State of New Mexico
Oil Conservation Division

Incident ID	NRM2009254898
District RP	
Facility ID	
Application ID	

Remediation Plan

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

☒ Detailed description of proposed remediation technique
☒ 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)(4) NMAC
☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☒ Extents of contamination must be fully delineated.

☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Amber Groves Title: Remediation Coordinator

Signature: Amber Groves Date: 10/21/2020

email: algroves@paalp.com Telephone: (575)200-5517

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NRM2009254898
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

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

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Amber Groves Title: Remediation Coordinator

Signature: Amber Groves Date: 10/21/2020

email: algroves@paalp.com Telephone: (575)200-5517

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

TRC
Results you can rely on

SITE CLOSURE / DEFERRAL REQUEST

COG SCREECH OWL FEDERAL CTB
UNIT LETTER K, SECTION 18, TOWNSHIP 26 SOUTH, RANGE 27 EAST, NMPM
N 32.038972° W 104.232091°
SOUTH OF CARLSBAD
EDDY COUNTY, NEW MEXICO
Incident ID NRM2009254898
SRS #: 2020-030

Prepared for:

Plains Pipeline, L.P.
333 Clay Street, Suite 1600
Houston, Texas 77002

Prepared by:

TRC Environmental Corporation
10 Desta Drive, Suite 150E
Midland, Texas 79705

November 2020

Curt D. Stanley
Senior Project Manager

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION AND BACKGROUND

On behalf of Plains Pipeline, L.P. (Plains), TRC Environmental Corporation (TRC) has prepared this Site Closure Deferral Request for the crude oil Release Site known as COG Screech Owl Federal CTB (SRS # 2020-030). The Release Site is also known as "Screech Owl". The Release Site is located approximately twenty-six (26) miles south of Carlsbad in Unit Letter K, Section 18, Township 26 South, Range 27 East, NMPM, in Eddy County, New Mexico. The Release Site is located west and adjacent to the COG Operating, LLC (COG) Screech Owl Central Tank Battery (CTB). The property owner is The United States Department of the Interior, Bureau of Land Management (BLM). The Release Site GPS coordinates are N 32.038972° W 104.232091°. A topographic location map and aerial map are provided as Figures 1 and 2, respectively.

On March 28, 2020, due to a nipple failure on the meter skid, Plains experienced a release of approximately fifteen (15) barrels (bbls) of crude oil. Approximately twelve (12) bbls of crude oil was recovered during initial response activities. The released crude oil impacted the area inside the Plains secondary containment and flowed north around the COG tank battery secondary containment and onto the caliche pad located north of the Plains and COG secondary containments. In addition, crude oil was sprayed into the COG secondary containment and the area immediately south of the COG secondary containment. The NMOCD Release Notification and Corrective Action (Form C-141) is provided as Appendix G. Photographic Documentation is provided as Appendix A.

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) indicated no water wells were located within a one-half (0.5) mile radius of the release point. On September 20, 2018, Plains installed a monitor well (MW-1) at the Release Site and associated with a previous release (#2RP-474). During the installation of monitor well MW-1, groundwater was encountered at approximately ninety-three (93) feet below ground surface (bgs).

The Bureau of Land Management (BLM) publicly available *Karst Potential Map* indicates the COG Screech Owl Federal CTB Release Site, is located in a "critical karst" area. Based on the inferred location of the Release Site in an area of "critical karst", the *NMOCD Closure Criteria for Soils Impacted by a Release* are the most stringent closure criteria listed. The BLM Karst Potential Map is provided as Figure 3. The monitor well MW-1 log is provided as Appendix B.

2.0 VARIANCE REQUEST

On April 21, 2020, following delineation activities, a Plains Representative requested a NMOCD variance of the required confirmation sample standard. Plains acknowledged the Release Site is located in a "high karst" area and as such, remediation standards would generally be the most stringent.

On March 11, 2017, a previous release (Alpha Gathering, Seg 3, Lat 6E – NMOCD Reference #2RP-4747) occurred at this Site. On September 20, 2018, following the NMOCD approved remediation activities, a monitor well (MW-1) was installed at the Alpha Gathering, Seg 3, Lat 6E Release Site located adjacent the COG Screech Owl CTB. During the installation of the monitor well, groundwater was encountered at approximately ninety-three (93) feet bgs. On

October 8, 2018, a groundwater sample was collected from the monitor well and submitted to the laboratory for analysis of total dissolved solids (TDS) and benzene, toluene, ethylbenzene, and xylene (BTEX). The analytical results indicated concentrations of benzene, toluene, ethylbenzene, and xylene (BTEX) were less than the applicable Reporting Limit (RL) and less than the NMOCD regulatory guidelines. The analytical results indicated the TDS concentration of the groundwater sample was 485,000 mg/L and exceeded the NMOCD and New Mexico Water Quality Control Commission (NMQWCC) standard of 10,000 mg/L, for abatable groundwater.

On December 6, 2018, based on the analytical results of the October 8, 2018 groundwater sampling event, Plains, BLM, and NMOCD Representatives met at the NMOCD District 2 Office in Artesia. During the meeting, the representatives of the NMOCD and BLM approved of the plugging and abandonment of monitor well MW-1, by a licensed New Mexico water well driller. On February 6, 2019, monitor well MW-1 was plugged and abandoned by a licensed New Mexico water well driller as per the NMOSE plugging permit requirements. Please reference the Alpha Gathering, Seg 3, Lat 6E – (NMOCD Reference #2RP-4747) Site Closure Request (dated January 2019), for additional details.

On April 21, 2020, based on the depth and non-abatable quality of the groundwater, Plains requested a variance in the Total Petroleum Hydrocarbon (TPH) confirmation sample standard from 100 mg/kg to 2,500 mg/kg as outlined in Table 1 of the *NMOCD Closure Criteria for Soils Impacted by a Release*. On June 8, 2020, the variance was approved by the NMOCD.

Please reference NMOCD correspondence provided as Appendix C.

Based on the NMOCD approved variance, the Closure Criteria for the COG Screech Owl Federal CTB Release Site are as follows:

- Benzene - 10 mg/kg
- Benzene, Toluene, ethylbenzene, and total xylenes (BTEX) - 50 mg/kg
- Total Petroleum Hydrocarbons (TPH): GRO+DRO = 1,000 mg/kg, GRO+DRO+ORO = 2,500 mg/kg
- Chloride – 600 mg/kg

3.0 SUMMARY OF EXCAVATION ACTIVITIES

During initial response activities, a second-party contractor excavated heavily impacted soil by hand or by utilizing a backhoe. Impacted soil was temporarily stockpiled on a polyethene liner to mitigate the migration of contaminates into the subsurface soil, pending transportation to Lea Land, LLC., (Permit Number WM-01-035 New Mexico) located northeast of Carlsbad, New Mexico.

On April 7, 2020, delineation activities commenced and six (6) soil samples (D1 @ 1', D2 @ 1', E @ 1', S @ 1', W @ 1', and N @ 1') were collected and submitted to the laboratory for analysis of Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) using Method SW 846-8021B, Total Petroleum Hydrocarbon (TPH) using Method SW 846-8015M, and chloride using Method EPA 300.0. The analytical results indicated benzene concentrations ranged from less than the

applicable laboratory reporting limit (RL) for soil samples D1 @ 1', D2 @ 1', S @ 1', W @ 1', and N @ 1' to 0.00256 mg/kg for soil sample E @ 1'. BTEX concentrations ranged from less than the applicable laboratory RL for soil sample D2 @ 1', S @ 1', and W @ 1' to 0.06520 mg/kg for soil sample E @ 1'. TPH Gasoline Range Organics plus Diesel Range Organics (TPH GRO + DRO) concentrations ranged from less than the applicable laboratory RL for soil samples D1 @ 1', D2 @ 1', S @ 1', W @ 1', and N @ 1' to 2,062.9 mg/kg for soil sample E @ 1'. TPH Gasoline Range Organics plus Diesel Range Organics plus Oil Range Organics (TPH GRO + DRO + ORO) concentrations ranged from less than the applicable laboratory RL for soil samples D1 @ 1', D2 @ 1', S @ 1', W @ 1', and N @ 1' to 2,333.9 mg/kg for soil sample E @ 1'. Chloride concentrations ranged from 16.8 mg/kg for soil sample D1 @ 1' to 1,050 mg/kg for soil sample E @ 1'. Please reference Table 1 for a Summary of Concentrations of BTEX, TPH, and Chlorides in Soil. Chloride Field Test Results are provided in Appendix D and laboratory analytical reports are provided as Appendix E. Please reference Figure 4 (Excavation and Sample Location Map) and Figure 5 (Excavation and Sample Location Map with Aerial Photographic Imagery) for soil sample locations.

Based on the April 7, 2020 analytical results, additional delineation efforts were warranted in the area represented by soil sample E @ 1'.

On April 9, 2020, one (1) delineation soil sample (E @ 14") was collected and submitted to the laboratory for analysis of BTEX, TPH, and chloride. The analytical results indicated the benzene concentration was less than the applicable laboratory RL and the BTEX concentration was less than the applicable laboratory RL. The TPH GRO + DRO concentration was 197 mg/kg and the TPH GRO + DRO + ORO concentration was 234.8 mg/kg. The chloride concentration was 204 mg/kg.

Based on the April 9, 2020 analytical results, no additional delineation efforts were warranted.

On April 30, 2020 and June 1, 2020, an addendum to the initial April 21, 2020 variance request was submitted to the NMOCD by Plains. As indicated above, on March 11, 2017, a previous release (Alpha Gathering, Seg 3, Lat 6E – NMOCD Reference #2RP-4747) occurred at this Site. During the March 11, 2017 Release, a portion of the release was deferred by the NMOCD and BLM, due to the proximity to the COG Screech Owl CTB secondary containment.

The March 28, 2020 release followed a similar flowpath as the March 11, 2017 flowpath, flowing under the COG secondary containment. Due to the commingling of the two (2) releases, Plains requested the area under the COG secondary containment be deferred. On June 8, 2020, the NMOCD approved the variance request addendum to combine the 2RP-4747 and Incident NRM2009254898 deferrals.

In accordance with the *NMOCD Closure Criteria for Soils Impacted by a Release,* one (1) - five (5) point composite soil sample was collected and submitted to the laboratory for BTEX, TPH and chloride analysis for each approximately two-hundred (200) square foot area of excavation floor or sidewall.

On June 11, 2020, seven (7) excavation floor soil samples (F1 @ 1', F2 @ 2.5', F3 @ 1', F4 @ 2', F5 @ 1.5', F6 @ 1' and F7 @ 6") were collected and submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. The analytical results indicated benzene concentrations ranged from less than laboratory RL for soil samples F1 @ 1', F2 @ 2.5', F3 @ 1', F4 @ 2', F5 @ 1.5', and F6 @ 1' to 0.0125 mg/kg for soil sample F7 @ 6". BTEX concentrations ranged from less than the laboratory RL for soil samples F1 @ 1', F2 @ 2.5', F3 @ 1', F4 @ 2', and F6 @ 1' to 0.02216 mg/kg for soil sample F7 @ 6". TPH GRO + DRO concentrations ranged from 122 mg/kg for soil sample F3 @ 1' to 3,972 mg/kg for soil sample F5 @ 1.5'. TPH GRO + DRO + ORO concentrations ranged from 122 mg/kg for soil sample F3 @ 1' to 4,468 mg/kg for soil sample F5 @ 1.5'. Chloride concentrations ranged from 43.4 mg/kg for soil sample F5 @ 1.5' to 261 mg/kg for soil sample F2 @ 2.5'.

On June 11, 2020, ten (10) excavation sidewall soil samples (CNSW @ 6", CSSW @ 1.5', CWSW-1 @ 6", CSWS-2 @ 1', CESW-1 @ 1', CESW-2 @ 1', FP-1 SW, FP-2 SW, FP-3 SW, and FP-4 SW) were collected and submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. The analytical results indicated benzene concentrations ranged from less than laboratory RL for soil samples (CNSW @ 6", CSSW @ 1.5', CWSW-1 @ 6", CSWS-2 @ 1', CESW-1 @ 1', CESW-2 @ 1', FP-1 SW, FP-3 SW, and FP-4 SW to 0.0127 mg/kg for soil sample FP-2 SW. BTEX concentrations ranged from less than the laboratory RL for soil samples CSSW @ 1.5', CWSW-1 @ 6", CSWS-2 @ 1', CESW-1 @ 1', CESW-2 @ 1', FP-1 SW, FP-2 SW, FP-3 SW, and FP-4 SW to 0.0555 mg/kg for soil sample CNSW @ 6". TPH GRO + DRO concentrations ranged from 710 mg/kg for soil sample FP-3 SW to 8,714 mg/kg for soil sample CESW-1 @ 1'. TPH GRO + DRO + ORO concentrations ranged from 834 mg/kg for soil sample FP-3 SW to 9,714 mg/kg for soil sample CESW-1 @ 1''. Chloride concentrations ranged from 17.4 mg/kg for soil sample CESW-2 @ 1' to 524 mg/kg for soil sample CWSW-1 @ 6".

Based on the June 11, 2020 sampling event, soil represented by soil samples F5 @ 1.5', CNSW @ 6", CSSW @ 1.5', CWSW-1 @ 6", CSWS-2 @ 1', CESW-1 @ 1', CESW-2 @ 1', FP-2 SW, and FP-4 SW required additional excavation activities.

On June 17, 2020, one (1) excavation floor soil sample (F8 @ 14") and one (1) excavation sidewall soil sample (OS-SW) were collected and submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. The analytical results indicated benzene and BTEX concentrations were less than laboratory RL for each soil sample. TPH GRO + DRO concentrations ranged from less than the applicable laboratory RL for soil sample OS-SW to 78.5 mg/kg for soil sample F8 @ 14". TPH GRO + DRO + ORO concentrations ranged from less than the laboratory RL for soil sample OS-SW to 78.5 mg/kg for soil sample F8 @ 14". Chloride concentrations ranged from 197 mg/kg for soil sample F8 @ 14" to 331 mg/kg for soil sample OS-SW.

On June 17, 2020, four (4) sidewall soil samples (T-WW-N, T-WW-S, T-EW-N, and T-EW-S) and two (2) floor soil samples (T-BH-N @ 3' and T-BH-S @ 3'), were collected and submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. The soil samples were collected from an area approximately fifty (50) feet in length, two (2) feet in width, and three (3) feet in depth and located between the Plains berm and the COG Screech Owl CTB secondary containment. The analytical results indicated benzene concentrations were less than laboratory

RL for six (6) soil samples. BTEX concentrations ranged from less than the laboratory RL for soil samples T-WW-N, T-EW-N, and T-EW-S to 0.00979 mg/kg for soil sample T-BH-S @ 3'. TPH GRO + DRO concentrations ranged from 2,110.5 mg/kg for soil sample T-WW-N to 25,820 mg/kg for soil sample T-EW-N. TPH GRO + DRO + ORO concentrations ranged from 2,410 mg/kg for soil sample T-WW-N to 31,120 mg/kg for soil sample T-EW-N. Chloride concentrations ranged from 87.2 mg/kg for soil sample T-WW-S to 229 mg/kg for soil sample T-BH-N @ 3'.

On July 1, 2020, four (4) excavation floor and sidewall soil samples (CWSW-1A @ 6", CWSW-2A @ 1', CSSW-A @ 1.5', and F9 @ 1') were collected and submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. The analytical results indicated benzene and BTEX concentrations ranged from less than laboratory RL for all four (4) soil samples. TPH GRO + DRO concentrations ranged from less than the laboratory RL for soil samples CWSW-2A @ 1' and CSSW-A @ 1.5' to 44.2 mg/kg for soil sample F9 @ 1'. TPH GRO + DRO + ORO concentrations ranged from less than the laboratory RL for soil samples CWSW-2A @ 1' and CSSW-A @ 1.5' to 44.2 mg/kg for soil sample F9 @ 1'. Chloride concentrations ranged from 26.9 mg/kg for soil sample CSSW-A @ 1.5' to 59.5 mg/kg for soil sample CWSW-1A @ 6".

On July 7, 2020, three (3) excavation floor and sidewall soil samples (FP-4A SW @ 6", FP-2A SW @ 3", and F-5A @ 2.5') were collected and submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. The analytical results indicated benzene and BTEX concentrations ranged from less than laboratory RL for all three (3) soil samples. TPH GRO + DRO concentrations ranged from less than the laboratory RL for soil sample FP-2A SW @ 3" to 635 mg/kg for soil sample F-5A @ 2.5'. TPH GRO + DRO + ORO concentrations ranged from less than the laboratory RL for soil sample FP-2A SW @ 3" to 717.9 mg/kg for soil sample F-5A @ 2.5'. Chloride concentrations ranged from 8.45 mg/kg for soil sample FP-2A SW @ 3" to 32.4 mg/kg for soil sample FP-4A SW @ 6". Please note, during the excavation of soil represented by excavation floor soil sample F-5 @ 1.5', soil represented by sidewall soil samples T-WW-N and T-WW-S was also excavated.

On July 8, 2020, one (1) excavation sidewall soil sample (CNSW-A @ 6") was collected and submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. The analytical results indicated the benzene concentration was less than laboratory RL for the soil sample and the BTEX concentration was 0.00246 mg/kg. The TPH GRO + DRO concentration was 9,209 mg/kg for the soil sample and the TPH GRO + DRO + ORO concentration was 10,709 mg/kg for the soil sample. The chloride concentration was 33.5 mg/kg for the soil sample.

On July 15, 2020, one (1) excavation sidewall soil sample (CNSW-B @ 6") was collected and submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. The analytical results indicated the benzene and BTEX concentrations were less than laboratory RL for the soil sample. The TPH GRO + DRO and TPH GRO + DRO + ORO concentrations were less than the applicable laboratory RL and the chloride concentration was 75.0 mg/kg.

On April 30, 2020 and June 1, 2020, an addendum to the initial April 21, 2020 variance request was submitted to the NMOCD by Plains. As indicated above, on March 11, 2017, a previous

release (Alpha Gathering, Seg 3, Lat 6E – NMOCD Reference #2RP-4747) occurred at this Site. During the March 11, 2017 Release, a portion of the release was deferred by the NMOCD and BLM, due to the proximity to the COG Screech Owl CTB secondary containment.

The March 28, 2020 release followed a similar flowpath as the March 11, 2017 flowpath, flowing under the COG secondary containment. Due to the commingling of the two (2) releases, Plains requested the area under the COG secondary containment be deferred. On June 8, 2020, the NMOCD approved the variance request addendum to combine the 2RP-4747 and Incident NRM2009254898 deferrals. Excavation in these areas was not approved by COG and remediation of this area will be deferred to time of abandonment (TOA) of the COG Screech Owl Central Tank Battery Facility.

On September 3 and 4, 2020, a total of approximately 333,760 pounds (167 tons), which is equivalent to approximately 167 cubic yards of excavated soil was transported under manifest to Lea Land, LLC. Please reference Appendix F for the Request for Approval to Accept Solid Waste (NMOCD Form C-138). Please reference Appendix H for the Lea Land, Inc. Disposal Manifests.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Soil samples were obtained utilizing single-use, disposable, latex gloves and clean sampling tools. The soil sample was placed in a disposable Ziploc sample bag. The bag was labeled and a portion of the soil sample was then placed in a sterile glass container equipped with a Teflon-lined lid furnished by the analytical laboratory. The container was filled to capacity to limit the amount of headspace present. Each container was labeled and placed on ice in an insulated cooler. Proper chain-of-custody documentation was maintained throughout the sampling process.

Soil samples were delivered to Permian Basin Environmental Laboratory (Permian Lab) Midland, Texas for BTEX, TPH and chlorides analyses using the method described below.

- TPH concentrations in accordance with modified EPA Method 8015M GRO/DRO
- BTEX concentrations in accordance with EPA Method SW-846 8021b
- Chlorides concentrations in accordance with EPA Method E 300.

4.2 Decontamination of Equipment

Soil sampling tools such as small hand shovels were washed with Liqui-Nox® detergent and rinsed with distilled water between the collection of soil samples.

4.3 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody form.

5.0 SITE CLOSURE / DEFERAL REQUEST

Based on the analytical results of soil samples collected throughout the COG Screech Owl Federal CTB incident (ID NRM2009254898), Plains requests the NMOCD and BLM grant Site Closure status for the areas not approved by the NMOCD for deferral. Areas approved for deferral by the NMOCD will be addressed at the time of abandonment (TOA) of the COG Screech Owl Central Tank Battery Facility.

A Final Release Notification and Corrective Action (NMOCD Form C-141) is submitted with this Site Closure Deferral Request.

6.0 LIMITATIONS

TRC has prepared this Site Closure Deferral Request to the best of its ability. No other warranty, expressed or implied, is made or intended.

TRC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. TRC has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. TRC has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. TRC also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of TRC and/or Plains.

7.0 DISTRIBUTION

Copy 1:
Carlsbad Field Office
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Oil Conservation Division – District II
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cdstanley@trccompanies.com

Figures

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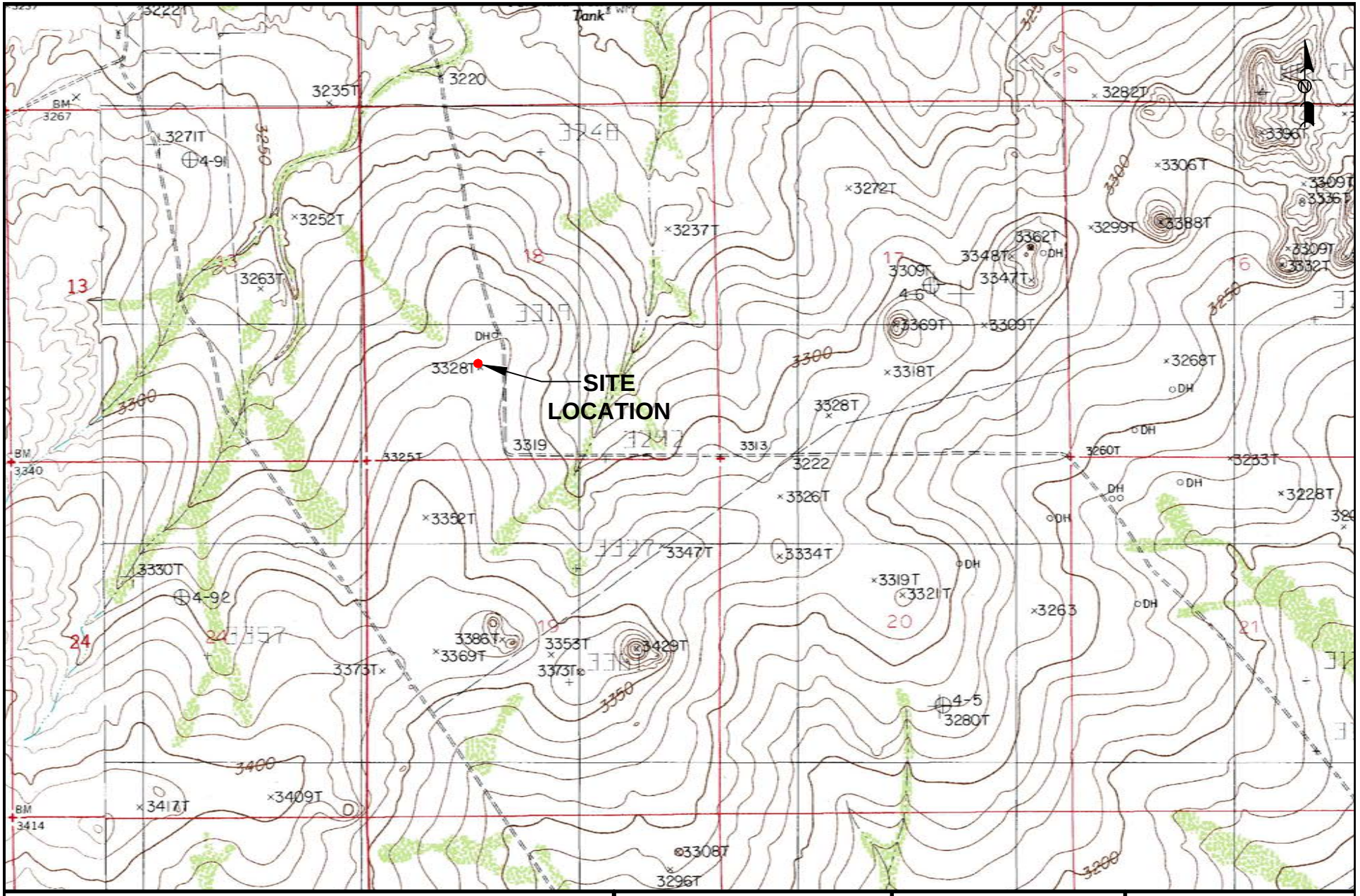

LEGEND:

2000 1000 0 1000 2000

Distance in Feet

Figure 1

Location Map

Plains Pipeline, L.P.
COG Screech Owl Federal CTB
Eddy County, NM

Scale: 1" = 2000'	
CAD By: CS	Checked By: CS
Draft: August 6, 2020	
Lat. N 32.038972°, Long. W 104.232091°	
ULT K, Sec 18 T26S R27E	
TRC Proj. No.: 391243	

TRC
10 Desta Drive, Suite 150E
Midland, Texas 79705
432.520.7720

LEGEND:

- Site Location
- 1/2 Mile Radius

2000 1000 0 1000 2000

Distance in Feet

Figure 2

Aerial Map

Plains Pipeline, L.P.
COG Screech Owl Federal CTB
Eddy County, NM

Scale: 1" = 2,000'
CAD By: CS
Checked By: CS
Draft: August 6, 2020
Lat. N 32.038972° Long. W 104.232091°
ULT K, Sec 18, T26S R27E

TRC
10 Desta Drive, Suite 150E
Midland, Texas 79703
432.520.7720

LEGEND:

- Low Karst Potential
- Medium Karst Potential
- Critical Karst Potential

3000 1500 0 1500 3000

Distance in Feet

Figure 3

Karst Potential Map
Plains Pipeline, L.P.
COG Screech Owl Federal CTB
Eddy County, NM

Scale: 1" = 3000'
CAD By: CS
Checked By: CS
Draft: August 6, 2020
Lat. N 32.038972° Long. W 104.232091°
ULT K, Sec 18, T26S R27E

TRC
10 Desta Drive, Suite 150E
Midland, Texas 79703
432.520.7720

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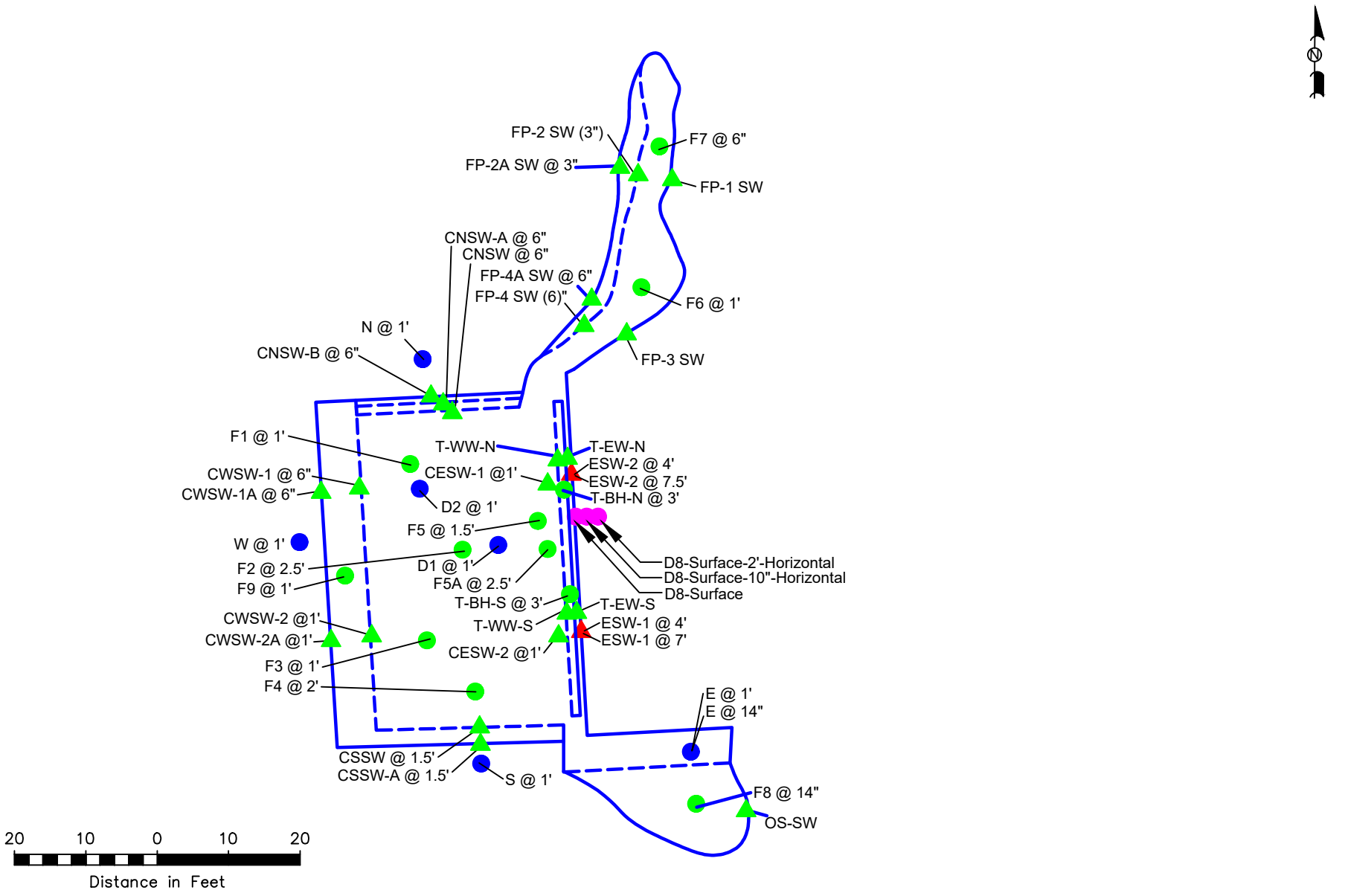

LEGEND:

- Area of Impact
- 2017 Sidewall Sample Location
- 2017 Surface Soil Sample Location
- 2020 Delineation Sample Location
- 2020 Sidwall Soil Sample Location
- 2020 Excavation Soil Sample Location

Figure 4

Excavation and Sample Location Map

Plains Pipeline, L.P.
COG Screech Owl Federal CTB
Eddy County, NM

Scale: 1" = 20'	
CAD By: CS	Checked By: CS
Draft: July 28, 2020	
Lat. N 32.09125°	Long. W 104.23278°
NE1/4 SW1/4 Sec 18 T26S R27E	
TRC Proj. No.: 391243	

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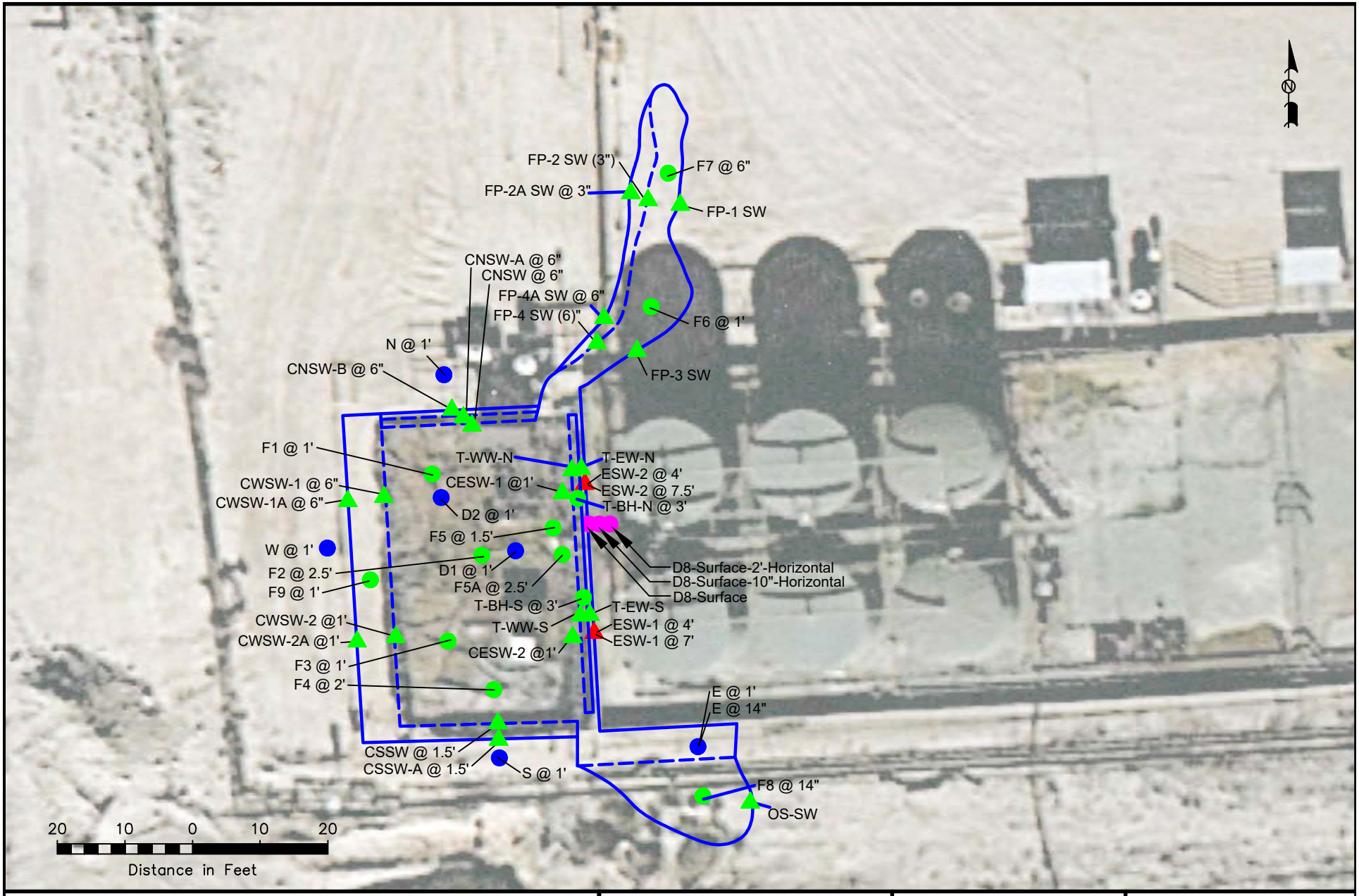
Midland, Texas 79705
432.520.7720

DRAWING NAME: Y:\Nova\Project Files\Plains\New Mexico\COG - Screech Owl Federal CTB - New\ Figure 5 Screech Owl CTB July 2020.dwg --- PLOT DATE: October 20, 2020 - 1:01PM --- LAYOUT: Layout1



LEGEND:

- Area of Impact
- 2017 Sidewall Sample Location
- 2017 Surface Soil Sample Location
- 2020 Delineation Sample Location
- 2020 Sidwall Soil Sample Location
- 2020 Excavation Soil Sample Location

Figure 5
Excavation and Sample Location Map with Aerial Photographic Imagery
Plains Pipeline, L.P.
COG Screech Owl Federal CTB
Eddy County, NM

Scale: 1" = 20'	
CAD By: CS	Checked By: CS
Draft: July 28, 2020	
Lat. N 32.09125°	Long. W 104.23278°
NE1/4 SW1/4 Sec 18 T26S R27E	
TRC Proj. No.: 391243	

TRC
10 Desta Drive, Suite 150E
Midland, Texas 79705
432.520.7720

Table

TABLE 1
CONCENTRATIONS OF BTEX, TPH, AND CHLORIDE IN SOIL

COG - Screech Owl Federal CTB
PLAINS PIPELINE, L.P.
EDDY COUNTY, NM
PLAINS SRS NUMBER: 2020-030

SAMPLE LOCATION	SAMPLE DATE	SAMPLE DEPTH	STATUS	Methods: EPA SW 846-8021B, 5030						Methods:					Method
				BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	m,p XYLENE (mg/kg)	o XYLENE (mg/kg)	TOTAL BTEX (mg/kg)	EPA SW 846-8015M					300.0
										GRO (mg/kg) C_6 - C_{10}	DRO (mg/kg) C_{10} - C_{28}	GRO + DRO (mg/kg) C_6 - C_{28}	ORO (mg/kg) C_{28} - C_{35}	TOTAL TPH (mg/kg) C_6 - C_{35}	CHLORIDE (mg/kg)
NMOCD Regulatory Guideline				**10**	-	-	-	-	**50**	-	-	**1,000**	-	**2,500**	**600**
D1 @ 1'	4/7/2020	1'	Excavated	<0.00119	<0.00119	<0.00119	0.00287	<0.00119	0.00287	<29.8	<29.8	<29.8	<29.8	<29.8	16.8
D2 @ 1'	4/7/2020	1'	Excavated	<0.00119	<0.00119	<0.00119	<0.00238	<0.00119	<0.00238	<29.8	<29.8	<29.8	<29.8	<29.8	34.6
E @ 1'	4/7/2020	1'	Excavated	0.00256	0.00934	0.00309	0.0405	0.00971	0.06520	52.9	2010	**2062.9**	271	2333.9	**1050**
S @ 1'	4/7/2020	1'	In-Situ	<0.00119	<0.00119	<0.00119	<0.00238	<0.00119	<0.00238	<29.8	<29.8	<29.8	<29.8	<29.8	20.0
W @ 1'	4/7/2020	1'	In-Situ	<0.00116	<0.00116	<0.00116	<0.00233	<0.00116	<0.00233	<29.1	<29.1	<29.1	<29.1	<29.1	33.9
N @ 1'	4/7/2020	1'	In-Situ	<0.00130	<0.00130	<0.00130	0.00353	0.00148	0.00501	<32.5	<32.5	<32.5	<32.5	<32.5	61.3
E @ 14"	4/9/2020	14"	In-Situ	<0.00115	<0.00115	<0.00115	<0.00230	<0.00115	<0.00230	<28.7	197	197	37.8	234.8	204
F1 @ 1'	6/11/2020	1'	In-Situ	<0.00102	<0.00510	<0.00510	<0.00510	<0.00510	<0.00510	<25.5	767	767	119	886	127
F2 @ 2.5'	6/11/2020	2.5'	In-Situ	<0.00106	<0.00532	<0.00532	<0.00532	<0.00532	<0.00532	<26.6	584	584	93.9	677.9	261
F3 @ 1'	6/11/2020	1'	In-Situ	<0.00101	<0.00505	<0.00505	<0.00505	<0.00505	<0.00505	<25.3	122	122	<25.3	122	58.6
F4 @ 2'	6/11/2020	2'	In-Situ	<0.00103	<0.00515	<0.00515	<0.00515	<0.00515	<0.00515	<25.8	395	395	53.4	448.4	77.2
F5 @ 1.5'	6/11/2020	1.5'	Excavated	<0.00104	<0.00521	<0.00521	0.00716	<0.00521	0.00716	112	3860	**3972**	496	**4468**	43.4
F6 @ 1'	6/11/2020	1'	In-Situ	<0.00103	<0.00515	<0.00515	<0.00515	<0.00515	<0.00515	<25.8	384	384	71.9	456	209
F7 @ 6"	6/11/2020	6"	In-Situ	0.0125	<0.00505	<0.00505	0.00966	<0.00505	0.02216	<25.3	541	541	106	647	125
CNSW @ 6"	6/11/2020	6"	Excavated	<0.00101	<0.00505	<0.00505	0.0394	0.0161	0.0555	278	7800	**8078**	892	**8970**	59.4
CSSW @ 1.5'	6/11/2020	1.5'	Excavated	<0.00102	<0.00510	<0.00510	0.0116	<0.00510	0.0116	65.5	2120	**2186**	311	**2497**	56.7
CWSW-1 @ 6"	6/11/2020	6"	Excavated	<0.00108	<0.00538	<0.00538	<0.00538	<0.00538	<0.00538	50.6	5080	**5130.6**	852	**5983**	524
CWSW-2 @ 1'	6/11/2020	1'	Excavated	<0.00101	<0.00505	<0.00505	0.0110	<0.00505	0.0110	259	4780	**5039**	676	**5715**	32.9
CESW-1 @ 1'	6/11/2020	1'	Excavated	<0.00101	0.00524	<0.00505	0.0280	0.00911	0.04235	294	8420	**8714**	1000	**9714**	17.8
CESW-2 @ 1'	6/11/2020	1'	Excavated	<0.00103	<0.00515	<0.00515	0.0277	0.0107	0.0384	228	6320	**6548**	773	**7321**	17.4
FP-1 SW	6/11/2020	3"	In-Situ	<0.00101	0.0101	<0.00505	0.00509	<0.00505	0.01519	<25.3	868	868	183	1051	133
FP-2 SW	6/11/2020	3"	Excavated	0.0127	0.0124	<0.00500	<0.00500	<0.00500	0.0251	<25.0	1220	**1220**	241	1461	176
FP-3 SW	6/11/2020	6"	In-Situ	0.00428	0.0397	0.00647	0.0428	0.0166	0.10985	<25.0	710	710	124	834	216
FP-4 SW	6/11/2020	6"	Excavated	<0.00104	0.00566	<0.00521	0.0286	0.0118	0.04606	56.3	2910	**2966**	586	**3552**	188
F8 @ 14"	6/17/2020	14"	In-Situ	<0.00109	<0.00543	<0.00543	<0.00543	<0.00543	<0.00543	<27.2	78.5	78.5	<27.2	78.5	194
OS-SW	6/17/2020	8"	In-Situ	<0.00108	<0.00538	<0.00538	<0.00538	<0.00543	<0.00543	<26.9	<26.9	<26.9	<26.9	<26.9	331
T-WW-N	6/17/2020	2'	Excavated	<0.00102	<0.00510	<0.00510	<0.00510	<0.00510	<0.00510	50.5	2060	**2110.5**	305	2410	162
T-WW-S	6/17/2020	2'	Excavated	<0.00101	<0.00505	<0.00505	0.00533	<0.00505	0.00533	83.1	4370	**4453.1**	632	**5085.1**	87.2
T-BH-N @ 3'	6/17/2020	3'	DEFERRED	<0.00106	<0.00532	<0.00532	0.00957	<0.00532	0.00957	275	8820	**9095**	1600	**10695**	229
T-BH-S @ 3'	6/17/2020	3'	DEFERRED	<0.00106	<0.00532	<0.00532	0.00979	<0.00532	0.00979	416	13100	**13516**	1900	**15416**	91.2

TABLE 1
CONCENTRATIONS OF BTEX, TPH, AND CHLORIDE IN SOIL

COG - Screech Owl Federal CTB
PLAINS PIPELINE, L.P.
EDDY COUNTY, NM
PLAINS SRS NUMBER: 2020-030

SAMPLE LOCATION	SAMPLE DATE	SAMPLE DEPTH	STATUS	Methods: EPA SW 846-8021B, 5030						Methods:					Method
										EPA SW 846-8015M					300.0
				BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	m,p XYLENE (mg/kg)	o XYLENE (mg/kg)	TOTAL BTEX (mg/kg)	GRO (mg/kg) C_6 - C_{10}	DRO (mg/kg) C_{10} - C_{28}	GRO + DRO (mg/kg) C_6 - C_{28}	ORO (mg/kg) C_{28} - C_{35}	TOTAL TPH (mg/kg) C_6 - C_{35}	CHLORIDE (mg/kg)
NMOCD Regulatory Guideline				**10**	-	-	-	-	**50**	-	-	**1,000**	-	**2,500**	**600**
T-EW-N	6/17/2020	2'	DEFERRED	<0.00108	<0.00538	<0.00538	<0.00538	<0.00538	<0.00538	320	25500	**25820**	5300	**31120**	111
T-EW-S	6/17/2020	2'	DEFERRED	<0.00104	<0.00521	<0.00521	<0.00521	<0.00521	<0.00521	<260	16600	**16600**	3650.00	**20250**	89.0
CWSW-1A @ 6"	7/1/2020	6"	In-Situ	<0.00104	<0.00208	<0.00104	<0.00208	<0.00104	<0.00208	<26.0	37.0	37.0	<26.0	37.0	59.5
CWSW-2A @ 1'	7/1/2020	1'	In-Situ	<0.00106	<0.00213	<0.00106	<0.00213	<0.00106	<0.00213	<26.2	<26.2	<26.2	<26.2	<26.2	46.2
CSSW-A @ 1.5'	7/1/2020	1.5'	In-Situ	<0.00109	<0.00217	<0.00109	<0.00217	<0.00109	<0.00217	<27.2	<27.2	<27.2	<27.2	<27.2	26.9
F9 @ 1'	7/1/2020	1'	In-Situ	<0.00108	<0.00215	<0.00108	<0.00215	<0.00108	<0.00215	<26.9	44.2	44.2	<26.9	44.2	38.9
FP-4A SW @ 6"	7/7/2020	6"	In-Situ	<0.00111	<0.00111	<0.00111	<0.00222	<0.00111	<0.00222	<27.8	74.5	74.5	<27.8	74.5	32.4
FP-2A SW @ 3"	7/7/2020	3"	In-Situ	<0.00114	<0.00114	<0.00114	<0.00227	<0.00114	<0.00227	<28.4	<28.4	<28.4	<28.4	<28.4	8.45
F-5A @ 2.5'	7/7/2020	2.5'	In-Situ	<0.00104	<0.00104	<0.00104	0.00573	<0.00104	0.00573	<26.0	635	635	82.9	717.9	23.9
CNSW-A @ 6"	7/8/2020	6"	Excavated	<0.00101	<0.00101	<0.00101	0.00246	<0.00101	0.00246	209	9000	**9209**	1500	**10709**	33.5
CNSW-B @ 6"	7/15/2020	6"	In-Situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<25.5	<25.5	<25.5	<25.5	<25.5	75.0

Appendix A
Photographic Documentation

TRC
Results you can rely on

Photographic Documentation

Client: Plains Pipeline, L.P.
Project Name: COG Screech Owl Federal CTB

Prepared by: TRC Environmental Corporation
Location: Eddy County, New Mexico

Photograph No. 1 **Date:** **April 7, 2020** **Direction:** **Looking south** **Description:** **Photo of initial Release on north side of COG containment.**	
Photograph No. 2 **Date:** **April 8, 2020** **Direction:** **Looking northwest** **Description:** **Excavation of saturated soil during initial response activities.**	

Photographic Documentation

Client: Plains Pipeline, L.P.
Project Name: COG Screech Owl Federal CTB

Prepared by: TRC Environmental Corporation
Location: Eddy County, New Mexico

Photograph No. 3 **Date:** **April 8, 2020** **Direction:** **Looking west** **Description:** **Excavation of saturated soil during initial response activities.**	
Photograph No. 4 **Date:** **April 9, 2020** **Direction:** **Looking north** **Description:** **Excavation of saturated soil during initial response activities completed.**	

Photographic Documentation

Client: Plains Pipeline, L.P.
Project Name: COG Screech Owl Federal CTB

Prepared by: TRC Environmental Corporation
Location: Eddy County, New Mexico

Photograph No. 5 **Date:** **April 9, 2020** **Direction:** **Looking northeast** **Description:** **North flowpath prior to excavation activities.**	
Photograph No. 6 **Date:** **September 21, 2020** **Direction:** **Looking southeast** **Description:** **North flowpath area backfilled following excavation activities.**	

Photographic Documentation

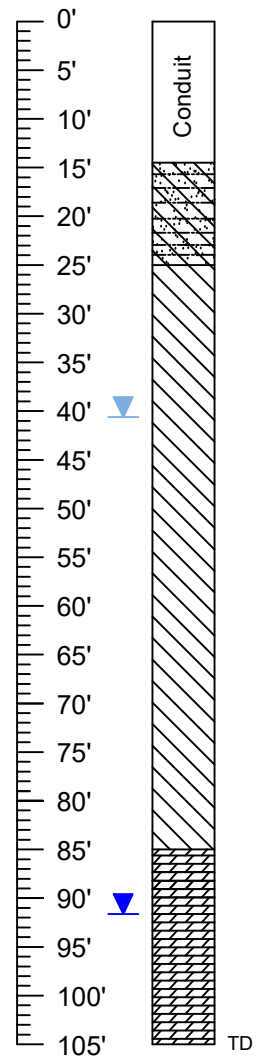
Client: Plains Pipeline, L.P.
Project Name: COG Screech Owl Federal CTB

Prepared by: TRC Environmental Corporation
Location: Eddy County, New Mexico

Photograph No. 7 **Date:** **September 21, 2020** **Direction:** **Looking south** **Description:** **Facility polyliner and security fencing re-established.**	
Photograph No. 8 **Date:** **September 21, 2020** **Direction:** **Looking east** **Description:** **Facility polyliner and security fencing re-established.**	

Appendix B
Monitor Well MW-1 Log

Monitor Well MW-1



Notes

No Odor / No Stain
No Odor / No Stain
No Odor / No Stain
No Odor / No Stain
No Odor / No Stain
No Odor / No Stain
No Odor / No Stain
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No Odor / No Stain
No Odor / No Stain
No Odor / No Stain
No Odor / No Stain
No Odor / No Stain

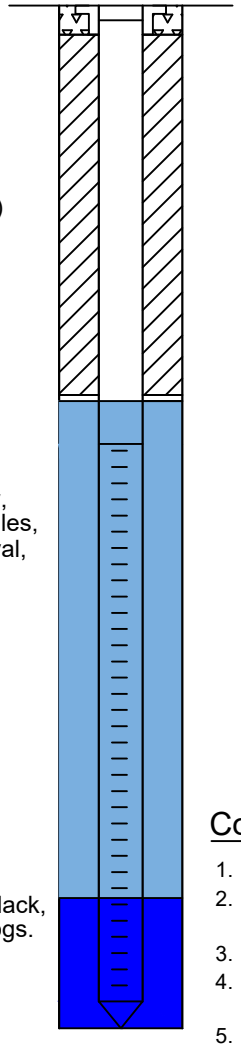
Soil Description

0 - 14.5' - Drilling conduit in former excavation

14.5' - 25' - Sand, light brown, Clay, red, Gypsum, white dry 15' - 25', (moist at 25') soft to hard.

25' - 85' - Gypsum, white to light gray, with some Sandstone nodules, white, dry throughout interval, soft to very hard.

85' - 105' - Dolomite, dark brown to black, wet at approximately 93' bgs.



Monitor Well Details

Date Drilled	September 20, 2018
Thickness of Bentonite Seal	3 ft
Length of PVC Well Screen	37 ft
Depth of PVC Well	105 ft
Depth of Exploratory Well	105 ft

Grout Surface Seal - 3' to Surface

Bentonite Pellet Seal - 40' to 3'

Sand Pack - 40' to 105'

Screen - 45' to 105''

Indicates the ground water level measured on 9/20/2018.

Indicates the ground water level measured on 9/29/2018.

Completion Notes

1. The monitor well was installed on date using Air rotary drilling techniques.
2. The well was constructed with 2" ID, 0.020 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3. The well is flush mount Style.
4. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
5. The depths indicated are referenced from the ground surface.

Figure 3
MW-1 Boring Log And Monitor Well Details
Plains Pipeline, LP
Alpha Gathering Seg 3 LAT 6E Eddy County, NM

Scale: None
CAD By: CS
Checked By: CS
Draft: October 21, 2018
Lat. N 32.039236° Long. W 104.131222°
TRC Proj. No.: 274959

TRC
10 Desta Drive, Suite 150E
Midland, Texas 79705
432.520.7720

Appendix C
NMOCD Correspondence

From: Amber L Groves
To: Stanley, Curtis D.
Subject: [EXTERNAL] Fwd: NRM2009254898 Plains Screech Owl Variance Request & Addendum
Date: Monday, June 8, 2020 10:41:13 AM

Hey Curt,

I just received approval on the variance for Screech Owl. Let's get confirmation samples, please!

Thank you,
Amber

Sent from my iPhone

Begin forwarded message:

> **From:** "Billings, Bradford, EMNRD" <Bradford.Billings@state.nm.us>
> **Date:** June 8, 2020 at 9:36:50 AM MDT
> **To:** Amber L Groves <ALGroves@paalp.com>
> **Subject: RE: NRM2009254898 Plains Screech Owl Variance Request & Addendum [External]**
>
> 6/08/2020
>
> Plains Pipeline
>
> Amber Groves – Plains
>
> Dear Amber,
>
> As per your request below, and with the following understanding as presented, Plains has approval to carry on with investigation as outlined below and to utilize the delineation data from other release for data source when Plains submits the likely deferral documentation.
>
> If there are any questions please do not hesitate to contact me as needs arise. Please keep a copy of this communication and associated email sting as no paper copy will follow.
>
> Thank you for your efforts.
>
> Sincerely,

Bradford Billings
EMNRD/OCD

OCD approval does not relieve the operator of liability should their operations fail to adequately
investigate and remediate contamination that may pose a threat to ground water, surface water,
human health or the environment. In addition, OCD approval does not relieve the operator of
responsibility for compliance with any other federal, state, local laws and/or regulations

---

From: Amber L Groves <ALGroves@paalp.com>
Sent: Monday, June 1, 2020 3:11 PM
To: Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Subject: [EXT] RE: NRM2009254898 Plains Screech Owl Variance Request & Addendum

Bradford,

To clarify from our recent conversation, Plains has a deferral in place under 2RP-4147 for the area between Plains' LACT berm and COG's containment. It is currently excavated to 3' bgs, and the previously deferred area will need to remain in place due to proximity to in place equipment. Plains will take confirmation samples of the 50 ft X 2ft area that will be requested as a deferral in the closure request, and would like to utilize the delineation data from the 2017 deferral for the impact that was left in place. Additional deferral of this area will be based on the analytical results from the monitor well installed in 2018 being above the NMWQCC standard for abatable groundwater.

Thank you,

Amber

From: Amber L Groves
Sent: Monday, June 1, 2020 2:26 PM
To: 'Billings, Bradford, EMNRD' <Bradford.Billings@state.nm.us>
Subject: FW: NRM2009254898 Plains Screech Owl Variance Request & Addendum

Good Afternoon, Bradford,

Below are the two variance requests that I sent in for our Screech Owl site. I just pasted both sets of verbiage here and the data is all attached. Please feel free to give me a call with any questions and as always it was good talking to you today!

Plains would like to respectfully add an addendum to the below variance request that was submitted to NMOCD on April 21, 2020. A portion of the March 28, 2020 release occurred directly into a flow path from a previously deferred release. 2RP-4147 occurred on March 11, 2017 and a portion of Plains' release was deferred due to its proximity to COG's CTB containment. The portion of Plains' current release that occurred in conjunction with the deferred area of 2RP-4147 is 50 ft in length X 2ft in width and has been excavated to an approximate depth of 3 ft bgs. Attached is a chemistry table outlining delineation samples from the 2017 release noting a depth of 4 ft bgs with a concentration of 2,984 mg/kg TPH and 7 ft bgs with a concentration of 33.2 mg/kg TPH. During excavation activities through 2017 and 2018, it was necessary for Plains to utilize a hammer hoe due to the geologic formation characterized as gypsum in the area. As such, utilizing a hand auger for delineation purposes has proved ineffectual. Also attached in the 2017 and 2020 combined documentation are photos indicating the infeasibility of utilizing equipment due to the existence of piping and LACT equipment in coexistence with COG's tank battery in relation to the 50 ft X 2ft area.

As indicated in the variance request below, Plains installed a monitor well at this location on October 8, 2018. Results from TDS analysis exceeded the NMWQCC standard for abatable groundwater. With the groundwater and geologic information presented, Plains respectfully requests for delineation data from 2017 to suffice in characterization of the current release for the 50 ft X 2ft area between Plains' LACT containment and COG's CTB containment. Please feel free to give me a call should you have any questions.

On March 28, 2020, Plains had an approximate 15 bbl release at COG's Screech Owl CTB. The C-141 was filed with NMOCD online on April 1, 2020 and assigned NRM2009254898. Initial delineation activities at the release site commenced on April 7, 2020 and soil sample results can be found in the attached Chemistry Table. Soil samples were advanced to 1 ft. bgs with the East (E) sample being advanced to a terminal depth of 14" with a result of 234.8 mg/kg TPH.

On September 20, 2018, Plains installed a monitor well at the COG Screech Owl CTB. Depth to water was determined to be approximately 93 feet bgs. A groundwater sample was collected on October 8, 2018 and analyzed for total dissolved solids (TDS). The analytical results indicated the TDS concentration was 485,000 mg/L. This result exceeds the NMOCD and New Mexico Water Quality Control Commission (NMWQCC) standard of 10,000 mg/L for abatable water. Please find attached the boring log and the analytical results from the groundwater sample collected from the monitor well. Also attached is published /pertinent information regarding the groundwater in the area. While Plains acknowledges the site is located in a high karst area, we respectfully request a variance for vertical delineation based on the downward trend of TPH concentrations collected from soil sample E and an impermeable gypsum layer, being

sufficed at the 234.8 mg/kg TPH. Plains also respectfully requests a variance on the 100 mg/kg confirmation sample standard to the 2,500 mg/kg standard in Table 1. Both variance requests are based on the provided groundwater data.

Thank you,

Amber L. Groves
Remediation Coordinator
Plains All American
3112 W. US Hwy 82
Lovington, NM 88260
575-200-5517

From: Amber L Groves
Sent: Thursday, April 30, 2020 10:10 AM
To: 'Billings, Bradford, EMNRD' <Bradford.Billings@state.nm.us>; 'cristina.eads@state.nm.us' <cristina.eads@state.nm.us>; 'victoria.venegas@state.nm.us' <victoria.venegas@state.nm.us>; 'robert.hamlet@state.nm.us' <robert.hamlet@state.nm.us>
Cc: 'mike.bratcher@state.nm.us' <mike.bratcher@state.nm.us>; Camille J Bryant <CJBryant@paalp.com>; 'Stanley, Curtis D.' <CDStanley@trccompanies.com>
Subject: NRM2009254898 Plains Screech Owl Variance Request & Addendum

Good Morning,

Plains would like to respectfully add an addendum to the below variance request that was submitted to NMOCD on April 21, 2020. A portion of the March 28, 2020 release occurred directly into a flow path from a previously deferred release. 2RP-4147 occurred on March 11, 2017 and a portion of Plains' release was deferred due to its proximity to COG's CTB containment. The portion of Plains' current release that occurred in conjunction with the deferred area of 2RP-4147 is 50 ft in length X 2ft in width and has been excavated to an approximate depth of 3 ft bgs. Attached is a chemistry table outlining delineation samples from the 2017 release noting a depth of 4 ft bgs with a concentration of 2,984 mg/kg TPH and 7 ft bgs with a concentration of 33.2 mg/kg TPH. During excavation activities through 2017 and 2018, it was necessary for Plains to utilize a hammer hoe due to the geologic formation characterized as gypsum in the area. As such, utilizing a hand auger for delineation purposes has proved ineffectual. Also attached in the 2017 and 2020 combined documentation are photos indicating the infeasibility of utilizing equipment due to the existence of piping and LACT equipment in coexistence with COG's tank battery in relation to the 50 ft X 2ft area.

As indicated in the variance request below, Plains installed a monitor well at this location on October 8, 2018. Results from TDS analysis exceeded the NMWQCC standard for abatable groundwater. With the groundwater and geologic information presented, Plains respectfully requests for delineation data from 2017 to suffice in characterization of the current release for the 50 ft X 2ft area between Plains' LACT containment and COG's CTB containment. Please feel free to give me a call should you have any questions.

Thank you,

Amber L. Groves
Remediation Coordinator
Plains All American
3112 W. US Hwy 82
Lovington, NM 88260
575-200-5517

From: Amber L Groves
Sent: Tuesday, April 21, 2020 9:51 AM
To: 'Billings, Bradford, EMNRD' <Bradford.Billings@state.nm.us>; 'cristina.eads@state.nm.us' <cristina.eads@state.nm.us>; 'victoria.venegas@state.nm.us' <victoria.venegas@state.nm.us>; 'robert.hamlet@state.nm.us' <robert.hamlet@state.nm.us>
Cc: 'mike.bratcher@state.nm.us' <mike.bratcher@state.nm.us>; Camille J Bryant <CJBryant@paalp.com>; Stanley, Curtis D. <CDStanley@trccompanies.com>
Subject: NRM2009254898 Plains Screech Owl Variance Request

Good Morning,

On March 28, 2020, Plains had an approximate 15 bbl release at COG's Screech Owl CTB. The C-141 was filed with NMOCD online on April 1, 2020 and assigned NRM2009254898. Initial delineation activities at the release site commenced on April 7, 2020 and soil sample results can be found in the attached Chemistry Table. Soil samples were advanced to 1 ft. bgs with the East (E) sample being advanced to a terminal depth of 14" with a result of 234.8 mg/kg TPH.

On September 20, 2018, Plains installed a monitor well at the COG Screech Owl CTB. Depth to water was determined to be approximately 93 feet bgs. A groundwater sample was collected on October 8, 2018 and analyzed for total dissolved solids (TDS). The analytical results indicated the TDS concentration was 485,000 mg/L. This result exceeds the NMOCD and New Mexico Water Quality Control Commission (NMWQCC)

standard of 10,000 mg/L for abatable water. Please find attached the boring log and the analytical results from the groundwater sample collected from the monitor well. Also attached is published /pertinent information regarding the groundwater in the area. While Plains acknowledges the site is located in a high karst area, we respectfully request a variance for vertical delineation based on the downward trend of TPH concentrations collected from soil sample E and an impermeable gypsum layer, being sufficed at the 234.8 mg/kg TPH. Plains also respectfully requests a variance on the 100 mg/kg confirmation sample standard to the 2,500 mg/kg standard in Table 1. Both variance requests are based on the provided groundwater data.

Please feel free to give me a call should you have any questions!

Thank you,

Amber L. Groves
Remediation Coordinator
Plains All American
3112 W. US Hwy 82
Lovington, NM 88260
575-200-5517

Attention:
The information contained in this message and/or attachments is intended only for the person or entity to which it is addressed and may contain confidential and/or privileged material. If you received this in error, please contact the Plains Service Desk at 713-646-4444 and delete the material from any system and destroy any copies.

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Appendix D
Chloride Field Test Results

CHLORIDE FIELD TEST RESULTS

COG SCREECH OWL FEDERAL CTB
PLAINS PIPELINE, LP
EDDY COUNTY, NM
Incident ID NRM2009254898

SAMPLE LOCATION	SAMPLE DATE	SAMPLE DEPTH (feet)	FIELD SCREEN CHLORIDE (mg/kg)
E @ 14"	4/9/2020	14"	156
F1 @ 1'	6/11/2020	1'	ND
F2 @ 2.5'	6/11/2020	2.5'	212
F3 @ 1'	6/11/2020	1'	ND
F4 @ 2'	6/11/2020	2'	ND
F5 @ 1.5'	6/11/2020	1.5'	ND
F6 @ 1'	6/11/2020	1'	212
F7 @ 6"	6/11/2020	6"	ND
CNSW @ 6"	6/11/2020	6"	ND
CSSW @ 1.5'	6/11/2020	1.5'	ND
CWSW-1 @ 6"	6/11/2020	6"	212
CWSW-2 @ 1'	6/11/2020	1'	ND
CESW-1 @ 1'	6/11/2020	1'	ND
FP-1 SW	6/11/2020	3"	ND
FP-2 SW	6/11/2020	3"	212
FP-3 SW	6/11/2020	6"	212
FP-4 SW	6/11/2020	6"	184
T-WW-N	6/17/2020	2'	ND
T-WW-S	6/17/2020	2'	ND
T-BH-N @ 3'	6/17/2020	3'	ND
T-BH-S @ 3'	6/17/2020	3'	356
T-EW-N	6/17/2020	2'	ND
T-EW-S	6/17/2020	2'	ND
CWSW-1A @ 6"	7/1/2020	6"	ND
CWSW-2A @ 1'	7/1/2020	1'	ND
CSSW-A @ 1.5'	7/1/2020	1.5'	ND
F9 @ 1'	7/1/2020	1'	ND
FP-4A SW @ 6"	7/7/2020	6"	ND
FP-2A SW @ 3"	7/7/2020	3"	ND
F-5A @ 2.5'	7/7/2020	2.5'	ND
CNSW-A @ 6"	7/8/2020	6"	ND

Appendix E
Laboratory Analytical Reports

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Curt Stanley
TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland, TX 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Location:

Lab Order Number: 0D08002

NELAP/TCEQ # T104704516-18-9

Report Date: 04/09/20

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
D1 @ 1'	0D08002-01	Soil	04/07/20 10:10	04-08-2020 09:11
D1 @ 2'	0D08002-02	Soil	04/07/20 10:20	04-08-2020 09:11
D2 @ 1'	0D08002-03	Soil	04/07/20 10:40	04-08-2020 09:11
D2 @ 2'	0D08002-04	Soil	04/07/20 10:50	04-08-2020 09:11
E @ 1'	0D08002-05	Soil	04/07/20 11:20	04-08-2020 09:11
S @ 1'	0D08002-06	Soil	04/07/20 11:30	04-08-2020 09:11
W @ 1'	0D08002-07	Soil	04/07/20 11:50	04-08-2020 09:11
N @ 1'	0D08002-08	Soil	04/07/20 12:10	04-08-2020 09:11

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

D1 @ 1'

0D08002-01 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00119	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Toluene	ND	0.00119	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Ethylbenzene	ND	0.00119	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Xylene (p/m)	**0.00287**	0.00238	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Xylene (o)	ND	0.00119	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*99.1 %*	*75-125*		*P0D0802*	*04/08/20*	*04/08/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*94.0 %*	*75-125*		*P0D0802*	*04/08/20*	*04/08/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**16.8**	1.19	mg/kg dry	1	P0D0804	04/08/20	04/09/20	EPA 300.0	
% Moisture	**16.0**	0.1	%	1	P0D0901	04/09/20	04/09/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	29.8	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
>C12-C28	ND	29.8	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
>C28-C35	ND	29.8	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*87.0 %*	*70-130*		*P0D0803*	*04/08/20*	*04/08/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*102 %*	*70-130*		*P0D0803*	*04/08/20*	*04/08/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	29.8	mg/kg dry	1	[CALC]	04/08/20	04/08/20	calc	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

D1 @ 2'

0D08002-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**17.0**	0.1	%	1	P0D0901	04/09/20	04/09/20	ASTM D2216	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

D2 @ 1'

0D08002-03 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00119	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Toluene	ND	0.00119	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Ethylbenzene	ND	0.00119	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Xylene (p/m)	ND	0.00238	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Xylene (o)	ND	0.00119	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*94.4 %*	*75-125*		*P0D0802*	*04/08/20*	*04/08/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*99.0 %*	*75-125*		*P0D0802*	*04/08/20*	*04/08/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**34.6**	1.19	mg/kg dry	1	P0D0804	04/08/20	04/09/20	EPA 300.0	
% Moisture	**16.0**	0.1	%	1	P0D0901	04/09/20	04/09/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	29.8	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
>C12-C28	ND	29.8	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
>C28-C35	ND	29.8	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*76.4 %*	*70-130*		*P0D0803*	*04/08/20*	*04/08/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*89.4 %*	*70-130*		*P0D0803*	*04/08/20*	*04/08/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	29.8	mg/kg dry	1	[CALC]	04/08/20	04/08/20	calc	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

D2 @ 2'

0D08002-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
% Moisture	**16.0**	0.1	%	1	P0D0901	04/09/20	04/09/20	ASTM D2216	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

E @ 1'

0D08002-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	**0.00256**	0.00112	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Toluene	**0.00934**	0.00112	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Ethylbenzene	**0.00309**	0.00112	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Xylene (p/m)	**0.0405**	0.00225	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Xylene (o)	**0.00971**	0.00112	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*101 %*	*75-125*		*P0D0802*	*04/08/20*	*04/08/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*102 %*	*75-125*		*P0D0802*	*04/08/20*	*04/08/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**1050**	28.1	mg/kg dry	25	P0D0804	04/08/20	04/09/20	EPA 300.0	
% Moisture	**11.0**	0.1	%	1	P0D0901	04/09/20	04/09/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**52.9**	28.1	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
>C12-C28	**2010**	28.1	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
>C28-C35	**271**	28.1	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*89.0 %*	*70-130*		*P0D0803*	*04/08/20*	*04/08/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*117 %*	*70-130*		*P0D0803*	*04/08/20*	*04/08/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**2330**	28.1	mg/kg dry	1	[CALC]	04/08/20	04/08/20	calc	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

S @ 1'

0D08002-06 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00119	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Toluene	ND	0.00119	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Ethylbenzene	ND	0.00119	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Xylene (p/m)	ND	0.00238	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Xylene (o)	ND	0.00119	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*98.4 %*	*75-125*		*P0D0802*	*04/08/20*	*04/08/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*105 %*	*75-125*		*P0D0802*	*04/08/20*	*04/08/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**20.0**	1.19	mg/kg dry	1	P0D0804	04/08/20	04/09/20	EPA 300.0	
% Moisture	**16.0**	0.1	%	1	P0D0901	04/09/20	04/09/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	29.8	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
>C12-C28	ND	29.8	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
>C28-C35	ND	29.8	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*84.8 %*	*70-130*		*P0D0803*	*04/08/20*	*04/08/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.8 %*	*70-130*		*P0D0803*	*04/08/20*	*04/08/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	29.8	mg/kg dry	1	[CALC]	04/08/20	04/08/20	calc	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

W @ 1'

0D08002-07 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00116	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Toluene	ND	0.00116	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Ethylbenzene	ND	0.00116	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Xylene (p/m)	ND	0.00233	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Xylene (o)	ND	0.00116	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*99.4 %*	*75-125*		*P0D0802*	*04/08/20*	*04/08/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*103 %*	*75-125*		*P0D0802*	*04/08/20*	*04/08/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**33.9**	1.16	mg/kg dry	1	P0D0804	04/08/20	04/09/20	EPA 300.0	
% Moisture	**14.0**	0.1	%	1	P0D0901	04/09/20	04/09/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	29.1	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
>C12-C28	ND	29.1	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
>C28-C35	ND	29.1	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*78.3 %*	*70-130*		*P0D0803*	*04/08/20*	*04/08/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*89.4 %*	*70-130*		*P0D0803*	*04/08/20*	*04/08/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	29.1	mg/kg dry	1	[CALC]	04/08/20	04/08/20	calc	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

N @ 1'

0D08002-08 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00130	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Toluene	ND	0.00130	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Ethylbenzene	ND	0.00130	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Xylene (p/m)	**0.00353**	0.00260	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Xylene (o)	**0.00148**	0.00130	mg/kg dry	1	P0D0802	04/08/20	04/08/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*105 %*	*75-125*		*P0D0802*	*04/08/20*	*04/08/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*97.4 %*	*75-125*		*P0D0802*	*04/08/20*	*04/08/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**61.3**	1.30	mg/kg dry	1	P0D0804	04/08/20	04/09/20	EPA 300.0	
% Moisture	**23.0**	0.1	%	1	P0D0901	04/09/20	04/09/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	32.5	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
>C12-C28	ND	32.5	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
>C28-C35	ND	32.5	mg/kg dry	1	P0D0803	04/08/20	04/08/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*78.6 %*	*70-130*		*P0D0803*	*04/08/20*	*04/08/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*89.5 %*	*70-130*		*P0D0803*	*04/08/20*	*04/08/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	32.5	mg/kg dry	1	[CALC]	04/08/20	04/08/20	calc	

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0D0802 - General Preparation (GC)										
Blank (P0D0802-BLK1)				Prepared & Analyzed: 04/08/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	*0.112*		*"*	*0.120*		*93.6*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.111*		*"*	*0.120*		*92.4*	*75-125*			
LCS (P0D0802-BS1)				Prepared & Analyzed: 04/08/20						
Benzene	0.0945	0.00100	mg/kg wet	0.100		94.5	70-130			
Toluene	0.0945	0.00100	"	0.100		94.5	70-130			
Ethylbenzene	0.100	0.00100	"	0.100		100	70-130			
Xylene (p/m)	0.207	0.00200	"	0.200		103	70-130			
Xylene (o)	0.106	0.00100	"	0.100		106	70-130			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*96.2*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.116*		*"*	*0.120*		*96.7*	*75-125*			
LCS Dup (P0D0802-BSD1)				Prepared & Analyzed: 04/08/20						
Benzene	0.101	0.00100	mg/kg wet	0.100		101	70-130	6.64	20	
Toluene	0.103	0.00100	"	0.100		103	70-130	8.86	20	
Ethylbenzene	0.103	0.00100	"	0.100		103	70-130	2.37	20	
Xylene (p/m)	0.224	0.00200	"	0.200		112	70-130	7.99	20	
Xylene (o)	0.104	0.00100	"	0.100		104	70-130	1.27	20	
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*97.0*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.116*		*"*	*0.120*		*97.1*	*75-125*			
Calibration Check (P0D0802-CCV2)				Prepared & Analyzed: 04/08/20						
Benzene	0.100	0.00100	mg/kg wet	0.100		100	80-120			
Toluene	0.102	0.00100	"	0.100		102	80-120			
Ethylbenzene	0.110	0.00100	"	0.100		110	80-120			
Xylene (p/m)	0.216	0.00200	"	0.200		108	80-120			
Xylene (o)	0.107	0.00100	"	0.100		107	80-120			
Surrogate: 1,4-Difluorobenzene	*0.121*		*"*	*0.120*		*101*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.122*		*"*	*0.120*		*102*	*75-125*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0D0802 - General Preparation (GC)										
Matrix Spike (P0D0802-MS1)		**Source: 0D08002-01**		Prepared & Analyzed: 04/08/20						
Benzene	0.0939	0.00119	mg/kg dry	0.119	ND	78.9	80-120			QM-07
Toluene	0.0967	0.00119	"	0.119	0.00104	80.4	80-120			
Ethylbenzene	0.119	0.00119	"	0.119	ND	99.9	80-120			
Xylene (p/m)	0.206	0.00238	"	0.238	0.00287	85.3	80-120			
Xylene (o)	0.103	0.00119	"	0.119	0.000631	86.0	80-120			
Surrogate: 1,4-Difluorobenzene	*0.144*		*"*	*0.143*		*101*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.153*		*"*	*0.143*		*107*	*75-125*			
Matrix Spike Dup (P0D0802-MSD1)		**Source: 0D08002-01**		Prepared & Analyzed: 04/08/20						
Benzene	0.0981	0.00119	mg/kg dry	0.119	ND	82.4	80-120	4.39	20	
Toluene	0.0997	0.00119	"	0.119	0.00104	82.9	80-120	3.04	20	
Ethylbenzene	0.120	0.00119	"	0.119	ND	101	80-120	0.678	20	
Xylene (p/m)	0.207	0.00238	"	0.238	0.00287	85.7	80-120	0.491	20	
Xylene (o)	0.107	0.00119	"	0.119	0.000631	89.4	80-120	3.79	20	
Surrogate: 1,4-Difluorobenzene	*0.146*		*"*	*0.143*		*103*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.151*		*"*	*0.143*		*106*	*75-125*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0D0804 - * DEFAULT PREP *** **										
Blank (P0D0804-BLK1)				Prepared: 04/08/20 Analyzed: 04/09/20						
Chloride	ND	0.100	mg/kg wet							
LCS (P0D0804-BS1)				Prepared: 04/08/20 Analyzed: 04/09/20						
Chloride	437	1.00	mg/kg wet	400		109	80-120			
LCS Dup (P0D0804-BSD1)				Prepared: 04/08/20 Analyzed: 04/09/20						
Chloride	431	1.00	mg/kg wet	400		108	80-120	1.59	20	
Calibration Blank (P0D0804-CCB1)				Prepared: 04/08/20 Analyzed: 04/09/20						
Chloride	0.00		mg/kg wet							
Calibration Blank (P0D0804-CCB2)				Prepared: 04/08/20 Analyzed: 04/09/20						
Chloride	0.00		mg/kg wet							
Calibration Check (P0D0804-CCV1)				Prepared: 04/08/20 Analyzed: 04/09/20						
Chloride	21.8		mg/kg	20.0		109	0-200			
Calibration Check (P0D0804-CCV2)				Prepared: 04/08/20 Analyzed: 04/09/20						
Chloride	22.2		mg/kg	20.0		111	0-200			
Matrix Spike (P0D0804-MS1)		**Source: 0D08001-01**		Prepared: 04/08/20 Analyzed: 04/09/20						
Chloride	767	5.00	mg/kg dry	500	260	101	80-120			
Matrix Spike Dup (P0D0804-MSD1)		**Source: 0D08001-01**		Prepared: 04/08/20 Analyzed: 04/09/20						
Chloride	799	5.00	mg/kg dry	500	260	108	80-120	4.15	20	
Batch P0D0901 - * DEFAULT PREP *** **										
Blank (P0D0901-BLK1)				Prepared & Analyzed: 04/09/20						
% Moisture	ND	0.1	%							

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0D0901 - * DEFAULT PREP *** **										
Duplicate (P0D0901-DUP1)		**Source: 0D08005-07**		Prepared & Analyzed: 04/09/20						
% Moisture	9.0	0.1	%		9.0			0.00	20	
Duplicate (P0D0901-DUP2)		**Source: 0D08005-28**		Prepared & Analyzed: 04/09/20						
% Moisture	6.0	0.1	%		7.0			15.4	20	

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0D0803 - TX 1005										
Blank (P0D0803-BLK1)				Prepared & Analyzed: 04/08/20						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*94.3*		*"*	*100*		*94.3*	*70-130*			
Surrogate: o-Terphenyl	*51.5*		*"*	*50.0*		*103*	*70-130*			
LCS (P0D0803-BS1)				Prepared & Analyzed: 04/08/20						
C6-C12	929	25.0	mg/kg wet	1000		92.9	75-125			
>C12-C28	1120	25.0	"	1000		112	75-125			
Surrogate: 1-Chlorooctane	*117*		*"*	*100*		*117*	*70-130*			
Surrogate: o-Terphenyl	*50.0*		*"*	*50.0*		*99.9*	*70-130*			
LCS Dup (P0D0803-BSD1)				Prepared & Analyzed: 04/08/20						
C6-C12	960	25.0	mg/kg wet	1000		96.0	75-125	3.29	20	
>C12-C28	1160	25.0	"	1000		116	75-125	3.72	20	
Surrogate: 1-Chlorooctane	*120*		*"*	*100*		*120*	*70-130*			
Surrogate: o-Terphenyl	*51.0*		*"*	*50.0*		*102*	*70-130*			
Calibration Blank (P0D0803-CCB1)				Prepared & Analyzed: 04/08/20						
C6-C12	13.5		mg/kg wet							
>C12-C28	23.6		"							
Surrogate: 1-Chlorooctane	*103*		*"*	*100*		*103*	*70-130*			
Surrogate: o-Terphenyl	*55.8*		*"*	*50.0*		*112*	*70-130*			
Calibration Blank (P0D0803-CCB2)				Prepared & Analyzed: 04/08/20						
C6-C12	19.6		mg/kg wet							
>C12-C28	16.1		"							
Surrogate: 1-Chlorooctane	*114*		*"*	*100*		*114*	*70-130*			
Surrogate: o-Terphenyl	*61.6*		*"*	*50.0*		*123*	*70-130*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0D0803 - TX 1005										
Calibration Check (P0D0803-CCV1)				Prepared & Analyzed: 04/08/20						
C6-C12	552	25.0	mg/kg wet	500		110	85-115			
>C12-C28	546	25.0	"	500		109	85-115			
Surrogate: 1-Chlorooctane	*120*		*"*	*100*		*120*	*70-130*			
Surrogate: o-Terphenyl	*55.3*		*"*	*50.0*		*111*	*70-130*			
Calibration Check (P0D0803-CCV2)				Prepared & Analyzed: 04/08/20						
C6-C12	534	25.0	mg/kg wet	500		107	85-115			
>C12-C28	561	25.0	"	500		112	85-115			
Surrogate: 1-Chlorooctane	*119*		*"*	*100*		*119*	*70-130*			
Surrogate: o-Terphenyl	*56.5*		*"*	*50.0*		*113*	*70-130*			
Matrix Spike (P0D0803-MS1)		**Source: 0D08002-01**		Prepared & Analyzed: 04/08/20						
C6-C12	984	29.8	mg/kg dry	1190	18.2	81.2	75-125			
>C12-C28	1150	29.8	"	1190	25.3	94.8	75-125			
Surrogate: 1-Chlorooctane	*115*		*"*	*119*		*96.5*	*70-130*			
Surrogate: o-Terphenyl	*49.5*		*"*	*59.5*		*83.1*	*70-130*			
Matrix Spike Dup (P0D0803-MSD1)		**Source: 0D08002-01**		Prepared & Analyzed: 04/08/20						
C6-C12	967	29.8	mg/kg dry	1190	18.2	79.7	75-125	1.86	20	
>C12-C28	1150	29.8	"	1190	25.3	94.4	75-125	0.435	20	
Surrogate: 1-Chlorooctane	*117*		*"*	*119*		*98.4*	*70-130*			
Surrogate: o-Terphenyl	*49.2*		*"*	*59.5*		*82.6*	*70-130*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Notes and Definitions

ROI	Received on Ice
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BULK	Samples received in Bulk soil containers
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 4/9/2020

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706
Phone: 432-661-4184

Project Manager: Curt Stanley
Company Name: TRC Environmental Corporation
Company Address: 10 Desta Drive, Ste 150E
City/State/Zip: Midland/TX/79703
Telephone No: (432)5207720 Fax No:
Sampler Signature:
e-mail: cdstanley@trcsolutions.com, cjbryant@paalp.com, algroves@paalp.com

Project Name: COG - Screech Owl CTB
Project #: 2020-030
Project Loc: Eddy County, New Mexico
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 0D08002

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1	8015M	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: 8015B	BTEX 8021B/5030 or BTEX 8260 X	RCI	N.O.R.M.	Chlorides E 300	Paint Filter	HOLD	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	D1 @ 1'			4/7/2020	1010		1	X								Soil	X											X				X				X
2	D1 @ 2'			4/7/2020	1020		1	X								Soil																	X			
3	D2 @ 1'			4/7/2020	1040		1	X								Soil	X											X				X				X
4	D2 @ 2'			4/7/2020	1050		1	X								Soil																X			
5	E @ 1'			4/7/2020	1120		1	X								Soil	X											X				X				X
6	S @ 1'			4/7/2020	1130		1	X								Soil	X											X				X				X
7	W @ 1'			4/7/2020	1150		1	X								Soil	X											X				X				X
8	N @ 1'			4/7/2020	1210		1	X								Soil	X											X				X				X

Special Instructions: Bill to Plains

Relinquished by:	Date	Time	Received by:	Date	Time
	4/8/20	9:11			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by PBEL: Tessa Bledsoe	4/8/20	9:11

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt:
Received: 5.0 °C CF +1
Adjusted: 6.0 °C Factor +2

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Curt Stanley
TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland, TX 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Location: Eddy County, NM

Lab Order Number: 0D13001

NELAP/TCEQ # T104704516-18-9

Report Date: 04/15/20

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
E @ 14"	0D13001-01	Soil	04/09/20 12:15	04-13-2020 08:13

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

E @ 14"

0D13001-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
Organics by GC									
Benzene	ND	0.00115	mg/kg dry	1	P0D1302	04/13/20	04/13/20	EPA 8021B	
Toluene	ND	0.00115	mg/kg dry	1	P0D1302	04/13/20	04/13/20	EPA 8021B	
Ethylbenzene	ND	0.00115	mg/kg dry	1	P0D1302	04/13/20	04/13/20	EPA 8021B	
Xylene (p/m)	ND	0.00230	mg/kg dry	1	P0D1302	04/13/20	04/13/20	EPA 8021B	
Xylene (o)	ND	0.00115	mg/kg dry	1	P0D1302	04/13/20	04/13/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*103 %*	*75-125*		*P0D1302*	*04/13/20*	*04/13/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*97.1 %*	*75-125*		*P0D1302*	*04/13/20*	*04/13/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**204**	11.5	mg/kg dry	10	P0D1307	04/13/20	04/13/20	EPA 300.0	
% Moisture	**13.0**	0.1	%	1	P0D1402	04/14/20	04/14/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	28.7	mg/kg dry	1	P0D1303	04/13/20	04/14/20	TPH 8015M	
>C12-C28	**197**	28.7	mg/kg dry	1	P0D1303	04/13/20	04/14/20	TPH 8015M	
>C28-C35	**37.8**	28.7	mg/kg dry	1	P0D1303	04/13/20	04/14/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.0 %*	*70-130*		*P0D1303*	*04/13/20*	*04/14/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*105 %*	*70-130*		*P0D1303*	*04/13/20*	*04/14/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**235**	28.7	mg/kg dry	1	[CALC]	04/13/20	04/14/20	calc	

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0D1302 - General Preparation (GC)										
Blank (P0D1302-BLK1)				Prepared & Analyzed: 04/13/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*96.1*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.120*		*"*	*0.120*		*99.8*	*75-125*			
LCS (P0D1302-BS1)				Prepared & Analyzed: 04/13/20						
Benzene	0.0943	0.00100	mg/kg wet	0.100		94.3	70-130			
Toluene	0.0971	0.00100	"	0.100		97.1	70-130			
Ethylbenzene	0.103	0.00100	"	0.100		103	70-130			
Xylene (p/m)	0.210	0.00200	"	0.200		105	70-130			
Xylene (o)	0.106	0.00100	"	0.100		106	70-130			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*96.1*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.117*		*"*	*0.120*		*97.3*	*75-125*			
LCS Dup (P0D1302-BSD1)				Prepared & Analyzed: 04/13/20						
Benzene	0.100	0.00100	mg/kg wet	0.100		100	70-130	6.24	20	
Toluene	0.105	0.00100	"	0.100		105	70-130	7.63	20	
Ethylbenzene	0.108	0.00100	"	0.100		108	70-130	4.50	20	
Xylene (p/m)	0.225	0.00200	"	0.200		112	70-130	7.05	20	
Xylene (o)	0.109	0.00100	"	0.100		109	70-130	2.54	20	
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.3*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.118*		*"*	*0.120*		*98.0*	*75-125*			
Calibration Blank (P0D1302-CCB1)				Prepared & Analyzed: 04/13/20						
Benzene	0.00		mg/kg wet							
Toluene	0.650		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.460		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	*0.112*		*"*	*0.120*		*93.0*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.113*		*"*	*0.120*		*94.5*	*75-125*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0D1302 - General Preparation (GC)										
Calibration Blank (P0D1302-CCB2)				Prepared & Analyzed: 04/13/20						
Benzene	0.00		mg/kg wet							
Toluene	0.790		"							
Ethylbenzene	0.460		"							
Xylene (p/m)	0.820		"							
Xylene (o)	0.320		"							
Surrogate: 1,4-Difluorobenzene	*0.114*		"	*0.120*		*94.8*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.119*		"	*0.120*		*99.0*	*75-125*			
Calibration Check (P0D1302-CCV1)				Prepared & Analyzed: 04/13/20						
Benzene	0.0891	0.00100	mg/kg wet	0.100		89.1	80-120			
Toluene	0.0964	0.00100	"	0.100		96.4	80-120			
Ethylbenzene	0.108	0.00100	"	0.100		108	80-120			
Xylene (p/m)	0.214	0.00200	"	0.200		107	80-120			
Xylene (o)	0.107	0.00100	"	0.100		107	80-120			
Surrogate: 4-Bromofluorobenzene	*0.117*		"	*0.120*		*97.7*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.122*		"	*0.120*		*101*	*75-125*			
Calibration Check (P0D1302-CCV2)				Prepared & Analyzed: 04/13/20						
Benzene	0.0920	0.00100	mg/kg wet	0.100		92.0	80-120			
Toluene	0.0997	0.00100	"	0.100		99.7	80-120			
Ethylbenzene	0.112	0.00100	"	0.100		112	80-120			
Xylene (p/m)	0.221	0.00200	"	0.200		111	80-120			
Xylene (o)	0.106	0.00100	"	0.100		106	80-120			
Surrogate: 4-Bromofluorobenzene	*0.122*		"	*0.120*		*101*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.118*		"	*0.120*		*98.1*	*75-125*			
Calibration Check (P0D1302-CCV3)				Prepared & Analyzed: 04/13/20						
Benzene	0.0918	0.00100	mg/kg wet	0.100		91.8	80-120			
Toluene	0.101	0.00100	"	0.100		101	80-120			
Ethylbenzene	0.115	0.00100	"	0.100		115	80-120			
Xylene (p/m)	0.223	0.00200	"	0.200		112	80-120			
Xylene (o)	0.111	0.00100	"	0.100		111	80-120			
Surrogate: 4-Bromofluorobenzene	*0.125*		"	*0.120*		*104*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.120*		"	*0.120*		*99.7*	*75-125*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0D1302 - General Preparation (GC)										
Matrix Spike (P0D1302-MS1)	**Source: 0D13002-01**			Prepared & Analyzed: 04/13/20						
Benzene	2.14	0.0204	mg/kg dry	2.04	ND	105	80-120			
Toluene	2.30	0.0204	"	2.04	0.172	104	80-120			
Ethylbenzene	2.14	0.0204	"	2.04	0.537	78.6	80-120			QM-07
Xylene (p/m)	4.38	0.0408	"	4.08	0.912	84.9	80-120			
Xylene (o)	2.17	0.0204	"	2.04	0.231	94.9	80-120			
Surrogate: 4-Bromofluorobenzene	*0.140*		"	*0.122*		*114*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.127*		"	*0.122*		*104*	*75-125*			
Matrix Spike Dup (P0D1302-MSD1)	**Source: 0D13002-01**			Prepared & Analyzed: 04/13/20						
Benzene	2.08	0.0204	mg/kg dry	2.04	ND	102	80-120	2.61	20	
Toluene	2.26	0.0204	"	2.04	0.172	102	80-120	2.03	20	
Ethylbenzene	2.24	0.0204	"	2.04	0.537	83.6	80-120	6.09	20	
Xylene (p/m)	4.33	0.0408	"	4.08	0.912	83.7	80-120	1.44	20	
Xylene (o)	2.00	0.0204	"	2.04	0.231	86.8	80-120	8.97	20	
Surrogate: 4-Bromofluorobenzene	*0.141*		"	*0.122*		*115*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.117*		"	*0.122*		*95.6*	*75-125*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0D1307 - * DEFAULT PREP *** **										
LCS (P0D1307-BS1)				Prepared & Analyzed: 04/13/20						
Chloride	402	1.00	mg/kg wet	400		100	80-120			
LCS Dup (P0D1307-BSD1)				Prepared & Analyzed: 04/13/20						
Chloride	399	1.00	mg/kg wet	400		99.8	80-120	0.577	20	
Calibration Blank (P0D1307-CCB1)				Prepared & Analyzed: 04/13/20						
Chloride	0.00		mg/kg wet							
Calibration Blank (P0D1307-CCB2)				Prepared & Analyzed: 04/13/20						
Chloride	0.00		mg/kg wet							
Calibration Check (P0D1307-CCV1)				Prepared & Analyzed: 04/13/20						
Chloride	20.0		mg/kg	20.0		99.9	0-200			
Calibration Check (P0D1307-CCV2)				Prepared & Analyzed: 04/13/20						
Chloride	19.9		mg/kg	20.0		99.7	0-200			
Calibration Check (P0D1307-CCV3)				Prepared & Analyzed: 04/13/20						
Chloride	20.1		mg/kg	20.0		101	0-200			
Matrix Spike (P0D1307-MS1)		**Source: 0D13001-01**		Prepared & Analyzed: 04/13/20						
Chloride	1370	11.5	mg/kg dry	1150	204	102	80-120			
Matrix Spike (P0D1307-MS2)		**Source: 0D13003-12**		Prepared & Analyzed: 04/13/20						
Chloride	1190	5.68	mg/kg dry	568	553	113	80-120			
Matrix Spike Dup (P0D1307-MSD1)		**Source: 0D13001-01**		Prepared & Analyzed: 04/13/20						
Chloride	1450	11.5	mg/kg dry	1150	204	108	80-120	5.45	20	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0D1307 - * DEFAULT PREP *** **										
Matrix Spike Dup (P0D1307-MSD2)		**Source: 0D13003-12**		Prepared & Analyzed: 04/13/20						
Chloride	1230	5.68	mg/kg dry	568	553	119	80-120	2.91	20	
Batch P0D1402 - * DEFAULT PREP *** **										
Blank (P0D1402-BLK1)				Prepared & Analyzed: 04/14/20						
% Moisture	ND	0.1	%							
Duplicate (P0D1402-DUP1)		**Source: 0D13003-12**		Prepared & Analyzed: 04/14/20						
% Moisture	11.0	0.1	%		12.0			8.70	20	
Duplicate (P0D1402-DUP2)		**Source: 0D13004-05**		Prepared & Analyzed: 04/14/20						
% Moisture	4.0	0.1	%		4.0			0.00	20	

TRC Solutions- Midland, Texas
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Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0D1303 - TX 1005										
Blank (P0D1303-BLK1)				Prepared & Analyzed: 04/13/20						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*112*		*"*	*100*		*112*	*70-130*			
Surrogate: o-Terphenyl	*59.2*		*"*	*50.0*		*118*	*70-130*			
LCS (P0D1303-BS1)				Prepared & Analyzed: 04/13/20						
C6-C12	1010	25.0	mg/kg wet	1000		101	75-125			
>C12-C28	1030	25.0	"	1000		103	75-125			
Surrogate: 1-Chlorooctane	*119*		*"*	*100*		*119*	*70-130*			
Surrogate: o-Terphenyl	*49.5*		*"*	*50.0*		*99.1*	*70-130*			
LCS Dup (P0D1303-BSD1)				Prepared & Analyzed: 04/13/20						
C6-C12	894	25.0	mg/kg wet	1000		89.4	75-125	11.9	20	
>C12-C28	891	25.0	"	1000		89.1	75-125	14.5	20	
Surrogate: 1-Chlorooctane	*87.7*		*"*	*100*		*87.7*	*70-130*			
Surrogate: o-Terphenyl	*44.8*		*"*	*50.0*		*89.6*	*70-130*			
Calibration Blank (P0D1303-CCB1)				Prepared & Analyzed: 04/13/20						
C6-C12	10.6		mg/kg wet							
>C12-C28	23.4		"							
Surrogate: 1-Chlorooctane	*112*		*"*	*100*		*112*	*70-130*			
Surrogate: o-Terphenyl	*58.0*		*"*	*50.0*		*116*	*70-130*			
Calibration Blank (P0D1303-CCB2)				Prepared: 04/13/20 Analyzed: 04/14/20						
C6-C12	9.61		mg/kg wet							
>C12-C28	15.2		"							
Surrogate: 1-Chlorooctane	*112*		*"*	*100*		*112*	*70-130*			
Surrogate: o-Terphenyl	*58.9*		*"*	*50.0*		*118*	*70-130*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0D1303 - TX 1005										
Calibration Check (P0D1303-CCV1)				Prepared & Analyzed: 04/13/20						
C6-C12	496	25.0	mg/kg wet	500		99.1	85-115			
>C12-C28	496	25.0	"	500		99.3	85-115			
Surrogate: 1-Chlorooctane	*116*		"	*100*		*116*	*70-130*			
Surrogate: o-Terphenyl	*54.2*		"	*50.0*		*108*	*70-130*			
Calibration Check (P0D1303-CCV2)				Prepared: 04/13/20 Analyzed: 04/14/20						
C6-C12	537	25.0	mg/kg wet	500		107	85-115			
>C12-C28	532	25.0	"	500		106	85-115			
Surrogate: 1-Chlorooctane	*112*		"	*100*		*112*	*70-130*			
Surrogate: o-Terphenyl	*54.3*		"	*50.0*		*109*	*70-130*			
Calibration Check (P0D1303-CCV3)				Prepared: 04/13/20 Analyzed: 04/14/20						
C6-C12	494	25.0	mg/kg wet	500		98.9	85-115			
>C12-C28	506	25.0	"	500		101	85-115			
Surrogate: 1-Chlorooctane	*106*		"	*100*		*106*	*70-130*			
Surrogate: o-Terphenyl	*50.8*		"	*50.0*		*102*	*70-130*			
Matrix Spike (P0D1303-MS1)		**Source: 0D09001-06**		Prepared: 04/13/20 Analyzed: 04/14/20						
C6-C12	847	25.8	mg/kg dry	1030	26.3	79.6	75-125			
>C12-C28	1020	25.8	"	1030	574	43.7	75-125			QM-07
Surrogate: 1-Chlorooctane	*84.3*		"	*103*		*81.8*	*70-130*			
Surrogate: o-Terphenyl	*49.2*		"	*51.5*		*95.4*	*70-130*			
Matrix Spike Dup (P0D1303-MSD1)		**Source: 0D09001-06**		Prepared: 04/13/20 Analyzed: 04/14/20						
C6-C12	858	25.8	mg/kg dry	1030	26.3	80.7	75-125	1.31	20	
>C12-C28	1050	25.8	"	1030	574	46.5	75-125	6.34	20	QM-07
Surrogate: 1-Chlorooctane	*94.9*		"	*103*		*92.0*	*70-130*			
Surrogate: o-Terphenyl	*45.1*		"	*51.5*		*87.5*	*70-130*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BULK	Samples received in Bulk soil containers
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 4/15/2020

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706
Phone: 432-661-4184

Project Manager: Curt Stanley
Company Name: TRC Environmental Corporation
Company Address: 10 Desta Drive, Ste 150E
City/State/Zip: Midland/TX/79703
Telephone No: (432)5207720 Fax No:
Sampler Signature:
e-mail: cdstanley@trcsolutions.com, cjbryant@paalp.com, algroves@paalp.com

Project Name: COG - Screech Owl CTB
Project #: 2020-030
Project Loc: Eddy County, New Mexico
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 0D13001

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 8015M	TOTAL: TPH: 418.1	TPH: TX 1005	TPH: TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260 X	RCI	N.O.R.M.	Chloride E 300	Paint Filter	HOLD	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	E @ 14"			4/9/2020	1215		1	X								Soil	X									X			X					X

Special Instructions: Rice to Plains

Relinquished by:	Date	Time	Received by:	Date	Time
	4/13/20	8:10			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by PBEL:	4/13/20	8:10

Laboratory Comments:

Sample Containers Intact?	Y N
VOCs Free of Headspace?	N
Labels on container(s)	N
Custody seals on container(s)	N
Custody seals on cooler(s)	N
Sample Hand Delivered	N
by Sampler/Client Rep. ?	N
by Courier? UPS DHL FedEx Lone Star	
Temperature Upon Receipt:	
Received: 1.2 °C	
Adjusted: 2.2 °C Factor	1.2

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Curt Stanley
TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland, TX 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Location: Eddy County, NM

Lab Order Number: 0F15007

NELAP/TCEQ # T104704516-17-8

Report Date: 06/29/20

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
F1 @ 1'	0F15007-01	Soil	06/11/20 13:00	06-15-2020 09:39
F2 @ 2.5'	0F15007-02	Soil	06/11/20 13:10	06-15-2020 09:39
F3 @ 1'	0F15007-03	Soil	06/11/20 13:20	06-15-2020 09:39
F4 @ 2'	0F15007-04	Soil	06/11/20 13:30	06-15-2020 09:39
F5 @ 1.5'	0F15007-05	Soil	06/11/20 13:40	06-15-2020 09:39
F6 @ 1'	0F15007-06	Soil	06/11/20 13:50	06-15-2020 09:39
F7 @ 6"	0F15007-07	Soil	06/11/20 14:00	06-15-2020 09:39
CNSW @ 6"	0F15007-08	Soil	06/11/20 14:10	06-15-2020 09:39
CSSW @ 1.5'	0F15007-09	Soil	06/11/20 14:15	06-15-2020 09:39
CWSW-1 @ 6"	0F15007-10	Soil	06/11/20 14:20	06-15-2020 09:39
CWSW-2 @ 1'	0F15007-11	Soil	06/11/20 14:30	06-15-2020 09:39
CESW-1 @ 1'	0F15007-12	Soil	06/11/20 14:35	06-15-2020 09:39
CESW-2 @ 1'	0F15007-13	Soil	06/11/20 14:37	06-15-2020 09:39
FP-1 SW	0F15007-14	Soil	06/11/20 14:45	06-15-2020 09:39
FP-2 SW	0F15007-15	Soil	06/11/20 14:50	06-15-2020 09:39
FP-3 SW	0F15007-16	Soil	06/11/20 14:55	06-15-2020 09:39
FP-4 SW	0F15007-17	Soil	06/11/20 15:00	06-15-2020 09:39

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
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Midland TX, 79705	Project Manager: Curt Stanley	

F1 @ 1'

0F15007-01 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Toluene	ND	0.00510	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Ethylbenzene	ND	0.00510	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (p/m)	ND	0.00510	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (o)	ND	0.00510	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*92.3 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*102 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**127**	1.02	mg/kg dry	1	P0F1704	06/17/20	06/18/20	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
>C12-C28	**767**	25.5	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
>C28-C35	**119**	25.5	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*84.9 %*	*70-130*		*P0F1604*	*06/16/20*	*06/16/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*94.7 %*	*70-130*		*P0F1604*	*06/16/20*	*06/16/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**886**	25.5	mg/kg dry	1	[CALC]	06/16/20	06/16/20	calc	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
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Midland TX, 79705	Project Manager: Curt Stanley	

F2 @ 2.5'

0F15007-02 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00106	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Toluene	ND	0.00532	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Ethylbenzene	ND	0.00532	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (p/m)	ND	0.00532	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (o)	ND	0.00532	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*92.9 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*97.3 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**261**	5.32	mg/kg dry	5	P0F1704	06/17/20	06/18/20	EPA 300.0	
% Moisture	**6.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.6	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
>C12-C28	**584**	26.6	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
>C28-C35	**93.9**	26.6	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*87.3 %*	*70-130*		*P0F1604*	*06/16/20*	*06/16/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*96.8 %*	*70-130*		*P0F1604*	*06/16/20*	*06/16/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**678**	26.6	mg/kg dry	1	[CALC]	06/16/20	06/16/20	calc	

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F3 @ 1'

0F15007-03 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00101	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Toluene	ND	0.00505	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Ethylbenzene	ND	0.00505	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (p/m)	ND	0.00505	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (o)	ND	0.00505	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*98.4 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*92.4 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**58.6**	1.01	mg/kg dry	1	P0F1704	06/17/20	06/18/20	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.3	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
>C12-C28	**122**	25.3	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
>C28-C35	ND	25.3	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*88.0 %*	*70-130*		*P0F1604*	*06/16/20*	*06/16/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*97.7 %*	*70-130*		*P0F1604*	*06/16/20*	*06/16/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**122**	25.3	mg/kg dry	1	[CALC]	06/16/20	06/16/20	calc	

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F4 @ 2'

0F15007-04 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Toluene	ND	0.00515	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Ethylbenzene	ND	0.00515	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (p/m)	ND	0.00515	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (o)	ND	0.00515	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*89.7 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*98.1 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**77.2**	1.03	mg/kg dry	1	P0F1704	06/17/20	06/18/20	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
>C12-C28	**395**	25.8	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
>C28-C35	**53.4**	25.8	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*92.5 %*	*70-130*		*P0F1604*	*06/16/20*	*06/16/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*92.7 %*	*70-130*		*P0F1604*	*06/16/20*	*06/16/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**448**	25.8	mg/kg dry	1	[CALC]	06/16/20	06/16/20	calc	

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F5 @ 1.5'

0F15007-05 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Toluene	ND	0.00521	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Ethylbenzene	ND	0.00521	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (p/m)	**0.00716**	0.00521	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (o)	ND	0.00521	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*85.1 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*103 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**43.4**	1.04	mg/kg dry	1	P0F1704	06/17/20	06/18/20	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**112**	26.0	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
>C12-C28	**3860**	26.0	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
>C28-C35	**496**	26.0	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*94.1 %*	*70-130*		*P0F1604*	*06/16/20*	*06/16/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*98.1 %*	*70-130*		*P0F1604*	*06/16/20*	*06/16/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**4470**	26.0	mg/kg dry	1	[CALC]	06/16/20	06/16/20	calc	

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F6 @ 1'

0F15007-06 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Toluene	ND	0.00515	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Ethylbenzene	ND	0.00515	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (p/m)	ND	0.00515	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (o)	ND	0.00515	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*93.7 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.8 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**209**	5.15	mg/kg dry	5	P0F1705	06/17/20	06/18/20	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
>C12-C28	**384**	25.8	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
>C28-C35	**71.9**	25.8	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.4 %*	*70-130*		*P0F1604*	*06/16/20*	*06/16/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*106 %*	*70-130*		*P0F1604*	*06/16/20*	*06/16/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**456**	25.8	mg/kg dry	1	[CALC]	06/16/20	06/16/20	calc	

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Midland TX, 79705	Project Manager: Curt Stanley	

F7 @ 6"

0F15007-07 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	**0.0125**	0.00101	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Toluene	ND	0.00505	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Ethylbenzene	ND	0.00505	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (p/m)	**0.00966**	0.00505	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (o)	ND	0.00505	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*95.5 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*98.9 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**125**	1.01	mg/kg dry	1	P0F1705	06/17/20	06/18/20	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.3	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
>C12-C28	**541**	25.3	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
>C28-C35	**106**	25.3	mg/kg dry	1	P0F1604	06/16/20	06/16/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*89.7 %*	*70-130*		*P0F1604*	*06/16/20*	*06/16/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*93.7 %*	*70-130*		*P0F1604*	*06/16/20*	*06/16/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**646**	25.3	mg/kg dry	1	[CALC]	06/16/20	06/16/20	calc	

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CNSW @ 6"

0F15007-08 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00101	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Toluene	ND	0.00505	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Ethylbenzene	ND	0.00505	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (p/m)	**0.0394**	0.00505	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (o)	**0.0161**	0.00505	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*87.5 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*112 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**59.4**	1.01	mg/kg dry	1	P0F1705	06/17/20	06/18/20	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**278**	126	mg/kg dry	5	P0F1605	06/16/20	06/19/20	TPH 8015M	
>C12-C28	**7800**	126	mg/kg dry	5	P0F1605	06/16/20	06/19/20	TPH 8015M	
>C28-C35	**892**	126	mg/kg dry	5	P0F1605	06/16/20	06/19/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*99.4 %*	*70-130*		*P0F1605*	*06/16/20*	*06/19/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*92.0 %*	*70-130*		*P0F1605*	*06/16/20*	*06/19/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**8970**	126	mg/kg dry	5	[CALC]	06/16/20	06/19/20	calc	

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Midland TX, 79705	Project Manager: Curt Stanley	

CSSW @ 1.5'

0F15007-09 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Toluene	ND	0.00510	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Ethylbenzene	ND	0.00510	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (p/m)	**0.0116**	0.00510	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (o)	ND	0.00510	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*101 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*90.5 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**56.7**	1.02	mg/kg dry	1	P0F1705	06/17/20	06/18/20	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**65.5**	25.5	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
>C12-C28	**2120**	25.5	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
>C28-C35	**311**	25.5	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*91.1 %*	*70-130*		*P0F1605*	*06/16/20*	*06/17/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*78.3 %*	*70-130*		*P0F1605*	*06/16/20*	*06/17/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**2500**	25.5	mg/kg dry	1	[CALC]	06/16/20	06/17/20	calc	

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Midland TX, 79705	Project Manager: Curt Stanley	

CWSW-1 @ 6"

0F15007-10 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Toluene	ND	0.00538	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Ethylbenzene	ND	0.00538	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (p/m)	ND	0.00538	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Xylene (o)	ND	0.00538	mg/kg dry	1	P0F1504	06/15/20	06/15/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*106 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*87.8 %*	*75-125*		*P0F1504*	*06/15/20*	*06/15/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**524**	10.8	mg/kg dry	10	P0F1705	06/17/20	06/18/20	EPA 300.0	
% Moisture	**7.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**50.6**	26.9	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
>C12-C28	**5080**	26.9	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
>C28-C35	**852**	26.9	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.3 %*	*70-130*		*P0F1605*	*06/16/20*	*06/17/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*101 %*	*70-130*		*P0F1605*	*06/16/20*	*06/17/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**5980**	26.9	mg/kg dry	1	[CALC]	06/16/20	06/17/20	calc	

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Midland TX, 79705	Project Manager: Curt Stanley	

CWSW-2 @ 1'

0F15007-11 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00101	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Toluene	ND	0.00505	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Ethylbenzene	ND	0.00505	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Xylene (p/m)	**0.0110**	0.00505	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Xylene (o)	ND	0.00505	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*107 %*	*75-125*		*P0F1601*	*06/16/20*	*06/16/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*88.3 %*	*75-125*		*P0F1601*	*06/16/20*	*06/16/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**32.9**	1.01	mg/kg dry	1	P0F1705	06/17/20	06/18/20	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**259**	25.3	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
>C12-C28	**4780**	25.3	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
>C28-C35	**676**	25.3	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*103 %*	*70-130*		*P0F1605*	*06/16/20*	*06/17/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*106 %*	*70-130*		*P0F1605*	*06/16/20*	*06/17/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**5720**	25.3	mg/kg dry	1	[CALC]	06/16/20	06/17/20	calc	

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Midland TX, 79705	Project Manager: Curt Stanley	

CESW-1 @ 1'

0F15007-12 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00101	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Toluene	**0.00524**	0.00505	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Ethylbenzene	ND	0.00505	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Xylene (p/m)	**0.0280**	0.00505	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Xylene (o)	**0.00911**	0.00505	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*104 %*	*75-125*		*P0F1601*	*06/16/20*	*06/16/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*82.7 %*	*75-125*		*P0F1601*	*06/16/20*	*06/16/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**17.8**	1.01	mg/kg dry	1	P0F1705	06/17/20	06/18/20	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**294**	126	mg/kg dry	5	P0F1605	06/16/20	06/19/20	TPH 8015M	
>C12-C28	**8420**	126	mg/kg dry	5	P0F1605	06/16/20	06/19/20	TPH 8015M	
>C28-C35	**1000**	126	mg/kg dry	5	P0F1605	06/16/20	06/19/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*95.6 %*	*70-130*		*P0F1605*	*06/16/20*	*06/19/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*71.5 %*	*70-130*		*P0F1605*	*06/16/20*	*06/19/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**9710**	126	mg/kg dry	5	[CALC]	06/16/20	06/19/20	calc	

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CESW-2 @ 1'

0F15007-13 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Toluene	ND	0.00515	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Ethylbenzene	ND	0.00515	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Xylene (p/m)	**0.0277**	0.00515	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Xylene (o)	**0.0107**	0.00515	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*104 %*	*75-125*		*P0F1601*	*06/16/20*	*06/16/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*83.6 %*	*75-125*		*P0F1601*	*06/16/20*	*06/16/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**17.4**	1.03	mg/kg dry	1	P0F1705	06/17/20	06/18/20	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**228**	129	mg/kg dry	5	P0F1605	06/16/20	06/19/20	TPH 8015M	
>C12-C28	**6320**	129	mg/kg dry	5	P0F1605	06/16/20	06/19/20	TPH 8015M	
>C28-C35	**773**	129	mg/kg dry	5	P0F1605	06/16/20	06/19/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*94.1 %*	*70-130*		*P0F1605*	*06/16/20*	*06/19/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*71.6 %*	*70-130*		*P0F1605*	*06/16/20*	*06/19/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**7320**	129	mg/kg dry	5	[CALC]	06/16/20	06/19/20	calc	

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10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

FP-1 SW

0F15007-14 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00101	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Toluene	**0.0101**	0.00505	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Ethylbenzene	ND	0.00505	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Xylene (p/m)	**0.00509**	0.00505	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Xylene (o)	ND	0.00505	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.6 %*	*75-125*		*P0F1601*	*06/16/20*	*06/16/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*90.3 %*	*75-125*		*P0F1601*	*06/16/20*	*06/16/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**133**	1.01	mg/kg dry	1	P0F1705	06/17/20	06/18/20	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.3	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
>C12-C28	**621**	25.3	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
>C28-C35	**121**	25.3	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*104 %*	*70-130*		*P0F1605*	*06/16/20*	*06/17/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*80.6 %*	*70-130*		*P0F1605*	*06/16/20*	*06/17/20*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	**742**	25.3	mg/kg dry	1	[CALC]	06/16/20	06/17/20	calc	

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10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

FP-2 SW

0F15007-15 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	**0.0127**	0.00100	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Toluene	**0.0124**	0.00500	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Ethylbenzene	ND	0.00500	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Xylene (p/m)	ND	0.00500	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Xylene (o)	ND	0.00500	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*90.3 %*	*75-125*		*P0F1601*	*06/16/20*	*06/16/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*100 %*	*75-125*		*P0F1601*	*06/16/20*	*06/16/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**176**	1.00	mg/kg dry	1	P0F1705	06/17/20	06/18/20	EPA 300.0	
% Moisture	ND	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.0	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
>C12-C28	**1220**	25.0	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
>C28-C35	**241**	25.0	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*87.2 %*	*70-130*		*P0F1605*	*06/16/20*	*06/17/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*64.7 %*	*70-130*		*P0F1605*	*06/16/20*	*06/17/20*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	**1460**	25.0	mg/kg dry	1	[CALC]	06/16/20	06/17/20	calc	

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10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

FP-3 SW

0F15007-16 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	**0.00428**	0.00100	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Toluene	**0.0397**	0.00500	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Ethylbenzene	**0.00647**	0.00500	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Xylene (p/m)	**0.0428**	0.00500	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Xylene (o)	**0.0166**	0.00500	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*100 %*	*75-125*		*P0F1601*	*06/16/20*	*06/16/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*90.8 %*	*75-125*		*P0F1601*	*06/16/20*	*06/16/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**216**	10.0	mg/kg dry	10	P0F1705	06/17/20	06/18/20	EPA 300.0	
% Moisture	ND	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.0	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
>C12-C28	**710**	25.0	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
>C28-C35	**127**	25.0	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*85.1 %*	*70-130*		*P0F1605*	*06/16/20*	*06/17/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*62.5 %*	*70-130*		*P0F1605*	*06/16/20*	*06/17/20*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	**838**	25.0	mg/kg dry	1	[CALC]	06/16/20	06/17/20	calc	

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10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

FP-4 SW

0F15007-17 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Toluene	**0.00566**	0.00521	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Ethylbenzene	ND	0.00521	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Xylene (p/m)	**0.0286**	0.00521	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Xylene (o)	**0.0118**	0.00521	mg/kg dry	1	P0F1601	06/16/20	06/16/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*99.9 %*	*75-125*		*P0F1601*	*06/16/20*	*06/16/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*80.5 %*	*75-125*		*P0F1601*	*06/16/20*	*06/16/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**188**	1.04	mg/kg dry	1	P0F1705	06/17/20	06/18/20	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**56.3**	26.0	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
>C12-C28	**2910**	26.0	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
>C28-C35	**586**	26.0	mg/kg dry	1	P0F1605	06/16/20	06/17/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*90.6 %*	*70-130*		*P0F1605*	*06/16/20*	*06/17/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*73.1 %*	*70-130*		*P0F1605*	*06/16/20*	*06/17/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**3550**	26.0	mg/kg dry	1	[CALC]	06/16/20	06/17/20	calc	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1504 - General Preparation (GC)										
Blank (P0F1504-BLK1)				Prepared & Analyzed: 06/15/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*95.7*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.103*		*"*	*0.120*		*86.1*	*75-125*			
LCS (P0F1504-BS1)				Prepared & Analyzed: 06/15/20						
Benzene	0.0969	0.00100	mg/kg wet	0.100		96.9	70-130			
Toluene	0.0977	0.00100	"	0.100		97.7	70-130			
Ethylbenzene	0.100	0.00100	"	0.100		100	70-130			
Xylene (p/m)	0.202	0.00200	"	0.200		101	70-130			
Xylene (o)	0.107	0.00100	"	0.100		107	70-130			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.5*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.104*		*"*	*0.120*		*86.7*	*75-125*			
LCS Dup (P0F1504-BSD1)				Prepared & Analyzed: 06/15/20						
Benzene	0.0888	0.00100	mg/kg wet	0.100		88.8	70-130	8.76	20	
Toluene	0.0926	0.00100	"	0.100		92.6	70-130	5.34	20	
Ethylbenzene	0.0987	0.00100	"	0.100		98.7	70-130	1.26	20	
Xylene (p/m)	0.188	0.00200	"	0.200		94.1	70-130	6.90	20	
Xylene (o)	0.101	0.00100	"	0.100		101	70-130	6.15	20	
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.4*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.105*		*"*	*0.120*		*87.4*	*75-125*			
Calibration Blank (P0F1504-CCB1)				Prepared & Analyzed: 06/15/20						
Benzene	0.00		mg/kg wet							
Toluene	0.690		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.430		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	*0.113*		*"*	*0.120*		*93.9*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.104*		*"*	*0.120*		*86.5*	*75-125*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1504 - General Preparation (GC)										
Calibration Blank (P0F1504-CCB2)				Prepared & Analyzed: 06/15/20						
Benzene	0.00		mg/kg wet							
Toluene	0.430		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.640		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	*0.114*		"	*0.120*		*95.0*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.105*		"	*0.120*		*87.8*	*75-125*			
Calibration Check (P0F1504-CCV1)				Prepared & Analyzed: 06/15/20						
Benzene	0.0882	0.00100	mg/kg wet	0.100		88.2	80-120			
Toluene	0.0899	0.00100	"	0.100		89.9	80-120			
Ethylbenzene	0.0911	0.00100	"	0.100		91.1	80-120			
Xylene (p/m)	0.179	0.00200	"	0.200		89.6	80-120			
Xylene (o)	0.0967	0.00100	"	0.100		96.7	80-120			
Surrogate: 4-Bromofluorobenzene	*0.103*		"	*0.120*		*85.6*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.115*		"	*0.120*		*96.2*	*75-125*			
Calibration Check (P0F1504-CCV2)				Prepared & Analyzed: 06/15/20						
Benzene	0.0928	0.00100	mg/kg wet	0.100		92.8	80-120			
Toluene	0.0907	0.00100	"	0.100		90.7	80-120			
Ethylbenzene	0.0919	0.00100	"	0.100		91.9	80-120			
Xylene (p/m)	0.181	0.00200	"	0.200		90.4	80-120			
Xylene (o)	0.103	0.00100	"	0.100		103	80-120			
Surrogate: 1,4-Difluorobenzene	*0.116*		"	*0.120*		*96.6*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.109*		"	*0.120*		*90.4*	*75-125*			
Calibration Check (P0F1504-CCV3)				Prepared & Analyzed: 06/15/20						
Benzene	0.0918	0.00100	mg/kg wet	0.100		91.8	80-120			
Toluene	0.0937	0.00100	"	0.100		93.7	80-120			
Ethylbenzene	0.0953	0.00100	"	0.100		95.3	80-120			
Xylene (p/m)	0.184	0.00200	"	0.200		91.8	80-120			
Xylene (o)	0.105	0.00100	"	0.100		105	80-120			
Surrogate: 1,4-Difluorobenzene	*0.116*		"	*0.120*		*96.7*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.108*		"	*0.120*		*90.1*	*75-125*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1504 - General Preparation (GC)										
Matrix Spike (P0F1504-MS1)	**Source: 0F15005-01**			Prepared & Analyzed: 06/15/20						
Benzene	0.0754	0.00103	mg/kg dry	0.103	ND	73.2	80-120			QM-05
Toluene	0.0739	0.00103	"	0.103	ND	71.6	80-120			QM-05
Ethylbenzene	0.0876	0.00103	"	0.103	ND	85.0	80-120			
Xylene (p/m)	0.147	0.00206	"	0.206	ND	71.5	80-120			QM-05
Xylene (o)	0.0773	0.00103	"	0.103	ND	75.0	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	*0.110*		*"*	*0.124*		*89.1*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.119*		*"*	*0.124*		*96.5*	*75-125*			
Matrix Spike Dup (P0F1504-MSD1)	**Source: 0F15005-01**			Prepared & Analyzed: 06/15/20						
Benzene	0.0771	0.00103	mg/kg dry	0.103	ND	74.8	80-120	2.18	20	QM-05
Toluene	0.0778	0.00103	"	0.103	ND	75.4	80-120	5.14	20	QM-05
Ethylbenzene	0.0910	0.00103	"	0.103	ND	88.3	80-120	3.77	20	
Xylene (p/m)	0.156	0.00206	"	0.206	ND	75.6	80-120	5.55	20	QM-05
Xylene (o)	0.0832	0.00103	"	0.103	ND	80.7	80-120	7.36	20	
Surrogate: 1,4-Difluorobenzene	*0.120*		*"*	*0.124*		*97.3*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.112*		*"*	*0.124*		*90.8*	*75-125*			
Batch P0F1601 - General Preparation (GC)										
Blank (P0F1601-BLK1)				Prepared & Analyzed: 06/16/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00500	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00500	"							
Xylene (o)	ND	0.00500	"							
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*95.2*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.105*		*"*	*0.120*		*87.3*	*75-125*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

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BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1601 - General Preparation (GC)										
LCS (P0F1601-BS1)				Prepared & Analyzed: 06/16/20						
Benzene	0.0903	0.00100	mg/kg wet	0.100		90.3	70-130			
Toluene	0.0941	0.00500	"	0.100		94.1	70-130			
Ethylbenzene	0.0978	0.00100	"	0.100		97.8	70-130			
Xylene (p/m)	0.193	0.00500	"	0.200		96.5	70-130			
Xylene (o)	0.103	0.00500	"	0.100		103	70-130			
Surrogate: 4-Bromofluorobenzene	*0.106*		"	*0.120*		*88.3*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.117*		"	*0.120*		*97.2*	*75-125*			
LCS Dup (P0F1601-BSD1)				Prepared & Analyzed: 06/16/20						
Benzene	0.0952	0.00100	mg/kg wet	0.100		95.2	70-130	5.30	20	
Toluene	0.0996	0.00500	"	0.100		99.6	70-130	5.59	20	
Ethylbenzene	0.0962	0.00100	"	0.100		96.2	70-130	1.73	20	
Xylene (p/m)	0.203	0.00500	"	0.200		101	70-130	4.80	20	
Xylene (o)	0.109	0.00500	"	0.100		109	70-130	5.31	20	
Surrogate: 4-Bromofluorobenzene	*0.105*		"	*0.120*		*87.7*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.116*		"	*0.120*		*96.8*	*75-125*			
Calibration Blank (P0F1601-CCB1)				Prepared & Analyzed: 06/16/20						
Benzene	0.00		mg/kg wet							
Toluene	0.500		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.470		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	*0.115*		"	*0.120*		*95.9*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.103*		"	*0.120*		*86.0*	*75-125*			
Calibration Blank (P0F1601-CCB2)				Prepared & Analyzed: 06/16/20						
Benzene	0.00		mg/kg wet							
Toluene	0.540		"							
Ethylbenzene	0.410		"							
Xylene (p/m)	0.770		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	*0.109*		"	*0.120*		*90.5*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.114*		"	*0.120*		*95.1*	*75-125*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
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BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1601 - General Preparation (GC)										
Calibration Blank (P0F1601-CCB3)				Prepared & Analyzed: 06/16/20						
Benzene	0.00		mg/kg wet							
Toluene	0.970		"							
Ethylbenzene	0.720		"							
Xylene (p/m)	1.98		"							
Xylene (o)	0.650		"							
Surrogate: 4-Bromofluorobenzene	*0.119*		*"*	*0.120*		*99.1*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.113*		*"*	*0.120*		*94.4*	*75-125*			
Calibration Check (P0F1601-CCV1)				Prepared & Analyzed: 06/16/20						
Benzene	0.0926	0.00100	mg/kg wet	0.100		92.6	80-120			
Toluene	0.0944	0.00500	"	0.100		94.4	80-120			
Ethylbenzene	0.0953	0.00100	"	0.100		95.3	80-120			
Xylene (p/m)	0.188	0.00500	"	0.200		93.9	80-120			
Xylene (o)	0.104	0.00500	"	0.100		104	80-120			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.3*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.104*		*"*	*0.120*		*87.0*	*75-125*			
Calibration Check (P0F1601-CCV2)				Prepared & Analyzed: 06/16/20						
Benzene	0.0895	0.00100	mg/kg wet	0.100		89.5	80-120			
Toluene	0.0919	0.00500	"	0.100		91.9	80-120			
Ethylbenzene	0.0942	0.00100	"	0.100		94.2	80-120			
Xylene (p/m)	0.180	0.00500	"	0.200		90.2	80-120			
Xylene (o)	0.100	0.00500	"	0.100		100	80-120			
Surrogate: 1,4-Difluorobenzene	*0.117*		*"*	*0.120*		*97.5*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.106*		*"*	*0.120*		*88.7*	*75-125*			
Calibration Check (P0F1601-CCV3)				Prepared & Analyzed: 06/16/20						
Benzene	0.0939	0.00100	mg/kg wet	0.100		93.9	80-120			
Toluene	0.103	0.00500	"	0.100		103	80-120			
Ethylbenzene	0.104	0.00100	"	0.100		104	80-120			
Xylene (p/m)	0.204	0.00500	"	0.200		102	80-120			
Xylene (o)	0.104	0.00500	"	0.100		104	80-120			
Surrogate: 4-Bromofluorobenzene	*0.118*		*"*	*0.120*		*97.9*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*96.0*	*75-125*			

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10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1601 - General Preparation (GC)										
Matrix Spike (P0F1601-MS1)	**Source: 0F09003-01**			Prepared & Analyzed: 06/16/20						
Benzene	0.0744	0.00106	mg/kg dry	0.106	ND	69.9	80-120			QM-05
Toluene	0.0985	0.00532	"	0.106	0.00496	87.9	80-120			
Ethylbenzene	0.0981	0.00106	"	0.106	0.00163	90.6	80-120			
Xylene (p/m)	0.188	0.00532	"	0.213	0.00506	85.9	80-120			
Xylene (o)	0.132	0.00532	"	0.106	0.00129	123	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	*0.0634*		*"*	*0.128*		*49.6*	*75-125*			*S-GC*
Surrogate: 1,4-Difluorobenzene	*0.112*		*"*	*0.128*		*87.9*	*75-125*			
Matrix Spike Dup (P0F1601-MSD1)	**Source: 0F09003-01**			Prepared & Analyzed: 06/16/20						
Benzene	0.0790	0.00106	mg/kg dry	0.106	ND	74.3	80-120	6.09	20	QM-05
Toluene	0.0929	0.00532	"	0.106	0.00496	82.7	80-120	6.17	20	
Ethylbenzene	0.102	0.00106	"	0.106	0.00163	94.7	80-120	4.40	20	
Xylene (p/m)	0.185	0.00532	"	0.213	0.00506	84.6	80-120	1.48	20	
Xylene (o)	0.109	0.00532	"	0.106	0.00129	102	80-120	19.3	20	
Surrogate: 1,4-Difluorobenzene	*0.118*		*"*	*0.128*		*92.5*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.177*		*"*	*0.128*		*138*	*75-125*			*S-GC*

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1603 - * DEFAULT PREP *** **										
Blank (P0F1603-BLK1)				Prepared & Analyzed: 06/16/20						
% Moisture	ND	0.1	%							
Duplicate (P0F1603-DUP1)		**Source: 0F15007-01**		Prepared & Analyzed: 06/16/20						
% Moisture	2.0	0.1	%		2.0			0.00	20	
Duplicate (P0F1603-DUP2)		**Source: 0F15007-17**		Prepared & Analyzed: 06/16/20						
% Moisture	4.0	0.1	%		4.0			0.00	20	
Batch P0F1704 - * DEFAULT PREP *** **										
Blank (P0F1704-BLK1)				Prepared & Analyzed: 06/17/20						
Chloride	ND	1.00	mg/kg wet							
LCS (P0F1704-BS1)				Prepared & Analyzed: 06/17/20						
Chloride	391	1.00	mg/kg wet	400		97.7	80-120			
LCS Dup (P0F1704-BSD1)				Prepared & Analyzed: 06/17/20						
Chloride	389	1.00	mg/kg wet	400		97.1	80-120	0.590	20	
Calibration Blank (P0F1704-CCB1)				Prepared & Analyzed: 06/17/20						
Chloride	0.00		mg/kg wet							
Calibration Blank (P0F1704-CCB2)				Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	0.00		mg/kg wet							
Calibration Check (P0F1704-CCV1)				Prepared & Analyzed: 06/17/20						
Chloride	18.8		mg/kg	20.0		93.9	0-200			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1704 - * DEFAULT PREP *** **										
Calibration Check (P0F1704-CCV2)				Prepared & Analyzed: 06/17/20						
Chloride	20.1		mg/kg	20.0		100	0-200			
Matrix Spike (P0F1704-MS1)		Source: 0F12006-01		Prepared & Analyzed: 06/17/20						
Chloride	447	1.00	mg/kg dry	500	10.9	87.2	80-120			
Matrix Spike (P0F1704-MS2)		Source: 0F12007-17		Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	32200	56.2	mg/kg dry	2810	29700	87.3	80-120			
Matrix Spike Dup (P0F1704-MSD1)		Source: 0F12006-01		Prepared & Analyzed: 06/17/20						
Chloride	471	1.00	mg/kg dry	500	10.9	92.1	80-120	5.31	20	
Matrix Spike Dup (P0F1704-MSD2)		Source: 0F12007-17		Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	32200	56.2	mg/kg dry	2810	29700	87.7	80-120	0.0367	20	
Batch P0F1705 - * DEFAULT PREP *** **										
Blank (P0F1705-BLK1)				Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	ND	1.00	mg/kg wet							
LCS (P0F1705-BS1)				Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	409	1.00	mg/kg wet	400		102	80-120			
LCS Dup (P0F1705-BSD1)				Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	417	1.00	mg/kg wet	400		104	80-120	2.03	20	
Calibration Blank (P0F1705-CCB1)				Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	0.00		mg/kg wet							

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

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Project Number: 2020-030
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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1705 - * DEFAULT PREP *** **										
Calibration Blank (P0F1705-CCB2)				Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	0.00		mg/kg wet							
Calibration Check (P0F1705-CCV1)				Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	19.5		mg/kg	20.0		97.7	0-200			
Calibration Check (P0F1705-CCV2)				Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	19.8		mg/kg	20.0		99.2	0-200			
Calibration Check (P0F1705-CCV3)				Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	19.0		mg/kg	20.0		95.2	0-200			
Matrix Spike (P0F1705-MS1)		**Source: 0F15007-06**		Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	822	5.15	mg/kg dry	515	209	119	80-120			
Matrix Spike (P0F1705-MS2)		**Source: 0F15007-16**		Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	1230	10.0	mg/kg dry	1000	216	102	80-120			
Matrix Spike Dup (P0F1705-MSD1)		**Source: 0F15007-06**		Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	768	5.15	mg/kg dry	515	209	109	80-120	6.81	20	
Matrix Spike Dup (P0F1705-MSD2)		**Source: 0F15007-16**		Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	1230	10.0	mg/kg dry	1000	216	101	80-120	0.430	20	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1604 - TX 1005										
Blank (P0F1604-BLK1)				Prepared & Analyzed: 06/16/20						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*89.1*		*"*	*100*		*89.1*	*70-130*			
Surrogate: o-Terphenyl	*46.3*		*"*	*50.0*		*92.7*	*70-130*			
LCS (P0F1604-BS1)				Prepared & Analyzed: 06/16/20						
C6-C12	1120	25.0	mg/kg wet	1000		112	75-125			
>C12-C28	1210	25.0	"	1000		121	75-125			
Surrogate: 1-Chlorooctane	*102*		*"*	*100*		*102*	*70-130*			
Surrogate: o-Terphenyl	*40.8*		*"*	*50.0*		*81.7*	*70-130*			
LCS Dup (P0F1604-BSD1)				Prepared & Analyzed: 06/16/20						
C6-C12	1160	25.0	mg/kg wet	1000		116	75-125	3.30	20	
>C12-C28	1210	25.0	"	1000		121	75-125	0.655	20	
Surrogate: 1-Chlorooctane	*105*		*"*	*100*		*105*	*70-130*			
Surrogate: o-Terphenyl	*41.4*		*"*	*50.0*		*82.8*	*70-130*			
Calibration Blank (P0F1604-CCB1)				Prepared & Analyzed: 06/16/20						
C6-C12	16.8		mg/kg wet							
>C12-C28	10.8		"							
Surrogate: 1-Chlorooctane	*88.9*		*"*	*100*		*88.9*	*70-130*			
Surrogate: o-Terphenyl	*46.9*		*"*	*50.0*		*93.8*	*70-130*			
Calibration Blank (P0F1604-CCB2)				Prepared & Analyzed: 06/16/20						
C6-C12	12.6		mg/kg wet							
>C12-C28	12.0		"							
Surrogate: 1-Chlorooctane	*83.8*		*"*	*100*		*83.8*	*70-130*			
Surrogate: o-Terphenyl	*43.7*		*"*	*50.0*		*87.4*	*70-130*			

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Midland TX, 79705	Project Manager: Curt Stanley	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1604 - TX 1005										
Calibration Check (P0F1604-CCV1)				Prepared & Analyzed: 06/16/20						
C6-C12	502	25.0	mg/kg wet	500		100	85-115			
>C12-C28	547	25.0	"	500		109	85-115			
Surrogate: 1-Chlorooctane	*101*		"	*100*		*101*	*70-130*			
Surrogate: o-Terphenyl	*46.6*		"	*50.0*		*93.3*	*70-130*			
Calibration Check (P0F1604-CCV2)				Prepared & Analyzed: 06/16/20						
C6-C12	537	25.0	mg/kg wet	500		107	85-115			
>C12-C28	562	25.0	"	500		112	85-115			
Surrogate: 1-Chlorooctane	*88.6*		"	*100*		*88.6*	*70-130*			
Surrogate: o-Terphenyl	*41.2*		"	*50.0*		*82.4*	*70-130*			
Matrix Spike (P0F1604-MS1)	**Source: 0F15007-07**			Prepared & Analyzed: 06/16/20						
C6-C12	1170	25.3	mg/kg dry	1010	20.6	113	75-125			
>C12-C28	1230	25.3	"	1010	541	68.3	75-125			
Surrogate: 1-Chlorooctane	*115*		"	*101*		*114*	*70-130*			
Surrogate: o-Terphenyl	*48.3*		"	*50.5*		*95.6*	*70-130*			
Matrix Spike Dup (P0F1604-MSD1)	**Source: 0F15007-07**			Prepared: 06/16/20 Analyzed: 06/17/20						
C6-C12	1160	25.3	mg/kg dry	1010	20.6	113	75-125	0.251	20	
>C12-C28	1240	25.3	"	1010	541	68.8	75-125	0.749	20	
Surrogate: 1-Chlorooctane	*115*		"	*101*		*114*	*70-130*			
Surrogate: o-Terphenyl	*46.6*		"	*50.5*		*92.2*	*70-130*			
Batch P0F1605 - TX 1005										
Blank (P0F1605-BLK1)				Prepared: 06/16/20 Analyzed: 06/17/20						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*97.6*		"	*100*		*97.6*	*70-130*			
Surrogate: o-Terphenyl	*47.9*		"	*50.0*		*95.7*	*70-130*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1605 - TX 1005										
LCS (P0F1605-BS1)				Prepared: 06/16/20 Analyzed: 06/17/20						
C6-C12	979	25.0	mg/kg wet	1000		97.9	75-125			
>C12-C28	1180	25.0	"	1000		118	75-125			
Surrogate: 1-Chlorooctane	*90.6*		*"*	*100*		*90.6*	*70-130*			
Surrogate: o-Terphenyl	*43.0*		*"*	*50.0*		*86.1*	*70-130*			
LCS Dup (P0F1605-BSD1)				Prepared: 06/16/20 Analyzed: 06/17/20						
C6-C12	994	25.0	mg/kg wet	1000		99.4	75-125	1.60	20	
>C12-C28	1110	25.0	"	1000		111	75-125	6.08	20	
Surrogate: 1-Chlorooctane	*90.9*		*"*	*100*		*90.9*	*70-130*			
Surrogate: o-Terphenyl	*43.5*		*"*	*50.0*		*87.1*	*70-130*			
Calibration Blank (P0F1605-CCB1)				Prepared: 06/16/20 Analyzed: 06/17/20						
C6-C12	12.0		mg/kg wet							
>C12-C28	6.93		"							
Surrogate: 1-Chlorooctane	*98.0*		*"*	*100*		*98.0*	*70-130*			
Surrogate: o-Terphenyl	*48.6*		*"*	*50.0*		*97.3*	*70-130*			
Calibration Blank (P0F1605-CCB2)				Prepared: 06/16/20 Analyzed: 06/17/20						
C6-C12	14.1		mg/kg wet							
>C12-C28	12.5		"							
Surrogate: 1-Chlorooctane	*90.1*		*"*	*100*		*90.1*	*70-130*			
Surrogate: o-Terphenyl	*45.6*		*"*	*50.0*		*91.3*	*70-130*			
Calibration Check (P0F1605-CCV1)				Prepared: 06/16/20 Analyzed: 06/17/20						
C6-C12	486	25.0	mg/kg wet	500		97.2	85-115			
>C12-C28	547	25.0	"	500		109	85-115			
Surrogate: 1-Chlorooctane	*95.6*		*"*	*100*		*95.6*	*70-130*			
Surrogate: o-Terphenyl	*46.7*		*"*	*50.0*		*93.4*	*70-130*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1605 - TX 1005										
Calibration Check (P0F1605-CCV2)				Prepared: 06/16/20 Analyzed: 06/17/20						
C6-C12	454	25.0	mg/kg wet	500		90.9	85-115			
>C12-C28	486	25.0	"	500		97.2	85-115			
Surrogate: 1-Chlorooctane	*89.7*		*"*	*100*		*89.7*	*70-130*			
Surrogate: o-Terphenyl	*44.6*		*"*	*50.0*		*89.3*	*70-130*			
Calibration Check (P0F1605-CCV3)				Prepared: 06/16/20 Analyzed: 06/17/20						
C6-C12	490	25.0	mg/kg wet	500		97.9	85-115			
>C12-C28	533	25.0	"	500		107	85-115			
Surrogate: 1-Chlorooctane	*94.3*		*"*	*100*		*94.3*	*70-130*			
Surrogate: o-Terphenyl	*47.3*		*"*	*50.0*		*94.6*	*70-130*			
Matrix Spike (P0F1605-MS1)	**Source: 0F15007-08**			Prepared: 06/16/20 Analyzed: 06/19/20						
C6-C12	1230	126	mg/kg dry	1010	278	94.4	75-125			
>C12-C28	9120	126	"	1010	7800	131	75-125			
Surrogate: 1-Chlorooctane	*92.2*		*"*	*101*		*91.3*	*70-130*			
Surrogate: o-Terphenyl	*46.8*		*"*	*50.5*		*92.6*	*70-130*			
Matrix Spike Dup (P0F1605-MSD1)	**Source: 0F15007-08**			Prepared: 06/16/20 Analyzed: 06/19/20						
C6-C12	1220	126	mg/kg dry	1010	278	93.7	75-125	0.728	20	
>C12-C28	9020	126	"	1010	7800	121	75-125	7.81	20	
Surrogate: 1-Chlorooctane	*91.8*		*"*	*101*		*90.9*	*70-130*			
Surrogate: o-Terphenyl	*46.5*		*"*	*50.5*		*92.1*	*70-130*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
ROI	Received on Ice
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
BULK	Samples received in Bulk soil containers
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 6/29/2020

Brent Barron, Laboratory Director/Technical Director

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

LKC CK CD

PAGE 1 OF 2

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706

Phone: 432-661-4184

Project Manager: Curt Stanley
Company Name: TRC Environmental Corporation
Company Address: 10 Desta Drive, Ste 150E
City/State/Zip: Midland/TX/79703
Telephone No: (432)5207720
Sampler Signature:

Project Name: COG - Screech Owl CTB
Project #: 2020-030
Project Loc: Eddy County, New Mexico
PO #:

Fax No:
e-mail: cdstanley@trcsolutions.com, cjbryant@paalp.com, algroves@paalp.com

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: OF15007

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300	Paint Filter	TCLP BTEX	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	F1 @ 1'			6/11/2020	1300		1	X								Soil	X							X			X				X
2	F2 @ 2.5'			6/11/2020	1310		1	X								Soil	X							X			X				X
3	F3 @ 1'			6/11/2020	1320		1	X								Soil	X							X			X				X
4	F4 @ 2'			6/11/2020	1330		1	X								Soil	X							X			X				X
5	F5 @ 1.5'			6/11/2020	1340		1	X								Soil	X							X			X				X
6	F6 @ 1'			6/11/2020	1350		1	X								Soil	X							X			X				X
7	F7 @ 6"			6/11/2020	1400		1	X								Soil	X							X			X				X
8	CNSW @ 6"			6/11/2020	1410		1	X								Soil	X							X			X				X
9	CSSW @ 1.5'			6/11/2020	1415		1	X								Soil	X							X			X				X

Special Instructions: Bill To Plains

Relinquished by:	Date	Time	Received by:	Date	Time
	6/15	939			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by PBEL:	Date	Time
				6/15	939

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt:
Received: 0.4 °C
Adjusted: 0.5 1.4 °C Factor CH LR

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706

Phone: 432-661-4184

Project Manager: Curt Stanley
Company Name: TRC Environmental Corporation
Company Address: 10 Desta Drive, Ste 150E
City/State/Zip: Midland/TX/79703
Telephone No: (432)5207720 Fax No:
Sampler Signature:
e-mail: cdstanley@trcsolutions.com, cjbryant@paalp.com, algroves@paalp.com

Project Name: COG - Screech Owl CTB
Project #: 2020-030
Project Loc: Eddy County, New Mexico
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: OF15007

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 / 8015M	TOTAL: TPH: 8015B / TX 1005 / TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300	Paint Filter	TCLP BTEX	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
10	CWSW-1 @ 6"			6/11/2020	1420		1	X								Soil	X							X			X				X
11	CWSW-2 @ 1'			6/11/2020	1430		1	X								Soil	X							X			X				X
12	CESW-1 @ 1'			6/11/2020	1435		1	X								Soil	X							X			X				X
13	CESW-2 @ 1'			6/11/2020	1437		1	X								Soil	X							X			X				X
14	FP-1 SW			6/11/2020	1445		1	X								Soil	X							X			X				X
15	FP-2 SW			6/11/2020	1450		1	X								Soil	X							X			X				X
16	FP-3 SW			6/11/2020	1455		1	X								Soil	X							X			X				X
17	FP-4 SW			6/11/2020	1500		1	X								Soil	X							X			X				X

Special Instructions: Bill To Plains

Relinquished by:	Date	Time	Received by:	Date	Time
	6/5	939			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by PBEL:	Date	Time
				6/5	939

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt:
Received: 0.4 °C
Adjusted: 1.4 °C Factor CH 4

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Curt Stanley
TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland, TX 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Location: Eddy County, NM

Lab Order Number: 0F18007

NELAP/TCEQ # T104704516-17-8

Report Date: 07/01/20

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
F8 @ 14"	0F18007-01	Soil	06/17/20 13:00	06-18-2020 15:34
OS-SW	0F18007-02	Soil	06/17/20 13:15	06-18-2020 15:34
T-WW-N	0F18007-03	Soil	06/17/20 14:00	06-18-2020 15:34
T-WW-S	0F18007-04	Soil	06/17/20 14:10	06-18-2020 15:34
T-BH-N @ 3'	0F18007-05	Soil	06/17/20 14:25	06-18-2020 15:34
T-BH-S @ 3'	0F18007-06	Soil	06/17/20 14:35	06-18-2020 15:34
T-EW-N	0F18007-07	Soil	06/17/20 14:50	06-18-2020 15:34
T-EW-S	0F18007-08	Soil	06/17/20 15:00	06-18-2020 15:34

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

F8 @ 14"

0F18007-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00109	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Toluene	ND	0.00543	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Ethylbenzene	ND	0.00543	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (p/m)	ND	0.00543	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (o)	ND	0.00543	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*88.4 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.6 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**194**	10.9	mg/kg dry	10	P0F2101	06/21/20	06/21/20	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P0F1901	06/19/20	06/19/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.2	mg/kg dry	1	P0F1906	06/19/20	06/19/20	TPH 8015M	
>C12-C28	**78.5**	27.2	mg/kg dry	1	P0F1906	06/19/20	06/19/20	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P0F1906	06/19/20	06/19/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*105 %*	*70-130*		*P0F1906*	*06/19/20*	*06/19/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*110 %*	*70-130*		*P0F1906*	*06/19/20*	*06/19/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**78.5**	27.2	mg/kg dry	1	[CALC]	06/19/20	06/19/20	calc	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

OS-SW

0F18007-02 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Toluene	ND	0.00538	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Ethylbenzene	ND	0.00538	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (p/m)	ND	0.00538	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (o)	ND	0.00538	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.3 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*91.4 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**331**	10.8	mg/kg dry	10	P0F2101	06/21/20	06/21/20	EPA 300.0	
% Moisture	**7.0**	0.1	%	1	P0F1901	06/19/20	06/19/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.9	mg/kg dry	1	P0F1906	06/19/20	06/19/20	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P0F1906	06/19/20	06/19/20	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P0F1906	06/19/20	06/19/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*109 %*	*70-130*		*P0F1906*	*06/19/20*	*06/19/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*115 %*	*70-130*		*P0F1906*	*06/19/20*	*06/19/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	06/19/20	06/19/20	calc	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

T-WW-N

0F18007-03 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Toluene	ND	0.00510	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Ethylbenzene	ND	0.00510	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (p/m)	ND	0.00510	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (o)	ND	0.00510	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*94.7 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*105 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**162**	5.10	mg/kg dry	5	P0F2101	06/21/20	06/21/20	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P0F1901	06/19/20	06/19/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**50.5**	25.5	mg/kg dry	1	P0F1906	06/19/20	06/19/20	TPH 8015M	
>C12-C28	**2060**	25.5	mg/kg dry	1	P0F1906	06/19/20	06/19/20	TPH 8015M	
>C28-C35	**305**	25.5	mg/kg dry	1	P0F1906	06/19/20	06/19/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*105 %*	*70-130*		*P0F1906*	*06/19/20*	*06/19/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*109 %*	*70-130*		*P0F1906*	*06/19/20*	*06/19/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**2410**	25.5	mg/kg dry	1	[CALC]	06/19/20	06/19/20	calc	

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

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T-WW-S

0F18007-04 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00101	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Toluene	ND	0.00505	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Ethylbenzene	ND	0.00505	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (p/m)	**0.00533**	0.00505	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (o)	ND	0.00505	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*107 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*89.6 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**87.2**	1.01	mg/kg dry	1	P0F2101	06/21/20	06/21/20	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P0F1901	06/19/20	06/19/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**83.1**	25.3	mg/kg dry	1	P0F1906	06/19/20	06/19/20	TPH 8015M	
>C12-C28	**4370**	25.3	mg/kg dry	1	P0F1906	06/19/20	06/19/20	TPH 8015M	
>C28-C35	**632**	25.3	mg/kg dry	1	P0F1906	06/19/20	06/19/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*104 %*	*70-130*		*P0F1906*	*06/19/20*	*06/19/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*102 %*	*70-130*		*P0F1906*	*06/19/20*	*06/19/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**5080**	25.3	mg/kg dry	1	[CALC]	06/19/20	06/19/20	calc	

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10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

T-BH-N @ 3'

0F18007-05 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00106	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Toluene	ND	0.00532	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Ethylbenzene	ND	0.00532	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (p/m)	**0.00957**	0.00532	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (o)	ND	0.00532	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*89.7 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*110 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**229**	5.32	mg/kg dry	5	P0F2101	06/21/20	06/21/20	EPA 300.0	
% Moisture	**6.0**	0.1	%	1	P0F1901	06/19/20	06/19/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**275**	133	mg/kg dry	5	P0F1906	06/19/20	06/22/20	TPH 8015M	
>C12-C28	**8820**	133	mg/kg dry	5	P0F1906	06/19/20	06/22/20	TPH 8015M	
>C28-C35	**1600**	133	mg/kg dry	5	P0F1906	06/19/20	06/22/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*114 %*	*70-130*		*P0F1906*	*06/19/20*	*06/22/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*122 %*	*70-130*		*P0F1906*	*06/19/20*	*06/22/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**10700**	133	mg/kg dry	5	[CALC]	06/19/20	06/22/20	calc	

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Midland TX, 79705	Project Manager: Curt Stanley	

T-BH-S @ 3'

0F18007-06 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00106	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Toluene	ND	0.00532	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Ethylbenzene	ND	0.00532	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (p/m)	**0.00979**	0.00532	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (o)	ND	0.00532	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*110 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*92.7 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**91.2**	5.32	mg/kg dry	5	P0F2101	06/21/20	06/21/20	EPA 300.0	
% Moisture	**6.0**	0.1	%	1	P0F1901	06/19/20	06/19/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**416**	133	mg/kg dry	5	P0F1906	06/19/20	06/19/20	TPH 8015M	
>C12-C28	**13100**	133	mg/kg dry	5	P0F1906	06/19/20	06/19/20	TPH 8015M	
>C28-C35	**1900**	133	mg/kg dry	5	P0F1906	06/19/20	06/19/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*107 %*	*70-130*		*P0F1906*	*06/19/20*	*06/19/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*113 %*	*70-130*		*P0F1906*	*06/19/20*	*06/19/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**15400**	133	mg/kg dry	5	[CALC]	06/19/20	06/19/20	calc	

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10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

T-EW-N

0F18007-07 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Toluene	ND	0.00538	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Ethylbenzene	ND	0.00538	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (p/m)	**0.0126**	0.00538	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (o)	ND	0.00538	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*110 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*84.3 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**111**	10.8	mg/kg dry	10	P0F2101	06/21/20	06/21/20	EPA 300.0	
% Moisture	**7.0**	0.1	%	1	P0F1901	06/19/20	06/19/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**320**	269	mg/kg dry	10	P0F1906	06/19/20	06/22/20	TPH 8015M	
>C12-C28	**25500**	269	mg/kg dry	10	P0F1906	06/19/20	06/22/20	TPH 8015M	
>C28-C35	**5300**	269	mg/kg dry	10	P0F1906	06/19/20	06/22/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*102 %*	*70-130*		*P0F1906*	*06/19/20*	*06/22/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*121 %*	*70-130*		*P0F1906*	*06/19/20*	*06/22/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**31100**	269	mg/kg dry	10	[CALC]	06/19/20	06/22/20	calc	

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10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

T-EW-S

0F18007-08 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Toluene	ND	0.00521	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Ethylbenzene	ND	0.00521	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (p/m)	ND	0.00521	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Xylene (o)	ND	0.00521	mg/kg dry	1	P0F1914	06/19/20	06/20/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*116 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*84.4 %*	*75-125*		*P0F1914*	*06/19/20*	*06/20/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**89.0**	10.4	mg/kg dry	10	P0F2101	06/21/20	06/21/20	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P0F1901	06/19/20	06/19/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	260	mg/kg dry	10	P0F1906	06/19/20	06/22/20	TPH 8015M	
>C12-C28	**16600**	260	mg/kg dry	10	P0F1906	06/19/20	06/22/20	TPH 8015M	
>C28-C35	**3650**	260	mg/kg dry	10	P0F1906	06/19/20	06/22/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*102 %*	*70-130*		*P0F1906*	*06/19/20*	*06/22/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*99.2 %*	*70-130*		*P0F1906*	*06/19/20*	*06/22/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**20200**	260	mg/kg dry	10	[CALC]	06/19/20	06/22/20	calc	

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10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1914 - General Preparation (GC)										
Blank (P0F1914-BLK1)				Prepared: 06/19/20 Analyzed: 06/20/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00500	"							
Ethylbenzene	ND	0.00500	"							
Xylene (p/m)	ND	0.00500	"							
Xylene (o)	ND	0.00500	"							
Surrogate: 1,4-Difluorobenzene	*0.111*		"	*0.120*		*92.6*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.102*		"	*0.120*		*84.7*	*75-125*			
LCS (P0F1914-BS1)				Prepared: 06/19/20 Analyzed: 06/20/20						
Benzene	0.0978	0.00100	mg/kg wet	0.100		97.8	70-130			
Toluene	0.0968	0.00500	"	0.100		96.8	70-130			
Ethylbenzene	0.0962	0.00500	"	0.100		96.2	70-130			
Xylene (p/m)	0.194	0.00500	"	0.200		97.2	70-130			
Xylene (o)	0.108	0.00500	"	0.100		108	70-130			
Surrogate: 4-Bromofluorobenzene	*0.106*		"	*0.120*		*88.7*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.115*		"	*0.120*		*95.5*	*75-125*			
LCS Dup (P0F1914-BSD1)				Prepared: 06/19/20 Analyzed: 06/20/20						
Benzene	0.0948	0.00100	mg/kg wet	0.100		94.8	70-130	3.09	20	
Toluene	0.0951	0.00500	"	0.100		95.1	70-130	1.73	20	
Ethylbenzene	0.0994	0.00500	"	0.100		99.4	70-130	3.34	20	
Xylene (p/m)	0.189	0.00500	"	0.200		94.5	70-130	2.81	20	
Xylene (o)	0.104	0.00500	"	0.100		104	70-130	3.53	20	
Surrogate: 1,4-Difluorobenzene	*0.114*		"	*0.120*		*95.0*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.105*		"	*0.120*		*87.8*	*75-125*			
Calibration Check (P0F1914-CCV1)				Prepared: 06/19/20 Analyzed: 06/20/20						
Benzene	0.0956	0.00100	mg/kg wet	0.100		95.6	80-120			
Toluene	0.0965	0.00500	"	0.100		96.5	80-120			
Ethylbenzene	0.100	0.00500	"	0.100		100	80-120			
Xylene (p/m)	0.188	0.00500	"	0.200		94.2	80-120			
Xylene (o)	0.105	0.00500	"	0.100		105	80-120			
Surrogate: 4-Bromofluorobenzene	*0.109*		"	*0.120*		*90.8*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.115*		"	*0.120*		*95.5*	*75-125*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
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BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1914 - General Preparation (GC)										
Calibration Check (P0F1914-CCV2)				Prepared: 06/19/20 Analyzed: 06/20/20						
Benzene	0.0961	0.00100	mg/kg wet	0.100		96.1	80-120			
Toluene	0.0948	0.00500	"	0.100		94.8	80-120			
Ethylbenzene	0.0968	0.00500	"	0.100		96.8	80-120			
Xylene (p/m)	0.182	0.00500	"	0.200		91.1	80-120			
Xylene (o)	0.103	0.00500	"	0.100		103	80-120			
Surrogate: 4-Bromofluorobenzene	*0.104*		"	*0.120*		*86.9*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.115*		"	*0.120*		*96.1*	*75-125*			
Calibration Check (P0F1914-CCV3)				Prepared: 06/19/20 Analyzed: 06/21/20						
Benzene	0.0954	0.00100	mg/kg wet	0.100		95.4	80-120			
Toluene	0.0962	0.00500	"	0.100		96.2	80-120			
Ethylbenzene	0.0981	0.00500	"	0.100		98.1	80-120			
Xylene (p/m)	0.183	0.00500	"	0.200		91.6	80-120			
Xylene (o)	0.105	0.00500	"	0.100		105	80-120			
Surrogate: 4-Bromofluorobenzene	*0.105*		"	*0.120*		*87.1*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.115*		"	*0.120*		*95.4*	*75-125*			
Matrix Spike (P0F1914-MS1)		**Source: 0F18005-29**		Prepared: 06/19/20 Analyzed: 06/20/20						
Benzene	0.0846	0.00110	mg/kg dry	0.110	ND	77.0	80-120			QM-07
Toluene	0.0605	0.00549	"	0.110	0.000901	54.2	80-120			QM-07
Ethylbenzene	0.0496	0.00549	"	0.110	ND	45.1	80-120			QM-07
Xylene (p/m)	0.0538	0.00549	"	0.220	0.00152	23.8	80-120			QM-07
Xylene (o)	0.0703	0.00549	"	0.110	0.000747	63.3	80-120			QM-07
Surrogate: 1,4-Difluorobenzene	*0.130*		"	*0.132*		*98.2*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.119*		"	*0.132*		*90.5*	*75-125*			
Matrix Spike Dup (P0F1914-MSD1)		**Source: 0F18005-29**		Prepared: 06/19/20 Analyzed: 06/20/20						
Benzene	0.0865	0.00110	mg/kg dry	0.110	ND	78.7	80-120	2.25	20	QM-07
Toluene	0.0513	0.00549	"	0.110	0.000901	45.9	80-120	16.7	20	QM-07
Ethylbenzene	0.0440	0.00549	"	0.110	ND	40.0	80-120	12.0	20	QM-07
Xylene (p/m)	0.00977	0.00549	"	0.220	0.00152	3.76	80-120	145	20	QM-07
Xylene (o)	0.0731	0.00549	"	0.110	0.000747	65.9	80-120	4.01	20	QM-07
Surrogate: 1,4-Difluorobenzene	*0.129*		"	*0.132*		*98.0*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.117*		"	*0.132*		*89.1*	*75-125*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1901 - * DEFAULT PREP *** **										
Blank (P0F1901-BLK1)				Prepared & Analyzed: 06/19/20						
% Moisture	ND	0.1	%							
Duplicate (P0F1901-DUP1)		**Source: 0F18005-08**		Prepared & Analyzed: 06/19/20						
% Moisture	1.0	0.1	%		1.0			0.00	20	
Duplicate (P0F1901-DUP2)		**Source: 0F18005-35**		Prepared & Analyzed: 06/19/20						
% Moisture	3.0	0.1	%		3.0			0.00	20	
Duplicate (P0F1901-DUP3)		**Source: 0F18005-38**		Prepared & Analyzed: 06/19/20						
% Moisture	ND	0.1	%		ND				20	
Batch P0F2101 - * DEFAULT PREP *** **										
Blank (P0F2101-BLK1)				Prepared & Analyzed: 06/21/20						
Chloride	ND	1.00	mg/kg wet							
LCS (P0F2101-BS1)				Prepared & Analyzed: 06/21/20						
Chloride	449	1.00	mg/kg wet	400		112	80-120			
LCS Dup (P0F2101-BSD1)				Prepared & Analyzed: 06/21/20						
Chloride	438	1.00	mg/kg wet	400		110	80-120	2.39	20	
Calibration Blank (P0F2101-CCB2)				Prepared & Analyzed: 06/21/20						
Chloride	0.00		mg/kg wet							
Calibration Check (P0F2101-CCV1)				Prepared & Analyzed: 06/21/20						
Chloride	21.0		mg/kg	20.0		105	0-200			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F2101 - * DEFAULT PREP *** **										
Calibration Check (P0F2101-CCV2)				Prepared & Analyzed: 06/21/20						
Chloride	19.7		mg/kg	20.0		98.6	0-200			
Calibration Check (P0F2101-CCV3)				Prepared: 06/21/20 Analyzed: 06/22/20						
Chloride	24.2		mg/kg	20.0		121	0-200			
Matrix Spike (P0F2101-MS1)		**Source: 0F19010-01**		Prepared & Analyzed: 06/21/20						
Chloride	1520	1.14	mg/kg dry	568	1000	90.6	80-120			
Matrix Spike (P0F2101-MS2)		**Source: 0F18007-08**		Prepared & Analyzed: 06/21/20						
Chloride	1080	10.4	mg/kg dry	1040	89.0	95.5	80-120			
Matrix Spike Dup (P0F2101-MSD1)		**Source: 0F19010-01**		Prepared & Analyzed: 06/21/20						
Chloride	1400	1.14	mg/kg dry	568	1000	70.7	80-120	7.74	20	QM-05
Matrix Spike Dup (P0F2101-MSD2)		**Source: 0F18007-08**		Prepared & Analyzed: 06/21/20						
Chloride	1140	10.4	mg/kg dry	1040	89.0	101	80-120	5.37	20	

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10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1906 - TX 1005										
Blank (P0F1906-BLK1)				Prepared & Analyzed: 06/19/20						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*104*		*"*	*100*		*104*	*70-130*			
Surrogate: o-Terphenyl	*51.5*		*"*	*50.0*		*103*	*70-130*			
LCS (P0F1906-BS1)				Prepared & Analyzed: 06/19/20						
C6-C12	832	25.0	mg/kg wet	1000		83.2	75-125			
>C12-C28	1060	25.0	"	1000		106	75-125			
Surrogate: 1-Chlorooctane	*86.3*		*"*	*100*		*86.3*	*70-130*			
Surrogate: o-Terphenyl	*42.1*		*"*	*50.0*		*84.1*	*70-130*			
LCS Dup (P0F1906-BSD1)				Prepared & Analyzed: 06/19/20						
C6-C12	880	25.0	mg/kg wet	1000		88.0	75-125	5.55	20	
>C12-C28	1100	25.0	"	1000		110	75-125	4.24	20	
Surrogate: 1-Chlorooctane	*90.1*		*"*	*100*		*90.1*	*70-130*			
Surrogate: o-Terphenyl	*43.7*		*"*	*50.0*		*87.4*	*70-130*			
Calibration Blank (P0F1906-CCB1)				Prepared & Analyzed: 06/19/20						
C6-C12	16.4		mg/kg wet							
>C12-C28	7.29		"							
Surrogate: 1-Chlorooctane	*104*		*"*	*100*		*104*	*70-130*			
Surrogate: o-Terphenyl	*52.3*		*"*	*50.0*		*105*	*70-130*			
Calibration Blank (P0F1906-CCB2)				Prepared & Analyzed: 06/19/20						
C6-C12	18.2		mg/kg wet							
>C12-C28	8.53		"							
Surrogate: 1-Chlorooctane	*109*		*"*	*100*		*109*	*70-130*			
Surrogate: o-Terphenyl	*55.6*		*"*	*50.0*		*111*	*70-130*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1906 - TX 1005										
Calibration Check (P0F1906-CCV1)				Prepared & Analyzed: 06/19/20						
C6-C12	435	25.0	mg/kg wet	500		87.1	85-115			
>C12-C28	515	25.0	"	500		103	85-115			
Surrogate: 1-Chlorooctane	*100*		"	*100*		*100*	*70-130*			
Surrogate: o-Terphenyl	*49.8*		"	*50.0*		*99.5*	*70-130*			
Calibration Check (P0F1906-CCV2)				Prepared & Analyzed: 06/19/20						
C6-C12	457	25.0	mg/kg wet	500		91.5	85-115			
>C12-C28	537	25.0	"	500		107	85-115			
Surrogate: 1-Chlorooctane	*103*		"	*100*		*103*	*70-130*			
Surrogate: o-Terphenyl	*51.8*		"	*50.0*		*104*	*70-130*			
Matrix Spike (P0F1906-MS1)	**Source: 0F18005-38**			Prepared: 06/19/20 Analyzed: 06/20/20						
C6-C12	964	25.0	mg/kg dry	1000	14.5	95.0	75-125			
>C12-C28	1160	25.0	"	1000	ND	116	75-125			
Surrogate: 1-Chlorooctane	*96.4*		"	*100*		*96.4*	*70-130*			
Surrogate: o-Terphenyl	*44.3*		"	*50.0*		*88.7*	*70-130*			
Matrix Spike Dup (P0F1906-MSD1)	**Source: 0F18005-38**			Prepared: 06/19/20 Analyzed: 06/20/20						
C6-C12	982	25.0	mg/kg dry	1000	14.5	96.7	75-125	1.83	20	
>C12-C28	1200	25.0	"	1000	ND	120	75-125	3.11	20	
Surrogate: 1-Chlorooctane	*97.4*		"	*100*		*97.4*	*70-130*			
Surrogate: o-Terphenyl	*45.2*		"	*50.0*		*90.4*	*70-130*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Notes and Definitions

ROI	Received on Ice
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
BULK	Samples received in Bulk soil containers
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 7/1/2020

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706
Phone: 432-661-4184

Project Manager: Curt Stanley
Company Name: TRC Environmental Corporation
Company Address: 10 Desta Drive, Ste 150E
City/State/Zip: Midland/TX/79703
Telephone No: (432)5207720
Fax No:
Sampler Signature:
e-mail: cdstanley@trcsolutions.com, cjbryant@paalp.com, algroves@paalp.com

Project Name: COG - Screech Owl CTB
Project #: 2020-030
Project Loc: Eddy County, New Mexico
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 0F18007

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1	8015M	TPH: TX 1005	TPH: TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B 8030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300	Paint Filter	TCLP BTEX	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	F8 @ 14"			6/17/2020	1300		1	X								Soil	X									X			X				X
2	OS-SW			6/17/2020	1315		1	X								Soil	X									X			X				X
3	T-WW-N			6/17/2020	1400		1	X								Soil	X									X			X				X
4	T-WW-S			6/17/2020	1410		1	X								Soil	X									X			X				X
5	T-BH-N @ 3'			6/17/2020	1425		1	X								Soil	X									X			X				X
6	T-BH-S @ 3'			6/17/2020	1435		1	X								Soil	X									X			X				X
7	T-EW-N			6/17/2020	1450		1	X								Soil	X									X			X				X
8	T-EW-S			6/17/2020	1500		1	X								Soil	X									X			X				X

Special Instructions: Bill To Plains

Relinquished by:	Date	Time	Received by:	Date	Time
	6/18/20	15:34			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by PBEL: Tina Bledsoe	6/18/20	15:34

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt:
Received: 1.9 °C CF +1.2
Adjusted: 2.9 °C Factor

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Curt Stanley
TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland, TX 79705

Project: Plains- Screech Owl CTB
Project Number: SRS#2020-030
Location: Eddy County, NM

Lab Order Number: 0G01015

NELAP/TCEQ # T104704516-17-8

Report Date: 07/09/20

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: Plains- Screech Owl CTB
Project Number: SRS#2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CWSW-1A @ 6"	0G01015-01	Soil	07/01/20 11:00	07-01-2020 16:16
CWSW-2A @ 1'	0G01015-02	Soil	07/01/20 11:10	07-01-2020 16:16
CSSW-A @ 1.5'	0G01015-03	Soil	07/01/20 11:20	07-01-2020 16:16
F9 @ 1'	0G01015-04	Soil	07/01/20 12:10	07-01-2020 16:16

TRC Solutions- Midland, Texas	Project: Plains- Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: SRS#2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

CWSW-1A @ 6"

0G01015-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Toluene	ND	0.00208	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*91.3 %*	*75-125*		*P0G0605*	*07/06/20*	*07/06/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*99.5 %*	*75-125*		*P0G0605*	*07/06/20*	*07/06/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**59.5**	1.04	mg/kg dry	1	P0G0702	07/07/20	07/07/20	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P0G0202	07/02/20	07/02/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P0G0106	07/01/20	07/02/20	TPH 8015M	
>C12-C28	**37.0**	26.0	mg/kg dry	1	P0G0106	07/01/20	07/02/20	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P0G0106	07/01/20	07/02/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*99.7 %*	*70-130*		*P0G0106*	*07/01/20*	*07/02/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*100 %*	*70-130*		*P0G0106*	*07/01/20*	*07/02/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**37.0**	26.0	mg/kg dry	1	[CALC]	07/01/20	07/02/20	calc	

TRC Solutions- Midland, Texas	Project: Plains- Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: SRS#2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

CWSW-2A @ 1'

0G01015-02 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00106	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Toluene	ND	0.00213	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Ethylbenzene	ND	0.00106	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Xylene (p/m)	ND	0.00213	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*98.7 %*	*75-125*		*P0G0605*	*07/06/20*	*07/06/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*90.3 %*	*75-125*		*P0G0605*	*07/06/20*	*07/06/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**46.2**	1.06	mg/kg dry	1	P0G0702	07/07/20	07/07/20	EPA 300.0	
% Moisture	**6.0**	0.1	%	1	P0G0202	07/02/20	07/02/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.6	mg/kg dry	1	P0G0106	07/01/20	07/02/20	TPH 8015M	
>C12-C28	ND	26.6	mg/kg dry	1	P0G0106	07/01/20	07/02/20	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P0G0106	07/01/20	07/02/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*106 %*	*70-130*		*P0G0106*	*07/01/20*	*07/02/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*107 %*	*70-130*		*P0G0106*	*07/01/20*	*07/02/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	07/01/20	07/02/20	calc	

TRC Solutions- Midland, Texas	Project: Plains- Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: SRS#2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

CSSW-A @ 1.5'

0G01015-03 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00109	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Toluene	ND	0.00217	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Xylene (p/m)	ND	0.00217	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*95.2 %*	*75-125*		*P0G0605*	*07/06/20*	*07/06/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*98.8 %*	*75-125*		*P0G0605*	*07/06/20*	*07/06/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**26.9**	1.09	mg/kg dry	1	P0G0702	07/07/20	07/07/20	EPA 300.0	
% Moisture	**8.0**	0.1	%	1	P0G0202	07/02/20	07/02/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.2	mg/kg dry	1	P0G0106	07/01/20	07/02/20	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P0G0106	07/01/20	07/02/20	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P0G0106	07/01/20	07/02/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*108 %*	*70-130*		*P0G0106*	*07/01/20*	*07/02/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*109 %*	*70-130*		*P0G0106*	*07/01/20*	*07/02/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	07/01/20	07/02/20	calc	

TRC Solutions- Midland, Texas	Project: Plains- Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: SRS#2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

F9 @ 1'

0G01015-04 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Toluene	ND	0.00215	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P0G0605	07/06/20	07/06/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*99.1 %*	*75-125*		*P0G0605*	*07/06/20*	*07/06/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*90.2 %*	*75-125*		*P0G0605*	*07/06/20*	*07/06/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**38.9**	1.08	mg/kg dry	1	P0G0702	07/07/20	07/07/20	EPA 300.0	
% Moisture	**7.0**	0.1	%	1	P0G0202	07/02/20	07/02/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.9	mg/kg dry	1	P0G0106	07/01/20	07/02/20	TPH 8015M	
>C12-C28	**44.2**	26.9	mg/kg dry	1	P0G0106	07/01/20	07/02/20	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P0G0106	07/01/20	07/02/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*97.9 %*	*70-130*		*P0G0106*	*07/01/20*	*07/02/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*98.1 %*	*70-130*		*P0G0106*	*07/01/20*	*07/02/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**44.2**	26.9	mg/kg dry	1	[CALC]	07/01/20	07/02/20	calc	

TRC Solutions- Midland, Texas	Project: Plains- Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: SRS#2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0605 - General Preparation (GC)										
Blank (P0G0605-BLK1)				Prepared & Analyzed: 07/06/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00200	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	*0.115*		"	*0.120*		*96.2*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.106*		"	*0.120*		*88.0*	*75-125*			
LCS (P0G0605-BS1)				Prepared & Analyzed: 07/06/20						
Benzene	0.0978	0.00100	mg/kg wet	0.100		97.8	70-130			
Toluene	0.0954	0.00200	"	0.100		95.4	70-130			
Ethylbenzene	0.0969	0.00100	"	0.100		96.9	70-130			
Xylene (p/m)	0.194	0.00200	"	0.200		96.8	70-130			
Xylene (o)	0.0979	0.00100	"	0.100		97.9	70-130			
Surrogate: 1,4-Difluorobenzene	*0.117*		"	*0.120*		*97.9*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.103*		"	*0.120*		*85.6*	*75-125*			
LCS Dup (P0G0605-BSD1)				Prepared & Analyzed: 07/06/20						
Benzene	0.103	0.00100	mg/kg wet	0.100		103	70-130	4.94	20	
Toluene	0.102	0.00200	"	0.100		102	70-130	6.90	20	
Ethylbenzene	0.106	0.00100	"	0.100		106	70-130	8.74	20	
Xylene (p/m)	0.210	0.00200	"	0.200		105	70-130	7.97	20	
Xylene (o)	0.108	0.00100	"	0.100		108	70-130	10.0	20	
Surrogate: 1,4-Difluorobenzene	*0.118*		"	*0.120*		*98.2*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.106*		"	*0.120*		*88.3*	*75-125*			
Calibration Blank (P0G0605-CCB1)				Prepared & Analyzed: 07/06/20						
Benzene	0.00		mg/kg wet							
Toluene	1.22		"							
Ethylbenzene	0.360		"							
Xylene (p/m)	0.650		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	*0.100*		"	*0.120*		*83.4*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.116*		"	*0.120*		*96.6*	*75-125*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: Plains- Screech Owl CTB
Project Number: SRS#2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0605 - General Preparation (GC)										
Calibration Check (P0G0605-CCV1)				Prepared & Analyzed: 07/06/20						
Benzene	0.108	0.00100	mg/kg wet	0.100		108	80-120			
Toluene	0.105	0.00200	"	0.100		105	80-120			
Ethylbenzene	0.107	0.00100	"	0.100		107	80-120			
Xylene (p/m)	0.210	0.00200	"	0.200		105	80-120			
Xylene (o)	0.112	0.00100	"	0.100		112	80-120			
Surrogate: 4-Bromofluorobenzene	*0.104*		"	*0.120*		*87.0*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.118*		"	*0.120*		*98.2*	*75-125*			
Calibration Check (P0G0605-CCV2)				Prepared & Analyzed: 07/06/20						
Benzene	0.0991	0.00100	mg/kg wet	0.100		99.1	80-120			
Toluene	0.0940	0.00200	"	0.100		94.0	80-120			
Ethylbenzene	0.0924	0.00100	"	0.100		92.4	80-120			
Xylene (p/m)	0.182	0.00200	"	0.200		91.0	80-120			
Xylene (o)	0.0979	0.00100	"	0.100		97.9	80-120			
Surrogate: 1,4-Difluorobenzene	*0.120*		"	*0.120*		*99.9*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.106*		"	*0.120*		*88.1*	*75-125*			
Matrix Spike (P0G0605-MS1)		**Source: 0G01015-01**		Prepared & Analyzed: 07/06/20						
Benzene	0.0735	0.00104	mg/kg dry	0.104	ND	70.6	80-120			QM-07
Toluene	0.0732	0.00208	"	0.104	ND	70.2	80-120			QM-07
Ethylbenzene	0.0781	0.00104	"	0.104	ND	74.9	80-120			QM-07
Xylene (p/m)	0.136	0.00208	"	0.208	0.00105	64.5	80-120			QM-07
Xylene (o)	0.0644	0.00104	"	0.104	ND	61.9	80-120			QM-07
Surrogate: 1,4-Difluorobenzene	*0.124*		"	*0.125*		*98.8*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.115*		"	*0.125*		*91.6*	*75-125*			
Matrix Spike Dup (P0G0605-MSD1)		**Source: 0G01015-01**		Prepared & Analyzed: 07/06/20						
Benzene	0.0950	0.00104	mg/kg dry	0.104	ND	91.2	80-120	25.5	20	QM-07
Toluene	0.0946	0.00208	"	0.104	ND	90.8	80-120	25.6	20	QM-07
Ethylbenzene	0.0946	0.00104	"	0.104	ND	90.8	80-120	19.1	20	
Xylene (p/m)	0.183	0.00208	"	0.208	0.00105	87.3	80-120	29.9	20	QM-07
Xylene (o)	0.0921	0.00104	"	0.104	ND	88.4	80-120	35.3	20	QM-07
Surrogate: 4-Bromofluorobenzene	*0.118*		"	*0.125*		*94.2*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.127*		"	*0.125*		*101*	*75-125*			

TRC Solutions- Midland, Texas	Project: Plains- Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: SRS#2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0202 - * DEFAULT PREP *** **										
Blank (P0G0202-BLK1)				Prepared & Analyzed: 07/02/20						
% Moisture	ND	0.1	%							
Blank (P0G0202-BLK2)				Prepared & Analyzed: 07/02/20						
% Moisture	ND	0.1	%							
Duplicate (P0G0202-DUP1)		**Source: 0G01003-01**		Prepared & Analyzed: 07/02/20						
% Moisture	11.0	0.1	%		11.0			0.00	20	
Duplicate (P0G0202-DUP2)		**Source: 0G01003-11**		Prepared & Analyzed: 07/02/20						
% Moisture	7.0	0.1	%		7.0			0.00	20	
Duplicate (P0G0202-DUP3)		**Source: 0G01004-01**		Prepared & Analyzed: 07/02/20						
% Moisture	2.0	0.1	%		2.0			0.00	20	
Duplicate (P0G0202-DUP4)		**Source: 0G01009-05**		Prepared & Analyzed: 07/02/20						
% Moisture	10.0	0.1	%		13.0			26.1	20	R
Duplicate (P0G0202-DUP5)		**Source: 0G01011-01**		Prepared & Analyzed: 07/02/20						
% Moisture	5.0	0.1	%		7.0			33.3	20	R
Duplicate (P0G0202-DUP6)		**Source: 0G01011-11**		Prepared & Analyzed: 07/02/20						
% Moisture	5.0	0.1	%		5.0			0.00	20	
Duplicate (P0G0202-DUP7)		**Source: 0G01012-11**		Prepared & Analyzed: 07/02/20						
% Moisture	4.0	0.1	%		3.0			28.6	20	R
Duplicate (P0G0202-DUP8)		**Source: 0G01013-06**		Prepared & Analyzed: 07/02/20						
% Moisture	6.0	0.1	%		4.0			40.0	20	R

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: Plains- Screech Owl CTB
Project Number: SRS#2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0202 - * DEFAULT PREP *** **										
Duplicate (P0G0202-DUP9)	**Source: 0G01013-14**			Prepared & Analyzed: 07/02/20						
% Moisture	8.0	0.1	%		7.0			13.3	20	
Batch P0G0702 - * DEFAULT PREP *** **										
Blank (P0G0702-BLK1)				Prepared & Analyzed: 07/07/20						
Chloride	ND	1.00	mg/kg wet							
LCS (P0G0702-BS1)				Prepared & Analyzed: 07/07/20						
Chloride	397	1.00	mg/kg wet	400		99.2	80-120			
LCS Dup (P0G0702-BSD1)				Prepared & Analyzed: 07/07/20						
Chloride	397	1.00	mg/kg wet	400		99.2	80-120	0.0454	20	
Calibration Blank (P0G0702-CCB1)				Prepared & Analyzed: 07/07/20						
Chloride	0.00		mg/kg wet							
Calibration Check (P0G0702-CCV1)				Prepared & Analyzed: 07/07/20						
Chloride	18.8		mg/kg	20.0		94.1	0-200			
Calibration Check (P0G0702-CCV2)				Prepared & Analyzed: 07/07/20						
Chloride	18.9		mg/kg	20.0		94.4	0-200			
Calibration Check (P0G0702-CCV3)				Prepared: 07/07/20 Analyzed: 07/08/20						
Chloride	18.9		mg/kg	20.0		94.6	0-200			
Matrix Spike (P0G0702-MS1)	**Source: 0G01013-08**			Prepared & Analyzed: 07/07/20						
Chloride	561	1.14	mg/kg dry	568	29.2	93.6	80-120			

TRC Solutions- Midland, Texas	Project: Plains- Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: SRS#2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0702 - * DEFAULT PREP *** **										
Matrix Spike (P0G0702-MS2)	**Source: 0G02002-03**			Prepared & Analyzed: 07/07/20						
Chloride	1680	1.11	mg/kg dry	778	824	110	80-120			
Matrix Spike Dup (P0G0702-MSD1)	**Source: 0G01013-08**			Prepared & Analyzed: 07/07/20						
Chloride	556	1.14	mg/kg dry	568	29.2	92.8	80-120	0.806	20	
Matrix Spike Dup (P0G0702-MSD2)	**Source: 0G02002-03**			Prepared & Analyzed: 07/07/20						
Chloride	1700	1.11	mg/kg dry	778	824	113	80-120	1.40	20	

TRC Solutions- Midland, Texas	Project: Plains- Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: SRS#2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0106 - TX 1005										
Blank (P0G0106-BLK1)				Prepared: 07/01/20 Analyzed: 07/02/20						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*99.5*		*"*	*100*		*99.5*	*70-130*			
Surrogate: o-Terphenyl	*47.9*		*"*	*50.0*		*95.8*	*70-130*			
LCS (P0G0106-BS1)				Prepared: 07/01/20 Analyzed: 07/02/20						
C6-C12	1130	25.0	mg/kg wet	1000		113	75-125			
>C12-C28	1200	25.0	"	1000		120	75-125			
Surrogate: 1-Chlorooctane	*115*		*"*	*100*		*115*	*70-130*			
Surrogate: o-Terphenyl	*44.5*		*"*	*50.0*		*89.0*	*70-130*			
LCS Dup (P0G0106-BSD1)				Prepared: 07/01/20 Analyzed: 07/02/20						
C6-C12	1160	25.0	mg/kg wet	1000		116	75-125	2.83	20	
>C12-C28	1230	25.0	"	1000		123	75-125	2.54	20	
Surrogate: 1-Chlorooctane	*118*		*"*	*100*		*118*	*70-130*			
Surrogate: o-Terphenyl	*45.4*		*"*	*50.0*		*90.7*	*70-130*			
Matrix Spike (P0G0106-MS1)		**Source: 0G01003-25**		Prepared: 07/01/20 Analyzed: 07/02/20						
C6-C12	1160	27.5	mg/kg dry	1100	ND	105	75-125			
>C12-C28	1240	27.5	"	1100	ND	113	75-125			
Surrogate: 1-Chlorooctane	*105*		*"*	*110*		*96.0*	*70-130*			
Surrogate: o-Terphenyl	*41.4*		*"*	*54.9*		*75.4*	*70-130*			
Matrix Spike Dup (P0G0106-MSD1)		**Source: 0G01003-25**		Prepared: 07/01/20 Analyzed: 07/02/20						
C6-C12	1140	27.5	mg/kg dry	1100	ND	104	75-125	1.36	20	
>C12-C28	1220	27.5	"	1100	ND	111	75-125	1.04	20	
Surrogate: 1-Chlorooctane	*104*		*"*	*110*		*94.7*	*70-130*			
Surrogate: o-Terphenyl	*40.8*		*"*	*54.9*		*74.3*	*70-130*			

TRC Solutions- Midland, Texas	Project: Plains- Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: SRS#2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Notes and Definitions

ROI	Received on Ice
R	The RPD exceeded the method control limit. The individual analyte QA/QC recoveries, however, were within acceptance limits.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BULK	Samples received in Bulk soil containers
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 7/9/2020

Brent Barron, Laboratory Director/Technical Director

TRC Solutions- Midland, Texas	Project: Plains- Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: SRS#2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

L TB CK 03

Page 15 of 15

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
1400 Rankin HWY
Midland, Texas 79701

Phone: 432-686-7235

Project Manager: Curt Stanley
Company Name: TRC
Company Address: 10 Desta Dr. Ste 150E
City/State/Zip: Midland, TX
Telephone No: 432-520-7720
Fax No: —
Sampler Signature: [signature]
e-mail:

Project Name: Schreech Quail Ct
Project #: 2020-030
Project Loc: Eddy County, NM
PO #:
Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 0G01015

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled 2020	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other)	TPH: TX 1005 TX 1006	Anions (Cl, SO4, Alkalinity)	BTEX 8021B/5030 or BTEX 8260	TPH - 8015M	BTEX	Cl - E300.0	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	CWSW-1A@6"			7/1	1100		1	X								S				X	X	X		X
2	CWSW-2A@1'			↓	1110		↓	↓								↓				↓	↓	↓		↓
3	CSSW-A@1.5'			↓	1120		↓	↓								↓				↓	↓	↓		↓
4	F9@1'			↓	1210		↓	↓								↓				↓	↓	↓		↓

Analyze For: TCLP: TOTAL: X

Special Instructions: Bill to Plains

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	7/1/2020	1616			
			Received by PBEL: [signature]	7/1/20	16:16

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) (Y) N
Custody seals on container(s) (Y) N
Custody seals on cooler(s) (Y) N
Sample Hand Delivered (Y) N
by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt:
Received: 3.5 °C CF+1
Adjusted: 4.5 °C Factor C2

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Curt Stanley
TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland, TX 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Location: Eddy County, NM

Lab Order Number: 0G08022

NELAP/TCEQ # T104704516-17-8

Report Date: 07/15/20

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FP-4A SW @ 6"	0G08022-01	Soil	07/07/20 11:00	07-08-2020 13:00
FP-2A SW @ 3"	0G08022-02	Soil	07/07/20 11:20	07-08-2020 13:00
FP-5A @ 2.5'	0G08022-03	Soil	07/07/20 12:00	07-08-2020 13:00

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

FP-4A SW @ 6"

0G08022-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00111	mg/kg dry	1	P0G0908	07/09/20	07/10/20	EPA 8021B	
Toluene	ND	0.00111	mg/kg dry	1	P0G0908	07/09/20	07/10/20	EPA 8021B	
Ethylbenzene	ND	0.00111	mg/kg dry	1	P0G0908	07/09/20	07/10/20	EPA 8021B	
Xylene (p/m)	ND	0.00222	mg/kg dry	1	P0G0908	07/09/20	07/10/20	EPA 8021B	
Xylene (o)	ND	0.00111	mg/kg dry	1	P0G0908	07/09/20	07/10/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*105 %*	*75-125*		*P0G0908*	*07/09/20*	*07/10/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.1 %*	*75-125*		*P0G0908*	*07/09/20*	*07/10/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**32.4**	1.11	mg/kg dry	1	P0G1202	07/12/20	07/14/20	EPA 300.0	
% Moisture	**10.0**	0.1	%	1	P0G0905	07/09/20	07/09/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.8	mg/kg dry	1	P0G0903	07/09/20	07/09/20	TPH 8015M	
>C12-C28	**74.5**	27.8	mg/kg dry	1	P0G0903	07/09/20	07/09/20	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P0G0903	07/09/20	07/09/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*100 %*	*70-130*		*P0G0903*	*07/09/20*	*07/09/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*100 %*	*70-130*		*P0G0903*	*07/09/20*	*07/09/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**74.5**	27.8	mg/kg dry	1	[CALC]	07/09/20	07/09/20	calc	

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

FP-2A SW @ 3"

0G08022-02 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00114	mg/kg dry	1	P0G0908	07/09/20	07/09/20	EPA 8021B	
Toluene	ND	0.00114	mg/kg dry	1	P0G0908	07/09/20	07/09/20	EPA 8021B	
Ethylbenzene	ND	0.00114	mg/kg dry	1	P0G0908	07/09/20	07/09/20	EPA 8021B	
Xylene (p/m)	ND	0.00227	mg/kg dry	1	P0G0908	07/09/20	07/09/20	EPA 8021B	
Xylene (o)	ND	0.00114	mg/kg dry	1	P0G0908	07/09/20	07/09/20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*97.6 %*	*75-125*		*P0G0908*	*07/09/20*	*07/09/20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*111 %*	*75-125*		*P0G0908*	*07/09/20*	*07/09/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**8.45**	1.14	mg/kg dry	1	P0G1202	07/12/20	07/14/20	EPA 300.0	
% Moisture	**12.0**	0.1	%	1	P0G0905	07/09/20	07/09/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	28.4	mg/kg dry	1	P0G0903	07/09/20	07/09/20	TPH 8015M	
>C12-C28	ND	28.4	mg/kg dry	1	P0G0903	07/09/20	07/09/20	TPH 8015M	
>C28-C35	ND	28.4	mg/kg dry	1	P0G0903	07/09/20	07/09/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*105 %*	*70-130*		*P0G0903*	*07/09/20*	*07/09/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*104 %*	*70-130*		*P0G0903*	*07/09/20*	*07/09/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	28.4	mg/kg dry	1	[CALC]	07/09/20	07/09/20	calc	

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10 Desta Dr STE 150E	Project Number: 2020-030	
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FP-5A @ 2.5'

0G08022-03 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P0G0908	07/09/20	07/09/20	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P0G0908	07/09/20	07/09/20	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P0G0908	07/09/20	07/09/20	EPA 8021B	
Xylene (p/m)	**0.00573**	0.00208	mg/kg dry	1	P0G0908	07/09/20	07/09/20	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P0G0908	07/09/20	07/09/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*114 %*	*75-125*		*P0G0908*	*07/09/20*	*07/09/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*101 %*	*75-125*		*P0G0908*	*07/09/20*	*07/09/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**23.9**	1.04	mg/kg dry	1	P0G1202	07/12/20	07/13/20	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P0G0905	07/09/20	07/09/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P0G0903	07/09/20	07/09/20	TPH 8015M	
>C12-C28	**635**	26.0	mg/kg dry	1	P0G0903	07/09/20	07/09/20	TPH 8015M	
>C28-C35	**82.9**	26.0	mg/kg dry	1	P0G0903	07/09/20	07/09/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*111 %*	*70-130*		*P0G0903*	*07/09/20*	*07/09/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*119 %*	*70-130*		*P0G0903*	*07/09/20*	*07/09/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**718**	26.0	mg/kg dry	1	[CALC]	07/09/20	07/09/20	calc	

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10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0908 - General Preparation (GC)										
Blank (P0G0908-BLK1)				Prepared & Analyzed: 07/09/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	*0.113*		"	*0.120*		*93.9*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.123*		"	*0.120*		*102*	*75-125*			
LCS (P0G0908-BS1)				Prepared & Analyzed: 07/09/20						
Benzene	0.104	0.00100	mg/kg wet	0.100		104	70-130			
Toluene	0.0982	0.00100	"	0.100		98.2	70-130			
Ethylbenzene	0.101	0.00100	"	0.100		101	70-130			
Xylene (p/m)	0.215	0.00200	"	0.200		108	70-130			
Xylene (o)	0.104	0.00100	"	0.100		104	70-130			
Surrogate: 1,4-Difluorobenzene	*0.118*		"	*0.120*		*98.3*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.120*		"	*0.120*		*99.6*	*75-125*			
LCS Dup (P0G0908-BSD1)				Prepared & Analyzed: 07/09/20						
Benzene	0.110	0.00100	mg/kg wet	0.100		110	70-130	5.83	20	
Toluene	0.105	0.00100	"	0.100		105	70-130	6.65	20	
Ethylbenzene	0.104	0.00100	"	0.100		104	70-130	2.53	20	
Xylene (p/m)	0.228	0.00200	"	0.200		114	70-130	5.81	20	
Xylene (o)	0.112	0.00100	"	0.100		112	70-130	7.53	20	
Surrogate: 1,4-Difluorobenzene	*0.118*		"	*0.120*		*98.6*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.121*		"	*0.120*		*101*	*75-125*			
Calibration Blank (P0G0908-CCB1)				Prepared & Analyzed: 07/09/20						
Benzene	0.00		mg/kg wet							
Toluene	0.730		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.310		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	*0.124*		"	*0.120*		*103*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.114*		"	*0.120*		*95.3*	*75-125*			

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Midland TX, 79705

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Project Number: 2020-030
Project Manager: Curt Stanley

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BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0908 - General Preparation (GC)										
Calibration Blank (P0G0908-CCB2)				Prepared & Analyzed: 07/09/20						
Benzene	0.00		mg/kg wet							
Toluene	0.960		"							
Ethylbenzene	0.490		"							
Xylene (p/m)	1.23		"							
Xylene (o)	0.380		"							
Surrogate: 4-Bromofluorobenzene	*0.130*		*"*	*0.120*		*109*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.3*	*75-125*			
Calibration Blank (P0G0908-CCB3)				Prepared & Analyzed: 07/09/20						
Benzene	0.00		mg/kg wet							
Toluene	0.950		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.440		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	*0.106*		*"*	*0.120*		*87.9*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.6*	*75-125*			
Calibration Check (P0G0908-CCV1)				Prepared & Analyzed: 07/09/20						
Benzene	0.103	0.00100	mg/kg wet	0.100		103	80-120			
Toluene	0.0930	0.00100	"	0.100		93.0	80-120			
Ethylbenzene	0.0963	0.00100	"	0.100		96.3	80-120			
Xylene (p/m)	0.198	0.00200	"	0.200		99.2	80-120			
Xylene (o)	0.0989	0.00100	"	0.100		98.9	80-120			
Surrogate: 4-Bromofluorobenzene	*0.115*		*"*	*0.120*		*95.6*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.117*		*"*	*0.120*		*97.7*	*75-125*			
Calibration Check (P0G0908-CCV2)				Prepared & Analyzed: 07/09/20						
Benzene	0.110	0.00100	mg/kg wet	0.100		110	80-120			
Toluene	0.102	0.00100	"	0.100		102	80-120			
Ethylbenzene	0.106	0.00100	"	0.100		106	80-120			
Xylene (p/m)	0.213	0.00200	"	0.200		106	80-120			
Xylene (o)	0.115	0.00100	"	0.100		115	80-120			
Surrogate: 1,4-Difluorobenzene	*0.120*		*"*	*0.120*		*100*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.127*		*"*	*0.120*		*106*	*75-125*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0908 - General Preparation (GC)										
Calibration Check (P0G0908-CCV3)				Prepared & Analyzed: 07/09/20						
Benzene	0.110	0.00100	mg/kg wet	0.100		110	80-120			
Toluene	0.0996	0.00100	"	0.100		99.6	80-120			
Ethylbenzene	0.103	0.00100	"	0.100		103	80-120			
Xylene (p/m)	0.205	0.00200	"	0.200		102	80-120			
Xylene (o)	0.106	0.00100	"	0.100		106	80-120			
Surrogate: 4-Bromofluorobenzene	*0.117*		"	*0.120*		*97.1*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.119*		"	*0.120*		*99.0*	*75-125*			
Matrix Spike (P0G0908-MS1)		**Source: 0G08013-01**		Prepared & Analyzed: 07/09/20						
Benzene	0.0782	0.00102	mg/kg dry	0.102	ND	76.6	80-120			QM-07
Toluene	0.0753	0.00102	"	0.102	ND	73.8	80-120			QM-07
Ethylbenzene	0.0958	0.00102	"	0.102	ND	93.9	80-120			
Xylene (p/m)	0.164	0.00204	"	0.204	0.00119	79.8	80-120			QM-07
Xylene (o)	0.0781	0.00102	"	0.102	0.000510	76.0	80-120			QM-07
Surrogate: 4-Bromofluorobenzene	*0.132*		"	*0.122*		*107*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.121*		"	*0.122*		*98.8*	*75-125*			
Matrix Spike Dup (P0G0908-MSD1)		**Source: 0G08013-01**		Prepared & Analyzed: 07/09/20						
Benzene	0.0923	0.00102	mg/kg dry	0.102	ND	90.5	80-120	16.6	20	
Toluene	0.0836	0.00102	"	0.102	ND	82.0	80-120	10.4	20	
Ethylbenzene	0.105	0.00102	"	0.102	ND	103	80-120	9.31	20	
Xylene (p/m)	0.179	0.00204	"	0.204	0.00119	87.0	80-120	8.72	20	
Xylene (o)	0.0880	0.00102	"	0.102	0.000510	85.7	80-120	12.0	20	
Surrogate: 1,4-Difluorobenzene	*0.122*		"	*0.122*		*99.6*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.128*		"	*0.122*		*104*	*75-125*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0905 - * DEFAULT PREP *** **										
Blank (P0G0905-BLK1)				Prepared & Analyzed: 07/09/20						
% Moisture	ND	0.1	%							
Blank (P0G0905-BLK2)				Prepared & Analyzed: 07/09/20						
% Moisture	ND	0.1	%							
Duplicate (P0G0905-DUP1)		**Source: 0G08002-03**		Prepared & Analyzed: 07/09/20						
% Moisture	11.0	0.1	%		11.0			0.00	20	
Duplicate (P0G0905-DUP2)		**Source: 0G08004-05**		Prepared & Analyzed: 07/09/20						
% Moisture	15.0	0.1	%		14.0			6.90	20	
Duplicate (P0G0905-DUP3)		**Source: 0G08007-07**		Prepared & Analyzed: 07/09/20						
% Moisture	13.0	0.1	%		12.0			8.00	20	
Duplicate (P0G0905-DUP4)		**Source: 0G08008-09**		Prepared & Analyzed: 07/09/20						
% Moisture	ND	0.1	%		ND				20	
Duplicate (P0G0905-DUP5)		**Source: 0G08008-24**		Prepared & Analyzed: 07/09/20						
% Moisture	1.0	0.1	%		2.0			66.7	20	
Duplicate (P0G0905-DUP6)		**Source: 0G08008-34**		Prepared & Analyzed: 07/09/20						
% Moisture	ND	0.1	%		ND				20	
Duplicate (P0G0905-DUP7)		**Source: 0G08009-10**		Prepared & Analyzed: 07/09/20						
% Moisture	13.0	0.1	%		13.0			0.00	20	
Duplicate (P0G0905-DUP8)		**Source: 0G08009-20**		Prepared & Analyzed: 07/09/20						
% Moisture	9.0	0.1	%		9.0			0.00	20	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0905 - * DEFAULT PREP *** **										
Duplicate (P0G0905-DUP9)		**Source: 0G08009-35**		Prepared & Analyzed: 07/09/20						
% Moisture	8.0	0.1	%		7.0			13.3	20	
Duplicate (P0G0905-DUPA)		**Source: 0G08011-03**		Prepared & Analyzed: 07/09/20						
% Moisture	ND	0.1	%		ND				20	
Duplicate (P0G0905-DUPB)		**Source: 0G08018-01**		Prepared & Analyzed: 07/09/20						
% Moisture	6.0	0.1	%		5.0			18.2	20	
Duplicate (P0G0905-DUPC)		**Source: 0G08022-02**		Prepared & Analyzed: 07/09/20						
% Moisture	13.0	0.1	%		12.0			8.00	20	
Batch P0G1202 - * DEFAULT PREP *** **										
LCS (P0G1202-BS1)				Prepared & Analyzed: 07/12/20						
Chloride	411	1.00	mg/kg wet	400		103	80-120			
LCS Dup (P0G1202-BSD1)				Prepared & Analyzed: 07/12/20						
Chloride	408	1.00	mg/kg wet	400		102	80-120	0.676	20	
Calibration Check (P0G1202-CCV1)				Prepared & Analyzed: 07/12/20						
Chloride	19.4		mg/kg	20.0		96.8	0-200			
Calibration Check (P0G1202-CCV2)				Prepared: 07/12/20 Analyzed: 07/13/20						
Chloride	19.5		mg/kg	20.0		97.4	0-200			
Calibration Check (P0G1202-CCV3)				Prepared: 07/12/20 Analyzed: 07/13/20						
Chloride	19.7		mg/kg	20.0		98.5	0-200			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

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Project Number: 2020-030
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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G1202 - * DEFAULT PREP *** **										
Matrix Spike (P0G1202-MS1)	**Source: 0G08009-40**			Prepared & Analyzed: 07/12/20						
Chloride	3150	5.15	mg/kg dry	515	2610	106	80-120			
Matrix Spike (P0G1202-MS2)	**Source: 0G08022-02**			Prepared: 07/12/20 Analyzed: 07/14/20						
Chloride	587	1.14	mg/kg dry	568	8.45	102	80-120			
Matrix Spike Dup (P0G1202-MSD1)	**Source: 0G08009-40**			Prepared & Analyzed: 07/12/20						
Chloride	3140	5.15	mg/kg dry	515	2610	102	80-120	0.559	20	
Matrix Spike Dup (P0G1202-MSD2)	**Source: 0G08022-02**			Prepared: 07/12/20 Analyzed: 07/14/20						
Chloride	554	1.14	mg/kg dry	568	8.45	96.1	80-120	5.73	20	

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10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0903 - TX 1005										
Blank (P0G0903-BLK1)				Prepared & Analyzed: 07/09/20						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*111*		*"*	*100*		*111*	*70-130*			
Surrogate: o-Terphenyl	*58.6*		*"*	*50.0*		*117*	*70-130*			
LCS (P0G0903-BS1)				Prepared & Analyzed: 07/09/20						
C6-C12	955	25.0	mg/kg wet	1000		95.5	75-125			
>C12-C28	1200	25.0	"	1000		120	75-125			
Surrogate: 1-Chlorooctane	*124*		*"*	*100*		*124*	*70-130*			
Surrogate: o-Terphenyl	*54.0*		*"*	*50.0*		*108*	*70-130*			
LCS Dup (P0G0903-BSD1)				Prepared & Analyzed: 07/09/20						
C6-C12	956	25.0	mg/kg wet	1000		95.6	75-125	0.144	20	
>C12-C28	1190	25.0	"	1000		119	75-125	0.730	20	
Surrogate: 1-Chlorooctane	*123*		*"*	*100*		*123*	*70-130*			
Surrogate: o-Terphenyl	*53.2*		*"*	*50.0*		*106*	*70-130*			
Calibration Check (P0G0903-CCV1)				Prepared & Analyzed: 07/09/20						
C6-C12	517	25.0	mg/kg wet	500		103	85-115			
>C12-C28	566	25.0	"	500		113	85-115			
Surrogate: 1-Chlorooctane	*110*		*"*	*100*		*110*	*70-130*			
Surrogate: o-Terphenyl	*54.1*		*"*	*50.0*		*108*	*70-130*			
Calibration Check (P0G0903-CCV2)				Prepared & Analyzed: 07/09/20						
C6-C12	545	25.0	mg/kg wet	500		109	85-115			
>C12-C28	548	25.0	"	500		110	85-115			
Surrogate: 1-Chlorooctane	*88.1*		*"*	*100*		*88.1*	*70-130*			
Surrogate: o-Terphenyl	*56.0*		*"*	*50.0*		*112*	*70-130*			

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Midland TX, 79705	Project Manager: Curt Stanley	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0903 - TX 1005										
Calibration Check (P0G0903-CCV3)				Prepared: 07/09/20 Analyzed: 07/10/20						
C6-C12	542	25.0	mg/kg wet	500		108	85-115			
>C12-C28	560	25.0	"	500		112	85-115			
Surrogate: 1-Chlorooctane	*105*		*"*	*100*		*105*	*70-130*			
Surrogate: o-Terphenyl	*57.6*		*"*	*50.0*		*115*	*70-130*			
Matrix Spike (P0G0903-MS1)		**Source: 0G08022-01**		Prepared: 07/09/20 Analyzed: 07/10/20						
C6-C12	1730	27.8	mg/kg dry	1110	17.3	154	75-125			QM-05
>C12-C28	2040	27.8	"	1110	74.5	177	75-125			QM-05
Surrogate: 1-Chlorooctane	*125*		*"*	*111*		*113*	*70-130*			
Surrogate: o-Terphenyl	*59.5*		*"*	*55.6*		*107*	*70-130*			
Matrix Spike Dup (P0G0903-MSD1)		**Source: 0G08022-01**		Prepared: 07/09/20 Analyzed: 07/10/20						
C6-C12	1720	27.8	mg/kg dry	1110	17.3	153	75-125	0.354	20	QM-05
>C12-C28	1990	27.8	"	1110	74.5	172	75-125	2.91	20	QM-05
Surrogate: 1-Chlorooctane	*122*		*"*	*111*		*110*	*70-130*			
Surrogate: o-Terphenyl	*58.7*		*"*	*55.6*		*106*	*70-130*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Notes and Definitions

ROI	Received on Ice
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
BULK	Samples received in Bulk soil containers
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 7/15/2020

Brent Barron, Laboratory Director/Technical Director

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

LO2 OK MD

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706

Phone: 432-661-4184

Project Manager: Curt Stanley

Company Name: TRC Environmental Corporation

Company Address: 10 Desta Drive, Ste 150E

City/State/Zip: Midland/TX/79703

Telephone No: (432)5207720

Sampler Signature: [signature]

Project Name: COG - Screech Owl CTB

Project #: 2020-030

Project Loc: Eddy County, New Mexico

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Fax No:

e-mail: cdstanley@trcsolutions.com
cjbryant@paalp.com
algroves@paalp.com

(lab use only)
ORDER #: OG08022

Analyze For: TCLP: / TOTAL: (X marked under BTEX 8021B/5030 or BTEX 8260)

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other)	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300	Paint Filter	TCLP BTEX	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	FP-4A SW @ 6"			7/7/2020	1100		1	X								Soil	X								X			X				X
2	FP-2A SW @ 3"			7/7/2020	1120		1	X								Soil	X								X			X				X
3	F-5A @ 2.5'			7/7/2020	1200		1	X								Soil	X								X			X				X

Special Instructions: Basin to Plains

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	7/8/20	13:00	[signature]		
[signature]					
			Received by PBEL: [signature]	7/8/20	13:00

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt:
Received: 4.1 °C CF+1
Adjusted: 5.1 °C Factor C2

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Curt Stanley
TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland, TX 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Location: Eddy County, NM

Lab Order Number: 0G09009

NELAP/TCEQ # T104704516-17-8

Report Date: 07/15/20

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CNSW-A @ 6"	0G09009-01	Soil	07/08/20 09:10	07-09-2020 14:35

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

CNSW-A @ 6"

0G09009-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00101	mg/kg dry	1	P0G0909	07/09/20	07/10/20	EPA 8021B	
Toluene	ND	0.00101	mg/kg dry	1	P0G0909	07/09/20	07/10/20	EPA 8021B	
Ethylbenzene	ND	0.00101	mg/kg dry	1	P0G0909	07/09/20	07/10/20	EPA 8021B	
Xylene (p/m)	**0.00246**	0.00202	mg/kg dry	1	P0G0909	07/09/20	07/10/20	EPA 8021B	
Xylene (o)	ND	0.00101	mg/kg dry	1	P0G0909	07/09/20	07/10/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*111 %*	*75-125*		*P0G0909*	*07/09/20*	*07/10/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*112 %*	*75-125*		*P0G0909*	*07/09/20*	*07/10/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**33.5**	1.01	mg/kg dry	1	P0G1306	07/13/20	07/14/20	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P0G1007	07/10/20	07/10/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**209**	126	mg/kg dry	5	P0G1005	07/10/20	07/13/20	TPH 8015M	
>C12-C28	**9000**	126	mg/kg dry	5	P0G1005	07/10/20	07/13/20	TPH 8015M	
>C28-C35	**1500**	126	mg/kg dry	5	P0G1005	07/10/20	07/13/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*124 %*	*70-130*		*P0G1005*	*07/10/20*	*07/13/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*118 %*	*70-130*		*P0G1005*	*07/10/20*	*07/13/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**10700**	126	mg/kg dry	5	[CALC]	07/10/20	07/13/20	calc	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0909 - General Preparation (GC)										
Blank (P0G0909-BLK1)				Prepared: 07/09/20 Analyzed: 07/10/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	*0.119*		"	*0.120*		*99.1*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.113*		"	*0.120*		*94.2*	*75-125*			
LCS (P0G0909-BS1)				Prepared & Analyzed: 07/09/20						
Benzene	0.0938	0.00100	mg/kg wet	0.100		93.8	70-130			
Toluene	0.0918	0.00100	"	0.100		91.8	70-130			
Ethylbenzene	0.0992	0.00100	"	0.100		99.2	70-130			
Xylene (p/m)	0.195	0.00200	"	0.200		97.4	70-130			
Xylene (o)	0.0942	0.00100	"	0.100		94.2	70-130			
Surrogate: 1,4-Difluorobenzene	*0.118*		"	*0.120*		*98.5*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.119*		"	*0.120*		*98.8*	*75-125*			
LCS Dup (P0G0909-BSD1)				Prepared & Analyzed: 07/09/20						
Benzene	0.104	0.00100	mg/kg wet	0.100		104	70-130	10.3	20	
Toluene	0.0968	0.00100	"	0.100		96.8	70-130	5.33	20	
Ethylbenzene	0.100	0.00100	"	0.100		100	70-130	1.15	20	
Xylene (p/m)	0.204	0.00200	"	0.200		102	70-130	4.74	20	
Xylene (o)	0.102	0.00100	"	0.100		102	70-130	8.03	20	
Surrogate: 1,4-Difluorobenzene	*0.117*		"	*0.120*		*97.9*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.118*		"	*0.120*		*98.3*	*75-125*			
Calibration Blank (P0G0909-CCB1)				Prepared & Analyzed: 07/09/20						
Benzene	0.00		mg/kg wet							
Toluene	0.950		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.440		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	*0.106*		"	*0.120*		*87.9*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.116*		"	*0.120*		*96.6*	*75-125*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0909 - General Preparation (GC)										
Calibration Blank (P0G0909-CCB2)				Prepared: 07/09/20 Analyzed: 07/10/20						
Benzene	0.00		mg/kg wet							
Toluene	0.490		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.400		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	*0.108*		*"*	*0.120*		*89.8*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.103*		*"*	*0.120*		*86.0*	*75-125*			
Calibration Check (P0G0909-CCV1)				Prepared & Analyzed: 07/09/20						
Benzene	0.110	0.00100	mg/kg wet	0.100		110	80-120			
Toluene	0.0996	0.00100	"	0.100		99.6	80-120			
Ethylbenzene	0.103	0.00100	"	0.100		103	80-120			
Xylene (p/m)	0.205	0.00200	"	0.200		102	80-120			
Xylene (o)	0.106	0.00100	"	0.100		106	80-120			
Surrogate: 1,4-Difluorobenzene	*0.119*		*"*	*0.120*		*99.0*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.117*		*"*	*0.120*		*97.1*	*75-125*			
Calibration Check (P0G0909-CCV2)				Prepared: 07/09/20 Analyzed: 07/10/20						
Benzene	0.112	0.00100	mg/kg wet	0.100		112	80-120			
Toluene	0.100	0.00100	"	0.100		100	80-120			
Ethylbenzene	0.105	0.00100	"	0.100		105	80-120			
Xylene (p/m)	0.213	0.00200	"	0.200		106	80-120			
Xylene (o)	0.112	0.00100	"	0.100		112	80-120			
Surrogate: 4-Bromofluorobenzene	*0.123*		*"*	*0.120*		*103*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.117*		*"*	*0.120*		*97.7*	*75-125*			
Matrix Spike (P0G0909-MS1)		**Source: 0G09002-09**		Prepared: 07/09/20 Analyzed: 07/10/20						
Benzene	0.0788	0.00102	mg/kg dry	0.102	ND	77.2	80-120			QM-07
Toluene	0.0534	0.00102	"	0.102	0.00300	49.4	80-120			QM-07
Ethylbenzene	0.0445	0.00102	"	0.102	ND	43.6	80-120			QM-07
Xylene (p/m)	0.0710	0.00204	"	0.204	ND	34.8	80-120			QM-07
Xylene (o)	0.0294	0.00102	"	0.102	ND	28.9	80-120			QM-07
Surrogate: 1,4-Difluorobenzene	*0.123*		*"*	*0.122*		*101*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.116*		*"*	*0.122*		*94.9*	*75-125*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0909 - General Preparation (GC)										
Matrix Spike Dup (P0G0909-MSD1)	**Source: 0G09002-09**			Prepared: 07/09/20 Analyzed: 07/10/20						
Benzene	0.0784	0.00102	mg/kg dry	0.102	ND	76.8	80-120	0.467	20	QM-07
Toluene	0.0497	0.00102	"	0.102	0.00300	45.8	80-120	7.46	20	QM-07
Ethylbenzene	0.0397	0.00102	"	0.102	ND	38.9	80-120	11.4	20	QM-07
Xylene (p/m)	0.0628	0.00204	"	0.204	ND	30.8	80-120	12.2	20	QM-07
Xylene (o)	0.0271	0.00102	"	0.102	ND	26.6	80-120	8.19	20	QM-07
Surrogate: 1,4-Difluorobenzene	*0.125*		*"*	*0.122*		*102*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.110*		*"*	*0.122*		*89.6*	*75-125*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G1007 - * DEFAULT PREP *** **										
Blank (P0G1007-BLK1)				Prepared & Analyzed: 07/10/20						
% Moisture	ND	0.1	%							
Blank (P0G1007-BLK2)				Prepared & Analyzed: 07/10/20						
% Moisture	ND	0.1	%							
Blank (P0G1007-BLK3)				Prepared & Analyzed: 07/10/20						
% Moisture	ND	0.1	%							
Blank (P0G1007-BLK4)				Prepared & Analyzed: 07/10/20						
% Moisture	ND	0.1	%							
Duplicate (P0G1007-DUP1)		**Source: 0G08026-10**		Prepared & Analyzed: 07/10/20						
% Moisture	7.0	0.1	%		7.0			0.00	20	
Duplicate (P0G1007-DUP2)		**Source: 0G08027-08**		Prepared & Analyzed: 07/10/20						
% Moisture	4.0	0.1	%		4.0			0.00	20	
Duplicate (P0G1007-DUP3)		**Source: 0G09002-15**		Prepared & Analyzed: 07/10/20						
% Moisture	1.0	0.1	%		1.0			0.00	20	
Duplicate (P0G1007-DUP7)		**Source: 0G09010-08**		Prepared & Analyzed: 07/10/20						
% Moisture	13.0	0.1	%		13.0			0.00	20	
Batch P0G1306 - * DEFAULT PREP *** **										
LCS (P0G1306-BS1)				Prepared: 07/13/20 Analyzed: 07/14/20						
Chloride	399	1.00	mg/kg wet	400		99.9	80-120			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G1306 - * DEFAULT PREP *** **										
LCS Dup (P0G1306-BSD1)				Prepared: 07/13/20 Analyzed: 07/14/20						
Chloride	397	1.00	mg/kg wet	400		99.2	80-120	0.678	20	
Calibration Check (P0G1306-CCV1)				Prepared: 07/13/20 Analyzed: 07/14/20						
Chloride	19.1		mg/kg	20.0		95.7	0-200			
Calibration Check (P0G1306-CCV2)				Prepared: 07/13/20 Analyzed: 07/14/20						
Chloride	20.0		mg/kg	20.0		100	0-200			
Calibration Check (P0G1306-CCV3)				Prepared: 07/13/20 Analyzed: 07/14/20						
Chloride	20.0		mg/kg	20.0		100	0-200			
Matrix Spike (P0G1306-MS1)		**Source: 0G13003-21**		Prepared: 07/13/20 Analyzed: 07/14/20						
Chloride	11000	11.0	mg/kg dry	1100	9800	105	80-120			
Matrix Spike (P0G1306-MS2)		**Source: 0G09004-05**		Prepared: 07/13/20 Analyzed: 07/14/20						
Chloride	586	1.08	mg/kg dry	538	36.0	102	80-120			
Matrix Spike Dup (P0G1306-MSD1)		**Source: 0G13003-21**		Prepared: 07/13/20 Analyzed: 07/14/20						
Chloride	11000	11.0	mg/kg dry	1100	9800	110	80-120	0.482	20	
Matrix Spike Dup (P0G1306-MSD2)		**Source: 0G09004-05**		Prepared: 07/13/20 Analyzed: 07/14/20						
Chloride	883	1.08	mg/kg dry	538	36.0	158	80-120	40.4	20	QM-05

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G1005 - TX 1005										
Blank (P0G1005-BLK1)				Prepared: 07/10/20 Analyzed: 07/12/20						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*108*		*"*	*100*		*108*	*70-130*			
Surrogate: o-Terphenyl	*55.6*		*"*	*50.0*		*111*	*70-130*			
LCS (P0G1005-BS1)				Prepared: 07/10/20 Analyzed: 07/12/20						
C6-C12	998	25.0	mg/kg wet	1000		99.8	75-125			
>C12-C28	1220	25.0	"	1000		122	75-125			
Surrogate: 1-Chlorooctane	*129*		*"*	*100*		*129*	*70-130*			
Surrogate: o-Terphenyl	*56.1*		*"*	*50.0*		*112*	*70-130*			
LCS Dup (P0G1005-BSD1)				Prepared: 07/10/20 Analyzed: 07/12/20						
C6-C12	983	25.0	mg/kg wet	1000		98.3	75-125	1.47	20	
>C12-C28	1160	25.0	"	1000		116	75-125	5.04	20	
Surrogate: 1-Chlorooctane	*110*		*"*	*100*		*110*	*70-130*			
Surrogate: o-Terphenyl	*56.2*		*"*	*50.0*		*112*	*70-130*			
Calibration Blank (P0G1005-CCB2)				Prepared: 07/10/20 Analyzed: 07/12/20						
C6-C12	17.7		mg/kg wet							
>C12-C28	18.9		"							
Surrogate: 1-Chlorooctane	*118*		*"*	*100*		*118*	*70-130*			
Surrogate: o-Terphenyl	*58.8*		*"*	*50.0*		*118*	*70-130*			
Calibration Check (P0G1005-CCV1)				Prepared: 07/10/20 Analyzed: 07/12/20						
C6-C12	521	25.0	mg/kg wet	500		104	85-115			
>C12-C28	527	25.0	"	500		105	85-115			
Surrogate: 1-Chlorooctane	*118*		*"*	*100*		*118*	*70-130*			
Surrogate: o-Terphenyl	*57.1*		*"*	*50.0*		*114*	*70-130*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G1005 - TX 1005										
Calibration Check (P0G1005-CCV2)				Prepared: 07/10/20 Analyzed: 07/12/20						
C6-C12	518	25.0	mg/kg wet	500		104	85-115			
>C12-C28	537	25.0	"	500		107	85-115			
Surrogate: 1-Chlorooctane	*118*		*"*	*100*		*118*	*70-130*			
Surrogate: o-Terphenyl	*58.2*		*"*	*50.0*		*116*	*70-130*			
Calibration Check (P0G1005-CCV3)				Prepared: 07/10/20 Analyzed: 07/13/20						
C6-C12	553	25.0	mg/kg wet	500		111	85-115			
>C12-C28	574	25.0	"	500		115	85-115			
Surrogate: 1-Chlorooctane	*117*		*"*	*100*		*117*	*70-130*			
Surrogate: o-Terphenyl	*58.3*		*"*	*50.0*		*117*	*70-130*			
Matrix Spike (P0G1005-MS1)		**Source: 0G09011-04**		Prepared: 07/10/20 Analyzed: 07/13/20						
C6-C12	1100	26.0	mg/kg dry	1040	26.3	103	75-125			
>C12-C28	1360	26.0	"	1040	19.4	128	75-125			QM-05
Surrogate: 1-Chlorooctane	*127*		*"*	*104*		*122*	*70-130*			
Surrogate: o-Terphenyl	*61.0*		*"*	*52.1*		*117*	*70-130*			
Matrix Spike Dup (P0G1005-MSD1)		**Source: 0G09011-04**		Prepared: 07/10/20 Analyzed: 07/13/20						
C6-C12	1110	26.0	mg/kg dry	1040	26.3	104	75-125	1.25	20	
>C12-C28	1340	26.0	"	1040	19.4	127	75-125	1.21	20	QM-05
Surrogate: 1-Chlorooctane	*116*		*"*	*104*		*111*	*70-130*			
Surrogate: o-Terphenyl	*62.4*		*"*	*52.1*		*120*	*70-130*			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Notes and Definitions

ROI	Received on Ice
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
BULK	Samples received in Bulk soil containers
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 7/15/2020

Brent Barron, Laboratory Director/Technical Director

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

LO3 CKTB

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706

Phone: 432-661-4184

Page 1 of 1

Page 13 of 13

Project Manager: Curt Stanley

Company Name: TRC Environmental Corporation

Company Address: 10 Desta Drive, Ste 150E

City/State/Zip: Midland/TX/79703

Telephone No: (432)5207720

Fax No:

Sampler Signature: [signature]

e-mail: cdstanley@trcsolutions.com
cjbryant@paalp.com
algroves@paalp.com

Project Name: COG - Screech Owl CTB

Project #: 2020-030

Project Loc: Eddy County, New Mexico

PO #:

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 0G09009

Analyze For: TCLP: / TOTAL: (X marked under BTEX)

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other)	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1008	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300	Paint Filter	TCLP BTEX	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	CNSW-A @ 6"			7/8/2020	910		1	X								Soil	X								X			X				X

Special Instructions: Bill To PLAINS

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	7/9/2020	1435			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by PBEL:	Date	Time
			[signature]	7/9/20	14:35

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt:
Received: 4.1 °C CF +1
Adjusted: 5.1 °C Factor L2

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Curt Stanley
TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland, TX 79705

Project: Screech Owl CTB
Project Number: SRS# 2020-030
Location: Eddy County, New Mexico

Lab Order Number: 0G16001

NELAP/TCEQ # T104704516-17-8

Report Date: 07/17/20

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: Screech Owl CTB
Project Number: SRS# 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CNSW-B @ 6"	0G16001-01	Soil	07/15/20 10:05	07-16-2020 08:25

TRC Solutions- Midland, Texas	Project: Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: SRS# 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

CNSW-B @ 6"

0G16001-01 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Organics by GC									
Benzene	ND	0.00100	mg/kg dry	1	P0G1603	07/16/20	07/16/20	EPA 8021B	
Toluene	ND	0.00200	mg/kg dry	1	P0G1603	07/16/20	07/16/20	EPA 8021B	
Ethylbenzene	ND	0.00100	mg/kg dry	1	P0G1603	07/16/20	07/16/20	EPA 8021B	
Xylene (p/m)	ND	0.00200	mg/kg dry	1	P0G1603	07/16/20	07/16/20	EPA 8021B	
Xylene (o)	ND	0.00100	mg/kg dry	1	P0G1603	07/16/20	07/16/20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*98.4 %*	*75-125*		*P0G1603*	*07/16/20*	*07/16/20*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*94.1 %*	*75-125*		*P0G1603*	*07/16/20*	*07/16/20*	*EPA 8021B*	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**75.0**	1.02	mg/kg dry	1	P0G1606	07/16/20	07/16/20	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P0G1703	07/17/20	07/17/20	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P0G1602	07/16/20	07/16/20	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P0G1602	07/16/20	07/16/20	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P0G1602	07/16/20	07/16/20	TPH 8015M	
Surrogate: 1-Chlorooctane		*100 %*	*70-130*		*P0G1602*	*07/16/20*	*07/16/20*	*TPH 8015M*	
Surrogate: o-Terphenyl		*111 %*	*70-130*		*P0G1602*	*07/16/20*	*07/16/20*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	07/16/20	07/16/20	calc	

TRC Solutions- Midland, Texas	Project: Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: SRS# 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G1603 - General Preparation (GC)										
Blank (P0G1603-BLK1)				Prepared & Analyzed: 07/16/20						
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00200	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	*0.110*		"	*0.120*		*91.9*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.108*		"	*0.120*		*90.4*	*75-125*			
LCS (P0G1603-BS1)				Prepared & Analyzed: 07/16/20						
Benzene	0.102	0.00100	mg/kg wet	0.100		102	80-120			
Toluene	0.0956	0.00200	"	0.100		95.6	80-120			
Ethylbenzene	0.105	0.00100	"	0.100		105	80-120			
Xylene (p/m)	0.213	0.00200	"	0.200		106	80-120			
Xylene (o)	0.0984	0.00100	"	0.100		98.4	80-120			
Surrogate: 4-Bromofluorobenzene	*0.107*		"	*0.120*		*89.4*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.114*		"	*0.120*		*95.0*	*75-125*			
LCS Dup (P0G1603-BSD1)				Prepared & Analyzed: 07/16/20						
Benzene	0.105	0.00100	mg/kg wet	0.100		105	80-120	2.88	20	
Toluene	0.104	0.00200	"	0.100		104	80-120	8.74	20	
Ethylbenzene	0.104	0.00100	"	0.100		104	80-120	0.0861	20	
Xylene (p/m)	0.232	0.00200	"	0.200		116	80-120	8.80	20	
Xylene (o)	0.108	0.00100	"	0.100		108	80-120	8.94	20	
Surrogate: 4-Bromofluorobenzene	*0.112*		"	*0.120*		*93.0*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.115*		"	*0.120*		*95.7*	*75-125*			
Calibration Blank (P0G1603-CCB1)				Prepared & Analyzed: 07/16/20						
Benzene	0.00		mg/kg wet							
Toluene	1.39		"							
Ethylbenzene	0.460		"							
Xylene (p/m)	0.780		"							
Xylene (o)	0.500		"							
Surrogate: 4-Bromofluorobenzene	*0.112*		"	*0.120*		*93.5*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.109*		"	*0.120*		*90.7*	*75-125*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: Screech Owl CTB
Project Number: SRS# 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G1603 - General Preparation (GC)										
Calibration Blank (P0G1603-CCB2)				Prepared & Analyzed: 07/16/20						
Benzene	0.310		mg/kg wet							
Toluene	0.920		"							
Ethylbenzene	0.590		"							
Xylene (p/m)	1.19		"							
Xylene (o)	0.510		"							
Surrogate: 4-Bromofluorobenzene	*0.108*		*"*	*0.120*		*90.0*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.110*		*"*	*0.120*		*91.3*	*75-125*			
Calibration Check (P0G1603-CCV1)				Prepared & Analyzed: 07/16/20						
Benzene	0.0983	0.00100	mg/kg wet	0.100		98.3	80-120			
Toluene	0.0951	0.00200	"	0.100		95.1	80-120			
Ethylbenzene	0.104	0.00100	"	0.100		104	80-120			
Xylene (p/m)	0.214	0.00200	"	0.200		107	80-120			
Xylene (o)	0.102	0.00100	"	0.100		102	80-120			
Surrogate: 4-Bromofluorobenzene	*0.110*		*"*	*0.120*		*92.0*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*95.2*	*75-125*			
Calibration Check (P0G1603-CCV2)				Prepared & Analyzed: 07/16/20						
Benzene	0.105	0.00100	mg/kg wet	0.100		105	80-120			
Toluene	0.105	0.00200	"	0.100		105	80-120			
Ethylbenzene	0.112	0.00100	"	0.100		112	80-120			
Xylene (p/m)	0.228	0.00200	"	0.200		114	80-120			
Xylene (o)	0.108	0.00100	"	0.100		108	80-120			
Surrogate: 4-Bromofluorobenzene	*0.112*		*"*	*0.120*		*93.4*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.9*	*75-125*			
Calibration Check (P0G1603-CCV3)				Prepared & Analyzed: 07/16/20						
Benzene	0.108	0.00100	mg/kg wet	0.100		108	80-120			
Toluene	0.103	0.00200	"	0.100		103	80-120			
Ethylbenzene	0.109	0.00100	"	0.100		109	80-120			
Xylene (p/m)	0.220	0.00200	"	0.200		110	80-120			
Xylene (o)	0.110	0.00100	"	0.100		110	80-120			
Surrogate: 4-Bromofluorobenzene	*0.111*		*"*	*0.120*		*92.4*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*95.9*	*75-125*			

TRC Solutions- Midland, Texas	Project: Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: SRS# 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G1603 - General Preparation (GC)										
Matrix Spike (P0G1603-MS1)		**Source: 0G16001-01**		Prepared & Analyzed: 07/16/20						
Benzene	0.0838	0.00100	mg/kg dry	0.102	ND	82.2	80-120			
Toluene	0.0828	0.00200	"	0.102	0.000551	80.6	80-120			
Ethylbenzene	0.103	0.00100	"	0.102	ND	101	80-120			
Xylene (p/m)	0.176	0.00200	"	0.204	ND	86.3	80-120			
Xylene (o)	0.0840	0.00100	"	0.102	ND	82.3	80-120			
Surrogate: 4-Bromofluorobenzene	*0.133*		"	*0.122*		*109*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.120*		"	*0.122*		*98.1*	*75-125*			
Matrix Spike Dup (P0G1603-MSD1)		**Source: 0G16001-01**		Prepared & Analyzed: 07/16/20						
Benzene	0.0869	0.00100	mg/kg dry	0.102	ND	85.2	80-120	3.60	20	
Toluene	0.0850	0.00200	"	0.102	0.000551	82.7	80-120	2.57	20	
Ethylbenzene	0.104	0.00100	"	0.102	ND	102	80-120	0.711	20	
Xylene (p/m)	0.175	0.00200	"	0.204	ND	85.7	80-120	0.680	20	
Xylene (o)	0.0835	0.00100	"	0.102	ND	81.8	80-120	0.585	20	
Surrogate: 4-Bromofluorobenzene	*0.126*		"	*0.122*		*103*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.121*		"	*0.122*		*98.8*	*75-125*			

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: Screech Owl CTB
Project Number: SRS# 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G1606 - * DEFAULT PREP *** **										
LCS (P0G1606-BS1)				Prepared & Analyzed: 07/16/20						
Chloride	400	1.00	mg/kg wet	400		100	80-120			
LCS Dup (P0G1606-BSD1)				Prepared & Analyzed: 07/16/20						
Chloride	400	1.00	mg/kg wet	400		100	80-120	0.0599	20	
Calibration Check (P0G1606-CCV1)				Prepared & Analyzed: 07/16/20						
Chloride	19.8		mg/kg	20.0		98.8	0-200			
Calibration Check (P0G1606-CCV2)				Prepared & Analyzed: 07/16/20						
Chloride	19.6		mg/kg	20.0		98.0	0-200			
Calibration Check (P0G1606-CCV3)				Prepared & Analyzed: 07/16/20						
Chloride	19.8		mg/kg	20.0		98.8	0-200			
Matrix Spike (P0G1606-MS1)		**Source: 0G16001-01**		Prepared & Analyzed: 07/16/20						
Chloride	547	1.02	mg/kg dry	510	75.0	92.5	80-120			
Matrix Spike (P0G1606-MS2)		**Source: 0G14003-01**		Prepared & Analyzed: 07/16/20						
Chloride	20500	58.8	mg/kg dry	5880	13300	122	80-120			QM-05
Matrix Spike Dup (P0G1606-MSD1)		**Source: 0G16001-01**		Prepared & Analyzed: 07/16/20						
Chloride	590	1.02	mg/kg dry	510	75.0	101	80-120	7.68	20	
Matrix Spike Dup (P0G1606-MSD2)		**Source: 0G14003-01**		Prepared & Analyzed: 07/16/20						
Chloride	19500	58.8	mg/kg dry	5880	13300	105	80-120	4.97	20	
Batch P0G1703 - * DEFAULT PREP *** **										
Blank (P0G1703-BLK1)				Prepared & Analyzed: 07/17/20						
% Moisture	ND	0.1	%							

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: Screech Owl CTB
Project Number: SRS# 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G1703 - * DEFAULT PREP *** **										
Blank (P0G1703-BLK2)				Prepared & Analyzed: 07/17/20						
% Moisture	ND	0.1	%							
Blank (P0G1703-BLK3)				Prepared & Analyzed: 07/17/20						
% Moisture	ND	0.1	%							
Duplicate (P0G1703-DUP1)		**Source: 0G16002-09**		Prepared & Analyzed: 07/17/20						
% Moisture	4.0	0.1	%		4.0			0.00	20	
Duplicate (P0G1703-DUP2)		**Source: 0G16003-09**		Prepared & Analyzed: 07/17/20						
% Moisture	11.0	0.1	%		11.0			0.00	20	
Duplicate (P0G1703-DUP3)		**Source: 0G16005-03**		Prepared & Analyzed: 07/17/20						
% Moisture	3.0	0.1	%		3.0			0.00	20	
Duplicate (P0G1703-DUP4)		**Source: 0G16006-08**		Prepared & Analyzed: 07/17/20						
% Moisture	14.0	0.1	%		14.0			0.00	20	
Duplicate (P0G1703-DUP5)		**Source: 0G16012-10**		Prepared & Analyzed: 07/17/20						
% Moisture	8.0	0.1	%		9.0			11.8	20	

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: Screech Owl CTB
Project Number: SRS# 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

Notes and Definitions

QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 7/17/2020

Brent Barron, Laboratory Director/Technical Director

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706

Phone: 432-661-4184

Project Manager: Curt Stanley

Company Name: TRC Environmental Corporation

Company Address: 10 Desta Drive, Ste 150E

City/State/Zip: Midland/TX/79703

Telephone No: (432)5207720

Fax No:

Sampler Signature:

e-mail: cdstanley@trcsolutions.com
cjbryant@paalp.com
algroves@paalp.com

Project Name: Screech Owl CTB

Project #: 2020-030

Project Loc: Eddy County, New Mexico

PO #:

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 0616001

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW = Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1008	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300	Paint Filter	TCLP Benzene	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
-01	CNSW-B @ 6"			7/15/2020	1005		1	X								Soil	X								X			X				X

TCLP:
TOTAL: X

Special Instructions: Bill to Plains

Relinquished by:	Date	Time	Received by:	Date	Time
	7/16/20	825			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by PBEL:	7/16/20	825

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)		N
Custody seals on cooler(s)		N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt:
Received: 4.5/5.5 °C
Adjusted: °C Factor 1L2

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Curt Stanley
TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland, TX 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Location: Eddy County, NM

Lab Order Number: 0F15006

NELAP/TCEQ # T104704516-18-9

Report Date: 07/09/20

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WC	0F15006-01	Soil	06/11/20 15:15	06-15-2020 09:39

TCLP Metals, TCLP BTEX, and RCI analysis were subcontracted to ALS Houston. Their report is attached after the Chain of Custody. Their TCEQ TNI certification number can be found here:
https://www.tceq.texas.gov/assets/public/compliance/compliance_support/qa/labs/als_svcs_houston.pdf

NORM analysis was subcontracted to ARS International, Port Allen LA. Their report is attached to the email due to an incompatibility issue with our LIMS.

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

WC

0F15006-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**187**	1.02	mg/kg dry	1	P0F1704	06/17/20	06/18/20	EPA 300.0	
Reactive Cyanide	ND	100	mg/kg	1	P0F2407	06/18/20	06/18/20	SW846 9010B	SUB-13
Ignitability by Flashpoint	>212		°F	1	P0F2407	06/20/20	06/20/20	ASTM D93-80	SUB-13
pH	**7.42**	0.10	pH Units	1	P0F2407	06/22/20	06/22/20	EPA 9045B	SUB-13
% Moisture	**2.0**	0.1	%	1	P0F1603	06/16/20	06/16/20	ASTM D2216	
Reactive Sulfide	ND	100	mg/kg	1	P0F2407	06/18/20	06/18/20	SW846 9030B	SUB-13
Naturally Occuring Radioactive Material (N.O.R.M.)									
Radium 226	**1.74**	1.53	pCi/g	1	P0G0906	06/17/20	07/02/20	EPA 901.1	SUB12
Radium 228	ND	0.31	pCi/g	1	P0G0906	06/17/20	07/02/20	EPA 901.1	SUB12
Lead 210	ND	1.37	pCi/g	1	P0G0906	06/17/20	07/02/20	EPA 901.1	SUB12
Total Gamma	**9.30**		pCi/g	1	P0G0906	06/17/20	07/02/20	EPA 901.1	SUB12
Lead 210 Analysis Error	**1.21**		+/- 2 Sigma	1	P0G0906	06/17/20	07/02/20	EPA 901.1	SUB12
Radium 226 Analysis Error	**1.20**		+/- 2 Sigma	1	P0G0906	06/17/20	07/02/20	EPA 901.1	SUB12
Radium 228 Analysis Error	**0.20**		+/- 2 Sigma	1	P0G0906	06/17/20	07/02/20	EPA 901.1	SUB12
TCLP Metals 1311 by EPA / Standard Methods									
Mercury	ND	0.000200	mg/L	1	P0F2407	06/18/20	06/19/20	EPA 7470A	SUB-13
Chromium	ND	0.0500	mg/L	1	P0F2407	06/18/20	06/22/20	EPA 6020A	SUB-13
Arsenic	ND	0.0500	mg/L	1	P0F2407	06/18/20	06/22/20	EPA 6020A	SUB-13
Selenium	ND	0.0500	mg/L	1	P0F2407	06/18/20	06/22/20	EPA 6020A	SUB-13
Silver	ND	0.0500	mg/L	1	P0F2407	06/18/20	06/22/20	EPA 6020A	SUB-13
Cadmium	ND	0.0500	mg/L	1	P0F2407	06/18/20	06/22/20	EPA 6020A	SUB-13
Barium	**0.485**	0.200	mg/L	1	P0F2407	06/18/20	06/22/20	EPA 6020A	SUB-13
Lead	ND	0.0500	mg/L	1	P0F2407	06/18/20	06/22/20	EPA 6020A	SUB-13

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

WC

0F15006-01 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TCLP Volatile Organic Compounds by EPA Method 1311/8260B									
Benzene	ND	100	ug/l	1	P0F2407	06/18/20	06/22/20	EPA 8260B	SUB-13
Toluene	ND	100	ug/l	1	P0F2407	06/18/20	06/22/20	EPA 8260B	SUB-13
Ethylbenzene	ND	100	ug/l	1	P0F2407	06/18/20	06/22/20	EPA 8260B	SUB-13
Xylene (p/m)	ND	200	ug/l	1	P0F2407	06/18/20	06/22/20	EPA 8260B	SUB-13
Xylene (o)	ND	100	ug/l	1	P0F2407	06/18/20	06/22/20	EPA 8260B	SUB-13
Physical Parameters by APHA/ASTM/EPA Methods									
Free Liquid	PASS		N/A	1	P0F2504	06/16/20	06/16/20	EPA 9095	

TRC Solutions- Midland, Texas
10 Desta Dr STE 150E
Midland TX, 79705

Project: COG-Screech Owl CTB
Project Number: 2020-030
Project Manager: Curt Stanley

Fax: (432) 520-7701

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1603 - * DEFAULT PREP *** **										
Blank (P0F1603-BLK1)				Prepared & Analyzed: 06/16/20						
% Moisture	ND	0.1	%							
Duplicate (P0F1603-DUP1)		**Source: 0F15007-01**		Prepared & Analyzed: 06/16/20						
% Moisture	2.0	0.1	%		2.0			0.00	20	
Duplicate (P0F1603-DUP2)		**Source: 0F15007-17**		Prepared & Analyzed: 06/16/20						
% Moisture	4.0	0.1	%		4.0			0.00	20	
Batch P0F1704 - * DEFAULT PREP *** **										
Blank (P0F1704-BLK1)				Prepared & Analyzed: 06/17/20						
Chloride	ND	1.00	mg/kg wet							
LCS (P0F1704-BS1)				Prepared & Analyzed: 06/17/20						
Chloride	391	1.00	mg/kg wet	400		97.7	80-120			
LCS Dup (P0F1704-BSD1)				Prepared & Analyzed: 06/17/20						
Chloride	389	1.00	mg/kg wet	400		97.1	80-120	0.590	20	
Calibration Blank (P0F1704-CCB1)				Prepared & Analyzed: 06/17/20						
Chloride	0.00		mg/kg wet							
Calibration Blank (P0F1704-CCB2)				Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	0.00		mg/kg wet							
Calibration Check (P0F1704-CCV1)				Prepared & Analyzed: 06/17/20						
Chloride	18.8		mg/kg	20.0		93.9	0-200			

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0F1704 - * DEFAULT PREP *** **										
Calibration Check (P0F1704-CCV2)				Prepared & Analyzed: 06/17/20						
Chloride	20.1		mg/kg	20.0		100	0-200			
Matrix Spike (P0F1704-MS1)		Source: 0F12006-01		Prepared & Analyzed: 06/17/20						
Chloride	447	1.00	mg/kg dry	500	10.9	87.2	80-120			
Matrix Spike (P0F1704-MS2)		Source: 0F12007-17		Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	32200	56.2	mg/kg dry	2810	29700	87.3	80-120			
Matrix Spike Dup (P0F1704-MSD1)		Source: 0F12006-01		Prepared & Analyzed: 06/17/20						
Chloride	471	1.00	mg/kg dry	500	10.9	92.1	80-120	5.31	20	
Matrix Spike Dup (P0F1704-MSD2)		Source: 0F12007-17		Prepared: 06/17/20 Analyzed: 06/18/20						
Chloride	32200	56.2	mg/kg dry	2810	29700	87.7	80-120	0.0367	20	

TRC Solutions- Midland, Texas	Project: COG-Screech Owl CTB	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: 2020-030	
Midland TX, 79705	Project Manager: Curt Stanley	

Notes and Definitions

SUB-13	Subcontract of analyte/analysis to ALS Houston.
SUB12	Analysis was subcontracted to ARS Port Allen Lousiana.
ROI	Received on Ice
BULK	Samples received in Bulk soil containers
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 7/9/2020

Brent Barron, Laboratory Director/Technical Director

LKC CK

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706
Phone: 432-661-4184

Project Manager: Curt Stanley
Company Name: TRC Environmental Corporation
Company Address: 10 Desta Drive, Ste 150E
City/State/Zip: Midland/TX/79703
Telephone No: (432)5207720 Fax No:
Sampler Signature:
e-mail: cdstanley@trcsolutions.com, cjbryant@paalp.com, algroves@paalp.com

Project Name: COG - Screech Owl CTB
Project #: 2020-030
Project Loc: Eddy County, New Mexico
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

TCEQ

(lab use only)
ORDER #: OF15006

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	TOTAL: RCI	N.O.R.M.	Chlorides E 300	Paint Filter	TCLP BTEX	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	WC			6/11/2020	1515		5	X								Soil						X				X	X	X	X	X		X

Special Instructions: Back To Plains

Relinquished by:	Date	Time	Received by:	Date	Time
	6/15	939			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by PBEL:	Date	Time
				6/16	939

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt:
Received: 0.4 °C
Adjusted: ~~0.5~~ 1.4 °C Factor CMH LC

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

June 23, 2020

Brent Barron
Permian Basin Environmental Lab, LP
10014 SCR 1213
Midland, TX 79706

Work Order: **HS20060856**

Laboratory Results for: **0F15006**

Dear Brent Barron,

ALS Environmental received 1 sample(s) on Jun 17, 2020 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: JUMOKE.LAWAL
Andy C. Neir

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
Work Order: HS20060856

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS20060856-01	0F15006-01	Soil		11-Jun-2020 15:15	17-Jun-2020 09:12	☐

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
Work Order: HS20060856

CASE NARRATIVE

Work Order Comments

• Sample received outside method holding time for pH. pH is an immediate test. Sample results are flagged with an "H" qualifier.

The temperature at the time of pH is reported. Please note that all pH results are already normalized to a temperature of 25 °C.

GCMS Volatiles by Method SW8260

Batch ID: 154621

Sample ID: HS20060934-03MS

• MS and MSD are for an unrelated sample

Metals by Method SW1311/6020

Batch ID: 154693

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Metals by Method SW7470

Batch ID: 154670

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method ASTM D92-12b

Batch ID: R363632

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SW9045D

Batch ID: R363694

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SW7.3.4.2

Batch ID: R363525

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SW7.3.3.2

Batch ID: R363522

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
Sample ID: 0F15006-01
Collection Date: 11-Jun-2020 15:15

ANALYTICAL REPORT
WorkOrder:HS20060856
Lab ID:HS20060856-01
Matrix:Soil

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
TCLP VOLATILES BY SW8260C		**Method:SW8260**	Leache:SW1311 / 19-Jun-2020	Prep:SW1311 / 19-Jun-2020		Analyst: PC
Benzene	ND		0.10	mg/L	20	22-Jun-2020 19:22
Ethylbenzene	ND		0.10	mg/L	20	22-Jun-2020 19:22
m,p-Xylene	ND		0.20	mg/L	20	22-Jun-2020 19:22
o-Xylene	ND		0.10	mg/L	20	22-Jun-2020 19:22
Toluene	ND		0.10	mg/L	20	22-Jun-2020 19:22
Xylenes, Total	ND		0.10	mg/L	20	22-Jun-2020 19:22
Surr: 1,2-Dichloroethane-d4	*117*		*70-126*	*%REC*	*20*	*22-Jun-2020 19:22*
Surr: 4-Bromofluorobenzene	*96.9*		*82-124*	*%REC*	*20*	*22-Jun-2020 19:22*
Surr: Dibromofluoromethane	*108*		*77-123*	*%REC*	*20*	*22-Jun-2020 19:22*
Surr: Toluene-d8	*103*		*82-127*	*%REC*	*20*	*22-Jun-2020 19:22*
TCLP METALS BY SW6020A		**Method:SW1311/6020**	Leache:SW1311 / 19-Jun-2020	Prep:SW3010A / 22-Jun-2020		Analyst: JHD
Arsenic	ND		0.0500	mg/L	1	22-Jun-2020 21:46
Barium	**0.485**		**0.200**	**mg/L**	1	22-Jun-2020 21:46
Cadmium	ND		0.0500	mg/L	1	22-Jun-2020 21:46
Chromium	ND		0.0500	mg/L	1	22-Jun-2020 21:46
Lead	ND		0.0500	mg/L	1	22-Jun-2020 21:46
Selenium	ND		0.0500	mg/L	1	22-Jun-2020 21:46
Silver	ND		0.0500	mg/L	1	22-Jun-2020 21:46
TCLP MERCURY BY SW7470A		**Method:SW7470**	Leache:SW1311 / 19-Jun-2020	Prep:SW7470 / 19-Jun-2020		Analyst: FO
Mercury	ND		0.000200	mg/L	1	19-Jun-2020 18:44
FLASH POINT BY CLEVELAND OPEN CUP ASTM D92-12B		**Method:ASTM D92-12b**				Analyst: TH
Flash Point	> 212	n	50.0	°F	1	20-Jun-2020 10:00
REACTIVE CYANIDE		**Method:SW7.3.3.2**		Prep:SW7.3.3.2		Analyst: KVL
Reactive Cyanide	ND	n	100	mg/Kg	1	18-Jun-2020 14:50
REACTIVE SULFIDE		**Method:SW7.3.4.2**				Analyst: KVL
Reactive Sulfide	ND	n	100	mg/Kg	1	18-Jun-2020 15:10
PH SOIL BY SW9045D		**Method:SW9045D**				Analyst: JAC
pH	**7.42**	H	**0.100**	**pH Units**	1	22-Jun-2020 14:31
Temp Deg C @pH	**20.9**	H	**0**	**°C**	1	22-Jun-2020 14:31

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Weight / Prep Log

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
WorkOrder: HS20060856

Batch ID: 154618 **Start Date:** 18 Jun 2020 16:00 **End Date:** 19 Jun 2020 09:00
Method: TCLP MERCURY EXTRACTION BY SW1311 **Prep Code:** 1311LHG EXT

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS20060856-01		100 (grams)	2000 (mL)	20

Batch ID: 154620 **Start Date:** 18 Jun 2020 16:00 **End Date:** 19 Jun 2020 09:00
Method: TCLP METALS EXTRACTION BY SW1311 **Prep Code:** 1311LM EXT

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS20060856-01		100 (grams)	2000 (mL)	20

Batch ID: 154621 **Start Date:** 18 Jun 2020 16:00 **End Date:** 19 Jun 2020 09:00
Method: TCLP ZHE (VOL EXTRACTION) **Prep Code:** 1311ZHE_NR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS20060856-01		25 (grams)	500 (mL)	20

Batch ID: 154670 **Start Date:** 19 Jun 2020 11:30 **End Date:** 19 Jun 2020 13:30
Method: MERCURY TCLP PREP BY SW7470A **Prep Code:** 1311_HGPR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS20060856-01		10 (mL)	10 (mL)	1

Batch ID: 154693 **Start Date:** 22 Jun 2020 12:00 **End Date:** 22 Jun 2020 12:00
Method: TCLP LEACHATE DIGESTION BY SW3010A **Prep Code:** 3010A_TCLP

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS20060856-01		1 (mL)	10 (mL)	10

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
WorkOrder: HS20060856

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 154621 (0)	**Test Name :** TCLP VOLATILES BY SW8260C				**Matrix:** Soil	
HS20060856-01	0F15006-01	11 Jun 2020 15:15	19 Jun 2020 09:00	19 Jun 2020 12:36	22 Jun 2020 19:22	20
Batch ID: 154670 (0)	**Test Name :** TCLP MERCURY BY SW7470A				**Matrix:** Soil	
HS20060856-01	0F15006-01	11 Jun 2020 15:15	19 Jun 2020 09:00	19 Jun 2020 11:30	19 Jun 2020 18:44	1
Batch ID: 154693 (0)	**Test Name :** TCLP METALS BY SW6020A				**Matrix:** Soil	
HS20060856-01	0F15006-01	11 Jun 2020 15:15	19 Jun 2020 09:00	22 Jun 2020 12:00	22 Jun 2020 21:46	1
Batch ID: R363522 (0)	**Test Name :** REACTIVE CYANIDE				**Matrix:** Soil	
HS20060856-01	0F15006-01	11 Jun 2020 15:15			18 Jun 2020 14:50	1
Batch ID: R363525 (0)	**Test Name :** REACTIVE SULFIDE				**Matrix:** Soil	
HS20060856-01	0F15006-01	11 Jun 2020 15:15			18 Jun 2020 15:10	1
Batch ID: R363632 (0)	**Test Name :** FLASH POINT BY CLEVELAND OPEN CUP ASTM D92-12B				**Matrix:** Soil	
HS20060856-01	0F15006-01	11 Jun 2020 15:15			20 Jun 2020 10:00	1
Batch ID: R363694 (0)	**Test Name :** PH SOIL BY SW9045D				**Matrix:** Soil	
HS20060856-01	0F15006-01	11 Jun 2020 15:15			22 Jun 2020 14:31	1

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
WorkOrder: HS20060856

QC BATCH REPORT

Batch ID: 154670 (0) **Instrument: HG03** **Method: TCLP MERCURY BY SW7470A**

MBLK Sample ID: **MBLKT1-154670** Units: **mg/L** Analysis Date: **19-Jun-2020 18:27**
Client ID: Run ID: **HG03_363622** SeqNo: **5628058** PrepDate: **19-Jun-2020** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.000200								

MBLK Sample ID: **MBLK-154670** Units: **mg/L** Analysis Date: **19-Jun-2020 18:19**
Client ID: Run ID: **HG03_363622** SeqNo: **5628053** PrepDate: **19-Jun-2020** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.000200								

LCS Sample ID: **LCS-154670** Units: **mg/L** Analysis Date: **19-Jun-2020 18:20**
Client ID: Run ID: **HG03_363622** SeqNo: **5628054** PrepDate: **19-Jun-2020** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00507	0.000200	0.005	0	101	80 - 120				

MS Sample ID: **HS20060799-01MS** Units: **mg/L** Analysis Date: **19-Jun-2020 18:24**
Client ID: Run ID: **HG03_363622** SeqNo: **5628056** PrepDate: **19-Jun-2020** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.005	0.000200	0.005	0.000011	99.8	75 - 125				

MSD Sample ID: **HS20060799-01MSD** Units: **mg/L** Analysis Date: **19-Jun-2020 18:25**
Client ID: Run ID: **HG03_363622** SeqNo: **5628057** PrepDate: **19-Jun-2020** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00505	0.000200	0.005	0.000011	101	75 - 125	0.005	0.995	20	

The following samples were analyzed in this batch: HS20060856-01

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
WorkOrder: HS20060856

QC BATCH REPORT

Batch ID: 154693 (0) **Instrument: ICPMS05** **Method: TCLP METALS BY SW6020A**

MBLK Sample ID: **MBLKT2-154693** Units: **mg/L** Analysis Date: **22-Jun-2020 21:34**
Client ID: Run ID: **ICPMS05_363671** SeqNo: **5630445** PrepDate: **22-Jun-2020** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.0500								
Barium	ND	0.200								
Cadmium	ND	0.0500								
Chromium	ND	0.0500								
Lead	ND	0.0500								
Selenium	ND	0.0500								
Silver	ND	0.0500								

MBLK Sample ID: **MBLKT3-154693** Units: **mg/L** Analysis Date: **22-Jun-2020 21:37**
Client ID: Run ID: **ICPMS05_363671** SeqNo: **5630446** PrepDate: **22-Jun-2020** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.0500								
Barium	ND	0.200								
Cadmium	ND	0.0500								
Chromium	ND	0.0500								
Lead	ND	0.0500								
Selenium	ND	0.0500								
Silver	ND	0.0500								

MBLK Sample ID: **MBLKT1-154693** Units: **mg/L** Analysis Date: **22-Jun-2020 21:32**
Client ID: Run ID: **ICPMS05_363671** SeqNo: **5630444** PrepDate: **22-Jun-2020** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.0500								
Barium	ND	0.200								
Cadmium	ND	0.0500								
Chromium	ND	0.0500								
Lead	ND	0.0500								
Selenium	ND	0.0500								
Silver	ND	0.0500								

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
WorkOrder: HS20060856

QC BATCH REPORT

Batch ID: 154693 (0) **Instrument: ICPMS05** **Method: TCLP METALS BY SW6020A**

MBLK Sample ID: **MBLK-154693** Units: **mg/L** Analysis Date: **22-Jun-2020 21:29**
Client ID: Run ID: **ICPMS05_363671** SeqNo: **5630443** PrepDate: **22-Jun-2020** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.00500								
Barium	ND	0.0200								
Cadmium	ND	0.00500								
Chromium	ND	0.00500								
Lead	ND	0.00500								
Selenium	ND	0.00500								
Silver	ND	0.00500								

LCS Sample ID: **LCS-154693** Units: **mg/L** Analysis Date: **22-Jun-2020 21:39**
Client ID: Run ID: **ICPMS05_363671** SeqNo: **5630447** PrepDate: **22-Jun-2020** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05037	0.00500	0.05	0	101	80 - 120				
Barium	0.04839	0.0200	0.05	0	96.8	80 - 120				
Cadmium	0.05079	0.00500	0.05	0	102	80 - 120				
Chromium	0.04932	0.00500	0.05	0	98.6	80 - 120				
Lead	0.0493	0.00500	0.05	0	98.6	80 - 120				
Selenium	0.05228	0.00500	0.05	0	105	80 - 120				
Silver	0.0485	0.00500	0.05	0	97.0	80 - 120				

MS Sample ID: **HS20060856-01MS** Units: **mg/L** Analysis Date: **22-Jun-2020 21:51**
Client ID: **0F15006-01** Run ID: **ICPMS05_363671** SeqNo: **5630452** PrepDate: **22-Jun-2020** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.5261	0.0500	0.5	0.01624	102	80 - 120				
Barium	0.8949	0.200	0.5	0.4851	82.0	80 - 120				
Cadmium	0.4767	0.0500	0.5	0.00011	95.3	80 - 120				
Chromium	0.4867	0.0500	0.5	0.00012	97.3	80 - 120				
Lead	0.4691	0.0500	0.5	0.00028	93.8	80 - 120				
Selenium	0.5227	0.0500	0.5	0.00157	104	80 - 120				
Silver	0.4505	0.0500	0.5	0.00011	90.1	80 - 120				

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
WorkOrder: HS20060856

QC BATCH REPORT

Batch ID: 154693 (0) **Instrument:** ICPMS05 **Method:** TCLP METALS BY SW6020A

MSD Sample ID: **HS20060856-01MSD** Units: **mg/L** Analysis Date: **23-Jun-2020 15:18**
Client ID: **0F15006-01** Run ID: **ICPMS05_363746** SeqNo: **5631962** PrepDate: **22-Jun-2020** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.5201	0.0500	0.5	0.01624	101	80 - 120	0.5261	1.15	20	
Barium	0.9399	0.200	0.5	0.4851	91.0	80 - 120	0.8949	4.9	20	
Cadmium	0.4854	0.0500	0.5	0	97.1	80 - 120	0.4767	1.81	20	
Chromium	0.4816	0.0500	0.5	0	96.3	80 - 120	0.4867	1.05	20	
Lead	0.4667	0.0500	0.5	0	93.3	80 - 120	0.4691	0.515	20	
Selenium	0.5003	0.0500	0.5	0	100	80 - 120	0.5227	4.38	20	
Silver	0.4705	0.0500	0.5	0	94.1	80 - 120	0.4505	4.35	20	

PDS Sample ID: **HS20060856-01PDS** Units: **mg/L** Analysis Date: **22-Jun-2020 21:56**
Client ID: **0F15006-01** Run ID: **ICPMS05_363671** SeqNo: **5630454** PrepDate: **22-Jun-2020** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	1.082	0.0500	1	0.01624	107	75 - 125				
Barium	1.416	0.200	1	0.4851	93.1	75 - 125				
Cadmium	0.9641	0.0500	1	0.00011	96.4	75 - 125				
Chromium	1.008	0.0500	1	0.00012	101	75 - 125				
Lead	0.9592	0.0500	1	0.00028	95.9	75 - 125				
Selenium	1.091	0.0500	1	0.00157	109	75 - 125				
Silver	0.8895	0.0500	1	0.00011	88.9	75 - 125				

SD Sample ID: **HS20060856-01SD** Units: **mg/L** Analysis Date: **22-Jun-2020 21:49**
Client ID: **0F15006-01** Run ID: **ICPMS05_363671** SeqNo: **5630451** PrepDate: **22-Jun-2020** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Arsenic	ND	0.250					0.01624	0	10	
Barium	0.4819	1.00					0.4851	0	10	J
Cadmium	ND	0.250					0.00011	0	10	
Chromium	ND	0.250					0.00012	0	10	
Lead	ND	0.250					0.00028	0	10	
Selenium	ND	0.250					0.00157	0	10	
Silver	ND	0.250					0.00011	0	10	

The following samples were analyzed in this batch: HS20060856-01

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
WorkOrder: HS20060856

QC BATCH REPORT

Batch ID: 154621 (0) **Instrument: VOA9** **Method: TCLP VOLATILES BY SW8260C**

MBLK Sample ID: **MBLK-154621** Units: **ug/L** Analysis Date: **22-Jun-2020 18:57**
Client ID: Run ID: **VOA9_363740** SeqNo: **5631134** PrepDate: **19-Jun-2020** DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	100								
Ethylbenzene	ND	100								
m,p-Xylene	ND	200								
o-Xylene	ND	100								
Toluene	ND	100								
Xylenes, Total	ND	100								
Surr: 1,2-Dichloroethane-d4	*1169*	*100*	*1000*	*0*	*117*	*70 - 130*				
Surr: 4-Bromofluorobenzene	*976.4*	*100*	*1000*	*0*	*97.6*	*82 - 115*				
Surr: Dibromofluoromethane	*1104*	*100*	*1000*	*0*	*110*	*73 - 126*				
Surr: Toluene-d8	*1037*	*100*	*1000*	*0*	*104*	*81 - 120*				

LCS Sample ID: **VLCSW-154621** Units: **ug/L** Analysis Date: **23-Jun-2020 12:05**
Client ID: Run ID: **VOA9_363777** SeqNo: **5632002** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	23.03	5.0	20	0	115	74 - 120				
Ethylbenzene	21.23	5.0	20	0	106	77 - 117				
m,p-Xylene	45.08	10	40	0	113	77 - 122				
o-Xylene	22.19	5.0	20	0	111	75 - 119				
Toluene	22.56	5.0	20	0	113	77 - 118				
Xylenes, Total	67.26	5.0	60	0	112	75 - 122				
Surr: 1,2-Dichloroethane-d4	*56.7*	*5.0*	*50*	*0*	*113*	*70 - 130*				
Surr: 4-Bromofluorobenzene	*51.03*	*5.0*	*50*	*0*	*102*	*82 - 115*				
Surr: Dibromofluoromethane	*54.09*	*5.0*	*50*	*0*	*108*	*73 - 126*				
Surr: Toluene-d8	*50.87*	*5.0*	*50*	*0*	*102*	*81 - 120*				

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
WorkOrder: HS20060856

QC BATCH REPORT

Batch ID: 154621 (0) **Instrument: VOA9** **Method: TCLP VOLATILES BY SW8260C**

LCS Sample ID: **VLCSW-154621** Units: **ug/L** Analysis Date: **22-Jun-2020 12:02**
Client ID: Run ID: **VOA9_363740** SeqNo: **5631130** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.89	5.0	20	0	109	74 - 120				
Ethylbenzene	20.21	5.0	20	0	101	77 - 117				
m,p-Xylene	42.03	10	40	0	105	77 - 122				
o-Xylene	20.9	5.0	20	0	105	75 - 119				
Toluene	20.79	5.0	20	0	104	77 - 118				
Xylenes, Total	62.93	5.0	60	0	105	75 - 122				
Surr: 1,2-Dichloroethane-d4	*56.07*	*5.0*	*50*	*0*	*112*	*70 - 130*				
Surr: 4-Bromofluorobenzene	*51*	*5.0*	*50*	*0*	*102*	*82 - 115*				
Surr: Dibromofluoromethane	*53.38*	*5.0*	*50*	*0*	*107*	*73 - 126*				
Surr: Toluene-d8	*51.31*	*5.0*	*50*	*0*	*103*	*81 - 120*				

MS Sample ID: **HS20060934-03MS** Units: **ug/L** Analysis Date: **23-Jun-2020 15:22**
Client ID: Run ID: **VOA9_363777** SeqNo: **5632009** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	25.24	5.0	20	0	126	70 - 127				
Ethylbenzene	24.85	5.0	20	0	124	70 - 124				S
m,p-Xylene	50.67	10	40	0	127	70 - 130				
o-Xylene	24.66	5.0	20	0	123	70 - 124				
Toluene	24.56	5.0	20	0	123	70 - 123				
Xylenes, Total	75.33	5.0	60	0	126	70 - 130				
Surr: 1,2-Dichloroethane-d4	*57.76*	*5.0*	*50*	*0*	*116*	*70 - 126*				
Surr: 4-Bromofluorobenzene	*50.12*	*5.0*	*50*	*0*	*100*	*82 - 124*				
Surr: Dibromofluoromethane	*54.58*	*5.0*	*50*	*0*	*109*	*77 - 123*				
Surr: Toluene-d8	*51.47*	*5.0*	*50*	*0*	*103*	*82 - 127*				

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
WorkOrder: HS20060856

QC BATCH REPORT

Batch ID: 154621 (0) **Instrument: VOA9** **Method: TCLP VOLATILES BY SW8260C**

MS Sample ID: **HS20060772-22MS** Units: **ug/L** Analysis Date: **22-Jun-2020 15:18**
Client ID: Run ID: **VOA9_363740** SeqNo: **5631133** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	25.84	5.0	20	0	129	70 - 127				S
Ethylbenzene	24.02	5.0	20	0	120	70 - 124				
m,p-Xylene	50.26	10	40	0	126	70 - 130				
o-Xylene	24.17	5.0	20	0	121	70 - 124				
Toluene	24.47	5.0	20	0	122	70 - 123				
Xylenes, Total	74.43	5.0	60	0	124	70 - 130				
Surr: 1,2-Dichloroethane-d4	*56.74*	*5.0*	*50*	*0*	*113*	*70 - 126*				
Surr: 4-Bromofluorobenzene	*50.24*	*5.0*	*50*	*0*	*100*	*82 - 124*				
Surr: Dibromofluoromethane	*54.3*	*5.0*	*50*	*0*	*109*	*77 - 123*				
Surr: Toluene-d8	*51.14*	*5.0*	*50*	*0*	*102*	*82 - 127*				

The following samples were analyzed in this batch: HS20060856-01

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
WorkOrder: HS20060856

QC BATCH REPORT

Batch ID: R363522 (0) **Instrument: UV-2450** **Method: REACTIVE CYANIDE**

MBLK Sample ID: **MBLK-R363522** Units: **mg/Kg** Analysis Date: **18-Jun-2020 14:50**
Client ID: Run ID: **UV-2450_363522** SeqNo: **5625503** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Reactive Cyanide	ND	100								

LCS Sample ID: **LCS-R363522** Units: **mg/Kg** Analysis Date: **18-Jun-2020 14:50**
Client ID: Run ID: **UV-2450_363522** SeqNo: **5625502** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Reactive Cyanide	0.67	100	10	0	6.70	5 - 100				J

MS Sample ID: **HS20060624-01MS** Units: **mg/Kg** Analysis Date: **18-Jun-2020 14:50**
Client ID: Run ID: **UV-2450_363522** SeqNo: **5625512** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Reactive Cyanide	0.6	100	10	0.01	5.90	5 - 100				J

The following samples were analyzed in this batch: HS20060856-01

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
WorkOrder: HS20060856

QC BATCH REPORT

Batch ID: R363525 (0) **Instrument: WetChem_HS** **Method: REACTIVE SULFIDE**

MBLK Sample ID: **MBLK-R363525** Units: **mg/Kg** Analysis Date: **18-Jun-2020 15:10**
Client ID: Run ID: **WetChem_HS_363525** SeqNo: **5625547** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Reactive Sulfide	ND	100								

LCS Sample ID: **LCS-R363525** Units: **mg/Kg** Analysis Date: **18-Jun-2020 15:10**
Client ID: Run ID: **WetChem_HS_363525** SeqNo: **5625546** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Reactive Sulfide	72	100	100	0	72.0	20 - 120				J

MS Sample ID: **HS20060624-01MS** Units: **mg/Kg** Analysis Date: **18-Jun-2020 15:10**
Client ID: Run ID: **WetChem_HS_363525** SeqNo: **5625548** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Reactive Sulfide	68	100	100	0	68.0	20 - 120				J

The following samples were analyzed in this batch: HS20060856-01

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
WorkOrder: HS20060856

QC BATCH REPORT

Batch ID: R363632 (0) **Instrument:** WetChem_HS **Method:** FLASH POINT BY CLEVELAND OPEN CUP ASTM D92-12B

DUP Sample ID: **HS20060799-01DUP** Units: **°F** Analysis Date: **20-Jun-2020 10:00**
Client ID: Run ID: **WetChem_HS_363632** SeqNo: **5628449** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Flash Point	> 212	50.0					0	0	30	

The following samples were analyzed in this batch: HS20060856-01

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
WorkOrder: HS20060856

QC BATCH REPORT

Batch ID: R363694 (0) **Instrument:** WetChem_HS **Method:** PH SOIL BY SW9045D

DUP Sample ID: **HS20060641-01DUP** Units: **pH Units** Analysis Date: **22-Jun-2020 14:31**
Client ID: Run ID: **WetChem_HS_363694** SeqNo: **5629903** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.64	0.100					7.7	0.782	10	
Temp Deg C @pH	20.9	0					21	0.477	10	

The following samples were analyzed in this batch: HS20060856-01

ALS Houston, US Date: 23-Jun-20

Client: Permian Basin Environmental Lab, LP
Project: 0F15006
WorkOrder: **HS20060856**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
Date	
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter

ALS Houston, US Date: 23-Jun-20

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	20-030-0	26-Mar-2021
Dept of Defense	ANAB L2231 V009	22-Dec-2021
Florida	E87611-28	30-Jun-2020
Illinois	2000322020-4	09-May-2021
Kansas	E-10352 2019-2020	31-Jul-2020
Louisiana	03087, 2019-2020	30-Jun-2020
Maryland	343, 2019-2020	30-Jun-2020
North Carolina	624-2020	31-Dec-2020
Oklahoma	2019-141	31-Aug-2020
Texas	T104704231-20-26	30-Apr-2021

ALS Houston, US Date: 23-Jun-20

Sample Receipt Checklist

Work Order ID: HS20060856 **Date/Time Received:** 17-Jun-2020 09:12

Client Name: Permian Basin Lab **Received by:** Paresh M. Giga

Completed By:	/S/ Jared R. Makan	17-Jun-2020 19:14	**Reviewed by:**	/S/ Andy C. Neir	18-Jun-2020 18:01
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **Soil** Carrier name: **ALS Courier**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☐	No ☑	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	1.9°C/1.9°C UC/C	IR25	
Cooler(s)/Kit(s):	Red		
Date/Time sample(s) sent to storage:	06/17/2020 19:15		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
1400 Rankin HWY
Midland, Texas 79701

Phone: 432-686-7235
PBELAB_SUB_COC_V2

Project Manager: Brent Barron

Company Name: PBEL

Company Address: 1400 Rankin HWY

City/State/Zip: Midland Texas 79701

Telephone No: 432-661-4184

Fax No:

Sampler Signature: N/A

e-mail: brentbarron@pbelab.com

Project Name: SUBCONTRACT

Project #:

Project Loc:

PO #:

Report Format: X Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: ICE	HNO_3	HCl 2x 40mL VOA	H_2SO_4	NaOH/ZnAC 250 Poly 1	$Na_2S_2O_3$	None Poly 500mL 250mL / Glass Amber 1000 500 mL	NaOH/ZnAc	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: RCI	8082 PCB ONLY	METALS,TCLP RCRA 8 BY ICPMS/7-	TCLP BTEX	NORM-COMPLETE	TCLP BTEX 8021B	BOD 405.1	8270C PAH LL	8260B COMPLETE LIST	8270C SVOC TCLP	TOX 9020B	Triethylene Glycol 8015m	PH	24 HOUR RUSH	Standard TAT 4 DAY
	0F15006-01			6/11/2020	15:15		1	X									S		X		X			X									X

HS20060856
Permian Basin Environmental Lab, LP
0F15006

Relinquished by:	Date	Time		Date	Time
Brent Barron		16:00			
Relinquished by:	Date	Time	Received by:	Date 6/17/20	Time 9:12
Relinquished by:	Date	Time	Received by:	Date	Time

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx		

Temperature Upon Receipt:
Received: °C
Adjusted: °C Factor

1.9°

Rec'd JUN 17 2020

ORIGIN ID:MAFA (432) 686-7235
BRENT BARRON
PBE LAB
1400 RANKIN HWY

MIDLAND, TX 79701
UNITED STATES US

SHIP DATE: 16JUN20
ACTWGT: 13.70 LB
CAD: 6998492/SSF02110
DIMS: 13x9x8 IN

BILL RECIPIENT

TO SAMPLE RECEIVING
ALS - HOUSTON
10450 STANCLIFF RD

Rec'd

HOUSTON TX 77099
(281) 530-5615

INV:
PO:
REF:
DEPT:

FedEx Express

REL# 3785346

TRK# 0200 8132 1558 9855

WED - 17 JUN 3:00P
STANDARD OVERNIGHT

AB SGRA

AHS
77099
TX-US IAH

Appendix F
Request for Approval to Accept Solid Waste
(NMOCD Form C-138)

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

Revised August 1, 2011

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Plains Pipeline, LP
1911 Connie Rd.
Carlsbad, NM 88220

2. Originating Site:
Plains Screech Owl CTB LACT

3. Location of Material (Street Address, City, State or ULSTR):
ULT "K", Section 18, Township 26 S, Range 27 East, Eddy County, New Mexico

4. Source and Description of Waste:
Waste was generated due to a crude oil release from a Plains LACT unit at the COG Operating, LLC Screech Owl CTB. The Plains LACT Unit is adjacent to the COG Screech Owl CTB.

Estimated Volume 220 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Willy Lujan, representative or authorized agent for Plains Pipeline, LP do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Willy Lujan, representative for Plains Pipeline, LP do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
Various

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Lea Land LLC – NMOCD Permit #NM-01-35-0

Address of Facility: Section 32, Township 20 South, Range 32 East, NMPM Lea County, New Mexico

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☑ Landfill ☐ Other

Waste Acceptance Status: ☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Sarahlyn Hall TITLE: Mgr. Mang. DATE: 8/25/20

SIGNATURE: Sarahlyn Hall TELEPHONE NO.: 405-579-1187

Surface Waste Management Facility Authorized Agent

Appendix G
Release Notification and Corrective Action
(NMOCD Form C-141)

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	NRM2009254898
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Plains Pipeline, L.P.	OGRID 713291
Contact Name Amber Groves	Contact Telephone 575-200-5517
Contact email algroves@paalp.com	Incident # *(assigned by OCD)*
Contact mailing address 3112 West US HWY 82, Lovington NM 88260	

Location of Release Source

Latitude 32.038972 Longitude -104.232091
(NAD 83 in decimal degrees to 5 decimal places)

Site Name COG Screech Owl Federal CTB	Site Type LACT Unit
Date Release Discovered 3/28/2020 @ 11:00 am	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
K	18	26S	27E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☒ Crude Oil	Volume Released (bbls) 15 bbls	Volume Recovered (bbls) 12 bbls
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
A nipple failure on the meter skid caused an approximate 15 bbl release.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NRM2009254898
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Amber Groves Title: Remediation Coordinator

Signature: Amber Groves Date: 4/1/2020

email: algroves@paalp.com Telephone: 575-200-5517

OCD Only

Received by: Ramona Marcus Date: 4/1/2020

Amber L Groves NRM2009254898

From: Tommy J Bacon
Sent: Wednesday, April 1, 2020 2:06 PM
To: Amber L Groves
Subject: Screech Owl release

Calculations for the release
25' X 40' X 1' X 0.0154= 15bbls

Thanks
Tommy

Appendix H
Lea Land, Inc. Disposal Manifests

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

fulk

NON-HAZARDOUS WASTE MANIFEST NO 138417 | 1. PAGE __ OF __ | 2. TRAILER NO. 265

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
Plains Pipeline, LP	1911 Connie Road			9/3/2020
PHONE NO. (713) 646-4100	CITY Carlsbade	STATE NM	ZIP 88220	6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. ~~Non-Regulated, Non Hazardous Waste~~	1	CM			
b.					
c.					
d. WT: 36420 38380					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
SCREECH OWL FEDERAL CTB	

TRANSPORTER

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME JOE ONTIVEROS | PHONE NO 575-887-4048 | 24-HOUR EMERGENCY NO.

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TRIPLE C OILFIELD SERVICES	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: JOSE CARTA (432) 634-3786	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Victor Loya	PRINTED/TYPED NAME
SIGNATURE Victor Loya DATE 9/3/2020	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		9/3/2020	8:35

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Fulk

NON-HAZARDOUS WASTE MANIFEST NO 138418 | 1. PAGE __ OF __ | 2. TRAILER NO. 266

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Plains Pipeline, LP	1911 Connie Road	9/3/2020
PHONE NO. (713) 646-4100	CITY Carlsbade STATE NM ZIP 88220	6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
~~Non-Regulated, Non Hazardous Waste~~ a.	1	CM			
b.					
c.					
~~WT.~~ d. 43,920 43,160					

12. COMMENTS OR SPECIAL INSTRUCTIONS: SCREECH OWL FEDERAL CTB

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME JOE ONTIVEROS PHONE NO. 575-887-4048 24-HOUR EMERGENCY NO.

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME | SIGNATURE | DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TRIPLE C OILFIELD SERVICES	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: JOSE CARTA (432) 634-3786	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Pedro Peña 9/3/2020	PRINTED/TYPED NAME
SIGNATURE Pedro Peña DATE	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		9/3/2020	8:40

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Triple C

NON-HAZARDOUS WASTE MANIFEST NO 138427 | 1. PAGE __ OF __ | 2. TRAILER NO. 005

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Plains Pipeline, LP	1911 Connie Road	9/3/2020
PHONE NO. (713) 646-4100	CITY Carlsbade STATE NM ZIP 88220	6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. ~~Non-Regulated, Non Hazardous Waste~~	1	CM			
b.					
c.					
d. WT. 43520					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
SCREECH OWL FEDERAL CTB	

TRANSPORTER

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME JOE ONTIVEROS PHONE NO 575-887-4048 24-HOUR EMERGENCY NO.

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME | SIGNATURE | DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TRIPLE C OILFIELD SERVICES	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: JOSE CARTA (432) 634-3786	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Miguel Holguin 9/3/2020	PRINTED/TYPED NAME
SIGNATURE Miguel H DATE	SIGNATURE DATE

DISPOSAL FACILITY

Lea Land, LLC	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		9/3/2020	2:40

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Triple C

NON-HAZARDOUS WASTE MANIFEST NO 138428 | 1. PAGE ___ OF ___ | 2. TRAILER NO. 02

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Plains Pipeline, LP	1911 Connie Road	9/3/2020
PHONE NO. (713) 646-4100	CITY Carlsbade STATE NM ZIP 88220	6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
Non-Regulated, Non Hazardous Waste		CM			
a.					
b.					
c. WT:					
d. 39,040					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
SCREECH OWL FEDERAL CTB	

TRANSPORTER

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME JOE ONTIVEROS PHONE NO. 575-887-4048 24-HOUR EMERGENCY NO.

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TRIPLE C OILFIELD SERVICES	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: JOSE CARTA (432) 634-3786	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME X Ruben Ugarte JR DATE 9/3/2020	PRINTED/TYPED NAME ___ DATE
SIGNATURE X ___ DATE	SIGNATURE ___ DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez	—	9/3/2020	2:45

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Fulk

NON-HAZARDOUS WASTE MANIFEST NO 138434 | 1. PAGE ___ OF ___ | 2. TRAILER NO. 266

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Plains Pipeline, LP	1911 Connie Road	9/4/2020
PHONE NO. (713) 646-4100	CITY Carlsbade STATE NM ZIP 88220	6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. ~~Non-Regulated, Non Hazardous Waste~~	1	~~CM~~			
b.					
c.					
d. ~~WT.~~ 44360					

12. COMMENTS OR SPECIAL INSTRUCTIONS: SCREECH OWL FEDERAL CTB

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME JOE ONTIVEROS PHONE NO 575-887-4048 24-HOUR EMERGENCY NO.

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME | SIGNATURE | DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TRIPLE C OILFIELD SERVICES	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: JOSE CARTA (432) 634-3786	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME Pedro Peña 9/4/2020	PRINTED/TYPED NAME
SIGNATURE Pedro Peña DATE	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048
PERMIT NO. WM-01-035 - New Mexico	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez		9/4/2020	4:35

GENERATOR: COPIES 1 & 6 | DISPOSAL SITE: COPIES 2 & 3 | TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND DISPOSAL SITE NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

Fulk

NON-HAZARDOUS WASTE MANIFEST NO 138448 | 1. PAGE __ OF __ | 2. TRAILER NO. 265

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
Plains Pipeline, LP	1911 Connie Road	9/4/2020
PHONE NO. (713) 646-4100	CITY Carlsbade STATE NM ZIP 88220	6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. ~~Non-Regulated, Non Hazardous Waste~~	1	CM			
b.					
c.					
d. WT. 14660					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
SCREECH OWL FEDERAL CTB	

GENERATOR

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME JOE ONTIVEROS PHONE NO 575-887-4048 24-HOUR EMERGENCY NO.

GENERATOR

15. **GENERATOR'S CERTIFICATION:** I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC

PRINTED/TYPED NAME	SIGNATURE	DATE

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME: TRIPLE C OILFIELD SERVICES	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT: JOSE CARTA	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: (432) 634-3786	EMERGENCY PHONE:
18. **TRANSPORTER (1):** Acknowledgment of receipt of material	19. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME x Victor Joya DATE 9/4/2020	PRINTED/TYPED NAME DATE
SIGNATURE x Victor Joya	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
Lea Land, LLC	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	575-887-4048

PERMIT NO.	20. COMMENTS
WM-01-035 - New Mexico	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
Santos Gonzalez	—	9/4/2020	8:20

GENERATOR: COPIES 1 & 6 DISPOSAL SITE: COPIES 2 & 3 TRANSPORTERS: COPIES 4 & 5

COPY 1

State of New Mexico
Oil Conservation Division

Incident ID	NRM2009254898
District RP	
Facility ID	
Application ID	

Remediation Plan

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

☒ Detailed description of proposed remediation technique
☒ 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)(4) NMAC
☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☒ Extents of contamination must be fully delineated.

☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Amber Groves Title: Remediation Coordinator

Signature: Amber Groves Date: 10/21/2020

email: algroves@paalp.com Telephone: (575)200-5517

OCD Only

Received by: Robert Hamlet Date: 4/1/2021

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☒ Deferral Approved

Signature: Robert Hamlet Date: 4/1/2021

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 11041

CONDITIONS OF APPROVAL

Operator:			OGRID:	Action Number:	Action Type:
PLAINS MARKETING L.P.	333 Clay St, Ste 1600	Houston, TX77002	34053	11041	C-141

OCD Reviewer	Condition
rhamlet	Plains deferral request to complete final remediation of soil sample locations T-BH-N @ 3', T-BH-S @ 3', T-EW-N, T-EW-S, and all contaminants under/between both secondary containments is approved. Plains will complete final remediation during any future major deconstruction/alteration and/or abandonment, whichever occurs first. The closure samples will need to meet closure criteria set forth in OCD variance approval. The release will remain an open Environmental Issue in OCD database files.