

Preliminary Site Assessment

**US 401 (Raeford Road) from West Hampton Oaks Drive to East of
Fairway Drive in Fayetteville**

Parcel 329 – Tally Investments, LLC Property

2616 Raeford Road, Fayetteville, North Carolina

State Project No. U-4405

WBS Element: 39049.1.1

December 16, 2016

Terracon Project No. 70167490



Prepared for:

North Carolina Department of Transportation
Raleigh, North Carolina

Prepared by:

Terracon Consultants, Inc.
Raleigh, North Carolina

terracon.com

Terracon

Environmental



Facilities



Geotechnical



Materials

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December 16, 2016



North Carolina Department of Transportation
Attention: Mr. Terry W. Fox, LG,
GeoEnvironmental Engineering Unit
Century Center Complex
Building B
1020 Birch Ridge Road
Raleigh, North Carolina 27610

Re: Preliminary Site Assessment (PSA)
US 401 (Raeford Road) from West Hampton Oaks Drive to East of Fairway Drive in
Fayetteville
Parcel 329 – Tally Investments, LLC Property
2616 Raeford Road, Fayetteville, North Carolina
State Project No. U-4405
WBS Element: 39049.1.1

Dear Mr. Fox:

Terracon Consultants, Inc. (Terracon) is pleased to submit a Preliminary Site Assessment (PSA) report for the above referenced site. This assessment was performed in accordance with our Proposal for Preliminary Site Assessment (Terracon Proposal No. P70167490) dated September 27, 2016. This report includes the findings of the investigation, and provides our conclusions and recommendations.

Terracon appreciates the opportunity to provide these services to the North Carolina Department of Transportation. If you have any questions concerning this report or need additional information, please contact us at 919-873-2211.

Sincerely,

Terracon Consultants, Inc.

Prepared by:



Ethan H. Smith
Field Geologist

Reviewed by:



Michael T. Jordan, P.G.
Environmental Department Manager

Terracon Consultants, Inc. 2401 Brentwood Road, Suite 107 Raleigh, NC 27604
P [919] 873 2211 F [919] 873 9555 terracon.com

PRELIMINARY SITE ASSESSMENT

**US 401 (RAEFORD ROAD) FROM WEST HAMPTON OAKS DRIVE TO EAST OF FAIRWAY
DRIVE IN FAYETTEVILLE, CUMBERLAND COUNTY, NORTH CAROLINA**

STATE PROJECT NO. U-4405

WBS ELEMENT: 39049.1.1

**PARCEL 329 – TALLY INVESTMENTS, LLC PROPERTY
2616 RAEFORD ROAD, FAYETTEVILLE, NORTH CAROLINA**

1.0 INTRODUCTION

1.1 Site Description

Site Name	US 401 (Raeford Road) from West Hampton Oaks Drive to East of Fairway Drive in Fayetteville
Site Location/Address	2616 Raeford Road, Fayetteville, NC 28303 (Cumberland County Tax PIN: 0427-31-8872)
General Site Description	The site consists of a one-story commercial building that is currently operated as Smitty's Cleaners. The site is further improved with a paved access drive and parking areas.

1.2 Site History

The site is located at 2616 Raeford Road in Fayetteville, Cumberland County, North Carolina. At the time of the Preliminary Site Assessment (PSA), the site was operating as Smitty's Cleaners. This facility has been a dry cleaner since 1956 and was formerly Gene's Dry Cleaners (NCDOT, 2016). According to the North Carolina Department of Environmental Quality (NCDEQ) – Division of Waste Management Dry-cleaning Solvent Cleanup Act (DSCA) Active and Inactive Drycleaner Facilities, the facility is listed as an active pickup store. The presence of contamination from dry-cleaning activities has not been investigated at the site.

1.3 Scope of Work

Terracon conducted the following PSA scope of work (SOW) in accordance with Terracon's proposal for PSA (Proposal No. P70167490) dated September 27, 2016. This PSA is being completed prior to planned median improvements and lane widening along US 401 (Raeford Road) in Fayetteville, North Carolina (site). The scope of work included a geophysical investigation, collection of three soil samples, and preparation of a report documenting our investigation activities. The PSA is not intended to delineate potential impacts. The PSA was performed within the proposed right-of-way (ROW) as indicated by NCDOT provided plan sheets.

Preliminary Site Assessment

Parcel 329 – Tally Investments, LLC Property ■ Fayetteville, North Carolina
December 16, 2016 ■ Terracon Project No. 70167490



1.4 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Terracon makes no warranties, either expressed or implied, regarding the findings, conclusions or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. These services were performed in accordance with our proposal for PSA (Terracon Proposal No. P70167490) dated September 27, 2016 and were not conducted in accordance with ASTM E1903-11.

1.5 Additional Scope Limitations

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, undetectable or not present during these services; thus, we cannot represent that the site is free of hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this PSA. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

1.6 Reliance

This report has been prepared for the exclusive use of the NCDOT. Authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the expressed written authorization of the client and Terracon.

2.0 FIELD ACTIVITIES

The following PSA activities are presented in the order that they were conducted in the field.

Exhibit 1 presents the topography of the site on a portion of the USGS topographic quadrangle map of Fayetteville, NC 1997. **Exhibit 2** is a site layout plan that indicates the approximate locations of the site features, soil boring locations, and analytical results.

2.1 Geophysical Survey

On October 20, October 26, and November 7, 2016, Geophysical Survey Investigations, PLLC conducted a geophysical investigation at the site in an effort to determine if unknown, metallic USTs were present beneath the proposed ROW area. The geophysical investigation included an electromagnetic (EM) induction survey using a Geonics EM61-MK2A metal detection instrument and a ground penetrating radar (GPR) survey using a Geophysical Survey Systems SIR-3000 unit.

The geophysical investigation did not reveal possible or probable metallic Underground Storage Tanks (USTs). However, buried metallic and nonmetallic lines/conduits were detected within the identified investigative area. In addition to metal detection and GPR scans, NC One Call public utility locator identified several underground utility lines. A copy of the geophysical report is included in **Appendix A**.

2.2 Soil Sampling

Based on the findings of the geophysical investigation and Terracon's site observations, Terracon provided oversight for the advancement of three soil borings (SB-14 through SB-16) along the southern portion of Parcel 329 and within the NCDOT ROW. The borings were completed by a North Carolina Certified Well Contractor (Regional Probing Services) using a truck-mount Geoprobe® 5410 direct-push drill rig.

Soil samples were collected in 4-foot, disposable, Macro-Core® sampler tubes to document soil lithology, color, moisture content, and sensory evidence of impacts. Each soil sample was screened for organic vapors using an 11.7 eV photoionization detector (PID). The PID data were collected in order to corroborate laboratory data and assist in selection of sample intervals for laboratory analysis. PID readings from the borings ranged from less than to equal to 0.1 parts per million (ppm).

Based on the proposed disturbance depths and discussion with the NCDOT, each of the soil borings was advanced to a depth of approximately 15 feet below land surface (bls). Three soil samples, one from each boring, were collected from depths ranging between 5 to 15 feet bls and

Preliminary Site Assessment

Parcel 329 – Tally Investments, LLC Property ■ Fayetteville, North Carolina
December 16, 2016 ■ Terracon Project No. 70167490



placed in laboratory provided sample containers and shipped to Shealy Environmental Services, Inc. (Shealy) for analysis of volatile organic compounds (VOCs) by EPA Method 8260 and semi-volatile organic compounds (SVOCs) by EPA Method 8270. Soil samples were collected in the depth interval that was most likely to be impacted.

The drilling equipment used at the site was decontaminated prior to use and between the advancement of each boring. Non-dedicated sampling equipment was decontaminated using a Liquinox®/water wash followed by a distilled water rinse. Each of the boreholes was backfilled with hydrated bentonite pellets and investigation derived waste (IDW) was containerized in a 55-gallon DOT approved drum. The drum was staged beside the dumpster north of the Dunkin Donuts located at 2628 Raeford Road, Fayetteville, NC 28303 (Dunkin Donuts contact - Matt Ellsworth [910-920-1992] for subsequent disposal by the NCDOT).

Soil generally consisted of clay and sandy clay. Groundwater was not encountered in the three borings. The soil boring logs are included in **Appendix B**. Sample locations were measured relative to site features and the locations depicted on **Exhibit 2** are approximate.

3.0 LABORATORY ANALYSES

Soil samples were submitted to Shealy for analysis of the following:

- Volatile organic compounds (VOCs) by EPA Method 8260; and
- Semi-volatile organic compounds (SVOCs) by EPA Method 8270.

Please refer to **Appendix C** for the laboratory analytical reports.

4.0 DATA EVALUATION

4.1 Soil Analytical Results

Laboratory analysis reported the following detections above the laboratory reporting limits in soil borings SB-14 through SB-16:

- Acetone was detected at 0.027 milligrams per kilogram (mg/kg) in SB-14 and 0.029 mg/kg in SB-15;
- Methylene chloride was detected at 0.0064 J mg/kg in SB-14, 0.0023 J mg/kg, and 0.0051 mg/kg in SB-16.

The J-flag denotes an estimated concentration above the method detection limit and below the reporting limit. Laboratory analysis revealed that detected compounds were not reported above

Preliminary Site Assessment

Parcel 329 – Tally Investments, LLC Property ■ Fayetteville, North Carolina
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their NCDEQ Inactive Hazardous Sites Preliminary Soil Remediation Goals (PSRG) Standards in soil borings SB-14 through SB-16.

Table 1 summarizes the results of the analyses of the soil samples. **Exhibit 2** depicts the boring locations and detected compounds.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The findings of this investigation are discussed below.

- The geophysical investigation did not reveal possible or probable metallic USTs. However, buried metallic and nonmetallic lines/conduits were detected within the identified investigative area.
- Laboratory analysis revealed that detected compounds were not reported above their NCDEQ Inactive Hazardous Sites PSRG Standards in soil borings SB-14 through SB-16.
- Terracon recommends NCDOT provide a copy of the results to the owner and/or operator of the site.
- Terracon does not recommend further assessment of the ROW at this site. However, based on historical dry-cleaning activities, construction workers should be alert for potential soil and/or groundwater impacts in other locations at the site.

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Parcel 329 – Tally Investments, LLC Property ■ Fayetteville, North Carolina
December 16, 2016 ■ Terracon Project No. 70167490



6.0 REFERENCES

NCDOT, 2016. Revised GeoEnvironmental Report for Preliminary Site Assessments. "Hazardous Material Report." August 30, 2016.

TABLES

Table 1
Summary of Soil Analytical Results
Preliminary Site Assessment
Parcel 329 - Tally Investments, LLC Property
Fayetteville, Cumberland County, North Carolina
Terracon Project No. 70167490

Sample ID:	SB-14	SB-15	SB-16	Protection of GW PSRG	Residential PSRG	Industrial/ Commercial PSRG
Sample Depth (ft bls):	11-13	13-15	5-7			
Volatile Organic Compounds (EPA Method 8260)						
Acetone	0.027	0.029	<0.021	24	12,200	100,000
Methylene chloride	0.0064J	0.0023 J	0.0051	0.023	57	640
Semi-volatile Organic Compounds (EPA Method 8270)						
Compounds were not detected above laboratory reporting limits.						

Notes:

Soil samples were collected on November 9, 2016.

Detected compounds are shown in the table.

Concentrations are reported in milligrams per kilogram (mg/kg).

GW - Groundwater

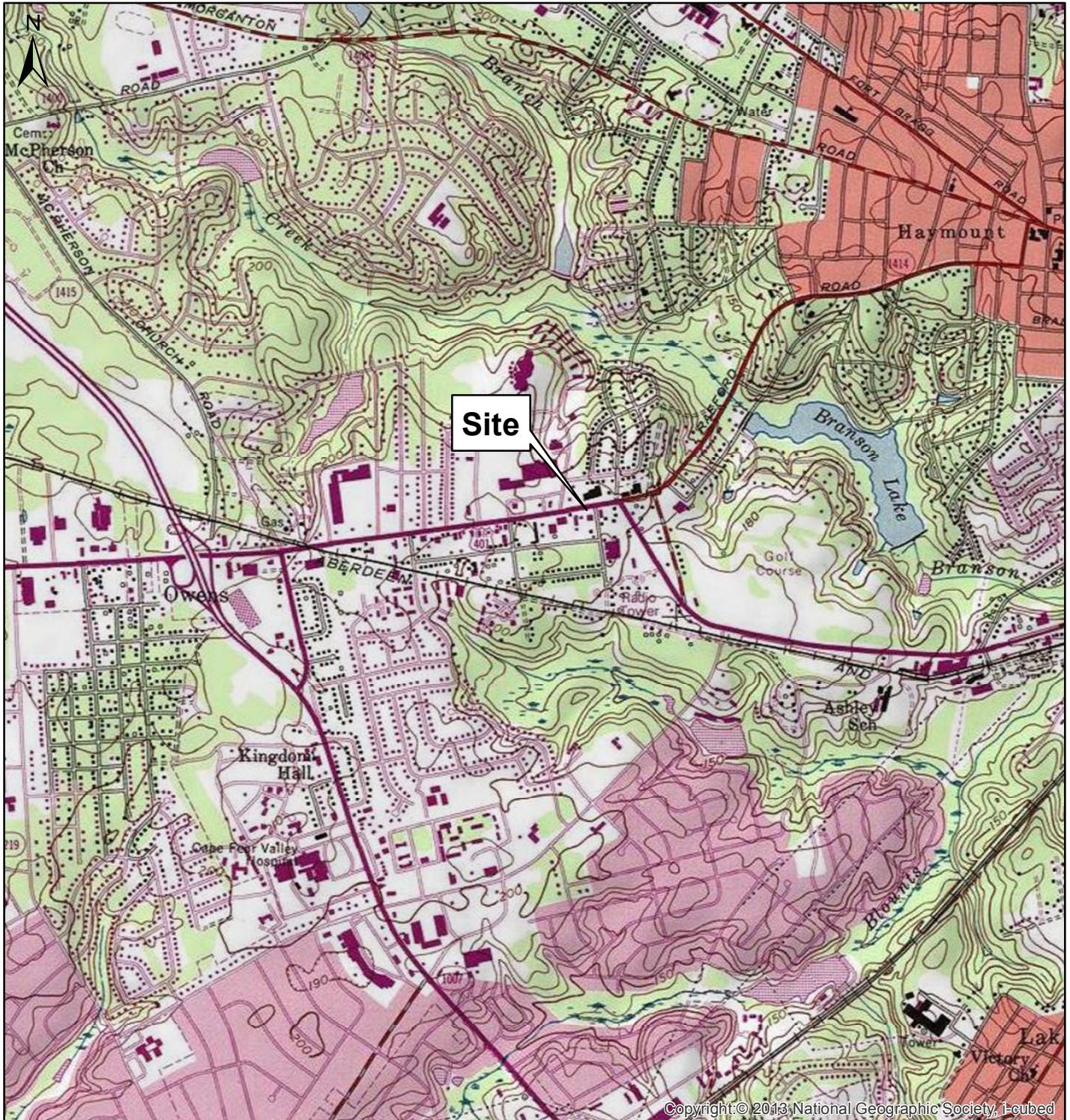
ft bls - feet below land surface.

J - estimated concentration between reporting and method detection limits.

Shaded cells indicate the analyte is above its Inactive Hazardous Sites Preliminary Soil Remediation Goals (PSRG) Standard (April 2016).

Bold: Constituent concentration reported above the method detection limit.

EXHIBITS



USGS TOPOGRAPHIC MAP
FAYETTEVILLE, NC QUADRANGLE
1997

Project Number: 70167490
Scale: 1:24,000
Drawn By: EHS
Checked By: MTJ
Date Drawn: 11/21/16

Terracon

2401 Brentwood Road, Suite 107

Raleigh, NC 27604

Phone: (919) 873-2211

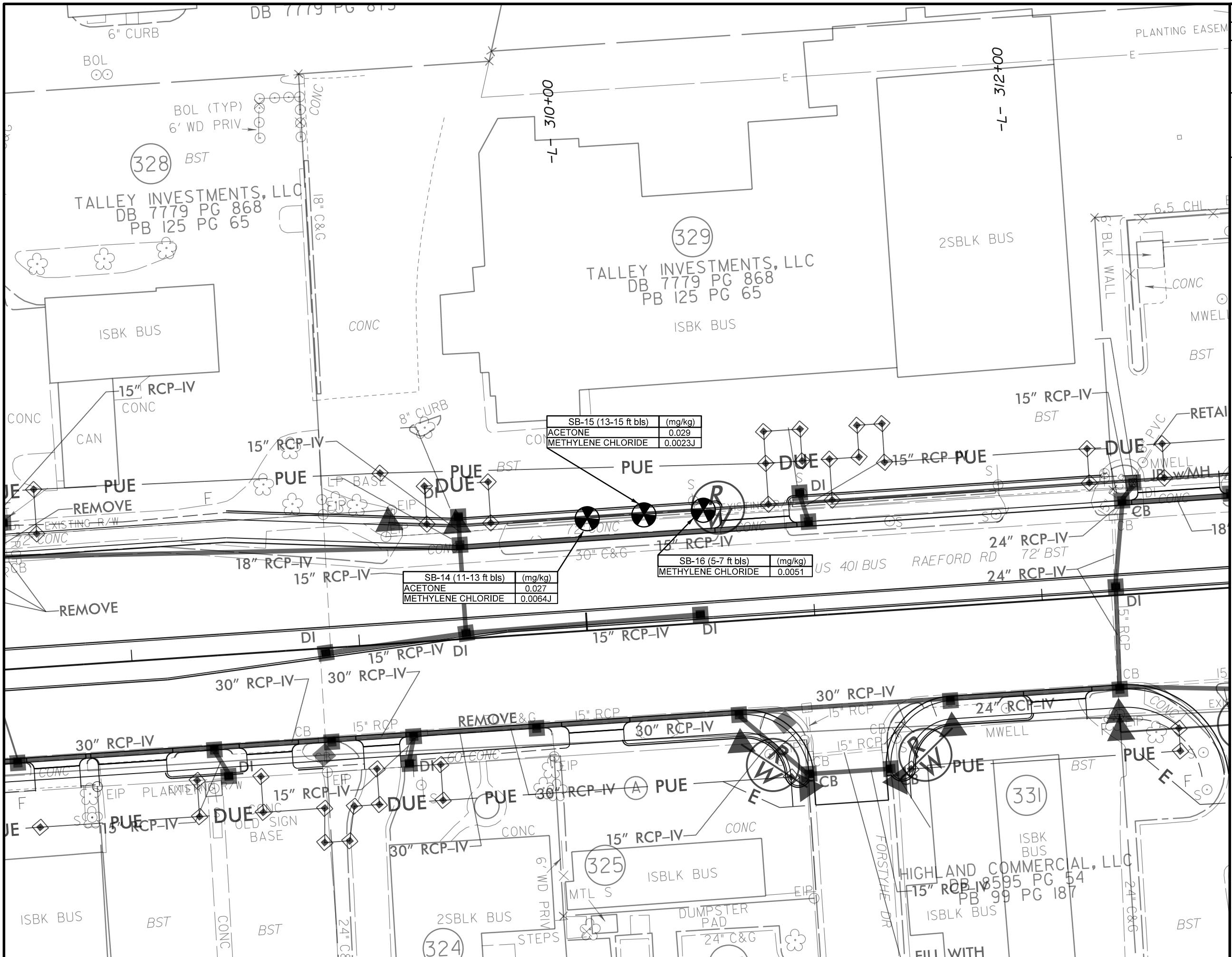
Fax: (919) 873-9555

Topographic Vicinity Map

U-4405
Parcel 329 - Tally Investments, LLC Property
2616 Raeford Road
Fayetteville, Cumberland County, NC

EXHIBIT
NO.

1



PROJECT REFERENCE NO.	EXHIBIT
39049.1.1 (U-4405)	2

SITE DIAGRAM WITH BORING LOCATIONS AND ANALYTICAL DATA

**PARCEL 329 – TALLY INVESTMENTS, LLC
PROPERTY
2616 RAEFORD ROAD
FAYETTEVILLE, CUMBERLAND COUNTY**

LEGEND

- — — PROPERTY LINE
 - — — EXISTING RIGHT OF WAY LINE
 -  PROPOSED RIGHT OF WAY LINE WITH IRON PIN AND CAP MARKER
 - — — PROPOSED EDGE OF TRAVEL
 - E — PROPOSED CONSTRUCTION EASEMENT
 - PUE — PROPOSED PERMANENT UTILITY EASEMENT
 - — — PROPOSED DRAINAGE PIPING
 -  PROPOSED CATCH BASIN
 -  C — PROPOSED CUT / FILL LINE
 -  BORING LOCATION

NOTES:

SOIL SAMPLES WERE COLLECTED ON
NOVEMBER 9, 2016

DETECTED COMPOUNDS ARE SHOWN IN TABLE

J - ESTIMATED CONCENTRATION BETWEEN REPORTING AND METHOD DETECTION LIMITS

SOIL CONCENTRATIONS ARE REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg)

ft bsl - FEET BELOW LAND SURFACE

- N -

A scale bar diagram for a map. It features a horizontal line with tick marks at 0, 20, 40, and 80. The segments between the tick marks are labeled 'FEET' below the line.

APPENDIX A

GEOPHYSICAL SURVEY REPORT

Terracon Consultants, Inc.

**GEOPHYSICAL INVESTIGATION
TO LOCATE METALLIC USTS**

**Tally Investments, LLC Property
(Parcel 329) 2616 Raeford Road
Fayetteville, North Carolina**



November 10, 2016
Geophysical Survey Investigations, PLLC Project No. 2016-37



4 Willimantic Drive, Greensboro, NC 27455
Office Tel: (336) 286-9718
denilm@bellsouth.net

**Terracon Consultants, Inc.
GEOPHYSICAL INVESTIGATION
TO LOCATE METALLIC USTS
Tally Investments, LLC Property
(Parcel 329) 2616 Raeford Road
Fayetteville, North Carolina**

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FIGURES

- Figure 1 Geophysical Equipment & Site Photographs
Figure 2 EM61-MK2A Metal Detection – Early Time Gate Results
Figure 3 EM61-MK2A Metal Detection – Differential Results

Report prepared for: Stephen J. Kerlin, PG
Terracon Consultants, Inc.
2401 Brentwood Road, Suite 107
Raleigh, North Carolina 27604

Prepared by:


Mark J. Denil, P.G.
Geophysical Survey Investigations, PLLC

1.0 INTRODUCTION

Geophysical Survey Investigations, PLLC (GSI) conducted an electromagnetic (EM) metal detection survey, ground penetrating radar (GPR) scanning and utility line clearance search for Terracon Consultants, Inc. on October 20, October 26 and November 7, 2016 across a portion of the Tally Investments, LLC property (Parcel 329) located at 2616 Raeford Road in Fayetteville, North Carolina. The geophysical investigation was performed as part of the North Carolina Department of Transportation (NCDOT) preliminary site assessment for State Project U-4405 (WBS Element 39049.1.1) US 401 (Raeford Road) from West of SR-1409 to US 401 Business (Robeson Street).

The geophysical investigation was conducted to determine if buried, metallic, underground, storage tanks (USTs) are present beneath the proposed Right-of-Way (ROW) and PUE areas of the site. The perimeter of the ROW/PUE area is shown as a red polygon in the aerial photograph presented in **Figure 1**. Presently, a commercial strip mall operates on this property and the geophysical investigation was conducted immediately adjacent to Smitty's Cleaners business.

Terracon representative Mr. Stephen Kerlin, PG provided guidance and site maps to Geophysical Survey Investigations, PLLC personnel prior to conducting the geophysical field work. The geophysical survey area at Parcel 329 has a maximum length and width of 165 feet and 50 feet, respectively. Please note that the ROW and PUE areas at this site were not marked or the survey markers were not visible at the time the geophysical investigation was conducted.

2.0 FIELD METHODOLOGY

The EM investigation was performed across the geophysical survey area (proposed ROW and PUE areas) using a Geonics EM61-MK2A metal detection instrument with a Trimble AG-114 GPS unit. EM61 metal detection data and GPS coordinates were digitally collected in latitude and longitude geodetic format (NAD83) using a Juniper data recorder at approximately 1.0 foot intervals along survey lines spaced approximately five feet apart. The Trackmaker NAV61MK2 software program was used with the data recorder to view the relative positions of the survey lines in real time during data acquisition.

According to the instrument specifications, the EM61-MK2A can detect a metal drum down to a maximum depth of approximately 8 to 10 feet. Objects less than one foot in size can be detected to a maximum depth of 4 or 5 feet. The EM61 and GPS data were downloaded to a computer and processed in the field using the Trackmaker61MK2 and Surfer for Windows software programs. GPS coordinates were converted during data processing to Universal Transverse Mercator (UTM) coordinates (in feet) which are used as location control in this report.

GPR scans were performed along northerly-southerly and easterly-westerly directions spaced primarily 3 to 5 feet apart across selected EM61 differential anomalies and areas containing steel reinforced concrete using the Geophysical Survey Systems SIR-3000 unit equipped with a 400 MHz antenna. GPR data were viewed in real time in a continuous mode using a vertical scan of 512 samples, at a sampling rate of 48 scans per second. A 70 MHz high pass filter and an 800 MHz low pass filter were used during data acquisition with the 400 MHz antenna. GPR data were viewed to a maximum investigating depth of approximately 5.0 feet based on an estimated two-way travel time of 8.0 nanoseconds per foot.

Following the UST investigation, areas around the proposed Terracon soil borings were scanned with the GPR unit and a DitchWitch 910 utility locator for buried utility line clearance and no further discussion regarding the utility clearance work will be made in this report. Photographs of the geophysical equipment used for the investigation and of the site are presented in Figure 1.

3.0 DISCUSSION OF RESULTS

Contour plots of the EM61 early time gate results and the EM61 differential results are presented in **Figures 2 and 3**, respectively. The early time gate results represent the most sensitive component of the EM61 instrument and detect metal objects regardless of size. The early time gate response can be used to delineate metallic conduits or utility lines, small, isolated, metal objects and areas containing insignificant metal debris. The differential results are obtained from the difference between the early time gate channel and late time gate channel of the EM61 instrument. The differential results focus on the larger metal objects such as drums and UST-size objects and ignore the smaller, insignificant, metal objects or debris.

The linear, EM61 early time gate anomalies intersecting UTM coordinates 2262605-E 12730079-N, 2262697-E 12730113-N, 2262718-E 12730097-N, and 2262726-E 12730125-N are probably in response to buried lines or conduits. Similarly, the EM61 anomalies centered near coordinates 2262578-E 12730067-N, 2262637-E 12730075-N and 2262713-E 12730086-N are probably in response to utility line-related equipment.

GPR scans across the large EM61 anomaly that is in response to the vehicle that was present at the time of the metal detection survey (centered near 2262633-E 12730093-N) detected a nonmetallic water line running from the edge of Raeford Road to the strip mall building. GPR scans suggest the EM61 differential anomalies centered near coordinates 2262691-E 12730096-N and 2262731-E 12730103-N are in response to known metallic surface objects and a portion of a buried metallic line, respectively.

Although a number of buried, metallic and nonmetallic lines/conduits were detected, the EM61 and GPR investigation suggests the proposed ROW/PUE area does not contain metallic USTs. Please refer to Figures 2 and 3 for additional (detailed) information regarding the geophysical findings at this site.

4.0 SUMMARY & CONCLUSIONS

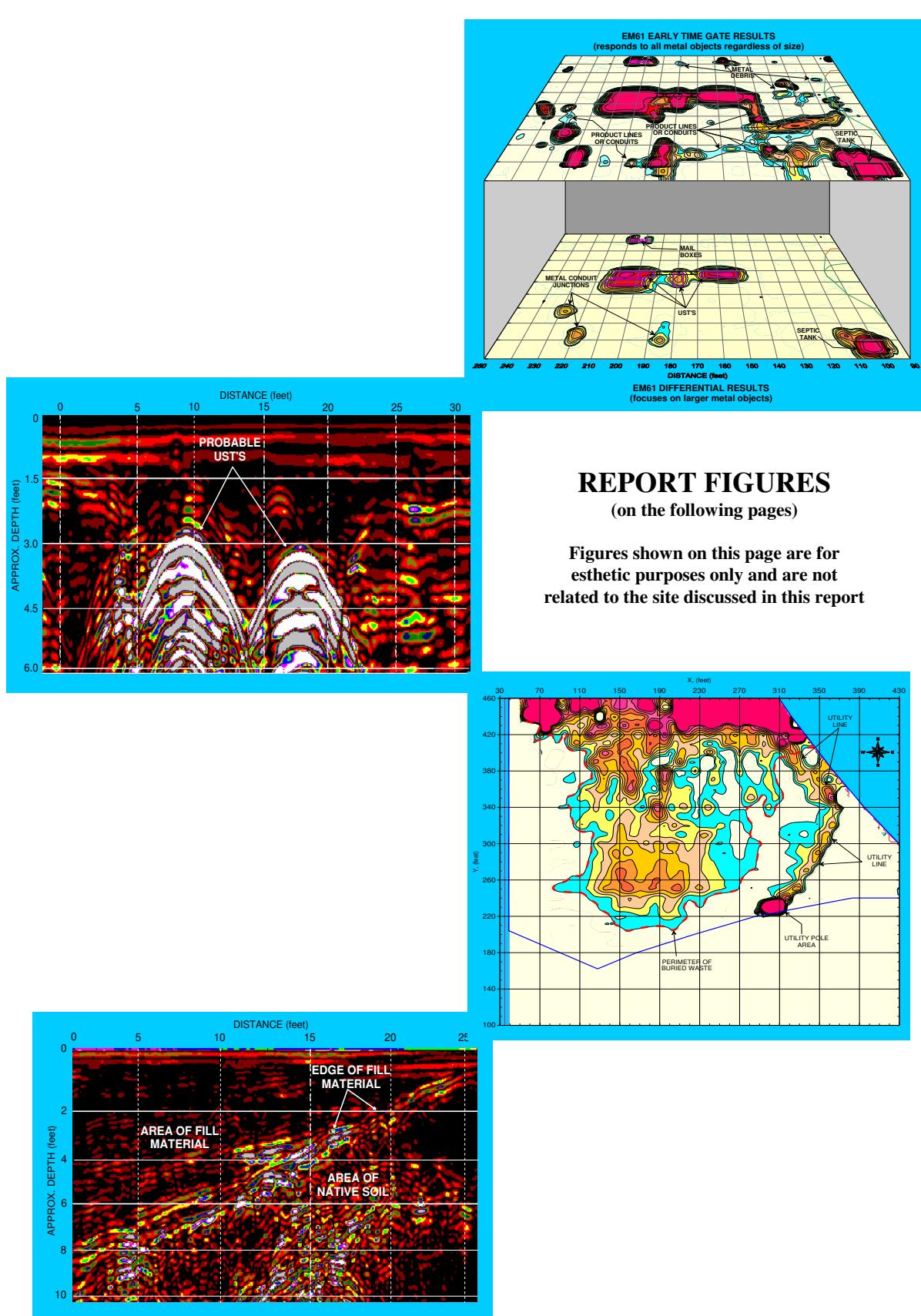
Our evaluation of the EM61 and GPR data collected across the geophysical survey area at the Tally Investments, LLC property (Parcel 329) located at 2616 Raeford Road in Fayetteville, North Carolina provides the following summary and conclusions:

- The combination of EM61 and GPR surveys provided reliable results for the detection of metallic USTs across the survey area within the depth interval of 0 to 6 feet.
- The linear, EM61 early time gate anomalies intersecting UTM coordinates 2262605-E 12730079-N, 2262697-E 12730113-N, 2262718-E 12730097-N, and 2262726-E 12730125-N are probably in response to buried lines or conduits.

- Although a number of buried, metallic and nonmetallic lines/conduits were detected, the EM61 and GPR investigation suggests the proposed ROW/PUE area does not contain metallic USTs.

5.0 LIMITATIONS

EM61 and GPR surveys have been performed and this report prepared for Terracon Consultants, Inc. in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the geophysical surveys are non-unique and may not represent actual subsurface conditions. Some of the EM61 and GPR anomalies interpreted as possible/probable USTs, utility lines, conduits, steel reinforced concrete, or miscellaneous, metal debris may be attributed to other surface or subsurface features and/or interference from cultural features.



REPORT FIGURES (on the following pages)

Figures shown on this page are for esthetic purposes only and are not related to the site discussed in this report



DITCHWITCH UTILITY LOCATOR

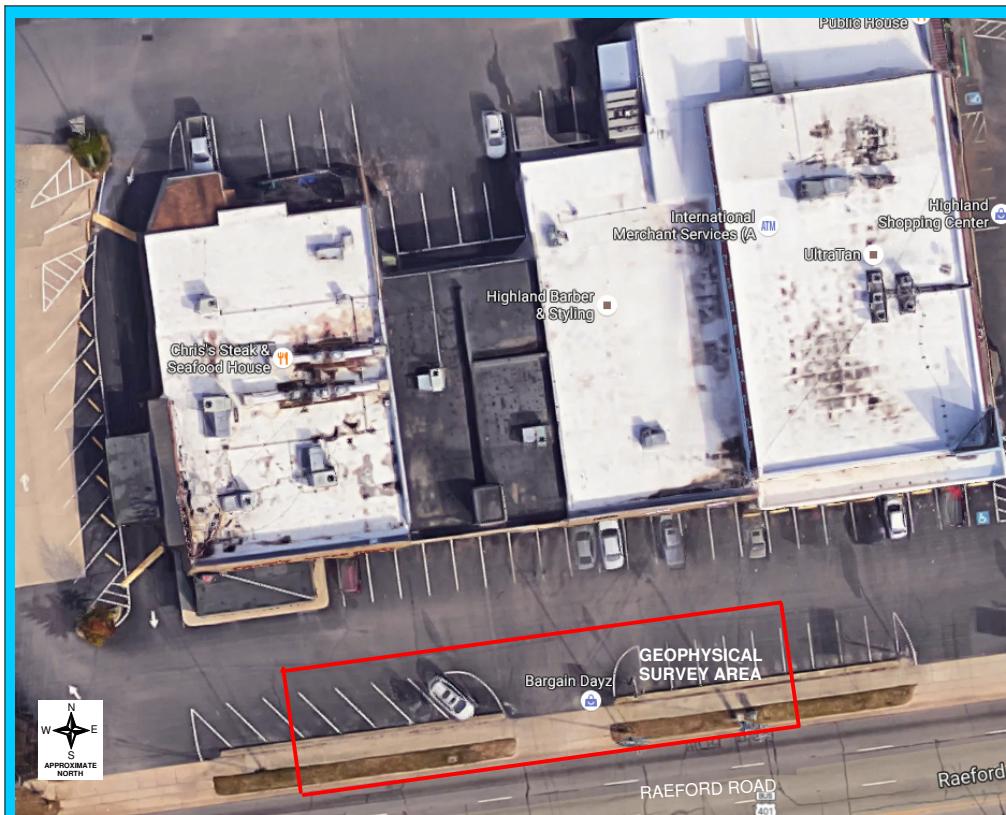


EM61 METAL DETECTOR

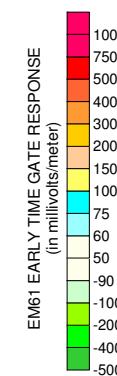
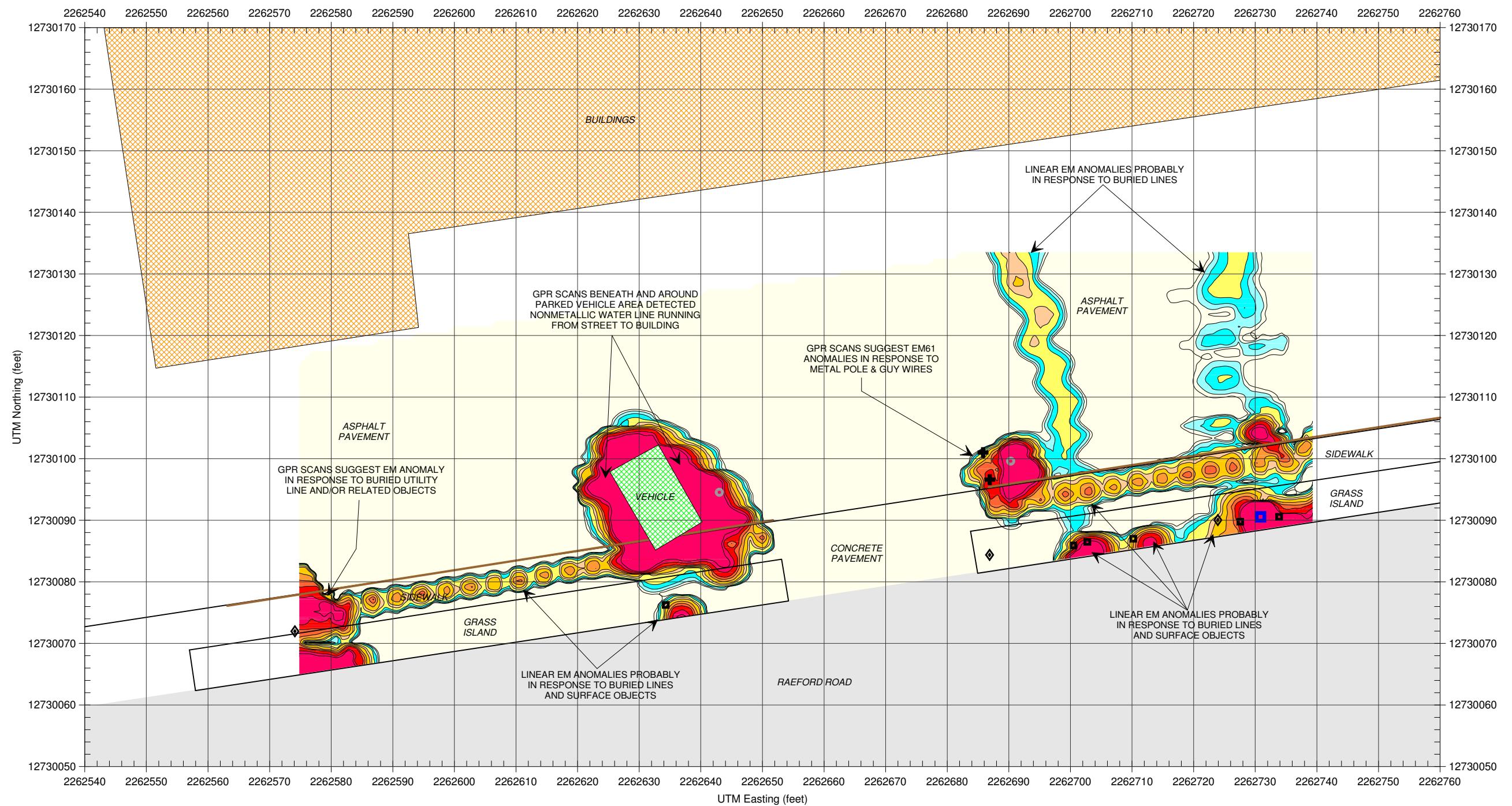


GROUND PENETRATING RADAR UNIT

The photographs show the DitchWitch 910 utility line locator, the Geonics EM61-MK2A metal detector and the GSSI SIR-3000 ground penetrating radar (GPR) unit that were used to conduct the geophysical investigation across the area of interest at Parcel 329.



The red polygon in the aerial photograph represents the approximate perimeter of the geophysical survey area at the Tally Investments, LLC property (Parcel 329) located along Raeford Road in Fayetteville, North Carolina.



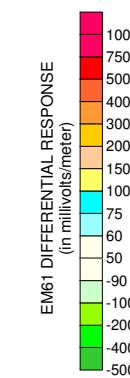
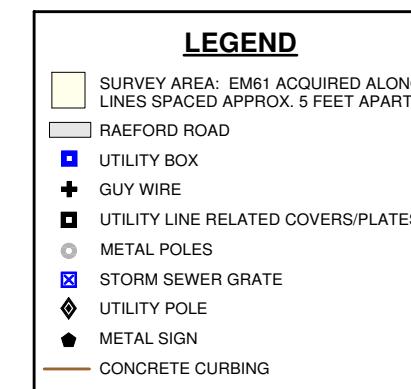
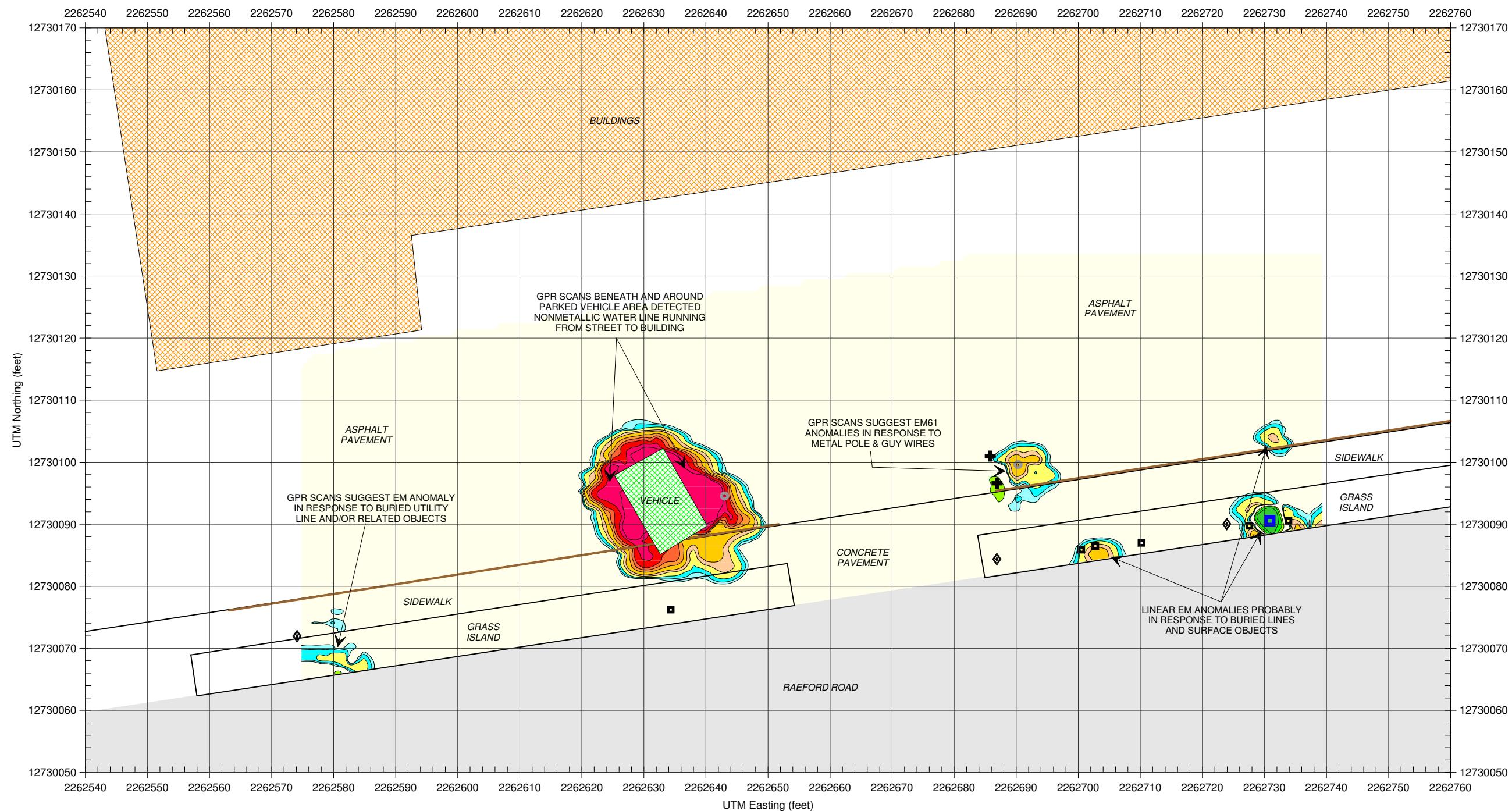
The contour plot shows the early time gate (most sensitive) response of the Geonics EM61-MK2A metal detection instrument in millivolts (mV). The early time gate response shows buried, metallic objects regardless of size. The EM61 survey was conducted on October 20, 2016. Ground penetrating radar (GPR) scans were conducted across selected EM61 anomalies and areas containing reinforced concrete on October 26, 2016 using a Geophysical Survey Systems SIR 3000 instrument with a 400 MHz antenna.



EM61-MK2A METAL DETECTION (EARLY TIME GATE RESULTS)

Terracon Consultants, Inc.
Tally Investments, LLC Property
Parcel 329
Fayetteville, North Carolina





Note: The contour plot shows the differential response between the top coil and the late time gate channel of the Geonics EM61-MK2A metal detection instrument in millivolts (mV). The differential response focuses on larger, buried, metallic objects such as drums and USTs and ignores smaller miscellaneous, buried, metal debris. The EM61 survey was conducted on October 20, 2016. Ground penetrating radar (GPR) scans were conducted across selected EM61 anomalies and areas containing reinforced concrete on October 26, 2016 using a Geophysical Survey Systems SIR 3000 unit with a 400 MHz antenna.



EM61-MK2A METAL DETECTION (DIFFERENTIAL RESULTS)

Terracon Consultants, Inc.
Tally Investments, LLC Property
Parcel 329
Fayetteville, North Carolina



APPENDIX B

SOIL BORING LOGS

Lithology Log

Boring ID:

SB-14

Project Number: 70167490								Start Date/Time: 11/9/16 0835	Sample Method	Drilling Method	
Site Location: Fayetteville, NC								End Date/Time: 11/9/16 0845	<input type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Macro-Core <input type="checkbox"/> Split Spoon <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Air Rotary <input type="checkbox"/> Shelby Tube	X DPT <input type="checkbox"/> HSA <input type="checkbox"/> Regional Probing Services	
Weather: WO, overcast								Boring Diameter: 2"			
Logged By: EHS								Total Depth: 15 ft BL			
Drilling Sub: Regional Probing Services								Water Level: NA			
Drill Rig: Truck Mount Geoprobe 5410								Well Installed: NO			
Depth (ft/bls)	Recovery (inches)	Blow Counts (n)	PID ppb	CH ₄	CO ₂	O ₂	H ₂ S	U.S.C.S	(Depth interval) Color, MAIN COMPONENT, minor component(s), structure, moisture, angularity, odor, staining	Lab Sample: ID, analysis, time	Drilling method, tooling, depth
0-1	12/12	-	<0.1					GM	(0-1) ASPHALT + PILL: black/gray/dry		
1-3	24/24	-	<0.1					CL	(1-3) CLAY: tan/gray/red. moist, medium plasticity		
3-5	24/24	-	<0.1					CL	(3-5) SAA		
5-7	24/24	-	<0.1					CL	(5-7) SAA. mottled		
7-9	24/24	-	<0.1					CL	(7-9) SAA		
9-11	24/24	-	<0.1					CL	(9-11) SAA		
11-13	24/24	-	<0.1					SC	(11-13) SANDY CLAY. gray/red/tan. moist	Sample SVOCs + VOCs	
13-15	24/24	-	<0.1					SC	(13-15) SAA		
Notes:											

Lithology Log

Boring ID: 58-15

Terracon

Project Number: 70167490							Start Date/Time: 11/1/16 0855	Sample Method	Drilling Method		
Site Location: Fayetteville, NC							End Date/Time: 11/1/16 0905	<input type="checkbox"/> Hand Auger	X DPT		
Weather: 100% overcast							Boring Diameter: 2"	<input checked="" type="checkbox"/> Macro-Core	<input type="checkbox"/> HSA		
Logged By: EHS							Total Depth: 15 ft bls	<input type="checkbox"/> Split Spoon	<input type="checkbox"/> Mud Rotary		
Drilling Sub: Regional Probing Services							Water Level: NA	<input type="checkbox"/> Shelby Tube	<input type="checkbox"/> Air Rotary		
Drill Rig: Truck Mount Geoprobe 5410							Well Installed: No		<input type="checkbox"/> Rock Core		
Depth (ft bls)	Recovery (inches)	Blow Counts (n)	PID ppm / ppb	CH ₄	CO ₂	O ₂	H ₂ S	U.S.C.S.	(Depth interval) Color, MAIN COMPONENT, minor component(s), structure, moisture, angularity, odor, staining	Lab Sample: ID, analysis, time	Drilling method, tooling, depth
0-1	12/12	-	<0.1					GM	(0-1) ASPHALT + FILL, black/tan, dry		
1-3	24/24	-	<0.1					CL	(1-3) CLAY, tan/gray, high plasticity, moist		
3-5	24/24	-	<0.1					CL	(3-5) SAA		
5-7	24/24	-	<0.1					CL	(5-7) SAA		
7-9	24/24	-	<0.1					CL	(7-9) SAA		
9-11	24/24	-	<0.1					CL	(9-11) SAA		
11-13	24/24	-	<0.1					SE SM	(11-13) SAND. tan/gray/red. moist		
13-15	24/24	-	<0.1					SM	(13-15) SAA	Sample SWL & VOC	
									boiling terminated at 15 ft bls		

Notes:

ppm: parts per million

ppb: parts per billion

NA= Not applicable

bls = below land surface

Lithology Log

Boring ID:

SB-14

Terracon

Project Number: 70167490							Start Date/Time: 11/9/16 07:25	Sample Method	Drilling Method		
Site Location: Fayetteville, NC							End Date/Time: 11/9/16 09:35	<input type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Macro-Core <input type="checkbox"/> Split Spoon <input type="checkbox"/> Shelby Tube	<input checked="" type="checkbox"/> DPT <input type="checkbox"/> HSA <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Air Rotary <input type="checkbox"/> Rock Core		
Weather: WO, overcast							Boring Diameter: 2.1"				
Logged By: EHS							Total Depth: 15 ftbls				
Drilling Sub: Regional Probing Services							Water Level: NA				
Drill Rig: Truck Mount Giddings 5410							Well Installed: No				
Depth (ft/bls)	Recovery (inches)	Blow Counts (n)	PID ppm / ppb	CH ₄	CO ₂	O ₂	H ₂ S	U.S.C.S.	(Depth interval) Color, MAIN COMPONENT, minor component(s), structure, moisture, angularity, odor, staining	Lab Sample: ID, analysis, time	Drilling method, tooling, depth
0-1	12	-	<0.1					GM	(0-1) ASPHALT + FILL black/tan, dry		
1-3	24	-	<0.1	-				CL	(1-3) CLAY, tan/orange, low plasticity, moist		
3-5	24	-	<0.1					CL	(3-5) SAA		
5-7	24	-	40.1 0.1					CL	(5-7) CLAY, gray/tan/red. mottled, moist	sample SVC VOC	
7-9	24	-	<0.1					CL	(7-9) SAA		
9-11	24	-	<0.1					CL	(9-11) SAA		
11-13	24	-	<0.1					SM	(11-13) SAND, orange/tan, moist		
13-15	24	-	<0.1					SM	(13-15) SAA		
									boring terminated at (5 ftbls)		

Notes:

ppm: parts per million

ppb: parts per billion

NA= Not applicable

bls = below land surface

APPENDIX C

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY FORMS

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Terracon Consultants, Inc.

2401 Brentwood Road

Suite 107 I

Raleigh, NC 27604

Attention: Stephen J. Kerlin

Project Name: **U-4405**

Project Number: **70167490**

Lot Number: **RK10027**

Date Completed: **11/16/2016**



Catherine S. Dover

Project Manager



This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative

Terracon Consultants, Inc.

Lot Number: RK10027

Project Name: U-4405

Project Number: 70167490

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Summary
Terracon Consultants, Inc.
Lot Number: RK10027
Project Name: U-4405
Project Number: 70167490

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SB-14	Solid	11/09/2016 0850	11/10/2016
002	SB-15	Solid	11/09/2016 0910	11/10/2016
003	SB-16	Solid	11/09/2016 0940	11/10/2016
004	SB-28	Solid	11/09/2016 1550	11/10/2016
005	SB-29	Solid	11/09/2016 1610	11/10/2016
006	SB-30	Solid	11/09/2016 1645	11/10/2016
007	SB-31	Solid	11/09/2016 1705	11/10/2016
008	SB-32	Solid	11/09/2016 1725	11/10/2016

(8 samples)

SHEALY ENVIRONMENTAL SERVICES, INC.

Executive Summary
Terracon Consultants, Inc.
Lot Number: RK10027
Project Name: U-4405
Project Number: 70167490

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	SB-14	Solid	Acetone	8260B	27		ug/kg	5
001	SB-14	Solid	Methylene chloride	8260B	6.4	J	ug/kg	5
002	SB-15	Solid	Acetone	8260B	29		ug/kg	9
002	SB-15	Solid	Methylene chloride	8260B	2.3	J	ug/kg	9
003	SB-16	Solid	Methylene chloride	8260B	5.1		ug/kg	13
004	SB-28	Solid	Acetone	8260B	19		ug/kg	17
004	SB-28	Solid	Methylene chloride	8260B	1.7	J	ug/kg	17
005	SB-29	Solid	Acetone	8260B	38		ug/kg	21
005	SB-29	Solid	Methylene chloride	8260B	6.8		ug/kg	21
006	SB-30	Solid	Acetone	8260B	25		ug/kg	25
006	SB-30	Solid	Methylene chloride	8260B	3.1	J	ug/kg	25
006	SB-30	Solid	Tetrachloroethene	8260B	2.7	J	ug/kg	25
007	SB-31	Solid	Acetone	8260B	32		ug/kg	29
007	SB-31	Solid	Methylene chloride	8260B	4.9	J	ug/kg	29
008	SB-32	Solid	Acetone	8260B	69		ug/kg	33
008	SB-32	Solid	Methylene chloride	8260B	8.1		ug/kg	33

(16 detections)

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-001				
Description: SB-14				Matrix: Solid				
Date Sampled: 11/09/2016 0850		Project Name: U-4405				% Solids: 72.8 11/10/2016 2259		
Date Received: 11/10/2016				Project Number: 70167490				

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
1	5035	8260B	1	11/11/2016	1108 SES		26577	5.14	
Parameter		CAS Number	Analytical Method		Result Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B		27	27	5.3	ug/kg	1
Benzene		71-43-2	8260B		ND	6.7	2.7	ug/kg	1
Bromodichloromethane		75-27-4	8260B		ND	6.7	2.7	ug/kg	1
Bromoform		75-25-2	8260B		ND	6.7	2.7	ug/kg	1
Bromomethane (Methyl bromide)		74-83-9	8260B		ND	6.7	2.7	ug/kg	1
2-Butanone (MEK)		78-93-3	8260B		ND	27	5.3	ug/kg	1
Carbon disulfide		75-15-0	8260B		ND	6.7	2.7	ug/kg	1
Carbon tetrachloride		56-23-5	8260B		ND	6.7	2.7	ug/kg	1
Chlorobenzene		108-90-7	8260B		ND	6.7	2.7	ug/kg	1
Chloroethane		75-00-3	8260B		ND	6.7	2.7	ug/kg	1
Chloroform		67-66-3	8260B		ND	6.7	2.7	ug/kg	1
Chloromethane (Methyl chloride)		74-87-3	8260B		ND	6.7	2.7	ug/kg	1
Cyclohexane		110-82-7	8260B		ND	6.7	2.7	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)		96-12-8	8260B		ND	6.7	2.7	ug/kg	1
Dibromochloromethane		124-48-1	8260B		ND	6.7	2.7	ug/kg	1
1,2-Dibromoethane (EDB)		106-93-4	8260B		ND	6.7	2.7	ug/kg	1
1,2-Dichlorobenzene		95-50-1	8260B		ND	6.7	2.7	ug/kg	1
1,3-Dichlorobenzene		541-73-1	8260B		ND	6.7	2.7	ug/kg	1
1,4-Dichlorobenzene		106-46-7	8260B		ND	6.7	2.7	ug/kg	1
Dichlorodifluoromethane		75-71-8	8260B		ND	6.7	2.7	ug/kg	1
1,1-Dichloroethane		75-34-3	8260B		ND	6.7	2.7	ug/kg	1
1,2-Dichloroethane		107-06-2	8260B		ND	6.7	2.7	ug/kg	1
1,1-Dichloroethene		75-35-4	8260B		ND	6.7	2.7	ug/kg	1
cis-1,2-Dichloroethene		156-59-2	8260B		ND	6.7	2.7	ug/kg	1
trans-1,2-Dichloroethene		156-60-5	8260B		ND	6.7	2.7	ug/kg	1
1,2-Dichloropropane		78-87-5	8260B		ND	6.7	2.7	ug/kg	1
cis-1,3-Dichloropropene		10061-01-5	8260B		ND	6.7	2.7	ug/kg	1
trans-1,3-Dichloropropene		10061-02-6	8260B		ND	6.7	2.7	ug/kg	1
Ethylbenzene		100-41-4	8260B		ND	6.7	2.7	ug/kg	1
2-Hexanone		591-78-6	8260B		ND	13	5.3	ug/kg	1
Isopropylbenzene		98-82-8	8260B		ND	6.7	2.7	ug/kg	1
Methyl acetate		79-20-9	8260B		ND	6.7	2.7	ug/kg	1
Methyl tertiary butyl ether (MTBE)		1634-04-4	8260B		ND	6.7	2.7	ug/kg	1
4-Methyl-2-pentanone		108-10-1	8260B		ND	13	5.3	ug/kg	1
Methylcyclohexane		108-87-2	8260B		ND	6.7	2.7	ug/kg	1
Methylene chloride		75-09-2	8260B		6.4 J	6.7	2.7	ug/kg	1
Styrene		100-42-5	8260B		ND	6.7	2.7	ug/kg	1
1,1,2,2-Tetrachloroethane		79-34-5	8260B		ND	6.7	2.7	ug/kg	1
Tetrachloroethene		127-18-4	8260B		ND	6.7	2.7	ug/kg	1
Toluene		108-88-3	8260B		ND	6.7	2.7	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane		76-13-1	8260B		ND	6.7	2.7	ug/kg	1
1,2,4-Trichlorobenzene		120-82-1	8260B		ND	6.7	2.7	ug/kg	1
1,1,1-Trichloroethane		71-55-6	8260B		ND	6.7	2.7	ug/kg	1
1,1,2-Trichloroethane		79-00-5	8260B		ND	6.7	2.7	ug/kg	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-001			
Description: SB-14				Matrix: Solid			
Date Sampled: 11/09/2016 0850	Project Name: U-4405			% Solids: 72.8 11/10/2016 2259			
Date Received: 11/10/2016	Project Number: 70167490						

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
1	5035	8260B	1	11/11/2016	1108 SES		26577	5.14	
Trichloroethene		79-01-6		8260B	ND	6.7	2.7	ug/kg	1
Trichlorofluoromethane		75-69-4		8260B	ND	6.7	2.7	ug/kg	1
Vinyl chloride		75-01-4		8260B	ND	6.7	2.7	ug/kg	1
Xylenes (total)		1330-20-7		8260B	ND	13	5.3	ug/kg	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits					
1,2-Dichloroethane-d4		80		53-142					
Bromofluorobenzene		114		47-138					
Toluene-d8		92		68-124					

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and \geq MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-001			
Description: SB-14				Matrix: Solid			
Date Sampled: 11/09/2016 0850		Project Name: U-4405		% Solids: 72.8 11/10/2016 2259			
Date Received: 11/10/2016		Project Number: 70167490					

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene		83-32-9	8270D	ND		17	6.5	ug/kg	1
Acenaphthylene		208-96-8	8270D	ND		17	4.1	ug/kg	1
Acetophenone		98-86-2	8270D	ND		87	9.0	ug/kg	1
Anthracene		120-12-7	8270D	ND		17	3.3	ug/kg	1
Atrazine		1912-24-9	8270D	ND		87	6.5	ug/kg	1
Benzaldehyde		100-52-7	8270D	ND		87	6.4	ug/kg	1
Benzo(a)anthracene		56-55-3	8270D	ND		17	2.6	ug/kg	1
Benzo(a)pyrene		50-32-8	8270D	ND		17	2.2	ug/kg	1
Benzo(b)fluoranthene		205-99-2	8270D	ND		17	2.5	ug/kg	1
Benzo(g,h,i)perylene		191-24-2	8270D	ND		17	4.9	ug/kg	1
Benzo(k)fluoranthene		207-08-9	8270D	ND		17	2.8	ug/kg	1
1,1'-Biphenyl		92-52-4	8270D	ND		87	6.1	ug/kg	1
4-Bromophenyl phenyl ether		101-55-3	8270D	ND		87	6.0	ug/kg	1
Butyl benzyl phthalate		85-68-7	8270D	ND		87	4.5	ug/kg	1
Caprolactam		105-60-2	8270D	ND		87	15	ug/kg	1
Carbazole		86-74-8	8270D	ND		87	5.4	ug/kg	1
bis (2-Chloro-1-methylethyl) ether		108-60-1	8270D	ND		87	8.7	ug/kg	1
4-Chloro-3-methyl phenol		59-50-7	8270D	ND		87	7.3	ug/kg	1
4-Chloroaniline		106-47-8	8270D	ND		87	7.5	ug/kg	1
bis(2-Chloroethoxy)methane		111-91-1	8270D	ND		87	4.5	ug/kg	1
bis(2-Chloroethyl)ether		111-44-4	8270D	ND		87	7.1	ug/kg	1
2-Chloronaphthalene		91-58-7	8270D	ND		87	16	ug/kg	1
2-Chlorophenol		95-57-8	8270D	ND		87	14	ug/kg	1
4-Chlorophenyl phenyl ether		7005-72-3	8270D	ND		87	5.2	ug/kg	1
Chrysene		218-01-9	8270D	ND		17	4.0	ug/kg	1
Dibenzo(a,h)anthracene		53-70-3	8270D	ND		17	3.9	ug/kg	1
Dibenzofuran		132-64-9	8270D	ND		87	6.5	ug/kg	1
3,3'-Dichlorobenzidine		91-94-1	8270D	ND		87	13	ug/kg	1
2,4-Dichlorophenol		120-83-2	8270D	ND		87	8.5	ug/kg	1
Diethylphthalate		84-66-2	8270D	ND		87	5.2	ug/kg	1
Dimethyl phthalate		131-11-3	8270D	ND		87	4.8	ug/kg	1
2,4-Dimethylphenol		105-67-9	8270D	ND		87	14	ug/kg	1
Di-n-butyl phthalate		84-74-2	8270D	ND		87	13	ug/kg	1
4,6-Dinitro-2-methylphenol		534-52-1	8270D	ND		430	13	ug/kg	1
2,4-Dinitrophenol		51-28-5	8270D	ND		430	21	ug/kg	1
2,4-Dinitrotoluene		121-14-2	8270D	ND		170	16	ug/kg	1
2,6-Dinitrotoluene		606-20-2	8270D	ND		170	14	ug/kg	1
Di-n-octylphthalate		117-84-0	8270D	ND		87	1.5	ug/kg	1
bis(2-Ethylhexyl)phthalate		117-81-7	8270D	ND		87	2.9	ug/kg	1
Fluoranthene		206-44-0	8270D	ND		17	2.8	ug/kg	1
Fluorene		86-73-7	8270D	ND		17	2.5	ug/kg	1
Hexachlorobenzene		118-74-1	8270D	ND		87	6.3	ug/kg	1
Hexachlorobutadiene		87-68-3	8270D	ND		87	11	ug/kg	1
Hexachlorocyclopentadiene		77-47-4	8270D	ND		430	8.3	ug/kg	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.	Laboratory ID: RK10027-001
Description: SB-14	Matrix: Solid
Date Sampled: 11/09/2016 0850	Project Name: U-4405
Date Received: 11/10/2016	Project Number: 70167490

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3546	8270D	1	11/14/2016 1929	ECB	11/11/2016 1918	26611		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane		67-72-1	8270D	ND		87	7.1	ug/kg	1
Indeno(1,2,3-c,d)pyrene		193-39-5	8270D	ND		17	3.5	ug/kg	1
Isophorone		78-59-1	8270D	ND		87	8.0	ug/kg	1
2-Methylnaphthalene		91-57-6	8270D	ND		17	7.6	ug/kg	1
2-Methylphenol		95-48-7	8270D	ND		87	23	ug/kg	1
3+4-Methylphenol		106-44-5	8270D	ND		170	21	ug/kg	1
Naphthalene		91-20-3	8270D	ND		17	6.1	ug/kg	1
2-Nitroaniline		88-74-4	8270D	ND		170	24	ug/kg	1
3-Nitroaniline		99-09-2	8270D	ND		170	24	ug/kg	1
4-Nitroaniline		100-01-6	8270D	ND		170	26	ug/kg	1
Nitrobenzene		98-95-3	8270D	ND		87	10	ug/kg	1
2-Nitrophenol		88-75-5	8270D	ND		170	10	ug/kg	1
4-Nitrophenol		100-02-7	8270D	ND		430	130	ug/kg	1
N-Nitrosodi-n-propylamine		621-64-7	8270D	ND		87	7.4	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)		86-30-6	8270D	ND		87	6.6	ug/kg	1
Pentachlorophenol		87-86-5	8270D	ND		430	35	ug/kg	1
Phenanthrene		85-01-8	8270D	ND		17	2.9	ug/kg	1
Phenol		108-95-2	8270D	ND		87	8.1	ug/kg	1
Pyrene		129-00-0	8270D	ND		17	3.7	ug/kg	1
2,4,5-Trichlorophenol		95-95-4	8270D	ND		87	5.6	ug/kg	1
2,4,6-Trichlorophenol		88-06-2	8270D	ND		87	6.2	ug/kg	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
2-Fluorobiphenyl		83	33-102						
2-Fluorophenol		90	28-104						
Nitrobenzene-d5		76	22-109						
Phenol-d5		96	27-103						
Terphenyl-d14		78	41-120						
2,4,6-Tribromophenol		88	30-117						

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and \geq MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-002				
Description: SB-15				Matrix: Solid				
Date Sampled: 11/09/2016 0910		Project Name: U-4405				% Solids: 91.8 11/10/2016 2259		
Date Received: 11/10/2016				Project Number: 70167490				

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
1	5035	8260B	1	11/11/2016 1130	SES		26577	5.04	
Parameter		CAS Number	Analytical Method		Result Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B		29	22	4.3	ug/kg	1
Benzene		71-43-2	8260B		ND	5.4	2.2	ug/kg	1
Bromodichloromethane		75-27-4	8260B		ND	5.4	2.2	ug/kg	1
Bromoform		75-25-2	8260B		ND	5.4	2.2	ug/kg	1
Bromomethane (Methyl bromide)		74-83-9	8260B		ND	5.4	2.2	ug/kg	1
2-Butanone (MEK)		78-93-3	8260B		ND	22	4.3	ug/kg	1
Carbon disulfide		75-15-0	8260B		ND	5.4	2.2	ug/kg	1
Carbon tetrachloride		56-23-5	8260B		ND	5.4	2.2	ug/kg	1
Chlorobenzene		108-90-7	8260B		ND	5.4	2.2	ug/kg	1
Chloroethane		75-00-3	8260B		ND	5.4	2.2	ug/kg	1
Chloroform		67-66-3	8260B		ND	5.4	2.2	ug/kg	1
Chloromethane (Methyl chloride)		74-87-3	8260B		ND	5.4	2.2	ug/kg	1
Cyclohexane		110-82-7	8260B		ND	5.4	2.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)		96-12-8	8260B		ND	5.4	2.2	ug/kg	1
Dibromochloromethane		124-48-1	8260B		ND	5.4	2.2	ug/kg	1
1,2-Dibromoethane (EDB)		106-93-4	8260B		ND	5.4	2.2	ug/kg	1
1,2-Dichlorobenzene		95-50-1	8260B		ND	5.4	2.2	ug/kg	1
1,3-Dichlorobenzene		541-73-1	8260B		ND	5.4	2.2	ug/kg	1
1,4-Dichlorobenzene		106-46-7	8260B		ND	5.4	2.2	ug/kg	1
Dichlorodifluoromethane		75-71-8	8260B		ND	5.4	2.2	ug/kg	1
1,1-Dichloroethane		75-34-3	8260B		ND	5.4	2.2	ug/kg	1
1,2-Dichloroethane		107-06-2	8260B		ND	5.4	2.2	ug/kg	1
1,1-Dichloroethene		75-35-4	8260B		ND	5.4	2.2	ug/kg	1
cis-1,2-Dichloroethene		156-59-2	8260B		ND	5.4	2.2	ug/kg	1
trans-1,2-Dichloroethene		156-60-5	8260B		ND	5.4	2.2	ug/kg	1
1,2-Dichloropropane		78-87-5	8260B		ND	5.4	2.2	ug/kg	1
cis-1,3-Dichloropropene		10061-01-5	8260B		ND	5.4	2.2	ug/kg	1
trans-1,3-Dichloropropene		10061-02-6	8260B		ND	5.4	2.2	ug/kg	1
Ethylbenzene		100-41-4	8260B		ND	5.4	2.2	ug/kg	1
2-Hexanone		591-78-6	8260B		ND	11	4.3	ug/kg	1
Isopropylbenzene		98-82-8	8260B		ND	5.4	2.2	ug/kg	1
Methyl acetate		79-20-9	8260B		ND	5.4	2.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)		1634-04-4	8260B		ND	5.4	2.2	ug/kg	1
4-Methyl-2-pentanone		108-10-1	8260B		ND	11	4.3	ug/kg	1
Methylcyclohexane		108-87-2	8260B		ND	5.4	2.2	ug/kg	1
Methylene chloride		75-09-2	8260B		2.3 J	5.4	2.2	ug/kg	1
Styrene		100-42-5	8260B		ND	5.4	2.2	ug/kg	1
1,1,2,2-Tetrachloroethane		79-34-5	8260B		ND	5.4	2.2	ug/kg	1
Tetrachloroethene		127-18-4	8260B		ND	5.4	2.2	ug/kg	1
Toluene		108-88-3	8260B		ND	5.4	2.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane		76-13-1	8260B		ND	5.4	2.2	ug/kg	1
1,2,4-Trichlorobenzene		120-82-1	8260B		ND	5.4	2.2	ug/kg	1
1,1,1-Trichloroethane		71-55-6	8260B		ND	5.4	2.2	ug/kg	1
1,1,2-Trichloroethane		79-00-5	8260B		ND	5.4	2.2	ug/kg	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-002				
Description: SB-15				Matrix: Solid				
Date Sampled: 11/09/2016 0910		Project Name: U-4405				% Solids: 91.8 11/10/2016 2259		
Date Received: 11/10/2016		Project Number: 70167490						

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
1	5035	8260B	1	11/11/2016 1130	SES		26577	5.04	
Trichloroethene		79-01-6		8260B	ND	5.4	2.2	ug/kg	1
Trichlorofluoromethane		75-69-4		8260B	ND	5.4	2.2	ug/kg	1
Vinyl chloride		75-01-4		8260B	ND	5.4	2.2	ug/kg	1
Xylenes (total)		1330-20-7		8260B	ND	11	4.3	ug/kg	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits					
1,2-Dichloroethane-d4			80	53-142					
Bromofluorobenzene			118	47-138					
Toluene-d8			95	68-124					

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and \geq MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-002			
Description: SB-15				Matrix: Solid			
Date Sampled: 11/09/2016 0910		Project Name: U-4405			% Solids: 91.8 11/10/2016 2259		
Date Received: 11/10/2016		Project Number: 70167490					

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene		83-32-9	8270D	ND	14	5.2	ug/kg	1	
Acenaphthylene		208-96-8	8270D	ND	14	3.3	ug/kg	1	
Acetophenone		98-86-2	8270D	ND	70	7.2	ug/kg	1	
Anthracene		120-12-7	8270D	ND	14	2.7	ug/kg	1	
Atrazine		1912-24-9	8270D	ND	70	5.2	ug/kg	1	
Benzaldehyde		100-52-7	8270D	ND	70	5.2	ug/kg	1	
Benzo(a)anthracene		56-55-3	8270D	ND	14	2.1	ug/kg	1	
Benzo(a)pyrene		50-32-8	8270D	ND	14	1.8	ug/kg	1	
Benzo(b)fluoranthene		205-99-2	8270D	ND	14	2.0	ug/kg	1	
Benzo(g,h,i)perylene		191-24-2	8270D	ND	14	3.9	ug/kg	1	
Benzo(k)fluoranthene		207-08-9	8270D	ND	14	2.2	ug/kg	1	
1,1'-Biphenyl		92-52-4	8270D	ND	70	4.9	ug/kg	1	
4-Bromophenyl phenyl ether		101-55-3	8270D	ND	70	4.8	ug/kg	1	
Butyl benzyl phthalate		85-68-7	8270D	ND	70	3.6	ug/kg	1	
Caprolactam		105-60-2	8270D	ND	70	12	ug/kg	1	
Carbazole		86-74-8	8270D	ND	70	4.3	ug/kg	1	
bis (2-Chloro-1-methylethyl) ether		108-60-1	8270D	ND	70	7.0	ug/kg	1	
4-Chloro-3-methyl phenol		59-50-7	8270D	ND	70	5.8	ug/kg	1	
4-Chloroaniline		106-47-8	8270D	ND	70	6.0	ug/kg	1	
bis(2-Chloroethoxy)methane		111-91-1	8270D	ND	70	3.6	ug/kg	1	
bis(2-Chloroethyl)ether		111-44-4	8270D	ND	70	5.7	ug/kg	1	
2-Chloronaphthalene		91-58-7	8270D	ND	70	13	ug/kg	1	
2-Chlorophenol		95-57-8	8270D	ND	70	11	ug/kg	1	
4-Chlorophenyl phenyl ether		7005-72-3	8270D	ND	70	4.2	ug/kg	1	
Chrysene		218-01-9	8270D	ND	14	3.2	ug/kg	1	
Dibenzo(a,h)anthracene		53-70-3	8270D	ND	14	3.1	ug/kg	1	
Dibenzofuran		132-64-9	8270D	ND	70	5.2	ug/kg	1	
3,3'-Dichlorobenzidine		91-94-1	8270D	ND	70	10	ug/kg	1	
2,4-Dichlorophenol		120-83-2	8270D	ND	70	6.9	ug/kg	1	
Diethylphthalate		84-66-2	8270D	ND	70	4.1	ug/kg	1	
Dimethyl phthalate		131-11-3	8270D	ND	70	3.8	ug/kg	1	
2,4-Dimethylphenol		105-67-9	8270D	ND	70	11	ug/kg	1	
Di-n-butyl phthalate		84-74-2	8270D	ND	70	10	ug/kg	1	
4,6-Dinitro-2-methylphenol		534-52-1	8270D	ND	340	10	ug/kg	1	
2,4-Dinitrophenol		51-28-5	8270D	ND	340	17	ug/kg	1	
2,4-Dinitrotoluene		121-14-2	8270D	ND	140	13	ug/kg	1	
2,6-Dinitrotoluene		606-20-2	8270D	ND	140	11	ug/kg	1	
Di-n-octylphthalate		117-84-0	8270D	ND	70	1.2	ug/kg	1	
bis(2-Ethylhexyl)phthalate		117-81-7	8270D	ND	70	2.3	ug/kg	1	
Fluoranthene		206-44-0	8270D	ND	14	2.2	ug/kg	1	
Fluorene		86-73-7	8270D	ND	14	2.0	ug/kg	1	
Hexachlorobenzene		118-74-1	8270D	ND	70	5.1	ug/kg	1	
Hexachlorobutadiene		87-68-3	8270D	ND	70	8.8	ug/kg	1	
Hexachlorocyclopentadiene		77-47-4	8270D	ND	340	6.7	ug/kg	1	

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.	Laboratory ID: RK10027-002
Description: SB-15	Matrix: Solid
Date Sampled: 11/09/2016 0910	Project Name: U-4405
Date Received: 11/10/2016	Project Number: 70167490

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3546	8270D	1	11/14/2016 1954	ECB	11/11/2016 1918	26611		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane		67-72-1	8270D	ND		70	5.7	ug/kg	1
Indeno(1,2,3-c,d)pyrene		193-39-5	8270D	ND		14	2.8	ug/kg	1
Isophorone		78-59-1	8270D	ND		70	6.5	ug/kg	1
2-Methylnaphthalene		91-57-6	8270D	ND		14	6.1	ug/kg	1
2-Methylphenol		95-48-7	8270D	ND		70	18	ug/kg	1
3+4-Methylphenol		106-44-5	8270D	ND		140	17	ug/kg	1
Naphthalene		91-20-3	8270D	ND		14	4.9	ug/kg	1
2-Nitroaniline		88-74-4	8270D	ND		140	19	ug/kg	1
3-Nitroaniline		99-09-2	8270D	ND		140	19	ug/kg	1
4-Nitroaniline		100-01-6	8270D	ND		140	21	ug/kg	1
Nitrobenzene		98-95-3	8270D	ND		70	8.1	ug/kg	1
2-Nitrophenol		88-75-5	8270D	ND		140	8.1	ug/kg	1
4-Nitrophenol		100-02-7	8270D	ND		340	110	ug/kg	1
N-Nitrosodi-n-propylamine		621-64-7	8270D	ND		70	6.0	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)		86-30-6	8270D	ND		70	5.3	ug/kg	1
Pentachlorophenol		87-86-5	8270D	ND		340	28	ug/kg	1
Phenanthrene		85-01-8	8270D	ND		14	2.3	ug/kg	1
Phenol		108-95-2	8270D	ND		70	6.5	ug/kg	1
Pyrene		129-00-0	8270D	ND		14	3.0	ug/kg	1
2,4,5-Trichlorophenol		95-95-4	8270D	ND		70	4.5	ug/kg	1
2,4,6-Trichlorophenol		88-06-2	8270D	ND		70	5.0	ug/kg	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
2-Fluorobiphenyl		63	33-102						
2-Fluorophenol		64	28-104						
Nitrobenzene-d5		53	22-109						
Phenol-d5		67	27-103						
Terphenyl-d14		61	41-120						
2,4,6-Tribromophenol		63	30-117						

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-003				
Description: SB-16				Matrix: Solid				
Date Sampled: 11/09/2016 0940		Project Name: U-4405				% Solids: 83.3 11/10/2016 2259		
Date Received: 11/10/2016				Project Number: 70167490				

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
Parameter		CAS Number	Analytical Method		Result Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B		ND	21	4.1	ug/kg	1
Benzene		71-43-2	8260B		ND	5.1	2.1	ug/kg	1
Bromodichloromethane		75-27-4	8260B		ND	5.1	2.1	ug/kg	1
Bromoform		75-25-2	8260B		ND	5.1	2.1	ug/kg	1
Bromomethane (Methyl bromide)		74-83-9	8260B		ND	5.1	2.1	ug/kg	1
2-Butanone (MEK)		78-93-3	8260B		ND	21	4.1	ug/kg	1
Carbon disulfide		75-15-0	8260B		ND	5.1	2.1	ug/kg	1
Carbon tetrachloride		56-23-5	8260B		ND	5.1	2.1	ug/kg	1
Chlorobenzene		108-90-7	8260B		ND	5.1	2.1	ug/kg	1
Chloroethane		75-00-3	8260B		ND	5.1	2.1	ug/kg	1
Chloroform		67-66-3	8260B		ND	5.1	2.1	ug/kg	1
Chloromethane (Methyl chloride)		74-87-3	8260B		ND	5.1	2.1	ug/kg	1
Cyclohexane		110-82-7	8260B		ND	5.1	2.1	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)		96-12-8	8260B		ND	5.1	2.1	ug/kg	1
Dibromochloromethane		124-48-1	8260B		ND	5.1	2.1	ug/kg	1
1,2-Dibromoethane (EDB)		106-93-4	8260B		ND	5.1	2.1	ug/kg	1
1,2-Dichlorobenzene		95-50-1	8260B		ND	5.1	2.1	ug/kg	1
1,3-Dichlorobenzene		541-73-1	8260B		ND	5.1	2.1	ug/kg	1
1,4-Dichlorobenzene		106-46-7	8260B		ND	5.1	2.1	ug/kg	1
Dichlorodifluoromethane		75-71-8	8260B		ND	5.1	2.1	ug/kg	1
1,1-Dichloroethane		75-34-3	8260B		ND	5.1	2.1	ug/kg	1
1,2-Dichloroethane		107-06-2	8260B		ND	5.1	2.1	ug/kg	1
1,1-Dichloroethene		75-35-4	8260B		ND	5.1	2.1	ug/kg	1
cis-1,2-Dichloroethene		156-59-2	8260B		ND	5.1	2.1	ug/kg	1
trans-1,2-Dichloroethene		156-60-5	8260B		ND	5.1	2.1	ug/kg	1
1,2-Dichloropropane		78-87-5	8260B		ND	5.1	2.1	ug/kg	1
cis-1,3-Dichloropropene		10061-01-5	8260B		ND	5.1	2.1	ug/kg	1
trans-1,3-Dichloropropene		10061-02-6	8260B		ND	5.1	2.1	ug/kg	1
Ethylbenzene		100-41-4	8260B		ND	5.1	2.1	ug/kg	1
2-Hexanone		591-78-6	8260B		ND	10	4.1	ug/kg	1
Isopropylbenzene		98-82-8	8260B		ND	5.1	2.1	ug/kg	1
Methyl acetate		79-20-9	8260B		ND	5.1	2.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)		1634-04-4	8260B		ND	5.1	2.1	ug/kg	1
4-Methyl-2-pentanone		108-10-1	8260B		ND	10	4.1	ug/kg	1
Methylcyclohexane		108-87-2	8260B		ND	5.1	2.1	ug/kg	1
Methylene chloride		75-09-2	8260B		5.1	5.1	2.1	ug/kg	1
Styrene		100-42-5	8260B		ND	5.1	2.1	ug/kg	1
1,1,2,2-Tetrachloroethane		79-34-5	8260B		ND	5.1	2.1	ug/kg	1
Tetrachloroethene		127-18-4	8260B		ND	5.1	2.1	ug/kg	1
Toluene		108-88-3	8260B		ND	5.1	2.1	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane		76-13-1	8260B		ND	5.1	2.1	ug/kg	1
1,2,4-Trichlorobenzene		120-82-1	8260B		ND	5.1	2.1	ug/kg	1
1,1,1-Trichloroethane		71-55-6	8260B		ND	5.1	2.1	ug/kg	1
1,1,2-Trichloroethane		79-00-5	8260B		ND	5.1	2.1	ug/kg	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-003			
Description: SB-16				Matrix: Solid			
Date Sampled: 11/09/2016 0940	Project Name: U-4405			% Solids: 83.3 11/10/2016 2259			
Date Received: 11/10/2016	Project Number: 70167490						

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
Parameter		CAS Number		Analytical Method	Result Q	PQL	MDL	Units	Run
Trichloroethene		79-01-6		8260B	ND	5.1	2.1	ug/kg	1
Trichlorofluoromethane		75-69-4		8260B	ND	5.1	2.1	ug/kg	1
Vinyl chloride		75-01-4		8260B	ND	5.1	2.1	ug/kg	1
Xylenes (total)		1330-20-7		8260B	ND	10	4.1	ug/kg	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits					
1,2-Dichloroethane-d4			78	53-142					
Bromofluorobenzene			114	47-138					
Toluene-d8			94	68-124					

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and \geq MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-003			
Description: SB-16				Matrix: Solid			
Date Sampled: 11/09/2016 0940		Project Name: U-4405		% Solids: 83.3 11/10/2016 2259			
Date Received: 11/10/2016		Project Number: 70167490					

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene		83-32-9	8270D	ND		16	6.0	ug/kg	1
Acenaphthylene		208-96-8	8270D	ND		16	3.8	ug/kg	1
Acetophenone		98-86-2	8270D	ND		80	8.3	ug/kg	1
Anthracene		120-12-7	8270D	ND		16	3.1	ug/kg	1
Atrazine		1912-24-9	8270D	ND		80	6.0	ug/kg	1
Benzaldehyde		100-52-7	8270D	ND		80	5.9	ug/kg	1
Benzo(a)anthracene		56-55-3	8270D	ND		16	2.4	ug/kg	1
Benzo(a)pyrene		50-32-8	8270D	ND		16	2.1	ug/kg	1
Benzo(b)fluoranthene		205-99-2	8270D	ND		16	2.3	ug/kg	1
Benzo(g,h,i)perylene		191-24-2	8270D	ND		16	4.5	ug/kg	1
Benzo(k)fluoranthene		207-08-9	8270D	ND		16	2.5	ug/kg	1
1,1'-Biphenyl		92-52-4	8270D	ND		80	5.6	ug/kg	1
4-Bromophenyl phenyl ether		101-55-3	8270D	ND		80	5.5	ug/kg	1
Butyl benzyl phthalate		85-68-7	8270D	ND		80	4.1	ug/kg	1
Caprolactam		105-60-2	8270D	ND		80	14	ug/kg	1
Carbazole		86-74-8	8270D	ND		80	5.0	ug/kg	1
bis (2-Chloro-1-methylethyl) ether		108-60-1	8270D	ND		80	8.0	ug/kg	1
4-Chloro-3-methyl phenol		59-50-7	8270D	ND		80	6.7	ug/kg	1
4-Chloroaniline		106-47-8	8270D	ND		80	6.9	ug/kg	1
bis(2-Chloroethoxy)methane		111-91-1	8270D	ND		80	4.2	ug/kg	1
bis(2-Chloroethyl)ether		111-44-4	8270D	ND		80	6.5	ug/kg	1
2-Chloronaphthalene		91-58-7	8270D	ND		80	15	ug/kg	1
2-Chlorophenol		95-57-8	8270D	ND		80	13	ug/kg	1
4-Chlorophenyl phenyl ether		7005-72-3	8270D	ND		80	4.8	ug/kg	1
Chrysene		218-01-9	8270D	ND		16	3.7	ug/kg	1
Dibenzo(a,h)anthracene		53-70-3	8270D	ND		16	3.6	ug/kg	1
Dibenzofuran		132-64-9	8270D	ND		80	6.0	ug/kg	1
3,3'-Dichlorobenzidine		91-94-1	8270D	ND		80	12	ug/kg	1
2,4-Dichlorophenol		120-83-2	8270D	ND		80	7.9	ug/kg	1
Diethylphthalate		84-66-2	8270D	ND		80	4.7	ug/kg	1
Dimethyl phthalate		131-11-3	8270D	ND		80	4.4	ug/kg	1
2,4-Dimethylphenol		105-67-9	8270D	ND		80	13	ug/kg	1
Di-n-butyl phthalate		84-74-2	8270D	ND		80	12	ug/kg	1
4,6-Dinitro-2-methylphenol		534-52-1	8270D	ND		390	12	ug/kg	1
2,4-Dinitrophenol		51-28-5	8270D	ND		390	19	ug/kg	1
2,4-Dinitrotoluene		121-14-2	8270D	ND		160	15	ug/kg	1
2,6-Dinitrotoluene		606-20-2	8270D	ND		160	13	ug/kg	1
Di-n-octylphthalate		117-84-0	8270D	ND		80	1.4	ug/kg	1
bis(2-Ethylhexyl)phthalate		117-81-7	8270D	ND		80	2.7	ug/kg	1
Fluoranthene		206-44-0	8270D	ND		16	2.6	ug/kg	1
Fluorene		86-73-7	8270D	ND		16	2.3	ug/kg	1
Hexachlorobenzene		118-74-1	8270D	ND		80	5.8	ug/kg	1
Hexachlorobutadiene		87-68-3	8270D	ND		80	10	ug/kg	1
Hexachlorocyclopentadiene		77-47-4	8270D	ND		390	7.7	ug/kg	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.	Laboratory ID: RK10027-003
Description: SB-16	Matrix: Solid
Date Sampled: 11/09/2016 0940	Project Name: U-4405
Date Received: 11/10/2016	Project Number: 70167490

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3546	8270D	1	11/14/2016 2018	ECB	11/11/2016 1918	26611		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane		67-72-1	8270D	ND		80	6.5	ug/kg	1
Indeno(1,2,3-c,d)pyrene		193-39-5	8270D	ND		16	3.2	ug/kg	1
Isophorone		78-59-1	8270D	ND		80	7.4	ug/kg	1
2-Methylnaphthalene		91-57-6	8270D	ND		16	7.0	ug/kg	1
2-Methylphenol		95-48-7	8270D	ND		80	21	ug/kg	1
3+4-Methylphenol		106-44-5	8270D	ND		160	20	ug/kg	1
Naphthalene		91-20-3	8270D	ND		16	5.6	ug/kg	1
2-Nitroaniline		88-74-4	8270D	ND		160	22	ug/kg	1
3-Nitroaniline		99-09-2	8270D	ND		160	22	ug/kg	1
4-Nitroaniline		100-01-6	8270D	ND		160	24	ug/kg	1
Nitrobenzene		98-95-3	8270D	ND		80	9.3	ug/kg	1
2-Nitrophenol		88-75-5	8270D	ND		160	9.3	ug/kg	1
4-Nitrophenol		100-02-7	8270D	ND		390	120	ug/kg	1
N-Nitrosodi-n-propylamine		621-64-7	8270D	ND		80	6.8	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)		86-30-6	8270D	ND		80	6.1	ug/kg	1
Pentachlorophenol		87-86-5	8270D	ND		390	32	ug/kg	1
Phenanthrene		85-01-8	8270D	ND		16	2.7	ug/kg	1
Phenol		108-95-2	8270D	ND		80	7.4	ug/kg	1
Pyrene		129-00-0	8270D	ND		16	3.4	ug/kg	1
2,4,5-Trichlorophenol		95-95-4	8270D	ND		80	5.2	ug/kg	1
2,4,6-Trichlorophenol		88-06-2	8270D	ND		80	5.7	ug/kg	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
2-Fluorobiphenyl		64	33-102						
2-Fluorophenol		71	28-104						
Nitrobenzene-d5		55	22-109						
Phenol-d5		74	27-103						
Terphenyl-d14		60	41-120						
2,4,6-Tribromophenol		65	30-117						

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and \geq MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-004				
Description: SB-28				Matrix: Solid				
Date Sampled: 11/09/2016 1550		Project Name: U-4405				% Solids: 86.0 11/10/2016 2259		
Date Received: 11/10/2016		Project Number: 70167490						

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
Parameter		CAS Number	Analytical Method		Result Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B		19	17	3.4	ug/kg	1
Benzene		71-43-2	8260B		ND	4.2	1.7	ug/kg	1
Bromodichloromethane		75-27-4	8260B		ND	4.2	1.7	ug/kg	1
Bromoform		75-25-2	8260B		ND	4.2	1.7	ug/kg	1
Bromomethane (Methyl bromide)		74-83-9	8260B		ND	4.2	1.7	ug/kg	1
2-Butanone (MEK)		78-93-3	8260B		ND	17	3.4	ug/kg	1
Carbon disulfide		75-15-0	8260B		ND	4.2	1.7	ug/kg	1
Carbon tetrachloride		56-23-5	8260B		ND	4.2	1.7	ug/kg	1
Chlorobenzene		108-90-7	8260B		ND	4.2	1.7	ug/kg	1
Chloroethane		75-00-3	8260B		ND	4.2	1.7	ug/kg	1
Chloroform		67-66-3	8260B		ND	4.2	1.7	ug/kg	1
Chloromethane (Methyl chloride)		74-87-3	8260B		ND	4.2	1.7	ug/kg	1
Cyclohexane		110-82-7	8260B		ND	4.2	1.7	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)		96-12-8	8260B		ND	4.2	1.7	ug/kg	1
Dibromochloromethane		124-48-1	8260B		ND	4.2	1.7	ug/kg	1
1,2-Dibromoethane (EDB)		106-93-4	8260B		ND	4.2	1.7	ug/kg	1
1,2-Dichlorobenzene		95-50-1	8260B		ND	4.2	1.7	ug/kg	1
1,3-Dichlorobenzene		541-73-1	8260B		ND	4.2	1.7	ug/kg	1
1,4-Dichlorobenzene		106-46-7	8260B		ND	4.2	1.7	ug/kg	1
Dichlorodifluoromethane		75-71-8	8260B		ND	4.2	1.7	ug/kg	1
1,1-Dichloroethane		75-34-3	8260B		ND	4.2	1.7	ug/kg	1
1,2-Dichloroethane		107-06-2	8260B		ND	4.2	1.7	ug/kg	1
1,1-Dichloroethene		75-35-4	8260B		ND	4.2	1.7	ug/kg	1
cis-1,2-Dichloroethene		156-59-2	8260B		ND	4.2	1.7	ug/kg	1
trans-1,2-Dichloroethene		156-60-5	8260B		ND	4.2	1.7	ug/kg	1
1,2-Dichloropropane		78-87-5	8260B		ND	4.2	1.7	ug/kg	1
cis-1,3-Dichloropropene		10061-01-5	8260B		ND	4.2	1.7	ug/kg	1
trans-1,3-Dichloropropene		10061-02-6	8260B		ND	4.2	1.7	ug/kg	1
Ethylbenzene		100-41-4	8260B		ND	4.2	1.7	ug/kg	1
2-Hexanone		591-78-6	8260B		ND	8.4	3.4	ug/kg	1
Isopropylbenzene		98-82-8	8260B		ND	4.2	1.7	ug/kg	1
Methyl acetate		79-20-9	8260B		ND	4.2	1.7	ug/kg	1
Methyl tertiary butyl ether (MTBE)		1634-04-4	8260B		ND	4.2	1.7	ug/kg	1
4-Methyl-2-pentanone		108-10-1	8260B		ND	8.4	3.4	ug/kg	1
Methylcyclohexane		108-87-2	8260B		ND	4.2	1.7	ug/kg	1
Methylene chloride		75-09-2	8260B		1.7 J	4.2	1.7	ug/kg	1
Styrene		100-42-5	8260B		ND	4.2	1.7	ug/kg	1
1,1,2,2-Tetrachloroethane		79-34-5	8260B		ND	4.2	1.7	ug/kg	1
Tetrachloroethene		127-18-4	8260B		ND	4.2	1.7	ug/kg	1
Toluene		108-88-3	8260B		ND	4.2	1.7	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane		76-13-1	8260B		ND	4.2	1.7	ug/kg	1
1,2,4-Trichlorobenzene		120-82-1	8260B		ND	4.2	1.7	ug/kg	1
1,1,1-Trichloroethane		71-55-6	8260B		ND	4.2	1.7	ug/kg	1
1,1,2-Trichloroethane		79-00-5	8260B		ND	4.2	1.7	ug/kg	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-004			
Description: SB-28				Matrix: Solid			
Date Sampled: 11/09/2016 1550	Project Name: U-4405		% Solids: 86.0 11/10/2016 2259				
Date Received: 11/10/2016	Project Number: 70167490						

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
1	5035	8260B	1	11/11/2016 1215	SES		26577	6.89	
Trichloroethene		79-01-6		8260B	ND	4.2	1.7	ug/kg	1
Trichlorofluoromethane		75-69-4		8260B	ND	4.2	1.7	ug/kg	1
Vinyl chloride		75-01-4		8260B	ND	4.2	1.7	ug/kg	1
Xylenes (total)		1330-20-7		8260B	ND	8.4	3.4	ug/kg	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits					
1,2-Dichloroethane-d4			81	53-142					
Bromofluorobenzene			114	47-138					
Toluene-d8			95	68-124					

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and \geq MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-004				
Description: SB-28				Matrix: Solid				
Date Sampled: 11/09/2016 1550		Project Name: U-4405				% Solids: 86.0 11/10/2016 2259		
Date Received: 11/10/2016				Project Number: 70167490				

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3546	8270D	1	11/15/2016 2015	ECB	11/11/2016 1918	26611		
Parameter		CAS Number	Analytical Method		Result Q	PQL	MDL	Units	Run
Acenaphthene		83-32-9	8270D	ND	15	5.7	ug/kg	1	
Acenaphthylene		208-96-8	8270D	ND	15	3.6	ug/kg	1	
Acetophenone		98-86-2	8270D	ND	76	7.9	ug/kg	1	
Anthracene		120-12-7	8270D	ND	15	2.9	ug/kg	1	
Atrazine		1912-24-9	8270D	ND	76	5.7	ug/kg	1	
Benzaldehyde		100-52-7	8270D	ND	76	5.7	ug/kg	1	
Benzo(a)anthracene		56-55-3	8270D	ND	15	2.3	ug/kg	1	
Benzo(a)pyrene		50-32-8	8270D	ND	15	2.0	ug/kg	1	
Benzo(b)fluoranthene		205-99-2	8270D	ND	15	2.2	ug/kg	1	
Benzo(g,h,i)perylene		191-24-2	8270D	ND	15	4.3	ug/kg	1	
Benzo(k)fluoranthene		207-08-9	8270D	ND	15	2.4	ug/kg	1	
1,1'-Biphenyl		92-52-4	8270D	ND	76	5.4	ug/kg	1	
4-Bromophenyl phenyl ether		101-55-3	8270D	ND	76	5.3	ug/kg	1	
Butyl benzyl phthalate		85-68-7	8270D	ND	76	3.9	ug/kg	1	
Caprolactam		105-60-2	8270D	ND	76	13	ug/kg	1	
Carbazole		86-74-8	8270D	ND	76	4.8	ug/kg	1	
bis (2-Chloro-1-methylethyl) ether		108-60-1	8270D	ND	76	7.6	ug/kg	1	
4-Chloro-3-methyl phenol		59-50-7	8270D	ND	76	6.4	ug/kg	1	
4-Chloroaniline		106-47-8	8270D	ND	76	6.6	ug/kg	1	
bis(2-Chloroethoxy)methane		111-91-1	8270D	ND	76	4.0	ug/kg	1	
bis(2-Chloroethyl)ether		111-44-4	8270D	ND	76	6.2	ug/kg	1	
2-Chloronaphthalene		91-58-7	8270D	ND	76	14	ug/kg	1	
2-Chlorophenol		95-57-8	8270D	ND	76	12	ug/kg	1	
4-Chlorophenyl phenyl ether		7005-72-3	8270D	ND	76	4.5	ug/kg	1	
Chrysene		218-01-9	8270D	ND	15	3.5	ug/kg	1	
Dibenzo(a,h)anthracene		53-70-3	8270D	ND	15	3.4	ug/kg	1	
Dibenzofuran		132-64-9	8270D	ND	76	5.7	ug/kg	1	
3,3'-Dichlorobenzidine		91-94-1	8270D	ND	76	11	ug/kg	1	
2,4-Dichlorophenol		120-83-2	8270D	ND	76	7.5	ug/kg	1	
Diethylphthalate		84-66-2	8270D	ND	76	4.5	ug/kg	1	
Dimethyl phthalate		131-11-3	8270D	ND	76	4.2	ug/kg	1	
2,4-Dimethylphenol		105-67-9	8270D	ND	76	12	ug/kg	1	
Di-n-butyl phthalate		84-74-2	8270D	ND	76	11	ug/kg	1	
4,6-Dinitro-2-methylphenol		534-52-1	8270D	ND	380	11	ug/kg	1	
2,4-Dinitrophenol		51-28-5	8270D	ND	380	19	ug/kg	1	
2,4-Dinitrotoluene		121-14-2	8270D	ND	150	14	ug/kg	1	
2,6-Dinitrotoluene		606-20-2	8270D	ND	150	12	ug/kg	1	
Di-n-octylphthalate		117-84-0	8270D	ND	76	1.4	ug/kg	1	
bis(2-Ethylhexyl)phthalate		117-81-7	8270D	ND	76	2.6	ug/kg	1	
Fluoranthene		206-44-0	8270D	ND	15	2.5	ug/kg	1	
Fluorene		86-73-7	8270D	ND	15	2.2	ug/kg	1	
Hexachlorobenzene		118-74-1	8270D	ND	76	5.6	ug/kg	1	
Hexachlorobutadiene		87-68-3	8270D	ND	76	9.7	ug/kg	1	
Hexachlorocyclopentadiene		77-47-4	8270D	ND	380	7.3	ug/kg	1	

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-004			
Description: SB-28				Matrix: Solid			
Date Sampled: 11/09/2016 1550		Project Name: U-4405		% Solids: 86.0 11/10/2016 2259			
Date Received: 11/10/2016		Project Number: 70167490					

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3546	8270D	1	11/15/2016 2015	ECB	11/11/2016 1918	26611		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane		67-72-1	8270D	ND		76	6.2	ug/kg	1
Indeno(1,2,3-c,d)pyrene		193-39-5	8270D	ND		15	3.1	ug/kg	1
Isophorone		78-59-1	8270D	ND		76	7.1	ug/kg	1
2-Methylnaphthalene		91-57-6	8270D	ND		15	6.7	ug/kg	1
2-Methylphenol		95-48-7	8270D	ND		76	20	ug/kg	1
3+4-Methylphenol		106-44-5	8270D	ND		150	19	ug/kg	1
Naphthalene		91-20-3	8270D	ND		15	5.3	ug/kg	1
2-Nitroaniline		88-74-4	8270D	ND		150	21	ug/kg	1
3-Nitroaniline		99-09-2	8270D	ND		150	21	ug/kg	1
4-Nitroaniline		100-01-6	8270D	ND		150	23	ug/kg	1
Nitrobenzene		98-95-3	8270D	ND		76	8.9	ug/kg	1
2-Nitrophenol		88-75-5	8270D	ND		150	8.9	ug/kg	1
4-Nitrophenol		100-02-7	8270D	ND		380	120	ug/kg	1
N-Nitrosodi-n-propylamine		621-64-7	8270D	ND		76	6.5	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)		86-30-6	8270D	ND		76	5.8	ug/kg	1
Pentachlorophenol		87-86-5	8270D	ND		380	30	ug/kg	1
Phenanthrene		85-01-8	8270D	ND		15	2.6	ug/kg	1
Phenol		108-95-2	8270D	ND		76	7.1	ug/kg	1
Pyrene		129-00-0	8270D	ND		15	3.2	ug/kg	1
2,4,5-Trichlorophenol		95-95-4	8270D	ND		76	5.0	ug/kg	1
2,4,6-Trichlorophenol		88-06-2	8270D	ND		76	5.4	ug/kg	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
2-Fluorobiphenyl		66	33-102						
2-Fluorophenol		70	28-104						
Nitrobenzene-d5		57	22-109						
Phenol-d5		70	27-103						
Terphenyl-d14		56	41-120						
2,4,6-Tribromophenol		74	30-117						

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-005				
Description: SB-29				Matrix: Solid				
Date Sampled: 11/09/2016 1610		Project Name: U-4405				% Solids: 76.1 11/10/2016 2259		
Date Received: 11/10/2016				Project Number: 70167490				

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
1	5035	8260B	1	11/11/2016 1237	SES		26577	4.99	
Parameter		CAS Number	Analytical Method		Result Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B		38	26	5.3	ug/kg	1
Benzene		71-43-2	8260B		ND	6.6	2.6	ug/kg	1
Bromodichloromethane		75-27-4	8260B		ND	6.6	2.6	ug/kg	1
Bromoform		75-25-2	8260B		ND	6.6	2.6	ug/kg	1
Bromomethane (Methyl bromide)		74-83-9	8260B		ND	6.6	2.6	ug/kg	1
2-Butanone (MEK)		78-93-3	8260B		ND	26	5.3	ug/kg	1
Carbon disulfide		75-15-0	8260B		ND	6.6	2.6	ug/kg	1
Carbon tetrachloride		56-23-5	8260B		ND	6.6	2.6	ug/kg	1
Chlorobenzene		108-90-7	8260B		ND	6.6	2.6	ug/kg	1
Chloroethane		75-00-3	8260B		ND	6.6	2.6	ug/kg	1
Chloroform		67-66-3	8260B		ND	6.6	2.6	ug/kg	1
Chloromethane (Methyl chloride)		74-87-3	8260B		ND	6.6	2.6	ug/kg	1
Cyclohexane		110-82-7	8260B		ND	6.6	2.6	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)		96-12-8	8260B		ND	6.6	2.6	ug/kg	1
Dibromochloromethane		124-48-1	8260B		ND	6.6	2.6	ug/kg	1
1,2-Dibromoethane (EDB)		106-93-4	8260B		ND	6.6	2.6	ug/kg	1
1,2-Dichlorobenzene		95-50-1	8260B		ND	6.6	2.6	ug/kg	1
1,3-Dichlorobenzene		541-73-1	8260B		ND	6.6	2.6	ug/kg	1
1,4-Dichlorobenzene		106-46-7	8260B		ND	6.6	2.6	ug/kg	1
Dichlorodifluoromethane		75-71-8	8260B		ND	6.6	2.6	ug/kg	1
1,1-Dichloroethane		75-34-3	8260B		ND	6.6	2.6	ug/kg	1
1,2-Dichloroethane		107-06-2	8260B		ND	6.6	2.6	ug/kg	1
1,1-Dichloroethene		75-35-4	8260B		ND	6.6	2.6	ug/kg	1
cis-1,2-Dichloroethene		156-59-2	8260B		ND	6.6	2.6	ug/kg	1
trans-1,2-Dichloroethene		156-60-5	8260B		ND	6.6	2.6	ug/kg	1
1,2-Dichloropropane		78-87-5	8260B		ND	6.6	2.6	ug/kg	1
cis-1,3-Dichloropropene		10061-01-5	8260B		ND	6.6	2.6	ug/kg	1
trans-1,3-Dichloropropene		10061-02-6	8260B		ND	6.6	2.6	ug/kg	1
Ethylbenzene		100-41-4	8260B		ND	6.6	2.6	ug/kg	1
2-Hexanone		591-78-6	8260B		ND	13	5.3	ug/kg	1
Isopropylbenzene		98-82-8	8260B		ND	6.6	2.6	ug/kg	1
Methyl acetate		79-20-9	8260B		ND	6.6	2.6	ug/kg	1
Methyl tertiary butyl ether (MTBE)		1634-04-4	8260B		ND	6.6	2.6	ug/kg	1
4-Methyl-2-pentanone		108-10-1	8260B		ND	13	5.3	ug/kg	1
Methylcyclohexane		108-87-2	8260B		ND	6.6	2.6	ug/kg	1
Methylene chloride		75-09-2	8260B		6.8	6.6	2.6	ug/kg	1
Styrene		100-42-5	8260B		ND	6.6	2.6	ug/kg	1
1,1,2,2-Tetrachloroethane		79-34-5	8260B		ND	6.6	2.6	ug/kg	1
Tetrachloroethene		127-18-4	8260B		ND	6.6	2.6	ug/kg	1
Toluene		108-88-3	8260B		ND	6.6	2.6	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane		76-13-1	8260B		ND	6.6	2.6	ug/kg	1
1,2,4-Trichlorobenzene		120-82-1	8260B		ND	6.6	2.6	ug/kg	1
1,1,1-Trichloroethane		71-55-6	8260B		ND	6.6	2.6	ug/kg	1
1,1,2-Trichloroethane		79-00-5	8260B		ND	6.6	2.6	ug/kg	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-005			
Description: SB-29				Matrix: Solid			
Date Sampled: 11/09/2016 1610	Project Name: U-4405			% Solids: 76.1 11/10/2016 2259			
Date Received: 11/10/2016	Project Number: 70167490						

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
1	5035	8260B	1	11/11/2016 1237	SES		26577	4.99	
Trichloroethene		79-01-6		8260B	ND	6.6	2.6	ug/kg	1
Trichlorofluoromethane		75-69-4		8260B	ND	6.6	2.6	ug/kg	1
Vinyl chloride		75-01-4		8260B	ND	6.6	2.6	ug/kg	1
Xylenes (total)		1330-20-7		8260B	ND	13	5.3	ug/kg	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits					
1,2-Dichloroethane-d4			83	53-142					
Bromofluorobenzene			115	47-138					
Toluene-d8			93	68-124					

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and \geq MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-005			
Description: SB-29				Matrix: Solid			
Date Sampled: 11/09/2016 1610		Project Name: U-4405			% Solids: 76.1 11/10/2016 2259		
Date Received: 11/10/2016		Project Number: 70167490					

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
Parameter		CAS Number	Analytical Method		Result Q	PQL	MDL	Units	Run
Acenaphthene		83-32-9	8270D	ND	17	6.4	ug/kg	1	
Acenaphthylene		208-96-8	8270D	ND	17	4.1	ug/kg	1	
Acetophenone		98-86-2	8270D	ND	86	8.9	ug/kg	1	
Anthracene		120-12-7	8270D	ND	17	3.3	ug/kg	1	
Atrazine		1912-24-9	8270D	ND	86	6.4	ug/kg	1	
Benzaldehyde		100-52-7	8270D	ND	86	6.4	ug/kg	1	
Benzo(a)anthracene		56-55-3	8270D	ND	17	2.5	ug/kg	1	
Benzo(a)pyrene		50-32-8	8270D	ND	17	2.2	ug/kg	1	
Benzo(b)fluoranthene		205-99-2	8270D	ND	17	2.5	ug/kg	1	
Benzo(g,h,i)perylene		191-24-2	8270D	ND	17	4.8	ug/kg	1	
Benzo(k)fluoranthene		207-08-9	8270D	ND	17	2.7	ug/kg	1	
1,1'-Biphenyl		92-52-4	8270D	ND	86	6.1	ug/kg	1	
4-Bromophenyl phenyl ether		101-55-3	8270D	ND	86	5.9	ug/kg	1	
Butyl benzyl phthalate		85-68-7	8270D	ND	86	4.4	ug/kg	1	
Caprolactam		105-60-2	8270D	ND	86	15	ug/kg	1	
Carbazole		86-74-8	8270D	ND	86	5.3	ug/kg	1	
bis (2-Chloro-1-methylethyl) ether		108-60-1	8270D	ND	86	8.6	ug/kg	1	
4-Chloro-3-methyl phenol		59-50-7	8270D	ND	86	7.2	ug/kg	1	
4-Chloroaniline		106-47-8	8270D	ND	86	7.4	ug/kg	1	
bis(2-Chloroethoxy)methane		111-91-1	8270D	ND	86	4.5	ug/kg	1	
bis(2-Chloroethyl)ether		111-44-4	8270D	ND	86	7.0	ug/kg	1	
2-Chloronaphthalene		91-58-7	8270D	ND	86	16	ug/kg	1	
2-Chlorophenol		95-57-8	8270D	ND	86	14	ug/kg	1	
4-Chlorophenyl phenyl ether		7005-72-3	8270D	ND	86	5.1	ug/kg	1	
Chrysene		218-01-9	8270D	ND	17	4.0	ug/kg	1	
Dibenzo(a,h)anthracene		53-70-3	8270D	ND	17	3.8	ug/kg	1	
Dibenzofuran		132-64-9	8270D	ND	86	6.4	ug/kg	1	
3,3'-Dichlorobenzidine		91-94-1	8270D	ND	86	13	ug/kg	1	
2,4-Dichlorophenol		120-83-2	8270D	ND	86	8.4	ug/kg	1	
Diethylphthalate		84-66-2	8270D	ND	86	5.1	ug/kg	1	
Dimethyl phthalate		131-11-3	8270D	ND	86	4.7	ug/kg	1	
2,4-Dimethylphenol		105-67-9	8270D	ND	86	14	ug/kg	1	
Di-n-butyl phthalate		84-74-2	8270D	ND	86	13	ug/kg	1	
4,6-Dinitro-2-methylphenol		534-52-1	8270D	ND	420	12	ug/kg	1	
2,4-Dinitrophenol		51-28-5	8270D	ND	420	21	ug/kg	1	
2,4-Dinitrotoluene		121-14-2	8270D	ND	170	16	ug/kg	1	
2,6-Dinitrotoluene		606-20-2	8270D	ND	170	14	ug/kg	1	
Di-n-octylphthalate		117-84-0	8270D	ND	86	1.5	ug/kg	1	
bis(2-Ethylhexyl)phthalate		117-81-7	8270D	ND	86	2.9	ug/kg	1	
Fluoranthene		206-44-0	8270D	ND	17	2.8	ug/kg	1	
Fluorene		86-73-7	8270D	ND	17	2.5	ug/kg	1	
Hexachlorobenzene		118-74-1	8270D	ND	86	6.2	ug/kg	1	
Hexachlorobutadiene		87-68-3	8270D	ND	86	11	ug/kg	1	
Hexachlorocyclopentadiene		77-47-4	8270D	ND	420	8.2	ug/kg	1	

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-005			
Description: SB-29				Matrix: Solid			
Date Sampled: 11/09/2016 1610		Project Name: U-4405			% Solids: 76.1 11/10/2016 2259		
Date Received: 11/10/2016		Project Number: 70167490					

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3546	8270D	1	11/15/2016 2039	ECB	11/11/2016 1918	26611		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane		67-72-1	8270D	ND		86	7.0	ug/kg	1
Indeno(1,2,3-c,d)pyrene		193-39-5	8270D	ND		17	3.5	ug/kg	1
Isophorone		78-59-1	8270D	ND		86	7.9	ug/kg	1
2-Methylnaphthalene		91-57-6	8270D	ND		17	7.5	ug/kg	1
2-Methylphenol		95-48-7	8270D	ND		86	23	ug/kg	1
3+4-Methylphenol		106-44-5	8270D	ND		170	21	ug/kg	1
Naphthalene		91-20-3	8270D	ND		17	6.0	ug/kg	1
2-Nitroaniline		88-74-4	8270D	ND		170	24	ug/kg	1
3-Nitroaniline		99-09-2	8270D	ND		170	23	ug/kg	1
4-Nitroaniline		100-01-6	8270D	ND		170	26	ug/kg	1
Nitrobenzene		98-95-3	8270D	ND		86	9.9	ug/kg	1
2-Nitrophenol		88-75-5	8270D	ND		170	10	ug/kg	1
4-Nitrophenol		100-02-7	8270D	ND		420	130	ug/kg	1
N-Nitrosodi-n-propylamine		621-64-7	8270D	ND		86	7.3	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)		86-30-6	8270D	ND		86	6.5	ug/kg	1
Pentachlorophenol		87-86-5	8270D	ND		420	34	ug/kg	1
Phenanthrene		85-01-8	8270D	ND		17	2.9	ug/kg	1
Phenol		108-95-2	8270D	ND		86	8.0	ug/kg	1
Pyrene		129-00-0	8270D	ND		17	3.6	ug/kg	1
2,4,5-Trichlorophenol		95-95-4	8270D	ND		86	5.6	ug/kg	1
2,4,6-Trichlorophenol		88-06-2	8270D	ND		86	6.1	ug/kg	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
2-Fluorobiphenyl		91	33-102						
2-Fluorophenol		101	28-104						
Nitrobenzene-d5		72	22-109						
Phenol-d5		101	27-103						
Terphenyl-d14		77	41-120						
2,4,6-Tribromophenol		95	30-117						

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and \geq MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-006				
Description: SB-30				Matrix: Solid				
Date Sampled: 11/09/2016 1645		Project Name: U-4405				% Solids: 76.4 11/10/2016 2259		
Date Received: 11/10/2016		Project Number: 70167490						

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
1	5035	8260B	1	11/11/2016 1259	SES		26577	6.14	
Parameter		CAS Number	Analytical Method		Result Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B	25	21	4.3	ug/kg	1	
Benzene		71-43-2	8260B	ND	5.3	2.1	ug/kg	1	
Bromodichloromethane		75-27-4	8260B	ND	5.3	2.1	ug/kg	1	
Bromoform		75-25-2	8260B	ND	5.3	2.1	ug/kg	1	
Bromomethane (Methyl bromide)		74-83-9	8260B	ND	5.3	2.1	ug/kg	1	
2-Butanone (MEK)		78-93-3	8260B	ND	21	4.3	ug/kg	1	
Carbon disulfide		75-15-0	8260B	ND	5.3	2.1	ug/kg	1	
Carbon tetrachloride		56-23-5	8260B	ND	5.3	2.1	ug/kg	1	
Chlorobenzene		108-90-7	8260B	ND	5.3	2.1	ug/kg	1	
Chloroethane		75-00-3	8260B	ND	5.3	2.1	ug/kg	1	
Chloroform		67-66-3	8260B	ND	5.3	2.1	ug/kg	1	
Chloromethane (Methyl chloride)		74-87-3	8260B	ND	5.3	2.1	ug/kg	1	
Cyclohexane		110-82-7	8260B	ND	5.3	2.1	ug/kg	1	
1,2-Dibromo-3-chloropropane (DBCP)		96-12-8	8260B	ND	5.3	2.1	ug/kg	1	
Dibromochloromethane		124-48-1	8260B	ND	5.3	2.1	ug/kg	1	
1,2-Dibromoethane (EDB)		106-93-4	8260B	ND	5.3	2.1	ug/kg	1	
1,2-Dichlorobenzene		95-50-1	8260B	ND	5.3	2.1	ug/kg	1	
1,3-Dichlorobenzene		541-73-1	8260B	ND	5.3	2.1	ug/kg	1	
1,4-Dichlorobenzene		106-46-7	8260B	ND	5.3	2.1	ug/kg	1	
Dichlorodifluoromethane		75-71-8	8260B	ND	5.3	2.1	ug/kg	1	
1,1-Dichloroethane		75-34-3	8260B	ND	5.3	2.1	ug/kg	1	
1,2-Dichloroethane		107-06-2	8260B	ND	5.3	2.1	ug/kg	1	
1,1-Dichloroethene		75-35-4	8260B	ND	5.3	2.1	ug/kg	1	
cis-1,2-Dichloroethene		156-59-2	8260B	ND	5.3	2.1	ug/kg	1	
trans-1,2-Dichloroethene		156-60-5	8260B	ND	5.3	2.1	ug/kg	1	
1,2-Dichloropropane		78-87-5	8260B	ND	5.3	2.1	ug/kg	1	
cis-1,3-Dichloropropene		10061-01-5	8260B	ND	5.3	2.1	ug/kg	1	
trans-1,3-Dichloropropene		10061-02-6	8260B	ND	5.3	2.1	ug/kg	1	
Ethylbenzene		100-41-4	8260B	ND	5.3	2.1	ug/kg	1	
2-Hexanone		591-78-6	8260B	ND	11	4.3	ug/kg	1	
Isopropylbenzene		98-82-8	8260B	ND	5.3	2.1	ug/kg	1	
Methyl acetate		79-20-9	8260B	ND	5.3	2.1	ug/kg	1	
Methyl tertiary butyl ether (MTBE)		1634-04-4	8260B	ND	5.3	2.1	ug/kg	1	
4-Methyl-2-pentanone		108-10-1	8260B	ND	11	4.3	ug/kg	1	
Methylcyclohexane		108-87-2	8260B	ND	5.3	2.1	ug/kg	1	
Methylene chloride		75-09-2	8260B	3.1 J	5.3	2.1	ug/kg	1	
Styrene		100-42-5	8260B	ND	5.3	2.1	ug/kg	1	
1,1,2,2-Tetrachloroethane		79-34-5	8260B	ND	5.3	2.1	ug/kg	1	
Tetrachloroethene		127-18-4	8260B	2.7 J	5.3	2.1	ug/kg	1	
Toluene		108-88-3	8260B	ND	5.3	2.1	ug/kg	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane		76-13-1	8260B	ND	5.3	2.1	ug/kg	1	
1,2,4-Trichlorobenzene		120-82-1	8260B	ND	5.3	2.1	ug/kg	1	
1,1,1-Trichloroethane		71-55-6	8260B	ND	5.3	2.1	ug/kg	1	
1,1,2-Trichloroethane		79-00-5	8260B	ND	5.3	2.1	ug/kg	1	

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-006			
Description: SB-30				Matrix: Solid			
Date Sampled: 11/09/2016 1645	Project Name: U-4405			% Solids: 76.4 11/10/2016 2259			
Date Received: 11/10/2016	Project Number: 70167490						

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
1	5035	8260B	1	11/11/2016 1259	SES		26577	6.14	
Trichloroethene		79-01-6		8260B	ND	5.3	2.1	ug/kg	1
Trichlorofluoromethane		75-69-4		8260B	ND	5.3	2.1	ug/kg	1
Vinyl chloride		75-01-4		8260B	ND	5.3	2.1	ug/kg	1
Xylenes (total)		1330-20-7		8260B	ND	11	4.3	ug/kg	1
Surrogate		Run 1 Q	% Recovery	Acceptance Limits					
1,2-Dichloroethane-d4		81		53-142					
Bromofluorobenzene		115		47-138					
Toluene-d8		94		68-124					

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and \geq MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-006			
Description: SB-30				Matrix: Solid			
Date Sampled: 11/09/2016 1645		Project Name: U-4405		% Solids: 76.4 11/10/2016 2259			
Date Received: 11/10/2016		Project Number: 70167490					

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene		83-32-9	8270D	ND		17	6.4	ug/kg	1
Acenaphthylene		208-96-8	8270D	ND		17	4.1	ug/kg	1
Acetophenone		98-86-2	8270D	ND		85	8.8	ug/kg	1
Anthracene		120-12-7	8270D	ND		17	3.3	ug/kg	1
Atrazine		1912-24-9	8270D	ND		85	6.4	ug/kg	1
Benzaldehyde		100-52-7	8270D	ND		85	6.3	ug/kg	1
Benzo(a)anthracene		56-55-3	8270D	ND		17	2.5	ug/kg	1
Benzo(a)pyrene		50-32-8	8270D	ND		17	2.2	ug/kg	1
Benzo(b)fluoranthene		205-99-2	8270D	ND		17	2.5	ug/kg	1
Benzo(g,h,i)perylene		191-24-2	8270D	ND		17	4.8	ug/kg	1
Benzo(k)fluoranthene		207-08-9	8270D	ND		17	2.7	ug/kg	1
1,1'-Biphenyl		92-52-4	8270D	ND		85	6.0	ug/kg	1
4-Bromophenyl phenyl ether		101-55-3	8270D	ND		85	5.9	ug/kg	1
Butyl benzyl phthalate		85-68-7	8270D	ND		85	4.4	ug/kg	1
Caprolactam		105-60-2	8270D	ND		85	15	ug/kg	1
Carbazole		86-74-8	8270D	ND		85	5.3	ug/kg	1
bis (2-Chloro-1-methylethyl) ether		108-60-1	8270D	ND		85	8.5	ug/kg	1
4-Chloro-3-methyl phenol		59-50-7	8270D	ND		85	7.1	ug/kg	1
4-Chloroaniline		106-47-8	8270D	ND		85	7.4	ug/kg	1
bis(2-Chloroethoxy)methane		111-91-1	8270D	ND		85	4.4	ug/kg	1
bis(2-Chloroethyl)ether		111-44-4	8270D	ND		85	6.9	ug/kg	1
2-Chloronaphthalene		91-58-7	8270D	ND		85	16	ug/kg	1
2-Chlorophenol		95-57-8	8270D	ND		85	14	ug/kg	1
4-Chlorophenyl phenyl ether		7005-72-3	8270D	ND		85	5.1	ug/kg	1
Chrysene		218-01-9	8270D	ND		17	4.0	ug/kg	1
Dibenzo(a,h)anthracene		53-70-3	8270D	ND		17	3.8	ug/kg	1
Dibenzofuran		132-64-9	8270D	ND		85	6.4	ug/kg	1
3,3'-Dichlorobenzidine		91-94-1	8270D	ND		85	13	ug/kg	1
2,4-Dichlorophenol		120-83-2	8270D	ND		85	8.4	ug/kg	1
Diethylphthalate		84-66-2	8270D	ND		85	5.1	ug/kg	1
Dimethyl phthalate		131-11-3	8270D	ND		85	4.7	ug/kg	1
2,4-Dimethylphenol		105-67-9	8270D	ND		85	14	ug/kg	1
Di-n-butyl phthalate		84-74-2	8270D	ND		85	12	ug/kg	1
4,6-Dinitro-2-methylphenol		534-52-1	8270D	ND		420	12	ug/kg	1
2,4-Dinitrophenol		51-28-5	8270D	ND		420	21	ug/kg	1
2,4-Dinitrotoluene		121-14-2	8270D	ND		170	16	ug/kg	1
2,6-Dinitrotoluene		606-20-2	8270D	ND		170	14	ug/kg	1
Di-n-octylphthalate		117-84-0	8270D	ND		85	1.5	ug/kg	1
bis(2-Ethylhexyl)phthalate		117-81-7	8270D	ND		85	2.9	ug/kg	1
Fluoranthene		206-44-0	8270D	ND		17	2.7	ug/kg	1
Fluorene		86-73-7	8270D	ND		17	2.5	ug/kg	1
Hexachlorobenzene		118-74-1	8270D	ND		85	6.2	ug/kg	1
Hexachlorobutadiene		87-68-3	8270D	ND		85	11	ug/kg	1
Hexachlorocyclopentadiene		77-47-4	8270D	ND		420	8.2	ug/kg	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-006			
Description: SB-30				Matrix: Solid			
Date Sampled: 11/09/2016 1645		Project Name: U-4405		% Solids: 76.4 11/10/2016 2259			
Date Received: 11/10/2016		Project Number: 70167490					

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3546	8270D	1	11/15/2016 2103	ECB	11/11/2016 1918	26611		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane		67-72-1	8270D	ND		85	6.9	ug/kg	1
Indeno(1,2,3-c,d)pyrene		193-39-5	8270D	ND		17	3.5	ug/kg	1
Isophorone		78-59-1	8270D	ND		85	7.9	ug/kg	1
2-Methylnaphthalene		91-57-6	8270D	ND		17	7.5	ug/kg	1
2-Methylphenol		95-48-7	8270D	ND		85	23	ug/kg	1
3+4-Methylphenol		106-44-5	8270D	ND		170	21	ug/kg	1
Naphthalene		91-20-3	8270D	ND		17	6.0	ug/kg	1
2-Nitroaniline		88-74-4	8270D	ND		170	24	ug/kg	1
3-Nitroaniline		99-09-2	8270D	ND		170	23	ug/kg	1
4-Nitroaniline		100-01-6	8270D	ND		170	26	ug/kg	1
Nitrobenzene		98-95-3	8270D	ND		85	9.9	ug/kg	1
2-Nitrophenol		88-75-5	8270D	ND		170	9.9	ug/kg	1
4-Nitrophenol		100-02-7	8270D	ND		420	130	ug/kg	1
N-Nitrosodi-n-propylamine		621-64-7	8270D	ND		85	7.3	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)		86-30-6	8270D	ND		85	6.5	ug/kg	1
Pentachlorophenol		87-86-5	8270D	ND		420	34	ug/kg	1
Phenanthrene		85-01-8	8270D	ND		17	2.9	ug/kg	1
Phenol		108-95-2	8270D	ND		85	8.0	ug/kg	1
Pyrene		129-00-0	8270D	ND		17	3.6	ug/kg	1
2,4,5-Trichlorophenol		95-95-4	8270D	ND		85	5.6	ug/kg	1
2,4,6-Trichlorophenol		88-06-2	8270D	ND		85	6.1	ug/kg	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
2-Fluorobiphenyl		78	33-102						
2-Fluorophenol		82	28-104						
Nitrobenzene-d5		63	22-109						
Phenol-d5		83	27-103						
Terphenyl-d14		67	41-120						
2,4,6-Tribromophenol		79	30-117						

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and \geq MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-007				
Description: SB-31				Matrix: Solid				
Date Sampled: 11/09/2016 1705		Project Name: U-4405				% Solids: 91.1 11/10/2016 2259		
Date Received: 11/10/2016				Project Number: 70167490				

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
1	5035	8260B	1	11/11/2016 1321	SES		26577	5.04	
Parameter		CAS Number	Analytical Method		Result Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B		32	22	4.4	ug/kg	1
Benzene		71-43-2	8260B		ND	5.4	2.2	ug/kg	1
Bromodichloromethane		75-27-4	8260B		ND	5.4	2.2	ug/kg	1
Bromoform		75-25-2	8260B		ND	5.4	2.2	ug/kg	1
Bromomethane (Methyl bromide)		74-83-9	8260B		ND	5.4	2.2	ug/kg	1
2-Butanone (MEK)		78-93-3	8260B		ND	22	4.4	ug/kg	1
Carbon disulfide		75-15-0	8260B		ND	5.4	2.2	ug/kg	1
Carbon tetrachloride		56-23-5	8260B		ND	5.4	2.2	ug/kg	1
Chlorobenzene		108-90-7	8260B		ND	5.4	2.2	ug/kg	1
Chloroethane		75-00-3	8260B		ND	5.4	2.2	ug/kg	1
Chloroform		67-66-3	8260B		ND	5.4	2.2	ug/kg	1
Chloromethane (Methyl chloride)		74-87-3	8260B		ND	5.4	2.2	ug/kg	1
Cyclohexane		110-82-7	8260B		ND	5.4	2.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)		96-12-8	8260B		ND	5.4	2.2	ug/kg	1
Dibromochloromethane		124-48-1	8260B		ND	5.4	2.2	ug/kg	1
1,2-Dibromoethane (EDB)		106-93-4	8260B		ND	5.4	2.2	ug/kg	1
1,2-Dichlorobenzene		95-50-1	8260B		ND	5.4	2.2	ug/kg	1
1,3-Dichlorobenzene		541-73-1	8260B		ND	5.4	2.2	ug/kg	1
1,4-Dichlorobenzene		106-46-7	8260B		ND	5.4	2.2	ug/kg	1
Dichlorodifluoromethane		75-71-8	8260B		ND	5.4	2.2	ug/kg	1
1,1-Dichloroethane		75-34-3	8260B		ND	5.4	2.2	ug/kg	1
1,2-Dichloroethane		107-06-2	8260B		ND	5.4	2.2	ug/kg	1
1,1-Dichloroethene		75-35-4	8260B		ND	5.4	2.2	ug/kg	1
cis-1,2-Dichloroethene		156-59-2	8260B		ND	5.4	2.2	ug/kg	1
trans-1,2-Dichloroethene		156-60-5	8260B		ND	5.4	2.2	ug/kg	1
1,2-Dichloropropane		78-87-5	8260B		ND	5.4	2.2	ug/kg	1
cis-1,3-Dichloropropene		10061-01-5	8260B		ND	5.4	2.2	ug/kg	1
trans-1,3-Dichloropropene		10061-02-6	8260B		ND	5.4	2.2	ug/kg	1
Ethylbenzene		100-41-4	8260B		ND	5.4	2.2	ug/kg	1
2-Hexanone		591-78-6	8260B		ND	11	4.4	ug/kg	1
Isopropylbenzene		98-82-8	8260B		ND	5.4	2.2	ug/kg	1
Methyl acetate		79-20-9	8260B		ND	5.4	2.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)		1634-04-4	8260B		ND	5.4	2.2	ug/kg	1
4-Methyl-2-pentanone		108-10-1	8260B		ND	11	4.4	ug/kg	1
Methylcyclohexane		108-87-2	8260B		ND	5.4	2.2	ug/kg	1
Methylene chloride		75-09-2	8260B		4.9	J	5.4	2.2	ug/kg
Styrene		100-42-5	8260B		ND	5.4	2.2	ug/kg	1
1,1,2,2-Tetrachloroethane		79-34-5	8260B		ND	5.4	2.2	ug/kg	1
Tetrachloroethene		127-18-4	8260B		ND	5.4	2.2	ug/kg	1
Toluene		108-88-3	8260B		ND	5.4	2.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane		76-13-1	8260B		ND	5.4	2.2	ug/kg	1
1,2,4-Trichlorobenzene		120-82-1	8260B		ND	5.4	2.2	ug/kg	1
1,1,1-Trichloroethane		71-55-6	8260B		ND	5.4	2.2	ug/kg	1
1,1,2-Trichloroethane		79-00-5	8260B		ND	5.4	2.2	ug/kg	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-007			
Description: SB-31				Matrix: Solid			
Date Sampled: 11/09/2016 1705	Project Name: U-4405			% Solids: 91.1 11/10/2016 2259			
Date Received: 11/10/2016	Project Number: 70167490						

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
1	5035	8260B	1	11/11/2016 1321	SES		26577	5.04	
Trichloroethene		79-01-6		8260B	ND	5.4	2.2	ug/kg	1
Trichlorofluoromethane		75-69-4		8260B	ND	5.4	2.2	ug/kg	1
Vinyl chloride		75-01-4		8260B	ND	5.4	2.2	ug/kg	1
Xylenes (total)		1330-20-7		8260B	ND	11	4.4	ug/kg	1
Surrogate		Q	Run 1 % Recovery	Acceptance Limits					
1,2-Dichloroethane-d4			83	53-142					
Bromofluorobenzene			114	47-138					
Toluene-d8			94	68-124					

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and \geq MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-007			
Description: SB-31				Matrix: Solid			
Date Sampled: 11/09/2016 1705		Project Name: U-4405			% Solids: 91.1 11/10/2016 2259		
Date Received: 11/10/2016		Project Number: 70167490					

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene		83-32-9	8270D	ND		15	5.5	ug/kg	1
Acenaphthylene		208-96-8	8270D	ND		15	3.5	ug/kg	1
Acetophenone		98-86-2	8270D	ND		73	7.6	ug/kg	1
Anthracene		120-12-7	8270D	ND		15	2.8	ug/kg	1
Atrazine		1912-24-9	8270D	ND		73	5.5	ug/kg	1
Benzaldehyde		100-52-7	8270D	ND		73	5.4	ug/kg	1
Benzo(a)anthracene		56-55-3	8270D	ND		15	2.2	ug/kg	1
Benzo(a)pyrene		50-32-8	8270D	ND		15	1.9	ug/kg	1
Benzo(b)fluoranthene		205-99-2	8270D	ND		15	2.1	ug/kg	1
Benzo(g,h,i)perylene		191-24-2	8270D	ND		15	4.1	ug/kg	1
Benzo(k)fluoranthene		207-08-9	8270D	ND		15	2.3	ug/kg	1
1,1'-Biphenyl		92-52-4	8270D	ND		73	5.2	ug/kg	1
4-Bromophenyl phenyl ether		101-55-3	8270D	ND		73	5.0	ug/kg	1
Butyl benzyl phthalate		85-68-7	8270D	ND		73	3.8	ug/kg	1
Caprolactam		105-60-2	8270D	ND		73	13	ug/kg	1
Carbazole		86-74-8	8270D	ND		73	4.6	ug/kg	1
bis (2-Chloro-1-methylethyl) ether		108-60-1	8270D	ND		73	7.3	ug/kg	1
4-Chloro-3-methyl phenol		59-50-7	8270D	ND		73	6.1	ug/kg	1
4-Chloroaniline		106-47-8	8270D	ND		73	6.3	ug/kg	1
bis(2-Chloroethoxy)methane		111-91-1	8270D	ND		73	3.8	ug/kg	1
bis(2-Chloroethyl)ether		111-44-4	8270D	ND		73	5.9	ug/kg	1
2-Chloronaphthalene		91-58-7	8270D	ND		73	14	ug/kg	1
2-Chlorophenol		95-57-8	8270D	ND		73	12	ug/kg	1
4-Chlorophenyl phenyl ether		7005-72-3	8270D	ND		73	4.4	ug/kg	1
Chrysene		218-01-9	8270D	ND		15	3.4	ug/kg	1
Dibenzo(a,h)anthracene		53-70-3	8270D	ND		15	3.3	ug/kg	1
Dibenzofuran		132-64-9	8270D	ND		73	5.5	ug/kg	1
3,3'-Dichlorobenzidine		91-94-1	8270D	ND		73	11	ug/kg	1
2,4-Dichlorophenol		120-83-2	8270D	ND		73	7.2	ug/kg	1
Diethylphthalate		84-66-2	8270D	ND		73	4.3	ug/kg	1
Dimethyl phthalate		131-11-3	8270D	ND		73	4.0	ug/kg	1
2,4-Dimethylphenol		105-67-9	8270D	ND		73	12	ug/kg	1
Di-n-butyl phthalate		84-74-2	8270D	ND		73	11	ug/kg	1
4,6-Dinitro-2-methylphenol		534-52-1	8270D	ND		360	11	ug/kg	1
2,4-Dinitrophenol		51-28-5	8270D	ND		360	18	ug/kg	1
2,4-Dinitrotoluene		121-14-2	8270D	ND		140	13	ug/kg	1
2,6-Dinitrotoluene		606-20-2	8270D	ND		140	12	ug/kg	1
Di-n-octylphthalate		117-84-0	8270D	ND		73	1.3	ug/kg	1
bis(2-Ethylhexyl)phthalate		117-81-7	8270D	ND		73	2.5	ug/kg	1
Fluoranthene		206-44-0	8270D	ND		15	2.3	ug/kg	1
Fluorene		86-73-7	8270D	ND		15	2.1	ug/kg	1
Hexachlorobenzene		118-74-1	8270D	ND		73	5.3	ug/kg	1
Hexachlorobutadiene		87-68-3	8270D	ND		73	9.3	ug/kg	1
Hexachlorocyclopentadiene		77-47-4	8270D	ND		360	7.0	ug/kg	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-007			
Description: SB-31				Matrix: Solid			
Date Sampled: 11/09/2016 1705		Project Name: U-4405			% Solids: 91.1 11/10/2016 2259		
Date Received: 11/10/2016		Project Number: 70167490					

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3546	8270D	1	11/15/2016 2127	ECB	11/11/2016 1918	26611		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane		67-72-1	8270D	ND	73	5.9	ug/kg	1	
Indeno(1,2,3-c,d)pyrene		193-39-5	8270D	ND	15	3.0	ug/kg	1	
Isophorone		78-59-1	8270D	ND	73	6.8	ug/kg	1	
2-Methylnaphthalene		91-57-6	8270D	ND	15	6.4	ug/kg	1	
2-Methylphenol		95-48-7	8270D	ND	73	19	ug/kg	1	
3+4-Methylphenol		106-44-5	8270D	ND	140	18	ug/kg	1	
Naphthalene		91-20-3	8270D	ND	15	5.1	ug/kg	1	
2-Nitroaniline		88-74-4	8270D	ND	140	20	ug/kg	1	
3-Nitroaniline		99-09-2	8270D	ND	140	20	ug/kg	1	
4-Nitroaniline		100-01-6	8270D	ND	140	22	ug/kg	1	
Nitrobenzene		98-95-3	8270D	ND	73	8.5	ug/kg	1	
2-Nitrophenol		88-75-5	8270D	ND	140	8.5	ug/kg	1	
4-Nitrophenol		100-02-7	8270D	ND	360	110	ug/kg	1	
N-Nitrosodi-n-propylamine		621-64-7	8270D	ND	73	6.2	ug/kg	1	
N-Nitrosodiphenylamine (Diphenylamine)		86-30-6	8270D	ND	73	5.6	ug/kg	1	
Pentachlorophenol		87-86-5	8270D	ND	360	29	ug/kg	1	
Phenanthrene		85-01-8	8270D	ND	15	2.5	ug/kg	1	
Phenol		108-95-2	8270D	ND	73	6.8	ug/kg	1	
Pyrene		129-00-0	8270D	ND	15	3.1	ug/kg	1	
2,4,5-Trichlorophenol		95-95-4	8270D	ND	73	4.8	ug/kg	1	
2,4,6-Trichlorophenol		88-06-2	8270D	ND	73	5.2	ug/kg	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
2-Fluorobiphenyl		58	33-102						
2-Fluorophenol		69	28-104						
Nitrobenzene-d5		57	22-109						
Phenol-d5		69	27-103						
Terphenyl-d14		55	41-120						
2,4,6-Tribromophenol		66	30-117						

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and \geq MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-008				
Description: SB-32				Matrix: Solid				
Date Sampled: 11/09/2016 1725		Project Name: U-4405				% Solids: 63.7 11/10/2016 2259		
Date Received: 11/10/2016				Project Number: 70167490				

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
1	5035	8260B	1	11/11/2016 1343	SES		26577	4.94	
Parameter		CAS Number	Analytical Method		Result Q	PQL	MDL	Units	Run
Acetone		67-64-1	8260B		69	32	6.4	ug/kg	1
Benzene		71-43-2	8260B		ND	7.9	3.2	ug/kg	1
Bromodichloromethane		75-27-4	8260B		ND	7.9	3.2	ug/kg	1
Bromoform		75-25-2	8260B		ND	7.9	3.2	ug/kg	1
Bromomethane (Methyl bromide)		74-83-9	8260B		ND	7.9	3.2	ug/kg	1
2-Butanone (MEK)		78-93-3	8260B		ND	32	6.4	ug/kg	1
Carbon disulfide		75-15-0	8260B		ND	7.9	3.2	ug/kg	1
Carbon tetrachloride		56-23-5	8260B		ND	7.9	3.2	ug/kg	1
Chlorobenzene		108-90-7	8260B		ND	7.9	3.2	ug/kg	1
Chloroethane		75-00-3	8260B		ND	7.9	3.2	ug/kg	1
Chloroform		67-66-3	8260B		ND	7.9	3.2	ug/kg	1
Chloromethane (Methyl chloride)		74-87-3	8260B		ND	7.9	3.2	ug/kg	1
Cyclohexane		110-82-7	8260B		ND	7.9	3.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)		96-12-8	8260B		ND	7.9	3.2	ug/kg	1
Dibromochloromethane		124-48-1	8260B		ND	7.9	3.2	ug/kg	1
1,2-Dibromoethane (EDB)		106-93-4	8260B		ND	7.9	3.2	ug/kg	1
1,2-Dichlorobenzene		95-50-1	8260B		ND	7.9	3.2	ug/kg	1
1,3-Dichlorobenzene		541-73-1	8260B		ND	7.9	3.2	ug/kg	1
1,4-Dichlorobenzene		106-46-7	8260B		ND	7.9	3.2	ug/kg	1
Dichlorodifluoromethane		75-71-8	8260B		ND	7.9	3.2	ug/kg	1
1,1-Dichloroethane		75-34-3	8260B		ND	7.9	3.2	ug/kg	1
1,2-Dichloroethane		107-06-2	8260B		ND	7.9	3.2	ug/kg	1
1,1-Dichloroethene		75-35-4	8260B		ND	7.9	3.2	ug/kg	1
cis-1,2-Dichloroethene		156-59-2	8260B		ND	7.9	3.2	ug/kg	1
trans-1,2-Dichloroethene		156-60-5	8260B		ND	7.9	3.2	ug/kg	1
1,2-Dichloropropane		78-87-5	8260B		ND	7.9	3.2	ug/kg	1
cis-1,3-Dichloropropene		10061-01-5	8260B		ND	7.9	3.2	ug/kg	1
trans-1,3-Dichloropropene		10061-02-6	8260B		ND	7.9	3.2	ug/kg	1
Ethylbenzene		100-41-4	8260B		ND	7.9	3.2	ug/kg	1
2-Hexanone		591-78-6	8260B		ND	16	6.4	ug/kg	1
Isopropylbenzene		98-82-8	8260B		ND	7.9	3.2	ug/kg	1
Methyl acetate		79-20-9	8260B		ND	7.9	3.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)		1634-04-4	8260B		ND	7.9	3.2	ug/kg	1
4-Methyl-2-pentanone		108-10-1	8260B		ND	16	6.4	ug/kg	1
Methylcyclohexane		108-87-2	8260B		ND	7.9	3.2	ug/kg	1
Methylene chloride		75-09-2	8260B		8.1	7.9	3.2	ug/kg	1
Styrene		100-42-5	8260B		ND	7.9	3.2	ug/kg	1
1,1,2,2-Tetrachloroethane		79-34-5	8260B		ND	7.9	3.2	ug/kg	1
Tetrachloroethene		127-18-4	8260B		ND	7.9	3.2	ug/kg	1
Toluene		108-88-3	8260B		ND	7.9	3.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane		76-13-1	8260B		ND	7.9	3.2	ug/kg	1
1,2,4-Trichlorobenzene		120-82-1	8260B		ND	7.9	3.2	ug/kg	1
1,1,1-Trichloroethane		71-55-6	8260B		ND	7.9	3.2	ug/kg	1
1,1,2-Trichloroethane		79-00-5	8260B		ND	7.9	3.2	ug/kg	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Volatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-008			
Description: SB-32				Matrix: Solid			
Date Sampled: 11/09/2016 1725	Project Name: U-4405			% Solids: 63.7 11/10/2016 2259			
Date Received: 11/10/2016	Project Number: 70167490						

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)	
1	5035	8260B	1	11/11/2016 1343	SES		26577	4.94	
Trichloroethene		79-01-6		8260B	ND	7.9	3.2	ug/kg	1
Trichlorofluoromethane		75-69-4		8260B	ND	7.9	3.2	ug/kg	1
Vinyl chloride		75-01-4		8260B	ND	7.9	3.2	ug/kg	1
Xylenes (total)		1330-20-7		8260B	ND	16	6.4	ug/kg	1
Surrogate		Run 1 Q	% Recovery	Acceptance Limits					
1,2-Dichloroethane-d4		82		53-142					
Bromofluorobenzene		117		47-138					
Toluene-d8		93		68-124					

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and \geq MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-008			
Description: SB-32				Matrix: Solid			
Date Sampled: 11/09/2016 1725		Project Name: U-4405			% Solids: 63.7 11/10/2016 2259		
Date Received: 11/10/2016		Project Number: 70167490					

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene		83-32-9	8270D	ND		20	7.6	ug/kg	1
Acenaphthylene		208-96-8	8270D	ND		20	4.8	ug/kg	1
Acetophenone		98-86-2	8270D	ND		100	10	ug/kg	1
Anthracene		120-12-7	8270D	ND		20	3.9	ug/kg	1
Atrazine		1912-24-9	8270D	ND		100	7.6	ug/kg	1
Benzaldehyde		100-52-7	8270D	ND		100	7.5	ug/kg	1
Benzo(a)anthracene		56-55-3	8270D	ND		20	3.0	ug/kg	1
Benzo(a)pyrene		50-32-8	8270D	ND		20	2.6	ug/kg	1
Benzo(b)fluoranthene		205-99-2	8270D	ND		20	2.9	ug/kg	1
Benzo(g,h,i)perylene		191-24-2	8270D	ND		20	5.7	ug/kg	1
Benzo(k)fluoranthene		207-08-9	8270D	ND		20	3.2	ug/kg	1
1,1'-Biphenyl		92-52-4	8270D	ND		100	7.1	ug/kg	1
4-Bromophenyl phenyl ether		101-55-3	8270D	ND		100	7.0	ug/kg	1
Butyl benzyl phthalate		85-68-7	8270D	ND		100	5.2	ug/kg	1
Caprolactam		105-60-2	8270D	ND		100	18	ug/kg	1
Carbazole		86-74-8	8270D	ND		100	6.3	ug/kg	1
bis (2-Chloro-1-methylethyl) ether		108-60-1	8270D	ND		100	10	ug/kg	1
4-Chloro-3-methyl phenol		59-50-7	8270D	ND		100	8.4	ug/kg	1
4-Chloroaniline		106-47-8	8270D	ND		100	8.7	ug/kg	1
bis(2-Chloroethoxy)methane		111-91-1	8270D	ND		100	5.3	ug/kg	1
bis(2-Chloroethyl)ether		111-44-4	8270D	ND		100	8.2	ug/kg	1
2-Chloronaphthalene		91-58-7	8270D	ND		100	19	ug/kg	1
2-Chlorophenol		95-57-8	8270D	ND		100	16	ug/kg	1
4-Chlorophenyl phenyl ether		7005-72-3	8270D	ND		100	6.0	ug/kg	1
Chrysene		218-01-9	8270D	ND		20	4.7	ug/kg	1
Dibenzo(a,h)anthracene		53-70-3	8270D	ND		20	4.5	ug/kg	1
Dibenzofuran		132-64-9	8270D	ND		100	7.6	ug/kg	1
3,3'-Dichlorobenzidine		91-94-1	8270D	ND		100	15	ug/kg	1
2,4-Dichlorophenol		120-83-2	8270D	ND		100	10	ug/kg	1
Diethylphthalate		84-66-2	8270D	ND		100	6.0	ug/kg	1
Dimethyl phthalate		131-11-3	8270D	ND		100	5.6	ug/kg	1
2,4-Dimethylphenol		105-67-9	8270D	ND		100	16	ug/kg	1
Di-n-butyl phthalate		84-74-2	8270D	ND		100	15	ug/kg	1
4,6-Dinitro-2-methylphenol		534-52-1	8270D	ND		500	15	ug/kg	1
2,4-Dinitrophenol		51-28-5	8270D	ND		500	25	ug/kg	1
2,4-Dinitrotoluene		121-14-2	8270D	ND		200	18	ug/kg	1
2,6-Dinitrotoluene		606-20-2	8270D	ND		200	16	ug/kg	1
Di-n-octylphthalate		117-84-0	8270D	ND		100	1.8	ug/kg	1
bis(2-Ethylhexyl)phthalate		117-81-7	8270D	ND		100	3.4	ug/kg	1
Fluoranthene		206-44-0	8270D	ND		20	3.2	ug/kg	1
Fluorene		86-73-7	8270D	ND		20	2.9	ug/kg	1
Hexachlorobenzene		118-74-1	8270D	ND		100	7.4	ug/kg	1
Hexachlorobutadiene		87-68-3	8270D	ND		100	13	ug/kg	1
Hexachlorocyclopentadiene		77-47-4	8270D	ND		500	9.7	ug/kg	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

D = Dilution > 1

Semivolatile Organic Compounds by GC/MS

Client: Terracon Consultants, Inc.				Laboratory ID: RK10027-008			
Description: SB-32				Matrix: Solid			
Date Sampled: 11/09/2016 1725		Project Name: U-4405			% Solids: 63.7 11/10/2016 2259		
Date Received: 11/10/2016		Project Number: 70167490					

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3546	8270D	1	11/15/2016 2151	ECB	11/14/2016 2323	26757		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Hexachloroethane		67-72-1	8270D	ND		100	8.2	ug/kg	1
Indeno(1,2,3-c,d)pyrene		193-39-5	8270D	ND		20	4.1	ug/kg	1
Isophorone		78-59-1	8270D	ND		100	9.4	ug/kg	1
2-Methylnaphthalene		91-57-6	8270D	ND		20	8.8	ug/kg	1
2-Methylphenol		95-48-7	8270D	ND		100	27	ug/kg	1
3+4-Methylphenol		106-44-5	8270D	ND		200	25	ug/kg	1
Naphthalene		91-20-3	8270D	ND		20	7.1	ug/kg	1
2-Nitroaniline		88-74-4	8270D	ND		200	28	ug/kg	1
3-Nitroaniline		99-09-2	8270D	ND		200	28	ug/kg	1
4-Nitroaniline		100-01-6	8270D	ND		200	30	ug/kg	1
Nitrobenzene		98-95-3	8270D	ND		100	12	ug/kg	1
2-Nitrophenol		88-75-5	8270D	ND		200	12	ug/kg	1
4-Nitrophenol		100-02-7	8270D	ND		500	160	ug/kg	1
N-Nitrosodi-n-propylamine		621-64-7	8270D	ND		100	8.6	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)		86-30-6	8270D	ND		100	7.7	ug/kg	1
Pentachlorophenol		87-86-5	8270D	ND		500	40	ug/kg	1
Phenanthrene		85-01-8	8270D	ND		20	3.4	ug/kg	1
Phenol		108-95-2	8270D	ND		100	9.4	ug/kg	1
Pyrene		129-00-0	8270D	ND		20	4.3	ug/kg	1
2,4,5-Trichlorophenol		95-95-4	8270D	ND		100	6.6	ug/kg	1
2,4,6-Trichlorophenol		88-06-2	8270D	ND		100	7.2	ug/kg	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
2-Fluorobiphenyl		70	33-102						
2-Fluorophenol		71	28-104						
Nitrobenzene-d5		60	22-109						
Phenol-d5		73	27-103						
Terphenyl-d14		59	41-120						
2,4,6-Tribromophenol		75	30-117						

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time
 ND = Not detected at or above the MDL J = Estimated result < PQL and \geq MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" D = Dilution > 1

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ26577-001

Batch: 26577

Analytical Method: 8260B

Matrix: Solid

Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Acetone	ND		1	20	4.0	ug/kg	11/11/2016 1032
Benzene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Bromodichloromethane	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Bromoform	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Bromomethane (Methyl bromide)	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
2-Butanone (MEK)	ND		1	20	4.0	ug/kg	11/11/2016 1032
Carbon disulfide	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Carbon tetrachloride	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Chlorobenzene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Chloroethane	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Chloroform	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Chloromethane (Methyl chloride)	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Cyclohexane	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Dibromochloromethane	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
1,2-Dibromoethane (EDB)	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
1,4-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
1,3-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
1,2-Dichlorobenzene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Dichlorodifluoromethane	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
1,2-Dichloroethane	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
1,1-Dichloroethane	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
trans-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
cis-1,2-Dichloroethene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
1,1-Dichloroethene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
1,2-Dichloropropane	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
trans-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
cis-1,3-Dichloropropene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Ethylbenzene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
2-Hexanone	ND		1	10	4.0	ug/kg	11/11/2016 1032
Isopropylbenzene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Methyl acetate	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
4-Methyl-2-pentanone	ND		1	10	4.0	ug/kg	11/11/2016 1032
Methylcyclohexane	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Methylene chloride	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Styrene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
1,1,2,2-Tetrachloroethane	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Tetrachloroethene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Toluene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
1,2,4-Trichlorobenzene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
1,1,2-Trichloroethane	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
1,1,1-Trichloroethane	ND		1	5.0	2.0	ug/kg	11/11/2016 1032

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: RQ26577-001

Batch: 26577

Analytical Method: 8260B

Matrix: Solid

Prep Method: 5035

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Trichloroethene	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Trichlorofluoromethane	ND		1	5.0	2.0	ug/kg	11/11/2016 1032
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene	114		47-138				
1,2-Dichloroethane-d4	79		53-142				
Toluene-d8	94		68-124				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ26577-002

Batch: 26577

Analytical Method: 8260B

Matrix: Solid

Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	87		1	87	60-140	11/11/2016 0932
Benzene	50	40		1	81	69-123	11/11/2016 0932
Bromodichloromethane	50	48		1	95	69-121	11/11/2016 0932
Bromoform	50	46		1	92	61-119	11/11/2016 0932
Bromomethane (Methyl bromide)	50	39		1	77	10-168	11/11/2016 0932
2-Butanone (MEK)	100	77		1	77	57-148	11/11/2016 0932
Carbon disulfide	50	40		1	81	58-122	11/11/2016 0932
Carbon tetrachloride	50	43		1	85	58-136	11/11/2016 0932
Chlorobenzene	50	47		1	94	59-129	11/11/2016 0932
Chloroethane	50	40		1	81	60-140	11/11/2016 0932
Chloroform	50	41		1	83	71-125	11/11/2016 0932
Chloromethane (Methyl chloride)	50	39		1	78	34-134	11/11/2016 0932
Cyclohexane	50	42		1	84	53-139	11/11/2016 0932
1,2-Dibromo-3-chloropropane (DBCP)	50	45		1	90	55-125	11/11/2016 0932
Dibromochloromethane	50	48		1	97	66-119	11/11/2016 0932
1,2-Dibromoethane (EDB)	50	47		1	93	74-124	11/11/2016 0932
1,4-Dichlorobenzene	50	52		1	104	52-133	11/11/2016 0932
1,3-Dichlorobenzene	50	52		1	104	51-134	11/11/2016 0932
1,2-Dichlorobenzene	50	52		1	104	57-131	11/11/2016 0932
Dichlorodifluoromethane	50	41		1	83	10-157	11/11/2016 0932
1,2-Dichloroethane	50	45		1	90	67-129	11/11/2016 0932
1,1-Dichloroethane	50	41		1	82	71-127	11/11/2016 0932
trans-1,2-Dichloroethene	50	40		1	81	68-131	11/11/2016 0932
cis-1,2-Dichloroethene	50	40		1	81	70-122	11/11/2016 0932
1,1-Dichloroethene	50	39		1	78	69-138	11/11/2016 0932
1,2-Dichloropropane	50	43		1	85	72-124	11/11/2016 0932
trans-1,3-Dichloropropene	50	48		1	96	70-124	11/11/2016 0932
cis-1,3-Dichloropropene	50	45		1	90	70-126	11/11/2016 0932
Ethylbenzene	50	46		1	92	59-128	11/11/2016 0932
2-Hexanone	100	88		1	88	54-137	11/11/2016 0932
Isopropylbenzene	50	49		1	99	50-136	11/11/2016 0932
Methyl acetate	50	37		1	74	59-137	11/11/2016 0932
Methyl tertiary butyl ether (MTBE)	50	41		1	83	70-130	11/11/2016 0932
4-Methyl-2-pentanone	100	87		1	87	60-134	11/11/2016 0932
Methylcyclohexane	50	45		1	91	41-144	11/11/2016 0932
Methylene chloride	50	39		1	79	70-130	11/11/2016 0932
Styrene	50	50		1	100	54-136	11/11/2016 0932
1,1,2,2-Tetrachloroethane	50	49		1	99	69-132	11/11/2016 0932
Tetrachloroethene	50	49		1	98	45-150	11/11/2016 0932
Toluene	50	47		1	94	61-129	11/11/2016 0932
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	41		1	82	49-136	11/11/2016 0932
1,2,4-Trichlorobenzene	50	55		1	110	34-145	11/11/2016 0932
1,1,2-Trichloroethane	50	47		1	93	55-128	11/11/2016 0932
1,1,1-Trichloroethane	50	41		1	83	63-128	11/11/2016 0932

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: RQ26577-002

Batch: 26577

Analytical Method: 8260B

Matrix: Solid

Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	42		1	84	62-126	11/11/2016 0932
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		116	47-138				
1,2-Dichloroethane-d4		78	53-142				
Toluene-d8		94	68-124				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: RK10027-001DU

Batch: 26577

Analytical Method: 8260B

Matrix: Solid

Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Result (ug/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Acetone	27	37	+	1	30	20	11/11/2016 1450
Benzene	ND	ND		1	0.00	20	11/11/2016 1450
Bromodichloromethane	ND	ND		1	0.00	20	11/11/2016 1450
Bromoform	ND	ND		1	0.00	20	11/11/2016 1450
Bromomethane (Methyl bromide)	ND	ND		1	0.00	20	11/11/2016 1450
2-Butanone (MEK)	ND	ND		1	0.00	20	11/11/2016 1450
Carbon disulfide	ND	ND		1	0.00	20	11/11/2016 1450
Carbon tetrachloride	ND	ND		1	0.00	20	11/11/2016 1450
Chlorobenzene	ND	ND		1	0.00	20	11/11/2016 1450
Chloroethane	ND	ND		1	0.00	20	11/11/2016 1450
Chloroform	ND	ND		1	0.00	20	11/11/2016 1450
Chloromethane (Methyl chloride)	ND	ND		1	0.00	20	11/11/2016 1450
Cyclohexane	ND	ND		1	0.00	20	11/11/2016 1450
1,2-Dibromo-3-chloropropane (DBCP)	ND	ND		1	0.00	20	11/11/2016 1450
Dibromochloromethane	ND	ND		1	0.00	20	11/11/2016 1450
1,2-Dibromoethane (EDB)	ND	ND		1	0.00	20	11/11/2016 1450
1,2-Dichlorobenzene	ND	ND		1	0.00	20	11/11/2016 1450
1,3-Dichlorobenzene	ND	ND		1	0.00	20	11/11/2016 1450
1,4-Dichlorobenzene	ND	ND		1	0.00	20	11/11/2016 1450
Dichlorodifluoromethane	ND	ND		1	0.00	20	11/11/2016 1450
1,1-Dichloroethane	ND	ND		1	0.00	20	11/11/2016 1450
1,2-Dichloroethane	ND	ND		1	0.00	20	11/11/2016 1450
1,1-Dichloroethene	ND	ND		1	0.00	20	11/11/2016 1450
cis-1,2-Dichloroethene	ND	ND		1	0.00	20	11/11/2016 1450
trans-1,2-Dichloroethene	ND	ND		1	0.00	20	11/11/2016 1450
1,2-Dichloropropane	ND	ND		1	0.00	20	11/11/2016 1450
cis-1,3-Dichloropropene	ND	ND		1	0.00	20	11/11/2016 1450
trans-1,3-Dichloropropene	ND	ND		1	0.00	20	11/11/2016 1450
Ethylbenzene	ND	ND		1	0.00	20	11/11/2016 1450
2-Hexanone	ND	ND		1	0.00	20	11/11/2016 1450
Isopropylbenzene	ND	ND		1	0.00	20	11/11/2016 1450
Methyl acetate	ND	ND		1	0.00	20	11/11/2016 1450
Methyl tertiary butyl ether (MTBE)	ND	ND		1	0.00	20	11/11/2016 1450
4-Methyl-2-pentanone	ND	ND		1	0.00	20	11/11/2016 1450
Methylcyclohexane	ND	ND		1	0.00	20	11/11/2016 1450
Methylene chloride	6.4	ND		1	0.00	20	11/11/2016 1450
Styrene	ND	ND		1	0.00	20	11/11/2016 1450
1,1,2,2-Tetrachloroethane	ND	ND		1	0.00	20	11/11/2016 1450
Tetrachloroethene	ND	ND		1	0.00	20	11/11/2016 1450
Toluene	ND	ND		1	0.00	20	11/11/2016 1450
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND		1	0.00	20	11/11/2016 1450
1,2,4-Trichlorobenzene	ND	ND		1	0.00	20	11/11/2016 1450
1,1,1-Trichloroethane	ND	ND		1	0.00	20	11/11/2016 1450
1,1,2-Trichloroethane	ND	ND		1	0.00	20	11/11/2016 1450

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: RK10027-001DU

Matrix: Solid

Batch: 26577

Prep Method: 5035

Analytical Method: 8260B

Parameter	Sample Amount (ug/kg)	Result (ug/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Trichloroethene	ND	ND		1	0.00	20	11/11/2016 1450
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		82	53-142				
Bromofluorobenzene		117	47-138				
Toluene-d8		94	68-124				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: RK10027-002MS

Batch: 26577

Analytical Method: 8260B

Matrix: Solid

Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	29	100	88	N	1	57	60-140	11/11/2016 1512
Benzene	ND	52	37		1	71	69-123	11/11/2016 1512
Bromodichloromethane	ND	52	43		1	83	69-121	11/11/2016 1512
Bromoform	ND	52	45		1	86	61-119	11/11/2016 1512
Bromomethane (Methyl bromide)	ND	52	38		1	73	35-144	11/11/2016 1512
2-Butanone (MEK)	ND	100	73		1	70	57-148	11/11/2016 1512
Carbon disulfide	ND	52	37		1	72	58-122	11/11/2016 1512
Carbon tetrachloride	ND	52	40		1	78	58-136	11/11/2016 1512
Chlorobenzene	ND	52	42		1	82	59-129	11/11/2016 1512
Chloroethane	ND	52	39		1	76	50-132	11/11/2016 1512
Chloroform	ND	52	39		1	74	71-125	11/11/2016 1512
Chloromethane (Methyl chloride)	ND	52	40		1	77	34-134	11/11/2016 1512
Cyclohexane	ND	52	42		1	80	53-139	11/11/2016 1512
1,2-Dibromo-3-chloropropane (DBCP)	ND	52	46		1	89	55-125	11/11/2016 1512
Dibromochloromethane	ND	52	45		1	87	66-119	11/11/2016 1512
1,2-Dibromoethane (EDB)	ND	52	43		1	83	74-124	11/11/2016 1512
1,2-Dichlorobenzene	ND	52	46		1	88	57-131	11/11/2016 1512
1,3-Dichlorobenzene	ND	52	43		1	84	51-134	11/11/2016 1512
1,4-Dichlorobenzene	ND	52	45		1	86	52-133	11/11/2016 1512
Dichlorodifluoromethane	ND	52	45		1	86	10-157	11/11/2016 1512
1,1-Dichloroethane	ND	52	37		1	72	71-127	11/11/2016 1512
1,2-Dichloroethane	ND	52	43		1	83	67-129	11/11/2016 1512
1,1-Dichloroethene	ND	52	38		1	72	69-138	11/11/2016 1512
cis-1,2-Dichloroethene	ND	52	37		1	71	70-122	11/11/2016 1512
trans-1,2-Dichloroethene	ND	52	37		1	72	68-131	11/11/2016 1512
1,2-Dichloropropane	ND	52	39		1	75	72-124	11/11/2016 1512
cis-1,3-Dichloropropene	ND	52	40		1	78	70-126	11/11/2016 1512
trans-1,3-Dichloropropene	ND	52	44		1	84	70-124	11/11/2016 1512
Ethylbenzene	ND	52	42		1	81	59-128	11/11/2016 1512
2-Hexanone	ND	100	89		1	85	54-137	11/11/2016 1512
Isopropylbenzene	ND	52	45		1	87	50-136	11/11/2016 1512
Methyl acetate	ND	52	36		1	69	59-137	11/11/2016 1512
Methyl tertiary butyl ether (MTBE)	ND	52	36		1	70	70-130	11/11/2016 1512
4-Methyl-2-pentanone	ND	100	86		1	83	60-134	11/11/2016 1512
Methylcyclohexane	ND	52	46		1	88	41-144	11/11/2016 1512
Methylene chloride	2.3	52	39	N	1	71	77-129	11/11/2016 1512
Styrene	ND	52	45		1	87	54-136	11/11/2016 1512
1,1,2,2-Tetrachloroethane	ND	52	45		1	86	69-132	11/11/2016 1512
Tetrachloroethene	ND	52	45		1	87	70-130	11/11/2016 1512
Toluene	ND	52	42		1	81	61-129	11/11/2016 1512
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	42		1	81	49-136	11/11/2016 1512
1,2,4-Trichlorobenzene	ND	52	45		1	88	34-145	11/11/2016 1512
1,1,1-Trichloroethane	ND	52	39		1	76	63-128	11/11/2016 1512
1,1,2-Trichloroethane	ND	52	43		1	83	55-128	11/11/2016 1512

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: RK10027-002MS

Matrix: Solid

Batch: 26577

Prep Method: 5035

Analytical Method: 8260B

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	ND	52	40		1	77	62-126	11/11/2016 1512
Surrogate	Q	% Rec	Acceptance Limit					
1,2-Dichloroethane-d4		83	53-142					
Bromofluorobenzene		120	47-138					
Toluene-d8		95	68-124					

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ26611-001

Batch: 26611

Analytical Method: 8270D

Matrix: Solid

Prep Method: 3546

Prep Date: 11/11/2016 1918

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,1'-Biphenyl	ND		1	67	4.7	ug/kg	11/14/2016 0948
2,4,5-Trichlorophenol	ND		1	67	4.4	ug/kg	11/14/2016 0948
2,4,6-Trichlorophenol	ND		1	67	4.8	ug/kg	11/14/2016 0948
2,4-Dichlorophenol	ND		1	67	6.6	ug/kg	11/14/2016 0948
2,4-Dimethylphenol	ND		1	67	11	ug/kg	11/14/2016 0948
2,4-Dinitrophenol	ND		1	330	16	ug/kg	11/14/2016 0948
2,4-Dinitrotoluene	ND		1	130	12	ug/kg	11/14/2016 0948
2,6-Dinitrotoluene	ND		1	130	11	ug/kg	11/14/2016 0948
2-Chloronaphthalene	ND		1	67	13	ug/kg	11/14/2016 0948
2-Chlorophenol	ND		1	67	11	ug/kg	11/14/2016 0948
2-Methylnaphthalene	ND		1	13	5.9	ug/kg	11/14/2016 0948
2-Methylphenol	ND		1	67	18	ug/kg	11/14/2016 0948
2-Nitroaniline	ND		1	130	19	ug/kg	11/14/2016 0948
2-Nitrophenol	ND		1	130	7.8	ug/kg	11/14/2016 0948
3+4-Methylphenol	ND		1	130	17	ug/kg	11/14/2016 0948
3,3'-Dichlorobenzidine	ND		1	67	10	ug/kg	11/14/2016 0948
3-Nitroaniline	ND		1	130	18	ug/kg	11/14/2016 0948
4,6-Dinitro-2-methylphenol	ND		1	330	9.8	ug/kg	11/14/2016 0948
4-Bromophenyl phenyl ether	ND		1	67	4.6	ug/kg	11/14/2016 0948
4-Chloro-3-methyl phenol	ND		1	67	5.6	ug/kg	11/14/2016 0948
4-Chloroaniline	ND		1	67	5.8	ug/kg	11/14/2016 0948
4-Chlorophenyl phenyl ether	ND		1	67	4.0	ug/kg	11/14/2016 0948
4-Nitroaniline	ND		1	130	20	ug/kg	11/14/2016 0948
4-Nitrophenol	ND		1	330	100	ug/kg	11/14/2016 0948
Acenaphthene	ND		1	13	5.0	ug/kg	11/14/2016 0948
Acenaphthylene	ND		1	13	3.2	ug/kg	11/14/2016 0948
Acetophenone	ND		1	67	6.9	ug/kg	11/14/2016 0948
Anthracene	ND		1	13	2.6	ug/kg	11/14/2016 0948
Atrazine	ND		1	67	5.0	ug/kg	11/14/2016 0948
Benzaldehyde	ND		1	67	5.0	ug/kg	11/14/2016 0948
Benzo(a)anthracene	ND		1	13	2.0	ug/kg	11/14/2016 0948
Benzo(a)pyrene	ND		1	13	1.7	ug/kg	11/14/2016 0948
Benzo(b)fluoranthene	ND		1	13	1.9	ug/kg	11/14/2016 0948
Benzo(g,h,i)perylene	ND		1	13	3.8	ug/kg	11/14/2016 0948
Benzo(k)fluoranthene	ND		1	13	2.1	ug/kg	11/14/2016 0948
bis (2-Chloro-1-methylethyl) ether	ND		1	67	6.7	ug/kg	11/14/2016 0948
bis(2-Chloroethoxy)methane	ND		1	67	3.5	ug/kg	11/14/2016 0948
bis(2-Chloroethyl)ether	ND		1	67	5.5	ug/kg	11/14/2016 0948
bis(2-Ethylhexyl)phthalate	ND		1	67	2.3	ug/kg	11/14/2016 0948
Butyl benzyl phthalate	ND		1	67	3.5	ug/kg	11/14/2016 0948
Caprolactam	ND		1	67	12	ug/kg	11/14/2016 0948
Carbazole	ND		1	67	4.2	ug/kg	11/14/2016 0948
Chrysene	ND		1	13	3.1	ug/kg	11/14/2016 0948
Di-n-butyl phthalate	ND		1	67	9.8	ug/kg	11/14/2016 0948

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ26611-001

Batch: 26611

Analytical Method: 8270D

Matrix: Solid

Prep Method: 3546

Prep Date: 11/11/2016 1918

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Di-n-octylphthalate	ND		1	67	1.2	ug/kg	11/14/2016 0948
Dibenzo(a,h)anthracene	ND		1	13	3.0	ug/kg	11/14/2016 0948
Dibenzofuran	ND		1	67	5.0	ug/kg	11/14/2016 0948
Diethylphthalate	ND		1	67	4.0	ug/kg	11/14/2016 0948
Dimethyl phthalate	ND		1	67	3.7	ug/kg	11/14/2016 0948
Fluoranthene	ND		1	13	2.2	ug/kg	11/14/2016 0948
Fluorene	ND		1	13	1.9	ug/kg	11/14/2016 0948
Hexachlorobenzene	ND		1	67	4.9	ug/kg	11/14/2016 0948
Hexachlorobutadiene	ND		1	67	8.5	ug/kg	11/14/2016 0948
Hexachlorocyclopentadiene	ND		1	330	6.4	ug/kg	11/14/2016 0948
Hexachloroethane	ND		1	67	5.5	ug/kg	11/14/2016 0948
Indeno(1,2,3-c,d)pyrene	ND		1	13	2.7	ug/kg	11/14/2016 0948
Isophorone	ND		1	67	6.2	ug/kg	11/14/2016 0948
N-Nitrosodi-n-propylamine	ND		1	67	5.7	ug/kg	11/14/2016 0948
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	67	5.1	ug/kg	11/14/2016 0948
Naphthalene	ND		1	13	4.7	ug/kg	11/14/2016 0948
Nitrobenzene	ND		1	67	7.8	ug/kg	11/14/2016 0948
Pentachlorophenol	ND		1	330	27	ug/kg	11/14/2016 0948
Phenanthrone	ND		1	13	2.3	ug/kg	11/14/2016 0948
Phenol	ND		1	67	6.2	ug/kg	11/14/2016 0948
Pyrene	ND		1	13	2.8	ug/kg	11/14/2016 0948
Surrogate	Q	% Rec		Acceptance Limit			
2,4,6-Tribromophenol		83		30-117			
2-Fluorobiphenyl		82		33-102			
2-Fluorophenol		89		28-104			
Nitrobenzene-d5		72		22-109			
Phenol-d5		90		27-103			
Terphenyl-d14		82		41-120			

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ26611-002

Batch: 26611

Analytical Method: 8270D

Matrix: Solid

Prep Method: 3546

Prep Date: 11/11/2016 1918

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	670	550		1	83	49-110	11/14/2016 1012
2,4,5-Trichlorophenol	670	580		1	86	46-122	11/14/2016 1012
2,4,6-Trichlorophenol	670	600		1	90	38-115	11/14/2016 1012
2,4-Dichlorophenol	1300	1200		1	93	41-113	11/14/2016 1012
2,4-Dimethylphenol	670	530		1	79	33-123	11/14/2016 1012
2,4-Dinitrophenol	670	580		1	87	45-127	11/14/2016 1012
2,4-Dinitrotoluene	670	610		1	92	48-124	11/14/2016 1012
2,6-Dinitrotoluene	670	600		1	90	47-125	11/14/2016 1012
2-Chloronaphthalene	670	560		1	84	31-127	11/14/2016 1012
2-Chlorophenol	670	620		1	93	37-106	11/14/2016 1012
2-Methylnaphthalene	670	630		1	95	40-106	11/14/2016 1012
2-Methylphenol	670	550		1	83	32-107	11/14/2016 1012
2-Nitroaniline	670	600		1	90	45-123	11/14/2016 1012
2-Nitrophenol	670	590		1	89	35-108	11/14/2016 1012
3+4-Methylphenol	670	650		1	98	39-108	11/14/2016 1012
3,3'-Dichlorobenzidine	670	390		1	58	46-113	11/14/2016 1012
3-Nitroaniline	670	450		1	67	24-127	11/14/2016 1012
4,6-Dinitro-2-methylphenol	670	540		1	82	40-130	11/14/2016 1012
4-Bromophenyl phenyl ether	670	540		1	81	46-118	11/14/2016 1012
4-Chloro-3-methyl phenol	670	600		1	90	49-118	11/14/2016 1012
4-Chloroaniline	670	190		1	28	10-125	11/14/2016 1012
4-Chlorophenyl phenyl ether	670	580		1	87	47-116	11/14/2016 1012
4-Nitroaniline	670	580		1	87	48-127	11/14/2016 1012
4-Nitrophenol	1300	980		1	74	18-154	11/14/2016 1012
Acenaphthene	670	570		1	85	46-114	11/14/2016 1012
Acenaphthylene	670	580		1	87	44-122	11/14/2016 1012
Acetophenone	670	520		1	78	48-111	11/14/2016 1012
Anthracene	670	620		1	92	50-119	11/14/2016 1012
Atrazine	670	530		1	80	48-116	11/14/2016 1012
Benzaldehyde	670	160		1	23	10-110	11/14/2016 1012
Benzo(a)anthracene	670	610		1	91	47-121	11/14/2016 1012
Benzo(a)pyrene	670	640		1	96	55-134	11/14/2016 1012
Benzo(b)fluoranthene	670	630		1	95	28-139	11/14/2016 1012
Benzo(g,h,i)perylene	670	710		1	106	36-125	11/14/2016 1012
Benzo(k)fluoranthene	670	640		1	96	47-130	11/14/2016 1012
bis(2-Chloro-1-methylethyl) ether	670	460		1	69	31-102	11/14/2016 1012
bis(2-Chloroethoxy)methane	670	530		1	80	39-108	11/14/2016 1012
bis(2-Chloroethyl)ether	670	470		1	71	32-105	11/14/2016 1012
bis(2-Ethylhexyl)phthalate	670	600		1	90	45-128	11/14/2016 1012
Butyl benzyl phthalate	670	620		1	94	46-128	11/14/2016 1012
Caprolactam	670	680		1	102	43-121	11/14/2016 1012
Carbazole	670	600		1	91	47-128	11/14/2016 1012
Chrysene	670	610		1	92	45-126	11/14/2016 1012
Di-n-butyl phthalate	670	630		1	94	51-129	11/14/2016 1012

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ26611-002

Batch: 26611

Analytical Method: 8270D

Matrix: Solid

Prep Method: 3546

Prep Date: 11/11/2016 1918

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Di-n-octylphthalate	670	550		1	82	49-142	11/14/2016 1012
Dibenzo(a,h)anthracene	670	660		1	99	45-122	11/14/2016 1012
Dibenzofuran	670	610		1	91	45-112	11/14/2016 1012
Diethylphthalate	670	610		1	91	49-123	11/14/2016 1012
Dimethyl phthalate	670	620		1	93	48-120	11/14/2016 1012
Fluoranthene	670	640		1	96	50-123	11/14/2016 1012
Fluorene	670	610		1	91	48-117	11/14/2016 1012
Hexachlorobenzene	670	630		1	95	44-122	11/14/2016 1012
Hexachlorobutadiene	670	590		1	88	33-103	11/14/2016 1012
Hexachlorocyclopentadiene	3300	2300		1	70	18-121	11/14/2016 1012
Hexachloroethane	670	530		1	79	30-96	11/14/2016 1012
Indeno(1,2,3-c,d)pyrene	670	640		1	97	45-123	11/14/2016 1012
Isophorone	670	550		1	82	41-113	11/14/2016 1012
N-Nitrosodi-n-propylamine	670	570		1	85	32-115	11/14/2016 1012
N-Nitrosodiphenylamine (Diphenylamine)	670	570		1	85	53-150	11/14/2016 1012
Naphthalene	670	580		1	86	36-110	11/14/2016 1012
Nitrobenzene	670	550		1	82	33-114	11/14/2016 1012
Pentachlorophenol	1300	1400		1	106	27-138	11/14/2016 1012
Phenanthren	670	600		1	89	49-117	11/14/2016 1012
Phenol	670	570		1	86	36-108	11/14/2016 1012
Pyrene	670	630		1	95	47-119	11/14/2016 1012
Surrogate	Q	% Rec	Acceptance Limit				
2,4,6-Tribromophenol		88	30-117				
2-Fluorobiphenyl		80	33-102				
2-Fluorophenol		86	28-104				
Nitrobenzene-d5		78	22-109				
Phenol-d5		86	27-103				
Terphenyl-d14		77	41-120				

PQL = Practical quantitation limit

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+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ26757-001

Batch: 26757

Analytical Method: 8270D

Matrix: Solid

Prep Method: 3546

Prep Date: 11/14/2016 2323

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
1,1'-Biphenyl	ND		1	67	4.7	ug/kg	11/15/2016 1124
2,4,5-Trichlorophenol	ND		1	67	4.4	ug/kg	11/15/2016 1124
2,4,6-Trichlorophenol	ND		1	67	4.8	ug/kg	11/15/2016 1124
2,4-Dichlorophenol	ND		1	67	6.6	ug/kg	11/15/2016 1124
2,4-Dimethylphenol	ND		1	67	11	ug/kg	11/15/2016 1124
2,4-Dinitrophenol	ND		1	330	16	ug/kg	11/15/2016 1124
2,4-Dinitrotoluene	ND		1	130	12	ug/kg	11/15/2016 1124
2,6-Dinitrotoluene	ND		1	130	11	ug/kg	11/15/2016 1124
2-Chloronaphthalene	ND		1	67	13	ug/kg	11/15/2016 1124
2-Chlorophenol	ND		1	67	11	ug/kg	11/15/2016 1124
2-Methylnaphthalene	ND		1	13	5.9	ug/kg	11/15/2016 1124
2-Methylphenol	ND		1	67	18	ug/kg	11/15/2016 1124
2-Nitroaniline	ND		1	130	19	ug/kg	11/15/2016 1124
2-Nitrophenol	ND		1	130	7.8	ug/kg	11/15/2016 1124
3+4-Methylphenol	ND		1	130	17	ug/kg	11/15/2016 1124
3,3'-Dichlorobenzidine	ND		1	67	10	ug/kg	11/15/2016 1124
3-Nitroaniline	ND		1	130	18	ug/kg	11/15/2016 1124
4,6-Dinitro-2-methylphenol	ND		1	330	9.8	ug/kg	11/15/2016 1124
4-Bromophenyl phenyl ether	ND		1	67	4.6	ug/kg	11/15/2016 1124
4-Chloro-3-methyl phenol	ND		1	67	5.6	ug/kg	11/15/2016 1124
4-Chloroaniline	ND		1	67	5.8	ug/kg	11/15/2016 1124
4-Chlorophenyl phenyl ether	ND		1	67	4.0	ug/kg	11/15/2016 1124
4-Nitroaniline	ND		1	130	20	ug/kg	11/15/2016 1124
4-Nitrophenol	ND		1	330	100	ug/kg	11/15/2016 1124
Acenaphthene	ND		1	13	5.0	ug/kg	11/15/2016 1124
Acenaphthylene	ND		1	13	3.2	ug/kg	11/15/2016 1124
Acetophenone	ND		1	67	6.9	ug/kg	11/15/2016 1124
Anthracene	ND		1	13	2.6	ug/kg	11/15/2016 1124
Atrazine	ND		1	67	5.0	ug/kg	11/15/2016 1124
Benzaldehyde	ND		1	67	5.0	ug/kg	11/15/2016 1124
Benzo(a)anthracene	ND		1	13	2.0	ug/kg	11/15/2016 1124
Benzo(a)pyrene	ND		1	13	1.7	ug/kg	11/15/2016 1124
Benzo(b)fluoranthene	ND		1	13	1.9	ug/kg	11/15/2016 1124
Benzo(g,h,i)perylene	ND		1	13	3.8	ug/kg	11/15/2016 1124
Benzo(k)fluoranthene	ND		1	13	2.1	ug/kg	11/15/2016 1124
bis (2-Chloro-1-methylethyl) ether	ND		1	67	6.7	ug/kg	11/15/2016 1124
bis(2-Chloroethoxy)methane	ND		1	67	3.5	ug/kg	11/15/2016 1124
bis(2-Chloroethyl)ether	ND		1	67	5.5	ug/kg	11/15/2016 1124
bis(2-Ethylhexyl)phthalate	ND		1	67	2.3	ug/kg	11/15/2016 1124
Butyl benzyl phthalate	ND		1	67	3.5	ug/kg	11/15/2016 1124
Caprolactam	ND		1	67	12	ug/kg	11/15/2016 1124
Carbazole	ND		1	67	4.2	ug/kg	11/15/2016 1124
Chrysene	ND		1	13	3.1	ug/kg	11/15/2016 1124
Di-n-butyl phthalate	ND		1	67	9.8	ug/kg	11/15/2016 1124

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: RQ26757-001

Batch: 26757

Analytical Method: 8270D

Matrix: Solid

Prep Method: 3546

Prep Date: 11/14/2016 2323

Parameter	Result	Q	Dil	PQL	MDL	Units	Analysis Date
Di-n-octylphthalate	ND		1	67	1.2	ug/kg	11/15/2016 1124
Dibenzo(a,h)anthracene	ND		1	13	3.0	ug/kg	11/15/2016 1124
Dibenzofuran	ND		1	67	5.0	ug/kg	11/15/2016 1124
Diethylphthalate	ND		1	67	4.0	ug/kg	11/15/2016 1124
Dimethyl phthalate	ND		1	67	3.7	ug/kg	11/15/2016 1124
Fluoranthene	ND		1	13	2.2	ug/kg	11/15/2016 1124
Fluorene	ND		1	13	1.9	ug/kg	11/15/2016 1124
Hexachlorobenzene	ND		1	67	4.9	ug/kg	11/15/2016 1124
Hexachlorobutadiene	ND		1	67	8.5	ug/kg	11/15/2016 1124
Hexachlorocyclopentadiene	ND		1	330	6.4	ug/kg	11/15/2016 1124
Hexachloroethane	ND		1	67	5.5	ug/kg	11/15/2016 1124
Indeno(1,2,3-c,d)pyrene	ND		1	13	2.7	ug/kg	11/15/2016 1124
Isophorone	ND		1	67	6.2	ug/kg	11/15/2016 1124
N-Nitrosodi-n-propylamine	ND		1	67	5.7	ug/kg	11/15/2016 1124
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	67	5.1	ug/kg	11/15/2016 1124
Naphthalene	ND		1	13	4.7	ug/kg	11/15/2016 1124
Nitrobenzene	ND		1	67	7.8	ug/kg	11/15/2016 1124
Pentachlorophenol	ND		1	330	27	ug/kg	11/15/2016 1124
Phenanthren	ND		1	13	2.3	ug/kg	11/15/2016 1124
Phenol	ND		1	67	6.2	ug/kg	11/15/2016 1124
Pyrene	ND		1	13	2.8	ug/kg	11/15/2016 1124
Surrogate	Q	% Rec		Acceptance Limit			
2,4,6-Tribromophenol		53		30-117			
2-Fluorobiphenyl		55		33-102			
2-Fluorophenol		64		28-104			
Nitrobenzene-d5		49		22-109			
Phenol-d5		69		27-103			
Terphenyl-d14		46		41-120			

PQL = Practical quantitation limit

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N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ26757-002

Batch: 26757

Analytical Method: 8270D

Matrix: Solid

Prep Method: 3546

Prep Date: 11/14/2016 2323

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	670	550		1	83	49-110	11/15/2016 1148
2,4,5-Trichlorophenol	670	560		1	83	46-122	11/15/2016 1148
2,4,6-Trichlorophenol	670	600		1	90	38-115	11/15/2016 1148
2,4-Dichlorophenol	1300	1200		1	92	41-113	11/15/2016 1148
2,4-Dimethylphenol	670	550		1	83	33-123	11/15/2016 1148
2,4-Dinitrophenol	670	580		1	87	45-127	11/15/2016 1148
2,4-Dinitrotoluene	670	590		1	89	48-124	11/15/2016 1148
2,6-Dinitrotoluene	670	590		1	88	47-125	11/15/2016 1148
2-Chloronaphthalene	670	560		1	83	31-127	11/15/2016 1148
2-Chlorophenol	670	600		1	90	37-106	11/15/2016 1148
2-Methylnaphthalene	670	600		1	89	40-106	11/15/2016 1148
2-Methylphenol	670	520		1	79	32-107	11/15/2016 1148
2-Nitroaniline	670	590		1	88	45-123	11/15/2016 1148
2-Nitrophenol	670	600		1	90	35-108	11/15/2016 1148
3+4-Methylphenol	670	700		1	105	39-108	11/15/2016 1148
3,3'-Dichlorobenzidine	670	320		1	48	46-113	11/15/2016 1148
3-Nitroaniline	670	400		1	61	24-127	11/15/2016 1148
4,6-Dinitro-2-methylphenol	670	550		1	82	40-130	11/15/2016 1148
4-Bromophenyl phenyl ether	670	540		1	82	46-118	11/15/2016 1148
4-Chloro-3-methyl phenol	670	580		1	86	49-118	11/15/2016 1148
4-Chloroaniline	670	310		1	46	10-125	11/15/2016 1148
4-Chlorophenyl phenyl ether	670	540		1	81	47-116	11/15/2016 1148
4-Nitroaniline	670	530		1	79	48-127	11/15/2016 1148
4-Nitrophenol	1300	730		1	55	18-154	11/15/2016 1148
Acenaphthene	670	560		1	84	46-114	11/15/2016 1148
Acenaphthylene	670	570		1	86	44-122	11/15/2016 1148
Acetophenone	670	540		1	82	48-111	11/15/2016 1148
Anthracene	670	600		1	90	50-119	11/15/2016 1148
Atrazine	670	560		1	84	48-116	11/15/2016 1148
Benzaldehyde	670	240		1	37	10-110	11/15/2016 1148
Benzo(a)anthracene	670	600		1	89	47-121	11/15/2016 1148
Benzo(a)pyrene	670	600		1	90	55-134	11/15/2016 1148
Benzo(b)fluoranthene	670	610		1	92	28-139	11/15/2016 1148
Benzo(g,h,i)perylene	670	600		1	91	36-125	11/15/2016 1148
Benzo(k)fluoranthene	670	570		1	85	47-130	11/15/2016 1148
bis(2-Chloro-1-methylethyl) ether	670	460		1	69	31-102	11/15/2016 1148
bis(2-Chloroethoxy)methane	670	530		1	79	39-108	11/15/2016 1148
bis(2-Chloroethyl)ether	670	460		1	68	32-105	11/15/2016 1148
bis(2-Ethylhexyl)phthalate	670	620		1	93	45-128	11/15/2016 1148
Butyl benzyl phthalate	670	640		1	96	46-128	11/15/2016 1148
Caprolactam	670	630		1	94	43-121	11/15/2016 1148
Carbazole	670	580		1	87	47-128	11/15/2016 1148
Chrysene	670	580		1	87	45-126	11/15/2016 1148
Di-n-butyl phthalate	670	640		1	96	51-129	11/15/2016 1148

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

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+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: RQ26757-002

Batch: 26757

Analytical Method: 8270D

Matrix: Solid

Prep Method: 3546

Prep Date: 11/14/2016 2323

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Di-n-octylphthalate	670	550		1	83	49-142	11/15/2016 1148
Dibenzo(a,h)anthracene	670	600		1	90	45-122	11/15/2016 1148
Dibenzofuran	670	590		1	89	45-112	11/15/2016 1148
Diethylphthalate	670	610		1	92	49-123	11/15/2016 1148
Dimethyl phthalate	670	610		1	92	48-120	11/15/2016 1148
Fluoranthene	670	630		1	95	50-123	11/15/2016 1148
Fluorene	670	580		1	86	48-117	11/15/2016 1148
Hexachlorobenzene	670	630		1	95	44-122	11/15/2016 1148
Hexachlorobutadiene	670	570		1	86	33-103	11/15/2016 1148
Hexachlorocyclopentadiene	3300	2100		1	63	18-121	11/15/2016 1148
Hexachloroethane	670	510		1	77	30-96	11/15/2016 1148
Indeno(1,2,3-c,d)pyrene	670	590		1	89	45-123	11/15/2016 1148
Isophorone	670	540		1	81	41-113	11/15/2016 1148
N-Nitrosodi-n-propylamine	670	570		1	85	32-115	11/15/2016 1148
N-Nitrosodiphenylamine (Diphenylamine)	670	580		1	87	53-150	11/15/2016 1148
Naphthalene	670	580		1	87	36-110	11/15/2016 1148
Nitrobenzene	670	510		1	77	33-114	11/15/2016 1148
Pentachlorophenol	1300	1300		1	100	27-138	11/15/2016 1148
Phenanthren	670	590		1	88	49-117	11/15/2016 1148
Phenol	670	560		1	84	36-108	11/15/2016 1148
Pyrene	670	630		1	94	47-119	11/15/2016 1148
Surrogate	Q	% Rec	Acceptance Limit				
2,4,6-Tribromophenol		84	30-117				
2-Fluorobiphenyl		79	33-102				
2-Fluorophenol		83	28-104				
Nitrobenzene-d5		73	22-109				
Phenol-d5		85	27-103				
Terphenyl-d14		65	41-120				

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+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

**Chain of Custody
and
Miscellaneous Documents**

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 66485

SHEALY ENVIRONMENTAL SERVICES, INC.

Client: Tenacor		Report to Contact: Steve Kerlin		Telephone No./Email: Steve.Kerlin@Tenacor.com		Quote No.: 1943				
Address: #401 Birchwood Rd		Sampler's Signature: Ethan Smith		Analys (Attach list if more space is needed)		Page 1 of 1				
City: Raleigh		State: NC Zip Code: 27604		Project Name: 1J-4405		Barcode: RK10027				
Project No.: 70107490		P.O. No.		Matrix		No. of Contaminants or Preservative Type				
(Contaminants for each sample may be combined on one line.)		Date	Time	Preservative Added	Preservative Type	Lead	Mercury			
		1/9/10	0850	G	1	X	X			
SB-14		1/9/10	0910	G	2	X	X			
SB-15		1/9/10	0940	G	2	X	X			
SB-16		1/9/10	1550	G	2	X	X			
SB-28		1/9/10	1610	G	2	X	X			
SB-29		1/9/10	1645	G	2	X	X			
SB-30		1/9/10	1655	G	2	X	X			
SB-31		1/9/10	1705	G	2	X	X			
SB-32		1/9/10	1725	G	2	X	X			
<i>Handwritten notes: SMC 8270, VOC 8240</i>										
Turn Around Time Required (Prior lab approval required for expedited TAT)										
<input type="checkbox"/> Standard	<input checked="" type="checkbox"/> Rush (Specify)	Sample Disposal		QC Requirements (Specify)						
		<input type="checkbox"/> Return to Client	<input checked="" type="checkbox"/> Disposal by Lab	<input type="checkbox"/> Possible Hazard	<input type="checkbox"/> Generalization	<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Fammale	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison	<input type="checkbox"/> Unknown
1. Feliquestified by Ethan Smith		Date 1/9/10	Time 1330	1. Received by					Date 1/9/10	Time 1330
2. Relinquished by		Date	Time	2. Received by					Date	Time
3. Relinquished by		Date	Time	3. Received by					Date	Time
4. Relinquished by FedEx		Date 1/10/10	Time 1400	4. Laboratory received by S. Smith					Date 1/10/10	Time 0910
Note: All samples are retained for four weeks from receipt unless other arrangements are made.										
				<input type="checkbox"/> Lab Use Only	<input type="checkbox"/> Received on los (Circle) (Y)	<input type="checkbox"/> No	<input type="checkbox"/> Ice Pack	<input type="checkbox"/> Receipt Temp. 23.2 °C		

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME0018C-05

Page 1 of 1
Effective Date: 09/28/2016
Expiry Date: 09/28/2031

Sample Receipt Checklist (SRC)

Client: TECNOLON

Cooler Inspected by/date: SESI / 11/01/16 Lot #: 14K0027

Means of receipt: <input type="checkbox"/> SESI <input type="checkbox"/> Client <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Other		
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
1. Were custody seals present on the cooler? .		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
2. If custody seals were present, were they intact and unbroken?		
pH strip ID: NA Cl strip ID: NA		
Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt: 12.1 12.3 °C / / °C / / °C / / °C		
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: G IR Gun Correction Factor: 0.2 °C		
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> Dry Ice <input type="checkbox"/> None		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).		
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
4. Is the commercial courier's packing slip attached to this form?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
5. Were proper custody procedures (relinquished/received) followed?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
6. Were sample IDs listed on the COC?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
7. Were sample IDs listed on all sample containers?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
8. Was collection date & time listed on the COC?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
9. Was collection date & time listed on all sample containers?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
10. Did all container label information (ID, date, time) agree with the COC?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
11. Were tests to be performed listed on the COC?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
13. Was adequate sample volume available?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
15. Were any samples containers missing/excess (circle one) samples Not listed on COC?		
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
16. Were bubbles present >"pea-size" (¼" or 6mm in diameter) in any VOA vials?		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
17. Were all DRO/metals/nutrient samples received at a pH of < 2?		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
18. Were all cyanide and/or sulfide samples received at a pH >12?		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
19. Were all applicable NH3/TKN/cyanide/phenol/BNA (<0.2mg/L) samples free of residual chlorine?		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
20. Were collection temperatures documented on the COC for NC samples?		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
21. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?		
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
22. Was the quote number used taken from the container label?		
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)		
Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with (H ₂ SO ₄ , HNO ₃ , HCl, NaOH) using SR # _____.		
Sample(s) _____ were received with bubbles >6 mm in diameter.		
Samples(s) _____ were received with TRC >0.2 mg/L (If #21 is No) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na ₂ S ₂ O ₃) with Shealy ID: _____.		
SC Drinking Water Project Sample(s) pH verified to be > 2 by _____ Date: _____		
Sample(s) _____ were Not received at a pH of < 2 and were adjusted accordingly using SR# _____.		
Sample labels applied by: W Verified by: _____ Date: 11/01/16		

Comments: _____
