Site Characterization and Closure Report

Oilfield Water Logistics (OWL) SWD Operating, LLC
Harrier Booster Pump Produced Water Release
Unit Letter C, Section 12, T26S, R32E,
Incident Tracking No. NRM2021932931
Lea County, New Mexico

October 26, 2020

Prepared For:

Mr. Phillip Sanders
OWL SWD Operating, LLC
8201 Preston Road, Suite 520
Dallas, Texas 75225

Ms. Christina Eads
New Mexico EMNRD
Oil Conservation Division
5200 Oakland Avenue Northeast, Ste. 100
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Prepared By:

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October 26, 2020

Mr. Phillip Sanders
Oilfield Water Logistics SWD Operating, LLC
8201 Preston Road, Suite 520
Dallas, Texas 75225

RE: **Delineation and Site Characterization Report: OWL SWD Operating, LLC, Harrier Booster Pump Station Produced Water Release, Unit Letter C, Section 12, T26S, R32E, Lea County, New Mexico**
Incident Tracking No. NRM2021932931

Dear Mr. Sanders:

KJ Environmental Mgt., Inc. (KJE) is pleased to submit this Delineation and Site Characterization Report for the produced water release located on the Harrier Booster Pump 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,

Travis Reddick
Environmental Associate

William B. Soderstrom
Director of Environmental Services

Kevin Ware, P.E., QEP, REM
Principal

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APPENDICES

Executive Summary

KJ Environmental Mgt., Inc. (KJE), was retained by Oilfield Water Logistics (OWL) SWD Operating, LLC, to complete delineation activities for a produced water release from the Harrier Booster pump station in Lea County, New Mexico.

On August 4, 2020, KJE was notified by Mr. Phillip Sanders, Safety Director with OWL SWD Operating, LLC, regarding a release of produced water 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 release was assigned an incident tracking number, NRM2021932931, and delineation and site characterization activities commenced.

Based on conversations with OWL SWD Operating, LLC, the produced water release occurred from the Harrier Booster pump station and resulted from the bleed off nipple and ball valve blowing off the bottom of the booster pump, causing the release. Pursuant to New Mexico Administrative Code (NMAC) 19.15.29 issued on May 13, 2018, KJE advanced 19 preliminary soil borings (SS-01 through SS-19) and one background sample (SS-BG) within and outside the spill area but allowed a minimum 25-foot setback to the four (4) Energy Transfer high-pressure gas lines to address appropriate safety measures and collect representative soil samples.

Soil samples collected during delineation and characterization activities did not indicate concentrations of benzene, toluene, ethyl benzene, and xylenes (BTEX) above laboratory method detection limits. However, extended range total petroleum hydrocarbons (TPH) concentrations exceeded the NMAC closure criteria of 100 mg/kg in soil samples SS-17, SS-18, and SS-19; which KJE believes resulted from a historical release associated with the well pad and current operations. Moreover, chloride concentrations exceeded the NMAC closure criteria of 600 mg/kg in soil samples SS-01, SS-02, SS-03, SS-04, SS-05, SS-08, SS-11, SS-14, SS-15, SS-15, SS-17, and SS-18. The remaining soil samples submitted for laboratory analysis were either below the NMAC closure criteria or below laboratory reporting limits (non-detect).

KJE contracted Enviro-Drill, Inc., a licensed driller in the state of New Mexico, to install a temporary monitoring well, to approximately 55 feet below ground surface (bgs), in the vicinity of the produced water release to confirm or deny groundwater levels in regards to ground surface (Well Permit Number C 04485 POD1). Based on the absence of groundwater within 50 feet of ground surface and the recovery of 260 barrels (BBLs), chloride and TPH concentrations below their less conservative closure criteria in soil borings SS-01, SS-02, SS-03, SS-04, SS-05, SS-08, SS-15, SS-17, and SS-18 will be allowed to remain in place. However, soil borings SS-11, SS-14, SS-15, and SS-18 will be properly excavated and transported to an approved landfill while maintaining appropriate safety measures (25-foot setback).

Remediation activities (dig and haul) began on October 5 through October 9, 2020, to address the exceedances of chlorides and TPH detected in soil samples. OWL and Expert Environmental

personnel, under the supervision of KJE, excavated impacted soil in an approximate 20' x 20' x 4' pattern around soil borings SS-11, SS-14, SS-15, and SS-18. However, during remediation activities, a previously unknown injection line was discovered in the vicinity of SS-18. Due to the location of the injection line, the excavation perimeter around SS-18 was moved to accommodate appropriate safety measures. Upon receipt of analytical results below applicable NMAC closure criteria, the excavations were backfilled with clean, imported fill material.

OWL and KJE respectfully requests deferral of the OCD requirements to complete further investigations and remediation adjacent to and below the high-pressure gas pipelines, the county road, and the fence line. The GPS coordinates of the extent of this area include: 32.065376, -103.629260; 32.065305, -103.629271; 32.065282, -103.629210; 32.065088, -103.629210; 32.065054, -103.629130; 32.064987, -103.629220; 32.065029, -103.629663; 32.065052, -103.629633; 32.065086, -103.629421; 32.065162, -103.629422; 32.065195, -103.629323; 32.065287, -103.629356; 32.065306, -103.629286; and 32.065366, -103.629284 which are illustrated on the attached Figure 1 for a total area of approximately 9,603 square feet. OWL and KJE request that the remediation be delayed until the pipelines, county road, and the fence line are removed or relocated in the future to prevent possible damage to or reduction of structural integrity for each obstacle in question. When the obstacles 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. A copy of the Remediation Deferral Request letter is included in Appendix I.

1.0 Introduction

On August 4, 2020, KJE was provided notification by Mr. Phillip Sanders, Safety Director with OWL SWD Operating, LLC, regarding a release of produced water along the Harrier booster Pump located approximately 25 miles southwest of Jal, Lea County, New Mexico. According to OWL personnel, the bleed off nipple and ball valve blew off the bottom of the booster pump which caused the release. KJE verbally notified the NMOCD and BLM of the release on August 4, 2020, and it was determined approximately 280 BBLs of produced water was released, with approximately 260 BBLs recovered during emergency response activities. According to OWL personnel, the release occurred on the Harrier booster pump station and pooled on the well pad owned by BTA directly to the north. In addition, KJE submitted Form C-141 to the NMOCD on August 4, 2020 for review and approval. A response was received from Mr. Eugene Bolton, with the NMOCD, indicating the incident was assigned incident tracking number NRM2021932931. Furthermore, based on conversations with Mr. James Amos, with the Bureau of Land Management (BLM), OWL was not required to perform an archeological survey for the release. The general view of the spill is illustrated in Appendix A on Figure 1.

Pursuant to NMAC 19.15.29 on August 8, 2018, KJE arrived on-site August 25, 2020, to begin delineation and site characterization procedures. The NMOCD approved C-141 form is located in Appendix F of this report.

2.0 Environmental Assessment Activities

2.1 Delineation Activities

On August 25, 2020, KJE performed delineation and site characterization activities in an attempt to delineate the release horizontally and vertically by advancing 19 soil borings (SS-01 through SS-19) within and outside the spill area. In addition, KJE advanced one (1) background boring approximately 300 feet west of the produced water release in an attempt to obtain background soil concentrations for comparison. The soil borings and background boring were advanced utilizing a Geoprobe 7822DT (direct-push techniques) to a maximum depth ranging from two (2) to seven (7) feet bgs. Groundwater was not encountered during the advancement of the soil borings or background boring; therefore, groundwater was not sampled or considered during the sampling event. The soil boring locations and approximate spill area are included in Appendix A.

Field screening for chloride concentrations and soil conductivity was conducted using a calibrated Hanna HI993310 soil conductivity meter. In addition, 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. The soil boring logs are included in Appendix C.

2.2 Remediation Activities

KJE contracted Enviro-Drill, Inc., a licensed driller in the state of New Mexico, to install a temporary monitoring well, to approximately 55 feet bgs, in the vicinity of the produced water release to confirm or deny groundwater levels in regards to ground surace (Well Permit Number C 04485 POD1). Furthermore, KJE allowed the temporary monitoring well to stabilize prior to manually gauging the temporary well. Next, KJE utilized a KECK 100' water level meter to manually gauge the temporary monitoring well and groundwater was not encountered within 55 feet of the ground surface. Pursuant to NMAC 19.15.29, if the documented depth to groundwater ranges from 51 to 100 feet bgs, the closure criteria for chlorides and TPH are increased to 10,000 mg/kg and 2,500 mg/kg; respectively. Based on the absence of groundwater within 50 feet of ground surface and the recovery of 260 BBLs (280 BBLs total), chloride and TPH concentrations below their less conservative closure criteria in soil borings SS-01, SS-02, SS-03, SS-04, SS-05, SS-08, SS-15, SS-17, and SS-18 will be allowed to remain in place. However, soil borings SS-11, SS-14, SS-15, and SS-18 will be properly excavated and transported to an approved landfill while maintaining appropriate safety measures (25-foot setback).

Remediation activities (dig and haul) began on October 5 through October 9, 2020, to address the exceedances of chlorides and TPH detected in soil samples. OWL and Expert Environmental personnel, under the supervision of KJE, excavated impacted soil in an approximate 20' x 20' x 4' pattern around soil borings SS-11, SS-14, SS-15, and SS-18. However, during remediation activities, a previously unknown injection line was discovered in the vicinity of SS-18. Due to the location of the injection line, the excavation perimeter around SS-18 was moved to accommodate appropriate safety measures. Following the excavation of impacted soil, Expert Environmental performed in-situ titration sampling to determine chloride concentrations prior to collecting confirmation samples. Once titration results were below the less conservative closure criteria, Expert Environmental collected confirmation soil samples and submitted for laboratory analysis to Cardinal Laboratories (a NELAP accredited laboratory) in Hobbs, New Mexico. Upon receipt of analytical results below NMAC closure criteria, the excavations were backfilled with clean fill material. Copies of analytical reports are included in Appendix E.

2.3 Deviations from the Scope

Soil borings were field adjusted due to the proximity of high-pressure gas lines, fencing, and county roads and a minimum 25-feet setback was set forth to maintain structural integrity and address safety concerns. During the installation of the soil borings, KJE encountered refusal due to caliche in all soil borings ranging from two (2) to seven (7) feet bgs. The soil boring locations and approximate release area are included in Appendix A.

It should be noted, during remediation activities an unknown injection pipeline was discovered in the vicinity of SS-18. Due to the location of the injection pipeline, the excavation perimeter around SS-18 was moved to accommodate appropriate safety measures.

3.0 Soil Sample Collection / Handling Procedures

3.1 Soil Samples

Soil samples were collected based on field indicators or depth of potential impact as noted above, and all 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 Carlsbad, New Mexico) accompanied by completed chain-of-custody. The soil samples were analyzed for BTEX via Method 8260, extended range TPH via Method 8015 modified, and chlorides via Method EPA 300. The sample collection and handling activities were conducted in accordance with USEPA Standard Operating Procedures and strict chain-of-custody protocols.

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

3.2 Groundwater Samples

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, no water well was in the immediate area of the release. KJE installed a temporary monitoring well, permit number C04485 POD1, in order to document the absence or presence of groundwater within 50 feet of ground surface. After installation of the temporary monitoring well, KJE utilized a KECK 100' water level meter to manually gauge the temporary monitoring well and groundwater was not encountered within 55 feet of the ground surface. As such, the potential for groundwater impact is not anticipated. Based on the absence of shallow groundwater and lack as a known source of drinking water in the vicinity of the release, there is no complete exposure pathway to shallow groundwater. No use of groundwater is expected following site remediation. In addition, site remediation activities were not expected to encounter groundwater due to the depth of the groundwater in the vicinity of the site. As such, KJE does not recommend further action regarding potential groundwater impact. A copy of the well permit is included in Appendix F.

4.0 Summary of Analytical Results

4.1 NMAC Closure Criteria

The NMOCD required delineation of BTEX, extended range TPH, and chlorides for the release area. Published values for BTEX and TPH were obtained from the document "New Mexico Administrative Code Title 19, Natural Resources and Wildlife, Chapter 15, Oil and Gas, Part 29,

Releases, issued August 14, 2018. Horizontal and vertical delineation concentrations were determined to be 10 mg/kg benzene, 50 mg/kg BTEX, 100 mg/kg TPH and 600 mg/kg chloride based on the potential of groundwater to be within 50 feet of the ground surface. See Figure 1 in Appendix A for soil boring locations.

4.2 Soil Analytical Results

Soil samples collected during delineation and characterization activities did not indicate concentrations of BTEX above laboratory method detection limits. However, TPH concentrations exceeded the NMAC closure criteria of 100 mg/kg in soil samples SS-17 0 – 2.5' (816 mg/kg), SS-18 0 – 2' (2,990 mg/kg), and SS-19 0 – 2' (177 mg/kg). Moreover, chloride concentrations exceeded the NMAC closure criteria of 600 mg/kg in soil samples SS-01 0 – 2' (1,840 mg/kg), SS-02 0 – 2' (3,940 mg/kg), SS-03 0 – 2' (1,070 mg/kg), SS-03 4 – 5' (809 mg/kg), SS-04 0 – 2' (685 mg/kg), SS-05 0 – 2.5' (3,580 mg/kg), SS-08 0 – 2' (1,280 mg/kg), SS-11 0 – 2' (10,900 mg/kg), SS-14 0 – 2' (13,500 mg/kg), SS-15 0 – 2' (15,500 mg/kg), SS-15 2 – 4' (3,950 mg/kg), SS-15 4 – 5' (753 mg/kg), SS-17 0 – 2.5' (3,720 mg/kg), and SS-18 0 – 2' (2,790 mg/kg).The remaining soil samples submitted for laboratory analysis were either below the NMAC closure criteria or below laboratory reporting limits (non-detect).

A summary table of the analytical results are included in Appendix B and copies of the laboratory analytical reports with chain-of-custody forms are included in Appendix D.

5.0 Photographs

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

6.0 Conclusions/Recommendations

Soil samples collected during delineation and characterization activities did not indicate concentrations of BTEX above laboratory method detection limits. However, TPH concentrations exceeded the NMAC closure criteria of 100 mg/kg in soil samples SS-17 0 – 2.5' (816 mg/kg), SS-18 0 – 2' (2,990 mg/kg), and SS-19 0 – 2' (177 mg/kg). Moreover, chloride concentrations exceeded the NMAC closure criteria of 600 mg/kg in soil samples SS-01 0 – 2' (1,840 mg/kg), SS-02 0 – 2' (3,940 mg/kg), SS-03 0 – 2' (1,070 mg/kg), SS-03 4 – 5' (809 mg/kg), SS-04 0 – 2' (685 mg/kg), SS-05 0 – 2.5' (3,580 mg/kg), SS-08 0 – 2' (1,280 mg/kg), SS-11 0 – 2' (10,900 mg/kg), SS-14 0 – 2' (13,500 mg/kg), SS-15 0 – 2' (15,500 mg/kg), SS-15 2 – 4' (3,950 mg/kg), SS-15 4 – 5' (753 mg/kg), SS-17 0 – 2.5' (3,720 mg/kg), and SS-18 0 – 2' (2,790 mg/kg).The remaining soil samples submitted for laboratory analysis were either below the NMAC closure criteria or below laboratory reporting limits (non-detect).

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OWL SWD Operating, LLC, and KJE respectfully requests deferral of the NMOCD requirements to complete further investigations and remediation adjacent to and below the high-pressure gas lines, the county road, and the fence line. The GPS coordinates of the extent of this area are 32.065376, -103.629260; 32.065305, -103.629271; 32.065282, -103.629210; 32.065088, -103.629210; 32.065054, -103.629130; 32.064987, -103.629220; 32.065029, -103.629663; 32.065052, -103.629633; 32.065086, -103.629421; 32.065162, -103.629422; 32.065195, -103.629323; 32.065287, -103.629356; 32.065306, -103.629286; and 32.065366, -103.629284 which are illustrated on the attached Figure 1 for a total area of approximately 9,603 square feet. OWL and KJE request that the remediation be delayed until the pipelines, county road, and the fence line are removed or relocated in the future to prevent possible damage to or reduction of structural integrity for each obstacle in question. When the obstacles 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. A copy of the Remediation Deferral Request letter is included in Appendix I.

Furthermore, KJE has prepared this delineation and site characterization report detailing excavation activities including copies of waste manifests, laboratory analytical results, and pertinent site information.

7.0 Qualifications of Environmental Professional

This is to certify the delineation and site characterization activities completed at the site located at the Harrier booster pump station in Lea County, New Mexico; was performed following EPA, NMOCD, and industry-approved standards/protocols. This work was conducted on August 25, 2020 by Travis Reddick of KJE, for Mr. Phillip Sanders with OWL SWD Operating, LLC, and all field activities were completed under the supervision of Mr. William B. Soderstrom. Mr. Soderstrom's credentials are included in Appendix J.

8.0 Signature of Environmental Professional

William Soderstrom 10/26/2020

William B. Soderstrom Date
Environmental Professional
Director of Environmental Services

APPENDIX A

Figures

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

LEGEND
- RELEASE POINT
- SOIL BORING (TOTAL: 19)
- BACKGROUND SAMPLE
- INJECTION LINE
- APPROXIMATE SPILL AREA
- APPROXIMATE DEFERRAL AREA
- EXCAVATION AREA (20'X20')

SCALE: 1"=60'

N

RP
32.064987, -103.629220
32.065054, -103.629130
32.065088, -103.629210
32.065029, -103.629663
32.065052, -103.629633
32.065086, -103.629421
32.065162, -103.629422
32.065195, -103.629323
32.065282, -103.629210
32.065287, -103.629356
32.065306, -103.629286
32.065366, -103.629284
32.065376, -103.629260
32.065305, -103.629271
DEFERRAL AREA APPROXIMATELY 9,603 SQ. FT.
SPILL AREA APPROXIMATELY 35,350 SQ. FT.
SS-01
SS-02
SS-03
SS-04
SS-05
SS-06
SS-07
SS-08
SS-09
SS-10
SS-11
SS-12
SS-13
SS-14
SS-15
SS-16
SS-17
SS-18
SS-19
SS-BG

APPROXIMATE SPILL AREA AND PROPOSED SOIL BORING LOCATION MAP

OILFIELD WATER LOGISTICS (OWL) SWD OPERATING, LLC
280 BBL PRODUCED WATER RELEASE - INCIDENT NO. NRM2021932931
UNIT LETTER C, SECTION 12, T26S, R32E, LEA COUNTY, NEW MEXICO

DATE: 09/15/2020
VERSION: 1.0
THIS DRAWING IS FOR INFORMATION PURPOSES ONLY
REVISIONS:

FIGURE: 1

KJE
500 Moseley Road
Cross Roads, Texas 76227
Phone (940) 387-0805
www.kje-us.com
(TBPE # F-12214)

APPENDIX B

Analytical Data

Table 1: Soil Analytical Data
Harrier Booster Pump
32.064992. -103.629600
Jal, Lea County, New Mexico

Laboratory Sample Designation		Units	NMAC Closure Criteria[1]	NMAC Closure Criteria[2]	670969-001	670969-002	670969-003	670969-004	670969-005	670969-006	670969-007	670969-008	670969-009	670969-010	670969-011	670969-012	670969-013	670969-014	670969-015
Sample Designation					SS-01	SS-01	SS-02	SS-02	SS-02	SS-02	SS-03	SS-03	SS-03	SS-04	SS-04	SS-05	SS-06	SS-06	SS-07
Date Collected					8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020
Sample Depth					0 - 2'	2 - 4'	0 - 2'	2 - 4'	4 - 6'	6 - 7'	0 - 2'	2 - 4'	4 - 5'	0 - 2'	2 - 4'	0 - 2.5'	0 - 2'	2 - 3'	0 - 2'
Method	Analyte																		
8015	TPH[2]	mg/kg	100	2,500	<53.9	--	<54.6	--	--	--	<54.5	--	--	<52.2	--	<55.4	<52.6	--	<53.6
8260	BENZENE	mg/kg	10	10	<0.00215	--	<0.00218	--	--	--	<0.00217	--	--	<0.00211	--	<0.00220	<0.00208	--	<0.00214
	ETHYLBENZENE	mg/kg	--	--	<0.00215	--	<0.00218	--	--	--	<0.00217	--	--	<0.00211	--	<0.00220	<0.00208	--	<0.00214
	TOLUENE	mg/kg	--	--	<0.00215	--	<0.00218	--	--	--	<0.00217	--	--	<0.00211	--	<0.00220	<0.00208	--	<0.00214
	XYLENE	mg/kg	--	--	<0.00215	--	<0.00218	--	--	--	<0.00217	--	--	<0.00211	--	<0.00220	<0.00208	--	<0.00214
	TOTAL BTEX[3]	mg/kg	50	50	<0.00215	--	<0.00218	--	--	--	<0.00217	--	--	<0.00211	--	<0.00220	<0.00208	--	<0.00214
300	CHLORIDE	mg/kg	600	10,000	**1,840**	**157**	**3,940**	**85**	**83.9**	**129**	**1,070**	**171**	**809**	**685**	**142**	**3,580**	**119**	**111**	**97**

Laboratory Sample Designation		Units	NMAC Closure Criteria[1]	NMAC Closure Criteria[2]	670969-016	670969-017	670969-018	670969-019	670969-020	670969-021	670969-022	670969-023	670969-024	670969-025	670969-026	670969-027	670969-028	670969-029	670969-030
Sample Designation					SS-08	SS-08	SS-09	SS-09	SS-10	SS-11	SS-11	SS-12	SS-12	SS-13	SS-13	SS-13	SS-14	SS-15	SS-15
Date Collected					8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020
Sample Depth					0 - 2'	2 - 3'	0 - 2'	2 - 3'	0 - 2'	0 - 2'	2 - 3'	0 - 2'	2 - 3.5'	0 - 2'	2 - 4'	4 - 5'	0 - 2'	0 - 2'	2 - 4'
Method	Analyte																		
8015	TPH	mg/kg	100	2,500	<75.4	--	<51.4	--	<52.7	<53.0	--	<51.9	--	<61.7	--	--	<53.4	<53.9	--
8260	BENZENE	mg/kg	10	10	<0.00302	--	<0.00206	--	<0.00211	<0.00212	--	<0.00207	--	<0.00248	--	--	<0.00214	<0.00212	--
	ETHYLBENZENE	mg/kg	--	--	<0.00302	--	<0.00206	--	<0.00211	<0.00212	--	<0.00207	--	<0.00248	--	--	<0.00214	<0.00212	--
	TOLUENE	mg/kg	--	--	<0.00302	--	<0.00206	--	<0.00211	<0.00212	--	<0.00207	--	<0.00248	--	--	<0.00214	<0.00212	--
	XYLENE	mg/kg	--	--	<0.00302	--	<0.00206	--	<0.00211	<0.00212	--	<0.00207	--	<0.00248	--	--	<0.00214	<0.00212	--
	TOTAL BTEX	mg/kg	50	50	<0.00302	--	<0.00206	--	<0.00211	<0.00212	--	<0.00207	--	<0.00248	--	--	<0.00214	<0.00212	--
300	CHLORIDE	mg/kg	600	10,000	**1,280**	**50**	**244**	**55**	**106**	**10,900**	**118**	**352**	**560**	**154**	**12.8**	**11**	**13,500**	**15,500**	**3,950**

Laboratory Sample Designation		Units	NMAC Closure Criteria[1]	NMAC Closure Criteria[2]	670969-031	670969-032	670969-033	670969-034	670969-035	670969-036	670969-037	670969-038	670969-039	670969-040
Sample Designation					SS-15	SS-16	SS-16	SS-17	SS-18	SS-18	SS-19	SS-19	SS-BG	SS-BG
Date Collected					8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020	8/25/2020
Sample Depth					4 - 5'	0 - 2'	2 - 3'	0 - 2.5'	0 - 2'	2 - 3'	0 - 2'	2 - 4.5'	0 - 2'	2 - 3.5'
Method	Analyte													
8015	TPH	mg/kg	100	2,500	--	<52.6	--	**816**	**2,990**	<55.7	**177**	<56.0	<60.3	--
8260	BENZENE	mg/kg	10	10	--	<0.00209	--	<0.00253	<0.00215	<0.00222	<0.00228	<0.00224	<0.00239	--
	ETHYLBENZENE	mg/kg	--	--	--	<0.00209	--	<0.00253	<0.00215	<0.00222	<0.00228	<0.00224	<0.00239	--
	TOLUENE	mg/kg	--	--	--	<0.00209	--	<0.00253	<0.00215	<0.00222	<0.00228	<0.00224	<0.00239	--
	XYLENE	mg/kg	--	--	--	<0.00209	--	<0.00253	<0.00215	<0.00222	<0.00228	<0.00224	<0.00239	--
	TOTAL BTEX	mg/kg	50	50	--	<0.00209	--	<0.00253	<0.00215	<0.00222	<0.00228	<0.00224	<0.00239	--
300	CHLORIDE	mg/kg	600	10,000	**753**	**259**	**389**	**3,720**	**2,790**	**401**	**390**	**122**	**376**	**63**

Notes:
1) New Mexico Administrative Code (NMAC) Title 19, Chapter 15, Part 29, Table 1 Closure Criteria for Soils Impacted by a Release with Groundwater ≤50 feet bgs, issued August 8, 2018
2) New Mexico Administrative Code (NMAC) Title 19, Chapter 15, Part 29, Table 1 Closure Criteria for Soils Impacted by a Release with Groundwater >50 feet and <100 feet bgs, issued August 8, 2018
mg/kg = milligrams per killogram
Bold = Analyte was detected at concentrations above laboratory sample detection limits
Highlighted = Analyte was detected at concentrations above NMAC Closure Criteria
"--" = Not applicable

Table 2: Soil Confirmation Analytical Data
Harrier Booster Pump
32.064992. -103.629600
Jal, Lea County, New Mexico

Laboratory Sample Designation		Units	NMAC Closure Criteria[1]	NMAC Closure Criteria[2]	H002657-01	H002657-02	H002657-03	H002657-04	H002657-05	H002657-06	H002674-01	H002674-02	H002674-03	H002674-04	H002674-05	H002674-06	H002674-07
Sample Designation					SP 11 @ N. Wall	SP 11 @ W. Wall	SP 11 @ E. Wall	SP 11 @ S. Wall	SP 11 @ 3'	SP 15 @ S. Wall	SP 15 @ N. Wall	SP 15 @ W. Wall	SP 14 @ S. Wall	SP 14 @ E. Wall	SP 14 @ 2'	SP 14 @ N. Wall	SP 15 @ 6'
Date Collected					10/6/2020	10/6/2020	10/6/2020	10/6/2020	10/6/2020	10/6/2020	10/7/2020	10/7/2020	10/7/2020	10/7/2020	10/7/2020	10/7/2020	10/7/2020
Sample Depth					2'	2'	2'	2'	3'	2'	2'	2'	2'	2'	2'	2'	6'
Method	Analyte																
8015	TPH[2]	mg/kg	100	2,500	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10
8260	BENZENE	mg/kg	10	10	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	ETHYLBENZENE	mg/kg	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	TOLUENE	mg/kg	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	XYLENE	mg/kg	--	--	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150	<0.150
	TOTAL BTEX[3]	mg/kg	50	50	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300	<0.300
300	CHLORIDE	mg/kg	600	10,000	**64**	**304**	**96**	**144**	**80**	**80**	**176**	**80**	**32**	**48**	**208**	**64**	**752**

Notes:
1) New Mexico Administrative Code (NMAC) Title 19, Chapter 15, Part 29, Table 1 Closure Criteria for Soils Impacted by a Release with Groundwater ≤50 feet bgs, issued August 8, 2018
2) New Mexico Administrative Code (NMAC) Title 19, Chapter 15, Part 29, Table 1 Closure Criteria for Soils Impacted by a Release with Groundwater >50 feet and <100 feet bgs, issued August 8, 2018
mg/kg = milligrams per killogram
Bold = Analyte was detected at concentrations above laboratory sample detection limits
Highlighted = Analyte was detected at concentrations above NMAC Closure Criteria
"--" = Not applicable

Table 3: GPS Coordiantes Harrier Booster Pump 32.064992, -103.629600 Jal, Lea County, New Mexico			
Location	Description	Latitude	Longitude
SS-01	Soil Boring	32.3746	-104.22852
SS-02	Soil Boring	32.06590	-103.62953
SS-03	Soil Boring	32.06597	-103.62939
SS-04	Soil Boring	32.06596	-103.62921
SS-05	Soil Boring	32.0658	-103.62923
SS-06	Soil Boring	32.06581	-103.6294
SS-07	Soil Boring	32.06588	-103.62955
SS-08	Soil Boring	32.0657	-103.62965
SS-09	Soil Boring	32.06558	-103.62974
SS-10	Soil Boring	32.06556	-103.62962
SS-11	Soil Boring	32.06557	-103.6295
SS-12	Soil Boring	32.06556	-103.62931
SS-13	Soil Boring	32.06555	-103.62916
SS-14	Soil Boring	32.06543	-103.62916
SS-15	Soil Boring	32.06546	-103.6293
SS-16	Soil Boring	32.06549	-103.6295
SS-17	Soil Boring	32.06594	-103.62963
SS-18	Soil Boring	32.06593	-103.62996
SS-19	Soil Boring	32.06594	-103.6293
SS-BG	Background Soil Boring	32.06591	-103.6304

Notes:

GPS coordinates were collected on August 25, 2020, by Mr. Travis Reddick utilizing Garmin GPSMAP 64sc unit ID 3951309141.

APPENDIX C

Boring Logs

Bold. Insightful. Connected.

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 #**	SS-01	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	4’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Well Completion** *(graphical representation only, not to scale)*
SAND (SP), white, no odor, tiny grain size, dry, chunks of caliche throughout	-0-	0 – 2 0830	--	--	
	-1-			--	
	-2-	2 – 4 0835	--	--	
Refusal at 4’ due to caliche	-3-			--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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

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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 #**	SS-02	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	7’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Well Completion** *(graphical representation only, not to scale)*
SAND (SP), white with red mottled in toward lower end, no odor, dry, tiny grain size, abundant caliche throughout	-0-	0 – 2 0845	--	--	
	-1-			--	
	-2-	2 – 4 0850	--	--	
	-3-			--	
	-4-	4 – 6 0853	--	--	
	-5-			--	
Refusal at 7’ due to caliche	-6-	6 – 7 0855	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-03	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	5’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
SAND (SP), beige, tiny particle size, slight organic soil odor, dry	-0-	0 – 2 0909	--	--	
	-1-			--	
	-2-	2 – 4 0912	--	--	
	-3-			--	
Refusal at 5’ due to caliche	-4-	4 – 5 0915	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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KJ Environmental & Civil Engineering
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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-04	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	4’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
SAND (SP), white chalky sand, tiny grain size, dry, no odor	-0-	0 – 2 0920	--	--	
	-1-			--	
	-2-	2 – 4 0925	--	--	
Refusal at 4’ due to caliche	-3-			--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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

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RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-05	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	2.5'	**Diameter of Boring:**	2.25"
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
SAND (SP), mostly white chalky sand, slight mottles of red throughout, tiny grain size, dry, no odor	-0-	0 – 2.5 0930	--	--	
	-1-			--	
	-2-		--	--	
Refusal at 2.5' due to caliche.					
		--	--	--	
	-3-			--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-06	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	3’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
SAND (SP), white chalky sand, dry, no odor, tiny grain size	-0-	0 – 2 0942	--	--	
	-1-			--	
Refusal at 3’ due to caliche	-2-	2 – 3 0945	--	--	
	-3-	--	--	--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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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 #**	SS-07	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	2’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Well Completion** *(graphical representation only, not to scale)*
SAND (SP), white chalky sand, no odor, dry, tiny particle size	-0-	0 – 2 1000	--	--	
Refusal at 2’ due to caliche	-1-			--	
	-2-	--	--	--	
	-3-	--	--	--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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

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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 #**	SS-08	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	3’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
SAND (SP), beige, small particle size, no odor, dry	-0-	0 – 2 1017	--	--	
	-1-			--	
Refusal at 3’ due to caliche	-2-	2 – 3 1020	--	--	
	-3-	--	--	--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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RECORD OF SUBSURFACE EXPLORATION

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940-387-0805 • FAX 940-387-0830

Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-09	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	3’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
SAND (SP), beige sand, small particle size, no odor, dry	-0-	0 – 2 1030	--	--	
	-1-			--	
Refusal at 3’ due to caliche	-2-	2 – 3 1035	--	--	
	-3-	--	--	--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-10	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	2'	**Diameter of Boring:**	2.25"
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
SAND (SP), white chalky sand, dry, no odor, tiny grain size, well sorted and consolidated	-0-	0 – 2 1046	--	--	
	-1-			--	
Refusal at 2' due to caliche	-2-	--	--	--	
	-3-	--	--	--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-11	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	3’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
SAND (SP), beige sand, dry, no odor, tiny grain size, well sorted, well consolidated	-0-	0 – 2 1053	--	--	
	-1-			--	
Refusal at 3’ due to caliche	-2-	2 – 3 1056	--	--	
	-3-	--	--	--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-12	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	3.5'	**Diameter of Boring:**	2.25"
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
SAND (SP), alternating white and beige layers, small grain size, dry, no odor	-0-	0 – 2 1105	--	--	
	-1-			--	
	-2-	2 – 3.5 1107	--	--	
Refusal at 3.5' due to caliche	-3-			--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-13	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	5’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
SAND (SP), red sand transitioning to white caliche	-0-	0 – 2 1112	--	--	
	-1-			--	
	-2-	2 – 4 1115	--	--	
	-3-			--	
Refusal at 5’ due to caliche	-4-	4 – 5 1118	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-14	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	2’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Well Completion** *(graphical representation only, not to scale)*
SAND (SP), mostly white sand, beige mottles, dry, no odor	-0-	0 – 2 1127	--	--	
Refusal at 2’ due to caliche	-1-			--	
	-2-	--	--	--	
	-3-	--	--	--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-15	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	5'	**Diameter of Boring:**	2.25"
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Well Completion** *(graphical representation only, not to scale)*
SAND (SP), red sand slowly transitioning to beige, then white caliche, dry, no odor, tiny grain size	-0-	0 – 2 1134	--	--	
	-1-			--	
	-2-	2 – 4 1137	--	--	
	-3-			--	
Refusal at 5' due to caliche	-4-	4 – 5 1140	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-16	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	4’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
SAND (SP), white sand, beige mottles, no odor, dry, small grain size	-0-	0 – 2 1142	--	--	
	-1-			--	
	-2-	2 – 4 1145	--	--	
Refusal at 4’ due to caliche	-3-			--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-17	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	2.5’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
SAND (SP), slightly larger grain size than other borings, white to slight beige, no odor, dry	-0-	0 – 2.5 1230	--	--	
	-1-			--	
	-2-		--	--	
Refusal at 2.5’ due to caliche.		--	--	--	
	-3-			--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-18	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	3’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
SAND (SP), slightly red sand to white caliche, no odor, dry.	-0-	0 – 2 1233	--	--	
	-1-			--	
Refusal at 3’ due to caliche	-2-	2 – 3 1236	--	--	
	-3-	--	--	--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-19	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	4.5’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Well Completion** *(graphical representation only, not to scale)*
SAND (SP), white caliche mixed with large boulders of caliche, dry, no odor	-0-	0 – 2 1244	--	--	
	-1-			--	
	-2-	2 – 4.5 1246	--	--	
	-3-			--	
Refusal at 4.5’ due to caliche	-4-			--	
	--	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-BG	**Date Drilled:**	August 25, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	3.5’	**Diameter of Boring:**	2.25”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.064992, -103.629600			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Enviro-Drill			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	DP	**Sampling Method:**	Acetate Sleeve	**Logged By:**	TR	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
SAND (SP), dirt transitioning to caliche, no odor, dry	-0-	0 – 2 1302	--	--	
	-1-			--	
	-2-	2 – 3.5 1305	--	--	
Refusal at 3.5’ due to caliche	-3-			--	
	-4-	--	--	--	
	-5-	--	--	--	
	-6-	--	--	--	
	-7-	--	--	--	
	-8-	--	--	--	
	-9-	--	--	--	
	-10-	--	--	--	
	-11-	--	--	--	
	-12-	--	--	--	
	-13-	--	--	--	
	-14-	--	--	--	
	-15-	--	--	--	
	-16-	--	--	--	
	-17-	--	--	--	
	-18-	--	--	--	
	-19-	--	--	--	
	-20-	--	--	--	

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

KJE Bold. Insightful. Connected.

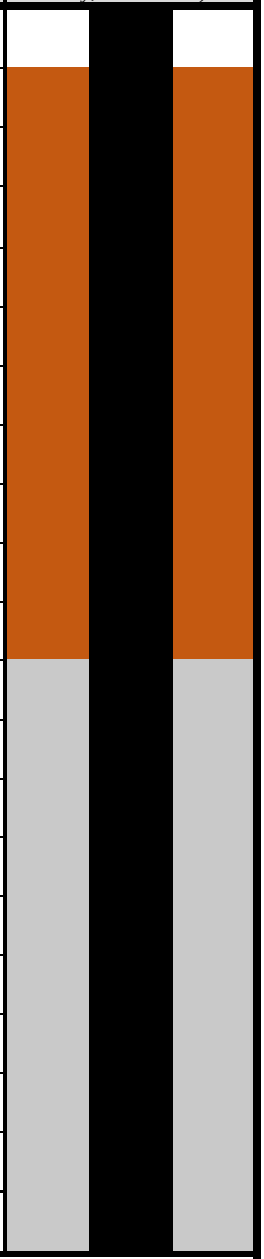
RECORD OF SUBSURFACE EXPLORATION

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 #**	MW-1	**Date Drilled:**	October 5, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	55’	**Diameter of Boring:**	6”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	55’	**Diameter of Screen:**	2”
Project Address:	32.064992, -103.629600			**Length of Screen:**	10’	**Diameter of Casing:**	2”
Driller:	Enviro-Drill			**Length of Casing:**	45’	**Slot Size:**	02
Drilling Method:	HSA	**Sampling Method:**	N/A	**Logged By:**	TR	**Well Material:**	PVC

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)
Red Sand to pinkish sand mixed with caliche at around 5’, fine grain size, well consolidated.	-0-	--	--	--
	-1-	--	--	--
***Black shading denotes PVC riser.**	-2-	--	--	--
***Orange Red shading denotes native backfill.**	-3-	--	--	--
	-4-	--	--	--
	-5-	--	--	--
	-6-	--	--	--
5’ – 8’, beige sand, medium grain size, poorly consolidated, darker red at around 10’	-7-	--	--	--
	-8-	--	--	--
	-9-	--	--	--
	-10-	--	--	--
	-11-	--	--	--
***Light gray shading denotes grout.**	-12-	--	--	--
	-13-	--	--	--
	-14-	--	--	--
Reddish orange sand at 15’ fine grain size, no odor	-15-	--	--	--
	-16-	--	--	--
	-17-	--	--	--
	-18-	--	--	--
Slight refusal between 20’ – 25’ really fine red sand, well sorted and consolidated	-19-	--	--	--
	-20-	--	--	--

Well Completion *(graphical representation only, not to scale)*



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

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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 #**	MW-1	**Date Drilled:**	October 5, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	55’	**Diameter of Boring:**	6”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	55’	**Diameter of Screen:**	2”
Project Address:	32.064992, -103.629600			**Length of Screen:**	10’	**Diameter of Casing:**	2”
Driller:	Enviro-Drill			**Length of Casing:**	45’	**Slot Size:**	02
Drilling Method:	HSA	**Sampling Method:**	N/A	**Logged By:**	TR	**Well Material:**	PVC

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion *(graphical representation only, not to scale)*
	-21-	--	--	--	
	-22-	--	--	--	
	-23-	--	--	--	
	-24-	--	--	--	
	-25-	--	--	--	
	-26-	--	--	--	
	-27-	--	--	--	
	-28-	--	--	--	
	-29-	--	--	--	
Darker red from 30’ – 35’, still really fine, well sorted and well consolidated	-30-	--	--	--	
	-31-	--	--	--	
	-32-	--	--	--	
	-33-	--	--	--	
	-34-	--	--	--	
	-35-	--	--	--	
	-36-	--	--	--	
	-37-	--	--	--	
	-38-	--	--	--	
	-39-	--	--	--	
	-40-	--	--	--	
	-41-	--	--	--	

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

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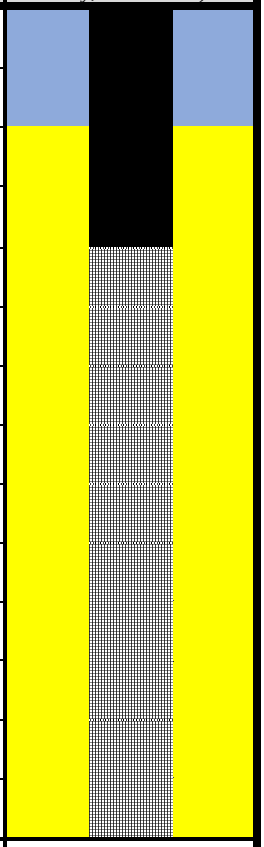
RECORD OF SUBSURFACE EXPLORATION

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 #**	MW-1	**Date Drilled:**	October 5, 2020
Client Address:	8201 Preston Road, Suite 520, Dallas, Texas 75225			**Depth of Boring:**	55’	**Diameter of Boring:**	6”
Project Name:	NRM2021932931 – Harrier Booster Pump			**Depth of Well:**	55’	**Diameter of Screen:**	2”
Project Address:	32.064992, -103.629600			**Length of Screen:**	10’	**Diameter of Casing:**	2”
Driller:	Enviro-Drill			**Length of Casing:**	45’	**Slot Size:**	02
Drilling Method:	HSA	**Sampling Method:**	N/A	**Logged By:**	TR	**Well Material:**	PVC

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Well Completion** *(graphical representation only, not to scale)*
***Blue gray shading denotes bentonite.**	-42-	--	--	--	
	-43-	--	--	--	
***Yellow shading denotes sand**	-44-	--	--	--	
	-45-	--	--	--	
	-46-	--	--	--	
***Cross-hatching denotes well screen.**	-47-	--	--	--	
	-48-	--	--	--	
	-49-	--	--	--	
	-50-	--	--	--	
	-51-	--	--	--	
	-52-	--	--	--	
	-53-	--	--	--	
	-54-	--	--	--	
Entire well dry, total depth of 55’, dry at the bottom of the well.	-55-	--	--	--	
	--	--	--	--	
	--	--	--	--	
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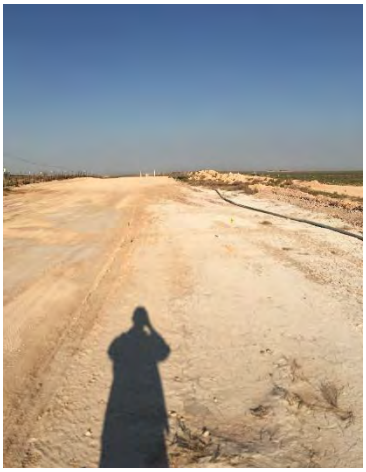
	--	--	--	--	

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

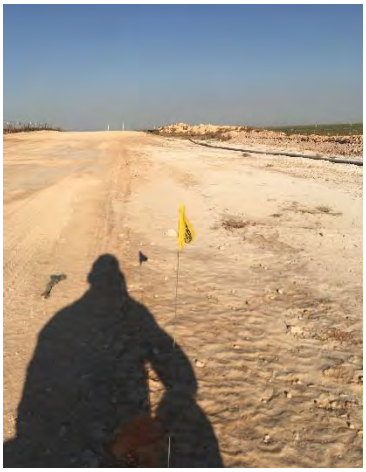
APPENDIX D

Photographic Documentation

Site Photographs

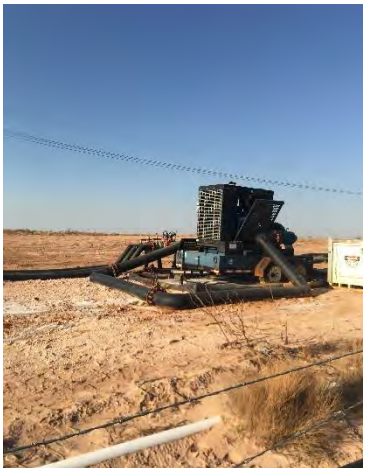


1. View of buried high-pressure gas lines to be deferred.



2. Close-up view gas marker flags and ground markings.

3. View along fence with buried-high pressure gas lines underneath to be deferred.

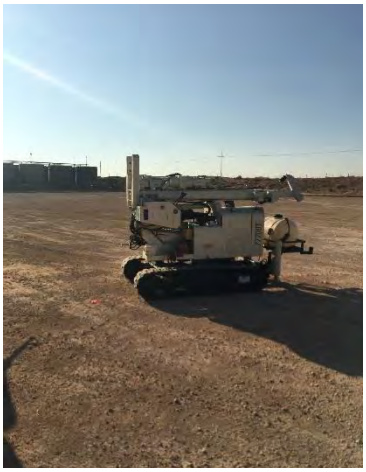


4. View of booster pump where spill occurred, buried high-pressure gas line flag visible in background.

5. View on other side of fence with buried-high pressure gas line marker flags visible.

6. View of pad where delineation was performed.

Site Photographs



7. View of 7822DT Geoprobe rig used to advance soil borings.

8. View of advancement of SB-01.

9. View of advancement of SB-01 at the caliche layer.

10. View of advancement of SB-04.

11. View of advancement of SB-08.

12. View of tape measuring 30-foot deferment from high pressure gas line.

Site Photographs

13. Typical view of sampling techniques.

14. Close-up view of typical lithology.

15. View of marked soil boring with bentonite plug.

16. View of sampling techniques.

17. View of advancement of background boring.

18. View of installation of MW-1 to monitor depth to groundwater.

Site Photographs

19. View of temporary monitoring well installed near SS-BG.

20. View of Water Level Meter showing depth of well at approximately 55'.

21. View showing no water detected at max sensitivity level.

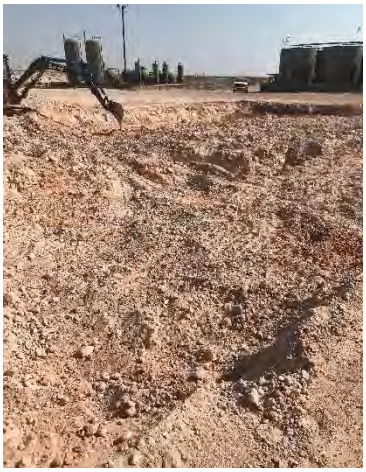
22. Overview of MW-1 with cutting barrels set beside.

23. View of excavated contaminated soil from SS-11, SS-14, and SS-15.

24. View of high-pressure gas line south of release area, facing east.

Site Photographs

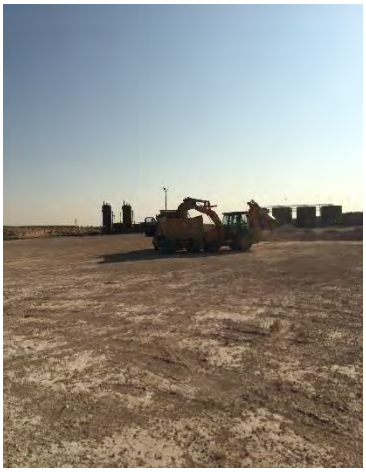
25. View of excavations of SS-14 and SS-15.



26. View of SS-14 with excavator visible.

27. View of excavation of SS-11.

28. View of excavation of SS-11 with contaminated soil and backhoe visible.



29. View of backhoe dumping contaminated dirt into dump truck to be disposed of.

APPENDIX E

Laboratory Analytical Reports

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Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: OWL080420D
Contact: Travis Reddick
Project Location: Jal

Date Received in Lab: Tue 08.25.2020 16:27
Report Date: 08.28.2020 13:58
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	670969-001		670969-002		670969-003		670969-004		670969-005		670969-006	
	Field Id:	SS-01 0-2'		SS-01 2-4 '		SS-02 0-2'		SS-02 2-4'		SS-02 4-6'		SS-02 6-7'	
	Depth:	2- ft		4- ft		2- ft		4- ft		6- ft		7- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.25.2020 08:30		08.25.2020 08:35		08.25.2020 08:45		08.25.2020 08:50		08.25.2020 08:53		08.25.2020 08:55	
BTEX by EPA 8021B	***Extracted:***	08.26.2020 16:50				08.26.2020 16:50							
	Analyzed:	08.26.2020 18:18				08.26.2020 18:38							
	Units/RL:	mg/kg	RL			mg/kg	RL						
Benzene		<0.00215	0.00215			<0.00218	0.00218						
Toluene		<0.00215	0.00215			<0.00218	0.00218						
Ethylbenzene		<0.00215	0.00215			<0.00218	0.00218						
m,p-Xylenes		<0.00430	0.00430			<0.00435	0.00435						
o-Xylene		<0.00215	0.00215			<0.00218	0.00218						
Total Xylenes		<0.00215	0.00215			<0.00218	0.00218						
Total BTEX		<0.00215	0.00215			<0.00218	0.00218						
Chloride by EPA 300	***Extracted:***	08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39	
	Analyzed:	08.26.2020 18:36		08.26.2020 18:53		08.26.2020 18:58		08.26.2020 19:04		08.26.2020 19:09		08.26.2020 19:26	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1840	53.8	157	10.8	3940	54.4	84.8	10.8	83.9	11.0	129	13.2
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.70		8.25		8.62		7.38		8.24		24.2	
TPH by SW8015 Mod	***Extracted:***	08.26.2020 12:15				08.26.2020 12:15							
	Analyzed:	08.26.2020 14:00				08.26.2020 14:20							
	Units/RL:	mg/kg	RL			mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)		<53.9	53.9			<54.6	54.6						
Diesel Range Organics (DRO)		<53.9	53.9			<54.6	54.6						
Motor Oil Range Hydrocarbons (MRO)		<53.9	53.9			<54.6	54.6						
Total TPH		<53.9	53.9			<54.6	54.6						

BRL - Below Reporting Limit

Jessica Kramer

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: OWL080420D
Contact: Travis Reddick
Project Location: Jal

Date Received in Lab: Tue 08.25.2020 16:27
Report Date: 08.28.2020 13:58
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	670969-007		670969-008		670969-009		670969-010		670969-011		670969-012	
	Field Id:	SS-03 0-2'		SS-03 2-4'		SS-03 4-5'		SS-04 0-2'		SS-04 2-4'		SS-05 0-2.5'	
	Depth:	2- ft		4- ft		5- ft		2- ft		4- ft		2.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.25.2020 09:09		08.25.2020 09:12		08.25.2020 09:15		08.25.2020 09:20		08.25.2020 09:20		08.25.2020 09:20	
BTEX by EPA 8021B	***Extracted:***	08.26.2020 16:50						08.26.2020 16:50				08.26.2020 16:50	
	Analyzed:	08.26.2020 18:58						08.26.2020 19:19				08.26.2020 19:39	
	Units/RL:	mg/kg	RL					mg/kg	RL			mg/kg	RL
Benzene		<0.00217	0.00217					<0.00211	0.00211			<0.00220	0.00220
Toluene		<0.00217	0.00217					<0.00211	0.00211			<0.00220	0.00220
Ethylbenzene		<0.00217	0.00217					<0.00211	0.00211			<0.00220	0.00220
m,p-Xylenes		<0.00433	0.00433					<0.00421	0.00421			<0.00440	0.00440
o-Xylene		<0.00217	0.00217					<0.00211	0.00211			<0.00220	0.00220
Total Xylenes		<0.00217	0.00217					<0.00211	0.00211			<0.00220	0.00220
Total BTEX		<0.00217	0.00217					<0.00211	0.00211			<0.00220	0.00220
Chloride by EPA 300	***Extracted:***	08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39	
	Analyzed:	08.26.2020 19:32		08.26.2020 19:37		08.26.2020 19:43		08.26.2020 19:48		08.26.2020 19:54		08.26.2020 20:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1070	10.9	171	10.9	809	54.4	685	10.4	142	10.6	3580	54.9
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		8.18		8.79		8.34		4.12		6.41		9.41	
TPH by SW8015 Mod	***Extracted:***	08.26.2020 12:15						08.26.2020 12:15				08.26.2020 12:15	
	Analyzed:	08.26.2020 14:40						08.26.2020 15:01				08.26.2020 15:21	
	Units/RL:	mg/kg	RL					mg/kg	RL			mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<54.4	54.4					<52.2	52.2			<55.4	55.4
Diesel Range Organics (DRO)		<54.4	54.4					<52.2	52.2			<55.4	55.4
Motor Oil Range Hydrocarbons (MRO)		<54.4	54.4					<52.2	52.2			<55.4	55.4
Total TPH		<54.4	54.4					<52.2	52.2			<55.4	55.4

BRL - Below Reporting Limit

Jessica Kramer

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Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: OWL080420D
Contact: Travis Reddick
Project Location: Jal

Date Received in Lab: Tue 08.25.2020 16:27
Report Date: 08.28.2020 13:58
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	670969-013		670969-014		670969-015		670969-016		670969-017		670969-018	
	Field Id:	SS-06 0-2'		SS-06 2-3'		SS-07 0-2'		SS-08 0-2'		SS-08 2-3'		SS-09 0-2'	
	Depth:	2- ft		3- ft		2- ft		2- ft		3- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.25.2020 09:20		08.25.2020 09:20		08.25.2020 09:20		08.25.2020 09:20		08.25.2020 09:20		08.25.2020 09:20	
BTEX by EPA 8021B	***Extracted:***	08.26.2020 16:50				08.26.2020 16:50		08.26.2020 16:50				08.26.2020 16:50	
	Analyzed:	08.26.2020 20:00				08.26.2020 20:20		08.26.2020 20:40				08.26.2020 21:01	
	Units/RL:	mg/kg	RL			mg/kg	RL	mg/kg	RL			mg/kg	RL
Benzene		<0.00208	0.00208			<0.00214	0.00214	<0.00302	0.00302			<0.00206	0.00206
Toluene		<0.00208	0.00208			<0.00214	0.00214	<0.00302	0.00302			<0.00206	0.00206
Ethylbenzene		<0.00208	0.00208			<0.00214	0.00214	<0.00302	0.00302			<0.00206	0.00206
m,p-Xylenes		<0.00416	0.00416			<0.00428	0.00428	<0.00604	0.00604			<0.00412	0.00412
o-Xylene		<0.00208	0.00208			<0.00214	0.00214	<0.00302	0.00302			<0.00206	0.00206
Total Xylenes		<0.00208	0.00208			<0.00214	0.00214	<0.00302	0.00302			<0.00206	0.00206
Total BTEX		<0.00208	0.00208			<0.00214	0.00214	<0.00302	0.00302			<0.00206	0.00206
Chloride by EPA 300	***Extracted:***	08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39	
	Analyzed:	08.26.2020 20:16		08.26.2020 20:33		08.26.2020 20:39		08.26.2020 20:44		08.26.2020 20:50		08.26.2020 20:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		119	10.5	111	10.6	97.0	10.8	1280	15.2	49.8	10.8	244	10.2
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.76		4.97		6.85		33.8		7.81		2.97	
TPH by SW8015 Mod	***Extracted:***	08.26.2020 12:15				08.26.2020 12:15		08.26.2020 14:00				08.26.2020 14:00	
	Analyzed:	08.26.2020 15:41				08.26.2020 16:01		08.26.2020 16:21				08.26.2020 17:01	
	Units/RL:	mg/kg	RL			mg/kg	RL	mg/kg	RL			mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<52.6	52.6			<53.6	53.6	<75.4	75.4			<51.4	51.4
Diesel Range Organics (DRO)		<52.6	52.6			<53.6	53.6	<75.4	75.4			<51.4	51.4
Motor Oil Range Hydrocarbons (MRO)		<52.6	52.6			<53.6	53.6	<75.4	75.4			<51.4	51.4
Total TPH		<52.6	52.6			<53.6	53.6	<75.4	75.4			<51.4	51.4

BRL - Below Reporting Limit

Jessica Kramer

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Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: OWL080420D
Contact: Travis Reddick
Project Location: Jal

Date Received in Lab: Tue 08.25.2020 16:27
Report Date: 08.28.2020 13:58
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	670969-019		670969-020		670969-021		670969-022		670969-023		670969-024	
	Field Id:	SS-09 2-3'		SS-10 0-2'		SS-11 0-2'		SS-11 2-3'		SS-12 0-2'		SS-12 2-3.5'	
	Depth:	3- ft		2- ft		2- ft		3- ft		2- ft		3.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.25.2020 09:20		08.25.2020 09:20		08.25.2020 10:53		08.25.2020 10:56		08.25.2020 11:05		08.25.2020 11:07	
BTEX by EPA 8021B	***Extracted:***			08.26.2020 16:50		08.26.2020 16:50				08.26.2020 16:50			
	Analyzed:			08.26.2020 21:21		08.26.2020 22:08				08.26.2020 22:37			
	Units/RL:			mg/kg	RL	mg/kg	RL			mg/kg	RL		
Benzene				<0.00211	0.00211	<0.00212	0.00212			<0.00207	0.00207		
Toluene				<0.00211	0.00211	<0.00212	0.00212			<0.00207	0.00207		
Ethylbenzene				<0.00211	0.00211	<0.00212	0.00212			<0.00207	0.00207		
m,p-Xylenes				<0.00423	0.00423	<0.00424	0.00424			<0.00413	0.00413		
o-Xylene				<0.00211	0.00211	<0.00212	0.00212			<0.00207	0.00207		
Total Xylenes				<0.00211	0.00211	<0.00212	0.00212			<0.00207	0.00207		
Total BTEX				<0.00211	0.00211	<0.00212	0.00212			<0.00207	0.00207		
Chloride by EPA 300	***Extracted:***	08.26.2020 17:39		08.26.2020 17:39		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00	
	Analyzed:	08.26.2020 21:01		08.26.2020 21:07		08.26.2020 21:40		08.26.2020 21:57		08.26.2020 22:02		08.26.2020 22:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		54.9	10.4	106	10.5	10900	212	118	10.5	352	10.4	560	11.5
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.17		5.16		6.16		5.53		3.82		13.0	
TPH by SW8015 Mod	***Extracted:***			08.26.2020 14:00		08.26.2020 14:00				08.26.2020 14:00			
	Analyzed:			08.26.2020 17:23		08.26.2020 17:43				08.26.2020 18:03			
	Units/RL:			mg/kg	RL	mg/kg	RL			mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)				<52.7	52.7	<53.0	53.0			<51.9	51.9		
Diesel Range Organics (DRO)				<52.7	52.7	<53.0	53.0			<51.9	51.9		
Motor Oil Range Hydrocarbons (MRO)				<52.7	52.7	<53.0	53.0			<51.9	51.9		
Total TPH				<52.7	52.7	<53.0	53.0			<51.9	51.9		

BRL - Below Reporting Limit

Jessica Kramer

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: OWL080420D
Contact: Travis Reddick
Project Location: Jal

Date Received in Lab: Tue 08.25.2020 16:27
Report Date: 08.28.2020 13:58
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	670969-025		670969-026		670969-027		670969-028		670969-029		670969-030	
	Field Id:	SS-13 0-2'		SS-13 2-4'		SS-13 4-5'		SS-14 0-2'		SS-15 0-2'		SS-15 2-4'	
	Depth:	2- ft		4- ft		5- ft		2- ft		2- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.25.2020 11:12		08.25.2020 11:15		08.25.2020 11:18		08.25.2020 11:27		08.25.2020 11:34		08.25.2020 11:37	
BTEX by EPA 8021B	***Extracted:***	08.26.2020 16:50						08.26.2020 16:50		08.26.2020 16:50			
	Analyzed:	08.27.2020 01:41						08.26.2020 23:18		08.26.2020 23:38			
	Units/RL:	mg/kg	RL					mg/kg	RL	mg/kg	RL		
Benzene		<0.00248	0.00248					<0.00214	0.00214	<0.00212	0.00212		
Toluene		<0.00248	0.00248					<0.00214	0.00214	<0.00212	0.00212		
Ethylbenzene		<0.00248	0.00248					<0.00214	0.00214	<0.00212	0.00212		
m,p-Xylenes		<0.00496	0.00496					<0.00427	0.00427	<0.00425	0.00425		
o-Xylene		<0.00248	0.00248					<0.00214	0.00214	<0.00212	0.00212		
Total Xylenes		<0.00248	0.00248					<0.00214	0.00214	<0.00212	0.00212		
Total BTEX		<0.00248	0.00248					<0.00214	0.00214	<0.00212	0.00212		
Chloride by EPA 300	***Extracted:***	08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00	
	Analyzed:	08.26.2020 22:13		08.26.2020 22:30		08.26.2020 22:36		08.26.2020 22:41		08.26.2020 22:47		08.26.2020 22:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		154	12.4	12.8	10.4	11.4	10.8	13500	213	15500	214	3950	72.7
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		19.3		2.69		6.28		6.21		6.78		31.5	
TPH by SW8015 Mod	***Extracted:***	08.26.2020 16:30						08.26.2020 14:00		08.26.2020 14:00			
	Analyzed:	08.27.2020 00:49						08.26.2020 18:22		08.26.2020 18:43			
	Units/RL:	mg/kg	RL					mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<61.7	61.7					<53.4	53.4	<53.9	53.9		
Diesel Range Organics (DRO)		<61.7	61.7					<53.4	53.4	<53.9	53.9		
Motor Oil Range Hydrocarbons (MRO)		<61.7	61.7					<53.4	53.4	<53.9	53.9		
Total TPH		<61.7	61.7					<53.4	53.4	<53.9	53.9		

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Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: OWL080420D
Contact: Travis Reddick
Project Location: Jal

Date Received in Lab: Tue 08.25.2020 16:27
Report Date: 08.28.2020 13:58
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	670969-031		670969-032		670969-033		670969-034		670969-035		670969-036	
	Field Id:	SS-15 4-5'		SS-16 0-2'		SS-16 2-3'		SS-17 0-2.5'		SS-18 0-2'		SS-18 2-3'	
	Depth:	5- ft		2- ft		4- ft		2.5- ft		2- ft		3- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.25.2020 11:40		08.25.2020 11:42		08.25.2020 11:45		08.25.2020 12:30		08.25.2020 12:33		08.25.2020 12:36	
BTEX by EPA 8021B	***Extracted:***			08.26.2020 16:50				08.26.2020 16:50		08.26.2020 16:50			
	Analyzed:			08.26.2020 23:59				08.27.2020 00:19		08.27.2020 00:39			
	Units/RL:			mg/kg	RL			mg/kg	RL	mg/kg	RL		
Benzene				<0.00209	0.00209			<0.00253	0.00253	<0.00215	0.00215		
Toluene				<0.00209	0.00209			<0.00253	0.00253	<0.00215	0.00215		
Ethylbenzene				<0.00209	0.00209			<0.00253	0.00253	<0.00215	0.00215		
m,p-Xylenes				<0.00418	0.00418			<0.00506	0.00506	<0.00430	0.00430		
o-Xylene				<0.00209	0.00209			<0.00253	0.00253	<0.00215	0.00215		
Total Xylenes				<0.00209	0.00209			<0.00253	0.00253	<0.00215	0.00215		
Total BTEX				<0.00209	0.00209			<0.00253	0.00253	<0.00215	0.00215		
Chloride by EPA 300	***Extracted:***	08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00	
	Analyzed:	08.26.2020 22:58		08.26.2020 23:15		08.26.2020 23:20		08.26.2020 23:37		08.26.2020 23:43		08.26.2020 23:48	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		753	10.6	167	10.4	389	10.5	3720	63.2	2790	54.1	401	11.1
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		5.81		4.90		5.69		21.3		7.80		10.3	
TPH by SW8015 Mod	***Extracted:***			08.26.2020 14:00				08.26.2020 14:00		08.26.2020 16:30			
	Analyzed:			08.26.2020 19:03				08.26.2020 19:23		08.27.2020 10:34			
	Units/RL:			mg/kg	RL			mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)				<52.6	52.6			<63.6	63.6	<54.1	54.1		
Diesel Range Organics (DRO)				<52.6	52.6			610	63.6	1980	54.1		
Motor Oil Range Hydrocarbons (MRO)				<52.6	52.6			206	63.6	1010	54.1		
Total TPH				<52.6	52.6			816	63.6	2990	54.1		

BRL - Below Reporting Limit

Jessica Kramer

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Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: OWL080420D
Contact: Travis Reddick
Project Location: Jal

Date Received in Lab: Tue 08.25.2020 16:27
Report Date: 08.28.2020 13:58
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	670969-037		670969-038		670969-039		670969-040					
	Field Id:	SS-19 0-2'		SS-19 2.-4.5'		SS-BG 0-2'		SS-BG 2-3.5'					
	Depth:	2- ft		4.5- ft		2- ft		3.5- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	08.25.2020 12:44		08.25.2020 12:46		08.25.2020 13:02		08.25.2020 13:05					
BTEX by EPA 8021B	***Extracted:***	08.26.2020 16:50				08.26.2020 16:50							
	Analyzed:	08.27.2020 01:00				08.27.2020 01:20							
	Units/RL:	mg/kg	RL			mg/kg	RL						
Benzene		<0.00228	0.00228			<0.00239	0.00239						
Toluene		<0.00228	0.00228			<0.00239	0.00239						
Ethylbenzene		<0.00228	0.00228			<0.00239	0.00239						
m,p-Xylenes		<0.00456	0.00456			<0.00478	0.00478						
o-Xylene		<0.00228	0.00228			<0.00239	0.00239						
Total Xylenes		<0.00228	0.00228			<0.00239	0.00239						
Total BTEX		<0.00228	0.00228			<0.00239	0.00239						
Chloride by EPA 300	***Extracted:***	08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00					
	Analyzed:	08.26.2020 23:54		08.26.2020 23:59		08.27.2020 00:05		08.27.2020 00:10					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		390	11.4	122	11.2	376	11.9	63.0	11.0				
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		12.4		11.0		16.9		9.33					
TPH by SW8015 Mod	***Extracted:***	08.26.2020 14:00				08.26.2020 14:00							
	Analyzed:	08.26.2020 19:43				08.26.2020 20:03							
	Units/RL:	mg/kg	RL			mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)		<56.8	56.8			<60.3	60.3						
Diesel Range Organics (DRO)		118	56.8			<60.3	60.3						
Motor Oil Range Hydrocarbons (MRO)		59.4	56.8			<60.3	60.3						
Total TPH		177	56.8			<60.3	60.3						

BRL - Below Reporting Limit

Jessica Kramer

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Analytical Report 670969

for

KJ Environmental & Civil Engineering

Project Manager: Travis Reddick

Harrier Booster Pump

OWL080420D

08.28.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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08.28.2020

Project Manager: **Travis Reddick**
KJ Environmental & Civil Engineering
500 Moseley Rd
Aubrey, TX 76227

Reference: Eurofins Xenco, LLC Report No(s): **670969**
Harrier Booster Pump
Project Address: Jal

Travis Reddick:

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 Eurofins Xenco, LLC Report Number(s) 670969. 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 Eurofins Xenco, LLC. 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. 670969 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

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Sample Cross Reference 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS-01 0-2'	S	08.25.2020 08:30	2 ft	670969-001
SS-01 2-4 '	S	08.25.2020 08:35	4 ft	670969-002
SS-02 0-2'	S	08.25.2020 08:45	2 ft	670969-003
SS-02 2-4'	S	08.25.2020 08:50	4 ft	670969-004
SS-02 4-6'	S	08.25.2020 08:53	6 ft	670969-005
SS-02 6-7'	S	08.25.2020 08:55	7 ft	670969-006
SS-03 0-2'	S	08.25.2020 09:09	2 ft	670969-007
SS-03 2-4'	S	08.25.2020 09:12	4 ft	670969-008
SS-03 4-5'	S	08.25.2020 09:15	5 ft	670969-009
SS-04 0-2'	S	08.25.2020 09:20	2 ft	670969-010
SS-04 2-4'	S	08.25.2020 09:20	4 ft	670969-011
SS-05 0-2.5'	S	08.25.2020 09:20	2.5 ft	670969-012
SS-06 0-2'	S	08.25.2020 09:20	2 ft	670969-013
SS-06 2-3'	S	08.25.2020 09:20	3 ft	670969-014
SS-07 0-2'	S	08.25.2020 09:20	2 ft	670969-015
SS-08 0-2'	S	08.25.2020 09:20	2 ft	670969-016
SS-08 2-3'	S	08.25.2020 09:20	3 ft	670969-017
SS-09 0-2'	S	08.25.2020 09:20	2 ft	670969-018
SS-09 2-3'	S	08.25.2020 09:20	3 ft	670969-019
SS-10 0-2'	S	08.25.2020 09:20	2 ft	670969-020
SS-11 0-2'	S	08.25.2020 10:53	2 ft	670969-021
SS-11 2-3'	S	08.25.2020 10:56	3 ft	670969-022
SS-12 0-2'	S	08.25.2020 11:05	2 ft	670969-023
SS-12 2-3.5'	S	08.25.2020 11:07	3.5 ft	670969-024
SS-13 0-2'	S	08.25.2020 11:12	2 ft	670969-025
SS-13 2-4'	S	08.25.2020 11:15	4 ft	670969-026
SS-13 4-5'	S	08.25.2020 11:18	5 ft	670969-027
SS-14 0-2'	S	08.25.2020 11:27	2 ft	670969-028
SS-15 0-2'	S	08.25.2020 11:34	2 ft	670969-029
SS-15 2-4'	S	08.25.2020 11:37	4 ft	670969-030
SS-15 4-5'	S	08.25.2020 11:40	5 ft	670969-031
SS-16 0-2'	S	08.25.2020 11:42	2 ft	670969-032
SS-16 2-3'	S	08.25.2020 11:45	4 ft	670969-033
SS-17 0-2.5'	S	08.25.2020 12:30	2.5 ft	670969-034
SS-18 0-2'	S	08.25.2020 12:33	2 ft	670969-035
SS-18 2-3'	S	08.25.2020 12:36	3 ft	670969-036
SS-19 0-2'	S	08.25.2020 12:44	2 ft	670969-037
SS-19 2.-4.5'	S	08.25.2020 12:46	4.5 ft	670969-038
SS-BG 0-2'	S	08.25.2020 13:02	2 ft	670969-039
SS-BG 2-3.5'	S	08.25.2020 13:05	3.5 ft	670969-040

CASE NARRATIVE

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Client Name: KJ Environmental & Civil Engineering

Project Name: Harrier Booster Pump

Project ID: *OWL080420D*
Work Order Number(s): *670969*

Report Date: *08.28.2020*
Date Received: *08.25.2020*

Sample receipt non conformances and comments:

Hold all sampling of TPH and BTEX below 2.5 feet pending results of samples above2.5 feet.

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id:	**SS-01 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-001	Date Collected:	08.25.2020 08:30	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	7.7
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1840**	53.8	mg/kg	08.26.2020 18:36		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	7.7
Analyst:	DTH	Date Prep:	08.26.2020 12:15	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<53.9	53.9	mg/kg	08.26.2020 14:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<53.9	53.9	mg/kg	08.26.2020 14:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<53.9	53.9	mg/kg	08.26.2020 14:00	U	1
Total TPH	PHC635	<53.9	53.9	mg/kg	08.26.2020 14:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	08.26.2020 14:00	
o-Terphenyl	84-15-1	114	%	70-135	08.26.2020 14:00	

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Harrier Booster Pump

Sample Id:	**SS-01 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-001	Date Collected:	08.25.2020 08:30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	7.7
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00215	0.00215	mg/kg	08.26.2020 18:18	U	1
Toluene	108-88-3	<0.00215	0.00215	mg/kg	08.26.2020 18:18	U	1
Ethylbenzene	100-41-4	<0.00215	0.00215	mg/kg	08.26.2020 18:18	U	1
m,p-Xylenes	179601-23-1	<0.00430	0.00430	mg/kg	08.26.2020 18:18	U	1
o-Xylene	95-47-6	<0.00215	0.00215	mg/kg	08.26.2020 18:18	U	1
Total Xylenes	1330-20-7	<0.00215	0.00215	mg/kg	08.26.2020 18:18	U	1
Total BTEX		<0.00215	0.00215	mg/kg	08.26.2020 18:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	08.26.2020 18:18	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.26.2020 18:18	

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Harrier Booster Pump

Sample Id:	**SS-01 2-4 '**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-002	Date Collected:	08.25.2020 08:35	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	8.25
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**157**	10.8	mg/kg	08.26.2020 18:53		1

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Harrier Booster Pump

Sample Id:	**SS-02 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-003	Date Collected:	08.25.2020 08:45	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	8.62
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3940**	54.4	mg/kg	08.26.2020 18:58		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	8.62
Analyst:	DTH	Date Prep:	08.26.2020 12:15	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<54.6	54.6	mg/kg	08.26.2020 14:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<54.6	54.6	mg/kg	08.26.2020 14:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<54.6	54.6	mg/kg	08.26.2020 14:20	U	1
Total TPH	PHC635	<54.6	54.6	mg/kg	08.26.2020 14:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	08.26.2020 14:20	
o-Terphenyl	84-15-1	120	%	70-135	08.26.2020 14:20	

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Harrier Booster Pump

Sample Id:	**SS-02 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-003	Date Collected:	08.25.2020 08:45	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	8.62
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00218	0.00218	mg/kg	08.26.2020 18:38	U	1
Toluene	108-88-3	<0.00218	0.00218	mg/kg	08.26.2020 18:38	U	1
Ethylbenzene	100-41-4	<0.00218	0.00218	mg/kg	08.26.2020 18:38	U	1
m,p-Xylenes	179601-23-1	<0.00435	0.00435	mg/kg	08.26.2020 18:38	U	1
o-Xylene	95-47-6	<0.00218	0.00218	mg/kg	08.26.2020 18:38	U	1
Total Xylenes	1330-20-7	<0.00218	0.00218	mg/kg	08.26.2020 18:38	U	1
Total BTEX		<0.00218	0.00218	mg/kg	08.26.2020 18:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.26.2020 18:38	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.26.2020 18:38	

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Harrier Booster Pump

Sample Id:	**SS-02 2-4'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-004	Date Collected:	08.25.2020 08:50	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	7.38
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**84.8**	10.8	mg/kg	08.26.2020 19:04		1

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Harrier Booster Pump

Sample Id:	**SS-02 4-6'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-005	Date Collected:	08.25.2020 08:53	Sample Depth:	6 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	8.24
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**83.9**	11.0	mg/kg	08.26.2020 19:09		1

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Harrier Booster Pump

Sample Id:	**SS-02 6-7'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-006	Date Collected:	08.25.2020 08:55	Sample Depth:	7 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	24.24
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**129**	13.2	mg/kg	08.26.2020 19:26		1

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Harrier Booster Pump

Sample Id:	**SS-03 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-007	Date Collected:	08.25.2020 09:09	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	8.18
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1070**	10.9	mg/kg	08.26.2020 19:32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	8.18
Analyst:	DTH	Date Prep:	08.26.2020 12:15	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<54.4	54.4	mg/kg	08.26.2020 14:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<54.4	54.4	mg/kg	08.26.2020 14:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<54.4	54.4	mg/kg	08.26.2020 14:40	U	1
Total TPH	PHC635	<54.4	54.4	mg/kg	08.26.2020 14:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	08.26.2020 14:40	
o-Terphenyl	84-15-1	109	%	70-135	08.26.2020 14:40	

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Harrier Booster Pump

Sample Id:	**SS-03 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-007	Date Collected:	08.25.2020 09:09	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	8.18
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00217	0.00217	mg/kg	08.26.2020 18:58	U	1
Toluene	108-88-3	<0.00217	0.00217	mg/kg	08.26.2020 18:58	U	1
Ethylbenzene	100-41-4	<0.00217	0.00217	mg/kg	08.26.2020 18:58	U	1
m,p-Xylenes	179601-23-1	<0.00433	0.00433	mg/kg	08.26.2020 18:58	U	1
o-Xylene	95-47-6	<0.00217	0.00217	mg/kg	08.26.2020 18:58	U	1
Total Xylenes	1330-20-7	<0.00217	0.00217	mg/kg	08.26.2020 18:58	U	1
Total BTEX		<0.00217	0.00217	mg/kg	08.26.2020 18:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.26.2020 18:58	
4-Bromofluorobenzene	460-00-4	112	%	70-130	08.26.2020 18:58	

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Harrier Booster Pump

Sample Id:	**SS-03 2-4'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-008	Date Collected:	08.25.2020 09:12	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	8.79
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**171**	10.9	mg/kg	08.26.2020 19:37		1

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Harrier Booster Pump

Sample Id:	**SS-03 4-5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-009	Date Collected:	08.25.2020 09:15	Sample Depth:	5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	8.34
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**809**	54.4	mg/kg	08.26.2020 19:43		5

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Harrier Booster Pump

Sample Id:	**SS-04 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-010	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	4.12
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**685**	10.4	mg/kg	08.26.2020 19:48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	4.12
Analyst:	DTH	Date Prep:	08.26.2020 12:15	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<52.2	52.2	mg/kg	08.26.2020 15:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<52.2	52.2	mg/kg	08.26.2020 15:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<52.2	52.2	mg/kg	08.26.2020 15:01	U	1
Total TPH	PHC635	<52.2	52.2	mg/kg	08.26.2020 15:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	08.26.2020 15:01	
o-Terphenyl	84-15-1	113	%	70-135	08.26.2020 15:01	

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Harrier Booster Pump

Sample Id:	**SS-04 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-010	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	4.12
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00211	0.00211	mg/kg	08.26.2020 19:19	U	1
Toluene	108-88-3	<0.00211	0.00211	mg/kg	08.26.2020 19:19	U	1
Ethylbenzene	100-41-4	<0.00211	0.00211	mg/kg	08.26.2020 19:19	U	1
m,p-Xylenes	179601-23-1	<0.00421	0.00421	mg/kg	08.26.2020 19:19	U	1
o-Xylene	95-47-6	<0.00211	0.00211	mg/kg	08.26.2020 19:19	U	1
Total Xylenes	1330-20-7	<0.00211	0.00211	mg/kg	08.26.2020 19:19	U	1
Total BTEX		<0.00211	0.00211	mg/kg	08.26.2020 19:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.26.2020 19:19	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.26.2020 19:19	

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Harrier Booster Pump

Sample Id:	**SS-04 2-4'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-011	Date Collected:	08.25.2020 09:20	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	6.41
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**142**	10.6	mg/kg	08.26.2020 19:54		1

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Harrier Booster Pump

Sample Id:	**SS-05 0-2.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-012	Date Collected:	08.25.2020 09:20	Sample Depth:	2.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	9.41
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3580**	54.9	mg/kg	08.26.2020 20:11		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	9.41
Analyst:	DTH	Date Prep:	08.26.2020 12:15	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<55.4	55.4	mg/kg	08.26.2020 15:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<55.4	55.4	mg/kg	08.26.2020 15:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<55.4	55.4	mg/kg	08.26.2020 15:21	U	1
Total TPH	PHC635	<55.4	55.4	mg/kg	08.26.2020 15:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	08.26.2020 15:21	
o-Terphenyl	84-15-1	118	%	70-135	08.26.2020 15:21	

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Harrier Booster Pump

Sample Id:	**SS-05 0-2.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-012	Date Collected:	08.25.2020 09:20	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	9.41
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00220	0.00220	mg/kg	08.26.2020 19:39	U	1
Toluene	108-88-3	<0.00220	0.00220	mg/kg	08.26.2020 19:39	U	1
Ethylbenzene	100-41-4	<0.00220	0.00220	mg/kg	08.26.2020 19:39	U	1
m,p-Xylenes	179601-23-1	<0.00440	0.00440	mg/kg	08.26.2020 19:39	U	1
o-Xylene	95-47-6	<0.00220	0.00220	mg/kg	08.26.2020 19:39	U	1
Total Xylenes	1330-20-7	<0.00220	0.00220	mg/kg	08.26.2020 19:39	U	1
Total BTEX		<0.00220	0.00220	mg/kg	08.26.2020 19:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.26.2020 19:39	
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.26.2020 19:39	

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Harrier Booster Pump

Sample Id:	**SS-06 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-013	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	4.76
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**119**	10.5	mg/kg	08.26.2020 20:16		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	4.76
Analyst:	DTH	Date Prep:	08.26.2020 12:15	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<52.6	52.6	mg/kg	08.26.2020 15:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<52.6	52.6	mg/kg	08.26.2020 15:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<52.6	52.6	mg/kg	08.26.2020 15:41	U	1
Total TPH	PHC635	<52.6	52.6	mg/kg	08.26.2020 15:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	08.26.2020 15:41	
o-Terphenyl	84-15-1	119	%	70-135	08.26.2020 15:41	

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Harrier Booster Pump

Sample Id:	**SS-06 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-013	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	4.76
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00208	0.00208	mg/kg	08.26.2020 20:00	U	1
Toluene	108-88-3	<0.00208	0.00208	mg/kg	08.26.2020 20:00	U	1
Ethylbenzene	100-41-4	<0.00208	0.00208	mg/kg	08.26.2020 20:00	U	1
m,p-Xylenes	179601-23-1	<0.00416	0.00416	mg/kg	08.26.2020 20:00	U	1
o-Xylene	95-47-6	<0.00208	0.00208	mg/kg	08.26.2020 20:00	U	1
Total Xylenes	1330-20-7	<0.00208	0.00208	mg/kg	08.26.2020 20:00	U	1
Total BTEX		<0.00208	0.00208	mg/kg	08.26.2020 20:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.26.2020 20:00	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.26.2020 20:00	

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Harrier Booster Pump

Sample Id:	**SS-06 2-3'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-014	Date Collected:	08.25.2020 09:20	Sample Depth:	3 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	4.97
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**111**	10.6	mg/kg	08.26.2020 20:33		1

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Harrier Booster Pump

Sample Id:	**SS-07 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-015	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	6.85
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**97.0**	10.8	mg/kg	08.26.2020 20:39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	6.85
Analyst:	DTH	Date Prep:	08.26.2020 12:15	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<53.6	53.6	mg/kg	08.26.2020 16:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<53.6	53.6	mg/kg	08.26.2020 16:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<53.6	53.6	mg/kg	08.26.2020 16:01	U	1
Total TPH	PHC635	<53.6	53.6	mg/kg	08.26.2020 16:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	08.26.2020 16:01	
o-Terphenyl	84-15-1	121	%	70-135	08.26.2020 16:01	

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Harrier Booster Pump

Sample Id:	**SS-07 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-015	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	6.85
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00214	0.00214	mg/kg	08.26.2020 20:20	U	1
Toluene	108-88-3	<0.00214	0.00214	mg/kg	08.26.2020 20:20	U	1
Ethylbenzene	100-41-4	<0.00214	0.00214	mg/kg	08.26.2020 20:20	U	1
m,p-Xylenes	179601-23-1	<0.00428	0.00428	mg/kg	08.26.2020 20:20	U	1
o-Xylene	95-47-6	<0.00214	0.00214	mg/kg	08.26.2020 20:20	U	1
Total Xylenes	1330-20-7	<0.00214	0.00214	mg/kg	08.26.2020 20:20	U	1
Total BTEX		<0.00214	0.00214	mg/kg	08.26.2020 20:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.26.2020 20:20	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.26.2020 20:20	

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Harrier Booster Pump

Sample Id:	**SS-08 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-016	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	33.77
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1280**	15.2	mg/kg	08.26.2020 20:44		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	33.77
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<75.4	75.4	mg/kg	08.26.2020 16:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<75.4	75.4	mg/kg	08.26.2020 16:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<75.4	75.4	mg/kg	08.26.2020 16:21	U	1
Total TPH	PHC635	<75.4	75.4	mg/kg	08.26.2020 16:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	08.26.2020 16:21	
o-Terphenyl	84-15-1	117	%	70-135	08.26.2020 16:21	

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Harrier Booster Pump

Sample Id:	**SS-08 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-016	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	33.77
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00302	0.00302	mg/kg	08.26.2020 20:40	U	1
Toluene	108-88-3	<0.00302	0.00302	mg/kg	08.26.2020 20:40	U	1
Ethylbenzene	100-41-4	<0.00302	0.00302	mg/kg	08.26.2020 20:40	U	1
m,p-Xylenes	179601-23-1	<0.00604	0.00604	mg/kg	08.26.2020 20:40	U	1
o-Xylene	95-47-6	<0.00302	0.00302	mg/kg	08.26.2020 20:40	U	1
Total Xylenes	1330-20-7	<0.00302	0.00302	mg/kg	08.26.2020 20:40	U	1
Total BTEX		<0.00302	0.00302	mg/kg	08.26.2020 20:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.26.2020 20:40	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.26.2020 20:40	

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Harrier Booster Pump

Sample Id:	**SS-08 2-3'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-017	Date Collected:	08.25.2020 09:20	Sample Depth:	3 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	7.81
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**49.8**	10.8	mg/kg	08.26.2020 20:50		1

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Harrier Booster Pump

Sample Id:	**SS-09 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-018	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	2.97
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**244**	10.2	mg/kg	08.26.2020 20:55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	2.97
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<51.4	51.4	mg/kg	08.26.2020 17:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<51.4	51.4	mg/kg	08.26.2020 17:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<51.4	51.4	mg/kg	08.26.2020 17:01	U	1
Total TPH	PHC635	<51.4	51.4	mg/kg	08.26.2020 17:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	08.26.2020 17:01	
o-Terphenyl	84-15-1	116	%	70-135	08.26.2020 17:01	

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Harrier Booster Pump

Sample Id:	**SS-09 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-018	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	2.97
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00206	0.00206	mg/kg	08.26.2020 21:01	U	1
Toluene	108-88-3	<0.00206	0.00206	mg/kg	08.26.2020 21:01	U	1
Ethylbenzene	100-41-4	<0.00206	0.00206	mg/kg	08.26.2020 21:01	U	1
m,p-Xylenes	179601-23-1	<0.00412	0.00412	mg/kg	08.26.2020 21:01	U	1
o-Xylene	95-47-6	<0.00206	0.00206	mg/kg	08.26.2020 21:01	U	1
Total Xylenes	1330-20-7	<0.00206	0.00206	mg/kg	08.26.2020 21:01	U	1
Total BTEX		<0.00206	0.00206	mg/kg	08.26.2020 21:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.26.2020 21:01	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.26.2020 21:01	

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Harrier Booster Pump

Sample Id:	**SS-09 2-3'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-019	Date Collected:	08.25.2020 09:20	Sample Depth:	3 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	4.17
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**54.9**	10.4	mg/kg	08.26.2020 21:01		1

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Harrier Booster Pump

Sample Id:	**SS-10 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-020	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	5.16
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**106**	10.5	mg/kg	08.26.2020 21:07		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	5.16
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<52.7	52.7	mg/kg	08.26.2020 17:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<52.7	52.7	mg/kg	08.26.2020 17:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<52.7	52.7	mg/kg	08.26.2020 17:23	U	1
Total TPH	PHC635	<52.7	52.7	mg/kg	08.26.2020 17:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	08.26.2020 17:23	
o-Terphenyl	84-15-1	117	%	70-135	08.26.2020 17:23	

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Harrier Booster Pump

Sample Id:	**SS-10 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-020	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	5.16
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00211	0.00211	mg/kg	08.26.2020 21:21	U	1
Toluene	108-88-3	<0.00211	0.00211	mg/kg	08.26.2020 21:21	U	1
Ethylbenzene	100-41-4	<0.00211	0.00211	mg/kg	08.26.2020 21:21	U	1
m,p-Xylenes	179601-23-1	<0.00423	0.00423	mg/kg	08.26.2020 21:21	U	1
o-Xylene	95-47-6	<0.00211	0.00211	mg/kg	08.26.2020 21:21	U	1
Total Xylenes	1330-20-7	<0.00211	0.00211	mg/kg	08.26.2020 21:21	U	1
Total BTEX		<0.00211	0.00211	mg/kg	08.26.2020 21:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.26.2020 21:21	
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.26.2020 21:21	

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Harrier Booster Pump

Sample Id:	**SS-11 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-021	Date Collected:	08.25.2020 10:53	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	6.16
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10900**	212	mg/kg	08.26.2020 21:40		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	6.16
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<53.0	53.0	mg/kg	08.26.2020 17:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<53.0	53.0	mg/kg	08.26.2020 17:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<53.0	53.0	mg/kg	08.26.2020 17:43	U	1
Total TPH	PHC635	<53.0	53.0	mg/kg	08.26.2020 17:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	134	%	70-135	08.26.2020 17:43	
o-Terphenyl	84-15-1	106	%	70-135	08.26.2020 17:43	

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Harrier Booster Pump

Sample Id:	**SS-11 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-021	Date Collected:	08.25.2020 10:53	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	6.16
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00212	0.00212	mg/kg	08.26.2020 22:08	U	1
Toluene	108-88-3	<0.00212	0.00212	mg/kg	08.26.2020 22:08	U	1
Ethylbenzene	100-41-4	<0.00212	0.00212	mg/kg	08.26.2020 22:08	U	1
m,p-Xylenes	179601-23-1	<0.00424	0.00424	mg/kg	08.26.2020 22:08	U	1
o-Xylene	95-47-6	<0.00212	0.00212	mg/kg	08.26.2020 22:08	U	1
Total Xylenes	1330-20-7	<0.00212	0.00212	mg/kg	08.26.2020 22:08	U	1
Total BTEX		<0.00212	0.00212	mg/kg	08.26.2020 22:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	08.26.2020 22:08	
1,4-Difluorobenzene	540-36-3	95	%	70-130	08.26.2020 22:08	

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Harrier Booster Pump

Sample Id:	**SS-11 2-3'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-022	Date Collected:	08.25.2020 10:56	Sample Depth:	3 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	5.53
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**118**	10.5	mg/kg	08.26.2020 21:57		1

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Harrier Booster Pump

Sample Id:	**SS-12 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-023	Date Collected:	08.25.2020 11:05	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	3.82
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**352**	10.4	mg/kg	08.26.2020 22:02		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	3.82
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<51.9	51.9	mg/kg	08.26.2020 18:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<51.9	51.9	mg/kg	08.26.2020 18:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<51.9	51.9	mg/kg	08.26.2020 18:03	U	1
Total TPH	PHC635	<51.9	51.9	mg/kg	08.26.2020 18:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	08.26.2020 18:03	
o-Terphenyl	84-15-1	115	%	70-135	08.26.2020 18:03	

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Harrier Booster Pump

Sample Id:	**SS-12 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-023	Date Collected:	08.25.2020 11:05	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	3.82
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00207	0.00207	mg/kg	08.26.2020 22:37	U	1
Toluene	108-88-3	<0.00207	0.00207	mg/kg	08.26.2020 22:37	U	1
Ethylbenzene	100-41-4	<0.00207	0.00207	mg/kg	08.26.2020 22:37	U	1
m,p-Xylenes	179601-23-1	<0.00413	0.00413	mg/kg	08.26.2020 22:37	U	1
o-Xylene	95-47-6	<0.00207	0.00207	mg/kg	08.26.2020 22:37	U	1
Total Xylenes	1330-20-7	<0.00207	0.00207	mg/kg	08.26.2020 22:37	U	1
Total BTEX		<0.00207	0.00207	mg/kg	08.26.2020 22:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	08.26.2020 22:37	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.26.2020 22:37	

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Harrier Booster Pump

Sample Id:	**SS-12 2-3.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-024	Date Collected:	08.25.2020 11:07	Sample Depth:	3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	13.03
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**560**	11.5	mg/kg	08.26.2020 22:08		1

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Harrier Booster Pump

Sample Id:	**SS-13 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-025	Date Collected:	08.25.2020 11:12	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	19.26
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**154**	12.4	mg/kg	08.26.2020 22:13		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	19.26
Analyst:	DTH	Date Prep:	08.26.2020 16:30	Basis:	Dry Weight
Seq Number:	3135658				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<61.7	61.7	mg/kg	08.27.2020 00:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<61.7	61.7	mg/kg	08.27.2020 00:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<61.7	61.7	mg/kg	08.27.2020 00:49	U	1
Total TPH	PHC635	<61.7	61.7	mg/kg	08.27.2020 00:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	08.27.2020 00:49	
o-Terphenyl	84-15-1	105	%	70-135	08.27.2020 00:49	

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Harrier Booster Pump

Sample Id:	**SS-13 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-025	Date Collected:	08.25.2020 11:12	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	19.26
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00248	0.00248	mg/kg	08.27.2020 01:41	U	1
Toluene	108-88-3	<0.00248	0.00248	mg/kg	08.27.2020 01:41	U	1
Ethylbenzene	100-41-4	<0.00248	0.00248	mg/kg	08.27.2020 01:41	U	1
m,p-Xylenes	179601-23-1	<0.00496	0.00496	mg/kg	08.27.2020 01:41	U	1
o-Xylene	95-47-6	<0.00248	0.00248	mg/kg	08.27.2020 01:41	U	1
Total Xylenes	1330-20-7	<0.00248	0.00248	mg/kg	08.27.2020 01:41	U	1
Total BTEX		<0.00248	0.00248	mg/kg	08.27.2020 01:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.27.2020 01:41	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.27.2020 01:41	

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Harrier Booster Pump

Sample Id:	**SS-13 2-4'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-026	Date Collected:	08.25.2020 11:15	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	2.69
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.8**	10.4	mg/kg	08.26.2020 22:30		1

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Harrier Booster Pump

Sample Id:	**SS-13 4-5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-027	Date Collected:	08.25.2020 11:18	Sample Depth:	5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	6.28
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.4**	10.8	mg/kg	08.26.2020 22:36		1

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Harrier Booster Pump

Sample Id:	**SS-14 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-028	Date Collected:	08.25.2020 11:27	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	6.21
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13500**	213	mg/kg	08.26.2020 22:41		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	6.21
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<53.4	53.4	mg/kg	08.26.2020 18:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<53.4	53.4	mg/kg	08.26.2020 18:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<53.4	53.4	mg/kg	08.26.2020 18:22	U	1
Total TPH	PHC635	<53.4	53.4	mg/kg	08.26.2020 18:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	08.26.2020 18:22	
o-Terphenyl	84-15-1	111	%	70-135	08.26.2020 18:22	

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Harrier Booster Pump

Sample Id:	**SS-14 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-028	Date Collected:	08.25.2020 11:27	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	6.21
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00214	0.00214	mg/kg	08.26.2020 23:18	U	1
Toluene	108-88-3	<0.00214	0.00214	mg/kg	08.26.2020 23:18	U	1
Ethylbenzene	100-41-4	<0.00214	0.00214	mg/kg	08.26.2020 23:18	U	1
m,p-Xylenes	179601-23-1	<0.00427	0.00427	mg/kg	08.26.2020 23:18	U	1
o-Xylene	95-47-6	<0.00214	0.00214	mg/kg	08.26.2020 23:18	U	1
Total Xylenes	1330-20-7	<0.00214	0.00214	mg/kg	08.26.2020 23:18	U	1
Total BTEX		<0.00214	0.00214	mg/kg	08.26.2020 23:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	08.26.2020 23:18	
4-Bromofluorobenzene	460-00-4	110	%	70-130	08.26.2020 23:18	

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Harrier Booster Pump

Sample Id:	**SS-15 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-029	Date Collected:	08.25.2020 11:34	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	6.78
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**15500**	214	mg/kg	08.26.2020 22:47		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	6.78
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<53.9	53.9	mg/kg	08.26.2020 18:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<53.9	53.9	mg/kg	08.26.2020 18:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<53.9	53.9	mg/kg	08.26.2020 18:43	U	1
Total TPH	PHC635	<53.9	53.9	mg/kg	08.26.2020 18:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	08.26.2020 18:43	
o-Terphenyl	84-15-1	112	%	70-135	08.26.2020 18:43	

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Harrier Booster Pump

Sample Id:	**SS-15 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-029	Date Collected:	08.25.2020 11:34	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	6.78
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00212	0.00212	mg/kg	08.26.2020 23:38	U	1
Toluene	108-88-3	<0.00212	0.00212	mg/kg	08.26.2020 23:38	U	1
Ethylbenzene	100-41-4	<0.00212	0.00212	mg/kg	08.26.2020 23:38	U	1
m,p-Xylenes	179601-23-1	<0.00425	0.00425	mg/kg	08.26.2020 23:38	U	1
o-Xylene	95-47-6	<0.00212	0.00212	mg/kg	08.26.2020 23:38	U	1
Total Xylenes	1330-20-7	<0.00212	0.00212	mg/kg	08.26.2020 23:38	U	1
Total BTEX		<0.00212	0.00212	mg/kg	08.26.2020 23:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.26.2020 23:38	
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.26.2020 23:38	

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Harrier Booster Pump

Sample Id:	**SS-15 2-4'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-030	Date Collected:	08.25.2020 11:37	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	31.51
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3950**	72.7	mg/kg	08.26.2020 22:52		5

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Harrier Booster Pump

Sample Id:	**SS-15 4-5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-031	Date Collected:	08.25.2020 11:40	Sample Depth:	5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	5.81
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**753**	10.6	mg/kg	08.26.2020 22:58		1

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Harrier Booster Pump

Sample Id:	**SS-16 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-032	Date Collected:	08.25.2020 11:42	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	4.9
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**167**	10.4	mg/kg	08.26.2020 23:15		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	4.9
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<52.6	52.6	mg/kg	08.26.2020 19:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<52.6	52.6	mg/kg	08.26.2020 19:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<52.6	52.6	mg/kg	08.26.2020 19:03	U	1
Total TPH	PHC635	<52.6	52.6	mg/kg	08.26.2020 19:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	08.26.2020 19:03	
o-Terphenyl	84-15-1	114	%	70-135	08.26.2020 19:03	

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Harrier Booster Pump

Sample Id:	**SS-16 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-032	Date Collected:	08.25.2020 11:42	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	4.9
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00209	0.00209	mg/kg	08.26.2020 23:59	U	1
Toluene	108-88-3	<0.00209	0.00209	mg/kg	08.26.2020 23:59	U	1
Ethylbenzene	100-41-4	<0.00209	0.00209	mg/kg	08.26.2020 23:59	U	1
m,p-Xylenes	179601-23-1	<0.00418	0.00418	mg/kg	08.26.2020 23:59	U	1
o-Xylene	95-47-6	<0.00209	0.00209	mg/kg	08.26.2020 23:59	U	1
Total Xylenes	1330-20-7	<0.00209	0.00209	mg/kg	08.26.2020 23:59	U	1
Total BTEX		<0.00209	0.00209	mg/kg	08.26.2020 23:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.26.2020 23:59	
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.26.2020 23:59	

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Harrier Booster Pump

Sample Id:	**SS-16 2-3'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-033	Date Collected:	08.25.2020 11:45	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	5.69
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**389**	10.5	mg/kg	08.26.2020 23:20		1

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Harrier Booster Pump

Sample Id:	**SS-17 0-2.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-034	Date Collected:	08.25.2020 12:30	Sample Depth:	2.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	21.31
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3720**	63.2	mg/kg	08.26.2020 23:37		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	21.31
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<63.6	63.6	mg/kg	08.26.2020 19:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	**610**	63.6	mg/kg	08.26.2020 19:23		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**206**	63.6	mg/kg	08.26.2020 19:23		1
Total TPH	PHC635	**816**	63.6	mg/kg	08.26.2020 19:23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	08.26.2020 19:23	
o-Terphenyl	84-15-1	121	%	70-135	08.26.2020 19:23	

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Harrier Booster Pump

Sample Id:	**SS-17 0-2.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-034	Date Collected:	08.25.2020 12:30	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	21.31
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00253	0.00253	mg/kg	08.27.2020 00:19	U	1
Toluene	108-88-3	<0.00253	0.00253	mg/kg	08.27.2020 00:19	U	1
Ethylbenzene	100-41-4	<0.00253	0.00253	mg/kg	08.27.2020 00:19	U	1
m,p-Xylenes	179601-23-1	<0.00506	0.00506	mg/kg	08.27.2020 00:19	U	1
o-Xylene	95-47-6	<0.00253	0.00253	mg/kg	08.27.2020 00:19	U	1
Total Xylenes	1330-20-7	<0.00253	0.00253	mg/kg	08.27.2020 00:19	U	1
Total BTEX		<0.00253	0.00253	mg/kg	08.27.2020 00:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.27.2020 00:19	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.27.2020 00:19	

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Harrier Booster Pump

Sample Id:	**SS-18 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-035	Date Collected:	08.25.2020 12:33	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	7.8
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2790**	54.1	mg/kg	08.26.2020 23:43		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	7.8
Analyst:	DTH	Date Prep:	08.26.2020 16:30	Basis:	Dry Weight
Seq Number:	3135658				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<54.1	54.1	mg/kg	08.27.2020 10:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	**1980**	54.1	mg/kg	08.27.2020 10:34		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**1010**	54.1	mg/kg	08.27.2020 10:34		1
Total TPH	PHC635	**2990**	54.1	mg/kg	08.27.2020 10:34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	08.27.2020 10:34	
o-Terphenyl	84-15-1	113	%	70-135	08.27.2020 10:34	

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KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id:	**SS-18 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-035	Date Collected:	08.25.2020 12:33	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	7.8
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00215	0.00215	mg/kg	08.27.2020 00:39	U	1
Toluene	108-88-3	<0.00215	0.00215	mg/kg	08.27.2020 00:39	U	1
Ethylbenzene	100-41-4	<0.00215	0.00215	mg/kg	08.27.2020 00:39	U	1
m,p-Xylenes	179601-23-1	<0.00430	0.00430	mg/kg	08.27.2020 00:39	U	1
o-Xylene	95-47-6	<0.00215	0.00215	mg/kg	08.27.2020 00:39	U	1
Total Xylenes	1330-20-7	<0.00215	0.00215	mg/kg	08.27.2020 00:39	U	1
Total BTEX		<0.00215	0.00215	mg/kg	08.27.2020 00:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.27.2020 00:39	
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.27.2020 00:39	

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Harrier Booster Pump

Sample Id:	**SS-18 2-3'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-036	Date Collected:	08.25.2020 12:36	Sample Depth:	3 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	10.26
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**401**	11.1	mg/kg	08.26.2020 23:48		1

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Harrier Booster Pump

Sample Id:	**SS-19 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-037	Date Collected:	08.25.2020 12:44	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	12.42
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**390**	11.4	mg/kg	08.26.2020 23:54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	12.42
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<56.8	56.8	mg/kg	08.26.2020 19:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	**118**	56.8	mg/kg	08.26.2020 19:43		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**59.4**	56.8	mg/kg	08.26.2020 19:43		1
Total TPH	PHC635	**177**	56.8	mg/kg	08.26.2020 19:43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	08.26.2020 19:43	
o-Terphenyl	84-15-1	120	%	70-135	08.26.2020 19:43	

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Harrier Booster Pump

Sample Id:	**SS-19 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-037	Date Collected:	08.25.2020 12:44	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	12.42
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00228	0.00228	mg/kg	08.27.2020 01:00	U	1
Toluene	108-88-3	<0.00228	0.00228	mg/kg	08.27.2020 01:00	U	1
Ethylbenzene	100-41-4	<0.00228	0.00228	mg/kg	08.27.2020 01:00	U	1
m,p-Xylenes	179601-23-1	<0.00456	0.00456	mg/kg	08.27.2020 01:00	U	1
o-Xylene	95-47-6	<0.00228	0.00228	mg/kg	08.27.2020 01:00	U	1
Total Xylenes	1330-20-7	<0.00228	0.00228	mg/kg	08.27.2020 01:00	U	1
Total BTEX		<0.00228	0.00228	mg/kg	08.27.2020 01:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	08.27.2020 01:00	
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.27.2020 01:00	

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Harrier Booster Pump

Sample Id:	**SS-19 2.-4.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-038	Date Collected:	08.25.2020 12:46	Sample Depth:	4.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	10.95
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**122**	11.2	mg/kg	08.26.2020 23:59		1

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Harrier Booster Pump

Sample Id:	**SS-BG 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-039	Date Collected:	08.25.2020 13:02	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	16.87
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**376**	11.9	mg/kg	08.27.2020 00:05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	16.87
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<60.3	60.3	mg/kg	08.26.2020 20:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<60.3	60.3	mg/kg	08.26.2020 20:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<60.3	60.3	mg/kg	08.26.2020 20:03	U	1
Total TPH	PHC635	<60.3	60.3	mg/kg	08.26.2020 20:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	08.26.2020 20:03	
o-Terphenyl	84-15-1	107	%	70-135	08.26.2020 20:03	

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Harrier Booster Pump

Sample Id:	**SS-BG 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-039	Date Collected:	08.25.2020 13:02	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	16.87
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00239	0.00239	mg/kg	08.27.2020 01:20	U	1
Toluene	108-88-3	<0.00239	0.00239	mg/kg	08.27.2020 01:20	U	1
Ethylbenzene	100-41-4	<0.00239	0.00239	mg/kg	08.27.2020 01:20	U	1
m,p-Xylenes	179601-23-1	<0.00478	0.00478	mg/kg	08.27.2020 01:20	U	1
o-Xylene	95-47-6	<0.00239	0.00239	mg/kg	08.27.2020 01:20	U	1
Total Xylenes	1330-20-7	<0.00239	0.00239	mg/kg	08.27.2020 01:20	U	1
Total BTEX		<0.00239	0.00239	mg/kg	08.27.2020 01:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.27.2020 01:20	
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.27.2020 01:20	

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Harrier Booster Pump

Sample Id:	**SS-BG 2-3.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-040	Date Collected:	08.25.2020 13:05	Sample Depth:	3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	9.33
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**63.0**	11.0	mg/kg	08.27.2020 00:10		1

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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. **ND** Not Detected.

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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

QC Summary 670969

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KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3135673 — Matrix: Solid — Date Prep: 08.26.2020
MB Sample Id: 7710237-1-BLK — LCS Sample Id: 7710237-1-BKS — LCSD Sample Id: 7710237-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	262	105	265	106	90-110	1	20	mg/kg	08.26.2020 21:29	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3135672 — Matrix: Solid — Date Prep: 08.26.2020
MB Sample Id: 7710229-1-BLK — LCS Sample Id: 7710229-1-BKS — LCSD Sample Id: 7710229-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	262	105	266	106	90-110	2	20	mg/kg	08.26.2020 18:25	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3135673 — Matrix: Soil — Date Prep: 08.26.2020
Parent Sample Id: 670969-021 — MS Sample Id: 670969-021 S — MSD Sample Id: 670969-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10900	214	11100	93	11100	93	90-110	0	20	mg/kg	08.26.2020 21:46	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3135673 — Matrix: Soil — Date Prep: 08.26.2020
Parent Sample Id: 670969-031 — MS Sample Id: 670969-031 S — MSD Sample Id: 670969-031 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	753	212	963	99	965	100	90-110	0	20	mg/kg	08.26.2020 23:04	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3135672 — Matrix: Soil — Date Prep: 08.26.2020
Parent Sample Id: 670969-001 — MS Sample Id: 670969-001 S — MSD Sample Id: 670969-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1840	216	2040	93	2050	97	90-110	0	20	mg/kg	08.26.2020 18:41	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3135672 — Matrix: Soil — Date Prep: 08.26.2020
Parent Sample Id: 670969-011 — MS Sample Id: 670969-011 S — MSD Sample Id: 670969-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	142	212	361	103	363	104	90-110	1	20	mg/kg	08.26.2020 19:59	

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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QC Summary 670969

KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: **Percent Moisture**
Seq Number: 3135705 Matrix: Solid
MB Sample Id: 3135705-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<	%	08.27.2020 13:45	

Analytical Method: **Percent Moisture**
Seq Number: 3135706 Matrix: Solid
MB Sample Id: 3135706-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<	%	08.27.2020 13:45	

Analytical Method: **Percent Moisture**
Seq Number: 3135708 Matrix: Solid
MB Sample Id: 3135708-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<	%	08.27.2020 13:45	

Analytical Method: **Percent Moisture**
Seq Number: 3135705 Matrix: Sludge
Parent Sample Id: 671106-001 MD Sample Id: 671106-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	50.9	50.5	1	20	%	08.27.2020 13:45	

Analytical Method: **Percent Moisture**
Seq Number: 3135705 Matrix: Sludge
Parent Sample Id: 671107-005 MD Sample Id: 671107-005 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	64.4	64.0	1	20	%	08.27.2020 13:45	

Analytical Method: **Percent Moisture**
Seq Number: 3135706 Matrix: Soil
Parent Sample Id: 670969-010 MD Sample Id: 670969-010 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	4.12	4.11	0	20	%	08.27.2020 13:45	

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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QC Summary 670969

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Harrier Booster Pump

Analytical Method: **Percent Moisture**
Seq Number: 3135706 Matrix: Soil
Parent Sample Id: 670969-019 MD Sample Id: 670969-019 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	4.17	4.00	4	20	%	08.27.2020 13:45	

Analytical Method: **Percent Moisture**
Seq Number: 3135708 Matrix: Soil
Parent Sample Id: 670969-029 MD Sample Id: 670969-029 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	6.78	6.72	1	20	%	08.27.2020 13:45	

Analytical Method: **Percent Moisture**
Seq Number: 3135708 Matrix: Soil
Parent Sample Id: 670969-039 MD Sample Id: 670969-039 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	16.9	15.9	6	20	%	08.27.2020 13:45	

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3135677 Matrix: Solid Date Prep: 08.26.2020
MB Sample Id: 7710220-1-BLK LCS Sample Id: 7710220-1-BKS LCSD Sample Id: 7710220-1-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)	<50.0	1000	993	99	1030	103	70-135	4	35	mg/kg	08.26.2020 11:59	
Diesel Range Organics (DRO)	<50.0	1000	1080	108	1090	109	70-135	1	35	mg/kg	08.26.2020 11:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		134		131		70-135	%	08.26.2020 11:59
o-Terphenyl	121		130		122		70-135	%	08.26.2020 11:59

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3135658 Matrix: Solid Date Prep: 08.26.2020
MB Sample Id: 7710230-1-BLK LCS Sample Id: 7710230-1-BKS LCSD Sample Id: 7710230-1-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)	<50.0	1000	1000	100	1000	100	70-135	0	35	mg/kg	08.26.2020 21:46	
Diesel Range Organics (DRO)	<50.0	1000	1040	104	1050	105	70-135	1	35	mg/kg	08.26.2020 21:46	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		119		118		70-135	%	08.26.2020 21:46
o-Terphenyl	88		107		105		70-135	%	08.26.2020 21:46

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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QC Summary 670969

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Harrier Booster Pump

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3135677 Matrix: Solid Date Prep: 08.26.2020
MB Sample Id: 7710220-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.26.2020 11:38	

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3135658 Matrix: Solid Date Prep: 08.26.2020
MB Sample Id: 7710230-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.26.2020 21:26	

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3135677 Matrix: Soil Date Prep: 08.26.2020
Parent Sample Id: 670985-012 MS Sample Id: 670985-012 S MSD Sample Id: 670985-012 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)	<50.0	1000	1000	100	1100	111	70-135	10	35	mg/kg	08.26.2020 12:59	
Diesel Range Organics (DRO)	<50.0	1000	1080	108	1050	106	70-135	3	35	mg/kg	08.26.2020 12:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	135		132		70-135	%	08.26.2020 12:59
o-Terphenyl	128		115		70-135	%	08.26.2020 12:59

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3135658 Matrix: Soil Date Prep: 08.26.2020
Parent Sample Id: 671092-001 MS Sample Id: 671092-001 S MSD Sample Id: 671092-001 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)	<50.0	999	865	87	914	92	70-135	6	35	mg/kg	08.26.2020 22:47	
Diesel Range Organics (DRO)	<50.0	999	924	92	975	98	70-135	5	35	mg/kg	08.26.2020 22:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		128		70-135	%	08.26.2020 22:47
o-Terphenyl	112		117		70-135	%	08.26.2020 22:47

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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 670969

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KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3135669 Matrix: Solid Date Prep: 08.26.2020
MB Sample Id: 7710236-1-BLK LCS Sample Id: 7710236-1-BKS LCSD Sample Id: 7710236-1-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	0.102	102	0.100	100	70-130	2	35	mg/kg	08.26.2020 17:01	
Toluene	<0.00200	0.100	0.0967	97	0.0948	95	70-130	2	35	mg/kg	08.26.2020 17:01	
Ethylbenzene	<0.00200	0.100	0.102	102	0.0997	100	71-129	2	35	mg/kg	08.26.2020 17:01	
m,p-Xylenes	<0.00400	0.200	0.206	103	0.202	101	70-135	2	35	mg/kg	08.26.2020 17:01	
o-Xylene	<0.00200	0.100	0.103	103	0.0988	99	71-133	4	35	mg/kg	08.26.2020 17:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		101		94		70-130	%	08.26.2020 17:01
4-Bromofluorobenzene	108		99		96		70-130	%	08.26.2020 17:01

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3135669 Matrix: Soil Date Prep: 08.26.2020
Parent Sample Id: 670969-001 MS Sample Id: 670969-001 S MSD Sample Id: 670969-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00215	0.108	0.110	102	0.101	94	70-130	9	35	mg/kg	08.27.2020 02:01	
Toluene	<0.00215	0.108	0.103	95	0.0955	88	70-130	8	35	mg/kg	08.27.2020 02:01	
Ethylbenzene	<0.00215	0.108	0.105	97	0.101	94	71-129	4	35	mg/kg	08.27.2020 02:01	
m,p-Xylenes	<0.00431	0.215	0.212	99	0.201	93	70-135	5	35	mg/kg	08.27.2020 02:01	
o-Xylene	<0.00215	0.108	0.106	98	0.0982	91	71-133	8	35	mg/kg	08.27.2020 02:01	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		70-130	%	08.27.2020 02:01
4-Bromofluorobenzene	103		100		70-130	%	08.27.2020 02:01

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

XENCO LABORATORIES

Setting the Standard since 1990

CHAIN OF CUSTODY

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670969

Stafford,Texas (281-240-4200)
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Odessa, Texas (432-563-1800)
Norcross, Georgia (770-449-8800)
Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)
www.xenco.com

Xenco Quote # | Xenco Job #

Client / Reporting Information

Company Name / Branch: KJE, Enviromental & Civil Engineering
Company Address: 500 Mosely Road, Cross Roads, Texas 76227
Email: james@kjenviromental.com Phone No: (940)387-0805
treddick@kje-us.com 214-287-5837
Project Contact: James Fox Travis Reddick
Samplers's Name

Project Information

Project Name/Number: OWL102816D OWL080420D
Project Location: Jal
Invoice To: Oilfield Water Logistics
PO Number:

Analytical Information

Matrix Codes

S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
W = 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	BTEX 8260 (5035)	TPH	CHLORIDES	Field Comments
1	SS-01 0-2'	2'	8/25	0830	SS	1									X	X	X	
2	SS-01 2-4'	4'	8/25	0835														
3	SS-02 0-2'	2'		0845														
4	SS-02 2-4'	4'		0850														
5	SS-02 4-6'	6'		0853														
6	SS-02 6-7'	7'		0855														
7	SS-03 0-2'	2'		0909														
8	SS-03 2-4'	4'		0912														
9	SS-03 4-5'	5'		0915														
10	SS-04 0-2'	2'	↓	0920	↓	↓									↓	↓	↓	

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
- [ ] TRRP Checklist

Notes:

HOLD all sampling of TPH and BTEX below 2.5feet pending results of samples above 2.5feet.

FED-EX / UPS: Tracking #

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		8/25 1627	1	2		2
3	Relinquished by: Cloe Clifton	8.25 1627	3	4		4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X Cooler Temp. 3.0/2.8 Thermo. Corr. Factor -0.2

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

CHAIN OF CUSTODY

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Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)
www.xenco.com

Xenco Quote # | Xenco Job #

Client / Reporting Information

Company Name / Branch: KJE, Enviromental & Civil Engineering
Company Address: 500 Mosely Road, Cross Roads, Texas 76227
Email: james@kjenviromental.com / treddick@kje-us.com
Phone No: (940)387-0805 / 214-387-5875
Project Contact: James Fox / Travis Reddick
Samplers's Name

Project Information

Project Name/Number: OWL102816D (OWL08042011)
Project Location: Jal
Invoice To: Oilfield Water Logistics
PO Number:

Matrix Codes

S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
W = 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	Analytical Information: BTEX 8260 (5035)	TPH	CHLORIDES	Field Comments
1	SS-04 2-4'	4'	8/25	0925	SS	1									X	X	X	
2	SS-05 0-2.5'	2.5'		0930														
3	SS-06 0-2'	2'		0942														
4	SS-06 2-3'	3'		0945														
5	SS-07 0-2'	2'		1000														
6	SS-08 0-2'	2'		1017														
7	SS-08 2-3'	3'		1020														
8	SS-09 0-2'	2'		1030														
9	SS-09 2-3'	3'		1035														
10	SS-10 0-2'	2'	↓	1046	↓	↓									↓	↓	↓	

Turnaround Time (Business days)

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HOLD all sampling of TPH and BTEX below 2.5 feet pending results of samples above 2.5 feet

FED-EX / UPS: Tracking #

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		8/25 1627	1	2		2
3	Relinquished By: Clint Clifton	8.25 16:27	3	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: X Cooler Temp. 3.0/2.8 Thermo. Corr. Factor -0.0

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CHAIN OF CUSTODY

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Xenco Quote #

Xenco Job #

Client / Reporting Information

Company Name / Branch: KJE, Enviromental & Civil Engineering

Company Address: 500 Mosely Road, Cross Roads, Texas 76227

Email: james@kjenviromental.com Phone No: (940)387-0805

freddick@kje-us.com 214-287-55?

Project Contact: James Fox Travis Reddick

Samplers's Name

Project Information

Project Name/Number: OWL102816D OWL080420

Project Location:

Invoice To: Oilfield Water Logistics

PO Number:

Analytical Information

Matrix Codes

S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
W = 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 8260 (5035)	TPH	CHLORIDES	Field Comments
1	SS-11 0-2'	2'	8/25	1053	SS	1									X	X	X	
2	SS-11 2-3'	3'		1056														
3	SS-12 0-2'	2'		1105														
4	SS-12 2-3.5'	3.5'		1107														
5	SS-13 0-2'	2'		1112														
6	SS-13 2-4'	4'		1115														
7	SS-13 4-5'	5'		1118														
8	SS-14 0-2'	2'		1127														
9	SS-15 0-2'	2'		1134														
10	SS-15 2-4'	4'	↓	1137	↓	↓									↓	↓	↓	

Turnaround Time (Business days)

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- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

HOLD all BTEX and TPH sampling below 2.5 feet pending results of samples above 2.5 feet.

FED-EX / UPS: Tracking #

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		8/26 1627	1	2		2
3	Relinquished by: Cle Clifton	8.26 1627	3	4		4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X Cooler Temp. 3.0/2.8 Thermo. Corr. Factor -0.2

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XENCO LABORATORIES

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CHAIN OF CUSTODY

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Xenco Quote # | Xenco Job #

Client / Reporting Information

Company Name / Branch: KJE, Enviromental & Civil Engineering
Company Address: 500 Mosely Road, Cross Roads, Texas 76227
Email: james@kjenvironmental.com Phone No: (940)387-0805
treddick@kje-us.com 214-287-5875
Project Contact: James Fox / Travis Reddick
Samplers's Name

Project Information

Project Name/Number: OWL102816D OWL080420D
Project Location: Jal
Invoice To: Oilfield Water Logistics
PO Number:

Analytical Information

Matrix Codes

S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
W = 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	BTEX 8260 (5035)	TPH	CHLORIDES	Field Comments
1	SS-15 4-5'	5'	8/25	1140	SS	1									X	X	X	
2	SS-16 0-2'	2'		1142														
3	SS-16 2-4'	4'		1145														
4	SS-17 0-2.5'	2.5'		1230														
5	SS-18 0-2'	2'		1233														
6	SS-18 2-3'	3'		1236														
7	SS-19 0-2'	2'		[illegible]														
8	SS-19 2-4.5'	4.5'		[illegible]														
9	SS-BG 0-2'	2'		1302														
10	SS-BG 2-3.5	3.5'		1305														

Turnaround Time (Business days)

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- [ ] UST / RG -411
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FED-EX / UPS: Tracking #

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		8/25 1617	1	2		2
3	Clive Clifton	8.25 16:27	3	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. / Thermo. Corr. Factor
			5			X 3.0/2.8 -0.2

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

Inter-Office Shipment

IOS Number : 69397

Date/Time: 08.26.2020
Lab# From: **Carlsbad**
Lab# To: **Midland**

Created by: Cloe Clifton
Delivery Priority:
Air Bill No.: 771368231354

Please send report to: Jessica Kramer
Address: 1089 N Canal Street
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
670969-001	S	SS-01 0-2'	08.25.2020 08:30	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-002	S	SS-01 2-4 '	08.25.2020 08:35	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-003	S	SS-02 0-2'	08.25.2020 08:45	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-004	S	SS-02 2-4'	08.25.2020 08:50	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-005	S	SS-02 4-6'	08.25.2020 08:53	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-006	S	SS-02 6-7'	08.25.2020 08:55	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-007	S	SS-03 0-2'	08.25.2020 09:09	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-008	S	SS-03 2-4'	08.25.2020 09:12	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-009	S	SS-03 4-5'	08.25.2020 09:15	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-010	S	SS-04 0-2'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-011	S	SS-04 2-4'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-012	S	SS-05 0-2.5'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-013	S	SS-06 0-2'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-014	S	SS-06 2-3'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-015	S	SS-07 0-2'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-016	S	SS-08 0-2'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-017	S	SS-08 2-3'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-018	S	SS-09 0-2'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-019	S	SS-09 2-3'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-020	S	SS-10 0-2'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-021	S	SS-11 0-2'	08.25.2020 10:53	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-022	S	SS-11 2-3'	08.25.2020 10:56	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-023	S	SS-12 0-2'	08.25.2020 11:05	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-024	S	SS-12 2-3.5'	08.25.2020 11:07	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-025	S	SS-13 0-2'	08.25.2020 11:12	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	

Inter-Office Shipment

IOS Number : 69397

Date/Time: 08.26.2020
Lab# From: **Carlsbad**
Lab# To: **Midland**

Created by: Cloe Clifton
Delivery Priority:
Air Bill No.: 771368231354

Please send report to: Jessica Kramer
Address: 1089 N Canal Street
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
670969-026	S	SS-13 2-4'	08.25.2020 11:15	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-027	S	SS-13 4-5'	08.25.2020 11:18	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-028	S	SS-14 0-2'	08.25.2020 11:27	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-029	S	SS-15 0-2'	08.25.2020 11:34	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-030	S	SS-15 2-4'	08.25.2020 11:37	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-031	S	SS-15 4-5'	08.25.2020 11:40	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-032	S	SS-16 0-2'	08.25.2020 11:42	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-033	S	SS-16 2-3'	08.25.2020 11:45	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-034	S	SS-17 0-2.5'	08.25.2020 12:30	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-035	S	SS-18 0-2'	08.25.2020 12:33	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-036	S	SS-18 2-3'	08.25.2020 12:36	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-037	S	SS-19 0-2'	08.25.2020 12:44	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-038	S	SS-19 2.-4.5'	08.25.2020 12:46	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-039	S	SS-BG 0-2'	08.25.2020 13:02	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-040	S	SS-BG 2-3.5'	08.25.2020 13:05	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	

Inter Office Shipment or Sample Comments:

Relinquished By: Cloe Clifton
Date Relinquished: 08.26.2020

Received By: Brianna Teel
Date Received: 08.27.2020
Cooler Temperature: 0.5

Eurofins Xenco, LLC

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 69397

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : IR-8

Sent By: Cloe Clifton **Date Sent:** 08.26.2020 10.45 AM

Received By: Brianna Teel **Date Received:** 08.27.2020 11.36 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: Brianna Teel Date: 08.27.2020

Brianna Teel

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: KJ Environmental & Civil Engineering

Date/ Time Received: 08.25.2020 04.27.00 PM

Work Order #: 670969

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T NM 007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	2.8	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	Samples subbed to Xenco Midland.
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Martha Castro Date: 08.26.2020

Checklist reviewed by: Jessica Kramer Date: 08.26.2020

Jessica Kramer

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Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: OWL080420D
Contact: Travis Reddick
Project Location: Jal

Date Received in Lab: Tue 08.25.2020 16:27
Report Date: 09.02.2020 07:54
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	670969-001		670969-002		670969-003		670969-004		670969-005		670969-006	
	Field Id:	SS-01 0-2'		SS-01 2-4 '		SS-02 0-2'		SS-02 2-4'		SS-02 4-6'		SS-02 6-7'	
	Depth:	2- ft		4- ft		2- ft		4- ft		6- ft		7- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.25.2020 08:30		08.25.2020 08:35		08.25.2020 08:45		08.25.2020 08:50		08.25.2020 08:53		08.25.2020 08:55	
BTEX by EPA 8021B	***Extracted:***	08.26.2020 16:50				08.26.2020 16:50							
	Analyzed:	08.26.2020 18:18				08.26.2020 18:38							
	Units/RL:	mg/kg	RL			mg/kg	RL						
Benzene		<0.00215	0.00215			<0.00218	0.00218						
Toluene		<0.00215	0.00215			<0.00218	0.00218						
Ethylbenzene		<0.00215	0.00215			<0.00218	0.00218						
m,p-Xylenes		<0.00430	0.00430			<0.00435	0.00435						
o-Xylene		<0.00215	0.00215			<0.00218	0.00218						
Total Xylenes		<0.00215	0.00215			<0.00218	0.00218						
Total BTEX		<0.00215	0.00215			<0.00218	0.00218						
Chloride by EPA 300	***Extracted:***	08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39	
	Analyzed:	08.26.2020 18:36		08.26.2020 18:53		08.26.2020 18:58		08.26.2020 19:04		08.26.2020 19:09		08.26.2020 19:26	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1840	53.8	157	10.8	3940	54.4	84.8	10.8	83.9	11.0	129	13.2
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.70		8.25		8.62		7.38		8.24		24.2	
TPH by SW8015 Mod	***Extracted:***	08.26.2020 12:15				08.26.2020 12:15							
	Analyzed:	08.26.2020 14:00				08.26.2020 14:20							
	Units/RL:	mg/kg	RL			mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)		<53.9	53.9			<54.6	54.6						
Diesel Range Organics (DRO)		<53.9	53.9			<54.6	54.6						
Motor Oil Range Hydrocarbons (MRO)		<53.9	53.9			<54.6	54.6						
Total TPH		<53.9	53.9			<54.6	54.6						

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Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: OWL080420D
Contact: Travis Reddick
Project Location: Jal

Date Received in Lab: Tue 08.25.2020 16:27
Report Date: 09.02.2020 07:54
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	670969-007		670969-008		670969-009		670969-010		670969-011		670969-012	
	Field Id:	SS-03 0-2'		SS-03 2-4'		SS-03 4-5'		SS-04 0-2'		SS-04 2-4'		SS-05 0-2.5'	
	Depth:	2- ft		4- ft		5- ft		2- ft		4- ft		2.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.25.2020 09:09		08.25.2020 09:12		08.25.2020 09:15		08.25.2020 09:20		08.25.2020 09:20		08.25.2020 09:20	
BTEX by EPA 8021B	***Extracted:***	08.26.2020 16:50						08.26.2020 16:50				08.26.2020 16:50	
	Analyzed:	08.26.2020 18:58						08.26.2020 19:19				08.26.2020 19:39	
	Units/RL:	mg/kg	RL					mg/kg	RL			mg/kg	RL
Benzene		<0.00217	0.00217					<0.00211	0.00211			<0.00220	0.00220
Toluene		<0.00217	0.00217					<0.00211	0.00211			<0.00220	0.00220
Ethylbenzene		<0.00217	0.00217					<0.00211	0.00211			<0.00220	0.00220
m,p-Xylenes		<0.00433	0.00433					<0.00421	0.00421			<0.00440	0.00440
o-Xylene		<0.00217	0.00217					<0.00211	0.00211			<0.00220	0.00220
Total Xylenes		<0.00217	0.00217					<0.00211	0.00211			<0.00220	0.00220
Total BTEX		<0.00217	0.00217					<0.00211	0.00211			<0.00220	0.00220
Chloride by EPA 300	***Extracted:***	08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39	
	Analyzed:	08.26.2020 19:32		08.26.2020 19:37		08.26.2020 19:43		08.26.2020 19:48		08.26.2020 19:54		08.26.2020 20:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1070	10.9	171	10.9	809	54.4	685	10.4	142	10.6	3580	54.9
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		8.18		8.79		8.34		4.12		6.41		9.41	
TPH by SW8015 Mod	***Extracted:***	08.26.2020 12:15						08.26.2020 12:15				08.26.2020 12:15	
	Analyzed:	08.26.2020 14:40						08.26.2020 15:01				08.26.2020 15:21	
	Units/RL:	mg/kg	RL					mg/kg	RL			mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<54.4	54.4					<52.2	52.2			<55.4	55.4
Diesel Range Organics (DRO)		<54.4	54.4					<52.2	52.2			<55.4	55.4
Motor Oil Range Hydrocarbons (MRO)		<54.4	54.4					<52.2	52.2			<55.4	55.4
Total TPH		<54.4	54.4					<52.2	52.2			<55.4	55.4

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Jessica Kramer

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Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: OWL080420D
Contact: Travis Reddick
Project Location: Jal

Date Received in Lab: Tue 08.25.2020 16:27
Report Date: 09.02.2020 07:54
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	670969-013		670969-014		670969-015		670969-016		670969-017		670969-018	
	Field Id:	SS-06 0-2'		SS-06 2-3'		SS-07 0-2'		SS-08 0-2'		SS-08 2-3'		SS-09 0-2'	
	Depth:	2- ft		3- ft		2- ft		2- ft		3- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.25.2020 09:20		08.25.2020 09:20		08.25.2020 09:20		08.25.2020 09:20		08.25.2020 09:20		08.25.2020 09:20	
BTEX by EPA 8021B	***Extracted:***	08.26.2020 16:50				08.26.2020 16:50		08.26.2020 16:50				08.26.2020 16:50	
	Analyzed:	08.26.2020 20:00				08.26.2020 20:20		08.26.2020 20:40				08.26.2020 21:01	
	Units/RL:	mg/kg	RL			mg/kg	RL	mg/kg	RL			mg/kg	RL
Benzene		<0.00208	0.00208			<0.00214	0.00214	<0.00302	0.00302			<0.00206	0.00206
Toluene		<0.00208	0.00208			<0.00214	0.00214	<0.00302	0.00302			<0.00206	0.00206
Ethylbenzene		<0.00208	0.00208			<0.00214	0.00214	<0.00302	0.00302			<0.00206	0.00206
m,p-Xylenes		<0.00416	0.00416			<0.00428	0.00428	<0.00604	0.00604			<0.00412	0.00412
o-Xylene		<0.00208	0.00208			<0.00214	0.00214	<0.00302	0.00302			<0.00206	0.00206
Total Xylenes		<0.00208	0.00208			<0.00214	0.00214	<0.00302	0.00302			<0.00206	0.00206
Total BTEX		<0.00208	0.00208			<0.00214	0.00214	<0.00302	0.00302			<0.00206	0.00206
Chloride by EPA 300	***Extracted:***	08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39		08.26.2020 17:39	
	Analyzed:	08.26.2020 20:16		08.26.2020 20:33		08.26.2020 20:39		08.26.2020 20:44		08.26.2020 20:50		08.26.2020 20:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		119	10.5	111	10.6	97.0	10.8	1280	15.2	49.8	10.8	244	10.2
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.76		4.97		6.85		33.8		7.81		2.97	
TPH by SW8015 Mod	***Extracted:***	08.26.2020 12:15				08.26.2020 12:15		08.26.2020 14:00				08.26.2020 14:00	
	Analyzed:	08.26.2020 15:41				08.26.2020 16:01		08.26.2020 16:21				08.26.2020 17:01	
	Units/RL:	mg/kg	RL			mg/kg	RL	mg/kg	RL			mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<52.6	52.6			<53.6	53.6	<75.4	75.4			<51.4	51.4
Diesel Range Organics (DRO)		<52.6	52.6			<53.6	53.6	<75.4	75.4			<51.4	51.4
Motor Oil Range Hydrocarbons (MRO)		<52.6	52.6			<53.6	53.6	<75.4	75.4			<51.4	51.4
Total TPH		<52.6	52.6			<53.6	53.6	<75.4	75.4			<51.4	51.4

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Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: OWL080420D
Contact: Travis Reddick
Project Location: Jal

Date Received in Lab: Tue 08.25.2020 16:27
Report Date: 09.02.2020 07:54
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	670969-019		670969-020		670969-021		670969-022		670969-023		670969-024	
	Field Id:	SS-09 2-3'		SS-10 0-2'		SS-11 0-2'		SS-11 2-3'		SS-12 0-2'		SS-12 2-3.5'	
	Depth:	3- ft		2- ft		2- ft		3- ft		2- ft		3.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.25.2020 09:20		08.25.2020 09:20		08.25.2020 10:53		08.25.2020 10:56		08.25.2020 11:05		08.25.2020 11:07	
BTEX by EPA 8021B	***Extracted:***			08.26.2020 16:50		08.26.2020 16:50				08.26.2020 16:50			
	Analyzed:			08.26.2020 21:21		08.26.2020 22:08				08.26.2020 22:37			
	Units/RL:			mg/kg	RL	mg/kg	RL			mg/kg	RL		
Benzene				<0.00211	0.00211	<0.00212	0.00212			<0.00207	0.00207		
Toluene				<0.00211	0.00211	<0.00212	0.00212			<0.00207	0.00207		
Ethylbenzene				<0.00211	0.00211	<0.00212	0.00212			<0.00207	0.00207		
m,p-Xylenes				<0.00423	0.00423	<0.00424	0.00424			<0.00413	0.00413		
o-Xylene				<0.00211	0.00211	<0.00212	0.00212			<0.00207	0.00207		
Total Xylenes				<0.00211	0.00211	<0.00212	0.00212			<0.00207	0.00207		
Total BTEX				<0.00211	0.00211	<0.00212	0.00212			<0.00207	0.00207		
Chloride by EPA 300	***Extracted:***	08.26.2020 17:39		08.26.2020 17:39		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00	
	Analyzed:	08.26.2020 21:01		08.26.2020 21:07		08.26.2020 21:40		08.26.2020 21:57		08.26.2020 22:02		08.26.2020 22:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		54.9	10.4	106	10.5	10900	212	118	10.5	352	10.4	560	11.5
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.17		5.16		6.16		5.53		3.82		13.0	
TPH by SW8015 Mod	***Extracted:***			08.26.2020 14:00		08.26.2020 14:00				08.26.2020 14:00			
	Analyzed:			08.26.2020 17:23		08.26.2020 17:43				08.26.2020 18:03			
	Units/RL:			mg/kg	RL	mg/kg	RL			mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)				<52.7	52.7	<53.0	53.0			<51.9	51.9		
Diesel Range Organics (DRO)				<52.7	52.7	<53.0	53.0			<51.9	51.9		
Motor Oil Range Hydrocarbons (MRO)				<52.7	52.7	<53.0	53.0			<51.9	51.9		
Total TPH				<52.7	52.7	<53.0	53.0			<51.9	51.9		

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Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: OWL080420D
Contact: Travis Reddick
Project Location: Jal

Date Received in Lab: Tue 08.25.2020 16:27
Report Date: 09.02.2020 07:54
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	670969-025		670969-026		670969-027		670969-028		670969-029		670969-030	
	Field Id:	SS-13 0-2'		SS-13 2-4'		SS-13 4-5'		SS-14 0-2'		SS-15 0-2'		SS-15 2-4'	
	Depth:	2- ft		4- ft		5- ft		2- ft		2- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.25.2020 11:12		08.25.2020 11:15		08.25.2020 11:18		08.25.2020 11:27		08.25.2020 11:34		08.25.2020 11:37	
BTEX by EPA 8021B	***Extracted:***	08.26.2020 16:50						08.26.2020 16:50		08.26.2020 16:50			
	Analyzed:	08.27.2020 01:41						08.26.2020 23:18		08.26.2020 23:38			
	Units/RL:	mg/kg	RL					mg/kg	RL	mg/kg	RL		
Benzene		<0.00248	0.00248					<0.00214	0.00214	<0.00212	0.00212		
Toluene		<0.00248	0.00248					<0.00214	0.00214	<0.00212	0.00212		
Ethylbenzene		<0.00248	0.00248					<0.00214	0.00214	<0.00212	0.00212		
m,p-Xylenes		<0.00496	0.00496					<0.00427	0.00427	<0.00425	0.00425		
o-Xylene		<0.00248	0.00248					<0.00214	0.00214	<0.00212	0.00212		
Total Xylenes		<0.00248	0.00248					<0.00214	0.00214	<0.00212	0.00212		
Total BTEX		<0.00248	0.00248					<0.00214	0.00214	<0.00212	0.00212		
Chloride by EPA 300	***Extracted:***	08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00	
	Analyzed:	08.26.2020 22:13		08.26.2020 22:30		08.26.2020 22:36		08.26.2020 22:41		08.26.2020 22:47		08.26.2020 22:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		154	12.4	12.8	10.4	11.4	10.8	13500	213	15500	214	3950	72.7
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		19.3		2.69		6.28		6.21		6.78		31.5	
TPH by SW8015 Mod	***Extracted:***	08.26.2020 16:30						08.26.2020 14:00		08.26.2020 14:00			
	Analyzed:	08.27.2020 00:49						08.26.2020 18:22		08.26.2020 18:43			
	Units/RL:	mg/kg	RL					mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<61.7	61.7					<53.4	53.4	<53.9	53.9		
Diesel Range Organics (DRO)		<61.7	61.7					<53.4	53.4	<53.9	53.9		
Motor Oil Range Hydrocarbons (MRO)		<61.7	61.7					<53.4	53.4	<53.9	53.9		
Total TPH		<61.7	61.7					<53.4	53.4	<53.9	53.9		

BRL - Below Reporting Limit

Jessica Kramer

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Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: OWL080420D
Contact: Travis Reddick
Project Location: Jal

Date Received in Lab: Tue 08.25.2020 16:27
Report Date: 09.02.2020 07:54
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	670969-031		670969-032		670969-033		670969-034		670969-035		670969-036	
	Field Id:	SS-15 4-5'		SS-16 0-2'		SS-16 2-3'		SS-17 0-2.5'		SS-18 0-2'		SS-18 2-3'	
	Depth:	5- ft		2- ft		4- ft		2.5- ft		2- ft		3- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.25.2020 11:40		08.25.2020 11:42		08.25.2020 11:45		08.25.2020 12:30		08.25.2020 12:33		08.25.2020 12:36	
BTEX by EPA 8021B	***Extracted:***			08.26.2020 16:50				08.26.2020 16:50		08.26.2020 16:50		09.01.2020 08:48	
	Analyzed:			08.26.2020 23:59				08.27.2020 00:19		08.27.2020 00:39		09.01.2020 12:33	
	Units/RL:			mg/kg	RL			mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene				<0.00209	0.00209			<0.00253	0.00253	<0.00215	0.00215	<0.00222	0.00222
Toluene				<0.00209	0.00209			<0.00253	0.00253	<0.00215	0.00215	<0.00222	0.00222
Ethylbenzene				<0.00209	0.00209			<0.00253	0.00253	<0.00215	0.00215	<0.00222	0.00222
m,p-Xylenes				<0.00418	0.00418			<0.00506	0.00506	<0.00430	0.00430	<0.00443	0.00443
o-Xylene				<0.00209	0.00209			<0.00253	0.00253	<0.00215	0.00215	<0.00222	0.00222
Total Xylenes				<0.00209	0.00209			<0.00253	0.00253	<0.00215	0.00215	<0.00222	0.00222
Total BTEX				<0.00209	0.00209			<0.00253	0.00253	<0.00215	0.00215	<0.00222	0.00222
Chloride by EPA 300	***Extracted:***	08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00	
	Analyzed:	08.26.2020 22:58		08.26.2020 23:15		08.26.2020 23:20		08.26.2020 23:37		08.26.2020 23:43		08.26.2020 23:48	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		753	10.6	167	10.4	389	10.5	3720	63.2	2790	54.1	401	11.1
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		5.81		4.90		5.69		21.3		7.80		10.3	
TPH by SW8015 Mod	***Extracted:***			08.26.2020 14:00				08.26.2020 14:00		08.26.2020 16:30		09.01.2020 10:30	
	Analyzed:			08.26.2020 19:03				08.26.2020 19:23		08.27.2020 10:34		09.01.2020 10:49	
	Units/RL:			mg/kg	RL			mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)				<52.6	52.6			<63.6	63.6	<54.1	54.1	<55.7	55.7
Diesel Range Organics (DRO)				<52.6	52.6			610	63.6	1980	54.1	<55.7	55.7
Motor Oil Range Hydrocarbons (MRO)				<52.6	52.6			206	63.6	1010	54.1	<55.7	55.7
Total TPH				<52.6	52.6			816	63.6	2990	54.1	<55.7	55.7

BRL - Below Reporting Limit

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Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: OWL080420D
Contact: Travis Reddick
Project Location: Jal

Date Received in Lab: Tue 08.25.2020 16:27
Report Date: 09.02.2020 07:54
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	670969-037		670969-038		670969-039		670969-040					
	Field Id:	SS-19 0-2'		SS-19 2.-4.5'		SS-BG 0-2'		SS-BG 2-3.5'					
	Depth:	2- ft		4.5- ft		2- ft		3.5- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	08.25.2020 12:44		08.25.2020 12:46		08.25.2020 13:02		08.25.2020 13:05					
BTEX by EPA 8021B	***Extracted:***	08.26.2020 16:50		09.01.2020 08:48		08.26.2020 16:50							
	Analyzed:	08.27.2020 01:00		09.01.2020 14:37		08.27.2020 01:20							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Benzene		<0.00228	0.00228	<0.00224	0.00224	<0.00239	0.00239						
Toluene		<0.00228	0.00228	<0.00224	0.00224	<0.00239	0.00239						
Ethylbenzene		<0.00228	0.00228	<0.00224	0.00224	<0.00239	0.00239						
m,p-Xylenes		<0.00456	0.00456	<0.00448	0.00448	<0.00478	0.00478						
o-Xylene		<0.00228	0.00228	<0.00224	0.00224	<0.00239	0.00239						
Total Xylenes		<0.00228	0.00228	<0.00224	0.00224	<0.00239	0.00239						
Total BTEX		<0.00228	0.00228	<0.00224	0.00224	<0.00239	0.00239						
Chloride by EPA 300	***Extracted:***	08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00		08.26.2020 16:00					
	Analyzed:	08.26.2020 23:54		08.26.2020 23:59		08.27.2020 00:05		08.27.2020 00:10					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		390	11.4	122	11.2	376	11.9	63.0	11.0				
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45		08.27.2020 13:45					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		12.4		11.0		16.9		9.33					
TPH by SW8015 Mod	***Extracted:***	08.26.2020 14:00		09.01.2020 10:30		08.26.2020 14:00							
	Analyzed:	08.26.2020 19:43		09.01.2020 11:51		08.26.2020 20:03							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)		<56.8	56.8	<56.0	56.0	<60.3	60.3						
Diesel Range Organics (DRO)		118	56.8	<56.0	56.0	<60.3	60.3						
Motor Oil Range Hydrocarbons (MRO)		59.4	56.8	<56.0	56.0	<60.3	60.3						
Total TPH		177	56.8	<56.0	56.0	<60.3	60.3						

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Jessica Kramer

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Analytical Report 670969

for

KJ Environmental & Civil Engineering

Project Manager: Travis Reddick

Harrier Booster Pump

OWL080420D

09.02.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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09.02.2020

Project Manager: **Travis Reddick**
KJ Environmental & Civil Engineering
500 Moseley Rd
Aubrey, TX 76227

Reference: Eurofins Xenco, LLC Report No(s): **670969**
Harrier Booster Pump
Project Address: Jal

Travis Reddick:

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 Eurofins Xenco, LLC Report Number(s) 670969. 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 Eurofins Xenco, LLC. 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. 670969 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

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Sample Cross Reference 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS-01 0-2'	S	08.25.2020 08:30	2 ft	670969-001
SS-01 2-4 '	S	08.25.2020 08:35	4 ft	670969-002
SS-02 0-2'	S	08.25.2020 08:45	2 ft	670969-003
SS-02 2-4'	S	08.25.2020 08:50	4 ft	670969-004
SS-02 4-6'	S	08.25.2020 08:53	6 ft	670969-005
SS-02 6-7'	S	08.25.2020 08:55	7 ft	670969-006
SS-03 0-2'	S	08.25.2020 09:09	2 ft	670969-007
SS-03 2-4'	S	08.25.2020 09:12	4 ft	670969-008
SS-03 4-5'	S	08.25.2020 09:15	5 ft	670969-009
SS-04 0-2'	S	08.25.2020 09:20	2 ft	670969-010
SS-04 2-4'	S	08.25.2020 09:20	4 ft	670969-011
SS-05 0-2.5'	S	08.25.2020 09:20	2.5 ft	670969-012
SS-06 0-2'	S	08.25.2020 09:20	2 ft	670969-013
SS-06 2-3'	S	08.25.2020 09:20	3 ft	670969-014
SS-07 0-2'	S	08.25.2020 09:20	2 ft	670969-015
SS-08 0-2'	S	08.25.2020 09:20	2 ft	670969-016
SS-08 2-3'	S	08.25.2020 09:20	3 ft	670969-017
SS-09 0-2'	S	08.25.2020 09:20	2 ft	670969-018
SS-09 2-3'	S	08.25.2020 09:20	3 ft	670969-019
SS-10 0-2'	S	08.25.2020 09:20	2 ft	670969-020
SS-11 0-2'	S	08.25.2020 10:53	2 ft	670969-021
SS-11 2-3'	S	08.25.2020 10:56	3 ft	670969-022
SS-12 0-2'	S	08.25.2020 11:05	2 ft	670969-023
SS-12 2-3.5'	S	08.25.2020 11:07	3.5 ft	670969-024
SS-13 0-2'	S	08.25.2020 11:12	2 ft	670969-025
SS-13 2-4'	S	08.25.2020 11:15	4 ft	670969-026
SS-13 4-5'	S	08.25.2020 11:18	5 ft	670969-027
SS-14 0-2'	S	08.25.2020 11:27	2 ft	670969-028
SS-15 0-2'	S	08.25.2020 11:34	2 ft	670969-029
SS-15 2-4'	S	08.25.2020 11:37	4 ft	670969-030
SS-15 4-5'	S	08.25.2020 11:40	5 ft	670969-031
SS-16 0-2'	S	08.25.2020 11:42	2 ft	670969-032
SS-16 2-3'	S	08.25.2020 11:45	4 ft	670969-033
SS-17 0-2.5'	S	08.25.2020 12:30	2.5 ft	670969-034
SS-18 0-2'	S	08.25.2020 12:33	2 ft	670969-035
SS-18 2-3'	S	08.25.2020 12:36	3 ft	670969-036
SS-19 0-2'	S	08.25.2020 12:44	2 ft	670969-037
SS-19 2.-4.5'	S	08.25.2020 12:46	4.5 ft	670969-038
SS-BG 0-2'	S	08.25.2020 13:02	2 ft	670969-039
SS-BG 2-3.5'	S	08.25.2020 13:05	3.5 ft	670969-040

CASE NARRATIVE

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Client Name: KJ Environmental & Civil Engineering

Project Name: Harrier Booster Pump

Project ID: *OWL080420D*
Work Order Number(s): *670969*

Report Date: *09.02.2020*
Date Received: *08.25.2020*

Sample receipt non conformances and comments:

Hold all sampling of TPH and BTEX below 2.5 feet pending results of samples above2.5 feet.

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id:	**SS-01 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-001	Date Collected:	08.25.2020 08:30	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	7.7
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1840**	53.8	mg/kg	08.26.2020 18:36		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	7.7
Analyst:	DTH	Date Prep:	08.26.2020 12:15	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<53.9	53.9	mg/kg	08.26.2020 14:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<53.9	53.9	mg/kg	08.26.2020 14:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<53.9	53.9	mg/kg	08.26.2020 14:00	U	1
Total TPH	PHC635	<53.9	53.9	mg/kg	08.26.2020 14:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	08.26.2020 14:00	
o-Terphenyl	84-15-1	114	%	70-135	08.26.2020 14:00	

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Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id:	**SS-01 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-001	Date Collected:	08.25.2020 08:30	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	7.7
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00215	0.00215	mg/kg	08.26.2020 18:18	U	1
Toluene	108-88-3	<0.00215	0.00215	mg/kg	08.26.2020 18:18	U	1
Ethylbenzene	100-41-4	<0.00215	0.00215	mg/kg	08.26.2020 18:18	U	1
m,p-Xylenes	179601-23-1	<0.00430	0.00430	mg/kg	08.26.2020 18:18	U	1
o-Xylene	95-47-6	<0.00215	0.00215	mg/kg	08.26.2020 18:18	U	1
Total Xylenes	1330-20-7	<0.00215	0.00215	mg/kg	08.26.2020 18:18	U	1
Total BTEX		<0.00215	0.00215	mg/kg	08.26.2020 18:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	08.26.2020 18:18	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.26.2020 18:18	

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Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id:	**SS-01 2-4 '**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-002	Date Collected:	08.25.2020 08:35	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	8.25
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**157**	10.8	mg/kg	08.26.2020 18:53		1

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Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id:	**SS-02 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-003	Date Collected:	08.25.2020 08:45	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	8.62
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3940**	54.4	mg/kg	08.26.2020 18:58		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	8.62
Analyst:	DTH	Date Prep:	08.26.2020 12:15	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<54.6	54.6	mg/kg	08.26.2020 14:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<54.6	54.6	mg/kg	08.26.2020 14:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<54.6	54.6	mg/kg	08.26.2020 14:20	U	1
Total TPH	PHC635	<54.6	54.6	mg/kg	08.26.2020 14:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	08.26.2020 14:20	
o-Terphenyl	84-15-1	120	%	70-135	08.26.2020 14:20	

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Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id:	**SS-02 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-003	Date Collected:	08.25.2020 08:45	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	8.62
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00218	0.00218	mg/kg	08.26.2020 18:38	U	1
Toluene	108-88-3	<0.00218	0.00218	mg/kg	08.26.2020 18:38	U	1
Ethylbenzene	100-41-4	<0.00218	0.00218	mg/kg	08.26.2020 18:38	U	1
m,p-Xylenes	179601-23-1	<0.00435	0.00435	mg/kg	08.26.2020 18:38	U	1
o-Xylene	95-47-6	<0.00218	0.00218	mg/kg	08.26.2020 18:38	U	1
Total Xylenes	1330-20-7	<0.00218	0.00218	mg/kg	08.26.2020 18:38	U	1
Total BTEX		<0.00218	0.00218	mg/kg	08.26.2020 18:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.26.2020 18:38	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.26.2020 18:38	

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Harrier Booster Pump

Sample Id:	**SS-02 2-4'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-004	Date Collected:	08.25.2020 08:50	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	7.38
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**84.8**	10.8	mg/kg	08.26.2020 19:04		1

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Harrier Booster Pump

Sample Id:	**SS-02 4-6'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-005	Date Collected:	08.25.2020 08:53	Sample Depth:	6 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	8.24
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**83.9**	11.0	mg/kg	08.26.2020 19:09		1

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Harrier Booster Pump

Sample Id:	**SS-02 6-7'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-006	Date Collected:	08.25.2020 08:55	Sample Depth:	7 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	24.24
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**129**	13.2	mg/kg	08.26.2020 19:26		1

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Harrier Booster Pump

Sample Id:	**SS-03 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-007	Date Collected:	08.25.2020 09:09	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	8.18
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1070**	10.9	mg/kg	08.26.2020 19:32		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	8.18
Analyst:	DTH	Date Prep:	08.26.2020 12:15	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<54.4	54.4	mg/kg	08.26.2020 14:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<54.4	54.4	mg/kg	08.26.2020 14:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<54.4	54.4	mg/kg	08.26.2020 14:40	U	1
Total TPH	PHC635	<54.4	54.4	mg/kg	08.26.2020 14:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	08.26.2020 14:40	
o-Terphenyl	84-15-1	109	%	70-135	08.26.2020 14:40	

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Harrier Booster Pump

Sample Id:	**SS-03 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-007	Date Collected:	08.25.2020 09:09	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	8.18
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00217	0.00217	mg/kg	08.26.2020 18:58	U	1
Toluene	108-88-3	<0.00217	0.00217	mg/kg	08.26.2020 18:58	U	1
Ethylbenzene	100-41-4	<0.00217	0.00217	mg/kg	08.26.2020 18:58	U	1
m,p-Xylenes	179601-23-1	<0.00433	0.00433	mg/kg	08.26.2020 18:58	U	1
o-Xylene	95-47-6	<0.00217	0.00217	mg/kg	08.26.2020 18:58	U	1
Total Xylenes	1330-20-7	<0.00217	0.00217	mg/kg	08.26.2020 18:58	U	1
Total BTEX		<0.00217	0.00217	mg/kg	08.26.2020 18:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.26.2020 18:58	
4-Bromofluorobenzene	460-00-4	112	%	70-130	08.26.2020 18:58	

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Harrier Booster Pump

Sample Id:	**SS-03 2-4'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-008	Date Collected:	08.25.2020 09:12	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	8.79
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**171**	10.9	mg/kg	08.26.2020 19:37		1

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Harrier Booster Pump

Sample Id:	**SS-03 4-5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-009	Date Collected:	08.25.2020 09:15	Sample Depth:	5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	8.34
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**809**	54.4	mg/kg	08.26.2020 19:43		5

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Harrier Booster Pump

Sample Id:	**SS-04 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-010	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	4.12
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**685**	10.4	mg/kg	08.26.2020 19:48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	4.12
Analyst:	DTH	Date Prep:	08.26.2020 12:15	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<52.2	52.2	mg/kg	08.26.2020 15:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<52.2	52.2	mg/kg	08.26.2020 15:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<52.2	52.2	mg/kg	08.26.2020 15:01	U	1
Total TPH	PHC635	<52.2	52.2	mg/kg	08.26.2020 15:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	08.26.2020 15:01	
o-Terphenyl	84-15-1	113	%	70-135	08.26.2020 15:01	

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Harrier Booster Pump

Sample Id:	**SS-04 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-010	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	4.12
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00211	0.00211	mg/kg	08.26.2020 19:19	U	1
Toluene	108-88-3	<0.00211	0.00211	mg/kg	08.26.2020 19:19	U	1
Ethylbenzene	100-41-4	<0.00211	0.00211	mg/kg	08.26.2020 19:19	U	1
m,p-Xylenes	179601-23-1	<0.00421	0.00421	mg/kg	08.26.2020 19:19	U	1
o-Xylene	95-47-6	<0.00211	0.00211	mg/kg	08.26.2020 19:19	U	1
Total Xylenes	1330-20-7	<0.00211	0.00211	mg/kg	08.26.2020 19:19	U	1
Total BTEX		<0.00211	0.00211	mg/kg	08.26.2020 19:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.26.2020 19:19	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.26.2020 19:19	

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Harrier Booster Pump

Sample Id:	**SS-04 2-4'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-011	Date Collected:	08.25.2020 09:20	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	6.41
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**142**	10.6	mg/kg	08.26.2020 19:54		1

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Harrier Booster Pump

Sample Id:	**SS-05 0-2.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-012	Date Collected:	08.25.2020 09:20	Sample Depth:	2.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	9.41
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3580**	54.9	mg/kg	08.26.2020 20:11		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	9.41
Analyst:	DTH	Date Prep:	08.26.2020 12:15	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<55.4	55.4	mg/kg	08.26.2020 15:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<55.4	55.4	mg/kg	08.26.2020 15:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<55.4	55.4	mg/kg	08.26.2020 15:21	U	1
Total TPH	PHC635	<55.4	55.4	mg/kg	08.26.2020 15:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	08.26.2020 15:21	
o-Terphenyl	84-15-1	118	%	70-135	08.26.2020 15:21	

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Harrier Booster Pump

Sample Id:	**SS-05 0-2.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-012	Date Collected:	08.25.2020 09:20	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	9.41
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00220	0.00220	mg/kg	08.26.2020 19:39	U	1
Toluene	108-88-3	<0.00220	0.00220	mg/kg	08.26.2020 19:39	U	1
Ethylbenzene	100-41-4	<0.00220	0.00220	mg/kg	08.26.2020 19:39	U	1
m,p-Xylenes	179601-23-1	<0.00440	0.00440	mg/kg	08.26.2020 19:39	U	1
o-Xylene	95-47-6	<0.00220	0.00220	mg/kg	08.26.2020 19:39	U	1
Total Xylenes	1330-20-7	<0.00220	0.00220	mg/kg	08.26.2020 19:39	U	1
Total BTEX		<0.00220	0.00220	mg/kg	08.26.2020 19:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.26.2020 19:39	
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.26.2020 19:39	

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Harrier Booster Pump

Sample Id:	**SS-06 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-013	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	4.76
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**119**	10.5	mg/kg	08.26.2020 20:16		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	4.76
Analyst:	DTH	Date Prep:	08.26.2020 12:15	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<52.6	52.6	mg/kg	08.26.2020 15:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<52.6	52.6	mg/kg	08.26.2020 15:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<52.6	52.6	mg/kg	08.26.2020 15:41	U	1
Total TPH	PHC635	<52.6	52.6	mg/kg	08.26.2020 15:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	08.26.2020 15:41	
o-Terphenyl	84-15-1	119	%	70-135	08.26.2020 15:41	

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Harrier Booster Pump

Sample Id:	**SS-06 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-013	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	4.76
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00208	0.00208	mg/kg	08.26.2020 20:00	U	1
Toluene	108-88-3	<0.00208	0.00208	mg/kg	08.26.2020 20:00	U	1
Ethylbenzene	100-41-4	<0.00208	0.00208	mg/kg	08.26.2020 20:00	U	1
m,p-Xylenes	179601-23-1	<0.00416	0.00416	mg/kg	08.26.2020 20:00	U	1
o-Xylene	95-47-6	<0.00208	0.00208	mg/kg	08.26.2020 20:00	U	1
Total Xylenes	1330-20-7	<0.00208	0.00208	mg/kg	08.26.2020 20:00	U	1
Total BTEX		<0.00208	0.00208	mg/kg	08.26.2020 20:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.26.2020 20:00	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.26.2020 20:00	

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Harrier Booster Pump

Sample Id:	**SS-06 2-3'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-014	Date Collected:	08.25.2020 09:20	Sample Depth:	3 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	4.97
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**111**	10.6	mg/kg	08.26.2020 20:33		1

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Harrier Booster Pump

Sample Id:	**SS-07 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-015	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	6.85
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**97.0**	10.8	mg/kg	08.26.2020 20:39		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	6.85
Analyst:	DTH	Date Prep:	08.26.2020 12:15	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<53.6	53.6	mg/kg	08.26.2020 16:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<53.6	53.6	mg/kg	08.26.2020 16:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<53.6	53.6	mg/kg	08.26.2020 16:01	U	1
Total TPH	PHC635	<53.6	53.6	mg/kg	08.26.2020 16:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	08.26.2020 16:01	
o-Terphenyl	84-15-1	121	%	70-135	08.26.2020 16:01	

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Harrier Booster Pump

Sample Id:	**SS-07 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-015	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	6.85
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00214	0.00214	mg/kg	08.26.2020 20:20	U	1
Toluene	108-88-3	<0.00214	0.00214	mg/kg	08.26.2020 20:20	U	1
Ethylbenzene	100-41-4	<0.00214	0.00214	mg/kg	08.26.2020 20:20	U	1
m,p-Xylenes	179601-23-1	<0.00428	0.00428	mg/kg	08.26.2020 20:20	U	1
o-Xylene	95-47-6	<0.00214	0.00214	mg/kg	08.26.2020 20:20	U	1
Total Xylenes	1330-20-7	<0.00214	0.00214	mg/kg	08.26.2020 20:20	U	1
Total BTEX		<0.00214	0.00214	mg/kg	08.26.2020 20:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.26.2020 20:20	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.26.2020 20:20	

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Harrier Booster Pump

Sample Id:	**SS-08 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-016	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	33.77
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1280**	15.2	mg/kg	08.26.2020 20:44		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	33.77
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<75.4	75.4	mg/kg	08.26.2020 16:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<75.4	75.4	mg/kg	08.26.2020 16:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<75.4	75.4	mg/kg	08.26.2020 16:21	U	1
Total TPH	PHC635	<75.4	75.4	mg/kg	08.26.2020 16:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	08.26.2020 16:21	
o-Terphenyl	84-15-1	117	%	70-135	08.26.2020 16:21	

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Harrier Booster Pump

Sample Id:	**SS-08 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-016	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	33.77
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00302	0.00302	mg/kg	08.26.2020 20:40	U	1
Toluene	108-88-3	<0.00302	0.00302	mg/kg	08.26.2020 20:40	U	1
Ethylbenzene	100-41-4	<0.00302	0.00302	mg/kg	08.26.2020 20:40	U	1
m,p-Xylenes	179601-23-1	<0.00604	0.00604	mg/kg	08.26.2020 20:40	U	1
o-Xylene	95-47-6	<0.00302	0.00302	mg/kg	08.26.2020 20:40	U	1
Total Xylenes	1330-20-7	<0.00302	0.00302	mg/kg	08.26.2020 20:40	U	1
Total BTEX		<0.00302	0.00302	mg/kg	08.26.2020 20:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.26.2020 20:40	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.26.2020 20:40	

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Harrier Booster Pump

Sample Id:	**SS-08 2-3'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-017	Date Collected:	08.25.2020 09:20	Sample Depth:	3 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	7.81
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**49.8**	10.8	mg/kg	08.26.2020 20:50		1

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Harrier Booster Pump

Sample Id:	**SS-09 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-018	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	2.97
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**244**	10.2	mg/kg	08.26.2020 20:55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	2.97
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<51.4	51.4	mg/kg	08.26.2020 17:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<51.4	51.4	mg/kg	08.26.2020 17:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<51.4	51.4	mg/kg	08.26.2020 17:01	U	1
Total TPH	PHC635	<51.4	51.4	mg/kg	08.26.2020 17:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	08.26.2020 17:01	
o-Terphenyl	84-15-1	116	%	70-135	08.26.2020 17:01	

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Harrier Booster Pump

Sample Id:	**SS-09 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-018	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	2.97
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00206	0.00206	mg/kg	08.26.2020 21:01	U	1
Toluene	108-88-3	<0.00206	0.00206	mg/kg	08.26.2020 21:01	U	1
Ethylbenzene	100-41-4	<0.00206	0.00206	mg/kg	08.26.2020 21:01	U	1
m,p-Xylenes	179601-23-1	<0.00412	0.00412	mg/kg	08.26.2020 21:01	U	1
o-Xylene	95-47-6	<0.00206	0.00206	mg/kg	08.26.2020 21:01	U	1
Total Xylenes	1330-20-7	<0.00206	0.00206	mg/kg	08.26.2020 21:01	U	1
Total BTEX		<0.00206	0.00206	mg/kg	08.26.2020 21:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.26.2020 21:01	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.26.2020 21:01	

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Harrier Booster Pump

Sample Id:	**SS-09 2-3'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-019	Date Collected:	08.25.2020 09:20	Sample Depth:	3 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	4.17
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**54.9**	10.4	mg/kg	08.26.2020 21:01		1

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Harrier Booster Pump

Sample Id:	**SS-10 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-020	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	5.16
Analyst:	MAB	Date Prep:	08.26.2020 17:39	Basis:	Dry Weight
Seq Number:	3135672				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**106**	10.5	mg/kg	08.26.2020 21:07		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	5.16
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<52.7	52.7	mg/kg	08.26.2020 17:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<52.7	52.7	mg/kg	08.26.2020 17:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<52.7	52.7	mg/kg	08.26.2020 17:23	U	1
Total TPH	PHC635	<52.7	52.7	mg/kg	08.26.2020 17:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	08.26.2020 17:23	
o-Terphenyl	84-15-1	117	%	70-135	08.26.2020 17:23	

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Harrier Booster Pump

Sample Id:	**SS-10 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-020	Date Collected:	08.25.2020 09:20	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	5.16
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00211	0.00211	mg/kg	08.26.2020 21:21	U	1
Toluene	108-88-3	<0.00211	0.00211	mg/kg	08.26.2020 21:21	U	1
Ethylbenzene	100-41-4	<0.00211	0.00211	mg/kg	08.26.2020 21:21	U	1
m,p-Xylenes	179601-23-1	<0.00423	0.00423	mg/kg	08.26.2020 21:21	U	1
o-Xylene	95-47-6	<0.00211	0.00211	mg/kg	08.26.2020 21:21	U	1
Total Xylenes	1330-20-7	<0.00211	0.00211	mg/kg	08.26.2020 21:21	U	1
Total BTEX		<0.00211	0.00211	mg/kg	08.26.2020 21:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.26.2020 21:21	
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.26.2020 21:21	

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Harrier Booster Pump

Sample Id:	**SS-11 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-021	Date Collected:	08.25.2020 10:53	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	6.16
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10900**	212	mg/kg	08.26.2020 21:40		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	6.16
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<53.0	53.0	mg/kg	08.26.2020 17:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<53.0	53.0	mg/kg	08.26.2020 17:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<53.0	53.0	mg/kg	08.26.2020 17:43	U	1
Total TPH	PHC635	<53.0	53.0	mg/kg	08.26.2020 17:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	134	%	70-135	08.26.2020 17:43	
o-Terphenyl	84-15-1	106	%	70-135	08.26.2020 17:43	

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Harrier Booster Pump

Sample Id:	**SS-11 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-021	Date Collected:	08.25.2020 10:53	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	6.16
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00212	0.00212	mg/kg	08.26.2020 22:08	U	1
Toluene	108-88-3	<0.00212	0.00212	mg/kg	08.26.2020 22:08	U	1
Ethylbenzene	100-41-4	<0.00212	0.00212	mg/kg	08.26.2020 22:08	U	1
m,p-Xylenes	179601-23-1	<0.00424	0.00424	mg/kg	08.26.2020 22:08	U	1
o-Xylene	95-47-6	<0.00212	0.00212	mg/kg	08.26.2020 22:08	U	1
Total Xylenes	1330-20-7	<0.00212	0.00212	mg/kg	08.26.2020 22:08	U	1
Total BTEX		<0.00212	0.00212	mg/kg	08.26.2020 22:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	08.26.2020 22:08	
1,4-Difluorobenzene	540-36-3	95	%	70-130	08.26.2020 22:08	

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Harrier Booster Pump

Sample Id:	**SS-11 2-3'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-022	Date Collected:	08.25.2020 10:56	Sample Depth:	3 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	5.53
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**118**	10.5	mg/kg	08.26.2020 21:57		1

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Harrier Booster Pump

Sample Id:	**SS-12 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-023	Date Collected:	08.25.2020 11:05	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	3.82
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**352**	10.4	mg/kg	08.26.2020 22:02		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	3.82
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<51.9	51.9	mg/kg	08.26.2020 18:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<51.9	51.9	mg/kg	08.26.2020 18:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<51.9	51.9	mg/kg	08.26.2020 18:03	U	1
Total TPH	PHC635	<51.9	51.9	mg/kg	08.26.2020 18:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	08.26.2020 18:03	
o-Terphenyl	84-15-1	115	%	70-135	08.26.2020 18:03	

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Harrier Booster Pump

Sample Id:	**SS-12 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-023	Date Collected:	08.25.2020 11:05	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	3.82
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00207	0.00207	mg/kg	08.26.2020 22:37	U	1
Toluene	108-88-3	<0.00207	0.00207	mg/kg	08.26.2020 22:37	U	1
Ethylbenzene	100-41-4	<0.00207	0.00207	mg/kg	08.26.2020 22:37	U	1
m,p-Xylenes	179601-23-1	<0.00413	0.00413	mg/kg	08.26.2020 22:37	U	1
o-Xylene	95-47-6	<0.00207	0.00207	mg/kg	08.26.2020 22:37	U	1
Total Xylenes	1330-20-7	<0.00207	0.00207	mg/kg	08.26.2020 22:37	U	1
Total BTEX		<0.00207	0.00207	mg/kg	08.26.2020 22:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	08.26.2020 22:37	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.26.2020 22:37	

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Harrier Booster Pump

Sample Id:	**SS-12 2-3.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-024	Date Collected:	08.25.2020 11:07	Sample Depth:	3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	13.03
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**560**	11.5	mg/kg	08.26.2020 22:08		1

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Harrier Booster Pump

Sample Id:	**SS-13 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-025	Date Collected:	08.25.2020 11:12	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	19.26
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**154**	12.4	mg/kg	08.26.2020 22:13		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	19.26
Analyst:	DTH	Date Prep:	08.26.2020 16:30	Basis:	Dry Weight
Seq Number:	3135658				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<61.7	61.7	mg/kg	08.27.2020 00:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<61.7	61.7	mg/kg	08.27.2020 00:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<61.7	61.7	mg/kg	08.27.2020 00:49	U	1
Total TPH	PHC635	<61.7	61.7	mg/kg	08.27.2020 00:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	08.27.2020 00:49	
o-Terphenyl	84-15-1	105	%	70-135	08.27.2020 00:49	

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Harrier Booster Pump

Sample Id:	**SS-13 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-025	Date Collected:	08.25.2020 11:12	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	19.26
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00248	0.00248	mg/kg	08.27.2020 01:41	U	1
Toluene	108-88-3	<0.00248	0.00248	mg/kg	08.27.2020 01:41	U	1
Ethylbenzene	100-41-4	<0.00248	0.00248	mg/kg	08.27.2020 01:41	U	1
m,p-Xylenes	179601-23-1	<0.00496	0.00496	mg/kg	08.27.2020 01:41	U	1
o-Xylene	95-47-6	<0.00248	0.00248	mg/kg	08.27.2020 01:41	U	1
Total Xylenes	1330-20-7	<0.00248	0.00248	mg/kg	08.27.2020 01:41	U	1
Total BTEX		<0.00248	0.00248	mg/kg	08.27.2020 01:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.27.2020 01:41	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.27.2020 01:41	

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Harrier Booster Pump

Sample Id:	**SS-13 2-4'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-026	Date Collected:	08.25.2020 11:15	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	2.69
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.8**	10.4	mg/kg	08.26.2020 22:30		1

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KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id:	**SS-13 4-5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-027	Date Collected:	08.25.2020 11:18	Sample Depth:	5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	6.28
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.4**	10.8	mg/kg	08.26.2020 22:36		1

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Harrier Booster Pump

Sample Id:	**SS-14 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-028	Date Collected:	08.25.2020 11:27	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	6.21
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13500**	213	mg/kg	08.26.2020 22:41		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	6.21
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<53.4	53.4	mg/kg	08.26.2020 18:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<53.4	53.4	mg/kg	08.26.2020 18:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<53.4	53.4	mg/kg	08.26.2020 18:22	U	1
Total TPH	PHC635	<53.4	53.4	mg/kg	08.26.2020 18:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	08.26.2020 18:22	
o-Terphenyl	84-15-1	111	%	70-135	08.26.2020 18:22	

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KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id:	**SS-14 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-028	Date Collected:	08.25.2020 11:27	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	6.21
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00214	0.00214	mg/kg	08.26.2020 23:18	U	1
Toluene	108-88-3	<0.00214	0.00214	mg/kg	08.26.2020 23:18	U	1
Ethylbenzene	100-41-4	<0.00214	0.00214	mg/kg	08.26.2020 23:18	U	1
m,p-Xylenes	179601-23-1	<0.00427	0.00427	mg/kg	08.26.2020 23:18	U	1
o-Xylene	95-47-6	<0.00214	0.00214	mg/kg	08.26.2020 23:18	U	1
Total Xylenes	1330-20-7	<0.00214	0.00214	mg/kg	08.26.2020 23:18	U	1
Total BTEX		<0.00214	0.00214	mg/kg	08.26.2020 23:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	08.26.2020 23:18	
4-Bromofluorobenzene	460-00-4	110	%	70-130	08.26.2020 23:18	

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Harrier Booster Pump

Sample Id:	**SS-15 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-029	Date Collected:	08.25.2020 11:34	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	6.78
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**15500**	214	mg/kg	08.26.2020 22:47		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	6.78
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<53.9	53.9	mg/kg	08.26.2020 18:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<53.9	53.9	mg/kg	08.26.2020 18:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<53.9	53.9	mg/kg	08.26.2020 18:43	U	1
Total TPH	PHC635	<53.9	53.9	mg/kg	08.26.2020 18:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	08.26.2020 18:43	
o-Terphenyl	84-15-1	112	%	70-135	08.26.2020 18:43	

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Harrier Booster Pump

Sample Id:	**SS-15 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-029	Date Collected:	08.25.2020 11:34	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	6.78
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00212	0.00212	mg/kg	08.26.2020 23:38	U	1
Toluene	108-88-3	<0.00212	0.00212	mg/kg	08.26.2020 23:38	U	1
Ethylbenzene	100-41-4	<0.00212	0.00212	mg/kg	08.26.2020 23:38	U	1
m,p-Xylenes	179601-23-1	<0.00425	0.00425	mg/kg	08.26.2020 23:38	U	1
o-Xylene	95-47-6	<0.00212	0.00212	mg/kg	08.26.2020 23:38	U	1
Total Xylenes	1330-20-7	<0.00212	0.00212	mg/kg	08.26.2020 23:38	U	1
Total BTEX		<0.00212	0.00212	mg/kg	08.26.2020 23:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.26.2020 23:38	
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.26.2020 23:38	

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Harrier Booster Pump

Sample Id:	**SS-15 2-4'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-030	Date Collected:	08.25.2020 11:37	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	31.51
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3950**	72.7	mg/kg	08.26.2020 22:52		5

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Harrier Booster Pump

Sample Id:	**SS-15 4-5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-031	Date Collected:	08.25.2020 11:40	Sample Depth:	5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	5.81
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**753**	10.6	mg/kg	08.26.2020 22:58		1

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Harrier Booster Pump

Sample Id:	**SS-16 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-032	Date Collected:	08.25.2020 11:42	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	4.9
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**167**	10.4	mg/kg	08.26.2020 23:15		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	4.9
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<52.6	52.6	mg/kg	08.26.2020 19:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<52.6	52.6	mg/kg	08.26.2020 19:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<52.6	52.6	mg/kg	08.26.2020 19:03	U	1
Total TPH	PHC635	<52.6	52.6	mg/kg	08.26.2020 19:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	08.26.2020 19:03	
o-Terphenyl	84-15-1	114	%	70-135	08.26.2020 19:03	

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Harrier Booster Pump

Sample Id:	**SS-16 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-032	Date Collected:	08.25.2020 11:42	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	4.9
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00209	0.00209	mg/kg	08.26.2020 23:59	U	1
Toluene	108-88-3	<0.00209	0.00209	mg/kg	08.26.2020 23:59	U	1
Ethylbenzene	100-41-4	<0.00209	0.00209	mg/kg	08.26.2020 23:59	U	1
m,p-Xylenes	179601-23-1	<0.00418	0.00418	mg/kg	08.26.2020 23:59	U	1
o-Xylene	95-47-6	<0.00209	0.00209	mg/kg	08.26.2020 23:59	U	1
Total Xylenes	1330-20-7	<0.00209	0.00209	mg/kg	08.26.2020 23:59	U	1
Total BTEX		<0.00209	0.00209	mg/kg	08.26.2020 23:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.26.2020 23:59	
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.26.2020 23:59	

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Harrier Booster Pump

Sample Id:	**SS-16 2-3'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-033	Date Collected:	08.25.2020 11:45	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	5.69
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**389**	10.5	mg/kg	08.26.2020 23:20		1

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Harrier Booster Pump

Sample Id:	**SS-17 0-2.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-034	Date Collected:	08.25.2020 12:30	Sample Depth:	2.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	21.31
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3720**	63.2	mg/kg	08.26.2020 23:37		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	21.31
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<63.6	63.6	mg/kg	08.26.2020 19:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	**610**	63.6	mg/kg	08.26.2020 19:23		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**206**	63.6	mg/kg	08.26.2020 19:23		1
Total TPH	PHC635	**816**	63.6	mg/kg	08.26.2020 19:23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	08.26.2020 19:23	
o-Terphenyl	84-15-1	121	%	70-135	08.26.2020 19:23	

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Harrier Booster Pump

Sample Id:	**SS-17 0-2.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-034	Date Collected:	08.25.2020 12:30	Sample Depth:	2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	21.31
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00253	0.00253	mg/kg	08.27.2020 00:19	U	1
Toluene	108-88-3	<0.00253	0.00253	mg/kg	08.27.2020 00:19	U	1
Ethylbenzene	100-41-4	<0.00253	0.00253	mg/kg	08.27.2020 00:19	U	1
m,p-Xylenes	179601-23-1	<0.00506	0.00506	mg/kg	08.27.2020 00:19	U	1
o-Xylene	95-47-6	<0.00253	0.00253	mg/kg	08.27.2020 00:19	U	1
Total Xylenes	1330-20-7	<0.00253	0.00253	mg/kg	08.27.2020 00:19	U	1
Total BTEX		<0.00253	0.00253	mg/kg	08.27.2020 00:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.27.2020 00:19	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.27.2020 00:19	

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KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id:	**SS-18 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-035	Date Collected:	08.25.2020 12:33	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	7.8
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2790**	54.1	mg/kg	08.26.2020 23:43		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	7.8
Analyst:	DTH	Date Prep:	08.26.2020 16:30	Basis:	Dry Weight
Seq Number:	3135658				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<54.1	54.1	mg/kg	08.27.2020 10:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	**1980**	54.1	mg/kg	08.27.2020 10:34		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**1010**	54.1	mg/kg	08.27.2020 10:34		1
Total TPH	PHC635	**2990**	54.1	mg/kg	08.27.2020 10:34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	08.27.2020 10:34	
o-Terphenyl	84-15-1	113	%	70-135	08.27.2020 10:34	

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Harrier Booster Pump

Sample Id:	**SS-18 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-035	Date Collected:	08.25.2020 12:33	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	7.8
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00215	0.00215	mg/kg	08.27.2020 00:39	U	1
Toluene	108-88-3	<0.00215	0.00215	mg/kg	08.27.2020 00:39	U	1
Ethylbenzene	100-41-4	<0.00215	0.00215	mg/kg	08.27.2020 00:39	U	1
m,p-Xylenes	179601-23-1	<0.00430	0.00430	mg/kg	08.27.2020 00:39	U	1
o-Xylene	95-47-6	<0.00215	0.00215	mg/kg	08.27.2020 00:39	U	1
Total Xylenes	1330-20-7	<0.00215	0.00215	mg/kg	08.27.2020 00:39	U	1
Total BTEX		<0.00215	0.00215	mg/kg	08.27.2020 00:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.27.2020 00:39	
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.27.2020 00:39	

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Harrier Booster Pump

Sample Id:	**SS-18 2-3'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-036	Date Collected:	08.25.2020 12:36	Sample Depth:	3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	10.26
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**401**	11.1	mg/kg	08.26.2020 23:48		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	10.26
Analyst:	DTH	Date Prep:	09.01.2020 10:30	Basis:	Dry Weight
Seq Number:	3136075				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<55.7	55.7	mg/kg	09.01.2020 10:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<55.7	55.7	mg/kg	09.01.2020 10:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<55.7	55.7	mg/kg	09.01.2020 10:49	U	1
Total TPH	PHC635	<55.7	55.7	mg/kg	09.01.2020 10:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	09.01.2020 10:49	
o-Terphenyl	84-15-1	107	%	70-135	09.01.2020 10:49	

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Harrier Booster Pump

Sample Id:	**SS-18 2-3'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-036	Date Collected:	08.25.2020 12:36	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	10.26
Analyst:	MAB	Date Prep:	09.01.2020 08:48	Basis:	Dry Weight
Seq Number:	3136128				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00222	0.00222	mg/kg	09.01.2020 12:33	U	1
Toluene	108-88-3	<0.00222	0.00222	mg/kg	09.01.2020 12:33	U	1
Ethylbenzene	100-41-4	<0.00222	0.00222	mg/kg	09.01.2020 12:33	U	1
m,p-Xylenes	179601-23-1	<0.00443	0.00443	mg/kg	09.01.2020 12:33	U	1
o-Xylene	95-47-6	<0.00222	0.00222	mg/kg	09.01.2020 12:33	U	1
Total Xylenes	1330-20-7	<0.00222	0.00222	mg/kg	09.01.2020 12:33	U	1
Total BTEX		<0.00222	0.00222	mg/kg	09.01.2020 12:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.01.2020 12:33	
4-Bromofluorobenzene	460-00-4	90	%	70-130	09.01.2020 12:33	

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Harrier Booster Pump

Sample Id:	**SS-19 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-037	Date Collected:	08.25.2020 12:44	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	12.42
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**390**	11.4	mg/kg	08.26.2020 23:54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	12.42
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<56.8	56.8	mg/kg	08.26.2020 19:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	**118**	56.8	mg/kg	08.26.2020 19:43		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**59.4**	56.8	mg/kg	08.26.2020 19:43		1
Total TPH	PHC635	**177**	56.8	mg/kg	08.26.2020 19:43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	08.26.2020 19:43	
o-Terphenyl	84-15-1	120	%	70-135	08.26.2020 19:43	

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KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id:	**SS-19 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-037	Date Collected:	08.25.2020 12:44	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	12.42
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00228	0.00228	mg/kg	08.27.2020 01:00	U	1
Toluene	108-88-3	<0.00228	0.00228	mg/kg	08.27.2020 01:00	U	1
Ethylbenzene	100-41-4	<0.00228	0.00228	mg/kg	08.27.2020 01:00	U	1
m,p-Xylenes	179601-23-1	<0.00456	0.00456	mg/kg	08.27.2020 01:00	U	1
o-Xylene	95-47-6	<0.00228	0.00228	mg/kg	08.27.2020 01:00	U	1
Total Xylenes	1330-20-7	<0.00228	0.00228	mg/kg	08.27.2020 01:00	U	1
Total BTEX		<0.00228	0.00228	mg/kg	08.27.2020 01:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	08.27.2020 01:00	
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.27.2020 01:00	

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Harrier Booster Pump

Sample Id:	**SS-19 2.-4.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-038	Date Collected:	08.25.2020 12:46	Sample Depth:	4.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	10.95
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**122**	11.2	mg/kg	08.26.2020 23:59		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	10.95
Analyst:	DTH	Date Prep:	09.01.2020 10:30	Basis:	Dry Weight
Seq Number:	3136075				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<56.0	56.0	mg/kg	09.01.2020 11:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<56.0	56.0	mg/kg	09.01.2020 11:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<56.0	56.0	mg/kg	09.01.2020 11:51	U	1
Total TPH	PHC635	<56.0	56.0	mg/kg	09.01.2020 11:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	09.01.2020 11:51	
o-Terphenyl	84-15-1	106	%	70-135	09.01.2020 11:51	

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Harrier Booster Pump

Sample Id:	**SS-19 2.-4.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-038	Date Collected:	08.25.2020 12:46	Sample Depth:	4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	10.95
Analyst:	MAB	Date Prep:	09.01.2020 08:48	Basis:	Dry Weight
Seq Number:	3136128				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00224	0.00224	mg/kg	09.01.2020 14:37	U	1
Toluene	108-88-3	<0.00224	0.00224	mg/kg	09.01.2020 14:37	U	1
Ethylbenzene	100-41-4	<0.00224	0.00224	mg/kg	09.01.2020 14:37	U	1
m,p-Xylenes	179601-23-1	<0.00448	0.00448	mg/kg	09.01.2020 14:37	U	1
o-Xylene	95-47-6	<0.00224	0.00224	mg/kg	09.01.2020 14:37	U	1
Total Xylenes	1330-20-7	<0.00224	0.00224	mg/kg	09.01.2020 14:37	U	1
Total BTEX		<0.00224	0.00224	mg/kg	09.01.2020 14:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	09.01.2020 14:37	
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.01.2020 14:37	

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Harrier Booster Pump

Sample Id:	**SS-BG 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-039	Date Collected:	08.25.2020 13:02	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	16.87
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**376**	11.9	mg/kg	08.27.2020 00:05		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	16.87
Analyst:	DTH	Date Prep:	08.26.2020 14:00	Basis:	Dry Weight
Seq Number:	3135677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<60.3	60.3	mg/kg	08.26.2020 20:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<60.3	60.3	mg/kg	08.26.2020 20:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<60.3	60.3	mg/kg	08.26.2020 20:03	U	1
Total TPH	PHC635	<60.3	60.3	mg/kg	08.26.2020 20:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	08.26.2020 20:03	
o-Terphenyl	84-15-1	107	%	70-135	08.26.2020 20:03	

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Harrier Booster Pump

Sample Id:	**SS-BG 0-2'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-039	Date Collected:	08.25.2020 13:02	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	16.87
Analyst:	MAB	Date Prep:	08.26.2020 16:50	Basis:	Dry Weight
Seq Number:	3135669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00239	0.00239	mg/kg	08.27.2020 01:20	U	1
Toluene	108-88-3	<0.00239	0.00239	mg/kg	08.27.2020 01:20	U	1
Ethylbenzene	100-41-4	<0.00239	0.00239	mg/kg	08.27.2020 01:20	U	1
m,p-Xylenes	179601-23-1	<0.00478	0.00478	mg/kg	08.27.2020 01:20	U	1
o-Xylene	95-47-6	<0.00239	0.00239	mg/kg	08.27.2020 01:20	U	1
Total Xylenes	1330-20-7	<0.00239	0.00239	mg/kg	08.27.2020 01:20	U	1
Total BTEX		<0.00239	0.00239	mg/kg	08.27.2020 01:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.27.2020 01:20	
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.27.2020 01:20	

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Harrier Booster Pump

Sample Id:	**SS-BG 2-3.5'**	Matrix:	Soil	Date Received:	08.25.2020 16:27
Lab Sample Id:	670969-040	Date Collected:	08.25.2020 13:05	Sample Depth:	3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	9.33
Analyst:	MAB	Date Prep:	08.26.2020 16:00	Basis:	Dry Weight
Seq Number:	3135673				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**63.0**	11.0	mg/kg	08.27.2020 00:10		1

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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. **ND** Not Detected.

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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

QC Summary 670969

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KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3135673 — Matrix: Solid — Date Prep: 08.26.2020
MB Sample Id: 7710237-1-BLK — LCS Sample Id: 7710237-1-BKS — LCSD Sample Id: 7710237-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	262	105	265	106	90-110	1	20	mg/kg	08.26.2020 21:29	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3135672 — Matrix: Solid — Date Prep: 08.26.2020
MB Sample Id: 7710229-1-BLK — LCS Sample Id: 7710229-1-BKS — LCSD Sample Id: 7710229-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	262	105	266	106	90-110	2	20	mg/kg	08.26.2020 18:25	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3135673 — Matrix: Soil — Date Prep: 08.26.2020
Parent Sample Id: 670969-021 — MS Sample Id: 670969-021 S — MSD Sample Id: 670969-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10900	214	11100	93	11100	93	90-110	0	20	mg/kg	08.26.2020 21:46	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3135673 — Matrix: Soil — Date Prep: 08.26.2020
Parent Sample Id: 670969-031 — MS Sample Id: 670969-031 S — MSD Sample Id: 670969-031 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	753	212	963	99	965	100	90-110	0	20	mg/kg	08.26.2020 23:04	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3135672 — Matrix: Soil — Date Prep: 08.26.2020
Parent Sample Id: 670969-001 — MS Sample Id: 670969-001 S — MSD Sample Id: 670969-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1840	216	2040	93	2050	97	90-110	0	20	mg/kg	08.26.2020 18:41	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3135672 — Matrix: Soil — Date Prep: 08.26.2020
Parent Sample Id: 670969-011 — MS Sample Id: 670969-011 S — MSD Sample Id: 670969-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	142	212	361	103	363	104	90-110	1	20	mg/kg	08.26.2020 19:59	

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
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

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QC Summary 670969

KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: **Percent Moisture**
Seq Number: 3135705 Matrix: Solid
MB Sample Id: 3135705-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<	%	08.27.2020 13:45	

Analytical Method: **Percent Moisture**
Seq Number: 3135706 Matrix: Solid
MB Sample Id: 3135706-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<	%	08.27.2020 13:45	

Analytical Method: **Percent Moisture**
Seq Number: 3135708 Matrix: Solid
MB Sample Id: 3135708-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<	%	08.27.2020 13:45	

Analytical Method: **Percent Moisture**
Seq Number: 3135705 Matrix: Sludge
Parent Sample Id: 671106-001 MD Sample Id: 671106-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	50.9	50.5	1	20	%	08.27.2020 13:45	

Analytical Method: **Percent Moisture**
Seq Number: 3135705 Matrix: Sludge
Parent Sample Id: 671107-005 MD Sample Id: 671107-005 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	64.4	64.0	1	20	%	08.27.2020 13:45	

Analytical Method: **Percent Moisture**
Seq Number: 3135706 Matrix: Soil
Parent Sample Id: 670969-010 MD Sample Id: 670969-010 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	4.12	4.11	0	20	%	08.27.2020 13:45	

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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QC Summary 670969

KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: **Percent Moisture**
Seq Number: 3135706 Matrix: Soil
Parent Sample Id: 670969-019 MD Sample Id: 670969-019 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	4.17	4.00	4	20	%	08.27.2020 13:45	

Analytical Method: **Percent Moisture**
Seq Number: 3135708 Matrix: Soil
Parent Sample Id: 670969-029 MD Sample Id: 670969-029 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	6.78	6.72	1	20	%	08.27.2020 13:45	

Analytical Method: **Percent Moisture**
Seq Number: 3135708 Matrix: Soil
Parent Sample Id: 670969-039 MD Sample Id: 670969-039 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	16.9	15.9	6	20	%	08.27.2020 13:45	

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3135677 Matrix: Solid Date Prep: 08.26.2020
MB Sample Id: 7710220-1-BLK LCS Sample Id: 7710220-1-BKS LCSD Sample Id: 7710220-1-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)	<50.0	1000	993	99	1030	103	70-135	4	35	mg/kg	08.26.2020 11:59	
Diesel Range Organics (DRO)	<50.0	1000	1080	108	1090	109	70-135	1	35	mg/kg	08.26.2020 11:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		134		131		70-135	%	08.26.2020 11:59
o-Terphenyl	121		130		122		70-135	%	08.26.2020 11:59

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3135658 Matrix: Solid Date Prep: 08.26.2020
MB Sample Id: 7710230-1-BLK LCS Sample Id: 7710230-1-BKS LCSD Sample Id: 7710230-1-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)	<50.0	1000	1000	100	1000	100	70-135	0	35	mg/kg	08.26.2020 21:46	
Diesel Range Organics (DRO)	<50.0	1000	1040	104	1050	105	70-135	1	35	mg/kg	08.26.2020 21:46	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		119		118		70-135	%	08.26.2020 21:46
o-Terphenyl	88		107		105		70-135	%	08.26.2020 21:46

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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 670969

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Harrier Booster Pump

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3136075 — Matrix: Solid — Date Prep: 09.01.2020
MB Sample Id: 7710578-1-BLK — LCS Sample Id: 7710578-1-BKS — LCSD Sample Id: 7710578-1-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)	<50.0	1000	883	88	880	88	70-135	0	35	mg/kg	09.01.2020 10:09	
Diesel Range Organics (DRO)	<50.0	1000	991	99	986	99	70-135	1	35	mg/kg	09.01.2020 10:09	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		118		117		70-135	%	09.01.2020 10:09
o-Terphenyl	101		112		111		70-135	%	09.01.2020 10:09

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3135677 — Matrix: Solid — Date Prep: 08.26.2020
MB Sample Id: 7710220-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.26.2020 11:38	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3135658 — Matrix: Solid — Date Prep: 08.26.2020
MB Sample Id: 7710230-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.26.2020 21:26	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3136075 — Matrix: Solid — Date Prep: 09.01.2020
MB Sample Id: 7710578-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.01.2020 09:49	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3135677 — Matrix: Soil — Date Prep: 08.26.2020
Parent Sample Id: 670985-012 — MS Sample Id: 670985-012 S — MSD Sample Id: 670985-012 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)	<50.0	1000	1000	100	1100	111	70-135	10	35	mg/kg	08.26.2020 12:59	
Diesel Range Organics (DRO)	<50.0	1000	1080	108	1050	106	70-135	3	35	mg/kg	08.26.2020 12:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	135		132		70-135	%	08.26.2020 12:59
o-Terphenyl	128		115		70-135	%	08.26.2020 12:59

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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 670969

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KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3135658 Matrix: Soil Date Prep: 08.26.2020
Parent Sample Id: 671092-001 MS Sample Id: 671092-001 S MSD Sample Id: 671092-001 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)	<50.0	999	865	87	914	92	70-135	6	35	mg/kg	08.26.2020 22:47	
Diesel Range Organics (DRO)	<50.0	999	924	92	975	98	70-135	5	35	mg/kg	08.26.2020 22:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		128		70-135	%	08.26.2020 22:47
o-Terphenyl	112		117		70-135	%	08.26.2020 22:47

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3136075 Matrix: Soil Date Prep: 09.01.2020
Parent Sample Id: 670969-036 MS Sample Id: 670969-036 S MSD Sample Id: 670969-036 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)	<55.6	1110	939	85	917	82	70-135	2	35	mg/kg	09.01.2020 11:10	
Diesel Range Organics (DRO)	<55.6	1110	1050	95	1030	92	70-135	2	35	mg/kg	09.01.2020 11:10	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		112		70-135	%	09.01.2020 11:10
o-Terphenyl	110		106		70-135	%	09.01.2020 11:10

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3135669 Matrix: Solid Date Prep: 08.26.2020
MB Sample Id: 7710236-1-BLK LCS Sample Id: 7710236-1-BKS LCSD Sample Id: 7710236-1-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	0.102	102	0.100	100	70-130	2	35	mg/kg	08.26.2020 17:01	
Toluene	<0.00200	0.100	0.0967	97	0.0948	95	70-130	2	35	mg/kg	08.26.2020 17:01	
Ethylbenzene	<0.00200	0.100	0.102	102	0.0997	100	71-129	2	35	mg/kg	08.26.2020 17:01	
m,p-Xylenes	<0.00400	0.200	0.206	103	0.202	101	70-135	2	35	mg/kg	08.26.2020 17:01	
o-Xylene	<0.00200	0.100	0.103	103	0.0988	99	71-133	4	35	mg/kg	08.26.2020 17:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		101		94		70-130	%	08.26.2020 17:01
4-Bromofluorobenzene	108		99		96		70-130	%	08.26.2020 17:01

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
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

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QC Summary 670969

KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3136128 — Matrix: Solid — Date Prep: 09.01.2020
MB Sample Id: 7710554-1-BLK — LCS Sample Id: 7710554-1-BKS — LCSD Sample Id: 7710554-1-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	0.0973	97	0.108	108	70-130	10	35	mg/kg	09.01.2020 15:44	
Toluene	<0.00200	0.100	0.0931	93	0.103	103	70-130	10	35	mg/kg	09.01.2020 15:44	
Ethylbenzene	<0.00200	0.100	0.0868	87	0.0957	96	71-129	10	35	mg/kg	09.01.2020 15:44	
m,p-Xylenes	<0.00400	0.200	0.176	88	0.193	97	70-135	9	35	mg/kg	09.01.2020 15:44	
o-Xylene	<0.00200	0.100	0.0870	87	0.0960	96	71-133	10	35	mg/kg	09.01.2020 15:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		100		100		70-130	%	09.01.2020 15:44
4-Bromofluorobenzene	85		90		87		70-130	%	09.01.2020 15:44

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3135669 — Matrix: Soil — Date Prep: 08.26.2020
Parent Sample Id: 670969-001 — MS Sample Id: 670969-001 S — MSD Sample Id: 670969-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00215	0.108	0.110	102	0.101	94	70-130	9	35	mg/kg	08.27.2020 02:01	
Toluene	<0.00215	0.108	0.103	95	0.0955	88	70-130	8	35	mg/kg	08.27.2020 02:01	
Ethylbenzene	<0.00215	0.108	0.105	97	0.101	94	71-129	4	35	mg/kg	08.27.2020 02:01	
m,p-Xylenes	<0.00431	0.215	0.212	99	0.201	93	70-135	5	35	mg/kg	08.27.2020 02:01	
o-Xylene	<0.00215	0.108	0.106	98	0.0982	91	71-133	8	35	mg/kg	08.27.2020 02:01	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		70-130	%	08.27.2020 02:01
4-Bromofluorobenzene	103		100		70-130	%	08.27.2020 02:01

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3136128 — Matrix: Soil — Date Prep: 09.01.2020
Parent Sample Id: 670969-036 — MS Sample Id: 670969-036 S — MSD Sample Id: 670969-036 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00223	0.112	0.104	93	0.114	102	70-130	9	35	mg/kg	09.01.2020 14:14	
Toluene	<0.00223	0.112	0.100	89	0.110	98	70-130	10	35	mg/kg	09.01.2020 14:14	
Ethylbenzene	<0.00223	0.112	0.0941	84	0.102	91	71-129	8	35	mg/kg	09.01.2020 14:14	
m,p-Xylenes	<0.00447	0.223	0.189	85	0.206	92	70-135	9	35	mg/kg	09.01.2020 14:14	
o-Xylene	<0.00223	0.112	0.0915	82	0.103	92	71-133	12	35	mg/kg	09.01.2020 14:14	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		100		70-130	%	09.01.2020 14:14
4-Bromofluorobenzene	87		92		70-130	%	09.01.2020 14:14

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
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

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Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)
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Xenco Quote # | Xenco Job #

Client / Reporting Information

Company Name / Branch: KJE, Enviromental & Civil Engineering
Company Address: 500 Mosely Road, Cross Roads, Texas 76227
Email: james@kjenviromental.com Phone No: (940)387-0805
treddick@kje-us.com 214-287-5837
Project Contact: James Fox Travis Reddick
Samplers's Name

Project Information

Project Name/Number: OWL102816D OWL080420D
Project Location: Jal
Invoice To: Oilfield Water Logistics
PO Number:

Analytical Information

Matrix Codes

S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
W = 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	BTEX 8260 (5035)	TPH	CHLORIDES	Field Comments
1	SS-01 0-2'	2'	8/25	0830	SS	1									X	X	X	
2	SS-01 2-4'	4'	8/25	0835														
3	SS-02 0-2'	2'		0845														
4	SS-02 2-4'	4'		0850														
5	SS-02 4-6'	6'		0853														
6	SS-02 6-7'	7'		0855														
7	SS-03 0-2'	2'		0909														
8	SS-03 2-4'	4'		0912														
9	SS-03 4-5'	5'		0915														
10	SS-04 0-2'	2'	↓	0920	↓	↓									↓	↓	↓	

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
- [ ] TRRP Checklist

Notes:

HOLD all sampling of TPH and BTEX below 2.5 feet pending results of samples above 2.5 feet.

FED-EX / UPS: Tracking #

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		8/25 1627	1	2		2
3	Relinquished by: Clee Clifton	Date Time: 8.25 1627	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X Cooler Temp. 3.0/2.8 Thermo. Corr. Factor -0.2

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

CHAIN OF CUSTODY

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Xenco Quote # | Xenco Job #

Client / Reporting Information

Company Name / Branch: KJE, Enviromental & Civil Engineering
Company Address: 500 Mosely Road, Cross Roads, Texas 76227
Email: james@kjenviromental.com Phone No: (940)387-0805
treddick@kje-us.com 214-387-5875
Project Contact: James Fox Travis Reddick
Samplers's Name

Project Information

Project Name/Number: OWL102816D OWL08042011
Project Location: Jal
Invoice To: Oilfield Water Logistics
PO Number:

Analytical Information

Matrix Codes

S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
W = 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	BTEX 8260 (5035)	TPH	CHLORIDES	Field Comments
1	SS-04 2-4'	4'	8/25	0925	SS	1									X	X	X	
2	SS-05 0-2.5'	2.5'		0930														
3	SS-06 0-2'	2'		0942														
4	SS-06 2-3'	3'		0945														
5	SS-07 0-2'	2'		1000														
6	SS-08 0-2'	2'		1017														
7	SS-08 2-3'	3'		1020														
8	SS-09 0-2'	2'		1030														
9	SS-09 2-3'	3'		1035														
10	SS-10 0-2'	2'	↓	1046	↓	↓									↓	↓	↓	

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	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		8/25 1627	1	2		2
3	Relinquished by: Clint Clifton	8.25 16:27	3	4		4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X Cooler Temp. 3.0/2.8 Thermo. Corr. Factor -0.0

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Xenco Quote #

Xenco Job #

Client / Reporting Information

Company Name / Branch: KJE, Enviromental & Civil Engineering

Company Address: 500 Mosely Road, Cross Roads, Texas 76227

Email: james@kjenvironmental.com Phone No: (940)387-0805

freddick@kje-us.com 214-287-5575

Project Contact: James Fox Travis Reddick

Samplers's Name

Project Information

Project Name/Number: OWL102816D OWL080420

Project Location:

Invoice To: Oilfield Water Logistics

PO Number:

Analytical Information

Matrix Codes

S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
W = 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 8260 (5035)	TPH	CHLORIDES	Field Comments
1	SS-11 0-2'	2'	8/25	1053	SS	1									X	X	X	
2	SS-11 2-3'	3'		1056														
3	SS-12 0-2'	2'		1105														
4	SS-12 2-3.5'	3.5'		1107														
5	SS-13 0-2'	2'		1112														
6	SS-13 2-4'	4'		1115														
7	SS-13 4-5'	5'		1118														
8	SS-14 0-2'	2'		1127														
9	SS-15 0-2'	2'		1134														
10	SS-15 2-4'	4'	↓	1137	↓	↓									↓	↓	↓	

Turnaround Time (Business days)

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- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

HOLD all BTEX and TPH sampling below 2.5 feet pending results of samples above 2.5 feet.

FED-EX / UPS: Tracking #

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		8.26 1627	1	2		2
3	Relinquished by: Cle Clifton	8.26 1627	3	4		4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X Cooler Temp. 3.0/2.8 Thermo. Corr. Factor -0.2

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Xenco Quote # | Xenco Job #

Client / Reporting Information

Company Name / Branch: KJE, Enviromental & Civil Engineering
Company Address: 500 Mosely Road, Cross Roads, Texas 76227
Email: james@kjenvironmental.com Phone No: (940)387-0805
treddick@kje-us.com 214-287-5875
Project Contact: James Fox / Travis Reddick
Samplers's Name

Project Information

Project Name/Number: OWL102816D OWL080420D
Project Location: Jal
Invoice To: Oilfield Water Logistics
PO Number:

Analytical Information

Matrix Codes

S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
W = 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	BTEX 8260 (5035)	TPH	CHLORIDES	Field Comments
1	SS-15 4-5'	5'	8/25	1140	SS	1									X	X	X	
2	SS-16 0-2'	2'		1142														
3	SS-16 2-4'	4'		1145														
4	SS-17 0-2.5'	2.5'		1230														
5	SS-18 0-2'	2'		1233														
6	SS-18 2-3'	3'		1236														
7	SS-19 0-2'	2'		[illegible]														
8	SS-19 2-4.5'	4.5'		[illegible]														
9	SS-BG 0-2'	2'		1302														
10	SS-BG 2-3.5	3.5'		1305														

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
- [ ] TRRP Checklist

Notes:

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FED-EX / UPS: Tracking #

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		8/25 1617	1	2		2
3	Clive Clifton	8.25 16:27	3	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. / Thermo. Corr. Factor
			5			X 3.0/2.8 -0.2

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

Inter-Office Shipment

IOS Number : 69397

Date/Time: 08.26.2020
Lab# From: **Carlsbad**
Lab# To: **Midland**

Created by: Cloe Clifton
Delivery Priority:
Air Bill No.: 771368231354

Please send report to: Jessica Kramer
Address: 1089 N Canal Street
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
670969-001	S	SS-01 0-2'	08.25.2020 08:30	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-002	S	SS-01 2-4 '	08.25.2020 08:35	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-003	S	SS-02 0-2'	08.25.2020 08:45	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-004	S	SS-02 2-4'	08.25.2020 08:50	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-005	S	SS-02 4-6'	08.25.2020 08:53	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-006	S	SS-02 6-7'	08.25.2020 08:55	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-007	S	SS-03 0-2'	08.25.2020 09:09	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-008	S	SS-03 2-4'	08.25.2020 09:12	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-009	S	SS-03 4-5'	08.25.2020 09:15	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-010	S	SS-04 0-2'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-011	S	SS-04 2-4'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-012	S	SS-05 0-2.5'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-013	S	SS-06 0-2'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-014	S	SS-06 2-3'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-015	S	SS-07 0-2'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-016	S	SS-08 0-2'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-017	S	SS-08 2-3'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-018	S	SS-09 0-2'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-019	S	SS-09 2-3'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-020	S	SS-10 0-2'	08.25.2020 09:20	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-021	S	SS-11 0-2'	08.25.2020 10:53	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-022	S	SS-11 2-3'	08.25.2020 10:56	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-023	S	SS-12 0-2'	08.25.2020 11:05	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-024	S	SS-12 2-3.5'	08.25.2020 11:07	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-025	S	SS-13 0-2'	08.25.2020 11:12	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	

Inter-Office Shipment

IOS Number : 69397

Date/Time: 08.26.2020
Lab# From: **Carlsbad**
Lab# To: **Midland**
Created by: Cloe Clifton
Delivery Priority:
Air Bill No.: 771368231354
Please send report to: Jessica Kramer
Address: 1089 N Canal Street
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
670969-026	S	SS-13 2-4'	08.25.2020 11:15	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-027	S	SS-13 4-5'	08.25.2020 11:18	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-028	S	SS-14 0-2'	08.25.2020 11:27	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-029	S	SS-15 0-2'	08.25.2020 11:34	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-030	S	SS-15 2-4'	08.25.2020 11:37	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-031	S	SS-15 4-5'	08.25.2020 11:40	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-032	S	SS-16 0-2'	08.25.2020 11:42	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-033	S	SS-16 2-3'	08.25.2020 11:45	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-034	S	SS-17 0-2.5'	08.25.2020 12:30	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-035	S	SS-18 0-2'	08.25.2020 12:33	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-036	S	SS-18 2-3'	08.25.2020 12:36	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-037	S	SS-19 0-2'	08.25.2020 12:44	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-038	S	SS-19 2.-4.5'	08.25.2020 12:46	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-039	S	SS-BG 0-2'	08.25.2020 13:02	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	
670969-040	S	SS-BG 2-3.5'	08.25.2020 13:05	AD2216A	Percent Moisture	08.27.2020	10.09.2020	JKR	MOIST	

Inter Office Shipment or Sample Comments:

Relinquished By: Cloe Clifton
Date Relinquished: 08.26.2020

Received By: Brianna Teel
Date Received: 08.27.2020
Cooler Temperature: 0.5

Eurofins Xenco, LLC

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 69397

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : IR-8

Sent By: Cloe Clifton **Date Sent:** 08.26.2020 10.45 AM

Received By: Brianna Teel **Date Received:** 08.27.2020 11.36 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: Brianna Teel Date: 08.27.2020

Brianna Teel

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: KJ Environmental & Civil Engineering

Date/ Time Received: 08.25.2020 04.27.00 PM

Work Order #: 670969

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T NM 007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	2.8	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	Samples subbed to Xenco Midland.
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Martha Castro Date: 08.26.2020

Checklist reviewed by: Jessica Kramer Date: 08.26.2020

Jessica Kramer

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

October 08, 2020

PHILLIP SANDERS

OILFIELD WATER LOGISTICS

8214 WESTCHESTER DRIVE, SUITE 850

DALLAS, TX 75225

RE: HARRIER BOOSTER PUMP

Enclosed are the results of analyses for samples received by the laboratory on 10/07/20 10:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Received:	10/07/2020	Sampling Date:	10/06/2020
Reported:	10/08/2020	Sampling Type:	Soil
Project Name:	HARRIER BOOSTER PUMP	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 11 @ N. WALL (H002657-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/07/2020	ND	2.06	103	2.00	2.76	
Toluene*	<0.050	0.050	10/07/2020	ND	2.07	103	2.00	2.90	
Ethylbenzene*	<0.050	0.050	10/07/2020	ND	2.03	101	2.00	2.77	
Total Xylenes*	<0.150	0.150	10/07/2020	ND	5.82	97.0	6.00	2.57	
Total BTEX	<0.300	0.300	10/07/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.4 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	10/08/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/07/2020	ND	198	98.8	200	9.78	
DRO >C10-C28*	<10.0	10.0	10/07/2020	ND	194	97.2	200	6.02	
EXT DRO >C28-C36	<10.0	10.0	10/07/2020	ND					

Surrogate: 1-Chlorooctane *96.6 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *94.8 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Received:	10/07/2020	Sampling Date:	10/06/2020
Reported:	10/08/2020	Sampling Type:	Soil
Project Name:	HARRIER BOOSTER PUMP	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 11 @ W. WALL (H002657-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/07/2020	ND	2.06	103	2.00	2.76	
Toluene*	<0.050	0.050	10/07/2020	ND	2.07	103	2.00	2.90	
Ethylbenzene*	<0.050	0.050	10/07/2020	ND	2.03	101	2.00	2.77	
Total Xylenes*	<0.150	0.150	10/07/2020	ND	5.82	97.0	6.00	2.57	
Total BTEX	<0.300	0.300	10/07/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.8 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**304**	16.0	10/08/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/07/2020	ND	198	98.8	200	9.78	
DRO >C10-C28*	<10.0	10.0	10/07/2020	ND	194	97.2	200	6.02	
EXT DRO >C28-C36	<10.0	10.0	10/07/2020	ND					

Surrogate: 1-Chlorooctane *105 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *104 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Received:	10/07/2020	Sampling Date:	10/06/2020
Reported:	10/08/2020	Sampling Type:	Soil
Project Name:	HARRIER BOOSTER PUMP	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 11 @ E. WALL (H002657-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/07/2020	ND	2.06	103	2.00	2.76	
Toluene*	<0.050	0.050	10/07/2020	ND	2.07	103	2.00	2.90	
Ethylbenzene*	<0.050	0.050	10/07/2020	ND	2.03	101	2.00	2.77	
Total Xylenes*	<0.150	0.150	10/07/2020	ND	5.82	97.0	6.00	2.57	
Total BTEX	<0.300	0.300	10/07/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.4 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	10/08/2020	ND	400	100	400	11.3	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/07/2020	ND	198	98.8	200	9.78	
DRO >C10-C28*	<10.0	10.0	10/07/2020	ND	194	97.2	200	6.02	
EXT DRO >C28-C36	<10.0	10.0	10/07/2020	ND					

Surrogate: 1-Chlorooctane *102 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *99.5 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Received:	10/07/2020	Sampling Date:	10/06/2020
Reported:	10/08/2020	Sampling Type:	Soil
Project Name:	HARRIER BOOSTER PUMP	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 11 @ S. WALL (H002657-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/07/2020	ND	2.06	103	2.00	2.76	
Toluene*	<0.050	0.050	10/07/2020	ND	2.07	103	2.00	2.90	
Ethylbenzene*	<0.050	0.050	10/07/2020	ND	2.03	101	2.00	2.77	
Total Xylenes*	<0.150	0.150	10/07/2020	ND	5.82	97.0	6.00	2.57	
Total BTEX	<0.300	0.300	10/07/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**144**	16.0	10/08/2020	ND	400	100	400	11.3	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/07/2020	ND	198	98.8	200	9.78	
DRO >C10-C28*	<10.0	10.0	10/07/2020	ND	194	97.2	200	6.02	
EXT DRO >C28-C36	<10.0	10.0	10/07/2020	ND					

Surrogate: 1-Chlorooctane *104 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *102 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Received:	10/07/2020	Sampling Date:	10/06/2020
Reported:	10/08/2020	Sampling Type:	Soil
Project Name:	HARRIER BOOSTER PUMP	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 11 @ 3' (H002657-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/07/2020	ND	2.06	103	2.00	2.76	
Toluene*	<0.050	0.050	10/07/2020	ND	2.07	103	2.00	2.90	
Ethylbenzene*	<0.050	0.050	10/07/2020	ND	2.03	101	2.00	2.77	
Total Xylenes*	<0.150	0.150	10/07/2020	ND	5.82	97.0	6.00	2.57	
Total BTEX	<0.300	0.300	10/07/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.6 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	10/08/2020	ND	400	100	400	11.3	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/07/2020	ND	198	98.8	200	9.78	
DRO >C10-C28*	<10.0	10.0	10/07/2020	ND	194	97.2	200	6.02	
EXT DRO >C28-C36	<10.0	10.0	10/07/2020	ND					

Surrogate: 1-Chlorooctane *99.8 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *98.4 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Received:	10/07/2020	Sampling Date:	10/06/2020
Reported:	10/08/2020	Sampling Type:	Soil
Project Name:	HARRIER BOOSTER PUMP	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 15 @ S. WALL (H002657-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/07/2020	ND	2.06	103	2.00	2.76	
Toluene*	<0.050	0.050	10/07/2020	ND	2.07	103	2.00	2.90	
Ethylbenzene*	<0.050	0.050	10/07/2020	ND	2.03	101	2.00	2.77	
Total Xylenes*	<0.150	0.150	10/07/2020	ND	5.82	97.0	6.00	2.57	
Total BTEX	<0.300	0.300	10/07/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.1 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	10/08/2020	ND	400	100	400	11.3	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/07/2020	ND	198	98.8	200	9.78	
DRO >C10-C28*	<10.0	10.0	10/07/2020	ND	194	97.2	200	6.02	
EXT DRO >C28-C36	<10.0	10.0	10/07/2020	ND					

Surrogate: 1-Chlorooctane *97.9 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *96.0 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: OWL
Project Manager:
Address:
City: State: Zip:
Phone #: Fax #:
Project #: Project Owner:
Project Name:
Project Location: Harrier Booster Pump
Sampler Name:

BILL TO
P.O. #:
Company:
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: CL	TPH	BTEX
H002657-1	Spll @ N wall	X	X			X					X			11:01	X	X	X
2	Spll @ W wall	X	X			X					X			10:59	X	X	X
3	Spll @ E wall	X	X			X					X			11:04	X	X	X
4	Spll @ S wall	X	X			X					X			1:58	X	X	X
5	Spll @ 3'	X	X			X					X			2:50	X	X	X
6	SP15 @ Swall	X	X			X					X			2:17	X	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Date: 10-7-20 Time: 1030 Received By: Tamara Hodgson
Relinquished By: Date: Time: Received By:

Delivered By: (Circle One)
Sampler - UPS - Bus - Other: 4.4°c #113

Sample Condition: Cool: Yes / No; Intact: Yes / No
CHECKED BY: (Initials) T.O.

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:

Michael@expertenviroservices.com
Rsanders1975@yahoo.com
Bush

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

October 09, 2020

PHILLIP SANDERS

OILFIELD WATER LOGISTICS

8214 WESTCHESTER DRIVE, SUITE 850

DALLAS, TX 75225

RE: HARRIER BOOSTER PUMP

Enclosed are the results of analyses for samples received by the laboratory on 10/08/20 8:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/09/2020	Sampling Type:	Soil
Project Name:	HARRIER BOOSTER PUMP	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 15 @ N. WALL (H002674-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/08/2020	ND	2.11	106	2.00	4.45	
Toluene*	<0.050	0.050	10/08/2020	ND	2.12	106	2.00	4.24	
Ethylbenzene*	<0.050	0.050	10/08/2020	ND	2.08	104	2.00	4.38	
Total Xylenes*	<0.150	0.150	10/08/2020	ND	5.97	99.5	6.00	4.24	
Total BTEX	<0.300	0.300	10/08/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	10/08/2020	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/08/2020	ND	214	107	200	5.94	
DRO >C10-C28*	<10.0	10.0	10/08/2020	ND	221	111	200	6.79	
EXT DRO >C28-C36	<10.0	10.0	10/08/2020	ND					

Surrogate: 1-Chlorooctane *124 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *141 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/09/2020	Sampling Type:	Soil
Project Name:	HARRIER BOOSTER PUMP	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 15 @ W. WALL (H002674-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/08/2020	ND	2.11	106	2.00	4.45	
Toluene*	<0.050	0.050	10/08/2020	ND	2.12	106	2.00	4.24	
Ethylbenzene*	<0.050	0.050	10/08/2020	ND	2.08	104	2.00	4.38	
Total Xylenes*	<0.150	0.150	10/08/2020	ND	5.97	99.5	6.00	4.24	
Total BTEX	<0.300	0.300	10/08/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.2 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	10/08/2020	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/08/2020	ND	214	107	200	5.94	
DRO >C10-C28*	<10.0	10.0	10/08/2020	ND	221	111	200	6.79	
EXT DRO >C28-C36	<10.0	10.0	10/08/2020	ND					

Surrogate: 1-Chlorooctane *122 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *140 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/09/2020	Sampling Type:	Soil
Project Name:	HARRIER BOOSTER PUMP	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 14 @ S. WALL (H002674-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/08/2020	ND	2.11	106	2.00	4.45	
Toluene*	<0.050	0.050	10/08/2020	ND	2.12	106	2.00	4.24	
Ethylbenzene*	<0.050	0.050	10/08/2020	ND	2.08	104	2.00	4.38	
Total Xylenes*	<0.150	0.150	10/08/2020	ND	5.97	99.5	6.00	4.24	
Total BTEX	<0.300	0.300	10/08/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.0 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	10/08/2020	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/08/2020	ND	214	107	200	5.94	
DRO >C10-C28*	<10.0	10.0	10/08/2020	ND	221	111	200	6.79	
EXT DRO >C28-C36	<10.0	10.0	10/08/2020	ND					

Surrogate: 1-Chlorooctane *125 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *143 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/09/2020	Sampling Type:	Soil
Project Name:	HARRIER BOOSTER PUMP	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 14 @ E. WALL (H002674-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/08/2020	ND	2.11	106	2.00	4.45	
Toluene*	<0.050	0.050	10/08/2020	ND	2.12	106	2.00	4.24	
Ethylbenzene*	<0.050	0.050	10/08/2020	ND	2.08	104	2.00	4.38	
Total Xylenes*	<0.150	0.150	10/08/2020	ND	5.97	99.5	6.00	4.24	
Total BTEX	<0.300	0.300	10/08/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	10/08/2020	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2020	ND	214	107	200	5.94	
DRO >C10-C28*	<10.0	10.0	10/09/2020	ND	221	111	200	6.79	
EXT DRO >C28-C36	<10.0	10.0	10/09/2020	ND					

Surrogate: 1-Chlorooctane *119 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *134 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/09/2020	Sampling Type:	Soil
Project Name:	HARRIER BOOSTER PUMP	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 14 @ 2' (H002674-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/08/2020	ND	2.11	106	2.00	4.45	
Toluene*	<0.050	0.050	10/08/2020	ND	2.12	106	2.00	4.24	
Ethylbenzene*	<0.050	0.050	10/08/2020	ND	2.08	104	2.00	4.38	
Total Xylenes*	<0.150	0.150	10/08/2020	ND	5.97	99.5	6.00	4.24	
Total BTEX	<0.300	0.300	10/08/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.7 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**208**	16.0	10/08/2020	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2020	ND	214	107	200	5.94	
DRO >C10-C28*	<10.0	10.0	10/09/2020	ND	221	111	200	6.79	
EXT DRO >C28-C36	<10.0	10.0	10/09/2020	ND					

Surrogate: 1-Chlorooctane *113 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *128 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/09/2020	Sampling Type:	Soil
Project Name:	HARRIER BOOSTER PUMP	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 14 @ N. WALL (H002674-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/08/2020	ND	2.11	106	2.00	4.45	
Toluene*	<0.050	0.050	10/08/2020	ND	2.12	106	2.00	4.24	
Ethylbenzene*	<0.050	0.050	10/08/2020	ND	2.08	104	2.00	4.38	
Total Xylenes*	<0.150	0.150	10/08/2020	ND	5.97	99.5	6.00	4.24	
Total BTEX	<0.300	0.300	10/08/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.8 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	10/08/2020	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2020	ND	214	107	200	5.94	
DRO >C10-C28*	<10.0	10.0	10/09/2020	ND	221	111	200	6.79	
EXT DRO >C28-C36	<10.0	10.0	10/09/2020	ND					

Surrogate: 1-Chlorooctane *120 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *133 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Received:	10/08/2020	Sampling Date:	10/07/2020
Reported:	10/09/2020	Sampling Type:	Soil
Project Name:	HARRIER BOOSTER PUMP	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 15 @ 6' (H002674-07)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/08/2020	ND	2.11	106	2.00	4.45	
Toluene*	<0.050	0.050	10/08/2020	ND	2.12	106	2.00	4.24	
Ethylbenzene*	<0.050	0.050	10/08/2020	ND	2.08	104	2.00	4.38	
Total Xylenes*	<0.150	0.150	10/08/2020	ND	5.97	99.5	6.00	4.24	
Total BTEX	<0.300	0.300	10/08/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.8 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**752**	16.0	10/08/2020	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2020	ND	214	107	200	5.94	
DRO >C10-C28*	<10.0	10.0	10/09/2020	ND	221	111	200	6.79	
EXT DRO >C28-C36	<10.0	10.0	10/09/2020	ND					

Surrogate: 1-Chlorooctane *120 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *136 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: OWL
Project Manager:
Address:
City: State: Zip:
Phone #: Fax #:
Project #: Project Owner:
Project Name: [redacted]
Project Location: Harrier Booster Pump
Sampler Name:

BILL TO
P.O. #:
Company: Expect
Attn: Michael Alv
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	CL	TPH	BTEX
H002674																	
1	Sp15@N wall	X				X					X		10-7-20	1:40	X	X	X
2	Sp15@W wall	X				X					X			1:45	X	X	X
3	Sp14@S wall	X				X					X			12:13	X	X	X
4	Sp14@E wall	X				X					X			1:20	X	X	X
5	Sp14@2'	X				X					X		10-7-20	1:58	X	X	X
6	Sp14@N wall	G				X					X		10-7-20	4:34	X	X	X
7	Sp15@@6'	G				X					X		10-7-20	4:40	X	X	X

Relinquished By: Date: 10/8/20 Time: 0815 Received By: Tamara Oldaker
Relinquished By: Date: Time: Received By:
Delivered By: (Circle One)
Sampler - UPS - Bus - Other: 4.6° C #113
Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No
CHECKED BY: (Initials) TO

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:
PSanders1975@yahoo.com
Michael@expectenviroservices.com
Rush

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

APPENDIX F

NMOCD Approved C-141 Form

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 Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NRM2021932931
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party OWL SWD Operating, LLC	OGRID 308339
Contact Name Mr. Phillip Sanders	Contact Telephone 210-906-3551
Contact email psanders@oilfieldwaterlogistics.com	Incident # *(assigned by OCD)*
Contact mailing address 8201 Preston Road, Suite 520, Dallas, Texas 75225	

Location of Release Source

Latitude 32.064992 Longitude -103.629600
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Harrier Booster Pump	Site Type Booster station
Date Release Discovered 08/03/2020	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
C	12	26S	32E	Lea County

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

BLM

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 280	Volume Recovered (bbls) 260
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☒ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

The bleed off nipple and ball valve blew off the bottom of the booster pump. OWL repaired the non-coded components that caused the release with stainless steel fittings and parts.

State of New Mexico
Oil Conservation Division

Incident ID	NRM2021932931
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Approximately 280 BBLs of produced water was released to surrounding soil.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Yes, KJE contacted the OCD (Mr. Eugene Bolton, 575-840-5961) and BLM (Mr. Ross Klein, 505-954-2143) to verbally notify each department of the release. KJE left a voicemail for Ross on 8/4/20 1345.

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

N/A; OWL transported and disposed of recovered fluid to Delaware Basin Landfill.

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: Phillip Sanders Title: HSE Director

Signature: [signature] Date: 8/4/20

email: psanders@oilfieldwaterlogistics.com Telephone: 432-269-3735

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NRM2021932931
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	N/A (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: Phillip Sanders Title: HSE Director

Signature: Date: 10/26/20

email: Telephone: 432-269-3735

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NRM2021932931
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- [X] Detailed description of proposed remediation technique
- [X] Scaled sitemap with GPS coordinates showing delineation points
- [X] Estimated volume of material to be remediated
- [X] Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- [X] Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- [X] Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- [X] Extents of contamination must be fully delineated.
- [X] Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: Phillip Sanders Title: HSE Director

Signature: _____ Date: 10/26/20

email: _____ Telephone: 432-269-3735

OCD Only

Received by: Cristina Eads Date: 10/26/2020

☐ Approved ☐ Approved with Attached Conditions of Approval ☑ Denied ☐ Deferral Approved

Signature: _____ Date: 01/22/2021

Denied for following reason:
Sampling has not taken place anywhere within the area requested for deferral. Per 19.15.12 C. (2) NMAC, "...The deferral may be granted so long as the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground water."

State of New Mexico
Oil Conservation Division

Incident ID	NRM2021932931
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Phillip Sanders Title: HSE DIRECTOR

Signature: _____ Date: 10/26/20

email: _____ Telephone: 432-269-3735

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

APPENDIX G

Well Permit

John R. D Antonio, Jr., P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 679614
File Nbr: C 04485

Oct. 06, 2020

TRAVIS REDDICK
KJ ENVIRONMENTAL
500 MOSELEY RD
CROSS ROAD, TX 76227

Greetings:

Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during well drilling activities.

Carefully review the attached conditions of approval for all specific permit requirements.

* If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.

* If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.

* The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.

* This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us.

Sincerely,

Claudia Guillen
(575)622-6521

Enclosure

explore

File No.

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose:	☐ Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well (Pump test)	☐ Construction Site/Public Works Dewatering	☐ Other(Describe):
☒ Monitoring Well	☐ Mine Dewatering	

A separate permit will be required to apply water to beneficial use **regardless** if use is consumptive or nonconsumptive.

☒ Temporary Request - Requested Start Date: 10/5/2020 Requested End Date: 10/6/2020

Plugging Plan of Operations Submitted? ☐ Yes ☒ No

---

1. APPLICANT(S)

Name: KJ Environmental	Name:
Contact or Agent: Travis Reddick — check here if Agent ☐	Contact or Agent: — check here if Agent ☐
Mailing Address: 500 Moseley Road	Mailing Address:
City: Cross Roads	City:
State: TX Zip Code: 76227	State: Zip Code:
Phone: 214-287-5875 Phone (Work): ☐ Home ☒ Cell	Phone: Phone (Work): ☐ Home ☐ Cell
E-mail (optional): treddick@kje-us.com	E-mail (optional):

OSE DII OCT 1 2020 AM 10:08

FOR OSE INTERNAL USE — Application for Permit, Form WR-07, Rev 11/17/16

File No.: C-4485	Trn. No.: 679614	Receipt No.: 242599
Trans Description (optional): MON		
Sub-Basin: C	PCW/LOG Due Date: 10/6/2021	

2. WELL(S) Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☐ NM State Plane (NAD83) (Feet)
☐ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☒ UTM (NAD83) (Meters)
☐ Zone 12N
☒ Zone 13N

☐ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
C-4485 POD1	629271	3548560	Unit C, Section 12, Township 26S, Range 32E, Lea County

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☐ **Yes** ☒ **No** **If yes, how many**

Other description relating well to common landmarks, streets, or other:

Well is on land owned by: BLM

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☐ **Yes** ☒ **No**
If yes, how many_____

Approximate depth of well (feet): 60 feet	Outside diameter of well casing (inches):2"
Driller Name: Enviro-Drill, Inc.	Driller License Number: WD 1186

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

Well will be a temporary monitoring well to prove the presence (or lack thereof) of groundwater in order to satisfy OCD closure requirements. Well will be drilled to approximately 60' using Air Rotary techniques, tested for groundwater the next day, then plugged and removed.
M Needs to be rushed, please call or e-mail when application is recieved.

OSE DII OCT 1 2020 AM10:03

FOR OSE INTERNAL USE — Application for Permit, Form WR-07

File No.: C-4485	Tm No.: 679614

4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory: ☐ Include a description of any proposed pump test, if applicable.	**Pollution Control and/or Recovery:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge.	**Construction De-Watering:** ☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	**Mine De-Watering:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ■ Include the reason for the monitoring well, and, ■ The duration of the planned monitoring.	☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	**Ground Source Heat Pump:** ☐ Include a description of the geothermal heat exchange project, ☐ The number of boreholes for the completed project and required depths. ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Travis Reddick
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 6th day of SEPT 20 20, for the State Engineer,

JOHN DR. D'ANTONIO JR., P.E., State Engineer

By: Signature JUAN HERNANDEZ Print

Title: WATER RESOURCES MANAGER I
Print

FOR OSE INTERNAL USE Application for Permit, Form WR-07

File No.: C-4485 Trn No.: 679614

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL

17-1A Depth of the well shall not exceed the thickness of the valley fill.

17-4 No water shall be appropriated and beneficially used under this permit.

17-6 The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable and approved by the state engineer. The well shall be plugged with an office of the state engineer approved sealant for use in the plugging of non-artesian wells. The well driller shall cut the casing off at least four (4) feet below ground surface and fill the open hole with at least two vertical feet of approved sealant. The driller must fill or cover any open annulus with sealant. Once the sealant has cured, the well driller or well owner may cover the seal with soil. A Plugging Report for said well shall be filed with the Office of the State Engineer in a District Office within 30 days of completion of the plugging.

17-7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

17-B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.

17-C The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record.
The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.

17-P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between hydrogeologic zones.

17-Q The State Engineer retains jurisdiction over this permit.

17-R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.

LOG The Point of Diversion C 04485 POD1 must be completed and the Well Log filed on or before 10/06/2021.

IT IS THE PERMITTEES RESPONSIBILITY TO OBTAIN ALL AUTHORIZATIONS AND PERMISSIONS TO DRILL ON PROPERTY OF OTHER OWNERSHIP BEFORE COMMENCING ACTIVITIES UNDER THIS PERMIT.

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 10/02/2020	Pub. of Notice Ordered:
Date Returned - Correction:	Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

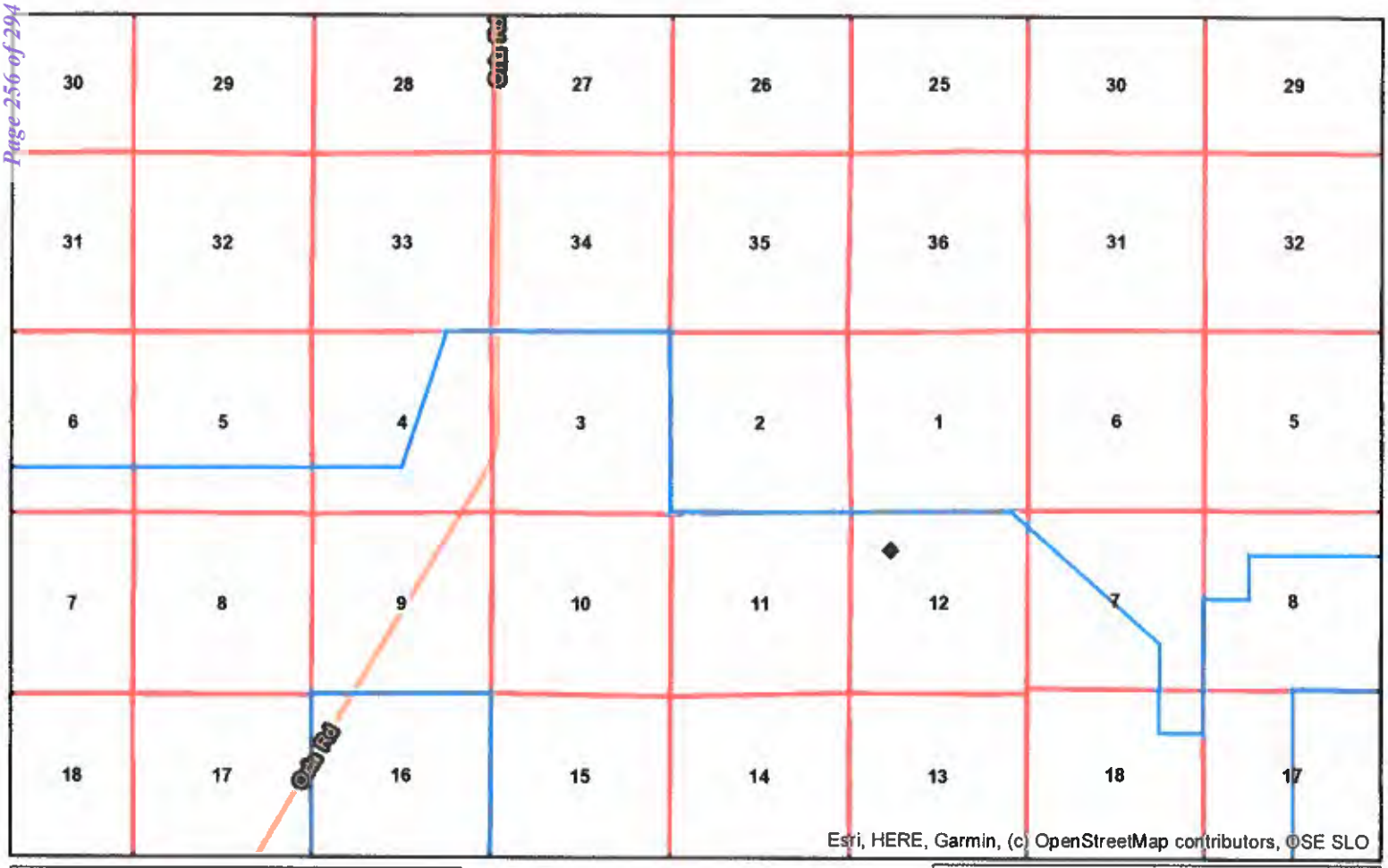
Witness my hand and seal this 06 day of Oct A.D., 2020

John R. D Antonio, Jr., P.E., State Engineer

By: JUAN HERNANDEZ

Trn Desc: C 04485 POD1

File Number: C 04485
Trn Number: 679614



Coordinates

UTM - NAD 83 (m) - Zone 13

Easting 629039.748

Northing 3548124.618

State Plane - NAD 83 (f) - Zone E

Easting 758291.480

Northing 386995.212

Degrees Minutes Seconds

Latitude 32 : 3 : 43.200000

Longitude -103 : 37 : 58.800000

Location pulled from Coordinate Search

NEW MEXICO OFFICE OF THE STATE ENGINEER

1:72,224

mi

0 0.275 0.55 1.1

N

GUILLEN 10/5/2020

Office of the State Engineer

Interstate Stream Commission

Spatial Information

County: Lea

Groundwater Basin: Carlsbad

Abstract Area:C

CUB

Land Grant:

Not in Land Grant

Restrictions:

NA

PLSS Description

SESENWNW Qtr of Sec 12 of 026S 032E

Derived from CADNSDI- Qtr Sec. locations are calculated and are only approximations

Parcel Information

UPC/DocNum:

Parcel Owner:

Address:null null null null null null

Legal:

POD Information

Owner: KJ ENV

File Number: C-4485 POD1

POD Status: NoData

Permit Status: NoData

Permit Use: NoData

Purpose: MON

◆ Coord Search Location

☐ Sections

OFFICE OF THE STATE ENGINEER/INTERSTATE STREAM COMMISSION – ROSWELL OFFICE

OFFICIAL RECEIPT NUMBER: 2 - 42599 DATE: 10-1-20 FILE NO.: NEW

TOTAL: 5.00 RECEIVED: Five DOLLARS CHECK NO.: 9190 CASH: ____

PAYOR: KS Enviro Mgmt Inc ADDRESS: BOX 831 CITY: Aubrey STATE: TX

ZIP: 76227 RECEIVED BY: ym

INSTRUCTIONS: Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. **Original** to payor; **pink** copy to Program Support/ASD; and **yellow** copy for Water Rights. If a mistake is made, void the original and all copies and submit to Program Support/ASD as part of your daily deposit.

A. Ground Water Filing Fees

___	1. Change of Ownership of Water Right	$ 2.00
___	2. Application to Appropriate or Supplement Domestic 72-12-1 Well	$ 125.00
___	3. Application to Repair or Deepen 72-12-1 Well	$ 75.00
___	4. Application for Replacement 72-12-1 Well	$ 75.00
___	5. Application to Change Purpose of Use 72-12-1 Well	$ 75.00
___	6. Application for Stock Well/Temp. Use	$ 5.00
___	7. Application to Appropriate Irrigation, Municipal, or Commercial Use	$ 25.00
___	8. Declaration of Water Right	$ 1.00
___	9. Application for Additional Point of Diversion Non 72-12-1 Per Well	$ 25.00
___	10. Application to Change Place or Purpose of Use Non 72-12-1 Well	$ 25.00
___	11. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Ground Water	$ 50.00
___	12. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water	$ 50.00
___	13. Application to Change Point of Diversion of Non 72-12-1 Well	$ 25.00
___	14. Application to Repair or Deepen Non 72-12-1 Well	$ 5.00
1	15. Application for Test, Expl. Observ. Well	$ 5.00
___	16. Application for Extension of Time	$ 25.00
___	17. Proof of Application to Beneficial Use	$ 25.00
___	18. Notice of Intent to Appropriate	$ 25.00

B. Surface Water Filing Fees

___	1. Change of Ownership of a Water Right	$ 5.00
___	2. Declaration of Water Right	$ 10.00
___	3. Amended Declaration	$ 25.00
___	4. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Surface Water	$ 200.00
___	5. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Surface Water	$ 200.00
___	6. Application to Change Point of Diversion	$ 100.00
___	7. Application to Change Place and/or Purpose of Use	$ 100.00
___	8. Application to Appropriate	$ 25.00
___	9. Notice of Intent to Appropriate	$ 25.00
___	10. Application for Extension of Time	$ 50.00
___	11. Supplemental Well to a Surface Right	$ 100.00
___	12. Return Flow Credit	$ 100.00
___	13. Proof of Completion of Works	$ 25.00
___	14. Proof of Application of Water to Beneficial Use	$ 25.00
___	15. Water Development Plan	$ 100.00
___	16. Declaration of Livestock Water Impoundment	$ 10.00
___	17. Application for Livestock Water Impoundment	$ 10.00

All fees are non-refundable.

C. Well Driller Fees

___	1. Application for Well Driller's License	$ 50.00
___	2. Application for Renewal of Well Driller's License	$ 50.00
___	3. Application to Amend Well Driller's License	$ 50.00

D. Reproduction of Documents

___ @ 0.25¢ $____

___ Map(s) $____

E. Certification $____

F. Other $____

G. Comments:

Fed X

Guillen, Claudia, OSE

From: Travis Reddick [TReddick@kje-us.com]
Sent: Friday, October 02, 2020 2:34 PM
To: Guillen, Claudia, OSE
Subject: [EXT] Re: BLM Authorization Permit

Hi Claudia, it's actually on a well pad owned by BTA, BLM has told me we don't need an arch survey but not a permit.

Sent from my iPhone

On Oct 2, 2020, at 3:09 PM, Guillen, Claudia, OSE <Claudia.Guillen@state.nm.us> wrote:

Hello,

I am working on your Monitoring Permit but I need the BLM Permit please.

Thanks,

Claudia K. Guillen

NM Office of the State Engineer, District II

1900 W. 2nd St.

Roswell, NM 88201

(575) 622-6521

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.): C-04485 OWL 362	WELL TAG ID NO.: NA	OSE FILE NO(S).: C-04485
WELL OWNER NAME(S): KJ ENVIRONMENTAL		PHONE (OPTIONAL): 214-287-5875
WELL OWNER MAILING ADDRESS: 500 MOSSELEY ROAD		CITY: CROSS ROADS STATE: TX ZIP: 76227

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	3548560			N
LONGITUDE	629271			W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD 1186	RODNEY HAMMER	ENVIRO-DRILL, INC.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
10/05/2020	10/06/2020	55'	55'	None (Dry)

COMPLETED WELL IS: ☐ ARTESIAN ☒ DRY HOLE ☐ SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT):

DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☒ ROTARY ☐ HAMMER ☐ CABLE TOOL ☒ OTHER – SPECIFY: HSA

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
55	45	8"	Screen	FJT	2"	2"	.010
45	0	8"	Blank	"	"	"	

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
55	43	8"	Sand 10/20	10	tremie
43	41	8"	Hole Plug	1	
41	0	8"	Grout	100 gal.	↓

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	10		Sand + gravel	Y (N)	
10	25		gravel + Caliche	Y (N)	
25	45		Caliche	Y (N)	
45	55		Sandstone	Y (N)	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

Rodney Hammer — 10-14-20

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2

APPENDIX H

Waste Manifests

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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
OVL (Oilfield Water Logistics SWD)

2. Originating Site
Harrier Booster Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders

3. Location of Material (Street Address, City, State or ULSTR):
Same as above NO API # for this location

4. Source and Description of Waste:
Dump Truck
Contaminated Soil/Caliche Backfill

Estimated Volume ____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 (yd³) bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Phillip Sanders, representative or authorized agent for _____ do hereby certify that according the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

X☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste.
Operator Use Only: Waste Acceptance Frequency ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
JMJ
Carlos C.

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63) 18659

Address of Facility: 1029 W. NM Hwy 128 Jal, NM 88252

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status:

☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: scalehouse DATE: 10-8-20

SIGNATURE: _____ TELEPHONE NO.: 505-231-1071

Surface Waste Management Facility Authorized Agent

District I
1625 N F ench Dr , Hobbs IM 88240
District II
811 S. Fir St., Artesia, NI 8210
District II
1000 Rio razos Road, Az , NM 87410
District IV
1220 S. St Francis Dr., Sa 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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Gen rator Name ad Address:
OW L (Oilfie . Water Logistics SWD)

2. Ori inating Site
Ha rier Boos r Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders

3. Loc tion of Mat ial (Street Address, City, State or ULSTR):
Sar e as above NO API # for this location

4. Sou ce and Desc ption of Waste: Dump Truck
Contaminated Soil
Estimat d Volume ____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 120 yd³ / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Phill Sanders, representative or authorized agent for _____ do hereby certify t at according the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulato y determinat , the above described waste is: (Check the appropriate classification)

X RCRA Exe pt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exe pt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-H empt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by cha acteristics es blished in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, sub art D, as am ded. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the ppropriate it s)

☐ MSL S Informatio ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERA OR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that represer ative sample of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have be n found to cc orm to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the re resentative s nples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.3(NMAC.

5. Tra sporter:
JMJ Santana O

OCD Pe mitted Surfa : Waste Management Facility
Name nd Facility I mit #: Northern Delaware Basin Landfill (NM1-63) 18674
Addre s of Facility: 029 W. NM Hwy 128 Jal, NM 88252
Metho l of Treatme and/or Disposal:
☐ Eva ration ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste A ceptance St s:
☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT N AME: _____ TITLE: scalehouse DATE: 10-8-20
SIGNAT JRE: _____ TELEPHONE NO.: 505-231-1071
Surfa Waste Management Facility Authorized Agent

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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
OWL (Oilfield Water Logistics SWD)

2. Originating Site:
Carrier Box Water Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders

3. Location of Material (Street Address, City, State or ULSTR):
Same as above NO API # for this location

4. Source and Description of Waste: Dump Truck
Contaminated Soil

Estimated Volume _____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 yd³ / bbls

5.
GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Phillip Sanders, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

X ☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste.
Operator Use Only: Waste Acceptance Frequency ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
JMJ Carlos C.

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63) 18675

Address of Facility: 2029 W. NM Hwy 128 Jal, NM 88252

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status:

☑ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: scalehouse DATE: 10-8-20

SIGNATURE: _____ TELEPHONE NO.: 505-231-1071

Surface Waste Management Facility Authorized Agent

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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
OWL (Oilfield Water Logistics SWD)

2. **Originating Site:**
Harrier Booster Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders

3. **Location of Material (Street Address, City, State or ULSTR):**
Same as above **NO API # for this location** Dump Truck

4. **Source and Description of Waste:**
Contaminated Soil

Estimated Volume _____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 (yd³) bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Phillip Sanders, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

X☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:**
JMJ Carlos C.

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63) 18760

Address of Facility: 2029 W. NM Hwy 128 Jal, NM 88252

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status:

☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: scalehouse DATE: 10-9-20

SIGNATURE: _____ TELEPHONE NO.: 505-231-1071

Surface Waste Management Facility Authorized Agent

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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
OWL (Oilfield Water Logistics SWD)

2. Originating Site
Harrier Boos[ter] Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders

3. Location of Material (Street Address, City, State or ULSTR):
Same as above NO API # for this location Dump truck

4. Source and Description of Waste:
Contaminated Soil

Estimated Volume ____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 (yd³) / bbls

5.

GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Phillip Sanders, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
JMJ Sanlang O. ticket #18761 truck #11

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63)

Address of Facility: 29 W. NM Hwy 128 Jal, NM 88252

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☒ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: scalehouse DATE: 10/09/20

SIGNATURE: _____ TELEPHONE NO.: 505-231-1071

Surface Waste Management Facility Authorized Agent

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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
OWL (Oilfield Water Logistics SWD)

2. Originating Site:
Harrier Booster Pump Lea Co, NM PO: 4326 Co Man: Phillip Sanders

3. Location of Material (Street Address, City, State or ULSTR):
Same as above NO API # for this location

4. Source and Description of Waste: Dump-Truck

Contaminated Soil/Caliche Backfill

Estimated Volume ____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 (yd³) / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Phillip Sanders, representative or authorized agent for ____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

X☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, ____, representative for ____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
JMJ Carlos Chaves

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63)

Address of Facility: 2029 W. NM Hwy 128 Jal, NM 88252

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☒ Landfill ☐ Other 18441

Waste Acceptance Status:

☒ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: ____ TITLE: scalehouse DATE: 10-07-20

SIGNATURE: ____ TELEPHONE NO.: 505-231-1071

Surface Waste Management Facility Authorized Agent

District I
811 S. 1st St., Artesia, 88210
District II
1000 R. Brazos Road, Aztec, NM 87410
District V
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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: OWL SWD AFE 4326

2. Originating Site: Harr - Booster Pump

3. Location of Material (Street Address, City, State or ULSTR): DUMP TRUCK

4. Source and Description of Waste: Contaminated soil

Estimated Volume _____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 yd³ / bbls

5.

GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I Phillip S -dez, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

[ ] RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

[ ] RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: JMJ Carlos Chavez - 18275

OCD Permitted Surface Waste Management Facility

Name and Facility: Permit #: NDBL NM1-43

Address of Facility: 2122 Hwy 128

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status: ☑ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: _____ DATE: 10/12/20

SIGNATURE: _____ TELEPHONE NO.: _____

Surface Waste Management Facility Authorized Agent

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

Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:** OWL SWD AFE 4326
2. **Originating Site:** Harvey Booster Pump
3. **Location of Material (Street Address, City, State or ULSTR):** Lea CO. NM
4. **Source and Description of Waste:** DUMP-Truck Contaminated Soil

Estimated Volume _____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 yd³ / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Mike Sinden, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☑ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:** JMJ Santana Cruz

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: NDAL NM1-43

Address of Facility: 2625 Hwy 128

Method of Treatment and/or Disposal: 18277

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status:

☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: _____ DATE: 10-06-20

SIGNATURE: Reyna TELEPHONE NO.:

Surface Waste Management Facility Authorized Agent

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

Revised August 1, 2011

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REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Owl SWD   AFL-4326

2. **Originating Site:**
Harner Booster Pump

3. **Location of Material (Street Address, City, State or ULSTR):**

4. **Source and Description of Waste:**
Caliche Backfill/Contaminated Soil

Estimated Volume ______ yd³ / bbls   Known Volume (to be entered by the operator at the end of the haul) 12 yd³ / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Phillip Snider, representative or authorized agent for ______ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☑ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, ______, representative for ______ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:**
JMJ   Carlos Chavez - 18303

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: R360 NM1-6

Address of Facility: 4507 Hwy 62

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status:

☑ APPROVED   ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: ______ TITLE: ______ DATE: 10/1/2020

SIGNATURE: ______ TELEPHONE NO.: ______
Surface Waste Management Facility Authorized Agent

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-138
Revised August 1, 2011

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REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
SWL SWB AFE 4326

2. **Originating Site:**
Harris Booster Pump

3. **Location of Material (Street Address, City, State or ULSTR):**
Dump Truck

4. **Source and Description of Waste:**
Contaminated Soil/Backfill

Estimated Volume ____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 yd³ / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Phillip Snyder, representative or authorized agent for ____________ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☑ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, ____________, representative for ____________ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:**
TNJ Santana Ortiz 18306

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: NDDL NM1-63

Address of Facility: 2023 Hwy 132

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status:

☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: ____________ TITLE: ____________ DATE: 10/6/20

SIGNATURE: ____________ TELEPHONE NO.:
Surface Waste Management Facility Authorized Agent

District I
811 S. First St., Artesia, NM 88210
District II
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised August 1, 2011

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REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: Owl SWD AFE 4326

2. Originating Site: Harris - Booster Pump

3. Location of Material (Street Address, City, State or ULSTR): Dump Truck

4. Source and Description of Waste: Contaminated Soil/Caliche Backfill

Estimated Volume _____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 yd³ / bbls

5.

GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, [illegible], representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

6. Transporter: TNT Standard C-1853

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: [illegible]

Address of Facility: [illegible]

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status:

☑ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: _____ DATE: 10/16/20

SIGNATURE: _____ TELEPHONE NO.: _____

Surface Waste Management Facility Authorized Agent

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

Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised August 1, 2011

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REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
OWL SWD
PO 4326

2. **Originating Site:**
Hamer Booster Pump

3. **Location of Material (Street Address, City, State or ULSTR):**
Lea, CO NM
Dump Truck

4. **Source and Description of Waste:**
Contaminated Soil
Caliche Backfill

Estimated Volume ____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 yd³ / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Keith Sander, representative or authorized agent for ________ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☑ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I ________, representative for ________ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:**
JMJ
Carlos Chavez - 18332

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: [illegible]

Address of Facility: [illegible]

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

18332

Waste Acceptance Status:

☑ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: ________ TITLE: ________ DATE: 10/6/20

SIGNATURE: ________ TELEPHONE NO.:
Surface Waste Management Facility Authorized Agent

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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: APE 4326
Jal SWD

2. Originating Site
Hanna Booster Pump

3. Location of Material (Street Address, City, State or ULSTR):
Lea, NM

4. Source and Description of Waste: Dump Truck
Contaminated Soil

Estimated Volume ______ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 (yd³) / bbls

GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, ______, representative or authorized agent for ______ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☑ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, ______, representative for ______ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
JMJ Santana, O #18352

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: NDDS NM1-63

Address of Facility: Jal NM 128

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status:

☑ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: ______ TITLE: ______ DATE: 10/06/20

SIGNATURE: ______ TELEPHONE NO.:

Surface Waste Management Facility Authorized Agent

District II
811 S. Fi[illegible] t St., Artesia, N[illegible] 88210
District II
1000 Rio [illegible]razos Road, A[illegible] :, NM 87410
District IV
1220 S. S[illegible] Francis Dr., Sa[illegible] Fe, NM 87505

Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised August 1, 2011

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REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
OWL SWD   AFE 4326

2. Originating Site:
Harris Booster Pump

3. Location of Material (Street Address, City, State or ULSTR):
Lea, NM

4. Source and Description of Waste: Dump Truck
Contaminated Soil

Estimated Volume ______ yd³ / bbls   Known Volume (to be entered by the operator at the end of the haul) 12 yd³ / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, [illegible], representative or authorized agent for ______ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☑ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I ______, representative for ______ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
TMJ   Carlos, C   #18354

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: [illegible] NM-[illegible]

Address of Facility: [illegible]

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status:

☑ APPROVED   ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: ______ TITLE: ______ DATE: 10/06/20

SIGNATURE: [signature] TELEPHONE NO.: ______
Surface Waste Management Facility Authorized Agent

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-138
Revised August 1, 2011

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REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
OVL (Oilfield Water Logistics SWD)

2. Originating Site
Harrier Booster Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders

3. Location of Material (Street Address, City, State or ULSTR):
Same as above NO API # for this location Dump Truck

4. Source and Description of Waste:
Contaminated Soil/Caliche Backfill

Estimated Volume ____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 yd³ / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Phillip Sanders, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

X☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR FOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
JMJ Santana Ortiz 18415

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63)

Address of Facility: 2029 W. NM Hwy 128 Jal, NM 88252

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status: ☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: scalehouse DATE: 10-7-20

SIGNATURE: _____ TELEPHONE NO.: 505-231-1071

Surface Waste Management Facility Authorized Agent

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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1000 Rio Brazos Road, Aztec, NM 87410
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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-138
Revised August 1, 2011

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REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:

OWL (Oilfield Water Logistics SWD)

2. Originating Site:

Harrier Booster Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders

3. Location of Material (Street Address, City, State or ULSTR):

Same as above **NO API # for this location** [illegible]

4. Source and Description of Waste:

Contaminated Soil/Caliche Backfill

Estimated Volume ______ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Phillip Sanders, representative or authorized agent for ______ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

X☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. ***Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load***

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, ______, representative for ______ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:

JMJ [illegible]

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63)

Address of Facility: 2029 W. NM Hwy 128 Jal, NM 88252

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status:

☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: ______ TITLE: scalehouse DATE: 10/7/20

SIGNATURE: ______ TELEPHONE NO.: 505-231-1071

Surface Waste Management Facility Authorized Agent

District I
1625 N. French Dr., Hobbs, NM 88240
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811 S. First St., Artesia, NM 88210
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Energy Minerals and Natural Resources

Oil Conservation Division
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Santa Fe, NM 87505

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
OWL (Oilfield Water Logistics SWD)

2. Originating Site:
Harrier Booster Pump Lea Co, NM PO 4326 Co Man: Phillip Sanders

3. Location of Material (Street Address, City, State or ULSTR):
Same as above NO API # for this location

4. Source and Description of Waste: DUMP TRUCK

Contaminated Soil/Caliche Backfill

Estimated Volume _____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 (yd³) / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Phillip Sanders, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

X☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
JMJ Carlos Chavez

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63)

Address of Facility: 2029 W. NM Hwy 128 Jal, NM 88252 18500

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☒ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: scalehouse DATE: 10-07-20

SIGNATURE: _____ TELEPHONE NO.: 505-231-1071

Surface Waste Management Facility Authorized Agent

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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
OWL (Oilfield Water Logistics SWD)

2. Originating Site:
Harrier Booster Pump Lea Co, NM PO #: 4326 Co Man: Phillip Sanders

3. Location of Material (Street Address, City, State or ULSTR):
Same as above NO API # for this location

4. Source and Description of Waste: DUMP Truck
Caliche Backfill

Estimated Volume _____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 (yd³) / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Phillip Sanders, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

X☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
JMJ Santana Ortiz

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63)

Address of Facility: 2029 W. NM Hwy 128 Jal, NM 88252

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☒ Landfill ☐ Other 18507

Waste Acceptance Status:

☒ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: scalehouse DATE: 10-07-20

SIGNATURE: Reyna TELEPHONE NO.: 505-231-1071

Surface Waste Management Facility Authorized Agent

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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
OVL (Oilfield Water Logistics SWD)

2. Originating Site:
Harrier Booster Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders

3. Location of Material (Street Address, City, State or ULSTR):
Same as above
NO API # for this location

4. Source and Description of Waste:
Contaminated Soil/

Estimated Volume _____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 (0) yd³ / bbls

5.
GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Phillip Sanders, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

X☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste.
Operator Use Only: Waste Acceptance Frequency ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR FOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
JMJ Carlos Chavez 18518

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63)

Address of Facility: 1029 W. NM Hwy 128 Jal, NM 88252

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status:

☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: scalehouse DATE: 10/7/20

SIGNATURE: _____ TELEPHONE NO.: 505-231-1071

Surface Waste Management Facility Authorized Agent

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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
OVL (Oilfield Water Logistics SWD)

2. **Originating Site**
Harrier Booster Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders

3. **Location of Material (Street Address, City, State or ULSTR):**
Same as above NO API # for this location

4. **Source and Description of Waste:** end dump
Contaminated Soil
Estimated Volume ____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 yd³ / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Phillip Sanders, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

X☑ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste.
Operator Use Only: Waste Acceptance Frequency ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR OR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:**
JMJ Suntana Ortiz

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63)

Address of Facility: 029 W. NM Hwy 128 Jal, NM 88252

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☑ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status: 18520

☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: scalehouse DATE: 100720

SIGNATURE: _____ TELEPHONE NO.: 505-231-1071

Surface Waste Management Facility Authorized Agent

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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
OWL (Oilfield Water Logistics SWD)

2. Originating Site
Harrier Booster Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders

3. Location of Material (Street Address, City, State or ULSTR):
Same as above NO API # for this location

4. Source and Description of Waste: Dump Truck
Contaminated Soil/Caliche Backfill
Estimated Volume _____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 (20) yd³ / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Phillip Sanders, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

X☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
JMJ Carlos C.

OCD Permitted Surface Waste Management Facility 18596

Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63)

Address of Facility: 1029 W. NM Hwy 128 Jal, NM 88252

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: scalehouse DATE: 10-8-20

SIGNATURE: _____ TELEPHONE NO.: 505-231-1071

Surface Waste Management Facility Authorized Agent

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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
OWL (Oilfield Water Logistics SWD)

2. Originating Site:
Harrier Booster Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders

3. Location of Material (Street Address, City, State or ULSTR):
Same as above NO API # for this location

4. Source and Description of Waste: Dump Truck
Contaminated Soil/Caliche Backfill
Estimated Volume ____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 (7) yds / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Phillip Sanders, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

X[ ] RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
JMJ Santano D

OCD Permitted Surface Waste Management Facility
Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63) 18597
Address of Facility: 2029 W. NM Hwy 128 Jal, NM 88252
Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☑ Other

Waste Acceptance Status:
☑ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: scalehouse DATE: 10-8-20

SIGNATURE: _____ TELEPHONE NO.: 505-231-1071
Surface Waste Management Facility Authorized Agent

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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
OWL (Oilfield Water Logistics SWD)

2. Originating Site:
Harrier Booster Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders

3. Location of Material (Street Address, City, State or ULSTR):
Same as above NO API # for this location

4. Source and Description of Waste: DUMP TR

Contaminated Soil/Caliche Backfill

Estimated Volume _____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 (yd³) / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Phillip Sanders, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

X☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
JMJ Santana 8

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63) 18628

Address of Facility: 2029 W. NM Hwy 128 Jal, NM 88252

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status:

☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: scalehouse DATE: 10/8/20

SIGNATURE: _____ TELEPHONE NO.: 505-231-1071

Surface Waste Management Facility Authorized Agent

District I
811 S. 1 rst St., Artesia, 4 88210
District II
1000 R Brazos Road, cc, NM 87410
District V
1220 S. t Francis Dr., ta 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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Ge erator Nan and Address:
O VL (Oilfi d Water Logistics SWD)

2. O iginating Sit
H rrier Boo er Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders

3. Lo cation of Ma rial (Street Address, City, State or ULSTR):
Sa ne as above NO API # for this location

4. So rce and Des iption of Waste: Dump truck
Contaminated Soil/Caliche Backfill

Estima ed Volume yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 yd³ / bbls

5.
GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Phil p Sanders, representative or authorized agent for _____ do hereby certify hat accordin to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulat ry determina n, the above described waste is: (Check the appropriate classification)

X[ ] RCRA Ex mpt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exe mpt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non- cempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by cha acteristics e blished in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, sub part D, as am ded. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate i ns)

☐ MS S Informatic ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENER. OR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that represer tative sample of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have be n found to c form to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the r presentative mples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.3 NMAC.

5. Tra nsporter:
JMJ

OCD Pe mitted Surfa e Waste Management Facility

Name nd Facility I mit #: Northern Delaware Basin Landfill (NM1-63)

Addre s of Facility: 029 W. NM Hwy 128 Jal, NM 88252

Metho l of Treatmer and/or Disposal:

☐ Evap ration ☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Ac ceptance Sta s:

☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT N AME: _____ TITLE: scalehouse DATE: 10-08-20

SIGNATI RE: _____ TELEPHONE NO.: 505-231-1071

Surfac Waste Management Facility Authorized Agent

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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
OWL (Oilfield Water Logistics SWD)

2. Originating Site:
Harrier Booster Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders

3. Location of Material (Street Address, City, State or ULSTR):
Same as above
NO API # for this location

4. Source and Description of Waste:
Dump Truck
Contaminated Soil/Caliche Backfill

Estimated Volume _____ yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 12 yd³ / bbls

5.
GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Phillip Sanders, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

X☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste.
Operator Use Only: Waste Acceptance Frequency ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
JMJ
Santana O.

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Northern Delaware Basin Landfill (NM1-63) 18653

Address of Facility: 29 W. NM Hwy 128 Jal, NM 88252

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☐ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: scalehouse DATE: 10-2-20

SIGNATURE: _____ TELEPHONE NO.: 505-231-1071

Surface Waste Management Facility Authorized Agent

APPENDIX I

Deferral Request Letter

KJE
Bold. Insightful. Connected.
500 Moseley Road, Cross Roads, Texas 76227 | 940.387.0805 | www.KJE-us.com

October 26, 2020

Ms. Christina Eads
New Mexico, Energy Minerals and Natural Resources (EMNRD)
Oil Conservation Division (OCD)
5200 Oakland Avenue Northeast, Ste. 100
Albuquerque, New Mexico 87113

RE: Remediation Deferral Due to Possible Reduction of Pipeline Structural Integrity
Harrier Booster Pump Produced Water Release
Unit Letter C, Section 12, T26S, R32E,
Incident Tracking No. NRM2021932931
Lea County, New Mexico

Dear Ms. Eads:

Oilfield Water Logistics (OWL) SWD Operating, LLC, and KJE respectfully requests deferral of the OCD requirements to complete further investigations and remediation for Incident Tracking No. NRM2021932931. The impacted soil is adjacent to, or below high-pressure gas pipelines and within the respective setback area. The GPS coordinates of the extent of this area include: 32.065376, -103.629260; 32.065305, -103.629271; 32.065282, -103.629210; 32.065088, -103.629210; 32.065054, -103.629130; 32.064987, -103.629220; 32.065029, -103.629663; 32.065052, -103.629633; 32.065086, -103.629421; 32.065162, -103.629422; 32.065195, -103.629323; 32.065287, -103.629356; 32.065306, -103.629286; and 32.065366, -103.629284. Additionally, the proposed deferral area is included on Figure 1 in Appendix A. OWL and KJE request that remediation be delayed until the pipelines are removed, plugged, or abandoned; whichever occurs first, to prevent possible damage to, or reduction of the pipelines structural integrity which could cause additional spills or releases. When the pipelines are removed, plugged, or abandoned in the future, OWL will contact NMOCD to discuss required investigations, or remediation which may or may not be required at that time.

If we can be of further assistance, please do not hesitate to contact us at 940-387-0805. We look forward to working with you to achieve regulatory closure at this time.

Sincerely,

Travis Reddick
Environmental Associate

William B. Soderstrom
Director of Environmental Services

APPENDIX J

Environmental Professional's Credentials

William B. Soderstrom

500 Moseley Road
Cross Roads, Texas 76227
(405) 258-8623
wsoderstrom@kje-us.com

WORK EXPERIENCE

Environmental Services Manager –Environmental Department 07/2018 – Present
KJ Environmental Management, Inc. – Denton, TX

- Managed and reviewed Phase I Environmental Site Assessments (ESAs) and Limited Phase II ESAs for active and historical service stations, dry cleaners, commercial and retail properties, and vacant or undeveloped land throughout New Mexico, Oklahoma and Texas utilizing hand auger equipment, truck-mounted hollow-stem augers (HSA), and direct-push technologies (Geoprobe).
- Provided professional environmental consulting services to individual businesses, real estate developers (commercial, industrial, and multi- family residential), financial institutions, manufacturing facilities and corporate representatives to ensure compliance with the United States Environmental Protection Agency (USEPA), Oklahoma Corporation Commission (OCC), Oklahoma Department of Environmental Quality (ODEQ) and Texas Commission on Environmental Quality (TCEQ) rules and regulations.
- Supervised and coordinated the remediation of various produced water releases ranging from 95 barrels to 12,000 barrels in conjunction with state regulatory agencies including the Railroad Commission of Texas, TCEQ Emergency Response, New Mexico Oil Conservation Division, New Mexico Bureau of Land Management, New Mexico State Land Office, and the United States Army Corps of Engineers.
- Enrolled and managed chemical manufacturing and industrial facilities into the TCEQ Voluntary Cleanup Program (VCP), Corrective Action (CA) and Municipal Setting Designation (MSD) regulatory programs throughout north Texas.
- Managed the characterization and remediation of exploration and production (E&P) exempt waste for multiple oil and gas companies in south and west Texas.

Assistant Project Manager –Remediation Division 07/2015 – 07/2018
The VERTEX Companies, Inc. – Irving, TX

- Conducted Phase I ESAs and Limited Phase II ESAs for active and historical service stations, dry cleaners, commercial and retail properties, and vacant or undeveloped land throughout Alabama, Arizona, Arkansas, California, Georgia, Kansas, Louisiana, Mississippi, Missouri, New Mexico, Oklahoma, Oregon, Tennessee, and Texas utilizing hand auger equipment, truck-mounted HSAs, and direct push technologies (Geoprobe).
- Performed a Phase II ESA at an active bulk petroleum storage facility in Alabama to delineate impacted soils for a potential real estate transaction.
- Provided consulting services to individual businesses, real estate developers (commercial, industrial, and multi-family residential), financial institutions, and corporate representatives to ensure compliance with Alabama Department of Environmental Management (ADEM), Arkansas Department of Environmental Quality (ADEQ), Kansas Department of Health and Environment (KDHE), Missouri Department of Natural Resources (MDNR), OCC, ODEQ, Oregon Department of Environmental Quality (Oregon DEQ), and TCEQ rules and regulations.
- Screened impacted soils within Operable Unit 1 (OU-1) and coordinated the characterization, transportation, and disposal of approximately 7,500 cubic yards of soil to approved Class I and Class II landfill.
- Provided technical support for the VCP, MSD, and TCEQ Subchapter T: Use of Land Over Closed Municipal Solid Waste (MSW) Landfills throughout the Dallas-Fort Worth Metroplex.
- Installed and sampled soil vapor probes to adhere to TCEQ Subchapter T reporting limits for MSW Landfills in Dallas.
- Operated as team leader for the removal, disposal, characterization, and transportation of ghost storage tanks, aboveground storage tanks (ASTs), underground storage tanks (USTs) and stockpiled backfill at former and current gas stations, tank batteries, and manufacturing facilities throughout the Dallas-Fort Worth Metroplex and Oklahoma.
- Provided construction oversight for the installation and verification of a low-profile ventilation system and vapor mitigation system at various multi-family complexes for sub-grade areas and first floor living spaces.

Staff Scientist – Real Estate Division 09/2013 – 07/2015
W&M Environmental Group, LLC – Plano, TX

- Conducted Phase I ESAs and Limited Phase II Investigations for active and historical manufacturing facilities, active and historical service stations, commercial and retail properties, dry cleaners, and vacant or undeveloped land throughout Texas utilizing hand auger equipment, truck-mounted HSA, and direct push technologies (Geoprobe).
- Provided consulting services to real estate developers (commercial and multi-family residential), financial institutions, and corporate representatives to ensure compliance with the ODEQ, OCC, and TCEQ.
- Provided technical support for MSD, VCP, Affected Property Assessment Report (APAR), and Innocent Owner/Operator Program (IOP) applications for a former service station and auto repair shop.
- Provided emergency response to multiple pipeline and tank battery spills in Texas and Oklahoma and collected confirmation soil samples to delineate vertical and horizontal extent.

- Acted as field team leader for the removal, disposal, and transportation of underground storage tanks at various sites throughout the Dallas-Fort Worth Metroplex.
- Acted as field team leader for the collection of pond sediment samples to delineate heavy metals and polychlorinated biphenyls (PCBs) at a former Naval Air Station.
- Installed and sampled soil vapor probes at historical dry cleaners, leaking petroleum storage tank sites, auto body repair shops and commercial properties throughout Texas.
- Performed Stormwater Pollution Prevention Plan (SWPPP) site reconnaissance for various manufacturing facilities in the Dallas-Fort Worth Metroplex.

Staff Environmental Scientist –Environmental Department 06/2010 – 09/2013
Terracon Consultants, Inc – Oklahoma City, OK

- Conducted Limited Phase II Environmental Site Assessments for active manufacturing facilities, historical dry cleaners, service stations, and vacant or undeveloped land throughout Oklahoma utilizing hand auger equipment, air-rotary drilling, and truck-mounted HSA.
- Provided emergency response to brine water spill and screened approximately 2,000 cubic yards of soil for off-site disposal.
- Provided consulting services to real estate developers, financial institutions, and corporate representatives to ensure compliance with the ODEQ and OCC.
- Acted as field team leader for screening impacted soils and coordinating the management, transportation, and disposal of approximately 28,000 cubic yards of impacted soil to land-farm for treatment.
- Served as field team professional on the investigation and plume delineation of two dry-cleaner sites within the ODEQ VCP and Brownfields program.
- Provided support for state environmental regulatory activities regarding Concentrated Animal Feeding Operation (CAFO) permits of numerous swine facilities in Oklahoma and Texas.
- Completed due diligence services for Oklahoma based oil/gas company to assess the potential impact to threatened or endangered species, wetlands, and potential locations of archeological or cultural significance throughout Oklahoma.

EDUCATIONAL BACKGROUND

Bachelor of Science, Environmental Sciences May 2010
Option: Natural Resources
Minor: Soil Science
Oklahoma State University, Stillwater, OK

Curriculum Vitae

Kevin J. Ware
PE
500 Moseley Road
Crossroads, TX
76227
O 940-387-0805
C 469-487-6083

Education	**M.S., Environmental Engineering (2003)** Oklahoma State University, Stillwater, Oklahoma **B.S., Environmental Science (1999)** College of Civil Engineering University of Oklahoma, Norman, Oklahoma
Current Position	**Principal** KJE, Inc.
Experience	**KJE, Inc. (2005-Present)** **Principal** Denton, Texas • Managing team of licensed engineers involved in design and permitting of Texas RRC pit permits, SWD injection permits, waste separation permits, land treatment permits, disposal cell permits, and drilling permits • Managing due diligence work for oil/gas field acquisitions • Managing/reviewing engineering design of SWD surface facilities • Reviewing and managing air permitting activities related to oil/gas field activities (production, completion, SWD, midstream, refining) • Completing civil engineering design of oil/gas pad sites, TXDOT driveway applications, and facility design • Performing environmental/compliance audits for numerous industrial, oil/gas, and commercial clients • Managing remediation sites (lead contamination, groundwater contamination, etc…) • Expert Witness Testimony – Environmental Management and Remediation Expert • Wetlands Determinations and Floodplain Delineation/Hydraulic Studies

GaiaTech, Inc. (2005)
Irving, Texas
Senior Environmental Consultant

- Performed environmental compliance, safety and engineering audits for various large scale industrial/commercial clients (air, water, hazardous waste, safety, etc.).
- Completed Due Diligence Reports (Phase I, Phase II, etc…) for large industrial sites
- Designed waste minimization systems (wastewater recycling project)

Isbell Engineering Group, Inc. (2003-2005)
Sanger, Texas
Environmental Engineering Manager

- Completed environmental compliance and safety audits for industrial clients
- Reviewed engineering designs for subdivisions.
- Reviewed oil/gas drilling permit application for cities
- Completed engineering design on commercial developments
- Performed Phase I Site Assessments
- Directed environmental investigations for waste dump sites.
- Assisted in the review of City Engineering plans for small municipalities

Science Applications International (SAIC) (2003)
Midwest City, Oklahoma
Environmental Engineer

- Created a Site Health & Safety Plan for Air Force Groundwater Remediation Project
- Field safety manager for groundwater monitoring project

Marshall Environmental Management, Inc.(1999-2003)
Oklahoma City, Oklahoma
Environ. Specialist/Industrial Hygienist

- Completed Phase I Site Assessment reports for various types of development
- Managed remediation projects for oil refinery site
- Managed remediation project for abandoned tire manufacturing plant
- Managed remediation of oil/gas site cleanup
- Performed Asbestos Surveys and Air Monitoring of Abatement Projects

Certifications & Licenses	Licensed Professional Engineer (TX) License #136599 Qualified Environmental Professional (QEP) (Accredited through the Institute of Professional Environmental Practice) Registered Environmental Manager (National Registry of Environmental Professionals)
Additional Experience	Recognized and Admitted as Expert Witness in Texas RRC Environmental Permitting Hearings (Oil and Gas Docket No. 02-0300234)
	Instructor - Certified Environmental Auditor Classes National Registry of Environmental Professionals License
	RRC Environmental Task Force Member (Advisory Committee to RRC Commissioners on Recommended Environmental Rule Changes / Updates)