	5/16/2008	
Hexachlorocyclopentadiene	BQL	10.4	10.4	1	5/16/2008	
Hexachloroethane	BQL	5.19	0.820	1	5/16/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.19	2.37	1	5/16/2008	
Isophorone	BQL	5.19	0.659	1	5/16/2008	
Naphthalene	9.44	5.19	0.560	1	5/16/2008	
Nitrobenzene	BQL	5.19	0.685	1	5/16/2008	
2-Nitrophenol	BQL	5.19	1.83	1	5/16/2008	
4-Nitrophenol	BQL	25.9	1.64	1	5/16/2008	
N-Nitrosodi-n-propylamine	BQL	5.19	0.970	1	5/16/2008	
Pentachlorophenol	BQL	25.9	1.47	1	5/16/2008	
Phenanthrene	1.71	5.19	0.716	1	5/16/2008	J

**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTG480-MW18
Client Project ID: G480
Lab Sample ID: G128-2187-3I
Lab Project ID: G128-2187

Analyzed By: DES
Date Collected: 5/8/2008 11:45
Date Received: 5/9/2008
Date Extracted: 5/14/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.19	1.75	1	5/16/2008	
Pyrene	BQL	5.19	1.08	1	5/16/2008	
1,2,4-Trichlorobenzene	BQL	5.19	0.690	1	5/16/2008	
2,4,6-Trichlorophenol	BQL	5.19	1.51	1	5/16/2008	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	9.2	92		
2-Fluorophenol		10	6.9	69		
Nitrobenzene-d5		10	10.5	105		
Phenol-d6		10	9.8	98		
2,4,6-Tribromophenol		10	10.8	108		
4-Terphenyl-d14		10	9	90		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: USTG480-MW18
Client Project ID: G480
Lab Sample ID: G128-2187-3I
Lab Project ID: G128-2187
Sample Wt/Vol: 964 ML
Dilution: 1

Analyzed By: DES
Date Collected: 5/8/2008 11:45
Date Received: 5/9/2008
Date Extracted: 5/14/2008
Date Analyzed: 5/16/2008
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Naphthalene, 1,3-dimethyl-	6.70	000575-41-7	97	37.9
2	Unknown	4.98			37.8
3	Naphthalene, 2,6-dimethyl-	6.62	000581-42-0	98	32.2
4	Naphthalene, 2,6-dimethyl-	6.73	000581-42-0	97	28.8
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: G480

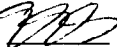
Sample Information	
Sample Identification	USTG480-MW16
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	05/08/08
Date Received	05/09/08
Date Extracted	05/09/08 23:15 - 05/09/08 23:15
Date Analyzed	05/09/08 23:15 - 05/09/08 23:15
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C ₅ -C ₈ Aliphatics**	BQL	100	
C ₉ -C ₁₂ Aliphatics**	BQL	100	
C ₉ -C ₁₀ Aromatics**	BQL	100	
		Percent Recovery	Limits Lower Upper
Surrogate % Recovery - PID		103	70 130
Surrogate % Recovery - FID		105	70 130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-2187-1a	Lab Info: g128-2187-1a
FID Info: VP050908/034F0101.D	PID Info: VP050908/034R0101.D

Reviewed By: 

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: G480

Sample Information	
Sample Identification	USTG480-MW17
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	05/08/08
Date Received	05/09/08
Date Extracted	05/12/08 23:16 - 05/12/08 23:16
Date Analyzed	05/12/08 23:16 - 05/12/08 23:16
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C ₅ -C ₈ Aliphatics**	297	100	
C ₉ -C ₁₂ Aliphatics**	1970	100	
C ₉ -C ₁₀ Aromatics**	1700	100	
	Percent Recovery	Flags	Limits Lower Upper
	Surrogate % Recovery - PID	122	70 130
	Surrogate % Recovery - FID	146	*** 70 130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

*** = High surrogate recovery due to matrix interference.

Lab Info: g128-2187-2b	Lab Info: g128-2187-2b
FID Info: VP051208/034F0101.D	PID Info: VP051208/034R0101.D

Reviewed By:

**VPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: G480

Sample Information	
Sample Identification	USTG480-MW18
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	05/08/08
Date Received	05/09/08
Date Extracted	05/12/08 22:49 - 05/12/08 22:49
Date Analyzed	05/12/08 22:49 - 05/12/08 22:49
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result µg/L	Report Limit µg/L	Flags	
C ₅ -C ₈ Aliphatics**	BQL	100		
C ₉ -C ₁₂ Aliphatics**	115	100		
C ₉ -C ₁₀ Aromatics**	114	100		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	98.8		70	130
Surrogate % Recovery - FID	103		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-2187-3b	Lab Info: g128-2187-3b
FID Info: VP051208/033F0101.D	PID Info: VP051208/033R0101.D

Reviewed By: 

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 04/29/08

PID Initial Calibration Date: 04/29/08

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	33.1	0.265	105	0.842	100	10
C ₉ -C ₁₂ Aliphatics	30.9	0.247	98.3	0.786	100	10
C ₉ -C ₁₀ Aromatics	27.7	0.222	88.1	0.705	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	4.85	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	23.11	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	8.53	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 05/09/08

Filename: VP050908/002F0101.d

Calibration Check

Range	Levels (mg/Kg)	(µg/L)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	1.6	-6.3	±25%
C ₉ -C ₁₂ Aliphatics	200	1.6	-0.7	±25%
C ₉ -C ₁₀ Aromatics	200	1.6	-6.4	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve



Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 04/29/08PID Initial Calibration Date: 04/29/08

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	33.1	0.265	105	0.842	100	10
C ₉ -C ₁₂ Aliphatics	30.9	0.247	98.3	0.786	100	10
C ₉ -C ₁₀ Aromatics	27.7	0.222	88.1	0.705	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	4.85	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	23.11	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	8.53	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 05/12/08Filename: VP051208/002F0101.d

Calibration Check

Range	Levels (mg/Kg)	(µg/L)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	1.6	-7.3	±25%
C ₉ -C ₁₂ Aliphatics	200	1.6	0.4	±25%
C ₉ -C ₁₀ Aromatics	200	1.6	-5.7	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

**EPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: G480

Sample Information	
Sample Identification	USTG480-MW16
Sample Matrix	WATER
Date Collected	05/08/08
Date Received	05/09/08
Date Extracted	05/09/08
Date Analyzed	05/15/08 21:46 - 05/15/08 22:14
Dry Weight	100
Dilution Factor	1 - 1
Initial Volume (mL)	927
Final Volume (mL)	5.0

Analytical Results			
Analytes**	Result µg/L	Report Limit µg/L	Flags
C9-C18 Aliphatics	BQL	100	
C19-C36 Aliphatics	BQL	100	
C11-C22 Aromatics	BQL	100	

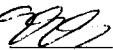
Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	33.5	****	40	140
Aromatic (ortho-terphenyl)	86.0		40	140
Fractionation 1 (2-bromonaphthalene)	133		40	140
Fractionation 2 (2-fluorobiphenyl)	120		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

**** = Low surrogate recovery failure.

Insufficient sample left for re-extract.

Lab Info: G128-2187-1H	Lab Info: G128-2187-1H
Aliphatic: EP051508/017F1301.D	Aromatic: EP051508/018F1401.D

Reviewed By: 

**EPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: G480

Sample Information	
Sample Identification	USTG480-MW17
Sample Matrix	WATER
Date Collected	05/08/08
Date Received	05/09/08
Date Extracted	05/09/08
Date Analyzed	05/13/08 14:40 - 05/12/08 14:09
Dry Weight	100
Dilution Factor	2 - 1
Initial Volume (mL)	949
Final Volume (mL)	5.0

Analytical Results			
Analytes**	Result µg/L	Report Limit µg/L	Flags
C9-C18 Aliphatics	3210	100	
C19-C36 Aliphatics	289	100	
C11-C22 Aromatics	6580	100	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	42.3		40	140
Aromatic (ortho-terphenyl)	75.6		40	140
Fractionation 1 (2-bromonaphthalene)	112		40	140
Fractionation 2 (2-fluorobiphenyl)	116		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G128-2187-2H	Lab Info: G128-2187-2H
Aliphatic: EP051308/005F0501.D	Aromatic: EP051208/007F0101.D

Reviewed By:

**EPH (Aliphatics/Aromatics) Laboratory Reporting Form**Client Name: Richard Catlin & AssociatesProject Name: G480

Sample Information	
Sample Identification	USTG480-MW18
Sample Matrix	WATER
Date Collected	05/08/08
Date Received	05/09/08
Date Extracted	05/09/08
Date Analyzed	05/12/08 14:38 - 05/12/08 15:06
Dry Weight	100
Dilution Factor	1 - 1
Initial Volume (mL)	961
Final Volume (mL)	5.0

Analytical Results			
Analytes**	Result µg/L	Report Limit µg/L	Flags
C9-C18 Aliphatics	112	100	
C19-C36 Aliphatics	BQL	100	
C11-C22 Aromatics	330	100	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	29.5	****	40	140
Aromatic (ortho-terphenyl)	81.1		40	140
Fractionation 1 (2-bromonaphthalene)	137		40	140
Fractionation 2 (2-fluorobiphenyl)	126		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

**** = Low surrogate recovery failure.

Insufficient sample left for re-extract.

Lab Info: G128-2187-3H	Lab Info: G128-2187-3H
Aliphatic: EP051208/008F0201.D	Aromatic: EP051208/009F0301.D

Reviewed By:

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/29/08

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(10/17/06) (µg/L)	(10/17/06) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	28.1	0.847	89	2.69	100	10
C19-C36 Aliphatics	36.5	1.17	116	3.72	100	10
C11-C22 Aromatics	27.6	9.47	87.8	30.1	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	400	12.5	15.23	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		
C ₁₉ -C ₃₆ Aliphatics	400	12.5	10.23	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		
C ₁₁ -C ₂₂ Aromatics	400	12.5	16.86	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		

Calibration Check Date: 05/12/08
05/12/08

Filenames: ep051208/001f0101.d
ep051208/002f0201.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	200	6.25	8.5	±25%
C19-C36 Aliphatics	200	6.25	7.8	±25%
C11-C22 Aromatics	200	6.25	2.4	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit

RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/29/08

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(10/17/06) (µg/L)	(10/17/06) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	28.1	0.847	89	2.69	100	10
C19-C36 Aliphatics	36.5	1.17	116	3.72	100	10
C11-C22 Aromatics	27.6	9.47	87.8	30.1	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	400	12.5	15.23	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		
C ₁₉ -C ₃₆ Aliphatics	400	12.5	10.23	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		
C ₁₁ -C ₂₂ Aromatics	400	12.5	16.86	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		

Calibration Check Date: 05/13/08
05/13/08

Filenames: ep051308/001f0101.d
ep051308/002f0201.d

Calibration Check

Range	Levels (µg/L) (mg/Kg)		%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	200	6.25	11.2	±25%
C19-C36 Aliphatics	200	6.25	10.4	±25%
C11-C22 Aromatics	200	6.25	1.1	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/29/08

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(10/17/06) (µg/L)	(10/17/06) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	28.1	0.847	89	2.69	100	10
C19-C36 Aliphatics	36.5	1.17	116	3.72	100	10
C11-C22 Aromatics	27.6	9.47	87.8	30.1	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	400	12.5	15.23	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		
C ₁₉ -C ₃₆ Aliphatics	400	12.5	10.23	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		
C ₁₁ -C ₂₂ Aromatics	400	12.5	16.86	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		

Calibration Check Date: 05/14/08
05/14/08

Filenames: ep051408/001f0101.d
ep051408/002f0201.d

Calibration Check

Range	Levels (µg/L) (mg/Kg)		%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	200	6.25	16.6	±25%
C19-C36 Aliphatics	200	6.25	16.1	±25%
C11-C22 Aromatics	200	6.25	-18.5	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit

RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/29/08

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(10/17/06) (µg/L)	(10/17/06) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	28.1	0.847	89	2.69	100	10
C19-C36 Aliphatics	36.5	1.17	116	3.72	100	10
C11-C22 Aromatics	27.6	9.47	87.8	30.1	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	400	12.5	15.23	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		
C ₁₉ -C ₃₆ Aliphatics	400	12.5	10.23	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		
C ₁₁ -C ₂₂ Aromatics	400	12.5	16.86	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		

Calibration Check Date: 05/15/08
05/15/08

Filenames: ep051508/001f0101.d
ep051508/002f0201.d

Calibration Check

Range	Levels (µg/L) (mg/Kg)		%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	200	6.25	0.9	±25%
C19-C36 Aliphatics	200	6.25	-0.6	±25%
C11-C22 Aromatics	200	6.25	5.2	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit

RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/29/08

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(10/17/06) (µg/L)	(10/17/06) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	28.1	0.847	89	2.69	100	10
C19-C36 Aliphatics	36.5	1.17	116	3.72	100	10
C11-C22 Aromatics	27.6	9.47	87.8	30.1	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	400	12.5	15.23	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		
C ₁₉ -C ₃₆ Aliphatics	400	12.5	10.23	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		
C ₁₁ -C ₂₂ Aromatics	400	12.5	16.86	Calibration Factor
	200	6.25		
	100	3.13		
	50	1.56		
	10	0.313		

Calibration Check Date: 05/16/08
05/16/08

Filenames: ep051608/001f0101.d
ep051608/002f0201.d

Calibration Check

Range	Levels		%Difference if CF %Drift if LR	Limits
	(µg/L)	(mg/Kg)		
C9-C18 Aliphatics	200	6.25	0.7	≤±25%
C19-C36 Aliphatics	200	6.25	3.2	≤±25%
C11-C22 Aromatics	200	6.25	8.2	≤±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit

RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

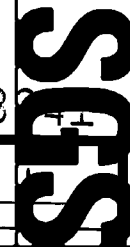


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1 CLIENT: Catlin
CONTACT: Steve Hudson PHONE NO: (910) 452.5861
PROJECT: G480 SITE/PWSID#: 206-111
REPORTS TO: Steve Hudson E-MAIL:
INVOICE TO: Sheila @ Catlin QUOTE #
P.O. NUMBER 280509-2

SGS Reference:

G128-2187

PAGE 1 OF 1

No
CONTAINERS

SAMPLE
TYPE
C= COMP
G= GRAB

Preservatives
Used

Analysis
Required

3

602

625+TICS

VPH

EPH

HCl

-

HCl

HCl

APPENDIX F

**VERTICAL HYDRAULIC GRADIENT
DETERMINATION AS OF MAY 20, 2008**

APPENDIX F**SUMMARY OF VERTICAL
HYDRAULIC GRADIENT ESTIMATES****Comprehensive Site Assessment
Site G480****Marine Corps Base
Camp Lejeune, NC**

GAUGING DATE: May 20, 2008	WELL PAIR	
	SHALLOW	DEEP
WELL IDENTIFICATION	USTG480-MW03	USTG480-MW15
TOP OF CASING ELEVATION (FEET)	13.79	13.80
DEPTH TO WATER (FEET)	7.18	6.21
APPROXIMATE MID-SCREEN DEPTH (FEET)	9.75	53.50
APPROXIMATE MID-SCREEN ELEVATION (FEET)	4.04	-39.70
STATIC WATER LEVEL ELEVATION (FEET) *	7.42	7.59
DIFFERENCE IN STATIC WATER LEVEL ELEVATION (FEET)	-0.17	
DIFFERENCE IN MID-SCREEN ELEVATION (FEET)	43.74	
VERTICAL GRADIENT	-0.0039	

Free phase product in well, elevation calculated by:
 [Top of Casing Elevation - Depth to Water] +
 [Free Product Thickness x (0.99)]

NEGATIVE GRADIENT INDICATES "UPWARDS"
 GROUNDWATER MIGRATION POTENTIAL.

APPENDIX F**SUMMARY OF VERTICAL
HYDRAULIC GRADIENT ESTIMATES****Comprehensive Site Assessment
Site G480****Marine Corps Base
Camp Lejeune, NC**

GAUGING DATE: May 20, 2008		WELL PAIR	
WELL IDENTIFICATION		SHALLOW	DEEP
		USTTC341-MW14	USTTC341-MW15
TOP OF CASING ELEVATION (FEET)		15.36	15.33
DEPTH TO WATER (FEET)		5.65	5.77
APPROXIMATE MID-SCREEN DEPTH (FEET)		7.75	27.25
APPROXIMATE MID-SCREEN ELEVATION (FEET)		7.61	-11.92
STATIC WATER LEVEL ELEVATION (FEET)		9.71	9.56
DIFFERENCE IN STATIC WATER LEVEL ELEVATION (FEET)		0.15	
DIFFERENCE IN MID-SCREEN ELEVATION (FEET)		19.53	
VERTICAL GRADIENT		0.0077	

POSITIVE GRADIENT INDICATES "DOWNWARDS"
GROUNDWATER MIGRATION POTENTIAL.

APPENDIX G

**AVERAGE GROUNDWATER LINEAR
FLOW VELOCITY AS OF MAY 20, 2008**

APPENDIX G

AVERAGE GROUNDWATER LINEAR FLOW
VELOCITY CALCULATIONSComprehensive Site Assessment
Site G480Marine Corps Base
Camp Lejeune, NC

$$V_{AVG} = (K/Ne_{AVG}) (dh/dl)$$

Where:

 V_{AVG} = Average Groundwater Linear Flow Velocity (ft/day)

 K = Hydraulic Conductivity in ft/day from slug test = **1.055** ft/day
performed on USTG480-MW09.
(Calculations Attached)

 dh = Change in Hydraulic Head (ft) between wells
USTTC341- and USTG480- = 9.71 - 4.26
MW14 MW16 = **5.45** ft.

 dl = Horizontal Distance (ft) between wells
USTTC341- and USTG480- = **491.8** ft.
MW14 MW16

 Ne_{AVG} = Effective Porosity = Average of **0.437** from Table 2.1
in Todd (1980) for fine-grained sand, silt, and clay.

Using:

 K = 1.055 ft/day

 dh/dl = 0.011082 ft/ft

 Ne_{AVG} = 0.437 unitless

$$V_{AVG} = \frac{1.06}{0.437} \times 0.011082$$

V_{AVG} = 0.027 ft/day TO THE East Northeast

COMPUTED BY: Steven Hudson
DATE: 6/12/2008CHECKED BY: _____
DATE: _____

APPENDIX H

CONTAMINANT VELOCITY CALCULATIONS

APPENDIX H

CONTAMINANT VELOCITY CALCULATIONS

for

NAPHTHALENE

Comprehensive Site Assessment

Site G480

Marine Corps Base

Camp Lejeune, NC

$K_{ow} = 2300$ for NAPHTHALENE (p. 23, Table II-9, EPA, WQA Part I)

DETERMINE CONTAMINANT VELOCITY

$$V_c = V_{AVG}/R_d$$

WHERE:

V_c = Contaminant Velocity (ft/day)

V_{AVG} = Average Groundwater Linear Flow Velocity (ft/day) (Appendix G)

R_d = Retardation Factor

CALCULATE RETARDATION FACTOR

$$R_d = 1 + [K_d (r_b / P)]$$

WHERE:

K_d = Distribution Coefficient (ml/g)

ρ_b = Bulk Density (ml/g)

P = Porosity (decimal)

DISTRIBUTION COEFFICIENT

$$K_d = K_{oc} [0.2 (1-F) x_{oc}^s + F (x_{oc}^f)]$$

WHERE:

F = Mass of Silt and Clay/Mass of Sand, Silt, and Clay

x_{oc}^s = Organic Fraction of Sand [$0 \leq x_{oc}^s \leq 0.1$]

x_{oc}^f = Organic Fraction of Silt and Clay [$0 \leq x_{oc}^f \leq 0.1$]

$K_{oc} = 0.63 (K_{ow})$

K_{ow} = Octanol Water Partition Coefficient

$F = 0.032$ Estimated from grain size analysis on samples with similar lithology.

FROM:

$$K_{ow} = 2300$$

$$K_{oc} = 0.63 \text{ (} 2300 \text{)}$$

$$K_{oc} = 1449$$

$$\rho_b = 1.47 \text{ g/cm}^3 \text{ for AVERAGE* (p. 314, Table VII-2, EPA, WQA Part II)}$$

$$P = 0.44 \text{ for AVERAGE* (p. 318, Table VII-4, EPA, WQA Part II)}$$

$$x_{oc}^s = 0.025 \text{ (Mean Value)}$$

* = Average for f. sand, silt, and clay.

$$x_{oc}^f = 0.065 \text{ (Mean Value)}$$

THEREFORE:

$$K_d = K_{oc} [0.2(1-F) x_{oc}^s + F (x_{oc}^f)]$$

$$K_d = 1449 [0.2(1- 0.032) 0.025 + 0.032 (0.065)]$$

$$K_d = 10.03$$

$$R_d = 1 + K_d [(\rho_b / P)]$$

$$R_d = 1 + [10.03 (1.47 / 0.44)]$$

$$R_d = 34.50$$

CALCULATE CONTAMINANT VELOCITY

$$V_c = V_{AVG} / R_d$$

$$V_c = 0.0268 \text{ (ft/day) / } 34.50$$

$V_c = 0.000777 \text{ (ft/day) for NAPHTHALENE}$

COMPUTED BY: Steven Hudson

DATE: 6/12/2008

CHECKED BY: _____

DATE: _____

* Contaminant velocity equations and reference data are from:

U.S. Environmental Protection Agency, September 1985, *Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Ground Water*, PB865-122496, Parts 1, 2, and 3, EPA #s 600/685/002a,b, and c.

U.S. Environmental Protection Agency, Environmental Research Laboratory, Office of Research and Development, Revised 1985, *Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants*, Part II, 444 pp.

APPENDIX H
CONTAMINANT VELOCITY CALCULATIONS
for
BENZENE

Comprehensive Site Assessment
Site G480

Marine Corps Base
Camp Lejeune, NC

$K_{ow} = 100$ for BENZENE (p. 23, Table II-9, EPA, WQA Part I)

DETERMINE CONTAMINANT VELOCITY

$$V_c = V_{AVG}/R_d$$

WHERE:

V_c = Contaminant Velocity (ft/day)

V_{AVG} = Average Groundwater Linear Flow Velocity (ft/day) (Appendix G)

R_d = Retardation Factor

CALCULATE RETARDATION FACTOR

$$R_d = 1 + [K_d (r_b / P)]$$

WHERE:

K_d = Distribution Coefficient (ml/g)

ρ_b = Bulk Density (ml/g)

P = Porosity (decimal)

DISTRIBUTION COEFFICIENT

$$K_d = K_{oc} [0.2 (1-F) x_{oc}^s + F (x_{oc}^f)]$$

WHERE:

F = Mass of Silt and Clay/Mass of Sand, Silt, and Clay

x_{oc}^s = Organic Fraction of Sand [$0 \leq x_{oc}^s \leq 0.1$]

x_{oc}^f = Organic Fraction of Silt and Clay [$0 \leq x_{oc}^f \leq 0.1$]

$K_{oc} = 0.63 (K_{ow})$

K_{ow} = Octanol Water Partition Coefficient

$F = 0.032$ Estimated from grain size analysis on samples with similar lithology.

FROM:

$$K_{ow} = 100$$

$$K_{oc} = 0.63 \quad (100)$$

$$K_{oc} = 63$$

$$\rho_b = 1.47 \text{ g/cm}^3 \text{ for AVERAGE* (p. 314, Table VII-2, EPA, WQA Part II)}$$

$$P = 0.44 \text{ for AVERAGE* (p. 318, Table VII-4, EPA, WQA Part II)}$$

$$x_{oc}^s = 0.025 \text{ (Mean Value)}$$

* = Average for f. sand, silt, and clay.

$$x_{oc}^f = 0.065 \text{ (Mean Value)}$$

THEREFORE:

$$K_d = K_{oc} [0.2(1-F) x_{oc}^s + F (x_{oc}^f)]$$

$$K_d = 63 [0.2(1- 0.032) 0.025 + 0.032 (0.065)]$$

$$K_d = 0.436$$

$$R_d = 1 + K_d [(\rho_b / P)]$$

$$R_d = 1 + [0.436 (1.47 / 0.44)]$$

$$R_d = 2.46$$

CALCULATE CONTAMINANT VELOCITY

$$V_c = V_{AVG} / R_d$$

$$V_c = 0.0268 \text{ (ft/day)} / 2.46$$

$V_c = 0.010910 \text{ (ft/day) for BENZENE}$

COMPUTED BY: Steven Hudson

DATE: 6/12/2008

CHECKED BY: _____

DATE: _____

* Contaminant velocity equations and reference data are from:

U.S. Environmental Protection Agency, September 1985, *Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Ground Water*, PB865-122496, Parts 1, 2, and 3, EPA #s 600685002a,b, and c.

U.S. Environmental Protection Agency, Environmental Research Laboratory, Office of Research and Development, Revised 1985, *Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants*, Part II, 444 pp.

APPENDIX I
NCDOT RIGHT-OF-WAY AGREEMENT



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

DIVISION OF HIGHWAYS

LYNDO TIPPETT
SECRETARY

April 7, 2008

U.S.M.C.
Attention: Johanna Arnold
McHugh Blvd. Building 12, Room 235
Camp Lejeune, NC 28542

Dear Ms. Arnold:

SUBJECT: Encroachment Agreement on US 17 Bypass in Onslow County
(Reference Number: E-67-08-027)

Attached for your files is a copy of Right of Way Encroachment contract properly executed. This contract covers the following:

Installation of three (3) monitoring wells in the US 17 Bypass median.

This encroachment is within a controlled access.

This approval is also subject to the attached Special Provisions.

Very truly yours,

H.A. Pope / a.l.e.

H. A. Pope, P.E.
Division Engineer

HAP/ARE/dlr

Attachment

cc: Robert Memory
Robert A. Vause, P.E.
Kristoff Bauer, Manager of City of Jacksonville

ENTERED
JAX MAIN: FEB 19 2003

STATE PROJECT U-2107B STATE OF NORTH CAROLINA
ROUTE US HWY 17 Bypass FEDERAL PROJECT COUNTY Onslow

DISTRICT 1

DEPARTMENT OF TRANSPORTATION

-AND-

Commanding Officer
I&E/EMD/EQB)

Marine Corps Base - McHugh Boulevard
Building 12, Room 235
Camp Lejeune, NC 28542

Phone: 910-451-9114

RIGHT OF WAY
MAR 28 2008 ENCROACHMENT AGREEMENT
INTERSTATE AND OTHER CONTROLLED

ACCESS HIGHWAYS

67 08 027

THIS AGREEMENT, made and entered into this the 7th day of APRIL, 20 08, by and between the Department of Transportation, party of the first part; and Commanding Officer, Marine Corps Base, Camp Lejeune, party of the second part,

WITNESSETH

THAT WHEREAS, the party of the second part desires to encroach on the right of way of the public road designated as Route(s) US Highway 17 Bypass, located adjacent of Camp Geiger approximately 1/2 mile southeast of the intersection of US HWY 17 Bypass and US HWY 17 Business. with the construction and/or erection of: three (3) groundwater monitoring wells within the median of US HWY 17 Bypass.

WHEREAS, it is to the material advantage of the party of the second part to effect this encroachment, and the party of the first part in the exercise of authority conferred upon it by statute, is willing to permit the encroachment within the limits of the right of way as indicated, subject to the conditions of this agreement;

NOW, THEREFORE, IT IS AGREED that the party of the first part hereby grants to the party of the second part the right and privilege to make this encroachment as shown on attached plan sheet(s), specifications and special provisions which are made a part hereof upon the following conditions, to wit:

That the installation, operation, and maintenance of the above described facility will be accomplished in accordance with the party of the first part's latest POLICIES AND PROCEDURES FOR ACCOMMODATING UTILITIES ON HIGHWAY RIGHTS-OF-WAY, and such revisions and amendments thereto as may be in effect at the date of this agreement. Information as to these policies and procedures may be obtained from the Division Engineer or State Utility Agent of the party of the first part.

That the said party of the second part hereby agrees that access for servicing its facilities will be limited to access via (a) frontage roads where provided, (b) nearby or adjacent public roads and street, or (c) trails along or near the highway right of way lines, connecting only to an intersecting road; from any one or all of which entry may be made to the outer portion of the highway right of way. The party of the second part's rights of access to the through-traffic roadways and ramps shall be subject to the same rules and regulations as apply to the general public, except if an emergency situation occurs, and the usual means of access for service operation as herein provided will not permit the immediate action required by the party of the second part in making emergency repairs as required for the safety and welfare of the public, the party of the second part shall have a temporary right of access to and from the through-traffic roadways and ramps as necessary to accomplish the required emergency repairs, provided that the party of the second part complies with the regulations established by the party of the first part for policing and control to protect the highway users.

That the said party of the second part binds and obligates himself to install and maintain the encroaching facility in such safe and proper condition that it will not interfere with or endanger travel upon said highway, nor obstruct nor interfere with the proper maintenance thereof, to reimburse the party of the first part for the cost incurred for any repairs or maintenance to its roadways and structures necessary due to the installation and existence of the facilities of the party of the second part, and if at any time the party of the first part shall require the removal of or changes in the location of the said facilities, that the said party of the second part binds himself, his successors and assigns, to promptly remove or alter the said facilities, in order to conform to the said requirement, without any cost to the party of the first part.

That the party of the second part agrees to provide during construction and any subsequent maintenance proper signs, signal lights, flagmen and other warning devices for the protection of traffic in conformance with the latest Manual on Uniform Traffic Control Devices for Streets and Highways and Amendments or Supplements thereto. Information as to the above rules and regulations may be obtained from the Division Engineer of the party of the first part.

That the party of the second part hereby agrees to indemnify and save harmless the party of the first part from all damages and claims for damage that may arise by reason of the installation and maintenance of this encroachment.

That the party of the second part agrees to restore all areas disturbed during installation and maintenance to the satisfaction of the Division Engineer of the party of the first part. The party of the second part agrees to exercise every reasonable precaution during construction and maintenance to prevent eroding of soil; silting or pollution of rivers, streams, lakes, reservoirs, other water impoundments, ground surfaces or other property; or pollution of the air. There shall be compliance with applicable rules and regulations of the North Carolina Division of Environmental Management, North Carolina Sedimentation Control Commission, and with ordinances and regulations of various counties, municipalities and other official agencies relating to pollution prevention and control. When any installation or maintenance operation disturbs the ground surface and existing ground cover, the party of the second part agrees to remove and replace the sod or otherwise reestablish the grass cover to meet the satisfaction of the Division Engineer of the party of the first part.

That the party of the second part agrees to assume the actual cost of any inspection of the work considered to be necessary by the Division Engineer of the party of the first part.

That the party of the second part agrees to have available at the construction site, at all times during construction, a copy of this agreement showing evidence of approval by the party of the first part. The party of the first part reserves the right to stop all work unless evidence of approval can be shown.

Provided the work contained in this agreement is being performed on a completed highway open to traffic; the party of the second part agrees to give written notice to the Division Engineer of the party of the first part when all work contained herein has been completed. Unless specifically requested by the party of the first part, written notice of completion of work on highway projects under construction will not be required.

That in the case of noncompliance with the terms of this agreement by the party of the second part, the party of the first part reserves the right to stop all work until the facility has been brought into compliance or removed from the right of way at no cost to the party of the first part.

That it is agreed by both parties that this agreement shall become void if actual construction of the work contemplated herein is not begun within one (1) year from the date of authorization by the party of the first part unless written waiver is secured by the party of the second part from the party of the first part.

During the performance of this contract, the second party, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor"), agrees as follows:

- a. Compliance with Regulations: The contractor shall comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the U. S. Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- b. Nondiscrimination: The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- c. Solicitations for Subcontracts, including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- d. Information and Reports: The contractor shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the Department of Transportation, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.
- e. Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the Department of Transportation shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to,
 - (1) withholding of payments to the contractor under the contract until the contractor complies, and/or
 - (2) cancellation, termination or suspension of the contract, in whole or in part.
- f. Incorporation of Provisions: The contractor shall include the provisions of paragraphs "a" through "f" in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the Department of Transportation or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Department of Transportation to enter into such litigation to protect the interests of the State, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

R/W (162) : Party of the Second Part certifies that this agreement is true and accurate copy of the form R/W (162) incorporating all revisions to date.

IN WITNESS WHEREOF, each of the parties to this agreement has caused the same to be executed the day and year first above written.

ATTEST OR WITNESS:

Capt. Jason E. Engstrom

Deputy Director, Environmental Management Division
By direction of the Commanding Officer

MCB - McHugh Blvd., Building 12, Camp Lejeune, NC 28542

DEPARTMENT OF TRANSPORTATION

BY:

H. A. Brown / A.R.C.
ASSISTANT MANAGER OF RIGHT-OF-WAY
DIVISION ENGINEER

John R. Townson

Director, Environmental Management Division
By direction of the Commanding Officer

MCB - McHugh Blvd., Building 12, Camp Lejeune, NC 28542
Second Party

INSTRUCTIONS

When the applicant is a corporation or a municipality, this agreement must have the corporate seal and be attested by the corporation secretary or by the empowered city official, unless a waiver of corporate seal and attestation by the secretary or by the empowered City official is on file in the Raleigh office of the Manager of Right of Way. In the space provided in this agreement for execution, the name of the corporation or municipality shall be typed above the name, and title of all persons signing the agreement should be typed directly below their signature.

When the applicant is not a corporation, then his signature must be witnessed by one person. The address should be included in this agreement and the names of all persons signing the agreement should be typed directly below their signature.

GENERAL REQUIREMENTS

1. Wherever possible, freeway crossing should be parallel to and within the prevailing right of way of intersecting roads.
2. Crossings should be as near as possible normal to the center line of the freeway.
3. Parallel encroachments will not be permitted except outside of control of access lines.
4. The Department's Division Engineer should be given notice by the applicant prior to actual starting of installations included in this agreement.

For Overhead Wire Lines

1. Minimum vertical clearances of overhead wires above all roadways must conform to clearances set out in the National Electric Safety Code.
2. Supporting poles or structures must be clear of control of access lines, and be at least 30 feet clear of the edge of shoulders of through lanes and 20 feet clear of the shoulders of interchange ramps.

For Underground Utilities

1. Open-cut installation for crossings will be permitted only when a highway project is in rough grading stage prior to paving. Generally, on rough grading projects, open-cut will not be permitted in fills of over 10 feet in depth and back filled material must be compacted to maximum density meeting Department requirements.
2. Encasements under an existing freeway must be installed by means of tunneling, jacking, or boring and any voids outside the encasement must be filled with lean concrete grout and the ends of encasements be satisfactorily closed.
3. In cut section, encasement must extend continuously from ditch line to ditch line and in fill section, encasement must extend continuously five feet beyond toe to slopes.
4. Vents for encasement should be extended to the right of way line or as otherwise required by the Department.
5. All pipe encasements as to material and strength shall meet the standards and specifications of the Department.
6. When trenching is carried down cut slopes, excavation must be backfilled to maximum density and the disturbed portion of the slope be stabilized and sodded to the satisfaction of the Department's Engineer.

Plans

This Encroachment agreement must be accompanied, in the form of an attachment, by a plan showing the following:

1. All roadways and ramps
2. Right of way and control of access lines
3. Drainage structures or bridges if affected by encroachment
4. Location of the proposed encroachment
5. Length, size and type of encroachment
6. Dimensions, showing the distance from the encroachment to roadways, shoulders, structures, etc.
7. Location by highway survey station number. If station number cannot be obtained, location should be shown by distance from some identifiable point, such as a bridge, road intersection, etc. (To assist in preparation of the encroachment plan, Department roadway plans may be seen at the various Highway Division Offices or at the Raleigh Office.)

All encroachment agreements involving the crossing of the right of way, roadways and/or ramps of a freeway, must be accompanied, in the form of an attachment, by a profile showing the following information:

1. The profile should extend from right of way line to right of way line and show all slopes (cut or fill), ditches, shoulders, pavements, medians, etc.
2. A vertical dimension from bottom of road ditches and from surface of pavement to encroaching structures.
3. Length, size, and type of encasement where required.
4. Notation of portion to be installed by open-cut.
5. For underground encroachments involving encasements that must be vented, the location of vents must be shown.
6. Method of installation must be shown in detail on either the plan or profile.
7. Any attachment to a bridge or other drainage structure must be approved by the Department's Bridge Design Unit.
8. Where profile is required, it should be on same sheet with the plan.

SPECIAL PROVISIONS OR SPECIFICATIONS

Any special provisions or specifications as to the performance of the work or the method of construction that may be required by the Department must be shown on a separate sheet attached to encroachment, provided that such information cannot be shown on the plan and profile sheet.

**ENCROACHMENT AGREEMENT
SPECIAL PROVISIONS**

027
E-67-08-26
Onslow County

- SP A** The North Carolina Department of Transportation is in the process of developing a Work Zone Traffic Control Qualification and Training Program that will begin its implementation in 2009. This program will require qualified and trained Work Zone Flaggers in every flagging operation (July 2009), qualified and trained Work Zone Traffic Control Installers on every traffic control installation (January 2010), and qualified and trained Work Zone Traffic Control Supervisors on Significant Projects (July 2010). It is intended for the program to include anyone working within NCDOT Rights of Way including work associated with NCDOT construction and encroachment agreements as well as all NCDOT operations.
- Training for these certifications will be provided by NCDOT approved training sources and/or private entities that have been pre-approved to train themselves. Additional information will be provided as this program progresses. Further information can be found on the NCDOT web site at www.ncdot.org/~wztc.
- SP 1** Notify the DOT Highway Maintenance Engineer prior to beginning work and/or backfilling pipe culvert for inspection of work and when work is satisfactorily completed. (910-455-3777)
- SP 3** An executed copy of this encroachment agreement shall be present at the construction site at all times during construction. NCDOT reserves the right to stop all work unless evidence of approval can be shown. If safety or traffic conditions warrant such action, NCDOT reserves the right to further limit, restrict, or suspend operations within the right of way.
- SP 4** Materials and workmanship shall conform to the NC Department of Transportation's Standards and Specifications.
- SP 5A** The encroaching party is required to contact the appropriate Utility Companies involved and make satisfactory arrangements to adjust the utilities in conflict with the proposed work prior to beginning construction.
- SP 6** Proper temporary and permanent measures shall be used to control erosion and sedimentation in accordance with local, State and Federal regulations. If any area in excess of one (1) acre will be disturbed, the Encroachee shall submit to the District Engineer's Office a Sediment and Erosion Control Plan which has been approved by the appropriate regulatory agency or authority prior to beginning any work on the Right of Way. FAILURE TO PROVIDE THIS INFORMATION SHALL BE GROUNDS FOR SUSPENSION OF OPERATIONS.

- SP 8** Proper traffic control devices, signs, etc. shall be installed to insure public safety in accordance with the latest edition of the Manual on Uniform Traffic Control Devices and any supplements.

The Encroachee shall provide traffic control devices, lane closures, road closures, positive protection and/or any other warning or positive protection devices necessary for the safety of motorists and workers during construction and any subsequent maintenance. This shall be performed in accordance with the latest NCDOT "Roadway Standard Drawings" and "Standard Specifications for Roads and Structures" and Amendments or Supplements thereto. When there is no guidance provided in the Roadway Standard Drawings or Specifications, comply with the "Manual on Uniform Traffic Control Devices for Streets and Highways" and Amendment or Supplement thereto. Information as to the above rules and regulations may be obtained from the NCDOT Division 3 Engineer.

- SP 9** Since work will be performed within the Jacksonville city limits, it will be your responsibility to notify the local Municipality prior to beginning work.
- SP 14** Approval of this Encroachment does not include any portion of the work outside the North Carolina Department of Transportation's Rights of Way.
- SP 16** No lane closures shall be allowed between the hours of 6:00 am to 9:00 am, and 4:00 pm to 7:00 pm. (Peak hours restricted)
- SP 19** No lane closures or impediment to traffic shall be allowed on state holidays and local events.
- SP 20** Any work requiring equipment or personnel within five (5) feet [ten (10) feet on divided roadways] from the edge of any travel lane shall require a lane closure with appropriate tapers.
- SP 22** All excavations shall be backfilled, paved and traversable prior to removing lane closure.
- SP 28** Only one lane closure in each direction.
- SP 36** All equipment and materials shall be removed from the right of way when not in use.
- SP 37** This encroachment is approved with the understanding that the North Carolina Department of Transportation does not guarantee the right of way on this road, nor will it be responsible for any claim for damages brought by any property owner by reason of the installation.
- SP 47** Any drainage structure disturbed or damaged shall be restored to its original condition as directed by the District Engineer.

- SP 48** No access, parking, or material storage shall be allowed along or from Control of Access Highways.
- SP 55** The encroaching party shall comply with all applicable state and federal environmental regulations, and shall obtain all necessary state and federal environmental permits, including but not limited to, those related to sediment control, stormwater, wetland, streams, endangered species, and historical sites.
- SP 56** Trenching, boring pits, and/or other excavations shall not be left open or unsafe overnight. The contractor shall comply with all OSHA requirements and provide a competent person on site to supervise excavations at all times.
- SP 57** Any pavement damaged due to installation of this facility or damaged by equipment used to install this facility, shall be resurfaced to the satisfaction of District Engineer.
- SP 58** Right of way monuments disturbed during construction shall be referenced by a registered Land Surveyor and reset after construction.
- SP 59** All Roadway signs removed due to construction shall be reinstalled at the end of each day.
- SP 60** Excavation material shall not be placed on the pavement. Drainage structures shall not be blocked with excavation material.
- SP 61** The proposed construction shall in no way impede or alter the drainage of the existing roadway. Reshape shoulders and slopes to allow positive drainage
- SP 62** Strict compliance with the "Policies and Procedures for Accommodating Utilities on Highway Rights of Way" Manual shall be required.
- SP 65** No construction shall be permitted when shoulders are wet.
- SP 66** Shoulders, ditch slopes, and ditches disturbed as a result of this encroachment shall be seeded, mulched, and restored to the satisfaction of the District Engineer.
- SP 67** The issuance of this encroachment does not preclude the encroachee from complying with any and all statutes, rules, regulations, or ordinances which may be imposed by other government agencies (local, state, and federal) which have jurisdiction.
- SP 74** RESERVED FOR SEED DETAIL. THIS PROVISION MUST BE PRINTED SEPARATELY. GO TO MAIN MENU, CHOOSE REPORT OPTIONS, AND THEN CHOOSE PRINT PROVISIONS SEPARATELY. DO NOT USE THIS NUMBER FOR ANYTHING ELSE.

SP 74

All areas disturbed by this encroachment work shall be seeded per the below noted seed detail.

SEED DETAIL

After the installation of the utility is complete, the area disturbed in a non-residential shall be seeded as follows:

50 lbs./acre	Tall Fescue
5 lbs./acre	Centipede
50 lbs./acre	PENSACOLA Bahiagrass
500 lbs./acre	Fertilizer
4000 lbs./acre	Limestone

All residential areas must be hand finished as directed by the Engineer to give a "lawn type appearance" and the following seed mix should be applied:

50 lbs./acre	Tall Fescue Type I
50 lbs./acre	Tall Fescue Type II
5 lbs./acre	Centipede
500 lbs./acre	Fertilizer
4000 lbs./acre	Limestone

Type I and Type II Tall Fescue shall be separate varieties chosen from the list below:

Adventure	Adventure II	Amigo	Anthem
Apache	Apache II	Arid	Brookstone
Bonanza	Chesapeake	Chieftain	Coronado
Crossfire II	Debutante	Duster	Falcon
Falcon II	Finelawn Petite	Finelawn	Finelawn I
Genesis	Grande	Guardian	Hounddog
Jaguar	Jaguar III	Kentucky 31	Kitty Hawk
Monarch	Montauk	Mustang	Olympic
Pacer	Pixie	Pyramid	Rebel
Rebel Jr.	Rebel II	Renegade	Safari
Shenandoah	Titan	Tomahawk	Trailblazer
Tribute	Wrangler		

For all mixtures:

May 1- August 31- add 10 lbs./acre Kobe or Korean Lespedeza

September 1- April 30- add 10 lbs./acre Rye Grain

Environmentally Sensitive Areas

This project is located in an "Environmentally Sensitive Area". This designation requires special procedures to be used for clearing and grubbing, temporary stream crossings, and grading operations within the area identified on the plans. This also requires special procedures to be used for seeding and mulching and staged seeding within the project.

Clearing and grubbing:

In areas identified on the erosion control plans as "Environmentally Sensitive Areas", clearing operations can be performed, but not grubbing operations until immediately prior to beginning grading operations as described in Section 200, Article 200-1, in the Standard Specifications. The "Environmentally Sensitive Area" shall be defined as a 50 foot buffer zone on both sides of the stream (or depression) measured from top of streambank (or center of depression.) Only clearing operations (not grubbing) shall be allowed in this buffer zone until immediately prior to beginning grading operations. Erosion control devices shall be installed immediately following the clearing operation.

Grading:

Once grading operations begin in identified "Environmentally Sensitive Areas", work will progress in a continuous manner until complete. All construction within these areas must progress in a continuous manner such that each phase is complete and areas permanently stabilized prior to beginning of next phase. Failure to complete any phase of construction in a continuous manner in "Environmentally Sensitive Areas" as specified will be just cause for the Engineer to direct the suspension of work in accordance with Section 108-7 of the Standard Specifications.

Temporary Stream Crossings:

Any crossing of streams within the limits of this project must be accomplished in accordance with Section 107-13(b) of the Standard Specifications.

Seeding and mulching:

Seeding and mulching shall be performed in accordance with Section 1660 of the Standard Specifications and vegetative cover sufficient to restrain erosion shall be installed immediately following grade establishment.

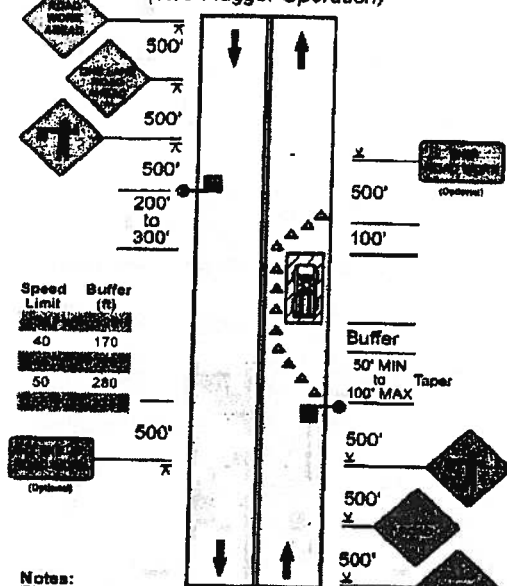
Seeding and mulching shall be performed on the areas disturbed by construction immediately following final grade establishment. No appreciable time shall lapse into the contract time without stabilization of slopes, ditches and other areas within the "Environmentally Sensitive Areas" as indicated on the Erosion Control Plans.

Stage Seeding:

The work covered by this section shall consist of the establishment of a vegetative cover on cut and fill slopes as grading progresses. Seeding and mulching shall be done in stages on cut and fill slopes that are greater than 20 feet in height or greater than 2 acres in area. Each stage shall not exceed the limits stated above.

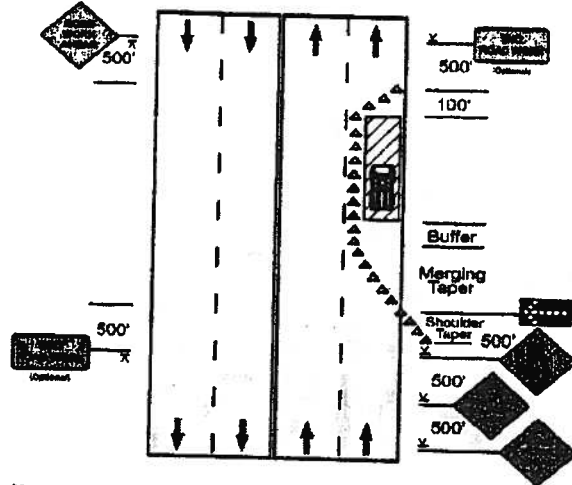
- SP 75** RESERVED FOR ENVIRONMENTALLY SENSITIVE AREAS. THIS PROVISION MUST BE PRINTED SEPARATELY. GO TO MAIN MENU, CHOOSE REPORT OPTIONS, AND THEN CHOOSE PRINT PROVISIONS SEPARATELY. DO NOT USE THIS NUMBER FOR ANYTHING ELSE.
- SP 96** During construction if there is a 2" dropoff or greater then the dropoff has to be corrected the same workday. If it is in a curb and gutter section then there shall not be a dropoff behind the curb of 6" or more. If so, then the correction has to be made the same workday.
- SP110** This encroachment only covers the wells shown on the attached plan. Any additional wells at this location shall require an encroachment revision. PROPOSED WELLS SHALL BE UTILIZED FOR MONITORING ONLY; ANY OTHER USE SUCH AS REMEDIATION, DEWATERING, ETC. SHALL REQUIRE A NEW ENCROACHMENT AGREEMENT.
- SP113** Well cap shall be flush mounted with the ground/pavement surface in areas within the routine mowing boundaries with the frame and cover designed for HS 20 loading.
- SP114** Any contaminated soils encountered in construction, as spoil from the well installation, shall be removed from the right-of way prior to completion of the wells.

After the monitoring well(s) have served its intended purpose, the encroaching party shall fill the well(s) in a manner approved by the Division of Environmental Management. Any above ground obstructions shall also be removed from the right of way.



Notes:

1. A "Be Prepared To Stop" sign may be added to the sign series, located between the Flagger symbol and the "One Lane Road Ahead" signs. If used, then the spacing of all four signs in the series will be 500 feet.
2. For low-speed (35 MPH or less) conditions, a 200-foot sign spacing may be used. For speeds of 40 to 50 MPH a 350-foot sign spacing may be used.
3. For operations of 60 minutes or less, the "Road Work Ahead" sign may be omitted.
4. Generally, the use of "End Road Work" signs is optional for short duration work sites. However, if the work site itself is long, or the beginning and end of the work site are not visible to a driver passing through it, then "End Road Work" signs should be used.

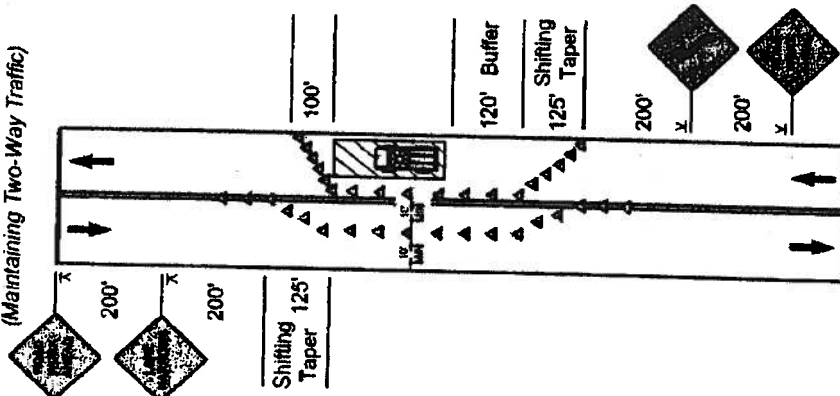


Notes:

1. For freeways or expressways, see page 29.
 2. When the left lane on an undivided road is closed, channelizing devices must be placed along the centerline as well. Closure of the adjacent interior lane may also be considered in order to provide access to the work space, room for vehicles and materials, and a lateral buffer from the opposing traffic flow.
 3. For low-speed (35 MPH or less) conditions, a 200-foot sign spacing may be used. For speeds of 40 to 50 MPH a 350-foot sign spacing may be used.
- | Speed Limit | Shoulder Taper (ft) | Merging Taper (ft) | Buffer (ft) |
|-------------|---------------------|--------------------|-------------|
| 40 | 90 | 320 | 170 |
| 50 | 170 | 600 | 280 |
4. Use of an arrow panel is optional based on traffic volume, speed, and visibility. The arrow panel should be placed on the shoulder of the roadway at the beginning of the merging taper, and should be delineated with channelizing devices or shielded with a barrier or crash cushion.
 5. Generally, the use of "End Road Work" signs is optional for short duration work sites. However, if the work site itself is long or the beginning and end of the work site are not visible to a driver passing through it, the "End Road Work" signs should be used.

Speed Limit	Shoulder Taper (ft)	Merging Taper (ft)	Buffer (ft)
40	90	320	170
50	170	600	280

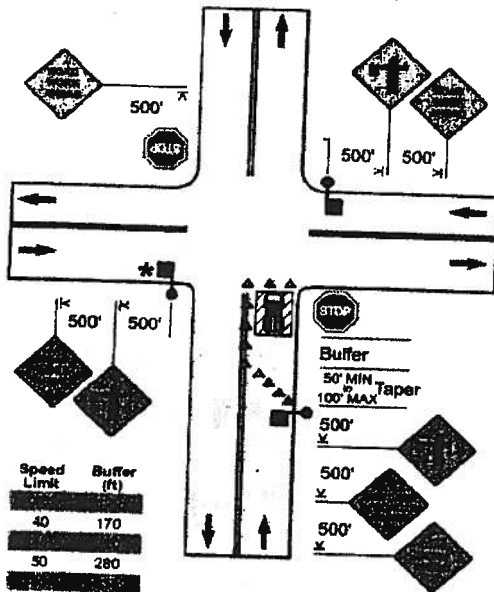
Work in Travel Lane on a Minor Urban Street
(Maintaining Two-Way Traffic)



Notes:

1. This layout is only appropriate for low-volume, low-speed (35 MPH or less) urban streets.
2. A minimum lane width of 10' should be provided in both directions, measured between the channelizing devices and from the channelizing devices to the edge of pavement.
3. Additional advance warning may be appropriate, such as "Lane Shifts" and "Lane Narrows" signs.

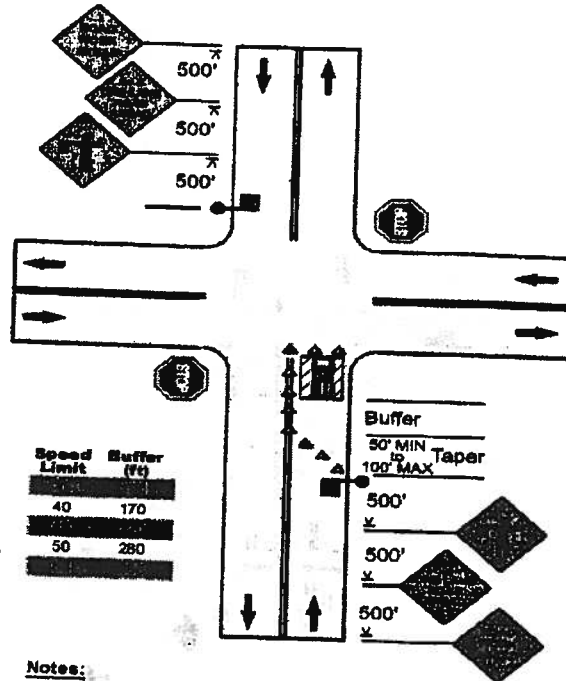
Lane Closure in Advance of an Intersection
(Work Area on the Side Road)



Notes:

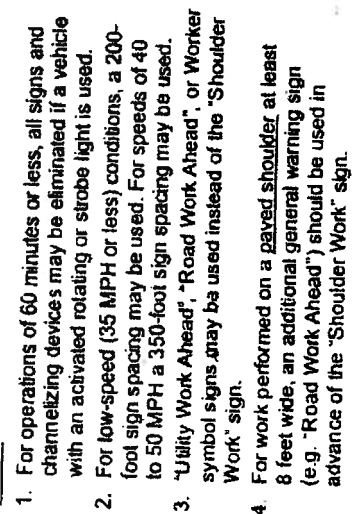
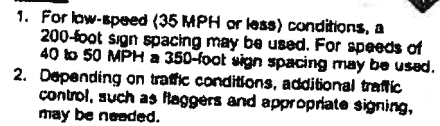
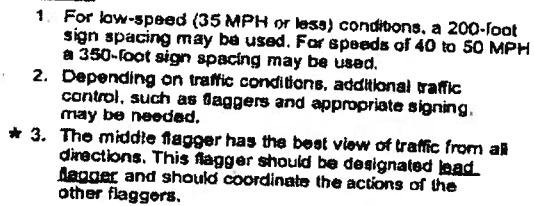
1. For low-speed (35 MPH or less) conditions, a 200-foot sign spacing may be used. For speeds of 40 to 50 MPH a 350-foot sign spacing may be used.
2. Depending on traffic conditions, additional traffic control, such as flaggers and appropriate signing, may be needed.
- * 3. The middle flagger has the best view of traffic from all directions. This flagger should be designated **lead** **flagger** and should coordinate the actions of the other flaggers.

**Lane Closure in Advance of an Intersection
(Work Area on the Through Road)**

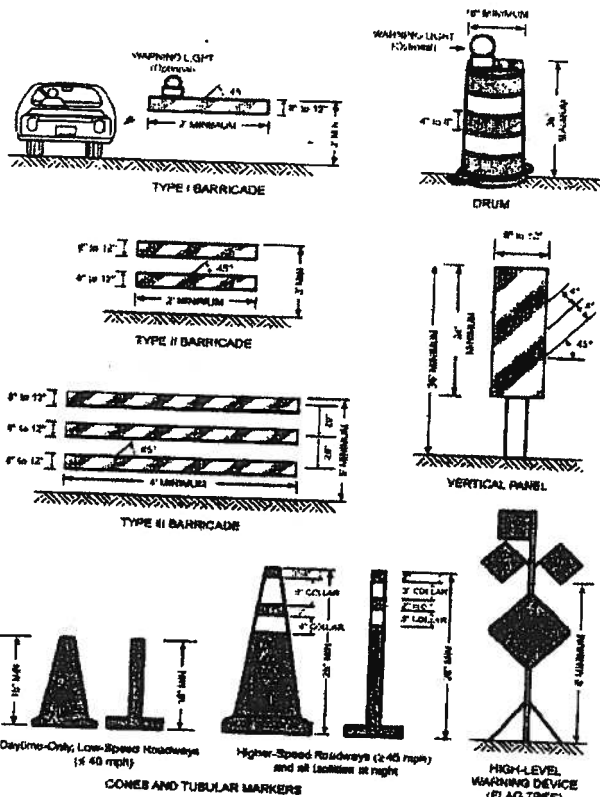


Notes:

1. For low-speed (35 MPH or less) conditions, a 200-foot sign spacing may be used. For speeds of 40 to 50 MPH a 350-foot sign spacing may be used.
2. Depending on traffic conditions, additional traffic control, such as flaggers and appropriate signing, may be needed on the side road approaches.



Channelizing Devices



Notes:

1. Stripes on barricade rails slope downward at an angle of 45 degrees in the direction traffic is to pass.
2. Barricade rail stripe widths shall be 6 inches, except that 4-inch wide stripes may be used if rail lengths are less than 36 inches.
3. The sides of barricades facing traffic shall have retroreflective rail faces.

Taper Length Criteria for Work Zones

There are five types of tapers used in work zone traffic control. The following are their lengths.

Type of Taper	Taper Length
Merging Taper	1. Minimum
Shifting Taper	1/2 L. Minimum
Shoulder Taper	1/3 L. Minimum
One-Lane, Two-Way Traffic Taper	50 feet Minimum to 100 feet Maximum
Dowstream Taper (use is optional)	100 feet per lane Minimum

Formulas for L

Speed Limit	Formula
40 MPH or Less	$L = WS^2$
45 MPH or Greater	$L = WS$

L = Taper length in feet

W = Width of offset in feet

S = Posted speed limit or next 85th percentile speed prior to work starting or the anticipated operating speed in mph

Number of Channelizing Devices Needed

Length (ft)	35 MPH		45 MPH		55 MPH	
	Taper	Buffer/Work	Taper	Buffer/Work	Taper	Buffer/Work
100	6	2-3	8	2-3	8	2-3
150	8	3-5	8	2-4	8	2-3
200	7	3-6	8	3-5	8	2-4
250	9	4-8	7	3-8	8	3-5
300	10	5-9	8	4-7	7	3-6
350	11	5-10	9	4-8	8	4-7
400	13	6-12	10	5-9	9	4-8
450	14	7-13	11	5-10	10	5-9
500	16	8-15	13	6-12	11	5-10
550	17	8-16	14	7-13	11	6-10
600	19	9-18	15	7-14	12	6-11
650	20	10-19	16	8-15	13	6-12

Lighting Devices

Lighting devices for short-term work zones are designed to supplement the signs and channelizing devices used in these zones. Typical lighting devices include warning lights, vehicle rotating or strobe lights, and arrow panels.

Warning Lights – the principal types and use of warning lights are:

1. **Low-Intensity Flashing Lights (Type A)** – used at night to warn of an isolated hazard.
2. **High-Intensity Flashing Lights (Type B)** – used both day and night to warn of an isolated hazard or draw attention to advance warning signs.
3. **Low-Intensity Steady-Burn Lights (Type C)** – used at night in a series to delineate the edge of the travelway and channel traffic.

Arrow Panels

Panel Type	Roadway Speed	Min. Size	Min. # Lamps	Min. Legibility Distance
A	≤ 35 mph	48" x 24"	12	1/2 mile
B	40 - 50 mph	60" x 30"	13	3/4 mile
C	≥ 55 mph	88" x 43"	15	1 mile

For mobile operations on high-speed roadways Type B (60" x 30") Arrow Panels may be used



North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor
William G. Ross Jr., Secretary

Division of Waste Management
Underground Storage Tank Section

Dan R. Matthews, Director

September 18, 2007

Mr. Steve Hudson
Catlin Engineers and Scientists
P. O. Box 10279
Wilmington, NC 28404-0279

Re: Review of Letter Concerning Free-Product
Delineation
Building G480
Camp Lejeune
Onslow County

Dear Mr. Hudson:

The Division has received and reviewed your September 10, 2007 letter concerning delineation of a groundwater contaminant/free-product plume at the subject site. The Division understands that the NCDOT is requiring a letter from the Division expressing the requirement to delineate the plume at this location.

We understand that the subject plume is from an underground storage tank which was previously located at the subject site. The detection of free-product automatically classifies the risk of this incident at a minimum of intermediate. Responsible parties of intermediate risk sites must comply with the assessment requirements of 15A NCAC 2L .0106c and g, and 15A NCAC 2N .0706. These regulations require the entire extent of plume be defined. Catlin Engineers and Scientists feels that up to 4 additional monitoring wells will be required on the easement to delineate the contaminant plume.

If you have any questions regarding this letter, please contact me at the address or telephone number listed below.

Sincerely,

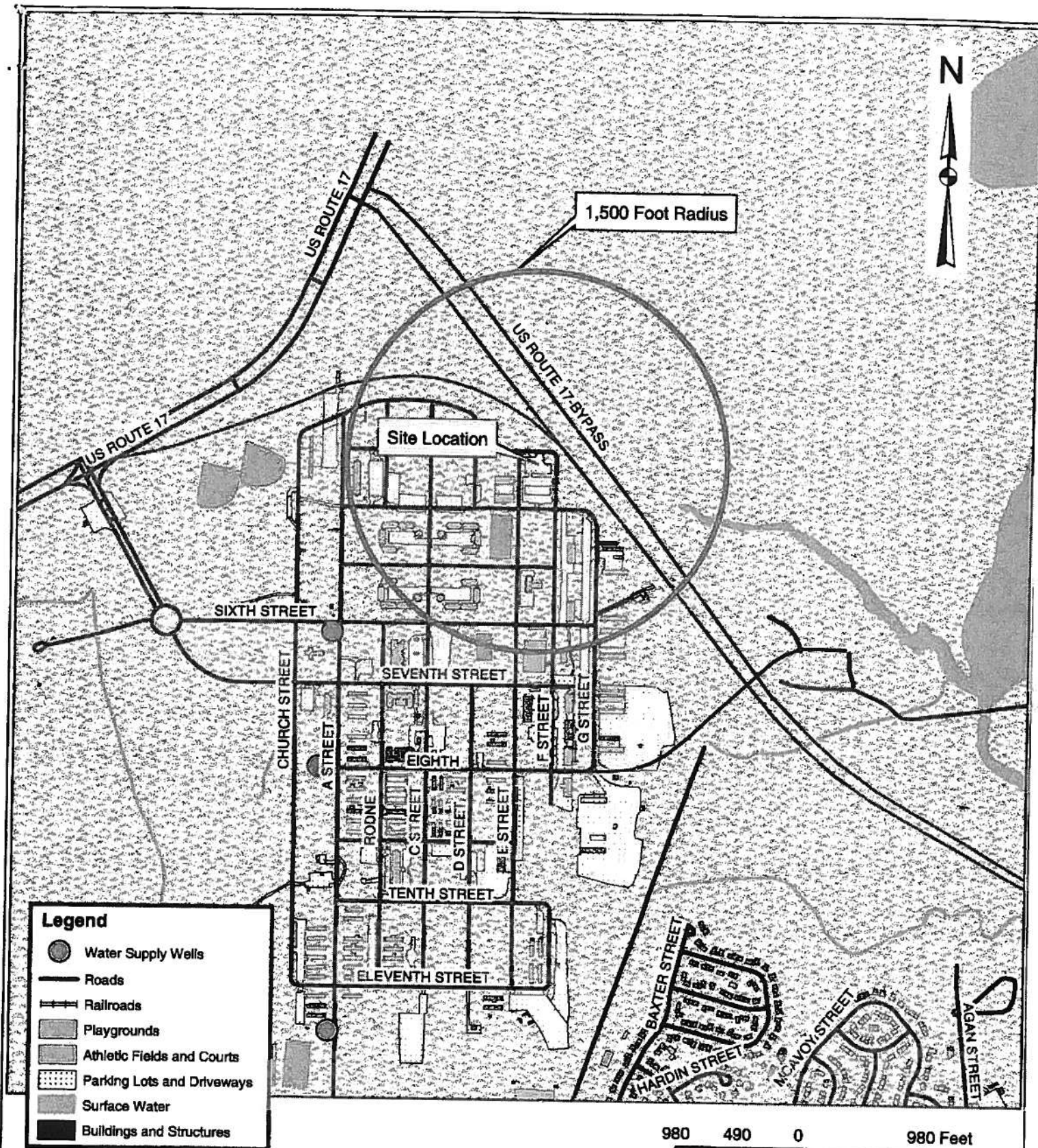
Bruce Reed
Hydrogeologist II
Wilmington Regional Office

cc: Johanna Arnold (Camp Lejeune)
WiRO-UST

UST Regional Offices

Asheville (ARO) – 2090 US Highway 70, Swannanoa, NC 28778 (828) 296-4500

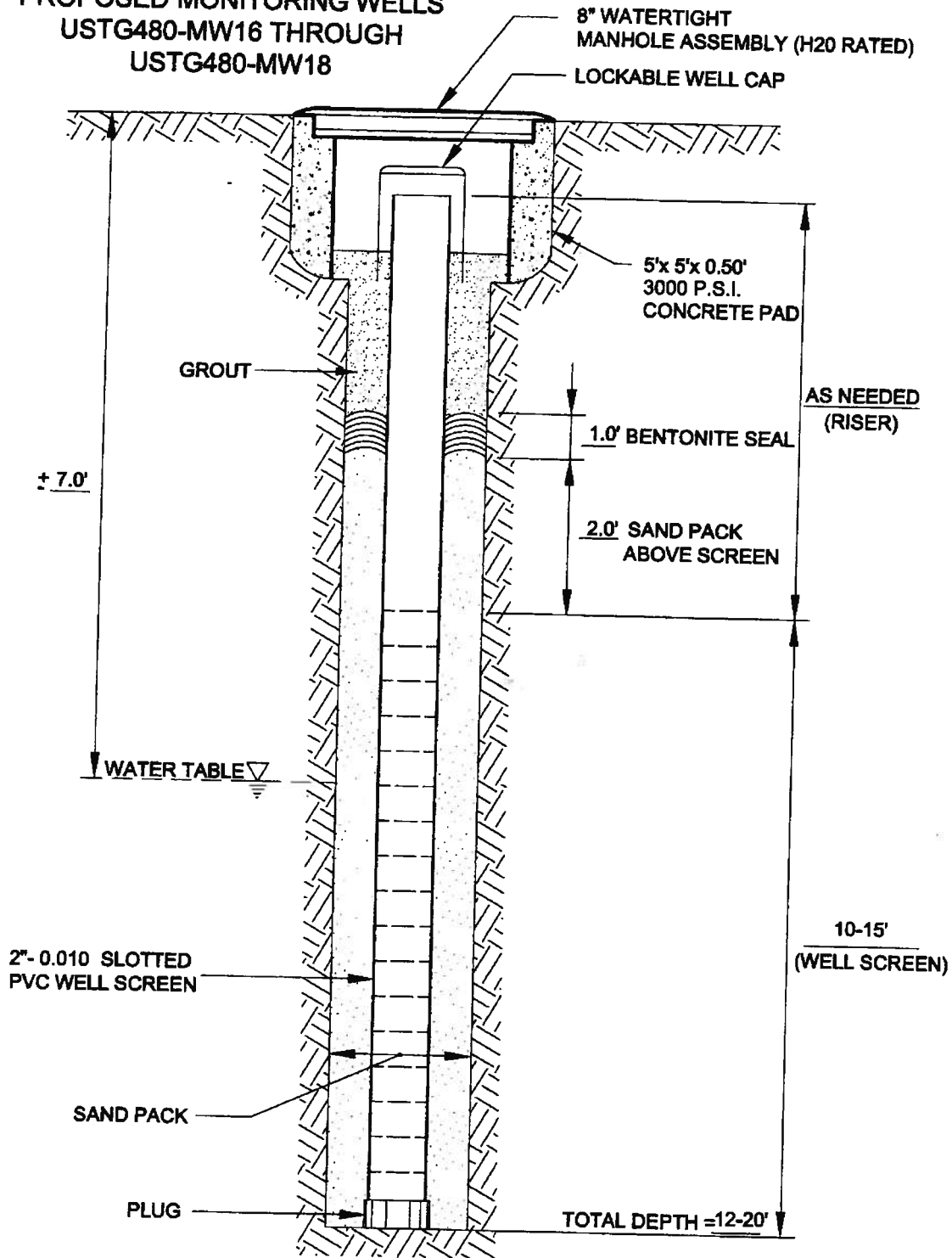
Fayetteville (FAY) – Systel Building, Suite 714, Fayetteville, NC 28301 (910) 486-1541



Data Sources: Data Layers provided by MCB Camp Lejeune GIS Office.

	PROJECT WORKPLAN/HASP SITE G480 - CSA MARINE CORPS BASE CAMP LEJEUNE, NC		TITLE SITE LOCATION MAP		FIGURE 1
	JOB NO. 206-111	DATE NOV 2007	SCALE AS SHOWN	DRAWN BY SAC	CHECKED BY SVH

**PROPOSED MONITORING WELLS
USTG480-MW16 THROUGH
USTG480-MW18**



CAELIN
ENGINEERS and SCIENTISTS
WILMINGTON, NORTH CAROLINA

PROJECT
**SITE G480
MARINE CORPS BASE
CAMP LEJEUNE, NC**

JOB NO: 206-111 DATE: DEC 2007

TITLE
**PROPOSED
UNPAVED SURFACE TYPE II
MONITORING WELL DETAIL**

SCALE: NTS DRAWN BY: KAWS CHECKED BY: MEM

FIGURE
3

APR 25 2008

Marine Corps Base Camp Lejeune
EMD Document Routing Slip

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COPY:

SUBJECT: ENCROACHMENT AGREEMENT ON US 17 BYPASS IN ONSLOW COUNTY

COMMENTS: Byrne / Johnson - for your files.
ST

ROUTING: Originator: J LEFORD Initials: JCL Date: 4/24/2008
1. J TOWNSON Initials: JMT Date: 4/24/08
2. Initials: Date:
3. Initials: Date:

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APPENDIX J

RISK CLASSIFICATION AND LAND USE FORM

Risk Classification and Land Use Form

Part I - Groundwater/Surface Water/Vapor Impacts

1. High Risk

- a) *Has a water supply well, including one used for non-drinking purposes, been contaminated by the release?* YES NO
- b) *Is a water supply well used for drinking water located within 1,000 feet of the source area of the release?* YES NO
- c) *Is a water supply well not used for drinking water (e.g., irrigation, washing cars, industrial cooling water, filling swimming pools) located within 250 feet of the source area of the release?* YES NO
- d) *Does groundwater within 500 feet of the source area of the release have the potential for future use in that there is no source of water supply other than the groundwater?* YES NO
- e) *Do vapors from the release pose a threat of explosion because of accumulation of the vapors in a confined space?* YES NO
- f) *Are there any other factors that would cause the discharge or release to pose an imminent danger to public health, public safety, or the environment?* YES NO

2. Intermediate Risk

- a) *Is surface water located within 500 feet of the source area of the release?* YES **NO**
If YES, does the maximum groundwater contaminant concentration exceed the surface water quality standards and criteria found in 15A NCAC 2B.0200 by a factor of 10? YES NO

The closest named surface water body is Brinson Creek located approximately 600 feet northeast of the release.

- b) *Is the release located in the Coastal Plain physiographic region as designated on a map entitled "Geology of North Carolina" published by the Department in 1985?* **YES** NO
If YES, is the source area of the release located in an area in which there is recharge to an unconfined or semi-confined deeper aquifer that is being used or may be used as a source of drinking water. YES **NO**

- c) *Is the source area of the discharge or release located within an approved or planned wellhead protection area as defined in 42 USC 300h-7(e)??* YES **NO**

Wellhead protection areas defined by 42 USC 300h-7(e) have not, as of this time, been designated by the State. However, MCB Camp Lejeune has identified wellhead protection areas on the base. Based on the most recent Wellhead Protection Plan – 2002 Update, the potential source area is not located within a proposed wellhead protection area.

- d/e) *Do the levels of groundwater contamination for any contaminant exceed the gross contamination levels established by the Department?* YES **NO**

- * *Is free product present in monitoring wells at thicknesses of greater than 0.10 feet?* **YES** NO

3. Low Risk

A low risk classification means that the risk posed by a release does not meet any of the high or intermediate risk criteria or, based on site-specific information received by the Department, the release does not pose a significant risk.

Part II - Land Use

Property Containing Source Area of Release

The questions below pertain to the property containing the source area of the release.

1. *Does the property contain one or more primary or secondary residences (permanent or temporary)?* YES **NO**
2. *Does the property contain a school, daycare center, hospital, playground, park, recreation area, church, nursing home, or other place of public assembly?* YES **NO**
3. *Does the property contain a commercial (e.g., retail, warehouse, office/business space, etc.) or industrial (e.g., manufacturing, utilities, industrial research and development, chemical/petroleum bulk storage, etc.) enterprise, an inactive commercial or industrial enterprise, or is the land undeveloped?* **YES** NO
Property is currently utilized as an Explosive Ordnance and Disposal Armory and Office Supply supporting USMC activities.
4. *Do children visit the property?* YES **NO**
Under normal circumstances, children are not expected to visit the property.
6. *Is access to the property reliably restricted consistent with its use (e.g., by fences, security personnel or both)? Explain.* **YES** NO
Subject site is within the limits of Camp Geiger and MCAS New River which are restricted from the general public by both security personnel and fences.
7. *Do pavement, buildings, or other structures cap the contaminated soil? Describe.* YES **NO**
Some areas of impacted soil are not covered. However, the majority of the impacted area is capped by asphalt.

If YES, what mechanisms are in place or can be put into place to ensure that the contaminated soil will remain capped in the foreseeable future?
8. *What is the zoning status of the property?*
MCB Camp Lejeune is not subject to local or county-zoning requirements; however, the project site is located within an Industrial/Commercial area.
9. *Is the use of the property likely to change in the next 20 years?* YES **NO**

Property Surrounding Source Area of Release

The questions below pertain to the area within 1500 feet of the source area of the release (excludes property containing source area of the release):

1. *What is the distance from the source area of the release to the **nearest** primary or secondary residence (permanent or temporary)?*

Greater than 1,500 feet.

2. *What is the distance from the source area of the release to the **nearest** school, daycare center, hospital, playground, park, recreation area, church, nursing home or other place of public assembly?*

A Marine Corps athletic field is located approximately 500 feet south southwest of the release.

3. *What is the zoning status of properties in the surrounding area?*

As previously stated, MCB Camp Lejeune is not subject to local or county-zoning requirements; however, the use of the project site is considered Industrial in nature

4. *Briefly characterize the use and activities of the land in the surrounding area.*

The subject site is bordered to the east and northeast by US Highway 17 Bypass and wetlands and bordered to the south, west, and northwest by Camp Geiger.