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August 27, 2009

NAVFAC Mid-Atlantic
Marine Corps North Carolina IPT
Environmental Business Line
Attn: Mr. David Borton, P.G.
6506 Hampton Boulevard
Building C, Room 314
Norfolk, VA 23508-1278

Re: UST Site TC-942 – Additional Soil and Groundwater Assessment
Marine Corps Base, Camp Lejeune, North Carolina
Navy Contract No. N62470-05-D-6200
Delivery Order No. 0074
CATLIN Project No. 209-034

Dear Mr. Borton:

CATLIN Engineers and Scientists (CATLIN) has collected soil and groundwater samples in the vicinity of a former Used Oil Underground Storage Tank (UST) adjacent to Building TC-942 in order to evaluate site contamination following the transfer of site jurisdiction from the Marine Corps Base (MCB) Camp Lejeune Installation Restoration (IR) Program to the MCB Camp Lejeune UST Program. The samples were collected to determine if soil or groundwater contamination above the action levels/standards was present in this location. Please find below a summary of the sampling activities, results and CATLIN's recommendations.

General Site Information and History

Site UST TC-942 is located adjacent to the southwestern corner of Building TC-942 which is located at the corner of E Street and 10th Street aboard MCB Camp Lejeune, North Carolina. The primary potential contaminant source in the area is the former used oil UST TC-942. The 550 gallon used oil UST was closed by removal on December 18, 1993 (see Tables 1 and 2 for UST information). Please refer to Figure 1 for a vicinity map of the project site. Site details are presented on Figure 2.

An Initial Site Assessment/UST Closure by Removal Report was prepared by Peele's Pump and Tank Company in 1994 that documented the subject UST removal, site

characteristics and initial soil sample analysis results. Additional soil and groundwater analytical results were reported in a Five Well Site Check Report by R.E. Wright Environmental, Inc., dated June 1995 and a Final Remedial Investigation for Operable Unit (OU) 16 and Sites 89 and 93 (UST TC-942), dated June 15, 1998. Analytical data submitted in the previously mentioned 1995 and 1998 reports indicated residual soil and groundwater contamination in the vicinity of the former used oil UST TC-942.

The current investigation, detailed in this report, was conducted to determine if remnant soil or groundwater contamination existed above the North Carolina Department of Environment and Natural Resources (NCDENR) Maximum Soil Contaminant Concentrations (MSCCs) and 2L Groundwater Quality Standards (GWQSs) in the vicinity of the former used oil UST TC-942.

Current Soil Sampling Activities

On June 22, 2009 CATLIN personnel arrived on-site to conduct soil sampling activities adjacent to site groundwater monitoring wells USTTC942-MW01 and USTTC942-MW03 in the area of the former Used Oil UST TC-942. Soil samples USTTC942-HA01 and USTTC942-HA03 were collected continuously from the surface to a depth of two feet below land surface (BLS) by hand auger technique adjacent to monitoring wells USTTC-942-MW01 and USTTC-942-MW03, respectively.

The soil samples collected for laboratory analysis was packed in the appropriate pre-labeled glassware and placed in a chilled cooler pending delivery to SGS Laboratories in Wilmington, North Carolina for analysis per EPA Methods 8260 with 5035 preparation, 8270, Chromium and Lead per 6010B and MADEP EPH and VPH.

The complete laboratory report and Chain of Custody (COC) documentation is included in Appendix A and is summarized as follows:

As indicated in Tables 3 through 5, the only EPA Method 8260 compounds detected in the submitted soil samples were Acetone, estimated at 0.0111 mg/kg and 0.0204 mg/kg in samples USTTC942-HA01 and USTTC942-HA03, respectively and 1,2,3-Trichlorobenzene at a concentration of 0.00484 mg/kg in soil sample USTTC942-HA03. Both reported Acetone concentrations were well below the lowest NCDENR MSCC for Acetone. A MSCC standard for 1,2,3-Trichlorobenzene has not yet been established by NCDENR. An estimated Fluorene concentration of 0.167 mg/kg in soil sample USTTC942-HA03 was the only EPA Method 8270 compound detected in both soil samples. The detected Fluorene concentration in soil sample USTTC942-HA03 was significantly less than the lowest applicable MSCC. Lead and Chromium per EPA Method 6010B were detected in soil samples USTTC942-HA01 (6.99 mg/kg Lead and 11.8 mg/kg Chromium) and USTTC942-HA03 (9.04 mg/kg Lead and 10.9 mg/kg Chromium). The concentrations of these metals for each soil sample were below the NCDENR MSCCs. It should be noted that Chromium was also detected in the batch blank utilized by the laboratory for quality control purposes. Analytical results of the MADEP EPH/VPH analyses indicated a concentration of 15 mg/kg for C19-C36

Aliphatics in soil sample USTTC942-HA01. Soil sample USTTC942-HA03 displayed concentrations of C9-C18 Aliphatics at 39.6 mg/kg and C19-C36 Aliphatics at 350 mg/kg. The reported MADEP EPH/VPH concentrations for both soil samples were below the NCDENR MSCCs.

Current Groundwater Sampling Activities

Groundwater sampling activities were conducted by CATLIN personnel in conjunction with the previously discussed soil sampling activities performed on June 22, 2009. Site groundwater monitoring well USTTC942-MW04 was developed and purged of three volumes of water utilizing a new, disposable polyethylene bailer prior to sample collection. Representative groundwater sample USTTC942-MW04 was collected in pre-labeled glassware and placed in a cooler with ice for transport to SGS Laboratories in Wilmington, North Carolina for analysis per EPA Methods 625, Lead per 6010B, Standard Method 6200B and MADEP EPH and VPH.

The complete laboratory report and Chain of Custody (COC) documentation is included in Appendix A and summarized as follows:

All EPA Method 625 groundwater analytes were reported below laboratory method detection limits (MDLs). Lead was detected in the EPA Method 6010B analysis at a concentration of 23.3 ug/L, which was above the 2L GWQS of 15 ug/L. Standard Method 6200B compounds detected in the groundwater sample included Benzene (estimated concentration of 0.150 ug/L), sec-Butylbenzene (estimated concentration of 0.210 ug/L), cis-1,2-dichloroethene (4.56 ug/l), trans-1,2-dichloroethene (0.520 ug/L), Methylene Chloride (estimated concentration of 0.360 ug/L) and Vinyl Chloride (3.09 ug/L). The reported Vinyl Chloride concentration (3.09 ug/L) was the only detected Standard Method 6200B compound that exceeded its applicable 2L GWQS (0.015 ug/L). Laboratory analytical results for the MADEP EPH/VPH groundwater analyses were reported below laboratory MDLs. Groundwater analytical results are provided in the attached Tables 6 through 8.

Recommendations

The soil samples collected during the current investigation in the vicinity of the former Used Oil UST at Building TC-942 did not reveal remnant soil contamination above any of the established MSCCs. The compound 1,2,3-Trichlorobenzene was detected at an extremely low concentration (0.00484 mg/kg) in soil sample USTTC942-HA03. A MSCC standard for 1,2,3-Trichlorobenzene has not yet been established by NCDENR; however, for the similar compound 1,2,4-Trichlorobenzene the Soil-to-Groundwater (STGW) MSCC is 2.6 mg/kg. Therefore, the detected concentration of 1,2,3-Trichlorobenzene does not appear to be a significant threat to human health or groundwater.

The presence of remnant Lead (23.3 ug/L) and Vinyl Chloride (3.09 ug/L) groundwater contamination in excess of the applicable 2L GWQS was detected in the groundwater

sample collected from site monitoring well USTTC942-MW04. However, the concentrations of these two compounds do not approach the Gross Contaminant Levels (GCLs). Also, the UST TC-942 site is part of OU 16 – Site 93 under the MCB Camp Lejeune IR Program. Under the IR Program OU 16 – Site 93 has a signed Record of Decision (ROD) with the EPA and NCDENR which has implemented a groundwater restriction as part of the Land Use Controls (LUCs) at the subject site. Also, as part of the ROD periodic groundwater monitoring will be conducted at the site to document monitored natural attenuation. Therefore, to avoid duplication of effort CATLIN recommends that the UST TC-942 site be included in the LUCs under Site 93 which have already been filed with the NCDENR and Onslow County. Additional actions at this site will be conducted by the MCB Camp Lejeune IR Program.

CATLIN Engineers and Scientists appreciate the opportunity to continue to provide services to NAVFAC Mid-Atlantic and the MCB on your environmental projects.

Sincerely,



Dimitri A. Talbert
Project Scientist



Michael E. Mason, P.E.
Program Manager



cc: Ms. Susan Tsimpinos - NAVFAC Mid-Atlantic Contracts
Commanding Officer - Attn: Director I&E/EMD/EQB (with two copies)

TABLES

TABLE 1

**SITE HISTORY
UST SYSTEM INFORMATION**

**UST TC-942 SITE
MCB, CAMP LEJEUNE, NORTH CAROLINA**

UST ID Number	Product (gasoline, diesel, jet fuel, etc.)	Capacity (gallons)	Date of Spill (m/dd/yy)	Date Permanently Closed (P), or Still in Use* (C) (m/dd/yy)	Was Release Associated with UST Sytem? (Yes/No)
UST TC-942	Used Oil	550	Unknown	(P) 12/18/93	Yes

TABLE 2

**SITE HISTORY
OWNER/OPERATOR INFORMATION**

**UST TC-942 SITE
MCB, CAMP LEJEUNE, NORTH CAROLINA**

Dates of Ownership/Operation (m/dd/yy) to (m/dd/yy)	UST ID Number	Name of Owner or Operator (indicate which)	Site Use
unknown-1993	UST TC-942	Commanding General Marine Corps Base Camp Lejeune, NC	Used Oil
Commanding Officer I & E/EMD/EQB (Mr. Thomas Burton) Marine Corps Base PSC 20004 McHugh Blvd. Building 12, Camp Lejeune, NC 28542-0004		(910) 451-5068	

TABLE 3

**SUMMARY OF SOIL LABORATORY RESULTS
EPA Methods 8260, 8270 and Chromium and Lead per 6010B**

Incident Name and No.: UST TC-942 - Pending

Sample ID	Contaminant of Concern →		Acetone	1,2,3-Trichlorobenzene	All Other 8260 Analytes	Fluorene	All Other 8270 Analytes	Chromium	Lead
	Date Collected	Sample Depth (ft. BLS)							
Analytical Method			EPA 8260			EPA 8270		EPA 6010B	
Residential MSCC (mg/kg)			1,564	NE	Varies	620	Varies	47	400
Industrial/Commercial MSCC (mg/kg)			40,880	NE	Varies	16,400	Varies	1,226	400
STGW MSCC (mg/kg)			2.8	NE	Varies	44	Varies	27	270
USTTC942-HA01	6/22/2009	0-2	0.0111 J	<0.00098	BMDL	<0.055	BMDL	6.99 B	11.8
USTTC942-HA03	6/22/2009	0-2	0.0204 J	0.00484	BMDL	0.167 J	BMDL	9.04 B	10.9

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

B = Compound also detected in batch blank

BMDL = Below Method Detection Limit

ft. BLS = Feet Below Land Surface.

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

NE = None Established

< = Less than method detection limit

MSCC = Maximum Soil Contaminant Concentration

STGW = Soil to Groundwater

Bold results indicate concentrations above lowest MSCC.

TABLE 4

**SUMMARY OF SOIL LABORATORY RESULTS
MADEP EPH/VPH**

Incident Name and No.: UST TC-942 - Pending

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)						
METHOD			EPH			VPH		
USTTC942-HA01	6/22/2009	0-2	<10.0	15	<10.0	<10.0	<10.0	<10.0
USTTC942-HA03	6/22/2009	0-2	39.6	350	<10.0	<10.0	<10.0	<10.0

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

< = Less than method detection limit

ft. BLS = Feet Below Land Surface.

TABLE 5

**SUMMARY OF SOIL LABORATORY RESULTS
MADEP EPH/VPH AS COMPARED TO MSCCs**

Incident Name and No.: UST TC-942 - Pending

Sample ID	Contaminant of Concern →		C5-C8 Aliphatics	C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C22 Aromatics
	Date Collected	Sample Depth (ft. BLS)				
Residential MSCC (mg/kg)			939	9,386	93,860	469
Industrial/Commercial MSCC (mg/kg)			24,528	245,280	#	12,264
STGW MSCC (mg/kg)			72	3,300	##	34
USTTC942-HA01	6/22/2009	0-2	<10.0	<10.0	15	<20.0
USTTC942-HA03	6/22/2009	0-2	<10.0	39.6	350	<20.0

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

< = Less than method detection limit

= Health based level > 100%

= Considered Immobile

MSCC = Maximum Soil Contaminant Concentration

STGW = Soil to Groundwater

TABLE 6

**SUMMARY OF GROUNDWATER LABORATORY RESULTS
EPA Methods 625, Lead per 6010B and Standard Method 6200B**

Incident Name and No.: UST TC-942 - Pending

Well ID	Contaminant of Concern →		All 625 Analytes	Lead	Benzene	sec-Butylbenzene	cis-1,2-Dichloroethene	trans-1,2-dichloroethene	Methylene chloride	Vinyl chloride	All Other 6200B Analytes
	Sample ID	Date Collected									
Analytical Method			EPA 625	EPA 6010B	SM 6200B						
GCL (µg/L)			Varies	15,000	5,000	8,500	70,000	100,000	4,600	15	Varies
2L GWQS (µg/L)			Varies	15	1	70	70	100	4.6	0.015	Varies
USTTC942-MW04	USTTC942-MW04	6/22/2009	BMDL	23.3	0.150 J	0.210 J	4.56	0.520	0.360 J	3.09	BMDL

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

BMDL = Below Method Detection Limit

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

GCL = Gross Contaminant Level

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

Bold results indicate concentrations above 2L GWQS or GCL.

TABLE 7

**SUMMARY OF GROUNDWATER LABORATORY RESULTS
EPA Method MADEP EPH/VPH**

Incident Name and No.: UST TC-942 - Pending

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						
Method			EPH			VPH		
USTTC942-MW04	USTTC942-MW04	6/22/2009	<100	<100	<100	<100	<100	<100

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

< = Less than method detection limit

TABLE 8

**SUMMARY OF GROUNDWATER LABORATORY RESULTS
MADEP EPH/VPH AS COMPARED TO 2L GWQS**

Incident Name and No.: UST TC-942 - Pending

Well ID	Contaminant of Concern →		C5-C8 Aliphatics	C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C22 Aromatics
	Sample ID	Date Collected				
GCL (µg/L) 2L GWQS (µg/L)			NE 420	NE 4,200	NE 42,000	NE 210
USTTC942-MW04	USTTC942-MW04	6/22/2009	<100	<100	<100	<200

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

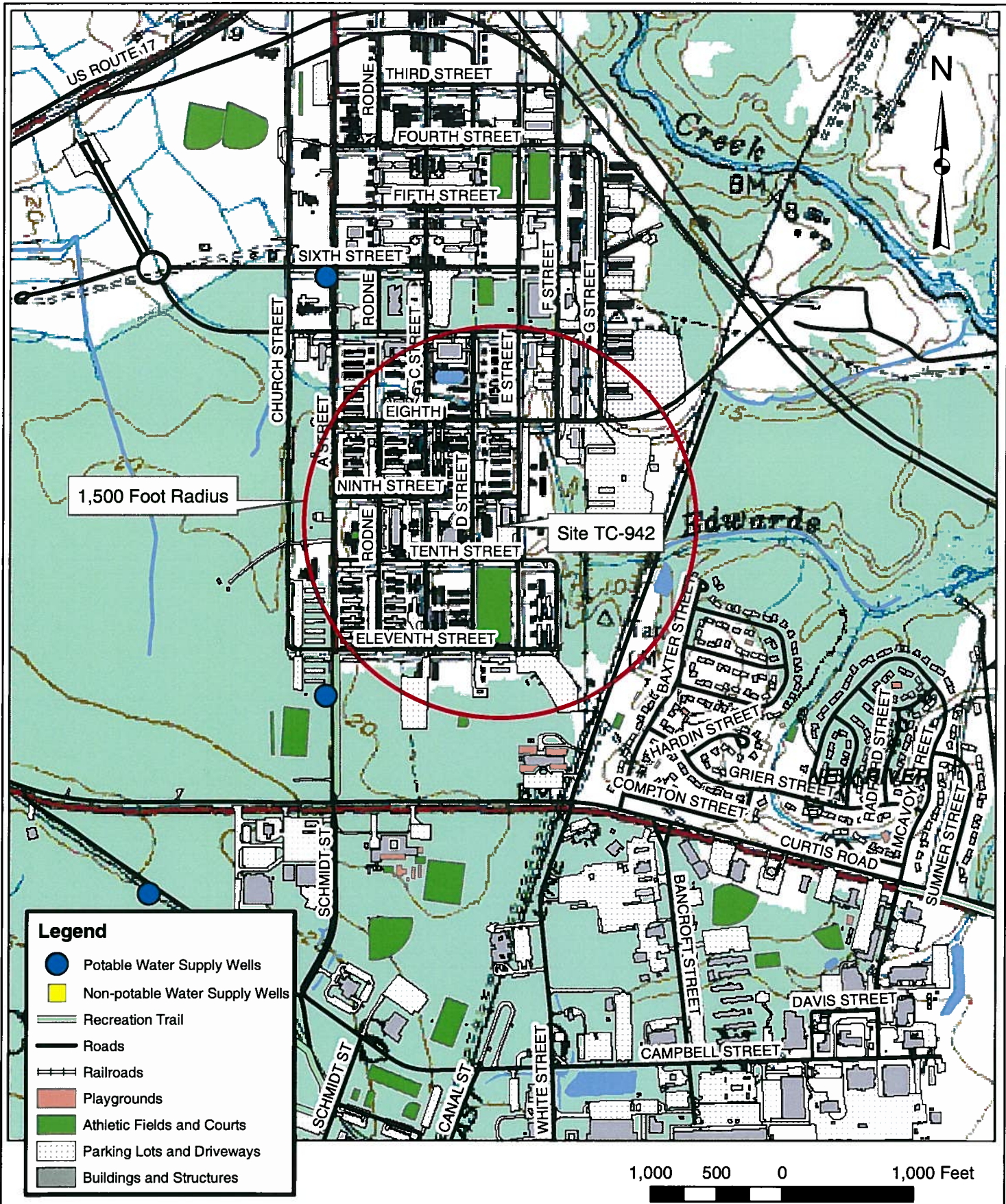
NE = None Established

< = Less than method detection limit


GCL = Gross Contaminant Level

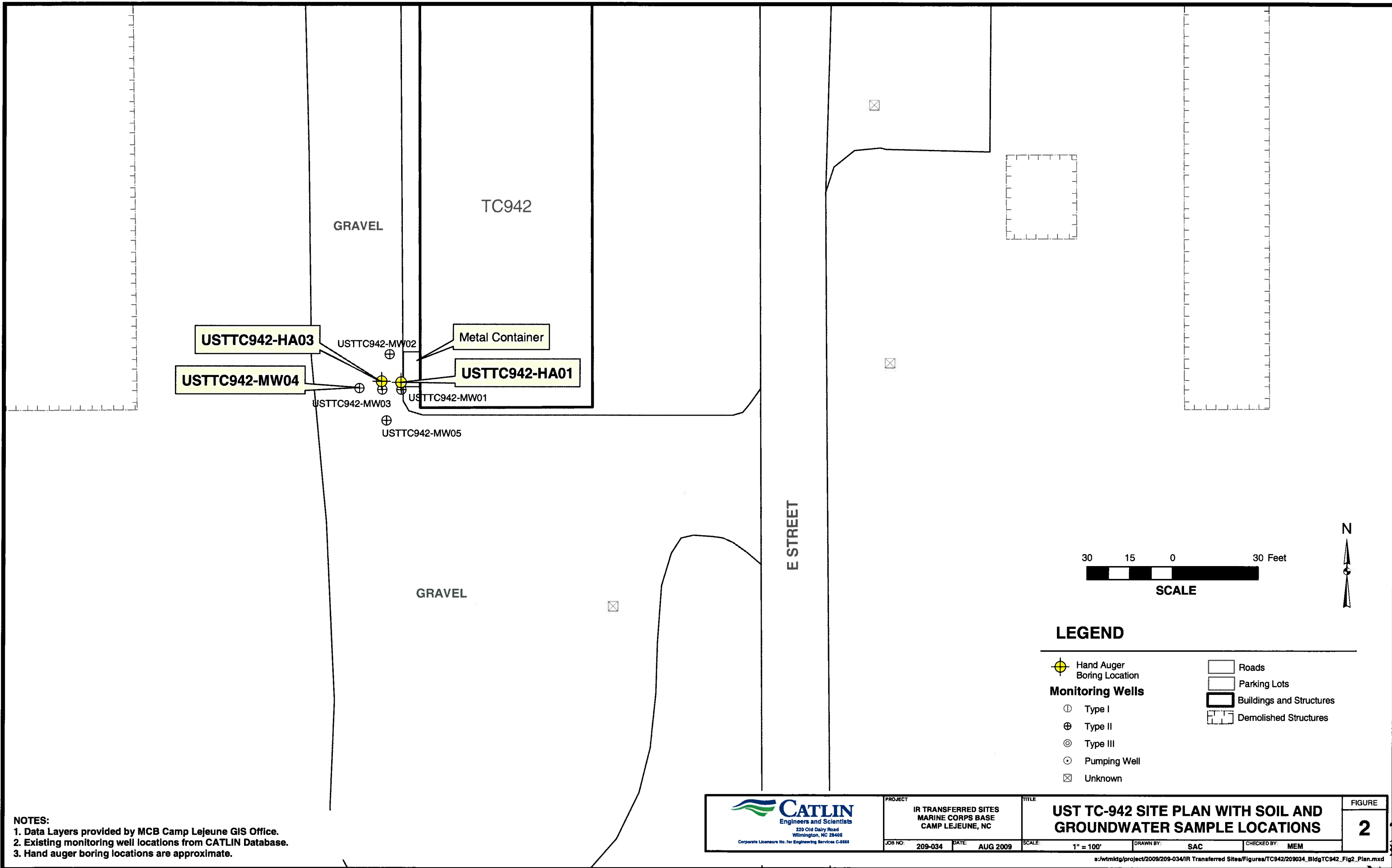
2L GWQS = NCAC T15A:02L Groundwater Quality Standards

FIGURES



Data Sources: Data Layers provided by MCB Camp Lejeune GIS Office.

 <p>220 Old Dairy Road Wilmington, NC 28405 Corporate License No. for Engineering Services C-0585</p>	PROJECT IR TRANSFERRED SITES MARINE CORPS BASE CAMP LEJEUNE, NC		TITLE UST TC-942 - SITE LOCATION MAP		FIGURE 1
	JOB NO. 209-034	DATE AUG 2009	SCALE AS SHOWN	DRAWN BY SAC	



USTTC942-HA03
 USTTC942-MW04
 USTTC942-MW02
 USTTC942-MW03
 USTTC942-MW05
 USTTC942-MW01
 USTTC942-HA01
 Metal Container



LEGEND

- Hand Auger Boring Location
- Type I
- Type II
- Type III
- Pumping Well
- Unknown
- Roads
- Parking Lots
- Buildings and Structures
- Demolished Structures

NOTES:
 1. Data Layers provided by MCB Camp Lejeune GIS Office.
 2. Existing monitoring well locations from CATLIN Database.
 3. Hand auger boring locations are approximate.

 CATLIN Engineers and Scientists 220 Old Dairy Road Wilmington, NC 28405 <small>Corporate License No. for Engineering Services C-6888</small>	PROJECT IR TRANSFERRED SITES MARINE CORPS BASE CAMP LEJEUNE, NC	TITLE UST TC-942 SITE PLAN WITH SOIL AND GROUNDWATER SAMPLE LOCATIONS	FIGURE 2
	JOB NO: 209-034 DATE: AUG 2009	SCALE: 1" = 100'	DRAWN BY: SAC CHECKED BY: MEM

APPENDIX A

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



Shane Chasteen
Richard Catlin & Associates
P.O. Box 10279
Wilmington, NC 28404-0279

Report Number: G128-2391

Client Project: UST TC-942


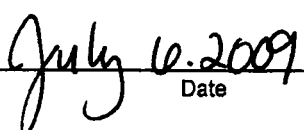
Dear Shane Chasteen,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. 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 services performed during this project, please call Barbara Hager 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.

Sincerely,
SGS North America, Inc.

 
Project Manager Date
Barbara Hager

SGS North America, Inc.
List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification 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/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

UJ = Target analytes with recoveries that are $10\% < \%R < LCL$; # of MEs are allowable and compounds are not detected in the sample.

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.

SGS North America, Inc.

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

Client Sample ID: USTTC942-HA01
 Client Project ID: UST TC-942
 Lab Sample ID G128-2391-1A
 Lab Project ID: G128-2391
 Report Basis: Dry Weight

Analyzed By: MJC
 Date Collected: 06-22-2009 12:15
 Date Received: 6/22/2009
 Matrix: Soil
 Sample Amount: 6.05 g
 %Solids: 87.5

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.0111	0.0472	0.00653	1	7/1/2009	J
Benzene	BQL	0.00472	0.00101	1	7/1/2009	
Bromobenzene	BQL	0.00472	0.00097	1	7/1/2009	
Bromochloromethane	BQL	0.00472	0.00162	1	7/1/2009	
Bromodichloromethane	BQL	0.00472	0.00094	1	7/1/2009	
Bromoform	BQL	0.00472	0.00094	1	7/1/2009	
Bromomethane	BQL	0.00472	0.00099	1	7/1/2009	
2-Butanone	BQL	0.0236	0.00513	1	7/1/2009	
n-Butylbenzene	BQL	0.00472	0.00090	1	7/1/2009	
sec-Butylbenzene	BQL	0.00472	0.00095	1	7/1/2009	
tert-Butylbenzene	BQL	0.00472	0.00106	1	7/1/2009	
Carbon disulfide	BQL	0.00472	0.00253	1	7/1/2009	
Carbon tetrachloride	BQL	0.00472	0.00096	1	7/1/2009	
Chlorobenzene	BQL	0.00472	0.00112	1	7/1/2009	
Chloroethane	BQL	0.00472	0.00150	1	7/1/2009	
Chloroform	BQL	0.00472	0.00113	1	7/1/2009	
Chloromethane	BQL	0.00472	0.00107	1	7/1/2009	
2-Chlorotoluene	BQL	0.00472	0.00095	1	7/1/2009	
4-Chlorotoluene	BQL	0.00472	0.00118	1	7/1/2009	
Dibromochloromethane	BQL	0.00472	0.00130	1	7/1/2009	
1,2-Dibromo-3-chloropropane	BQL	0.0236	0.00137	1	7/1/2009	
Dibromomethane	BQL	0.00472	0.00143	1	7/1/2009	
1,2-Dibromoethane (EDB)	BQL	0.00472	0.00107	1	7/1/2009	
1,2-Dichlorobenzene	BQL	0.00472	0.00122	1	7/1/2009	
1,3-Dichlorobenzene	BQL	0.00472	0.00121	1	7/1/2009	
1,4-Dichlorobenzene	BQL	0.00472	0.00099	1	7/1/2009	
trans-1,4-Dichloro-2-butene	BQL	0.0236	0.00130	1	7/1/2009	
1,1-Dichloroethane	BQL	0.00472	0.00100	1	7/1/2009	
1,1-Dichloroethene	BQL	0.00472	0.00140	1	7/1/2009	
1,2-Dichloroethane	BQL	0.00472	0.00125	1	7/1/2009	
cis-1,2-Dichloroethene	BQL	0.00472	0.00121	1	7/1/2009	
trans-1,2-dichloroethene	BQL	0.00472	0.00107	1	7/1/2009	
1,2-Dichloropropane	BQL	0.00472	0.00111	1	7/1/2009	
1,3-Dichloropropane	BQL	0.00472	0.00106	1	7/1/2009	
2,2-Dichloropropane	BQL	0.00472	0.00113	1	7/1/2009	
1,1-Dichloropropene	BQL	0.00472	0.00148	1	7/1/2009	
cis-1,3-Dichloropropene	BQL	0.00472	0.00079	1	7/1/2009	
trans-1,3-Dichloropropene	BQL	0.00472	0.00091	1	7/1/2009	
Dichlorodifluoromethane	BQL	0.00472	0.00125	1	7/1/2009	
Diisopropyl ether (DIPE)	BQL	0.00472	0.00107	1	7/1/2009	
Ethylbenzene	BQL	0.00472	0.00082	1	7/1/2009	
Hexachlorobutadiene	BQL	0.00472	0.00092	1	7/1/2009	
2-Hexanone	BQL	0.0118	0.00306	1	7/1/2009	
Iodomethane	BQL	0.00472	0.00102	1	7/1/2009	

SGS North America, Inc.

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

Client Sample ID: USTTC942-HA01
 Client Project ID: UST TC-942
 Lab Sample ID G128-2391-1A
 Lab Project ID: G128-2391
 Report Basis: Dry Weight

Analyzed By: MJC
 Date Collected: 06-22-2009 12:15
 Date Received: 6/22/2009
 Matrix: Soil
 Sample Amount: 6.05 g
 %Solids: 87.5

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Isopropylbenzene	BQL	0.00472	0.00084	1	7/1/2009	
4-Isopropyltoluene	BQL	0.00472	0.00101	1	7/1/2009	
Methylene chloride	BQL	0.0189	0.00112	1	7/1/2009	
4-Methyl-2-pentanone	BQL	0.0118	0.00437	1	7/1/2009	
Methyl-tert-butyl ether (MTBE)	BQL	0.00472	0.00105	1	7/1/2009	
Naphthalene	BQL	0.00472	0.00080	1	7/1/2009	
n-Propyl benzene	BQL	0.00472	0.00119	1	7/1/2009	
Styrene	BQL	0.00472	0.00104	1	7/1/2009	
1,1,1,2-Tetrachloroethane	BQL	0.00472	0.00096	1	7/1/2009	
1,1,2,2-Tetrachloroethane	BQL	0.00472	0.00107	1	7/1/2009	
Tetrachloroethene	BQL	0.00472	0.00087	1	7/1/2009	
Toluene	BQL	0.00472	0.00094	1	7/1/2009	
1,2,3-Trichlorobenzene	BQL	0.00472	0.00098	1	7/1/2009	
1,2,4-Trichlorobenzene	BQL	0.00472	0.00097	1	7/1/2009	
Trichloroethene	BQL	0.00472	0.00090	1	7/1/2009	
1,1,1-Trichloroethane	BQL	0.00472	0.00107	1	7/1/2009	
1,1,2-Trichloroethane	BQL	0.00472	0.00155	1	7/1/2009	
Trichlorofluoromethane	BQL	0.00472	0.00097	1	7/1/2009	
1,2,3-Trichloropropane	BQL	0.00472	0.00117	1	7/1/2009	
1,2,4-Trimethylbenzene	BQL	0.00472	0.00119	1	7/1/2009	
1,3,5-Trimethylbenzene	BQL	0.00472	0.00108	1	7/1/2009	
Vinyl chloride	BQL	0.00472	0.00128	1	7/1/2009	
m-,p-Xylene	BQL	0.00944	0.00181	1	7/1/2009	
o-Xylene	BQL	0.00472	0.00092	1	7/1/2009	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.05	0.0609	122		
Toluene-d8		0.05	0.0495	99		
4-Bromofluorobenzene		0.05	0.0476	95		

Comments:

Flags:

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

Analyst: 3/

Reviewed By: 

SGS North America, Inc.

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

Client Sample ID: USTTC942-HA03
 Client Project ID: UST TC-942
 Lab Sample ID G128-2391-2A
 Lab Project ID: G128-2391
 Report Basis: Dry Weight

Analyzed By: MJC
 Date Collected: 06-22-2009 12:30
 Date Received: 6/22/2009
 Matrix: Soil
 Sample Amount: 7.23 g
 %Solids: 86.8

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.0204	0.0398	0.00550	1	7/1/2009	J
Benzene	BQL	0.00398	0.00085	1	7/1/2009	
Bromobenzene	BQL	0.00398	0.00082	1	7/1/2009	
Bromochloromethane	BQL	0.00398	0.00137	1	7/1/2009	
Bromodichloromethane	BQL	0.00398	0.00079	1	7/1/2009	
Bromoform	BQL	0.00398	0.00080	1	7/1/2009	
Bromomethane	BQL	0.00398	0.00084	1	7/1/2009	
2-Butanone	BQL	0.0199	0.00432	1	7/1/2009	
n-Butylbenzene	BQL	0.00398	0.00076	1	7/1/2009	
sec-Butylbenzene	BQL	0.00398	0.00080	1	7/1/2009	
tert-Butylbenzene	BQL	0.00398	0.00089	1	7/1/2009	
Carbon disulfide	BQL	0.00398	0.00213	1	7/1/2009	
Carbon tetrachloride	BQL	0.00398	0.00081	1	7/1/2009	
Chlorobenzene	BQL	0.00398	0.00095	1	7/1/2009	
Chloroethane	BQL	0.00398	0.00127	1	7/1/2009	
Chloroform	BQL	0.00398	0.00096	1	7/1/2009	
Chloromethane	BQL	0.00398	0.00090	1	7/1/2009	
2-Chlorotoluene	BQL	0.00398	0.00080	1	7/1/2009	
4-Chlorotoluene	BQL	0.00398	0.00100	1	7/1/2009	
Dibromochloromethane	BQL	0.00398	0.00110	1	7/1/2009	
1,2-Dibromo-3-chloropropane	BQL	0.0199	0.00115	1	7/1/2009	
Dibromomethane	BQL	0.00398	0.00120	1	7/1/2009	
1,2-Dibromoethane (EDB)	BQL	0.00398	0.00090	1	7/1/2009	
1,2-Dichlorobenzene	BQL	0.00398	0.00103	1	7/1/2009	
1,3-Dichlorobenzene	BQL	0.00398	0.00102	1	7/1/2009	
1,4-Dichlorobenzene	BQL	0.00398	0.00084	1	7/1/2009	
trans-1,4-Dichloro-2-butene	BQL	0.0199	0.00110	1	7/1/2009	
1,1-Dichloroethane	BQL	0.00398	0.00084	1	7/1/2009	
1,1-Dichloroethene	BQL	0.00398	0.00118	1	7/1/2009	
1,2-Dichloroethane	BQL	0.00398	0.00105	1	7/1/2009	
cis-1,2-Dichloroethene	BQL	0.00398	0.00102	1	7/1/2009	
trans-1,2-dichloroethene	BQL	0.00398	0.00090	1	7/1/2009	
1,2-Dichloropropane	BQL	0.00398	0.00094	1	7/1/2009	
1,3-Dichloropropane	BQL	0.00398	0.00089	1	7/1/2009	
2,2-Dichloropropane	BQL	0.00398	0.00096	1	7/1/2009	
1,1-Dichloropropene	BQL	0.00398	0.00125	1	7/1/2009	
cis-1,3-Dichloropropene	BQL	0.00398	0.00066	1	7/1/2009	
trans-1,3-Dichloropropene	BQL	0.00398	0.00077	1	7/1/2009	
Dichlorodifluoromethane	BQL	0.00398	0.00105	1	7/1/2009	
Diisopropyl ether (DIPE)	BQL	0.00398	0.00090	1	7/1/2009	
Ethylbenzene	BQL	0.00398	0.00069	1	7/1/2009	
Hexachlorobutadiene	BQL	0.00398	0.00078	1	7/1/2009	
2-Hexanone	BQL	0.00995	0.00258	1	7/1/2009	
Iodomethane	BQL	0.00398	0.00086	1	7/1/2009	

SGS North America, Inc.

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

Client Sample ID: USTTC942-HA03
 Client Project ID: UST TC-942
 Lab Sample ID G128-2391-2A
 Lab Project ID: G128-2391
 Report Basis: Dry Weight

Analyzed By: MJC
 Date Collected: 06-22-2009 12:30
 Date Received: 6/22/2009
 Matrix: Soil
 Sample Amount: 7.23 g
 %Solids: 86.8

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Isopropylbenzene	BQL	0.00398	0.00071	1	7/1/2009	
4-Isopropyltoluene	BQL	0.00398	0.00085	1	7/1/2009	
Methylene chloride	BQL	0.0159	0.00095	1	7/1/2009	
4-Methyl-2-pentanone	BQL	0.00995	0.00369	1	7/1/2009	
Methyl-tert-butyl ether (MTBE)	BQL	0.00398	0.00088	1	7/1/2009	
Naphthalene	BQL	0.00398	0.00068	1	7/1/2009	
n-Propyl benzene	BQL	0.00398	0.00100	1	7/1/2009	
Styrene	BQL	0.00398	0.00088	1	7/1/2009	
1,1,1,2-Tetrachloroethane	BQL	0.00398	0.00081	1	7/1/2009	
1,1,2,2-Tetrachloroethane	BQL	0.00398	0.00090	1	7/1/2009	
Tetrachloroethene	BQL	0.00398	0.00073	1	7/1/2009	
Toluene	BQL	0.00398	0.00079	1	7/1/2009	
1,2,3-Trichlorobenzene	0.00484	0.00398	0.00083	1	7/1/2009	
1,2,4-Trichlorobenzene	BQL	0.00398	0.00082	1	7/1/2009	
Trichloroethene	BQL	0.00398	0.00076	1	7/1/2009	
1,1,1-Trichloroethane	BQL	0.00398	0.00090	1	7/1/2009	
1,1,2-Trichloroethane	BQL	0.00398	0.00131	1	7/1/2009	
Trichlorofluoromethane	BQL	0.00398	0.00082	1	7/1/2009	
1,2,3-Trichloropropane	BQL	0.00398	0.00099	1	7/1/2009	
1,2,4-Trimethylbenzene	BQL	0.00398	0.00100	1	7/1/2009	
1,3,5-Trimethylbenzene	BQL	0.00398	0.00091	1	7/1/2009	
Vinyl chloride	BQL	0.00398	0.00108	1	7/1/2009	
m-,p-Xylene	BQL	0.00796	0.00153	1	7/1/2009	
o-Xylene	BQL	0.00398	0.00077	1	7/1/2009	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		0.05	0.0563	113		
Toluene-d8		0.05	0.0601	120		
4-Bromofluorobenzene		0.05	0.0518	104		

Comments:

Flags:

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

Analyst: 3

Reviewed By: MJC

SGS North America, Inc.

Results for Volatiles
by GCMS 6200B

Client Sample ID: USTTC942-MW04
Client Project ID: UST TC-942
Lab Sample ID: G128-2391-3E
Lab Project ID: G128-2391

Analyzed By: DVO
Date Collected: 6/22/2009 14:00
Date Received: 6/22/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Benzene	0.150	0.500	0.0650	1	6/26/2009	J
Bromobenzene	BQL	0.500	0.0560	1	6/26/2009	
Bromochloromethane	BQL	0.500	0.101	1	6/26/2009	
Bromodichloromethane	BQL	0.500	0.0760	1	6/26/2009	
Bromoform	BQL	0.500	0.120	1	6/26/2009	
Bromomethane	BQL	0.500	0.133	1	6/26/2009	
n-Butylbenzene	BQL	0.500	0.109	1	6/26/2009	
sec-Butylbenzene	0.210	0.500	0.0840	1	6/26/2009	J
tert-Butylbenzene	BQL	0.500	0.0500	1	6/26/2009	
Carbon tetrachloride	BQL	0.500	0.0870	1	6/26/2009	
Chlorobenzene	BQL	0.500	0.0820	1	6/26/2009	
Chloroethane	BQL	0.500	0.106	1	6/26/2009	
Chloroform	BQL	0.500	0.0790	1	6/26/2009	
Chloromethane	BQL	0.500	0.146	1	6/26/2009	
2-Chlorotoluene	BQL	0.500	0.0990	1	6/26/2009	
4-Chlorotoluene	BQL	0.500	0.0800	1	6/26/2009	
Dibromochloromethane	BQL	0.500	0.0900	1	6/26/2009	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	6/26/2009	
Dibromomethane	BQL	0.500	0.113	1	6/26/2009	
1,2-Dibromoethane (EDB)	BQL	0.500	0.124	1	6/26/2009	
1,2-Dichlorobenzene	BQL	0.500	0.127	1	6/26/2009	
1,3-Dichlorobenzene	BQL	0.500	0.0810	1	6/26/2009	
1,4-Dichlorobenzene	BQL	0.500	0.0790	1	6/26/2009	
1,1-Dichloroethane	BQL	0.500	0.0740	1	6/26/2009	
1,1-Dichloroethene	BQL	0.500	0.0890	1	6/26/2009	
1,2-Dichloroethane	BQL	0.500	0.0790	1	6/26/2009	
cis-1,2-Dichloroethene	4.56	0.500	0.0650	1	6/26/2009	
trans-1,2-dichloroethene	0.520	0.500	0.0890	1	6/26/2009	
1,2-Dichloropropane	BQL	0.500	0.0940	1	6/26/2009	
1,3-Dichloropropane	BQL	0.500	0.127	1	6/26/2009	
2,2-Dichloropropane	BQL	0.500	0.0590	1	6/26/2009	
1,1-Dichloropropene	BQL	0.500	0.0720	1	6/26/2009	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	6/26/2009	
Diisopropyl ether (DIPE)	BQL	0.500	0.0730	1	6/26/2009	
Ethylbenzene	BQL	0.500	0.0770	1	6/26/2009	
Hexachlorobutadiene	BQL	0.500	0.228	1	6/26/2009	
Isopropylbenzene	BQL	0.500	0.0710	1	6/26/2009	
4-Isopropyltoluene	BQL	0.500	0.0480	1	6/26/2009	
Methylene chloride	0.360	5.00	0.0980	1	6/26/2009	J
Methyl-tert-butyl ether (MTBE)	BQL	0.500	0.0670	1	6/26/2009	
Naphthalene	BQL	0.500	0.133	1	6/26/2009	
n-Propyl benzene	BQL	0.500	0.0800	1	6/26/2009	
Styrene	BQL	0.500	0.0850	1	6/26/2009	
1,1,1,2-Tetrachloroethane	BQL	0.500	0.0900	1	6/26/2009	
1,1,2,2-Tetrachloroethane	BQL	0.500	0.115	1	6/26/2009	

SGS North America, Inc.

Results for Volatiles
by GCMS 6200B

Client Sample ID: USTTC942-MW04
Client Project ID: UST TC-942
Lab Sample ID: G128-2391-3E
Lab Project ID: G128-2391

Analyzed By: DVO
Date Collected: 6/22/2009 14:00
Date Received: 6/22/2009
Matrix: Water
Sample Amount: 5 mL


Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Tetrachloroethene	BQL	0.500	0.0690	1	6/26/2009	
Toluene	BQL	0.500	0.0760	1	6/26/2009	
1,2,3-Trichlorobenzene	BQL	0.500	0.190	1	6/26/2009	
1,2,4-Trichlorobenzene	BQL	0.500	0.119	1	6/26/2009	
Trichloroethene	BQL	0.500	0.0540	1	6/26/2009	
1,1,1-Trichloroethane	BQL	0.500	0.0540	1	6/26/2009	
1,1,2-Trichloroethane	BQL	0.500	0.182	1	6/26/2009	
Trichlorofluoromethane	BQL	0.500	0.111	1	6/26/2009	
1,2,3-Trichloropropane	BQL	0.500	0.120	1	6/26/2009	
1,2,4-Trimethylbenzene	BQL	0.500	0.0650	1	6/26/2009	
1,3,5-Trimethylbenzene	BQL	0.500	0.0740	1	6/26/2009	
Vinyl chloride	3.09	0.500	0.149	1	6/26/2009	
m-,p-Xylene	BQL	1.00	0.0980	1	6/26/2009	
o-Xylene	BQL	0.500	0.0650	1	6/26/2009	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	10.6	106		
Toluene-d8		10	10.5	105		
4-Bromofluorobenzene		10	10.3	103		

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTTC942-HA01
 Client Project ID: UST TC-942
 Lab Sample ID: G128-2391-1H
 Lab Project ID: G128-2391
 Report Basis: Dry weight
 Initial Weight: 32.54 g

Analyzed By: DCS
 Date Collected: 6/22/2009 12:15
 Date Received: 6/22/2009
 Date Extracted: 6/24/2009
 Matrix: Soil
 % Solids: 87.51

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.351	0.054	1	6/25/2009	
Acenaphthylene	BQL	0.351	0.049	1	6/25/2009	
Anthracene	BQL	0.351	0.048	1	6/25/2009	
Benzo[a]anthracene	BQL	0.351	0.048	1	6/25/2009	
Benzo[a]pyrene	BQL	0.351	0.051	1	6/25/2009	
Benzo[b]fluoranthene	BQL	0.351	0.049	1	6/25/2009	
Benzo[g,h,i]perylene	BQL	0.351	0.061	1	6/25/2009	
Benzo[k]fluoranthene	BQL	0.351	0.050	1	6/25/2009	
Benzoic Acid	BQL	1.76	0.434	1	6/25/2009	
Bis(2-chloroethoxy)methane	BQL	0.351	0.052	1	6/25/2009	
Bis(2-chloroethyl)ether	BQL	0.351	0.071	1	6/25/2009	
Bis(2-chloroisopropyl)ether	BQL	0.351	0.057	1	6/25/2009	
Bis(2-ethylhexyl)phthalate	BQL	0.351	0.054	1	6/25/2009	
4-bromophenyl phenyl ether	BQL	0.351	0.062	1	6/25/2009	
Butylbenzylphthalate	BQL	0.351	0.052	1	6/25/2009	
2-Chloronaphthalene	BQL	0.351	0.049	1	6/25/2009	
2-Chlorophenol	BQL	0.351	0.045	1	6/25/2009	
4-Chloro-3-methylphenol	BQL	0.351	0.051	1	6/25/2009	
4-Chloroaniline	BQL	1.76	0.057	1	6/25/2009	
4-Chlorophenyl phenyl ether	BQL	0.351	0.052	1	6/25/2009	UJ
Chrysene	BQL	0.351	0.034	1	6/25/2009	
Dibenzo[a,h]anthracene	BQL	0.351	0.045	1	6/25/2009	
Dibenzofuran	BQL	0.351	0.050	1	6/25/2009	
Di-n-Butylphthalate	BQL	0.351	0.051	1	6/25/2009	
1,2-Dichlorobenzene	BQL	0.351	0.059	1	6/25/2009	
1,3-Dichlorobenzene	BQL	0.351	0.057	1	6/25/2009	
1,4-Dichlorobenzene	BQL	0.351	0.051	1	6/25/2009	
3,3'-Dichlorobenzidine	BQL	0.702	0.058	1	6/25/2009	
2,4-Dichlorophenol	BQL	0.351	0.038	1	6/25/2009	
Diethylphthalate	BQL	0.351	0.047	1	6/25/2009	
Dimethylphthalate	BQL	0.351	0.054	1	6/25/2009	
2,4-Dimethylphenol	BQL	0.351	0.064	1	6/25/2009	
Di-n-octylphthalate	BQL	0.351	0.054	1	6/25/2009	
4,6-Dinitro-2-methylphenol	BQL	1.76	0.042	1	6/25/2009	
2,4-Dinitrophenol	BQL	1.76	0.046	1	6/25/2009	
2,4-Dinitrotoluene	BQL	0.351	0.053	1	6/25/2009	
2,6-Dinitrotoluene	BQL	0.351	0.058	1	6/25/2009	
Fluoranthene	BQL	0.351	0.057	1	6/25/2009	
Fluorene	BQL	0.351	0.055	1	6/25/2009	
Hexachlorobenzene	BQL	0.351	0.076	1	6/25/2009	
Hexachlorobutadiene	BQL	0.351	0.064	1	6/25/2009	
Hexachlorocyclopentadiene	BQL	0.702	0.069	1	6/25/2009	
Hexachloroethane	BQL	0.351	0.055	1	6/25/2009	
Indeno(1,2,3-c,d)pyrene	BQL	0.351	0.041	1	6/25/2009	
Isophorone	BQL	0.351	0.051	1	6/25/2009	
2-Methylnaphthalene	BQL	0.351	0.057	1	6/25/2009	
2-Methylphenol	BQL	0.351	0.054	1	6/25/2009	

SGS North America, Inc.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTTC942-HA01
 Client Project ID: UST TC-942
 Lab Sample ID: G128-2391-1H
 Lab Project ID: G128-2391
 Report Basis: Dry weight
 Initial Weight: 32.54 g

Analyzed By: DCS
 Date Collected: 6/22/2009 12:15
 Date Received: 6/22/2009
 Date Extracted: 6/24/2009
 Matrix: Soil
 % Solids: 87.51

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	0.351	0.046	1	6/25/2009	
Naphthalene	BQL	0.351	0.049	1	6/25/2009	
2-Nitroaniline	BQL	0.351	0.047	1	6/25/2009	UJ
3-Nitroaniline	BQL	1.76	0.052	1	6/25/2009	
4-Nitroaniline	BQL	1.76	0.047	1	6/25/2009	
Nitrobenzene	BQL	0.351	0.047	1	6/25/2009	
2-Nitrophenol	BQL	0.351	0.051	1	6/25/2009	
4-Nitrophenol	BQL	1.76	0.061	1	6/25/2009	
Diphenylamine *	BQL	0.351	0.057	1	6/25/2009	
Pentachlorophenol	BQL	1.76	0.032	1	6/25/2009	
Phenanthrene	BQL	0.351	0.049	1	6/25/2009	
Phenol	BQL	0.351	0.048	1	6/25/2009	
Pyrene	BQL	0.351	0.048	1	6/25/2009	
1,2,4-Trichlorobenzene	BQL	0.351	0.063	1	6/25/2009	
2,4,5-Trichlorophenol	BQL	0.351	0.052	1	6/25/2009	
2,4,6-Trichlorophenol	BQL	0.351	0.031	1	6/25/2009	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	9	90		
2-Fluorophenol		10	10.2	102		
Nitrobenzene-d5		10	8.5	85		
Phenol-d6		10	9.6	96		
2,4,6-Tribromophenol		10	7.6	76		
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: 

SGS North America, Inc.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTTC942-HA03
 Client Project ID: UST TC-942
 Lab Sample ID: G128-2391-2H
 Lab Project ID: G128-2391
 Report Basis: Dry weight
 Initial Weight: 33.19 g

Analyzed By: DCS
 Date Collected: 6/22/2009 12:30
 Date Received: 6/22/2009
 Date Extracted: 6/24/2009
 Matrix: Soil
 % Solids: 86.77

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.347	0.053	1	6/25/2009	
Acenaphthylene	BQL	0.347	0.049	1	6/25/2009	
Anthracene	BQL	0.347	0.047	1	6/25/2009	
Benzo[a]anthracene	BQL	0.347	0.048	1	6/25/2009	
Benzo[a]pyrene	BQL	0.347	0.050	1	6/25/2009	
Benzo[b]fluoranthene	BQL	0.347	0.048	1	6/25/2009	
Benzo[g,h,i]perylene	BQL	0.347	0.060	1	6/25/2009	
Benzo[k]fluoranthene	BQL	0.347	0.049	1	6/25/2009	
Benzoic Acid	BQL	1.74	0.429	1	6/25/2009	
Bis(2-chloroethoxy)methane	BQL	0.347	0.051	1	6/25/2009	
Bis(2-chloroethyl)ether	BQL	0.347	0.071	1	6/25/2009	
Bis(2-chloroisopropyl)ether	BQL	0.347	0.056	1	6/25/2009	
Bis(2-ethylhexyl)phthalate	BQL	0.347	0.053	1	6/25/2009	
4-bromophenyl phenyl ether	BQL	0.347	0.062	1	6/25/2009	
Butylbenzylphthalate	BQL	0.347	0.051	1	6/25/2009	
2-Chloronaphthalene	BQL	0.347	0.048	1	6/25/2009	
2-Chlorophenol	BQL	0.347	0.044	1	6/25/2009	
4-Chloro-3-methylphenol	BQL	0.347	0.051	1	6/25/2009	
4-Chloroaniline	BQL	1.74	0.057	1	6/25/2009	
4-Chlorophenyl phenyl ether	BQL	0.347	0.051	1	6/25/2009	UJ
Chrysene	BQL	0.347	0.033	1	6/25/2009	
Dibenzo[a,h]anthracene	BQL	0.347	0.044	1	6/25/2009	
Dibenzofuran	BQL	0.347	0.049	1	6/25/2009	
Di-n-Butylphthalate	BQL	0.347	0.051	1	6/25/2009	
1,2-Dichlorobenzene	BQL	0.347	0.059	1	6/25/2009	
1,3-Dichlorobenzene	BQL	0.347	0.056	1	6/25/2009	
1,4-Dichlorobenzene	BQL	0.347	0.050	1	6/25/2009	
3,3'-Dichlorobenzidine	BQL	0.694	0.057	1	6/25/2009	
2,4-Dichlorophenol	BQL	0.347	0.038	1	6/25/2009	
Diethylphthalate	BQL	0.347	0.047	1	6/25/2009	
Dimethylphthalate	BQL	0.347	0.054	1	6/25/2009	
2,4-Dimethylphenol	BQL	0.347	0.063	1	6/25/2009	
Di-n-octylphthalate	BQL	0.347	0.054	1	6/25/2009	
4,6-Dinitro-2-methylphenol	BQL	1.74	0.041	1	6/25/2009	
2,4-Dinitrophenol	BQL	1.74	0.045	1	6/25/2009	
2,4-Dinitrotoluene	BQL	0.347	0.053	1	6/25/2009	
2,6-Dinitrotoluene	BQL	0.347	0.057	1	6/25/2009	
Fluoranthene	BQL	0.347	0.056	1	6/25/2009	
Fluorene	0.167	0.347	0.054	1	6/25/2009	J
Hexachlorobenzene	BQL	0.347	0.075	1	6/25/2009	
Hexachlorobutadiene	BQL	0.347	0.063	1	6/25/2009	
Hexachlorocyclopentadiene	BQL	0.694	0.068	1	6/25/2009	
Hexachloroethane	BQL	0.347	0.054	1	6/25/2009	
Indeno(1,2,3-c,d)pyrene	BQL	0.347	0.041	1	6/25/2009	
Isophorone	BQL	0.347	0.051	1	6/25/2009	
2-Methylnaphthalene	BQL	0.347	0.057	1	6/25/2009	
2-Methylphenol	BQL	0.347	0.053	1	6/25/2009	

SGS North America, Inc.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTTC942-HA03
 Client Project ID: UST TC-942
 Lab Sample ID: G128-2391-2H
 Lab Project ID: G128-2391
 Report Basis: Dry weight
 Initial Weight: 33.19 g

Analyzed By: DCS
 Date Collected: 6/22/2009 12:30
 Date Received: 6/22/2009
 Date Extracted: 6/24/2009
 Matrix: Soil
 % Solids: 86.77

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	0.347	0.045	1	6/25/2009	
Naphthalene	BQL	0.347	0.049	1	6/25/2009	
2-Nitroaniline	BQL	0.347	0.047	1	6/25/2009	UJ
3-Nitroaniline	BQL	1.74	0.051	1	6/25/2009	
4-Nitroaniline	BQL	1.74	0.047	1	6/25/2009	
Nitrobenzene	BQL	0.347	0.046	1	6/25/2009	
2-Nitrophenol	BQL	0.347	0.051	1	6/25/2009	
4-Nitrophenol	BQL	1.74	0.060	1	6/25/2009	
Diphenylamine *	BQL	0.347	0.056	1	6/25/2009	
Pentachlorophenol	BQL	1.74	0.032	1	6/25/2009	
Phenanthrene	BQL	0.347	0.049	1	6/25/2009	
Phenol	BQL	0.347	0.047	1	6/25/2009	
Pyrene	BQL	0.347	0.047	1	6/25/2009	
1,2,4-Trichlorobenzene	BQL	0.347	0.063	1	6/25/2009	
2,4,5-Trichlorophenol	BQL	0.347	0.052	1	6/25/2009	
2,4,6-Trichlorophenol	BQL	0.347	0.031	1	6/25/2009	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	9.2	92		
2-Fluorophenol		10	9.8	98		
Nitrobenzene-d5		10	8.6	86		
Phenol-d6		10	9.3	93		
2,4,6-Tribromophenol		10	7.7	77		
4-Terphenyl-d14		10	10.1	101		

Comments:

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

Flags:

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

Reviewed By: 

SGS North America, Inc.

**Results for Semivolatiles
by GCMS 625 for 610 Compounds**

Client Sample ID: USTTC942-MW04
 Client Project ID: UST TC-942
 Lab Sample ID: G128-2391-3L
 Lab Project ID: G128-2391

Analyzed By: DCS
 Date Collected: 6/22/2009 14:00
 Date Received: 6/22/2009
 Date Extracted: 6/24/2009
 Matrix: Water

Initial/Final Amt: 837 mL / 5.0 mL

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.97	0.890	1	6/26/2009	
Acenaphthylene	BQL	5.97	0.890	1	6/26/2009	
Anthracene	BQL	5.97	1.05	1	6/26/2009	
Benzo[a]anthracene	BQL	5.97	0.812	1	6/26/2009	
Benzo[a]pyrene	BQL	5.97	0.759	1	6/26/2009	
Benzo[b]fluoranthene	BQL	5.97	0.854	1	6/26/2009	
Benzo[g,h,i]perylene	BQL	5.97	0.735	1	6/26/2009	
Benzo[k]fluoranthene	BQL	5.97	0.657	1	6/26/2009	
Chrysene	BQL	5.97	0.663	1	6/26/2009	
Dibenzo[a,h]anthracene	BQL	5.97	0.526	1	6/26/2009	
Fluoranthene	BQL	5.97	0.842	1	6/26/2009	
Fluorene	BQL	5.97	0.866	1	6/26/2009	
Indeno(1,2,3-c,d)pyrene	BQL	5.97	2.73	1	6/26/2009	
1-Methylnaphthalene	BQL	5.97	0.968	1	6/26/2009	
2-Methylnaphthalene	BQL	5.97	0.854	1	6/26/2009	
Naphthalene	BQL	5.97	1.09	1	6/26/2009	
Phenanthrene	BQL	5.97	0.532	1	6/26/2009	
Pyrene	BQL	5.97	2.47	1	6/26/2009	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.9	89
Nitrobenzene-d5	10	8.7	87
4-Terphenyl-d14	10	6.6	66

Comments:

Flags:

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

Reviewed By: 

Results for Metals

Client Sample ID:	USTTC942-HA01	Analyzed By:	PSW
Client Project ID:	UST TC-942	Date Collected:	6/22/2009 12:15
Lab Sample ID:	G128-2391-1	Date Received:	6/22/2009
Lab Project ID:	G128-2391	Matrix:	SOIL
ICP InitWt/Vol:	0.52 g	Final Vol:	50 mL
Hg InitWt/Vol:		Final Vol:	
Prep Batch:	14519	Solids	87.51
		Report Basis:	Dry

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Chromium	6.99	1.10	0.131	1	MG/KG	6010B	6/26/2009	B
Lead	11.8	1.10	0.680	1	MG/KG	6010B	6/26/2009	

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL
 B= Amount in Prep Blank > MDL

Reviewed By: 
 METALS.XLS

Results for Metals

Client Sample ID:	USTTC942-HA03	Analyzed By:	PSW
Client Project ID:	UST TC-942	Date Collected:	6/22/2009 12:30
Lab Sample ID:	G128-2391-2	Date Received:	6/22/2009
Lab Project ID:	G128-2391	Matrix:	SOIL
ICP InitWt/Vol:	0.51 g	Final Vol:	50 mL
Hg InitWt/Vol:		Final Vol:	
Prep Batch:	14519	Solids	86.77
		Report Basis:	Dry

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Chromium	9.04	1.13	0.134	1	MG/KG	6010B	6/26/2009	B
Lead	10.9	1.13	0.699	1	MG/KG	6010B	6/26/2009	

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL
 B= Amount in Prep Blank > MDL

Reviewed By: 
 METALS.XLS

SGS North America, Inc.

Results for Metals

Client Sample ID: USTTC942-MW04
 Client Project ID: UST TC-942
 Lab Sample ID: G128-2391-3
 Lab Project ID: G128-2391
 ICP InitWt/Vol: 50 mL Final Vol: 50 mL
 Hg InitWt/Vol: Final Vol:
 Prep Batch: 14500

Analyzed By: PSW
 Date Collected: 6/22/2009 14:00
 Date Received: 6/22/2009
 Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	0.0233	0.0100	0.00679	1	MG/L	6010B	6/29/2009	

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL
 B= Amount in Prep Blank > MDL

Reviewed By: 
 METALS.XLS

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & Associates

Project Name: UST TC-942

Sample Information	
Sample Identification	USTTC942-HA01
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	06/22/09 12:15
Date Received	06/22/09
Date Extracted	06/23/09
Date Analyzed	06/25/09 23:29 - 06/25/09 23:29
Dry Weight	87.5
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	84.3		70	130
Surrogate % Recovery - FID	104		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: g128-2391-1c	Lab Info: g128-2391-1c
FID Info: VP062509/031F0101.D	PID Info: VP062509/031R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & Associates

Project Name: UST TC-942

Sample Information	
Sample Identification	USTTC942-HA03
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	06/22/09 12:30
Date Received	06/22/09
Date Extracted	06/23/09
Date Analyzed	06/25/09 23:56 - 06/25/09 23:56
Dry Weight	86.8
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	83.9		70	130
Surrogate % Recovery - FID	107		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: g128-2391-2d	Lab Info: g128-2391-2d
FID Info: VP062509/032F0101.D	PID Info: VP062509/032R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & Associates

Project Name: UST TC-942

Sample Information	
Sample Identification	USTTC942-MW04
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	06/22/09 14:00
Date Received	06/22/09
Date Extracted	06/25/09 19:30 - 06/25/09 19:30
Date Analyzed	06/25/09 19:30 - 06/25/09 19:30
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	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	81.8		70	130
Surrogate % Recovery - FID	101		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: g128-2391-3a	Lab Info: g128-2391-3a
FID Info: VP062509/022F0101.D	PID Info: VP062509/022R0101.D

Reviewed By: *[Signature]*

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 05/08/09 PID Initial Calibration Date: 05/08/09

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	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	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	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 06/25/09 Filename: VP062509/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	-10.2 /	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-8.9 ✓	±25%
C ₉ -C ₁₀ Aromatics	200	16	8.8 ✓	±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: 05/08/09 PID Initial Calibration Date: 05/08/09

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	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	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	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 06/25/09 Filename: VP062509/036F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	-21.0 ✓	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-6.8 ✓	±25%
C ₉ -C ₁₀ Aromatics	200	16	8.6 ✓	±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

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & Associates

Project Name: UST TC-942

Sample Information	
Sample Identification	USTTC942-HA01
Sample Matrix	Soil
Date Collected	06/22/09 12:15
Date Received	06/22/09
Date Extracted	06/25/09
Date Analyzed	07/01/09 14:08 - 07/01/09 14:36
Dry Weight	87.5
Dilution Factor	1 - 1
Initial weight (g)	12.63
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	BQL	10.0	
C19-C36 Aliphatics	15.0	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	97.5		40	140
Aromatic (ortho-terphenyl)	95.8		40	140
Fractionation 1 (2-bromonaphthalene)	104		40	140
Fractionation 2 (2-fluorobiphenyl)	104		40	140

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

Lab Info: G128-2391-1I	Lab Info: G128-2391-1I
Aliphatic: EP070109/009F0801.D	Aromatic: EP070109/010F0901.D

Reviewed By: _____

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & Associates

Project Name: UST TC-942

Sample Information	
Sample Identification	USTTC942-HA03
Sample Matrix	Soil
Date Collected	06/22/09 12:30
Date Received	06/22/09
Date Extracted	06/25/09
Date Analyzed	07/01/09 15:05 - 07/01/09 15:34
Dry Weight	86.8
Dilution Factor	1 - 1
Initial weight (g)	14.47
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	39.6	10.0	
C19-C36 Aliphatics	350	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	86.1		40	140
Aromatic (ortho-terphenyl)	94.9		40	140
Fractionation 1 (2-bromonaphthalene)	98.7		40	140
Fractionation 2 (2-fluorobiphenyl)	99.2		40	140

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

Lab Info: G128-2391-2I	Lab Info: G128-2391-2I
Aliphatic: EP070109/011F1001.D	Aromatic: EP070109/012F1101.D

Reviewed By: MA

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & Associates

Project Name: UST TC-942

Sample Information	
Sample Identification	USTTC942-MW04
Sample Matrix	Water
Date Collected	06/22/09 14:00
Date Received	06/22/09
Date Extracted	06/24/09
Date Analyzed	06/25/09 19:46 - 06/25/09 20:15
Dry Weight	NA
Dilution Factor	1 - 1
Initial Volume (mL)	925
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)	92.0		40	140
Aromatic (ortho-terphenyl)	86.0		40	140
Fractionation 1 (2-bromonaphthalene)	139		40	140
Fractionation 2 (2-fluorobiphenyl)	142	***	40	140

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

*** = High surrogate recovery due to matrix interference.

Lab Info: G128-2391-3M	Lab Info: G128-2391-3M
Aliphatic: EP062509/012F0801.D	Aromatic: EP062509/013F0901.D

Reviewed By: 

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/27/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	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	200	33.3	11.19	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	5.72	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	1.61	Calibration Factor
	50	8.3		
	100	16.67		
	25	4.17		
	5	0.833		

Calibration Check Date: 06/25/09 Filenames: ep062509/005f0101.d
06/25/09 ep062509/002f0201.d

Calibration Check

Range	Levels (mg/Kg)	(µg/L)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	13.8 ✓	±25%
C19-C36 Aliphatics	100	16.7	15.7 ✓	±25%
C11-C22 Aromatics	100	16.7	8.3 ✓	±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

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/27/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	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	200	33.3	11.19	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	5.72	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	1.61	Calibration Factor
	50	8.3		
	100	16.67		
	25	4.17		
	5	0.833		

Calibration Check Date: 06/25/09
06/25/09

Filenames: ep062509/018f1401.d
ep062509/019f1501.d

Calibration Check

Range	Levels (mg/Kg)	(µg/L)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	17.1 ✓	±25%
C19-C36 Aliphatics	100	16.7	21.7 ✓	±25%
C11-C22 Aromatics	100	16.7	13.0 ✓	±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: 04/27/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	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	200	33.3	11.19	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	5.72	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	1.61	Calibration Factor
	50	8.3		
	100	16.67		
	25	4.17		
	5	0.833		

Calibration Check Date: 07/01/09
07/01/09

Filenames: ep070109/001f0101.d
ep070109/002f0101.d

Calibration Check

Range	Levels (mg/Kg)	(µg/L)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	20.7 ✓	±25%
C19-C36 Aliphatics	100	16.7	24.4 ✓	±25%
C11-C22 Aromatics	100	16.7	7.5 ✓	±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: 04/27/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	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	200	33.3	11.19	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	5.72	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	1.61	Calibration Factor
	50	8.3		
	100	16.67		
	25	4.17		
	5	0.833		

Calibration Check Date: 07/01/09
07/01/09

Filenames: ep070109/013f1201.d
ep070109/014f1301.d

Calibration Check

Range	Levels (mg/Kg)	Levels (µg/L)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	14.6 ✓	±25%
C19-C36 Aliphatics	100	16.7	17.0 ✓	±25%
C11-C22 Aromatics	100	16.7	-4.1 ✓	±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

