Spill Delineation Report & Remediation Plan

March 16, 2018

Oilfield Water Logistics (OWL) Produced Water Pipeline Release
Nearby Unit Letter M, N, C, D, Sections 9 and 4, T26S, R36E, Lea County, New Mexico – Case No. 1RP-4860

PRELIMINARY RESULTS

Prepared For:

Mr. Phillip Sanders
Oilfield Water Logistics
8214 Westchester Drive, Suite 850
Dallas, Texas 75225

New Mexico Energy Minerals and Natural Resources Department (EMNRD)
Oil Conservation Division (OCD)
Ms. Olivia Yu
1220 South Saint Francis Drive
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Prepared By:

KJE
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March 16, 2018

Mr. Phillip Sanders
Oilfield Water Logistics
8214 Westchester Drive, Suite 850
Dallas, Texas 75225

RE: **Soil Delineation Report and Remediation Workplan: Oilfield Water Logistics (OWL) Produced Water Pipeline Nearby Unit Letter M, N, C, D, Sections 9 and 4, T26S, R36E, Lea County, New Mexico – Case No. 1RP- 4860**

Dear Mr. Sanders:

KJ Environmental Mgt., Inc. (KJE) is pleased to submit this Soil Delineation Report and Remediation Workplan for the Produced Water Pipeline Release located near Jal in Lea County, New Mexico. This report discusses background information, assessment purpose and scope of work, execution of work, and documents the corresponding results.

We appreciate your selection of KJE for this project and look forward to assisting you further on other projects. If you have any questions, please do not hesitate to contact either of the undersigned at 940-387-0805. Thank you for the opportunity to provide professional environmental consulting services. It has been a pleasure working with you.

Best Regards,

Heather Leven
Environmental Project Manager

Dena M. Vandenberg, REM, LEEP AP
Director of Environmental Services

Table of Contents

1.0 Summary

KJ Environmental Mgt., Inc. (KJE), was retained by Oilfield Water Logistics (OWL) to complete certain delineation activities for a produced water pipeline release to vacant land situated approximately five miles southwest of Jal in Lea County, New Mexico. The results of the delineation activities are summarized as follows:

- On October 24, 2017, KJE was notified by Mr. Phillip Sanders, Safety Director with OWL, regarding a spill occurrence at the above referenced location. Following the New Mexico Oil Conservation Division (NMOCD), part of the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD) notification and approval, the spill was assigned remediation case number 1RP-4860. Soil delineation activities included the advancement of 16 soil borings to depths ranging from zero to 22 feet below ground surface (bgs). Analytical soil data identified chloride at concentrations above the NMOCD approved criteria. Details regarding the spill delineation activities and remediation plan are further summarized herein.

2.0 Introduction

On October 24, 2017, KJE was provided notification by Mr. Phillip Sanders, Safety Director with OWL, regarding a spill occurrence over a relatively short time frame. KJE provided further notification to the New Mexico Oil Conservation Division (NMOCD), part of The New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), of the spill at 10:05 a.m. on October 23, 2017. It was determined that 2,800 barrels of produced water was released during the spill event. KJE submitted Form C-141 Spill reports to OCD on November 1, 2017, for their review. A response received from the NMOCD, indicated that the incident was assigned remediation case number 1RP-4860. The general view of the spill is illustrated in Appendix A on Figure A1.

Subsequent to the NMOCD directive to complete division-approved corrective action, at the request of the NMOCD, KJE completed a delineation workplan detailing the collection of soil samples for analysis to delineate the vertical and horizontal extent of produced water impacted soil. This workplan was submitted by KJE and administratively approved by Ms. Olivia Yu on December 11, 2017. The NMOCD approved Work Plan for the Characterization of Impacts is located in Appendix G of this report.

As such, following approval of the characterization of impacts workplan, from January 10 through January 23, 2018, 16 soil borings were advanced within the spill area, one of which (soil boring BG) was advanced outside of the impacted soil area, in close proximity to the spill area, in an effort to confirm background soil constituents. Soil samples collected were transferred to an accredited laboratory and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), extended range total petroleum hydrocarbons (TPH), and/ or chloride. Implementation of the characterization of impacts workplan is further detailed below.

3.0 Environmental Assessment Activities

3.1 Delineation Activities

In accordance with the NMOCD Approved Work Plan for the Characterization of Impacts, KJE personnel observed the drilling subcontractor advance 16 soil borings (SB-1 through SB-16) within the soil impact area and one soil boring (BG) within the area in close proximity, but outside of the spill area in an attempt to delineate the extent of soil impact and potential groundwater impacts. The locations of the soil borings are depicted on the Overview of the Spill Area and Boring Location Map in Appendix A.

The subcontracted driller advanced the borings via flight augers to depths ranging from zero to 22 feet below ground surface (bgs) with the intent to delineate the vertical area of impact, five feet beyond the known area of impact[1], per NMOCD directives. As indicated above, in lieu of groundwater, soil samples were collected from five feet below the known area of soil impact. Additionally, soil collected from SB-6 exhibited the deepest concentrations of chloride (1,180 mg/kg at six to eight feet bgs) above the NMOCD approved criteria. As such, this soil boring was selected for further vertical delineation in an effort to identify potential groundwater impacts. Based on the analytical data, chloride concentrations were first identified below the NMOCD specified criteria at a depth of eight feet bgs (19.6 mg/kg). Therefore, KJE advanced the boring to 22 feet bgs. Groundwater was not encountered during the drilling activities; therefore, groundwater was not developed nor sampled during the sampling event.

Field screening for chloride concentrations and soil conductivity was conducted using a calibrated Hanna HI993310 soil conductivity meter. Field screening for Volatile Organic Compounds (VOCs) was conducted using a calibrated Photoionization Detector (PID) (Model RAE MINIRAE Lite 0-5K ppm) to screen for the highest readings from each of the borings. Photo documentation of field activities is included in Appendix C. The soil boring lithology and field screening data table (Table 1) is included in Appendix B for review. Due to the uniformity in lithology, representative boring logs are also provided in Appendix D.

3.2 Deviations from the Scope

Soil borings were field adjusted due to the proximity of the pipelines and associated setback areas. Initial analytical data from soil borings SB3, SB4 and SB6 indicated that the vertical delineation distance from soil below the permissible chloride levels, was less than the NMOCD dictated five feet. Subsequently, soil borings for SB3 and SB6[2] were then replicated at the request of NMOCD on January 23, 2018, in an effort to provide adequate vertical delineation depths.

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[1] Known area of impact is considered to be from the surface to the vertical depth of the first soil sample with confirmed chloride concentrations below the NMOCD approved criteria of 600 ppm.

[2] The NMOCD did not request a replicated soil boring for SB4, since the analytical data confirmed chloride impacts below the NMOCD criteria vertically for four feet.

4.0 Soil Sample Collection/Handling Procedures

Soil samples were collected based on field indicators, proximity to the boring termination depths, or depth of potential impact as noted above, and select samples were collected in four ounce laboratory supplied glass containers for laboratory analysis. The collected soil samples were placed in laboratory-supplied containers, labeled, placed in an insulated container with ice, providing a 4°C environment for sufficient preservation until delivery to Xenco Laboratories (a third-party, independent, and licensed environmental laboratory in Midland, Texas) accompanied by completed chain-of-custody. The sample collection and handling activities were conducted in accordance with USEPA Standard Operating Procedures and strict chain-of-custody protocols. Before and after installation of each of the soil borings, the drilling augers were decontaminated.

A representative amount of samples were collected for quality control/ quality assurance purposes. These samples are duplicate samples and referenced as DUP. The soil samples were analyzed for BTEX by SW-846 Method 8021B, Extended-Range TPH by SW-846 Method 8015 modified with extended range, and/ or Chlorides by EPA Method 300. These analytical methods are the EPA, NMOCD, and industry-approved standards used to determine the potential for soil contamination.

The sample results were compared to the NMOCD approved applicable criteria, as detailed below and in Appendix B.

5.0 Summary of Analytical Results

Soil Action Limits

The NMOCD required delineation of BTEX, Extended-Range TPH, and Chlorides for the spill area. Published values for BTEX and TPH were obtained from the NMOCD document "Guidelines for Remediation of Leaks, Spills, and Releases, 1993". Horizontal and vertical delineation values were determined to be 10 ppm Benzene, 50 ppm BTEX, and 5,000 ppm TPH since no groundwater or surface water was present in the site area. Verbal directives issued by NMOCD representative Ms. Olivia Yu indicated that chloride impacted soil was to be vertically and horizontally delineated to 600 ppm, with vertical delineation of soil below the 600 ppm mandated criteria to be maintained five feet beyond the first soil sample indicative of soil below the mandated criteria. See Figure A1 in Appendix A for soil borings locations and areas of exceedances. Analytical results are included on Table 1 in Appendix B for review. Laboratory reports are also included in Appendix E.

Soil Delineation – Analytical Data

Analytical soil data did not identify concentrations of BTEX or TPH above the laboratory method detection limit. Analytical soil data identified Chloride at concentrations up to 6,060 mg/kg (ppm); however, these concentrations were delineated to below 600 ppm, five feet beyond the known area of impact. Analytical data is included on Table 1 in Appendix B for review.

Based on the analytical data, soil above the applicable criteria has been identified at depths in the Spill Area ranging from zero to eight feet bgs. The estimated area of impacted soil is approximately 0.19 acres (8,454 square feet), and the estimated area of contaminated soil contour line is illustrated on Figure A2 in Appendix A. Based on the pipelines and associated buffer zones in the area, the estimated volume of accessible impacted soil in the Spill Area is 1,252 cubic yards. Based on the laboratory analytical results, delineation of impacted soils has been completed.

Analytical summary tables of the results are included in Appendix B. Copies of the laboratory analytical reports with chain-of-custody forms are included in Appendix E.

Groundwater

Groundwater was not encountered in the soil borings advanced, nor was it anticipated to be encountered. According to records obtained from the New Mexico Office of the State Engineer's office Hydrology Bureau records, the minimum depth to water for the water well located closest to the release area was for a well located in the southeast corner of Section 9. In 1996 the depth to water was reported at 174 feet. As such and based on the analytical data, which explored soil borings to depths five feet below the known areas of impact and twelve feet beyond the boring exhibiting the deepest vertical extent of chloride concentrations above the NMOCD criteria, potential groundwater impact was not anticipated. Additionally, because shallow groundwater is not known in the area and is not a source of drinking water, there is no complete exposure pathway to shallow groundwater. No use of groundwater is expected following Site remediation. Site remediation activities are not expected to encounter groundwater due to the depth of the groundwater at the Site. As such, KJE does not recommend further action regarding potential groundwater impact.

6.0 Risk Screening

6.1 Chemicals of Potential Concern

Chemicals of potential concern (COPCs) were initially identified as TPH, BTEX, and Chlorides. Following soil delineation activities and based on soil analytical data, TPH and BTEX have been eliminated as COPCs. As such, chloride has been identified as the only COPC. Analytical data from soil borings SB3, SB4, SB5, SB6, and SB8 exhibited chloride concentrations above the applicable NMOCD criteria in the Spill Area and are included in Table 1 below. Concentrations were compared to the NMOCD Action Limits, Pit and Recycling Containment Closures, and the New Mexico Environmental Department (NMED) Soil Screening Levels issued December 2014 and July 2015.

Table 1: Analytical Results from Soil Borings

SPILL AREA							
Sample ID	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	Chlorides	TPH
SB3 (0'-2')	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	2980	<15.0
SB3 (2'-4')	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2700	<15.0
SB3 (4'-6')	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2880	<15.0
SB3 (0'-2')*	NA	NA	NA	NA	NA	2420	<15.0
SB3 (2'-4')*	NA	NA	NA	NA	NA	2010	<15.0
SB3 (4'-6')*	NA	NA	NA	NA	NA	3880	<15.0
SB4 (0'-2')	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	2960	<15.0
SB4 (2'-4')	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	6060	<15.0
SB4 (4'-6')	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1120	<15.0
SB5 (0'-2')	<0.00341	<0.00341	<0.00341	<0.00341	<0.00341	2770	<15.0
SB5 (2'-4')	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	938	<15.0
SB6 (0'-2')	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	2760	<15.0
SB6 (2'-4')	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2700	<15.0
SB6 (4'-6')	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	4100	<15.0
SB6 (6'-8')	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	1010	<15.0
SB6 (8'-10')	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	834	<15.0
SB6 (0'-2')*	NA	NA	NA	NA	NA	2600	<15.0
SB6 (2'-4')*	NA	NA	NA	NA	NA	2370	<15.0
SB6 (4'-6')*	NA	NA	NA	NA	NA	3570	<15.0
SB6 (6'-8')*	NA	NA	NA	NA	NA	1180	<15.0
SB8 (0'-2')	NA	NA	NA	NA	NA	889	<15.0
OCD Action Limits 1993 Guideline	10	--	--	-	50	Horiz. – 600 Vert. – 600	5,000
Action Limits and Closure Requirements Assumes Depth To Water is > 100 feet							

*These soil borings were replicated to provide adequate vertical delineation depths.

6.2 Exposure Pathways

Potential exposure pathways for the COPCs at the Site include ingestion and dermal contact with COPCs via soil, groundwater, and surface water. There currently are no vapor phase COPCs; therefore soil gas is eliminated as a potential exposure pathway. Following remediation of onsite soils at the Site, there are expected to be no complete exposure pathways for ingestion or dermal contact with COPCs via soil, groundwater, and surface water. Each is discussed briefly below.

6.2.1 Soil

Following Site remediation, it is expected that there will be no complete exposure pathways to any remaining COPCs in soil at depth beneath the Site, with the exception of soil located within the pipeline easements and buffer zones. The potential exposure pathways to COPCs in soils are expected to occur during Site remediation when near-surface soils are disturbed. Those potential pathways include construction worker exposure to airborne dust, dermal contact with dust, and possible inadvertent ingestion. Measures to mitigate these potential exposures will be addressed in the Health and Safety Plan (HASP). COPCs in soil within the pipeline easements and buffer zones do not have a potential exposure pathway as these soil areas are not allowed to be disturbed until the pipelines need to be replaced or repaired. Chloride impacted soil exceeding criteria during remediation activities will be managed in accordance with the HASP and applicable regulations.

6.2.2 Surface Water

There is currently no direct contact of surface water with impacted soil, and all surface water exits the Site as storm water. There is no surface water at the Site and, therefore, no pathway for exposure. Similarly, following Site redevelopment, it is expected that there will be no complete exposure pathway to surface water. During remediation, surface water is expected to percolate into Site soils; measures to mitigate surface run-off will be mitigated utilizing berms and poly-liners.

6.2.3 Groundwater

As discussed above, the depth of potential impact has been explored and delineated for the spill area and groundwater was not encountered nor is groundwater a source of drinking water. Additionally, shallow groundwater is not known in the area; therefore, there is no complete exposure pathway to shallow groundwater. No use of groundwater is expected following Site remediation. Site remediation activities are not expected to encounter groundwater due to the depth of the groundwater at the Site.

7.0 Photographs

Photo documentation of the drilling and sampling activities are included in Appendix C.

8.0 Conclusions/Recommendations

KJE has concluded that the majority of the spill area has been delineated, and that there would be no beneficial outcome of installing additional soil borings in the spill area. KJE feels that we would only replicate analytical results from other nearby soil borings.

According to the records acquired from the New Mexico Office of the State Engineers database, it appears that there is at least 166 feet between the zones of impacted soil and groundwater. KJE feels that the chance of groundwater contamination from the impacted soil is highly unlikely.

Based on the following reasoning, KJE requests that the majority of the impacted soils, primarily south of the OWL saltwater line, in the spill area be allowed to remain in place, as further discussed below, since groundwater is determined to be at a depth unlikely to be impacted by the release:

- the majority of the impacted soil is located adjacent to, or below one of four operating pipelines (OWL saltwater line, Energy Transfer gas line, Kinder Morgan Gas Line, and nearby ranch drinking water). Excavation in these areas could adversely affect the structural integrity of one or all of these pipelines. As such, areas of chloride impact within these areas will be deferred, as detailed below.

- adverse environmental impacts are minimal,
  - little vegetation was present in the area due to the sandy soils, and the right of way (ROW) is being used as the route for 24-hour OWL pipeline inspectors
  - there is no noticeable impact to wildlife
  - there are no residences in the site area
  - there are no buildings in the site area for vapor intrusion consideration
  - there is no ongoing air quality impact
  - construction worker exposure would be primarily chlorides and addressed via the HASP during remediation activities
- the small total volume (1,252 cubic yards) of accessible impacted soil in the spill area will be remediated based on KJE recommendations.

Two small areas of accessible chloride impacted soil were identified within the Spill Area with analytical results above the NMOCD action levels for chloride. KJE proposes that the accessible impacted soil areas be excavated by OWL in the areas where chlorides exceed 600 ppm up to a depth of 4' (approximately 1,252 cubic yards), and placed on 20 mil poly sheeting in the excavation, as depicted in Figure A2. Trench anchors should be used to secure the poly sheeting. OWL will blend the impacted soil with clean soil, and KJE will collect one sample for every 25 cubic yards of blended soil to ensure remediation compliance with the NMOCD directive of 600 ppm. OWL will then return the soil to the poly-lined excavation. Confirmatory soil samples will be collected along the sidewalls of the excavation only, for horizontal delineation confirmation. Confirmatory soil samples will not be collected along the sidewalls adjoining the requested deferral area, further discussed below.

No excavation will be completed within the designated buffer zone set forth by each individual pipeline owner on each side of the pipeline easements, to maintain the structural stability of the pipelines. As such, KJE respectfully requests deferral of the NMOCD requirements to complete further investigations and remediation for Case No. 1RP 4860 adjacent to and below the subject pipeline, and within the respective setback areas, which corresponds to two areas. These areas correspond to approximately 202,390 square feet. The GPS coordinates of the extent of these two areas are 32.065321° N, -103.275404°W, 32.0656266°N, -103.275404°W, 32.065478°N, -103.272597°W, 32.065424°N, -103.272584°W, 32.065219°N, -103.275404°W, 32.064647°N, -103.275404°W, 32.065359°N, -103.272584°W, and 32.064670°N, -103.272584°W, which are illustrated on the attached Sheet A2. OWL and KJE request that the remediation be delayed until the pipelines are removed or relocated in the future to prevent possible damage to, or reduction of the pipeline structural integrity which could cause an additional spill. When the pipelines are removed or relocated in the future, OWL will contact NMOCD to discuss required investigations, or remediation which may or may not be required at that time.

Disturbed areas outside of the easement will be reseeded with BLM mix to reestablish growth. Due to vegetative growth restrictions imposed by the pipeline owners, the easement will not be seeded.

Regarding groundwater, based on review of available groundwater data, in conjunction with KJE's soil analytical data, KJE has opined that groundwater impact is unlikely; therefore, further action regarding groundwater is not required.

If we can be of further assistance, please do not hesitate to contact us at 940-387-0805. Thank you for the opportunity to provide professional environmental consulting services. It has been a pleasure working with you.

9.0 Qualifications of Environmental Professional

This is to certify that the Environmental Investigation that was completed at the produced water spill site located approximately five miles southwest of Jal in Lea County, New Mexico were conducted using EPA, NMOCD, and industry-approved standards/protocols. This field work was conducted from January 10 through January 23, 2018 for OWL, and all field activities were completed under the supervision of Ms. Dena M. Vandenberg, REM, LEED AP. Mr. Ware's and Ms. Vandenberg's credentials are included in Appendix E for review.

10.0 Signature of Environmental Professional

March 16, 2018

Dena M. Vandenberg, REM, LEED AP — Date
Environmental Professional
Director of Environmental Services

APPENDIX A

Figure A1 – Overview of the Spill Area and Boring Location

Map Figure A2 – Proposed Impacted Soil Excavation and Deferral Areas

LEGEND

RELEASE POINT ▲
SOIL BORING (TOTAL: 16) ○
BACKGROUND SAMPLE ●
RANCH WATER LINE (WITH 10' BUFFER ON EACH SIDE)
OWL SALTWATER LINE (WITH 10' BUFFER ON EACH SIDE)
TEMPORARY FENCE
OVER HEAD POWER LINE (WITH 25' BUFFER ON EACH SIDE)
ENERGY TRANSFER GAS LINE (WITH 15' BUFFER ON EACH SIDE)
KINDER MORGAN GAS LINE (WITH 20' BUFFER ON EACH SIDE)

60 0 30 60
SCALE: 1" = 60'

N

NOTES:
1. SOIL BORINGS WITH CALLOUTS EXHIBITED CHLORIDE CONCENTRATIONS ABOVE 600 PPM. THE CONCENTRATIONS LISTED ARE IN PPM.
2. TPH AND BTEX DID NOT EXCEED APPLICABLE CRITERIA.
3. BING MAPS WAS USED AS AN UNDERLAY IMAGE FOR THIS MAP. (http://bing.com/maps)

REVISIONS:

THIS DRAWING IS TO BE USED FOR PERMIT INFORMATION PURPOSES ONLY.

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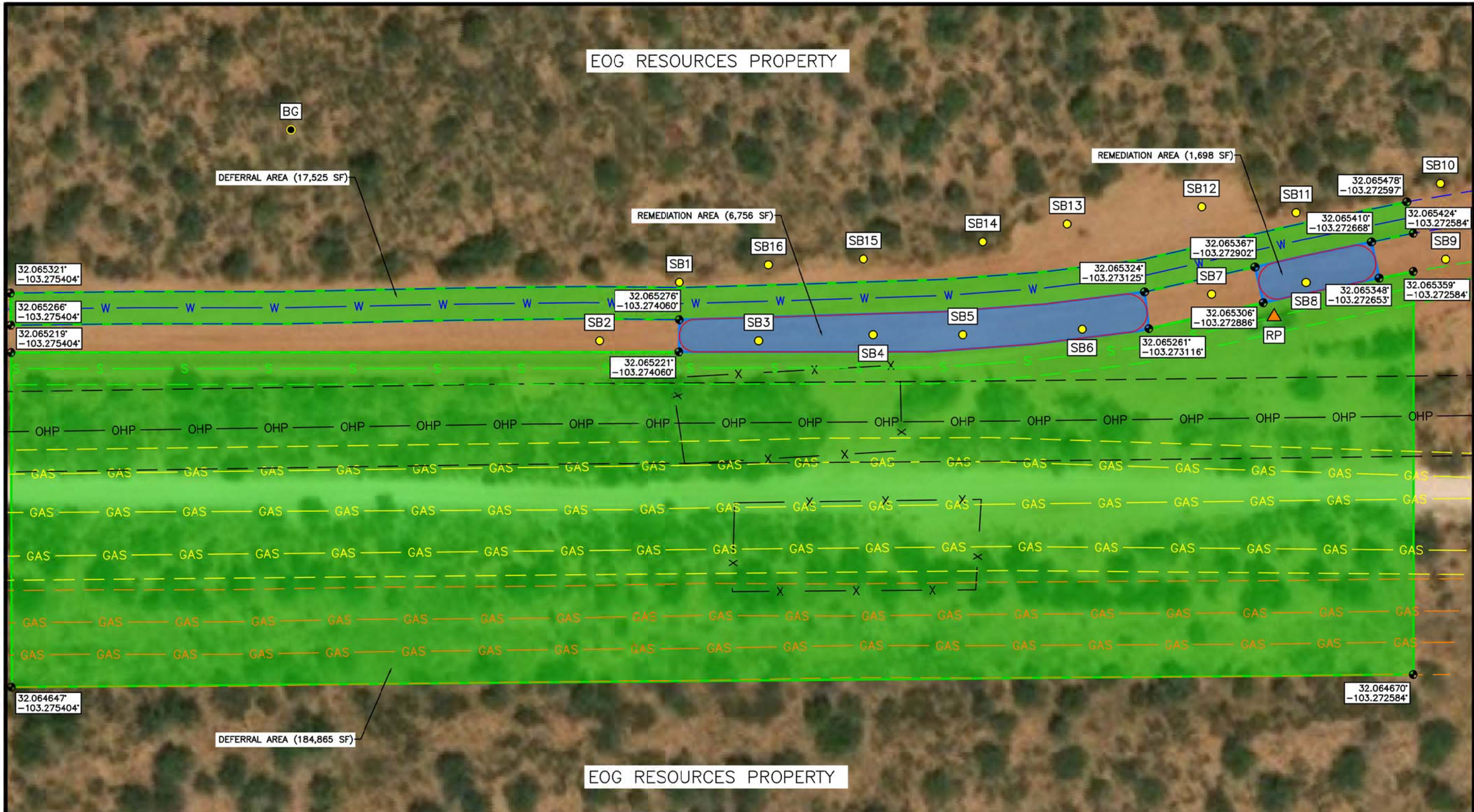
ENVIRONMENTAL & CIVIL ENGINEERING

OVERVIEW OF SPILL AREA &
BORING LOCATION MAP
OWL SWD OPERATING, LLC
LEA COUNTY, NEW MEXICO; UNITS M, N, C & D;
SECTIONS 9 & 4; TOWNSHIP 26S; RANGE 36E
CASE NO. 1RP-4860

DATE:
1/31/2018

SHEET:
A1



LEGEND

- RELEASE POINT
- SOIL BORING (TOTAL: 16)
- BACKGROUND SAMPLE
- EXCAVATION AREA
- PROPOSED DEFERRAL AREA
- EXCEEDANCE AREA
- RANCH WATER LINE (WITH 10' BUFFER ON EACH SIDE)
- OWL SALTWATER LINE (WITH 10' BUFFER ON EACH SIDE)
- TEMPORARY FENCE
- OVER HEAD POWER LINE (WITH 25' BUFFER ON EACH SIDE)
- ENERGY TRANSFER GAS LINE (WITH 15' BUFFER ON EACH SIDE)
- KINDER MORGAN GAS LINE (WITH 20' BUFFER ON EACH SIDE)

60 0 30 60

SCALE: 1" = 60'

N

NOTES:
1. GOOGLE EARTH WAS USED AS AN UNDERLAY IMAGE FOR THIS MAP. (http://earth.google.com/)

REVISIONS.

THIS DRAWING IS TO BE USED FOR PERMIT INFORMATION PURPOSES ONLY.

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KJE ENVIRONMENTAL & CIVIL ENGINEERING

PROPOSED IMPACTED SOIL EXCAVATION & DEFERRAL AREAS MAP
OWL SWD OPERATING, LLC
LEA COUNTY, NEW MEXICO; UNITS M, N, C & D; SECTIONS 9 & 4; TOWNSHIP 26S; RANGE 36E
CASE NO. 1RP-4860

DATE: 3/5/2018

SHEET: A2

APPENDIX B

Table 1 – Field and Soil Analytical Data

Table 1: Field and Soil Analytical Data
OWL Produced Water Pipeline Release Nearby Unit Letter M, N, C, and D
Lea County, New Mexico
NMOCD Case No. 1RP-4860

Field Data							Laboratory Analytical Data			
Sample ID	Date Collected	GPS Coodrinates	Soil Type	Soil Color/Size	PID (PPM)	Chlorides (field screening)	Benzene	Total BTEX	Chlorides	Total TPH
							Action Limits			
							10 mg/kg	50 mg/kg	Horizontal: 600 mg/kg Vertical: 600 mg/kg	5000 mg/kg
BG (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.97	<0.00198	<0.00198	<4.97	<15.0
BG (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.99	<0.00200	<0.00200	<4.99	<15.0
BG (4'-6')	1/16/2018	32.06560°, -103.27484°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.98	<0.00200	<0.00200	<4.98	<15.0
BG (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.91	<0.00201	<0.00201	<4.91	<15.0
BG (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.98	<0.00199	<0.00199	<4.98	<15.0
SB1 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.98	<0.00200	<0.00200	<4.98	<15.0
SB1 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.93	<0.00199	<0.00199	<4.93	<15.0
SB1 (4'-6')	1/16/2018	32.06534°, -103.27406°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.94	<0.00202	<0.00202	<4.94	<15.0
SB1 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.98	<0.00200	<0.00200	<4.98	<15.0
SB1 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.97	<0.00200	<0.00200	<4.97	<15.0
SB2 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.92	<0.00198	<0.00198	<4.92	<15.0
SB2 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.98	<0.00201	<0.00201	<4.98	<15.0
SB2 (4'-6')	1/16/2018	32.06524°, -103.27422°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.94	<0.00202	<0.00202	<4.94	<15.0
SB2 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.97	<0.00200	<0.00200	<4.97	<15.0
SB2 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.95	<0.00199	<0.00199	<4.95	<15.0
SB3 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	2980	<0.00199	<0.00199	2980	<15.0
SB3 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	2700	<0.00200	<0.00200	2700	<15.0
SB3 (4'-6')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	2880	<0.00200	<0.00200	2880	<15.0
SB3 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	246	<0.00201	<0.00201	246	<15.0
SB3 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	483	<0.00200	<0.00200	483	<15.0
SB3 (0'-2')*	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	2420	NA	NA	2420	NA
SB3 (2'-4')*	1/23/2018	32.06524°, -103.27390°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	2010	NA	NA	2010	NA
SB3 (4'-6')*	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	3880	NA	NA	3880	NA
SB3 (6'-8')*	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	389	NA	NA	389	NA
SB3 (8'-10')*	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	398	NA	NA	398	NA
SB3 (10'-12')	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.00	NA	NA	<5.00	NA
SB3 (12'-14')	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.00	NA	NA	<5.00	NA
SB3 (14'-16')	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.90	NA	NA	<4.90	NA
SB4 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	2960	<0.00202	<0.00202	2960	<15.0
SB4 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	6060	<0.00200	<0.00200	6060	<15.0
SB4 (4'-6')	1/16/2018	32.06525°, -103.27367°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	1120	<0.00200	<0.00200	1120	<15.0
SB4 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	215	<0.00199	<0.00199	215	<15.0
SB4 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	549	<0.00199	<0.00199	549	<15.0
SB4 (8'-10') DUP	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	127	<0.00198	<0.00198	127	<15.0
SB5 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	2770	<0.00341	<0.00341	2770	<15.0
SB5 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	938	<0.00200	<0.00200	938	<15.0
SB5 (4'-6')	1/16/2018	32.06525°, -103.27349°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	19	<0.00200	<0.00200	19	<15.0
SB5 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	20.5	<0.00201	<0.00201	20.5	<15.0
SB5 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	59.2	<0.00200	<0.00200	59.2	<15.0
SB6 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	2760	<0.00199	<0.00199	2760	<15.0
SB6 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	2700	<0.00200	<0.00200	2700	<15.0
SB6 (4'-6')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	4100	<0.00201	<0.00201	4100	<15.0
SB6 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	1010	<0.00199	<0.00199	1010	<15.0
SB6 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	834	<0.00199	<0.00199	834	<15.0
SB6 (0'-2')*	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	2600	NA	NA	2600	NA
SB6 (2'-4')*	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	2370	NA	NA	2370	NA
SB6 (4'-6')*	1/23/2018	32.06526°, -103.27325°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	3570	NA	NA	3570	NA
SB6 (6'-8')*	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	1180	NA	NA	1180	NA
SB6 (8'-10')*	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	19.6	NA	NA	19.6	NA
SB6 (10'-12')	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	231	NA	NA	231	NA
SB6 (12'-14')	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.00	NA	NA	<5.00	NA
SB6 (14'-16')	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.00	NA	NA	<5.00	NA
SB6 (16'-18')	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	11.8	NA	NA	11.8	NA
SB6 (18'-20')	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	206	NA	NA	206	NA
SB6 (20'-22')	1/23/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	265	NA	NA	265	NA
SB7 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	224	<0.00202	<0.00202	224	<15.0
SB7 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	19.4	<0.00200	<0.00200	19.4	<15.0
SB7 (4'-6')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.99	<0.00202	<0.00202	<4.99	<15.0
SB7 (6'-8')	1/16/2018	32.06532°, -103.27299°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.95	<0.00199	<0.00199	<4.95	<15.0
SB7 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	43.8	<0.00199	<0.00199	43.8	<15.0
SB7 (10'-12')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	26.3	<0.00200	<0.00200	26.3	<15.0
SB7 (12'-14')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.95	<0.00201	<0.00201	<4.95	<15.0
SB7 (14'-16')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.95	<0.00202	<0.00202	<4.95	<15.0
SB8 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	8.5	889	<0.00199	<0.00199	889	<15.0
SB8 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	7.92	<0.00198	<0.00198	7.92	<15.0
SB8 (4'-6')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.99	<0.00200	<0.00200	<4.99	<15.0
SB8 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.99	<0.00201	<0.00201	<4.99	<15.0
SB8 (8'-10')	1/16/2018	32.06534°, -103.272980°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.92	<0.00198	<0.00198	<4.92	<15.0
SB8 (10'-12')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	105	<0.00201	<0.00201	105	<15.0
SB8 (10'-12')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.95	<0.00200	<0.00200	<4.95	<15.0
SB8 (12'-14')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.94	<0.00198	<0.00198	<4.94	<15.0
SB8 (14'-16')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.91	<0.00198	<0.00198	<4.91	<15.0
SB9 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.91	<0.00198	<0.00198	<4.91	<15.0
SB9 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.94	<0.00201	<0.00201	<4.94	<15.0
SB9 (4'-6')	1/16/2018	32.06538°, -103.27252°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.94	<0.00200	<0.00200	<4.94	<15.0
SB9 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.91	<0.00199	<0.00199	<4.91	<15.0
SB9 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.98	<0.00200	<0.00200	<4.98	<15.0
SB10 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.00	NA	NA	<5.00	NA
SB10 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.98	NA	NA	<4.98	NA
SB10 (4'-6')	1/16/2018	32.065510°, -103.272530°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.01	NA	NA	<5.01	NA
SB10 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.98	NA	NA	<4.98	NA
SB10 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	20.6	NA	NA	20.6	NA
SB11 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.00	NA	NA	<5.00	NA
SB11 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.01	NA	NA	<5.01	NA
SB11 (4'-6')	1/16/2018	32.065460°, -103.272820°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	20.5	NA	NA	20.5	NA
SB11 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	21	NA	NA	21	NA
SB11 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	6.23	NA	NA	6.23	NA
SB12 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.97	NA	NA	<4.97	NA
SB12 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.03	NA	NA	<5.03	NA
SB12 (4'-6')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.98	NA	NA	<4.98	NA
SB12 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.00	NA	NA	<5.00	NA
SB12 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.00	NA	NA	<5.00	NA
SB12 (0'-2')	1/16/2018	32.06547°, -103.27301°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.97	NA	NA	<4.97	NA
SB12 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.03	NA	NA	<5.03	NA

Table 1: Field and Soil Analytical Data
OWL Produced Water Pipeline Release Nearby Unit Letter M, N, C, and D
Lea County, New Mexico
NMOCD Case No. 1RP-4860

Field Data							Laboratory Analytical Data			
Sample ID	Date Collected	GPS Coodrinates	Soil Type	Soil Color/Size	PID (PPM)	Chlorides (field screening)	Benzene	Total BTEX	Chlorides	Total TPH
							Action Limits			
							10 mg/kg	50 mg/kg	Horizontal: 600 mg/kg Vertical: 600 mg/kg	5000 mg/kg
SB12 (4'-6')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.98	NA	NA	<4.98	NA
SB12 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.00	NA	NA	<5.00	NA
SB12 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.00	NA	NA	<5.00	NA
SB13 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.99	NA	NA	<4.99	NA
SB13 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.01	NA	NA	<5.01	NA
SB13 (4'-6')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	16.1	NA	NA	16.1	NA
SB13 (4'-6') DUP	1/16/2018	32.06544°, -103.27328°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	20.1	NA	NA	20.1	NA
SB13 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.99	NA	NA	<4.99	NA
SB13 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	5.98	NA	NA	5.98	NA
SB13 (10'-12')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	139	NA	NA	139	NA
SB14 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.99	NA	NA	<4.99	NA
SB14 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.00	NA	NA	<5.00	NA
SB14 (4'-6')	1/16/2018	32.06541°, -103.27345°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.01	NA	NA	<5.01	NA
SB14 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.01	NA	NA	<5.01	NA
SB14 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.00	NA	NA	<5.00	NA
SB15 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.97	NA	NA	<4.97	NA
SB15 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.99	NA	NA	<4.99	NA
SB15 (4'-6')	1/16/2018	32.065380°, -103.273690°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.01	NA	NA	<5.01	NA
SB15 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.98	NA	NA	<4.98	NA
SB15 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.01	NA	NA	<5.01	NA
SB16 (0'-2')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.98	NA	NA	<4.98	NA
SB16 (2'-4')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.99	NA	NA	<4.99	NA
SB16 (4'-6')	1/16/2018	32.06537°, -103.27388°	SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<4.99	NA	NA	<4.99	NA
SB16 (6'-8')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.00	NA	NA	<5.00	NA
SB16 (8'-10')	1/16/2018		SP - Poorly - graded sands, gravelly sands, little or no fines	Red/Fine	0.0	<5.00	NA	NA	<5.00	NA

NOTE: NR=NO RECOVERY, PR=PROBE REFUSAL, SPLIT=SPLIT SAMPLE, NA=NOT ANALYZED, DUP=DUPLICATE SAMPLE FOR ANALYSIS

*These soil borings were replicated to provide adequate vertical delineation depths.

GPS locations are subject to a +/- 10 foot margin of error.

Highlight designates and exceedance in applicable criteria

APPENDIX C

Photography Exhibits

Site Photographs

Photo 1: View of the excavation area.

Photo 2: View of sampling area with plastic sheeting.

Photo 3: View of typical boring installed via geoprobe.

Photo 4: View of typical light red sand soil sample.

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Photo 5: View of typical boring installed via geoprobe.

Photo 6: View of initial spill area.

Photo 3: View of the excavation area, present prior to the spill.

Photo 4: View of the excavation area, present prior to the spill. .

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APPENDIX D

Representative Logs – 1RP-4860

RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
500 Moseley Road • Cross Roads, TX 76227
940-387-0805 • FAX 940-387-0830

Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	BG	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	0		
	-2- -3-	2.0-4.0		0		
	-4- -5-	4.0-6.0		50		
	-6- -7-	6.0-8.0		50		
	-8- -9-	8.0-10.0		50		
NOTE: No water was encountered throughout installation this boring	-10- -11- -12- -13- -14- -15- -20- -21- -22- -23- -24- -27- -28- -29- -30-					

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
500 Moseley Road • Cross Roads, TX 76227
940-387-0805 • FAX 940-387-0830

Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB1	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	0		
	-2-					
	-3-	2.0-4.0		50		
	-4-					
	-5-	4.0-6.0		0		
	-6-					
	-7-	6.0-8.0		0		
	-8-					
	-9-	8.0-10.0		0		
	-10-					
NOTE: No water was encountered throughout installation this boring	-11-					
	-12-					
	-13-					
	-14-					
	-15-					
	-20-					
	-21-					
	-22-					
	-23-					
	-24-					
	-27-					
	-28-					
	-29-					
These logs should not be used separately from the original report.	-30-					

RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
500 Moseley Road • Cross Roads, TX 76227
940-387-0805 • FAX 940-387-0830

Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB2	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	0		
	-2- -3-	2.0-4.0		0		
	-4- -5-	4.0-6.0		30		
	-6- -7-	6.0-8.0		20		
	-8- -9-	8.0-10.0		25		
NOTE: No water was encountered throughout installation this boring	-10- -11- -12- -13- -14- -15- -20- -21- -22- -23- -24- -27- -28- -29- -30-					

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB3	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	325		
	-2-					
	-3-	2.0-4.0		310		
	-4-					
	-5-	4.0-6.0		425		
	-6-					
	-7-	6.0-8.0		45		
	-8-					
	-9-	8.0-10.0		50		
	-10-					
NOTE: No water was encountered throughout installation this boring	-11-					
	-12-					
	-13-					
	-14-					
	-15-					
	-20-					
	-21-					
	-22-					
	-23-					
	-24-					
	-27-					
	-28-					
	-29-					
These logs should not be used separately from the original report.	-30-					

RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
500 Moseley Road • Cross Roads, TX 76227
940-387-0805 • FAX 940-387-0830

Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB4	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	425		
	-2- -3-	2.0-4.0		535		
	-4- -5-	4.0-6.0		225		
	-6- -7-	6.0-8.0		70		
	-8- -9-	8.0-10.0		15		
NOTE: No water was encountered throughout installation this boring	-10- -11- -12- -13- -14- -15- -20- -21- -22- -23- -24- -27- -28- -29- -30-					

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB5	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	325		
	-2-					
	-3-	2.0-4.0		125		
	-4-					
	-5-	4.0-6.0		45		
	-6-					
	-7-	6.0-8.0		100		
	-8-					
	-9-	8.0-10.0		40		
	-10-					
NOTE: No water was encountered throughout installation this boring	-11-					
	-12-					
	-13-					
	-14-					
	-15-					
	-20-					
	-21-					
	-22-					
	-23-					
	-24-					
	-27-					
	-28-					
	-29-					
These logs should not be used separately from the original report.	-30-					

RECORD OF SUBSURFACE EXPLORATION

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB6	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	350		
	-2-					
	-3-	2.0-4.0		680		
	-4-					
	-5-	4.0-6.0		400		
	-6-					
	-7-	6.0-8.0		20		
	-8-					
	-9-	8.0-10.0		75		
	-10-					
NOTE: No water was encountered throughout installation this boring						

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB7	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	16’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	500		
	-2-					
	-3-	2.0-4.0		100		
	-4-					
	-5-	4.0-6.0		25		
	-6-					
	-7-	6.0-8.0		5		
	-8-					
	-9-	8.0-10.0		15		
	-10-					
	-11-	10.0-12.0		40		
	-12-					
	-13-	12.0-14.0		5		
	-14-					
	-15-	14.0-16.0		5		
	-16-					
NOTE: No water was encountered throughout installation this boring						

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB8	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	16’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	8.5	225		
	-2- -3-	2.0-4.0	0.0	15		
	-4- -5-	4.0-6.0		50		
	-6- -7-	6.0-8.0		25		
	-8- -9-	8.0-10.0		5		
	-10- -11-	10.0-12.0		25		
	-12- -13-	12.0-14.0		25		
	-14- -15- -16-	14.0-16.0		30		
NOTE: No water was encountered throughout installation this boring						

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
500 Moseley Road • Cross Roads, TX 76227
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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB9	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	0		
	-2-					
	-3-	2.0-4.0		5		
	-4-					
	-5-	4.0-6.0		20		
	-6-					
	-7-	6.0-8.0		25		
	-8-					
	-9-	8.0-10.0		10		
	-10-					
NOTE: No water was encountered throughout installation this boring						

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB10	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	0		
	-2-					
	-3-	2.0-4.0		20		
	-4-					
	-5-	4.0-6.0		15		
	-6-					
	-7-	6.0-8.0		5		
	-8-					
	-9-	8.0-10.0		5		
	-10-					
NOTE: No water was encountered throughout installation this boring						

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB11	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	0		
	-2- -3-	2.0-4.0		0		
	-4- -5-	4.0-6.0		15		
	-6- -7-	6.0-8.0		15		
	-8- -9-	8.0-10.0		10		
	-10-					
NOTE: No water was encountered throughout installation this boring						

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
500 Moseley Road • Cross Roads, TX 76227
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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB12	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	0		
	-2-					
	-3-	2.0-4.0		10		
	-4-					
	-5-	4.0-6.0		10		
	-6-					
	-7-	6.0-8.0		5		
	-8-					
	-9-	8.0-10.0		10		
	-10-					
NOTE: No water was encountered throughout installation this boring						

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB13	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	0		
	-2-					
	-3-	2.0-4.0		5		
	-4-					
	-5-	4.0-6.0		65		
	-6-					
	-7-	6.0-8.0		25		
	-8-					
	-9-	8.0-10.0		65		
	-10-					
NOTE: No water was encountered throughout installation this boring						

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB14	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	0		
	-2- -3-	2.0-4.0		0		
	-4- -5-	4.0-6.0		25		
	-6- -7-	6.0-8.0		10		
	-8- -9-	8.0-10.0		5		
	-10-					
NOTE: No water was encountered throughout installation this boring						

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB15	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	0		
	-2- -3-	2.0-4.0		0		
	-4- -5-	4.0-6.0		5		
	-6- -7-	6.0-8.0		0		
	-8- -9-	8.0-10.0		0		
	-10-					
NOTE: No water was encountered throughout installation this boring						

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
500 Moseley Road • Cross Roads, TX 76227
940-387-0805 • FAX 940-387-0830

Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB16	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	10’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	0.0	0		
	-2- -3-	2.0-4.0		0		
	-4- -5-	4.0-6.0		15		
	-6- -7-	6.0-8.0		10		
	-8- -9-	8.0-10.0		25		
	-10-					
NOTE: No water was encountered throughout installation this boring						

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
500 Moseley Road • Cross Roads, TX 76227
940-387-0805 • FAX 940-387-0830

Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB6 (2)	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	22’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	8.5	325		
	-2- -3-	2.0-4.0	0.0	700		
	-4- -5-	4.0-6.0		670		
	-6- -7-	6.0-8.0		400		
	-8- -9-	8.0-10.0		180		
	-10- -11-	10.0-12.0		150		
	-12- -13-	12.0-14.0		200		
	-14- -15-	14.0-16.0		125		
	-16- -17-	16.0-18.0		75		
	-18- -19-	18.0-20.0		125		
	-20- -21-	20.0-22.0		100		
NOTE: No water was encountered throughout installation this boring	-22-					

These logs should not be used separately from the original report.

RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
500 Moseley Road • Cross Roads, TX 76227
940-387-0805 • FAX 940-387-0830

Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SB3 (2)	**Date Drilled:**	Jan. 10-23, 2018
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	16’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064995 -103.273214 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	8.5	265		
	-2- -3-	2.0-4.0	0.0	250		
	-4- -5-	4.0-6.0		700		
	-6- -7-	6.0-8.0		250		
	-8- -9-	8.0-10.0		270		
	-10- -11-	10.0-12.0		60		
	-12- -13-	12.0-14.0		250		
	-14- -15- -16-	14.0-16.0		250		
NOTE: No water was encountered throughout installation this boring						

These logs should not be used separately from the original report.

APPENDIX E

Laboratory Analytical Reports

Certificate of Analysis Summary 573594

OWL SWD Operating LLC, Dallas, TX

Project Name: 1RP-4860

Project Id: OWL102217D
Contact: Phillip Sanders
Project Location: Jal NM

Date Received in Lab: Tue Jan-16-18 09:00 am
Report Date: 19-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573594-001		573594-002		573594-003		573594-004		573594-005		573594-006	
	Field Id:	BG 0-2		BG 2-4		BG 4-6		BG 6-8		BG 8-10		SB1 0-2	
	Depth:	2'-		4'-		6'-		8'-		10'-		2'-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-10-18 13:00		Jan-10-18 13:10		Jan-10-18 13:20		Jan-10-18 13:30		Jan-10-18 13:40		Jan-10-18 16:00	
BTEX by EPA 8021B	***Extracted:***	Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00	
	Analyzed:	Jan-16-18 22:57		Jan-16-18 23:16		Jan-16-18 23:36		Jan-16-18 23:55		Jan-17-18 00:14		Jan-17-18 00:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Toluene		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Ethylbenzene		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
m,p-Xylenes		<0.00397	0.00397	<0.00399	0.00399	<0.00401	0.00401	<0.00402	0.00402	<0.00398	0.00398	<0.00399	0.00399
o-Xylene		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Total Xylenes		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Total BTEX		<0.00198	0.00198	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Chloride by EPA 300	***Extracted:***	Jan-17-18 16:15		Jan-17-18 16:15		Jan-17-18 16:15		Jan-17-18 16:15		Jan-17-18 16:15		Jan-17-18 16:15	
	Analyzed:	Jan-18-18 18:37		Jan-18-18 18:58		Jan-18-18 19:05		Jan-18-18 19:12		Jan-18-18 19:19		Jan-18-18 19:26	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.97	4.97	<4.99	4.99	<4.98	4.98	<4.91	4.91	<4.98	4.98	<4.98	4.98
TPH By SW8015 Mod	***Extracted:***	Jan-16-18 10:00		Jan-16-18 10:00		Jan-16-18 10:00		Jan-16-18 10:00		Jan-16-18 10:00		Jan-16-18 10:00	
	Analyzed:	Jan-16-18 11:59		Jan-16-18 13:07		Jan-16-18 13:30		Jan-16-18 13:54		Jan-16-18 14:18		Jan-16-18 14:42	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573594

OWL SWD Operating LLC, Dallas, TX

Project Name: 1RP-4860

Project Id: OWL102217D
Contact: Phillip Sanders
Project Location: Jal NM

Date Received in Lab: Tue Jan-16-18 09:00 am
Report Date: 19-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573594-007		573594-008		573594-009		573594-010		573594-011		573594-012	
	Field Id:	SB1 2-4		SB1 4-6		SB1 6-8		SB1 8-10		SB2 0-2		SB2 2-4	
	Depth:	4'-		6'-		8'-		10'-		2'-		4'-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-10-18 16:10		Jan-10-18 16:20		Jan-10-18 16:30		Jan-10-18 16:40		Jan-11-18 08:00		Jan-11-18 08:10	
BTEX by EPA 8021B	***Extracted:***	Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00	
	Analyzed:	Jan-17-18 00:52		Jan-17-18 01:12		Jan-17-18 01:29		Jan-17-18 01:48		Jan-17-18 02:45		Jan-17-18 03:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201
Toluene		<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201
Ethylbenzene		<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201
m,p-Xylenes		<0.00398	0.00398	<0.00403	0.00403	<0.00401	0.00401	<0.00399	0.00399	<0.00396	0.00396	<0.00402	0.00402
o-Xylene		<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201
Total Xylenes		<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201
Total BTEX		<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201
Chloride by EPA 300	***Extracted:***	Jan-17-18 16:15		Jan-17-18 16:15		Jan-17-18 16:15		Jan-17-18 16:15		Jan-17-18 16:15		Jan-17-18 16:15	
	Analyzed:	Jan-18-18 19:33		Jan-18-18 19:54		Jan-18-18 20:01		Jan-18-18 20:22		Jan-18-18 20:29		Jan-18-18 20:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.93	4.93	<4.94	4.94	<4.98	4.98	<4.97	4.97	<4.92	4.92	<4.98	4.98
TPH By SW8015 Mod	***Extracted:***	Jan-16-18 10:00		Jan-16-18 10:00		Jan-16-18 10:00		Jan-16-18 10:00		Jan-16-18 10:00		Jan-16-18 10:00	
	Analyzed:	Jan-16-18 15:06		Jan-16-18 15:31		Jan-16-18 15:55		Jan-16-18 16:21		Jan-16-18 17:34		Jan-16-18 17:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573594

OWL SWD Operating LLC, Dallas, TX

Project Name: 1RP-4860

Project Id: OWL102217D
Contact: Phillip Sanders
Project Location: Jal NM

Date Received in Lab: Tue Jan-16-18 09:00 am
Report Date: 19-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573594-013		573594-014		573594-015		573594-016		573594-017		573594-018	
	Field Id:	SB2 4-6		SB2 6-8		SB2 8-10		SB3 0-2		SB3 2-4		SB3 4-6	
	Depth:	6'-		8'-		10'-		2'-		4'-		6'-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-11-18 08:20		Jan-11-18 08:30		Jan-11-18 08:40		Jan-11-18 09:00		Jan-11-18 09:10		Jan-11-18 09:20	
BTEX by EPA 8021B	***Extracted:***	Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00		Jan-16-18 17:00	
	Analyzed:	Jan-17-18 03:23		Jan-17-18 03:41		Jan-17-18 04:00		Jan-17-18 04:19		Jan-17-18 04:38		Jan-17-18 04:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00404	0.00404	<0.00401	0.00401	<0.00398	0.00398	<0.00398	0.00398	<0.00399	0.00399	<0.00401	0.00401
o-Xylene		<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
Total BTEX		<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200
Chloride by EPA 300	***Extracted:***	Jan-17-18 16:15		Jan-17-18 16:15		Jan-17-18 16:15		Jan-17-18 16:15		Jan-17-18 17:05		Jan-17-18 17:05	
	Analyzed:	Jan-18-18 20:43		Jan-18-18 20:50		Jan-18-18 20:57		Jan-18-18 21:04		Jan-18-18 22:06		Jan-18-18 22:13	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.94	4.94	<4.97	4.97	<4.95	4.95	2980	24.8	2700	24.7	2880	24.9
TPH By SW8015 Mod	***Extracted:***	Jan-16-18 10:00		Jan-16-18 10:00		Jan-16-18 10:00		Jan-16-18 10:00		Jan-16-18 10:00		Jan-16-18 10:00	
	Analyzed:	Jan-16-18 18:24		Jan-16-18 18:50		Jan-16-18 19:15		Jan-16-18 19:40		Jan-16-18 20:05		Jan-16-18 20:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573594

OWL SWD Operating LLC, Dallas, TX

Project Name: 1RP-4860

Project Id: OWL102217D
Contact: Phillip Sanders
Project Location: Jal NM

Date Received in Lab: Tue Jan-16-18 09:00 am
Report Date: 19-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573594-019		573594-020		573594-021		573594-022		573594-023		573594-024	
	Field Id:	SB3 6-8		SB3 8-10		SB4 0-2		SB4 2-4		SB4 4-6		SB4 6-8	
	Depth:	8'-		10'-		2'-		4'-		6'-		8'-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-11-18 09:30		Jan-11-18 09:40		Jan-11-18 10:00		Jan-11-18 10:10		Jan-11-18 10:20		Jan-11-18 10:30	
BTEX by EPA 8021B	***Extracted:***	Jan-16-18 17:00		Jan-18-18 08:00		Jan-17-18 16:00		Jan-17-18 16:00		Jan-17-18 16:00		Jan-17-18 16:00	
	Analyzed:	Jan-17-18 05:16		Jan-18-18 13:35		Jan-17-18 20:35		Jan-17-18 20:55		Jan-17-18 21:15		Jan-17-18 21:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Toluene		<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
m,p-Xylenes		<0.00402	0.00402	<0.00399	0.00399	<0.00403	0.00403	<0.00401	0.00401	<0.00399	0.00399	<0.00398	0.00398
o-Xylene		<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Total BTEX		<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199
Chloride by EPA 300	***Extracted:***	Jan-17-18 17:05		Jan-17-18 17:05		Jan-17-18 17:05		Jan-17-18 17:05		Jan-17-18 17:05		Jan-17-18 17:05	
	Analyzed:	Jan-18-18 21:46		Jan-18-18 22:20		Jan-18-18 22:27		Jan-18-18 22:48		Jan-18-18 22:55		Jan-18-18 23:02	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		246	4.97	483	4.99	2960	24.8	6060	49.8	1120	4.98	215	4.97
TPH By SW8015 Mod	***Extracted:***	Jan-16-18 10:00		Jan-16-18 10:00		Jan-16-18 16:00		Jan-16-18 16:00		Jan-16-18 16:00		Jan-16-18 16:00	
	Analyzed:	Jan-16-18 20:55		Jan-16-18 21:20		Jan-17-18 03:24		Jan-17-18 07:17		Jan-17-18 07:39		Jan-17-18 08:01	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573594

OWL SWD Operating LLC, Dallas, TX

Project Name: 1RP-4860

Project Id: OWL102217D
Contact: Phillip Sanders
Project Location: Jal NM

Date Received in Lab: Tue Jan-16-18 09:00 am
Report Date: 19-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573594-025		573594-026		573594-027		573594-028		573594-029		573594-030	
	Field Id:	SB4 8-10 (1)		SB4 8-10 (2)		SB5 0-2		SB5 2-4		SB5 4-6		SB5 6-8	
	Depth:	10'-		10'-		2'-		4'-		6'-		8'-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-11-18 10:40		Jan-11-18 10:40		Jan-11-18 10:45		Jan-11-18 10:50		Jan-11-18 10:55		Jan-11-18 11:00	
BTEX by EPA 8021B	***Extracted:***	Jan-17-18 16:00		Jan-17-18 16:00		Jan-18-18 08:00		Jan-17-18 16:00		Jan-17-18 16:00		Jan-17-18 16:00	
	Analyzed:	Jan-17-18 21:54		Jan-17-18 22:14		Jan-18-18 16:50		Jan-17-18 22:53		Jan-17-18 23:13		Jan-17-18 23:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00198	0.00198	<0.00341	0.00341	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Toluene		<0.00199	0.00199	<0.00198	0.00198	<0.00341	0.00341	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Ethylbenzene		<0.00199	0.00199	<0.00198	0.00198	<0.00341	0.00341	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
m,p-Xylenes		<0.00398	0.00398	<0.00397	0.00397	<0.00683	0.00683	<0.00401	0.00401	<0.00399	0.00399	<0.00402	0.00402
o-Xylene		<0.00199	0.00199	<0.00198	0.00198	<0.00341	0.00341	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Total Xylenes		<0.00199	0.00199	<0.00198	0.00198	<0.00341	0.00341	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Total BTEX		<0.00199	0.00199	<0.00198	0.00198	<0.00341	0.00341	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201
Chloride by EPA 300	***Extracted:***	Jan-17-18 17:05		Jan-17-18 17:05		Jan-17-18 17:05		Jan-17-18 17:05		Jan-17-18 17:05		Jan-17-18 17:05	
	Analyzed:	Jan-18-18 23:09		Jan-18-18 23:23		Jan-18-18 23:16		Jan-18-18 23:44		Jan-18-18 23:51		Jan-19-18 00:12	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		549	4.97	127	4.98	2770	25.0	938	4.96	19.0	5.00	20.5	4.97
TPH By SW8015 Mod	***Extracted:***	Jan-16-18 16:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00	
	Analyzed:	Jan-17-18 08:23		Jan-18-18 09:25		Jan-18-18 10:25		Jan-18-18 10:45		Jan-18-18 11:05		Jan-18-18 11:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573594

OWL SWD Operating LLC, Dallas, TX

Project Name: 1RP-4860

Project Id: OWL102217D
Contact: Phillip Sanders
Project Location: Jal NM

Date Received in Lab: Tue Jan-16-18 09:00 am
Report Date: 19-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573594-031		573594-032		573594-033		573594-034		573594-035		573594-036	
	Field Id:	SB5 8-10		SB6 0-2		SB6 2-4		SB6 4-6		SB6 6-8		SB6 8-10	
	Depth:	10'-		2'-		4'-		6'-		8'-		10'-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-11-18 11:05		Jan-11-18 11:30		Jan-11-18 11:40		Jan-11-18 11:50		Jan-11-18 12:00		Jan-11-18 12:10	
BTEX by EPA 8021B	***Extracted:***	Jan-17-18 16:00		Jan-17-18 16:00		Jan-17-18 16:00		Jan-17-18 16:00		Jan-17-18 16:00		Jan-17-18 16:00	
	Analyzed:	Jan-18-18 00:32		Jan-18-18 00:51		Jan-18-18 01:11		Jan-18-18 01:31		Jan-18-18 01:51		Jan-18-18 02:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199
m,p-Xylenes		<0.00401	0.00401	<0.00398	0.00398	<0.00399	0.00399	<0.00402	0.00402	<0.00398	0.00398	<0.00398	0.00398
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00199	0.00199
Chloride by EPA 300	***Extracted:***	Jan-17-18 17:05		Jan-17-18 17:05		Jan-17-18 17:05		Jan-17-18 17:05		Jan-17-18 17:05		Jan-17-18 17:05	
	Analyzed:	Jan-19-18 00:19		Jan-19-18 00:26		Jan-19-18 00:33		Jan-19-18 00:40		Jan-19-18 00:47		Jan-19-18 00:54	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		59.2	4.98	2760	24.9	2700	24.9	4100	25.0	1010	4.99	834	4.99
TPH By SW8015 Mod	***Extracted:***	Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00	
	Analyzed:	Jan-18-18 11:43		Jan-18-18 12:03		Jan-18-18 12:25		Jan-18-18 12:45		Jan-18-18 13:04		Jan-18-18 14:06	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573594

OWL SWD Operating LLC, Dallas, TX

Project Name: 1RP-4860

Project Id: OWL102217D
Contact: Phillip Sanders
Project Location: Jal NM

Date Received in Lab: Tue Jan-16-18 09:00 am
Report Date: 19-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573594-037		573594-038		573594-039		573594-040		573594-041		573594-042	
	Field Id:	SB7 0-2		SB7 2-4		SB7 4-6		SB7 6-8		SB7 8-10		SB7 10-12	
	Depth:	2'-		4'-		6'-		8'-		10'-		12'-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-11-18 13:00		Jan-11-18 13:10		Jan-11-18 13:20		Jan-11-18 13:30		Jan-11-18 13:40		Jan-11-18 13:50	
BTEX by EPA 8021B	***Extracted:***	Jan-17-18 16:00		Jan-17-18 16:00		Jan-17-18 16:00		Jan-17-18 16:00		Jan-17-18 09:00		Jan-17-18 09:00	
	Analyzed:	Jan-18-18 02:30		Jan-18-18 02:50		Jan-18-18 09:27		Jan-18-18 09:46		Jan-17-18 10:18		Jan-17-18 10:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00202	0.00202	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200
Toluene		<0.00202	0.00202	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200
Ethylbenzene		<0.00202	0.00202	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200
m,p-Xylenes		<0.00403	0.00403	<0.00401	0.00401	<0.00404	0.00404	<0.00398	0.00398	<0.00398	0.00398	<0.00399	0.00399
o-Xylene		<0.00202	0.00202	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200
Total Xylenes		<0.00202	0.00202	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200
Total BTEX		<0.00202	0.00202	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200
Chloride by EPA 300	***Extracted:***	Jan-18-18 08:35		Jan-18-18 08:35		Jan-18-18 08:35		Jan-18-18 08:35		Jan-18-18 08:35		Jan-18-18 08:35	
	Analyzed:	Jan-18-18 09:26		Jan-18-18 09:47		Jan-18-18 09:54		Jan-18-18 10:01		Jan-18-18 10:08		Jan-18-18 10:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		224	5.00	19.4	4.97	<4.99	4.99	<4.95	4.95	43.8	4.94	26.3	4.91
TPH By SW8015 Mod	***Extracted:***	Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00	
	Analyzed:	Jan-18-18 14:25		Jan-18-18 14:45		Jan-18-18 15:04		Jan-18-18 15:24		Jan-18-18 15:44		Jan-18-18 16:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573594

OWL SWD Operating LLC, Dallas, TX

Project Name: 1RP-4860

Project Id: OWL102217D
Contact: Phillip Sanders
Project Location: Jal NM

Date Received in Lab: Tue Jan-16-18 09:00 am
Report Date: 19-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573594-043		573594-044		573594-045		573594-046		573594-047		573594-048	
	Field Id:	SB7 12-14		SB7 14-16		SB8 0-2		SB8 2-4		SB8 4-6		SB8 6-8	
	Depth:	14'-		16'-		2'-		4'-		6'-		8'-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-11-18 14:00		Jan-11-18 14:10		Jan-11-18 14:20		Jan-11-18 14:30		Jan-11-18 14:40		Jan-11-18 14:50	
BTEX by EPA 8021B	***Extracted:***	Jan-17-18 09:00		Jan-17-18 09:00		Jan-17-18 09:00		Jan-17-18 09:00		Jan-17-18 09:00		Jan-17-18 09:00	
	Analyzed:	Jan-17-18 10:57		Jan-17-18 11:16		Jan-17-18 11:35		Jan-17-18 11:54		Jan-17-18 12:14		Jan-17-18 12:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201
Toluene		<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201
Ethylbenzene		<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201
m,p-Xylenes		<0.00402	0.00402	<0.00403	0.00403	<0.00398	0.00398	<0.00397	0.00397	<0.00399	0.00399	<0.00402	0.00402
o-Xylene		<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201
Total Xylenes		<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201
Total BTEX		<0.00201	0.00201	<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201
Chloride by EPA 300	***Extracted:***	Jan-18-18 08:35		Jan-18-18 08:35		Jan-18-18 08:35		Jan-18-18 08:35		Jan-18-18 08:35		Jan-18-18 08:35	
	Analyzed:	Jan-18-18 10:36		Jan-18-18 10:43		Jan-18-18 10:50		Jan-18-18 10:57		Jan-18-18 11:04		Jan-18-18 11:25	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.95	4.95	<4.95	4.95	889	4.99	7.92	4.94	<4.99	4.99	<4.99	4.99
TPH By SW8015 Mod	***Extracted:***	Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00	
	Analyzed:	Jan-18-18 16:25		Jan-18-18 16:44		Jan-18-18 17:03		Jan-18-18 18:46		Jan-18-18 19:45		Jan-18-18 20:06	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573594

OWL SWD Operating LLC, Dallas, TX

Project Name: 1RP-4860

Project Id: OWL102217D
Contact: Phillip Sanders
Project Location: Jal NM

Date Received in Lab: Tue Jan-16-18 09:00 am
Report Date: 19-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573594-049		573594-050		573594-051		573594-052		573594-053		573594-054	
	Field Id:	SB8 8-10		SB8 10-12 (1)		SB8 10-12 (2)		SB8 12-14		SB8 14-16		SB9 0-2	
	Depth:	10'-		12'-		12'-		14'-		16'-		2'-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-11-18 15:00		Jan-11-18 15:10		Jan-11-18 15:20		Jan-11-18 15:30		Jan-11-18 15:40		Jan-11-18 15:50	
BTEX by EPA 8021B	***Extracted:***	Jan-18-18 08:00		Jan-18-18 08:00		Jan-17-18 09:00		Jan-17-18 09:00		Jan-17-18 09:00		Jan-17-18 09:00	
	Analyzed:	Jan-18-18 12:56		Jan-18-18 13:16		Jan-17-18 14:17		Jan-17-18 14:36		Jan-17-18 14:56		Jan-17-18 15:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198
Toluene		<0.00198	0.00198	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198
Ethylbenzene		<0.00198	0.00198	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198
m,p-Xylenes		<0.00397	0.00397	<0.00402	0.00402	<0.00401	0.00401	<0.00398	0.00398	<0.00397	0.00397	<0.00396	0.00396
o-Xylene		<0.00198	0.00198	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198
Total Xylenes		<0.00198	0.00198	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198
Total BTEX		<0.00198	0.00198	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00198	0.00198
Chloride by EPA 300	***Extracted:***	Jan-18-18 08:35		Jan-18-18 08:35		Jan-18-18 08:35		Jan-18-18 08:35		Jan-18-18 08:35		Jan-18-18 08:35	
	Analyzed:	Jan-18-18 11:31		Jan-18-18 12:06		Jan-18-18 12:13		Jan-18-18 12:20		Jan-18-18 12:27		Jan-18-18 12:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.92	4.92	105	4.93	<4.95	4.95	<4.96	4.96	<4.94	4.94	<4.91	4.91
TPH By SW8015 Mod	***Extracted:***	Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00	
	Analyzed:	Jan-18-18 20:26		Jan-18-18 20:45		Jan-18-18 21:05		Jan-18-18 21:26		Jan-18-18 21:49		Jan-18-18 22:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 573594

OWL SWD Operating LLC, Dallas, TX

Project Name: 1RP-4860

Project Id: OWL102217D
Contact: Phillip Sanders
Project Location: Jal NM

Date Received in Lab: Tue Jan-16-18 09:00 am
Report Date: 19-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	573594-055		573594-056		573594-057		573594-058					
	Field Id:	SB9 2-4		SB9 4-6		SB9 6-8		SB9 8-10					
	Depth:	4'-		6'-		8'-		10'-					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Jan-11-18 16:00		Jan-11-18 16:10		Jan-11-18 16:20		Jan-11-18 16:30					
BTEX by EPA 8021B	***Extracted:***	Jan-17-18 09:00		Jan-17-18 09:00		Jan-17-18 09:00		Jan-18-18 08:00					
	Analyzed:	Jan-17-18 15:34		Jan-17-18 15:54		Jan-17-18 16:20		Jan-18-18 17:09					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Toluene		<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
m,p-Xylenes		<0.00402	0.00402	<0.00401	0.00401	<0.00398	0.00398	<0.00401	0.00401				
o-Xylene		<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Total BTEX		<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Chloride by EPA 300	***Extracted:***	Jan-18-18 08:35		Jan-18-18 08:35		Jan-18-18 16:00		Jan-18-18 16:00					
	Analyzed:	Jan-18-18 12:41		Jan-18-18 12:48		Jan-19-18 01:57		Jan-19-18 02:04					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		<4.94	4.94	<4.94	4.94	<4.91	4.91	<4.98	4.98				
TPH By SW8015 Mod	***Extracted:***	Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00		Jan-18-18 07:00					
	Analyzed:	Jan-18-18 22:30		Jan-18-18 23:32		Jan-18-18 23:52		Jan-19-18 00:12					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0				

Kelsey Brooks
Project Manager

Analytical Report 573594

for

OWL SWD Operating LLC

Project Manager: Phillip Sanders

1RP-4860

OWL102217D

19-JAN-18

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

19-JAN-18

Project Manager: **Phillip Sanders**
OWL SWD Operating LLC
8214 Westchester Dr. Suite 850
Dallas, TX 75225

Reference: XENCO Report No(s): **573594**
1RP-4860
Project Address: Jal NM

Phillip Sanders:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 573594. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 573594 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 573594

OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BG 0-2	S	01-10-18 13:00	2'	573594-001
BG 2-4	S	01-10-18 13:10	4'	573594-002
BG 4-6	S	01-10-18 13:20	6'	573594-003
BG 6-8	S	01-10-18 13:30	8'	573594-004
BG 8-10	S	01-10-18 13:40	10'	573594-005
SB1 0-2	S	01-10-18 16:00	2'	573594-006
SB1 2-4	S	01-10-18 16:10	4'	573594-007
SB1 4-6	S	01-10-18 16:20	6'	573594-008
SB1 6-8	S	01-10-18 16:30	8'	573594-009
SB1 8-10	S	01-10-18 16:40	10'	573594-010
SB2 0-2	S	01-11-18 08:00	2'	573594-011
SB2 2-4	S	01-11-18 08:10	4'	573594-012
SB2 4-6	S	01-11-18 08:20	6'	573594-013
SB2 6-8	S	01-11-18 08:30	8'	573594-014
SB2 8-10	S	01-11-18 08:40	10'	573594-015
SB3 0-2	S	01-11-18 09:00	2'	573594-016
SB3 2-4	S	01-11-18 09:10	4'	573594-017
SB3 4-6	S	01-11-18 09:20	6'	573594-018
SB3 6-8	S	01-11-18 09:30	8'	573594-019
SB3 8-10	S	01-11-18 09:40	10'	573594-020
SB4 0-2	S	01-11-18 10:00	2'	573594-021
SB4 2-4	S	01-11-18 10:10	4'	573594-022
SB4 4-6	S	01-11-18 10:20	6'	573594-023
SB4 6-8	S	01-11-18 10:30	8'	573594-024
SB4 8-10 (1)	S	01-11-18 10:40	10'	573594-025
SB4 8-10 (2)	S	01-11-18 10:40	10'	573594-026
SB5 0-2	S	01-11-18 10:45	2'	573594-027
SB5 2-4	S	01-11-18 10:50	4'	573594-028
SB5 4-6	S	01-11-18 10:55	6'	573594-029
SB5 6-8	S	01-11-18 11:00	8'	573594-030
SB5 8-10	S	01-11-18 11:05	10'	573594-031
SB6 0-2	S	01-11-18 11:30	2'	573594-032
SB6 2-4	S	01-11-18 11:40	4'	573594-033
SB6 4-6	S	01-11-18 11:50	6'	573594-034
SB6 6-8	S	01-11-18 12:00	8'	573594-035
SB6 8-10	S	01-11-18 12:10	10'	573594-036
SB7 0-2	S	01-11-18 13:00	2'	573594-037
SB7 2-4	S	01-11-18 13:10	4'	573594-038
SB7 4-6	S	01-11-18 13:20	6'	573594-039
SB7 6-8	S	01-11-18 13:30	8'	573594-040
SB7 8-10	S	01-11-18 13:40	10'	573594-041
SB7 10-12	S	01-11-18 13:50	12'	573594-042
SB7 12-14	S	01-11-18 14:00	14'	573594-043

SB7 14-16	S	01-11-18 14:10	16'	573594-044
SB8 0-2	S	01-11-18 14:20	2'	573594-045
SB8 2-4	S	01-11-18 14:30	4'	573594-046
SB8 4-6	S	01-11-18 14:40	6'	573594-047
SB8 6-8	S	01-11-18 14:50	8'	573594-048
SB8 8-10	S	01-11-18 15:00	10'	573594-049
SB8 10-12 (1)	S	01-11-18 15:10	12'	573594-050
SB8 10-12 (2)	S	01-11-18 15:20	12'	573594-051
SB8 12-14	S	01-11-18 15:30	14'	573594-052
SB8 14-16	S	01-11-18 15:40	16'	573594-053
SB9 0-2	S	01-11-18 15:50	2'	573594-054
SB9 2-4	S	01-11-18 16:00	4'	573594-055
SB9 4-6	S	01-11-18 16:10	6'	573594-056
SB9 6-8	S	01-11-18 16:20	8'	573594-057
SB9 8-10	S	01-11-18 16:30	10'	573594-058

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3038415 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Lab Sample ID 573594-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 573594-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019.
The Laboratory Control Sample for m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3038601 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3038602 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3038608 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3038661 Chloride by EPA 300
Lab Sample ID 573594-007 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 573594-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analytical Results 573594

OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**BG 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-001	Date Collected:	01.10.18 13.00	Sample Depth:	2'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	01.18.18 18.37	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 11.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 11.59	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 11.59	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 11.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	01.16.18 11.59	
o-Terphenyl	84-15-1	76	%	70-135	01.16.18 11.59	

Certificate of Analytical Results 573594

OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**BG 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-001	Date Collected:	01.10.18 13.00	Sample Depth:	2'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.16.18 22.57	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.16.18 22.57	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.16.18 22.57	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.16.18 22.57	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.16.18 22.57	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.16.18 22.57	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.16.18 22.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	80-120	01.16.18 22.57	
1,4-Difluorobenzene	540-36-3	98	%	80-120	01.16.18 22.57	

Certificate of Analytical Results 573594

OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**BG 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-002	Date Collected:	01.10.18 13.10	Sample Depth:	4'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	01.18.18 18.58	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 13.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 13.07	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 13.07	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 13.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-135	01.16.18 13.07	
o-Terphenyl	84-15-1	73	%	70-135	01.16.18 13.07	

Certificate of Analytical Results 573594

OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**BG 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-002	Date Collected:	01.10.18 13.10	Sample Depth:	4'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.16.18 23.16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.16.18 23.16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.16.18 23.16	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.16.18 23.16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.16.18 23.16	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.16.18 23.16	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.16.18 23.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	89	%	80-120	01.16.18 23.16	
4-Bromofluorobenzene	460-00-4	86	%	80-120	01.16.18 23.16	

Certificate of Analytical Results 573594

OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**BG 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-003	Date Collected:	01.10.18 13.20	Sample Depth:	6'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	01.18.18 19.05	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 13.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 13.30	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 13.30	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 13.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-135	01.16.18 13.30	
o-Terphenyl	84-15-1	79	%	70-135	01.16.18 13.30	

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Sample Id:	**BG 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-003	Date Collected:	01.10.18 13.20	Sample Depth:	6'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.16.18 23.36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.16.18 23.36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.16.18 23.36	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.16.18 23.36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.16.18 23.36	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.16.18 23.36	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.16.18 23.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	80-120	01.16.18 23.36	
1,4-Difluorobenzene	540-36-3	96	%	80-120	01.16.18 23.36	

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Sample Id:	**BG 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-004	Date Collected:	01.10.18 13.30	Sample Depth:	8'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.91	4.91	mg/kg	01.18.18 19.12	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	01.16.18 13.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	01.16.18 13.54	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	01.16.18 13.54	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	01.16.18 13.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	01.16.18 13.54	
o-Terphenyl	84-15-1	80	%	70-135	01.16.18 13.54	

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Sample Id:	**BG 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-004	Date Collected:	01.10.18 13.30	Sample Depth:	8'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.16.18 23.55	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.16.18 23.55	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.16.18 23.55	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.16.18 23.55	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.16.18 23.55	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.16.18 23.55	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.16.18 23.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	80-120	01.16.18 23.55	
4-Bromofluorobenzene	460-00-4	90	%	80-120	01.16.18 23.55	

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Sample Id:	**BG 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-005	Date Collected:	01.10.18 13.40	Sample Depth:	10'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	01.18.18 19.19	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 14.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 14.18	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 14.18	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 14.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-135	01.16.18 14.18	
o-Terphenyl	84-15-1	76	%	70-135	01.16.18 14.18	

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Sample Id:	**BG 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-005	Date Collected:	01.10.18 13.40	Sample Depth:	10'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.18 00.14	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.18 00.14	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.18 00.14	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.18 00.14	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.18 00.14	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.18 00.14	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.18 00.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	80-120	01.17.18 00.14	
4-Bromofluorobenzene	460-00-4	89	%	80-120	01.17.18 00.14	

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Sample Id:	**SB1 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-006	Date Collected:	01.10.18 16.00	Sample Depth:	2'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	01.18.18 19.26	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 14.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 14.42	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 14.42	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 14.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-135	01.16.18 14.42	
o-Terphenyl	84-15-1	73	%	70-135	01.16.18 14.42	

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Sample Id:	**SB1 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-006	Date Collected:	01.10.18 16.00	Sample Depth:	2'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.18 00.33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.18 00.33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.18 00.33	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.17.18 00.33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.18 00.33	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.18 00.33	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.18 00.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	80-120	01.17.18 00.33	
4-Bromofluorobenzene	460-00-4	90	%	80-120	01.17.18 00.33	

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Sample Id:	**SB1 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-007	Date Collected:	01.10.18 16.10	Sample Depth:	4'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.93	4.93	mg/kg	01.18.18 19.33	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 15.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 15.06	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 15.06	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 15.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-135	01.16.18 15.06	
o-Terphenyl	84-15-1	75	%	70-135	01.16.18 15.06	

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Sample Id:	**SB1 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-007	Date Collected:	01.10.18 16.10	Sample Depth:	4'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.18 00.52	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.18 00.52	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.18 00.52	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.18 00.52	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.18 00.52	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.18 00.52	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.18 00.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	80-120	01.17.18 00.52	
1,4-Difluorobenzene	540-36-3	95	%	80-120	01.17.18 00.52	

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Sample Id:	**SB1 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-008	Date Collected:	01.10.18 16.20	Sample Depth:	6'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.94	4.94	mg/kg	01.18.18 19.54	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 15.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 15.31	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 15.31	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 15.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-135	01.16.18 15.31	
o-Terphenyl	84-15-1	76	%	70-135	01.16.18 15.31	

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Sample Id:	**SB1 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-008	Date Collected:	01.10.18 16.20	Sample Depth:	6'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.17.18 01.12	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.17.18 01.12	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.17.18 01.12	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.17.18 01.12	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.17.18 01.12	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.17.18 01.12	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.17.18 01.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	80-120	01.17.18 01.12	
1,4-Difluorobenzene	540-36-3	99	%	80-120	01.17.18 01.12	

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Sample Id:	**SB1 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-009	Date Collected:	01.10.18 16.30	Sample Depth:	8'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	01.18.18 20.01	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 15.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 15.55	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 15.55	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 15.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-135	01.16.18 15.55	
o-Terphenyl	84-15-1	76	%	70-135	01.16.18 15.55	

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Sample Id:	**SB1 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-009	Date Collected:	01.10.18 16.30	Sample Depth:	8'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.18 01.29	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.18 01.29	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.18 01.29	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.18 01.29	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.18 01.29	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.18 01.29	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.18 01.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	80-120	01.17.18 01.29	
1,4-Difluorobenzene	540-36-3	97	%	80-120	01.17.18 01.29	

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Sample Id:	**SB1 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-010	Date Collected:	01.10.18 16.40	Sample Depth:	10'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	01.18.18 20.22	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 16.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 16.21	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 16.21	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 16.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-135	01.16.18 16.21	
o-Terphenyl	84-15-1	71	%	70-135	01.16.18 16.21	

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Sample Id:	**SB1 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-010	Date Collected:	01.10.18 16.40	Sample Depth:	10'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.18 01.48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.18 01.48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.18 01.48	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.17.18 01.48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.18 01.48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.18 01.48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.18 01.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	80-120	01.17.18 01.48	
4-Bromofluorobenzene	460-00-4	88	%	80-120	01.17.18 01.48	

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Sample Id:	**SB2 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-011	Date Collected:	01.11.18 08.00	Sample Depth:	2'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.92	4.92	mg/kg	01.18.18 20.29	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 17.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 17.34	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 17.34	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 17.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-135	01.16.18 17.34	
o-Terphenyl	84-15-1	75	%	70-135	01.16.18 17.34	

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Sample Id:	**SB2 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-011	Date Collected:	01.11.18 08.00	Sample Depth:	2'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.17.18 02.45	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.17.18 02.45	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.17.18 02.45	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.17.18 02.45	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.17.18 02.45	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.17.18 02.45	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.17.18 02.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	80-120	01.17.18 02.45	
4-Bromofluorobenzene	460-00-4	90	%	80-120	01.17.18 02.45	

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Sample Id:	**SB2 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-012	Date Collected:	01.11.18 08.10	Sample Depth:	4'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	01.18.18 20.36	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 17.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 17.59	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 17.59	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 17.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	75	%	70-135	01.16.18 17.59	
o-Terphenyl	84-15-1	75	%	70-135	01.16.18 17.59	

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Sample Id:	**SB2 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-012	Date Collected:	01.11.18 08.10	Sample Depth:	4'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.17.18 03.04	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.18 03.04	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.18 03.04	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.18 03.04	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.17.18 03.04	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.17.18 03.04	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.17.18 03.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	80-120	01.17.18 03.04	
1,4-Difluorobenzene	540-36-3	94	%	80-120	01.17.18 03.04	

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Sample Id:	**SB2 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-013	Date Collected:	01.11.18 08.20	Sample Depth:	6'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.94	4.94	mg/kg	01.18.18 20.43	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 18.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 18.24	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 18.24	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 18.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	75	%	70-135	01.16.18 18.24	
o-Terphenyl	84-15-1	77	%	70-135	01.16.18 18.24	

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Sample Id:	**SB2 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-013	Date Collected:	01.11.18 08.20	Sample Depth:	6'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.17.18 03.23	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.17.18 03.23	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.17.18 03.23	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.17.18 03.23	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.17.18 03.23	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.17.18 03.23	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.17.18 03.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	80-120	01.17.18 03.23	
1,4-Difluorobenzene	540-36-3	99	%	80-120	01.17.18 03.23	

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Sample Id:	**SB2 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-014	Date Collected:	01.11.18 08.30	Sample Depth:	8'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	01.18.18 20.50	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 18.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 18.50	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 18.50	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 18.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	01.16.18 18.50	
o-Terphenyl	84-15-1	82	%	70-135	01.16.18 18.50	

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Sample Id:	**SB2 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-014	Date Collected:	01.11.18 08.30	Sample Depth:	8'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.18 03.41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.18 03.41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.18 03.41	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.18 03.41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.18 03.41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.18 03.41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.18 03.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	80-120	01.17.18 03.41	
1,4-Difluorobenzene	540-36-3	97	%	80-120	01.17.18 03.41	

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Sample Id:	**SB2 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-015	Date Collected:	01.11.18 08.40	Sample Depth:	10'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	01.18.18 20.57	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 19.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 19.15	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 19.15	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 19.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	01.16.18 19.15	
o-Terphenyl	84-15-1	82	%	70-135	01.16.18 19.15	

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Sample Id:	**SB2 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-015	Date Collected:	01.11.18 08.40	Sample Depth:	10'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.18 04.00	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.18 04.00	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.18 04.00	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.18 04.00	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.18 04.00	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.18 04.00	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.18 04.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	80-120	01.17.18 04.00	
1,4-Difluorobenzene	540-36-3	96	%	80-120	01.17.18 04.00	

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Sample Id:	**SB3 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-016	Date Collected:	01.11.18 09.00	Sample Depth:	2'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 16.15	Basis:	Wet Weight
Seq Number:	3038661				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2980**	24.8	mg/kg	01.18.18 21.04		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 19.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 19.40	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 19.40	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 19.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	01.16.18 19.40	
o-Terphenyl	84-15-1	80	%	70-135	01.16.18 19.40	

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Sample Id:	**SB3 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-016	Date Collected:	01.11.18 09.00	Sample Depth:	2'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.18 04.19	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.18 04.19	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.18 04.19	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.18 04.19	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.18 04.19	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.18 04.19	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.18 04.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	80-120	01.17.18 04.19	
1,4-Difluorobenzene	540-36-3	96	%	80-120	01.17.18 04.19	

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1RP-4860

Sample Id:	**SB3 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-017	Date Collected:	01.11.18 09.10	Sample Depth:	4'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2700**	24.7	mg/kg	01.18.18 22.06		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 20.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 20.05	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 20.05	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 20.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-135	01.16.18 20.05	
o-Terphenyl	84-15-1	79	%	70-135	01.16.18 20.05	

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Sample Id:	**SB3 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-017	Date Collected:	01.11.18 09.10	Sample Depth:	4'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.18 04.38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.18 04.38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.18 04.38	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.17.18 04.38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.18 04.38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.18 04.38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.18 04.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	80-120	01.17.18 04.38	
4-Bromofluorobenzene	460-00-4	91	%	80-120	01.17.18 04.38	

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Sample Id:	**SB3 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-018	Date Collected:	01.11.18 09.20	Sample Depth:	6'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2880**	24.9	mg/kg	01.18.18 22.13		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 20.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 20.31	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 20.31	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 20.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	01.16.18 20.31	
o-Terphenyl	84-15-1	86	%	70-135	01.16.18 20.31	

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Sample Id:	**SB3 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-018	Date Collected:	01.11.18 09.20	Sample Depth:	6'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.18 04.57	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.18 04.57	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.18 04.57	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.18 04.57	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.18 04.57	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.18 04.57	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.18 04.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	80-120	01.17.18 04.57	
1,4-Difluorobenzene	540-36-3	99	%	80-120	01.17.18 04.57	

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Sample Id:	**SB3 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-019	Date Collected:	01.11.18 09.30	Sample Depth:	8'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**246**	4.97	mg/kg	01.18.18 21.46		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 20.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 20.55	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 20.55	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 20.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	01.16.18 20.55	
o-Terphenyl	84-15-1	88	%	70-135	01.16.18 20.55	

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Sample Id:	**SB3 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-019	Date Collected:	01.11.18 09.30	Sample Depth:	8'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.16.18 17.00	Basis:	Wet Weight
Seq Number:	3038415				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.17.18 05.16	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.18 05.16	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.18 05.16	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.18 05.16	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.17.18 05.16	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.17.18 05.16	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.17.18 05.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	80-120	01.17.18 05.16	
1,4-Difluorobenzene	540-36-3	99	%	80-120	01.17.18 05.16	

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Sample Id:	**SB3 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-020	Date Collected:	01.11.18 09.40	Sample Depth:	10'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**483**	4.99	mg/kg	01.18.18 22.20		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 10.00	Basis:	Wet Weight
Seq Number:	3038510				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.16.18 21.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.16.18 21.20	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.16.18 21.20	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.16.18 21.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	01.16.18 21.20	
o-Terphenyl	84-15-1	85	%	70-135	01.16.18 21.20	

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Sample Id:	**SB3 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-020	Date Collected:	01.11.18 09.40	Sample Depth:	10'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.18.18 08.00	Basis:	Wet Weight
Seq Number:	3038608				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.18 13.35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.18 13.35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.18 13.35	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.18.18 13.35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.18 13.35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.18 13.35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.18 13.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	80-120	01.18.18 13.35	
1,4-Difluorobenzene	540-36-3	97	%	80-120	01.18.18 13.35	

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Sample Id:	**SB4 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-021	Date Collected:	01.11.18 10.00	Sample Depth:	2'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2960**	24.8	mg/kg	01.18.18 22.27		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 16.00	Basis:	Wet Weight
Seq Number:	3038511				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.17.18 03.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.17.18 03.24	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.17.18 03.24	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.17.18 03.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	01.17.18 03.24	
o-Terphenyl	84-15-1	88	%	70-135	01.17.18 03.24	

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Sample Id:	**SB4 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-021	Date Collected:	01.11.18 10.00	Sample Depth:	2'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.17.18 20.35	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.17.18 20.35	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.17.18 20.35	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.17.18 20.35	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.17.18 20.35	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.17.18 20.35	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.17.18 20.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	92	%	80-120	01.17.18 20.35	
4-Bromofluorobenzene	460-00-4	85	%	80-120	01.17.18 20.35	

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Sample Id:	**SB4 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-022	Date Collected:	01.11.18 10.10	Sample Depth:	4'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6060**	49.8	mg/kg	01.18.18 22.48		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 16.00	Basis:	Wet Weight
Seq Number:	3038511				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.17.18 07.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.17.18 07.17	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.17.18 07.17	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.17.18 07.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	01.17.18 07.17	
o-Terphenyl	84-15-1	104	%	70-135	01.17.18 07.17	

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Sample Id:	**SB4 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-022	Date Collected:	01.11.18 10.10	Sample Depth:	4'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.18 20.55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.18 20.55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.18 20.55	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.18 20.55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.18 20.55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.18 20.55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.18 20.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	82	%	80-120	01.17.18 20.55	
4-Bromofluorobenzene	460-00-4	82	%	80-120	01.17.18 20.55	

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Sample Id:	**SB4 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-023	Date Collected:	01.11.18 10.20	Sample Depth:	6'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1120**	4.98	mg/kg	01.18.18 22.55		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 16.00	Basis:	Wet Weight
Seq Number:	3038511				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.17.18 07.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.17.18 07.39	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.17.18 07.39	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.17.18 07.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	01.17.18 07.39	
o-Terphenyl	84-15-1	91	%	70-135	01.17.18 07.39	

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Sample Id:	**SB4 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-023	Date Collected:	01.11.18 10.20	Sample Depth:	6'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.18 21.15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.18 21.15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.18 21.15	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.17.18 21.15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.18 21.15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.18 21.15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.18 21.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	80-120	01.17.18 21.15	
1,4-Difluorobenzene	540-36-3	97	%	80-120	01.17.18 21.15	

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Sample Id:	**SB4 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-024	Date Collected:	01.11.18 10.30	Sample Depth:	8'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**215**	4.97	mg/kg	01.18.18 23.02		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 16.00	Basis:	Wet Weight
Seq Number:	3038511				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.17.18 08.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.17.18 08.01	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.17.18 08.01	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.17.18 08.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	01.17.18 08.01	
o-Terphenyl	84-15-1	83	%	70-135	01.17.18 08.01	

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Sample Id:	**SB4 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-024	Date Collected:	01.11.18 10.30	Sample Depth:	8'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.18 21.35	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.18 21.35	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.18 21.35	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.18 21.35	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.18 21.35	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.18 21.35	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.18 21.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	80-120	01.17.18 21.35	
4-Bromofluorobenzene	460-00-4	81	%	80-120	01.17.18 21.35	

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1RP-4860

Sample Id:	**SB4 8-10 (1)**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-025	Date Collected:	01.11.18 10.40	Sample Depth:	10'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**549**	4.97	mg/kg	01.18.18 23.09		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.16.18 16.00	Basis:	Wet Weight
Seq Number:	3038511				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.17.18 08.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.17.18 08.23	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.17.18 08.23	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.17.18 08.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	01.17.18 08.23	
o-Terphenyl	84-15-1	89	%	70-135	01.17.18 08.23	

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Sample Id:	**SB4 8-10 (1)**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-025	Date Collected:	01.11.18 10.40	Sample Depth:	10'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.18 21.54	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.18 21.54	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.18 21.54	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.18 21.54	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.18 21.54	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.18 21.54	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.18 21.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	80-120	01.17.18 21.54	
1,4-Difluorobenzene	540-36-3	100	%	80-120	01.17.18 21.54	

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1RP-4860

Sample Id:	**SB4 8-10 (2)**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-026	Date Collected:	01.11.18 10.40	Sample Depth:	10'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**127**	4.98	mg/kg	01.18.18 23.23		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 09.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 09.25	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 09.25	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 09.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	01.18.18 09.25	
o-Terphenyl	84-15-1	114	%	70-135	01.18.18 09.25	

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Sample Id:	**SB4 8-10 (2)**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-026	Date Collected:	01.11.18 10.40	Sample Depth:	10'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.17.18 22.14	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.17.18 22.14	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.17.18 22.14	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.17.18 22.14	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.17.18 22.14	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.17.18 22.14	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.17.18 22.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	80-120	01.17.18 22.14	
1,4-Difluorobenzene	540-36-3	98	%	80-120	01.17.18 22.14	

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Sample Id:	**SB5 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-027	Date Collected:	01.11.18 10.45	Sample Depth:	2'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2770**	25.0	mg/kg	01.18.18 23.16		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 10.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 10.25	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 10.25	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 10.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	01.18.18 10.25	
o-Terphenyl	84-15-1	92	%	70-135	01.18.18 10.25	

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Sample Id:	**SB5 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-027	Date Collected:	01.11.18 10.45	Sample Depth:	2'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.18.18 08.00	Basis:	Wet Weight
Seq Number:	3038608				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00341	0.00341	mg/kg	01.18.18 16.50	U	1
Toluene	108-88-3	<0.00341	0.00341	mg/kg	01.18.18 16.50	U	1
Ethylbenzene	100-41-4	<0.00341	0.00341	mg/kg	01.18.18 16.50	U	1
m,p-Xylenes	179601-23-1	<0.00683	0.00683	mg/kg	01.18.18 16.50	U	1
o-Xylene	95-47-6	<0.00341	0.00341	mg/kg	01.18.18 16.50	U	1
Total Xylenes	1330-20-7	<0.00341	0.00341	mg/kg	01.18.18 16.50	U	1
Total BTEX		<0.00341	0.00341	mg/kg	01.18.18 16.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	80-120	01.18.18 16.50	
4-Bromofluorobenzene	460-00-4	86	%	80-120	01.18.18 16.50	

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Sample Id:	**SB5 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-028	Date Collected:	01.11.18 10.50	Sample Depth:	4'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**938**	4.96	mg/kg	01.18.18 23.44		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 10.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 10.45	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 10.45	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 10.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	01.18.18 10.45	
o-Terphenyl	84-15-1	91	%	70-135	01.18.18 10.45	

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Sample Id:	**SB5 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-028	Date Collected:	01.11.18 10.50	Sample Depth:	4'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.18 22.53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.18 22.53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.18 22.53	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.18 22.53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.18 22.53	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.18 22.53	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.18 22.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	80-120	01.17.18 22.53	
1,4-Difluorobenzene	540-36-3	99	%	80-120	01.17.18 22.53	

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Sample Id:	**SB5 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-029	Date Collected:	01.11.18 10.55	Sample Depth:	6'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**19.0**	5.00	mg/kg	01.18.18 23.51		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 11.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 11.05	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 11.05	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 11.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	01.18.18 11.05	
o-Terphenyl	84-15-1	98	%	70-135	01.18.18 11.05	

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Sample Id:	**SB5 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-029	Date Collected:	01.11.18 10.55	Sample Depth:	6'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.18 23.13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.18 23.13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.18 23.13	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.17.18 23.13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.18 23.13	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.18 23.13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.18 23.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	80-120	01.17.18 23.13	
1,4-Difluorobenzene	540-36-3	97	%	80-120	01.17.18 23.13	

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Sample Id:	**SB5 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-030	Date Collected:	01.11.18 11.00	Sample Depth:	8'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**20.5**	4.97	mg/kg	01.19.18 00.12		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 11.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 11.24	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 11.24	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 11.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	01.18.18 11.24	
o-Terphenyl	84-15-1	96	%	70-135	01.18.18 11.24	

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Sample Id:	**SB5 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-030	Date Collected:	01.11.18 11.00	Sample Depth:	8'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.17.18 23.33	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.18 23.33	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.18 23.33	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.18 23.33	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.17.18 23.33	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.17.18 23.33	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.17.18 23.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	80-120	01.17.18 23.33	
1,4-Difluorobenzene	540-36-3	98	%	80-120	01.17.18 23.33	

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1RP-4860

Sample Id:	**SB5 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-031	Date Collected:	01.11.18 11.05	Sample Depth:	10'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**59.2**	4.98	mg/kg	01.19.18 00.19		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 11.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 11.43	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 11.43	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 11.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	01.18.18 11.43	
o-Terphenyl	84-15-1	91	%	70-135	01.18.18 11.43	

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Sample Id:	**SB5 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-031	Date Collected:	01.11.18 11.05	Sample Depth:	10'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.18 00.32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.18 00.32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.18 00.32	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.18.18 00.32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.18 00.32	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.18 00.32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.18 00.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	80-120	01.18.18 00.32	
4-Bromofluorobenzene	460-00-4	96	%	80-120	01.18.18 00.32	

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Sample Id:	**SB6 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-032	Date Collected:	01.11.18 11.30	Sample Depth:	2'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2760**	24.9	mg/kg	01.19.18 00.26		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 12.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 12.03	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 12.03	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 12.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	01.18.18 12.03	
o-Terphenyl	84-15-1	92	%	70-135	01.18.18 12.03	

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Sample Id:	**SB6 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-032	Date Collected:	01.11.18 11.30	Sample Depth:	2'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.18.18 00.51	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.18.18 00.51	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.18.18 00.51	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.18.18 00.51	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.18.18 00.51	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.18.18 00.51	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.18.18 00.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	80-120	01.18.18 00.51	
1,4-Difluorobenzene	540-36-3	86	%	80-120	01.18.18 00.51	

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Sample Id:	**SB6 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-033	Date Collected:	01.11.18 11.40	Sample Depth:	4'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2700**	24.9	mg/kg	01.19.18 00.33		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 12.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 12.25	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 12.25	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 12.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-135	01.18.18 12.25	
o-Terphenyl	84-15-1	75	%	70-135	01.18.18 12.25	

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Sample Id:	**SB6 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-033	Date Collected:	01.11.18 11.40	Sample Depth:	4'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.18 01.11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.18 01.11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.18 01.11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.18.18 01.11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.18 01.11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.18 01.11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.18 01.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	80-120	01.18.18 01.11	
1,4-Difluorobenzene	540-36-3	98	%	80-120	01.18.18 01.11	

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Sample Id:	**SB6 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-034	Date Collected:	01.11.18 11.50	Sample Depth:	6'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4100**	25.0	mg/kg	01.19.18 00.40		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 12.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 12.45	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 12.45	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 12.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	01.18.18 12.45	
o-Terphenyl	84-15-1	88	%	70-135	01.18.18 12.45	

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Sample Id:	**SB6 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-034	Date Collected:	01.11.18 11.50	Sample Depth:	6'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.18.18 01.31	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.18.18 01.31	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.18.18 01.31	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.18.18 01.31	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.18.18 01.31	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.18.18 01.31	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.18.18 01.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	80-120	01.18.18 01.31	
1,4-Difluorobenzene	540-36-3	100	%	80-120	01.18.18 01.31	

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Sample Id:	**SB6 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-035	Date Collected:	01.11.18 12.00	Sample Depth:	8'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1010**	4.99	mg/kg	01.19.18 00.47		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 13.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 13.04	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 13.04	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 13.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	01.18.18 13.04	
o-Terphenyl	84-15-1	92	%	70-135	01.18.18 13.04	

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Sample Id:	**SB6 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-035	Date Collected:	01.11.18 12.00	Sample Depth:	8'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.18.18 01.51	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.18.18 01.51	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.18.18 01.51	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.18.18 01.51	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.18.18 01.51	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.18.18 01.51	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.18.18 01.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	80-120	01.18.18 01.51	
4-Bromofluorobenzene	460-00-4	96	%	80-120	01.18.18 01.51	

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Sample Id:	**SB6 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-036	Date Collected:	01.11.18 12.10	Sample Depth:	10'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.17.18 17.05	Basis:	Wet Weight
Seq Number:	3038664				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**834**	4.99	mg/kg	01.19.18 00.54		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 14.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 14.06	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 14.06	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 14.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	01.18.18 14.06	
o-Terphenyl	84-15-1	94	%	70-135	01.18.18 14.06	

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Sample Id:	**SB6 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-036	Date Collected:	01.11.18 12.10	Sample Depth:	10'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.18.18 02.10	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.18.18 02.10	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.18.18 02.10	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.18.18 02.10	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.18.18 02.10	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.18.18 02.10	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.18.18 02.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	80-120	01.18.18 02.10	
1,4-Difluorobenzene	540-36-3	100	%	80-120	01.18.18 02.10	

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Sample Id:	**SB7 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-037	Date Collected:	01.11.18 13.00	Sample Depth:	2'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**224**	5.00	mg/kg	01.18.18 09.26		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	01.18.18 14.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	01.18.18 14.25	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	01.18.18 14.25	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	01.18.18 14.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	01.18.18 14.25	
o-Terphenyl	84-15-1	92	%	70-135	01.18.18 14.25	

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Sample Id:	**SB7 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-037	Date Collected:	01.11.18 13.00	Sample Depth:	2'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.18.18 02.30	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.18.18 02.30	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.18.18 02.30	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.18.18 02.30	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.18.18 02.30	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.18.18 02.30	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.18.18 02.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	80-120	01.18.18 02.30	
1,4-Difluorobenzene	540-36-3	102	%	80-120	01.18.18 02.30	

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Sample Id:	**SB7 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-038	Date Collected:	01.11.18 13.10	Sample Depth:	4'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**19.4**	4.97	mg/kg	01.18.18 09.47		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 14.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 14.45	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 14.45	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 14.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	01.18.18 14.45	
o-Terphenyl	84-15-1	91	%	70-135	01.18.18 14.45	

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Sample Id:	**SB7 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-038	Date Collected:	01.11.18 13.10	Sample Depth:	4'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.18 02.50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.18 02.50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.18 02.50	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.18.18 02.50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.18 02.50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.18 02.50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.18 02.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	80-120	01.18.18 02.50	
1,4-Difluorobenzene	540-36-3	94	%	80-120	01.18.18 02.50	

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Sample Id:	**SB7 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-039	Date Collected:	01.11.18 13.20	Sample Depth:	6'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	01.18.18 09.54	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 15.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 15.04	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 15.04	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 15.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	01.18.18 15.04	
o-Terphenyl	84-15-1	87	%	70-135	01.18.18 15.04	

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Sample Id:	**SB7 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-039	Date Collected:	01.11.18 13.20	Sample Depth:	6'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.18.18 09.27	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.18.18 09.27	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.18.18 09.27	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.18.18 09.27	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.18.18 09.27	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.18.18 09.27	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.18.18 09.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	80-120	01.18.18 09.27	
1,4-Difluorobenzene	540-36-3	92	%	80-120	01.18.18 09.27	

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Sample Id:	**SB7 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-040	Date Collected:	01.11.18 13.30	Sample Depth:	8'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	01.18.18 10.01	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 15.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 15.24	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 15.24	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 15.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	01.18.18 15.24	
o-Terphenyl	84-15-1	82	%	70-135	01.18.18 15.24	

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Sample Id:	**SB7 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-040	Date Collected:	01.11.18 13.30	Sample Depth:	8'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 16.00	Basis:	Wet Weight
Seq Number:	3038602				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.18.18 09.46	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.18.18 09.46	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.18.18 09.46	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.18.18 09.46	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.18.18 09.46	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.18.18 09.46	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.18.18 09.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	80-120	01.18.18 09.46	
4-Bromofluorobenzene	460-00-4	113	%	80-120	01.18.18 09.46	

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Sample Id:	**SB7 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-041	Date Collected:	01.11.18 13.40	Sample Depth:	10'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**43.8**	4.94	mg/kg	01.18.18 10.08		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 15.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 15.44	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 15.44	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 15.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	01.18.18 15.44	
o-Terphenyl	84-15-1	95	%	70-135	01.18.18 15.44	

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Sample Id:	**SB7 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-041	Date Collected:	01.11.18 13.40	Sample Depth:	10'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.18 10.18	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.18 10.18	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.18 10.18	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.18 10.18	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.18 10.18	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.18 10.18	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.18 10.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	80-120	01.17.18 10.18	
4-Bromofluorobenzene	460-00-4	91	%	80-120	01.17.18 10.18	

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Sample Id:	**SB7 10-12**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-042	Date Collected:	01.11.18 13.50	Sample Depth:	12'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**26.3**	4.91	mg/kg	01.18.18 10.29		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 16.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 16.05	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 16.05	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 16.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	01.18.18 16.05	
o-Terphenyl	84-15-1	98	%	70-135	01.18.18 16.05	

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Sample Id:	**SB7 10-12**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-042	Date Collected:	01.11.18 13.50	Sample Depth:	12'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.18 10.37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.18 10.37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.18 10.37	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.17.18 10.37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.18 10.37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.18 10.37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.18 10.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	80-120	01.17.18 10.37	
1,4-Difluorobenzene	540-36-3	89	%	80-120	01.17.18 10.37	

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Sample Id:	**SB7 12-14**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-043	Date Collected:	01.11.18 14.00	Sample Depth:	14'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	01.18.18 10.36	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 16.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 16.25	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 16.25	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 16.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	01.18.18 16.25	
o-Terphenyl	84-15-1	94	%	70-135	01.18.18 16.25	

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Sample Id:	**SB7 12-14**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-043	Date Collected:	01.11.18 14.00	Sample Depth:	14'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.17.18 10.57	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.18 10.57	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.18 10.57	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.18 10.57	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.17.18 10.57	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.17.18 10.57	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.17.18 10.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	80-120	01.17.18 10.57	
4-Bromofluorobenzene	460-00-4	89	%	80-120	01.17.18 10.57	

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Sample Id:	**SB7 14-16**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-044	Date Collected:	01.11.18 14.10	Sample Depth:	16'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	01.18.18 10.43	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 16.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 16.44	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 16.44	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 16.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	01.18.18 16.44	
o-Terphenyl	84-15-1	101	%	70-135	01.18.18 16.44	

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Sample Id:	**SB7 14-16**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-044	Date Collected:	01.11.18 14.10	Sample Depth:	16'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.17.18 11.16	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.17.18 11.16	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.17.18 11.16	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.17.18 11.16	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.17.18 11.16	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.17.18 11.16	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.17.18 11.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	80-120	01.17.18 11.16	
4-Bromofluorobenzene	460-00-4	89	%	80-120	01.17.18 11.16	

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Sample Id:	**SB8 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-045	Date Collected:	01.11.18 14.20	Sample Depth:	2'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**889**	4.99	mg/kg	01.18.18 10.50		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038634				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 17.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 17.03	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 17.03	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 17.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	01.18.18 17.03	
o-Terphenyl	84-15-1	89	%	70-135	01.18.18 17.03	

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Sample Id:	**SB8 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-045	Date Collected:	01.11.18 14.20	Sample Depth:	2'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.18 11.35	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.18 11.35	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.18 11.35	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.18 11.35	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.18 11.35	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.18 11.35	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.18 11.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	80-120	01.17.18 11.35	
4-Bromofluorobenzene	460-00-4	87	%	80-120	01.17.18 11.35	

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Sample Id:	**SB8 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-046	Date Collected:	01.11.18 14.30	Sample Depth:	4'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.92**	4.94	mg/kg	01.18.18 10.57		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038635				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 18.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 18.46	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 18.46	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 18.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	01.18.18 18.46	
o-Terphenyl	84-15-1	85	%	70-135	01.18.18 18.46	

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Sample Id:	**SB8 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-046	Date Collected:	01.11.18 14.30	Sample Depth:	4'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.17.18 11.54	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.17.18 11.54	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.17.18 11.54	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.17.18 11.54	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.17.18 11.54	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.17.18 11.54	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.17.18 11.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	89	%	80-120	01.17.18 11.54	
4-Bromofluorobenzene	460-00-4	84	%	80-120	01.17.18 11.54	

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Sample Id:	**SB8 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-047	Date Collected:	01.11.18 14.40	Sample Depth:	6'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	01.18.18 11.04	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038635				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 19.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 19.45	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 19.45	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 19.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	01.18.18 19.45	
o-Terphenyl	84-15-1	96	%	70-135	01.18.18 19.45	

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Sample Id:	**SB8 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-047	Date Collected:	01.11.18 14.40	Sample Depth:	6'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.18 12.14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.18 12.14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.18 12.14	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.17.18 12.14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.18 12.14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.18 12.14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.18 12.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	80-120	01.17.18 12.14	
1,4-Difluorobenzene	540-36-3	93	%	80-120	01.17.18 12.14	

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Sample Id:	**SB8 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-048	Date Collected:	01.11.18 14.50	Sample Depth:	8'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	01.18.18 11.25	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038635				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 20.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 20.06	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 20.06	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 20.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	01.18.18 20.06	
o-Terphenyl	84-15-1	93	%	70-135	01.18.18 20.06	

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Sample Id:	**SB8 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-048	Date Collected:	01.11.18 14.50	Sample Depth:	8'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.17.18 12.33	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.18 12.33	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.18 12.33	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.18 12.33	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.17.18 12.33	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.17.18 12.33	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.17.18 12.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	80-120	01.17.18 12.33	
1,4-Difluorobenzene	540-36-3	100	%	80-120	01.17.18 12.33	

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Sample Id:	**SB8 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-049	Date Collected:	01.11.18 15.00	Sample Depth:	10'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.92	4.92	mg/kg	01.18.18 11.31	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038635				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 20.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 20.26	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 20.26	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 20.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	01.18.18 20.26	
o-Terphenyl	84-15-1	89	%	70-135	01.18.18 20.26	

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Sample Id:	**SB8 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-049	Date Collected:	01.11.18 15.00	Sample Depth:	10'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.18.18 08.00	Basis:	Wet Weight
Seq Number:	3038608				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.18.18 12.56	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.18.18 12.56	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.18.18 12.56	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.18.18 12.56	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.18.18 12.56	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.18.18 12.56	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.18.18 12.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	80-120	01.18.18 12.56	
4-Bromofluorobenzene	460-00-4	87	%	80-120	01.18.18 12.56	

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Sample Id:	**SB8 10-12 (1)**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-050	Date Collected:	01.11.18 15.10	Sample Depth:	12'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**105**	4.93	mg/kg	01.18.18 12.06		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038635				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 20.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 20.45	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 20.45	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 20.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	01.18.18 20.45	
o-Terphenyl	84-15-1	94	%	70-135	01.18.18 20.45	

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Sample Id:	**SB8 10-12 (1)**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-050	Date Collected:	01.11.18 15.10	Sample Depth:	12'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.18.18 08.00	Basis:	Wet Weight
Seq Number:	3038608				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.18.18 13.16	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.18.18 13.16	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.18.18 13.16	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.18.18 13.16	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.18.18 13.16	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.18.18 13.16	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.18.18 13.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	80-120	01.18.18 13.16	
1,4-Difluorobenzene	540-36-3	97	%	80-120	01.18.18 13.16	

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Sample Id:	**SB8 10-12 (2)**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-051	Date Collected:	01.11.18 15.20	Sample Depth:	12'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	01.18.18 12.13	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038635				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 21.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 21.05	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 21.05	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 21.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	01.18.18 21.05	
o-Terphenyl	84-15-1	97	%	70-135	01.18.18 21.05	

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Sample Id:	**SB8 10-12 (2)**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-051	Date Collected:	01.11.18 15.20	Sample Depth:	12'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.18 14.17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.18 14.17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.18 14.17	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.18 14.17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.18 14.17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.18 14.17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.18 14.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	80-120	01.17.18 14.17	
1,4-Difluorobenzene	540-36-3	104	%	80-120	01.17.18 14.17	

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Sample Id:	**SB8 12-14**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-052	Date Collected:	01.11.18 15.30	Sample Depth:	14'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	01.18.18 12.20	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038635				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 21.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 21.26	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 21.26	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 21.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	01.18.18 21.26	
o-Terphenyl	84-15-1	90	%	70-135	01.18.18 21.26	

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Sample Id:	**SB8 12-14**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-052	Date Collected:	01.11.18 15.30	Sample Depth:	14'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.18 14.36	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.18 14.36	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.18 14.36	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.18 14.36	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.18 14.36	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.18 14.36	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.18 14.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	80-120	01.17.18 14.36	
1,4-Difluorobenzene	540-36-3	94	%	80-120	01.17.18 14.36	

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Sample Id:	**SB8 14-16**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-053	Date Collected:	01.11.18 15.40	Sample Depth:	16'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.94	4.94	mg/kg	01.18.18 12.27	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038635				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 21.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 21.49	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 21.49	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 21.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	01.18.18 21.49	
o-Terphenyl	84-15-1	89	%	70-135	01.18.18 21.49	

Certificate of Analytical Results 573594

OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**SB8 14-16**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-053	Date Collected:	01.11.18 15.40	Sample Depth:	16'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.17.18 14.56	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.17.18 14.56	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.17.18 14.56	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.17.18 14.56	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.17.18 14.56	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.17.18 14.56	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.17.18 14.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	80-120	01.17.18 14.56	
1,4-Difluorobenzene	540-36-3	96	%	80-120	01.17.18 14.56	

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OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**SB9 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-054	Date Collected:	01.11.18 15.50	Sample Depth:	2'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.91	4.91	mg/kg	01.18.18 12.34	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038635				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 22.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 22.10	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 22.10	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 22.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-135	01.18.18 22.10	
o-Terphenyl	84-15-1	76	%	70-135	01.18.18 22.10	

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OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**SB9 0-2**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-054	Date Collected:	01.11.18 15.50	Sample Depth:	2'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.17.18 15.15	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.17.18 15.15	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.17.18 15.15	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.17.18 15.15	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.17.18 15.15	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.17.18 15.15	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.17.18 15.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	80-120	01.17.18 15.15	
1,4-Difluorobenzene	540-36-3	96	%	80-120	01.17.18 15.15	

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OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**SB9 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-055	Date Collected:	01.11.18 16.00	Sample Depth:	4'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.94	4.94	mg/kg	01.18.18 12.41	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038635				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 22.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 22.30	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 22.30	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 22.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	01.18.18 22.30	
o-Terphenyl	84-15-1	83	%	70-135	01.18.18 22.30	

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OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**SB9 2-4**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-055	Date Collected:	01.11.18 16.00	Sample Depth:	4'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.17.18 15.34	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.18 15.34	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.18 15.34	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.18 15.34	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.17.18 15.34	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.17.18 15.34	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.17.18 15.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	80-120	01.17.18 15.34	
1,4-Difluorobenzene	540-36-3	100	%	80-120	01.17.18 15.34	

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OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**SB9 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-056	Date Collected:	01.11.18 16.10	Sample Depth:	6'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	OJS			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 08.35	Basis:	Wet Weight
Seq Number:	3038665				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.94	4.94	mg/kg	01.18.18 12.48	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038635				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 23.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 23.32	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 23.32	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 23.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	01.18.18 23.32	
o-Terphenyl	84-15-1	90	%	70-135	01.18.18 23.32	

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OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**SB9 4-6**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-056	Date Collected:	01.11.18 16.10	Sample Depth:	6'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.18 15.54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.18 15.54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.18 15.54	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.18 15.54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.18 15.54	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.18 15.54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.18 15.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	80-120	01.17.18 15.54	
1,4-Difluorobenzene	540-36-3	95	%	80-120	01.17.18 15.54	

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OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**SB9 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-057	Date Collected:	01.11.18 16.20	Sample Depth:	8'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 16.00	Basis:	Wet Weight
Seq Number:	3038668				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.91	4.91	mg/kg	01.19.18 01.57	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038635				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.18.18 23.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.18.18 23.52	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.18.18 23.52	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.18.18 23.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-135	01.18.18 23.52	
o-Terphenyl	84-15-1	77	%	70-135	01.18.18 23.52	

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OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**SB9 6-8**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-057	Date Collected:	01.11.18 16.20	Sample Depth:	8'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.17.18 09.00	Basis:	Wet Weight
Seq Number:	3038601				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.18 16.20	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.18 16.20	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.18 16.20	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.18 16.20	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.18 16.20	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.18 16.20	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.18 16.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	80-120	01.17.18 16.20	
1,4-Difluorobenzene	540-36-3	98	%	80-120	01.17.18 16.20	

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OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**SB9 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-058	Date Collected:	01.11.18 16.30	Sample Depth:	10'

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	LRI			% Moisture:	
Analyst:	OJS	Date Prep:	01.18.18 16.00	Basis:	Wet Weight
Seq Number:	3038668				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	01.19.18 02.04	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	01.18.18 07.00	Basis:	Wet Weight
Seq Number:	3038635				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.19.18 00.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.19.18 00.12	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.19.18 00.12	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.19.18 00.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-135	01.19.18 00.12	
o-Terphenyl	84-15-1	73	%	70-135	01.19.18 00.12	

Certificate of Analytical Results 573594

OWL SWD Operating LLC, Dallas, TX

1RP-4860

Sample Id:	**SB9 8-10**	Matrix:	Soil	Date Received:	01.16.18 09.00
Lab Sample Id:	573594-058	Date Collected:	01.11.18 16.30	Sample Depth:	10'
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	01.18.18 08.00	Basis:	Wet Weight
Seq Number:	3038608				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.18 17.09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.18 17.09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.18 17.09	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.18.18 17.09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.18 17.09	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.18 17.09	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.18 17.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	80-120	01.18.18 17.09	
1,4-Difluorobenzene	540-36-3	95	%	80-120	01.18.18 17.09	

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 573594

OWL SWD Operating LLC

1RP-4860

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3038661 Matrix: Solid Date Prep: 01.17.18
MB Sample Id: 7637630-1-BLK LCS Sample Id: 7637630-1-BKS LCSD Sample Id: 7637630-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	260	104	260	104	90-110	0	20	mg/kg	01.18.18 17:41	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3038664 Matrix: Solid Date Prep: 01.17.18
MB Sample Id: 7637631-1-BLK LCS Sample Id: 7637631-1-BKS LCSD Sample Id: 7637631-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	262	105	261	104	90-110	0	20	mg/kg	01.18.18 21:32	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3038665 Matrix: Solid Date Prep: 01.18.18
MB Sample Id: 7637632-1-BLK LCS Sample Id: 7637632-1-BKS LCSD Sample Id: 7637632-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	250	100	251	100	90-110	0	20	mg/kg	01.18.18 09:12	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3038668 Matrix: Solid Date Prep: 01.18.18
MB Sample Id: 7637692-1-BLK LCS Sample Id: 7637692-1-BKS LCSD Sample Id: 7637692-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	243	97	245	98	90-110	1	20	mg/kg	01.19.18 01:22	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3038661 Matrix: Soil Date Prep: 01.17.18
Parent Sample Id: 573468-003 MS Sample Id: 573468-003 S MSD Sample Id: 573468-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	929	247	1120	77	1120	77	90-110	0	20	mg/kg	01.18.18 18:02	X

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Final 1.000

QC Summary 573594

OWL SWD Operating LLC

1RP-4860

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3038661 Matrix: Soil Date Prep: 01.17.18
Parent Sample Id: 573594-007 MS Sample Id: 573594-007 S MSD Sample Id: 573594-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.93	247	274	111	265	107	90-110	3	20	mg/kg	01.18.18 19:40	X

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3038664 Matrix: Soil Date Prep: 01.17.18
Parent Sample Id: 573594-019 MS Sample Id: 573594-019 S MSD Sample Id: 573594-019 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	246	249	504	104	519	110	90-110	3	20	mg/kg	01.18.18 21:52	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3038664 Matrix: Soil Date Prep: 01.17.18
Parent Sample Id: 573594-026 MS Sample Id: 573594-026 S MSD Sample Id: 573594-026 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	127	249	394	107	398	109	90-110	1	20	mg/kg	01.18.18 23:30	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3038665 Matrix: Soil Date Prep: 01.18.18
Parent Sample Id: 573594-037 MS Sample Id: 573594-037 S MSD Sample Id: 573594-037 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	224	250	470	98	469	98	90-110	0	20	mg/kg	01.18.18 09:33	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3038665 Matrix: Soil Date Prep: 01.18.18
Parent Sample Id: 573594-047 MS Sample Id: 573594-047 S MSD Sample Id: 573594-047 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.99	250	248	99	258	103	90-110	4	20	mg/kg	01.18.18 11:11	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 573594

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Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3038668 — Matrix: Soil — Date Prep: 01.18.18
Parent Sample Id: 573493-001 — MS Sample Id: 573493-001 S — MSD Sample Id: 573493-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	72.2	249	319	99	316	98	90-110	1	20	mg/kg	01.19.18 01:43	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3038668 — Matrix: Soil — Date Prep: 01.18.18
Parent Sample Id: 573873-003 — MS Sample Id: 573873-003 S — MSD Sample Id: 573873-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	250	100	250	100	90-110	0	20	mg/kg	01.19.18 03:20	

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3038510 — Matrix: Solid — Date Prep: 01.16.18
MB Sample Id: 7637573-1-BLK — LCS Sample Id: 7637573-1-BKS — LCSD Sample Id: 7637573-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	828	83	803	80	70-135	3	35	mg/kg	01.16.18 11:02	
Diesel Range Organics (DRO)	<15.0	1000	869	87	802	80	70-135	8	35	mg/kg	01.16.18 11:02	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	81		84		77		70-135	%	01.16.18 11:02
o-Terphenyl	85		80		73		70-135	%	01.16.18 11:02

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3038511 — Matrix: Solid — Date Prep: 01.16.18
MB Sample Id: 7637574-1-BLK — LCS Sample Id: 7637574-1-BKS — LCSD Sample Id: 7637574-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	923	92	866	87	70-135	6	35	mg/kg	01.16.18 22:31	
Diesel Range Organics (DRO)	<15.0	1000	974	97	925	93	70-135	5	35	mg/kg	01.16.18 22:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		91		89		70-135	%	01.16.18 22:31
o-Terphenyl	100		89		89		70-135	%	01.16.18 22:31

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Final 1.000

QC Summary 573594

OWL SWD Operating LLC

1RP-4860

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3038634 — Matrix: Solid — Date Prep: 01.18.18
MB Sample Id: 7637705-1-BLK — LCS Sample Id: 7637705-1-BKS — LCSD Sample Id: 7637705-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	969	97	989	99	70-135	2	35	mg/kg	01.18.18 08:45	
Diesel Range Organics (DRO)	<15.0	1000	1030	103	1060	106	70-135	3	35	mg/kg	01.18.18 08:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	83		97		99		70-135	%	01.18.18 08:45
o-Terphenyl	92		98		96		70-135	%	01.18.18 08:45

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3038635 — Matrix: Solid — Date Prep: 01.18.18
MB Sample Id: 7637706-1-BLK — LCS Sample Id: 7637706-1-BKS — LCSD Sample Id: 7637706-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	904	90	831	83	70-135	8	35	mg/kg	01.18.18 18:04	
Diesel Range Organics (DRO)	<15.0	1000	1000	100	898	90	70-135	11	35	mg/kg	01.18.18 18:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		96		89		70-135	%	01.18.18 18:04
o-Terphenyl	102		96		90		70-135	%	01.18.18 18:04

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3038510 — Matrix: Soil — Date Prep: 01.16.18
Parent Sample Id: 573594-001 — MS Sample Id: 573594-001 S — MSD Sample Id: 573594-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	815	82	838	84	70-135	3	35	mg/kg	01.16.18 12:21	
Diesel Range Organics (DRO)	<15.0	999	889	89	839	84	70-135	6	35	mg/kg	01.16.18 12:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	82		75		70-135	%	01.16.18 12:21
o-Terphenyl	73		72		70-135	%	01.16.18 12:21

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 573594

OWL SWD Operating LLC

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Analytical Method: TPH By SW8015 Mod | Prep Method: TX1005P
Seq Number: 3038511 | Matrix: Soil | Date Prep: 01.16.18
Parent Sample Id: 572902-001 | MS Sample Id: 572902-001 S | MSD Sample Id: 572902-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	998	836	84	837	84	70-135	0	35	mg/kg	01.16.18 23:40	
Diesel Range Organics (DRO)	<15.0	998	965	97	964	96	70-135	0	35	mg/kg	01.16.18 23:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	85		83		70-135	%	01.16.18 23:40
o-Terphenyl	72		77		70-135	%	01.16.18 23:40

Analytical Method: TPH By SW8015 Mod | Prep Method: TX1005P
Seq Number: 3038634 | Matrix: Soil | Date Prep: 01.18.18
Parent Sample Id: 573594-026 | MS Sample Id: 573594-026 S | MSD Sample Id: 573594-026 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	999	100	1070	107	70-135	7	35	mg/kg	01.18.18 09:45	
Diesel Range Organics (DRO)	<15.0	1000	1070	107	1160	116	70-135	8	35	mg/kg	01.18.18 09:45	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		103		70-135	%	01.18.18 09:45
o-Terphenyl	100		103		70-135	%	01.18.18 09:45

Analytical Method: TPH By SW8015 Mod | Prep Method: TX1005P
Seq Number: 3038635 | Matrix: Soil | Date Prep: 01.18.18
Parent Sample Id: 573594-046 | MS Sample Id: 573594-046 S | MSD Sample Id: 573594-046 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	953	95	937	94	70-135	2	35	mg/kg	01.18.18 19:05	
Diesel Range Organics (DRO)	<15.0	999	953	95	958	96	70-135	1	35	mg/kg	01.18.18 19:05	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	87		88		70-135	%	01.18.18 19:05
o-Terphenyl	83		86		70-135	%	01.18.18 19:05

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 573594

OWL SWD Operating LLC

1RP-4860

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3038415 — Matrix: Solid — Date Prep: 01.16.18
MB Sample Id: 7637561-1-BLK — LCS Sample Id: 7637561-1-BKS — LCSD Sample Id: 7637561-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0892	90	0.0851	85	70-130	5	35	mg/kg	01.16.18 20:41	
Toluene	<0.00199	0.0994	0.0860	87	0.0819	82	70-130	5	35	mg/kg	01.16.18 20:41	
Ethylbenzene	<0.00199	0.0994	0.0825	83	0.0789	79	71-129	4	35	mg/kg	01.16.18 20:41	
m,p-Xylenes	<0.00398	0.199	0.164	82	0.158	79	70-135	4	35	mg/kg	01.16.18 20:41	
o-Xylene	<0.00199	0.0994	0.0834	84	0.0809	81	71-133	3	35	mg/kg	01.16.18 20:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		103		101		80-120	%	01.16.18 20:41
4-Bromofluorobenzene	86		96		96		80-120	%	01.16.18 20:41

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3038601 — Matrix: Solid — Date Prep: 01.17.18
MB Sample Id: 7637671-1-BLK — LCS Sample Id: 7637671-1-BKS — LCSD Sample Id: 7637671-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0755	76	0.0776	78	70-130	3	35	mg/kg	01.17.18 08:04	
Toluene	<0.00200	0.0998	0.0757	76	0.0790	79	70-130	4	35	mg/kg	01.17.18 08:04	
Ethylbenzene	<0.00200	0.0998	0.0784	79	0.0816	82	71-129	4	35	mg/kg	01.17.18 08:04	
m,p-Xylenes	<0.00399	0.200	0.156	78	0.163	82	70-135	4	35	mg/kg	01.17.18 08:04	
o-Xylene	<0.00200	0.0998	0.0808	81	0.0847	85	71-133	5	35	mg/kg	01.17.18 08:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		107		101		80-120	%	01.17.18 08:04
4-Bromofluorobenzene	94		101		101		80-120	%	01.17.18 08:04

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3038602 — Matrix: Solid — Date Prep: 01.17.18
MB Sample Id: 7637673-1-BLK — LCS Sample Id: 7637673-1-BKS — LCSD Sample Id: 7637673-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0800	80	0.0833	82	70-130	4	35	mg/kg	01.17.18 18:16	
Toluene	<0.00200	0.100	0.0786	79	0.0823	81	70-130	5	35	mg/kg	01.17.18 18:16	
Ethylbenzene	<0.00200	0.100	0.0786	79	0.0817	81	71-129	4	35	mg/kg	01.17.18 18:16	
m,p-Xylenes	<0.00401	0.200	0.157	79	0.163	81	70-135	4	35	mg/kg	01.17.18 18:16	
o-Xylene	<0.00200	0.100	0.0801	80	0.0839	83	71-133	5	35	mg/kg	01.17.18 18:16	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		104		110		80-120	%	01.17.18 18:16
4-Bromofluorobenzene	94		91		106		80-120	%	01.17.18 18:16

MS/MSD Percent Recovery [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
E = MSD/LCSD Result

QC Summary 573594

OWL SWD Operating LLC

1RP-4860

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3038608 | Matrix: Solid | Date Prep: 01.18.18
MB Sample Id: 7637698-1-BLK | LCS Sample Id: 7637698-1-BKS | LCSD Sample Id: 7637698-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.100	100	0.100	99	70-130	0	35	mg/kg	01.18.18 10:24	
Toluene	<0.00200	0.0998	0.0964	97	0.0977	97	70-130	1	35	mg/kg	01.18.18 10:24	
Ethylbenzene	<0.00200	0.0998	0.0918	92	0.0924	91	71-129	1	35	mg/kg	01.18.18 10:24	
m,p-Xylenes	<0.00399	0.200	0.184	92	0.186	93	70-135	1	35	mg/kg	01.18.18 10:24	
o-Xylene	<0.00200	0.0998	0.0906	91	0.0922	91	71-133	2	35	mg/kg	01.18.18 10:24	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		102		106		80-120	%	01.18.18 10:24
4-Bromofluorobenzene	85		100		103		80-120	%	01.18.18 10:24

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3038415 | Matrix: Soil | Date Prep: 01.16.18
Parent Sample Id: 573594-001 | MS Sample Id: 573594-001 S | MSD Sample Id: 573594-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0782	79	0.0742	74	70-130	5	35	mg/kg	01.16.18 21:20	
Toluene	<0.00199	0.0994	0.0783	79	0.0698	70	70-130	11	35	mg/kg	01.16.18 21:20	
Ethylbenzene	<0.00199	0.0994	0.0604	61	0.0541	54	71-129	11	35	mg/kg	01.16.18 21:20	X
m,p-Xylenes	<0.00398	0.199	0.108	54	0.123	62	70-135	13	35	mg/kg	01.16.18 21:20	X
o-Xylene	<0.00199	0.0994	0.0546	55	0.0663	67	71-133	19	35	mg/kg	01.16.18 21:20	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		104		80-120	%	01.16.18 21:20
4-Bromofluorobenzene	85		97		80-120	%	01.16.18 21:20

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3038602 | Matrix: Soil | Date Prep: 01.17.18
Parent Sample Id: 573594-021 | MS Sample Id: 573594-021 S | MSD Sample Id: 573594-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0780	78	0.0921	92	70-130	17	35	mg/kg	01.17.18 18:56	
Toluene	<0.00200	0.100	0.0766	77	0.0864	87	70-130	12	35	mg/kg	01.17.18 18:56	
Ethylbenzene	<0.00200	0.100	0.0754	75	0.0804	81	71-129	6	35	mg/kg	01.17.18 18:56	
m,p-Xylenes	<0.00401	0.200	0.151	76	0.161	81	70-135	6	35	mg/kg	01.17.18 18:56	
o-Xylene	<0.00200	0.100	0.0785	79	0.0799	80	71-133	2	35	mg/kg	01.17.18 18:56	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		105		80-120	%	01.17.18 18:56
4-Bromofluorobenzene	112		102		80-120	%	01.17.18 18:56

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 573594

OWL SWD Operating LLC

1RP-4860

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3038608 Matrix: Soil Date Prep: 01.18.18

Parent Sample Id: 573506-001 MS Sample Id: 573506-001 S MSD Sample Id: 573506-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0795	79	0.0733	73	70-130	8	35	mg/kg	01.18.18 11:02	
Toluene	<0.00202	0.101	0.0742	73	0.0678	68	70-130	9	35	mg/kg	01.18.18 11:02	X
Ethylbenzene	<0.00202	0.101	0.0650	64	0.0593	59	71-129	9	35	mg/kg	01.18.18 11:02	X
m,p-Xylenes	<0.00403	0.202	0.130	64	0.118	59	70-135	10	35	mg/kg	01.18.18 11:02	X
o-Xylene	<0.00202	0.101	0.0655	65	0.0591	59	71-133	10	35	mg/kg	01.18.18 11:02	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		102		80-120	%	01.18.18 11:02
4-Bromofluorobenzene	105		96		80-120	%	01.18.18 11:02

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

CHAIN OF CUSTODY

Revision 2016.1

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Page 1 Of 6

Stafford, TX (281) 240-4200 | El Paso, TX (915) 585-3443 | Midland, TX (432) 704-5440 | Phoenix, AZ (480) 355-0900 | Service Center- Amarillo, TX (806)678-4514
Dallas, TX (214) 902-0300 | Lubbock, TX (806) 794-1296 | San Antonio, TX (210) 509-3334 | Service Center - Baton Rouge, LA (832) 712-8143 | Service Center- Hobbs, NM (575) 392-7550

www.xenco.com

Xenco Quote # | Xenco Job # 573594

Client / Reporting Information

Company Name / Branch: OWL SWD Operating LLC
Company Address: 8214 Westchester Dr #850 Dallas, TX
Email: Phillip Sanders psanders@oilfieldwaterlogistics.com Phone No: 210-906-3553
Project Contact: James Fox
Samplers's Name: James Fox

Project Information

Project Name/Number: 1RP-4860 / OWL102217D
Project Location: Jal, NM
Invoice To: Oilfield Water Logistics (OWL)
PO Number:

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface Water
SL - Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH	BTEX	Chlorides	Field Comments
1	BG 0-2	2'	1/10	1300	S	1								X	X	X	X	
2	BG 2-4	4'		1310														
3	BG 4-6	6'		1320														
4	BG 6-8	8'		1330														
5	BG 8-10	10'		1340														
6	SB1 0-2	2'		1600														
7	SB1 2-4	4'		1610														
8	SB1 4-6	6'		1620														
9	SB1 6-8	8'		1630														
10	SB1 8-10	10'	↓	1640	↓	↓								↓	↓	↓	↓	

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [x] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] Level II Report with TRRP checklist

Notes:

*Email reports to dena@Kjenvironmental.com and james@Kjenvironmental.com

FED-EX / U

Temp: 1.7
CF: (0-6: -0.2°C) (6-23: +0.2°C)
Corrected Temp: 1.0
IR ID: R-8

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:
1		1/15/18 20:00	1	2	1/16 9:00
2	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:
	3		3	4	4
3	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable / On Ice / Cooler Temp. / Thermo. Corr. Factor
	5		5		

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

CHAIN OF CUSTODY

Revision 2016.1

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Dallas, TX (214) 902-0300 | Lubbock, TX (806) 794-1296 | San Antonio, TX (210) 509-3334 | Service Center - Baton Rouge, LA (832) 712-8143 | Service Center- Hobbs, NM (575) 392-7550

www.xenco.com

Xenco Quote # | Xenco Job # 573594

Client / Reporting Information

Company Name / Branch:
Company Address: see page # 1
Email: Phone No:
Project Contact:
Samplers's Name:

Project Information

Project Name/Number: IRP-4860 / OWL102217D
Project Location: Jal, NM
Invoice To: OWL
PO Number:

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface Water
SL - Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH	BTEX	Chlorides	Field Comments
1	SB2 0-2	2'	1-11-18	0800	S	1								X	X	X	X	
2	SB2 2-4	4'		0810														
3	SB2 4-6	6'		0820														
4	SB2 6-8	8'		0830														
5	SB2 8-10	10'		0840														
6	SB3 0-2	2'		0900														
7	SB3 2-4	4'		0910														
8	SB3 4-6	6'		0920														
9	SB3 6-8	8'		0930														
10	SB3 8-10	10'	↓	0940	↓	↓								↓	↓	↓	↓	

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
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- [ ] 7 Day TAT
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- [x] 3 Day EMERGENCY

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Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] Level II Report with TRRP checklist

Notes: * see page # 1

FED-EX / UPS:

Temp: 1.7 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.0

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:
1		1-15-18 20:00	1	2	1/16 9:00
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable: ☐ On Ice: ☒ Cooler Temp. Thermo. Corr. Factor

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Revision 2016.1

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www.xenco.com

Xenco Quote # | Xenco Job # 573594

Client / Reporting Information

Company Name / Branch:

Company Address:

Email: See page #1 | Phone No:

Project Contact:

Samplers's Name:

Project Information

Project Name/Number: IRP-4860 / OWL1022170

Project Location: Jal, NM

Invoice To: OWL

PO Number:

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface Water
SL - Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX	TPH	Chlorides	Field Comments
1	SB4 0-2	2'	1-11-18	1000	S	1								X	X	X	X	
2	SB4 2-4	4'		1010														
3	SB4 4-6	6'		1020														
4	SB4 6-8	8'		1030														
5	SB4 8-10 (1)	10'		1040														
6	SB4 8-10 (2)	10'		1040														
7	SB5 0-2	2'		1045														
8	SB5 2-4	4'		1050														
9	SB5 4-6	6'		1055														
10	SB5 6-8	8'		1100														

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [x] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] Level II Report with TRRP checklist

Notes: * See page #1

Temp: 1.2 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C) 1.0
Corrected Temp:

FED-E

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:
1		1-15-18 2000		2	1/16 9:01
3			3	4	4
5			5	Custody Seal #	Preserved where applicable: On Ice: Cooler Temp. Thermo. Corr. Factor

CHAIN OF CUSTODY

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www.xenco.com

Xenco Quote # | Xenco Job # 573594

Client / Reporting Information

Company Name / Branch:
Company Address:
Email: See page #1 Phone No:
Project Contact:
Samplers's Name:

Project Information

Project Name/Number: IRP-4860 / OWL 102217D
Project Location: Jal, NM
Invoice To: OWL
PO Number:

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface Water
SL - Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH	BTEX	Chlorides								Field Comments
1	SB5 8-10	10'	1-11-18	1105	S	1								X	X	X	X								
2	SB6 0-2	2'		1130																					
3	SB6 2-4	4'		1140																					
4	SB6 4-6	6'		1150																					
5	SB6 6-8	8'		1200																					
6	SB6 8-10	10'		1210																					
7	SB7 0-2	2'		1300																					
8	SB7 2-4	4'		1310																					
9	SB7 4-6	6'		1320																					
10	SB7 6-8	8'	↓	1330	↓	↓								↓	↓	↓	↓								

Turnaround Time (Business days)

- [ ] Same Day TAT
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- [ ] 7 Day TAT
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- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] Level II Report with TRRP checklist

FED-EX /

Notes:

* See page #1

Temp: 1.2 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.0

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:
1		1-15-18 2000	1	2	1/16/18 9.
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable / On Ice / Cooler Temp. / Thermo. Corr. Factor

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Revision 2016.1

Stafford, TX (281) 240-4200
Dallas, TX (214) 902-0300

El Paso, TX (915) 585-3443
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Midland, TX (432) 704-5440
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Phoenix, AZ (480) 355-0900
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Service Center- Amarillo, TX (806)678-4514
Service Center- Hobbs, NM (575) 392-7550

www.xenco.com

Xenco Quote #

Xenco Job # 573594

Client / Reporting Information

Company Name / Branch:

Company Address: See page #1

Email:

Phone No:

Project Contact:

Samplers's Name:

Project Information

Project Name/Number: IRP-4860 / OWL102217D

Project Location: Jal, NM

Invoice To: OWL

PO Number:

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface Water
SL - Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

No.	Field ID / Point of Collection	Sample Depth	Collection Date	Collection Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH	BTEX	Chlorides							Field Comments
1	SB7 8-10	10'	1-11-18	1340	S	1								X	X	X	X							
2	SB7 10-12	12'		1350																				
3	SB7 12-14	14'		1400																				
4	SB7 14-16	16'		1410																				
5	SB8 0-2	2'		1420																				
6	SB8 2-4	4'		1430																				
7	SB8 4-6	6'		1440																				
8	SB8 6-8	8'		1450																				
9	SB8 8-10	10'		1500																				
10	SB8 10-12 (1)	12'		1510																				

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
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- [ ] 7 Day TAT
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- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] Level II Report with TRRP checklist

Notes: * See page #1

FED-EX / UPS

Temp: 1.2 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.0

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	1-15-18 2000	1 [signature]	2	1/16 9:00	2
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice [X] / Cooler Temp. / Thermo. Corr. Factor

CHAIN OF CUSTODY

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Revision 2016.1

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www.xenco.com

Xenco Quote #

Xenco Job # 573594

Client / Reporting Information

Company Name / Branch:

Company Address: See page #1

Email: Phone No:

Project Contact:

Samplers's Name:

Project Information

Project Name/Number: IRP-4860 / OWL102217D

Project Location: Jal, NM

Invoice To: OWL

PO Number:

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface Water
SL - Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH	BTEX	Chlorides	Field Comments
1	SB8 10-12 (2)	12'	1-11-18	1520	S	1								X	X	X	X	
2	SB8 12-14	14'		1530														
3	SB8 14-16	16'		1540														
4	SB9 0-2	2'		1550														
5	SB9 2-4	4'		1600														
6	SB9 4-6	6'		1610														
7	SB9 6-8	8'		1620														
8	SB9 8-10	10'		1630														
9																		
10																		

Turnaround Time (Business days)

- ☐ Same Day TAT
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- ☐ TRRP Level IV
- ☐ Level 3 (CLP Forms)
- ☐ UST / RG -411
- ☐ Level II Report with TRRP checklist

Notes:

* See page #1

FED-EX / UPS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished By Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	R
1		1-15-18 2000	1	2	1/16 9:00	2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	R 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice

Temp: 1.2 IR ID:R-8

CF:(0-6: -0.2°C)

(6-23: +0.2°C)

Corrected Temp: 1.0

Cooler Temp. Thermo. Corr. Factor

APPENDIX F

Environmental Professional's Credentials

Kevin J. Ware

109 South Oakland Street
Denton, Texas 76201
Phone: 940-387-0805
Fax: 940-387-0830
Cell: 469-487-6083
kevin@kjenvironmental.com

EDUCATION

M.S., Environmental Engineering
Oklahoma State University, Stillwater, Oklahoma

B.S., Environmental Science
University of Oklahoma, Norman, Oklahoma

WORK EXPERIENCE

KJ Environmental Mgt., Inc.
Denton, Texas

President **– (December 2005 to Present)**

- Environmental compliance audits of large scale industrial and manufacturing plants
  - Air, water, waste, EPA reporting, etc….
- Hazardous Waste Management
  - Hazardous waste audits & management plans for thirty different industries
  - Designing process modifications for industrial clients to reduce waste (P2)
- Hazardous waste remediation
  - Soil & groundwater cleanup
    (Chlorinated solvents -lumber treating operation, Broken Bow, OK)
  - Soil & surface water cleanup
    (Lead contamination - natural gas pipeline, Madill, OK)
- Air permitting
  - Major source air permit applications for several large industries
- Phase I and Phase II Environmental Site Assessments
- Wetland delineation studies
- Storm water pollution prevention management (construction and industrial facilities)
- Expert witness

GaiaTech, Inc.
Irving, Texas

Senior Environmental Consultant **– (August 2005 to December 2005)**

- Performed Environmental Compliance, safety and engineering audits for various large-scale industrial/commercial clients
  - air, water, hazardous waste, safety, etc.
- Designed waste minimization system to lower operating costs for businesses
  - i.e., wastewater recycling project

Isbell Engineering Group, Inc.
Sanger, Texas

Senior Environmental Engineer – (July 2003 to August 2005)

- Completed environmental compliance and safety audits for industrial clients
- Performed Phase I Environmental Site Assessments – Due Diligence
- Reviewed engineering designs for a fire suppression system at a FEMA facility
- Directed environmental investigations for waste dump sites
- Designed utility (water/sanitary sewer) lines for subdivisions and other developments
- Assisted in the development of civil engineering construction plans for small medical offices/facilities
- Assisted in the review of City Engineering plans for small municipalities
- Assisted in the design and construction management of a 200,000 gal/day municipal-related wastewater treatment plant

Science Applications International (SAIC)
Midwest City, Oklahoma

Environmental Engineer – (May 2003 to July 2003)

- **Created Site Health & Safety Plan for Air Force Remediation Project (Tinker AFB)**
- **Field Safety Manager for groundwater monitoring project (Tinker AFB)**

Marshall Environmental Management, Inc.
Oklahoma City, Oklahoma

Environmental Specialist – (November 1999 to May 2003)

- **Facility-wide noise survey (FAA Facility- Will Rogers Airport, Oklahoma)**
- **Industrial Hygiene Studies – Tinker, AFB**
- **Lead-based paint analysis & remediation design of base housing (Vance AFB, OK)**
- Project Supervisor for cleanup and disposal of hazardous material spills
    - Emergency Response situations

Department of Environmental Quality (Oklahoma)
Oklahoma City, Oklahoma

Environmental Specialist – (July 1999 to November 1999)

- Trained and informed businesses of pollution prevention techniques
- Explained the applicability of environmental regulations to specific industrial sectors and regulated entities

CERTIFICATIONS AND LICENSES

- Engineer-In-Training (EIT)
- Qualified Environmental Professional – (Institute of Professional Practice)
- Registered Professional Environmental Specialist (Oklahoma)

OTHER

- **Routine Guest Lecturer for Southwest Oklahoma State Aviation Safety Classes at Tinker AFB, Midwest City, OK**

James Lawrence Fox

PROJECT MANAGER

WORK HISTORY

Project Manager

KJ Environmental Management, Inc.
2014 – Present

I am currently working as a Project Manager at KJ Environmental in Cross Roads, Texas. I have over three years of experience in the environmental field. I provide regulatory compliance services for various industries including oil and gas storage and trucking facilities, sand and gravel mining facilities, and manufacturing facilities. My areas of expertise include project management, wetland determination and delineation, construction and industrial storm water pollution prevention plans (SWPPP), management of PST tank pulls, oil pollution prevention compliance (SPCC), asbestos sampling and assessments, Phase I Environmental Site Assessments, Limited Phase II Environmental Site Assessments, and Naturally Occurring Radioactive Material (NORM) surveys. I have also served as the Project Manager for oil & gas production and commercial saltwater disposal clients in handling multiple produced water spill investigations and remediation activities completed under the jurisdiction of the Railroad Commission of Texas. I currently work as a Project Manager to complete projects for a variety of industries, while ensuring the delivery of the highest quality work product, customer service, and professionalism.

Environmental Scientist

Trinity River Authority of Texas (TRA)
2013 - 2014

At TRA, I conducted surface water sampling throughout the Trinity River Basin. Under the Planning and Environmental Services Special Studies and Assessments Manager, I handled a variety of tasks related to field data collection, field gear and sampling equipment preparation/maintenance, and data quality assurance/analysis. I worked within an interdisciplinary scientific team in both field and office settings. The job was physically demanding in harsh, outdoor environments. Main field studies included biological surveys, water quality sampling, geomorphological and hydrological surveys.

Field Technician

Texas Forest Service (TFS)
2009-2013

At TFS, I conducted various types of tree surveys for exotic invasive trees and insects throughout east Texas. I became very experienced in identifying woody plants and herbaceous species of Texas. I was certified for Wildland firefighting and assisted the U.S. Forest Service in prescribed burnings. I specifically aided in research and control of the southern pine beetle (*Dendroctonus frontalis*), Ips bark beetle (I*ps grandicollis, calligraphus and avulsus*), Nantucket pine tip moth (*Rhyacionia frustrana*) for the Texas Forest Service.

Military Service

United States Marine Corps
2004-2010

I served in Fallujah, Iraq with the 14th Marines in 2006 - 2007. During that time, I was awarded medals of combat action, Marine Corps Reserve select, Global war on terrorism, Iraq campaign medal, Sea service deployment, national defense service, Navy unit commendation, and armed forces reserve. My occupational specialty was an Automotive Maintenance Technician for the High Mobility Multipurpose Wheeled Vehicle (HMMWV), and the Medium Tactical Vehicle Replacement (MTVR). During my time in Fallujah, I assisted in planning and security of hundreds of convoys for multiple platoons of infantry Marines. I also routinely drove the lead patrol vehicle with an Improvised Explosive Devise (IED) / Mine sweeper attachment on a 7-ton vehicle.

EDUCATION

University of Stephen F. Austin
Bachelor of Science in Forestry with a focus in Wildlife Management
2009 – 2013

Activites and Societies:
Ducks Unlimited
Wildlife Society

ADDITIONAL INFORMATION

Professional Education & Certifications:

HAZWOPER 40 HR Certification
Certified Asbestos Inspector (Certificate No. 15039)
Certified NORM Surveyor
USACE Wetland Delineation 40 HR Training Course
Red Card certified for Wildland firefighting
SPCC/FRP Compliance Workshop, EPA Region 6

Affiliations:

Planning and Zoning Committee member for the City of Sanger, Texas
Parks and Recreation Committee member for the City of Sanger, Texas
Society of Texas Environmental Professionals

CONTACT INFORMATION

Email: jfox3549@yahoo.com
Phone: (940) 368 - 3535

Stanley "Gregg" Bessire, P.E., P.G.

940-387-0805 gregg@kjenvironmental.com

PROFESSIONAL EXPERIENCE:

KJE Environmental & Civil Engineering 2016 – Present

KJ Environmental Management, Inc. (KJE) is a dedicated, full-service environmental and civil engineering consulting firm located on the north side of the Dallas-Fort Worth metroplex. KJE is comprised of a team of professionals who strive to provide creative and cost effective solutions for today's multi-faceted environmental and civil engineering issues.

Senior Project Manager – Primary projects include Phase II Environmental Site Assessments, SPCC Plans, Stormwater Pollution Prevention Plans, and Oil and Gas Permitting.

Sage Environmental Consulting, L.P., Richardson, TX 2011 - 2016

Sage Environmental Consulting provides environmental project management and consulting services nationwide. Role was to manage soil and groundwater investigation projects and remediation, Due Diligence projects, Spill Prevention, Control, and Countermeasure (SPCC) Plans, and Storm Water Pollution Prevention Plans (SWPPP).

Senior Project Manager

- Developed and managed a fugitive gas emissions program for all New Source Performance Standard (NSPS) OOOO and Subpart W regulated equipment. The client was a Major Global Oil Company and project sites consisted of their Onshore USA Assets.
- Implemented best practices using Optical Gas Imaging (OGI) and FLIR GF320 Infrared Cameras to inspect all onshore equipment to identify any fugitive gas emission leak sources.
- Developed a Master Fugitive Emissions Program Plan and provided to all the assets, which included procedures, training, and methods for maintaining the program. Managed implementation by client supervisors at various locations throughout Texas and Louisiana.

Due Diligence Manager

- Managed teams of personnel who conducted due diligence site inspections for over 1,200 oil and gas wells and 67 tank batteries in less than two weeks across four separate regions of Texas.
- Reviewed Texas Commission on Environmental Quality (TCEQ) and Railroad Commission of Texas (RRCT) records, and aerial and site photographs for details and/or evidence of site contamination.
- Calculated estimated remediation costs for 49 separate tank batteries and well locations.

Senior Project Manager

- Proposed, Conducted, and Managed surface and subsurface spill investigations and remediation, and completed over 1,000 SWPPP and SPCC Plans.

Senior Project Manager

- Scheduled, Managed, and Performed Optical Gas Imaging (OGI) inspections utilizing FLIR (Forward Looking Infrared Radiometer) GF320 infrared cameras on offshore oil platforms in The Gulf of Mexico near Texas and Louisiana coasts.

Terracon Consultants, Inc., Enercon Services, Inc., Cirrus Associates, LLC., Fugro Consultants, Inc., Geoscience Consultants International, and Mas-Tek Engineering, Inc., **Dallas/Fort Worth, TX** 2009 - 2011

Civil Engineer / Professional Geoscientist / Project Manager: (Independent Consultant)
Primary projects included The North Tarrant Expressway in Fort Worth; the LBJ Freeway Managed Lanes in Dallas; and The Trinity River Levee and Floodplain investigation for The US Army Corp of Engineers.

- Conducted logging of drill holes and core holes to determine site specific lithology.
- Installed piezometers, developed monitor wells, and performed slug tests to determine the aquifer transmissivity and storativity for multiple monitoring wells.
- Conducted field soil tests, performed packer tests, installed piezometers, and recorded data from downhole pressure transducers.
- Assisted with CPT (Cone Penetrometer Testing) operator performing seismic survey tests, pore pressure dissipation tests, and dilatometer tests.
- Performed various other engineering projects on a contract basis. SPCC Plans, SWPPP, and Phase I or Phase II Environmental Site Assessments (ESAs) were additional responsibilities.

Talon/LPE, Inc., Carrollton, TX 2008 – 2009

Senior Engineer / Project Manager
- Managed, supervised, and conducted all project activities, including well/boring logging, development and sampling of groundwater monitoring wells; soil sample collection; waste classification and disposal; hydrogeologic characterizations; and preparing groundwater monitoring and corrective action plans.
- Designing, installed, and monitored the effectiveness of remediation systems. Performed these projects, as well as Phase I and II ESAs, for major oil, communication, utility, real estate, municipal, retail, and financial clients.
- Performed site visits and prepared SWPPP/SPCC Plans to maintain clients' regulatory compliance.

Terra-Solve, Inc., Carrollton, TX 1996 - 2008

Project Manager / Civil Engineer
- Managed, supervised, and conducted over 550 projects in 16 states. Coordinated field investigation activities, including scheduling and procurement of subcontract labor and necessary materials.
- Conducted well and boring logging at numerous sites in Texas, New Mexico, Oklahoma, and Arkansas. For these projects the lithologic units were described using the Unified Soil Classification System (USCS), conducted field screening for various geotechnical and analytical parameters, and prepared soil samples for shipping to testing laboratories in various states.
- Conducted Dual-Phase Extraction and aquifer tests, analyzed the recorded data and completed the required analytical reports. Performed these projects, as well as Phase I and II Environmental Site Assessments (ESAs), for major oil, communication, utility, real estate, municipal, retail, and financial clients.
- Designed remediation systems, supervised system installations, and monitored the effectiveness of various types of remediation systems.
- Performed site visits and prepared SWPPP/SPCC Plans to maintain clients' regulatory compliance.
- Provided construction management and engineering/construction inspection services over a five year period for a local municipality and Habitat For Humanity which included asphalt and concrete roadway construction, railroad crossings, utility installations, bridge construction, and sanitary sewer lift station construction.

EDUCATION, PROFESSIONAL REGISTRATIONS & TRAINING:

Education: B.S. *Petroleum Engineering*, **Texas Tech University**, Lubbock, TX

Professional Registrations:

- Licensed Professional Engineer (P.E.), (License No. 88441), Texas
- Licensed Professional Engineering Firm, (License No. 17779), Texas
- Licensed Professional Engineer (P.E.), (License No. 21593), New Mexico
- Licensed Professional Geoscientist (P.G.), (License No. 6264), Texas
- Licensed Professional Geoscientist (P.G.), (License No. 1051), Louisiana
- UST Remediation Consultant (License No. 60), Oklahoma
- Corrective Action Project Manager (CAPM No. 799), TCEQ
- Transportation Worker Identification Credential (TWIC), Transportation Safety Administration (TSA)

Certifications and Continuing Education:

- Occupational Safety and Health Administration (OSHA) Training for Hazardous Waste Operations, Supervisor Level, (40 Hour Course and Annual Refreshers)
- Basic Plus Safety and Annual Refreshers
- Wastewater and Stormwater Permitting and Compliance Seminars, TCEQ
- Produced Water Production Conference, Society of Petroleum Engineers
- Air Permitting Basics and Advanced Air Permitting, Sage Environmental Consulting
- Helicopter Underwater Egress Training (HUET), Falck Safety Training
- Oil and Gas Essentials, Sage Environmental Consulting
- Environmental Chemistry, Oklahoma State University
- Management of Solid and Hazardous Waste (RCRA), Oklahoma State University
- Pollution Prevention (P2) Plan and Waste Management Workshop, TCEQ
- Project Manager Professional Training (PMP), D and L Training

Dena Marie Vandenberg, REM, LEED AP
ENVIRONMENTAL PROFESSIONAL

WORK HISTORY

Chief Operating Officer / Director of Environmental Services
KJ Environmental Management, Inc.
June 2011 – Present (5 years, 2 months)

I am currently working as the Chief Operating Officer / Director of Environmental Services at KJ Environmental in Cross Roads, Texas. I have over eleven years of experience as an environmental professional in consulting. I lead a team of Engineers and Scientists to complete projects for a variety of industries, while ensuring the delivery of the highest quality work product, customer service, and professionalism.

Project Manager
KJ Environmental Management, Inc.
April 2010 – June 2011 (1 year 3 months)

When I began working at KJ Environmental in Denton, Texas as a Project Manager, I provided regulatory compliance services for various industries including oil and gas storage and trucking facilities, sand and cement handling facilities, manufacturing facilities, and municipal agencies. My areas of expertise included project management, construction and industrial storm water pollution prevention plans (SWPPP), NPDES/TPDES permit applications, management of PST tank pulls, oil pollution prevention compliance (SPCC), Permit-By-Rule (PBR) Applications, New Source Review (NSR) Applications, Barnett Shale Phase I & Phase II Special Emissions Inventories, Saltwater Disposal Well Permitting, Underground Injection Control Permitting, TCEQ Public Water System compliance, drinking water, storm water, ground water, and waste sampling, asbestos sampling, mold assessments, radon testing, lead-based paint sampling, lead in drinking water sampling, Phase I Environmental Site Assessments, Limited Phase II Environmental Site Assessments, noise monitoring, and brownfield redevelopment. I have also served as the Environmental Professional on record for oil & gas production and commercial saltwater disposal clients in handling multiple produced water spill investigations and remediation activities completed under the jurisdiction of the Railroad Commission of Texas.

Environmental Scientist
Terracon
Privately Held; 1001-5000 employees; Civil Engineering industry
April 2006 – February 2010 (3 years 11 months)

At Terracon, I conducted hundreds of Phase I ESAs for various types of properties from vacant land to industrial/manufacturing facilities and gas stations. I also did regulatory compliance consulting for oil & gas clients, industrial/manufacturing facilities, and municipalities. I completed SWPPPs and SPCCs, conducted storm water sampling, and operated a public water system on behalf of a municipality. I became a licensed Asbestos Inspector, Mold Assessment Technician, and LEED Accredited Professional.

Environmental Geologist
Cirrus Associates
March 2006 – March 2006 (1 month)

At Cirrus Associates, I acted as a contract employee on a VCP project for a client in Odessa, Texas. I conducted sampling of groundwater monitoring wells using low-flow sampling techniques.

Environmental Scientist
Delta Environmental
August 2004 – December 2005 (1 year 5 months)

At Delta Environmental, I worked conducted public drinking water sampling under a mulitmillion dollar TCEQ contract. I collected over 3,000 drinking water samples with a 99.8% laboratory acceptance rate. I was recognized as one of the top 5 samplers in the state for productivity and was trusted with the responsibility of training other samplers associated with the project. In addition, I conducted several ESAs to obtain more experience, when time would allow.

EDUCATION

University of North Texas
Bachelor of Science in Geography with a focus in Earth Science, Geology Minor
1999 – 2004

Activities and Societies:
Vice Chairman of the Planning & Zoning Commission for the Town of Providence Village, Texas
Delta Zeta Sorority

ADDITIONAL INFORMATION

Professional Education & Certifications:

National Registry of Environmental Professionals (NREP) Registered Environmental Manager (REM)
OSHA 29 CFR 1910.120 HAZWOPER 40 HR Certification
EPA Accredited Asbestos Inspector
TDSHS License Asbestos Inspector (License No. 602837)
TDSHS Licensed Mold Assessment Technician (License No. MAT1011)
TCEQ Class C Water Distribution Operator (License No. WD0007445)
Leadership in Energy and Environmental Design (LEED) Accredited Professional
Texas Commission on Environmental Quality (TCEQ) Certified Water Sampler under the Safe Drinking Water Act and State Regulations (ID No. 2005-006)
ORIS-Enviromod University- AERMOD Modeling For Permits Certification
Certified NORM Surveyor

Affiliations:

The North Texas Association of Environmental Professionals
Society of Texas Environmental Professionals
Association of American Geographers
U.S. Green Building Council

CONTACT INFORMATION

Email: denavandenberg@yahoo.com
Phone: (214) 364-7627

APPENDIX G

NMOCD Approved Pertinent Information and Workplans

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company OWL SWD OPERATING LLC	Contact Phillip Sanders
Address 8214 Westchester Dr. #850 Dallas, TX 75225	Telephone No. 210-906-3553
Facility Name N/A	Facility Type N/A

Surface Owner EOG	Mineral Owner EOG	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M,N,C,D	9 & 4	26S	36E					Lea

Latitude 32.064995 Longitude -103.273214 NAD83

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 2,800 BBL / Volume Recovered 580 BBL
Source of Release Pigging Station	Date and Hour of Occurrence 10/22/17 @ 0700 / Date and Hour of Discovery 10/22/17 @ 0700
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? OCD Emergency Reporting Hotline
By Whom? KJ Environmental Management, Inc.	Date and Hour 10/23/17 @ 1005
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.
If a Watercourse was Impacted, Describe Fully.*	

RECEIVED
By Olivia Yu at 1:54 pm, Nov 01, 2017

Describe Cause of Problem and Remedial Action Taken.*

A threaded nipple blew off at a pigging station. OWL employees replaced a valve and brought equipment on site to construct earthen berms preventing the spill from migrating.

Describe Area Affected and Cleanup Action Taken.*

Vacuum trucks were brought on site to recover fluids and 20 millimeter poly sheeting was placed over affected soil to prevent rainfall from causing further migration until an investigation work plan is approved by OCD.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Phillip Sanders	OIL CONSERVATION DIVISION
Printed Name: PHILLIP SANDERS	Approved by Environmental Specialist: oy
Title: SAFETY DIRECTOR	Approval Date: 11/1/2017 / Expiration Date:
E-mail Address: psanders@oilfieldwaterlogistics.com	Conditions of Approval: see attached directive / Attached ☑
Date: 10/26/17 Phone: 432-269-3735	

* Attach Additional Sheets If Necessary

1RP-4860

fOY1730556071

nOY1730556564

pOY1730556895

Photo Exhibit

Photo No. 001. View of the source of the release on 10/24/17. The background is of a pre-constructed pit (East Pit) that held a portion of the released produced water.

Photo No. 002. View of the second pre-constructed pit (West Pit) adjacent to the East Pit. New piping that was scheduled for installment is seen in the background. The west pit also held a large portion of the released produced water.

Photo No. 003. View of the spill path the produced water took west downhill eventually migrating south toward the area covered by poly in the background.

Photo No. 4. View of affected soil (north covered area) that was covered by 20 millimeter poly sheeting to prevent rainfall from causing further migration.

Photo No. 5. View of affected soil (south covered area) that was covered by 20 millimeter poly sheeting to prevent rainfall from causing further migration. NOTE: The NM811 identified multiple pipelines running parallel to the established caliche road.

Photo No. 6. View looking west of the caliche road transecting the spill area.

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _10/31/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4860__ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _12/1/2017_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

● Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

● Nominal detection limits for field and laboratory analyses must be provided.

● Composite sampling is not generally allowed.

● Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

CONFIDENTIAL

WORK PLAN
FOR THE CHARACTERIZATION OF IMPACTS

NOVEMBER 20, 2017

OWL SWD OPERATING, LLC
UNIT LETTERS M, N, C, D, SECTIONS 9 AND 4,
T26S, R36E
LEA COUNTY, NEW MEXICO
CASE NO. 1RP - 4860

PREPARED FOR:

MS. OLIVIA YU
ENVIRONMENTAL SPECIALIST
STATE OF NEW MEXICO ENERGY MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION
1625 NORTH FRENCH DRIVE
HOBBS, NEW MEXICO 88240

APPROVED
By Olivia Yu at 7:36 am, Dec 11, 2017

PREPARED BY:

KJE
ENVIRONMENTAL & CIVIL ENGINEERING
500 MOSELEY ROAD
CROSS ROADS, TEXAS 76227
(940) 387-0805 PHONE
(940) 387-0830 FAX

NMOCD approves of the proposed delineation plan for 1RP-4860 with these stipulations:
1) Permissible chloride levels for vertical and horizontal delineation are 600 mg/kg.
2) Establish at least 2 soil sampling locations south of the road.

500 Moseley Road
Cross Roads, Texas 76227
Phone 940-387-0805
Fax 940-387-0830

November 20, 2017

New Mexico Energy Minerals and Natural Resources Department (NM EMNRD)
Oil Conservation Division (OCD) – District 1
Ms. Olivia Yu
Environmental Specialist
1625 North French Drive
Hobbs, New Mexico 88240

Re: Work Plan for the Characterization of Impacts Due to a Pipeline Release
OWL SWD Operating, LLC Produced Water Pipeline Nearby Unit Letters M, N, C, D, Sections 9 and 4, T26S, R36E, Lea County, New Mexico – Case No. 1RP-4860

Dear Ms. Yu:

KJE understands that the goals of the characterization effort are: 1) Determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) Determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact 4) The characterization of any other adverse impacts that may have occurred (ex. Impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.).

KJE is pleased to provide the attached Work Plan for the characterization of Impacts due to a pipeline release associated with OWL SWD Operating, LLC (OWL's) pipeline, located in Lea County, New Mexico.

If we can be of further assistance, please do not hesitate to contact us at 940-387-0805. We look forward to receiving comments in order to proceed with the project and closure.

Gregg Bessire

Gregg Bessire, P.E., P.G.
Senior Project Manager

Dena M. Vandenberg, REM, LEED AP
Director of Environmental Services

ENVIRONMENTAL & CIVIL ENGINEERING
500 Moseley Road
Cross Roads, Texas 76227
Phone 940-387-0805
Fax 940-387-0830

November 20, 2017

New Mexico, Energy Minerals and Natural Resources (EMNRD)
Oil Conservation Division (OCD) – District 1
Ms. Olivia Yu
Environmental Specialist
1625 North French Drive
Hobbs, New Mexico 88240

Re: Work Plan for the Characterization of Impacts Due to a Pipeline Release OWL SWD Operating, LLC Produced Water Pipeline Nearby Unit Letters M, N, C, D, Sections 9 and 4, T26S, R36E, Lea County, New Mexico – Case No. 1RP-4860

Dear Ms. Yu:

KJ Environmental Management, Inc. (KJE) proposes to perform the following environmental consulting services for OWL SWD Operating, LLC (OWL) for the delineation portion of the project.

Environmental Investigation

The proposed scope of work will consist of performing an Environmental Investigation to evaluate the presence/absence of environmental contaminants in the soil at the above-referenced produced water release location.

KJE understands that the goals of this Work Plan and characterization effort are: 1) Determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) Determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact 4) The characterization of any other adverse impacts that may have occurred (ex. Impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.).

The Investigation will consist of the following activities:

- KJE will contact New Mexico 811 to request that they communicate with underground utility companies in the site area for location of their pipelines beneath the site and the site area.

- Multiple soil borings will be installed to the maximum depth necessary to reach chloride and other constituent delineation levels as noted below (horizontal and vertical delineation), by Geoprobe. A site map (Figure A1) is attached showing the general location and extent of the release. The proposed soil boring locations are illustrated on attached Figure A2, but the quantity of borings and boring locations may be field adjusted due to onsite conditions. The drilling contractor will be using a five (5) foot split-spoon continuous sampling device to allow for sampling of soil at two and one half (2.5) foot intervals for laboratory analysis. The actual number of borings and number of samples collected for analysis will be determined in the field based on assessment of release areas and Geoprobe access points available.

- Horizontal delineation of soil impacts will be attempted in each of the four cardinal compass directions. Adsorbed soil contamination will be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes (BTEX) by either Method 8260 or 8021, total petroleum hydrocarbons (TPH) by Method 8015 extended range (GRO+DRO+MRO; C6 thru C36), and for chloride by Method 300. KJE understands that delineation to 10 ppm Benzene, 50 ppm BTEX, 5,000 ppm TPH, and 600 ppm chlorides horizontally is required. Soil sampling will be both within the impacted area and beyond as field determined.

- Vertical delineation of soil impacts will also be attempted. Adsorbed soil contamination will be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes (BTEX) by either Method 8260 or 8021, total petroleum hydrocarbons (TPH) by Method 8015 extended range (GRO+DRO+MRO; C6 thru C36), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified if required by OCD. Vertical characterization samples should be taken at depth intervals no greater than five (5) feet apart. Lithologic description of encountered soils will also be provided. KJE understands that delineation to 10 ppm Benzene, 50 ppm BTEX, 5,000 ppm TPH, and 250 ppm chlorides vertically is required. At least ten (10) vertical feet of soils with contaminant concentrations at or below these values will be demonstrated as existing above the water table.

- In addition to the horizontal and vertical delineation borings, KJE will install one (1) soil boring upgradient of the release area to a depth of ten (10) feet and collect background samples at two and one half (2.5) foot intervals for laboratory analysis.

- Discrete, grab soil samples will be collected from each of the two and one half (2.5) foot intervals for laboratory analysis. A clean, decontaminated sampling trowel will be used to sample from each depth interval selected. For each soil boring, soil samples will be field screened using a calibrated Photo-ionization Detector (PID) (Model RAE MINIRAE 3000 Lite 0-15K ppm) for the highest reading for each boring. The sample with the highest PID reading and the sample collected at the bottom of each boring will be submitted for laboratory analysis.

- A statistically significant set of split samples will be submitted for confirmatory laboratory analysis, including the laterally farthest from the release sites and vertically deepest set of soil samples collected. In addition, we will ensure that there are at least two samples submitted for laboratory analysis from each boring (highest contamination from PID and deepest depth investigated).

- Each soil sample will be handled with nitrile-gloved hands. The samples will be placed in clean, dedicated, laboratory-supplied, 4-ounce glass containers, and labeled with pertinent sampling information. The soil samples will be then placed in a cooling chest with adequate ice, providing a 4°C environment for sufficient preservation until delivery to Xenco Laboratory (a third-party, NELAP Certified, independent, and licensed environmental laboratory in Midland, Texas). The sample collection and handling activities will be conducted in accordance with USEPA Standard Operating Procedures and strict chain-of-custody protocols. The drilling equipment, sampling equipment, and tools will be decontaminated before and between each sampling location. All personnel will use dedicated nitrile gloves that will be changed frequently during the drilling activities.

- For this investigation, groundwater is not anticipated to be encountered during environmental drilling. According to records obtained from the New Mexico Office of the State Engineer's office Hydrology Bureau records, the minimum depth to water for the water well located closest to the release area was for a well located in the southeast corner of Section 9, and in 1996 the depth to water was 174 feet. Water from this well is from the alluvial source which would be above the Triassic Chinle which is a water bearing zone above the Santa Rosa formation. The presence and/or depth of this potential water bearing formation are unknown in the spill area. KJE will install one (1) groundwater monitoring well to a depth of 50' past the deepest contamination to verify the presence or absence and depth, if applicable, of a shallow groundwater-bearing formation. The location of the groundwater monitoring well will be determined based on the initial laboratory analysis and will be advanced in the area of highest contamination.

- If groundwater is encountered in any of the soil borings, the boring will be left open for twenty-four (24) hours to determine if substantial water accumulates for sample collection and lab analysis. After 24 hours, KJE will attempt to collect a groundwater sample using a new disposable bailer and submit the samples for laboratory analysis of BTEX, TPH, and Chloride, if possible.

- Based on information provided by OWL the owner of the surface and subsurface estates that the release occurred on is EOG Natural Resources.

<u>Report of Findings</u>

KJE will prepare and provide an electronic copy of the final report describing the findings, conclusions, and recommendations from the Environmental Investigation. KJE will present the laboratory analytical results in a tabular format and compare these levels to the OCD specified delineation levels. Accurately scaled and well-drafted site maps will be provided showing the

location of all borings, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Digital photographic documentation of the release location and field work will also be included.

If we can be of further assistance, please do not hesitate to contact us at 940-387-0805. We look forward to receiving comments in order to proceed with the project and closure.

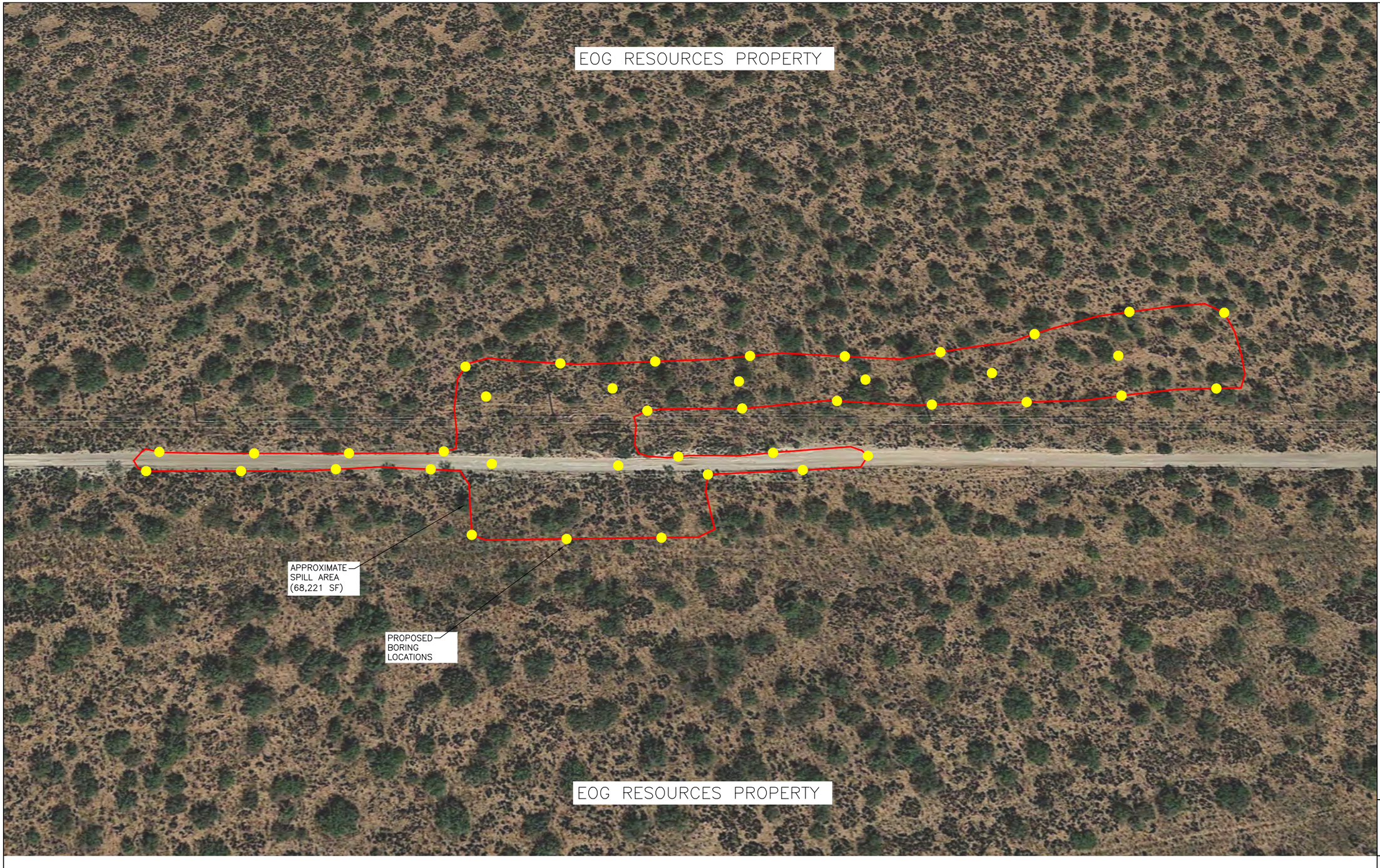
Sincerely,

Gregg Bessire

Gregg Bessire, P.E., P.G.
Senior Project Manager

Dena M. Vandenberg, REM / LEED AP
Director of Environmental Services

Attachments: Figure A1 – Detailed View of Release



REVISIONS:

THIS DRAWING IS TO BE USED FOR PERMIT INFORMATION PURPOSES ONLY.

500 Moseley Road
Cross Roads, TX 76227
Phone (940) 387-0805
Fax (940) 387-0830

DETAILED VIEW OF RELEASE
OWL SWD OPERATING, LLC
JAL, NEW MEXICO
UNITS M, N, C AND D;
SECTIONS 9 AND 4;
TOWNSHIP 26S RANGE 36E

DATE:
11/20/2017

SHEET:
A1

NOTES:
1. GOOGLE EARTH WAS USED AS AN UNDERLAY IMAGE FOR THIS MAP. (http://earth.google.com/)

60 0 30 60
SCALE: 1" = 60'

LEGEND
PROPOSED SOIL BORING (TOTAL: 39)

N

From: James Fox
To: Heather Leven
Subject: FW: Update 1RP-4860 Lab Analysis BG, and SB 1-9
Date: Wednesday, February 21, 2018 7:35:41 AM
Attachments: image005.jpg
image006.jpg
image003.jpg

James Fox

From: James Fox
Sent: Thursday, January 25, 2018 9:40 AM
To: Olivia.Yu@state.nm.us
Cc: 'Dena (KJE)'; Phillip Sanders (psanders@oilfieldwaterlogistics.com)
Subject: RE: Update 1RP-4860 Lab Analysis BG, and SB 1-9

Good morning Olivia!

Yes, soil sample SB4 8-10 was a split sample. I requested the lab confirm the discrepancy and will let you know if there was an error. I am updating and ID'ing sampling locations for both 1RP-4860 and 1RP-4820 site maps for your review and will submit those as soon as possible. Please let me know if you have any questions.

Thank you

James Fox

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Tuesday, January 23, 2018 5:00 PM
To: Dena; James Fox
Cc: Phillip Sanders (psanders@oilfieldwaterlogistics.com)
Subject: RE: Update 1RP-4860 Lab Analysis BG, and SB 1-9

Ms. Vandenberg:

Confirmed. No additional vertical delineation will be required for SB-4. However, in reassessment,

please clarify the sample ID SB4 8-10 (1) and (2). Is this a pair of split samples? There is a large discrepancy in chloride concentrations.

Please complete sample collection of the other proposed delineation locations for 1RP-4860. Also, as conveyed to Mr. Fox during a phone conversation yesterday afternoon, given the provided data, subsequent delineation samples would not require BTEX or TPH analyses.

Olivia

From: Dena [mailto:dena@kjenvironmental.com]
Sent: Tuesday, January 23, 2018 3:24 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; James Fox <james@kjenvironmental.com>
Cc: Phillip Sanders (psanders@oilfieldwaterlogistics.com) <psanders@oilfieldwaterlogistics.com>
Subject: RE: Update 1RP-4860 Lab Analysis BG, and SB 1-9

Good afternoon, Olivia!

Can you please confirm that we will not need to continue additional vertical delineation in the location of SB-4? Thank you!

Dena Vandenberg signature

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Tuesday, January 23, 2018 2:43 PM
To: James Fox <james@kjenvironmental.com>
Cc: Dena <dena@kjenvironmental.com>; Phillip Sanders (psanders@oilfieldwaterlogistics.com) <psanders@oilfieldwaterlogistics.com>
Subject: RE: Update 1RP-4860 Lab Analysis BG, and SB 1-9

Mr. Fox:

In review of the preliminary data submitted for 1RP-4860, without a map demarcating sample locations in relation to the release point or to each other, NMOCD determines that both SB-3 and SB-6 will need additional vertical delineation. Please continue vertical delineation in the same borehole if possible. If not, establish the additional soil bore locations in the vicinity to represent the impacted area.

Please clarify: laboratory analyses were for 9 soil bores in the release area and 1 background sample location. The map identifying the samples for rush analysis had 11 locations circled.

Thanks,
Olivia

From: James Fox [mailto:james@kjenvironmental.com]
Sent: Monday, January 22, 2018 10:56 AM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: Dena <dena@kjenvironmental.com>; Phillip Sanders (psanders@oilfieldwaterlogistics.com) <psanders@oilfieldwaterlogistics.com>
Subject: Update 1RP-4860 Lab Analysis BG, and SB 1-9

Good morning Ms. Yu,

Please see attached lab analysis for the Background sample, and Soil Borings 1-9 for 1RP-4860. Based on the lab analysis, Soil Boring 6 was exceeding the permissible chloride levels for vertical delineation to 10' depth at 834 mg/kg. In addition, Soil Boring 3 and 4 were not drilled to at least 5' past the point where the permissible level of Chlorides was reached. However, both Soil Borings 3 and 4 were clean to 4' past the point where the permissible level of Chlorides was reached. Would this be acceptable to OCD or would you like SB3 and SB4 redrilled?

I am planning on returning to 1RP-4860 after completing the remaining soil borings at 1RP-4820 on 1-23-18. I will drill adjacent to SB6 to reach the requested <600 mg/kg with 5' of maintained <600 mg/kg levels.

Please let me know if you have any questions. Thank you

James Fox