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

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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

Willia- Sodish

Kevin Ware, P.E., QEP, REM

Principal

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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

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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

Date

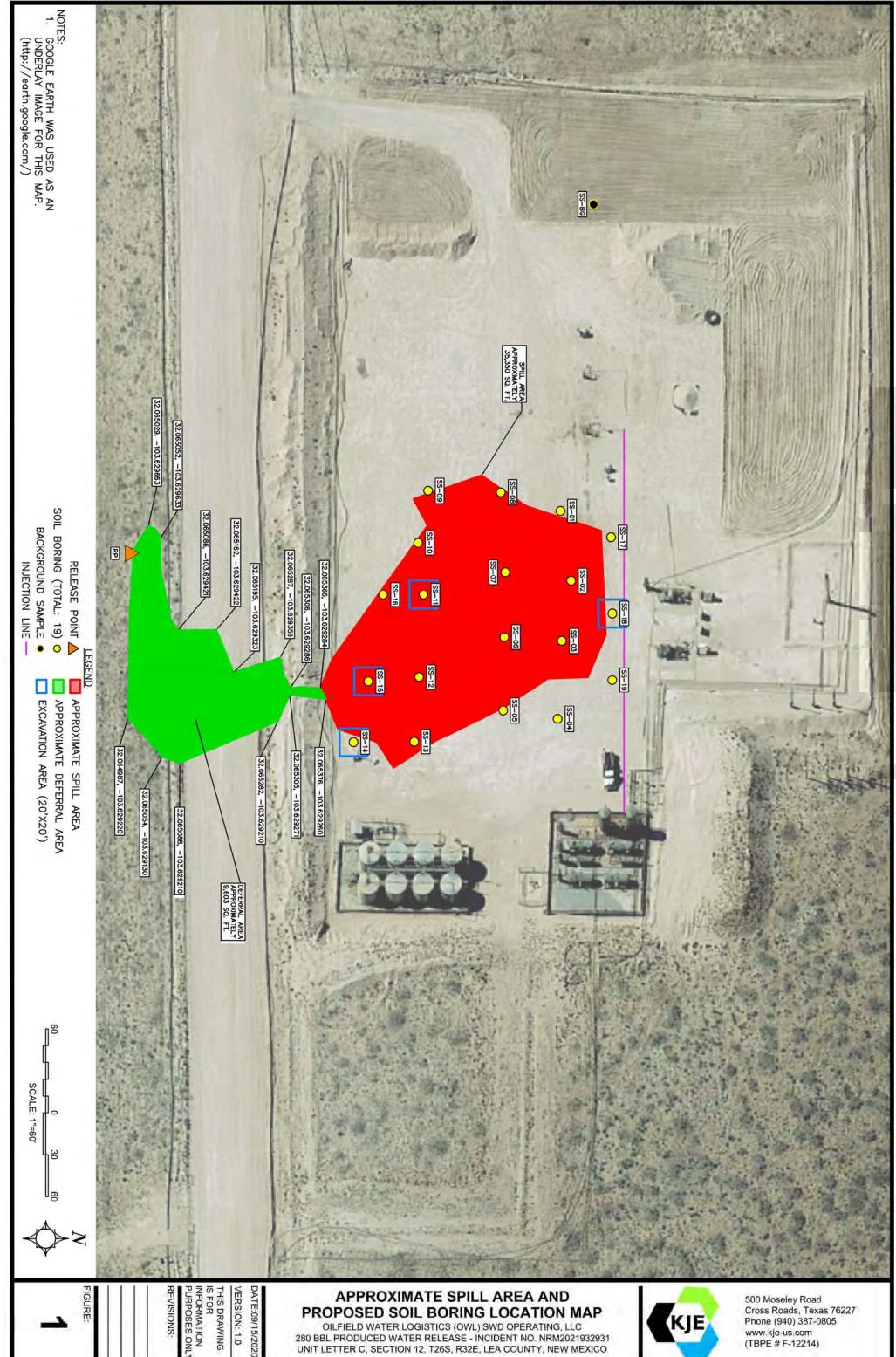
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William B. Soderstrom

Environmental Professional

Director of Environmental Services

APPENDIX A	
Figures	



UNIT LETTER C, SECTION 12, T26S, R32E, LEA COUNTY, NEW MEXICO

KJE

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ADDENDIV	
APPENDIX I	
Analytical Da	ta



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

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		NMAC Closure	NMAC Closure	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 Co	ollected	Units		Criteria ²	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 Method	· •		Criteria ¹	Criteria	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'
8015	· ·	mg/kg	100	2,500	<53.9		<54.6				<54.5			<52.2		<55.4	<52.6		<53.6
0010	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
8260	TOLUENE	mg/kg			<0.00215		<0.00218				<0.00217			<0.00211		<0.00220	<0.00208		<0.00214
0200	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
		J 3 3		-,	, , , , ,		, , , ,			<u>-</u>	, , , , ,				l.			l	
Laborat	ory Sample Designation				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		NIMAC CISSUES	NIMAC Classins	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
Sample Date Co	-	Units	NMAC Closure	NMAC Closure	SS-08 8/25/2020														
•	ollected	Units	NMAC Closure Criteria ¹	NMAC Closure Criteria ²	8/25/2020	SS-08 8/25/2020	SS-09 8/25/2020	SS-09 8/25/2020	SS-10 8/25/2020	SS-11 8/25/2020	SS-11 8/25/2020	SS-12 8/25/2020	SS-12 8/25/2020	SS-13 8/25/2020	SS-13 8/25/2020	SS-13 8/25/2020	SS-14 8/25/2020	SS-15 8/25/2020	SS-15 8/25/2020
Date Co	ollected Depth	Units	4	_		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 Co Sample Method	ollected Depth	Units mg/kg	4	_	8/25/2020	SS-08 8/25/2020	SS-09 8/25/2020	SS-09 8/25/2020	SS-10 8/25/2020	SS-11 8/25/2020	SS-11 8/25/2020	SS-12 8/25/2020	SS-12 8/25/2020	SS-13 8/25/2020	SS-13 8/25/2020	SS-13 8/25/2020	SS-14 8/25/2020	SS-15 8/25/2020	SS-15 8/25/2020
Date Co Sample Method	Depth Analyte		Criteria ¹	Criteria ²	8/25/2020 0 - 2'	SS-08 8/25/2020 2 - 3'	SS-09 8/25/2020 0 - 2'	SS-09 8/25/2020 2 - 3'	SS-10 8/25/2020 0 - 2'	SS-11 8/25/2020 0 - 2'	SS-11 8/25/2020 2 - 3'	SS-12 8/25/2020 0 - 2'	SS-12 8/25/2020 2 - 3.5'	SS-13 8/25/2020 0 - 2'	SS-13 8/25/2020 2 - 4'	SS-13 8/25/2020 4 - 5'	SS-14 8/25/2020 0 - 2'	SS-15 8/25/2020 0 - 2'	SS-15 8/25/2020 2 - 4'
Date Co Sample Method	Depth Analyte TPH	mg/kg	Criteria ¹	Criteria ² 2,500	8/25/2020 0 - 2' <75.4	SS-08 8/25/2020 2 - 3'	SS-09 8/25/2020 0 - 2' <51.4	SS-09 8/25/2020 2 - 3'	\$\$-10 8/25/2020 0 - 2' <52.7	SS-11 8/25/2020 0 - 2' <53.0	SS-11 8/25/2020 2 - 3'	SS-12 8/25/2020 0 - 2' <51.9	SS-12 8/25/2020 2 - 3.5'	SS-13 8/25/2020 0 - 2' <61.7	SS-13 8/25/2020 2 - 4'	SS-13 8/25/2020 4 - 5'	SS-14 8/25/2020 0 - 2' <53.4	SS-15 8/25/2020 0 - 2' <53.9	SS-15 8/25/2020 2 - 4'
Date Co Sample Method	Depth Analyte TPH BENZENE	mg/kg	Criteria ¹ 100 10	2,500 10	8/25/2020 0 - 2' <75.4 <0.00302	SS-08 8/25/2020 2 - 3'	SS-09 8/25/2020 0 - 2' <51.4 <0.00206	SS-09 8/25/2020 2 - 3'	SS-10 8/25/2020 0 - 2' <52.7 <0.00211	SS-11 8/25/2020 0 - 2' <53.0 <0.00212	SS-11 8/25/2020 2 - 3'	SS-12 8/25/2020 0 - 2' <51.9 <0.00207 <0.00207 <0.00207	SS-12 8/25/2020 2 - 3.5'	SS-13 8/25/2020 0 - 2' <61.7 <0.00248	SS-13 8/25/2020 2 - 4'	SS-13 8/25/2020 4 - 5'	SS-14 8/25/2020 0 - 2' <53.4 <0.00214 <0.00214	SS-15 8/25/2020 0 - 2' <53.9 <0.00212 <0.00212	SS-15 8/25/2020 2 - 4'
Date Co Sample Method 8015	Depth Analyte TPH BENZENE ETHYLBENZENE	mg/kg mg/kg mg/kg	100 10 	2,500 10	8/25/2020 0 - 2' <75.4 <0.00302 <0.00302	SS-08 8/25/2020 2 - 3' 	\$\$-09 8/25/2020 0 - 2' <51.4 <0.00206 <0.00206 <0.00206 <0.00206	SS-09 8/25/2020 2 - 3' 	SS-10 8/25/2020 0 - 2' <52.7 <0.00211 <0.00211 <0.00211 <0.00211	SS-11 8/25/2020 0 - 2' <53.0 <0.00212 <0.00212 <0.00212 <0.00212	SS-11 8/25/2020 2 - 3' 	SS-12 8/25/2020 0 - 2' <51.9 <0.00207 <0.00207 <0.00207	SS-12 8/25/2020 2 - 3.5' 	SS-13 8/25/2020 0 - 2' <61.7 <0.00248 <0.00248 <0.00248	SS-13 8/25/2020 2 - 4'	SS-13 8/25/2020 4 - 5' 	SS-14 8/25/2020 0 - 2' <53.4 <0.00214 <0.00214 <0.00214	SS-15 8/25/2020 0 - 2' <53.9 <0.00212 <0.00212 <0.00212	SS-15 8/25/2020 2 - 4'
Date Co Sample Method 8015	Depth Analyte TPH BENZENE ETHYLBENZENE TOLUENE XYLENE TOTAL BTEX	mg/kg mg/kg mg/kg mg/kg mg/kg	100 10 50	2,500 10 50	8/25/2020 0 - 2' <75.4 <0.00302 <0.00302 <0.00302 <0.00302 <0.00302	SS-08 8/25/2020 2 - 3' 	SS-09 8/25/2020 0 - 2' <51.4 <0.00206 <0.00206 <0.00206 <0.00206 <0.00206	SS-09 8/25/2020 2 - 3' 	SS-10 8/25/2020 0 - 2' <52.7 <0.00211 <0.00211 <0.00211 <0.00211	SS-11 8/25/2020 0 - 2' <53.0 <0.00212 <0.00212 <0.00212 <0.00212 <0.00212 <0.00212	SS-11 8/25/2020 2 - 3' 	SS-12 8/25/2020 0 - 2' <51.9 <0.00207 <0.00207 <0.00207 <0.00207	SS-12 8/25/2020 2 - 3.5' 	SS-13 8/25/2020 0 - 2' <61.7 <0.00248 <0.00248 <0.00248 <0.00248 <0.00248	SS-13 8/25/2020 2 - 4'	SS-13 8/25/2020 4 - 5' 	SS-14 8/25/2020 0 - 2' <53.4 <0.00214 <0.00214 <0.00214 <0.00214 <0.00214	SS-15 8/25/2020 0 - 2' <53.9 <0.00212 <0.00212 <0.00212 <0.00212	SS-15 8/25/2020 2 - 4'
Date Co Sample Method 8015	Depth Analyte TPH BENZENE ETHYLBENZENE TOLUENE XYLENE	mg/kg mg/kg mg/kg mg/kg mg/kg	100 10 	2,500 10 	8/25/2020 0 - 2' <75.4 <0.00302 <0.00302 <0.00302 <0.00302	SS-08 8/25/2020 2 - 3' 	\$\$-09 8/25/2020 0 - 2' <51.4 <0.00206 <0.00206 <0.00206 <0.00206	SS-09 8/25/2020 2 - 3' 	SS-10 8/25/2020 0 - 2' <52.7 <0.00211 <0.00211 <0.00211 <0.00211	SS-11 8/25/2020 0 - 2' <53.0 <0.00212 <0.00212 <0.00212 <0.00212	SS-11 8/25/2020 2 - 3' 	SS-12 8/25/2020 0 - 2' <51.9 <0.00207 <0.00207 <0.00207	SS-12 8/25/2020 2 - 3.5' 	SS-13 8/25/2020 0 - 2' <61.7 <0.00248 <0.00248 <0.00248	SS-13 8/25/2020 2 - 4' 	SS-13 8/25/2020 4 - 5' 	SS-14 8/25/2020 0 - 2' <53.4 <0.00214 <0.00214 <0.00214	SS-15 8/25/2020 0 - 2' <53.9 <0.00212 <0.00212 <0.00212	SS-15 8/25/2020 2 - 4'

Laborato	ry Sample Designation				670969-031	670969-032	670969-033	670969-034	670969-035	670969-036	670969-037	670969-038	670969-039	670969-040
Sample I	Designation		NMAC Closure	NMAC Closure	SS-15	SS-16	SS-16	SS-17	SS-18	SS-18	SS-19	SS-19	SS-BG	SS-BG
Date Col	lected	Units	Criteria ¹	Criteria ²	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 I	Depth		Criteria	Criteria	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				4-5	0-2	2-3	0 - 2.5	0-2	2-3	0-2	2 - 4.5	0-2	2 - 3.3
8015	TPH	mg/kg	100	2,500		<52.6		816	2,990	<55.7	177	<56.0	<60.3	
	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	
8260	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

Bold = Analyte was detected at concentrations above laboratory sample detection limits

Highlighted = Analyte was detected at concentrations above NMAC Closure Criteria

Laboratory Sample Designation

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

[&]quot;--" = Not applicable



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

Laborat	ory Sample Designation				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		NMAC Closure	NMAC Closure	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 Co	llected	Units			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		Criteria ¹	Criteria ²	21	21	21	21	21	21	21	21	21	21	2'	21	6'
Method	Analyte				2	2	2	2	3	2	2	2	2	2	2	2	0
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
	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
8260	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

Bold = Analyte was detected at concentrations above laboratory sample detection limits

Highlighted = Analyte was detected at concentrations above NMAC Closure Criteria

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

[&]quot;--" = 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
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.

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APPENDIX C	
Boring Logs	



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Client Name:	OWL SWD Ope	arating IIC		Wo	ll/Boring #	SS-01	Date Drilled:	August 25, 2020
Client Address:		oad, Suite 520, Dallas, Texa	as 75225		of Boring:	4'	Diameter of Boring:	2.25"
Project Name:		31 – Harrier Booster Pump			th of Well:	N/A	Diameter of Screen:	N/A
Project Address:	32.064992, -103				of Screen:	N/A	Diameter of Casing:	N/A
Driller:	Enviro-Drill				of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve		ogged By:	TR	Well Material:	N/A
(Color, Gr	Descrip ain Size, Texture	otion / Remarks , 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 grai	in size, dry, chunks of cali	che throughout	-0-	0-2			
				-1-	0830			
				-2-	2-4			
Refusal at 4' due to	caliche			-3-	0835			
				-4-				
				-5-				
				-6-				
				-7-				
				-8-				
				-9-				
				-10-				
				-11-				
				-12-				
				-13-				
				-14-				
				-15-				
				-17-				
				-18-				
				-19-				
				-20-				



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Client N	OMI CAMO C			***	11/D: "	GG 02	D-(D ''' '	A
Client Address	OWL SWD Ope		os 75225		ll/Boring#	SS-02 7'	Date Drilled:	August 25, 2020 2.25"
Client Address: Project Name:		oad, Suite 520, Dallas, Texa 31 – Harrier Booster Pump			of Boring: th of Well:	N/A	Diameter of Boring: Diameter of Screen:	N/A
Project Address:	32.064992, -103				of Screen:	N/A	Diameter of Casing:	N/A
Driller:	Enviro-Drill	.027000			of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve		ogged By:	TR	Well Material:	N/A
_	•				Sample		Chloride	Well Completion
(Color, Gr		tion / Remarks , Structure, Consistency,	Moisture)	Depth (feet)	Interval (feet)	PID (ppm)	Screening (ppm)	(graphical representation only, not to scale)
SAND (SP), white grain size, abundan		d in toward lower end, i	no odor, dry, tiny	-0-	0-2			
				-1-	0845			
				-2-	2-4			
				-3-	0850			
				-4-	4 – 6			
				-5-	0853			
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 Op	perating LLC		We	ll/Boring #	SS-03	Date Drilled:	August 25, 2020
Client Address:		oad, Suite 520, Dallas, Tex	as 75225		of Boring:	5'	Diameter of Boring:	2.25"
Project Name:		931 – Harrier Booster Pump			th of Well:	N/A	Diameter of Screen:	N/A
Project Address:	32.064992, -10				of Screen:	N/A	Diameter of Casing:	N/A
Driller:	Enviro-Drill				of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve		ogged By:	TR	Well Material:	N/A
	D	otion / Domonie		D4h	Sample	PID	Chloride	Well Completion
(Color, Gr	ain Size, Texture	ption / Remarks e, Structure, Consistency,	Moisture)	Depth (feet)	Interval (feet)	(ppm)	Screening (ppm)	(graphical representation only, not to scale)
SAND (SP), beige, t	iny particle size,	, slight organic soil odor, d	lry	-0-	0-2			
				-1-	0909			
				-2-	2-4			
				-3-	0912			
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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CII T							n	
Client Name:	OWL SWD Op		75225		Il/Boring #	SS-04	Date Drilled:	August 25, 2020
Client Address:		oad, Suite 520, Dallas, Texa 31 – Harrier Booster Pump	as 15225		of Boring:	4' N/A	Diameter of Boring: Diameter of Screen:	2.25" N/A
Project Name: Project Address:	32.064992, -103			Depth of Well: Length of Screen:		N/A N/A	Diameter of Screen:	N/A N/A
Driller:	Enviro-Drill	3.029000			of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve		Logged By:	TR	Well Material:	N/A
(Color, Gr	Descrip ain Size, Texture	ption / Remarks e, Structure, Consistency, l		Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion (graphical representatio only, not to scale)
SAND (SP), white o	chalky sand, tiny	grain size, dry, no odor		-0-	0-2			
				-1-	0920			
				-2-	2-4			
Refusal at 4' due to	caliche			-3-	0925			
				-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 Ope				ll/Boring #	SS-05	Date Drilled:	August 25, 2020
Client Address:	8201 Preston Ro	oad, Suite 520, Dallas, Texa	ns 75225		of Boring:	2.5'	Diameter of Boring:	2.25"
Project Name:		31 – Harrier Booster Pump			th of Well:	N/A	Diameter of Screen:	N/A
Project Address:	32.064992, -103	.629600			of Screen:	N/A	Diameter of Casing:	N/A
Driller:	Enviro-Drill	T			of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve	I	ogged By:	TR	Well Material:	N/A
	Descrin	tion / Remarks		Depth	Sample	PID	Chloride	Well Completion
(Color, Gr	ain Size. Texture.	Structure, Consistency, 1	Moisture)	(feet)	Interval	(ppm)	Screening	(graphical representation
				()	(feet)	dr /	(ppm)	only, not to scale)
SAND (SP), mostly grain size, dry, no o		and, slight mottles of red	I throughout, tiny	-0-				
				-1-	0 - 2.5 0930			
Refusal at 2.5' 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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Cl' (N	ONA CMD O	. IIC		XX7	II/D • "	00.00	D 4 D 31 1	A 425 2020
Client Name: Client Address:	OWL SWD Ope	erating, LLC oad, Suite 520, Dallas, Texa	no 75225		II/Boring # of Boring:	SS-06 3'	Date Drilled: Diameter of Boring:	August 25, 2020 2.25"
Project Name:		31 – Harrier Booster Pump			th of Well:	N/A	Diameter of Boring:	N/A
Project Address:	32.064992, -103				of Screen:	N/A	Diameter of Screen: Diameter of Casing:	N/A
Driller:	Enviro-Drill	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve		ogged By:	TR	Well Material:	N/A
	ain Size, Texture	otion / Remarks , Structure, Consistency,	Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion (graphical representation only, not to scale)
SAND (SP), white c	halky sand, dry,	no odor, tiny grain size		-0-	0-2			
				-1-	0942			
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-				
				-20-				



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Client Names	OWI CWD O	agenting IIC		Wa	II/Doring #	CC 07	Data Dvillada	August 25, 2020
Client Name: Client Address:	OWL SWD Op	oerating, LLC toad, Suite 520, Dallas, Texa	as 75225		II/Boring # of Boring:	SS-07 2'	Date Drilled: Diameter of Boring:	August 25, 2020 2.25"
Project Name:		931 – Harrier Booster Pump			th of Well:	N/A	Diameter of Screen:	N/A
Project Address:	32.064992, -10				of Screen:	N/A	Diameter of Casing:	N/A
Driller:	Enviro-Drill				of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve		ogged By:	TR	Well Material:	N/A
(Color, Gr	Descri ain Size, Textur	ption / Remarks e, Structure, Consistency,	Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion (graphical representatio only, not to scale)
SAND (SP), white c	halky sand, no o	odor, dry, tiny particle size		-0-	0 2			
Refusal at 2' due to	caliche			-1-	0 – 2 1000			
				-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	OWI CHID O	tin II C		XX/-	II/D: #	CC 00	Data Daillada	A
Client Name: Client Address:	OWL SWD Ope	oad, Suite 520, Dallas, Texa	as 75225		II/Boring # of Boring:	SS-08 3'	Date Drilled: Diameter of Boring:	August 25, 2020 2.25"
Project Name:		31 – Harrier Booster Pump			th of Well:	N/A	Diameter of Screen:	N/A
Project Address:	32.064992, -103				of Screen:	N/A	Diameter of Casing:	N/A
Driller:	Enviro-Drill			Length	of Casing:		Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve	I	ogged By:	TR	Well Material:	N/A
	ain Size, Texture	otion / Remarks e, Structure, Consistency,	Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion (graphical representation only, not to scale)
SAND (SP), beige, s	small particle size	e, no odor, dry		-0-	0-2			
				-1-	1017			
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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Client Name:	OWL SWD Ope	erating, LLC		We	ll/Boring #	SS-09	Date Drilled:	August 25, 2020
Client Address:		oad, Suite 520, Dallas, Texa	as 75225		of Boring:	3'	Diameter of Boring:	2.25"
Project Name:		31 – Harrier Booster Pump			th of Well:	N/A	Diameter of Screen:	N/A
Project Address:	32.064992, -103				of Screen:	N/A	Diameter of Casing:	N/A
Driller:	Enviro-Drill				of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve		logged By:	TR	Well Material:	N/A
,,					Sample		Chloride	Well Completion
(0.1.0	Descrip	tion / Remarks		Depth	Interval	PID	Screening	(graphical representation
(Color, Gr	ain Size, Texture,	, Structure, Consistency,	Moisture)	(feet)	(feet)	(ppm)	(ppm)	only, not to scale)
SAND (SP), beige sa	and, small partic	le size, no odor, dry						
(// 8	, .	, ,		-0-	0-2			
					1030			
				-1-				
					2 – 3			
Refusal at 3' due to	caliche			-2-	1035			
				-3-				
				-4-				
				-5-				
				-6-				
				-7-				
				-8-				
				-9-				
				-10-				
				-11-				
				4.5				
				-12-				
				4.5				
				-13-				
				4.				
				-14-				
				1.7				
				-15-				
				1.0				
				-16-				
				17				
				-17-				
				10				
				-18-				
				10				
				-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, Texa		th of Boring:	2'	Diameter of Boring:	2.25"
Project Name:	NRM2021932931 – Harrier Booster Pump		epth of Well:	N/A	Diameter of Screen:	N/A
Project Address:	32.064992, -103.629600		th of Screen:	N/A	Diameter of Casing:	N/A
Driller:	Enviro-Drill		th of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP Sampling Method:	Acetate Sleeve	Logged By:	TR	Well Material:	N/A
·	Description / Remarks ain Size, Texture, Structure, Consistency, l			PID (ppm)	Chloride Screening (ppm)	Well Completion (graphical representation only, not to scale)
SAND (SP), white consolidated	chalky sand, dry, no odor, tiny grain size	e, well sorted and	0-2			
Refusal at 2' due to	caliche	-1-	1046			
		-2-				
		-3-				
		-4-				
		-5-				
		-6-				
		-7-				
		-8-				
		-9-				
		-10-				
		-11-				
		-12-				
		-13-				
		-15-				
		-16-				
		-17-				
		-18-				
		-19-				
		-20-				

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Client Name: OWL SWD Operating, LLC	W	ell/Boring#	SS-11	Date Drilled:	August 25, 2020
Client Address: 8201 Preston Road, Suite 520, Dallas, Texas 75225		of Boring:	3'	Diameter of Boring:	2.25"
Project Name: NRM2021932931 – Harrier Booster Pump		th of Well:	N/A	Diameter of Screen:	N/A
Project Address: 32.064992, -103.629600		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 Sleeven	;]	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, we consolidated	-0-	0 – 2 1053			
	-1-				
Refusal at 3' due to caliche	-2-	2 – 3 1056			
	-3-				
	-4-				
	-5-				
	-6-				
	-7-				
	-8-				
	-10-				
	-11-				
	-12-				
	-13-				
	-14-				
	-15-				
	-16-				
	-17-				
	-18-				
	-19-				
These logs should not be used separately from the original report.	-20-				



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Client Name:	OWL SWD Ope	erating, LLC		We	ll/Boring #	SS-12	Date Drilled:	August 25, 2020
Client Address:		oad, Suite 520, Dallas, Texa	as 75225		of Boring:	3.5'	Diameter of Boring:	2.25"
Project Name:		31 – Harrier Booster Pump			th of Well:	N/A	Diameter of Screen:	N/A
Project Address:	32.064992, -103				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		ogged By:	TR	Well Material:	N/A
	Descrip	tion / Remarks		Depth	Sample Interval	PID	Chloride Screening	Well Completion (graphical representation
(Color, Gr	ain Size, Texture,	, Structure, Consistency,	Moisture)	(feet)	(feet)	(ppm)	(ppm)	only, not to scale)
SAND (SP), alterna	ting white and be	eige layers, small grain siz	ze, dry, no odor	-0-	0-2			
				-1-	1105			
Dafusal at 2.52 due	to galigha			-2-	2 – 3.5 1107			
Refusal at 3.5' due	то сапспе			-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 Op	perating, LLC		We	ll/Boring #	SS-13	Date Drilled:	August 25, 2020
Client Address:		load, Suite 520, Dallas, Tex	as 75225		of Boring:	5'	Diameter of Boring:	2.25"
Project Name:		931 – Harrier Booster Pump			th of Well:	N/A	Diameter of Screen:	N/A
Project Address:	32.064992, -10	3.629600			of Screen:	N/A	Diameter of Casing:	N/A
Driller:	Enviro-Drill	-			of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve	I	ogged By:	TR	Well Material:	N/A
	ain Size, Textur	ption / Remarks e, Structure, Consistency,	Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion (graphical representation only, not to scale)
SAND (SP), red san	d transitioning	to white caliche		-0-	0-2			
				-1-	1112			
				-2-	2-4			
				-3-	1115			
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-			1	

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Client Name:	OWL SWD Op	erating IIC		Wa	ll/Boring #	SS-14	Date Drilled:	August 25, 2020
Client Name:		oad, Suite 520, Dallas, Texa	ns 75225		of Boring:	2'	Date Drilled: Diameter of Boring:	2.25"
Project Name:		31 – Harrier Booster Pump	W 13443		th of Well:	N/A	Diameter of Screen:	N/A
Project Address:	32.064992, -103				of Screen:	N/A	Diameter of Casing:	N/A
Driller:	Enviro-Drill	***			of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve		ogged By:	TR	Well Material:	N/A
·	ain Size, Texture	ption / Remarks e, Structure, Consistency, l	Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion (graphical representation only, not to scale)
SAND (SP), mostly	white sand, beig	ge mottles, dry, no odor		-0-	0-2			
Refusal at 2' due to	caliche			-1-	1127			
				-2-				
				-3-				
				-4-				
				-5-				
				-6-				
				-7-				
				-8-				
				-9-				
				-10-				
				-11-				
				-12-				
				-13-				
				-14-				
				-15-				
				-16-				
				-17-				
				-18-				
				-19-				
				-20-				



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CII AN	OMI CMID O	. II.C		***	II/D • "	00.15	D (D 11 1	A 425 2020
Client Name: Client Address:	OWL SWD Ope	erating, LLC oad, Suite 520, Dallas, Texa	25.75.25		ll/Boring #	SS-15 5'	Date Drilled:	August 25, 2020 2.25"
Project Name:		31 – Harrier Booster Pump	18 13443		of Boring: th of Well:	N/A	Diameter of Boring: Diameter of Screen:	N/A
Project Address:	32.064992, -103				of Screen:	N/A	Diameter of Casing:	N/A
Driller:	Enviro-Drill	1.027000			of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve		ogged By:	TR	Well Material:	N/A
					Sample		Chloride	Well Completion
(Color, Gr	Descrip ain Size, Texture,	tion / Remarks , Structure, Consistency,	Moisture)	Depth (feet)	Interval (feet)	PID (ppm)	Screening (ppm)	(graphical representation only, not to scale)
SAND (SP), red sa odor, tiny grain size		ioning to beige, then whi	te caliche, dry, no	-0-	0-2			
				-1-	1134			
				-2-	2-4			
				-3-	1137			
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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6W = =	T 2222 2							1
Client Name:	OWL SWD Op		75005		Il/Boring #	SS-16	Date Drilled:	August 25, 2020
Client Address: 8201 Preston Road, Suite 520, Dallas, Texas 75225			Depth of Boring:		4' N/A	Diameter of Boring: Diameter of Screen:	2.25" N/A	
Project Name: NRM2021932931 – Harrier Booster Pump Project Address: 32.064992, -103.629600				Depth of Well: Length of Screen:		N/A N/A	Diameter of Screen: Diameter of Casing:	N/A N/A
Driller:	Enviro-Drill	5.027000			of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve		ogged 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 representatio only, not to scale)	
SAND (SP), white s	and, beige mottle	es, no odor, dry, small gra	in size	-0-	0-2			
				-1-	1142			
Refusal at 4' due to caliche					2 – 4 1145	1		
				-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 O	perating, LLC		We	ll/Boring #	SS-17	Date Drilled:	August 25, 2020
Client Address:			ıs 75225			2.5'	Diameter of Boring:	2.25"
Client Address: 8201 Preston Road, Suite 520, Dallas, Texas 75225 Project Name: NRM2021932931 – Harrier Booster Pump				Depth of Boring: 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				of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve		ogged By:	TR	Well Material:	N/A
	Descr	iption / Remarks		Depth	Sample Interval	PID	Chloride Screening	Well Completion (graphical representation
·		re, Structure, Consistency,	•	(feet)	(feet)	(ppm)	(ppm)	only, not to scale)
SAND (SP), slightly no odor, dry	y larger grain s	size than other borings, wh	ite to slight beige,	-0-				
				-1-	0 - 2.5 1230			
Refusal at 2.5' 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 Ope	erating IIC		Wa	ll/Boring #	SS-18	Date Drilled:	August 25, 2020
Client Address:			as 75225			3'	Diameter of Boring:	2.25"
Client Address: 8201 Preston Road, Suite 520, Dallas, Texas 75225 Project Name: NRM2021932931 – Harrier Booster Pump			Depth of Boring: 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:					of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve		ogged By:	TR	Well Material:	N/A
V					Sample		Chloride	Well Completion
(6.16		tion / Remarks	M ·	Depth	Interval	PID	Screening	(graphical representation
(Color, Gr	ain Size, Texture,	Structure, Consistency,	Moisture)	(feet)	(feet)	(ppm)	(ppm)	only, not to scale)
SAND (SP), slightly	red sand to whit	e caliche, no odor, dry.						
, ,, ,		•		-0-	0 - 2			
					1233			
				-1-				
					2-3			
Refusal at 3' due to	caliche			-2-	1236			
				-3-				
				-4-				
				-5-				
				-6-				
				-7-				
				-8-				
				-9-				
				-10-				
				-11-				
				-12-				
				4.5				
				-13-				
				4.				
				-14-				
				1.5				
				-15-				
				1.0				
				-16-				
				17				
				-17-				
				10				
				-18-				
				10				
				-19-				
				_				
				-20-				



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	l							
Client Name:	OWL SWD Op		75225		Il/Boring #	SS-19	Date Drilled:	August 25, 2020
Client Address:		oad, Suite 520, Dallas, Texa 331 – Harrier Booster Pump	as /5225		of Boring: th of Well:	4.5' N/A	Diameter of Boring: Diameter of Screen:	2.25" N/A
Project Name: Project Address:	32.064992, -103				of Screen:	N/A N/A	Diameter of Screen:	N/A N/A
Driller:	Enviro-Drill	3.027000			of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve		logged By:	TR	Well Material:	N/A
	Descrip ain Size, Texture	ption / Remarks e, Structure, Consistency,	Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion (graphical representation only, not to scale)
SAND (SP), white o	aliche mixed wit	th large boulders of caliche	e, dry, no odor	-0-	0-2			
				-1-	1244			
				-2-				
26 144511	P. I			-3-	2 – 4.5 1246			
Refusal at 4.5' due	то сапспе			-4-				
				-5-				
				-6-				
				-7-				
				-8-				
				-9-				
				-10-				
				-11-				
				-12-				
				-13-				
				-14-				
				-15-				
				-16-				
				-17-				
				-18-				
				-19-				
				-20-				



RECORD OF SUBSURFACE EXPLORATION

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Client Name: Client Address:	OWL SWD Op	oerating, LLC oad, Suite 520, Dallas, Texa	os 75225		ll/Boring # of Boring:	SS-BG 3.5'	Date Drilled: Diameter of Boring:	August 25, 2020 2.25"
Project Name:		031 – Harrier Booster Pump	18 / 3443		th of Well:	N/A	Diameter of Boring:	N/A
Project Address:	32.064992, -103				of Screen:	N/A	Diameter of Casing:	N/A
Driller:	Enviro-Drill	/ ***			of Casing:	N/A	Slot Size:	N/A
Drilling Method:	DP	Sampling Method:	Acetate Sleeve		ogged By:	TR	Well Material:	N/A
	ain Size, Texture	ption / Remarks e, Structure, Consistency, l	Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion (graphical representation only, not to scale)
SAND (SP), dirt tra	nnsitioning to cal	liche, no odor, dry		-0-	0-2			
				-1-	1302			
D-f1 -4 2 52 1	413-h			-2-	2 – 3.5 1305			
Refusal at 3.5' due	to caliche			-3-	1303			
				-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		We	ll/Boring #	MW-1	Date Drilled:	October 5, 2020
Client Address: 8201 F	Preston Road, Suite 520, Dallas, Texa	s 75225	Depth	of Boring:	55'	Diameter of Boring:	6"
	2021932931 – Harrier Booster Pump			th of Well:	55'	Diameter of Screen:	2"
	992, -103.629600			of Screen:	10'	Diameter of Casing:	2"
Driller: Enviro		27/4		of Casing:	45'	Slot Size:	02
Drilling Method:	HSA Sampling Method:	N/A	Logged B		TR	Well Material:	PVC
(Color, Grain Size	Description / Remarks , Texture, Structure, Consistency, N	Moisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion (graphical representation only, not to scale)
Red Sand to pinkish sand to consolidated.	mixed with caliche at around 5', fi	ne grain size, well	-0-				
			-1-				
*Black shading denotes PV			-2-				
*Orange Red shading deno	tes native backim.		-3-				
			-4-				
			-5-				
			-6-				
	um grain size, poorly consolidate	d, darker red at	-7-				
around 10'			-8-				
			-9-				
			-10-				
			-11-				
*Light gray shading denote	es grout.		-12-				
			-13-				
Reddish orange sand at 15'	fine grain size no odor		-14-				
rectuish of ange sand at 13	inic grain size, no odor		-15-				
			-16-				
			-17-				
			-18-				
Slight refusal between 2 consolidated	0' - 25' really fine red sand,	well sorted and	-19-				
Consuluateu			-20-				

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Client Name:	OWL SWD Ope				ll/Boring #	MW-1	Date Drilled:	October 5, 2020
Client Address:		oad, Suite 520, Dallas, Texas	s 75225		of Boring:	55'	Diameter of Boring:	6"
Project Name:		31 – Harrier Booster Pump			th of Well:	55'	Diameter of Screen:	2"
Project Address:	32.064992, -103	5.629600			of Screen:	10'	Diameter of Casing:	2"
Driller: Drilling Method:	Enviro-Drill HSA	Sampling Method:	N/A		of Casing: ogged By:	45' TR	Slot Size: Well Material:	02 PVC
Diffilling Method:	пъл	Sampling Method:	IN/A	1		IK		
(Color, Gra	Descrip ain Size, Texture	tion / Remarks , Structure, Consistency, N	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 reall	y fine, well sorted and well	consolidated	-30-				
				-31-				
				-32-				
				-33-				
				-34-				
				-35-				
				-36-				
				-37-				
				-38-				
				-39-				
				-40-				
These logs should	not be used sep	arately from the original	report.	-41-				

KJE Bold. Insightful. Connected.

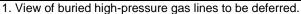
RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering

CII - T	OVVV 6 5				N. (2)			0 1 5 555
Client Name:	OWL SWD Ope		75225		II/Boring #	MW-1	Date Drilled:	October 5, 2020
Client Address: Project Name:		oad, Suite 520, Dallas, Texas 31 – Harrier Booster Pump	S 13223		of Boring: th of Well:	55' 55'	Diameter of Boring: Diameter of Screen:	6" 2"
Project Address:	32.064992, -103				of Screen:	10'	Diameter of Screen:	2"
Driller:	Enviro-Drill				of Casing:	45'	Slot Size:	02
Drilling Method:	HSA	Sampling Method:	N/A		Logged By:	TR	Well Material:	PVC
(Color, Gr	Descrip ain Size, Texture	otion / Remarks c, Structure, Consistency, M	Aoisture)	Depth (feet)	Sample Interval (feet)	PID (ppm)	Chloride Screening (ppm)	Well Completion (graphical representation only, not to scale)
*Blue gray shading	denotes bentonit	te.		-42-				
				-43-				
*Yellow shading de	notes sand			-44-				
				-45-				
				-46-				
*Cross-hatching de	notes well screen	.		-47-				
				-48-				
				-49-				
				-50-				
				-51-				
				-52-				
				-53-				
				-54-				
Entire well dry, tota	al depth of 55', di	ry at the bottom of the well	l.	-55-				

Received by OCD: 10/26/2020 4:21:22 PM	Page 42 of 294
APPENDIX D Photographic Documentation	
Filolographic Documentation	







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 highpressure gas line flag visible in background.

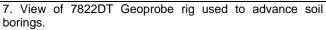


5. View on other side of fence with buried-high pressure gas 6. View of pad where delineation was performed. line marker flags visible.











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.

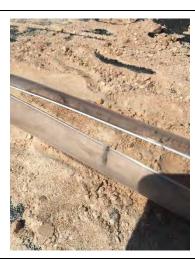


12. View of tape measuring 30-foot deferment from high pressure gas line.





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.





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.





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.



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ADDENDIVE	
APPENDIX E	
Laboratory Analytical Reports	

eurofins Environment Testing

Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: Contact: OWL080420D

Travis Reddick

Project Location:

Jal

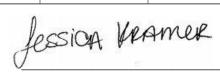
Date Received in Lab: Tue 08.25.2020 16:27

Report Date: 08.28.2020 13:58

Project Manager: Jessica Kramer

	Lab Id:	670969-0	001	670969-00)2	670969-0	03	670969-0	04	670969-00)5	670969-00	06
Analysis Requested	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'	
Anaiysis Kequesieu	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	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	7:39	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	9:09	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	Extracted:												
SUB: T104704400-20-21	Analyzed:	08.27.2020	13:45	08.27.2020 1	3:45	08.27.2020	13:45	08.27.2020	13:45	08.27.2020	3:45	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



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

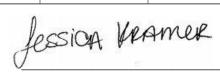
Date Received in Lab: Tue 08.25.2020 16:27

Report Date: 08.28.2020 13:58

Project Manager: Jessica Kramer

	Lab Id:	670969-0	007	670969-00	08	670969-00	09	670969-	010	670969-0	11	670969-0	12
Analysis Requested	Field Id:	SS-03 0-	2'	SS-03 2-4	ļ'	SS-03 4-5'		SS-04 0-2	2'	SS-04 2-4'		SS-05 0-2.5	5'
Anuiysis Requesieu	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 (9:12	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	Extracted:												
SUB: T104704400-20-21	Analyzed:	08.27.2020	13:45	08.27.2020 1	3:45	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



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

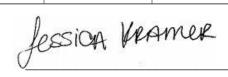
Date Received in Lab: Tue 08.25.2020 16:27

Report Date: 08.28.2020 13:58

Project Manager: Jessica Kramer

	Lab Id:	670969-0	13	670969-0	14	670969-0	15	670969-	016	670969-0	17	670969-0	018
Analysis Requested	Field Id:	SS-06 0-	2'	SS-06 2-3	3'	SS-07 0-2'		SS-08 0-2	2'	SS-08 2-3'		SS-09 0-2	
Anaiysis Requestea	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 (9:20	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	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				< 0.00214	0.00214	< 0.00302	0.00302			< 0.00206	0.00206
Toluene		< 0.00208	<0.00208 0.00208			< 0.00214	0.00214	< 0.00302	0.00302			< 0.00206	0.00206
Ethylbenzene		< 0.00208	<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	< 0.00302	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	Extracted:												
SUB: T104704400-20-21	Analyzed:	08.27.2020	13:45	08.27.2020 1	3:45	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



Environment Testing

Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: Contact:

OWL080420D

Travis Reddick

Project Location:

Jal

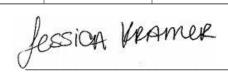
Date Received in Lab: Tue 08.25.2020 16:27

Report Date: 08.28.2020 13:58

Project Manager: Jessica Kramer

	Lab Id:	670969-0	19	670969-0	20	670969-0	21	670969-0	22	670969-0	23	670969-02	24
Analysis Requested	Field Id:	SS-09 2-3	3'	SS-10 0-2	2'	SS-11 0-2'		SS-11 2-3	.	SS-12 0-2'		SS-12 2-3.5	5'
Analysis Requesica	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	< 0.00212	0.00212			< 0.00207	0.00207		
Toluene					0.00211		0.00212			< 0.00207	0.00207		
Ethylbenzene					0.00211		0.00212			< 0.00207	0.00207		
m,p-Xylenes					0.00423		0.00424			< 0.00413	0.00413		
o-Xylene					0.00211		0.00212			< 0.00207	0.00207		
Total Xylenes					0.00211		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 2	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	Extracted:												
SUB: T104704400-20-21	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



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

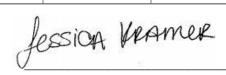
Date Received in Lab: Tue 08.25.2020 16:27

Report Date: 08.28.2020 13:58

Project Manager: Jessica Kramer

	Lab Id:	670969-0)25	670969-02	26	670969-0	27	670969-0	028	670969-0	29	670969-03	30
Analysis Requested	Field Id:	SS-13 0-	2'	SS-13 2-4	ļ'	SS-13 4-5'		SS-14 0-2	2'	SS-15 0-2	.	SS-15 2-4'	
Anaiysis Requesieu	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 1	1:15	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						< 0.00214	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 2	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	Extracted:												
SUB: T104704400-20-21	Analyzed:	08.27.2020	13:45	08.27.2020 1	3:45	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



Environment Testing

Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: Contact:

OWL080420D

Travis Reddick

Project Location:

Jal

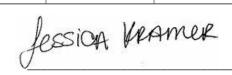
Date Received in Lab: Tue 08.25.2020 16:27

Report Date: 08.28.2020 13:58

Project Manager: Jessica Kramer

	Lab Id:	670969-0	31	670969-03	32	670969-03	33	670969-	034	670969-0)35	670969-0	36
Analysis Requested	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'	.
Analysis Requested	Depth:	5- ft		2- ft		4- ft		2.5- f	t	2- ft		3- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	,	SOIL	
	Sampled:	08.25.2020	11:40	08.25.2020 1	1:42	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 1	6:50			08.26.2020	16:50	08.26.2020	16:50		
	Analyzed:			08.26.2020 2	3:59			08.27.2020	00:19	08.27.2020	00:39		
	Units/RL:			mg/kg	RL			mg/kg	RL	mg/kg	RL		
Benzene					0.00209			< 0.00253	0.00253	< 0.00215	0.00215		
Toluene					0.00209			< 0.00253	0.00253	< 0.00215	0.00215		
Ethylbenzene					0.00209			< 0.00253	0.00253	< 0.00215	0.00215		
m,p-Xylenes					0.00418			< 0.00506	0.00506	< 0.00430	0.00430		
o-Xylene					0.00209			< 0.00253	0.00253	< 0.00215	0.00215		
Total Xylenes					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 1	6:00	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 2	3:15	08.26.2020 2	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	Extracted:												
SUB: T104704400-20-21	Analyzed:	08.27.2020	13:45	08.27.2020 1	3:45	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 1	4:00			08.26.2020	14:00	08.26.2020	16:30		
	Analyzed:			08.26.2020 1	9:03			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



Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: Contact: OWL080420D

Travis Reddick

Project Location:

Jal

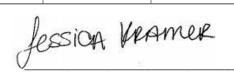
Date Received in Lab: Tue 08.25.2020 16:27

Report Date: 08.28.2020 13:58

Project Manager: Jessica Kramer

	Lab Id:	670969-0	37	670969-03	20	670969-0	30	670969-0	40		
Analysis Requested	Field Id:	SS-19 0-2	2'	SS-19 24	.5'	SS-BG 0-2	·	SS-BG 2-3.) '		
	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	2:46	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	Extracted:										
SUB: T104704400-20-21	Analyzed:	08.27.2020	13:45	08.27.2020	3:45	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			Т	

BRL - Below Reporting Limit





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)



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 Vramer

Project Manager

A Small Business and Minority Company

Sample Cross Reference 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

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	1
SS 02 0 2' S 08 25 2020 08.45 2 6 670050 002	2
3 00.43.4040 00.43 4 It 07.0909-003	3
SS-02 2-4' S 08.25.2020 08:50 4 ft 670969-004	4
SS-02 4-6' S 08.25.2020 08:53 6 ft 670969-005	5
SS-02 6-7' S 08.25.2020 08:55 7 ft 670969-006	6
SS-03 0-2' S 08.25.2020 09:09 2 ft 670969-007	7
SS-03 2-4' S 08.25.2020 09:12 4 ft 670969-008	8
SS-03 4-5' S 08.25.2020 09:15 5 ft 670969-009	9
SS-04 0-2' S 08.25.2020 09:20 2 ft 670969-010	C
SS-04 2-4' S 08.25.2020 09:20 4 ft 670969-011	1
SS-05 0-2.5' S 08.25.2020 09:20 2.5 ft 670969-012	2
SS-06 0-2' S 08.25.2020 09:20 2 ft 670969-013	3
SS-06 2-3' S 08.25.2020 09:20 3 ft 670969-014	4
SS-07 0-2' S 08.25.2020 09:20 2 ft 670969-015	5
SS-08 0-2' S 08.25.2020 09:20 2 ft 670969-016	6
SS-08 2-3' S 08.25.2020 09:20 3 ft 670969-017	7
SS-09 0-2' S 08.25.2020 09:20 2 ft 670969-018	8
SS-09 2-3' S 08.25.2020 09:20 3 ft 670969-019	9
SS-10 0-2' S 08.25.2020 09:20 2 ft 670969-020	C
SS-11 0-2' S 08.25.2020 10:53 2 ft 670969-021	1
SS-11 2-3' S 08.25.2020 10:56 3 ft 670969-022	2
SS-12 0-2' S 08.25.2020 11:05 2 ft 670969-023	3
SS-12 2-3.5' S 08.25.2020 11:07 3.5 ft 670969-024	4
SS-13 0-2' S 08.25.2020 11:12 2 ft 670969-025	5
SS-13 2-4' S 08.25.2020 11:15 4 ft 670969-026	6
SS-13 4-5' S 08.25.2020 11:18 5 ft 670969-027	7
SS-14 0-2' S 08.25.2020 11:27 2 ft 670969-028	8
SS-15 0-2' S 08.25.2020 11:34 2 ft 670969-029	9
SS-15 2-4' S 08.25.2020 11:37 4 ft 670969-030	C
SS-15 4-5' S 08.25.2020 11:40 5 ft 670969-031	1
SS-16 0-2' S 08.25.2020 11:42 2 ft 670969-032	2
SS-16 2-3' S 08.25.2020 11:45 4 ft 670969-033	3
SS-17 0-2.5' S 08.25.2020 12:30 2.5 ft 670969-034	4
SS-18 0-2' S 08.25.2020 12:33 2 ft 670969-035	5
SS-18 2-3' S 08.25.2020 12:36 3 ft 670969-036	6
SS-19 0-2' S 08.25.2020 12:44 2 ft 670969-037	7
SS-19 24.5' S 08.25.2020 12:46 4.5 ft 670969-038	8
SS-BG 0-2' S 08.25.2020 13:02 2 ft 670969-039	9
SS-BG 2-3.5' S 08.25.2020 13:05 3.5 ft 670969-040	0

CASE NARRATIVE

eurofins Environment Testing Xenco

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 above 2.5 feet.

Sample receipt non conformances and comments per sample:

None



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

Parameter	Cas Numbe	r 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		

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

08.26.2020 18:18

Analyst: MA

MAB

Date Prep: 08.26.2020 16:50

Basis:

Dry Weight

Seq Number: 3135669

1,4-Difluorobenzene

Parameter	Cas Number	r Result	\mathbf{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		

100

%

70-130

540-36-3

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

MAB Analyst:

Date Prep: 08.26.2020 17:39 Basis:

Dry Weight

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



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

8.62

% Moisture:

MAB Analyst:

Date Prep:

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		

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

DTH

% Moisture: 8.62

Analyst: DTH

Date Prep:

08.26.2020 12:15

08.26.2020 17:39

Basis:

Dry Weight

Parameter	Cas Numbe	r 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		

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

08.26.2020 16:50

%

70-130

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

08.26.2020 18:38

MAB Tech:

540-36-3

% Moisture: 8.62

MAB Analyst: Date Prep: Basis:

Dry Weight

Seq Number: 3135669

1,4-Difluorobenzene

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		

103

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id: SS-02 2-4' Matrix: Soil

Date Prep:

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

08.26.2020 17:39

Basis:

Dry Weight

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

eurofins **Environment Testing**

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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:

% Moisture: 8.24

MAB

MAB Analyst:

Date Prep: 08.26.2020 17:39 Basis:

Dry Weight

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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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

Date Prep:

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

Seq Number: 3135672

Date Prep:

08.26.2020 17:39

Basis:

Dry Weight

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

Parameter	Cas Number	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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	C	as Number	% Recovery	Units	Limits	Analysis Date	Flag	
1.4.75'01 1	-	10.26.2	00	0/	70.100	00.26.2020.10.50		

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Fl
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	

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id: SS-03 2-4' Matrix:

Date Received:08.25.2020 16:27

Lab Sample Id: 670969-008

Soil 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

MAB Analyst:

Date Prep:

08.26.2020 17:39

Basis:

Dry Weight

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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst: Seq Number: 3135672 Date Prep: 08.26.2020 17:39 Basis:

Dry Weight

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

Dil

1

Xenco

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

10.4

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

MAB

% Moisture: 4.12

Analyst: MAB

Date Prep:

16887-00-6

Basis:

mg/kg

Dry Weight

Flag

Seq Number: 3135672

Parameter Cas Number Result RL Units Analysis Date

685

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

Chloride

DTH

% Moisture: 4.12

08.26.2020 19:48

Analyst: DTH

Date Prep:

08.26.2020 12:15

08.26.2020 17:39

Basis: Di

Dry Weight

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	C	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Date Prep: 08.26.2020 16:50 Basis:

Dry Weight

Parameter	Cas Numbe	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id: SS-04 2-4' Matrix:

Date Received:08.25.2020 16:27

Lab Sample Id: 670969-011

Soil 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

MAB Analyst:

Date Prep:

08.26.2020 17:39

Basis:

Dry Weight

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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

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

Date Prep:

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

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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

08.26.2020 19:39

Tech:

MAB

% Moisture: 9.41

Analyst:

MAB

Date Prep: 08.26.2020 16:50 Basis:

Dry Weight

Seq Number: 3135669

4-Bromofluorobenzene

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		

108

%

70-130

460-00-4



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

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

Parameter	Cas Numbe	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Date Prep:

08.26.2020 16:50

Basis:

Dry Weight

Parameter	Cas Numbe	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id: SS-06 2-3' Matrix: Soil

Date Prep:

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

08.26.2020 17:39

Basis:

Dry Weight

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



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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 6.85

Tech:

MAB

% Moisture:

MAB Analyst:

Date Prep:

Basis:

Dry Weight

Seq Number: 3135672

Result **Parameter** Cas Number RLUnits **Analysis Date** Dil Flag 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

08.26.2020 17:39

Basis:

Dry Weight

Parameter	Cas Numbe	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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:

6.85

MAB

% Moisture:

MAB Analyst:

Date Prep: 08.26.2020 16:50 Basis:

Dry Weight

Parameter	Cas Number	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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:

% Moisture: 33.77

Analyst:

MAB

Dry Weight

Seq Number: 3135672

MAB

Date Prep:

08.26.2020 17:39

Basis:

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

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	C	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB

Analyst:

Date Prep:

08.26.2020 16:50

Basis:

Dry Weight

Parameter	Cas Numbe	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Date Prep:

08.26.2020 17:39

Basis:

Dry Weight

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



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

Parameter	Cas Numbe	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

08.26.2020 21:01

MAB Tech:

% Moisture: 2.97

MAB Analyst:

Date Prep:

08.26.2020 16:50

Basis:

Dry Weight

Seq Number: 3135669

4-Bromofluorobenzene

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		

104

%

70-130

460-00-4

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

08.26.2020 17:39

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

MAB

% Moisture: 4.17

Analyst: MAB

Date Prep:

Basis:

Dry Weight

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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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:

Analyst:

5.16

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

Parameter	Cas Numbe	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

08.26.2020 16:50

%

70-130

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech:

MAB

% Moisture: 5.16

08.26.2020 21:21

Analyst: MAB

Date Prep:

Basis:

Dry Weight

Seq Number: 3135669

1,4-Difluorobenzene

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		

97

540-36-3

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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:

70-135

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

o-Terphenyl

Date Prep:

08.26.2020 14:00

Basis: Dry Weight

08.26.2020 17:43

Seq Number: 3135677

Parameter	Cas Numbe	r 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		

106

84-15-1

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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:

6.16

MAB

% Moisture:

MAB Analyst:

Date Prep: 08.26.2020 16:50 Basis:

Dry Weight

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		

Environment Testing

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

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

Date Prep:

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

3.82

% Moisture:

MAB Analyst:

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

Parameter	Cas Number	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

08.26.2020 22:37

MAB Analyst:

Date Prep: 08.26.2020 16:50

Basis:

Dry Weight

Seq Number: 3135669

1,4-Difluorobenzene

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		

100

%

70-130

540-36-3

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Date Prep:

08.26.2020 16:00

Basis:

Dry Weight

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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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	C	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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:

% Moisture: 19.26

Dry Weight

MAB

MAB Analyst:

Date Prep: 08.26.2020 16:50

Basis:

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	

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id: SS-13 2-4' Matrix:

Date Received:08.25.2020 16:27

Lab Sample Id: 670969-026

Soil Date Collected: 08.25.2020 11:15

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

MAB

2.69

% Moisture:

Analyst:

MAB

Date Prep: 08.26.2020 16:00 Basis:

Dry Weight

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

Certificate of Analytical Results 670969

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

6.28

Analyst:

% Moisture:

MAB

Date Prep: 08.26.2020 16:00 Basis:

Dry Weight

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



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id: SS-14 0-2' Matrix: Soil

RL

213

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

Analysis Date

08.26.2020 22:41

MAB Analyst:

Cas Number

16887-00-6

Dry Weight

Seq Number: 3135673

Parameter

Chloride

Date Prep:

Result

13500

08.26.2020 16:00

Basis:

Units

mg/kg

Flag

Dil

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

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	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
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

Certificate of Analytical Results 670969

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

6.21

% Moisture:

MAB Analyst: Seq Number: 3135669 Date Prep: 08.26.2020 16:50 Basis: Dry Weight

Parameter	Cas Number	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

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

Date Prep:

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

Parameter	Cas Numbe	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

Parameter	Cas Number	r 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		

Environment Testing

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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

Environment Testing

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

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

Parameter	Cas Numbe	r Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<52.6	5 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

Parameter	Cas Number	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Date Prep:

08.26.2020 16:00 Basis:

Dry Weight

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



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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:

Analyst:

21.31

Dry Weight

MAB

Date Prep:

08.26.2020 16:00

Basis:

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

Parameter	Cas Number	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Date Prep:

08.26.2020 16:50

Basis: Dry Weight

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	

Certificate of Analytical Results 670969

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

Analyst:

Units

mg/kg

% Moisture: 7.8

Analysis Date

08.26.2020 23:43

MAB Seq Number: 3135673 Date Prep:

08.26.2020 16:00

Basis:

Flag

Dil

5

Dry Weight

Result **Parameter** Cas Number RLChloride 16887-00-6 2790 54.1

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

Parameter	Cas Number	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id: SS-18 0-2' Matrix: Soil

Date Prep:

Date Received:08.25.2020 16:27

Dry Weight

U

1

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:

% Moisture: 7.8

08.27.2020 00:39

Analyst:

Total BTEX

MAB MAB

08.26.2020 16:50 Basis:

mg/kg

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

0.00215

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	

< 0.00215

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst: Seq Number: 3135673 Date Prep: 08.26.2020 16:00 Basis:

Dry Weight

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



Certificate of Analytical Results 670969

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: Chloride by EPA 300

Prep Method: E300P

Tech:

MAB

% Moisture: 12.42

Analyst:

MAB

Dry Weight

Date Prep:

08.26.2020 16:00

Basis:

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

Parameter	Cas Number	r 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		

Certificate of Analytical Results 670969

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

MAB Analyst:

Date Prep: 08.26.2020 16:50 Basis: Dry Weight

seq	Number:	313566
•		

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	C	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

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	

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Date Prep: 08.26.2020 16:00 Basis:

Dry Weight

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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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	mo/ko	08 27 2020 00:05		1

Date Prep:

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

Parameter	Cas Numbe	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Date Prep: 08.26.2020 16:50

Basis:

Dry Weight

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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

9.33

% Moisture:

MAB Analyst: Seq Number: 3135673 Date Prep:

08.26.2020 16:00

Basis:

Dry Weight

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



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.

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

^{**} Surrogate recovered outside laboratory control limit.

670969 **QC Summary**

KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: Chloride by EPA 300

3135673 Seg Number:

7710237-1-BLK

Matrix: Solid

E300P Prep Method:

Date Prep: 08.26.2020

LCSD Sample Id: 7710237-1-BSD Units

MB Sample Id: **Parameter**

MB

LCS Sample Id: 7710237-1-BKS

LCSD LCSD %RPD RPD

20

Analysis

Chloride

Result Amount <10.0

Spike

250

Spike

Spike

Spike

212

216

Spike

212

Amount

Amount

Amount

Amount

LCS LCS Result %Rec 262 105

Result 265

%Rec 90-110 106

Limits

Limit 1

Date 08.26.2020 21:29 mg/kg

Flag

Analytical Method: Chloride by EPA 300

3135672

Matrix: Solid

Prep Method: Date Prep: 08.26.2020

E300P

Seq Number: MB Sample Id:

7710229-1-BLK

LCS Sample Id:

7710229-1-BKS

LCSD Sample Id: 7710229-1-BSD

Parameter

MB

LCS Result

262

LCS %Rec LCSD LCSD Result %Rec Limits

%RPD RPD Units Limit

Analysis

Chloride

<10.0

Result

250

105

266

106 90-110

20 2

08.26.2020 18:25 mg/kg

Flag Date

Analytical Method: Chloride by EPA 300

3135673

Matrix: Soil

MS

Prep Method: Date Prep: E300P

08.26.2020

Parent Sample Id: **Parameter**

Seq Number:

670969-021

MS Sample Id: 670969-021 S

MSD **MSD**

Limite

RPD %RPD

MSD Sample Id: 670969-021 SD Units

Analysis

Chloride

Result 10900 214

Parent

Result

753

Parent

Result %Rec 11100

MS

MS

963

Result

Result 93 11100 %Rec 93 90-110

Limit 0 20

08.26.2020 21:46

Flag Date

Analytical Method: Chloride by EPA 300

3135673

MS

99

%Rec

Prep Method:

RPD

Limit

20

mg/kg

Units

mg/kg

E300P

Seg Number: Parent Sample Id:

Parameter

Chloride

670969-031

Matrix: Soil MS Sample Id:

670969-031 S

MSD

Result

965

MSD

%Rec

100

%RPD

0

Limits

90-110

Date Prep: MSD Sample Id:

08.26.2020 670969-031 SD

Flag

Analysis

Date

08.26.2020 23:04

Analytical Method: Chloride by EPA 300 3135672

Matrix: Soil

Prep Method:

E300P

08.26.2020 Date Prep:

Parameter

Seq Number:

Parent Sample Id:

670969-001

MS Sample Id:

670969-001 S

MSD

MSD Sample Id:

670969-001 SD

Chloride

Parent Spike Result Amount

1840

Parent

Result

142

MS Result

2040

MS

361

Result

MS %Rec

93

MSD Result

2050

Limits %Rec

%RPD RPD Limit Units

Analysis Flag Date

Matrix: Soil

MS

103

%Rec

MSD

Result

363

90-110

Limits

90-110

20 0

08.26.2020 18:41 mg/kg

Analytical Method: Chloride by EPA 300

Parent Sample Id:

Seq Number:

Parameter

Chloride

3135672 670969-011 MS Sample Id:

670969-011 S

MSD

%Rec

104

97

Date Prep:

Prep Method:

MSD Sample Id:

RPD

Limit

20

E300P 08.26.2020

mg/kg

670969-011 SD Units Analysis

Date

08.26.2020 19:59

Flag

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

Log Difference

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

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result = MS/LCS Result

= MSD/LCSD Result

%RPD

1

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

Analysis

Analysis

Date 08.27.2020 13:45 Flag

Flag

Flag

Flag

670969 **QC Summary**

KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: Percent Moisture

3135705

Matrix: Solid

MB Sample Id: 3135705-1-BLK

Parameter

Seq Number:

MB Result

Percent Moisture

Date 08.27.2020 13:45 %

Analytical Method: Percent Moisture

3135706

Matrix: Solid

MB Sample Id: 3135706-1-BLK

Parameter

Seq Number:

MB

Percent Moisture

Result

Analytical Method: Percent Moisture Seq Number:

3135708

Matrix: Solid

MB Sample Id: 3135708-1-BLK

Parameter Percent Moisture

MR Result

Date 08.27.2020 13:45

Analysis

Units

Units

%

Units

Units

Analytical Method: Percent Moisture

Seg Number: Parent Sample Id: 3135705

671106-001

Matrix: Sludge

MD Sample Id: 671106-001 D

Parameter

Parent Result MD

Percent Moisture

50.9

Result 50.5

RPD Limit 1 20 %

%RPD

Date 08.27.2020 13:45

Analysis

Analytical Method: Percent Moisture

Seq Number:

3135705

Matrix: Sludge

Parent Sample Id:

671107-005

MD Sample Id: 671107-005 D

Parameter

Parent Result MD

%RPD RPD Units Limit

Analysis Flag Date

Percent Moisture

64.4

Result 64.0

08.27.2020 13:45 1 20 %

Analytical Method: Percent Moisture

Seq Number:

3135706

Matrix: Soil

Parent Sample Id:

670969-010

MD Sample Id: 670969-010 D

Parameter

Result

MD

Result

4.11

Limit

RPD

Date

Percent Moisture

4.12

Parent

0 20

%RPD

%

Units

08.27.2020 13:45

Analysis

Flag

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

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

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec

670969 **QC Summary**

KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: Percent Moisture

3135706 Seg Number:

670969-019 Parent Sample Id:

Matrix: Soil

MD Sample Id: 670969-019 D

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

Analytical Method: Percent Moisture

Seq Number:

3135708

670969-029

Matrix: Soil

MD Sample Id: 670969-029 D

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

Analytical Method: Percent Moisture

Seq Number: Parent Sample Id:

Parent Sample Id:

3135708

670969-039

Matrix: Soil MD Sample Id: 670969-039 D

%RPD **RPD Parent** MD Units Analysis Flag **Parameter** Result Result Limit Date

Percent Moisture 16.9 15.9

Analytical Method: TPH by SW8015 Mod

Seg Number:

3135677

Matrix: Solid

MB Sample Id: 7710220-1-BLK LCS Sample Id: 7710220-1-BKS LCSD Sample Id: 7710220-1-BSD

RPD MB Spike LCS LCS LCSD LCSD Limits %RPD Units Analysis **Parameter** Result Limit Date Result Amount %Rec %Rec Result Gasoline Range Hydrocarbons (GRO) 08.26.2020 11:59 99 35 < 50.0 1000 993 1030 103 70-135 4 mg/kg 08.26.2020 11:59 Diesel Range Organics (DRO) 1080 108 70-135 35 < 50.0 1000 1090 109 1 mg/kg

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

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135658

MB Sample Id:

7710230-1-BLK

Matrix: Solid

LCS Sample Id: 7710230-1-BKS

SW8015P Prep Method:

20

Prep Method:

Date Prep:

%

SW8015P

08.26.2020

6

Date Prep: 08.26.2020

LCSD Sample Id: 7710230-1-BSD

MB Spike LCS LCS Limits %RPD RPD Units Analysis LCSD LCSD Flag **Parameter** Limit Result Amount Result %Rec Date Result %Rec Gasoline Range Hydrocarbons (GRO) 08.26.2020 21:46 1000 1000 100 1000 35 mg/kg < 50.0 100 70-135 0 08.26.2020 21:46 Diesel Range Organics (DRO) 70-135 < 50.0 1000 1040 104 1050 105 1 35 mg/kg

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

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

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

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result

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

08.27.2020 13:45

Flag

670969 **QC Summary**

KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135677

Matrix: Solid

SW8015P Prep Method:

Date Prep: 08.26.2020

MB Sample Id: 7710220-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

MBResult

Units

Analysis Flag Date

Motor Oil Range Hydrocarbons (MRO) < 50.0

mg/kg

08.26.2020 11:38

Analytical Method: TPH by SW8015 Mod

Seq Number:

3135658

Matrix: Solid

SW8015P Prep Method:

Date Prep: 08.26.2020

MB Sample Id: 7710230-1-BLK

Parameter

MB Result < 50.0 Units

Analysis Flag

08.26.2020 21:26 mg/kg

Date

Analytical Method: TPH by SW8015 Mod

Seq Number:

3135677

Matrix: Soil

SW8015P Prep Method: Date Prep:

08.26.2020

Parent Sample Id:

670985-012

MS Sample Id: 670985-012 S

MSD Sample Id: 670985-012 SD

Spike %RPD **RPD** MS MS Units Parent MSD **MSD** Limits Analysis Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec Gasoline Range Hydrocarbons (GRO) <50.0 1000 10 35 08.26.2020 12:59 1000 100 1100 111 70-135 mg/kg Diesel Range Organics (DRO) < 50.0 1000 1080 108 1050 70-135 3 35 08.26.2020 12:59 106 mg/kg

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

Analytical Method: TPH by SW8015 Mod

Seq Number:

3135658

Matrix: Soil

Prep Method:

SW8015P

Date Prep: 08.26.2020

Parent Sample Id: 671092-001

MS Sample Id: 671092-001 S

MSD Sample Id: 671092-001 SD

Flag

%RPD RPD **Parent** Spike MS MS **MSD MSD** Limits Units Analysis **Parameter** %Rec Result Limit Date Result Amount Result %Rec Gasoline Range Hydrocarbons (GRO) 35 08.26.2020 22:47 < 50.0 999 865 87 914 92 70-135 6 mg/kg 08.26.2020 22:47 < 50.0 924 92 975 70-135 5 Diesel Range Organics (DRO) 999 98 35 mg/kg

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

LCS = Laboratory Control Sample = Parent Result = MS/LCS Result

E = MSD/LCSD Result

MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec



KJ Environmental & Civil Engineering

Harrier Booster Pump

96

70-130

SW5035A

Flag

Analytical Method: BTEX by EPA 8021B SW5035A Prep Method: Seq Number: 3135669 Matrix: Solid Date Prep: 08.26.2020 7710236-1-BLK LCS Sample Id: 7710236-1-BKS MB Sample Id: LCSD Sample Id: 7710236-1-BSD

I				•					•			
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	Lo %I		LCS Flag	LCSE %Rec			imits	Units	Analysis Date	
1,4-Difluorobenzene	103		10)1		94		70	-130	%	08.26.2020 17:01	
4-Bromofluorobenzene	108		9	9		96		70	-130	%	08.26.2020 17:01	

Analytical Method: BTEX by EPA 8021B

108

4-Bromofluorobenzene

Prep Method: Seq Number: 3135669 Matrix: Soil Date Prep: 08.26.2020 MS Sample Id: 670969-001 S MSD Sample Id: 670969-001 SD Parent Sample Id: 670969-001

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
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	%Rec	Flag	MSD %Rec	Flag	Limits	Units	Date
1,4-Difluorobenzene	100		99		70-130	%	08.27.2020 02:01
4-Bromofluorobenzene	103		100		70-130	%	08.27.2020 02:01

Setting the Standard since 1990

Stafford, Texas (281-240-4200)

CHAIN OF CUSTODY

Service Center - San Antonio, Texas (210-509-3334) Client / Reporting Information Company Name / Branch: KJE, Environmental & Civil Engineering Company Address: 500 Most lames@Kienvironmental.com Project Contact: Trovis Roads, Texas 76227 Email: lames@Kienvironmental.com Project Contact: Trovis Roads, Texas 76227 Email: lames@Kienvironmental.com Phone No. Project Contact: Trovis Roads Field ID / Point of Collection No. Field ID / Point of Collection No. Field ID / Point of Collection 1 \$5-01 0-2. 2 \$5-01 0-2. 4 \$5-01 0-2.	227 Phone No: (940)387-0805 3) 4-287587 C Sample Depth 3 4 4 4 4 4 4 4 4 4 6 6 6 6 7 6 7 7 7 7 7	Project Nar Project Loc Project Loc Prolection Collection Date 8/25	Project Inform: Project Inform: Project Inform: Project Inform: Author: OML102816D OML102816D Matrix books 55 O835 O835	Information Owl S Owl Fig. 19	HNO3 OF DESCRIPTION OF THE PROPERTY OF THE PRO	NaOH NaHSO4 bott	NONE	Norcross, Texas (432-563-1800) Norcross, Georgia (770-449-8800) Norcross, Georgi	s (432-563-1800) orgia (770-449-8800) Analytical information	Xenco Job #
0 10-55	Sample Depth J	81.25 81.25	10	# of bottles	Acetate HNO3	NaOH NaHSO4	NONE	1		
70-55	41	-	7,480					#		
10-53	1,9	0	082)							
12-0 80-55 4	み. ブ		5800						F	
14-6 50-55 8	17		7160							
10 55-04 6-d'	مُرِي	<	6920	-			<			
Turnaround Time (Business days)				Data Deliverable Information	Information				Notes:	
Same Day TAT Next Day EMERGENCY	5 Day TAT		Level III Std QC	Level II Std QC+ Forms		Level IV (Full Data	ta Pkg /raw data)	ta)	TOH.	-
	Contract TAT		Level 3	Level 3 (CLP Forms)		UST / RG -411			resylls	of sampler
TAT Starts Day received by Lah	if received by 5:00 pm		TRRP Checklist	hecklist						
Starts Da	, IT received by 5:00 pm SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY	OCUMENTED	BELOW EACH T	IME SAMPLES CH	ANGE POSSESSIO	ON, INCLUDING O	OURIER DELIVE	RY	FED-EX/U	FED-EX / UPS: Tracking #
Relinquished by Samples	Date Time: 8/A5	1627	Received By:		Reli 2	Relinquished By:		Date Time:		Received By:
3 Clar Cufton	Date Time:	1627	Received By:		Reli	Relinquished By:		Date Time:		Received By:
Relinquished by:	Date Time:		Received By:		Cus	Custody Seal #	P	Preserved where applicable	-	7 9

Setting the Standard since 1990

Stafford, Texas (281-240-4200)

CHAIN OF CUSTODY

Kelinquished by: Signature of this document and relinquishment of samples controller. Signature of this document and relinquishment of samples controller.	3 Clar Cuffon		Relipquished by Sampler:	SAMPI	TAT Starts Day received by Lab, if received by 5:00 pm	□ 3 Day EMERGENCY	2 Day EMERGENCY Contu	Next Day EMERGENCY 7 Day TAT	Same Day TAT 5 Da	Turnaround Time (Business days)	10 01.00	5-09	8 55-09 0-21	7 55-08 2-31	18-0 80-55 9	1-0 60-55 5	4 55-06 J-3'	3 55-06 6-21	2 55-05 0-1.5'	1 h-P ho-55 1	ried ID / Point of Collection		Samplers's Name	C-45.com	Pho	500 Mosely Road, Cross Roads, Texas 76227	KJE, Enviromental & Civil Engineering Company Address:	Client / Reporting Information Company Name / Branch:		Service Center - San Antonio, Texas (210-509-3334)	Dallas Texas (214-902-0300)	
Date Time:	Side Time:	179/ 57/8	Date Time:	E CUSTODY MUST BE DOCUME	d by 5:00 pm		Contract TAT	TAT	5 Day TAT		9,	, cv	9	٠٠٠	هر	9'	3'	ال	2.5	1/ 8/25	Sample Depth Date	Colle	PO Number:	314-787-7875	Phone No: (940)387-0805 Invoice To:		Proje	Proje		334)		
Received By:	Received By:		Received By:	SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION. INCILIDING COLIDIER DELIVERY		TRRP Checklist	Level 3 (CLP Forms)	Level III Std QC+ Forms	Level II Std QC	Data Deliverable Information	104/8 4	1035	1030	1000	1017	1000	0945	0942	0630	15 5460 51	Time Matrix bottles ±	Collection	mber:	Oilfield Water Logistics	е То:	Jai	OWL102816D OWLOGOY LOU	Project Information		www.xenco.com		
Custody Seal #	Relinquished By:	2	Relinquished By:	GE POSSESSION, INCLUDING COURIER I			UST / RG -411	TRRP Level IV	Level IV (Full Data Pkg /raw data)	formation											NaOH/Zn Acetate HNO3 H2SO4 NaOH NaHSO4 MEOH NONE	Number of preserved bottles					AND					
Preserved where applicable	Date Time:		Date Time:				LASA)	and	w data)	Not	< < <									× × ×	TPH CHLOF)					Analytical Information	Xenco Quote#	Norcross, Georgia (770-449-8800)	Odessa, Texas (432-563-1800)
Relinquished by: Date Time: Received By: Custody Seal # Preserved where applicable Only 3.0/2.8 Only 3.0/2.8 Only 5.	Received By:	2	Received By:	TEU-EX OF O. Hacking #	TIDO: Tapping t		ts of samples above dis fo	BTEX below d. 5 feet panding	OLD all sompling of TIBH	Notes:											Field Comments	A = Air	VV - Wilder O = OII WW = Waste Water	SL = Sludge OW = Ocean/Sea Water	SW = Surface water	GW = Ground Water DW = Drinking Water	S = Soil/Sed/Solid		rmation Matrix Codes	Xenco Job #		00) Lakeland, Florida (863-646-8526)



CHAIN OF CUSTODY

(Ciffer	Sall Sall	Day received by Lab, if re	1	3 Day EMERGENCY	2 Day EMERGENCY Contract TAT	Next Day EMERGENCY 7 Day TAT	Same Day TAT 5 Day TAT	Turnaround Time (Business days)	10 55-15 2-41	14-0 51-55 6	8 55-14 O-7,	7 55-13 4-50	6 55-13 2-4'	5 55-13 0-21	4 55-11 2-3.5'	3 55-12 6-21	2 55-11]-3'	1-0 11-55 1		No. Field ID / Point of Collection		Samplers's Name	1 - CS. COM	Phone N	ads, Texas 76227	Company Address:	Company Name / Branch:	Client / Reporting Information	Dallas I exas (214-902-0300) Service Center - San Antonio, Texas (210-509-3334)	Statioru, J exas (201-240-4200)
Date Time:	Sign 1627	826 1637	M MUST BE DOCUMENTE							4.4	7.	ď	οĭ	h.	*	3.5′	۶,	3'	3, 8172	Sample Depth Date	Collection	Collegio	PO Number:	6,40 10+ 110	387-0805 Invoice To:		Project Location:	Project Na			
Received By:	Received By:	Received By:	CEIVED BY 5:00 pm SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY		TRRP Checklist	Level 3 (CLP Forms)	Level III Std QC+ Forms	Level II Std QC	Data Deliverable Information	1137 4 4	1)\$4	1137	11/8	IIIS III	1112	1107	504	105/	1023 8201	Time Matrix bottles ±			917	Olifield Water Logistics	20		OWL102816D OWLOOUTHOR	Project Name/Number:	Project Information		
Custody Seal #	Relinquished By:	Relinquished By:	IGE POSSESSION, INCLUDING COURIEF			UST / RG -411	TRRP Level IV	Level IV (Full Data Pkg	iformation											NaOH/2 Acetate HNO3 H2SO4 NaOH NaHSO MEOH NONE	nime of preserved						CAROL	(N. 141)			
Preserved where applicable	Date Time:	Date Time:			-	7654	10 des	raw data) FIOL	Notes:	< < <									×	TPH CHL			5035)					Analytical Information	Norcross, Georgia (770-449-8800)	Odessa, lexas (432-563-1800)
On Ice Cooler Temp. Thermo. Corr. Factor	Received By:	Received By:	FED-EX / UPS: Tracking #		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	of smaller about 2	6-10 d. 5 1	_P all BTEx and TPH.												Field Comments		A = Air	O=OII	OW = OranySea Water	SW = Surface water	GW =Ground Water DW = Drinking Water P = Product	S = Soil/Sed/Solid		tion Matrix Codes	Xenco Job #	Lakeland, Florida (863-646-8526)

XENCO
LABORATORIES
Setting the Standard since 1990

CHAIN OF CUSTODY

Dallas Texas (214-902-0300) Service Center - San Antonio, Texas (210-509-3334)		moo.conex.www	B	Norcross, Georgia (770-449-8800) Xenco Quote # X	nco Job#	Tampa, Florida (813-620-2000)
Client / Reporting Information		Partial (afamatia)		Analytical Information	ormation	Matrix Codes
Company Name / Branch: KJE, Enviromental & Civil Engineering	Project N	102816D	V10807M			
Company Address: 500 Mosely Road, Cross Roads, Texas 76227	Project Location:	<u>a</u>	2			GW = Ground Water DW = Drinking Water
Phone	Phone No: (940)387-0805 Invoice To:	o: Oiffield Water Logistics				SW = Surface water SL = Sludge
James Front 150 15 Rpdd; ch	PO Number:			035)		W = Wipe
oanipiers 5 Maille						WW= Waste Water
No Field ID / Point of Collection	Collection	on	Number of preserved bottles			2
No. Field IU / Point of Collection	Sample Depth Date	Time Matrix bottles T	NaOH/Zn Acetate HNO3 H2SO4 NaOH NaHSO4 MEOH	BTEX 8 TPH CHLOF		Field Comments
1 52-15 1.55	51/3 1.5	1 55 0		×		i rele Confinentia
2 55-16 0-21	ره	1147		-		
3 55-16 J-41	14	[MS				
15.4-0 41-55 1	15.6	12.30				
5 55-18 6-7	م	1233				
e 55-18 J-7'	3/	1986				
16-0 61-55 1	9-	A CONTE				
8 55-19 9-4.5,	4.5'	LANSUM .				
, to 9d-55 6	يو	1302				
10 55-86, 2-3,5	3.51 €	1305 A A		2 2 4		
Turnaround Time (Business days)		Data Deliverable Information	formation		Notes:	
Same Day TAT		Level II Std QC	Level IV (Full Data Pkg /raw data)	<u>+</u>	061) All Samo	how of TPH and
Next Day EMERGENCY 7 Day TAT		Level III Std QC+ Forms	TRRP Level IV	7	Ex below 2.5	STANSAS .
2 Day EMERGENCY Contract TAT	AT	Level 3 (CLP Forms)	UST / RG -411	Nes	alte al sound	alo
3 Day EMERGENCY		TRRP Checklist				
TAT Starts Day received by Lab, if received by 5:00 pm	5:00 pm			FED-E)	FED-EX / UPS: Tracking #	
Reunquished by Sample:	Date Time:	SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURT Received By: Relinquished By:	GE POSSESSION, INCLUDING COURIE Relinquished By:	ER DELIVERY Date Time:	Received By:	
Relinquished by Cufton	Side Time:	Received By:	Relinquished By:	Date Time:	Received By:	
by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	on Jee Coole	Cooler Temp. Thermo. Corr. Factor

IOS Number : **69397**

Date/Time: 08.26.2020 Created by: Cloe Clifton Please send report to: Jessica Kramer

Lab# From: Carlsbad Delivery Priority: Address: 1089 N Canal Street

Lab# To: **Midland** Air Bill No.: 771368231354 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	

IOS Number : **69397**

Date/Time: 08.26.2020 Cloe Clifton Please send report to: Jessica Kramer Created by:

1089 N Canal Street Lab# From: Carlsbad Address: Delivery Priority:

Lab# To: Midland Air Bill No.: 771368231354 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 24.5'	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 Check	dist	Comments
#1 *Temperature of cooler(s)?		.5	
#2 *Shipping container in good conditi	on?	Yes	
#3 *Samples received with appropriate	e temperature?	Yes	
#4 *Custody Seals intact on shipping of	container/ cooler?	Yes	
#5 *Custody Seals Signed and dated f	or Containers/coolers	Yes	
#6 *IOS present?		Yes	
#7 Any missing/extra samples?		No	
#8 IOS agrees with sample label(s)/ma	atrix?	Yes	
#9 Sample matrix/ properties agree wi	th IOS?	Yes	
#10 Samples in proper container/ bottl	e?	Yes	
#11 Samples properly preserved?		Yes	
#12 Sample container(s) intact?		Yes	
#13 Sufficient sample amount for indic	ated test(s)?	Yes	
#14 All samples received within hold ti	me?	Yes	
* Must be completed for after-hours of NonConformance:	lelivery of samples prior to pla	acing in the refrigerator	
Corrective Action Taken:			
	Nonconformance Docu	mentation	
Contact:	Contacted by :	Date	:
Checklist reviewed by:	Brima Tal	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

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

Work Order #: 670969

Temperature Measuring device used: T NM 007

s	ample 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 containe	r/ cooler? Yes	3
#5 Custody Seals intact on sample bottles?	Yes	;
#6*Custody Seals Signed and dated?	Yes	;
#7 *Chain of Custody present?	Yes	3
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished	d/ received? Yes	3
#10 Chain of Custody agrees with sample labe	els/matrix? Yes	S
#11 Container label(s) legible and intact?	Yes	S
#12 Samples in proper container/ bottle?	Yes	S
#13 Samples properly preserved?	Yes	S
#14 Sample container(s) intact?	Yes	S
#15 Sufficient sample amount for indicated tes	t(s)? Yes	S
#16 All samples received within hold time?	Yes	S
#17 Subcontract of sample(s)?	Yes	Samples subbed to Xenco Midland.
#18 Water VOC samples have zero headspace	e? N/A	L

* 8	14	ha .		لممدما	£	~f+~"	h a	وزامام		~£ .	samnle		- 4	نامماء	:	46.		~~~4~	
	лист	110	como	16160	101	aiter-	monrs	CIEIIV	/PIV (m,	Samme	s mno	rto	Macii	161 11	THE	10111	nerait.	11

Anal	lyst:

PH Device/Lot#:

Checklist completed by:

Date: 08.26.2020

Checklist reviewed by: Jessica Vramer

Date: 08.26.2020

eurofins Environment Testing

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

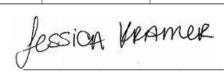
Date Received in Lab: Tue 08.25.2020 16:27

Report Date: 09.02.2020 07:54

Project Manager: Jessica Kramer

	Lab Id:	670969-0	001	670969-00)2	670969-0	03	670969-0	04	670969-0	05	670969-0	06
Analysis Requested	Field Id:	SS-01 0-	2'	SS-01 2-4	. •	SS-02 0-2'		SS-02 2-4' 4- ft		SS-02 4-6'		SS-02 6-7'	,
Analysis Requested	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						
Ethylbenzene		< 0.00215	0.00215				0.00218						
m,p-Xylenes		< 0.00430	0.00430				0.00435						
o-Xylene		< 0.00215	0.00215				0.00218						
Total Xylenes		< 0.00215	0.00215				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 1	7:39	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 1	8:53	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	Extracted:												
SUB: T104704400-20-21	Analyzed:	08.27.2020	13:45	08.27.2020 1	3:45	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



Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: Contact: OWL080420D

Travis Reddick

Project Location:

Jal

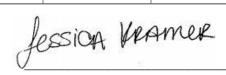
Date Received in Lab: Tue 08.25.2020 16:27

Report Date: 09.02.2020 07:54

Project Manager: Jessica Kramer

	Lab Id:	670969-0	007	670969-00)8	670969-00	09	670969-0	010	670969-0	11	670969-0	12
Analysis Requested	Field Id:	SS-03 0-	2'	SS-03 2-4	!'	SS-03 4-5'		SS-04 0-2	2'	SS-04 2-4'		SS-05 0-2.5	5'
Anaiysis Requesieu	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 (9:12	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	7:39	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	9:37	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	Extracted:												
SUB: T104704400-20-21	Analyzed:	08.27.2020	13:45	08.27.2020	3:45	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	<u> </u>				<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



Received by OCD: 10/26/2020 4:21:22 PM

eurofins Environment Testing

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

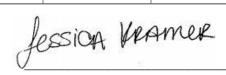
Date Received in Lab: Tue 08.25.2020 16:27

Report Date: 09.02.2020 07:54

Project Manager: Jessica Kramer

	Lab Id:	670969-0	013	670969-0	14	670969-0)15	670969-	016	670969-0	17	670969-0	18
Analysis Requested	Field Id:	SS-06 0-	2'	SS-06 2-3	3'	SS-07 0-2	2'	SS-08 0-2	2'	SS-08 2-3'		SS-09 0-2	.
Analysis Requesieu	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 (9:20	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	7:39	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 2	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	Extracted:												
SUB: T104704400-20-21	Analyzed:	08.27.2020	13:45	08.27.2020	3:45	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



eurofins Environment Testing Xenco

Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: Contact: OWL080420D

Travis Reddick

Project Location: Jal

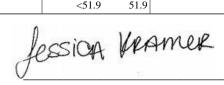
Date Received in Lab: Tue 08.25.2020 16:27

Report Date: 09.02.2020 07:54

Project Manager: Jessica Kramer

	Lab Id:	670969-0	19	670969-0	20	670969-0	21	670969-0	22	670969-0	23	670969-0	24
Analysis Requested	Field Id:	SS-09 2-	3'	SS-10 0-2	2'	SS-11 0-2' 2- ft		SS-11 2-3	•	SS-12 0-2'		SS-12 2-3.5	5'
Analysis Requesieu	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		0.00212			< 0.00207	0.00207		
Ethylbenzene					0.00211		0.00212			< 0.00207	0.00207		
m,p-Xylenes					0.00423		0.00424			< 0.00413	0.00413		
o-Xylene					0.00211		0.00212			< 0.00207	0.00207		
Total Xylenes					0.00211		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	Extracted:												
SUB: T104704400-20-21	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



Environment Testing

Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id:

OWL080420D

Travis Reddick **Contact:**

Project Location:

Jal

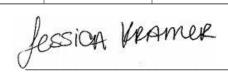
Date Received in Lab: Tue 08.25.2020 16:27

Report Date: 09.02.2020 07:54

Project Manager: Jessica Kramer

	Lab Id:	670969-0			26	670969-0	670969-027		028	670969-029 SS-15 0-2'		670969-03	30
Analysis Requested	Field Id:	SS-13 0-	2'	SS-13 2-4	ļ'	SS-13 4-5'		SS-14 0-2	2'	SS-15 0-2	.	SS-15 2-4'	
Anaiysis Requesieu	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 1	1:15	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 1	6:00	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 2	22:30	08.26.2020	22:36	08.26.2020	22:41	08.26.2020	22:47	08.26.2020 2	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	Extracted:												
SUB: T104704400-20-21	Analyzed:	08.27.2020	13:45	08.27.2020 1	3:45	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



Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: Contact: OWL080420D

Travis Reddick

Project Location:

Jal

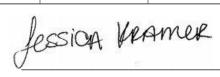
Date Received in Lab: Tue 08.25.2020 16:27

Report Date: 09.02.2020 07:54

Project Manager: Jessica Kramer

	Lab Id:	670969-0	31	670969-03	32	670969-03	33	670969-0	034	670969-0)35	670969-0	36
Analysis Requested	Field Id:	SS-15 4-	SS-15 4-5'		2'	SS-16 2-3'		SS-17 0-2.5'		SS-18 0-2'		SS-18 2-3'	
	Depth:	5- ft	5- ft		2- ft			2.5- ft		2- ft		3- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.25.2020	11:40	08.25.2020 1	1:42	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:	ı:		08.26.2020 16:50				08.26.2020 16:50		08.26.2020 16:50		09.01.2020 08:48	
	Analyzed:	l:		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			< 0.00253	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			< 0.00253	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 23:15		08.26.2020 16:00 08.26.2020 23:20		08.26.2020 16:00 08.26.2020 23:37		08.26.2020 16:00 08.26.2020 23:43		08.26.2020 16:00	
	Analyzed:											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	Extracted:												
SUB: T104704400-20-21	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: Analyzed:				08.26.2020 14:00				08.26.2020 14:00		08.26.2020 16:30		09.01.2020 10:30	
			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



Certificate of Analysis Summary 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Project Name: Harrier Booster Pump

Project Id: Contact: OWL080420D

Travis Reddick

Project Location:

Jal

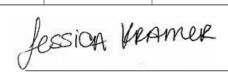
Date Received in Lab: Tue 08.25.2020 16:27

Report Date: 09.02.2020 07:54

Project Manager: Jessica Kramer

	7 1 71	670060.0	27	6700 CO O	20	670060.0	20	6700 CO O	40		
Analysis Requested	Lab Id:			670969-038		670969-039		670969-0	-		
	Field Id:	SS-19 0-	2'	SS-19 24	.5'	SS-BG 0-2	'	SS-BG 2-3.5	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	< 0.00239	0.00239				
m,p-Xylenes		< 0.00456	0.00456		0.00448	< 0.00478	0.00478				
o-Xylene		< 0.00228	0.00228		0.00224	< 0.00239	0.00239				
Total Xylenes		< 0.00228	0.00228		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		
	Analyzed:			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	Extracted:										
SUB: T104704400-20-21	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: Analyzed:		08.26.2020 14:00		09.01.2020 10:30		08.26.2020 14:00					
		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	<u> </u>			
Total TPH		177	56.8	< 56.0	56.0	<60.3	60.3	· ·			

BRL - Below Reporting Limit



Analytical Report 670969

for

KJ Environmental & Civil Engineering

Project Manager: Travis Reddick

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)



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 Vramer

Project Manager

A Small Business and Minority Company

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 24.5'	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

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CASE NARRATIVE

eurofins

Environment Testing
Xenco

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 above 2.5 feet.

Sample receipt non conformances and comments per sample:

None

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

Parameter	Cas Numbe	r 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		

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

MAB Analyst:

Date Prep: 08.26.2020 16:50 Basis:

Dry Weight

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		

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	

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

MAB Analyst:

Date Prep:

08.26.2020 17:39

Basis:

Dry Weight

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



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:

Dry Weight

Seq Number: 3135672

MAB

Date Prep: 08.26.2020 17:39 Basis:

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

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

 DTH

% Moisture: 8.62

08.26.2020 14:20

Analyst:

o-Terphenyl

DTH

Date Prep: 08.26.2020 12:15 Basis:

70-135

Dry Weight

Seq Number: 3135677

Parameter	Cas Number	r 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		

120

84-15-1

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:

% Moisture: 8.62

MAB

Basis:

Dry Weight

MAB Analyst: Seq Number: 3135669

	Date Prep:	08.26.2020 16:50
560		

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	

Environment Testing

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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

Date Prep:

1

Xenco

Environment Testing

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

Harrier Booster Pump

Sample Id: SS-02 4-6' Matrix: Soil Date Received:08.25.2020 16:27

Dry Weight

Lab Sample Id: 670969-005

Date Collected: 08.25.2020 08:53

08.26.2020 17:39

Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

Chloride

MAB

% Moisture:

08.26.2020 19:09

Analyst:

MAB

Basis:

mg/kg

8.24

Seq Number: 3135672

Parameter Result Cas Number RLUnits **Analysis Date** Flag Dil

11.0

Date Prep:

83.9

16887-00-6

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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 MAB

% Moisture: 24.24

Analyst:

Date Prep:

08.26.2020 17:39

Basis:

Dry Weight

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



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

08.26.2020 18:58

Tech:

MAB

% Moisture: 8.18

Analyst: MAB

Date Prep:

08.26.2020 16:50

Basis:

Dry Weight

Seq Number: 3135669

4-Bromofluorobenzene

Benzene 71-43-2 <0.00217	rameter	Cas Number	Result	\mathbf{RL}		Units	Analysis Date	Flag	Dil
Ethylbenzene 100-41-4 <0.00217 0.00217 mg/kg 08.26.2020 18:58 U m,p-Xylenes 179601-23-1 <0.00433	zene	71-43-2	< 0.00217	0.00217		mg/kg	08.26.2020 18:58	U	1
m,p-Xylenes 179601-23-1 <0.00433	uene	108-88-3	< 0.00217	0.00217		mg/kg	08.26.2020 18:58	U	1
o-Xylene 95-47-6 <0.00217	ylbenzene	100-41-4	< 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 Total BTEX <0.00217 0.00217 mg/kg 08.26.2020 18:58 U Surrogate Cas Number % Recovery Units Limits Analysis Date Fla	-Xylenes	179601-23-1	< 0.00433	0.00433		mg/kg	08.26.2020 18:58	U	1
Total BTEX <0.00217 0.00217 mg/kg 08.26.2020 18:58 U Surrogate Cas Number % Recovery Units Limits Analysis Date Fla	ylene	95-47-6	< 0.00217	0.00217		mg/kg	08.26.2020 18:58	U	1
Surrogate Cas Number % Recovery Units Limits Analysis Date Fla	al Xylenes	1330-20-7	< 0.00217	0.00217		mg/kg	08.26.2020 18:58	U	1
	al BTEX		< 0.00217	0.00217		mg/kg	08.26.2020 18:58	U	1
1,4-Difluorobenzene 540-36-3 98 % 70-130 08.26.2020 18:58	Surrogate	C	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
	1,4-Difluorobenzene	5.	40-36-3	98	%	70-130	08.26.2020 18:58		

112

%

70-130

460-00-4

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Date Prep:

08.26.2020 17:39

Basis:

Dry Weight

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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Seq Number: 3135672

Date Prep:

08.26.2020 17:39

Basis:

Dry Weight

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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Date Prep: 08.26.2020 16:50 Basis:

Dry Weight

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	Ca	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

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	

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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:

% Moisture: 6.41

Analyst:

MAB MAB

Date Prep: 08.26.2020 17:39

Basis:

Dry Weight

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



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

A -- - I----!- D-4-

MAB Analyst:

T T--- 24--

Dry Weight

Seq Number: 3135672

Donomoton

Date Prep:

Docult

Coc Number

08.26.2020 17:39

Basis:

rarameter	Cas Number	Result	KL	Units	Analysis Date	riag	DII
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

Parameter	Cas Numbe	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

B Date Prep:

08.26.2020 16:50

Basis: Dry Weight

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	



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst: Seq Number: 3135672

Date Prep:

08.26.2020 17:39

Basis:

Dry Weight

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

Parameter	Cas Number	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

08.26.2020 20:00

% Moisture: 4.76

Analyst:

MAB

Date Prep: 08.26.2020 16:50 Basis:

Dry Weight

Seq Number: 3135669

4-Bromofluorobenzene

Parameter	Cas Number	Result	\mathbf{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		

103

%

70-130

460-00-4

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

Analyst:

% Moisture: 4.97

MAB

Date Prep: 08.26.2020 17:39 Basis:

Dry Weight

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



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

08.26.2020 17:39

Basis:

Dry Weight

Seq Number: 3135672

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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

Date Prep:

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

Parameter	Cas Numbe	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

Parameter	Cas Number	r 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		



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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

Date Prep:

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

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	
4 611		444.05.0			50.405	00.04.000.44.04		



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

% Moi

% Moisture: 33.77

Analyst: MAB

Date Prep:

08.26.2020 16:50

Basis: Dry Weight

Parameter	Cas Number	Result	\mathbf{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 Diffyanahangana		540.26.2	100	0/	70.120	09 26 2020 20.40		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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

Date Prep:



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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

Date Prep:

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

Parameter	Cas Number	r 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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KJ Environmental & Civil Engineering, Aubrey, TX

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

08.26.2020 16:50

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture: 2.97

Analyst: MAB

Date Prep:

Basis:

Dry Weight

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	Ca	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

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	

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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

Date Prep:



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

5.16

% Moisture:

Analyst:

MAB

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

Date Prep:

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

Parameter	Cas Number	r 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		



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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:

Total BTEX

MAB

% Moisture: 5.16

08.26.2020 21:21

mg/kg

MAB Analyst: Seq Number: 3135669 Date Prep: 08.26.2020 16:50 Basis:

Dry Weight

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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

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	

< 0.00211 0.00211

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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:

Dry Weight

Seq Number: 3135673

MAB

Date Prep:

08.26.2020 16:00

Basis:

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

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	C	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Date Prep:

08.26.2020 16:50

Basis:

Dry Weight

Parameter	Cas Number	Result	\mathbf{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 Promofluorobanzana	,	160 00 4	0.0	0/-	70 120	09 26 2020 22:09		

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	

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst: Seq Number: 3135673 Date Prep:

08.26.2020 16:00

Basis:

Dry Weight

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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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

Date Prep:

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

Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
PHC610	<51.9	51.9		mg/kg	08.26.2020 18:03	U	1
C10C28DRO	<51.9	51.9		mg/kg	08.26.2020 18:03	U	1
PHCG2835	<51.9	51.9		mg/kg	08.26.2020 18:03	U	1
PHC635	<51.9	51.9		mg/kg	08.26.2020 18:03	U	1
(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
	PHC610 C10C28DRO PHCG2835 PHC635	PHC610 <51.9 C10C28DRO <51.9 PHCG2835 <51.9	PHC610 <51.9 51.9 C10C28DRO <51.9 51.9 PHCG2835 <51.9 51.9 PHC635 <51.9 51.9	PHC610	PHC610 <51.9 51.9 mg/kg C10C28DRO <51.9 51.9 mg/kg PHCG2835 <51.9 51.9 mg/kg PHC635 <51.9 51.9 mg/kg	PHC610 <51.9 51.9 mg/kg 08.26.2020 18:03 C10C28DRO <51.9	PHC610

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

08.26.2020 16:50

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech:

MAB

% Moisture: 3.82

MAB Analyst:

Date Prep:

Basis:

Dry Weight

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	C	as Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Bromofluorobenzene	14	50-00-4	111	0/2	70-130	08 26 2020 22:37		

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	

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Date Prep: 08.26.2020 16:00 Basis:

Dry Weight

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

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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: N

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

Parameter	Cas Numbe	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

Dry Weight

MAB Analyst:

Date Prep:

08.26.2020 16:50

Basis:

Parameter	Cas Number	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

2.69

% Moisture:

MAB Analyst: Seq Number: 3135673 Date Prep:

08.26.2020 16:00

Basis:

Dry Weight

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

Certificate of Analytical Results 670969

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:

6.28

MAB

% Moisture:

MAB Analyst: Seq Number: 3135673 Date Prep:

08.26.2020 16:00

Basis:

Dry Weight

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



Certificate of Analytical Results 670969

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: Chloride by EPA 300

Prep Method: E300P

Tech:

MAB

% Moisture: 6.21

Analyst: MA

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

Parameter	Cas Numbe	r 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		



Certificate of Analytical Results 670969

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: Analyst: MAB

% Moisture: 6.21

Tecn: IVIA

MAB

Date Prep: 08.26.2020 16:50

Basis:

Dry Weight

Parameter	Cas Number	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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: MA

MAB

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

Date Prep:

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

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	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
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



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

6.78

% Moisture:

MAB Analyst:

Date Prep: 08.26.2020 16:50 Basis:

Dry Weight

Seq Number:	3135669

Parameter	Cas Numbe	r 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		

Environment Testing

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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

Environment Testing

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

5.81

% Moisture:

MAB Analyst: Seq Number: 3135673 Date Prep:

08.26.2020 16:00

Basis:

Dry Weight

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



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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: Analyst: MAB

% Moisture: 4.9

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

Parameter	Cas Numbe	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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:

Analyst:

MAB MAB % Moisture: 4.9

Date Prep:

08.26.2020 16:50

Basis:

Dry Weight

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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

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



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

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

Date Prep:

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

Parameter	Cas Number	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Date Prep: 08.26.2020 16:50 Basis:

Dry Weight

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		



Certificate of Analytical Results 670969

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

Analyst:

Parameter

Chloride

MAB

Units

mg/kg

% Moisture: 7.8

Analysis Date

08.26.2020 23:43

Seq Number: 3135673

Date Prep:

Result

2790

08.26.2020 16:00

Basis:

Dry Weight

Flag

Dil

5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

DTH

Date Prep:

RL

54.1

% Moisture:

7.8

Analyst: DTH

Seq Number: 3135658

Cas Number

16887-00-6

08.26.2020 16:30

Dry Weight Basis:

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		

Certificate of Analytical Results 670969

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

08.26.2020 16:50

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech:

Analyst:

MAB

% Moisture: 7.8

MAB

Date Prep:

Basis:

Dry Weight

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	Ca	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

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	

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

Analyst:

MAB

% Moisture:

10.26

Seq Number: 3135673

Date Prep:

08.26.2020 16:00

Basis:

Dry Weight

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

Parameter	Cas Numbe	r 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		

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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: Ma

MAB

% Moisture: 10.26

Analyst: MAB

MΔR

Date Prep: 09.01.2020 08:48

Basis: Dry Weight

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	



Certificate of Analytical Results 670969

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: Chloride by EPA 300

Prep Method: E300P

Tech:

MAB

% Moisture: 12.42

Analyst:

MAB

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	mø/kø	08.26.2020.23:54		1

Date Prep:

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

Parameter	Cas Number	r 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		



Certificate of Analytical Results 670969

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

% Moisi

% Moisture: 12.42

Analyst: MAB

Date Prep:

08.26.2020 16:50

Basis:

Dry Weight

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		



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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: M

MAB

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	mo/ko	08 26 2020 23:59		1

Date Prep:

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

Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
PHC610	< 56.0	56.0		mg/kg	09.01.2020 11:51	U	1
C10C28DRO	< 56.0	56.0		mg/kg	09.01.2020 11:51	U	1
PHCG2835	< 56.0	56.0		mg/kg	09.01.2020 11:51	U	1
PHC635	<56.0	56.0		mg/kg	09.01.2020 11:51	U	1
(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
	PHC610 C10C28DRO PHCG2835 PHC635	PHC610 <56.0 C10C28DRO <56.0 PHCG2835 <56.0	PHC610 <56.0 56.0 C10C28DRO <56.0 56.0 PHCG2835 <56.0 56.0 PHC635 <56.0 56.0	PHC610	PHC610	PHC610 <56.0 56.0 mg/kg 09.01.2020 11:51 C10C28DRO <56.0	PHC610 <56.0 56.0 mg/kg 09.01.2020 11:51 U C10C28DRO <56.0

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

% Moisti

% Moisture: 10.95

Analyst: MAB

Date Prep:

09.01.2020 08:48

Basis:

Dry Weight

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		



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Tech:

% Moisture: 16.87

MAB

Dry Weight

Analyst:

Date Prep:

08.26.2020 16:00

Basis:

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

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	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
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



Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Date Prep: 08.26.2020 16:50 Basis:

Dry Weight

Parameter	Cas Number	Result	\mathbf{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	C	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
A Bromofluorobanzana	1	60 00 4	104	0/2	70 130	08 27 2020 01:20		

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	

Certificate of Analytical Results 670969

KJ Environmental & Civil Engineering, Aubrey, TX

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

MAB Analyst:

Seq Number: 3135673

Date Prep:

08.26.2020 16:00

Basis:

Dry Weight

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



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.
- RPD exceeded lab control limits.
- The target analyte was positively identified below the quantitation limit and above the detection limit.
- Analyte was not detected.
- 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.

BRL Below Reporting Limit.

ND Not Detected.

RLReporting 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

DLMethod Detection Limit

NC Non-Calculable

SMP Client Sample

BLK

MS

Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample

BKSD/LCSD Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD

Method Duplicate/Sample Duplicate

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

^{**} Surrogate recovered outside laboratory control limit.

670969 **QC Summary**

KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: Chloride by EPA 300

3135673 Seg Number:

Spike

250

Amount

Matrix: Solid

E300P Prep Method:

Date Prep: 08.26.2020 7710237-1-BSD

MB Sample Id:

7710237-1-BLK

LCS Sample Id:

7710237-1-BKS

LCSD Sample Id:

Parameter

MB Result

LCS Result

LCS LCSD %Rec Result

Limits LCSD %Rec

%RPD RPD Limit Units

Analysis Flag Date

Chloride

<10.0

262

265

90-110 106

20 1

mg/kg

08.26.2020 21:29

Analytical Method: Chloride by EPA 300

3135672

Matrix: Solid

105

Prep Method: Date Prep:

E300P 08.26.2020

Seq Number: MB Sample Id:

7710229-1-BLK

LCS Sample Id:

7710229-1-BKS

LCSD Sample Id: 7710229-1-BSD

RPD

Parameter

Chloride

MB Result <10.0

Parent

Result

10900

Parent

Result

Parent

Result

Parent

Result

142

1840

753

Spike Amount 250

LCS LCS Result %Rec 262 105 LCSD LCSD Result %Rec

Limits 90-110

106

%RPD Limit 20 2

Units Analysis

Flag Date 08.26.2020 18:25

Analytical Method: Chloride by EPA 300

Prep Method:

E300P

mg/kg

Seq Number: Parent Sample Id: 3135673

Matrix: Soil

93

670969-021 S

266

Date Prep: 08.26.2020

MSD Sample Id: 670969-021 SD

08.26.2020 21:46

Parameter

670969-021

Spike Amount 2.14

Spike

212

Spike

216

Amount

Amount

212

Amount

MS MS Result %Rec

11100

Result

963

MS Sample Id:

MSD Result 11100

MSD Limite %Rec 93

%RPD

0

Units

mg/kg

Analysis Flag Date

Chloride

Analytical Method: Chloride by EPA 300 Seg Number:

3135673

Matrix: Soil

%Rec

99

Result

MSD

Result

2050

965

100

E300P

Parent Sample Id:

670969-031

670969-031 S

Prep Method: Date Prep: MSD Sample Id:

20

Date Prep:

Limit

20

Prep Method:

RPD

Limit

20

08.26.2020 670969-031 SD

Parameter Chloride

MS Sample Id: MS MS

MSD MSD

Limits %Rec

90-110

90-110

RPD %RPD Limit Units

Analysis Flag Date

3135672

Matrix: Soil

%Rec

93

0

mg/kg

08.26.2020 23:04

Analytical Method: Chloride by EPA 300

Seq Number:

Prep Method:

E300P 08.26.2020

Parameter

Chloride

Parent Sample Id:

670969-001

MS Sample Id: MS MS

670969-001 S

MSD

%Rec

97

Limits

90-110

MSD Sample Id: %RPD RPD

670969-001 SD

Analysis Flag

Analytical Method: Chloride by EPA 300

Result

361

Result

2040

0

mg/kg

Units

Date

08.26.2020 18:41

Seq Number: Parent Sample Id:

3135672

Matrix: Soil MS Sample Id:

670969-011 S

Date Prep: MSD Sample Id:

E300P 08.26.2020

670969-011 SD Flag

Parameter

Chloride

670969-011

Spike MS

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

MS %Rec 103

MSD MSD Result %Rec 363

Limits 104 90-110

%RPD RPD Limit 20 1

LCS = Laboratory Control Sample

Units mg/kg

Analysis Date

08.26.2020 19:59

MS/MSD Percent Recovery

LCS/LCSD Recovery

Relative Percent Difference

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

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

670969 **QC Summary**

KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: Percent Moisture

3135705

Matrix: Solid

MB Sample Id: 3135705-1-BLK

Parameter

Seq Number:

Percent Moisture

MB Result

08.27.2020 13:45 %

Units

Units

Units

Flag

Analytical Method: Percent Moisture

Seq Number:

3135706

Matrix: Solid

MB Sample Id: 3135706-1-BLK

Parameter

MBResult

Analysis Date

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

MR

Analysis Date

Analysis

Flag

Flag

Flag

Flag

Percent Moisture

Result

08.27.2020 13:45

Analytical Method: Percent Moisture

Seg Number: Parent Sample Id: 3135705 671106-001 Matrix: Sludge

MD Sample Id: 671106-001 D

Parent Result MD

Parameter Percent Moisture

Result 50.5

Units Limit Date 08.27.2020 13:45 1 20 %

Analytical Method: Percent Moisture

Seq Number:

3135705

Matrix: Sludge

Parent Sample Id:

671107-005

MD Sample Id: 671107-005 D

Parameter Percent Moisture **Parent** Result

MD Result %RPD

%RPD

RPD

RPD

Limit

Units Analysis Date

64.4

50.9

64.0

08.27.2020 13:45 1 20 %

Seq Number:

Analytical Method: Percent Moisture

Matrix: Soil

Parent Sample Id:

3135706 670969-010

MD Sample Id: 670969-010 D

Parameter

Parent

Percent Moisture

Result

MD

4.12

Result 4.11

Limit 0 20

RPD

%RPD

Units %

Analysis Date 08.27.2020 13:45

Log Difference

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

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

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample A = Parent Result = MS/LCS Result

E = MSD/LCSD Result

MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec

670969 **QC Summary**

KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: Percent Moisture

3135706 Seg Number:

670969-019 Parent Sample Id:

Matrix: Soil

MD Sample Id: 670969-019 D

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

Analytical Method: Percent Moisture

Seq Number: 3135708

Matrix: Soil

MD Sample Id: 670969-029 D 670969-029 Parent Sample Id:

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

Analytical Method: Percent Moisture

Seq Number: 3135708

670969-039 Parent Sample Id:

MD Sample Id: 670969-039 D

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

Matrix: Soil

Analytical Method: TPH by SW8015 Mod

Seg Number: 3135677

Matrix: Solid MB Sample Id: 7710220-1-BLK LCS Sample Id: 7710220-1-BKS LCSD Sample Id: 7710220-1-BSD

RPD MB Spike LCS LCS LCSD LCSD Limits %RPD Units Analysis Flag **Parameter** Result Limit Date Result Amount %Rec %Rec Result Gasoline Range Hydrocarbons (GRO) 08.26.2020 11:59 99 35 < 50.0 1000 993 1030 103 70-135 4 mg/kg 08.26.2020 11:59 Diesel Range Organics (DRO) 1080 108 70-135 35 < 50.0 1000 1090 109 1 mg/kg

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

Analytical Method: TPH by SW8015 Mod

Seq Number: 3135658

Matrix: Solid Date Prep: 08.26.2020 LCS Sample Id: 7710230-1-BKS LCSD Sample Id: 7710230-1-BSD MB Sample Id: 7710230-1-BLK

MB Spike LCS LCS Limits %RPD RPD Units Analysis LCSD LCSD **Parameter** Limit Result Amount Result %Rec Date Result %Rec Gasoline Range Hydrocarbons (GRO) 08.26.2020 21:46 1000 1000 100 1000 35 mg/kg < 50.0 100 70-135 0 08.26.2020 21:46 Diesel Range Organics (DRO) 70-135 < 50.0 1000 1040 104 1050 105 1 35 mg/kg

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

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

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

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result

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

SW8015P

08.26.2020

SW8015P

Flag

Prep Method:

Prep Method:

Date Prep:

Flag

QC Summary 670969

KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method:TPH by SW8015 ModPrep Method:SW8015PSeq Number:3136075Matrix:SolidDate Prep:09.01.2020MB Sample Id:7710578-1-BLKLCS Sample Id:7710578-1-BKSLCSD Sample Id:7710578-1-BSD

RPD MB Spike LCS LCS Limits %RPD Units Analysis LCSD LCSD **Parameter** Result Amount Result %Rec Result %Rec Limit Date Gasoline Range Hydrocarbons (GRO) 1000 883 0 35 09.01.2020 10:09 < 50.0 88 880 88 70-135 mg/kg 09.01.2020 10:09 Diesel Range Organics (DRO) 1000 991 99 986 70-135 35 mg/kg < 50.0 99 1 MB MB LCS LCS LCSD Limits Units Analysis LCSD

Surrogate Flag %Rec Flag Flag Date %Rec %Rec 09.01.2020 10:09 1-Chlorooctane 97 118 117 70-135 % 09.01.2020 10:09 o-Terphenyl 101 112 111 70-135 %

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 Units Analysis Flag
Result Date

 $Motor Oil Range Hydrocarbons (MRO) \\ < 50.0 \\ mg/kg \quad 08.26.2020 \ 11:38$

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 Date
 Analysis Date
 Flag

 Motor Oil Range Hydrocarbons (MRO)
 <50.0</td>
 mg/kg
 08.26.2020 21:26
 98.26.2020 21:26

Analytical Method:TPH by SW8015 ModPrep Method:SW8015PSeq Number:3136075Matrix:SolidDate Prep:09.01.2020

Seq Number: 31360/5 Matrix: Solid Date Prep: 09.01.2020

MB Sample Id: 7710578-1-BLK

MB

ParameterMB ResultUnits DateAnalysis DateFlagMotor Oil Range Hydrocarbons (MRO)<50.0</td>mg/kg09.01.2020 09:49

Analytical Method:TPH by SW8015 ModPrep Method:SW8015PSeq Number:3135677Matrix: SoilDate Prep:08.26.2020

Parent Sample Id: 670985-012 MS Sample Id: 670985-012 S MSD Sample Id: 670985-012 SD

Spike MS MS %RPD RPD Units Parent MSD MSD Limits Analysis Flag **Parameter** Limit Result Amount Result %Rec Date Result %Rec Gasoline Range Hydrocarbons (GRO) 08.26.2020 12:59 < 50.0 1000 1000 100 1100 35 111 70-135 10 mg/kg 08.26.2020 12:59 Diesel Range Organics (DRO) < 50.0 1000 1080 108 1050 106 70-135 3 35 mg/kg

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

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |

LCS = Laboratory Control Sample MS = Matrix Spike A = Parent Result B = Spike Added

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

Page 78 of 88 Final 1.001

D = MSD/LCSD % Rec

Flag

Flag

SW8015P

SW5035A

Prep Method:

670969 **QC Summary**

KJ Environmental & Civil Engineering

Harrier Booster Pump

Analytical Method: TPH by SW8015 Mod

Prep Method: 08.26.2020 Seq Number: 3135658 Matrix: Soil Date Prep:

Parent Sample Id: 671092-001 MS Sample Id: 671092-001 S MSD Sample Id: 671092-001 SD

%RPD RPD **Parent** Spike MS MS Limits Units Analysis MSD MSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date Gasoline Range Hydrocarbons (GRO) < 50.0 999 865 87 914 35 08.26.2020 22:47 92 70-135 6 mg/kg 08.26.2020 22:47 70-135 35 mg/kg Diesel Range Organics (DRO) < 50.0 999 924 92 975 5 98

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

Analytical Method: TPH by SW8015 Mod

SW8015P Prep Method: 3136075 Seq Number: Matrix: Soil Date Prep: 09.01.2020 MS Sample Id: 670969-036 S MSD Sample Id: 670969-036 SD Parent Sample Id: 670969-036

RPD **Parent** Spike MS MS MSD MSD Limits %RPD Units Analysis **Parameter** Result Amount Result %Rec Result %Rec Limit Date 09.01.2020 11:10 Gasoline Range Hydrocarbons (GRO) 35 < 55.6 1110 939 85 917 70-135 2 82 mg/kg 09.01.2020 11:10 Diesel Range Organics (DRO) <55.6 1110 1050 95 1030 92 70-135 2 35 mg/kg

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

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135669 Matrix: Solid Date Prep: 08.26.2020

LCS Sample Id: 7710236-1-BKS LCSD Sample Id: 7710236-1-BSD MB Sample Id: 7710236-1-BLK

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
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

E = MSD/LCSD Result

09 01 2020 15:44

Flag

Flag

4-Bromofluorobenzene

85

QC Summary 670969

KJ Environmental & Civil Engineering

Harrier Booster Pump

87

70-130

%

Analytical Method:BTEX by EPA 8021BPrep Method:SW5035ASeq Number:3136128Matrix:SolidDate Prep:09.01.2020MB Sample Id:7710554-1-BLKLCS Sample Id:7710554-1-BKSLCSD 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 Flag	LCSD %Rec			imits	Units	Analysis Date	
1,4-Difluorobenzene	99		10	00		100		70	-130	%	09.01.2020 15:44	

Analytical Method:BTEX by EPA 8021BPrep Method:SW5035ASeq Number:3135669Matrix: SoilDate Prep:08.26.2020

90

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
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 8021BPrep Method:SW5035ASeq Number:3136128Matrix: SoilDate Prep:09.01.2020

Parent Sample Id: 670969-036 MS Sample Id: 670969-036 S MSD Sample Id: 670969-036 SD

%RPD MS Spike MS RPD **Parent** MSD MSD Limits Units Analysis **Parameter** Limit Date Result Amount Result %Rec Result %Rec Benzene < 0.00223 0.104 93 70-130 9 35 09.01.2020 14:14 0.112 0.114 102 mg/kg Toluene < 0.00223 0.112 0.100 89 0.110 98 70-130 10 35 mg/kg 09.01.2020 14:14 09.01.2020 14:14 Ethylbenzene 71-129 < 0.00223 0.112 0.0941 84 0.102 91 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 < 0.00223 0.0915 0.103 71-133 12 35 o-Xylene 0.112 82 92 mg/kg

Surrogate	MS MS %Rec Flag	MSD %Rec	MSD Limits Flag	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

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 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

XENCO LABORATORIES Setting the Standard since 1990

Stafford, Texas (281-240-4200)

CHAIN OF CUSTODY

670969

3 Day EMERGENCY 10 9 No. Relinquished by 2 Day EMERGENCY Next Day EMERGENCY Same Day TAT Samplers's Name Project Contact: James Fox 500 Mosely Road, Cross Roads, Texas 76227 Company Address: Company Name / Branch: KJE, Enviromental & Civil Engineering treddickatie-us.com Service Center - San Antonio, Texas (210-509-3334) TAT Starts Day received by Lab, if received by 5:00 pm Dallas Texas (214-902-0300) 125-04 55-03 80-53 55-03 10-55 0-85 Client / Reporting Information 5-02 Turnaround Time (Business days) -07 101 0-0 lifton CONS Field ID / Point of Collection 0-2 4-5-ターリ 0-11 15-0 アール 4-17 19-1 Reddick 7 Day TAT Contract TAT 5 Day TAT SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY 14-287-587 Phone No: (940)387-0805 Date Time: Page 14 A 7 3 Date Time: S/AS 111 9. 0 T 5. 1627 27/8 8125 PO Number: nvoice To: Project Location: Project Name/Number: Date 5 6920 0909 8 0880 5160 0912 2480 Received By: Received By: Received By: 1580 0835 OWL102816D TRRP Checklist 830 Oiffield Water Logistics Time Level 3 (CLP Forms) Level III Std QC+ Forms Level II Std QC Project Information Data Deliverable Information # of www.xenco.com 6 0101 h0807mg HCI NaOH/Zn Acetate INO3 Relinquished By: Custody Seal # Relinquished By: UST / RG -411 TRRP Level IV Level IV (Full Data Pkg /raw data) H2SO4 NaHSO4 MEOH NONE BTEX 8260 (5035) Norcross, Georgia (770-449-8800) Odessa, Texas (432-563-1800) Preserved where applicable 4 TPH Date Time: Date Time: X CHLORIDES Analytical Information FED-EX / UPS: Tracking # (resylos 970 HOL Received By: Received By: Xenco Job # 3 Farng ier 3.0/2.8 0 Lakeland, Florida (863-646-8526) Tampa, Florida (813-620-2000) above Field Comments 9 distres Thermo. Corr. Factor 0=01 SL = Sludge OW =Ocean/Sea Water WW= Waste Water W = Wipe P = Product A = Air SW = Surface water DW = Drinking Water S = Soil/Sed/Solid GW =Ground Water **Matrix Codes** V Prinding

Setting the Standard since 1990

Stafford, Texas (281-240-4200)

CHAIN OF CUSTODY

Constitution forms (a property)	No.				
Client / Reporting Information				Analytical ir	Analytical Information
Company Name / Branch: KJE, Enviromental & Civil Engineering	Project	Project Name/Number: OWL 0804 20 U	Norh		
Company Address: 500 Mosely Road, Cross Roads, Texas 76227	Project				
Email: james@kjenviromental.com Phone No: (940)387-0805	7-9875 Invoice To:	4			
Travis Reddick	PO Number:	N	-	35)	
ACCRETATION OF THE PROPERTY OF	Collection		Number of preserved bottles		
Field ID / Point of Collection	Sample Depth Date	Time Matrix bottles	NaOH/Zn Acetate HNO3 H2SO4 NaOH NaHSO4	BTEX 8 TPH CHLOR	
1h-P ho-55	8	1 55 5760	9	×	
55-05 0-7.5'	2.9	0530			
55-06 0-21	16	1 2460			
55-06 2-3'	31	2460			
16-0 60-55	9'	1000			
16-0 80-55	۵۱	1017			
55-08 2-31	3,	1000			
18-0 60-55	9-	1030			
1 2.	cv.	1035			
18-50 61-53	ð. N	P 1 94.01		< < <	
Turnaround Time (Business days)	-	Data Deliverable Information	formation		Notes:
Same Day TAT 5 Day TAT		Level II Std QC	Level IV (Full Data P	Pkg /raw data)	10LD all Sam
Next Day EMERGENCY 7 Day TAT		Level III Std QC+ Forms	TRRP Level IV	24	and BTEX Le
2 Day EMERGENCY Contract TAT		Level 3 (CLP Forms)	UST / RG -411	T'A	hard to of hisas
★ 3 Day EMERGENCY		TRRP Checklist			,
TAT Starts Day received by Lab, if received by 5:00 pm	pm				FED-EX / UPS: Tracking #
Relinquished by Sampler: SAMPLE CUSTODY N	Date Time:	SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY Received By: Received By: Relinquished By:	GE POSSESSION, INCLUDING COU Relinquished By:	URIER DELIVERY Date Time:	Received By:
Tribined by D.	8/25 /627 Date Time:	1 Received By:	2 Relinquished By:	Date Time:	Received By:
Relinquished by:	8 25 162 Date Time:	Received By:	4 Custody Seal #	Preserved where applicable	



CHAIN OF CUSTODY

630969

Relinquished by:	3 Clas Cifts	2 M		TAT Starts Day received by Lab, if received by 5:00 pm	3 Day EMERGENCY	2 Day EMERGENCY Contract TAT	Next Day EMERGENCY 7 Day TAT	Same Day TAT 5 Day TAT	Turnaround Time (Business days)	10 SS-15 2-4'	14-0 51-55 6	18-58-14 O-Ji	7 55-13 4-50	1 - 1 SI - 55 9	5 55-13 0-21	4 55-12 2-3.5'	3 55-12 6-21	2 55-11]-3'	1-0 11-55 1		No. Field ID / Point of Collection	allibra e cradilla	Samples Fox I Fav. 5 Keddick	edicka Rie-us.com	500 Mosely Road, Cross Roads, Texas 76227	Company Name / Branch: KJE, Environmental & Civil Engineering	Client / Reporting Information		Service Center - San Antonio, Texas (210-509-3334)	Dallas Texas (214-902-0300)	Stafford, Texas (281-240-4200)	
Date Time:	Date Time:	826 1637	TODY MUST BE DOCU	5:00 pm		4				A, A	٦,	٠, ٩	s.i	h/	J.	3.5'	۶,	3,	3,8	Sample Depth	Cc		Po	Phone No: (940)387-0805 Inv	3	Pr						
Received By:	Received By:	Received By:	SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER		TRRP Checklist	Level 3 (CLP Forms)	Level III Std QC+ Forms	Level II Std QC	Data Deliverable Information	1135 W V	1)\$4	1137	8111	IIIS III	1112	1107	204	1 1 950/	8172 1023 82 1	Date Time Matrix bottles T	Collection		PO Number:	Invoice To: Olifield Water Logistics	Project Location:	그류	Project Information		www.xenco.com			
Custody Seal #	Relinquished By:	Relinquished By:				UST / RG -411	TRRP Level IV	Level IV (Full Data Pkg /rav	nformation	4										NaOH/Z Acetate HNO3 H2SO4 NaOH NaHSO4 MEOH NONE	umber of preserved bottles					ander				2	0	
Preserved where applicable	Date Time:	Date Time:	DELIVERY	FE		٨		raw data)			~ ~									×	TPH CHLO			035)					Analytica	Xenco Quote #	Norcross, Georgia (770-449-8800)	Odessa, Texas (432-563-1800)
applicable On Ice Cooler Temp. Thermo, Corr. Factor	Received By:	Received By:	10 A	FED-EX / UPS: Tracking #		s of samples above a	sampling below 2.5 feet pendir	HOLD all BTEX and TPH,	Notes:											Field Comments	A = Ar	WW= Waste Water	W=Wipe O=Oil	SW = Surface water SL = Sludge OW = Ocean/Sea Water	GW = Ground Water DW = Drinking Water	S = Soll/Sed/Solid		Analytical Information Matrix Codes	Xenco Job #		-563-1800) Lakeland, Florida (863-646-8526)	

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 negicial under a fully executed client contract

XMNQQ LABORATORIES Setting the Standard since 1990

CHAIN OF CUSTODY

SS-18 G-1.S' J-38	Stafford, Texas (281-240-4200) Service Center - San Antonio, Texas (210-509-33) Service Center - San Antonio, Texas (210-509-33) Client / Reporting Information maany Name / Branch: E, Environmental & Civil Engineering mpany Address: D Mosely Road, Cross Roads, Texas 76227 Phone Texastic Intervironmental.com Texastic Intervironmen	T - Cat de	Project Information Project Information OWL102816D OWL 103 Itine Matrix bottles If y 1	NaOH/Zn Acetate HNO3 H2SO4 NaOH NaHSO4 MEOH NONE	Norcross, Georgia (770-449-8800) Xenco Quote # Xenco Quot	49-8800) Xenco Job #
SS-16	91-55 1-55	0	Matrix bottles T	Acetate HNO3 H2SO4 NaOH NaHSO	- × TPH	
A SS-17 O-J. S J-S J	25-16 9-	, ř, d	[M]			
SS - 18	0, 41-55	5.6	1230			
7 \$\$ - 19 \$\text{O-1}	1-55	w/ c	1936			
8 SS-19 d-4,S' 9 SS-13/6 0-3/3 10 SS+36/7 d-3/3 10 SS+36/	55-19	9.	A Syri			
9 35 - 136	61-55	4.5'	- War			
Data Deliverable Information Data Pkg /raw data)	25 - BG 9-55		1305			
Same Day TAT	Turnaround Time (Business days)			rmation		otes:
Day EMERGENCY			Level II Std QC	Level IV (Full Data Pi		10LD
2 Day EMERGENCY 2 Day EMERGENCY 3 Day EMERGENCY 3 Day EMERGENCY 411 TAT Starts Day received by Lab, if received by 5:00 pm TAT Starts Day received by Lab, if received by 5:00 pm SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY Relinquished by Sampler Received By: Received By: Received By: Received By: Received By: Date Time: Received By: Date Time: D			Level III Std QC+ Forms	TRRP Level IV	य	X
TAT Starts Day received by Lab, if received by 5:00 pm SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURSER DELIVERY Pate Time: C 1 Received By: C 2 Relinquished by: Date Time: C 2 Received By: Date Time: C 3 Received By: Date Time: Da			Level 3 (CLP Forms)	UST / RG -411	YK5	5
TAT Starts Day received by Lab, if received by 5:00 pm 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: Page Time: Received By: Page Time: Received By: Page Time: Received By: Page Time: Page Time	3 Day EMERGENCY		TRRP Checklist			
Relinquished by Sampler Date Time: Part	TAT Starts Day received by Lab, if received by 5	:00 pm			FED-E	(/ UPS:
Relinquished by: Date Time: Received By: Received By: Relinquished By: Date Time:	Sampler	Date Time:	Received By:			Received By:
	()	5	_	Relinquished By:	Date Time:	Received By:

IOS Number : **69397**

Date/Time: 08.26.2020 Created by: Cloe Clifton Please send report to: Jessica Kramer

Lab# From: Carlsbad Delivery Priority: Address: 1089 N Canal Street

Lab# To: **Midland** Air Bill No.: 771368231354 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	

IOS Number : **69397**

Date/Time: 08.26.2020 Cloe Clifton Please send report to: Jessica Kramer Created by:

1089 N Canal Street Lab# From: Carlsbad Address: Delivery Priority:

Lab# To: Midland Air Bill No.: 771368231354 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 24.5'	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 CliftonDate Sent:08.26.2020 10.45 AMReceived By:Brianna TeelDate 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 Yes #9 Sample matrix/ properties agree with IOS? #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 of	delivery of samples prior to pla	acing in the refrigerator	
NonConformance:			
Corrective Action Taken:			
	Nonconformance Docu	mentation	
Contact:	Contacted by :	Date:	
Checklist reviewed by:	Brianna Teel	Date: <u>08.27.2020</u>	

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: KJ Environmental & Civil Engineering

Date/ Time Received: 08.25.2020 04.27.00 PM

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

Temperature Measuring device used: T NM 007

Work Order #: 670969

Sample F	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/ receive	d? 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 r	ofriaorator	

Anal	lyst:
-∖iiai	ıysı.

PH Device/Lot#:

Checklist completed by:

Date: 08.26.2020

Checklist reviewed by: Jessica Vramer

Date: 08.26.2020



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/ga/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.

Celey D. Keine

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



Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Analyzed By MC

Received:

DTEV 0021D

10/07/2020

Sampling Date:

10/06/2020

Reported:

10/08/2020

Sampling Type:

Soil

Project Name:

HARRIER BOOSTER PUMP

Sampling Condition: Sample Received By: Cool & Intact
Tamara Oldaker

Project Number: Project Location:

NONE GIVEN NOT GIVEN

Sample ID: SP 11 @ N. WALL (H002657-01)

BTEX 8021B	mg,	/kg	Analyze	d 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	% 73.3-12	9								
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d 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	Analyze	d 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	% 44.3-14	4								
Surrogate: 1-Chlorooctadecane	94.8	% 42.2-15	6								

Cardinal Laboratories

*=Accredited Analyte

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Celeg D. Freene



Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Analyzed By: MS

Received:

10/07/2020

Sampling Date:

10/06/2020

Reported:

BTEX 8021B

10/08/2020

Sampling Type:

Soil

Project Name:

HARRIER BOOSTER PUMP

Sampling Condition: Sample Received By: Cool & Intact Tamara Oldaker

Project Number: Project Location:

NONE GIVEN

mg/kg

Sample ID: SP 11 @ W. WALL (H002657-02)

DILX GOZID	iiig/	, kg	Andryzo	u by. 1-15					
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	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d 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	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	104	% 42.2-15	6						

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*=Accredited Analyte

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Celey D. Kune



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: Sample Received By: Cool & Intact Tamara Oldaker

Project Number: Project Location:

NONE GIVEN

Sample ID: SP 11 @ E. WALL (H002657-03)

BTEX 8021B	mg,	/kg	Analyze	d 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	% 73.3-12	9							
Chloride, SM4500CI-B	mg,	/kg	Analyze	d 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	% 44.3-14	4							
Surrogate: 1-Chlorooctadecane	99.5	% 42.2-15	6							

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*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Analytical Results For:

OILFIELD WATER LOGISTICS PHILLIP SANDERS 8214 WESTCHESTER DRIVE, SUITE 850 **DALLAS TX, 75225** Fax To:

Received: 10/07/2020 Reported: 10/08/2020

Project Name: HARRIER BOOSTER PUMP

Project Number: NONE GIVEN

Project Location: **NOT GIVEN** Sampling Date: 10/06/2020

Sampling Type: Soil

Sampling Condition: Cool & Intact Sample Received By: Tamara Oldaker

Sample ID: SP 11 @ S. WALL (H002657-04)

BTEX 8021B	mg,	/kg	Analyze	d 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	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d 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	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	102	% 42.2-15	6						

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Celeg D. Keene



Analytical Results For:

OILFIELD WATER LOGISTICS PHILLIP SANDERS 8214 WESTCHESTER DRIVE, SUITE 850 DALLAS TX, 75225

Analyzed By: MS

Fax To:

Received:

10/07/2020

Sampling Date:

10/06/2020

Reported:

BTEX 8021B

10/08/2020

Sampling Type:

Soil

Project Name:

HARRIER BOOSTER PUMP

Sampling Condition: Sample Received By: Cool & Intact Tamara Oldaker

Project Number:

NONE GIVEN

mg/kg

Project Location: NOT GIVEN

Sample ID: SP 11 @ 3' (H002657-05)

	9/	9	7	7: : : :							
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	% 73.3-12	9								
Chloride, SM4500Cl-B	mg,	/kg	Analyze	ed 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	% 44.3-14	4								
Surrogate: 1-Chlorooctadecane	98.4	% 42.2-15	6								

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Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Applyzod By: MC

Fax

Received:

10/07/2020

Sampling Date:

10/06/2020

Reported:

10/08/2020

Sampling Type:

Soil

Project Name:

RTFY 8021R

HARRIER BOOSTER PUMP

Sampling Condition: Sample Received By: Cool & Intact

Project Number: Project Location:

NONE GIVEN

Sa

Tamara Oldaker

Sample ID: SP 15 @ S. WALL (H002657-06)

B1EX 8021B	mg	/ kg	Anaiyze	ea 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	% 73.3-12	9						
Chloride, SM4500CI-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	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	96.0	% 42.2-15	6						

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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

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Celeg D. Freene

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

(575) 393-2326 FAX (575) 393-2476 101 East Marland, Hobbs, NM 88240

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

J. J. Silling Lines			
Project Manager:	Γ	BILL TO	ANALYSIS BEOLIEST
Address:		P.O. #:	AWALTSIS REQUEST
City:		Company:	
Phone #	State: Zip:	Attn:	
Droinet #.	Fax#:	Address:	
Project No.	Project Owner:	City:	
	0	State: Zip:	
Finject Location: HUNCHA	yes poorter Puno	Phone #:	
FOR LABUSE DAILY	1		
-		ESERV. SAMPLING	
	(G)RAB OR (C)OM # CONTAINERS GROUNDWATER WASTEWATER SOIL	DIL SLUDGE OTHER: CID/BASE: DE / COOL THER:	
@ 11451	# C	O S O A O DATE TIME	
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011457	X	×	
S SPILE 3	×	X X 8S::1	
4 5815@S	Swall		
ISE NOTE: Liability and Damages, Cardinal's see, All claims including those for negligence.	PLEASE NOTE: Lability and Damages. Cardinal's lability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount and have seen and the claims what have been accompanied to the amount and have seen and the second to the second to tort, shall be limited to the amount and have seen and the second to the seco	in contract or fort, shall be limited to the amount out if we must be an account.	
Affiliate or successors arising out of or related to the Relinquished By:	Relinquished By: Date: Received By:	Relinquished By: Date:	No Add'l Phone #: No Add'l Fax #:
Relinquished By:		Michael@expertenviroservices.com	ervices.com
Sampler - UPS - Bus - Other:	Sample Condition Cool Intact Cool Intact Cool Intact No No	CHECKED BY: (Initials)	D. Ch
L >	ľ		



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/ga/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.

Celey D. Keine

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



Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

A ... - L ... - - - I D. .. MC

Received:

10/08/2020

Sampling Date:

10/07/2020

Reported:

10/09/2020

Sampling Type:

Soil

Project Name:

HARRIER BOOSTER PUMP

Sampling Condition: Sample Received By:

Cool & Intact Tamara Oldaker

Project Number:

NONE GIVEN

Project Location: NOT GIVEN

Sample ID: SP 15 @ N. WALL (H002674-01)

BTEX 8021B	mg,	/kg	Analyze	d 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	% 73.3-12	9						
Chloride, SM4500CI-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	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	141	% 42.2-15	6						

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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: Sample Received By: Cool & Intact Tamara Oldaker

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sample ID: SP 15 @ W. WALL (H002674-02)

BTEX 8021B	mg,	/kg	Analyze	d 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	% 73.3-12	9						
Chloride, SM4500CI-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	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	140	% 42.2-15	6						

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Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Applyzod By: MC

Received:

10/08/2020

Sampling Date:

10/07/2020

Reported:

10/09/2020

Sampling Type:

Soil

Project Name:

RTFY 8021R

HARRIER BOOSTER PUMP

Sampling Condition: Sample Received By: Cool & Intact Tamara Oldaker

Project Number: Project Location:

NONE GIVEN

Sample ID: SP 14 @ S. WALL (H002674-03)

BIEX 8021B	mg	/ kg	Anaiyze	а ву: м5					
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	% 73.3-12	9						
Chloride, SM4500CI-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	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	143	% 42.2-15	6						

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Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225

Analyzed By: MC

Fax To:

Received:

RTFY 8021R

10/08/2020

Sampling Date:

10/07/2020

Reported:

10/09/2020

Sampling Type:

Soil

Project Name:

HARRIER BOOSTER PUMP

Sampling Condition: Sample Received By: Cool & Intact Tamara Oldaker

Project Number:

NONE GIVEN

Project Location: NOT GIVEN

Sample ID: SP 14 @ E. WALL (H002674-04)

BS 2.11 2.12 2.08 5.97	% Recovery 106 106 104 99.5	True Value QC 2.00 2.00 2.00 2.00 6.00	4.45 4.24 4.38 4.24	Qualifier
2.12 2.08	106 104	2.00 2.00	4.24 4.38	
2.08	104	2.00	4.38	
5.97	99.5	6.00	4.24	
BS	% Recovery	True Value QC	RPD	Qualifier
400	100	400	3.92	
BS	% Recovery	True Value QC	RPD	Qualifier
214	107	200	5.94	
221	111	200	6.79	
2	14	14 107	14 107 200	14 107 200 5.94

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Analytical Results For:

OILFIELD WATER LOGISTICS
PHILLIP SANDERS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225
Fax To:

Analyzed By: MS

Received:

BTEX 8021B

10/08/2020

Sampling Date:

10/07/2020

Reported:

10/09/2020

Sampling Type:

Soil

Project Name:

HARRIER BOOSTER PUMP

Sampling Condition: Sample Received By: Cool & Intact Tamara Oldaker

Project Number:

NONE GIVEN

mg/kg

Project Location: NOT GIVEN

Sample ID: SP 14 @ 2' (H002674-05)

	91	9	7	7: : : :					
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	% 73.3-12	9						
Chloride, SM4500CI-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 %	26 44.3-14	4						
Surrogate: 1-Chlorooctadecane	128 9	% 42.2-15	6						

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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: Sample Received By: Cool & Intact Tamara Oldaker

Project Number: Project Location:

NONE GIVEN

NOT GIVEN

Sample ID: SP 14 @ N. WALL (H002674-06)

BTEX 8021B	mg/	kg	Analyze	d 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 % 73.3-12		9						
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 %	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	133 9	42.2-15	6						

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Celeg D. Keene



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: Sample Received By: Cool & Intact Tamara Oldaker

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sample ID: SP 15 @ 6' (H002674-07)

BTEX 8021B	mg/	kg	Analyze	d 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 % 73.3-12		9						
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 %	6 44.3-14	4						
Surrogate: 1-Chlorooctadecane	136 %	6 42.2-15	6						

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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

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Celeg D. Freene

Relinquished By

Received By:

Phone Result:

☐ Yes ☐ No

Add'l Phone #: Add'l Fax #:

Relinquished By:

Sampler - UPS - Bus - Other:

Sample Condition
Cool Intact
Yes Yes
No No

4

CHECKED BY

Michael (a) expect enviroservices, com

PSanders 1975@ Yahoo, com

(Initials)

Delivered By: (Circle One)

Time:



101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

analyses, All claims PLEASE NOTE: LI Sampler Name: Project Location: Project Name: Project #: Phone #: City: Project Manager: Company Name: OW C Address: FOR LAB USE ONLY Lab I.D 2514S 26/1/0 5915@1 Harrier Sample I.D. Booster Pump 500 2 Fax #: Project Owner: ₽ ♥ × × × (G)RAB OR (C)OMP Zip: # CONTAINERS GROUNDWATER WASTEWATER × X SOIL OIL SLUDGE City: OTHER Phone #: State: P.O. #: Fax #: Attn: Company: Exper Address: ACID/BASE PRESERV ICE / COOL OTHER BILL TO 10-7-20 10-7-30 10- 7-20 4:34 Zip: 10-7-20 DATE SAMPLING 4:40 1:58 12:13 1:40 1:45 TIME tion of the ap ANALYSIS REQUEST

ived by OCD: 10/26/2020 4:21:22 PM	Page 241 of
APPENDIX F	
NMOCD Approved C-141 Fo	orm

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			, LLC	OGRID	308339
Contact Name Mr. Phillip Sanders				Contact Te	Telephone 210-906-3551
Contact email psanders@oilfieldwaterlogistics.com			ogistics.com	Incident #	‡ (assigned by OCD)
Contact mailing address 8201 Preston Road, Suite 520, Dallas, T			oad, Suite 520, Da	allas, Texas 75225	5
			Location	of Release So	ource
Latitude 32.064992				Longitude	-103.629600
·			(NAD 83 in dec	rimal degrees to 5 decim	
Site Name H	larrier Bo	oster Pump		Site Type	Booster station
Date Release Dis	scovered	08/03/2020		API# (if app	pplicable)
		m 1'	D.		
Unit Letter S	Section	Township	Range 32E	Coun Lea Co	
	12	26S	32E	Lea Co	ounty
Surface Owner: [State [X Federal Tr	ibal Private (<i>N</i>	Name:)
	Е	BLM	Nature and	l Volume of I	Release
	Material	(s) Released (Select al	l that apply and attach	calculations or specific	c justification for the volumes provided below)
Crude Oil		Volume Released (bbls)			Volume Recovered (bbls)
X Produced Wa	ater	Volume Released (bbls) 280			Volume Recovered (bbls) 260
Is the concentration of dissolved chloride in produced water >10,000 mg/l?				hloride in the	Yes X No
Condensate Volume Released (bbls)			Volume Recovered (bbls)		
Natural Gas Volume Released (Mcf)			Volume Recovered (Mcf)		
Other (describe) Volume/Weight Released (provide units)		e units)	Volume/Weight Recovered (provide units)		
Cause of Release	 e				
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.					

- 7		2 / 2		" AA.
P	age	243	o_I	294
_	8-		\sim J	

Incident ID	NRM2021932931
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the respon	sible party consider this a major release?
release as defined by 19.15.29.7(A) NMAC?	Approximately 280 BBLs of prod	uced water was released to surrounding soil.
X Yes □ No		
Yes No		
If YES, was immediate no	Lotice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?
	·	5-840-5961) and BLM (Mr. Ross Klein,
	`	the release. KJE left a voicemail for Ross on
8/4/20 1345.		
	Initial Re	esponse
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 rele	ease has been stopped.	
37	is been secured to protect human health and	the environment.
**		ikes, absorbent pads, or other containment devices.
	ecoverable materials have been removed and	
	d above have <u>not</u> been undertaken, explain v	
N/A; Owl transpor	rted and disposed of recovered fluid t	o Delaware Basin Landini.
		emediation immediately after discovery of a release. If remediation
		efforts have been successfully completed or if the release occurred lease attach all information needed for closure evaluation.
I hereby certify that the info	rmation given above is true and complete to the b	pest of my knowledge and understand that pursuant to OCD rules and
regulations all operators are	required to report and/or file certain release notif	ications and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have
failed to adequately investig	ate and remediate contamination that pose a threa	at to groundwater, surface water, human health or the environment. In
addition, OCD acceptance of and/or regulations,	f a C-141 report does not relieve the operator of i	responsibility for compliance with any other federal, state, or local laws
	in Sanders	Title: HSE Director
Printed Name:	7	
Signature:		Date: 4 4 2 0
email: DSCLONPI	5 Onlfre duater logistics. Com	Date: 8 4 2 0 Telephone: 432-269-3735
F-01 16 CT	<u> </u>	
OCD Only		
Received by:		Date:

Received by OCD: 10/26/2020 4:21:22 PM Form C-141 State of New Mexico Oil Conservation Division Page 3

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Incident ID	NRM2021932931	
District RP		
Facility ID		
Application ID		

Site Assessment/Characterization

This information must be provided to the appropriate district office to taler than 20 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 X No		
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	Yes X 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 X No		
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	Yes X 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 X 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 X No		
Are the lateral extents of the release within 300 feet of a wetland?	Yes X 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 X 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?	X 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.
<u> </u>
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
X Field data
Data table of soil contaminant concentration data
X Depth to water determination
X 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.

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Incident ID	NRM2021932931
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a threaddition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations. Printed Name: Signature: email:	ifications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have eat to groundwater, surface water, human health or the environment. In
OCD Only	
Received by:	Date:

Detailed description of proposed remediation technique

Remediation Plan Checklist: Each of the following items must be included in the plan.

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Incident ID NRM2021932931
District RP
Facility ID
Application ID

Remediation Plan

 Scaled sitemap with GPS coordinates showing delineation points Estimated volume of material to be remediated Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(Proposed schedule for remediation (note if remediation plan timeline) 	
Deferral Requests Only: Each of the following items must be confirme	d as part of any request for deferral of remediation.
X Contamination must be in areas immediately under or around product deconstruction.	on equipment where remediation could cause a major facility
X Extents of contamination must be fully delineated.	
🗵 Contamination does not cause an imminent risk to human health, the	environment, or groundwater.
Signature: Da email: Te	release notifications and perform corrective actions for releases a C-141 report by the OCD does not relieve the operator of emediate contamination that pose a threat to groundwater, ance of a C-141 report does not relieve the operator of ad/or regulations.
OCD Only Orientina Fords	40/00/0000
Received by: Cristina Eads Date	
Approved Approved with Attached Conditions of Appro	val 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."

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X A scaled site and sampling diagram as described in 19.15.29.11 NMAC

	Page 247 of 29
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.

must be notified 2 days prior to liner inspection)	ill or photos of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appro	opriate ODC District office must be notified 2 days prior to final sampling)
■ Description of remediation activities	
and regulations all operators are required to report and/o may endanger public health or the environment. The ac should their operations have failed to adequately investi human health or the environment. In addition, OCD acc compliance with any other federal, state, or local laws at restore, reclaim, and re-vegetate the impacted surface ar	and complete to the best of my knowledge and understand that pursuant to OCD rules or file certain release notifications and perform corrective actions for releases which eceptance of a C-141 report by the OCD does not relieve the operator of liability figate and remediate contamination that pose a threat to groundwater, surface water, eceptance of a C-141 report does not relieve the operator of responsibility for and/or regulations. The responsible party acknowledges they must substantially rea to the conditions that existed prior to the release or their final land use in the ton to the OCD when reclimation and revegetation are complete. Date: Date: Title: Date: Telephone: T
OCD Only	
Received by:	Date:
	nsible party of liability should their operations have failed to adequately investigate and ster, surface water, human health, or the environment nor does not relieve the responsible al laws and/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

APPENDIX G	
Α΄΄΄΄ Α΄΄ Α΄΄ Α΄΄ Α΄΄ Α΄΄ Α΄ Θ΄ Α΄΄ Α΄ Θ΄ Α	
monday illine ill as	

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	
Purpose:	Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well (Pump test)	Construction Site/Put Works Dewatering	blic Other(Describe):
Monitoring Well	Mine Dewatering	
A separate permit will be required	d to apply water to beneficial us	se regardless if use is consumptive or nonconsumptive.
■ Temporary Request - Reques	ted Start Date: 10/5/2020	Requested End Date: 10/6/2020
Plugging Plan of Operations Sub	mitted? Yes No	

. APPLICANT(S)		
Name: KJ Environmental		Name:
Contact or Agent:	check here if Agent	Contact or Agent: check here if Agent
Fravis Reddick	•	3.55
Mailing Address: 500 Moseley Road		Mailing Address:
City:		City:
Cross Roads State:	Zin Codo:	State: 71-0-da
TX	Zip Code: 76227	State: Zip Code:
Phone: 214-287-5875	☐ Home ☐ Cell	Phone:
Phone (Work):		Phone (Work):
E-mail (optional):		E-mail (optional):
		l .
reddick@kje-us.com		
reddick@kje-us.com		
reddick@kje-us.com		DOT ON DOT 1 DODG AND O'D R
reddick@kje-us.com		OSE DIT OCT 1 2020 #ML0108
reddick@kje-us.com		DSE DIT OCT 1 2020 RM10108
reddick@kje-us.com	FOR OSE INTERNAL USE	Application for Permit, Form WR-07, Rev 11/17/16

FILE No.: LAURS Application for Permit, Form WR-07, Rev 11/17/16

File No.: LAURS Trm. No.: CAURS Receipt No.: LAURS PCW/LOG Due Date: 10 0 202

Page 1 of 3

2.	WELL(S)	Describe	the	well(s	ap	plicable	to	this	applicati	or

(Lat/Long - WGS84).		•	tate Plane (NAD 83), UTM (NAD 83), <u>or</u> Latitude/Longitude a PLSS location in addition to above.				
☐ NM State Plane (NAD83) ☐ NM West Zone ☐ NM East Zone ☐ NM Central Zone		JTM (NAD83) (Mete]Zone 12N]Zone 13N	Lat/Long (WGS84) (to the nearest 1/10 th 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				
2.4475 PODI	629271	3548560	Unit C, Section 12, Township 26S, Range 32E, Lea County				
NOTE: If more well locations Additional well descriptions	s need to be describ are attached:	ed, complete form	WR-08 (Attachment 1 – POD Descriptions) If yes, how many				
Other description relating well	to common landmark	s, streets, or other:					
Well is on land owned by: BLM	1						
Well Information: NOTE: If m	nore than one (1) we	ll needs to be desc	cribed, provide attachment. Attached? Yes No				
Approximate depth of well (fee	<u> </u>		Outside diameter of well casing (inches):2"				
Driller Name: Enviro - D	ill, Inc.	D	riller License Number: WD 1186				
. ADDITIONAL STATEMENTS							
equirements. Well will be drilled	to approximately 60'	using Air Rotary te	ereof) of groundwater in order to satisfy OCD closure chniques, tested for groundwater the next day, then plugged and call or e-mail when application				
			05E DT 00T 1 2020 ML0:08				
		**-					

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.:
Tm No.:
Page 2 of 3

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: Pollution Control and/or Recovery: Construction Mine De-Watering: ☐ Include a Include a plan for pollution De-Watering: ☐ Include a plan for pollution description of control/recovery, that includes the Include a description of the control/recovery, that includes the following: any proposed following: proposed dewatering A description of the need for mine A description of the need for the pump test, if operation. dewatering. pollution control or recovery operation. applicable. The estimated duration of ☐ The estimated maximum period of time The estimated maximum period of the operation, for completion of the operation. time for completion of the operation. The maximum amount of The source(s) of the water to be diverted. ☐ The annual diversion amount. water to be diverted, ☐The geohydrologic characteristics of the ☐ The annual consumptive use ☐ A description of the need aquifer(s). amount. for the dewatering operation, ☐The maximum amount of water to be ☐ The maximum amount of water to be diverted per annum. diverted and injected for the duration of A description of how the ☐The maximum amount of water to be the operation. diverted water will be disposed diverted for the duration of the operation. ☐ The method and place of discharge. ☐The quality of the water. Monitoring: ☐ The method of measurement of The method of measurement of water Ground Source Heat Pump: water produced and discharged. Include the ☐ Include a description of the diverted. ☐ The source of water to be injected. ☐ The method of measurement of ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of reason for the geothermal heat exchange monitoring project, well, and, water injected. ☐ The number of boreholes hydrologic effect of the project. ☐ The characteristics of the aquifer.
☐ The method of determining the The for the completed project and ☐The method and place of discharge. duration required depths. An estimation of the effects on surface of the planned resulting annual consumptive use of ☐ The time frame for water rights and underground water rights water and depletion from any related from the mine dewatering project. monitoring. constructing the geothermal stream system. heat exchange project, and, A description of the methods employed to ☐ The duration of the project. ☐ Preliminary surveys, design Proof of any permit required from the estimate effects on surface water rights and New Mexico Environment Department. underground water rights. An access agreement if the data, and additional Information on existing wells, rivers, applicant is not the owner of the land on information shall be included to springs, and wetlands within the area of which the pollution plume control or provide all essential facts hydrologic effect. recovery well is to be located. relating to the request. ACKNOWLEDGEMENT Travis Reddick I, We (name of applicant(s)), 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. day of SEPT 20 20 , for the State Engineer, Witness my hand and seal this ANTONIO, JR., P.E.___, State Engineer JUAN HERNANDEZ Signature WATER RESOURCES MANAGER I Title: Print

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.: Trn No.: Page 3 of 3

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.

Trn Desc: C 04485 POD1 File Number: C 04485
Trn Number: 679614

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.
- 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.

Trn Desc: C 04485 POD1 File Number: C 04485

Trn Number: 679614

Received by OCD: 10/26/2020 4:21:22 PM

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.

withess my hand and sear this 06 day of Oct A.D., 20;	06 day of Oct A.D., 2020
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John R. D Antorio, Av. P.E. , State Engineer

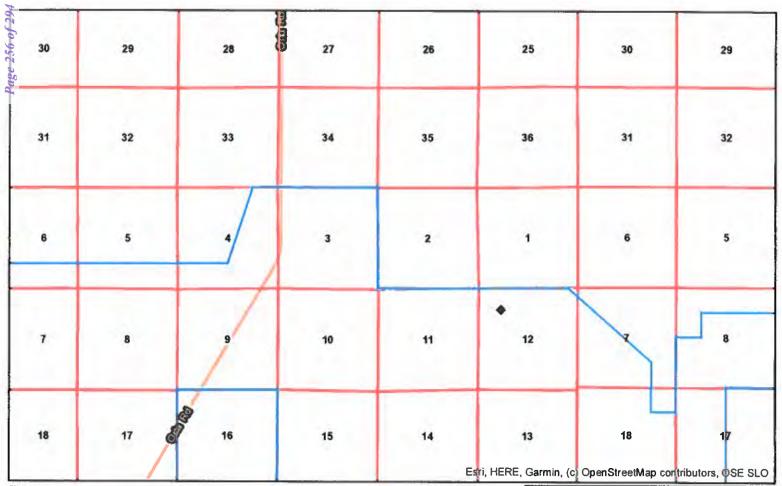
JUAN HERNANDEZ

STATE OF STA

Trn Desc: C 04485 POD1 File Number: C 04485

Trn Number: 679614

page: 3



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

Parcel Information

UPC/DocNum:

Parcel Owner:

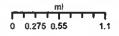
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Legal:

Received by OCD: 10/26/2020 4:21:22

NEW MEXICO OFFICE OF THE STATE ENGINEER

1:72,224





GUILLEN

10/5/2020



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

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

TE: X	\$ 50.00	
CHECK NO.: 940 CASH: CITY: STATE: O payor; pink copy to Program Support/ASD; and yell	C. Well Driller Fees 1. Application for Well Driller's License 2. Application for Renewal of Well Driller's License 3. Application to Amend Well Driller's License D. Reproduction of Documents @ 0.25¢ Map(s) F. Other G. Comments:	
FILE NO.: DOLLARS Company to pairly deposit.	\$ 5.00 \$ 10.00 \$ 25.00 \$ 200.00 \$ 100.00 \$ 100.00 \$ 25.00 \$ 100.00 \$ 100.00 \$ 10.00 \$ 10.00 \$ 10.00	
OFFICIAL RECEIPT NUMBER: 2-42599 TOTAL: PAYOR: K TOTAL: RECEIVED BY: INSTRUCTIONS: Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. Original to payor; plink 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.	B. Surface Water Filing Fees 1. Change of Ownership of a Water Right 2. Declaration of Water Right 3. Amended Declaration 4. Application to Change Point of Diversion 5. Application to Change Point of Diversion 6. Application to Change Point of Diversion 7. Application to Change Point of 7. Application to Change Place and/or 8. Application to Change Place and/or 8. Application to Change Place and/or 9. Notice of Intent to Appropriate 9. Notice of Intent to Appropriate 11. Supplemental Well to a Surface Right 12. Return Flow Credit 13. Proof of Completion of Works 14. Proof of Application of Water to 8. Beneficial Use 15. Water Development Plan 16. Declaration of Livestock Water 17. Application for Livestock Water 18. Impoundment 19. Application for Livestock Water 17. Application for Livestock Water 17. Application for Livestock Water	All fees are non-refundable.
BECEIVED: The man of the original and all	# 2.00 # 125.00 # 75.00 # 75.00 # 75.00 # 25.00 # 50.00 # 50.00	\$ 5.00 \$ 25.00 \$ 25.00 \$ 25.00
OFFICIAL RECEIPT NUMBER: 2-42599 TOTAL: PAYOR: K ZIP: RECEIVED BY: INSTRUCTIONS: Indicate the number of actions to the left for Water Rights. If a mistake is made, void the original and	A. Ground Water Filing Fees 1. Change of Ownership of Water Right 2. Application to Appropriate or Supplement Domestic 72-12-1 Well 3. Application for Replacement 72-12-1 Well 6. Application to Change Purpose of Use 72-12-1 Well 72-12-1 Well 8. Application for Stock Well/Temp. Use 8. Declaration of Water Right 9. Application for Additional Point of Diversion Non 72-12-1 Per Well 10. Application to Change Place or Purpose of Use Rompose of Use Non 72-12-1 Well 11. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water 12. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water 13. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water 13. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water 13. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water 14. Application to Repair or Deepen 15. Application to Repair or Deepen 16. Application to Repair or Deepen 17. Application to Repair or Deepen 18. Application to Repair or Deepen 19. Application to Repair or Deepen	15. Application for Test, Expl. Observ. Well 16. Application for Extension of Time 17. Proof of Application to Beneficial Use 18. Notice of Intent to Appropriate

Guillen, Claudia, OSE

From:

Travis Reddick [TReddick@kje-us.com]

Sent: To:

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

F	Lognes	NO 70-21								
Z		NO. (WELL N 4485	•	OWL 362	WELL TAG ID NO. NA		OSE FILE NO	, ,		
GENERAL AND WELL LOCATION		/NER NAME	(S)			***	PHONE (OPT	4485		
700'	KJ ENV	IRONME	NTAL				214-287-58	,		
170	1		NG ADDRESS				CITY		STATE	ZIP
WE	500 MO	SSELEY F	ROAD				CROSS RO	DADS	TX 76227	2
QN	WEL	L		DEGREES	MINUTES SEC	CONDS				
AL A	LOCAT	ION L	ATITUDE	3548560		Ν	* ACCURAC	Y REQUIRED: ONE TE	NTH OF A SECOND	
KER	(FROM		ONGITUDE	629271		W	* DATUM RE	EQUIRED: WGS 84		
1. GE	DESCRIP	TION RELAT	ING WELL LOCATION	TO STREET ADDI	RESS AND COMMON LAND	MARKS PLS	S (SECTION, TO	DWNSHJIP, RANGE) W	HERE AVAILABLE	
	LICENSE N	IO.	NAME OF LICENSE	D DRILLER			*******	NAME OF WELL DI	RILLING COMPANY	
	WD	1186		RO	DNEY HAMMER			l .	VIRO-DRILL, INC.	
	DRILLING	STARTED 5/2020	DRILLING ENDED 10/06/2020	DEPTH OF CO.	MPLETED WELL (FT)	BORE HOL	LE DEPTH (FT)	1 .	RST ENCOUNTERED (FT)
	10/0.	7/2020	10/00/2020		55'	5	5'	None		
NO	COMPLETI	ED WELL IS:	ARTESIAN	DRY HOL	E SHALLOW (UNC	CONFINED)		STATIC WATER LE	VEL IN COMPLETED WI	ELL (FT)
ATI	DRILLING	FLUID:	AIR	MUD	ADDITIVES - SP	ECIFY:				
CASING INFORMATION	DRILLING	METHOD:	ROTARY	HAMMER	CABLE TOOL	Хотнег	R - SPECIFY:	SA		
	DEPTH	(feet bgl)	BORE HOLE	CASING	MATERIAL AND/OR	CA	SING	CASING	CASING WALL	SLOT
	FROM	то	DIAM	(include e	GRADE ach casing string, and	CONN	ECTION	INSIDE DIAM.	THICKNESS	SLOT SIZE
CAS			(inches)	note s	ections of screen)	(add coupli	YPE ing diameter)	(inches)	(inches)	(inches)
2. DRILLING &	<u>55</u> 45	45	8" 8"	Scr	een	F2	1	2"	2"	-010
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	DEPTH		BORE HOLE DIAM. (inches)	1	FANNULAR SEAL MA		1	AMOUNT	МЕТНОІ	
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ANNULAR MATERIAL								MIN.		
3. A										
FOR O	SE INTERI	NAL USE					WR-20	WELL RECORD &	LOG (Version 06/30	/17)
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LOCA	TION					W	ELL TAG ID	NO.	PAGE 1	OF 2

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			THICKNESS	COLOR AND TYPE OF MATERIAL ENCO INCLUDE WATER-BEARING CAVITIES OR FR		WATER BEARING?	YIELD FOR WATER-
	FROM TO (fe		(feet)	(attach supplemental sheets to fully describ		(YES / NO)	BEARING
					- V	ZONES (gpm)	
	0	10		Sand + gravel gravel + Calicho Caliche	Y 🔞		
	10	25		gravel + Calicha		Y 🔞	
	25	45		Caliche	***************************************	Y 🔞	7
	45	<u>55</u>		Sandstone		Y 🚳	
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LL						Y N	
4. HYDROGEOLOGIC LOG OF WELL						Y N	A
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	METHODIA	SED TO EST	DIMATE VIELD	OF WATER-BEARING STRATA:	T 707		
					•	TAL ESTIMATED LL YIELD (gpm):	0.00
	PUMP AIR LIFT BAILER OTHER - SPECIFY:						0.00
Z	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 BERIOD.						
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TEST; RIG SUPERVISIO	MISCELLAN	EOUS INFO	ORMATION:				
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T; R							
TES	PRINT NAM	E(S) OF DR	ILL RIG SUPERV	VISOR(S) THAT PROVIDED ONSITE SUPERVISION	of well constru	ICTION OTHER TH	AN LICENSEE:
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Ę				DAYS AFTER COMPLETION OF WELL DRILLING:			BENOMBER
SIGNATURE	Ŋ		.1				
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.6		SIGNATU	RE OF DRILLER	/ PRINT SIGNEE NAME		DATE	
<u> </u>							
1	OSE INTERN	AL USE		,		CORD & LOG (Ver	sion 06/30/2017)
FILE	NO NO			POD NO.	TRN NO.		1

PAGE 2 OF 2

WELL TAG ID NO.

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APPENDIX	хн
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1625 N. F ench Dr., Hobb IM 88240 District II 811 S. Fit t St., Artesia, N

1000 Rio Jrazos Road, Az

1220 S. S Francis Dr., Sa

District II

District I'

NM 87410

Fc, 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

Page 262 of 294

Form C-138

documentation available for Division inspection,

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE I. Gen :rator Name nd Address: OV L (Oilfie | Water Logistics SWD) Ori finating Site Harrier Boos r Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders Los ition of Mat ial (Street Address, City, State or ULSTR); Sar le as above NO API # for this location Source and Desc ption of Waste: Contaminated Soil/Caliche Backfill Estimat d Volume yd3 / bbls Known Volume (to be entered by the operator at the end of the haul) bbls GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS Phill > Sanders , representative or authorized agent for do hereby the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 certify t at according regulate y determinat n, 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-Operator Use Only: Waste Acceptance Frequency | Monthly | Weekly | Per Load exe npt waste. RCRA Nonempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by plished in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, cha acteristics es sub art D, as am ded. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate it ☐ MSI 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 representative for do hereby certify that represer lative sample of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples form to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative: inples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.3 NMAC. 5. Transporter: JMJ OCD Pe mitted Surfi : Waste Management Facility Name and Facility 1 mit #: Northern Delaware Basin Landfill (NM1-63) Addre s of Facility: 029 W. NM Hwy 128 Jal, NM 88252 Methe I of Treatme and/or Disposal: □ Eva ration □ Injection □ Treating Plant □ Landfarm □ Landfill □ Other Waste A ceptance St 1s: ☐ APPROVED DENIED (Must Be Maintained As Permanent Record) DATE: 10-8-27 scalehouse PRINT NAME: TITLE: SIGNAT JRE: TELEPHONE NO.: _505-231-1071

Waste Management Facility Authorized Agent

Reserved by OCD: 10/26/2020 4:21:22 PM 1625 N F :nch Dt , Hohbs | M 88240

District II

811 S. Fir : St., Artesia, N1 38210

| District II | 1000 Rin | razos Road, Az | NM 87410 | | District IN | 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

Page 263 of 294 Form C-138 Revised August 1, 2011

	REQUEST FOR APP	ROVAL TO ACCE	PT SOLID WAST	E
1. Gen rator Name				
OW L (Oilfie	Water Logistics SWD)		
2. Ori inating Site				
Ha rier Boos	c Pump Lea Co, NA	M AFE: 4326	Co Man: Phillip	Sanders
	ial (Street Address, City, State		A A LAMIN TO THE PARTY	
	The state of the state of the			
4. Sou ce and Desc	ntion of Waster	NO API A	for this location	
4. Sou ce and Desc	Contaminated Soil			DumpTruck
Estimate d Volume		lume (to be entered by the op-		/2 (yd bbls
5.	GENERATOR CERTIF	FICATION STATEMENT	OF WASTE STATUS	0
I, Philli) Sanders	, representative or au	uthorized agent for		do hereby
certify t at according regulato y determinat	the Resource Conservation and 1, the above described waste is: (tion Agency's July 1988
X RCRA Exe exe 1pt waste.	ot: Oil field wastes generated fro Operator Use Only: Waste Acc			
RCRA Non-l cha acteristics es sub art D, as am the ppropriate it	ded. The following documentati	CFR 261.21-261.24, or listed	hazardous waste as defined	l in 40 CFR, part 261,
☐ MSL S Informatio	☐ RCRA Hazardous Waste A	Analysis X□ Process Know	vledge	description in Box 4)
GENER/	OR 19.15.36.15 WASTE TEST	TING CERTIFICATION ST	FATEMENT FOR LANDI	FARMS
1,	, representative for		do here	by certify that
represer ative sample have been found to co of the representative s 19.15.30 NMAC.	of the oil field waste have been so form to the specific requirements inples are attached to demonstrate	s applicable to landfarms purs	uant to Section 15 of 19.15.	36 NMAC. The results
5. Tra isporter:	JMJ		Sar	itana O
OCD Per mitted Surfa	: Waste Management Facility			
Name and Facility I	mit #: Northern Delaware B	Basin Landfill (NM1-63)		18474
Addre s of Facility:)29 W. NM Hwy 128 Jal, NM 8	8252		
Methe I of Treatmen	and/or Disposal:			
☐ Evaj	ration Injection Tre	eating Plant 🔲 Landfarm	☐ Landfill ☐ Other	
Waste A ceptance Sta	is: APPROVE	ED 🗆 DE	NIED (Must Be Maintained	
PRINT NAME:		TITLE:scalehouse	D	ATE: 10-8-20
SIGNAT JRE: Suprac	Waste Management Facility Authorized		O.: _505-231-1071	

Received by OCD: 10/26/2020 4:21:22 PM 1625 N French Dr., 1101 , NM 88240 District II 811 S irst St., Artesia, vi 88210 District III 1000 R 3 Brazos Road, tec, NM 87410

District IV 1220 S St. Francis Dr.,

Ita Fc, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection

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Revised August 1, 2011

	REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE
1. G nerator Nar OWL (Oilf	and Address: ld Water Logistics SWD)
2. O riginating Si	1
I arrier Bo	ter Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders
	erial (Street Address, City, State or ULSTR):
S me as above	NO API # for this location
4. Source and De	to the contract of the contrac
	Contaminated Soil:
Estim ted Volume	yd3 / bbls Known Volume (to be entered by the operator at the end of the haul)
5.	GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
I, Phi lip Sanders	, representative or authorized agent for do hereby
certify that according regula ory determination	to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 ion, the above described waste is: (Check the appropriate classification)
X RCRA E e: empt waste.	mpt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- Operator Use Only: Waste Acceptance Frequency
[RCRA Noi cl aracteristics st ppart D, as a th appropriate	Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by ablished in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, anded. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check ams)
☐ M DS Informat	n ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)
GENEI	TOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
1	, representative for do hereby certify that
repres ntative samp have then found to of the epresentative 19.15. 16 NMAC.	s of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples nform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results amples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of
5. T ansporter:	
.s. I ansporter.	JMJ Carlos C.
OCD P :rmitted Sur	ce Waste Management Facility
Nam : and Facility	'ermit #: Northern Delaware Basin Landfill (NM1-63) 18675
Add ess of Facilit	2029 W. NM Hwy 128 Jal, NM 88252
Metl od of Treatir	it and/or Disposal:
☐ Ev	oration Injection Treating Plant Landfarm Landfill Other
Waste (cceptance §	tus: DENIED (Must Be Maintained As Permanent Record)
PRINT NAME:	, TITLE: scalehouse DATE: 10-8-20
SIGNA URE:	TELEPHONE NO.: 505-231-1071

Received by OCD: 10/26/2020 4:21:22 PM
1625 N. French Dr., Holibs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410

1220 S. St. Francis Dr., Santa Fe, NM 87505

District IV

State of New Mexico Energy Minerals and Natural Resources Page 265 of 294
Revised August 1, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 *Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection,

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

			I I OK MI I KO	THE TO THOU	I I GOLID 112	10.1.0
	enerator Name and WL (Oilfield V	All the Street Control of the second	gistics SWD)			
2. 0	riginating Site:	-10				
Œ	larrier Booster I	ump	Lea Co, NM	AFE: 4326	Co Man: Pi	nillip Sanders
			Iress, City, State or U			
			A STATE OF THE STATE OF	A CANA		N. other
	ame as above			NO API	# for this location	DumpTruck
4. Sc	ource and Description	on of Wasto	2			
	(Contami	nated Soil'			
Estima	ated Volume	vd3 / l	bls Known Volume	to be entered by the on	erator at the end of the	haul) 12 (vd Abbls
5.			RATOR CERTIFICA			
I. Phi	llip Sanders	. re	presentative or authoriz	red agent for		do hereby
		Resource (very Act (RCRA) and th		Protection Agency's July 1988
			astes generated from oil Only: Waste Acceptar			s and are not mixed with non- Per Load
ch su th	naracteristics establis bpart D, as amended e appropriate items)	hed in RCR. The follow	A regulations, 40 CFR wing documentation is	261,21-261,24, or listed attached to demonstrate	d hazardous waste as de the above-described v	undards for waste hazardous by efined in 40 CFR, part 261, waste is non-hazardous. (Check
□ MS	SDS Information	RCRA H	azardous Waste Analys	is X□ Process Know	vledge	vide description in Box 4)
	GENERATOR	19.15.36.1	5 WASTE TESTING	CERTIFICATION ST	TATEMENT FOR L	ANDFARMS
1.		re	presentative for		Ac	hereby certify that
have b	een found to conform representative sample	he oil field w n to the spec	vaste have been subject	cable to landfarms purs	t and tested for chlorid	e content and that the samples 9.15.36 NMAC. The results
19.15	36 NMAC.					
5. Tı	ansporter: JN	иј			(arlos C.
OCD P	ermitted Surface W	aste Manag	ement Facility			
			rn Delaware Basin	Landfill (NM1-63)		18760
Addr	ess of Facility: 2029	W. NM IIw	y 128 Jal, NM 88252			
Meth	od of Treatment and	or Disposal	:		,	
	☐ Evaporation	on 🗌 Inj	ection Treating I	Plant 🔲 Landfarm	☐ Landfill ☐ O	ther
Waste A	Acceptance Status:		APPROVED	☐ DE	NIED (Must Bc Maint	ained As Permanent Record)
DINE	NAME.		THE PROPERTY.	and the same		DATE: 10-9-20
	NAME:	1	1	TITLES.		DATE: 10-7- 20
SIGNA		Management	Facility Authorized Agent	TELEPHONE N	O.: 505-231-1071	
	()		3			

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State of New Mexico Energy Minerals and Natural Resources Page 266 of 294
Revised August 1, 2011

District II 811 S. Fir: St., Artesia, N2 :8210

District III

SIGNATI RE: (

Vaste Management Facility Authorized Agent

1000 Rio I razos Road, Azi

District IV 1220 S. St. Francis Dr., Sau Fe, NM 87505

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe NIM 87505

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

	Santa Fe, NM 87303
	REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE
1. Gen rator Name OW L (Oilfie	ud Address: Water Logistics SWD)
2. Ori inating Site	
Ha rier Boos	r Pomp Lea Co, NM AFE: 4326 Co Man: Phillip Sanders
3. Loc tion of Mat-	
San e as above	NO API # for this location Jump truck
4. Sou ce and Desc	
	Contaminated Soil/
Estimate Volume	yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) (yd³) bbls
5. Philli Sanders	GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
certify that according regulatory determinat	, representative or authorized agent for do hereby the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 i, the above described waste is: (Check the appropriate classification)
X RCRA Exe exci ipt waste.	ot: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- Operator Use Only: Waste Acceptance Frequency Monthly Weekly Per Load
CRA Non-l chai icteristics est subj art D, as ame the ppropriate it-	empt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by lished in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, led. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check is)
☐ MSE 3 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
1,	, representative for do hereby certify that
represen alive sample have been found to co- of the re-resentative s 19.15.36 NMAC.	of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples orm to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results apples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of
5. Tra sporter:	JMJ Sanlana O.
OCD Per nitted Surfa	Waste Management Facility + 1876
Name nd Facility F	waste Management Facility mit #: Northern Delaware Basin Landfill (NM1-63) Truck # 1876
Addres a of Facility:	129 W. NM Hwy 128 Jal, NM 88252
Metho of Treatmer	and/or Disposal:
☐ Evar	ation Injection Treating Plant Landfarm Landfill Other
Vaste Acceptance Sta	s: DENIED (Must Be Maintained As Permanent Record)
PRINT NAME:	TITLE: scalehouse DATE: 10/09/20
2	

TELEPHONE NO.: _505-231-1071

Received by OCD: 10/26/2020 4:21:22 PM 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

SIGNATURE:

Surface Waste Management Facility Authorized Agent

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

Page 267 of 294 Form C-138

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPRO	OVAL TO ACCE	PT SOLID WAST	E
Generator Name and Address: OWL (Oilfield Water Logistics SWD)		THE THIRD	_
2. Originating Site:			
Harrier Booster Pump Lea Co, NM	DO: 4326	Co Man: Phillip	Sanders
3. Location of Material (Street Address, City, State or U			340,000
Same as above	NO API #	for this location	
4. Source and Description of Waste:			DIMPATURE
Contaminated Soil/Cali	che Backfill		DUMP-TRUCK
Estimated Volume yd3 / bbls Known Volume	(to be entered by the ope	erator at the end of the haul) 12 (yd³) bbls
5. GENERATOR CERTIFICA I, Phillip Sanders , representative or author		OF WASTE STATUS	,
I,	overy Act (RCRA) and th		do hereby ction Agency's July 1988
X RCRA Exempt: Oil field wastes generated from o exempt waste. Operator Use Only: Waste Accepta	il and gas exploration and	d production operations and	d are not mixed with non-
RCRA Non-Exempt: Oil field waste which is non-hearacteristics established in RCRA regulations, 40 CFR subpart D, as amended. The following documentation is the appropriate items)	2 261.21-261.24, or listed attached to demonstrate	hazardous waste as define the above-described waste	d in 40 CFR, part 261, is non-hazardous. (Check
☐ MSDS Information ☐ RCRA Hazardous Waste Analy			
GENERATOR 19.15.36.15 WASTE TESTING	CERTIFICATION ST		
l,, representative for	cted to the paint filter test	and tested for chloride con	by certify that stent and that the samples
have been found to conform to the specific requirements applied the representative samples are attached to demonstrate the 19.15.36 NMAC.	licable to landfarms pursu	ant to Section 15 of 19.15.	36 NMAC. The results
5. Transporter: JMJ		Carlos	Chaves
OCD Permitted Surface Waste Management Facility			Chris
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:			land 1
☐ Evaporation ☐ Injection ☐ Treating	Plant Landfarm	I.andfill ☐ Other	1844
Waste Acceptance Status:	□ pes	JIFD (Must De Meinte	I An Downswart Daniell
	and district	NED (Must Be Maintained	
PRINT NAME:	TITLE: scalehouse	D	ATE: 067-20

TELEPHONE NO.: 505-231-1071

Received by OCD: 10/26/2020 4:21:22 PM

State of New Mexico

Energy Minerals and Natural Resources

Revised August 1, 2011 29

District 1 811 S. 1 rst St., Artesia,

District V 1220 S. 3t. Francis Dr., 4 88210

District II 1000 R | Brazos Road, . ec, NM 87410

sta Fe, NM 87505

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 *Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

DECLIEST FOR APPROVAL TO ACCEPT SOLID WASTI

	REQUEST FOR APPROVAL	TO ACCEPT SOLID WASTE
1. G. nerator Nat	and Address:	AFF: 4326
OWI	SWA	AFE 11x6
2. O iginating Si		
Harr	erial (Street Address, City, State or ULSTR)	
3. L cation of M	erial (Street Address, City, State or ULSTR));
		DUMPTRUCE
4. S urce and De	ription of Waste:	
	Contaminated	1970
Estim ted Volume	yd³ / bbls Known Volume (to be o	entered by the operator at the end of the haul) / yd³/bbls
5. A 11- <		STATEMENT OF WASTE STATUS do hereby
certify that accordi	to the Resource Conservation and Recovery A	cet (RCRA) and the US Environmental Protection Agency's July 1988
regult ory determin	ion, the above described waste is: (Check the a	ppropriate classification)
[] RCRA Ex c empt waste.	ipt: Oil field wastes generated from oil and gas Operator Use Only: Waste Acceptance Fre	s exploration and production operations and are not mixed with non- equency Monthly Weekly Per Load
[] RCRA No	Exempt: Oil field waste which is non-hazardor	us that does not exceed the minimum standards for waste hazardous by 1-261.24, or listed hazardous waste as defined in 40 CFR, part 261,
s bpart D, as a	ended. The following documentation is attached	ed to demonstrate the above-described waste is non-hazardous. (Check
tl e appropriate		
☐ M 3DS Informa	an management of the contract of the	☐ Process Knowledge ☐ Other (Provide description in Box 4)
GENE	ATOR 19.15.36.15 WASTE TESTING CERT	TIFICATION STATEMENT FOR LANDFARMS
Ĭ	, representative for	do hereby certify that the paint filter test and tested for chloride content and that the samples
have een found to	onform to the specific requirements applicable	to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results
of the representativ	samples are attached to demonstrate the above-	described waste conform to the requirements of Section 15 of
5. 'I ansporter:	IMI	PAULOS CHALLES - 18075
	11.00	CONTOS CHAUPS - 18275
	ace Waste Management Facility	
Nar c and Facilit	Permit H: NDBL NM1-63	
Address of Facili	: York HON 179	
Me nod of Treats	nt and/or Disposal:	
□ E	poration	☐ Landfarm ☐ Landfill ☐ Other
Waste Acceptance	atus:	DENITED (Must De Maintained & Decement Personal)
	☑ APPROVED	DENIED (Must Be Maintained As Permanent Record)
PRINT NAME:	TTITI	LE: DATE: 10 LI 20
SIGNATURE:		TELEPHONE NO.:
Su	ce Waste Management Facility Authorized Agent	

И

Energy Minerals and Natural Resources

Revised Rage 269 of 294

District II

811 S. First St., Artesia, NM 88210

District III

1000 Icio Brazos Road, Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fc, NM 87505

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

REQUEST FOR APPRO	VAL TO ACCEPT SOLID WASTE
1. Generator Name and Address:	AFF. 4326
OWE SWA	JAI L 1-26
2 Originating Site:	
Harren Buaster Parents. 3. Location of Material (Street Address, City, State or U)	
3. Location of Material (Street Address, City, State or U	
	Lea CO. NT
4. Source and Description of Waste:	DUMP-Trick
Contamina	1-01 50
	10 0
Estimated Volume yd3/bbls Known Volume	(to be entered by the operator at the end of the haul) (yd')bbls
	TION STATEMENT OF WASTE STATIS zed agent for do hereby
representative or authoric certify that according to the Resource Conservation and Reco	very Act (RCRA) and the US Environmental Protection Agency's July 1988
regulatory determination, the above described waste is: (Chec	k the appropriate classification)
RCRA Exempt: Oil field wastes generated from oil a exempt waste. Operator Use Only: Waste Acceptant	and gas exploration and production operations and are not mixed with non- nce Frequency Monthly Weekly Per Load
characteristics established in RCRA regulations, 40 CFR	azardous that does not exceed the minimum standards for waste hazardous by 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, attached to demonstrate the above-described waste is non-hazardous. (Check
☐ MSDS Information ☐ RCRA Hazardous Waste Analyst	sis 🔲 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
have been found to conform to the specific requirements apply	ted to the paint filter test and tested for chloride content and that the samples icable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results above-described waste conform to the requirements of Section 15 of
5. Transporter:	
J NJ	Courtains (1)7-
OCD Permitted Surface Waste Management Facility	
Name and Facility Permit #: Nobec Nobel-	63
Address of Facility: 2021 1100 120	
Method of Treatment and/or Disposal:	1027
☐ Evaporation ☐ Injection ☐ Treating	Plant Landfarm Landfill Other
Waste Acceptance Status:	
☐ APPROVED	DENIED (Must Be Maintained As Permanent Record)
PRINT NAME:	TITLE: DATE: 10-66-20
Wound	TELEPHONE NO.:
Surface Waste Management Facility Authorized Agent	CALCITIONS NO.

DIGIT OF THEM INTOATOO

Energy Minerals and Natural Resources

Revised Augus 270 of 29

District U
311 S. First St., Artesia, NM 88210
District El
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 *Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVA	AL TO ACCEPT SOLID WASTE
1. Generator Name and Address:	A - (133)
Owl Swa	出してフェナら
2. Originating Site:	
 Location of Material (Street Address, City, State or ULS) 	TR):
4. Source and Description of Waste:	ntaminated Scil
Estimated Volume yd3/bbls Known Volume (to	be entered by the operator at the end of the haul) yd3/bb/s
5 GENERATOR CERTIFICATI	ON STATEMENT OF WASTE STATUS
1. 1 h. 11 g. 3 and compresentative or authorized	
certify that according to the Resource Conservation and Recover regulatory determination, the above described waste is: (Check the	y Act (RCRA) and the US Environmental Protection Agency's July 1988
RCRA Exempt: Oil field wastes generated from oil and exempt waste. Operator Use Only: Waste Acceptance	gas exploration and production operations and are not mixed with non- Frequency Monthly Weekly Per Load
characteristics established in RCRA regulations, 40 CFR 26 subpart D, as amended. The following documentation is attache appropriate items)	rdous that does not exceed the minimum standards for waste hazardous by 1.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, ached to demonstrate the above-described waste is non-hazardous. (Check
MSDS Information	☐ Process Knowledge ☐ Other (Provide description in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CI	ERTIFICATION STATEMENT FOR LANDFARMS
, 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 ble to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results we-described waste conform to the requirements of Section 15 of
*. Transporter:	Carles Charge - 18313
OCD Fermitted Surface Waste Management Facility	
Name and Facility Permit #: No hours No hours 4	A.
Address of Facility: 167 1 167 137	
Method of Treatment and/or Disposal:	
Livaporation Injection I Treating Pla	nt Landfarm Landfill Other
Vaste Acceptance Status:	DENIED (Must Be Maintained As Permanent Record)
	TTLE: DATE: (C)(C)
GIGNATURE:	TELEPHONE NO:

Surface Waste Management Facility Authorized Agent

Received by OCD 040/26/20204:21:22 PM District II \$11 S. Fir St., Artesia, N 38210

UHALO VI 1 1011 11404400 Energy Minerals and Natural Resources

District IL

1000 Rio . razos Road, Az , NM 87410 District IV 1220 S. St. Francis Dr., Sa. Fe, NM 87505 Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

		REQUEST FOR APPROVAL TO ACCEPT SOLID W.	ASTE
1. Gen	rator Name	nd Address	
	JWL	SWA	E. 4326
½ Ori	inating Site	A.	
		- Deaster Pump	
3. Loc	ition of Mat	ial (Street Address, City, State or ULSTR):	Domis Truck
- San	ce and Desi	Contaminated Scille	ckfill
Estimate	d Volume_	yd ³ /bbls Known Volume (to be entered by the operator at the end of the GENERATOR CERTIFICATION STATEMENT OF WASTE STATE	
The second second second	at according y determinat	the Resource Conservation and Recovery Act (RCRA) and the US Environmental	do hereby
	RCRA Exen apt waste.	: Oil field wastes generated from oil and gas exploration and production operations Operator Use Only: Waste Acceptance Frequency Monthly Weekly	and are not mixed with non- Per Load
cha sub	RCRA Non- acteristics es art D, as am ppropriate it	blished in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defeated. The following documentation is attached to demonstrate the above-described	defined in 40 CFR, part 261,
LI MSI	S Informatic		vide description in Box 4)
	GENER.		
have bee	ative sample a found to co presentative NMAC.	of the oil field waste have been subjected to the paint filter test and tested for chloridation to the specific requirements applicable to landfarms pursuant to Section 15 of	19.15.36 NMAC. The results
5. Tra	isporter:	INJ Caritana C	itis= 1830/c
		fi : Waste Management Facility	0
Dame	and Facility 1	1 mit#: 100 BC Nat 1. 1.3	
Addro	s of Facility	6 July 10-2 13-3	
Mothe		and/or Disposal:	
	Eva	a ration Injection Treating Plant I Landfarm I Landfill []	Other
Waste A	ceptance St	APPROVED DENIED (Must Be Main	ntained As Permanent Record)
TABLE	AME:	TITLE:	DATE: 10/0/20
TALKER	1017	TELEPHONE NO:	

Waste Management Facility Authorized Agent

Received by OCD 1040/26/26/26/4:21:22 PM Listisci II #11 S. Fir t St., Artesia, N 88210 District II 1000 Rio Trazos Road, Av :, NM 87410 District IV

District IV 1220 S. S. Francis Dr., Sa . Fe, NM 87505

Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

	REQUEST FOR APPR	OVAL TO ACCEPT	SOLID WAS	TE
Gen rator Name		The state of the s	Λ .~	Linn
	2000		Att	4376
2. Ori inating Site	ŭ Ď			
	- Bobuter Par			
3. Location of Mar	ial (Street Address, City, State or	ULSTR):	7	- Tolok
4. Soy 'ce and Des	ption of Waste:		LUM) MUCK
	()	Manyated	SillCal	CHE ROCKFIL
Estimate d Volume	yd³/bbls Known Volum			ul) 2 (yd³/bbls
5. Ph. 11: <		CATION STATEMENT OF V	VASTE STATUS	
certify t at according regulato y determinar		covery Act (RCRA) and the US		do hereby ection Agency's July 1988
RCRA Excn exe opt waste.	: Oil field wastes generated from o Operator Use Only: Waste Accep			
RCRA Non- cha acteristics es sub art D, as am the ppropriate it	ded. The following documentation	R 261.21-261.24, or listed haza	ardous waste as defin	ed in 40 CFR, part 261,
☐ MSf S Informatio	☐ RCRA Hazardous Waste Ana	lysis Process Knowledge	Other (Provide	description in Box 4)
GENER/	OR 19.15.36.15 WASTE TESTIN	G CERTIFICATION STATI	EMENT FOR LAN	DFARMS
representative sample have been found to co of the representative; 19.15.3c NMAC.	form to the specific requirements ap	plicable to landfarms pursuant t	tested for chloride co to Section 15 of 19.1	5.36 NMAC. The results
. Tra isporter:	TIMI	S	urdonal l	7-123
OCD Fer nitted Surfe	: Waste Management Facility		11.5190000	and the sale
Name and Pacifity I	mit#: 15 Days 10 ex 1	Le V		
Address of Facility:	101- Hart 1)3			
Metho of Treatmen	and/or Disposal:			
☐ Evaj	ation Injection Treating	ng Plant 🔲 Landfarm 🗹	Landfill [] Othe	ŕ
Waste At ceptance Sti	IS: APPROVED	DENIEL) (Must Be Maintain	ed As Permanent Record)
PEDIT'N MIE:	7	TITLE:		DATE: 10/10/20
SIGNATI RE:	Vaste Management Facility Authorized Ages	TELEPHONE NO.:	-	-10

Energy Minerals and Natural Resources

Revised Russ 273 of 294

Received by OGDH 10426/262014:21:22 PM District II & LL S. First St., Artesia, NM 88210 District III

1000 Rio Brazos Road, Avtec, NM 87410 1220 S. St. Francis Dr., Santa Fe, NM 87505 Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL	TO ACCEPT SOLID WASTE
Cenerator Name and Address:	PO 4376
2 Originating Site: Harrer Descritor Purp	
1. Location of Material (Street Address, City, State or ULSTR)	NM DUMP TACK
Source and Description of Waste:	inimated Still The Backfill To Backfill The Backfill T
Estimated Volume yd³/bbls Known Volume (to be of GENERATOR CERTIFICATION	STATEMENT OF WASTE STATES
t, representative or authorized age certify that according to the Resource Conservation and Recovery Acregulatory determination, the above described waste is: (Check the age)	ct (RCRA) and the US Environmental Protection Agency's July 1988
RCRA Exempt: Oil field wastes generated from oil and gas exempt waste. Operator Use Only: Waste Acceptance Free	exploration and production operations and are not mixed with non- equency Monthly Weekly Per Load
characteristics established in RCRA regulations, 40 CFR 261.21	s that does not exceed the minimum standards for waste hazardous by -261.24, or listed hazardous waste as defined in 40 CFR, part 261, ed to demonstrate the above-described waste is non-hazardous. (Check
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ GENERATOR 19.15.36.15 WASTE TESTING CERT	Process Knowledge
, representative for representative samples of the oil field waste have been subjected to thave been found to conform to the specific requirements applicable to of the representative samples are attached to demonstrate the above-19.12.36 NMAC.	do hereby certify that he paint filter test and tested for chloride content and that the samples to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results
t. Transporter:	Carlos Civugs - 18332
OCD Permitted Surface Waste Management Facility	
Name and Facility Permit #: 10 0 p.c. No 1 - 4 3.	
Address of Facility: 15 d a 11 may 11 2	
Method of Treatment and/or Disposal:	1641
☐ Evaporation ☐ Injection ☐ Treating Plant	Landfarm Landfill Other 185
Assie Acceptance Status:	DENIED (Must Be Maintained As Permanent Record)
PRINT NAME: TITL	E: DATE: \(\bigc\) \(\langle \bigc\)
warman Coll	THE REPORT NO.

Surface Waste Management Facility Authorized Agent

DIRECTOR 1 1011 114011190 **Energy Minerals and Natural Resources**

Revised Alage 274 of 294

District II. 1000 Rio razos Road, Az , NM 87410 District IV 1220 S. St. Francis Dr., Sa. Fe, NM 87505 Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

*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	nd Address:	1.7.7
Jul	SWIJ MIE	100
Z. Ori inating Site	ial (Street Address, City, State or ULSTR):	
3. Location of Man	ial (Street Address, City, State or ULSTR):	
	Lea NN	- 1-
d. Sor ree and Des	ption of Waste:	is in one
	Contaminated Soil	2 65
Estimat d Volume	yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS	yd¹) bbls
1 1 h 1/4 3	Ac, representative or authorized agent for	do hereby
certify that according regulatory determina	- CONTROL - CON	gency s July 1906
RCRA Exer	and the second s	mixed with non-
RCRA Non- che acteristics co sub sart D, as an the appropriate i	blished in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 ruded. The following documentation is attached to demonstrate the above-described waste is non-	CFR, part 261,
[] MS. S Information	RCRA Hazardous Waste Analysis 🔲 Process Knowledge 🖂 Other (Provide description	ion in Box 4)
GENER	FOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARM	IS
represe tative sample have been found to coff the persentative 19.15.3 NMAC.	form to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NM	d that the samples
5. Tr: nsporter:	JMJ Santana, 0 #183	352
OCD Pe mitted Sur!	e Waste Management Facility	
Hame and Facility	mit#: N≥Oog Nom 1 - 6 }	
Addn as of Facility	y luin man na	
	a : and/or Disposal:	
∐ Eνε	s pration Injection Treating Plant Landfarm Landfill Other	
Waste A :ceptance St	APPROVED DENIED (Must Be Maintained As Pe	
PHINT? AME:	TITLE: DATE:	10/06/20
STONATURE /	TELEPHONE NO.:	

Waste Management Facility Authorized Agent

Surf

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Energy Minerals and Natural Resources

311 S. Fit 1 St., Artesia, N 88210

District II

1000 Rio 3razos Road, A: :, NM 87410 District [* 1220 S. S. Francis Dr., Sa. 1 Fe, NM 87505 Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

	REQUEST FOR APPROVAL	TO ACCEPT SOLID WASTE
1. Ger erator Name		A = 2 (13)
	Swa	ATE 4326
2. Originating Site	ial (Street Address, City, State or ULSTR):	
3. Los ation of Mar	ption of Waste:	
4. Source and Des-	ption of Waste:	Lited Soil Damp Truck
Estimate d Volume		ntered by the operator at the end of the haul) Q (yd)/ bbls
certify t at according regulato y determinar	the Resource Conservation and Recovery Acn, the above described waste is: (Check the ap	et (RCRA) and the US Environmental Protection Agency's July 1988
RCRA Exentexe opt waste.		exploration and production operations and are not mixed with non- quency Monthly Weekly Per Load
RCRA Non- cha acteristics es sub art D, as am the ppropriate it	olished in RCRA regulations, 40 CFR 261.21-	s that does not exceed the minimum standards for waste hazardous by -261,24, or listed hazardous waste as defined in 40 CFR, part 261, d to demonstrate the above-described waste is non-hazardous. (Check
☐ MSI S Informatio	☐ RCRA Hazardous Waste Analysis ☐	Process Knowledge
GENER/ I represen ative sample have been found to ecof the representative sample 19.15.3c NMAC.	, representative for, fine oil field waste have been subjected to the form to the specific requirements applicable to	do hereby certify that the paint filter test and tested for chloride content and that the samples of landfarms pursuant to Section 15 of 19.15.36 NMAC. The results escribed waste conform to the requirements of Section 15 of
5. Tra sporter;	I'm I Carlo	5 C #18354
OCD Per nitted Surfa	· Waste Management Facility	
Name of Facility F	mit#: ND 34. Nay- 63	
Address of Facility:	101 1 11 12 123	
Metho of Treatmer	[[[[[[[[[[[[[[[[[[[
	ation Injection I Treating Plant	Landfarm Landfill Other
Vaste Acceptance Sta	☐ APPROVED	DATE: \U/ \U/ \U/ \U/ \U/
THE MINES	TITLE	DATE: 10/00/
SIGNATI RE: Surfic	Visite Management Facility Authorized Agent	ELEPHONE NO.:

Received by OCD: 10/26/2020 4:21:22 PM 1625 N. F ench Dr., Hobb! IM 88240

District II

District II

811 S. Fir + St., Artesia, N. 38210

District IV 1220 S. S. Francis Dr., Sa Fe, NM 87505

1000 Rio Frazos Road, Az , NM 87410

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

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	REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE
1. Gen :rator Name OV L (Oilfie	nd Address: Water Logistics SWD)
2. Ori finating Site Ha crier Boos	r Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders
3. Location of Mat	ial (Street Address, City, State or ULSTR): NO API # for this location
4. Sot ree and Desc	ption of Waste:
Estimat d Volume 5. 1, Phill a Sanders certify that according regulate by determinan XI RCRA Exercise exempt waste. RCRA Non-characteristics exempt acteristics exempt appropriate i MS IS Information GENER	Contaminated Soil/Caliche Backfill yd³/bbls Known Volume (to be entered by the operator at the end of the haul) yd³/bbls GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS , representative or authorized agent for do hereby the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 n, the above described waste is: (Check the appropriate classification) pt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- Operator Use Only: Waste Acceptance Frequency Monthly Weekly Per Load tempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by blished in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, ded. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check ns) RCRA Hazardous Waste Analysis X Process Knowledge Other (Provide description in Box 4) FOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
represe tative sample have be in found to c of the r presentative 19.15.3 NMAC.	of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples form to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results mples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of
5. Tr. nsporter:	Santaga Cytiz 18415
OCD Pe mitted Surf	e Waste Management Facility
Name and Facility	rmit #: Northern Delaware Basin Landfill (NM1-63)
Addr ss of Facility	:029 W. NM Hwy 128 Jal, NM 88252
Meth d of Treatme	and/or Disposal:
☐ Evɛ	ration Injection Treating Plant Landfarm Landfill Other
Waste A cceptance St	☐ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)
PRINT1 AME:	TITLE: scalehouse DATE: 10-120
SIGNAT URE:	Waste Management Facility Authorized Agent

Received by OCD: 10/26/2020 4:21:22 PM 1624 N French Dr., Hobbs, NM 88240

1624 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 Page 277 of 294
Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection

RECUEST FOR APPROVAL TO ACCEPT SOLID WASTE

	REQUEST FUR APPE	COVAL TO ACC	LEPI SOLID WAS	I E
Generator Name an OWL (Oilfield)	nd Address: Water Logistics SWD)	X		
2. Originating Site:				
Harrier Booster	Pump Lea Co, NM	AFE: 4326	Co Man: Philli	in Sanders
	al (Street Address, City, State o			Transition in
Same as above		NO. A	PI # for this location	Survey France
4. Source and Descrip	otion of Waste:	NO A	11 # for this location	DOLLH INC.K
	Contaminated Soil/Ca	iliche Backfill		
Estimated Volume	vd1/bbls Known Volu	me (to be entered by the	operator at the end of the hau	in 12 / vd ³ /bbls
5.	GENERATOR CERTIFI			10 10 10 10 10 10
1, Phillip Sanders	, representative or auth			do hereby
certify that according to regulatory determination.	the Resource Conservation and R t, the above described waste is: (C	ecovery Act (RCRA) an heck the appropriate cla	d the US Environmental Protessification)	ection Agency's July 1988
X RCRA Exemp exempt waste.	ot: Oil field wastes generated from Operator Use Only: Waste Accept	n oil and gas exploration	and production operations ar	nd are not mixed with non- Load
characteristics estable subpart D, as amend the appropriate items MSDS Information	empt: Oil field waste which is not lished in RCRA regulations, 40 C led. The following documentations: RCRA Hazardous Waste An OR 19.15.36.15 WASTE TESTI	FR 261.21-261.24, or list is attached to demonstrate alysis X Process K	sted hazardous waste as definerate the above-described waste nowledge Other (Providence)	ed in 40 CFR, part 261, e is non-hazardous. (Check e description in Box 4)
i,	, representative for		do her	reby certify that
have been found to confo	f the oil field waste have been sub form to the specific requirements a sples are attached to demonstrate t	pplicable to landfarms p	test and tested for chloride conursuant to Section 15 of 19.15	ontent and that the samples 5.36 NMAC. The results
5. Transporter:	IMI	Paul	- Direct	1,532 1
OCD Permitted Surface	Waste Management Facility		- 47 CM	
			2	
Name and Pacinty Pern	nit #: Northern Delaware Bas	sin Landilli (NM1-6	.5)	
Address of Facility: 202	29 W. NM Hwy 128 Jal, NM 882	52		
Method of Treatment ar	nd/or Disposal:			
☐ Evapora		- N □		
		ng Plant	m Landfill Dother	
Waste Acceptance Status	APPROVED		DENIED (Must Be Maintaine	ed As Permanent Record)
PRINT NAME:	- >	TITLE scaleho	use	DATE: /// 7/20
SIGNATURE:		TELEPHONE	NO.: _505-231-1071	
	aste Management Facility Authorized Age	ent	303-231-10/1	

Renefited by OCD: 10/26/2020 4:21:22 PM 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

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REQUEST FOR	APPROVAL TO	ACCEPT	SOLID	WASTE

1. Generator Name and OWL (Oilfield V	Address: Vater Logistics SWD)			
2. Originating Site:				
Harrier Booster F	ump Lea Co, NM	Q 4326	Ca Man	Phillip Sanders
	(Street Address, City, State or		Coman	Thomp Sanders
elization.	************	100	A DY A few Able to and on	
Same as above 4. Source and Description	on of Waste:	NU	API # for this location	D. D. D. Truck
	Contaminated Soil/Ca	liche Backfill		DUMP Truck
Estimated Volume	yd³ / bbls Known Volun	ne (to be entered by	the operator at the end of	the haul) 12 (yd³) bbls
5.	GENERATOR CERTIFIC			
1, Phillip Sanders	, representative or auth			do hereby
	e Resource Conservation and Re the above described waste is: (Ch			al Protection Agency's July 1988
	Oil field wastes generated from perator Use Only: Waste Accep			tions and are not mixed with non- Per Load
characteristics establis	hed in RCRA regulations, 40 CI	FR 261.21-261.24, o	r listed hazardous waste a	standards for waste hazardous by s defined in 40 CFR, part 261, d waste is non-hazardous. (Check
☐ MSDS Information ☐	RCRA Hazardous Waste Ana	alysis X□ Process	Knowledge	Provide description in Box 4)
GENERATOR	R 19.15.36.15 WASTE TESTIN	NG CERTIFICATI	ON STATEMENT FOR	LANDFARMS
1,	, representative for			do hereby certify that
have been found to conform	he oil field waste have been subj in to the specific requirements ap es are attached to demonstrate th	plicable to landfarm	s pursuant to Section 15	oride content and that the samples of 19.15.36 NMAC. The results irements of Section 15 of
5. Transporter:	3.0		14.0	
J.	МJ		Carlos	Charez
OCD Permitted Surface W	aste Management Facility		0,1,10	
Name and Facility Permit	#: Northern Delaware Bas	in Landfill (NM1	-63)	
Address of Facility 2020	W NM H 129 tol NM 9924			10000
Address of Facility: 2029	W. NM Hwy 128 Jal, NM 8825	52		1950C
Method of Treatment and	Vor Disposal:			100
☐ Evaporation	on 🗌 Injection 🔲 Treating	ng Plant 🔲 Land	farm Landfill	Other .
Waste Acceptance Status:	APPROVED		DENIED (Must Be M	aintained As Permanent Record)
PRINT NAME:		TITLE: scale	house	DATE: 10-07-60
SIGNATURE:	Management Facility Authorized Age	TELEPHO	NE NO.: _505-231-1071	

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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

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

DECLIEST FOR ADDROVAL TO ACCEPT SOLID WASTE

	REQUEST	OK APPRO	AL TO ACCE	PI SULID WAST	
	Name and Address: ilfield Water Logis	tics SWD)			
2. Originating	Site:				
Harrier E	Booster Pump	Lea Co, NM	PO :: 4326	Co Man: Phillip	Sanders
	Material (Street Addres				
Same as ab	Ove		NO API #	for this location	
	Description of Waste:		NOATI	tor this location	D. W.D. Twee
1 12 12 12 12				1	JUMP 1 100
		Calich	ne Backfill		
Estimated Volun	neyd³ / bbls	Known Volume (t	o be entered by the oper	rator at the end of the haul)	12 (yd3 bbls
5.	GENERA	TOR CERTIFICAT	ION STATEMENT O	F WASTE STATUS	
I, Phillip Sander		sentative or authorize			do hereby
	ding to the Resource Con mination, the above descri			US Environmental Protect cation)	tion Agency's July 1988
X☐ RCRA exempt was				production operations and	
characteristi	cs established in RCRA re s amended. The following	gulations, 40 CFR 2	61.21-261.24, or listed l	ceed the minimum standard hazardous waste as defined he above-described waste i	in 40 CFR, part 261,
☐ MSDS Inform	nation RCRA Haza	dous Waste Analysi	s X□ Process Knowl	edge	description in Box 4)
GEN	ERATOR 19.15.36.15 V	VASTE TESTING	CERTIFICATION ST.	ATEMENT FOR LANDE	FARMS
I,	, repre	sentative for		do herel	by certify that
of the representa 19.15.36 NMAC	to conform to the specific tive samples are attached	requirements applic	able to landfarms pursu	and tested for chloride cont ant to Section 15 of 19.15.3 onform to the requirements	36 NMAC. The results
5. Transporter	r: JMJ			Sontand	ONS
OCD Permitted S	Surface Waste Managem	ent Facility			~
Name and Faci	lity Permit #: Northern	Delaware Basin L	andfill (NM1-63)		
	ility: 2029 W. NM Hwy 1		723.31.7 4 23.21.2 32 4		
	atment and/or Disposal:	200000000000000000000000000000000000000			
	Evaporation Inject	ion Treating P	lant 🔲 Landfarm	Landfill Other	10507
Waste Acceptanc		ion incaung r	iant 🗀 Landiaini	Zandini 🗀 Onici	1630 T
waste Acceptanc	e status:	APPROVED	☐ DEN	IIED (Must Be Maintained	As Permanent Record)
PRINT NAME: _	0		TITLE: scalehouse	D	ATE: 10-07-20
SIGNATURE:	10	Ma	TELEPHONE NO	505-231-1071	
	Surface Waste Management Fac	Mry Authorized Agent			

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District II 1000 R Brazos Road, / cc, NM 87410 District V 1220 S. it Francis Dr., ta Fc, NM 87505

Surfac Vaste Management Facility Authorized Agent

Oil Conservation Division

State of New Mexico

Energy Minerals and Natural Resources

Revised August 1, 2011 *Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

1220 South St. Francis Dr. Santa Fe, NM 87505

	REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE
1. Generator Nan	and Address:
O'VL (Oilfi	d Water Logistics SWD)
2. O iginating Sit	
H residue Date	man Design of the Control of the Con
3. Le ation of Ma	er Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders rial (Street Address, City, State or ULSTR):
W. State of the st	, construction, confidence of CLSTR).
4. So irce and Des	iption of Waste: NO API # for this location
So nee and De	iption of Waste.
	Contaminated Soil/
Estima ed Volume	vd ³ (bble Kroum Volume (to be entered both a set of the set of t
5.	yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS (yd³) bbls
I, Phil p Sanders	, representative or authorized agent for do hereby
regular ry determina	of the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 on, the above described waste is: (Check the appropriate classification)
X[] RCRA Ex	ipt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- Operator Use Only: Waste Acceptance Frequency
RCRA Non- chi racteristics e: sul part D, as arr the appropriate i	cempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by blished in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, ided. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check
☐ MS >S Informatic	☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)
GENER	
1,	, representative for do hereby certify that
represe tative sample have be in found to co of the representative 19.15.3 NMAC.	of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples form to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results nples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of
5. Tra asporter:	IMJ Carlos Charas 18518
OCD Pe mitted Surfi	: Waste Management Facility
Name and Facility I	mit #: Northern Delaware Basin Landfill (NM1-63)
Addre s of Facility:	029 W. NM Hwy 128 Jal, NM 88252
Methe I of Treatmen	and/or Disposal:
☐ Evaj	
Waste Ar ceptance Str	
mane in reptance 30	APPROVED DENIED (Must Be Maintained As Permanent Record)
PRINT'N \ME:	reglehouse While Lot
	DATE: TOLITZE
SIGNATI RE:	TELEPHONE NO.: 505-231-1071

Received by OCD: 10/26/2020 4:21:22 PM 1625 N, F ench Dr., Hobb: IM 88240

District II

District IV

811 S. Fir t St., Artesia, N 38210

District II 1000 Rio Trazos Road, Az , NM 87410

1220 S. S. Francis Dr., Sa Fe, NM 87505

Surfac Vaste Management Facility Authorized Agent

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr.

Revised August 1, 2011

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1220 S. S. Francis Dr., Sa	Santa Fe, NM 87505
	REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE
1. Gen :rator Name OV L (Oilfie	nd Address: Water Logistics SWD)
2. Ori inating Site	
	r Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders
3. Loc ition of Mat	ial (Street Address, City, State or ULSTR):
Sar e as above	NO API # for this location
4. Sou ce and Desc	
Estimate d Volume_	yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 7 fyd³ / bbls
5.	GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
I, Philli Sanders certify t at according regulato y determinat	, representative or authorized agent for do hereby the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 1, the above described waste is: (Check the appropriate classification)
X ACRA Exe	pt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- Operator Use Only: Waste Acceptance Frequency
RCRA Non-l cha acteristics es sub art D, as am- the ppropriate it	blished in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, ded. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check
☐ MSI S Informatio	☐ 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 ative sample have been found to co of the representative s 19.15.3t NMAC.	of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples orm to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results nples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of
5. Tra isporter:	Suntana Ortiz
OCD Per nitted Surfa	: Waste Management Facility
Name and Facility I	mit #: Northern Delaware Basin Landfill (NM1-63)
Addre s of Facility:)29 W. NM Hwy 128 Jal, NM 88252
Metho I of Treatmen	
☐ Evar	ation Injection Treating Plant Landfarm Landfill Other
Waste A: ceptance Str	DENIED (Must Be Maintained As Permanent Record)
PRINT NAME:	DATE: 100720
SIGNAT IRE:	PELEPHONE NO.: 505-231-1071

Reinfield by OCD: 10/26/2020 4:21:22 PM 1625 N. 1 cheh Dr., Hobb NM 88240 District II 811 S. Fir t St., Artesia, N 88210

District II 1000 Rio Brazos Road, Az :, NM 87410

District I'
1220 S. S. Francis Dr., Sa 1Fe, 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.

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REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

	REQUEST FOR AFFROVAL TO ACCEPT SOLID WASTE
1. Ger erator Name OV 'L (Oilfie	nd Address: 1 Water Logistics SWD)
2. Ori jinating Site	
Harrier Boos	r Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders
3. Los ation of Mat	ial (Street Address, City, State or ULSTR):
Sau e as above	NO API # for this location
4. Source and Desc	ntion of Waste:
	Contaminated Soil/Caliche Backfill
Estimat d Volume	yd³/bbls Known Volume (to be entered by the operator at the end of the haul) /Q / yd'y bbls
5.	GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
1, Phill > Sanders	, representative or authorized agent for do hereby
certify t at according regulate y determinat	the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 n, the above described waste is: (Check the appropriate classification)
X[RCRA Ext exe npt waste.	pt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- Operator Use Only: Waste Acceptance Frequency
RCRA Non- cha acteristics es sub art D, as am the appropriate it	empt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by blished in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, ded. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check 15)
☐ MSI S Informatio	☐ 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
1.	, representative for do hereby certify that
represer ative sample have be n found to co of the representative : 19.15.31 NMAC.	of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples form to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results uples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of
5. Tra isporter:	
	Carlos (
OCD Per mitted Surfi	: Waste Management Facility
Name and Facility I	mit #: Northern Delaware Basin Landfill (NM1-63) 18 596
Addre s of Facility:)29 W. NM Hwy 128 Jal, NM 88252
Methe I of Treatmen	and/or Disposal:
	ration Injection Treating Plant Landfarm Landfill Other
Waste A. ceptance Sta	☐ APPROVED ☐ DENIED (Must Be Maintained As Permanent Record)
PRINT NAME:	TITLE: scalehouse DATE: 10-8-20
SIGNAT IRE: (Sufface	TELEPHONE NO.: 505-231-1071

Reseived by OCD: 10/26/2020 4:21:22 PM 1625 N. F ench Dr., Hobb & M 88240

District II 811 S. Fit 1 St., Artesia, N 88210

1000 Rio Trazos Road, Az

District II

; NM 87410

District I'
1220 S. S. 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

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REQUEST FOR	APPROVAL	TO ACCEPT	SOLID	WASTE

	REQUEST FOR ATTROVAL TO ACCEL T SOLID WHOTE	
OV L (Oilfie	nd Address: 1 Water Logistics SWD)	
2. Or ginating Site		
H: rrier Boos	r Pump Lea Co, NM AFE: 4326 Co Man; Phillip Sano	lers
3. Lo ation of Ma		
Sa ie as above	NO API # for this location	
4. So rce and Des	iption of Waste:	mpTruck
	Contaminated Soil/Caliche Backfill	
Estima :d Volume_	yd3 / bbls Known Volume (to be entered by the operator at the end of the haul)	Q (ydj/bbls
5.	GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS	J. November
I, Phil p Sanders certify hat according	, representative or authorized agent for, the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection A	do hereby gency's July 1988
regulat ry determina		
X[] RCRA Ex ex mpt waste.	operator Use Only: Waste Acceptance Frequency Monthly Weekly Per Load	at mixed with non-
RCRA Non ch racteristics e su part D, as an the appropriate	 iblished in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 ided. The following documentation is attached to demonstrate the above-described waste is non-ms) 	-hazardous. (Check
☐ MS DS Informati	i ☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide descri	ption in Box 4)
GENER	TOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARM	15
I,	of orm to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NM	nd that the samples
5. Ti insporter:	JMJ Sur	tano 0
OCD P rmitted Sur	re Waste Management Facility	
Nam : and Facility	ermit #: Northern Delaware Basin Landfill (NM1-63)	3597
Add :ss of Facilit	2029 W. NM Hwy 128 Jal, NM 88252	
Metl od of Treatm	t and/or Disposal:	
☐ Ev	oration Injection Treating Plant Landfarm Landfill Other	
Waste . «cceptance 5		Permanent Record)
		~
PRINT NAME:	TITLE: scalehouse DATE:	10-8-20
SIGNA FURE: LA	TELEPHONE NO.: _505-231-1071	-

Received by OCD: 10/26/2020 4:21:22 PM 1625 N, French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 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.

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REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

2. Originating Site:			
Harrier Booster Pump	Lea Co, NM	AFE: 4326	Co Man: Phillip Sanders
3. Location of Material (Street Ad	dress, City, State or U	LSTR):	The state of the s
Same as above		NO API #	for this location
4. Source and Description of Wast	e:		Pump
Contami	inated Soil/Calid	che Backfill	
Estimated Volume vd3 /	bbls Known Volume	(to be entered by the one	erator at the end of the haul) 12 (vd³) bbls
5. GENE	RATOR CERTIFICA	TION STATEMENT	DF WASTE STATUS
I, Phillip Sanders , re	epresentative or authori	zed agent for	do hereby
certify that according to the Resource regulatory determination, the above de	Conservation and Recor scribed waste is: (Chec	very Act (RCRA) and the	e US Environmental Protection Agency's July 1988
RCRA Exempt: Oil field w	astes generated from oi	l and gas exploration and	d production operations and are not mixed with non-
characteristics established in RCR	A regulations 40 CFR	261 21-261 24 or listed	ceed the minimum standards for waste hazardous by
subpart D, as amended. The follo the appropriate items)	wing documentation is	attached to demonstrate	hazardous waste as defined in 40 CFR, part 261, the above-described waste is non-hazardous. (Check
the appropriate items)	wing documentation is	attached to demonstrate	the above-described waste is non-hazardous. (Check
the appropriate items) MSDS Information RCRA H	wing documentation is azardous Waste Analys	attached to demonstrate sis X□ Process Know	the above-described waste is non-hazardous. (Check
subpart D, as amended. The follo the appropriate items) MSDS Information	azardous Waste Analys 15 WASTE TESTING	attached to demonstrate is X Process Know CERTIFICATION ST	the above-described waste is non-hazardous. (Check ledge Other (Provide description in Box 4) CATEMENT FOR LANDFARMS
subpart D, as amended. The follo the appropriate items) MSDS Information	azardous Waste Analys 15 WASTE TESTING Epresentative for waste have been subject	attached to demonstrate is X Process Know CERTIFICATION ST	the above-described waste is non-hazardous. (Check ledge
subpart D, as amended. The follo the appropriate items) MSDS Information RCRA H GENERATOR 19.15.36.1 I,	azardous Waste Analys 15 WASTE TESTING Epresentative for waste have been subject	attached to demonstrate is X Process Know CERTIFICATION ST ed to the paint filter test cable to landfarms pursu	the above-described waste is non-hazardous. (Check ledge Other (Provide description in Box 4) CATEMENT FOR LANDFARMS
subpart D, as amended. The follo the appropriate items) MSDS Information RCRA H GENERATOR 19.15.36. I,	azardous Waste Analys 15 WASTE TESTING Epresentative for waste have been subject	attached to demonstrate is X Process Know CERTIFICATION ST ed to the paint filter test cable to landfarms pursu	the above-described waste is non-hazardous. (Check ledge
subpart D, as amended. The follo the appropriate items) MSDS Information RCRA H GENERATOR 19.15.36. I,	azardous Waste Analys 15 WASTE TESTING Epresentative for waste have been subject	attached to demonstrate is X Process Know CERTIFICATION ST ed to the paint filter test cable to landfarms pursu	the above-described waste is non-hazardous. (Check ledge
subpart D, as amended. The follo the appropriate items) MSDS Information	azardous Waste Analys IS WASTE TESTING Expresentative for waste have been subject cific requirements appliated to demonstrate the a	attached to demonstrate is X Process Know CERTIFICATION ST ed to the paint filter test cable to landfarms pursu	the above-described waste is non-hazardous. (Check ledge
subpart D, as amended. The follo the appropriate items) MSDS Information	azardous Waste Analys IS WASTE TESTING Expresentative for waste have been subject cific requirements applined to demonstrate the a	attached to demonstrate is X Process Know CERTIFICATION ST red to the paint filter test cable to landfarms pursuabove-described waste co	the above-described waste is non-hazardous. (Check ledge
suppart D, as amended. The follo the appropriate items) MSDS Information RCRA H GENERATOR 19.15.36.1 ,	azardous Waste Analys IS WASTE TESTING Expresentative for waste have been subject cific requirements applied to demonstrate the a	attached to demonstrate is X Process Know CERTIFICATION ST red to the paint filter test cable to landfarms pursuabove-described waste co	the above-described waste is non-hazardous. (Check ledge
subpart D, as amended. The follo the appropriate items) MSDS Information	wing documentation is fazardous Waste Analys IS WASTE TESTING representative for waste have been subject cific requirements appli ned to demonstrate the a gement Facility rm Delaware Basin vy 128 Jal, NM 88252	attached to demonstrate is X Process Know CERTIFICATION ST red to the paint filter test cable to landfarms pursuabove-described waste co	the above-described waste is non-hazardous. (Check ledge
subpart D, as amended. The follo the appropriate items) MSDS Information	azardous Waste Analys IS WASTE TESTING Expresentative for waste have been subject cific requirements applied to demonstrate the authority Expresent Facility The Delaware Basin by 128 Jal, NM 88252	attached to demonstrate is X Process Know CERTIFICATION ST led to the paint filter test cable to landfarms pursu above-described waste co	the above-described waste is non-hazardous. (Check ledge
subpart D, as amended. The follo the appropriate items) MSDS Information	wing documentation is fazardous Waste Analys IS WASTE TESTING representative for waste have been subject cific requirements appli ned to demonstrate the a gement Facility rm Delaware Basin vy 128 Jal, NM 88252	attached to demonstrate is X Process Know CERTIFICATION ST led to the paint filter test cable to landfarms pursu above-described waste co	the above-described waste is non-hazardous. (Check ledge
suppart D, as amended. The follo the appropriate items) MSDS Information	azardous Waste Analys IS WASTE TESTING Expresentative for waste have been subject cific requirements applied to demonstrate the authority Expresent Facility The Delaware Basin by 128 Jal, NM 88252	attached to demonstrate is X Process Know CERTIFICATION ST led to the paint filter test cable to landfarms pursu above-described waste co	the above-described waste is non-hazardous. (Check ledge
subpart D, as amended. The follo the appropriate items) MSDS Information	azardous Waste Analys IS WASTE TESTING Expresentative for waste have been subject cific requirements applied to demonstrate the authority Expresent Facility Expression Delaware Basin by 128 Jal, NM 88252 It iection Treating I	attached to demonstrate is X Process Know CERTIFICATION ST led to the paint filter test cable to landfarms pursu above-described waste co	the above-described waste is non-hazardous. (Check ledge

State of New Mexico Energy Minerals and Natural Resources Page 285 of 294
Form C-138
Revised August 1, 2011

District 1 811 S. I rst St., Artesia, District II
1000 R: Brazos Road, cc, NM 87410
District V
1220 S. 3t Francis Dr., ta Fc, NM 87505

Surfac /aste Management Facility Authorized Agent

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

	REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE
1. Generator Nan	and Address:
O'VL (Oilfi	d Water Logistics SWD)
2. O iginating Sit	
Harrier Boo	er Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders
	rial (Street Address, City, State or ULSTR):
Sa ne as above	
4. So irce and Des	iption of Waste: NO API # for this location
	Contaminated Soil/Caliche Backfill
	Contaminated Son/Canche Backini
Estima ed Volume	yd³/bbls Known Volume (to be entered by the operator at the end of the haul) / yd³/bbls
I. Phil p Sanders	GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
certify nat according	, representative or authorized agent for do hereby the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988
regulate ry determina	in, the above described waste is: (Check the appropriate classification)
X[] RCRA Ex- ext mpt waste.	ipt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- Operator Use Only: Waste Acceptance Frequency Monthly Weekly Per Load
RCRA Non- characteristics es subpart D, as am the appropriate i	tempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by blished in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, ded. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check
☐ MS S Informatic	☐ RCRA Hazardous Waste Analysis X☐ Process Knowledge ☐ Other (Provide description in Box 4)
GENER.	
i,	, representative for do hereby certify that
representative sample have be in found to co of the representative : 19.15.3 NMAC.	of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples form to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results nples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of
5. Trε isporter:	JMJ Waste Management Facility
OCD Per mitted Surfa	: Waste Management Facility
Name and Facility I	mit #: Northern Delaware Basin Landfill (NM1-63)
Addre s of Facility:)29 W. NM Hwy 128 Jal, NM 88252
Metho of Treatmer	and/or Disposal:
Evar	
Vaste At reptance Sta	APPROVED DENIED (Must Be Maintained As Permanent Record)
RINT N IME:	— Washington Manual Control of
	DATE: 10.00 60
IGNATI RE:	TELEPHONE NO.: 505-231-1071

District | 88210 District | 1 811 S. F. st St., Artesia, N. 88210 District | 1 1000 Ric Brazos Road, A. c, NM 87410

District 1 / 1220 S. J. Francis Dr., S. a Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Page 286 of 294 Form C-138 Revised August 1, 2011

	REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE
1. Gei erator Nam	ınd Address:
O\/L (Oilfie	1 Water Logistics SWD)
2. Or ginating Site	
H: rrier Boos	r Pump Lea Co, NM AFE: 4326 Co Man: Phillip Sanders
3. Lo ation of Ma	ial (Street Address, City, State or ULSTR):
Sa 1e as above	NO API # for this location
4. Sor ree and Des	iption of Waste:
	Contaminated Soil/Caliche Backfill Truck
Estimat d Volume 5.	yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) yd³) bbls GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
I, Phill o Sanders	, representative or authorized agent for do hereby
regulate y determinat	the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 n, the above described waste is: (Check the appropriate classification)
X[RCRA Ext exe npt waste.	pt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- Operator Use Only: Waste Acceptance Frequency Monthly Weekly Per Load
RCRA Non- cha acteristics es sub art D, as am the appropriate it	empt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by blished in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, ded. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check 15)
☐ MSI 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 ative sample have been found to co of the representative s 19.15.30 NMAC.	of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples form to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results applies are attached to demonstrate the above-described waste conform to the requirements of Section 15 of
5. Tra isporter:	7.16
	Waste Management Facility mit #: Northern Delaware Basin Landfill (NM1-63) 18653
OCD Per nitted Surfs	: Waste Management Facility
Name and Facility F	mit #: Northern Delaware Basin Landfill (NM1-63) 18653
Addre s of Facility:)29 W. NM Hwy 128 Jal, NM 88252
Metho I of Treatmer	and/or Disposal:
☐ Evaj	ation Injection Treating Plant Landfarm Landfill Other
Waste At ceptance Sta	S: DENIED (Must Be Maintained As Permanent Record)
RINT NAME:	TITLE: scalehouse DATE: 10-8-20
SIGNATI RE: Surfac	Vaste Management Recility Authorized Agent TELEPHONE NO.: _505-231-1071



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

Willia Sodishin

eived by OCD: 10/26/2020 4:21:22 PM	Page 289 of
APPENDIX >	
	outining
Environmental Professional's Crede	entiais

William B. Soderstrom

500 Moseley Road Cross Roads, Texas 76227 (405) 258-8623 wsoderstrom@kje-us.com

WORK EXPERIENCE

Environmental Services Manager – Environmental Department KJ Environmental Management, Inc. – Denton, TX

07/2018 - Present

- 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 The VERTEX Companies, Inc. – Irving, TX

07/2015 - 07/2018

- 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 multifamily 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 ClassI 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 W&M Environmental Group, LLC – Plano, TX

09/2013 - 07/2015

- 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 Terracon Consultants, Inc – Oklahoma City, OK

06/2010 - 09/2013

- 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, airrotary 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 Option: Natural Resources

Minor: Soil Science

Oklahoma State University, Stillwater, OK

May 2010

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)