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State of New Mexico Oil Conservation Division

Incident ID	nOY1811336341
District RP	1RP-5024
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: AMDEV Signature: Amber (Grand	Title: <u>Remediation Coordinator</u> Date: 1/21/2020
email: <u>Alyyoves</u>	paarp.com	Telephone: <u>515-200-5517</u>
OCD Only		
OCD Only Received by:		Date:
Remediate contamination th		of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible for regulations.
	Bradford Billings	Date: 07/29/2021
losure Approved by:		Title:Envi.Spec.A
0CD: 1/		
Received by OCD		
Rec		



REMEDIATION SUMMARY AND RISK-BASED SITE CLOSURE REQUEST

MOORE SWEET HISTORICAL UNIT LETTERS A & H, SECTION 13, TOWNSHIP 11 SOUTH, RANGE 32 EAST, NMPM N 33.369369° W 103.66272° LEA COUNTY, NEW MEXICO 1RP-5024 SRS #: Moore Sweet Historical

Prepared for:

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

Prepared by:

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January 2020

Curt D. Stanley Senior Project Manager

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APPENDICES

- Appendix A: NMOCD and NMSLO Correspondence
- Appendix B: Photographic Documentation
- Appendix C: Depth to Groundwater Information
- Appendix D: Field Notes
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- Appendix F: Request for Approval to Accept Solid Waste (NMOCD Form C-138)

1.0 INTRODUCTION AND BACKGROUND

On behalf of Plains Marketing, L.P. (Plains), TRC Environmental Corporation (TRC) has prepared this *Remediation Summary and Risk-Based Closure Request* for the historical crude oil Release Site known as Moore Sweet Historical (SRS: Moore Sweet Historical). The Release Site is located approximately three (3) miles east of Caprock in Lea County, New Mexico in Unit Letters "A & H", Section 13, Township 11 South, Range 32 East, NMPM. The Release Site GPS coordinates are N 33.369369° W 103.66272°. The Release Site is located on property leased by Plains from The State of New Mexico and administered by the New Mexico State Land Office (NMSLO). A copy of New Mexico Oil Conservation Division (NMOCD) Release Notification and Corrective Action (Form C-141) is provided with this *Remediation Summary and Risk-Based Closure Request*. A topographic location map and aerial map are provided as Figure 1 and Figure 2, respectively. Photographic documentation is provided as Appendix B.

On April 11, 2018, evidence of historical hydrocarbon impact was discovered during the decommissioning and reclamation of the former storage and pump station, the date and circumstance of the release are unknown. Following the discovery of the historical impact, an initial Release Notification and Corrective Action (Form C-141) was filed with the NMOCD and NMSLO.

Following the discovery of the historical hydrocarbon impact, numerous test trenches were utilized to delineate the vertical and horizontal extent of the impact. Following the completion of vertical and horizontal delineation activities, an "Initial Investigation Summary and Proposed Remediation Workplan" (Remediation Workplan) was prepared.

On August 20, 2018, the Remediation Workplan was submitted, via email to the New Mexico Oil Conservation Division (NMOCD) and the NMSLO. Please reference the "Initial Investigation Summary and Proposed Remediation Workplan" for details. NMOCD and NMSLO email correspondence is provided as Appendix A.

On September 4, 2018, representatives of the NMOCD, Plains, and TRC met at the NMOCD District 1 Office in Hobbs, New Mexico. Following discussion of the proposed remediation activities, the NMOCD Representative approved the proposed Remediation Workplan.

On September 5, 2018, a representative of the NMSLO concurred, via email with the NMOCD workplan approval.

On September 6, 2018, the NMOCD reconsidered and denied the Plains request for the emplacement of a 20-mil polyurethane liner at four (4) feet below ground surface (bgs) in the areas represented by TT-1 and WTT-1. The NMOCD based the liner decision reversal on the reported depth of fifty (50) feet to groundwater. The NMOCD email indicated "Emplacement of a liner with 4 ft. removal will not be appropriate for this location" and further stated "In other words, at least 12 ft. of soil will need to be removed from the areas represented by TT-1 and WTT-1".

On October 23, 2018, TRC, on behalf of Plains Marketing, requested a "Alternative Sampling Plan" from the NMOCD. The proposed alternative sampling plan proposed the collection of discrete soil samples, utilizing mechanical equipment from the sidewalls of the excavated area in each cardinal direction and the base of the excavated area for depths greater than eight (8) feet bgs. In areas of the excavation less than eight (8) feet composite soil samples would be collected for each six hundred (600) square feet of surface area.

On November 4, 2018, the NMOCD approved the prosed "Alternative Sampling Plan", on the condition discrete soil samples would be collected in "discolored areas."

On September 18, 2019, TRC, on behalf of Plains prepared a "Variance Request". In the Variance Request, Plains requested NMOCD and NMSLO approval to install a twenty (20) millimeter (mil) polyurethane liner at approximately fifteen (15) feet bgs. This request was based on the safety concerns, the depth of impact, and the inherent dangers of excavating in hard limestone with a hammer hoe.

On September 20, 2019, the NMOCD (Santa Fe Office) approved the installation of the polyurethane liner at approximately fifteen (15) feet bgs, the NMOCD approval was conditional and required all horizontal (sidewall) soil samples exhibit BTEX, TPH and chloride concentrations less than the NMOCD regulatory guidelines. On November 14, 2019, the NMSLO concurred with the NMOCD approval.

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) indicated the average depth to groundwater in Section 13, Township 11 South, Range 32 East to be sixty-three (63) feet bgs. There are no surface-water features located within a 1,000-foot radius of the site.

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) suggests one (1) water well (NMOSE Well No. L 06273) was installed in 1968, approximately eight hundred fifty (850) feet northwest of the Release Site; the current status of the water well is unknown. A pedestrian survey of the area did not yield any evidence of the water well.

On January 17, 2018, NMOSE Well No. L-6588, formerly located on-site, was plugged by a licensed driller; information for NMOSE Well No. L-6588 was unavailable on the groundwater database maintained by the NMOSE. The plugging record submitted by the driller to the NMOSE indicated the static water level was fifty (50) feet bgs, but the static water level measurement was not witnessed by Plains personnel. Depth to Groundwater information is provided as Appendix C.

Based on the depth to groundwater at the Moore Sweet Historical Release Site, the *NMOCD Closure Criteria for Soils Impacted by a Release* are the most stringent closure criteria listed. The Bureau of Land Management (BLM) publicly available *Karst Potential Map* indicates the Moore Sweet Historical Release Site is located in a "low karst" area. The BLM Karst Potential Map is provided as Figure 3. Based on the NMOCD Closure Criteria for Soils Impacted by a Release, the Closure Criteria for the Moore Sweet Historical Release Site are as follows:

• Benzene - 10 mg/kg

- Benzene, Toluene, ethylbenzene, and total xylenes (BTEX) 50 mg/kg
- Total Petroleum Hydrocarbons (TPH) 100 mg/kg
- Chloride 600 mg/kg

2.0 SUMMARY OF EXCAVATION ACTIVITIES

In October 2018, utilizing a track hoe and hammer hoe when required, excavation activities commenced at the Historical Moore Sweet Release Site, excavated soil was initially stockpiled on-site pending transportation to an NMOCD approved Landfill. An Excavation and Sample Location Map is provided as Figure 4. An Excavation and Sample Location Map with photographic aerial underlay is provided as Figure 5. A Summary of Concentrations of Benzene, BTEX, TPH and Chloride is provided as Table 1 and field notes are provided in Appendix D. Laboratory Analytical Reports are provided as Appendix E. A copy of the NMOCD *Request for Approval to Accept Solid Waste*) NMOCD Form C-138 is provided as Appendix F.

On October 8, 2018, one (1) soil sample (NTT 1A @ 8') was collected from the north sidewall of the excavation and submitted to the laboratory for total petroleum hydrocarbon (TPH) analysis. The analytical results indicated the soil sample exhibited a total petroleum hydrocarbon concentration of 42.7 mg/kg.

On November 9, 2018, two (2) excavation floor soil samples (TT1 @ 14' and STT @ 12') were collected and submitted to the laboratory for TPH and chloride analysis. The analytical results indicated soil samples TT1 @ 14' and STT @ 12' exhibited TPH concentrations of 2,081.4 mg/kg and 2,791.9 mg/kg, respectively. The analytical results of chloride analysis indicated soil samples TT1 @ 14' and STT @ 12' exhibited chloride concentrations of 128 mg/kg and 80.0 mg/kg, respectively. Based on the analytical results, additional excavation was warranted in the areas represented by soil samples TT1 @ 14' and STT @ 12'.

In addition, twelve (12) sidewall soil samples (ETT Comp 1 @ 5', ETT Comp 2 @ 5', ETT-NW @ 2.5', WTT Comp 2 @ 4', WTT Comp 1 @ 4', WTT-SW @ 2', WTT-WW @ 2', WTT-NW @ 2', STT-EW @ 6', STT-NW @ 6', STT-SW @ 6', and STT-WW @ 6') were collected and submitted to the laboratory for TPH and chloride analysis. The analytical results indicated TPH concentrations ranged from 15.2 mg/kg for soil sample ETT Comp 2 @ 5' to 4,153.8 mg/kg for soil sample STT–WW @ 6'. The analytical results indicated concentrations of chloride were less than the NMOCD regulatory guideline of 600 mg/kg for all soil samples. Based on the analytical results, additional excavation was warranted in the areas represented by soil samples ETT Comp 1 @ 5', ETT-NW @ 2.5', WTT-SW @ 2', WTT-NW @ 2', STT-EW @ 6', STT-SW @ 6', and STT-WW @ 6'.

On November 9, 2018, one (1) excavation floor soil sample (TT2 @ 2') was collected and submitted to the laboratory for TPH and chloride analysis. The analytical results indicated soil sample TT2 @ 2' exhibited a TPH concentration of 519 mg/kg. The analytical results of chloride analysis indicated soil sample TT2 @ 2' exhibited a chloride concentration of 176 mg/kg. Based on the analytical results, additional excavation was warranted in the area represented by soil sample TT2 @ 2'.

In addition, four (4) sidewall soil samples (TT2-WW @ 1', TT2-NW @ 1', TT2-EW @ 1', and TT2-SW @ 1') were collected and submitted to the laboratory for TPH and chloride analysis. The analytical results indicated TPH concentrations ranged from 89.2 mg/kg for soil sample TT 2–SW @ 1' to 396 mg/kg for soil sample TT2–WW @ 1'. The analytical results indicated concentrations of chloride were less than the NMOCD regulatory guideline of 600 mg/kg for all soil samples. Based on the analytical results, additional excavation was warranted in the areas represented by soil samples TT2–WW @ 1', TT2–NW @ 1', and TT2–EW @ 1'.

On November 9, 2018, one (1) composite excavation floor soil sample (TT3 Comp @ 3') was collected and submitted to the laboratory for TPH and chloride analysis. The analytical results indicated soil sample TT3 Comp @ 3' exhibited a TPH concentration less than the laboratory RL. The analytical results of chloride analysis indicated soil sample TT3 Comp @ 3' exhibited a chloride concentration of 16.0 mg/kg. Based on the analytical results, additional excavation was not warranted in the area represented by soil sample TT3 Comp @ 3'.

In addition, four (4) sidewall soil samples (TT3-NW @ 1.5', TT3-SW @ 1.5', TT3-WW @ 1.5', and TT3-EW @ 1.5') were collected and submitted to the laboratory for TPH and chloride analysis. The analytical results indicated TPH concentrations ranged from less than the laboratory RL for soil samples TT3–SW @ 1.5' and TT3–WW @ 1.5' to 38.0 mg/kg for soil sample TT3–NW @ 1.5'. The analytical results indicated concentrations of chloride were less than the NMOCD regulatory guideline of 600 mg/kg for all soil samples. Based on the analytical results, no additional excavation was warranted the TT 3 area and the excavation was backfilled with non-impacted locally sourced "like" material.

On November 13, 2018, one (1) excavation floor soil sample (ETT Comp 3 @ 6') was collected and submitted to the laboratory for TPH and chloride analysis. The analytical results indicated soil sample ETT Comp 3 @ 6' exhibited a TPH concentration of less than the laboratory RL. The analytical results of chloride analysis indicated soil sample ETT Comp 3 @ 6' exhibited a chloride concentration of 320 mg/kg. Based on the analytical results, no additional excavation was warranted in the area represented by soil sample ETT Comp 3 @ 6'.

In addition, three (3) sidewall soil samples (ETT–SW @ 2.5', ETT–SW-2 @ 6", and ETT-EW @ 2.5') were collected and submitted to the laboratory for TPH and chloride analysis. The analytical results indicated TPH concentrations ranged from less than the laboratory RL for soil sample ETT-EW @ 2.5' to 15.6 mg/kg for soil sample ETT–SW-2 @ 6". The analytical results indicated concentrations of chloride were less than the NMOCD regulatory guideline of 600 mg/kg for all soil samples, with the exception of soil sample ETT-SW-2 @ 6". Based on the analytical results, additional excavation was warranted in the areas represented by soil sample ETT-SW-2 @ 6".

On December 12-13, 2018, using a track hoe, an investigation trench (TT-1) was advanced from the floor of the existing excavation at approximately fourteen (14) feet bgs. During the advancement of the investigation trench sixteen (16) soil samples (TT-1 @ 15', TT-1 @ 16', TT-1 @ 17', TT-1 @ 18', TT-1 @ 19', TT-1 @ 20', TT-1 @ 21', TT-1 @ 22', TT-1 @ 23', TT-1 @ 24', TT-1 @ 25', TT-1 @ 26', TT-1 @ 27', TT-1 @ 28', TT-1 @ 29', and TT-1 @ 30') were collected and submitted to the laboratory for BTEX, TPH and chloride analysis. The

analytical results indicated benzene concentrations ranged from less than the laboratory RL for soil samples TT-1 @ 15', TT-1 @ 16', TT-1 @ 17', TT-1 @ 20', TT-1 @ 21', TT-1 @ 22', TT-1 @ 23', TT-1 @ 24', TT-1 @ 25', TT-1 @ 29', and TT-1 @ 30' to 0.113 mg/kg for TT-1 @ 27'. Based on the analytical results, all soil samples exhibited benzene concentrations less than the NMOCD regulatory guideline of 10 mg/kg. The analytical results indicated BTEX concentrations ranged from less than the laboratory RL for soil samples exhibited benzene concentrations less than the NMOCD regulatory guideline of 50 mg/kg. The analytical results indicated BTEX concentrations less than the NMOCD regulatory guideline of 50 mg/kg. The analytical results indicated benzene concentrations less than the NMOCD regulatory guideline of 50 mg/kg. The analytical results indicated TPH concentrations ranged from 92.2 mg/kg for soil samples exhibited TPH concentrations greater than the NMOCD regulatory guideline of 100 mg/kg, with the exception of soil sample TT-1 @ 30' (92.2 mg/kg), which provided vertical delineation of impact at the Site. Chloride analysis was conducted on soil samples TT-1 @ 15' through TT-1 @ 20 exhibited chloride concentrations less than the NMOCD regulatory guideline.

On April 3, 2019, one (1) excavation sidewall soil sample (ETT-NW-B @ 2.5') was collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated benzene and BTEX concentrations were less than the laboratory RL in the submitted soil sample. Based on the analytical results, the soil sample exhibited benzene and BTEX concentrations less than the NMOCD regulatory guideline. The analytical results indicated the TPH concentration was 31.0 mg/kg and exhibited TPH less than the NMOCD regulatory guideline. Chloride analysis indicated the soil sample exhibited a chloride concentration of 641 mg/kg. The analytical results indicated the chloride concentration was greater than the NMOCD regulatory guideline. Based on the analytical results, additional excavation was warranted in the area represented by soil sample ETT-NW-B @ 2.5'.

On April 3, 2019, four (4) excavation floor soil samples (TT2–Comp 1 @ 3', TT2–Comp 2 @ 3', TT2–Comp 3 @ 3', and TT2–Comp 4 @ 3') were collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated benzene and BTEX concentrations were less than the laboratory RL all submitted soil samples. Based on the analytical results, all soil samples exhibited benzene and BTEX concentrations less than the NMOCD regulatory guideline. The analytical results indicated TPH concentrations ranged from 40.2 mg/kg for soil sample TT2–Comp 1 @ 3' to 184 mg/kg for TT2–Comp 2 @ 3'. Based on the analytical results, soil samples TT2–Comp 2 @ 3' and TT2–Comp 4 @ 3' exhibited TPH concentrations greater than the NMOCD regulatory guideline. Chloride analysis indicated soil samples TT2–Comp 1 @ 3', TT2–Comp 2 @ 3', TT2–Comp 3 @ 3', and TT2–Comp 4 @ 3' exhibited chloride concentrations less than the NMOCD regulatory guideline. Based on the analytical results, additional excavation was warranted in the areas represented by soil samples TT2–Comp 2 @ 3' and TT2–Comp 2 @ 3'.

On April 3, 2019, three (3) excavation sidewall soil samples (TT2-WW @ 1.5', TT2-NW @ 1.5', and TT2-EW @ 1.5',) were collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated benzene and BTEX concentrations were less than the laboratory RL all submitted soil samples. Based on the analytical results, all soil samples exhibited benzene and BTEX concentrations less than the NMOCD regulatory

guideline. The analytical results indicated TPH concentrations ranged from 38.5 mg/kg for soil sample TT2–WW @ 1.5' to 106 mg/kg for soil sample TT2-EW @ 1.5'. Based on the analytical results, soil samples TT2-NW @ 1.5' and TT2–EW @ 1.5' exhibited TPH concentrations greater than the NMOCD regulatory guideline. Chloride analysis indicated all soil samples exhibited chloride concentrations less than the NMOCD regulatory guideline. Based on the analytical results, additional excavation was warranted in the areas represented by soil samples TT2-NW @ 1.5' and TT2–EW @ 1.5'.

On April 4, 2019, two (2) excavation sidewall soil samples (WTT–NW–B @ 2' and WTT–SW –B @ 2') were collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated benzene and BTEX concentrations were less than the laboratory RL all submitted soil samples. Based on the analytical results, all soil samples exhibited benzene and BTEX concentrations less than the NMOCD regulatory guideline. The analytical results indicated TPH concentrations ranged from 76.3 mg/kg for soil sample WTT–SW–B @ 2' to 86.5 mg/kg for soil sample WTT–NW–B @ 2'. Based on the analytical results, soil samples WTT–NW–B @ 2' and WTT–SW–B @ 2' exhibited TPH concentrations less than the NMOCD regulatory guideline. Chloride analysis indicated all soil samples exhibited chloride concentrations less than the NMOCD regulatory guideline. Based on the analytical results, no additional excavation was warranted in the areas represented by soil samples WTT–NW–B @ 2' and WTT–SW–B @ 2'.

On April 16, 2019, four (4) excavation sidewall soil samples (STT-EW-B @ 6', STT-NW-B @ 6', STT-SW-B (a) 6', and STT-WW-B (a) 6') were collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated benzene concentrations were less than the laboratory RL all submitted soil samples. Based on the analytical results, all soil samples exhibited benzene concentrations less than the NMOCD regulatory guideline. The analytical results indicated BTEX concentrations ranged from 0.3198 mg/kg for soil sample STT-SW-B @ 6' to 32.13 mg/kg for soil sample STT-EW-B @ 6'. Based on the analytical results, all soil samples exhibited BTEX concentrations less than the NMOCD regulatory guideline. The analytical results indicated TPH concentrations ranged from 79.58 mg/kg for soil sample SST-SW-B (a) 6' to 7,137 mg/kg for soil sample STT-WW-B (a) 6'. Based on the analytical results, soil samples STT-EW-B @ 6', STT-NW-B @ 6', and STT-WW-B @ 6 exhibited TPH concentrations greater than the NMOCD regulatory guideline. Chloride analysis indicated all soil samples exhibited chloride concentrations less than the NMOCD regulatory guideline, with the exception of soil sample STT-EW-B @ 6', which exhibited a chloride concentration of 1,770 mg/kg. Based on the analytical results, additional excavation was warranted in the areas represented by soil samples STT-EW-B (a) 6', STT-NW-B (a) 6', and STT-WW-B @ 6'.

On April 17, 2019, two (2) excavation floor soil samples (ETT-Comp 1 @ 6' and ETT-Comp 4 (@ 5')) were collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated benzene, and BTEX concentrations were less than the laboratory RL in the submitted soil samples. Based on the analytical results, the soil samples exhibited benzene and BTEX concentrations less than the NMOCD regulatory guideline. The analytical results indicated the TPH concentrations ranged from 29.3 mg/kg for soil sample ETT-Comp 1 (@ 6') to 291 mg/kg for soil sample ETT-Comp 4 (@ 5'). Based on the analytical results, soil sample ETT-

Comp 4' @ 6' exhibited a TPH concentration greater than the NMOCD regulatory guideline. Chloride analysis indicated soil samples ETT-Comp 1 @ 6' and ETT-Comp 4 @ 5' exhibited chloride concentrations of 615 mg/kg and 724 mg/kg, respectively. Chloride analysis indicated a soil samples exhibited ETT-Comp 1 @ 6' and ETT-Comp 4 @ 5' chloride concentrations greater than the NMOCD regulatory guideline. Based on the analytical results, additional excavation was warranted in the areas represented by soil samples ETT-Comp 1 @ 6' and ETT-Comp 4 @ 5'.

On April 17, 2019, one (1) excavation sidewall soil sample (ETT-NW-C @ 2.5') was collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated the benzene, and BTEX concentration was less than the laboratory RL in the submitted soil sample. Based on the analytical results, the soil sample exhibited benzene and BTEX concentrations less than the NMOCD regulatory guideline. The analytical results indicated the TPH concentration was 359 mg/kg and based on the analytical results the soil sample exhibited a TPH concentration greater than the NMOCD regulatory guideline. Chloride analysis indicated the soil sample exhibited a chloride concentration of 197 mg/kg. Chloride analysis indicated the soil sample exhibited a chloride concentration greater than the NMOCD regulatory guideline. Based on the analytical results, additional excavation was warranted in the areas represented by soil sample ETT-NW-C @ 2.5'.

On April 17, 2019, one (1) excavation sidewall soil sample (WTT-NW-C @ 2.5') was collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated the benzene, BTEX, and TPH concentrations were less than the laboratory RL in the submitted soil sample. Based on the analytical results, the soil sample exhibited benzene, BTEX, and TPH concentrations less than the NMOCD regulatory guideline. Chloride analysis indicated the soil sample exhibited a chloride concentration of 197 mg/kg. Chloride analysis indicated the soil sample exhibited a chloride concentration of 965 mg/kg, which is greater than the NMOCD regulatory guideline. Based on the analytical results, additional excavation was warranted in the area represented by soil sample WTT-NW-C @ 2.5'.

On April 17, 2019, two (2) excavation floor soil samples (TT2 Comp 2 @ 4' and TT2 Comp 4 @ 4') were collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated benzene, and BTEX concentrations were less than the laboratory RL in the submitted soil samples. Based on the analytical results, the soil samples exhibited benzene and BTEX concentrations less than the NMOCD regulatory guideline. The analytical results indicated TPH concentrations ranged from 275 mg/kg for soil sample TT2 Comp 4 @ 4' to 399 mg/kg for soil sample TT2 Comp 2 @ 4'. Based on the analytical results, soil samples TT2 Comp 2 @ 4' and TT2 Comp 4 @ 4' exhibited TPH concentrations greater than the NMOCD regulatory guideline. Chloride analysis indicated soil samples TT2 Comp 2 @ 4' and TT2 Comp 4 @ 4' exhibited analysis indicated soil samples TT2 Comp 2 @ 4' and TT2 Comp 4 @ 4' exhibited concentrations of 35.1 mg/kg and 30.8 mg/kg, respectively. Chloride analysis indicated soil samples TT2 Comp 4 @ 4' exhibited concentrations less than the NMOCD regulatory guideline. Based on the analytical results, additional excavation was warranted in the areas represented by soil samples TT2 Comp 2 @ 4' and TT2 Comp 2 @ 4' and TT2 Comp 2 @ 4'.

On April 17, 2019, two (2) excavation sidewall soil samples (TT2-NW-B @ 1.5' and TT2-EW-B @ 1.5') were collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated benzene, and BTEX concentrations were less than the laboratory RL in the submitted soil samples. Based on the analytical results, the soil samples exhibited benzene and BTEX concentrations less than the NMOCD regulatory guideline. The analytical results indicated TPH concentrations ranged from less than the laboratory RL for soil sample TT2-EW-B @ 1.5' to 41.3 mg/kg for soil sample TT@-NW-B @ 1.5'. Based on the analytical results, soil samples TT2-NW-B @ 1.5' and TT2-EW-B @ 1.5' exhibited TPH concentrations less than the NMOCD regulatory guideline. The analytical results, soil samples TT2-NW-B @ 1.5' and TT2-EW-B @ 1.5' exhibited chloride concentrations of 136 mg/kg and 51.4 mg/kg, respectively. Chloride analysis indicated soil samples TT2-NW-B @ 1.5' and TT2-EW-B @ 1.5'.

On August 14, 2019, one (1) excavation sidewall soil sample (ETT-NW-D @ 2.5') was collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated the benzene, and BTEX concentration was less than the laboratory RL in the submitted soil sample. Based on the analytical results, the soil sample exhibited benzene and BTEX concentrations less than the NMOCD regulatory guideline. The analytical results indicated the TPH concentration greater than the NMOCD regulatory guideline. Chloride analysis indicated the soil sample exhibited a chloride concentration of 861 mg/kg. Chloride analysis indicated the soil sample exhibited a chloride concentration greater than the NMOCD regulatory guideline. Based on the analytical results, additional excavation was warranted in the areas represented by soil sample ETT-NW-D @ 2.5'.

On August 14, 2019, one (1) excavation sidewall soil sample (WTT-NW-D @ 2.5') was collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated the benzene, and BTEX concentration was less than the laboratory RL in the submitted soil sample. Based on the analytical results, the soil sample exhibited benzene and BTEX concentrations less than the NMOCD regulatory guideline. The analytical results indicated the TPH concentration greater than the NMOCD regulatory guideline. Chloride analysis indicated the soil sample exhibited a chloride concentration of 130 mg/kg. Chloride analysis indicated the soil sample exhibited a chloride concentration greater than the NMOCD regulatory guideline. Based on the analytical results, additional excavation was warranted in the areas represented by soil sample WTT-NW-D @ 2.5'.

On August 14, 2019, two (2) excavation floor soil samples (TT2 Comp 2 @ 5' and TT2 Comp 4 (@ 5')) were collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated benzene, and BTEX concentrations were less than the laboratory RL in the submitted soil samples. Based on the analytical results, the soil samples exhibited benzene and BTEX concentrations less than the NMOCD regulatory guideline. The analytical results indicated TPH concentrations ranged from 1,178 mg/kg for soil sample TT2 Comp 2 (@ 5') to 2,276 mg/kg for soil sample TT2 Comp 4 (@ 5'). Based on the analytical results, soil samples TT2

Comp 2 @ 5' and TT2 Comp 4 @ 5' exhibited TPH concentrations greater than the NMOCD regulatory guideline. Chloride analysis indicated soil samples TT2 Comp 2 @ 5' and TT2 Comp 4 @ 5' exhibited chloride concentrations of 53.3 mg/kg and 24.5 mg/kg, respectively. Chloride analysis indicated soil samples TT2 Comp 2 @ 5' and TT2 Comp 4 @ 5' exhibited concentrations less than the NMOCD regulatory guideline. Based on the analytical results, additional excavation was warranted in the areas represented by soil samples TT2 Comp 2 @ 5' and TT2 Comp 2 @ 5'.

On August 26, 2019, excavation activities continued and focused on the stabilization of the existing excavation, which included the benching of the existing excavation sidewalls. Please note, the area associated with trenches TT-1, WTT, ETT, SST, and NTT will be collectively referred to as the "Main Excavation" from this point forward. During the stabilization activities, numerous areas of concern sampled and identified during prior excavation activities were removed. Following the stabilization of the Main Excavation, the Main Excavation was sampled, and the analytical results were evaluated.

In addition, excavation activities continued and focused on the stabilization of the existing excavation associated with the TT-2 Trench area, which will be referred to as the "TT-2 Excavation" from this point forward. During the stabilization activities, numerous areas of concern sampled and identified during the previous excavation activities were removed. Following the stabilization of the TT2 Excavation, the TT2 Excavation was sampled, and the analytical results were evaluated.

On September 24, 2019, twenty-nine (29) excavation floor and sidewall soil samples (MN-S1C #1, MW-S1C, MW-F1C #1 @ 5', MW-F1C #2 @ 5', MSW-S1C, MSW-F1C @ 5', MS-S1C, MS-F1C @ 5', ME-S1C, ME-F1C #1 @ 4', ME-F1C #2 @ 4', MN-S1C #2, MNW-S2, MNW-F2 @ 10', MW-S2, MW-F2 @ 10', MSW-S2, MSW-F2 @ 10', MS-S2, MS-F2 @ 10', ME-S2, MW-F2 @ 10', MN-S2, MN-F2 @ 19', MS3 #1, MS3 #2, and MS# #3) were collected from the Main Excavation and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated benzene and BTEX concentrations were less than the laboratory RL in each of the twenty-nine (29) submitted soil samples. Based on the analytical results, benzene and BTEX concentrations were less than the NMOCD regulatory guideline. The analytical results indicated the TPH concentrations were less than the laboratory RL, with the exception of soil samples MSW-F1C @ 5', ME-S1C, MNW-S2, MNW-F2 @ 10', MW-S2, and MS-F2 @ 10', which exhibited TPH concentrations of 186 mg/kg, 46.6 mg/kg, 87.0 mg/kg, 27.2 mg/kg, 61.1 mg/kg, and 769 mg/kg, respectively. Based on the analytical results, the areas represented by soil samples MSW-F1C @ 5' (186 mg/kg) and MS-F2 @ 10' (769 mg/kg) exhibited TPH concentrations greater than the NMOCD regulatory guideline. Chloride concentrations ranged from 9.26 mg/kg for soil sample MNW-F2 @ 10' to 4,050 mg/kg for soil sample ME-F1C #2 @ 4'. Based on the analytical results, the areas represented by soil samples MW-S1C (695 mg/kg), ME-S1C (2,100 mg/kg), ME-F1C #1 @ 4' (603 mg/kg), ME-F1C #2 @ 4' (4,050 mg/kg), ME-S2 (1,030 mg/kg), and MS3 #3 (962 mg/kg) exhibited chloride concentrations greater than the NMOCD regulatory guideline.

Based on the analytical results, additional excavation was warranted in the areas represented by soil samples MW-S1C, MSW-F1C @ 5', ME-S1C, ME-F1C #1 @ 4', ME-F1C #2 @ 4', MS-F2 @ 10', ME-S2, MN-S2, and MS# #3.

On September 24, 2019, nine (9) Main Excavation Ramp floor and sidewall soil samples (M Ramp ES2, M Ramp E FL @ 10', M Ramp ES3, M Ramp WS3, M Ramp WS2, M Ramp W FL (a) 10', M Ramp Floor #1 Comp, M Ramp Floor #2 Comp, M Ramp Floor #3 Comp) were collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated benzene and BTEX concentrations were less than the laboratory RL in each of the nine (9) submitted soil samples. Based on the analytical results, benzene and BTEX concentrations were less than the NMOCD regulatory guideline. The analytical results indicated the TPH concentrations were less than the laboratory RL, with the exception of soil samples M Ramp WS2, M Ramp Floor #1 Comp, M Ramp Floor #2 Comp, and M Ramp Floor #3 Comp which exhibited TPH concentrations of 136 mg/kg, 108 mg/kg, 179 mg/kg, and 117 mg/kg, respectively. Based on the analytical results, the areas represented by soil samples M Ramp WS2 (136 mg/kg), M Ramp Floor #1 Comp (108 mg/kg), M Ramp Floor #2 Comp (179 mg/kg), and M Ramp Floor #3 Comp (117 mg/kg) exhibited TPH concentrations greater than the NMOCD regulatory guideline. Chloride concentrations ranged from 9.69 mg/kg for soil sample M Ramp WS2 to 741 mg/kg for soil sample M Ramp ES3. Based on the analytical results, the areas represented by soil sample M Ramp ES3 (741 mg/kg) exhibited chloride concentrations greater than the NMOCD regulatory guideline.

Based on the analytical results, additional excavation was warranted in the areas represented by soil samples M Ramp ES3, M Ramp Floor #1 Comp, M Ramp Floor #2 Comp, and M Ramp Floor #3 Comp.

On September 24, 2019, five (5) Main Excavation soil samples (Sample #1 @ 17' through Sample #5 @ 17) were collected at the juncture of Main Excavation floor and sidewall and submitted to the laboratory for BTEX, TPH, and chloride analysis. The soil samples were collected to ensure the horizontal delineation of the impacted excavation floor was achieved. The analytical results indicated benzene and BTEX concentrations were less than the laboratory RL in each of the five (5) submitted soil samples. Based on the analytical results, benzene and BTEX concentrations were less than the NMOCD regulatory guideline. The analytical results indicated TPH concentrations were less than the laboratory RL and NMOCD regulatory guideline. Chloride concentrations ranged from 46.4 mg/kg for Sample #2 @ 17' to 801 mg/kg for Sample #5 @ 17'. Based on the analytical results, the areas represented by soil Sample #5 @ 17' exhibited chloride concentrations greater than the NMOCD regulatory guideline.

Based on the analytical results, additional excavation was warranted in the area represented by Sample #5 @ 17'

On September 27, 2019, sixteen (16) TT2 Excavation soil samples (TT-2 NS1C, TT-2 NF1 @ 5', TT-2 WS1C, TT-2 WF1 @ 5', TT-2 SS1-3C, TT-2 NS2, TT-2 NF2 @ 10', TT-2 WS2, TT-2 WF2 @ 10', TT-2 NS3, TT-2 WS3, TT-2 ES1-3C, TT-2 Floor @ 15', TT-2 Ramp WSW, TT-2 ESW, TT-2 Ramp Floor Comp) were collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The analytical results indicated benzene, BTEX, and TPH concentrations

were less than the laboratory RL in each of the sixteen (16) submitted soil samples. Based on the analytical results, benzene, BTEX, and TPH concentrations were less than the NMOCD regulatory guideline. Chloride concentrations ranged from 20.4 mg/kg for soil sample TT-2 WF1 @ 5' to 545 mg/kg for soil sample TT-2 Ramp ESW. Based on the analytical results, all sixteen (16) soil samples exhibited chloride concentrations less than the NMOCD regulatory guideline. Based on the analytical results, the TT-2 Excavation was backfilled with non-impacted, locally sourced "like" material.

On October 17-21, 2019, nine (9) confirmation excavation floor and sidewall soil samples (MW-S1C-A, MSW-F1C @ 7', MS-F2 @ 13', MS-S1C-A, ME-F1C #1 @ 7', MS-F1C #2 @ 7', ME-S2-A, MN-S2-A, and MS #3A) were collected from the Main Excavation and submitted to the laboratory for TPH or chloride analysis. The analytical results indicated TPH concentrations for soil samples MSW-F1C @ 7' and MS-F2 @ 13' were 83.6 mg/kg and 550 mg/kg, respectively. Based on the analytical results, the area represented by soil sample MS-FW @ 13' (550 mg/kg) exhibited a TPH concentration greater than the NMOCD regulatory guideline. The analytical results indicated chloride concentrations for soil samples MW-S1C-A, MS-S1C-A, ME-F1C #1 @ 7', MS-F1C #2 @ 7', ME-S2-A, MN-S2-A, and MS #3A ranged from 72.2 mg/kg for soil sample MW-F1C #1 @ 7' to 439 mg/kg for soil sample ME-S1C-A. Based on the analytical results, the above stated confirmation soil samples exhibited a chloride concentration soil samples ME-S1C-A. Based on the analytical results, the above stated confirmation soil samples exhibited a chloride concentration soil sample ME-S1C-A. Based on the analytical results, the above stated confirmation soil samples exhibited a chloride concentration less than the NMOCD regulatory guideline.

Based on the analytical results, additional excavation was warranted in the area represented by soil sample MS-F2 @ 13'.

On October 21, 2019, one (1) Main Excavation confirmation soil sample (Sample #5A @ 17') was collected at the juncture of Main Excavation floor and sidewall and submitted to the laboratory for chloride analysis. The soil sample was collected to ensure the horizontal delineation of the impacted excavation floor was achieved. The analytical results indicated the chloride concentration for Sample #5A @ 17' was 13.9 mg/kg. Based on the analytical results, the area represented by soil Sample #5A @ 17' exhibited chloride concentrations less than the NMOCD regulatory guideline.

On October 22, 2019, five (5) Main Excavation Ramp floor and sidewall confirmation soil samples (M Ramp ES3-A, M Ramp WS3-A, M Ramp Floor #1A Comp, M Ramp Floor #2A Comp, and M Ramp Floor #3A Comp) were collected and submitted to the laboratory for TPH or chloride analysis. The analytical results indicated TPH concentrations for soil samples M Ramp WS3-A, M Ramp Floor #1A Comp, M Ramp Floor #2A Comp, and M Ramp Floor #1A Comp, M Ramp Floor #2A Comp, and M Ramp Floor #3A Comp ranged from less than the laboratory RL for soil samples M Ramp WS3-A, M Ramp Floor #3A to 115 mg/kg for soil sample M Ramp Floor #2A Comp. Based on the analytical results, the area represented by soil sample M Ramp Floor #2A Comp exhibited a TPH concentration greater than the NMOCD regulatory guideline. The analytical results indicated the chloride concentration for soil sample M Ramp ES3-A was 21.8 mg/kg. Based on the analytical results, the area represented by soil sample M Ramp ES3-A exhibited a chloride concentration for soil sample M Ramp ES3-A exhibited a chloride concentration for soil sample M Ramp ES3-A exhibited a chloride concentration for soil sample M Ramp ES3-A was 21.8 mg/kg.

Based on the analytical results, additional excavation was warranted in the area represented by soil sample M Ramp Floor #2A Comp.

On October 23, 2019, two (2) composite stockpile soil samples (South Stockpile and North Stockpile) were collected and submitted to the laboratory for BTEX, TPH, and chloride analysis. The stockpile contained approximately six-hundred (600) cubic yards (cy) of overburden removed from the Main Excavation. The analytical results indicated benzene and BTEX concentrations were less than the laboratory RL for each soil sample. The analytical results indicated TPH concentrations for South Stockpile and North Stockpile were 74.6 mg/kg and 50.9 mg/kg, respectively. The analytical results indicated chloride concentrations for South Stockpile and North Stockpile were 209 mg/kg and 164 mg/kg, respectively. Based on the analytical results the stockpiled soil was utilized as backfill material.

On November 7, 2019, one (1) Main Excavation floor confirmation soil sample (MS-F2 @ 14') and one (1) Main Excavation Ramp floor soil sample (M Ramp Floor #2B Comp) were collected and submitted to the laboratory for TPH analysis. The analytical results indicated TPH concentrations for soil samples MS-F2 @ 14' and M Ramp Floor #2B Comp were 38.3 mg/kg and less than the laboratory RL, respectively. Based on the analytical results, the area represented by soil sample MS-F2 @ 14' and M Ramp Floor #2B Comp exhibited a TPH concentration less than the NMOCD regulatory guideline.

On November 19, 2019, based on the analytical results and with NMOCD and NMSLO approved twenty (20) mil polyliner installed on the floor of the Main Excavation at approximately fifteen (15) feet bgs. As approved by the NMOCD and NMSLO, a six (6) inch layer of pad sand was placed above and below the liner to protect the liner during backfilling activities. Approximately six (6) inches of pad sand was placed above and below the line to protect the integrity of the liner during backfilling activities.

Following the emplacement of the liner and upper layer of pad sand, backfilling activities commenced. Locally purchased non-impacted "like" material was transported to the Site. Backfilled was compacted in eighteen (18) inch lifts to minimize future slumping. The top four (4) feet of backfill material consisted of topsoil which should enhance revegetation efforts at the Site.

Approximately 8,869 cubic yards of impacted soil was transported under manifest to the Gandy Marley disposal facility located west of Caprock, New Mexico. Copies of the Gandy Marley Disposal Manifests will be available upon request.

3.0 QA/QC PROCEDURES

3.1 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. 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. Upon selection of samples for analysis, the cooler was sealed for shipment to the laboratory. Proper chain-of-custody documentation was maintained throughout the sampling process.

Soil samples were delivered to Cardinal Laboratories in Hobbs, New Mexico, Xenco Laboratories in Midland, Texas and 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.

3.2 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.

3.3 Laboratory Protocol

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

4.0 SITE REVEGETATION

Following backfilling activities, the Moore Sweet Historical Site was contoured reminiscent of the surrounding area.

As required by the NMOCD and NMSLO, the Moore Sweet Historical Release Site will be revegetated as follows:

The Moore Sweet Historical Release Site consists of a Kimbrough-Lea complex soil with 0-3 percent slopes. Vegetation includes short grass and mid-grass communities with less than 5% of woody shrubs and a limited variety of forbs. The dominant grasses are blue grama, sideoats grama, buffalograss, plains bristlegrass and tobosa. Less dominate grasses include black grama, sand dropseed and threeawn. Forbs include gaura, croton, clover, globewillow, ragweed, and wooly plantain.

The preferred time for warm season species is 3-6 weeks after the last killing frost in the spring.

The seeds will be broadcast, and the area raked or dragged to cover the seed. When broadcasting the seed, the pounds per acre will be doubled.

Total pounds of pure live seed per acre are based on seed being weed free. If one species is not available, all other species available will be increased proportionately and at least four (4) species of the recommended grasses will be used, including one (1) forb. No less than eight (8) pounds per acre will be applied. The appropriate application will be reviewed prior to reclamation reseeding.

Common Name and	<u>Scientific Name</u>	Pounds of Pure Live
Preferred Variety		Seed Per Acre
Annual Quick-cover Grass		
Oats	Avena sativa	0.50
Sterile Triticale	Triticum aestivum X Secale	0.50
	cereale 'Quickguard'	
Cool Season Grass		
Western Wheatgrass	Agropyron smithii	2.50
Warm-Season Grass		
Blue Grama	Boutela gracilis	2.0
Little Bluestem	Schizachyrium scoparium	1.0
Black Grama	Bouteloua eriopoda	0.50
Buffalograss	Bouteloua dactyloides	0.50
Indiangrass	Sorghastrum nutans	0.50
Sideoats Grama	Bouteloua curtipendula var.	2.00
	Vaughn	
Wildflowers/ Forbs		
White prairie clover	Dalea candida	0.10
Scarlet globemallow	Sphaeralcea coccinea	0.10
Chia Sage	Salvia columbariae	0.10
Annual buckwheat	Eriogonum annuum	0.10

The NMSLO recommended seed mixture is as follows:

Noxious weeds growing in the seeded area will be minimized through mechanical or chemical treatment.

5.0 SITE CLOSURE REQUEST

Based on the analytical results of confirmation soil samples obtained from the floor and sidewalls of the excavation, TRC recommends Plains provide the NMOCD and NMSLO a copy of this Site Closure Request and request the NMOCD and NMSLO grant soil closure status to the Moore Sweet Historical Release Site.

6.0 LIMITATIONS

TRC has prepared this Site Closure 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

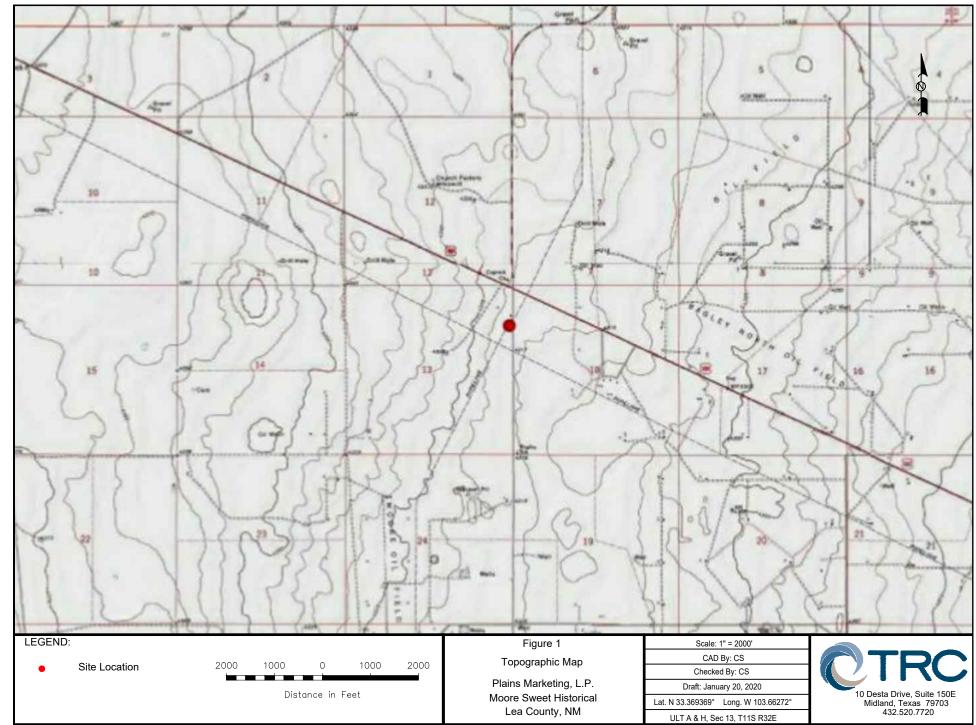
recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

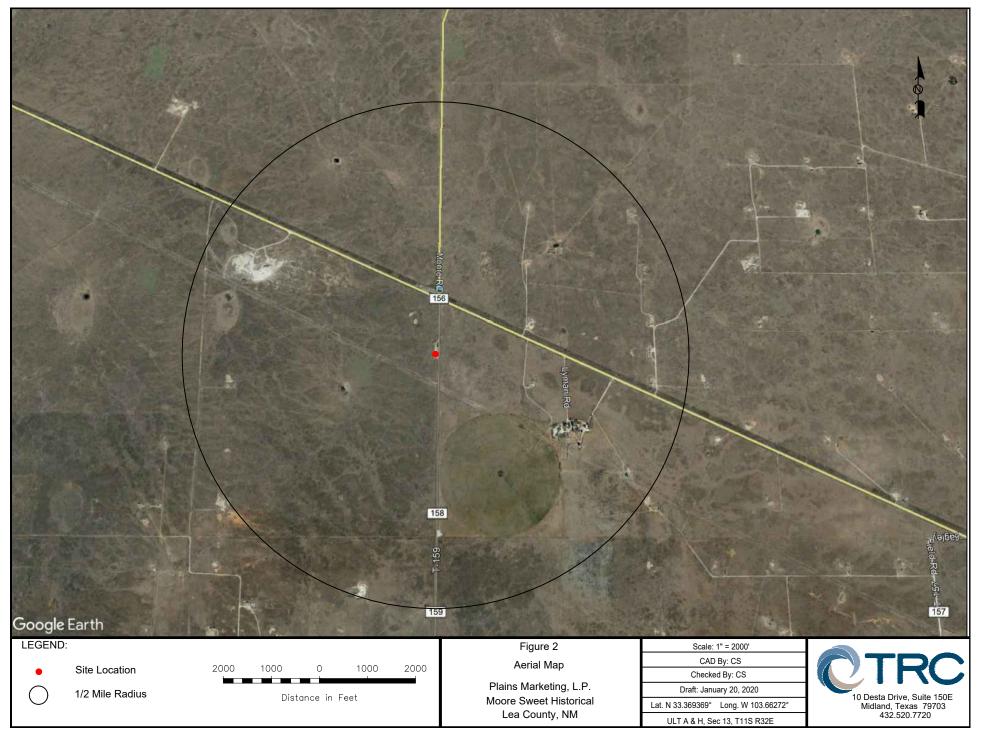
This report has been prepared for the benefit of Plains. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of TRC and/or Plains.

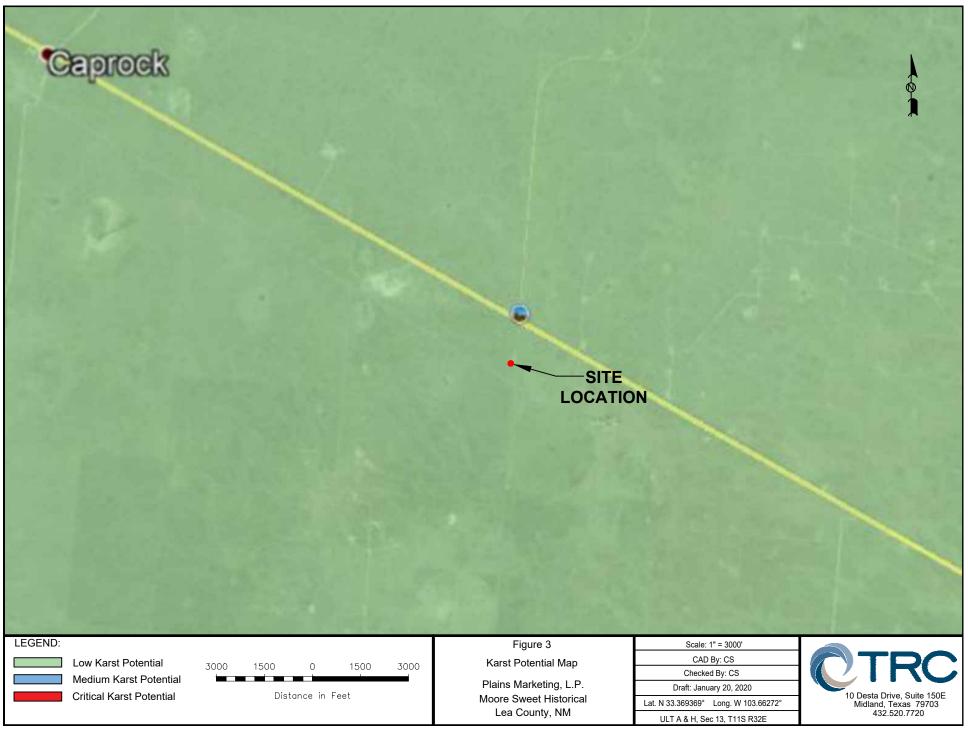
7.0 **DISTRIBUTION**

- Copy 1: New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division, District 1 1625 French Drive Hobbs, NM 88240
- Copy 2: Ryan Mann Hobbs Field Office New Mexico State Land Office 914 N. Linam Street Hobbs, NM 88240
- Copy 3: Amber Groves Plains Marketing, LP 10 Desta Drive, Suite 550E Midland, Texas 79705 algroves@paalp.com
- Copy 4: TRC Environmental Corporation 10 Desta Drive, Suite 150E Midland, Texas 79705 cdstanley@trccompanies.com

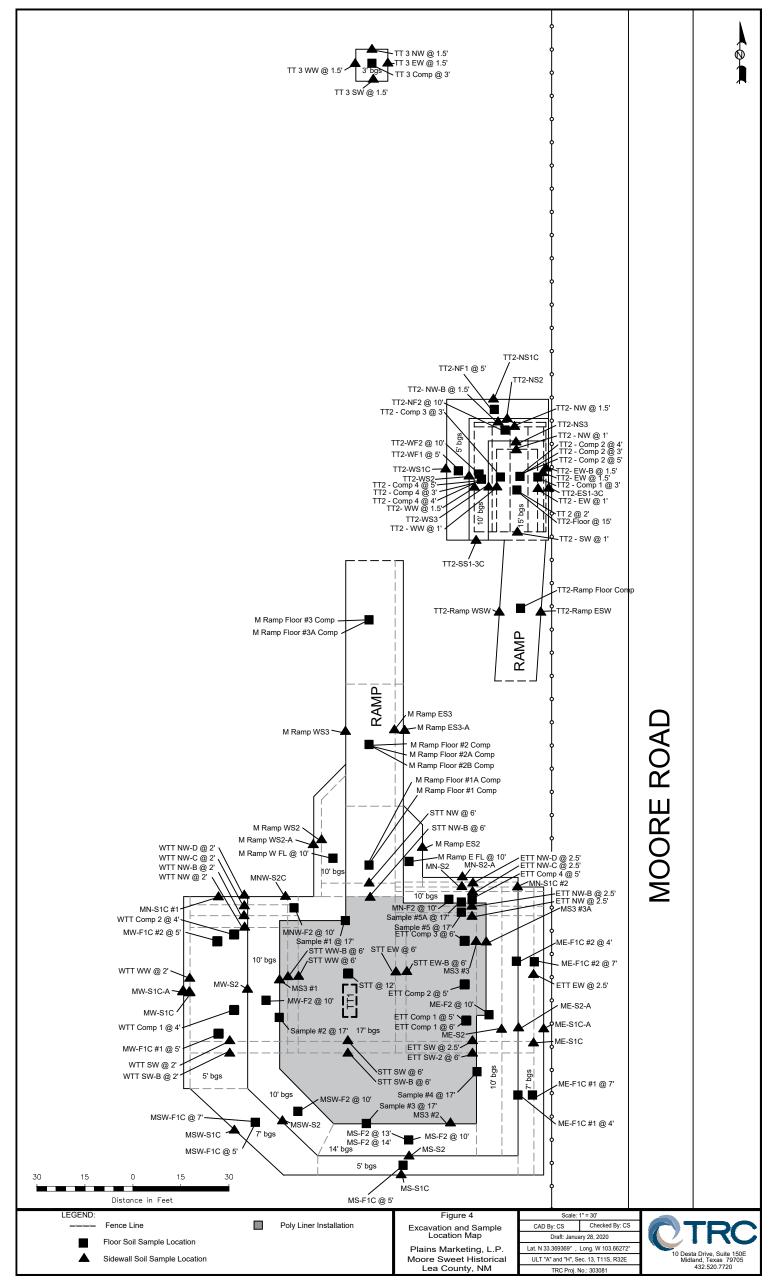
Figures



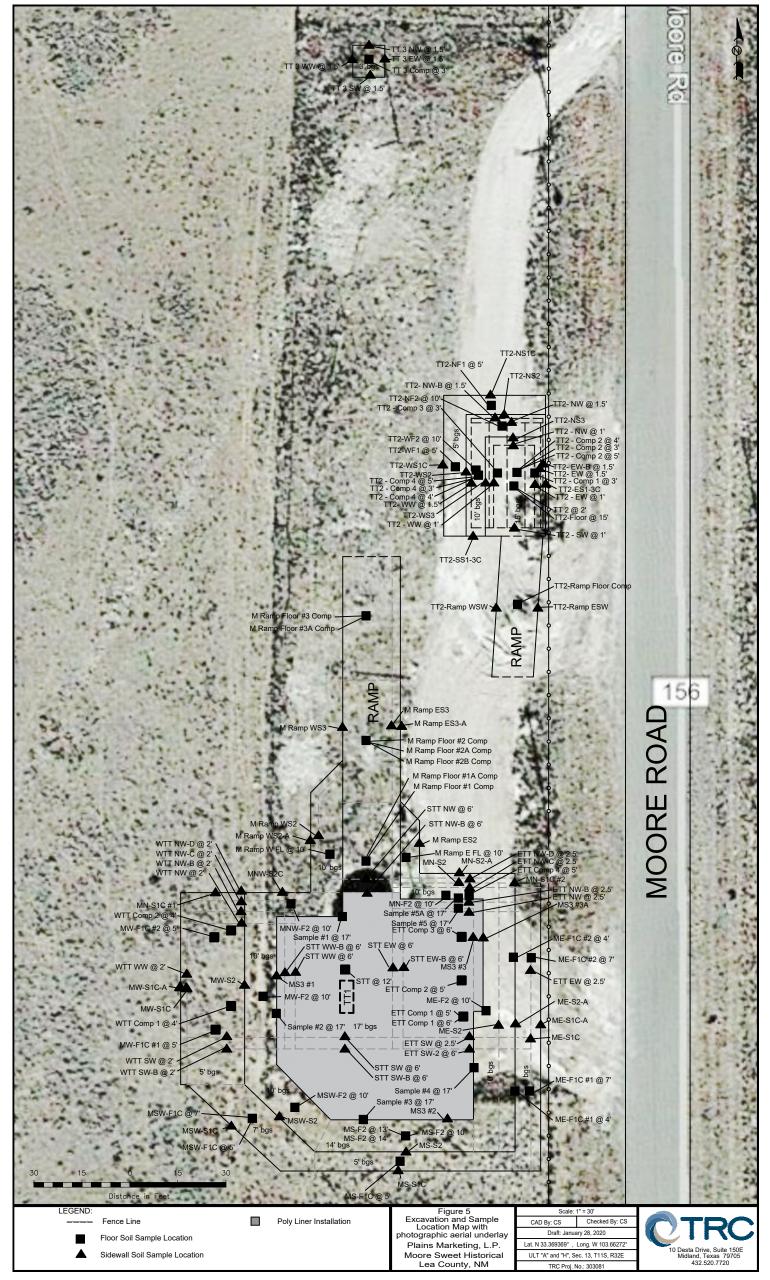




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CONCENTRATIONS OF BENZENE, BTEX, TPH, AND CHLORIDE IN SOIL MOORE SWEET HISTORICAL PLAINS MARKETING, L.P. LEA COUNTY, NM SRS# Moore Sweet Historical

					Methods: E	PA SW 846-802	1B, 5030				Methods:			Method:
	SAMPLE	SAMPLE	STATUS			ETHYL-	XYLENES.	TOTAL		1	EPA SW 846-80	15M		E300
SAMPLE LOCATION	DATE	DEPTH		BENZENE (mg/Kg)	TOLUENE (mg/Kg)	BENZENE (mg/Kg)	TOTAL (mg/Kg)	BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	GRO+DRO (mg/Kg)	ORO (mg/Kg)	TOTAL TPH (mg/Kg)	CHLORIDE (mg/Kg)
NTT 1A @ 8'	10/9/2018	8'	Excavated	-	-	-	-	-	<10.0	42.7	42.7	<10.0	42.7	-
TT 1 @ 14'	11/9/2018	14'	Excavated	-	-	-	-	-	69.4	1,770	1,839	242	2,081.4	128
ETT Comp 1 @ 5'	11/9/2018	5'	Excavated	-	-	-	-	-	<10.0	185	185	32.1	217.1	512
ETT Comp 2 @ 5'	11/9/2018	5'	Excavated	-	-	-	-	-	<10.0	15.2	15.2	<10.0	15.2	464
ETT - NW @ 2.5'	11/9/2018	2.5'	Excavated	-	-	-	-	-	<10.0	118	118	19.8	137.8	496
W TT Comp 2 @ 4'	11/9/2018	4'	Excavated	-	-	-	-	-	<10.0	32.7	33	11.6	44.3	48.0
W TT Comp 1 @ 4'	11/9/2018	4'	Excavated	-	-	-	-	-	<10.0	33.9	34	12.3	46.2	416
W TT - SW @ 2'	11/9/2018	2'	Excavated	-	-	-	-	-	<10.0	149	149	77.0	226.0	48.0
W TT - WW @ 2'	11/9/2018	2'	Excavated	-	-	-	-	-	<10.0	33.0	33	28.7	61.7	560
W TT - NW @ 2'	11/9/2018	2'	Excavated	-	-	-	-	-	<10.0	106	106	70.4	176.4	80.0
S TT @ 12'	11/9/2018	12'	Excavated	-	-	-	-	-	53.9	2,410	2,463.9	328	2,791.9	80.0
S TT - EW @ 6'	11/9/2018	6'	Excavated	-	-	-	-	-	32.0	2,110	2,142.0	323	2,465.0	384
S TT - NW @ 6'	11/9/2018	6'	Excavated	-	-	-	-	-	101	2,950	3,051	373	3,424	320
S TT - SW @ 6'	11/9/2018	6'	Excavated	-	-	-	-	-	31.8	1,050	1,081.8	161	1,242.8	192
S TT - WW @ 6'	11/9/2018	6'	Excavated	-	-	-	-	-	85.8	3,520	3,605.8	548	4,153.8	576
TT 2 @ 2'	11/9/2018	2'	Excavated	-	-	-	-	-	<10.0	348	348	171	519	176
TT 2 - WW @ 1'	11/9/2018	1'	Excavated	-	-	-	-	-	<10.0	249	249	147	396	320
TT 2 - NW @ 1'	11/9/2018	1'	Excavated	-	-	-	-	-	<10.0	70.8	71	34.6	105.4	208
TT 2 - EW @ 1'	11/9/2018	1'	Excavated	-	-	-	-	-	<10.0	249	249	108	357	16.0
TT 2 - SW @ 1'	11/9/2018	1'	Excavated	-	-	-	-	-	<10.0	49.7	50	39.5	89.2	208
TT 3 Comp @ 3'	11/9/2018	3'	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
TT 3 - NW @ 1.5'	11/9/2018	1.5'	In-Situ	-	-	-	-	-	<10.0	25.9	25.9	12.1	38.0	<16.0
TT 3 - SW @ 1.5'	11/9/2018	1.5'	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
TT 3 - WW @ 1.5'	11/9/2018	1.5'	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
TT 3 - EW @ 1.5'	11/9/2018	1.5'	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	13.8	13.8	<16.0
<u> </u>														
ETT Comp 3 @ 6'	11/13/2018	6'	Excavated	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	320
ETT - SW @ 2.5'	11/13/2018	2.5'	Excavated	-	-	-	-	-	<10.0	13.2	13.2	<10.0	13.2	160
ETT - SW-2 @ 6"	11/13/2018	6"	Excavated	-	-	-	-	-	<10.0	15.6	15.6	<10.0	15.6	672
ETT EW @ 2.5'	11/13/2018	2.5'	Excavated	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	304
<u> </u>														
TT-1 @ 15'	12/12/2018	15'	Excavated	< 0.0964	0.934	< 0.501	1.69	2.624	490	1,820	2,310	143	2,453	23.0
TT-1 @ 16"	12/12/2018	16'	Excavated	< 0.0962	0.983	< 0.500	1.89	2.873	533	1,660	2,193	118	2,311	180
TT-1 @ 17'	12/12/2018	17'	Excavated	< 0.200	1.27	< 0.200	< 0.399	1.27	725	2,150	2,875	150	3,025	34.6

CONCENTRATIONS OF BENZENE, BTEX, TPH, AND CHLORIDE IN SOIL MOORE SWEET HISTORICAL PLAINS MARKETING, L.P. LEA COUNTY, NM SRS# Moore Sweet Historical

					Methods: E	PA SW 846-802	1B, 5030				Methods:			Method: E300
	SAMPLE	SAMPLE				ETHYL-	XYLENES,	TOTAL		1	EPA SW 846-80	15M		
SAMPLE LOCATION	DATE	DEPTH	STATUS	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	BENZENE (mg/Kg)	TOTAL (mg/Kg)	BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	GRO+DRO (mg/Kg)	ORO (mg/Kg)	TOTAL TPH (mg/Kg)	CHLORIDE (mg/Kg)
TT-1 @ 18'	12/12/2018	18'	Risk	0.0849	0.0509	0.412	2.502	3.0498	501	1,270	1,771	114	1,885	460
TT-1 @ 19'	12/12/2018	19'	Risk	0.0379	1.97	0.306	2.386	4.6999	565	1,510	2,075	125	2,200	70.4
TT-1 @ 20'	12/12/2018	20'	Risk	< 0.000385	0.00483	0.0169	0.1044	0.12613	448	1,230	1,678	97.6	1,775.6	57.4
TT-1 @ 21'	12/12/2018	21'	Risk	< 0.0200	0.740	0.213	2.44	3.393	454	1,200	1,654	102	1,756	-
TT-1 @ 22'	12/12/2018	22'	Risk	< 0.00998	0.610	0.164	1.735	2.509	554	1,470	2,024	132	2,156	-
TT-1 @ 23'	12/12/2018	23'	Risk	< 0.00996	< 0.00996	< 0.00996	0.0837	0.0837	52.9	492	544.9	46.8	591.7	-
TT-1 @ 24'	12/12/2018	24'	Risk	< 0.00202	< 0.00202	0.00211	0.0265	0.02861	78.1	561	639.1	50.9	690.0	-
TT-1 @ 25'	12/12/2018	25'	Risk	< 0.00200	< 0.00200	< 0.00200	< 0.00400	< 0.00400	<15.0	117	117	<15.0	117	-
TT-1 @ 26'	2/13/2019	26'	Risk	0.111	0.0855	< 0.0199	0.152	0.3485	35.8	209	245	<15.0	244.8	-
TT-1 @ 27'	2/13/2019	27'	Risk	0.113	0.656	0.134	2.14	3.043	280	879	1,159	58.7	1,217.7	-
TT-1 @ 28'	2/13/2019	28'	Risk	0.106	< 0.00946	0.0269	0.1067	0.2396	31.0	176	207.0	<13.6	207.0	-
TT-1 @ 29'	2/13/2019	29'	Risk	< 0.00202	0.0320	0.00387	0.04936	0.08523	55.1	286	341.1	24.5	365.6	-
TT-1 @ 30'	2/13/2019	30'	Risk	< 0.000383	0.00395	< 0.000563	0.00477	0.00872	<15.0	92.2	92.2	<15.0	92.2	-
ETT - NW - B @ 2.5'	4/3/2019	2.5'	Excavated	<0.0198	<0.0198	<0.0198	< 0.0395	< 0.0395	<3.95	31.0	31.0	<25.1	31.0	641
TT2 - Comp 1 @ 3'	4/3/2019	3'	Excavated	< 0.0193	< 0.0193	< 0.0193	< 0.0387	< 0.0387	<3.87	40.2	40.2	<25.2	40.2	85.6
TT2 - Comp 2 @ 3'	4/3/2019	3'	Excavated	< 0.0183	< 0.0183	< 0.0183	< 0.0366	< 0.0366	<3.66	184	184	<24.8	184	30.3
TT2 - Comp 3 @ 3'	4/3/2019	3'	Excavated	< 0.0198	< 0.0198	< 0.0198	< 0.0395	< 0.0395	<3.95	68.3	68.3	<25.0	68.3	42.3
TT2 - Comp 4 @ 3'	4/3/2019	3'	Excavated	< 0.0178	< 0.0178	< 0.0178	< 0.0357	< 0.0357	<3.57	153	153	<25.2	153	14.9
TT2 - WW @ 1.5'	4/3/2019	1.5'	Excavated	< 0.0178	< 0.0178	< 0.0178	< 0.0356	< 0.0356	<3.56	38.5	38.5	<25.0	38.5	176
TT2 - NW @ 1.5'	4/3/2019	1.5'	Excavated	< 0.0185	< 0.0185	< 0.0185	< 0.0370	< 0.0370	<3.70	104	104	<25.1	104	128
TT2 - EW @ 1.5'	4/3/2019	1.5'	Excavated	< 0.0193	< 0.0193	< 0.0193	< 0.0386	< 0.0386	<3.86	106	106	<25.1	106	<9.98
WTT - NW - B @ 2'	4/4/2019	2'	Excavated	< 0.0184	< 0.0184	< 0.0184	< 0.0368	< 0.0368	<3.68	86.5	86.5	<25.0	86.5	100
WTT - SW - B @ 2'	4/4/2019	2'	Excavated	< 0.0196	< 0.0196	< 0.0196	< 0.0392	< 0.0392	<3.92	76.3	76.3	<24.9	76.3	159
STT-EW-B @ 6'	4/16/2019	6'	Excavated	<0.0996	3.07	4.56	24.5	32.13	526	5,470	5,996	145	6,141	1,770
STT-NW-B @ 6'	4/16/2019	6'	Excavated	< 0.0400	< 0.0400	<0.0400	0.364	0.364	126	1,210	1,336	28.9	1,364.9	48.0
STT-SW-B @ 6'	4/16/2019	6'	Excavated	< 0.0200	<0.0200	0.0838	0.236	0.3198	14.2	57.2	71.4	<25.2	79.58	99.1
STT-WW-B @ 6'	4/16/2019	6'	Excavated	<0.0200	<0.0200	0.698	4.12	4.818	661	6,280	6,941	196	7,137	63.3
ETT-Comp 1 @ 6'	4/17/2019	6'	Excavated	< 0.0179	< 0.0179	< 0.0179	< 0.0357	< 0.0357	<3.57	29.3	29.3	<24.8	29.3	615
ETT-Comp 1 @ 5'	4/17/2019	5'	Excavated	<0.0179	<0.0179	<0.0179	<0.0357	<0.0357	<3.57	29.3	29.3	<24.8	29.3 291	615 724
ETT-NW-C @ 2.5'	4/17/2019	2.5'	Excavated	<0.0171	<0.0171	<0.0171	<0.0342	<0.0342	<3.42	359	359	<25.2	291 359	197
L11-111-C @ 2.5	4/1//2019	2.3	Encavaled	-0.01/1	-0.01/1	-0.01/1	-0.0342	-0.0342	-5.72	559	559	~2.30	337	197

CONCENTRATIONS OF BENZENE, BTEX, TPH, AND CHLORIDE IN SOIL MOORE SWEET HISTORICAL PLAINS MARKETING, L.P. LEA COUNTY, NM SRS# Moore Sweet Historical

					Methods: E	PA SW 846-802	1B, 5030				Methods:			Method:
	SAMPLE	SAMPLE				ETHYL-	XYLENES.	TOTAL		1	EPA SW 846-80	15M		E300 CHLORIDE (mg/Kg)
SAMPLE LOCATION	DATE	DEPTH	STATUS	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	BENZENE (mg/Kg)	TOTAL (mg/Kg)	BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	GRO+DRO (mg/Kg)	ORO (mg/Kg)	TOTAL TPH (mg/Kg)	
WTT-NW-C @ 2'	4/17/2019	2'	Excavated	< 0.0189	< 0.0189	< 0.0189	< 0.0378	< 0.0378	<3.78	<24.8	<24.8	<24.8	<24.8	965
TT2 Comp 2 @ 4'	4/17/2019	4'	Excavated	< 0.0170	< 0.0170	< 0.0170	< 0.0340	< 0.0340	<3.40	399	399	<37.2	399	35.1
TT2 - Comp 4 @ 4'	4/17/2019	4'	Excavated	< 0.0185	< 0.0185	< 0.0185	< 0.0370	< 0.0370	<3.70	275	275	<126	275	30.8
TT2-NW-B @ 1.5'	4/17/2019	1.5'	Excavated	< 0.0192	< 0.0192	< 0.0192	< 0.0383	< 0.0383	<3.83	41.3	41	<25.0	41.3	136
TT2-EW-B @ 1.5'	4/17/2019	1.5'	Excavated	< 0.0172	< 0.0172	< 0.0172	< 0.0343	< 0.0343	<3.43	<25.2	<25.2	<25.2	<25.2	51.4
ETT-NW-D @ 2.5'	8/14/2019	2.5'	Excavated	<0.0178	<0.0178	<0.0178	< 0.0356	< 0.0356	<49.6	100	100	59.6	160	861
WTT-NW-D @ 2'	8/14/2019	2'	Excavated	<0.0197	<0.0197	<0.0197	< 0.0394	< 0.0394	<49.9	321	321	138	459	130
TT2 Comp 2 @ 5'	8/14/2019	5'	Excavated	< 0.0192	< 0.0192	< 0.0192	< 0.0384	< 0.0384	<50.0	960	960	218	1178	53.3
TT2 - Comp 4 @ 5'	8/14/2019	5'	Excavated	<0.0172	<0.0192	<0.0172	<0.0353	<0.0353	<50.0	1900	1,900	376	2276	24.5
112 - Comp + @ 5	8/14/2019	5	Excavated	<0.0177	<0.0177	<0.0177	<0.0355	<0.0555	<50.0	1900	1,900	570	2270	24.5
MN-S1C #1	9/24/2019	0 - 5'	In-Situ	< 0.00105	< 0.00105	< 0.00211	< 0.00211	< 0.00211	<26.3	<26.3	<26.3	<26.3	<26.3	29.0
MW-S1C	9/24/2019	0 - 5'	Excavated	< 0.00102	< 0.00102	< 0.00204	< 0.00102	< 0.00211	<25.5	<25.5	<25.5	<25.5	<25.5	695
MW-F1C #1 @ 5'	9/24/2019	5'	In-Situ	< 0.00102	< 0.00106	< 0.00213	< 0.00102	< 0.00106	<26.6	<26.6	<26.6	<26.6	<26.6	59.2
MW-F1C #2 @ 5'	9/24/2019	5'	In-Situ	< 0.00106	< 0.00106	< 0.00213	< 0.00106	< 0.00106	<26.6	<26.6	<26.6	<26.6	<26.6	42.6
MSW-S1C	9/24/2019	0 - 5'	In-Situ	< 0.00133	< 0.00133	< 0.00267	< 0.00133	< 0.00267	<33.3	<33.3	<33.3	<33.3	<33.3	86.7
MSW-F1C @ 5'	9/24/2019	5'	Excavated	< 0.00102	< 0.00102	< 0.00204	< 0.00102	< 0.00204	<25.5	186	186	<25.5	186	42.4
MS-S1C	9/24/2019	0 - 5'	In-Situ	< 0.00103	< 0.00103	< 0.00206	< 0.00103	< 0.00206	<25.8	<25.8	<25.8	<25.8	<25.8	596
MS-F1C @ 5'	9/24/2019	5'	In-Situ	< 0.00109	< 0.00109	< 0.00217	< 0.00109	< 0.00109	<27.2	<27.2	<27.2	<27.2	<27.2	124
ME-S1C	9/24/2019	0 - 4'	Excavted	< 0.00105	< 0.00105	< 0.00211	< 0.00105	< 0.00105	<26.3	46.6	46.6	<26.3	46.6	2100
ME-F1C #1 @ 4'	9/24/2019	4'	Excavated	< 0.00112	< 0.00112	< 0.00225	< 0.00112	< 0.00225	<28.1	<28.1	<28.1	<28.1	<28.1	603
ME-F1C #2 @ 4'	9/24/2019	4'	Excavated	< 0.00108	< 0.00108	< 0.00215	< 0.00108	< 0.00215	<26.9	<26.9	<26.9	<26.9	<26.9	4050
MN-S1C #2	9/24/2019	0 - 4'	In-Situ	< 0.00105	< 0.00105	< 0.00211	< 0.00105	< 0.00211	<26.3	<26.3	<26.3	<26.3	<26.3	197
MNW-S2	9/24/2019	0 - 10'	In-Situ	< 0.00101	< 0.00101	< 0.00202	< 0.00101	< 0.00202	<25.3	87.0	87.0	<25.3	87.0	214
MNW-F2 @ 10'	9/24/2019	10'	In-Situ	< 0.00109	< 0.00109	< 0.00217	< 0.00109	< 0.00217	<27.2	<27.2	<27.2	<27.2	<27.2	9.26
MW-S2	9/24/2019	5' - 10'	In-Situ	< 0.00102	< 0.00102	< 0.00204	< 0.00102	< 0.00204	<25.5	61.1	61.1	<25.5	61.1	109
MW-F2 @ 10'	9/24/2019	10'	In-Situ	< 0.00109	< 0.00109	< 0.00217	< 0.00109	< 0.00217	<27.2	<27.2	<27.2	<27.2	<27.2	33.7
MSW-S2	9/24/2019	5' - 10'	In-Situ	< 0.00104	< 0.00104	< 0.00208	< 0.00104	< 0.00208	<26.0	<26.0	<26.0	<26.0	<26.0	509
MSW-F2 @ 10'	9/24/2019	10'	In-Situ	< 0.00111	< 0.00111	< 0.00222	< 0.00111	< 0.00222	<27.8	<27.8	<27.8	<27.8	<27.8	353
MS-S2	9/24/2019	5' - 10'	In-Situ	< 0.00108	< 0.00108	< 0.00215	< 0.00108	< 0.00215	<26.9	<26.9	<26.9	<26.9	<26.9	348
MS-F2 @ 10'	9/24/2019	10'	Excavated	< 0.00108	< 0.00108	< 0.00215	< 0.00108	< 0.00215	<26.9	620	620	149	769	61.3
ME-S2	9/24/2019	5' - 10'	Excavated	< 0.00122	< 0.00122	< 0.00244	< 0.00122	< 0.00244	<30.5	<30.5	<30.5	<30.5	<30.5	1030
ME-F2 @ 10'	9/24/2019	10'	In-Situ	< 0.00112	< 0.00112	< 0.00225	< 0.00112	< 0.00225	<28.1	<28.1	<28.1	<28.1	<28.1	372
MN-S2	9/24/2019	5' - 10'	Excavated	< 0.00102	< 0.00102	< 0.00204	< 0.00102	< 0.00204	<25.5	<25.5	<25.5	<25.5	<25.5	1080

CONCENTRATIONS OF BENZENE, BTEX, TPH, AND CHLORIDE IN SOIL MOORE SWEET HISTORICAL PLAINS MARKETING, L.P. LEA COUNTY, NM SRS# Moore Sweet Historical

					Methods: E	PA SW 846-802	1B, 5030				Methods:			Method:
	SAMPLE	SAMPLE				ETHYL-	XYLENES,	TOTAL		1	EPA SW 846-80	15M		E300
SAMPLE LOCATION	DATE	DEPTH	STATUS	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	BENZENE (mg/Kg)	TOTAL (mg/Kg)	BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	GRO+DRO (mg/Kg)	ORO (mg/Kg)	TOTAL TPH (mg/Kg)	CHLORIDE (mg/Kg)
MN-F2 @ 10'	9/24/2019	10'	In-Situ	< 0.00104	< 0.00104	< 0.00208	< 0.00104	< 0.00208	<26.0	<26.0	<26.0	<26.0	<26.0	138
MS3 #1	9/24/2019	10' - 17'	In-Situ	< 0.00101	< 0.00101	< 0.00202	< 0.00101	< 0.00202	<253	<25.3	<25.3	<25.3	<25.3	48.8
MS3 #2	9/24/2019	10' - 17'	In-Situ	< 0.00106	< 0.00106	< 0.00106	< 0.00213	< 0.00213	<26.6	<26.6	<26.6	<26.6	<26.6	551
MS3 #3	9/24/2019	10' - 17'	Excavated	< 0.00102	< 0.00102	< 0.00102	< 0.00204	< 0.00204	<25.5	<25.5	<25.5	<25.5	<25.5	962
M Ramp ES2	9/24/2019	0 - 10'	In-Situ	< 0.00104	< 0.00104	< 0.00208	< 0.00104	< 0.00208	<26.0	<26.0	<26.0	<26.0	<26.0	31.2
M Ramp E FL @ 10'	9/24/2019	10'	In-Situ	< 0.00106	< 0.00106	< 0.00213	< 0.00106	< 0.00106	<26.6	<26.6	<26.6	<26.6	<26.6	36.3
M Ramp ES3	9/24/2019	0 - 17'	Excavated	< 0.00101	< 0.00101	< 0.00202	< 0.00101	< 0.00202	<25.3	<25.3	<25.3	<25.3	<25.3	741
M Ramp WS3	9/24/2019	0 - 17'	In-Situ	< 0.00101	< 0.00101	< 0.00202	< 0.00101	< 0.00202	<25.3	<25.3	<25.3	<25.3	<25.3	304
M Ramp WS2	9/24/2019	0 - 10'	Excavated	< 0.00106	< 0.00106	< 0.00213	< 0.00106	< 0.00106	<26.6	136	136	<26.6	136	9.69
M Ramp W FL @ 10'	9/24/2019	10'	In-Situ	< 0.00106	< 0.00106	< 0.00213	< 0.00106	< 0.00106	<26.6	<26.6	<26.6	<26.6	<26.6	34.5
M Ramp Floor #1 Comp	9/24/2019	10' - 17'	Excavated	< 0.00111	< 0.00111	< 0.00222	< 0.00111	< 0.00222	<27.8	108	108	<27.8	108	165
M Ramp Floor #2 Comp	9/24/2019	5' - 10'	Excavated	< 0.00105	< 0.00105	< 0.00211	< 0.00105	< 0.00211	<26.3	179	179	<26.3	179	288
M Ramp Floor #3 Comp	9/24/2019	0 - 5'	Excavated	< 0.00102	< 0.00102	< 0.00204	< 0.00102	< 0.00204	<25.5	117	117	<25.5	117	149
Sample #1 @ 17'	9/24/2019	17'	In-Situ	< 0.00111	< 0.00111	< 0.00222	< 0.00111	< 0.00222	<27.8	<27.8	<27.8	<27.8	<27.8	83.5
Sample #2 @ 17'	9/24/2019	17'	In-Situ	< 0.00109	< 0.00109	< 0.00217	< 0.00109	< 0.00217	<27.2	<27.2	<27.2	<27.2	<27.2	46.4
Sample #3 @ 17'	9/24/2019	17'	In-Situ	< 0.00110	< 0.00110	< 0.00220	< 0.00110	< 0.00220	<27.5	<27.5	<27.5	<27.5	<27.5	383
Sample #4 @ 17'	9/24/2019	17'	In-Situ	< 0.00111	< 0.00111	< 0.00222	< 0.00111	< 0.00222	<27.8	<27.8	<27.8	<27.8	<27.8	150
Sample #5 @ 17'	9/24/2019	17'	Excavated	< 0.00109	< 0.00109	< 0.00217	< 0.00109	< 0.00217	<27.2	<27.2	<27.2	<27.2	<27.2	801
TT-2 NS1C	9/27/2019	0 - 5'	In-Situ	< 0.00108	< 0.00108	< 0.00108	< 0.00215	< 0.00215	<26.9	<26.9	<26.9	<26.9	<26.9	158
TT-2 NF1 @ 5'	9/27/2019	5'	In-Situ	< 0.00104	< 0.00104	< 0.00104	< 0.00208	< 0.00208	<26.0	<26.0	<26.0	<26.0	<26.0	47.3
TT-2 WS1C	9/27/2019	0 - 5'	In-Situ	< 0.00103	< 0.00103	< 0.00103	< 0.00206	< 0.00206	<25.8	<25.8	<25.8	<25.8	<25.8	32.0
TT-2 WF1 @ 5'	9/27/2019	5'	In-Situ	< 0.00108	< 0.00108	< 0.00108	< 0.00215	< 0.00215	<26.9	<26.9	<26.9	<26.9	<26.9	20.4
TT-2 SS1-3C	9/27/2019	0 - 15'	In-Situ	< 0.00104	< 0.00104	< 0.00104	< 0.00208	< 0.00208	<26.0	<26.0	<26.0	<26.0	<26.0	79.1
TT-2 NS2	9/27/2019	5' - 10'	In-Situ	< 0.00104	< 0.00104	< 0.00104	< 0.00208	< 0.00208	<26.0	<26.0	<26.0	<26.0	<26.0	175
TT-2 NF2 @ 10'	9/27/2019	10'	In-Situ	< 0.00104	< 0.00104	< 0.00104	< 0.00208	< 0.00208	<26.0	<26.0	<26.0	<26.0	<26.0	31.2
TT-2 WS2	9/27/2019	5' - 10'	In-Situ	< 0.00104	< 0.00104	< 0.00104	< 0.00208	< 0.00208	<26.0	<26.0	<26.0	<26.0	<26.0	87.0
TT-2 WF2@ 10'	9/27/2019	10'	In-Situ	< 0.00111	< 0.00111	< 0.00111	< 0.00222	< 0.00222	<27.8	<27.8	<27.8	<27.8	<27.8	57.5
TT-2 NS3	9/27/2019	10' - 15'	In-Situ	< 0.00105	< 0.00105	< 0.00105	< 0.00211	< 0.00211	<26.3	<26.3	<26.3	<26.3	<26.3	55.6
TT-2 WS3	9/27/2019	10' - 15'	In-Situ	< 0.00106	< 0.00106	< 0.00106	< 0.00213	< 0.00213	<26.6	<26.6	<26.6	<26.6	<26.6	39.8
TT-2 ES1-3C	9/27/2019	0 - 15'	In-Situ	< 0.00103	< 0.00103	< 0.00103	< 0.00206	< 0.00206	<25.8	<25.8	<25.8	<25.8	<25.8	81.1
TT-2 Floor @ 15'	9/27/2019	15'	In-Situ	< 0.00106	< 0.00106	< 0.00106	< 0.00213	< 0.00213	<26.6	<26.6	<26.6	<26.6	<26.6	38.5
TT-2 Ramp WSW	9/27/2019	0 - 15'	In-Situ	< 0.00101	< 0.00101	< 0.00101	< 0.00202	< 0.00202	<25.3	<25.3	<25.3	<25.3	<25.3	42.9
TT-2 Ramp ESW	9/27/2019	0 - 15'	In-Situ	< 0.00102	< 0.00102	< 0.00102	< 0.00204	< 0.00204	<25.5	<25.5	<25.5	<25.5	<25.5	545
TT-2 Ramp Floor Comp	9/27/2019	0 - 15'	In-Situ	< 0.00105	< 0.00105	< 0.00105	< 0.00211	< 0.00211	<26.3	<26.3	<26.3	<26.3	<26.3	69.7
MW-S1C-A	10/17/2019	0 - 5'	In-Situ	-	-	-	-	-	-	-		-	-	114

CONCENTRATIONS OF BENZENE, BTEX, TPH, AND CHLORIDE IN SOIL MOORE SWEET HISTORICAL PLAINS MARKETING, L.P. LEA COUNTY, NM SRS# Moore Sweet Historical

					Methods: E	PA SW 846-8021	1B, 5030				Methods:			Method:
	SAMPLE	SAMPLE	STATUS			ETHYL-	XYLENES,	TOTAL	EPA SW 846-8015M					E300
SAMPLE LOCATION	DATE	DEPTH	514105	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	BENZENE (mg/Kg)	TOTAL (mg/Kg)	BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	GRO+DRO (mg/Kg)	ORO (mg/Kg)	TOTAL TPH (mg/Kg)	CHLORIDE (mg/Kg)
MSW-F1C @ 7'	10/17/2019	7'	In-Situ	-	-	-	-	-	-	-		-	83.6	-
MS-F2 @ 13'	10/17/2019	13'	Excavated	-	-	-	-	-	-	-		-	550	-
ME-S1C-A	10/18/2019	0 - 7'	In-Situ	-	-	-	-	-	-	-		-	-	439
ME-F1C #1 @ 7'	10/18/2019	7'	In-Situ	-	-	-	-	-	-	-		-	-	72.2
ME-F1C #2 @ 7'	10/18/2019	7'	In-Situ	-	-	-	-	-	-	-		-	-	158
ME-S2-A	10/18/2019	5' - 10'	In-Situ	-	-	-	-	-	-	-		-	-	285
MN-S2-A	10/21/2019	5' - 10'	In-Situ	-	-	-	-	-	-	-		-	-	78.1
MS3 #3A	10/21/2019	10' - 17'	In-Situ	-	-	-	-	-	-	-		-	-	75.1
Sample #5A @ 17'	10/21/2019	17'	In-Situ	-	-	-	-	-	-	-		-	-	13.9
M Ramp ES3-A	10/22/2019	0 - 17'	In-Situ	-	-	-	-	-	-	-		-	-	21.8
M Ramp WS2-A	10/22/2019	0 - 10'	In-Situ	-	-	-	-	-	-	-		-	<27.8	-
M Ramp Floor #1A Comp	10/22/2019	10' - 17'	In-Situ	-	-	-	-	-	-	-		-	<27.2	-
M Ramp Floor #2A Comp	10/22/2019	5.5' - 10.5'	Excavated	-	-	-	-	-	-	-		-	115	-
M Ramp Floor #3A Comp	10/22/2019	0 - 5'	In-Situ	-	-	-	-	-	-	-		-	<27.5	-
South Stockpile	10/23/2019	-	-	< 0.00106	< 0.00106	< 0.00106	< 0.00213	< 0.00213	<26.6	74.6	74.6	<26.6	74.6	209
North Stockpile	10/23/2019	-	-	< 0.00103	< 0.00103	< 0.00103	< 0.00206	< 0.00206	<25.8	50.9	50.9	<25.8	50.9	164
MS-F2 @ 14'	11/7/2019	14'	In-Situ	-	-	-	-	-	<27.5	38.3	38.3	<27.5	38.3	-
M Ramp Floor #2B Comp	11/7/2019	6' - 11'	In-Situ	-	-	-	-	-	<29.8	<29.8	<29.8	<29.8	<29.8	-
NMOCD I	NMOCD Regulatory Guideline			10	-	-	-	50	-	-		-	100	600

Appendix A NMOCD and NMSLO Correspondence

Stanley, Curtis D.

From:	Amber L Groves <algroves@paalp.com></algroves@paalp.com>
Sent:	Friday, January 31, 2020 9:59 AM
То:	Stanley, Curtis D.
Subject:	[EXTERNAL] FW: 1RP-5024 - Plains Moore Sweet Historical - Initial Investigation
	Summary and Proposed Remediation Workplan

This is an **EXTERNAL** email. Do not click links or open attachments unless you validate the sender and know the content is safe.

From: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Sent: Thursday, September 6, 2018 8:54 AM
To: Mann, Ryan <rmann@slo.state.nm.us>; Lowry, Joel <JLowry@trcsolutions.com>; Hernandez, Christina, EMNRD
<Christina.Hernandez@state.nm.us>
Cc: Camille J Bryant <CJBryant@paalp.com>; Amber L Groves <ALGroves@paalp.com>
Subject: RE: 1RP-5024 - Plains Moore Sweet Historical - Initial Investigation Summary and Proposed Remediation Workplan [External]

Good morning Ms. Bryant:

Pardon for the revised decision on proposed remedial activity for 1RP-5024. After a discussion yesterday afternoon with District 2 and using time-series USGS data, the determination is that if the deepest depth of impact from the water table is <= 50 ft., then the impacted soil needs to be removed. In other words, at least 12 ft. of soil will need to be removed from the areas represented by TT-1 and WTT-1. Emplacement of a liner with 4 ft. removal will not be appropriate for this location. Please ensure that there are confirmation chloride data as well.

Thank you for your continued compliance.

Olivia Yu Environmental Specialist NMOCD, District I <u>Olivia.yu@state.nm.us</u> 575-393-6161 x113

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: Mann, Ryan <<u>rmann@slo.state.nm.us</u>> Sent: Wednesday, September 5, 2018 3:54 PM To: Yu, Olivia, EMNRD <<u>Olivia.Yu@state.nm.us</u>>; Lowry, Joel <<u>JLowry@trcsolutions.com</u>>; Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>> Cc: Camille J Bryant <<u>CJBryant@paalp.com</u>>; Amber L Groves <<u>ALGroves@paalp.com</u>> Released to Imaging: 7/29/2021 4:15:26 PM

Subject: RE: 1RP-5024 - Plains Moore Sweet Historical - Initial Investigation Summary and Proposed Remediation Workplan

NMSLO approves the additional delineation and the remediation plan.

Ryan Mann Remediation Specialist Field Operation Division (575) 392-3697 (505) 699-1989 New Mexico State Land Office 2827 N. Dal Paso Suite 117 Hobbs, NM 88240

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Tuesday, September 4, 2018 12:14 PM
To: Lowry, Joel <<u>JLowry@trcsolutions.com</u>>; Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>; Mann,
Ryan <<u>rmann@slo.state.nm.us</u>>
Cc: Camille J Bryant <<u>CJBryant@paalp.com</u>>; Amber L Groves <<u>ALGroves@paalp.com</u>>
Subject: RE: 1RP-5024 - Plains Moore Sweet Historical - Initial Investigation Summary and Proposed Remediation
Workplan

Mr. Lowry et al.:

As per our meeting this morning, NMOCD agrees with the proposed additional delineation and remediation plan for 1RP-5024. Please remember to submit field and laboratory chloride data for the location, in conjunction with photo documentation of the remediated area. Please inform if clarification or further information is required.

Like approval from NMSLO required. NMSLO may have additional concerns or stipulations.

Thanks, Olivia

From: Yu, Olivia, EMNRD Sent: Monday, August 27, 2018 8:04 AM To: 'Lowry, Joel' <<u>JLowry@trcsolutions.com</u>>; Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>; Mann, Ryan <<u>rmann@slo.state.nm.us</u>> Cc: Camille J Bryant <<u>CJBryant@paalp.com</u>>; Amber L Groves <<u>ALGroves@paalp.com</u>> Subject: RE: 1RP-5024 - Plains Moore Sweet Historical - Initial Investigation Summary and Proposed Remediation Workplan

Good morning Mr. Lowry:

Yes. Confirmed for 8 am MST, September 4, 2018.

Please note that the new C-141 form is online: http://www.emnrd.state.nm.us/OCD/forms.html

Thanks, Olivia Released to Imaging: 7/29/2021 4:15:26 PM

From: Lowry, Joel <<u>JLowry@trcsolutions.com</u>> Sent: Monday, August 27, 2018 7:58 AM To: Yu, Olivia, EMNRD <<u>Olivia.Yu@state.nm.us</u>>; Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>; Mann, Ryan <<u>rmann@slo.state.nm.us</u>>

Cc: Camille J Bryant <<u>CJBryant@paalp.com</u>>; Amber L Groves <<u>ALGroves@paalp.com</u>>

Subject: RE: 1RP-5024 - Plains Moore Sweet Historical - Initial Investigation Summary and Proposed Remediation Workplan

Ms. Yu,

Might you be able to squeeze us in on the 4th. Possibly around 8:00 AM? Thanks.

Respectfully,

Joel Lowry

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Friday, August 24, 2018 9:30 AM
To: Lowry, Joel <<u>JLowry@trcsolutions.com</u>>; Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>; Mann, Ryan <<u>rmann@slo.state.nm.us</u>>
Cc: Camille J Bryant <<u>CJBryant@paalp.com</u>>; Amber L Groves <<u>ALGroves@paalp.com</u>>
Subject: RE: 1RP-5024 - Plains Moore Sweet Historical - Initial Investigation Summary and Proposed Remediation Workplan

Good morning Joel:

I just spoke with Amber. Pardon for missing the meeting request. Currently, the meeting availability dates are August 28 and September 4-5. Preference for morning meeting, if possible.

Thanks, Olivia

From: Lowry, Joel <<u>ILowry@trcsolutions.com</u>> Sent: Monday, August 20, 2018 2:52 PM To: Yu, Olivia, EMNRD <<u>Olivia.Yu@state.nm.us</u>>; Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>; Mann, Ryan <<u>rmann@slo.state.nm.us</u>> Cc: Camille J Bryant <<u>CJBryant@paalp.com</u>>; Amber L Groves <<u>ALGroves@paalp.com</u>> Subject: 1RP-5024 - Plains Moore Sweet Historical - Initial Investigation Summary and Proposed Remediation Workplan

Please find attached the *Initial Investigation Summary and Proposed Remediation Workplan* that has been prepared for Plains' Moore Sweet Historical environmental remediation Site. The Site is located in Unit Letters "A&H", Section 13, Township 11 South, Range 32 East in Lea County, New Mexico on land administered by the New Mexico State Land Office. The Initial C-141 indicated that historical soil impacts were discovered during the reclamation of a facility.

We are hoping that we might be able to schedule a meeting one afternoon this week or sometime early next week to discuss this project in person. Might you take a look at your schedule and check your availability? If you have any questions or need any additional information, please feel free to contact Camille Bryant or myself by phone or email.

Released to Imaging: 7/29/2021 4:15:26 PM

Respectfully,

Joel Lowry Senior Project Manager



2771 Highway 214, Denver City, TX 79323 C: 432-466-4450 LinkedIn | Twitter | Blog | www.trcsolutions.com

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Stanley, Curtis D.

From:	Amber L Groves <algroves@paalp.com></algroves@paalp.com>
Sent:	Tuesday, August 27, 2019 8:51 AM
To:	Stanley, Curtis D.
Subject:	FW: 1RP-5024 - Plains Moore Sweet Historical - Alternative Sampling Plan
Attachments:	ApprovedSamplingPlan1RP-5024.pdf

Here is the approval of the alternative sampling plan

From: Hernandez, Christina, EMNRD <Christina.Hernandez@state.nm.us> Sent: Friday, November 2, 2018 5:22 PM To: Conder, Zachary <ZConder@trcsolutions.com> Cc: Camille J Bryant <CJBryant@paalp.com>; Amber L Groves <ALGroves@paalp.com>; rmann@slo.state.nm.us Subject: RE: 1RP-5024 - Plains Moore Sweet Historical - Alternative Sampling Plan [External]

Dear Mr. Conder:

Please clarify if any field data is available for chlorides as previously discussed (meeting OCD Hobbs, Plains, and TRC on September 4, 2018 at the OCD Hobbs office).

NMOCD approves the alternative remediation sampling plan submitted for 1RP-5024 with the following requirement:

 For the < 8 feet BGS excavation area, if discolored areas are encountered please collect a discrete soil samples for those discolored areas specifically.

Thanks, Christina Hernandez EMNRD-OCD Environmental Specialist 1625 N. French Drive Hobbs, NM 88240 575-393-6161 x111 Christina.Hernandez@state.nm.us

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: Conder, Zachary <<u>ZConder@trcsolutions.com</u>>

Sent: Tuesday, October 23, 2018 1:38 PM

Received by OCD: 1/31/2020 11:08:49 AM

To: Yu, Olivia, EMNRD <<u>Olivia.Yu@state.nm.us</u>>; Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>> Cc: <u>cibryant@paalp.com</u>; Amber L Groves (<u>ALGroves@paalp.com</u>) <<u>ALGroves@paalp.com</u>>; <u>rmann@slo.state.nm.us</u> Subject: [EXT] 1RP-5024 - Plains Moore Sweet Historical - Alternative Sampling Plan

Ms. Yu and Ms. Hernandez,

On behalf of Plains Marketing, LP, TRC proposes the following alternative sampling plan for the Moore Sweet Historical Release Site. TRC proposes the collection of discrete soil samples utilizing mechanical equipment from the sidewalls of the excavated area in each cardinal direction and base of the excavated areas for depths greater than 8 feet below ground surface (BGS). In areas where the excavated areas representative of every 600 square feet and composite method soil samples from the base of the excavated areas representative of every 600 square feet and composite method sidewall soil samples in each cardinal direction. The collected soil samples will be submitted to the laboratory for analysis of TPH and Chloride concentrations. Please find attached the soil chemistry table and site sample location map for your convenience.

Respectfully,

Zachary Conder Field Operations Manager



2771 State Highway 214, Denver City, TX 79323 | C: 432 234 5084 LinkedIn | Twitter | Blog | www.trcsolutions.com

From: Lowry, Joel Sent: Tuesday, October 23, 2018 2:25 PM To: Conder, Zachary <<u>ZConder@trcsolutions.com</u>> Subject: FW: 1RP-5024 - Plains Moore Sweet Historical - Initial Investigation Summary and Proposed Remediation Workplan

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Tuesday, September 4, 2018 1:14 PM
To: Lowry, Joel <<u>JLowry@trcsolutions.com</u>>; Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>; Mann, Ryan <<u>rmann@slo.state.nm.us</u>>
Cc: Camille J Bryant <<u>CJBryant@paalp.com</u>>; Amber L Groves <<u>ALGroves@paalp.com</u>>
Subject: RE: 1RP-5024 - Plains Moore Sweet Historical - Initial Investigation Summary and Proposed Remediation Workplan

Mr. Lowry et al.:

As per our meeting this morning, NMOCD agrees with the proposed additional delineation and remediation plan for 1RP-5024. Please remember to submit field and laboratory chloride data for the location, in conjunction with photo documentation of the remediated area. Please inform if clarification or further information is required.

Like approval from NMSLO required. NMSLO may have additional concerns or stipulations.

Thanks, Olivia

Received by OCD: 1/31/2020 11:08:49 AM

From: Yu, Olivia, EMNRD

Sent: Monday, August 27, 2018 8:04 AM

To: 'Lowry, Joel' <<u>JLowry@trcsolutions.com</u>>; Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>; Mann, Ryan <<u>rmann@slo.state.nm.us</u>>

Cc: Camille J Bryant <<u>CJBryant@paalp.com</u>>; Amber L Groves <<u>ALGroves@paalp.com</u>>

Subject: RE: 1RP-5024 - Plains Moore Sweet Historical - Initial Investigation Summary and Proposed Remediation Workplan

Good morning Mr. Lowry:

Yes. Confirmed for 8 am MST, September 4, 2018.

Please note that the new C-141 form is online: http://www.emnrd.state.nm.us/OCD/forms.html

Thanks, Olivia

From: Lowry, Joel <<u>JLowry@trcsolutions.com</u>>
Sent: Monday, August 27, 2018 7:58 AM
To: Yu, Olivia, EMNRD <<u>Olivia.Yu@state.nm.us</u>>; Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>;
Mann, Ryan <<u>rmann@slo.state.nm.us</u>>
Cc: Camille J Bryant <<u>CJBryant@paalp.com</u>>; Amber L Groves <<u>ALGroves@paalp.com</u>>
Subject: RE: 1RP-5024 - Plains Moore Sweet Historical - Initial Investigation Summary and Proposed Remediation
Workplan

Ms. Yu,

Might you be able to squeeze us in on the 4th. Possibly around 8:00 AM? Thanks.

Respectfully,

Joel Lowry

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Friday, August 24, 2018 9:30 AM
To: Lowry, Joel <<u>JLowry@trcsolutions.com</u>>; Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>; Mann, Ryan <<u>rmann@slo.state.nm.us</u>>
Cc: Camille J Bryant <<u>CJBryant@paalp.com</u>>; Amber L Groves <<u>ALGroves@paalp.com</u>>
Subject: RE: 1RP-5024 - Plains Moore Sweet Historical - Initial Investigation Summary and Proposed Remediation Workplan

Good morning Joel:

I just spoke with Amber. Pardon for missing the meeting request. Currently, the meeting availability dates are August 28 and September 4-5. Preference for morning meeting, if possible.

Released to Imaging: 7/29/2021 4:15:26 PM

Thanks, Olivia

From: Lowry, Joel <<u>JLowry@trcsolutions.com</u>> Sent: Monday, August 20, 2018 2:52 PM To: Yu, Olivia, EMNRD <<u>Olivia.Yu@state.nm.us</u>>; Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>; Mann, Ryan <<u>rmann@slo.state.nm.us</u>>

Cc: Camille J Bryant <<u>CJBryant@paalp.com</u>>; Amber L Groves <<u>ALGroves@paalp.com</u>> Subject: 1RP-5024 - Plains Moore Sweet Historical - Initial Investigation Summary and Proposed Remediation Workplan

Please find attached the *Initial Investigation Summary and Proposed Remediation Workplan* that has been prepared for Plains' Moore Sweet Historical environmental remediation Site. The Site is located in Unit Letters "A&H", Section 13, Township 11 South, Range 32 East in Lea County, New Mexico on land administered by the New Mexico State Land Office. The Initial C-141 indicated that historical soil impacts were discovered during the reclamation of a facility.

We are hoping that we might be able to schedule a meeting one afternoon this week or sometime early next week to discuss this project in person. Might you take a look at your schedule and check your availability? If you have any questions or need any additional information, please feel free to contact Camille Bryant or myself by phone or email.

Respectfully,

Joel Lowry Senior Project Manager



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Stanley, Curtis D.

From:	Amber L Groves <algroves@paalp.com></algroves@paalp.com>
Sent:	Monday, January 20, 2020 9:52 AM
То:	Stanley, Curtis D.
Subject:	[EXTERNAL] FW: [EXT] FW: Urgent!! 1RP-5024 Plains Marketing Moore Sweet Variance
	Request

This is an **EXTERNAL** email. Do not click links or open attachments unless you validate the sender and know the content is safe.

From: Mann, Ryan <rmann@slo.state.nm.us>
Sent: Thursday, November 14, 2019 4:02 PM
To: 'Billings, Bradford, EMNRD' <Bradford.Billings@state.nm.us>; Amber L Groves <ALGroves@paalp.com>
Subject: RE: [EXT] FW: Urgent!! 1RP-5024 Plains Marketing Moore Sweet Variance Request [External]

Ms. Groves,

NMSLO agrees with NMOCD regarding the variance. Please inform if this plan changes.

Ryan Mann Remediation Specialist Surface Resources Office: (575)392-3697 Cell: (505)699-1989 New Mexico State Land Office 914 N. Linam Street Hobbs, NM 88240 rmann@slo.state.nm.us



nmstatelands.org

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From: Billings, Bradford, EMNRD [mailto:Bradford.Billings@state.nm.us]
Sent: Friday, September 20, 2019 9:45 AM
To: Amber L Groves <<u>ALGroves@paalp.com</u>>; Mann, Ryan <<u>rmann@slo.state.nm.us</u>>
Subject: RE: [EXT] FW: Urgent!! 1RP-5024 Plains Marketing Moore Sweet Variance Request

9/20/2019

Amber Groves – PAALP

Re: 1RP-5024

As per your request for Variance on liner usage for placement in excavation, the following:

As outlined in your request and with additional clarification as relayed to OCD, including the possibility of additional horizontal definition and soil removal for/in excavation is hereby approved. Please indicate in Closure report and additional work and data. All other aspects of Rule 29 apply.

Please be mindful of any additional needs the State Land Office may have for this location and your efforts.

Thank you for your time and patience.

Yours

Bradford Billings EMNRD/OCD Santa Fe

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
Sent: Friday, September 20, 2019 8:34 AM
To: Billings, Bradford, EMNRD ; 'Mann, Ryan'
Subject: [EXT] FW: Urgent!! 1RP-5024 Plains Marketing Moore Sweet Variance Request

Bradford,

Here is the text that I sent this morning and I will forward the e-mail that I was attempting to attach with the alternative sampling plan next.

Amber

From: Amber L Groves Sent: Friday, September 20, 2019 9:15 AM To: 'Billings, Bradford, EMNRD' <<u>Bradford.Billings@state.nm.us</u>>; 'Mann, Ryan' <<u>rmann@slo.state.nm.us</u>> Subject: FW: Urgent!! 1RP-5024 Plains Marketing Moore Sweet Variance Request [External]

Good Morning, Bradford,

Per our conversation yesterday, Plains will ensure that the Moore Sweet location under 1RP-5024 is horizontally sampled utilizing the attached approved alternative sampling plan. The proposed 20 mil polyurethane liner, will encompass the entire area as characterized by TT-1 until horizontal samples indicate that TPH, BTEX and Chloride levels are below current NMOCD standards. 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: Billings, Bradford, EMNRD <<u>Bradford.Billings@state.nm.us</u>> Sent: Wednesday, September 18, 2019 5:34 PM To: Amber L Groves <<u>ALGroves@paalp.com</u>> Subject: RE: 1RP-5024 Plains Marketing Moore Sweet Variance Request [External]

Hi Amber,

I know there are others for Plains, yet to be resolved, but I will talk with you tomorrow about this one. Likely okay, but a few questions. Hope you are doing well!

Bradford

From: Amber L Groves <<u>ALGroves@paalp.com</u>> Sent: Wednesday, September 18, 2019 9:12 AM To: EMNRD-OCD-District1spills <<u>EMNRD-OCD-District1spills@state.nm.us</u>> Cc: Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>> Subject: [EXT] 1RP-5024 Plains Marketing Moore Sweet Variance Request

Good Morning,

Please find attached a variance request for 1RP-5024 Plains Marketing Moore Sweet Site. Please feel free to give me a call at (575)200-5517 should you have any questions.

Thank you,

Received by OCD: 1/31/2020 11:08:49 AM

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

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Appendix B Photo Documentation



Photographic Documentation

Client: Plains Marketing, L.P. Project Name: Moore Sweet Historical

Date: October 17, 2018

Photograph No. 1

Direction: Looking east

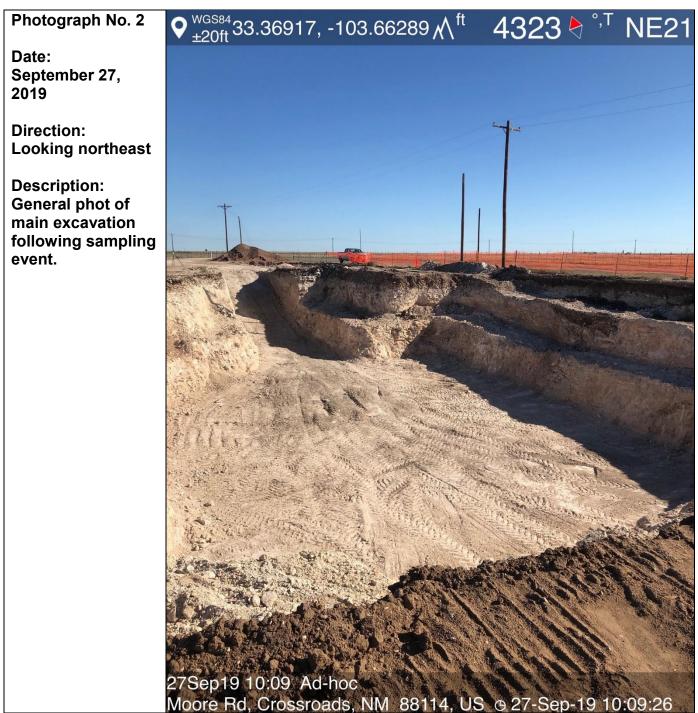
Description: Initial excavation activities at south end of impacted area. Prepared by: TRC Environmental Corporation Location: Lea County, New Mexico





Photographic Documentation

Client: Plains Marketing, L.P. Project Name: Moore Sweet Historical Prepared by: TRC Environmental Corporation Location: Lea County, New Mexico



Date:



Photographic Documentation

Client: Plains Marketing, L.P. Project Name: Moore Sweet Historical Prepared by: TRC Environmental Corporation Location: Lea County, New Mexico

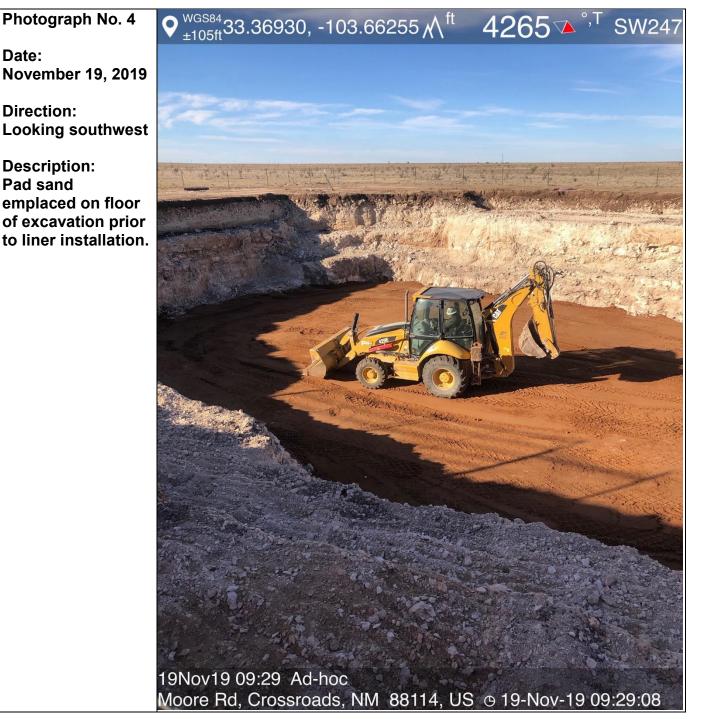


Date:



Photographic Documentation

Client: Plains Marketing, L.P. Project Name: Moore Sweet Historical Prepared by: TRC Environmental Corporation Location: Lea County, New Mexico



Date:



Photographic Documentation

Client: Plains Marketing, L.P. Project Name: Moore Sweet Historical

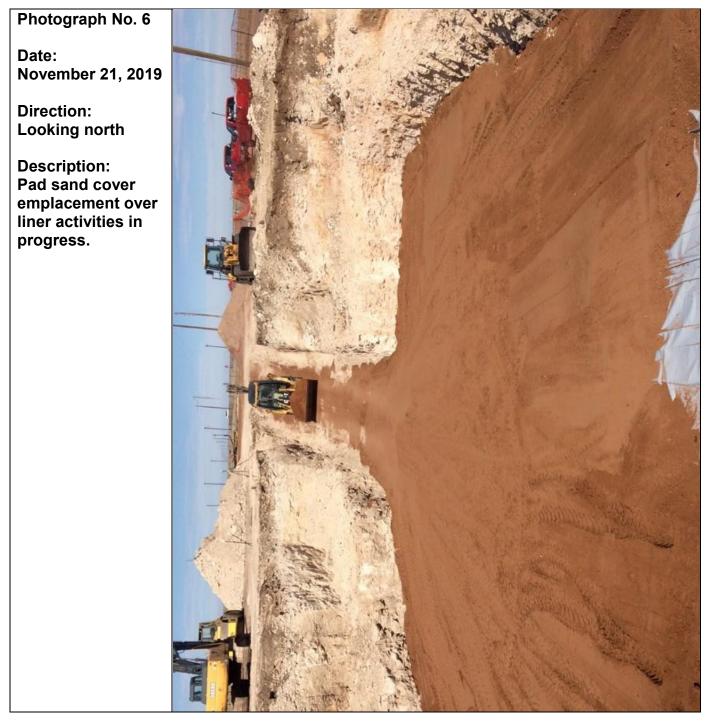
Prepared by: TRC Environmental Corporation Location: Lea County, New Mexico





Photographic Documentation

Client: Plains Marketing, L.P. Project Name: Moore Sweet Historical Prepared by: TRC Environmental Corporation Location: Lea County, New Mexico





Photographic Documentation

Client: Plains Marketing, L.P. Project Name: Moore Sweet Historical Prepared by: TRC Environmental Corporation Location: Lea County, New Mexico

Photograph No. 7 Date: November 21, 2019 Direction: Looking north Description: Backfill activities in progress.



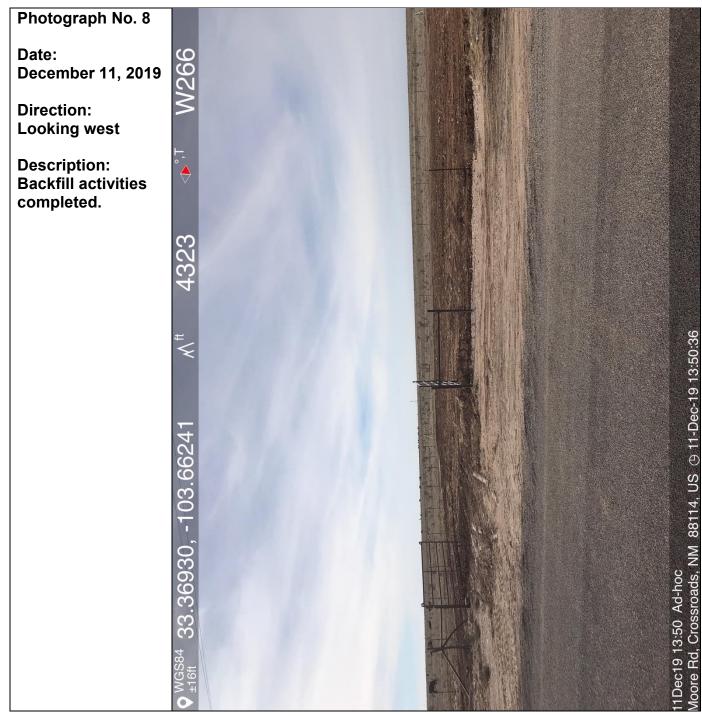


Client: Plains Marketing, L.P.

Project Name: Moore Sweet Historical

Photographic Documentation

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



Appendix C Depth to Groundwater Information



(A CLW##### in the

(R=POD has been

New Mexico Office of the State Engineer Water Column/Average Depth to Water

POD suffix indicates the replaced, POD has been replaced O=orphaned, & no longer serves a (quarters are 1=NW 2=NE 3=SW 4=SE) C=the file is water right file.) (NAD83 UTM in meters) closed) (quarters are smallest to largest) (In feet) POD Sub-000 Water **POD Number** basin County 64 16 4 Sec Tws Rng Y DistanceDepthWellDepthWater Column Code Х L 06273 L LE 2 2 13 11S 32E 624230 3693254* 256 150 60 90 L 01640 POD1 L LE 13 11S 32E 623643 3692636* 873 120 L 05741 L LE 4 12 11S 32E 624024 3693853* 874 152 L 12006 POD2 95 L LE 4 1 1 18 11S 33E 625386 3692537 🦲 1115 155 60 L 03762 R L LE 3 3 3 18 11S 33E 624546 3691950* 1124 120 58 62 L 03762 POD2 L LE 3 3 3 18 11S 33E 624546 3691950* 1124 122 58 64 3692360* 🦲 L 03765 S L LE 3 1 4 18 11S 33E 625334 1167 120 51 69 L 10817 L LE 3 4 07 11S 33E 625418 3693669* 1180 125 60 65 L 09506 L LE 1 4 18 11S 33E 625435 3692461* 1195 120 50 70 <u>L 1079</u>4 L LE 3 3 2 12 11S 32E 623711 3694356* 1464 60 50 10 L 06588 L LE 1 1 1 13 11S 32E 622924 3693339* 1504 120 65 55 L 03765 L LE 3 2 4 18 11S 33E 625737 3692363 🦲 1507 120 50 70 L 03765 R L LE 3 2 4 18 11S 33E 625737 3692363 1507 120 50 70 L 03765 POD3 L LE 3 2 4 18 11S 33E 625737 3692363 1507 160 83 77 L 01642 POD1 L LE 3 3 3 12 11S 32E 622918 3693541* 🌄 1559 132 L 02043 L LE 1 1 2 19 11S 33E 625346 3691755* 1614 140 60 80 L 02174 L LE 3 3 13 115 32E 623040 3692033* 1710 102 92 10 L 09615 L LE 2 1 24 11S 32E 623447 3691635* 1721 125 70 55 L 06362 L LE 3 1 17 11S 33E 626234 3692870* 1840 95 60 35 L 03990 L LE 1 2 2 19 11S 33E 625748 3691758* 1875 136 56 80 L 08642 L 32E 3691529* 🌉 1986 LE 4 1 1 24 11S 623144 110 64 46 L 01934 L LE 3 3 2 24 11S 32E 623753 3691136* 🦲 2036 115 65 50 L 09615 S L LE 24 11S 32E 623452 3691232* 2065 124 56 4 1 68 L 09615 S2 L LE 2 1 4 24 11S 32E 623958 3690933* 🌅 2178 141 65 76 L 00659 L LE 19 11S 33E 625271 3691044* 2199 133 61 72 L 09615 S3 L LE 1 1 4 24 11S 32E 623758 3690933* 🧰 2228 150 70 80 L 00215 POD6 L LE 4 1 4 24 11S 32E 623958 3690733* 2374 128 115 13 L 03989 L LE 2 1 4 19 11S 33E 625558 3690950* 🧧 2410 65 59 124 L 06249 L LE 2 3 08 11S 33E 626618 3694083* 🧧 2436 105 48 57 L 00215 POD4 L LE 32E 624065 2456 153 70 83 4 24 11S 3690633* L 09754 L LE 4 24 11S 32E 624065 2456 122 3690633* L 10790 L LE 2 23 118 32E 622447 3691419* 2557 113 52 61 L 10567 L LE 1 1 4 08 11S 33E 626919 3694188* 🎑 2754 130 58 72

Released to Imaging: 7/29/2021 4:15:26 PM

*UTM location was dorig												
Easting (X):	624403.72	North	ning (Y):	3693	065.61			Radius: 3000				
UTMNAD83 Rad	lius Search (in meters):											
Record Count: 36												
									Maximum Dept	h:	115 feet	
									Minimum Dept		48 feet	
								Averag	ge Depth to Wate	r:	63 feet	
<u>D 00270</u>	L	LL	212	20	110	520	020700					
L 00278	L	LE	2 1 2	25	11S	32E	623968	3690129* 🦲	2968	135		
<u>L 09080</u>	L	LE	3 3 4	19	11S	33E	625364	3690348* 🌍	2882	119	69	50
<u>L 04220</u>	L	LE	3 4	19	11S	33E	625465	3690449* 🌍	2823	100	54	46

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

4/20/18 8:19 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



STATE OF NEW MEXICO OFFICE OF THE STATE ENGINEER ROSWELL

Tom Blaine, P.E. State Engineer

DISTRICT II 1900 West Second St. Roswell, New Mexico 88201 Phone: (575) 622-6521 Fax: (575) 623-8559

November 29, 2017

Plains Marketing c/o Lee Peterson P.O. Box 30699 Amarllio, Texas 79120

RE: Well Plugging Plan of Operations for L-6588 E, Plains Marketing, Lea County, New Mexico

Greetings:

Enclosed is your copy of the Well Plugging Plan of Operations for the above described project.

The proposed method of operations for the subject well has been modified according to our phone conversation on November 29 as described below and is found to be acceptable and in accordance with the Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells 19.27.4 NMAC adopted August 31, 2005 by the State Engineer subject to the following:

Plugging operations shall also be conducted in accordance with NMED, NMOCD, or other State or Federal agencies having oversight for the above described project.

Clean gravel may be applied from 120 feet to 40 feet below ground surface (bgs). Bentonite pellets may then be applied from 40 feet to 23 feet bgs, followed by a Portland grout seal from 23 feet to ground surface.

Should a surface pad not remain in place and an annular seal is present, a shallow excavation which extends approximately 1 feet beyond the outer diameter (OD) of the casing and approximately 1 foot deep shall be dug. Apply the grout seal from 23 feet to 1 feet bgs, allowing the grout to overflow the casing to create a cap that extends approximately 2 feet beyond the OD of the casing to mitigate potential vertical migration of fluids at well head.

If no subsurface annular seal is noted around the OD of the casing, excavate approximately 3 deep around the casing and cut the casing at that depth. Apply the grout seal from 23 feet to 3 feet bgs, allowing the grout to overflow the casing to create a cap that extends approximately 2 feet beyond the OD of the casing.

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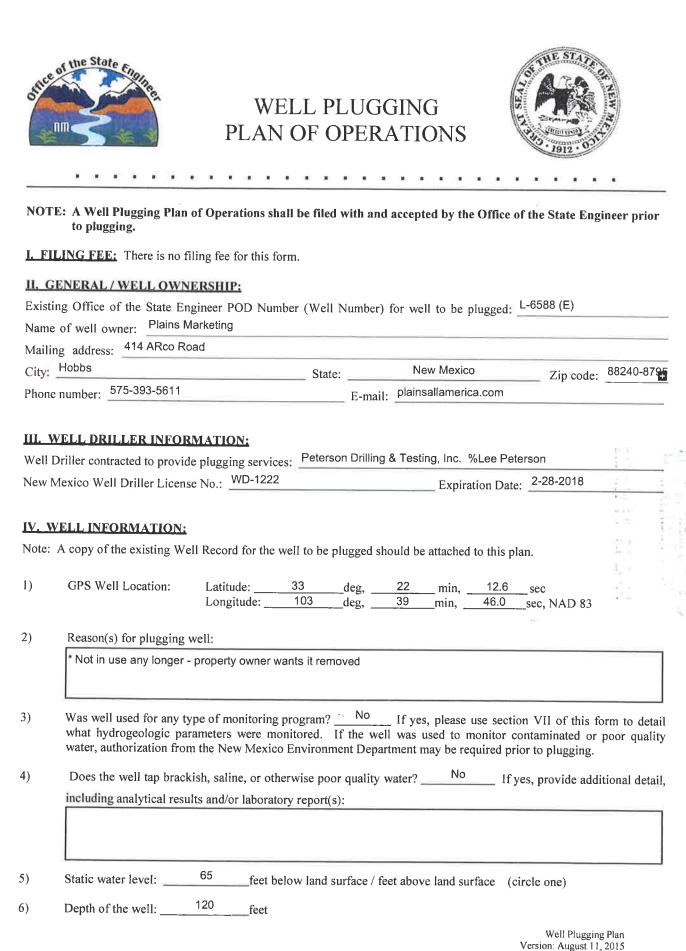
The grout water ratio should not exceed 6 gallons of water per 94 lb sack of Portland cement.

Sincerely,

Catherine Goetz, P.G., C.P.G.

Catherine/Goetz, P/G., C.P.G. Engineer Specialist Supervisor District II Office of the State Engineer cc Santa Fe

Page 1 of 5



7)

8)	Casing material:
9)	The well was constructed with: an open-hole production interval, state the open interval: a well screen or perforated pipe, state the screened interval(s): 65' to 120'
10)	What annular interval surrounding the artesian casing of this well is cement-grouted?
11)	Was the well built with surface casing? NoIf yes, is the annulus surrounding the surface casing grouted or otherwise sealed?If yes, please describe:

inches.

12) Has all pumping equipment and associated piping been removed from the well? Yes If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING:

Inside diameter of innermost casing: 7

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal.

1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well:

2) Will well head be cut-off below land surface after plugging? Yes

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant

- 1) For plugging intervals that employ cement grout, complete and attach Table A.
- 2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B!...
- 3) Theoretical volume of grout required to plug the well to land surface:
- 4) Type of Cement proposed: _____
- 5) Proposed cement grout mix: ______ gallons of water per 94 pound sack of Portland cement.
- 6) Will the grout be: _____ batch-mixed and delivered to the site

_____ mixed on site

Well Plugging Plan Version: August 11, 2015 Page 2 of 5

7) Grout additives requested, and percent by dry weight relative to cement:

8)

Additional notes and calculations:

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

VIII. SIGNATURE:

I, <u>Lee Peterson</u>, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Signature of Applicant

11/8/ Date

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

For Andy Mortey District It Manager

Well Plugging Plan Version: August 11, 2015 Page 3 of 5

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)			
Bottom of proposed interval of grout placement (ft bgl)			
Theoretical volume of grout required per interval (gallons)			
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement			
Mixed on-site or batch- mixed and delivered?			
Grout additive 1 requested			
Additive 1 percent by dry weight relative to cement			
Grout additive 2 requested			
Additive 2 percent by dry weight relative to cement			Day in a

Well Plugging Plan Version: August 11, 2015 Page 4 of 5

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)	Plug well with holeplug from 3' to 120'		
Bottom of proposed sealant of grout placement (ft bgl)	1' to 3' cement cut casting off 1' below ground level		
Theoretical volume of sealant required per interval (gallons)	7" I.D. Pipe = 239.7		
Proposed abandonment sealant (manufacturer and trade name)	Baroid: Holeplug graded sodium bentonite		

10

Well Plugging Plan Version: August 11, 2015 Page 5 of 5



PLUGGING RECORD

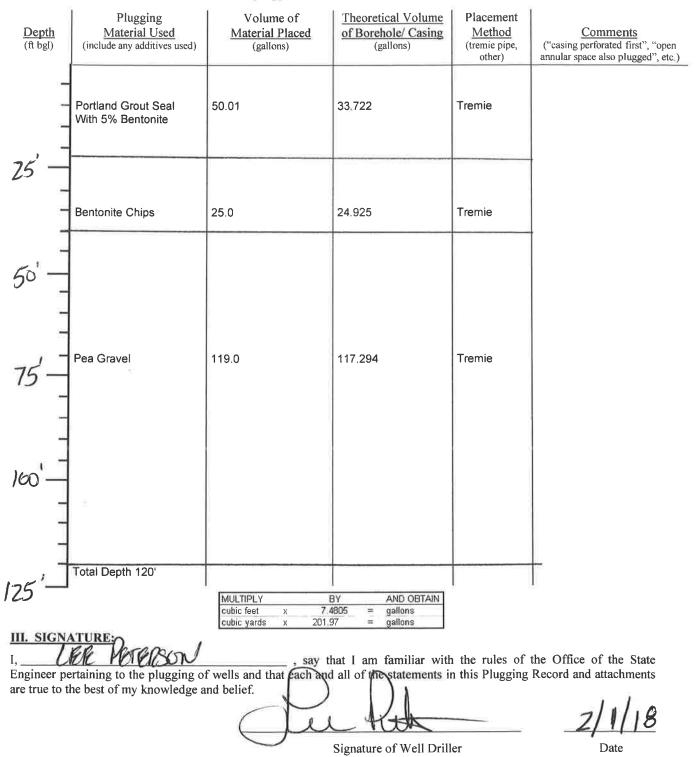


NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GI	ENERAL / WELL OWNERSHIP:						
State	Engineer Well Number: L-6588 (E)						
Well	owner: Plains Marketing			Phone No.:			
Maili	ng address: 414 Arco Road						
City:	Hobbs	State:	New	Mexico	Zip code: 88240-8795		
<u>II. W</u> 1)	ELL PLUGGING INFORMATION: Name of well drilling company that plu	agged well: Peter	rson Drilling 8	Testing, Inc %	Lee Peterson		
2)	New Mexico Well Driller License No.:						
3)	Well plugging activities were supervise Not in use any loner - proterty owner wa		g weil driller	(s)/rig supervis	or(s):		
4)	Date well plugging began: January		Date well plu	agging conclud	_{ed:} January 17, 2018		
5)	GPS Well Location: Latitude: Longitude: _				6sec 0sec, WGS 84		
6)	Depth of well confirmed at initiation of by the following manner:		ft be	low ground lev	vel (bgl),		
7)	Static water level measured at initiation	of plugging:	50 _ ft bg	gl			
8)	Date well plugging plan of operations v	was approved by t	he State Engi	ineer: 120)		

9) Were all plugging activities consistent with an approved plugging plan? <u>yes</u> If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.



For each interval plugged, describe within the following columns:

Version: September 8, 2009 Page 2 of 2

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Appendix D Field Notes

Page 68 of 468

ound period

الم	MOORE SWEET HISTORIE	
•	10/17-18/2019	· ·
na ang mang mang mang mang mang mang man	Chloride Field TEST	SCREENING (HACH LAATE
hallen stellen konstanten die beim Sonars termel		
4003-00-0946-0-400-0270030-4004	MW-51C-A	<124 ppn - 2124 ppm - <124 ppm -
100440241-004512-014400000-0010-04440500010-0	m5W-F1C@7'	2124 ppm
for landstream for the state of t	MJ-FZ@13	<124 ppm
n (1) (100 pc) (no straig) er med sint aus fast aus (Salaran) (Administ	ME-51C-A	280 ppm
	ME-F1C#107'	6121L X AMA 4
enelý ferených ježe na jest ježe vojské vyde postal statu jezer	ME-F1C #207'	e Iztppm
	ME-52-A	ZIZPPM
hilione el en CPA est de la place de Miladore en La compañía de la compañía de la compañía de la compañía de la	Sample # 50.17'	- 128 ppm
	M33#3A	2128 ppm -
	10/22/2019 MRAND E53-A	
and had been a strandorm of the stranger and a strategy and the	M KANP ES3-A	2128ppm
5-751-44-63-9-04-24-63-9-0-0-9-975-2-0-6-989		
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Appendix E Laboratory Analytical Reports



October 11, 2018

JOEL LOWRY PLAINS ALL AMERICAN PIPELINE 505 NORTH BIG SPRINGS ST STE. 600 MIDLAND, TX 79701

RE: MOORE SWEET

Enclosed are the results of analyses for samples received by the laboratory on 10/09/18 15:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

PLAINS ALL AMERICAN PIPELINE JOEL LOWRY 505 NORTH BIG SPRINGS ST STE. 600 MIDLAND TX, 79701 Fax To:

Received:	10/09/2018	Sampling Date:	10/09/2018
Reported:	10/11/2018	Sampling Type:	Solid
Project Name:	MOORE SWEET	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: NTT 1A @ 8' (H802875-01)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/11/2018	ND	200	100	200	0.492	
DRO >C10-C28*	42.7	10.0	10/11/2018	ND	194	97.0	200	0.0124	
EXT DRO >C28-C36	<10.0	10.0	10/11/2018	ND					
Surrogate: 1-Chlorooctane	92.6	% 41-142							
Surrogate: 1-Chlorooctadecane	94.0	% 37.6-14	7						

Cardinal Laboratories

*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		<u>CHAIN</u>	CHAIN-OF-CUSTODY AND ANALYSIS REQUEST
101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476	M 88240 3-2476		3
Company Name: TRC Solutions		01±1/E/	ANALYSIS REQUEST
Project Manager: Joel Lowry		P.O. #:	
Address: 10 Desta Drive Suite 150E		Company: PLANSS MG	
city: Midland State:	TX zip: 79705	R	
Phone #: 432-466-4450 Fax #:	>	Address: 0	
Project #: Project Owner:	Owner: PLAINS	City:	
Project Name: NOORE SWEE	1	State: Zip:	
Project Location: LEA Co DA		Phone #:	
Sampler Name: BECKY (ZIF	Fil	Fax #:	
FOR LAB USE ONLY	A. MATRIX	PRESERV. SAMPLING	
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Lab I.D. Sample I.D.	B OR (I TAINE NDWA EWATE	BASE:	
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7 15TT 12 @14'			-
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoewer shall be demote waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliate or europercenter action out of constant of constant of provide the based on the contract of the damages.	medy for any claim arising whether based in contract or tort, s rr shall be deemed waived unless made in writing and receive s, including without limitation, business interruptions, loss of u	in contract or tort, shall be limited to the amount paid by the client for the writing and received by Cardinal within 30 days after completion of the ar writing and received by Cardinal within 30 days after completion of the mruptions, loss of use, or loss of profits incurred by client, its subsidiaries, mruptions with the subsidiaries of profits incurred by client, its subsidiaries.	he oapticable tes,
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t Cardinal cannot accent verbal channes Please fax written channes to (575) 303 2326	Diase fax written changes to	(F7E) 202 2226	The summer of the state of

Page 73 of 468

Laboratories

Page 4 of 4



November 15, 2018

ZACH CONDER TRC 10 DESTA DR. SUITE 150 E MIDLAND, TX 79705

RE: MOORE SWEET

Enclosed are the results of analyses for samples received by the laboratory on 11/09/18 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



		TRC ZACH CONDER 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705 Fax To:		
Received:	11/09/2018		Sampling Date:	11/09/2018
Reported:	11/15/2018		Sampling Type:	Soil
Project Name:	MOORE SWEET		Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN		Sample Received By:	Jodi Henson
Project Location:	PLAINS PL			

Sample ID: E TT COMP 1 @ 5' (H803270-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	512	16.0	11/15/2018	ND	416	104	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/12/2018	ND	194	97.2	200	4.25	
DRO >C10-C28*	185	10.0	11/12/2018	ND	196	98.1	200	3.77	
EXT DRO >C28-C36	32.1	10.0	11/12/2018	ND					
Surrogate: 1-Chlorooctane	91.2	% 41-142							
Surrogate: 1-Chlorooctadecane	102	% 37.6-14	7						

Sample ID: E TT COMP 2 @ 5' (H803270-02)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	11/15/2018	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/12/2018	ND	194	97.2	200	4.25	
DRO >C10-C28*	15.2	10.0	11/12/2018	ND	196	98.1	200	3.77	
EXT DRO >C28-C36	<10.0	10.0	11/12/2018	ND					
Surrogate: 1-Chlorooctane	78.8	% 41-142	2						
Surrogate: 1-Chlorooctadecane	82.7	% 37.6-14	7						

Cardinal Laboratories

*=Accredited Analyte

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		TRC ZACH CONDER 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705 Fax To:		
Received:	11/09/2018		Sampling Date:	11/09/2018
Reported:	11/15/2018		Sampling Type:	Soil
Project Name:	MOORE SWEET		Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN		Sample Received By:	Jodi Henson
Project Location:	PLAINS PL			

Sample ID: E TT - NW @ 2.5' (H803270-03)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	11/15/2018	ND	416	104	400	3.92	
TPH 8015M	mg/kg Analyzed By: MS		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/12/2018	ND	194	97.2	200	4.25	
DRO >C10-C28*	118	10.0	11/12/2018	ND	196	98.1	200	3.77	
EXT DRO >C28-C36	19.8	10.0	11/12/2018	ND					
Surrogate: 1-Chlorooctane	84.2	% 41-142							
Surrogate: 1-Chlorooctadecane	97.0	% 37.6-14	7						

Sample ID: W TT COMP 2 @ 4' (H803270-04)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/15/2018	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/12/2018	ND	194	97.2	200	4.25	
DRO >C10-C28*	32.7	10.0	11/12/2018	ND	196	98.1	200	3.77	
EXT DRO >C28-C36	11.6	10.0	11/12/2018	ND					
Surrogate: 1-Chlorooctane	75.9	% 41-142							
Surrogate: 1-Chlorooctadecane	80.2	% 37.6-14	7						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	11/09/2018		Sampling Date:	11/09/2018
Reported:	11/15/2018		Sampling Type:	Soil
Project Name:	MOORE SWEET		Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN		Sample Received By:	Jodi Henson
Project Location:	PLAINS PL			

Sample ID: W TT- NW @ 2' (H803270-05)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/15/2018	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/12/2018	ND	194	97.2	200	4.25	
DRO >C10-C28*	106	10.0	11/12/2018	ND	196	98.1	200	3.77	
EXT DRO >C28-C36	70.4	10.0	11/12/2018	ND					
Surrogate: 1-Chlorooctane	91.2	% 41-142	,						
Surrogate: 1-Chlorooctadecane	100	% 37.6-14	7						

Sample ID: W TT COMP 1 @ 4' (H803270-06)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	11/15/2018	ND	416	104	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/12/2018	ND	194	97.2	200	4.25	
DRO >C10-C28*	33.9	10.0	11/12/2018	ND	196	98.1	200	3.77	
EXT DRO >C28-C36	12.3	10.0	11/12/2018	ND					
Surrogate: 1-Chlorooctane	87.3	% 41-142	?						
Surrogate: 1-Chlorooctadecane	93 .7	% 37.6-14	7						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	11/09/2018		Sampling Date:	11/09/2018
Reported:	11/15/2018		Sampling Type:	Soil
Project Name:	MOORE SWEET		Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN		Sample Received By:	Jodi Henson
Project Location:	PLAINS PL			

Sample ID: W TT - SW @ 2' (H803270-07)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS % Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/12/2018	ND	194	97.2	200	4.25	
DR0 >C10-C28*	149	10.0	11/12/2018	ND	196	98.1	200	3.77	
EXT DRO >C28-C36	77.0	10.0	11/12/2018	ND					
Surrogate: 1-Chlorooctane	83.6	% 41-142							
Surrogate: 1-Chlorooctadecane	95.0	% 37.6-14	7						

Sample ID: TT 3 COMP @ 3' (H803270-08)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	<10.0	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	<10.0	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	76.7	% 41-142							
Surrogate: 1-Chlorooctadecane	81.5	% 37.6-14	7						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	11/09/2018		Sampling Date:	11/09/2018
Reported:	11/15/2018		Sampling Type:	Soil
Project Name:	MOORE SWEET		Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN		Sample Received By:	Jodi Henson
Project Location:	PLAINS PL			

Sample ID: TT 3 - NW @ 1.5' (H803270-09)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	25.9	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	12.1	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	86.3	% 41-142	?						
Surrogate: 1-Chlorooctadecane	92.7	% 37.6-14	7						

Sample ID: TT 3 - SW @ 1.5' (H803270-10)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	<10.0	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	<10.0	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	77.0	% 41-142							
Surrogate: 1-Chlorooctadecane	82.6	% 37.6-14	7						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	11/09/2018		Sampling Date:	11/09/20	18
Reported:	11/15/2018		Sampling Type:	Soil	
Project Name:	MOORE SWEET		Sampling Condition:	Cool & In	tact
Project Number:	NONE GIVEN		Sample Received By:	Jodi Hens	on
Project Location:	PLAINS PL				

Sample ID: TT 3 - WW @ 1.5' (H803270-11)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	<10.0	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	<10.0	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	88.2	% 41-142							
Surrogate: 1-Chlorooctadecane	95.3	% 37.6-14	7						

Sample ID: TT 3 - EW @ 1.5' (H803270-12)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	<10.0	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	13.8	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	77.8	% 41-142							
Surrogate: 1-Chlorooctadecane	81.8	% 37.6-14	7						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	11/09/2018		Sampling Date:	11/09/2018
Reported:	11/15/2018		Sampling Type:	Soil
Project Name:	MOORE SWEET		Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN		Sample Received By:	Jodi Henson
Project Location:	PLAINS PL			

Sample ID: TT 2 @ 2' (H803270-13)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	348	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	171	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	73.7	% 41-142							
Surrogate: 1-Chlorooctadecane	89.1	% 37.6-14	7						

Sample ID: TT 2- WW @ 1' (H803270-14)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	249	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	147	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	85.9	% 41-142	?						
Surrogate: 1-Chlorooctadecane	99.0	% 37.6-14	7						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	11/09/2018		Sampling Date:	11/09/2018
Reported:	11/15/2018		Sampling Type:	Soil
Project Name:	MOORE SWEET		Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN		Sample Received By:	Jodi Henson
Project Location:	PLAINS PL			

Sample ID: TT 2- NW @ 1' (H803270-15)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	70.8	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	34.6	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	83.2	% 41-142							
Surrogate: 1-Chlorooctadecane	90.6	% 37.6-14	7						

Sample ID: TT 2- EW @ 1' (H803270-16)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	249	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	108	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	91.4	% 41-142							
Surrogate: 1-Chlorooctadecane	105	% 37.6-14	7						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	11/09/2018		Sampling Date:	11/09/2018
Reported:	11/15/2018		Sampling Type:	Soil
Project Name:	MOORE SWEET		Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN		Sample Received By:	Jodi Henson
Project Location:	PLAINS PL			

Sample ID: TT 2- SW @ 1' (H803270-17)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	49.7	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	39.5	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	88.1	% 41-142							
Surrogate: 1-Chlorooctadecane	94.4	% 37.6-14	7						

Sample ID: TT 1 @ 14' (H803270-18)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	69.4	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	1770	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	242	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	103	% 41-142							
Surrogate: 1-Chlorooctadecane	143	% 37.6-14	7						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	11/09/2018		Sampling Date:	11/09/2018
Reported:	11/15/2018		Sampling Type:	Soil
Project Name:	MOORE SWEET		Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN		Sample Received By:	Jodi Henson
Project Location:	PLAINS PL			

Sample ID: S TT @ 12' (H803270-19)

Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	53.9	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	2410	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	328	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	112 9	% 41-142	?						
Surrogate: 1-Chlorooctadecane	167	% 37.6-14	7						

Sample ID: W TT- WW @ 2' (H803270-20)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	33.0	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	28.7	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	76.0	% 41-142							
Surrogate: 1-Chlorooctadecane	79.8	% 37.6-14	7						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		TRC ZACH CONDER 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705 Fax To:		
Received:	11/09/2018		Sampling Date:	11/09/2018
Reported:	11/15/2018		Sampling Type:	Soil
Project Name:	MOORE SWEET		Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN		Sample Received By:	Jodi Henson
Project Location:	PLAINS PL			

Sample ID: S TT- EW @ 6' (H803270-21)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	32.0	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	2110	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	323	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	87.6	% 41-142							
Surrogate: 1-Chlorooctadecane	120	% 37.6-14	7						

Sample ID: S TT- NW @ 6' (H803270-22)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	101	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	2950	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	373	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	105	% 41-142	2						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		TRC ZACH CONDER 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705 Fax To:		
Received:	11/09/2018		Sampling Date:	11/09/2018
Reported:	11/15/2018		Sampling Type:	Soil
Project Name:	MOORE SWEET		Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN		Sample Received By:	Jodi Henson
Project Location:	PLAINS PL			

Sample ID: S TT- SW @ 6' (H803270-23)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	31.8	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	1050	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	161	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	97.7	% 41-142							
Surrogate: 1-Chlorooctadecane	121 % 37.6-147		7						

Sample ID: S TT- WW @ 6' (H803270-24)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	11/15/2018	ND	400	100	400	0.00	
TPH 8015M mg/kg		/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	85.8	10.0	11/13/2018	ND	196	97.8	200	1.82	
DRO >C10-C28*	3520	10.0	11/13/2018	ND	205	103	200	0.351	
EXT DRO >C28-C36	548	10.0	11/13/2018	ND					
Surrogate: 1-Chlorooctane	105	% 41-142	,						
Surrogate: 1-Chlorooctadecane	205	% 37.6-14	7						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Laboratories

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1013

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

(Circle One) Time: Bus - Other: -1.12	Time:	n shall be a, includir under by	10773-54@1.5' 0	9 TT 3 - NW @ 1.5' 6	8 TT3 Comp (2) 3' i	7 WTT-SW@Z' C	6 WTT Comp 2 204' C	5 UTT-NW(22' C	4 WTT Comp 2 @ 4' C	3 FTT-NW@ 2.5' C	2 ETT Comp 2 @ 5' C	1 ETT Comp 10 5' C	Lab I.D. Sample I.D. (G)RAB OR (C)OMP	FOR LAB USE ONLY	Sampler Name: Kylc Sch midt	Project Location:	Project Name: Moore Sweet	Project #: Project Owner:	Phone #: Fax #:	City: Midland State: TX Zip:	Address: 10 Desta Dr Suite 150	Project Manager: Zack Conder
Sample Condition CHECKED BY: Cool Intact Arfes Pres (http://	GOON JUNJON	any carm reamy wrenter cased in contract or fort, small be immed to an emouth paid by the element a deemed waived unless made in writing and received by Cardinal writin's days after completion of the gruthout limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiari Cardinal, regardless of whether such claim is based upon any of the above stated reasons or chevels (Received BY).	- *	× ×	X	X	- <u>x</u> <u>x</u>	- X X	- × ×	~ ×	X	×	# CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER :	MATRIX PRESERV. SAMPLING	Fax	Phone #:	State: Zip:	City:	Address:	Attn: Amber	OF Company: Mains	P.O. #:
Reschandt @ Fresolstions.co.1		plicable	7	-	× ×	× ×	× ×	R R R	× ×	×	8	XX	TIME CI- TPH							Ground	2	

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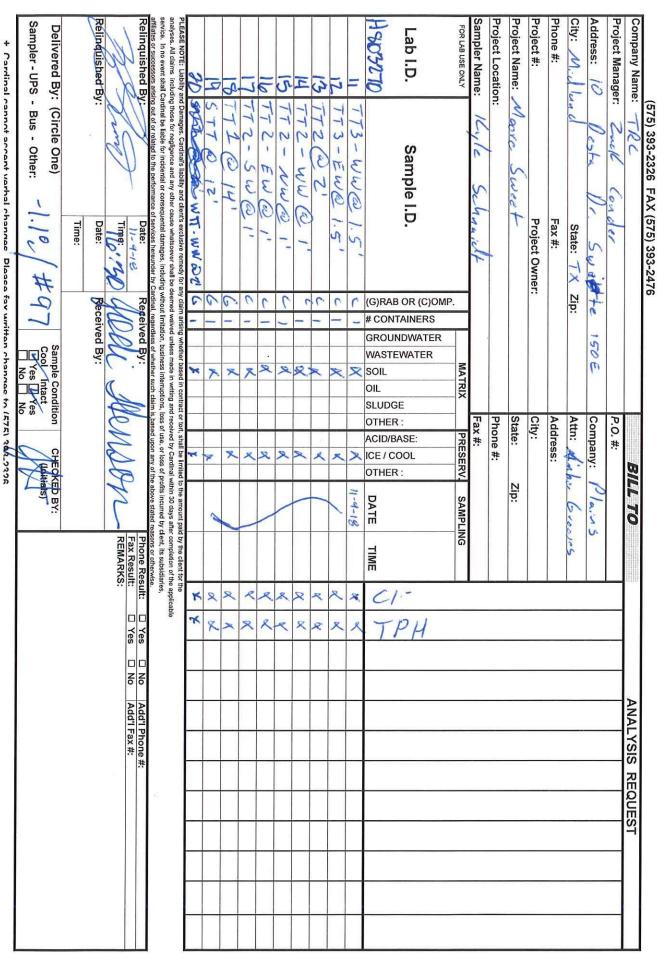
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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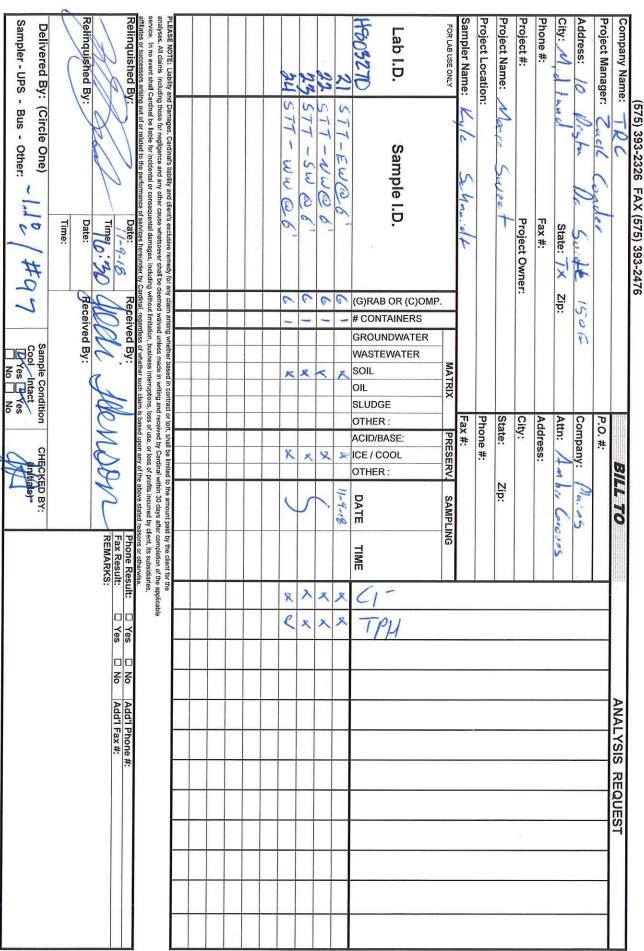
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of 17

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Cardinal rannot arrent verbal channes. Please fax written channes to (272) 200/3292



November 16, 2018

ZACH CONDER TRC 10 DESTA DR. SUITE 150 E MIDLAND, TX 79705

RE: MOORE SWEET

Enclosed are the results of analyses for samples received by the laboratory on 11/14/18 15:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



		TRC ZACH CONDER 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705 Fax To:		
Received:	11/14/2018		Sampling Date:	11/13/2018
Reported:	11/16/2018		Sampling Type:	Soil
Project Name:	MOORE SWEET		Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN		Sample Received By:	Tamara Oldaker
Project Location:	PLAINS PL - LEA CO	UNTY		

Sample ID: E TT COMP 3 @ 6' (H803320-01)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	11/15/2018	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2018	ND	214	107	200	1.99	
DRO >C10-C28*	<10.0	10.0	11/15/2018	ND	227	113	200	0.673	
EXT DRO >C28-C36	<10.0	10.0	11/15/2018	ND					
Surrogate: 1-Chlorooctane	106	% 41-142							
Surrogate: 1-Chlorooctadecane	101	% 37.6-14	7						

Sample ID: E TT SW @ 2.5' (H803320-02)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	11/15/2018	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2018	ND	214	107	200	1.99	
DRO >C10-C28*	13.2	10.0	11/15/2018	ND	227	113	200	0.673	
EXT DRO >C28-C36	<10.0	10.0	11/15/2018	ND					
Surrogate: 1-Chlorooctane	111 9	% 41-142							
Surrogate: 1-Chlorooctadecane	110 9	37.6-14	7						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		TRC ZACH CONDER 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705 Fax To:		
Received:	11/14/2018		Sampling Date:	11/13/2018
Reported:	11/16/2018		Sampling Type:	Soil
Project Name:	MOORE SWEET		Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN		Sample Received By:	Tamara Oldaker
Project Location:	PLAINS PL - LEA COU	UNTY		

Sample ID: E TT SW-2 @ 6" (H803320-03)

Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	11/15/2018	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2018	ND	214	107	200	1.99	
DRO >C10-C28*	15.6	10.0	11/15/2018	ND	227	113	200	0.673	
EXT DRO >C28-C36	<10.0	10.0	11/15/2018	ND					
Surrogate: 1-Chlorooctane	109	% 41-142							
Surrogate: 1-Chlorooctadecane	105	% 37.6-14	7						

Sample ID: E TT EW @ 2.5' (H803320-04)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	11/15/2018	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2018	ND	214	107	200	1.99	
DRO >C10-C28*	<10.0	10.0	11/15/2018	ND	227	113	200	0.673	
EXT DRO >C28-C36	<10.0	10.0	11/15/2018	ND					
Surrogate: 1-Chlorooctane	106	% 41-142							
Surrogate: 1-Chlorooctadecane	100 % 37.6-147		7						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

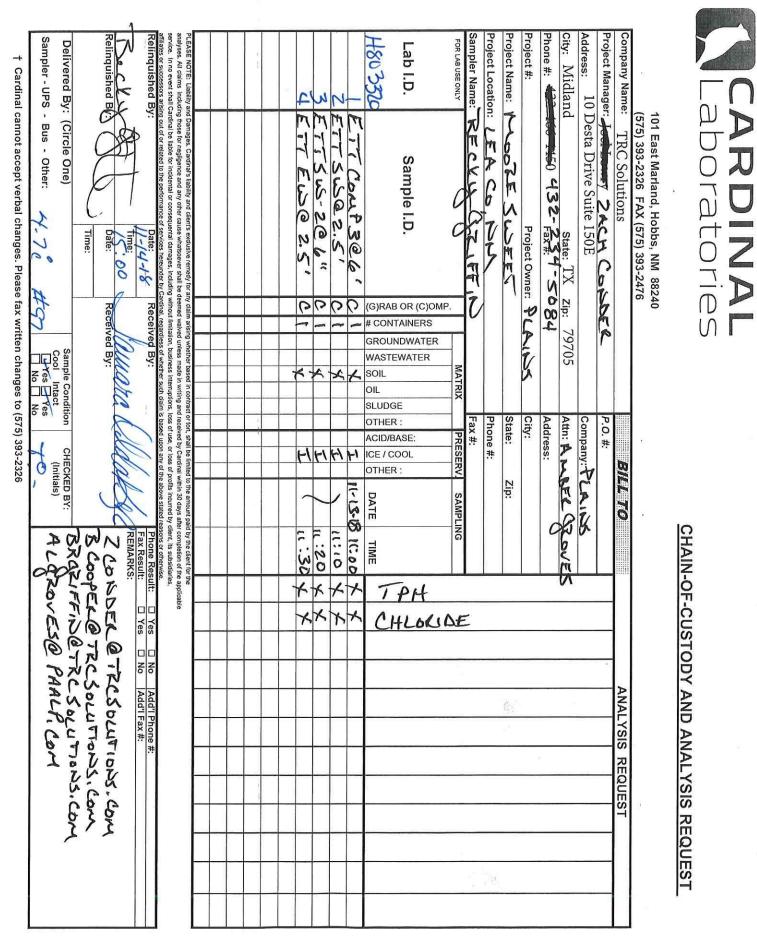
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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager





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Analytical Report 608722

for TRC Solutions, Inc

Project Manager: Zach Conder

Moore Sweet

27-DEC-18

Collected By: Client





1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757) Xenco-Atlanta (LELAP Lab ID #04176) Xenco-Tampa: Florida (E87429) Xenco-Lakeland: Florida (E84098)





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MS / MSD Recoveries	30
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27-DEC-18

Project Manager: Zach Conder TRC Solutions, Inc 2057 Commerce Midland, TX 79703

Reference: XENCO Report No(s): 608722 Moore Sweet Project Address: Lea County, NM

Zach Conder:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 608722. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 608722 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jession Vermer

Jessica Kramer Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



Page 3 of 37



Sample Id TT-1 @15' TT-1 @ 16' TT-1 @ 17' TT-1 @ 18' TT-1 @ 19' TT-1 @ 20' TT-1 @ 21' TT-1 @ 22' TT-1 @ 23' TT-1 @ 24' TT-1 @25 '



Sample Cross Reference 608722



TRC Solutions, Inc, Midland, TX

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	12-12-18 08:00	15 ft	608722-001
S	12-12-18 08:10	15 ft	608722-002
S	12-12-18 08:20	17 ft	608722-003
S	12-12-18 08:30	18 ft	608722-004
S	12-12-18 08:40	19 ft	608722-005
S	12-12-18 08:50	20 ft	608722-006
S	12-12-18 09:00	21 ft	608722-007
S	12-12-18 09:10	22 ft	608722-008
S	12-12-18 09:20	23 ft	608722-009
S	12-12-18 09:30	24 ft	608722-010
S	12-12-18 09:40	25 ft	608722-011

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Client Name: TRC Solutions, Inc Project Name: Moore Sweet

Project ID: Work Order Number(s): 608722 Report Date: 27-DEC-18 Date Received: 12/14/2018

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments: Batch: LBA-3073258 BTEX by EPA 8021 Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3074024 BTEX by EPA 8021

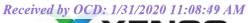
Soil samples were not received in Terracore kits and therefore were prepared by method 5030. Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 608722-005,608722-004.

Batch: LBA-3074046 BTEX by EPA 8021

Soil samples were not received in Terracore kits and therefore were prepared by method 5030. Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 608722-008,608722-007.





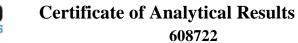
Certificate of Analytical Results 608722



TRC Solutions, Inc, Midland, TX

Sample Id: TT-1 @15'		Matrix:	Soil		Sample	Depth: 15 ft		
Lab Sample Id: 608722-001		Date Collecte	ed: 12.12.18 08	3.00	Date R	eceived: 12.14.	18 11.5	51
Analytical Method: Inorganic Anions by H	EPA 300/300.1				Prep M	ethod: E300P		
Analyst: CHE		% Moist:			Tech:	CHE		
Seq Number: 3073168		Date Prep: 12	2.17.18 09.00					
-		Prep seq: 76	668162					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	23.0	4.95	0.850	mg/kg	12.17.18 11:52		1
Analytical Method: TPH by SW8015 Mod	1				Prep M	ethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 3073493		Date Prep: 12	2.19.18 18.00					
		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	490	15.0	7.99	mg/kg	12.20.18 00:44		1
Diesel Range Organics (DRO)	C10C28DRO	1820	15.0	8.11	mg/kg	12.20.18 00:44		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	143	15.0	8.11	mg/kg	12.20.18 00:44		1
Total TPH	PHC635	2453		7.99	mg/kg	12.20.18 00:44		
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
1-Chlorooctane		124		70 - 1		1		
o-Terphenyl		111		70 - 1	135 %			
Analytical Method: BTEX by EPA 8021					Prep M	ethod: 5030B		
Analyst: SCM		% Moist:						
Seq Number: 3073258					Tech:	SCM		
Seq Number. 3073238		Date Prep: 12	2.17.18 08.45		Tech:	SCM		
Seq Number. 5075258		Date Prep: 12 Prep seq: 76			Tech:	SCM		
Parameter	CAS Number	-		SDL	Tech: Units	SCM Analysis Date	Flag	Dil Factor
		Prep seq: 76	568232	SDL 0.0964		Analysis	Flag U	Dil Factor 251
Parameter Benzene Toluene	Number 71-43-2 108-88-3	Prep seq: 76 Result <0.0964 0.934	568232 MQL 0.501 0.501	0.0964 0.114	Units mg/kg mg/kg	Analysis Date 12.17.18 17:36 12.17.18 17:36	U	251 251
Parameter Benzene Toluene Ethylbenzene	Number 71-43-2 108-88-3 100-41-4	Prep seq: 76 Result <0.0964 0.934 0.205	568232 MQL 0.501 0.501 0.501	0.0964 0.114 0.141	Units mg/kg mg/kg mg/kg	Analysis Date 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36	UJ	251 251 251
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	Number 71-43-2 108-88-3 100-41-4 179601-23-1	Prep seq: 76 Result <0.0964 0.934 0.205 <0.254	568232 MQL 0.501 0.501 0.501 1.00	0.0964 0.114 0.141 0.254	Units mg/kg mg/kg mg/kg mg/kg	Analysis Date 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36	U	251 251 251 251
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Prep seq: 76 Result <0.0964 0.934 0.205 <0.254 1.69	568232 MQL 0.501 0.501 0.501	0.0964 0.114 0.141 0.254 0.0863	Units mg/kg mg/kg mg/kg mg/kg	Analysis Date 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36	UJ	251 251 251
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	Number 71-43-2 108-88-3 100-41-4 179601-23-1	Prep seq: 76 Result <0.0964 0.934 0.205 <0.254	568232 MQL 0.501 0.501 0.501 1.00	0.0964 0.114 0.141 0.254	Units mg/kg mg/kg mg/kg mg/kg	Analysis Date 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36	UJ	251 251 251 251
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Prep seq: 76 Result <0.0964 0.934 0.205 <0.254 1.69 1.69	568232 MQL 0.501 0.501 0.501 1.00	0.0964 0.114 0.141 0.254 0.0863 0.0863	Units mg/kg mg/kg mg/kg mg/kg mg/kg	Analysis Date 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36	U J U	251 251 251 251
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total Total BTEX	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Prep seq: 76 Result <0.0964 0.934 0.205 <0.254 1.69 1.69 2.829	568232 MQL 0.501 0.501 0.501 1.00	0.0964 0.114 0.254 0.0863 0.0863 0.0863	Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Analysis Date 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36 12.17.18 17:36	U J U	251 251 251 251 251







TRC Solutions, Inc, Midland, TX

Sample Id: TT-1 @ 16 '		Matrix:	Soil		Sample	Depth: 15 ft		
Lab Sample Id: 608722-002		Date Collecte	ed: 12.12.18 08	3.10	Date Re	eceived: 12.14.	18 11.5	51
Analytical Method: Inorganic Anions by	EPA 300/300.1				Prep M	ethod: E300P		
Analyst: CHE		% Moist:			Tech:	CHE		
Seq Number: 3073168		Date Prep: 12	2.17.18 09.00					
		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	180	4.95	0.850	mg/kg	12.17.18 12:00		1
Analytical Method: TPH by SW8015 Mo	d				Prep M	ethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 3073493		Date Prep: 12	2 19 18 18 00					
Seq Number. 3073495		Prep seq: 76						
	G + G	riep seq. 70	00405					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	533	15.0	8.00	mg/kg	12.20.18 01:05		1
Diesel Range Organics (DRO)	C10C28DRO	1660	15.0	8.13	mg/kg	12.20.18 01:05		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	118	15.0	8.13	mg/kg	12.20.18 01:05		1
Total TPH	PHC635	2311		8	mg/kg	12.20.18 01:05		
Sumogoto		0/ D		T • • • • •	T	ts Analysis	Date	Flag
Surrogate		% Recovery		Limits	Uni	13 111119515	Date	Flag
1-Chlorooctane		119		70 - 1	135 %		Date	r lag
					135 %		Date	Flag
1-Chlorooctane		119		70 - 1	135 %			Fiag
1-Chlorooctane o-Terphenyl		119		70 - 1	135 % 135 %			Fiag
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021		119 113	2.17.18 08.45	70 - 1	135 % 135 % Prep M	ethod: 5030B		Fiag
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM		119 113 % Moist: Date Prep: 12	2.17.18 08.45	70 - 1	135 % 135 % Prep M	ethod: 5030B		Fiag
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM	CAS Number	119 113 % Moist: Date Prep: 12		70 - 1	135 % 135 % Prep M	ethod: 5030B		Dil Factor
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3073258 Parameter Benzene	Number 71-43-2	119 113 % Moist: Date Prep: 12 Prep seq: 76 Result <0.0962	568232 MQL 0.500	70 - 1 70 - 1 SDL 0.0962	135 % 135 % Prep M Tech: Units mg/kg	ethod: 5030B SCM Analysis Date 12.17.18 17:55		Dil Factor 250
I-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3073258 Parameter Benzene Toluene	Number 71-43-2 108-88-3	119 113 % Moist: Date Prep: 12 Prep seq: 76 Result <0.0962 0.983	568232 MQL 0.500 0.500	70 - 1 70 - 1 SDL 0.0962 0.114	135 % 135 % Prep M Tech: Units mg/kg mg/kg	ethod: 5030B SCM Analysis Date 12.17.18 17:55 12.17.18 17:55	Flag U	Dil Factor 250 250
I-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3073258 Parameter Benzene Toluene Ethylbenzene	Number 71-43-2 108-88-3 100-41-4	119 113 % Moist: Date Prep: 12 Prep seq: 76 Result <0.0962 0.983 0.225	568232 MQL 0.500 0.500 0.500	70 - 1 70 - 1 SDL 0.0962 0.114 0.141	135 % 135 % Prep M Tech: Units mg/kg mg/kg mg/kg	ethod: 5030B SCM Analysis Date 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55	Flag U J	Dil Factor 250 250 250
I-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3073258 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	Number 71-43-2 108-88-3 100-41-4 179601-23-1	119 113 % Moist: Date Prep: 12 Prep seq: 76 Result <0.0962 0.983 0.225 0.340	568232 MQL 0.500 0.500 0.500 1.00	70 - 1 70 - 1 SDL 0.0962 0.114 0.141 0.254	135 % 135 % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg	ethod: 5030B SCM 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55	Flag U	Dil Factor 250 250 250 250
I-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3073258 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	119 113 % Moist: Date Prep: 12 Prep seq: 76 Result <0.0962 0.983 0.225 0.340 1.89	568232 MQL 0.500 0.500 0.500	70 - 1 70 - 1 5DL 0.0962 0.114 0.141 0.254 0.0861	135 % 135 % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	ethod: 5030B SCM 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55	Flag U J	Dil Factor 250 250 250
I-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3073258 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	Number 71-43-2 108-88-3 100-41-4 179601-23-1	119 113 % Moist: Date Prep: 12 Prep seq: 76 Result <0.0962 0.983 0.225 0.340	568232 MQL 0.500 0.500 0.500 1.00	70 - 1 70 - 1 SDL 0.0962 0.114 0.141 0.254	135 % 135 % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg	ethod: 5030B SCM 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55	Flag U J	Dil Factor 250 250 250 250
I-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3073258 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	119 113 % Moist: Date Prep: 12 Prep seq: 76 Result <0.0962 0.983 0.225 0.340 1.89 2.23	568232 MQL 0.500 0.500 0.500 1.00	70 - 1 70 - 1 5DL 0.0962 0.114 0.141 0.254 0.0861 0.0861	135 % 135 % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Analysis SCM 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55	Flag U J J	Dil Factor 250 250 250 250
I-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3073258 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total Total BTEX	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	119 113 % Moist: Date Prep: 12 Prep seq: 76 Result <0.0962 0.983 0.225 0.340 1.89 2.23 3.438 % Recovery	568232 MQL 0.500 0.500 0.500 1.00	70 - 1 70 - 1 70 - 1 5DL 0.0962 0.114 0.141 0.254 0.0861 0.0861 0.0861 0.0861 Limits	135 % 135 % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	ethod: 5030B SCM 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55	Flag U J J	Dil Factor 250 250 250 250 250 250
I-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3073258 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total Total BTEX	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	119 113 % Moist: Date Prep: 12 Prep seq: 76 Result <0.0962 0.983 0.225 0.340 1.89 2.23 3.438	568232 MQL 0.500 0.500 0.500 1.00	70 - 1 70 - 1 8DL 0.0962 0.114 0.141 0.254 0.0861 0.0861 0.0861	135 % 135 % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	ethod: 5030B SCM 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55 12.17.18 17:55	Flag U J J	Dil Factor 250 250 250 250 250 250





Certificate of Analytical Results 608722



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Sample Id: TT-1 @	17'		Matrix:	Soil		Sample	Depth: 17 ft		
Lab Sample Id: 608722-0	003		Date Collecte	ed: 12.12.18 08	3.20	Date Re	eceived: 12.14.1	18 11.5	1
Analytical Method: Inor	rganic Anions by E	PA 300/300.1				Prep M	ethod: E300P		
Analyst: CHE			% Moist:			Tech:	CHE		
Seq Number: 3073168	2		Date Prep: 12	2 17 18 09 00					
Seq Number. 5075108	,		Prep seq: 76						
		~ ~ ~	Thep seq. 70	00102					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride		16887-00-6	34.6	4.96	0.852	mg/kg	12.17.18 12:09		1
Analytical Method: TPI	H by SW8015 Mod					Prep M	ethod: 1005		
Analyst: ARM	-		% Moist:			Tech:	ARM		
5	,		Date Prep: 12	19 18 18 00					
Seq Number: 3073493)								
			Prep seq: 76	008405					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydr	rocarbons (GRO)	PHC610	725	15.0	7.99	mg/kg	12.20.18 01:27		1
Diesel Range Organic	· /	C10C28DRO	2150	15.0	8.12	mg/kg	12.20.18 01:27		1
Motor Oil Range Hydrod	carbons (MRO)	PHCG2835	150	15.0	8.12	mg/kg	12.20.18 01:27		1
Total TPH		PHC635	3025		7.99	mg/kg	12.20.18 01:27		
Surrogate			% Recovery		Limits	Uni	ts Analysis	Date	Flag
1-Chlorooctane			116		70 - 1				
o-Terphenyl			119		70 - 1	35 %			
Analytical Method: BTI	EX by EPA 8021					Prep M	ethod: 5030B		
Analyst: SCM	5						Cuiou. 5050D		
Seq Number: 3073258			% Moist:			Tech:			
	2			2.17.18 08.45		Tech:	SCM		
1	3		Date Prep: 12			Tech:			
	3	C 4 S				Tech:	SCM		
Parameter	3	CAS Number	Date Prep: 12		SDL	Tech: Units		Flag	Dil Factor
	3		Date Prep: 12 Prep seq: 76	668232	SDL		SCM Analysis Date		Dil Factor
Parameter	3	Number	Date Prep: 12 Prep seq: 76 Result	568232 MQL		Units	SCM Analysis	Flag	
Parameter Benzene	3	Number 71-43-2 108-88-3 100-41-4	Date Prep: 12 Prep seq: 76 Result 0.0399	568232 MQL 0.200	0.0384	Units mg/kg	SCM Analysis Date 12.17.18 17:17	Flag	100
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	3	Number 71-43-2 108-88-3 100-41-4 179601-23-1	Date Prep: 12 Prep seq: 76 Result 0.0399 1.27 0.186 0.347	568232 MQL 0.200 0.200 0.200 0.200 0.399	0.0384 0.0455 0.0564 0.101	Units mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17	Flag J	100 100 100 100
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene	3	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Date Prep: 12 Prep seq: 76 Result 0.0399 1.27 0.186 0.347 1.85	568232 MQL 0.200 0.200 0.200	0.0384 0.0455 0.0564 0.101 0.0344	Units mg/kg mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17	Flag J J	100 100 100
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total	3	Number 71-43-2 108-88-3 100-41-4 179601-23-1	Date Prep: 12 Prep seq: 76 Result 0.0399 1.27 0.186 0.347 1.85 2.197	568232 MQL 0.200 0.200 0.200 0.200 0.399	0.0384 0.0455 0.0564 0.101 0.0344 0.0344	Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17	Flag J J	100 100 100 100
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene	3	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Date Prep: 12 Prep seq: 76 Result 0.0399 1.27 0.186 0.347 1.85	568232 MQL 0.200 0.200 0.200 0.200 0.399	0.0384 0.0455 0.0564 0.101 0.0344	Units mg/kg mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17	Flag J J	100 100 100 100
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total	3	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Date Prep: 12 Prep seq: 76 Result 0.0399 1.27 0.186 0.347 1.85 2.197	568232 MQL 0.200 0.200 0.200 0.200 0.399	0.0384 0.0455 0.0564 0.101 0.0344 0.0344	Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17 12.17.18 17:17	Flag J J J	100 100 100 100
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total Total BTEX	3	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Date Prep: 12 Prep seq: 76 Result 0.0399 1.27 0.186 0.347 1.85 2.197 3.6929	568232 MQL 0.200 0.200 0.200 0.200 0.399	0.0384 0.0455 0.0564 0.101 0.0344 0.0344 0.0344	Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.17.18 17:17 12.17.18 17:17	Flag J J J	100 100 100 100 100





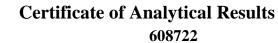
Certificate of Analytical Results 608722



TRC Solutions, Inc, Midland, TX

Sample Id: TT-1 @ 18 '		Matrix:	Soil		Sample	Depth: 18 ft		
Lab Sample Id: 608722-004		Date Collecte	ed: 12.12.18 08	3.30	Date Re	eceived: 12.14.	18 11.5	51
Analytical Method: Inorganic Anions by H	EPA 300/300.1				Prep M	ethod: E300P		
Analyst: CHE		% Moist:			Tech:	CHE		
Seq Number: 3073892		Date Prep: 12	2.21.18 15.00					
1		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	460	5.00	0.858	mg/kg	12.21.18 17:34		1
Analytical Method: TPH by SW8015 Mod	1				Prep M	ethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 3073906		Date Prep: 12	2.21.18 17.00					
		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	501	15.0	7.99	mg/kg	12.22.18 19:45		1
Diesel Range Organics (DRO)	C10C28DRO	1270	15.0	8.11	mg/kg	12.22.18 19:45		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	114	15.0	8.11	mg/kg	12.22.18 19:45		1
Total TPH	PHC635	1885		7.99	mg/kg	12.22.18 19:45		
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
1-Chlorooctane		121		70 - 1				
o-Terphenyl		119		70 - 1	135 %			
Analytical Method: BTEX by EPA 8021								
					Prep M	ethod: 5030B		
Analyst: SCM		% Moist:			Prep M Tech:	ethod: 5030B SCM		
		% Moist: Date Prep: 12	2.26.18 08.15		•			
•		Date Prep: 12	2.26.18 08.15 568765		•			
•	CAS Number	Date Prep: 12		SDL	•		Flag	Dil Factor
Seq Number: 3074024 Parameter Benzene	Number 71-43-2	Date Prep: 12 Prep seq: 76 Result 0.0849	568765 MQL 0.0100	0.00192	Tech: Units mg/kg	SCM Analysis Date 12.26.18 15:28		5
Seq Number: 3074024 Parameter Benzene Toluene	Number 71-43-2 108-88-3	Date Prep: 12 Prep seq: 76 Result 0.0849 0.0509	568765 MQL 0.0100 0.0100	0.00192 0.00228	Tech: Units mg/kg mg/kg	SCM Analysis Date 12.26.18 15:28 12.26.18 15:28		5 5
Seq Number: 3074024 Parameter Benzene Toluene Ethylbenzene	Number 71-43-2 108-88-3 100-41-4	Date Prep: 12 Prep seq: 76 Result 0.0849 0.0509 0.412	568765 MQL 0.0100 0.0100 0.0100	0.00192 0.00228 0.00282	Tech: Units mg/kg mg/kg mg/kg	SCM Analysis Date 12.26.18 15:28 12.26.18 15:28 12.26.18 15:28		5 5 5
Seq Number: 3074024 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	Number 71-43-2 108-88-3 100-41-4 179601-23-1	Date Prep: 12 Prep seq: 76 Result 0.0849 0.0509 0.412 0.642	568765 MQL 0.0100 0.0100 0.0100 0.0200	0.00192 0.00228 0.00282 0.00507	Tech: Units mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.26.18 15:28 12.26.18 15:28 12.26.18 15:28 12.26.18 15:28		5 5 5 5
Seq Number: 3074024 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Date Prep: 12 Prep seq: 76 Result 0.0849 0.0509 0.412 0.642 1.86	568765 MQL 0.0100 0.0100 0.0100	0.00192 0.00228 0.00282 0.00507 0.00172	Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.26.18 15:28 12.26.18 15:28 12.26.18 15:28 12.26.18 15:28 12.26.18 15:28		5 5 5
Seq Number: 3074024 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	Number 71-43-2 108-88-3 100-41-4 179601-23-1	Date Prep: 12 Prep seq: 76 Result 0.0849 0.0509 0.412 0.642	568765 MQL 0.0100 0.0100 0.0100 0.0200	0.00192 0.00228 0.00282 0.00507	Tech: Units mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.26.18 15:28 12.26.18 15:28 12.26.18 15:28 12.26.18 15:28		5 5 5 5
Seq Number: 3074024 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Date Prep: 12 Prep seq: 76 Result 0.0849 0.0509 0.412 0.642 1.86 2.502	568765 MQL 0.0100 0.0100 0.0100 0.0200	0.00192 0.00228 0.00282 0.00507 0.00172 0.00172	Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.26.18 15:28 12.26.18 15:28 12.26.18 15:28 12.26.18 15:28 12.26.18 15:28 12.26.18 15:28 12.26.18 15:28	Flag	5 5 5 5
Seq Number: 3074024 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total Total BTEX	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Date Prep: 12 Prep seq: 76 Result 0.0849 0.0509 0.412 0.642 1.86 2.502 3.0498	568765 MQL 0.0100 0.0100 0.0100 0.0200	0.00192 0.00228 0.00282 0.00507 0.00172 0.00172 0.00172	Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.26.18 15:28 12.26.18 15:28 1	Flag	5 5 5 5 5







TRC Solutions, Inc, Midland, TX

Sample Id: TT-1 @ 19 '		Matrix:	Soil		Sample	Depth: 19 ft		
Lab Sample Id: 608722-005		Date Collecte	ed: 12.12.18 08	3.40	Date Re	eceived: 12.14.1	18 11.5	51
Analytical Method: Inorganic Anions by I	EPA 300/300.1				Prep M	ethod: E300P		
Analyst: CHE		% Moist:			Tech:	CHE		
Seq Number: 3073892		Date Prep: 12	2.21.18 15.00					
		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	70.4	4.95	0.850	mg/kg	12.21.18 17:56		1
Analytical Method: TPH by SW8015 Mod	1				Prep M	ethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 3073906		Date Prep: 12	2.21.18 17.00					
1		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	565	15.0	7.99	mg/kg	12.22.18 20:06		1
Diesel Range Organics (DRO)	C10C28DRO	1510	15.0	8.11	mg/kg	12.22.18 20:06		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	125	15.0	8.11	mg/kg	12.22.18 20:06		1
Total TPH	PHC635	2200		7.99	mg/kg	12.22.18 20:06		
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
1-Chlorooctane o-Terphenyl		129 125		70 - 1 70 - 1				
					D M	ul 1 5020D		
Analytical Method: BTEX by EPA 8021					Prep M			
Analyst: SCM		% Moist			Tach	SCM		
•		% Moist:	0 26 10 00 15		Tech:	SCM		
Seq Number: 3074024		Date Prep: 12			Tech:	SCM		
•	CAS	Date Prep: 12	2.26.18 08.15 568765		Tech:			
•	CAS Number	Date Prep: 12		SDL	Tech: Units	SCM Analysis Date	Flag	Dil Factor
Seq Number: 3074024 Parameter Benzene	Number 71-43-2	Date Prep: 12 Prep seq: 76 Result 0.0379	568765 MQL 0.0100	0.00192	Units mg/kg	Analysis Date 12.26.18 15:47	Flag	5
Seq Number: 3074024 Parameter Benzene Toluene	Number 71-43-2 108-88-3	Date Prep: 12 Prep seq: 76 Result 0.0379 1.97	568765 MQL 0.0100 0.0100	0.00192 0.00228	Units mg/kg mg/kg	Analysis Date 12.26.18 15:47 12.26.18 15:47	Flag	5 5
Seq Number: 3074024 Parameter Benzene Toluene Ethylbenzene	Number 71-43-2 108-88-3 100-41-4	Date Prep: 12 Prep seq: 76 Result 0.0379 1.97 0.306	568765 MQL 0.0100 0.0100 0.0100	0.00192 0.00228 0.00282	Units mg/kg mg/kg mg/kg	Analysis Date 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47	Flag	5 5 5
Seq Number: 3074024 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	Number 71-43-2 108-88-3 100-41-4 179601-23-1	Date Prep: 12 Prep seq: 76 Result 0.0379 1.97 0.306 0.516	568765 MQL 0.0100 0.0100 0.0100 0.0200	0.00192 0.00228 0.00282 0.00507	Units mg/kg mg/kg mg/kg mg/kg	Analysis Date 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47	Flag	5 5 5 5
Seq Number: 3074024 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Date Prep: 12 Prep seq: 76 Result 0.0379 1.97 0.306 0.516 1.87	568765 MQL 0.0100 0.0100 0.0100	0.00192 0.00228 0.00282 0.00507 0.00172	Units mg/kg mg/kg mg/kg mg/kg mg/kg	Analysis Date 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47	Flag	5 5 5
Seq Number: 3074024 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	Number 71-43-2 108-88-3 100-41-4 179601-23-1	Date Prep: 12 Prep seq: 76 Result 0.0379 1.97 0.306 0.516	568765 MQL 0.0100 0.0100 0.0100 0.0200	0.00192 0.00228 0.00282 0.00507	Units mg/kg mg/kg mg/kg mg/kg	Analysis Date 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47	Flag	5 5 5 5
Seq Number: 3074024 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylene, Total	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Date Prep: 12 Prep seq: 76 Result 0.0379 1.97 0.306 0.516 1.87 2.386	568765 MQL 0.0100 0.0100 0.0100 0.0200	0.00192 0.00228 0.00282 0.00507 0.00172 0.00172	Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Analysis Date 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47		5 5 5 5
Seq Number: 3074024 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total Total BTEX	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Date Prep: 12 Prep seq: 76 Result 0.0379 1.97 0.306 0.516 1.87 2.386 4.6999	568765 MQL 0.0100 0.0100 0.0100 0.0200	0.00192 0.00228 0.00282 0.00507 0.00172 0.00172 0.00172	Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Analysis Date 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47 12.26.18 15:47		5 5 5 5 5





Certificate of Analytical Results 608722



TRC Solutions, Inc, Midland, TX

Sample Id: TT-1 @ 20'		Matrix:	Soil		Sample	Depth: 20 ft		
Lab Sample Id: 608722-006		Date Collecte	ed: 12.12.18 0	8.50	Date Re	eceived: 12.14.	18 11.5	51
Analytical Method: Inorganic Anions by H	EPA 300/300.1				Prep M	ethod: E300P		
Analyst: CHE		% Moist:			Tech:	CHE		
Seq Number: 3073892		Date Prep: 12	2.21.18 15.00					
1		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	57.4	4.96	0.852	mg/kg	12.21.18 18:02		1
Analytical Method: TPH by SW8015 Mod	1				Prep Me	ethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 3073906		Date Prep: 12	2.21.18 17.00					
		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	448	15.0	7.99	mg/kg	12.22.18 20:27		1
Diesel Range Organics (DRO)	C10C28DRO	1230	15.0	8.11	mg/kg	12.22.18 20:27		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	97.6	15.0	8.11	mg/kg	12.22.18 20:27		1
Total TPH	PHC635	1775.6		7.99	mg/kg	12.22.18 20:27		
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
1-Chlorooctane o-Terphenyl		125 120		70 - 1 70 - 1				
Analytical Method: BTEX by EPA 8021					Prep Me	ethod: 5030B		
Analyst: SCM					r			
Thirdyst. Sett		% Moist:			Tech			
Sag Number: 3074024		% Moist: Date Prep: 12	26 18 08 15		Tech:	SCM		
Seq Number: 3074024		Date Prep: 12	2.26.18 08.15 568765		Tech:			
Seq Number: 3074024 Parameter	CAS Number	Date Prep: 12		SDL	Tech: Units		Flag	Dil Factor
Parameter Benzene	Number 71-43-2	Date Prep: 12 Prep seq: 76	568765 MQL 0.00200	0.000385		SCM Analysis		Dil Factor
Parameter Benzene Toluene	Number 71-43-2 108-88-3	Date Prep: 12 Prep seq: 76 Result <0.000385 0.00483	568765 MQL 0.00200 0.00200	0.000385 0.000456	Units mg/kg mg/kg	SCM Analysis Date 12.26.18 15:09 12.26.18 15:09	Flag	1
Parameter Benzene Toluene Ethylbenzene	Number 71-43-2 108-88-3 100-41-4	Date Prep: 12 Prep seq: 76 Result <0.000385 0.00483 0.0169	568765 MQL 0.00200 0.00200 0.00200	0.000385 0.000456 0.000565	Units mg/kg mg/kg mg/kg	SCM Analysis Date 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09	Flag	1 1 1
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	Number 71-43-2 108-88-3 100-41-4 179601-23-1	Date Prep: 12 Prep seq: 76 Result <0.000385 0.00483 0.0169 0.0512	568765 MQL 0.00200 0.00200 0.00200 0.00200 0.00400	0.000385 0.000456 0.000565 0.00101	Units mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09	Flag	1 1 1 1
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Date Prep: 12 Prep seq: 76 Result <0.000385 0.00483 0.0169 0.0512 0.0532	568765 MQL 0.00200 0.00200 0.00200	0.000385 0.000456 0.000565 0.00101 0.000344	Units mg/kg mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09	Flag	1 1 1
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	Number 71-43-2 108-88-3 100-41-4 179601-23-1	Date Prep: 12 Prep seq: 76 Result <0.000385 0.00483 0.0169 0.0512	568765 MQL 0.00200 0.00200 0.00200 0.00200 0.00400	0.000385 0.000456 0.000565 0.00101	Units mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09	Flag	1 1 1 1
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Date Prep: 12 Prep seq: 76 Result <0.000385 0.00483 0.0169 0.0512 0.0532 0.1044	568765 MQL 0.00200 0.00200 0.00200 0.00200 0.00400	0.000385 0.000456 0.000565 0.00101 0.000344 0.000344	Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09	Flag U	1 1 1 1
Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total Total BTEX	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	Date Prep: 12 Prep seq: 76 Result <0.000385 0.00483 0.0169 0.0512 0.0532 0.1044 0.12613	568765 MQL 0.00200 0.00200 0.00200 0.00200 0.00400	0.000385 0.000456 0.000565 0.00101 0.000344 0.000344 0.000344	Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	SCM Analysis Date 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09 12.26.18 15:09	Flag U	1 1 1 1







TRC Solutions, Inc, Midland, TX

Moore Sweet

Sample Id: TT-1 @ 21 '		Matrix:	Soil		Sample	Depth: 21 ft		
Lab Sample Id: 608722-007		Date Collecte	d: 12.12.18 09	9.00	Date R	eceived: 12.14.1	8 11.5	1
Analytical Method: TPH by SW8015 Mod					Prep M	lethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
2			01 10 17 00		Teen.	AKW		
Seq Number: 3073906		Date Prep: 12						
		Prep seq: 76	68683					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	454	14.9	7.97	mg/kg	12.22.18 20:48		1
Diesel Range Organics (DRO)	C10C28DRO	1200	14.9	8.10	mg/kg	12.22.18 20:48		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	102	14.9	8.10	mg/kg	12.22.18 20:48		1
Total TPH	PHC635	1756		7.97	mg/kg	12.22.18 20:48		
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
		,			•	10 1111113010	2.400	8
1-Chlorooctane		122		70 - 1		·	2000	8
Ũ					135 %	,)	2	g
1-Chlorooctane		122		70 - 1	135 %	,)		
1-Chlorooctane		122		70 - 1	135 %			
1-Chlorooctane o-Terphenyl		122		70 - 1	135 % 135 %			
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021		122 114	2.26.18 12.00	70 - 1	135 % 135 % Prep M	lethod: 5030B	2	6
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM		122 114 % Moist:		70 - 1	135 % 135 % Prep M	lethod: 5030B	2	
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM	CAS Number	122 114 % Moist: Date Prep: 12		70 - 1	135 % 135 % Prep M	lethod: 5030B	Flag	Dil Factor
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3074046		122 114 % Moist: Date Prep: 12 Prep seq: 76	668772	70 70	135 % 135 % Prep M Tech:	iethod: 5030B SCM		
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3074046 Parameter	Number	122 114 % Moist: Date Prep: 12 Prep seq: 76 Result	568772 MQL	70 70 SDL	135 % 135 % Prep M Tech: Units	lethod: 5030B SCM Analysis Date	Flag	Dil Factor
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3074046 Parameter Benzene	Number 71-43-2	122 114 % Moist: Date Prep: 12 Prep seq: 76 Result 0.0101	568772 MQL 0.0200	70 - 70 - 70 - 70 - 70 - 70 - 70 - 70 -	135 % 135 % Prep M Tech: Units mg/kg	ethod: 5030B SCM Analysis Date 12.27.18 01:14	Flag JK	Dil Factor 10
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3074046 Parameter Benzene Toluene	Number 71-43-2 108-88-3	122 114 % Moist: Date Prep: 12 Prep seq: 76 Result 0.0101 0.740	568772 MQL 0.0200 0.0200	70 - 70 - 70 - 70 - 70 - 70 - 70 - 70 -	135 % 135 % Prep M Tech: Units mg/kg mg/kg	iethod: 5030B SCM Analysis Date 12.27.18 01:14 12.27.18 01:14	Flag JK K	Dil Factor 10 10
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3074046 Parameter Benzene Toluene Ethylbenzene	Number 71-43-2 108-88-3 100-41-4	122 114 % Moist: Date Prep: 12 Prep seq: 76 Result 0.0101 0.740 0.213	668772 MQL 0.0200 0.0200 0.0200	70 - 70 - 70 - 70 - 70 - 70 - 70 - 70 -	135 % 135 % Prep M Tech: Units mg/kg mg/kg mg/kg	iethod: 5030B SCM Analysis Date 12.27.18 01:14 12.27.18 01:14 12.27.18 01:14	Flag JK K K	Dil Factor 10 10 10
I-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3074046 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	Number 71-43-2 108-88-3 100-41-4 179601-23-1	122 114 % Moist: Date Prep: 12 Prep seq: 76 Result 0.0101 0.740 0.213 0.410	668772 MQL 0.0200 0.0200 0.0200 0.0200 0.0401	70 - 70 - 70 - 70 - 70 - 70 - 70 - 70 -	135 % 135 % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg	Analysis Date 12.27.18 01:14 12.27.18 01:14 12.27.18 01:14 12.27.18 01:14	Flag JK K K K	Dil Factor 10 10 10 10

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene 4-Bromofluorobenzene	127 198	70 - 130 70 - 130	% %		**

3.4031

Total BTEX

mg/kg

0.00345

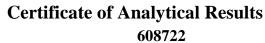
12.27.18 01:14

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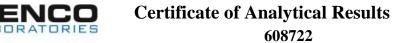
TRC Solutions, Inc, Midland, TX

Moore Sweet

Benzene		71-43-2	0.00569	0.00998	0.00192	mg/kg	12.27.18 01:33	IK	5
Parameter	r	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
			Prep seq: 70	668772					
eq Number:	3074046		Date Prep: 12	2.26.18 12.00					
analyst:	SCM		% Moist:			Tech:	SCM		
analytical Me	thod: BTEX by EPA 8021					Prep M	ethod: 5030B		
o-Terpheny	<i>v</i> 1		123		70 - 1	35 %			
1-Chlorooc	tane		124		70 - 1	35 %			
Surrogate			% Recovery		Limits	Uni	ts Analysis	Date	Flag
Total TPH		PHC635	2156		7.99	mg/kg	12.22.18 21:09		
	ange Hydrocarbons (MRO)	PHCG2835	132	15.0	8.12	mg/kg	12.22.18 21:09		1
	ge Organics (DRO)	C10C28DRO	1470	15.0	8.12	mg/kg	12.22.18 21:09		1
Parameter	r Range Hydrocarbons (GRO)	CAS Number PHC610	Result	MQL 15.0	SDL 7.99	Units mg/kg	Analysis Date	Flag	Dil Facto
			Prep seq: 70	568683					
eq Number:	3073906		Date Prep: 12	2.21.18 17.00					
Analyst:	ARM		% Moist:			Tech:	ARM		
analytical Me	ethod: TPH by SW8015 Mod	l				Prep M	ethod: 1005		
ab Sample Id	1: 608722-008		Date Collecte	ed: 12.12.18 09	9.10	Date Re	eceived: 12.14.	8 11.5	51

Benzene	71-43-2	0.00569	0.00998	0.00192	mg/kg	12.27.18 01:33	JK	5
Toluene	108-88-3	0.610	0.00998	0.00227	mg/kg	12.27.18 01:33	Κ	5
Ethylbenzene	100-41-4	0.164	0.00998	0.00282	mg/kg	12.27.18 01:33	Κ	5
m_p-Xylenes	179601-23-1	0.305	0.0200	0.00506	mg/kg	12.27.18 01:33	Κ	5
o-Xylene	95-47-6	1.43	0.00998	0.00172	mg/kg	12.27.18 01:33	Κ	5
Xylenes, Total	1330-20-7	1.735		0.00172	mg/kg	12.27.18 01:33	Κ	
Total BTEX		2.51469		0.00172	mg/kg	12.27.18 01:33	K	
Surrogate		% Recovery		Limits	Uni	its Analysi	is Date	Flag
1,4-Difluorobenzene	116			70 - 130 %				
4-Bromofluorobenzene		216			70 - 130 %			**







TRC Solutions, Inc, Midland, TX

Sample Id: TT-1 @ 23'		Matrix:	Soil		Sample	e Depth: 23 ft		
Lab Sample Id: 608722-009		Date Collecte	d: 12.12.18 09	9.20	Date R	eceived: 12.14.1	8 11.5	51
Analytical Method: TPH by SW8015 Mod	l				Prep M	lethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 3073906		Date Prep: 12	21 18 17 00					
3eq Number. 3073900								
		Prep seq: 76	08083					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	52.9	15.0	7.99	mg/kg	12.22.18 21:30		1
Diesel Range Organics (DRO)	C10C28DRO	492	15.0	8.11	mg/kg	12.22.18 21:30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	46.8	15.0	8.11	mg/kg	12.22.18 21:30		1
Total TPH	PHC635	591.7		7.99	mg/kg	12.22.18 21:30		
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
1-Chlorooctane		100		70 - 1	135 %	,)		
o-Terphenyl		105		70 - 1	135 %	,)		
Analytical Method: BTEX by EPA 8021					Prep M	lethod: 5030B		
Analyst: SCM		% Moist:			Tech:	SCM		
Seq Number: 3074046		Date Prep: 12	.26.18 12.00					
		Prep seq: 76	68772					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
				0.00100	mg/kg	12.27.18 01:53	JK	5
Benzene	71-43-2	0.00354	0.00996	0.00192	mg/kg	12.27.10 01.55	JK	
Benzene Toluene	71-43-2 108-88-3	0.00354 0.00513	0.00996 0.00996	0.00192	mg/kg	12.27.18 01:53	JK JK	5
					00			
Toluene	108-88-3	0.00513	0.00996	0.00227	mg/kg	12.27.18 01:53	JK	5
Toluene Ethylbenzene	108-88-3 100-41-4	0.00513 0.00503 0.00951 0.0837	0.00996 0.00996	0.00227 0.00281 0.00505 0.00171	mg/kg mg/kg	12.27.18 01:53 12.27.18 01:53	JK JK	5 5
Toluene Ethylbenzene m_p-Xylenes	108-88-3 100-41-4 179601-23-1	0.00513 0.00503 0.00951	0.00996 0.00996 0.0199	0.00227 0.00281 0.00505	mg/kg mg/kg mg/kg	12.27.18 01:53 12.27.18 01:53 12.27.18 01:53	JK JK JK	5 5 5

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	112	70 - 130	%		
4-Bromofluorobenzene	71	70 - 130	%		



BORATORIES





TRC Solutions, Inc, Midland, TX

Sample Id: TT-1 @ 24' Lab Sample Id: 608722-010 Analytical Method: TPH by SW8015 Mod	1	Matrix: Date Collecte	Soil d: 12.12.18 09	9.30		Depth: 24 ft eceived: 12.14.	18 11.5	51
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 3073906		Date Prep: 12	.21.18 17.00					
		Prep seq: 76	68683					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	78.1	15.0	7.99	mg/kg	12.22.18 21:51		1
Diesel Range Organics (DRO)	C10C28DRO	561	15.0	8.12	mg/kg	12.22.18 21:51		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	50.9	15.0	8.12	mg/kg	12.22.18 21:51		1
Total TPH	PHC635	690		7.99	mg/kg	12.22.18 21:51		
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
1-Chlorooctane		112		70 -	135 %	•		
o-Terphenyl		113		70 -	135 %	1		
Analytical Method: BTEX by EPA 8021					Prep M	ethod: 5030B		
Analyst: SCM		% Moist:			Tech:	SCM		
Seq Number: 3074046		Date Prep: 12	.26.18 12.00					
		Prep seq: 76	00772					

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Facto
Benzene	71-43-2	< 0.000388	0.00202	0.000388	mg/kg	12.27.18 02:12	UK	1
Toluene	108-88-3	0.000585	0.00202	0.000459	mg/kg	12.27.18 02:12	JK	1
Ethylbenzene	100-41-4	0.00211	0.00202	0.000569	mg/kg	12.27.18 02:12	Κ	1
m_p-Xylenes	179601-23-1	0.00321	0.00403	0.00102	mg/kg	12.27.18 02:12	JK	1
o-Xylene	95-47-6	0.0265	0.00202	0.000347	mg/kg	12.27.18 02:12	Κ	1
Xylenes, Total	1330-20-7	0.02971		0.000347	mg/kg	12.27.18 02:12	Κ	
Total BTEX		0.032405		0.000347	mg/kg	12.27.18 02:12	К	
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
1,4-Difluorobenzene		103		70 - 1	130 %			
4-Bromofluorobenzene		120		70 - 1	130 %)		



ORATORIES





TRC Solutions, Inc, Midland, TX

Moore Sweet

Sample Id: TT-1 @25 '		Matrix:	Soil		Sample	e Depth: 25 ft		
Lab Sample Id: 608722-011		Date Collecte	ed: 12.12.18 0	9.40	Date R	eceived: 12.14.	18 11.5	51
Analytical Method: TPH by SW8015 Mod	1				Prep M	lethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 3073906		Date Prep: 12	2.21.18 17.00					
		Prep seq: 76	568683					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	9.88	15.0	7.98	mg/kg	12.22.18 22:13	J	1
Diesel Range Organics (DRO)	C10C28DRO	117	15.0	8.10	mg/kg	12.22.18 22:13		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	13.3	15.0	8.10	mg/kg	12.22.18 22:13	J	1
Total TPH	PHC635	140.18		7.98	mg/kg	12.22.18 22:13		
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
1-Chlorooctane		95		70 - 1	135 %			
o-Terphenyl		97		70 - 1	135 %			
					D M	1 1 5020D		
Analytical Method: BTEX by EPA 8021					Prep M			
Analyst: SCM		% Moist:			Tech:	SCM		
Seq Number: 3074046		Date Prep: 12	2.26.18 12.00					
		Prep seq: 76	668772					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000385	0.00200	0.000385	mg/kg	12.27.18 02:31	UK	1
Toluene	108-88-3	< 0.000456	0.00200	0.000456	mg/kg	12.27.18 02:31	UK	1

1,4-Difluorobenzene		110		70 - 1	30 %	1		
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
Total BTEX		0.00371		0.000344	mg/kg	12.27.18 02:31	K	
Xylenes, Total	1330-20-7	0.00371		0.000344	mg/kg	12.27.18 02:31	Κ	
o-Xylene	95-47-6	0.00371	0.00200	0.000344	mg/kg	12.27.18 02:31	Κ	1
m_p-Xylenes	179601-23-1	< 0.00101	0.00400	0.00101	mg/kg	12.27.18 02:31	UK	1
Ethylbenzene	100-41-4	< 0.000565	0.00200	0.000565	mg/kg	12.27.18 02:31	UK	1
Toluene	108-88-3	< 0.000456	0.00200	0.000456	mg/kg	12.27.18 02:31	UK	1
Benzene	71-43-2	< 0.000385	0.00200	0.000385	mg/kg	12.27.18 02:31	UK	1

110

4-Bromofluorobenzene

70 - 130

%







TRC Solutions, Inc, Midland, TX

Sample Id: 7668162-1-BLK		Matrix:	Solid		Sample	Depth:		
Lab Sample Id: 7668162-1-BLK		Date Collecte	ed:		Date R	eceived:		
Analytical Method: Inorganic Anion	s by EPA 300/300.1				Prep M	ethod: E300P		
Analyst: CHE		% Moist:			Tech:	CHE		
Seq Number: 3073168		Date Prep: 12	2.17.18 09.00)				
		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.858	5.00	0.858	mg/kg	12.17.18 09:59	U	1
Sample Id: 7668232-1-BLK		Matrix:	Solid		Sample	Depth:		
Lab Sample Id: 7668232-1-BLK		Date Collecte	ed:		Date R	eceived:		
Analytical Method: BTEX by EPA 8	3021				Prep M	ethod: 5030B		
Analyst: SCM		% Moist:			Tech:	SCM		
Seq Number: 3073258		Date Prep: 12	2.17.18 08.45	5				
		Prep seq: 76	668232					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000387	0.00201	0.000387	mg/kg	12.17.18 10:40	U	1
Toluene	108-88-3	< 0.000458	0.00201	0.000458	mg/kg	12.17.18 10:40	U	1
Ethylbenzene	100-41-4	< 0.000568	0.00201	0.000568	mg/kg	12.17.18 10:40	U	1
m_p-Xylenes	179601-23-1	< 0.00102	0.00402	0.00102	mg/kg	12.17.18 10:40	U	1
o-Xylene	95-47-6	< 0.000346	0.00201	0.000346	mg/kg	12.17.18 10:40	U	1
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
1,4-Difluorobenzene		99		70 - 1	30 %	1		
4-Bromofluorobenzene		88		70 - 1	30 %	ı		







TRC Solutions, Inc, Midland, TX

Moore Sweet

Sample Id: 7668405-1-BLK		Matrix:	Solid		Sample	Depth:		
Lab Sample Id: 7668405-1-BLK		Date Collecte	d:		Date R	eceived:		
Analytical Method: TPH by SW8015 Me	od				Prep M	ethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 3073493		Date Prep: 12	2.19.18 18.00					
		Prep seq: 76	668405					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<8.00	15.0	8.00	mg/kg	12.19.18 20:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<8.13	15.0	8.13	mg/kg	12.19.18 20:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<8.13	15.0	8.13	mg/kg	12.19.18 20:57	U	1
Total TPH	PHC635	<8		8	mg/kg	12.19.18 20:57	U	
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
Surrogate 1-Chlorooctane		% Recovery 107		Limits 70 - 1		·	Date	Flag
0		·			135 %	,	Date	Flag
1-Chlorooctane		107	Solid	70 -	135 % 135 %	,	Date	Flag
1-Chlorooctane o-Terphenyl		107 109		70 -	135 % 135 % Sample		Date	Flag
1-Chlorooctane o-Terphenyl Sample Id: 7668612-1-BLK	· EPA 300/300.1	107 109 Matrix:		70 -	135 % 135 % Sample	Depth: eceived:		Flag
1-Chlorooctane o-Terphenyl Sample Id: 7668612-1-BLK Lab Sample Id: 7668612-1-BLK	[•] EPA 300/300.1	107 109 Matrix:		70 -	135 % 135 % Sample Date R	Depth: eceived:		Flag
1-Chlorooctane o-Terphenyl Sample Id: 7668612-1-BLK Lab Sample Id: 7668612-1-BLK Analytical Method: Inorganic Anions by	EPA 300/300.1	107 109 Matrix: Date Collecte	d:	70 -	135 % 135 % Sample Date R Prep M	Depth: eceived: fethod: E300P		Flag
1-Chlorooctane o-Terphenyl Sample Id: 7668612-1-BLK Lab Sample Id: 7668612-1-BLK Analytical Method: Inorganic Anions by Analyst: CHE	FEPA 300/300.1	107 109 Matrix: Date Collecte % Moist:	d: 2.21.18 15.00	70 -	135 % 135 % Sample Date R Prep M	Depth: eceived: fethod: E300P		Flag
1-Chlorooctane o-Terphenyl Sample Id: 7668612-1-BLK Lab Sample Id: 7668612-1-BLK Analytical Method: Inorganic Anions by Analyst: CHE	FEPA 300/300.1 CAS Number	107 109 Matrix: Date Collecte % Moist: Date Prep: 12	d: 2.21.18 15.00	70 -	135 % 135 % Sample Date R Prep M	Depth: eceived: fethod: E300P		Flag Dil Factor

.







TRC Solutions, Inc, Midland, TX

Moore Sweet

Gasoline Pange Hydrocarbons (GPO)	PHC610	<8.00	15.0	8.00	ma/ka	12 22 18 12:58	II	1
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
		Prep seq: 76	68683					
Seq Number: 3073906		Date Prep: 12	.21.18 17.00					
Analyst: ARM		% Moist:			Tech:	ARM		
Analytical Method: TPH by SW8015 Mo	1				Prep M	lethod: 1005		
Lab Sample Id: 7668683-1-BLK		Date Collecte	d:		Date R	eceived:		
Sample Id: 7668683-1-BLK		Matrix:	Solid		Sample	e Depth:		

Surrogate	9/	6 Recovery		Limits	Un	its Analysis	Date	Flag
Total TPH	PHC635	9.78		8	mg/kg	12.22.18 12:58	J	
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<8.13	15.0	8.13	mg/kg	12.22.18 12:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	9.78	15.0	8.13	mg/kg	12.22.18 12:58	J	1
Gasoline Range Hydrocarbons (GRO)	PHC610	<8.00	15.0	8.00	mg/kg	12.22.18 12:58	U	1

1-Chlorooctane o-Terphenyl	125 94	70 - 135 % 70 - 135 %
Sample Id: 7668765-1-BLK	Matrix: Solid	Sample Depth:
Lab Sample Id: 7668765-1-BLK	Date Collected:	Date Received:

Analytical Method: BTEX by EPA 8021

-	-		-	
Analyst:	SCM	% Moist:	Tech:	SCM
Seq Number:	3074024	Date Prep: 12.26.18 08.15		
		Prep seq: 7668765		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Facto
Benzene	71-43-2	< 0.000385	0.00200	0.000385	mg/kg	12.26.18 14:50	U	1
Toluene	108-88-3	< 0.000456	0.00200	0.000456	mg/kg	12.26.18 14:50	U	1
Ethylbenzene	100-41-4	< 0.000565	0.00200	0.000565	mg/kg	12.26.18 14:50	U	1
m_p-Xylenes	179601-23-1	< 0.00101	0.00400	0.00101	mg/kg	12.26.18 14:50	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	12.26.18 14:50	U	1
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
1,4-Difluorobenzene		99		70 -	130 %	,		
4-Bromofluorobenzene		85		70 -	130 %	,)		

Prep Method: 5030B







TRC Solutions, Inc, Midland, TX

Sample Id: 7668772-	1-BLK	Matrix:	Solid	Sample Depth	1:	
Lab Sample Id: 7668772-	1-BLK	Date Collected	d:	Date Received	1:	
Analytical Method: BTE	X by EPA 8021			Prep Method:	5030B	
Analyst: SCM		% Moist:		Tech:	SCM	
Seq Number: 3074046		Date Prep: 12	.26.18 12.00			
		Prep seq: 76	68772			
	CAS			An	alvsis	Dil Factor

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.000385	0.00200	0.000385	mg/kg	12.27.18 00:55	U	1
Toluene	108-88-3	< 0.000456	0.00200	0.000456	mg/kg	12.27.18 00:55	U	1
Ethylbenzene	100-41-4	< 0.000565	0.00200	0.000565	mg/kg	12.27.18 00:55	U	1
m_p-Xylenes	179601-23-1	< 0.00101	0.00400	0.00101	mg/kg	12.27.18 00:55	U	1
o-Xylene	95-47-6	< 0.000344	0.00200	0.000344	mg/kg	12.27.18 00:55	U	1
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

1,4-Difluorobenzene	107	70 - 130	%
4-Bromofluorobenzene	81	70 - 130	%



Flagging Criteria



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- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- **E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- ** Surrogate recovered outside laboratory control limit.
- **BRL** Below Reporting Limit.
- RL Reporting Limit
- MDL Method Detection LimitSDLSample Detection LimitLOD Limit of Detection
- PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- NC Non-Calculable

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	S Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory Control Sample Duplicate
MD/SD	Method Duplicate/Sample Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

Received by	OCD:	1/31/2	2020
	EIN		
LAE	BORAT	ORIES	5

11:08:49 AM Form 2 - Surrogate Recoveries

Project Name: Moore Sweet

Vork Orders: 608722,	,		Project II):		
Lab Batch #: 3073258	Sample: 7668232-1-BKS / 1					
Units: mg/kg	Date Analyzed: 12/17/18 09:06	SU.	RROGATE RE	ECOVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0309	0.0300	103	70-130	
4-Bromofluorobenzene		0.0266	0.0300	89	70-130	
Lab Batch #: 3073258	Sample: 7668232-1-BSD / 1	BSD Batcl	h: 1 Matrix:	Solid		
Units: mg/kg	Date Analyzed: 12/17/18 09:25	SU	RROGATE RE	ECOVERY	STUDY	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0302	0.0300	101	70-130	
4-Bromofluorobenzene		0.0265	0.0300	88	70-130	
Lab Batch #: 3073258	Sample: 608429-001 S / M	S Batcl	h: ¹ Matrix:	Soil		
Units: mg/kg	Date Analyzed: 12/17/18 09:44		RROGATE RE		STUDY	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	Anarytes	0.0305	0.0300	102	70-130	
4-Bromofluorobenzene		0.0267	0.0300	89	70-130	
Lab Batch #: 3073258	Sample: 608429-001 SD / N			Soil		
Units: mg/kg	Date Analyzed: 12/17/18 10:03		RROGATE RE		STUDY	
	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1,4-Difluorobenzene		0.0307	0.0300	102	70-130	
4-Bromofluorobenzene		0.0274	0.0300	91	70-130	
Lab Batch #: 3073258	Sample: 7668232-1-BLK /					
Units: mg/kg	Date Analyzed: 12/17/18 10:40	SU.	RROGATE RE	COVERY	STUDY	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	<u> </u>	0.0298	0.0300	99	70-130	
4-Bromofluorobenzene		0.0265	0.0300	88	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / BAll results are based on MDL and validated for QC purposes.

Received by	OCD:	1/31/20	20
LA	BORAT	ORIES	

11:08:49 AM Form 2 - Surrogate Recoveries

Project Name: Moore Sweet

Work Orders: 608722,			Project II			
Lab Batch #: 3074024	Sample: 7668765-1-BKS / 1					
Units: mg/kg	Date Analyzed: 12/26/18 12:25	501	RROGATE RE	ECOVERY ;	STUDY	
	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	Analytes					
1,4-Difluorobenzene		0.0303	0.0300	101	70-130	
4-Bromofluorobenzene		0.0269	0.0300	90	70-130	
Lab Batch #: 3074024	Sample: 7668765-1-BSD / 1					
Units: mg/kg	Date Analyzed: 12/26/18 12:44	SU	RROGATE RE	ECOVERY	STUDY	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0300	0.0300	100	70-130	
4-Bromofluorobenzene		0.0271	0.0300	90	70-130	
Lab Batch #: 3074024	Sample: 609206-014 S / MS	S Batch	n: ¹ Matrix:	Soil	I <u>.</u>	
Units: mg/kg	Date Analyzed: 12/26/18 13:54		RROGATE RE		STUDY	
BTEZ	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1,4-Difluorobenzene		0.0286	0.0300	95	70-130	
4-Bromofluorobenzene		0.0296	0.0300	99	70-130	
Lab Batch #: 3074024	Sample: 609206-014 SD / M					
Units: mg/kg	Date Analyzed: 12/26/18 14:13	SU	RROGATE RE	ECOVERY	STUDY	
	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene	Analytes	0.0200	0.0200		70.120	
4-Bromofluorobenzene		0.0300	0.0300	100 91	70-130	
	~ • 7 440745 1 DI K /				/0-150	
Lab Batch #: 3074024	Sample: 7668765-1-BLK / 1				TINV	
Units: mg/kg	Date Analyzed: 12/26/18 14:50	501	RROGATE RE	COVERI	1	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0296	0.0300	99	70-130	
4-Bromofluorobenzene		0.0254	0.0300	85	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / BAll results are based on MDL and validated for QC purposes.

Received by	OCD:	1/31/2	2020
	EIN		
LAE	BORAT	ORIES	5

11:08:49 AM Form 2 - Surrogate Recoveries

Project Name: Moore Sweet

Work Orders : 608722,			Project II			
Lab Batch #: 3074046	Sample: 7668772-1-BKS / 1		h: ¹ Matrix: RROGATE RH		TUDV	
	Date Analyzed: 12/26/18 23:21 X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	Analytes					
1,4-Difluorobenzene		0.0318	0.0300	106	70-130	
4-Bromofluorobenzene		0.0264	0.0300	88	70-130	
Lab Batch #: 3074046	Sample: 7668772-1-BSD / 1		-		62 65	
Units: mg/kg	Date Analyzed: 12/26/18 23:40	SU	RROGATE RE	ECOVERY	STUDY	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0319	0.0300	106	70-130	
4-Bromofluorobenzene		0.0263	0.0300	88	70-130	
Lab Batch #: 3074046	Sample: 609206-040 S / MS	S Batcl	h: ¹ Matrix:	Soil	<u> </u>	
Units: mg/kg	Date Analyzed: 12/27/18 00:00		RROGATE RE		STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0305	0.0300	102	70-130	
4-Bromofluorobenzene		0.0281	0.0300	94	70-130	
Lab Batch #: 3074046	Sample: 609206-040 SD / N	MSD Batcl	h: 1 Matrix:	Soil	I <u>.</u>	
Units: mg/kg	Date Analyzed: 12/27/18 00:19		RROGATE RE	ECOVERY S	STUDY	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0322	0.0300	107	70-130	
4-Bromofluorobenzene		0.0322	0.0300	88	70-130	
Lab Batch #: 3074046	Sample: 7668772-1-BLK / /					
Units: mg/kg	Date Analyzed: 12/27/18 00:55		RROGATE RE		STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0322	0.0300	107	70-130	
4-Bromofluorobenzene		0.0242	0.0300	81	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / BAll results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Moore Sweet

fork Orders : 608722 Lab Batch #: 3073493	Sample: 7668405-1-BLK /	BLK Batcl	Project I h: 1 Matrix			
Units: mg/kg	Date Analyzed: 12/19/18 20:57		RROGATE R		STUDY	
TPH	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1-Chlorooctane		107	100	107	70-135	
o-Terphenyl		54.5	50.0	109	70-135	
Lab Batch #: 3073493	Sample: 7668405-1-BKS / 1	BKS Batel	h: 1 Matrix	:Solid		
Units: mg/kg	Date Analyzed: 12/19/18 21:18	SU	RROGATE R	ECOVERY	STUDY	
TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111111 y 003	125	100	125	70-135	
o-Terphenyl		53.0	50.0	106	70-135	
Lab Batch #: 3073493	Sample: 7668405-1-BSD / 1	BSD Batcl	h: ¹ Matrix	· Solid		
Units: mg/kg	Date Analyzed: 12/19/18 21:38	SURROGATE RECOVERY STUDY				
TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	Anarytes	121	100	121	70-135	
o-Terphenyl		52.9	50.0	106	70-135	
Lab Batch #: 3073493	Sample: 608832-001 S / M	S Batcl	h: 1 Matrix	:Soil	1 1	
Units: mg/kg	Date Analyzed: 12/19/18 22:19		RROGATE R	ECOVERY	STUDY	
TPH	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1-Chlorooctane		108	99.6	108	70-135	
o-Terphenyl		47.7	49.8	96	70-135	
Lab Batch #: 3073493	Sample: 608832-001 SD / N					
Units: mg/kg	Date Analyzed: 12/19/18 22:40	SU	RROGATE R	ECOVERY	STUDY	
TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
		1	1	1		
1-Chlorooctane		107	99.8	107	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Moore Sweet

Work Orders : 608722,			Project ID			
Lab Batch #: 3073906	Sample: 7668683-1-BLK / E		h: ¹ Matrix: RROGATE RE		CTUDV	
Units: mg/kg	Date Analyzed: 12/22/18 12:58	501	KUGAIE KE			
	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	Analytes	ļ]	<u>ا</u>			ļ
1-Chlorooctane		125	100	125	70-135	<u> </u>
o-Terphenyl		46.9	50.0	94	70-135	<u>. </u>
Lab Batch #: 3073906	Sample: 7668683-1-BKS / E					
Units: mg/kg	Date Analyzed: 12/22/18 13:18	SUI	RROGATE RE	COVERY	STUDY	
	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	Aharyus	126	100	126	70-135	l
o-Terphenyl		56.8	50.0	114	70-135	
Lab Batch #: 3073906	Sample: 7668683-1-BSD / E	BSD Batch	h: ¹ Matrix:	• Solid	·	
Units: mg/kg	Date Analyzed: 12/22/18 13:39		RROGATE RE		STUDY	
	by SW8015 Mod	Amount	True	· · · · · ·	Control	
	Analytes	Found [A]	Amount [B]	Recovery %R [D]	Limits %R	Flags
1-Chlorooctane		121	100	121	70-135	
o-Terphenyl		62.9	50.0	126	70-135	
Lab Batch #: 3073906	Sample: 609031-001 S / MS	S Batch	h: 1 Matrix:	:Soil		
Units: mg/kg	Date Analyzed: 12/22/18 14:20	SUI	RROGATE RE	ECOVERY S	STUDY	
	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	Analytes	↓				
1-Chlorooctane		115	99.9	115	70-135	<u> </u>
o-Terphenyl		51.5	50.0	103	70-135	<u>.</u>
Lab Batch #: 3073906	Sample: 609031-001 SD / M					
Units: mg/kg	Date Analyzed: 12/22/18 14:40	SUI	RROGATE RE	COVERY S	STUDY	
	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		123	100	123	70-135	
o-Terphenyl		53.5	50.0	107	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



BS / BSD Recoveries



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Project Name: Moore Sweet

Work Order	#: 608722								Proj	ject ID:			
Analyst:	SCM		Da	ate Prepar	ed: 12/17/20	18			Date A	nalyzed:	12/17/2018		
Lab Batch ID:	: 3073258	Sample: 7668232-1-BK	S	Batcl	h #: 1		Matrix: Solid						
Units:	mg/kg			BLAN	K /BLANK	SPIKE /]	BLANK	SPIKE DUP	LICATE	RECOV	ERY STU	DY	
Analy	BTEX by EPA	8021	Blank nple Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene			0.000386	0.100	0.101	101	0.100	0.100	100	1	70-130	35	
Toluene		<	0.000457	0.100	0.0925	93	0.100	0.0921	92	0	70-130	35	
Ethylbenze	ene	<	0.000566	0.100	0.101	101	0.100	0.101	101	0	70-130	35	
m_p-Xyler	nes		< 0.00102	0.200	0.185	93	0.200	0.185	93	0	70-130	35	
o-Xylene		<	0.000345	0.100	0.0894	89	0.100	0.0898	90	0	70-130	35	
Analyst:	SCM		Da	ate Prepar	ed: 12/26/20	18	•		Date A	nalyzed:	12/26/2018	ł	
Lab Batch ID:	: 3074024	Sample: 7668765-1-BK	S	Batcl	n#: 1					Matrix:	Solid		
Units:	mg/kg			BLAN	K /BLANK	SPIKE /]	BLANK	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
Analy	BTEX by EPA	8021 Sar	Blank nple Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene		<	0.000385	0.100	0.109	109	0.100	0.106	106	3	70-130	35	+
Toluene		<	0.000456	0.100	0.100	100	0.100	0.0973	97	3	70-130	35	+
Ethylbenze	ene	<	0.000565	0.100	0.107	107	0.100	0.103	103	4	70-130	35	1
m_p-Xyler	nes		< 0.00101	0.200	0.199	100	0.200	0.191	96	4	70-130	35	
o-Xylene		<	(0.000344	0.100	0.0957	96	0.100	0.0923	92	4	70-130	35	1

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries



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Project Name: Moore Sweet

Work Order #	#: 608722								Proj	ject ID:			
Analyst:	SCM		Da	ate Prepar	ed: 12/26/201	8			Date A	nalyzed: 1	2/26/2018		
Lab Batch ID:	3074046	Sample: 7668772-1-	BKS	Batcl	h #: 1					Matrix: S	Solid		
Units:	mg/kg			BLAN	K/BLANK S	SPIKE / I	BLANK S	SPIKE DUP	LICATE	RECOVI	ERY STUI	DY	
	BTEX by EPA	8021	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analyt	es			[B]	[C]	[D]	[E]	Kesuit [r]	[6]				
Benzene			< 0.000384	0.0998	0.130	130	0.100	0.129	129	1	70-130	35	
Toluene			< 0.000455	0.0998	0.109	109	0.100	0.109	109	0	70-130	35	
Ethylbenzer	ne		< 0.000564	0.0998	0.116	116	0.100	0.117	117	1	70-130	35	
m_p-Xylene	es		< 0.00101	0.200	0.209	105	0.200	0.212	106	1	70-130	35	
o-Xylene			< 0.000344	0.0998	0.103	103	0.100	0.104	104	1	70-130	35	
Analyst:	CHE		Da	ate Prepar	ed: 12/17/201	8	•		Date A	nalyzed: 1	2/17/2018	•	
Lab Batch ID:	3073168	Sample: 7668162-1-	BKS	Batcl	h #: 1					Matrix: S	Solid		
Units:	mg/kg			BLAN	K /BLANK S	SPIKE / I	BLANK S	SPIKE DUP	LICATE	RECOVI	ERY STUI	ЭY	
Inorgan Analyt	nic Anions by El es	PA 300/300.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride			<0.858	250	259	104	250	258	103	0	90-110	20	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

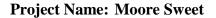


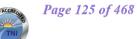
Project Name: Moore Sweet

Work Orde	er #: 608722							Pro	ject ID:			
Analyst:	CHE	D	ate Prepar	red: 12/21/201	.8			Date A	nalyzed:	2/21/2018		
Lab Batch II	D: 3073892 Sample: 7668612-1	-BKS	Batc	h #: 1					Matrix: S	Solid		
Units:	mg/kg		BLAN	K /BLANK S	SPIKE /]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUE	DY	
Inorg	ganic Anions by EPA 300/300.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride		<0.858	250	274	110	250	274	110	0	90-110	20	
Analyst:	ARM	D	ate Prepar	ed: 12/19/201	.8	ļ		Date A	nalyzed:	2/19/2018		
Lab Batch II	D: 3073493 Sample: 7668405-1		-	h #: 1					Matrix: S	Solid		
Units:	mg/kg		BLAN	K /BLANK S	SPIKE /]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUD	DY	
	TPH by SW8015 Mod	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Anal	lytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
Gasoline	e Range Hydrocarbons (GRO)	<8.00	1000	932	93	1000	921	92	1	70-135	20	
Diesel R	ange Organics (DRO)	<8.13	1000	973	97	1000	965	97	1	70-135	20	
Analyst:	ARM	D	ate Prepar	red: 12/21/201	.8			Date A	nalyzed:	2/22/2018	·	·
Lab Batch II	D: 3073906 Sample: 7668683-1	-BKS	Bate	h #: 1					Matrix: S	Solid		
Units:	mg/kg		BLAN	K /BLANK S	SPIKE /]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUE	DY	
Anal	TPH by SW8015 Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Range Hydrocarbons (GRO)	<8.00	1000	975	98	1000	1150	115	16	70-135	20	
Diesel R	ange Organics (DRO)	9.78	1000	977	98	1000	1160	116	17	70-135	20	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes







Work Order # :	608722						Project II):				
Lab Batch ID:	3073258	QC- Sample ID:	608429	-001 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	12/17/2018	Date Prepared:	12/17/2	018	An	alyst: S	SCM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	BTEX by EPA 8021	Parent Sample Result [A]	Spike Added	Spiked Sample Result [C]	Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	%R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes		[B]		[D]	[E]		[G]				L
Benzene		< 0.000383	0.0996	0.0889	89	0.0998	0.0858	86	4	70-130	35	
Toluene		0.000590	0.0996	0.0819	82	0.0998	0.0807	80	1	70-130	35	
Ethylbenzene		0.00100	0.0996	0.0892	89	0.0998	0.0861	85	4	70-130	35	
m_p-Xylenes		0.00141	0.199	0.163	81	0.200	0.158	78	3	70-130	35	
o-Xylene		0.000670	0.0996	0.0797	79	0.0998	0.0770	76	3	70-130	35	
Lab Batch ID:	3074024	QC- Sample ID:	609206	-014 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	12/26/2018	Date Prepared:	12/26/2	018	An	alyst: S	SCM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	BTEX by EPA 8021 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene		< 0.000385	0.100	0.110	110	0.100	0.115	115	4	70-130	35	
Toluene		< 0.000456	0.100	0.109	109	0.100	0.105	105	4	70-130	35	
Ethylbenzene		< 0.000565	0.100	0.124	124	0.100	0.112	112	10	70-130	35	
m_p-Xylenes		<0.00101	0.200	0.235	118	0.200	0.208	104	12	70-130	35	
o-Xylene		< 0.000344	0.100	0.113	113	0.100	0.100	100	12	70-130	35	

Matrix Spike Percent Recovery $[D] = 100^{*}(C-A)/B$ Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Matrix Spike Duplicate Percent Recovery $[G] = 100^{*}(F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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Work Order # :	608722						Due to st H	.				
			(00000)	040.5	D.	4 . 1. #.	Project II					
		QC- Sample ID:				tch #:	1 Matrix	C Soil				
	12/27/2018	Date Prepared:				alyst: S						
Reporting Units:	mg/kg		N	IATRIX SPIKI	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
B	BTEX by EPA 8021	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]		[D]	[E]	Kesun [F]	[G]	/0	701	70KI D	
Benzene		<0.000387	0.101	0.0954	94	0.100	0.111	111	15	70-130	35	
Toluene		<0.000458	0.101	0.0893	88	0.100	0.0939	94	5	70-130	35	
Ethylbenzene		<0.000568	0.101	0.0976	97	0.100	0.101	101	3	70-130	35	
m_p-Xylenes		<0.00102	0.201	0.180	90	0.201	0.183	91	2	70-130	35	
o-Xylene		<0.000346	0.101	0.0882	87	0.100	0.0892	89	1	70-130	35	
Lab Batch ID:	3073168	QC- Sample ID:	608721	-003 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	12/17/2018	Date Prepared:	12/17/2	018	An	alyst: (CHE					
Reporting Units:	mg/kg		N	IATRIX SPIKI	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Inorgani	c Anions by EPA 300/300.1	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
	Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Chloride												
		538	248	770	94	248	773	95	0	90-110	20	
Lab Batch ID:	3073168	538 QC- Sample ID:	-			248 tch #:	773 1 Matrix		0	90-110	20	
	3073168 12/17/2018		608747	-002 S	Ba	-	1 Matrix		0	90-110	20	
Date Analyzed:		QC- Sample ID:	608747 12/17/2	-002 S 018	Ba	ntch #: nalyst: (1 Matrix	x: Soil			20	
Date Analyzed: Reporting Units:	12/17/2018	QC- Sample ID: Date Prepared: Parent Sample	608747 12/17/2 M Spike	-002 S 018 IATRIX SPIKI Spiked Sample Result	Ba An E / MAT Spiked Sample	ntch #: nalyst: (RIX SPI Spike	1 Matrix CHE KE DUPLICA Duplicate Spiked Sample	x: Soil TE REC Spiked Dup.	OVERY	STUDY Control Limits	Control Limits	Flag
Date Analyzed: Reporting Units:	12/17/2018 mg/kg	QC- Sample ID: Date Prepared: Parent	608747 12/17/2 N	-002 S 018 IATRIX SPIKI Spiked Sample	Ba An E / MAT Spiked	ntch #: nalyst: (RIX SPI	1 Matriy CHE KE DUPLICA Duplicate	k: Soil TE REC Spiked	OVERY	STUDY Control	Control	Flag

Matrix Spike Percent Recovery $[D] = 100^{\circ}(C-A)/B$ Relative Percent Difference RPD = $200^{\circ}[(C-F)/(C+F)]$ Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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Project Name: Moore Sweet



	608722						D • (D					
Work Order # :							Project II					
Lab Batch ID:	3073892	QC- Sample ID:	609206	-030 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	12/21/2018	Date Prepared:	12/21/2	018	An	alyst: (CHE					
Reporting Units:	mg/kg		Ν	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	FE REC	OVERY	STUDY		
Inorga	nic Anions by EPA 300/300.1	Parent Sample Result	Spike	Spiked Sample Result	Spiked Sample %R	Spike	Duplicate Spiked Sample	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	Added [B]	[C]	%K [D]	Added [E]	Result [F]	%K [G]	70	%0K	%KPD	
Chloride		21.3	248	283	106	248	271	101	4	90-110	20	
Lab Batch ID:	3073892	QC- Sample ID:	609489	-001 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	12/21/2018	Date Prepared:	12/21/2	018	An	alyst: (CHE					
Reporting Units:	mg/kg		Ν	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	FE REC	OVERY	STUDY		
Inorga	nic Anions by EPA 300/300.1	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]	[C]	⁷ 6K [D]	E]	Kesut [F]	50K [G]	70	70K	70KFD	
Chloride		68.2	250	324	102	250	328	104	1	90-110	20	
Lab Batch ID:	3073493	QC- Sample ID:	608832	-001 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	12/19/2018	Date Prepared:	12/19/2	018	An	alyst: A	ARM					
Reporting Units:	mg/kg	-	N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	FE REC	OVERY	STUDY		
	TPH by SW8015 Mod	Parent Sample Result	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
	Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Gasoline Range	e Hydrocarbons (GRO)	<7.97	996	853	86	998	868	87	2	70-135	20	
Diesel Range C	Organics (DRO)	89.1	996	940	85	998	954	87	1	70-135	20	

Matrix Spike Percent Recovery $[D] = 100^{*}(C-A)/B$ Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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Project Name: Moore Sweet

Work Order # :	608722						Project II) :				
Lab Batch ID:	3073906	QC- Sample ID:	609031	-001 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	12/22/2018	Date Prepared:	12/21/2	018	An	alyst: A	ARM					
Reporting Units:	mg/kg		Μ	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
J	FPH by SW8015 Mod	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample		RPD	Control Limits	Control Limits	Flag
	Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Gasoline Range	Hydrocarbons (GRO)	<7.99	999	947	95	1000	963	96	2	70-135	20	
Diesel Range Or	rganics (DRO)	43.7	999	993	95	1000	1000	96	1	70-135	20	

Matrix Spike Percent Recovery $[D] = 100^{*}(C-A)/B$ Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

San Antonio, Texas (210-509-3334)	Phoenix, Arizor	hoenix, Arizona (480-355-0900)	
MINIARA TAVAR (199 701 5954)			
www.xenco.com	Xenco Quote #	Xenco Job #	INPERIA
	A	nalvtical Information	Matrix Corles
Project Information			Matix Codes
· D			W = Water
r k			s = son/sed/solid GW =Ground Water DW = Drinking Water
° /			P = Product SW = Surface water SL = Sludge
	d		OW =Ocean/Sea Water WI = WIpe
Invoice:	300		O = Oil
Collection Number	015 M e E 3		A = Air
Date Time Matrix bottles 1CI	H2SO4 NaOH NaHSO4 MEOH NONE TPH 80 Chloride	Но	
17-12-18	+ +		
1 8:20 5 1	1 X X 4		
		<i>+</i> -	
(1) 8:40 (1)			
1 8:5° 5 1			
		×	
1/ 9:10 5		*	
T(9:205)		+	
1 9:30 5			
Level II Std QC	Level IV (Full Data Pkg /raw data)	cibryant@paalp.com	
Level III Std QC+ Forms	TRRP Level IV	zconder@trcsolutions.com	
Level 3 (CLP Forms)	UST/RG -411	bcooper@trcsolutions.com	
TRRP Checklist		algroves@paalp.com	
AE DOCIMENTED BEI OW EACH TIME SAMBI SE CHANGE BA		FED-EX / UPS: Tracking #	1
3-18 Received By: () 3-18 1/SNEGATO (SNATU)	the hast	3:44	Ψ 12 μ/c
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ne: Received By: 5	Custody Seal # Preserved	where applicable On Ice	Cooler Teme. Thermo Corr. Factor
purchase order from client company to Xenco, its affiliates and sub control of Xenco. A minimum charge of \$75 will be applied to each	bcontractors. It assigns standard terms and conditions of project. Xenco's liability will be limited to the cost of sam	service. Xenco will be liable only for the cost of sa ples. Any samples received by Xenco but not anal	mples and shall not assume any responsibility for an yzed will be involced at \$5 per sample. These terms v
Date Tin Date Tin	Project Information Project Location: Project Location: LEA CLINE VILLE	Image: Transmission Project Information Project Information Project Information Project Information Project Informatinformatinfore Information Profore Information<	Analytical Information Analytical Information Information Information Information

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Stafford,Texas (281-240-4200)	San Antonio. Texas (210-509-3334)	
Dallas Texas (214-902-0300)		
	WWW.Xenco.com	Xenco Quote # Xenco Job #
		Analytical Information Matrix Codes
Client / Reporting Information	Project Information	
TRC Environmental Corporation	Project NameiNumber:	W = Water S = Soil/Sed/Solid
Company Address: 10 Desta Dr. Suite 150E Midland, TX 79705	Project Location:	GW = Ground Water DW = Drinking Water
Email: Pho Pho	Janoning To do Amber Groves	P = Product SW = Surface water SL = Sludge
Project Contact: Zach Conder	tt	OW =Ocean/Sea Water WI = Wipe
Samplers's Name: SPC CK Y G Z 4		
No. Field ID / Point of Collection	/Zn le 4 004	5 L
Depth	Date Time Matrix bottles HCI NaOH HCI NaOH HCI NaOH HCI NaOH HCI NaOH HCI NaOH	ВТЕ Н
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10 Turnarround Time / Business dave)		
Same Day TAT 5 Day TAT		olionado en la com
Next Day EMERGENCY	+ Forms TRRP Level IV	Inonder@tracolitions.com
2 Day EMERGENCY Contract TAT		bcooper@trcsolutions.com
3 Day EMERGENCY	TRRP Checklist	algroves@paalp.com
TAT Starts Day received by Lab, if received by 5:00 pm		FED-EX / UPS: Tracking #
	DOCUMENTED	
sampler		Date Time: 2.44 Receiver Br. J. X 12 10/18
shed by: () () ()	Received By: Relinquished By:	Received By:
Relinquished by: Date Time:	Received By: Custody Seal #	Preserved where applicable On Ice Cooler Temp. Thermo. Orr. Butdr
Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid losses or expenses incurred by the Client if such loses are due to circumstances beyond the or be enforced unless previously negotiated under a fully executed client contract.	Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assum to xesses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples and subcontractors and subcontractors in the service of samples. Any samples received by Xenco but not analyzed will be involced at \$5 be enforced unless previously negotiated under a fully executed client contract.	e any responsibility for any per sample. These terms will
		. Relea

Final 1.001

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SUNT EXPOSIO. .887 sn-x1 UJH UJH AI MAFA THOINARY OVERNIGHT FRI - 14 DEC HOLD 4102 2213 6026 0201 18K# ЗPэ 2 551C1/E1EF/184C TTLEL XI ANUTAIW 0081-295 (25) 3600 COUNTY ROAD 1276 SOUTH FEDEX EXPRESS SHIP CENTER FEDEX EXPRESS SHIP CENTER TO XENCO LABORATORIES BILL RECIPIENT DIMS: SEXIAXIA IN COD: 0909328/CAFE32 CAD: 0909328/CAFE32 SEXIAXIA IN SECTOR UNITED STATES US ŃŬŴ 4008 N GRIMES ETC, LLC OGI-ZEE (J.C) ABOH: UI NISIGO

Received by OCD: 1/31/2020 11:08:49 AM



XENCO Laboratories



Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 12/14/2018 11:51:00 AM Temperature Measuring device used : R8 Work Order #: 608722 Comments Sample Receipt Checklist 1.2 #1 *Temperature of cooler(s)? #2 *Shipping container in good condition? Yes #3 *Samples received on ice? Yes #4 *Custody Seals intact on shipping container/ cooler? N/A #5 Custody Seals intact on sample bottles? N/A #6*Custody Seals Signed and dated? N/A #7 *Chain of Custody present? Yes #8 Any missing/extra samples? No #9 Chain of Custody signed when relinquished/ received? Yes #10 Chain of Custody agrees with sample labels/matrix? Yes #11 Container label(s) legible and intact? Yes #12 Samples in proper container/ bottle? Yes #13 Samples properly preserved? Yes #14 Sample container(s) intact? Yes #15 Sufficient sample amount for indicated test(s)? Yes #16 All samples received within hold time? Yes #17 Subcontract of sample(s)? N/A #18 Water VOC samples have zero headspace? N/A

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

Analyst:

PH Device/Lot#:

Date: 12/14/2018

Checklist completed by: Bitanna Teel Checklist reviewed by: Markoath Kelsey Brooks

Date: 12/17/2018

Analytical Report 614757

for TRC Solutions, Inc

Project Manager: B Cooper

Moore Sweet

27-FEB-19

Collected By: Client





1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Atlanta (LELAP Lab ID #04176) Xenco-Tampa: Florida (E87429), North Carolina (483) Xenco-Lakeland: Florida (E84098)





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27-FEB-19

Project Manager: **B Cooper TRC Solutions, Inc** 2057 Commerce Midland, TX 79703

Reference: XENCO Report No(s): 614757 Moore Sweet Project Address:

B Cooper:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 614757. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 614757 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jession Vermer

Jessica Kramer Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America







Sample Cross Reference 614757



TRC Solutions, Inc, Midland, TX

Moore Sweet

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TT 1@ 26'	S	02-13-19 00:00	26 ft	614757-001
TT 1@ 27'	S	02-13-19 00:00	27 ft	614757-002
TT 1@ 28'	S	02-13-19 00:00	28 ft	614757-003
TT 1@ 29'	S	02-13-19 00:00	29 ft	614757-004
TT 1@ 30'	S	02-13-19 00:00	30 ft	614757-005
TT 1@ 31'	S	02-13-19 00:00	31 ft	Not Analyzed
TT 1@ 32'	S	02-13-19 00:00	32 ft	Not Analyzed
TT 1@ 33'	S	02-13-19 00:00	33 ft	Not Analyzed

Version: 1.%



Client Name: TRC Solutions, Inc

Project Name: Moore Sweet

Project ID: Work Order Number(s): 614757 Report Date: 27-FEB-19 Date Received: 02/15/2019

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3080327 BTEX by EPA 8021 Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected. Samples affected are: 614757-002. Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3080460 BTEX by EPA 8021 Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected. Samples affected are: 614757-005.

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.







TRC Solutions, Inc, Midland, TX

Moore Sweet

Sample Id: TT 1@ 26'		Matrix:	Soil		Sample	Depth: 26 ft		
Lab Sample Id: 614757-001		Date Collecte	ed: 02.13.19 00	0.00	Date R	eceived: 02.15.1	19 12.3	35
Analytical Method: TPH by SW8015 Mod	1				Prep M	ethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 3079495		Date Prep: 02	2 15 19 15 00		100111			
Seq Number. 5079495		•						
		Prep seq: 76	5/1969					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Facto
Gasoline Range Hydrocarbons (GRO)	PHC610	35.8	15.0	7.99	mg/kg	02.15.19 22:57		1
Diesel Range Organics (DRO)	C10C28DRO	209	15.0	8.11	mg/kg	02.15.19 22:57		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	13.7	15.0	8.11	mg/kg	02.15.19 22:57	J	1
Total TPH	PHC635	258.5		7.99	mg/kg	02.15.19 22:57		
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
1-Chlorooctane		107		70 - 1	35 %)		
o-Terphenyl		110		70 - 1	35 %)		
Analytical Method: BTEX by EPA 8021 Analyst: SCM Seq Number: 3080327		% Moist: Date Prep: 02	2.25.19 16.30		Prep M Tech:	lethod: 5030B SCM		
		Prep seq: 76	572488					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Facto
Benzene	71-43-2	0.111	0.0199	0.00383	mg/kg	02.26.19 03:26		10
Toluene	108-88-3	0.0855	0.0199	0.00453	mg/kg	02.26.19 03:26		10
Ethylbenzene	100-41-4	0.0101	0.0199	0.00561	mg/kg	02.26.19 03:26	J	10
m_p-Xylenes	179601-23-1	0.0251	0.0398	0.0101	mg/kg	02.26.19 03:26	J	10
o-Xylene	95-47-6	0.152	0.0199	0.00342	mg/kg	02.26.19 03:26		10
Xylenes, Total	1330-20-7	0.1771		0.00342	mg/kg	02.26.19 03:26		
Total BTEX		0.3837		0.00342	mg/kg	02.26.19 03:26		
9		% Recovery		Limits	Uni	its Analysis	Date	Flag
Surrogate		/ necovery		Limito	CIII	1111119515	Date	8
Surrogate 1,4-Difluorobenzene		130		70 - 1	-	··· · · · · ·	Date	g

4-Bromofluorobenzene

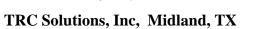
118

70 - 130

%







Moore Sweet

Sample Id: TT 1@ 27' Lab Sample Id: 614757-002		Matrix: Date Collecte	Soil ed: 02.13.19 00).00	Sample Depth: 27 ft Date Received: 02.15.19 12.35				
Analytical Method: TPH by SW8015 Mod	1				Prep M	lethod: 1005			
Analyst: ARM		% Moist:			Tech:	ARM			
Seq Number: 3079495		Date Prep: 02	2.15.19 15.00						
		Prep seq: 76	571969						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor	
Gasoline Range Hydrocarbons (GRO)	PHC610	280	15.0	7.98	mg/kg	02.15.19 23:16		1	
Diesel Range Organics (DRO)	C10C28DRO	879	15.0	8.10	mg/kg	02.15.19 23:16		1	
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	58.7	15.0	8.10	mg/kg	02.15.19 23:16		1	
Total TPH	PHC635	1217.7		7.98	mg/kg	02.15.19 23:16			
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag	
1-Chlorooctane		113		70 -	135 %				
o-Terphenyl		114		70 - 3	135 %	,)			
Analytical Method: BTEX by EPA 8021					Prep M	lethod: 5030B			
Analyst: SCM		% Moist:			Tech:	SCM			
Seq Number: 3080327		Date Prep: 02	2.25.19 16.30						
		Prep seq: 76	572488						

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.113	0.0998	0.0192	mg/kg	02.26.19 03:07		50
Toluene	108-88-3	0.656	0.0998	0.0227	mg/kg	02.26.19 03:07		50
Ethylbenzene	100-41-4	0.134	0.0998	0.0282	mg/kg	02.26.19 03:07		50
m_p-Xylenes	179601-23-1	0.360	0.200	0.0506	mg/kg	02.26.19 03:07		50
o-Xylene	95-47-6	1.78	0.0998	0.0172	mg/kg	02.26.19 03:07		50
Xylenes, Total	1330-20-7	2.14		0.0172	mg/kg	02.26.19 03:07		
Total BTEX		3.043		0.0172	mg/kg	02.26.19 03:07		
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
1,4-Difluorobenzene		107		70 - 1	.30 %			
4-Bromofluorobenzene		175		70 - 1	30 %)		**



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Moore Sweet

Sample Id: TT 1@ 28'		Matrix:	Soil	00.00		e Depth: 28 ft	10.12			
Lab Sample Id: 614757-003		Date Collecte	d: 02.13.19 (0.00	Date Received: 02.15.19 12.35					
Analytical Method: TPH by SW8015 Mod					Prep M	lethod: 1005				
Analyst: ARM		% Moist:			Tech:	ARM				
Seq Number: 3079495		Date Prep: 02	.15.19 15.00							
		Prep seq: 76	71969							
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor		
Gasoline Range Hydrocarbons (GRO)	PHC610	31.0	15.0	7.98	mg/kg	02.15.19 23:35		1		
Diesel Range Organics (DRO)	C10C28DRO	176	15.0	8.10	mg/kg	02.15.19 23:35		1		
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	13.6	15.0	8.10	mg/kg	02.15.19 23:35	J	1		
Total TPH	PHC635	220.6		7.98	mg/kg	02.15.19 23:35				
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag		
1-Chlorooctane		112		70 -	135 %	, D				
o-Terphenyl		110		70 -	135 %	ó				
Analytical Method: BTEX by EPA 8021 Analyst: SCM		% Moist:			Prep M Tech:	Iethod: 5030B SCM				

Seq Number: 3080327

Prep seq: 7672488

Date Prep: 02.25.19 16.30

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.106	0.0201	0.00387	mg/kg	02.26.19 03:45		10
Toluene	108-88-3	0.00946	0.0201	0.00458	mg/kg	02.26.19 03:45	J	10
Ethylbenzene	100-41-4	0.0269	0.0201	0.00568	mg/kg	02.26.19 03:45		10
m_p-Xylenes	179601-23-1	0.0534	0.0402	0.0102	mg/kg	02.26.19 03:45		10
o-Xylene	95-47-6	0.0533	0.0201	0.00346	mg/kg	02.26.19 03:45		10
Xylenes, Total	1330-20-7	0.1067		0.00346	mg/kg	02.26.19 03:45		
Total BTEX		0.24906		0.00346	mg/kg	02.26.19 03:45		
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
1,4-Difluorobenzene		129		70 - 1	130 %	,)		
4-Bromofluorobenzene		101		70 - 1	130 %	,)		







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TRC Solutions, Inc, Midland, TX

Sample Id: TT 1@ 29' Lab Sample Id: 614757-004		Matrix: Date Collecte	Soil ed: 02.13.19 00).00	Sample Depth: 29 ft Date Received: 02.15.19 12.35				
Analytical Method: TPH by SW8015 Mod	1				Prep M	lethod: 1005			
Analyst: ARM		% Moist:			Tech:	ARM			
Seq Number: 3080373		Date Prep: 02							
		Prep seq: 76	572518						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor	
Gasoline Range Hydrocarbons (GRO)	PHC610	55.1	15.0	7.98	mg/kg	02.25.19 19:45		1	
Diesel Range Organics (DRO)	C10C28DRO	286	15.0	8.10	mg/kg	02.25.19 19:45		1	
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	24.5	15.0	8.10	mg/kg	02.25.19 19:45		1	
Total TPH	PHC635	365.6		7.98	mg/kg	02.25.19 19:45			
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag	
1-Chlorooctane		103		70 -	135 %	ó			
o-Terphenyl		107		70 -	135 %	Ď			
Analytical Method: BTEX by EPA 8021					Pren M	Iethod: 5030B			
		% Moist:			Tech:	SCM			
Analyst: SCM			0 < 10 10 17		rech:	SCM			
Seq Number: 3080460		Date Prep: 02	2.26.19 13.45						
		Prep seq: 76	572572						

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	0.00111	0.00202	0.000388	mg/kg	02.26.19 16:40	J	1
Toluene	108-88-3	0.0320	0.00202	0.000459	mg/kg	02.26.19 16:40		1
Ethylbenzene	100-41-4	0.00387	0.00202	0.000569	mg/kg	02.26.19 16:40		1
m_p-Xylenes	179601-23-1	0.00756	0.00403	0.00102	mg/kg	02.26.19 16:40		1
o-Xylene	95-47-6	0.0418	0.00202	0.000347	mg/kg	02.26.19 16:40		1
Xylenes, Total	1330-20-7	0.04936		0.000347	mg/kg	02.26.19 16:40		
Total BTEX		0.08634		0.000347	mg/kg	02.26.19 16:40		
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
1,4-Difluorobenzene		105		70 - 1	130 %			
4-Bromofluorobenzene		128		70 - 1	130 %)		







U

02.26.19 16:03

02.26.19 16:03

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TRC Solutions, Inc, Midland, TX

Moore Sweet

Sample Id: TT 1@ 30'		Matrix:	Soil		Sample	e Depth: 30 ft		
Lab Sample Id: 614757-005		Date Collecte	d: 02.13.19.0	0.00	Date R	eceived: 02.15.1	9 12 3	35
		Date Concett	d. 02.15.19 0	0.00	Dute K		19 12	.5
Analytical Method: TPH by SW8015 Mod	d				Prep M	Iethod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 3080373		Date Prep: 02	2.25.19 11.00					
		Prep seq: 76	572518					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	8.77	15.0	7.99	mg/kg	02.25.19 20:04	J	1
Diesel Range Organics (DRO)	C10C28DRO	92.2	15.0	8.12	mg/kg	02.25.19 20:04		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<8.12	15.0	8.12	mg/kg	02.25.19 20:04	U	1
Total TPH	PHC635	100.97		7.99	mg/kg	02.25.19 20:04		
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
1-Chlorooctane		97		70 - 1	135 %	6		
o-Terphenyl		99		70 - 1	135 %	6		
Analytical Method: BTEX by EPA 8021					Prep M	Iethod: 5030B		
Analyst: SCM		% Moist:			Tech:	SCM		
Seq Number: 3080460		Date Prep: 02	2.26.19 13.45		i com	Sem		
		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
	71-43-2	< 0.000383	0.00199	0.000383	mg/kg	02.26.19 16:03	U	1
Benzene	11 15 2							
Benzene Toluene	108-88-3	0.00395	0.00199	0.000454	mg/kg	02.26.19 16:03		1
		0.00395 <0.000563	0.00199 0.00199	0.000454 0.000563	mg/kg mg/kg	02.26.19 16:03 02.26.19 16:03	U	1 1

Xylenes, Total Total BTEX	1330-20-7	0.00477 0.00872		00	26.19 16:03 26.19 16:03	
Surrogate		% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene		98	70 - 130	%		
4-Bromofluorobenzene		138	70 - 130	%		**

0.00398

0.00199

0.00101

0.000343

mg/kg

mg/kg

< 0.00101

0.00477

179601-23-1

95-47-6

m_p-Xylenes

o-Xylene







TRC Solutions, Inc, Midland, TX

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
		Prep seq: 7	671969					
Seq Number: 3079495		Date Prep: 0	2.15.19 15.00					
Analyst: ARM		% Moist:			Tech:	ARM		
Analytical Method: TPH by SW8015 Mod					Prep Me	ethod: 1005		
Lab Sample Id: 7671969-1-BLK		Date Collect	ed:		Date Re	ceived:		
Sample Id: 7671969-1-BLK		Matrix:	Solid		Sample	Depth:		

Gasoline F	ange Hydrocarbons (GRO)	PHC610	<8.00	15.0	8.00	mg/kg	02.15.19 19:25	U	1	
Diesel Rar	ge Organics (DRO)	C10C28DRO	<8.13	15.0	8.13	mg/kg	02.15.19 19:25	U	1	
Motor Oil R	ange Hydrocarbons (MRO)	PHCG2835	<8.13	15.0	8.13	mg/kg	02.15.19 19:25	U	1	
Total TPH		PHC635	<8		8	mg/kg	02.15.19 19:25	U		

Surrogate	% Recovery		Limits	Units	Analysis Date	Flag
1-Chlorooctane	125		70 - 135	%		
o-Terphenyl	124		70 - 135	%		
Sample Id: 7672488-1-BLK	Matrix:	Solid	Sa	mple Dep	oth:	
Lab Sample Id: 7672488-1-BLK	Date Collecte	d:	Da	ate Receiv	ved:	
Analytical Method: BTEX by EPA 8021			Pr	ep Metho	d: 5030B	

Analyst:	SCM	% Moist:	Tech:	SCM
Seq Number:	3080327	Date Prep: 02.25.19 16.30		
		Prep seq: 7672488		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Facto
Benzene	71-43-2	< 0.000383	0.00199	0.000383	mg/kg	02.25.19 20:30	U	1
Toluene	108-88-3	< 0.000453	0.00199	0.000453	mg/kg	02.25.19 20:30	U	1
Ethylbenzene	100-41-4	< 0.000561	0.00199	0.000561	mg/kg	02.25.19 20:30	U	1
m_p-Xylenes	179601-23-1	< 0.00101	0.00398	0.00101	mg/kg	02.25.19 20:30	U	1
o-Xylene	95-47-6	< 0.000342	0.00199	0.000342	mg/kg	02.25.19 20:30	U	1
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
1,4-Difluorobenzene		109		70 -	130 %	ó		
4-Bromofluorobenzene		93		70 -	130 %	ó		







TRC Solutions, Inc, Midland, TX

Sample Id: 7672518-1-BLK Lab Sample Id: 7672518-1-BLK		Matrix: Date Collected	Solid d:		Sample Date Rec	1		
			u.					
Analytical Method: TPH by SW8015 Mod					Prep Met	hod: 1005		
Analyst: ARM		% Moist:			Tech:	ARM		
Seq Number: 3080373		Date Prep: 02	.25.19 11.00					
		Prep seq: 76	72518					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor

PHC610	<8.00	15.0	8.00	mg/kg	02.25.19 11:51	U	1
C10C28DRO	<8.13	15.0	8.13	mg/kg	02.25.19 11:51	U	1
PHCG2835	<8.13	15.0	8.13	mg/kg	02.25.19 11:51	U	1
PHC635	<8		8	mg/kg	02.25.19 11:51	U	
	C10C28DRO PHCG2835	C10C28DRO <8.13 PHCG2835 <8.13	C10C28DRO <8.13 15.0 PHCG2835 <8.13 15.0	C10C28DRO<8.1315.08.13PHCG2835<8.13	C10C28DRO <8.13 15.0 8.13 mg/kg PHCG2835 <8.13	C10C28DRO <8.13 15.0 8.13 mg/kg 02.25.19 11:51 PHCG2835 <8.13	C10C28DRO <8.13 15.0 8.13 mg/kg 02.25.19 11:51 U PHCG2835 <8.13

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	116	70 - 135	%		
o-Terphenyl	118	70 - 135	%		
Sample Id: 7672572-1-BLK	Matrix: Solid	S	ample Dep	oth:	
Lab Sample Id: 7672572-1-BLK	Date Collected:	Date Received:			
Analytical Method: BTEX by EPA 8021		P	rep Metho	d: 5030B	

2	5		1	
Analyst:	SCM	% Moist:	Tech:	SCM
Seq Number:	3080460	Date Prep: 02.26.19 13.45		
		Prep seq: 7672572		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Facto
Benzene	71-43-2	< 0.000383	0.00199	0.000383	mg/kg	02.26.19 15:25	U	1
Toluene	108-88-3	< 0.000454	0.00199	0.000454	mg/kg	02.26.19 15:25	U	1
Ethylbenzene	100-41-4	< 0.000563	0.00199	0.000563	mg/kg	02.26.19 15:25	U	1
m_p-Xylenes	179601-23-1	< 0.00101	0.00398	0.00101	mg/kg	02.26.19 15:25	U	1
o-Xylene	95-47-6	< 0.000343	0.00199	0.000343	mg/kg	02.26.19 15:25	U	1
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
1,4-Difluorobenzene		109		70 -	130 %	ó		
4-Bromofluorobenzene		103		70 -	130 %	Ď		



Flagging Criteria



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- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- **F** RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- ** Surrogate recovered outside laboratory control limit.
- **BRL** Below Reporting Limit.
- RL Reporting Limit
- MDL Method Detection LimitSDLSample Detection LimitLOD Limit of Detection
- PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- NC Non-Calculable

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	S Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory Control Sample Duplicate
MD/SD	Method Duplicate/Sample Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

Received by OCD: 1/31/2020	
XENGU	
LABORATORIES	

11:08:49 AM Form 2 - Surrogate Recoveries

Project Name: Moore Sweet

Vork Orders: 614757	•		Project II):		
Lab Batch #: 3080327	Sample: 7672488-1-BKS / I	BKS Batch:	: 1 Matrix:	Solid		
Units: mg/kg	Date Analyzed: 02/25/19 18:57	SUR	ROGATE RE	ECOVERY	STUDY	
BTE	EX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0331	0.0300	110	70-130	
4-Bromofluorobenzene		0.0304	0.0300	101	70-130	
Lab Batch #: 3080327	Sample: 7672488-1-BSD / I	BSD Batch:	: 1 Matrix:	:Solid	<u> </u>	
Units: mg/kg	Date Analyzed: 02/25/19 19:16	SUR	ROGATE RE	ECOVERYS	STUDY	
	EX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	Third y ves	0.0331	0.0300	110	70-130	
4-Bromofluorobenzene		0.0304	0.0300	101	70-130	
Lab Batch #: 3080327	Sample: 615571-001 S / MS	S Batch:	: 1 Matrix:	:Soil	<u> </u>	
Units: mg/kg	Date Analyzed: 02/25/19 19:35		ROGATE RE		STUDY	
BTE	CX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0335	0.0300	112	70-130	
4-Bromofluorobenzene		0.0317	0.0300	106	70-130	
Lab Batch #: 3080327	Sample: 615571-001 SD / M	MSD Batch:	1 Matrix:	:Soil	<u>.</u> .	
Units: mg/kg	Date Analyzed: 02/25/19 19:54	SUR	ROGATE RE	ECOVERY	STUDY	
BTE	EX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	Third y ves	0.0332	0.0300	111	70-130	
4-Bromofluorobenzene		0.0317	0.0300	106	70-130	
Lab Batch #: 3080327	Sample: 7672488-1-BLK / I	BLK Batch:	: 1 Matrix:	:Solid	<u> </u>	
Units: mg/kg	Date Analyzed: 02/25/19 20:30	SUR	ROGATE RE	ECOVERYS	STUDY	
	EX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0326	0.0300	109	70-130	
4-Bromofluorobenzene		0.0278	0.0300	93	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Received by	OCD:	1/31/2	2020
	EIN		
LAE	BORAT	ORIES	5

11:08:49 AM Form 2 - Surrogate Recoveries

Project Name: Moore Sweet

Vork Orders : 614757,	,		Project II):		
Lab Batch #: 3080460	Sample: 7672572-1-BKS / 1					
Units: mg/kg	Date Analyzed: 02/26/19 13:52	SU	RROGATE RE	COVERY	STUDY	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0319	0.0300	106	70-130	
4-Bromofluorobenzene		0.0298	0.0300	99	70-130	
Lab Batch #: 3080460	Sample: 7672572-1-BSD / 1	BSD Batch	h: ¹ Matrix:	Solid	<u>.</u>	
Units: mg/kg	Date Analyzed: 02/26/19 14:11	SU	RROGATE RE	COVERY	STUDY	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene	Allalytes	0.0318	0.0300	106	70-130	 I
4-Bromofluorobenzene		0.0318	0.0300	99	70-130	 I
Lab Batch #: 3080460	Sample: 615456-001 S / MS					
Units: mg/kg	Date Analyzed: 02/26/19 14:30		RROGATE RE		STUDY	
	-		True		Control	
	X by EPA 8021 Analytes	Amount Found [A]	Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0326	0.0300	109	70-130	
4-Bromofluorobenzene		0.0311	0.0300	104	70-130	
Lab Batch #: 3080460	Sample: 615456-001 SD / M	MSD Batch	h: 1 Matrix:	Soil	1	
Units: mg/kg	Date Analyzed: 02/26/19 14:49	SU	RROGATE RE	ECOVERY	STUDY	
	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1,4-Difluorobenzene		0.0329	0.0300	110	70-130	
4-Bromofluorobenzene		0.0314	0.0300	105	70-130	
Lab Batch #: 3080460	Sample: 7672572-1-BLK /					
Units: mg/kg	Date Analyzed: 02/26/19 15:25	SU	RROGATE RE	COVERY :	STUDY	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0327	0.0300	109	70-130	
4-Bromofluorobenzene		0.0308	0.0300	103	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Moore Sweet

Vork Orders : 614757	,		Project II	D:		
Lab Batch #: 3079495	Sample: 7671969-1-BLK / 1	BLK Batel	h: 1 Matrix	:Solid		
Units: mg/kg	Date Analyzed: 02/15/19 19:25	SU	RROGATE RI	ECOVERY	STUDY	
ТРН І	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		125	100	125	70-135	
o-Terphenyl		62.2	50.0	124	70-135	
Lab Batch #: 3079495	Sample: 7671969-1-BKS / 1	BKS Batcl	h: ¹ Matrix	:Solid		
Units: mg/kg	Date Analyzed: 02/15/19 19:44	SU	RROGATE RI	ECOVERY	STUDY	
ТРН І	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	Analy Co	129	100	129	70-135	
o-Terphenyl		63.4	50.0	127	70-135	
Lab Batch #: 3079495	Sample: 7671969-1-BSD / 1	BSD Batcl	h: 1 Matrix	•Solid		
Units: mg/kg	Date Analyzed: 02/15/19 20:04		RROGATE RI	-	STUDY	
	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		115	100	115	70-135	
o-Terphenyl		64.9	50.0	113	70-135	
Lab Batch #: 3079495	Sample: 614582-001 S / MS					
Units: mg/kg	Date Analyzed: 02/15/19 20:42		RROGATE RI		STUDY	
	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		127	99.9	127	70-135	
o-Terphenyl		58.6	50.0	127	70-135	
Lab Batch #: 3079495	Sample: 614582-001 SD / N					
Units: mg/kg	Date Analyzed: 02/15/19 21:02		RROGATE RI		STUDY	
	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		128	99.9	128	70-135	
o-Terphenyl		59.6	50.0	119	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Moore Sweet

Vork Orders : 614757,	,		Project II):		
Lab Batch #: 3080373	Sample: 7672518-1-BLK / 1	BLK Batch	n: ¹ Matrix:	:Solid		
Units: mg/kg	Date Analyzed: 02/25/19 11:51	SUF	RROGATE RE	ECOVERY S	STUDY	
ТРН К	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		116	100	116	70-135	
o-Terphenyl		59.2	50.0	118	70-135	
Lab Batch #: 3080373	Sample: 7672518-1-BKS / 1	BKS Batch	n: ¹ Matrix:	Solid	<u> </u>	
Units: mg/kg	Date Analyzed: 02/25/19 12:11	SUF	RROGATE RE	COVERY S	STUDY	
TPH b	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		109	100	109	70-135	i
o-Terphenyl		47.6	50.0	95	70-135	
Lab Batch #: 3080373	Sample: 7672518-1-BSD / 1	BSD Batch	n: ¹ Matrix:	• Solid	<u> </u>	
Units: mg/kg	Date Analyzed: 02/25/19 12:31		RROGATE RE	-	STUDY	
	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	Allalyus	113	100	113	70-135	1
o-Terphenyl		48.0	50.0	96	70-135	
Lab Batch #: 3080373	Sample: 615525-001 S / MS	S Batch	n: 1 Matrix:	:Soil	<u> </u>	
Units: mg/kg	Date Analyzed: 02/25/19 13:10	SUF	RROGATE RE	ECOVERY S	STUDY	
TPH b	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	Allalytes	112	99.9	112	70-135	
o-Terphenyl		52.9	50.0	112	70-135	i
Lab Batch #: 3080373	Sample: 615525-001 SD / M				<u> </u>	
Units: mg/kg	Date Analyzed: 02/25/19 13:30		RROGATE RE		STUDY	
	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		107	99.7	107	70-135	
o-Terphenyl		49.9	49.9	100	70-135	 I

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



BS / BSD Recoveries



•

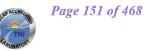
Project Name: Moore Sweet

Work Ord	er #: 614757							Pro	ject ID:			
Analyst:	SCM	Da	ate Prepar	ed: 02/25/20	19			Date A	nalyzed:	02/25/2019		
Lab Batch I	D: 3080327 Sample: 767	2488-1-BKS	Batcl	h #: 1					Matrix:	Solid		
Units:	mg/kg		BLAN	K /BLANK	SPIKE /]	BLANK	SPIKE DUP	LICATE	RECOV	ERY STU	DY	
Ano	BTEX by EPA 8021	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	lytes	<0.000386	0.100	0.127	127	0.0996	0.124	124	2	70-130	35	
Toluene	2	<0.000457	0.100	0.110	110	0.0996	0.107	107	3	70-130	35	
Ethylber	nzene	<0.000566	0.100	0.106	106	0.0996	0.102	102	4	70-130	35	
m_p-Xy	lenes	< 0.00102	0.200	0.211	106	0.199	0.204	103	3	70-130	35	-
o-Xylen	ie	<0.000345	0.100	0.104	104	0.0996	0.101	101	3	70-130	35	
Analyst:	SCM	Da	ate Prepar	ed: 02/26/20	19			Date A	nalyzed:	02/26/2019		4
Lab Batch I	D: 3080460 Sample: 767	2572-1-BKS	Batcl	h #: 1					Matrix:	Solid		
Units:	mg/kg		BLAN	K /BLANK	SPIKE /]	BLANK	SPIKE DUP	LICATE	RECOV	ERY STU	DY	
Ana	BTEX by EPA 8021 lytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	e	<0.000385	0.100	0.119	119	0.101	0.119	118	0	70-130	35	-
Toluene	>	<0.000456	0.100	0.107	107	0.101	0.106	105	1	70-130	35	1
Ethylber	nzene	< 0.000565	0.100	0.104	104	0.101	0.104	103	0	70-130	35	
m_p-Xy	vlenes	< 0.00101	0.200	0.210	105	0.201	0.208	103	1	70-130	35	
o-Xylen	ie	< 0.000344	0.100	0.103	103	0.101	0.103	102	0	70-130	35	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries



Project Name: Moore Sweet

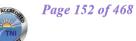
Work Orde	er #: 614757							Proj	ect ID:			
Analyst:	ARM	D	ate Prepar	ed: 02/15/20	19			Date A	nalyzed: (02/15/2019		
Lab Batch I	D: 3079495 Sample: 76719	969-1-BKS	Batcl	h #: 1					Matrix:	Solid		
Units:	mg/kg		BLAN	K/BLANK	SPIKE / 2	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI)Y	
	TPH by SW8015 Mod	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Ana	lytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
Gasoline	e Range Hydrocarbons (GRO)	<8.00	1000	907	91	1000	1040	104	14	70-135	20	
Diesel R	Range Organics (DRO)	<8.13	1000	979	98	1000	1190	119	19	70-135	20	
Analyst:	ARM	D	ate Prepar	ed: 02/25/20	19			Date A	nalyzed: ()2/25/2019		
Lab Batch I	D: 3080373 Sample: 76725	518-1-BKS	Batcl	h #: 1					Matrix:	Solid		
Units:	mg/kg		BLAN	K /BLANK	SPIKE / 2	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
A = 0	TPH by SW8015 Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	lytes	0.00								5 0.405		
	e Range Hydrocarbons (GRO)	<8.00	1000	905	91	1000	900	90	1	70-135	20	
Diesel R	Range Organics (DRO)	<8.13	1000	910	91	1000	914	91	0	70-135	20	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: Moore Sweet



Work Order # :	614757						Project II):				
Lab Batch ID:	3080327	QC- Sample ID:	615571	-001 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	02/25/2019	Date Prepared:	02/25/2	019	An	alyst: S	SCM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	BTEX by EPA 8021	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]	[0]	[D]	[E]	Kesutt [F]	[G]	/0	701		
Benzene		<0.000384	0.0998	0.0811	81	0.100	0.106	106	27	70-130	35	
Toluene		<0.000455	0.0998	0.0681	68	0.100	0.0905	91	28	70-130	35	Х
Ethylbenzene		<0.000564	0.0998	0.0583	58	0.100	0.0825	83	34	70-130	35	X
m_p-Xylenes		< 0.00101	0.200	0.117	59	0.200	0.164	82	33	70-130	35	Х
o-Xylene		< 0.000344	0.0998	0.0582	58	0.100	0.0819	82	34	70-130	35	X
Lab Batch ID:	3080460	QC- Sample ID:	615456	-001 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	02/26/2019	Date Prepared:	02/26/2	019	An	alyst: S	SCM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	BTEX by EPA 8021 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene		<0.000384	0.0998	0.0933	93	0.100	0.0953	95	2	70-130	35	
Toluene		<0.000455	0.0998	0.0814	82	0.100	0.0827	83	2	70-130	35	
Ethylbenzene		<0.000564	0.0998	0.0747	75	0.100	0.0764	76	2	70-130	35	
m_p-Xylenes		< 0.00101	0.200	0.152	76	0.200	0.154	77	1	70-130	35	
o-Xylene		<0.000344	0.0998	0.0752	75	0.100	0.0767	77	2	70-130	35	

Matrix Spike Percent Recovery $[D] = 100^{*}(C-A)/B$ Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Matrix Spike Duplicate Percent Recovery $[G] = 100^{*}(F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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Form 3 - MS / MSD Recoveries



Project Name: Moore Sweet

Work Order # :	614757						Project II):				
Lab Batch ID:	3079495	QC- Sample ID:	614582	-001 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	02/15/2019	Date Prepared:	02/15/2	.019	An	alyst: A	ARM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	IKE DUPLICA	TE REC	OVERY	STUDY		
]	FPH by SW8015 Mod	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample		RPD	Control Limits	Control Limits	Flag
	Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Gasoline Range	Hydrocarbons (GRO)	<7.99	999	997	100	999	972	97	3	70-135	20	
Diesel Range Or	rganics (DRO)	<8.12	999	1120	112	999	1090	109	3	70-135	20	
Lab Batch ID:	3080373	QC- Sample ID:	615525	-001 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	02/25/2019	Date Prepared:	02/25/2	.019	An	alyst: A	ARM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	IKE DUPLICA	TE REC	OVERY	STUDY		
]	FPH by SW8015 Mod	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample	-	RPD	Control Limits	Control Limits	Flag
	Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Gasoline Range	Hydrocarbons (GRO)	<7.99	999	910	91	997	887	89	3	70-135	20	
Diesel Range Or	ganics (DRO)	288	999	1200	91	997	1130	84	6	70-135	20	

Matrix Spike Percent Recovery $[D] = 100^{*}(C-A)/B$ Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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Stafford, Texas (281-240-4200)	San Ar	San Antonio, Texas (210-509-3334)	10-509-3334)			Phoeni	Phoenix. Arizona (480-355-0900)	na (480	-355-0	1000								
Dallas Texas (214-902-0300)	Midlan	Midland, Texas (432-704-5251)	04-5251)										unin ch e.		•			
			WWW.Xenco.com	om		Xenco Quote	uote #			Xe	Xenco Job #	*	C	7		5	_	
							A	Analytical Information	Inform	nation							Mati	Matrix Codes
Client / Reporting Information		Proje	Project Information	i														
TRC Environmental Corporation	Project I		Sweet				• ••••••					•••••					W = Water	fater
Company Address:	Project I	Project Location:	~ ~ ~ ~ ~ ~ ~										Canada Salanga)				S = S	= Soil/Sed/Solid
10 Desta Dr. Suite 150E Midland, TX 79705																	DW =	GW =Ground Water DW = Drinking Water
per @ He Solitions cog	Invoice To:	Plaino	goodile														SM = P	P = Product SW = Surface water
432-400-4450			~~~							IS	V.	م مانية الم					SL	SL = Sludge
Project Contact: Doer towny Brian Cooper	Invoice:		<i>N</i> .			<u> </u>				vieta	t (NI						OW =Ocea WI = Wipe	OW =Ocean/Sea Water WI = Wipe
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	Collection	ition		Number of preserved bottles	erved bottles		Ε3				5 M	X					ww≡w A = Air	ww= waste water A = Air
No. Field ID / Point of Collection	•••••••••			Zn	4							Ē		T				
	Sample Depth Date	Time	Matrix bottles 7	VaOH/2 Acetate 1NO3 12SO4	IaOH IaHSO IEOH	ГРН	Chlor NOR	RCI	CLF	CLP Chlor	PH	B7				!		
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Turnaround Time (Business days)			Data Deliverable Information	Information			-		No -	Notes:								
Same Day TAT 5 Day TAT		Leve	Level II Std QC		Level IV (Full Data Pkg	g /raw data)	÷	132.1	Howry@tresolutions.ccm	Hesolu	tions.	G						
Next Day EMERGENCY		Leve	Level III Std QC+ Forms	IHL []	TRRP Level IV			IN	zonder@hcions.com	@trc:	Sou	com		l				.
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3 Day EMERGENCY			TRRP Checklist									Í	•					
TAT Starts Day received by Lab, if received by 5:00 pm	pm								FED-EX / UPS: Tracking #	/UPS	Tracki	¶g#						
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Relinquished by:	Date Time:	Received By:	Y:	Cust	Custody Seal #	Pr	Preserved where applicable	where a	pplicat	le 4]01 [0	-0	00	Cooler Temp.	ġ	Thermo.	o. Corr. Factor
Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These larms will be applied to each project. Xenco's liability will be limited to the cost of samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These larms will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These larms will be invoiced at \$5 per sample.	is a valid purchase or yond the control of Xe	der from client compa Inco. A minimum cha	any to Xenco, its affiliate irge of \$75 will be applied	s and subcontractors d to each project. Xer	. It assigns standard I nco's liability will be lir	erms and cor nited to the co	nditions of a	service. X ples. Any	enco wil samples	i be liab receive	e only fo I by Xer	r the co co but n	st of sa	mples a /zed wil	I be Invo	I not as oiced at	sume any \$5 per s	responsibility for any ample. These terms will
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Setting the Standard since 1990

CHAIN OF CUSTODY

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Received by OCD: 1/31/2020 11:08:49 AM



XENCO Laboratories



Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 02/15/2019 12:35:00 PM Temperature Measuring device used : R8 Work Order #: 614757 Comments Sample Receipt Checklist #1 *Temperature of cooler(s)? .1 #2 *Shipping container in good condition? Yes #3 *Samples received on ice? Yes #4 *Custody Seals intact on shipping container/ cooler? N/A #5 Custody Seals intact on sample bottles? N/A #6*Custody Seals Signed and dated? N/A #7 *Chain of Custody present? Yes #8 Any missing/extra samples? No #9 Chain of Custody signed when relinquished/ received? Yes #10 Chain of Custody agrees with sample labels/matrix? Yes #11 Container label(s) legible and intact? Yes #12 Samples in proper container/ bottle? Yes #13 Samples properly preserved? Yes #14 Sample container(s) intact? Yes #15 Sufficient sample amount for indicated test(s)? Yes #16 All samples received within hold time? Yes #17 Subcontract of sample(s)? N/A #18 Water VOC samples have zero headspace? N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by: Brianna Teel

Date: 02/15/2019

Checklist reviewed by: Jession Whamer

Jessica Kramer

Date: 02/19/2019

Analytical Report 620194

for TRC Solutions/Environmental

Project Manager: Brian Cooper

NM Moore Sweet

11-APR-19

Collected By: Client





6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757) Xenco-Atlanta (LELAP Lab ID #04176) Xenco-Tampa: Florida (E87429), North Carolina (483) Xenco-Lakeland: Florida (E84098)



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Received by OCD: 1/31/2020 11:08:49 AM



11-APR-19

Project Manager: **Brian Cooper TRC Solutions/Environmental** 10 Desta Dr. Ste 150E Midland, TX 79705

Reference: XENCO Report No(s): 620194 NM Moore Sweet Project Address: Lea, Co. NM

Brian Cooper:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 620194. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 620194 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Muly K.

Mike Kimmel Client Services Manager

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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



Sample Cross Reference 620194



TRC Solutions/Environmental, Midland, TX

NM Moore Sweet

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TT2-Comp 1 @ 3'	S	04-03-19 12:00	3 ft	620194-001
TT2-Comp 2 @ 3'	S	04-03-19 12:15	3 ft	620194-002
TT2-Comp 3 @ 3'	S	04-03-19 12:30	3 ft	620194-003
TT2-Comp 4 @ 3'	S	04-03-19 12:45	3 ft	620194-004
TT2-NW @ 1.5'	S	04-03-19 13:00	1.5 ft	620194-005
TT2-EW @ 1.5'	S	04-03-19 13:15	1.5 ft	620194-006
TT2-WW @ 1.5'	S	04-03-19 13:30	1.5 ft	620194-007
ETT-NW-B @ 2.5'	S	04-03-19 14:30	2.5 ft	620194-008





CASE NARRATIVE

Client Name: TRC Solutions/Environmental Project Name: NM Moore Sweet

Project ID: Work Order Number(s): 620194 Report Date: *11-APR-19* Date Received: *04/03/2019*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3084803 DRO-ORO By SW8015B Surrogate Tricosane, Surrogate n-Triacontane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis. Samples affected are: 620194-002,620194-004,620194-005,620194-006.

Batch: LBA-3084840 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3084842 TPH GRO by EPA 8015 Mod.

Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 620194-006.

Surrogate a,a,a-Trifluorotoluene recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7675211-1-BSD,620194-001 S,620194-003,620194-008.







TRC Solutions/Environmental, Midland, TX

Sample Id:	TT2-Comp 1 @ 3'		Matrix:	Soil		Sample	Depth: 3 ft		
Lab Sample Id:	620194-001		Date Collecte	ed: 04.03.19 12	2.00	Date Re	eceived: 04.03.	19 16.	35
Analytical Meth	hod: Inorganic Anions by E	EPA 300/300.1				Prep M	ethod: E300P	,	
Analyst:	JYM		% Moist:			Tech:	JYM		
Seq Number:	3084960		Date Prep: 04	4.08.19 12.42					
Subcontractor:	SUB: T104704215-19-29		Prep seq: 76	675239					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride		16887-00-6	85.6	10.0	0.354	mg/kg	04.08.19 13:43		1
Analytical Meth	hod: DRO-ORO By SW80	15B				Prep M	ethod: 8015		
	MIT		% Moist:			Tech:	MIT		
-	3084803		Date Prep: 04	4.05.19 14.00					
			Prep seq: 76	575190					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
-	e Organics (DRO)	C10C28DRO	40.2	25.2	7.53	mg/kg	04.06.19 06:48		1
Oil Range H	ydrocarbons (ORO)	PHCG2835	<7.53	25.2	7.53	mg/kg	04.06.19 06:48	U	1
Surrogate			% Recovery		Limits	Uni	ts Analysis	Date	Flag
Tricosane			108		65 - 1				
n-Triacontan	ne		120		46 - 1	152 %			
Analytical Meth	hod: TPH GRO by EPA 80	15 Mod.				Prep M	ethod: 5030B		
Analyst:	MIT		% Moist:			Tech:	MIT		
Seq Number:	3084842		Date Prep: 04	4.05.19 14.00					
			Prep seq: 76	675211					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO		8006-61-9	<0.262	3.87	0.262	mg/kg	04.06.19 05:45	U	19
Surrogate			% Recovery		Limits	Uni	ts Analysis	Date	Flag
4-Bromofluo			90		76 - 1				
a,a,a-Trifluo	rotoluene		107		69 - 1	120 %			



4-Bromofluorobenzene

a,a,a-Trifluorotoluene



Certificate of Analytical Results 620194



TRC Solutions/Environmental, Midland, TX

NM Moore Sweet

Parameter	CAS	Result	MOL	SDL	Units	Analysis	Dil Factor	
		Prep seq: 76	75210					
Seq Number: 3084840		Date Prep: 04	.05.19 14.00					
Analyst: MIT		% Moist:			Tech:	MIT		
Analytical Method: BTEX by EPA 8021					Prep Metho	d: 5030B		
Lab Sample Id: 620194-001		Date Collected	d: 04.03.19 12.00	0	Date Receiv	ved: 04.03.	19 16.35	
Sample Id: TT2-Comp 1 @ 3'		Matrix:	Soil		Sample Dep	oth: 3 ft		

Parameter	Number	Result	MQL	SDL	Units	Date	Flag	
Benzene	71-43-2	< 0.00874	0.0193	0.00874	mg/kg	04.06.19 05:45	U	19
Toluene	108-88-3	< 0.00453	0.0193	0.00453	mg/kg	04.06.19 05:45	U	19
Ethylbenzene	100-41-4	< 0.00596	0.0193	0.00596	mg/kg	04.06.19 05:45	U	19
m_p-Xylenes	179601-23-1	< 0.00660	0.0387	0.00660	mg/kg	04.06.19 05:45	U	19
o-Xylene	95-47-6	< 0.00660	0.0193	0.00660	mg/kg	04.06.19 05:45	U	19
Xylenes, Total	1330-20-7	< 0.00660		0.00660	mg/kg	04.06.19 05:45	U	
Total BTEX		< 0.00453		0.00453	mg/kg	04.06.19 05:45	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

93

97

68 - 120

71 - 121

%

%







TRC Solutions/Environmental, Midland, TX

Sample Id: TT2-Comp	2 @ 3'	Matrix:	Soil		Sample	Depth: 3 ft		
Lab Sample Id: 620194-002		Date Collecte	ed: 04.03.19	12.15	Date R	eceived: 04.03.	19 16.	35
Analytical Method: Inorgan	nic Anions by EPA 300/300.1				Prep M	lethod: E300P	,	
Analyst: JYM	·	% Moist:			Tech:	JYM		
Seq Number: 3084960		Date Prep: 04	4.08.19 12.42					
Subcontractor: SUB: T1047	704215-19-29	Prep seq: 70	675239					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	30.3	9.98	0.353	mg/kg	04.08.19 14:10		1
Analytical Method: DRO-C	NPO By SW8015B				Prep M	ethod: 8015		
Analyst: MIT	NO Dy SW0015D	% Moist:			Tech:	MIT		
Seq Number: 3084803			4.05.19 14.00	1	10011.	1,111		
		Prep seq: 70						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (E	ORO) C10C28DRO	184	24.8	7.43	mg/kg	04.06.19 14:23		1
Oil Range Hydrocarbons	(ORO) PHCG2835	22.2	24.8	7.43	mg/kg	04.06.19 14:23	J	1
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
Tricosane n-Triacontane		220 202		65 - 1 46 - 1				**
Analytical Method: TPH G	RO by EPA 8015 Mod.				Prep M	lethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3084842		Date Prep: 04	4.05.19 14.00	1				
		Prep seq: 70	675211					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	<0.248	3.66	0.248	mg/kg	04.06.19 08:11	U	18
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
4-Bromofluorobenzene		89		76 - 1				
a,a,a-Trifluorotoluene		109		69 - 1	120 %			







TRC Solutions/Environmental, Midland, TX

Sample Id: TT2-Comp 2 @ 3'		Matrix: Soil	Sample Depth: 3 ft
Lab Sample Id: 620194-002		Date Collected: 04.03.19 12.15	Date Received: 04.03.19 16.35
Analytical Method: BTEX by EPA 8021			Prep Method: 5030B
Analyst: MIT		% Moist:	Tech: MIT
Seq Number: 3084840		Date Prep: 04.05.19 14.00	
		Prep seq: 7675210	
	CAS		Analysis Dil Fa

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00826	0.0183	0.00826	mg/kg	04.06.19 08:11	U	18
Toluene	108-88-3	< 0.00428	0.0183	0.00428	mg/kg	04.06.19 08:11	U	18
Ethylbenzene	100-41-4	< 0.00563	0.0183	0.00563	mg/kg	04.06.19 08:11	U	18
m_p-Xylenes	179601-23-1	< 0.00623	0.0366	0.00623	mg/kg	04.06.19 08:11	U	18
o-Xylene	95-47-6	< 0.00623	0.0183	0.00623	mg/kg	04.06.19 08:11	U	18
Xylenes, Total	1330-20-7	< 0.00623		0.00623	mg/kg	04.06.19 08:11	U	
Total BTEX		< 0.00428		0.00428	mg/kg	04.06.19 08:11	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

Surrogate	/o Recovery	Linnes	Onits	marysis Date	1146
4-Bromofluorobenzene	92	68 - 120	%		
a,a,a-Trifluorotoluene	99	71 - 121	%		







TRC Solutions/Environmental, Midland, TX

Sample Id:	ГТ2-Comp 3 @ 3'		Matrix:	Soil		Sample	Depth: 3 ft		
Lab Sample Id: 6	520194-003		Date Collecte	ed: 04.03.19 12	2.30	Date Re	eceived: 04.03.	19 16.3	35
Analytical Metho	od: Inorganic Anions by I	EPA 300/300.1				Prep M	ethod: E300P		
-	IYM		% Moist:			Tech:	JYM		
-	3084960		Date Prep: 04	4.08.19 12.42					
Subcontractor: S	SUB: T104704215-19-29		Prep seq: 76	575239					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride		16887-00-6	42.3	10.0	0.355	mg/kg	04.08.19 14:19		1
Analytical Meth	od: DRO-ORO By SW80	15B				Prep M	ethod: 8015		
-	MIT		% Moist:			Tech:	MIT		
•	3084803		Date Prep: 04	4.05.19 14.00					
1			Prep seq: 76						
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range	Organics (DRO)	C10C28DRO	68.3	25.0	7.47	mg/kg	04.06.19 09:42		1
Oil Range Hy	drocarbons (ORO)	PHCG2835	<7.47	25.0	7.47	mg/kg	04.06.19 09:42	U	1
Surrogate			% Recovery		Limits	Uni	ts Analysis	Date	Flag
Tricosane n-Triacontane	2		143 152		65 - 1 46 - 1				
Analytical Metho	od: TPH GRO by EPA 80	15 Mod.				Prep M	ethod: 5030B		
Analyst: N	MIT		% Moist:			Tech:	MIT		
Seq Number: 3	3084842		Date Prep: 04	4.05.19 14.00					
			Prep seq: 76	575211					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO		8006-61-9	<0.268	3.95	0.268	mg/kg	04.06.19 08:36	U	20
Surrogate			% Recovery		Limits	Uni	ts Analysis	Date	Flag
4-Bromofluor			102		76 - 1				
a,a,a-Trifluoro	otoluene		122		69 - 1	120 %			**





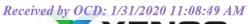


TRC Solutions/Environmental, Midland, TX

Doromotor	CAS	Docult	ΜΟΙ	SDI	Unite	Analysis	Dil Factor
		Prep seq: 76	75210				
Seq Number: 3084840		Date Prep: 04	.05.19 14.00				
Analyst: MIT		% Moist:			Tech:	MIT	
Analytical Method: BTEX by EPA 8021					Prep Metho	d: 5030E	3
Lab Sample Id: 620194-003		Date Collected	d: 04.03.19 1	2.30	Date Receiv	ved: 04.03.	19 16.35
Sample Id: TT2-Comp 3 @ 3'		Matrix:	Soil		Sample Dep	oth: 3 ft	

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00893	0.0198	0.00893	mg/kg	04.06.19 08:36	U	20
Toluene	108-88-3	< 0.00462	0.0198	0.00462	mg/kg	04.06.19 08:36	U	20
Ethylbenzene	100-41-4	< 0.00609	0.0198	0.00609	mg/kg	04.06.19 08:36	U	20
m_p-Xylenes	179601-23-1	< 0.00674	0.0395	0.00674	mg/kg	04.06.19 08:36	U	20
o-Xylene	95-47-6	< 0.00674	0.0198	0.00674	mg/kg	04.06.19 08:36	U	20
Xylenes, Total	1330-20-7	< 0.00674		0.00674	mg/kg	04.06.19 08:36	U	
Total BTEX		< 0.00462		0.00462	mg/kg	04.06.19 08:36	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
4 Bromofluorobenzene		105		68	120 0/			

4-Bromofluorobenzene	105	68 - 120	%
a,a,a-Trifluorotoluene	110	71 - 121	%







TRC Solutions/Environmental, Midland, TX

Sample Id: TT2-Con	np 4 @ 3'	Matrix:	Soil		Sample	e Depth: 3 ft		
Lab Sample Id: 620194-0	04	Date Collect	ed: 04.03.19	12.45	Date R	eceived: 04.03.	19 16.	35
Analytical Method: Inors	ganic Anions by EPA 300/300.	.1			Prep M	lethod: E300P	,	
Analyst: JYM	· ·	% Moist:			Tech:	JYM		
Seq Number: 3084960		Date Prep: 0	4.08.19 12.42	2				
Subcontractor: SUB: T10)4704215-19-29	Prep seq: 7	675239					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	14.9	9.94	0.352	mg/kg	04.08.19 14:27		1
Analytical Mathod: DPC	0 OPO By SW8015B				Drop M	lethod: 8015		
Analytical Method: DRC Analyst: MIT	-OKO DY 5 W 0013D	% Moist:			Prep M Tech:	MIT		
Seq Number: 3084803			4.05.19 14.00)	i com	1,111		
		Prep seq: 7						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics	(DRO) C10C28DR	0 153	25.2	7.55	mg/kg	04.06.19 14:59		1
Oil Range Hydrocarbo	ons (ORO) PHCG2835	20.4	25.2	7.55	mg/kg	04.06.19 14:59	J	1
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
Tricosane n-Triacontane		200 196		65 - 46 -				**
Analytical Method: TPH	GRO by EPA 8015 Mod.				Prep M	lethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3084842		Date Prep: 0	4.05.19 14.00)				
		Prep seq: 7	675211					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	<0.242	3.57	0.242	mg/kg	04.06.19 09:00	U	18
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
4-Bromofluorobenzene		98		76 -	123 %	Ď		
a,a,a-Trifluorotoluene		120		69 -	120 %	,)		





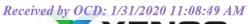


TRC Solutions/Environmental, Midland, TX

Doromotor	CAS	Dogult	MOI	SDI	Unita	Analysis	Dil Factor
		Prep seq: 76	75210				
Seq Number: 3084840		Date Prep: 04	.05.19 14.00				
Analyst: MIT		% Moist:			Tech:	MIT	
Analytical Method: BTEX by EPA 8021					Prep Metho	d: 5030B	
Lab Sample Id: 620194-004		Date Collecte	d: 04.03.19 1	2.45	Date Receiv	ved: 04.03.	19 16.35
Sample Id: TT2-Comp 4 @ 3'		Matrix:	Soil		Sample Dep	oth: 3 ft	

Parameter	Number	Result	MQL	SDL	Units	Date	Flag	
Benzene	71-43-2	< 0.00806	0.0178	0.00806	mg/kg	04.06.19 09:00	U	18
Toluene	108-88-3	< 0.00417	0.0178	0.00417	mg/kg	04.06.19 09:00	U	18
Ethylbenzene	100-41-4	< 0.00549	0.0178	0.00549	mg/kg	04.06.19 09:00	U	18
m_p-Xylenes	179601-23-1	< 0.00608	0.0357	0.00608	mg/kg	04.06.19 09:00	U	18
o-Xylene	95-47-6	< 0.00608	0.0178	0.00608	mg/kg	04.06.19 09:00	U	18
Xylenes, Total	1330-20-7	< 0.00608		0.00608	mg/kg	04.06.19 09:00	U	
Total BTEX		< 0.00417		0.00417	mg/kg	04.06.19 09:00	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

-			
4-Bromofluorobenzene	100	68 - 120	%
a,a,a-Trifluorotoluene	108	71 - 121	%







TRC Solutions/Environmental, Midland, TX

Sample Id: TT2-NW @ 1		Matrix:	Soil		Sample	e Depth: 1.5 ft		
Lab Sample Id: 620194-005		Date Collecte	ed: 04.03.19	13.00	Date R	eceived: 04.03.	19 16.3	35
Analytical Method: Inorganic	Anions by EPA 300/300.1				Prep M	Iethod: E300P	,	
Analyst: JYM	2	% Moist:			Tech:	JYM		
Seq Number: 3084960		Date Prep: 04	4.08.19 12.42					
Subcontractor: SUB: T104704	1215-19-29	Prep seq: 76	675239					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	128	10.0	0.354	mg/kg	04.08.19 14:36		1
Analytical Method: DRO-OR	O By SW8015B				Prep M	Iethod: 8015		
Analyst: MIT	5 2 ₃ 5 (10012 1	% Moist:			Tech:	MIT		
Seq Number: 3084803		Date Prep: 04	4.05.19 14.00					
		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO	O) C10C28DRO	104	25.1	7.50	mg/kg	04.06.19 15:34		1
Oil Range Hydrocarbons (O	PHCG2835	15.3	25.1	7.50	mg/kg	04.06.19 15:34	J	1
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
Tricosane n-Triacontane		174 175		65 - 1 46 - 1				**
Analytical Method: TPH GRO) by EPA 8015 Mod.				Prep M	lethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3084842		Date Prep: 04	4.05.19 14.00					
		Prep seq: 76	575211					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	< 0.250	3.70	0.250	mg/kg	04.06.19 09:23	U	18
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
4-Bromofluorobenzene		97		76 - 1		ó		
a,a,a-Trifluorotoluene		118		69 - 1	20 %	Ď		





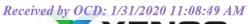


TRC Solutions/Environmental, Midland, TX

Denometer	CAS	Docult	MOI	SDI	Inita	nalysis	Dil Factor
		Prep seq: 76	75210				
Seq Number: 3084840		Date Prep: 04	.05.19 14.00				
Analyst: MIT		% Moist:			Tech:	MIT	
Analytical Method: BTEX by EPA 8021					Prep Metho	d: 5030B	:
Lab Sample Id: 620194-005		Date Collected	d: 04.03.19 1	3.00	Date Receiv	ed: 04.03.	19 16.35
Sample Id: TT2-NW @ 1.5'		Matrix:	Soil		Sample Dep	th: 1.5 ft	

Parameter	Number	Result	MQL	SDL	Units	Date	Flag	2111 40001
Benzene	71-43-2	< 0.00835	0.0185	0.00835	mg/kg	04.06.19 09:23	U	18
Toluene	108-88-3	< 0.00433	0.0185	0.00433	mg/kg	04.06.19 09:23	U	18
Ethylbenzene	100-41-4	< 0.00569	0.0185	0.00569	mg/kg	04.06.19 09:23	U	18
m_p-Xylenes	179601-23-1	< 0.00630	0.0370	0.00630	mg/kg	04.06.19 09:23	U	18
o-Xylene	95-47-6	< 0.00630	0.0185	0.00630	mg/kg	04.06.19 09:23	U	18
Xylenes, Total	1330-20-7	< 0.00630		0.00630	mg/kg	04.06.19 09:23	U	
Total BTEX		< 0.00433		0.00433	mg/kg	04.06.19 09:23	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

Surrogate	70 Recovery	Linnts	Onto	Analysis Date	Tiag
4-Bromofluorobenzene	100	68 - 120	%		
a,a,a-Trifluorotoluene	106	71 - 121	%		







TRC Solutions/Environmental, Midland, TX

Sample Id: TT2-EW @ 1.5'		Matrix:	Soil		Sample	e Depth: 1.5 ft		
Lab Sample Id: 620194-006		Date Collecte	ed: 04.03.19 13	3.15	Date R	eceived: 04.03.	19 16.3	35
Analytical Method: Inorganic Anions by I	EPA 300/300.1				Prep M	lethod: E300P	,	
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3084960		Date Prep: 04	.08.19 12.42					
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	575239					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	6.39	9.98	0.353	mg/kg	04.08.19 14:45	J	1
Analytical Method: DRO-ORO By SW80	15B				Prep M	Iethod: 8015		
Analyst: MIT	150	% Moist:			Tech:	MIT		
Seq Number: 3084803		Date Prep: 04	.05.19 14.00		100111			
		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO)	C10C28DRO	106	25.1	7.52	mg/kg	04.06.19 16:10		1
Oil Range Hydrocarbons (ORO)	PHCG2835	17.7	25.1	7.52	mg/kg	04.06.19 16:10	J	1
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
Tricosane n-Triacontane		176 183		65 - 1 46 - 1				**
Analytical Method: TPH GRO by EPA 80)15 Mod.				Prep M	Iethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3084842		Date Prep: 04	.05.19 14.00					
		Prep seq: 76	575211					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	<0.262	3.86	0.262	mg/kg	04.06.19 09:47	U	19
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
4-Bromofluorobenzene		74		76 - 3				**
a,a,a-Trifluorotoluene		85		69 - 1	120 %	6		







TRC Solutions/Environmental, Midland, TX

Sample Id: TT2-EW @ 1.5'		Matrix: Soil	Sample Depth: 1.5 ft
Lab Sample Id: 620194-006		Date Collected: 04.03.19 13.15	Date Received: 04.03.19 16.35
Analytical Method: BTEX by EPA 8021			Prep Method: 5030B
Analyst: MIT		% Moist:	Tech: MIT
Seq Number: 3084840		Date Prep: 04.05.19 14.00	
		Prep seq: 7675210	
	CAS		Analysis Dil Fa

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00873	0.0193	0.00873	mg/kg	04.06.19 09:47	U	19
Toluene	108-88-3	< 0.00452	0.0193	0.00452	mg/kg	04.06.19 09:47	U	19
Ethylbenzene	100-41-4	< 0.00595	0.0193	0.00595	mg/kg	04.06.19 09:47	U	19
m_p-Xylenes	179601-23-1	< 0.00658	0.0386	0.00658	mg/kg	04.06.19 09:47	U	19
o-Xylene	95-47-6	< 0.00658	0.0193	0.00658	mg/kg	04.06.19 09:47	U	19
Xylenes, Total	1330-20-7	< 0.00658		0.00658	mg/kg	04.06.19 09:47	U	
Total BTEX		< 0.00452		0.00452	mg/kg	04.06.19 09:47	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

6	•			·	0
4-Bromofluorobenzene	76	68 - 120	%		
a,a,a-Trifluorotoluene	77	71 - 121	%		







TRC Solutions/Environmental, Midland, TX

Sample Id: T	T2-WW @ 1.5'		Matrix:	Soil		Sample	Depth: 1.5 ft		
Lab Sample Id: 6	20194-007		Date Collecte	ed: 04.03.19 13	3.30	Date Re	eceived: 04.03.	19 16.3	35
Analytical Metho	od: Inorganic Anions by E	EPA 300/300.1				Prep M	ethod: E300P		
Analyst: J	YM		% Moist:			Tech:	JYM		
Seq Number: 3	084960		Date Prep: 04	4.08.19 12.42					
Subcontractor: S	UB: T104704215-19-29		Prep seq: 76	675239					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride		16887-00-6	176	9.98	0.353	mg/kg	04.08.19 14:54		1
Analytical Metho	od: DRO-ORO By SW80	15B				Prep M	ethod: 8015		
-	AIT		% Moist:			Tech:	MIT		
•	084803		Date Prep: 04	4.05.19 14.00					
			Prep seq: 76	575190					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range	Organics (DRO)	C10C28DRO	38.5	25.0	7.48	mg/kg	04.06.19 12:02		1
Oil Range Hyd	lrocarbons (ORO)	PHCG2835	<7.48	25.0	7.48	mg/kg	04.06.19 12:02	U	1
Surrogate			% Recovery		Limits	Uni	ts Analysis	Date	Flag
Tricosane			110		65 -				
n-Triacontane			130		46 - 1	152 %			
Analytical Metho	od: TPH GRO by EPA 80	15 Mod.				Prep M	ethod: 5030B		
Analyst: N	ЛIТ		% Moist:			Tech:	MIT		
Seq Number: 3	084842		Date Prep: 04	4.05.19 14.00					
			Prep seq: 76	575211					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO		8006-61-9	<0.241	3.56	0.241	mg/kg	04.06.19 10:11	U	18
Surrogate			% Recovery		Limits	Uni	ts Analysis	Date	Flag
4-Bromofluoro			97		76 - 1				
a,a,a-Trifluoro	otoluene		120		69 - 1	120 %			







TRC Solutions/Environmental, Midland, TX

Parameter	CAS	Recult	ΜΟΙ	SDI	Unite	Analysis	Flag	Dil Factor
		Prep seq: 76	75210					
Seq Number: 3084840		Date Prep: 04	.05.19 14.00					
Analyst: MIT		% Moist:			Tech:	MIT		
Analytical Method: BTEX by EPA 8021					Prep Metho	od: 5030B	•	
Lab Sample Id: 620194-007		Date Collected	d: 04.03.19 1	3.30	Date Recei	ved: 04.03.	19 16.3	5
Sample Id: TT2-WW @ 1.5'		Matrix:	Soil		Sample De	pth: 1.5 ft		

Parameter	Number	Result	MQL	SDL	Units	Date	Flag	
Benzene	71-43-2	< 0.00804	0.0178	0.00804	mg/kg	04.06.19 10:11	U	18
Toluene	108-88-3	< 0.00416	0.0178	0.00416	mg/kg	04.06.19 10:11	U	18
Ethylbenzene	100-41-4	< 0.00548	0.0178	0.00548	mg/kg	04.06.19 10:11	U	18
m_p-Xylenes	179601-23-1	< 0.00607	0.0356	0.00607	mg/kg	04.06.19 10:11	U	18
o-Xylene	95-47-6	< 0.00607	0.0178	0.00607	mg/kg	04.06.19 10:11	U	18
Xylenes, Total	1330-20-7	< 0.00607		0.00607	mg/kg	04.06.19 10:11	U	
Total BTEX		< 0.00416		0.00416	mg/kg	04.06.19 10:11	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

Surrogate	78 Recovery	Linns	Units	Analysis Date	riag
4-Bromofluorobenzene	99	68 - 120	%		
a,a,a-Trifluorotoluene	108	71 - 121	%		







TRC Solutions/Environmental, Midland, TX

Sample Id: ETT-NW-	-B @ 2.5'	Matrix:	Soil		Sample	Depth: 2.5 ft		
Lab Sample Id: 620194-00	8	Date Collect	ed: 04.03.19	14.30	Date Re	eceived: 04.03.	19 16.3	35
Analytical Method: Inorga	anic Anions by EPA 300/300.	1			Prep M	ethod: E300P	,	
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3084960		Date Prep: 04	4.08.19 12.42	2				
Subcontractor: SUB: T104	4704215-19-29	Prep seq: 7	675239					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	641	10.0	0.355	mg/kg	04.08.19 15:03		1
Analytical Method: DRO	-ORO By SW8015B				Prep M	ethod: 8015		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3084803		Date Prep: 04	4.05.19 14.00)				
		Prep seq: 7						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics		31.0	25.1	7.49	mg/kg	04.06.19 12:37		1
Oil Range Hydrocarbons	(ORO) PHCG2835	<7.49	25.1	7.49	mg/kg	04.06.19 12:37	U	1
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
Tricosane		104		65 -				
n-Triacontane		117		46 -	152 %			
Analytical Method: TPH	GRO by EPA 8015 Mod.				Prep M	ethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3084842		Date Prep: 04	4.05.19 14.00)				
		Prep seq: 7	675211					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	<0.268	3.95	0.268	mg/kg	04.06.19 10:35	U	20
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
4-Bromofluorobenzene		106		76 -				
a,a,a-Trifluorotoluene		123		69 -	120 %			**



a,a,a-Trifluorotoluene



Certificate of Analytical Results 620194



TRC Solutions/Environmental, Midland, TX

NM Moore Sweet

Sample Id: ETT-NW-B @ 2.5'	Matrix:	Soil	Sample Depth:	2.5 ft
Lab Sample Id: 620194-008	Date Collecte	d: 04.03.19 14.30	Date Received	04.03.19 16.35
Analytical Method: BTEX by EPA 8021			Prep Method:	5030B
Analyst: MIT	% Moist:		Tech:	MIT
Seq Number: 3084840	Date Prep: 04	.05.19 14.00		
	Prep seq: 76	75210		
	CAS		Ana	lysis Dil Factor

Parameter	Number	Result	MQL	SDL	Units	Date	Flag	DII Factor
Benzene	71-43-2	< 0.00893	0.0198	0.00893	mg/kg	04.06.19 10:35	U	20
Toluene	108-88-3	< 0.00462	0.0198	0.00462	mg/kg	04.06.19 10:35	U	20
Ethylbenzene	100-41-4	< 0.00609	0.0198	0.00609	mg/kg	04.06.19 10:35	U	20
m_p-Xylenes	179601-23-1	< 0.00674	0.0395	0.00674	mg/kg	04.06.19 10:35	U	20
o-Xylene	95-47-6	< 0.00674	0.0198	0.00674	mg/kg	04.06.19 10:35	U	20
Xylenes, Total	1330-20-7	< 0.00674		0.00674	mg/kg	04.06.19 10:35	U	
Total BTEX		< 0.00462		0.00462	mg/kg	04.06.19 10:35	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
4-Bromofluorobenzene		110		68 - 3	120 %)		

71 - 121

%

111







TRC Solutions/Environmental, Midland, TX

Sample Id: 7675190-1-BLK		Matrix:	Solid		Sample	e Depth:		
Lab Sample Id: 7675190-1-BLK		Date Collecte	ed:		Date R	eceived:		
Analytical Method: DRO-ORO By SW80	15B				Prep M	lethod: 8015		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3084803		Date Prep: 04	.05.19 14.00					
		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO)	C10C28DRO	<7.48	25.0	7.48	mg/kg	04.06.19 06:13	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<7.48	25.0	7.48	mg/kg	04.06.19 06:13	U	1
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
Tricosane		83		65 - 1	144 %			
n-Triacontane		98		46 - 1	152 %	,)		
Sample Id: 7675210-1-BLK		Matrix:	Solid		Sample	e Depth:		
Lab Sample Id: 7675210-1-BLK		Date Collecte	ed:		Date R	eceived:		
Analytical Method: BTEX by EPA 8021					Prep M	lethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3084840		Date Prep: 04	.05.19 14.00					
		Prep seq: 76	575210					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00904	0.0200	0.00904	mg/kg	04.06.19 05:21	U	20
Toluene	108-88-3	< 0.00468	0.0200	0.00468	mg/kg	04.06.19 05:21	U	20
Ethylbenzene	100-41-4	< 0.00616	0.0200	0.00616	mg/kg	04.06.19 05:21	U	20
m_p-Xylenes	179601-23-1	< 0.00682	0.0400	0.00682	mg/kg	04.06.19 05:21	U	20
o-Xylene	95-47-6	<0.00682	0.0200	0.00682	mg/kg	04.06.19 05:21	U	20
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
4-Bromofluorobenzene		102		68 - 1	120 %	,)		
a,a,a-Trifluorotoluene		107		71 - 1	121 %)		







TRC Solutions/Environmental, Midland, TX

Sample Id: 7675211-1-BLK		Matrix:	Solid		Sample	Depth:		
Lab Sample Id: 7675211-1-BLK		Date Collecte	ed:		Date R	eceived:		
Analytical Method: TPH GRO by EPA 80	15 Mod.				Prep M	lethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3084842		Date Prep: 04	4.05.19 14.00					
		Prep seq: 7	675211					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	<0.271	4.00	0.271	mg/kg	04.06.19 05:21	U	20
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
4-Bromofluorobenzene a,a,a-Trifluorotoluene		100 119		76 - 69 -				
Sample Id: 7675239-1-BLK		Matrix:	Solid		Sample	Depth:		
Lab Sample Id: 7675239-1-BLK		Date Collecte	ed:		Date R	eceived:		
Analytical Method: Inorganic Anions by E	EPA 300/300.1				Prep M	ethod: E300P		
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3084960		Date Prep: 04	4.08.19 12.42					
Subcontractor: SUB: T104704215-19-29		Prep seq: 70	575239					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	< 0.354	10.0	0.354	mg/kg	04.08.19 09:40	U	1



Flagging Criteria



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- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- **F** RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- ** Surrogate recovered outside laboratory control limit.
- **BRL** Below Reporting Limit.
- RL Reporting Limit
- MDL Method Detection LimitSDLSample Detection LimitLOD Limit of Detection
- PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- NC Non-Calculable

SMP Clie	ent Sample	BLK	Method Blank		
BKS/LCS	S Blank Spike/Laboratory Control Sample	BKSD/LCSD	CSD Blank Spike Duplicate/Laboratory Control Samp		
MD/SD	Method Duplicate/Sample Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate	

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



Project Name: NM Moore Sweet

Work Orders : 620194,			Project ID			
Lab Batch #: 3084840	Sample: 7675210-1-BKS / I				~~~~~	
Units: mg/kg	Date Analyzed: 04/06/19 02:55	SUP	RROGATE RE	COVERY S	STUDY	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	Allalytto	0.0845	0.100	85	68-120	
a,a,a-Trifluorotoluene		1.69	2.00	85	71-121	
	Sample: 7675210-1-BSD / I				,,,,,,,	
Lab Batch #: 3084840	•		h: 1 Matrix: RROGATE RE		STUDY	
Units: mg/kg	Date Analyzed: 04/06/19 03:19				1 1	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.0934	0.100	93	68-120	
a,a,a-Trifluorotoluene		1.97	2.00	99	71-121	
Lab Batch #: 3084840	Sample: 7675210-1-BLK / 1	BLK Batch	h: ¹ Matrix:	·Solid	<u>ı </u>	
Units: mg/kg	Date Analyzed: 04/06/19 05:21		RROGATE RE	-	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		i
4-Bromofluorobenzene		0.102	0.100	102	68-120	
a,a,a-Trifluorotoluene		2.14	2.00	107	71-121	
Lab Batch #: 3084840	Sample: 620194-001 S / MS		-	-		
Units: mg/kg	Date Analyzed: 04/06/19 06:10	SUF	RROGATE RE	COVERY S	STUDY	
	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	Analytes	0.0011	0.100		C2 120	i
4-Bromofluorobenzene a,a,a-Trifluorotoluene		0.0911	0.100	91	68-120 71-121	r
				98	/1-121	
Lab Batch #: 3084840	Sample: 620194-001 SD / M		h: 1 Matrix: RROGATE RE		OTHNY	
Units: mg/kg	Date Analyzed: 04/06/19 06:34				1	. <u> </u>
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.0905	0.100	91	68-120	
a,a,a-Trifluorotoluene		1.85	1.90	97	71-121	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: NM Moore Sweet

Vork Orders: 620194	,		Project II):					
Lab Batch #: 3084803	Sample: 7675190-1-BKS /		-						
Units: mg/kg	Date Analyzed: 04/06/19 03:53	SU	RROGATE RI	ECOVERY	STUDY				
DRO-C	DRO By SW8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
Tricosane		8.66	10.0	87	65-144				
n-Triacontane		9.90	10.0	99	46-152				
Lab Batch #: 3084803	Sample: 7675190-1-BSD /	BSD Batc	h: ¹ Matrix	Solid					
Units: mg/kg	Date Analyzed: 04/06/19 04:27	SU	RROGATE RI	ECOVERY	STUDY				
DRO-C	DRO By SW8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
Tricosane	Anarytes	8.71	10.0	87	65-144				
n-Triacontane		9.69	10.0	97	46-152				
Lab Batch #: 3084803	Sample: 7675190-1-BLK /								
Units: mg/kg	Date Analyzed: 04/06/19 06:13	BLK Batch: 1 Matrix: Solid SURROGATE RECOVERY STUDY							
	DRO By SW8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
Tricosane		8.29	10.0	83	65-144				
n-Triacontane		9.79	10.0	98	46-152				
Lab Batch #: 3084803	Sample: 620194-001 S / M								
Units: mg/kg	Date Analyzed: 04/06/19 07:23	AS Batch: 1 Matrix: Soil SURROGATE RECOVERY STUDY							
	DRO By SW8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
Tricosane		11.5	10.0	115	65-144				
n-Triacontane		12.0	10.0	120	46-152				
Lab Batch #: 3084803	Sample: 620194-001 SD / N	MSD Bate	h: 1 Matrix	Soil					
Units: mg/kg				COLEDIA	STUDY				
	Date Analyzed: 04/06/19 07:58	SU	RROGATE RI	ECOVERY	51001				
DRO-C	•	Amount Found [A]	RROGATE RI True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
DRO-C	Date Analyzed: 04/06/19 07:58 DRO By SW8015B	Amount Found	True Amount	Recovery %R	Control Limits	Flags			

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: NM Moore Sweet

Vork Orders : 620194	,		Project II):		
Lab Batch #: 3084842	Sample: 7675211-1-BKS / I	BKS Batel	h: ¹ Matrix:	Solid		
Units: mg/kg	Date Analyzed: 04/06/19 03:43	SU	RROGATE RE	ECOVERY	STUDY	
TPH GRO) by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	-	0.0811	0.100	81	76-123	
a,a,a-Trifluorotoluene		1.99	2.00	100	69-120	
Lab Batch #: 3084842	Sample: 7675211-1-BSD / 1	BSD Batcl	h: 1 Matrix:	Solid	·	
Units: mg/kg	Date Analyzed: 04/06/19 04:08	SU	RROGATE RE	ECOVERY	STUDY	
TPH GRO) by EPA 8015 Mod.	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	Analytes	0.107	0.100	107	76-123	
a,a,a-Trifluorotoluene		2.45	2.00	107	69-120	**
	Sample: 7675211-1-BLK / 1				07 120	
Lab Batch #: 3084842	-		h: ¹ Matrix: RROGATE RH		STUDY	
Units: mg/kg	Date Analyzed: 04/06/19 05:21					
TPH GRO) by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.0995	0.100	100	76-123	
a,a,a-Trifluorotoluene		2.37	2.00	119	69-120	
Lab Batch #: 3084842	Sample: 620194-001 S / MS	B Batcl	h: 1 Matrix:	Soil	· · · · ·	
Units: mg/kg	Date Analyzed: 04/06/19 06:58	SU	RROGATE RE	ECOVERY	STUDY	
TPH GRO) by EPA 8015 Mod.	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
4-Bromofluorobenzene		0.108	0.100	108	76-123	
a,a,a-Trifluorotoluene		2.44	1.96	124	69-120	**
Lab Batch #: 3084842	Sample: 620194-001 SD / N					
Units: mg/kg	Date Analyzed: 04/06/19 07:23	SU	RROGATE RE	ECOVERY	STUDY	
TPH GRO) by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	J	0.0831	0.100	83	76-123	
a.a.a-Trifluorotoluene		1.64	1.78	92	69-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



BS / BSD Recoveries



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Project Name: NM Moore Sweet

Work Order #: 620194							Proj	ect ID:			
Analyst: MIT	D	ate Prepar	red: 04/05/202	19			Date A	nalyzed: (04/06/2019		
Lab Batch ID: 3084840 Sample: 7675210-1	-BKS	Batcl	h #: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K/BLANK	SPIKE / I	BLANK S	SPIKE DUP	LICATE	RECOVI	ERY STUI	DY	
BTEX by EPA 8021	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											ļ,
Benzene	< 0.00904	2.00	1.97	99	2.00	1.94	97	2	55-120	20	
Toluene	< 0.00468	2.00	1.94	97	2.00	1.88	94	3	77-120	20	
Ethylbenzene	<0.00616	2.00	1.94	97	2.00	1.89	95	3	77-120	20	
m_p-Xylenes	< 0.00682	4.00	4.01	100	4.00	3.89	97	3	78-120	20	
o-Xylene	< 0.00682	2.00	2.05	103	2.00	2.01	101	2	78-120	20	
Analyst: MIT	D	ate Prepar	ed: 04/05/20	19			Date A	nalyzed: ()4/06/2019	ł	
Lab Batch ID: 3084803 Sample: 7675190-1	-BKS	Batcl	h #: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K/BLANK	SPIKE / I	BLANK S	SPIKE DUP	LICATE	RECOVI	ERY STUI	DY	
DRO-ORO By SW8015B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Diesel Range Organics (DRO)	<7.48	100	105	105	100	104	104	1	63-139	20	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries



Project Name: NM Moore Sweet

Work Order #: 620194							Proj	ject ID:			
Analyst: JYM	Γ	Oate Prepar	red: 04/08/20	19			Date A	nalyzed:	04/08/2019		
Lab Batch ID: 3084960 San	mple: 7675239-1-BKS	Batc	h #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE /	BLANK	SPIKE DUP	LICATE	RECOV	ERY STU	DY	
Inorganic Anions by EPA 3 Analytes	300/300.1 Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.354	100	102	102	100	102	102	0	80-120	20	
Analyst: MIT	Γ	ate Prepar	red: 04/05/20	19	-!		Date A	nalyzed:	04/06/2019	-	+
Lab Batch ID: 3084842 San	mple: 7675211-1-BKS	Batc	h #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE /	BLANK	SPIKE DUP	LICATE	RECOV	ERY STU	DY	
TPH GRO by EPA 8015 Analytes	5 Mod. Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
TPH-GRO	<0.271	20.0	18.8	94	20.0	17.9	90	5	35-129	20	1

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: NM Moore Sweet



Work Order # :	620194						Project II) :				
Lab Batch ID:	3084840	QC- Sample ID:	620194	-001 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	04/06/2019	Date Prepared:	04/05/2	019	Ar	nalyst: 1	TIM					
Reporting Units:	mg/kg		Ν	IATRIX SPIK	E / MAT	'RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	BTEX by EPA 8021	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]		[D]	[E]		[G]				
Benzene		< 0.00794	1.76	1.72	98	1.90	1.87	98	8	54-120	25	
Toluene		<0.00411	1.76	1.73	98	1.90	1.88	99	8	57-120	25	
Ethylbenzene		< 0.00541	1.76	1.71	97	1.90	1.85	97	8	58-131	25	
m_p-Xylenes		< 0.00599	3.51	3.49	99	3.80	3.80	100	9	62-124	25	
o-Xylene		< 0.00599	1.76	1.74	99	1.90	1.91	101	9	62-124	25	
Lab Batch ID:	3084803	QC- Sample ID:	620194	-001 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	04/06/2019	Date Prepared:	04/05/2	019	Ar	nalyst: 1	MIT					
Reporting Units:	mg/kg		Ν	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
D	PRO-ORO By SW8015B	Parent Sample Result	Spike	Spiked Sample Result	Sample		Duplicate Spiked Sample		RPD	Control Limits	Control Limits	Flag
	Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Diesel Range O	Organics (DRO)	40.2	100	129	89	99.9	127	87	2	63-139	20	
Lab Batch ID:	3084960	QC- Sample ID:	620194	-001 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	04/08/2019	Date Prepared:	04/08/2	019	Ar	nalyst: J	YM					
Reporting Units:	mg/kg		Ν	IATRIX SPIK	E / MAT	'RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Inorga	nic Anions by EPA 300/300.1	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]		⁷ 0K [D]	E]	Kesun [F]	76K [G]	70	701	70 KI D	
				1			1					

Matrix Spike Percent Recovery $[D] = 100^{*}(C-A)/B$ Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$

Chloride

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

82

100

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

85.6

100

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168

167

81

1

80-120

20



Form 3 - MS / MSD Recoveries



Project Name: NM Moore Sweet

Work Order # :	620194						Project II):				
Lab Batch ID:	3084960	QC- Sample ID:	620236	-003 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	04/08/2019	Date Prepared:04/08/2019Analyst:JYM										
Reporting Units:	mg/kg		Μ	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Inorgan	ic Anions by EPA 300/300.1	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]	[0]	[D]	[E]	Kesutt [F]	[G]	/0			
Chloride		18.1	100	124	106	100	124	106	0	80-120	20	
Lab Batch ID:	3084842	QC- Sample ID:	620194	-001 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	04/06/2019	Date Prepared:04/05/2019Analyst:MIT										
Reporting Units:	mg/kg		Μ	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
ТРН	GRO by EPA 8015 Mod.	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample	-	RPD	Control Limits	Control Limits	Flag
	Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
TPH-GRO		< 0.266	19.6	17.9	91	17.8	16.0	90	11	35-129	20	

Matrix Spike Percent Recovery $[D] = 100^{*}(C-A)/B$ Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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LABORATORIES	AUDIOU IN LITEN		
Setting the Standard since 1990	Page 1 Of 1		
Stafford,Texas (281-240-4200) Dallas Texas (214-902-0300)	San Antonio, Texas (210-509-3334) Midland, Texas (432-704-5251)	Phoenix, Arizona (480-355-0900)	
	W/W/W/WONPO/2000	ate # Xenco Job # (532)	194
Client / Reporting Information	Deviated Information	Analytical Information	Matrix Codes
Company Name / Branch: TRC Environmental Corporation	Project Name/Number:		AI
Company Address: 10 Desta Dr. Suite 150E	د		w = water S = Soil/Sed/Solid
, TX 79705	le 6 NM	٤	GW =Ground Water DW = Drinking Water
Email Ocourt CU + CSOL MONDE O	5	71	P = Product SW = Surface water
		2 SIBJ9N	SL = Sludge OW =Ocean/Sea Water Wi = Wipe
ampiers's name:	90	9092 18 Al	0 = Oil WW= Waste Water
No. Field ID / Point of Collection	HO HO HO HO HO HO HO HO HO HO HO HO HO H	H 8015 I Porte Benz SLP Benz SLP Benz SLP Benz SL MR SL MR	A = Air
172-Com (2)		ис 4 4 4 4 4 4 4 4 4 4 4 4 4	Field Comments
2 172 - Lone 2 (23'	7111 2/2		
\$ 172-643031	43 12:20		
4 172-604 Q31	43		
5 TR3-NUO 1.5'	2		
"TIA-6UP 1.5'	13 1:15		
	5		
<u>ه ۲۱ ۲-۸۷ - ۵۱ (م م ، ۶) ، ۵ ، ۶</u>	212 A/3 212 5 6		
10			
Turnaround Time (Business days)	Data Dell'verable information	Mytae.	
Same Day TAT	Level II Std QC	Ulos deservos	
Next Day EMERGENCY	Level III Std QC+ Forms TRRP Level IV	C 101 Your C 101 Your (C)	295/ 2 1 Cerm
2 Day EMERGENCY	Level 3 (CLP Forms) UST / RG -411	hrunner@freedetions.com	
3 Day EMERGENCY	TRRP Checklist		
TAT Starts Day received by Lab, if received by 5:00 pm	0 pm	alsreves eggelpican	
Relinguienter by Sampler:	DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION. INCLUDING COURIER DELIVERY Registed By:	Date Time: Received By:	
Retriquished by:		2 Date Time: Received By:	
Relinquished by:		ra Pholor Tomo	
and Martiner Officer			I REFIND. COLT. Factor

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Final 1.000

Inter-Office Shipment

.

IOS Number : 126051

Date/Time	: 04.05.2019 1	0:47 Created by	: Brenda	Ward	Please send report	to: Mike Kim	mel		
Lab# From	n: Lubbock	Delivery F	Priority:		Address:	6701 Aber	deen, Sui	ite 9 Lubbock, TX 7	9424
Lab# To:	Houston	Air Bill N	o.: 774902	303624	E-Mail:	mike.kimn	nel@xen	co.com	
Sample Id	Matrix Client Sa	mple Id Sample Collection	Method	Method Name	Lab Due	HT Due	РМ	Analytes	Sign
620194-001	S TT2-Comp	^{1 @ 3'} 04.03.2019 12:00	E300	Inorganic Anions by EPA 300/300.1	04.09.2019	05.01.2019	MKI	CL	
620194-002	S TT2-Comp	² @ 3' 04.03.2019 12:15	E300	Inorganic Anions by EPA 300/300.1	04.09.2019	05.01.2019	MKI	CL	
620194-003	S TT2-Comp	³ @ ³ 04.03.2019 12:30	E300	Inorganic Anions by EPA 300/300.1	04.09.2019	05.01.2019	MKI	CL	
620194-004	S TT2-Comp	4 @ 3' 04.03.2019 12:45	E300	Inorganic Anions by EPA 300/300.1	04.09.2019	05.01.2019	MKI	CL	
620194-005	S TT2-NW	² 1.5' 04.03.2019 13:00	E300	Inorganic Anions by EPA 300/300.1	04.09.2019	05.01.2019	MKI	CL	
620194-006	S TT2-EW @	04.03.2019 13:15	E300	Inorganic Anions by EPA 300/300.1	04.09.2019	05.01.2019	MKI	CL	
620194-007	S TT2-WW O	04.03.2019 13:30	E300	Inorganic Anions by EPA 300/300.1	04.09.2019	05.01.2019	MKI	CL	
620194-008	S ETT-NW-E	@ 2.5' 04.03.2019 14:30	E300	Inorganic Anions by EPA 300/300.1	04.09.2019	05.01.2019	MKI	CL	

Inter Office Shipment or Sample Comments:

Relinquished By:

Ward renda

Brenda Ward

Date Relinquished: 04.05.2019

Received By:

Monica Shakhshir

04.06.2019 10:00

Date Received:

Cooler Temperature: 1.6

Received by OCD: 1/31/2020 11:08:49 AM

XENCO

XENCO Laboratories



BORATORIES Inter Office Report- Sample Receipt Checklist

Sent To: Houston IOS #: 126051

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Temperature Measuring device used : HOU-068

Sent By:	Brenda Ward	Date Sent:	04/05/2019 10:47 AM
Received By	: Monica Shakhshir	Date Received:	04/06/2019 10:00 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	1.6	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received with appropriate temperature?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	Yes	
#5 *Custody Seals Signed and dated for Containers/coolers	Yes	
#6 *IOS present?	Yes	
#7 Any missing/extra samples?	No	
#8 IOS agrees with sample label(s)/matrix?	Yes	
#9 Sample matrix/ properties agree with IOS?	Yes	
#10 Samples in proper container/ bottle?	Yes	
#11 Samples properly preserved?	Yes	
#12 Sample container(s) intact?	Yes	
#13 Sufficient sample amount for indicated test(s)?	Yes	
#14 All samples received within hold time?	Yes	

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

NonConformance:

Corrective Action Taken:

Contact:

Nonconformance Documentation

Contacted by :

Date:

Checklist reviewed by: Auticheck

Date: 04/06/2019

Received by OCD: 1/31/2020 11:08:49 AM



XENCO Laboratories



Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions/Environmental Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 04/03/2019 04:35:00 PM Temperature Measuring device used : IR-3 Work Order #: 620194 Comments Sample Receipt Checklist 4.8 #1 *Temperature of cooler(s)? #2 *Shipping container in good condition? Yes #3 *Samples received on ice? Yes #4 *Custody Seals intact on shipping container/ cooler? N/A #5 Custody Seals intact on sample bottles? N/A #6*Custody Seals Signed and dated? N/A #7 *Chain of Custody present? Yes #8 Any missing/extra samples? No #9 Chain of Custody signed when relinquished/ received? Yes #10 Chain of Custody agrees with sample labels/matrix? Yes #11 Container label(s) legible and intact? Yes #12 Samples in proper container/ bottle? Yes #13 Samples properly preserved? Yes #14 Sample container(s) intact? Yes #15 Sufficient sample amount for indicated test(s)? Yes Yes #16 All samples received within hold time? #17 Subcontract of sample(s)? Yes Chloride sent to Stafford #18 Water VOC samples have zero headspace? N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by: Brenda Ward Brenda Ward

Date: 04/05/2019

Checklist reviewed by:

Mobeti Mike Kimmel

Date: 04/11/2019

Analytical Report 620204

for TRC Solutions/Environmental

Project Manager: Brian Cooper

NM Moore Sweet

11-APR-19

Collected By: Client





6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757) Xenco-Atlanta (LELAP Lab ID #04176) Xenco-Tampa: Florida (E87429), North Carolina (483) Xenco-Lakeland: Florida (E84098)



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11-APR-19

Project Manager: **Brian Cooper TRC Solutions/Environmental** 10 Desta Dr. Ste 150E Midland, TX 79705

Reference: XENCO Report No(s): 620204 NM Moore Sweet Project Address: Lea, Co. NM

Brian Cooper:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 620204. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 620204 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Muly K.

Mike Kimmel Client Services Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

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Sample Cross Reference 620204



TRC Solutions/Environmental, Midland, TX

NM Moore Sweet

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
WTT-NW-B @ 2	S	04-04-19 12:00	2 ft	620204-001
WTT-SW-B @ 2	S	04-04-19 12:15	2 ft	620204-002



CASE NARRATIVE

Client Name: TRC Solutions/Environmental Project Name: NM Moore Sweet

Project ID: Work Order Number(s): 620204 Report Date: *11-APR-19* Date Received: *04/04/2019*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments: Batch: LBA-3084803 DRO-ORO By SW8015B Surrogate Tricosane, Surrogate n-Triacontane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis. Samples affected are: 620204-001,620204-002.

Batch: LBA-3084840 BTEX by EPA 8021 Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3084842 TPH GRO by EPA 8015 Mod.

Surrogate a,a,a-Trifluorotoluene recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7675211-1-BSD,620194-001 S,620204-001.





Certificate of Analytical Results 620204



TRC Solutions/Environmental, Midland, TX

NM Moore Sweet

Sample Id: WTT-NW-B @ 2		Matrix:	Soil		Sample	e Depth: 2 ft		
Lab Sample Id: 620204-001		Date Collecte	ed: 04.04.19 12	2.00	Date R	eceived: 04.04.	19 15.:	52
Analytical Method: Inorganic Anions by	EPA 300/300.1				Prep M	Iethod: E300F	•	
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3084960		Date Prep: 04	4.08.19 12.42					
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	675239					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	100	9.92	0.351	mg/kg	04.08.19 17:15		1
Analytical Method: DRO-ORO By SW80	15B				Prep M	Iethod: 8015		
Analyst: MIT	150	% Moist:			Tech:	MIT		
Seq Number: 3084803		Date Prep: 04	4.05.19 14.00		reen.	11111		
Seq Rumber. 5004005		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO)	C10C28DRO	86.5	25.0	7.47	mg/kg	04.06.19 16:46		1
Oil Range Hydrocarbons (ORO)	PHCG2835	16.0	25.0	7.47	mg/kg	04.06.19 16:46	J	1
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
Tricosane n-Triacontane		164 173		65 - 46 -				**
Analytical Method: TPH GRO by EPA 80)15 Mod.				Prep M	lethod: 5030B	5	
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3084842		Date Prep: 04	4.05.19 14.00					
		Prep seq: 76	575211					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	<0.250	3.68	0.250	mg/kg	04.06.19 10:59	U	18
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
4-Bromofluorobenzene		100		76 -	123 %	ó		
a,a,a-Trifluorotoluene		121		69 -	120 %	ó		**



a,a,a-Trifluorotoluene



Certificate of Analytical Results 620204



TRC Solutions/Environmental, Midland, TX

NM Moore Sweet

Davamatar	CAS	Decult	MOI	SDI	Unita	Analysis	Dil Factor
		Prep seq: 76	75210				
Seq Number: 3084840		Date Prep: 04	.05.19 14.00				
Analyst: MIT		% Moist:			Tech:	MIT	
Analytical Method: BTEX by EPA 8021					Prep Metho	od: 5030B	3
Lab Sample Id: 620204-001		Date Collected	d: 04.04.19 1	2.00	Date Recei	ved: 04.04.	19 15.52
Sample Id: WTT-NW-B @ 2		Matrix:	Soil		Sample De	pth: 2 ft	

Parameter	Number	Result	MQL	SDL	Units	Date	Flag	
Benzene	71-43-2	< 0.00832	0.0184	0.00832	mg/kg	04.06.19 10:59	U	18
Toluene	108-88-3	< 0.00431	0.0184	0.00431	mg/kg	04.06.19 10:59	U	18
Ethylbenzene	100-41-4	< 0.00567	0.0184	0.00567	mg/kg	04.06.19 10:59	U	18
m,p-Xylenes	179601-23-1	< 0.00628	0.0368	0.00628	mg/kg	04.06.19 10:59	U	18
o-Xylene	95-47-6	< 0.00628	0.0184	0.00628	mg/kg	04.06.19 10:59	U	18
Total Xylenes	1330-20-7	< 0.00628		0.00628	mg/kg	04.06.19 10:59	U	
Total BTEX		< 0.00431		0.00431	mg/kg	04.06.19 10:59	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
4-Bromofluorobenzene		100		68 -	120 %	ó		

110

71 - 121

%





Certificate of Analytical Results 620204



TRC Solutions/Environmental, Midland, TX

NM Moore Sweet

Sample Id:	WTT-SW-B @ 2		Matrix:	Soil		Sample	Depth: 2 ft		
Lab Sample Id	: 620204-002		Date Collecte	ed: 04.04.19 12	2.15	Date R	eceived: 04.04.	19 15.:	52
Analytical Met	thod: Inorganic Anions by E	EPA 300/300.1				Prep M	ethod: E300P	,	
Analyst:	JYM		% Moist:			Tech:	JYM		
Seq Number:	3084960		Date Prep: 04	4.08.19 12.42					
Subcontractor:	SUB: T104704215-19-29		Prep seq: 76	575239					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride		16887-00-6	159	9.94	0.352	mg/kg	04.08.19 17:24		1
Analytical Met	thod: DRO-ORO By SW80	15B				Prep M	ethod: 8015		
Analyst:	MIT		% Moist:			Tech:	MIT		
Seq Number:	3084803		Date Prep: 04	4.05.19 14.00					
•			Prep seq: 76						
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
	ge Organics (DRO) Hydrocarbons (ORO)	C10C28DRO PHCG2835	76.3 11.0	24.9 24.9	7.44 7.44	mg/kg mg/kg	04.06.19 17:21 04.06.19 17:21	J	1 1
Surrogate			% Recovery		Limits	Uni	ts Analysis	Date	Flag
Tricosane n-Triaconta	ne		146 160		65 - 1 46 - 1				**
Analytical Met	thod: TPH GRO by EPA 80	15 Mod.				Prep M	ethod: 5030B		
Analyst:	MIT		% Moist:			Tech:	MIT		
Seq Number:	3084842		Date Prep: 04	4.05.19 14.00					
			Prep seq: 76	575211					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO		8006-61-9	<0.266	3.92	0.266	mg/kg	04.06.19 18:19	U	20
Surrogate			% Recovery		Limits	Uni	ts Analysis	Date	Flag
4-Bromoflu			100		76 - 1				
a,a,a-Trifluo	orotoiuene		108		69 - 1	120 %			



a,a,a-Trifluorotoluene



Certificate of Analytical Results 620204



TRC Solutions/Environmental, Midland, TX

NM Moore Sweet

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Data	Flag	Dil Factor
		Prep seq: 76	75210					
Seq Number: 3084840		Date Prep: 04	.05.19 14.00					
Analyst: MIT		% Moist:			Tech:	MIT		
Analytical Method: BTEX by EPA 8021					Prep Metho	od: 5030B	;	
Lab Sample Id: 620204-002		Date Collected	d: 04.04.19 1	2.15	Date Recei	ved: 04.04.	19 15.5	2
Sample Id: WTT-SW-B @ 2		Matrix:	Soil		Sample De	pth: 2 ft		

1 ar aniceer	Number	Kesun	MQL	SDL	Cinto	Date	1146	
Benzene	71-43-2	< 0.00886	0.0196	0.00886	mg/kg	04.06.19 18:19	U	20
Toluene	108-88-3	< 0.00459	0.0196	0.00459	mg/kg	04.06.19 18:19	U	20
Ethylbenzene	100-41-4	< 0.00604	0.0196	0.00604	mg/kg	04.06.19 18:19	U	20
m,p-Xylenes	179601-23-1	0.00980	0.0392	0.00669	mg/kg	04.06.19 18:19	J	20
o-Xylene	95-47-6	< 0.00669	0.0196	0.00669	mg/kg	04.06.19 18:19	U	20
Total Xylenes	1330-20-7	0.00980		0.00669	mg/kg	04.06.19 18:19	J	
Total BTEX		0.00980		0.00459	mg/kg	04.06.19 18:19	J	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
4-Bromofluorobenzene		102		68 - 1	120 %	,)		

97

71 - 121

%





Certificate of Analytical Results 620204



TRC Solutions/Environmental, Midland, TX

NM Moore Sweet

Sample Id: 7675190-1-BLK		Matrix:	Solid		Sample	e Depth:		
Lab Sample Id: 7675190-1-BLK		Date Collecte	d:		Date R	eceived:		
Analytical Method: DRO-ORO By SW80	15B				Prep M	lethod: 8015		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3084803		Date Prep: 04	.05.19 14.00					
		Prep seq: 76	75190					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO)	C10C28DRO	<7.48	25.0	7.48	mg/kg	04.06.19 06:13	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<7.48	25.0	7.48	mg/kg	04.06.19 06:13	U	1
G t		0/ D		T • • • •		· · · · · · ·	D	
Surrogate		% Recovery		Limits	Uni	·	Date	Flag
Tricosane n-Triacontane		83 98		65 - 1 46 - 1				
n Theomaile		70		10	152 A	,		
Sample Id: 7675210-1-BLK		Matrix:	Solid		Sample	Depth:		
Lab Sample Id: 7675210-1-BLK		Date Collecte	d:		Date R	eceived:		
Analytical Method: BTEX by EPA 8021					Prep M	ethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3084840		Date Prep: 04	.05.19 14.00					
		Prep seq: 76	75210					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00904	0.0200	0.00904	mg/kg	04.06.19 05:21	U	20
Toluene	108-88-3	< 0.00468	0.0200	0.00468	mg/kg	04.06.19 05:21	U	20
Ethylbenzene	100-41-4	< 0.00616	0.0200	0.00616	mg/kg	04.06.19 05:21	U	20
m,p-Xylenes	179601-23-1	< 0.00682	0.0400	0.00682	mg/kg	04.06.19 05:21	U	20
o-Xylene	95-47-6	< 0.00682	0.0200	0.00682	mg/kg	04.06.19 05:21	U	20
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
4-Bromofluorobenzene		102		68 - 1	120 %)		
a,a,a-Trifluorotoluene		107		71 - 1	121 %)		





Certificate of Analytical Results 620204



TRC Solutions/Environmental, Midland, TX

NM Moore Sweet

Sample Id: 7675211-1-BLK		Matrix:	Solid		Sample	Depth:		
Lab Sample Id: 7675211-1-BLK		Date Collecte	ed:		Date R	eceived:		
Analytical Method: TPH GRO by EPA 80	15 Mod.				Prep M	lethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3084842		Date Prep: 04	4.05.19 14.00					
		Prep seq: 76	675211					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	<0.271	4.00	0.271	mg/kg	04.06.19 05:21	U	20
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
4-Bromofluorobenzene a,a,a-Trifluorotoluene		100 119		76 - 1 69 - 1				
Sample Id: 7675239-1-BLK		Matrix:	Solid		Sample	Depth:		
Lab Sample Id: 7675239-1-BLK		Date Collecte	ed:		Date R	eceived:		
Analytical Method: Inorganic Anions by E	EPA 300/300.1				Prep M	ethod: E300P	,	
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3084960		Date Prep: 04	4.08.19 12.42					
Subcontractor: SUB: T104704215-19-29		Prep seq: 70	575239					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	< 0.354	10.0	0.354	mg/kg	04.08.19 09:40	U	1



LABORATORIES

Flagging Criteria



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- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- **E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- **F** RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- ** Surrogate recovered outside laboratory control limit.
- **BRL** Below Reporting Limit.
- RL Reporting Limit
- MDL Method Detection LimitSDLSample Detection LimitLOD Limit of Detection
- PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- NC Non-Calculable

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	S Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory Control Sample Duplicate
MD/SD	Method Duplicate/Sample Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Project Name: NM Moore Sweet

Work Orders : 620204,			Project ID			
Lab Batch #: 3084840	Sample: 7675210-1-BKS / I				OTIDV	
Units: mg/kg	Date Analyzed: 04/06/19 02:55	501	RROGATE RE	COVERY 3		
	CX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	Analytes	ļ				.
4-Bromofluorobenzene		0.0845	0.100	85	68-120	
a,a,a-Trifluorotoluene		1.69	2.00	85	71-121	<u>, </u>
Lab Batch #: 3084840	Sample: 7675210-1-BSD / I					
Units: mg/kg	Date Analyzed: 04/06/19 03:19	SU	RROGATE RE	COVERY S	STUDY	
	CX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	Ahary U.S	0.0934	0.100	93	68-120	
a,a,a-Trifluorotoluene		1.97	2.00	99	71-121	
Lab Batch #: 3084840	Sample: 7675210-1-BLK / 1	BLK Batch	h: ¹ Matrix:	Solid	<u> </u>	
Units: mg/kg	Date Analyzed: 04/06/19 05:21		RROGATE RE		STUDY	
	CX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	Anaryus	0.102	0.100	102	68-120	í
a,a,a-Trifluorotoluene		2.14	2.00	102	71-121	
Lab Batch #: 3084840	Sample: 620194-001 S / MS	S Batch	h: 1 Matrix:	:Soil	<u> </u>	
Units: mg/kg	Date Analyzed: 04/06/19 06:10		RROGATE RE	COVERY S	STUDY	
	CX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	Anaryus	0.0911	0.100	91	68-120	i
a,a,a-Trifluorotoluene		1.72	1.76	91	71-121	
Lab Batch #: 3084840	Sample: 620194-001 SD / M				<u> </u>	
Units: mg/kg	Date Analyzed: 04/06/19 06:34		RROGATE RE		STUDY	
BTE	CX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.0905	0.100	91	68-120	 I
a,a,a-Trifluorotoluene		1.85	1.90	97	71-121	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: NM Moore Sweet

Vork Orders : 620204	,		Project II):		
Lab Batch #: 3084803	Sample: 7675190-1-BKS / 1	BKS Bate	h: ¹ Matrix	Solid		
Units: mg/kg	Date Analyzed: 04/06/19 03:53	SU	RROGATE RI	ECOVERY	STUDY	
DRO-C	DRO By SW8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Tricosane		8.66	10.0	87	65-144	
n-Triacontane		9.90	10.0	99	46-152	
Lab Batch #: 3084803	Sample: 7675190-1-BSD / 1	BSD Bate	h: ¹ Matrix	Solid		
Units: mg/kg	Date Analyzed: 04/06/19 04:27	SU	RROGATE RI	ECOVERY	STUDY	
DRO-C	DRO By SW8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Tricosane	Anary ws	8.71	10.0	87	65-144	
n-Triacontane		9.69	10.0	97	46-152	
Lab Batch #: 3084803	Sample: 7675190-1-BLK /	BLK Bate	h: 1 Matrix	Solid		
Units: mg/kg	Date Analyzed: 04/06/19 06:13		RROGATE RI		STUDY	
	DRO By SW8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Tricosane		8.29	10.0	83	65-144	
n-Triacontane		9.79	10.0	98	46-152	
Lab Batch #: 3084803	Sample: 620194-001 S / MS					
Units: mg/kg	Date Analyzed: 04/06/19 07:23		RROGATE RI		STUDY	
	DRO By SW8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Tricosane	-	11.5	10.0	115	65-144	
n-Triacontane		12.0	10.0	120	46-152	
Lab Batch #: 3084803	Sample: 620194-001 SD / N	ASD Bate	h: 1 Matrix	Soil		
Units: mg/kg	Date Analyzed: 04/06/19 07:58	SU	RROGATE RI	ECOVERY	STUDY	
DRO-C	DRO By SW8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Tricosane		11.0	9.99	110	65-144	
n-Triacontane		12.0	9.99	120	46-152	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: NM Moore Sweet

Vork Orders : 620204,	,		Project II):		
Lab Batch #: 3084842	Sample: 7675211-1-BKS / H	BKS Batch	h: 1 Matrix:	Solid		
Units: mg/kg	Date Analyzed: 04/06/19 03:43	SU	RROGATE RE	ECOVERY S	STUDY	
) by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	-	0.0811	0.100	81	76-123	
a,a,a-Trifluorotoluene		1.99	2.00	100	69-120	
Lab Batch #: 3084842	Sample: 7675211-1-BSD / H	BSD Batch	h: ¹ Matrix:	Solid		
Units: mg/kg	Date Analyzed: 04/06/19 04:08	SU	RROGATE RE	ECOVERY S	STUDY	
) by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	A hary cos	0.107	0.100	107	76-123	
a,a,a-Trifluorotoluene		2.45	2.00	107	69-120	**
Lab Batch #: 3084842	Sample: 7675211-1-BLK / I			Solid	<u> </u>	
Units: mg/kg	Date Analyzed: 04/06/19 05:21		RROGATE RE		STUDY	
TPH GRO) by EPA 8015 Mod.	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
4-Bromofluorobenzene		0.0995	0.100	100	76-123	
a,a,a-Trifluorotoluene		2.37	2.00	119	69-120	
Lab Batch #: 3084842	Sample: 620194-001 S / MS			-		
Units: mg/kg	Date Analyzed: 04/06/19 06:58	SU	RROGATE RE	ECOVERY :	STUDY	
) by EPA 8015 Mod.	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	Analytes	0.100	0.100	108	76 122	
a,a,a-Trifluorotoluene		0.108	0.100	108	76-123 69-120	**
	S 620104 001 SD / N				07.120	
Lab Batch #: 3084842	Sample: 620194-001 SD / M		h: 1 Matrix: RROGATE RE		STUDY	
Units: mg/kg	Date Analyzed: 04/06/19 07:23				1 1	
) by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.0831	0.100	83	76-123	
a,a,a-Trifluorotoluene		1.64	1.78	92	69-120	
	1	1	1		1 1	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



BS / BSD Recoveries



•

Project Name: NM Moore Sweet

Work Order #: 620204							Proj	ect ID:							
Analyst: MIT	D	ate Prepare	ed: 04/05/201	.9	Date Analyzed: 04/06/2019										
Lab Batch ID: 3084840 Sample: 7675210-1-	BKS Batch #: 1 Matrix: Solid														
Units: mg/kg		BLANI	K /BLANK S	SPIKE / I	BLANK S	SPIKE DUPI	LICATE	RECOVI	ERY STUI	UDY					
BTEX by EPA 8021	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag				
Analytes		[D]	[U]		[E]	Kesuit [F]	[6]								
Benzene	< 0.00904	2.00	1.97	99	2.00	1.94	97	2	55-120	20					
Toluene	< 0.00468	2.00	1.94	97	2.00	1.88	94	3	77-120	20					
Ethylbenzene	< 0.00616	2.00	1.94	97	2.00	1.89	95	3	77-120	20					
m,p-Xylenes	< 0.00682	4.00	4.01	100	4.00	3.89	97	3	78-120	20					
o-Xylene	< 0.00682	2.00	2.05	103	2.00	2.01	101	2	78-120	20					
Analyst: MIT	D	ate Prepare	ed: 04/05/201	.9	•		Date A	nalyzed: (4/06/2019						
Lab Batch ID: 3084803 Sample: 7675190-1-	BKS	Batch	1#: 1					Matrix: S	Solid						
Units: mg/kg		BLANI	K/BLANK S	SPIKE / I	BLANK S	SPIKE DUPI	LICATE	RECOVI	ERY STUI	ΟY					
DRO-ORO By SW8015B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag				
Diesel Range Organics (DRO)	<7.48	100	105	105	100	104	104	1	63-139	20					

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries



Project Name: NM Moore Sweet

Work Order #: 620204							Proj	ject ID:			
Analyst: JYM	Date Prepared: 04/08/2019 Date Analyzed: 04/08/2019										
Lab Batch ID: 3084960 Sample: 7675239-1	-BKS	Batch #: 1 Matrix: Solid					Solid				
Units: mg/kg	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	< 0.354	100	102	102	100	102	102	0	80-120	20	
Analyst: MIT	D	ate Prepai	red: 04/05/20	19	Date Analyzed: 04/06/2019						
Lab Batch ID: 3084842 Sample: 7675211-1	-BKS	Batc	h #: 1	Matrix: Solid							
Units: mg/kg	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
TPH GRO by EPA 8015 Mod. Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
TPH-GRO	<0.271	20.0	18.8	94	20.0	17.9	90	5	35-129	20	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: NM Moore Sweet



Work Order # :	620204						Project II):				
Lab Batch ID:	3084840	QC- Sample ID:	620194	-001 S	Ba	tch #:	1 Matrix					
Date Analyzed:	04/06/2019	Date Prepared:			Ar	alyst: N	ЛIТ					
Reporting Units:	mg/kg	-				-	KE DUPLICA	TE REC	OVERY	STUDY		
	BTEX by EPA 8021	Parent Sample Result	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%K [G]	70	% K	%KPD	
Benzene		<0.00794	1.76	1.72	98	1.90	1.87	98	8	54-120	25	
Toluene		<0.00411	1.76	1.73	98	1.90	1.88	99	8	57-120	25	
Ethylbenzene		< 0.00541	1.76	1.71	97	1.90	1.85	97	8	58-131	25	
m,p-Xylenes		< 0.00599	3.51	3.49	99	3.80	3.80	100	9	62-124	25	
o-Xylene		< 0.00599	1.76	1.74	99	1.90	1.91	101	9	62-124	25	
Lab Batch ID:	3084803	QC- Sample ID:	620194	-001 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	04/06/2019	Date Prepared:	04/05/2	010	٨٣	alvst: N	ЛIТ					
,	04/00/2017	Duterreputeut	01/05/2	017	AL	alyst. P	*111					
2	mg/kg	Duit Prepareat				v	KE DUPLICA	TE REC	OVERY	STUDY		
Reporting Units:		Parent Sample	N Spike	IATRIX SPIK Spiked Sample Result	E / MAT Spiked Sample	RIX SPI Spike	KE DUPLICA Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Reporting Units:	mg/kg	Parent	N	IATRIX SPIK	E / MAT Spiked	, RIX SPI	KE DUPLICA	Spiked		Control		Flag
Reporting Units:	mg/kg RO-ORO By SW8015B Analytes	Parent Sample Result	N Spike Added	IATRIX SPIK Spiked Sample Result	E / MAT Spiked Sample %R	RIX SPI Spike Added	KE DUPLICA Duplicate Spiked Sample	Spiked Dup. %R	RPD	Control Limits	Limits	Flag
Reporting Units: D Diesel Range Or	mg/kg RO-ORO By SW8015B Analytes	Parent Sample Result [A]	M Spike Added [B] 100	ATRIX SPIK Spiked Sample Result [C] 129	E / MAT Spiked Sample %R [D] 89	RIX SPI Spike Added [E]	KE DUPLICA Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G] 87	RPD %	Control Limits %R	Limits %RPD	Flag
Reporting Units: D Diesel Range Or Lab Batch ID:	mg/kg RO-ORO By SW8015B Analytes rganics (DRO)	Parent Sample Result [A] 40.2	M. Spike Added [B] 100 620194	Spiked Sample Result [C] 129 -001 S	E / MAT Spiked Sample %R [D] 89 Ba	RIX SPI Spike Added [E] 99.9	KE DUPLICA Duplicate Spiked Sample Result [F] 127 1 Matrix	Spiked Dup. %R [G] 87	RPD %	Control Limits %R	Limits %RPD	Flag
Reporting Units: D Diesel Range Or Lab Batch ID: Date Analyzed:	mg/kg RO-ORO By SW8015B Analytes rganics (DRO) 3084960	Parent Sample Result [A] 40.2 QC- Sample ID:	Spike Added [B] 100 620194 04/08/2	ATRIX SPIK Spiked Sample Result [C] 129 -001 S 019	E / MAT Spiked Sample %R [D] 89 Ba Ar	RIX SPI Spike Added [E] 99.9 ttch #: nalyst: J	KE DUPLICA Duplicate Spiked Sample Result [F] 127 1 Matrix	Spiked Dup. %R [G] 87 x: Soil	RPD %	Control Limits %R 63-139	Limits %RPD	Flag
Reporting Units: D Diesel Range Or Lab Batch ID: Date Analyzed: Reporting Units:	mg/kg RO-ORO By SW8015B Analytes rganics (DRO) 3084960 04/08/2019	Parent Sample Result [A] 40.2 QC- Sample ID: Date Prepared: Parent Sample	Spike Added [B] 100 620194 04/08/2 M Spike	ATRIX SPIK Spiked Sample Result [C] 129 -001 S 019 IATRIX SPIK Spiked Sample Result	E / MAT Spiked Sample %R [D] 89 Ba Ar E / MAT Spiked Sample	RIX SPI Spike Added [E] 99.9 ntch #: nalyst: J RIX SPI Spike	KE DUPLICA Duplicate Spiked Sample Result [F] 127 1 Matrix YM KE DUPLICA Duplicate Spiked Sample	Spiked Dup. %R [G] 87 k: Soil TE REC Spiked Dup.	RPD % 2 OVERY RPD	Control Limits %R 63-139 STUDY Control Limits	Limits %RPD 20 Control Limits	
Reporting Units: Diesel Range Or Lab Batch ID: Date Analyzed: Reporting Units:	mg/kg RO-ORO By SW8015B Analytes rganics (DRO) 3084960 04/08/2019 mg/kg	Parent Sample Result [A] 40.2 QC- Sample ID: Date Prepared: Parent	N. Spike Added [B] 100 620194 04/08/2 N.	ATRIX SPIK Spiked Sample Result [C] 129 -001 S 019 ATRIX SPIK Spiked Sample	E / MAT Spiked Sample %R [D] 89 Ba An E / MAT Spiked	RIX SPI Spike Added [E] 99.9 ntch #: nalyst: J RIX SPI	KE DUPLICA Duplicate Spiked Sample Result [F] 127 1 Matrix YM KE DUPLICA Duplicate	Spiked Dup. %R [G] 87 k: Soil TE REC Spiked	RPD %	Control Limits %R 63-139 STUDY Control	Limits %RPD 20 Control	Flag

Matrix Spike Percent Recovery $[D] = 100^{*}(C-A)/B$ Relative Percent Difference RPD = $200^{*}[(C-F)/(C+F)]$ Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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Form 3 - MS / MSD Recoveries



Project Name: NM Moore Sweet

Work Order # :	620204						Project ID):				
Lab Batch ID:	3084960	QC- Sample ID:	620236	-003 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	04/08/2019	Date Prepared:	04/08/2	019	An	alyst: J	YM					
Reporting Units:	mg/kg	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Inorganic Anions by EPA 300/300.1		Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]		/0K [D]	[E]	Kesuit [F]	76K [G]	/0	70K	70KF D	
Chloride		18.1	100	124	106	100	124	106	0	80-120	20	
Lab Batch ID:	3084842	QC- Sample ID:	620194	-001 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	04/06/2019	Date Prepared:	04/05/2	019	An	alyst: N	MIT					
Reporting Units:	mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
TPH	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag	
	Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
TPH-GRO		<0.266	19.6	17.9	91	17.8	16.0	90	11	35-129	20	

Matrix Spike Percent Recovery $[D] = 100^{*}(C-A)/B$ Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Received by	OCD: 1/31/2020 11:08:49 AM		Page 211 of 468
202	D.com rage or Brownfields RRC Superfund Brownfields RRC Superfund ADaPT Other:	TI Sn U V Zn 1/7470 /7471 : Hg	Date/Time Revised Date 051418 Rev. 2018.1
		K Se Ag SiO2 Na Sr T 1631/245.1 1631/245.1 1631/245.1 is and conditions	Received by: (Signature)
	Program: UST/PST State of Project: Reporting:Level II Deliverables: EDD	Mg Mn Mo Ni Ni Se Ag TI U ssigns standard term: La to circumstances bu La to circumstances bu te d unless previously	
Chain of Custody Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334 Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296 Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta 6A (770-440-8800) Tamma EL (813-200 2000)	BE: 1: 3: 5: 5: 5: 5: 5: 5: 5: 5: 5: 5: 5: 5: 5:	BRCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se A <i>isoto TCLP / SPLP 6010</i> : BRCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U amples constitutes a faild purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditioned shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the conditioned and analyzed. These terms will be enforced unless previously negotiated.	Date/Time Relinguished by: (Signature)
CH Houston,TX (281) 240-4200 Dail Midland,TX (432-704-5440) EL M (575-392-7550) Phoenix,AZ (480	Bill to: (if different) Bill to: (if different) Company Name: Company Name: Company Name: Company Name: Company Name: Solution Solution Email: Email: Email: Email: Email: Email: Correction Factor: No Wet be: Vo No Vet be: Vo No Vo No Vet be: Vo Vo <td>CLP / SPLP 6010: 8RCRA TCLP / SPLP 6010: 8RCRA Istitutes a faild purchase order from clien of assume any responsibility for any los and a charge of \$5 for each sample subm</td> <td></td>	CLP / SPLP 6010: 8RCRA TCLP / SPLP 6010: 8RCRA Istitutes a faild purchase order from clien of assume any responsibility for any los and a charge of \$5 for each sample subm	
LABORADO LABORATORIES Hobbs.NM	Image: Section Matrix Sam Definition Matr	8 / 6020: (s) to be analy relinquishment of the cost of sample will be applied to	Heiniquished by: (Signature) Becarred by: (Signature)
X	Project Manager: Company Name: Address: City, State ZIP; Phone: Project Name: Project Name: Project Name: Project Name: Project Name: Project Name: Project Name: Sampler's Name: Sampler's Name: Sample Id Sample Id	Tota Circl Circl Notice: Sit	Line is

Final 1.000

Inter-Office Shipment

IOS Number : 126050

Date/Time	: 04.05.2019 10:44	Created by:	Brenda Ward		Please send report to:	Mike Kimme	el		
Lab# Fron	1: Lubbock	Delivery Priority	/:		Address:	6701 Aberde	en, Suit	te 9 Lubbock,	TX 79424
Lab# To:	Houston	Air Bill No.:	774902303624		E-Mail:	mike.kimme	l@xenc	o.com	
Sample Id	Matrix Client Sample Id	Sample Collection	Method	Method Name	Lab Due F	HT Due	РМ	Analytes	s Sign
620204-001	S WTT-NW-B @ 2	04.04.2019 12:00 E30	0 I	norganic Anions by EPA 300/300.1	04.10.2019 (05.02.2019	MKI	CL	
620204-002	S WTT-SW-B @ 2	04.04.2019 12:15 E30	0 I	Inorganic Anions by EPA 300/300.1	04.10.2019 (05.02.2019	MKI	CL	

Inter Office Shipment or Sample Comments:

Relinquished By:

Ward renda

Brenda Ward

Date Relinquished: 04.05.2019

Received By:

0

Monica Shakhshir

Date Received: 04.06.2019 10:00

Cooler Temperature: 1.6

Received by OCD: 1/31/2020 11:08:49 AM

XENCO

XENCO Laboratories



BORATORIES Inter Office Report- Sample Receipt Checklist

Sent To: Houston IOS #: 126050

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Temperature Measuring device used : HOU-068

Sent By:	Brenda Ward	Date Sent:	04/05/2019 10:44 AM
Received By	: Monica Shakhshir	Date Received:	04/06/2019 10:00 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	1.6	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received with appropriate temperature?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	Yes	
#5 *Custody Seals Signed and dated for Containers/coolers	Yes	
#6 *IOS present?	Yes	
#7 Any missing/extra samples?	No	
#8 IOS agrees with sample label(s)/matrix?	Yes	
#9 Sample matrix/ properties agree with IOS?	Yes	
#10 Samples in proper container/ bottle?	Yes	
#11 Samples properly preserved?	Yes	
#12 Sample container(s) intact?	Yes	
#13 Sufficient sample amount for indicated test(s)?	Yes	
#14 All samples received within hold time?	Yes	

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

NonConformance:

Corrective Action Taken:

Contact:

Nonconformance Documentation

Contacted by :

Date:

Checklist reviewed by: Auticheck

Date: 04/06/2019

Received by OCD: 1/31/2020 11:08:49 AM



XENCO Laboratories



Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions/Environmental Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 04/04/2019 03:52:00 PM **Temperature Measuring device used :** Work Order #: 620204 Comments Sample Receipt Checklist 5.1 #1 *Temperature of cooler(s)? #2 *Shipping container in good condition? Yes #3 *Samples received on ice? Yes #4 *Custody Seals intact on shipping container/ cooler? N/A #5 Custody Seals intact on sample bottles? N/A #6*Custody Seals Signed and dated? N/A #7 *Chain of Custody present? Yes #8 Any missing/extra samples? No #9 Chain of Custody signed when relinquished/ received? Yes #10 Chain of Custody agrees with sample labels/matrix? Yes #11 Container label(s) legible and intact? Yes #12 Samples in proper container/ bottle? Yes #13 Samples properly preserved? Yes #14 Sample container(s) intact? Yes #15 Sufficient sample amount for indicated test(s)? Yes Yes #16 All samples received within hold time? #17 Subcontract of sample(s)? Yes Chloride sent to Stafford #18 Water VOC samples have zero headspace? N/A

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

Analyst:

PH Device/Lot#: IR-3

Checklist completed by: Brenda Ward Brenda Ward

Date: 04/05/2019

Checklist reviewed by:

Muberti Mike Kimmel

Date: 04/11/2019

Analytical Report 621277

for TRC Solutions/Environmental

Project Manager: Curt Stanely

NM Moore Sweet

07-MAY-19

Collected By: Client





6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Atlanta (LELAP Lab ID #04176) Xenco-Tampa: Florida (E87429), North Carolina (483)



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07-MAY-19

Project Manager: **Curt Stanely TRC Solutions/Environmental** 10 Desta Dr. Ste 150E Midland, TX 79705

Reference: XENCO Report No(s): 621277 NM Moore Sweet Project Address:

Curt Stanely :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 621277. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 621277 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jession Vermer

Jessica Kramer Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Page 3 of 29



Sample Cross Reference 621277



TRC Solutions/Environmental, Midland, TX

NM Moore Sweet

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
STT-NW-B @ 6'	S	04-16-19 10:00	6 In	621277-001
STT-EW-B @ 6'	S	04-16-19 10:15	6 In	621277-002
STT-SW-B @ 6'	S	04-16-19 10:30	6 In	621277-003
STT-WW-B @ 6'	S	04-16-19 10:45	6 In	621277-004





CASE NARRATIVE

Client Name: TRC Solutions/Environmental Project Name: NM Moore Sweet

Project ID: Work Order Number(s): 621277 Report Date: 07-MAY-19 Date Received: 04/16/2019

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

TPH method blank had detected result above the SDL but below the MQL; therefore the data was accepted.

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3086071 Benzene By EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 621277-001 S,621277-001 SD,621277-002,621277-001.

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Lab Sample ID 621277-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m_p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 621277-001, -002, -003, -004.

The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, m_p-Xylenes, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3086074 TPH GRO by EPA 8015 Mod.

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 621277-001 S,621277-001 SD,621277-001.

Surrogate a,a,a-Trifluorotoluene recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7676005-1-BSD.

Batch: LBA-3086410 TPH GRO by EPA 8015 Mod.

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 621277-004.

Surrogate a,a,a-Trifluorotoluene recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7676207-1-BLK,621518-001 SD.

Received by OCD: 1/31/2020 11:08:49 AM

CASE NARRATIVE



Client Name: TRC Solutions/Environmental Project Name: NM Moore Sweet

Project ID: Work Order Number(s): 621277 Report Date: 07-MAY-19 Date Received: 04/16/2019

Batch: LBA-3086429 DRO-ORO By SW8015B

Lab Sample ID 621277-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Diesel Range Organics (DRO) recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 621277-001, -002, -003, -004.

The Laboratory Control Sample for Diesel Range Organics (DRO) is within laboratory Control Limits, therefore the data was accepted.

Surrogate n-Triacontane recovered below QC limits Data confirmed by re-analysis. Samples affected are: 7676032-1-BKS,621277-001.

Surrogate Tricosane recovered below QC limits Data confirmed by re-analysis. Samples affected are: 7676032-1-BSD.

Surrogate n-Triacontane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 621277-002,621277-003,621277-004.

Surrogate Tricosane recovered above QC limits. Matrix interferences is suspected; data confirmed by reanalysis.

Samples affected are: 621277-002,621277-004.

Lab Sample ID 621277-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Diesel Range Organics (DRO) recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 621277-001, -002, -003, -004.

The Laboratory Control Sample for Diesel Range Organics (DRO) is within laboratory Control Limits, therefore the data was accepted.







TRC Solutions/Environmental, Midland, TX

Sample Id: STT-NW-B @ 6'		Matrix:	Soil		Sample	Depth: 6 In		
Lab Sample Id: 621277-001		Date Collecte	ed: 04.16.19 10	0.00	Date R	eceived: 04.16.	19 14.	13
Analytical Method: Inorganic Anions by I	EPA 300/300.1				Prep M	ethod: E300P		
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3086040		Date Prep: 04	4.17.19 14.17					
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	675946					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	48.0	10.0	0.354	mg/kg	04.17.19 18:25		1
Analytical Method: DRO-ORO By SW80	15B				Prep M	ethod: 8015		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086429		Date Prep: 04	4.17.19 13.00					
1		Prep seq: 76	676032					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO)	C10C28DRO	1210	24.9	7.44	mg/kg	04.17.19 22:06	Х	1
Oil Range Hydrocarbons (ORO)	PHCG2835	28.9	24.9	7.44	mg/kg	04.17.19 22:06		1
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
Tricosane		107		65 - 1				
n-Triacontane		44		46 - 1	152 %			**
Analytical Method: TPH GRO by EPA 80	15 Mod.				Prep M	ethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086074		Date Prep: 04	4.17.19 13.00					
		Prep seq: 76	576005					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	126	8.00	0.542	mg/kg	04.17.19 21:28		40
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
4-Bromofluorobenzene		176		76 - 3				**
a,a,a-Trifluorotoluene		94		69 - 1	120 %			







TRC Solutions/Environmental, Midland, TX

Parameter	CAS	Result	MOL	SDL	Units	Analysis	Dil Factor Flag
		Prep seq: 76	76004				
Seq Number: 3086071		Date Prep: 04	17.19 13.00				
Analyst: MIT		% Moist:			Tech:	MIT	
Analytical Method: BTEX by EPA 8021					Prep Metho	od: 5030B	
Lab Sample Id: 621277-001		Date Collected	d: 04.16.19 1	0.00	Date Recei	ved: 04.16.	19 14.13
Sample Id: STT-NW-B @ 6'		Matrix:	Soil		Sample De	pth: 6 In	

Parameter	Number	Result	MQL	SDL	Units	Date	Flag	
Benzene	71-43-2	< 0.0181	0.0400	0.0181	mg/kg	04.17.19 21:28	UX	40
Toluene	108-88-3	< 0.00936	0.0400	0.00936	mg/kg	04.17.19 21:28	UX	40
Ethylbenzene	100-41-4	0.0200	0.0400	0.0123	mg/kg	04.17.19 21:28	JX	40
m_p-Xylenes	179601-23-1	0.364	0.0800	0.0136	mg/kg	04.17.19 21:28	Х	40
o-Xylene	95-47-6	< 0.0136	0.0400	0.0136	mg/kg	04.17.19 21:28	UX	40
Xylenes, Total	1330-20-7	0.364		0.0136	mg/kg	04.17.19 21:28		
Total BTEX		0.384		0.00936	mg/kg	04.17.19 21:28		
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

~	,,			 8
4-Bromofluorobenzene	126	68 - 120	%	**
a,a,a-Trifluorotoluene	79	71 - 121	%	







TRC Solutions/Environmental, Midland, TX

Sample Id: STT-EW-B @ 6	,	Matrix:	Soil		Sample	Depth: 6 In		
Lab Sample Id: 621277-002		Date Collecte	ed: 04.16.19	10.15	Date R	eceived: 04.16.	19 14.	13
Analytical Method: Inorganic A	nions by EPA 300/300.1				Prep M	ethod: E300F)	
Analyst: JYM	-	% Moist:			Tech:	JYM		
Seq Number: 3086040		Date Prep: 04	4.17.19 14.17					
Subcontractor: SUB: T10470421	5-19-29	Prep seq: 76	675946					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	1770	10.0	0.354	mg/kg	04.17.19 18:33		1
Analytical Method: DRO-ORO I	By SW8015B				Prep M	ethod: 8015		
Analyst: MIT	5	% Moist:			Tech:	MIT		
Seq Number: 3086429		Date Prep: 04	4.17.19 13.00					
-		Prep seq: 76	576032					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO)	C10C28DRO	5470	125	37.3	mg/kg	04.18.19 00:29		5
Oil Range Hydrocarbons (ORC	D) PHCG2835	145	125	37.3	mg/kg	04.18.19 00:29		5
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
Tricosane		388		65 -				**
n-Triacontane		199		46 - 1	152 %			**
Analytical Method: TPH GRO b	y EPA 8015 Mod.				Prep M	ethod: 5030B	6	
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086410		Date Prep: 04	4.18.19 15.00					
		Prep seq: 76	676207					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	526	77.4	5.24	mg/kg	04.20.19 20:43		387
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
4-Bromofluorobenzene		121		76 - 3				
a,a,a-Trifluorotoluene		114		69 - 1	120 %			





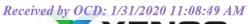


TRC Solutions/Environmental, Midland, TX

Sample Id: STT-EW-B @ 6'		Matrix:	Soil	Sample Depth	: 6 In
Lab Sample Id: 621277-002		Date Collected	d: 04.16.19 10.15	Date Received	d: 04.16.19 14.13
Analytical Method: BTEX by EPA 8021				Prep Method:	5030B
Analyst: MIT		% Moist:		Tech:	MIT
Seq Number: 3086071		Date Prep: 04.	.17.19 13.00		
		Prep seq: 76	76004		
D	CAS	D	MOL SDI	An	alysis Dil Factor

Parameter	Number	Result	MQL	SDL	Units	Date	Flag	Dirractor
Benzene	71-43-2	0.0598	0.0996	0.0450	mg/kg	04.17.19 23:55	J	100
Toluene	108-88-3	3.07	0.0996	0.0233	mg/kg	04.17.19 23:55		100
Ethylbenzene	100-41-4	4.56	0.0996	0.0307	mg/kg	04.17.19 23:55		100
m_p-Xylenes	179601-23-1	16.1	0.199	0.0340	mg/kg	04.17.19 23:55		100
o-Xylene	95-47-6	8.35	0.0996	0.0340	mg/kg	04.17.19 23:55		100
Xylenes, Total	1330-20-7	24.5		0.0340	mg/kg	04.17.19 23:55		
Total BTEX		32.1		0.0233	mg/kg	04.17.19 23:55		
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

Surrogate	76 Recovery	Linits	Units	Analysis Date	riag
4-Bromofluorobenzene	152	68 - 120	%		**
a,a,a-Trifluorotoluene	76	71 - 121	%		







TRC Solutions/Environmental, Midland, TX

Sample Id: STT-SW-B @ 6'		Matrix:	Soil		Sample	Depth: 6 In		
Lab Sample Id: 621277-003		Date Collecte	ed: 04.16.19 10	0.30	Date Re	eceived: 04.16.	19 14.	13
Analytical Method: Inorganic Anions by	EPA 300/300.1				Prep M	ethod: E300P	,	
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3086040		Date Prep: 04	4.17.19 14.17					
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	675946					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	99.1	10.0	0.354	mg/kg	04.17.19 18:42		1
Analytical Method: DRO-ORO By SW80	15B				Prep M	ethod: 8015		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086429		Date Prep: 04	4.17.19 13.00					
		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO)	C10C28DRO	57.2	25.2	7.54	mg/kg	04.18.19 01:04	В	1
Oil Range Hydrocarbons (ORO)	PHCG2835	8.18	25.2	7.54	mg/kg	04.18.19 01:04	J	1
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
Tricosane n-Triacontane		142 159		65 - 1 46 - 1				**
Analytical Method: TPH GRO by EPA 80)15 Mod.				Prep M	ethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086074		Date Prep: 04	4.17.19 13.00					
		Prep seq: 76	576005					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	14.2	3.99	0.270	mg/kg	04.18.19 00:19		20
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
4-Bromofluorobenzene		82		76 - 2				
a,a,a-Trifluorotoluene		84		69 - 3	120 %			







TRC Solutions/Environmental, Midland, TX

Parameter	CAS	Result	MOL	SDL	Units	Analysis	Dil Factor Flag
		Prep seq: 76	76004				
Seq Number: 3086071		Date Prep: 04	17.19 13.00				
Analyst: MIT		% Moist:			Tech:	MIT	
Analytical Method: BTEX by EPA 8021					Prep Metho	od: 5030B	:
Lab Sample Id: 621277-003		Date Collected	d: 04.16.19 1	0.30	Date Recei	ved: 04.16.	19 14.13
Sample Id: STT-SW-B @ 6'		Matrix:	Soil		Sample De	pth: 6 In	

Parameter	Number	Result	MQL	SDL	Units	Date	Flag	
Benzene	71-43-2	< 0.00902	0.0200	0.00902	mg/kg	04.18.19 00:19	U	20
Toluene	108-88-3	< 0.00467	0.0200	0.00467	mg/kg	04.18.19 00:19	U	20
Ethylbenzene	100-41-4	0.0838	0.0200	0.00615	mg/kg	04.18.19 00:19		20
m_p-Xylenes	179601-23-1	0.186	0.0399	0.00681	mg/kg	04.18.19 00:19		20
o-Xylene	95-47-6	0.0499	0.0200	0.00681	mg/kg	04.18.19 00:19		20
Xylenes, Total	1330-20-7	0.236		0.00681	mg/kg	04.18.19 00:19		
Total BTEX		0.320		0.00467	mg/kg	04.18.19 00:19		
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
4-Bromofluorobenzene	75	68 - 120	%		
a,a,a-Trifluorotoluene	71	71 - 121	%		







TRC Solutions/Environmental, Midland, TX

Sample Id: STT-WW-B @ 6'		Matrix:	Soil		Sample	Depth: 6 In		
Lab Sample Id: 621277-004		Date Collecte	ed: 04.16.19 10	0.45	Date Re	ceived: 04.16.1	19 14.	13
Analytical Method: Inorganic Anions by I	EPA 300/300.1				Prep Me	ethod: E300P		
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3086040		Date Prep: 04	4.17.19 14.17					
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	675946					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	63.3	10.0	0.354	mg/kg	04.17.19 18:51		1
Analytical Method: DRO-ORO By SW80	15B				Prep Me	ethod: 8015		
Analyst: MIT	100	% Moist:			Tech:	MIT		
Seq Number: 3086429		Date Prep: 04	4.17.19 13.00					
1		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO)	C10C28DRO	6280	124	37.2	mg/kg	04.18.19 01:40		5
Oil Range Hydrocarbons (ORO)	PHCG2835	196	124	37.2	mg/kg	04.18.19 01:40		5
Surrogate		% Recovery		Limits	Unit	ts Analysis	Date	Flag
Tricosane n-Triacontane		837 484		65 - 1 46 - 1				**
Analytical Method: TPH GRO by EPA 80	015 Mod.				Prep Me	ethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086410		Date Prep: 04	4.18.19 15.00					
		Prep seq: 76	576207					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	661	73.8	5.00	mg/kg	04.20.19 21:07		369
Surrogate		% Recovery		Limits	Unit	ts Analysis	Date	Flag
4-Bromofluorobenzene		163		76 - 1				**
a,a,a-Trifluorotoluene		109		69 - 1	120 %			







TRC Solutions/Environmental, Midland, TX

Sample Id: STT-WW-B @ 6'		Matrix:	Soil	Sample Depth	: 6 In
Lab Sample Id: 621277-004		Date Collected	1: 04.16.19 10.45	Date Received	: 04.16.19 14.13
Analytical Method: BTEX by EPA 8021				Prep Method:	5030B
Analyst: MIT		% Moist:		Tech:	MIT
Seq Number: 3086071		Date Prep: 04.	17.19 13.00		
		Prep seq: 76'	76004		
	CAS		NOL (DI	Ana	alysis Dil Factor

Parameter	Number	Result	MQL	SDL	Units	Date	Flag	211 1 40001
Benzene	71-43-2	< 0.0385	0.0852	0.0385	mg/kg	04.18.19 00:43	U	85
Toluene	108-88-3	< 0.0199	0.0852	0.0199	mg/kg	04.18.19 00:43	U	85
Ethylbenzene	100-41-4	0.698	0.0852	0.0262	mg/kg	04.18.19 00:43		85
m_p-Xylenes	179601-23-1	4.12	0.170	0.0290	mg/kg	04.18.19 00:43		85
o-Xylene	95-47-6	< 0.0290	0.0852	0.0290	mg/kg	04.18.19 00:43	U	85
Xylenes, Total	1330-20-7	4.12		0.0290	mg/kg	04.18.19 00:43		
Total BTEX		4.82		0.0199	mg/kg	04.18.19 00:43		
Surrogate		% Recovery		I imite	Un	ite Analycie	Date	Flag

Surrogate	76 Recovery	Linnts	Units	Analysis Date	riag
4-Bromofluorobenzene	116	68 - 120	%		
a,a,a-Trifluorotoluene	93	71 - 121	%		







TRC Solutions/Environmental, Midland, TX

Sample Id: 7675946-1-BLK		Matrix:	Solid		Sample	e Depth:		
Lab Sample Id: 7675946-1-BLK		Date Collect	ed:		Date R	leceived:		
Analytical Method: Inorganic Anions by	EPA 300/300.1				Prep M	fethod: E300P		
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3086040		Date Prep: 04	4.17.19 14.17					
Subcontractor: SUB: T104704215-19-29		Prep seq: 7	675946					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	< 0.354	10.0	0.354	mg/kg	04.17.19 16:31	U	1
Sample Id: 7676004-1-BLK		Matrix:	Solid		Sample	e Depth:		
Lab Sample Id: 7676004-1-BLK		Date Collecte	ed:		Date R	leceived:		
Analytical Method: BTEX by EPA 8021					Prep M	Iethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086071		Date Prep: 04	4.17.19 13.00					
		Prep seq: 7	676004					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00904	0.0200	0.00904	mg/kg	04.17.19 21:04	U	20
Toluene	108-88-3	< 0.00468	0.0200	0.00468	mg/kg	04.17.19 21:04	U	20
Ethylbenzene	100-41-4	< 0.00616	0.0200	0.00616	mg/kg	04.17.19 21:04	U	20
m_p-Xylenes o-Xylene	179601-23-1 95-47-6	<0.00682 <0.00682	0.0400 0.0200	0.00682 0.00682	mg/kg mg/kg	04.17.19 21:04 04.17.19 21:04	U U	20 20
Surrogate		% Recovery		Limits	Un	•	Date	Flag
4-Bromofluorobenzene a,a,a-Trifluorotoluene		81 82		68 - 1 71 - 1				
Sample Id: 7676005-1-BLK		Matrix:	Solid		Sample	e Depth:		
Lab Sample Id: 7676005-1-BLK		Date Collecto				leceived:		
Analytical Method: TPH GRO by EPA 8	015 Mod.				Prep M	fethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086074		Date Prep: 04	4.17.19 13.00					
		Prep seq: 7						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	<0.271	4.00	0.271	mg/kg	04.17.19 21:04	U	20
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
Surrogate 4-Bromofluorobenzene		% Recovery 86		Limits 76 - 1		•	Date	Flag







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TRC Solutions/Environmental, Midland, TX

NM Moore Sweet

Sample Id: 7676032-1-BLK	Matrix:	Solid		Sample	Depth:		
Lab Sample Id: 7676032-1-BLK	Date Collected	d:		Date Re	eceived:		
Analytical Method: DRO-ORO By SW8015B				Prep M	ethod: 8015		
Analyst: MIT	% Moist:			Tech:	MIT		
Seq Number: 3086429	Date Prep: 04	.17.19 13.00					
	Prep seq: 76	76032					
Parameter CA Num		MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO) C10C28	BDRO 11.7	25.0	7.48	mg/kg	04.17.19 21:29	J	1
Oil Range Hydrocarbons (ORO) PHCG2	835 <7.48	25.0	7.48	mg/kg	04.17.19 21:29	U	1
Surrogate	% Recovery		Limits	Uni	ts Analysis	Date	Flag
Tricosane	111		65 - 1	44 %			
Sample Id: 7676207-1-BLK	Matrix:	Solid		Sample	Depth:		
Lab Sample Id: 7676207-1-BLK	Date Collected	d:		Date Re	eceived:		
Analytical Method: TPH GRO by EPA 8015 Mod.				Prep M	ethod: 5030B		
Analyst: MIT	% Moist:			Tech:	MIT		
Seq Number: 3086410	Date Prep: 04	.18.19 15.00					
	Prep seq: 76	76207					
Parameter CA Num		MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO 8006-61	-9 <0.271	4.00	0.271	mg/kg	04.20.19 16:40	U	20
Surrogate	% Recovery		Limits	Uni	ts Analysis	Date	Flag

128

a,a,a-Trifluorotoluene

69 - 120

%



LABORATORIES

Flagging Criteria



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- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- **F** RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- ** Surrogate recovered outside laboratory control limit.
- **BRL** Below Reporting Limit.
- RL Reporting Limit
- MDL Method Detection LimitSDLSample Detection LimitLOD Limit of Detection
- PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- NC Non-Calculable

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	S Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory Control Sample Duplicate
MD/SD	Method Duplicate/Sample Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Project Name: NM Moore Sweet

Work Orders : 621277,			Project II			
Lab Batch #: 3086071	Sample: 7676004-1-BKS / 1					
Units: mg/kg	Date Analyzed: 04/17/19 18:38	SU.	RROGATE RE	ECOVERY S	STUDY	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	Allalytes	0.0839	0.100	84	68-120	
a.a.a-Trifluorotoluene		1.56	2.00	84 78	68-120 71-121	
	g1, 7676004 1 BSD /				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Lab Batch #: 3086071	Sample: 7676004-1-BSD /]		h: ¹ Matrix: RROGATE RH		TUDY	
Units: mg/kg	Date Analyzed: 04/17/19 19:03					
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.0849	0.100	85	68-120	
a,a,a-Trifluorotoluene		1.60	2.00	80	71-121	
Lab Batch #: 3086071	Sample: 7676004-1-BLK / 1	BLK Batcl	h: ¹ Matrix:	Solid	<u> </u>	
Units: mg/kg	Date Analyzed: 04/17/19 21:04		RROGATE RE		STUDY	
	BTEX by EPA 8021		True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes	[A]	լոյ	[D]	/011	
4-Bromofluorobenzene		0.0810	0.100	81	68-120	
a,a,a-Trifluorotoluene		1.63	2.00	82	71-121	
Lab Batch #: 3086071	Sample: 621277-001 S / MS	S Batcl	h: 1 Matrix:	Soil		
Units: mg/kg	Date Analyzed: 04/17/19 21:53	SU	RROGATE RE	ECOVERY	STUDY	
	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
4-Bromofluorobenzene		0.139	0.100	139	68-120	**
a,a,a-Trifluorotoluene		3.29	3.96	83	71-121	
Lab Batch #: 3086071	Sample: 621277-001 SD / M					
Units: mg/kg	Date Analyzed: 04/17/19 22:17	SU	RROGATE RE	ECOVERY	STUDY	
	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	Analytes	0.122	0.100		69 120	**
a,a,a-Trifluorotoluene		0.132	0.100	132 80	68-120 71-121	
a,a,a minuorotoracite		5.17	5.70	00	/1-121	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: NM Moore Sweet

Vork Orders : 621277,			Project I	D:		
Lab Batch #: 3086429	Sample: 7676032-1-BKS /					
Units: mg/kg	Date Analyzed: 04/17/19 19:02	SU	RROGATE R	ECOVERY	STUDY	
DRO-O	RO By SW8015B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
n-Triacontane		1.09	10.0	11	46-152	**
Lab Batch #: 3086429	Sample: 7676032-1-BSD /					
Units: mg/kg	Date Analyzed: 04/17/19 19:38	SURROGATE RECOVERY STUDY				
DRO-O	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
	Analytes					
Tricosane		0.680	10.0	7	65-144	**
Lab Batch #: 3086429	Sample: 7676032-1-BLK /			-		
Units: mg/kg	Date Analyzed: 04/17/19 21:29	SURROGATE RECOVERY STUDY				
DRO-O	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
	Analytes			[D]		
Tricosane		11.1	10.0	111	65-144	
Lab Batch #: 3086429	Sample: 621277-001 S / M.	S Batc	h: ¹ Matrix	:Soil		
Units: mg/kg	Date Analyzed: 04/17/19 22:42	SU	RROGATE R	ECOVERY	STUDY	
DRO-O	RO By SW8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Tricosane		9.04	10.0	90	65-144	
n-Triacontane		4.78	10.0	48	46-152	
Lab Batch #: 3086429	Sample: 621277-001 SD / N	MSD Batc	h: ¹ Matrix	:Soil	·	
Units: mg/kg	Date Analyzed: 04/17/19 23:17	SU	RROGATE R	ECOVERY	STUDY	
DRO-O	RO By SW8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Tricosane		14.1	10.1	140	65-144	
n-Triacontane		6.32	10.1	63	46-152	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: NM Moore Sweet

Work Orders : 621277,			Project II h: ¹ Matrix:			
Lab Batch #: 3086074	Sample: 7676005-1-BKS /		n: 1 Matrix: RROGATE RE		STUDY	
	Date Analyzed: 04/17/19 19:27 by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 	0.0983	0.100	98	76-123	
a,a,a-Trifluorotoluene		2.11	2.00	106	69-120	
Lab Batch #: 3086074	Sample: 7676005-1-BSD /	BSD Batcl	h: ¹ Matrix:	Solid	<u>ı </u>	
Units: mg/kg	Date Analyzed: 04/17/19 19:51		RROGATE RE		STUDY	
) by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.111	0.100	111	76-123	
a,a,a-Trifluorotoluene		2.55	2.00	128	69-120	**
Lab Batch #: 3086074	Sample: 7676005-1-BLK /	BLK Batcl	h: 1 Matrix:	Solid		
Units: mg/kg	Date Analyzed: 04/17/19 21:04	SU.	RROGATE RE	ECOVERYS	STUDY	
	TPH GRO by EPA 8015 Mod.			Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	Analytes	0.0860	0.100	86	76-123	
a,a,a-Trifluorotoluene		1.95	2.00	98	69-120	
Lab Batch #: 3086074	Sample: 621277-001 S / M	S Batcl	h: 1 Matrix:	Soil	<u> </u>	
Units: mg/kg	Date Analyzed: 04/17/19 22:42		RROGATE RE		STUDY	
TPH GRO	by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.181	0.100	181	76-123	**
a,a,a-Trifluorotoluene		3.80	3.95	96	69-120	
Lab Batch #: 3086074	Sample: 621277-001 SD / N	MSD Batcl	h: 1 Matrix:	Soil	•	
Units: mg/kg	Date Analyzed: 04/17/19 23:06	SU.	RROGATE RE	ECOVERY	STUDY	
) by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	-	0.187	0.100	187	76-123	**
a,a,a-Trifluorotoluene		3.81	3.85	99	69-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: NM Moore Sweet

Work Orders : 621277,		DV0 -	Project II			
Lab Batch #: 3086410	Sample: 7676207-1-BKS /					
Units: mg/kg	Date Analyzed: 04/20/19 15:04	<u> </u>	RROGATE RE			
	by EPA 8015 Mod.	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	Analytes					
4-Bromofluorobenzene		0.0897	0.100	90	76-123	
a,a,a-Trifluorotoluene		2.07	2.00	104	69-120	
Lab Batch #: 3086410	Sample: 7676207-1-BSD /					
Units: mg/kg	Date Analyzed: 04/20/19 15:28	SURROGATE RECOVERY STUDY				
) by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 	0.0893	0.100	89	76-123	
a,a,a-Trifluorotoluene		2.12	2.00	106	69-120	
Lab Batch #: 3086410	Sample: 7676207-1-BLK /	BLK Batcl	h: ¹ Matrix:	Solid	1	
Units: mg/kg	Date Analyzed: 04/20/19 16:40		RROGATE RE	ECOVERY S	STUDY	
	TPH GRO by EPA 8015 Mod.			Recovery %R [D]	Control Limits %R	Flags
	Analytes					
4-Bromofluorobenzene		0.105	0.100	105	76-123	**
a,a,a-Trifluorotoluene		2.56	2.00	128	69-120	**
Lab Batch #: 3086410	Sample: 621518-001 S / M					
Units: mg/kg	Date Analyzed: 04/20/19 18:17	SU	RROGATE RE	ECOVERY	STUDY	
) by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.0820	0.100	82	76-123	
a,a,a-Trifluorotoluene		1.71	1.80	95	69-120	
Lab Batch #: 3086410	Sample: 621518-001 SD / N	MSD Batcl	h: 1 Matrix:	Soil	<u>.</u>	
Units: mg/kg	Date Analyzed: 04/20/19 18:42	SU	RROGATE RE	ECOVERY	STUDY	
) by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.109	0.100	109	76-123	
a,a,a-Trifluorotoluene		2.47	1.93	128	69-120	**

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



BS / BSD Recoveries



.

Project Name: NM Moore Sweet

Work Order #: 621277							Proj	ect ID:			
Analyst: MIT	Date Prepared: 04/17/2019					Date Analyzed: 04/17/2019					
Lab Batch ID: 3086071 Sample: 7676004-1	-BKS	Batc	h #: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE / 1	BLANK S	SPIKE DUP	LICATE	RECOVI	ERY STUI	DY	
BTEX by EPA 8021	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	< 0.00904	2.00	2.00	100	2.00	2.01	101	0	55-120	20	
Toluene	< 0.00468	2.00	1.95	98	2.00	1.95	98	0	77-120	20	
Ethylbenzene	<0.00616	2.00	1.94	97	2.00	1.96	98	1	77-120	20	
m_p-Xylenes	<0.00682	4.00	3.87	97	4.00	3.91	98	1	78-120	20	
o-Xylene	< 0.00682	2.00	1.97	99	2.00	1.99	100	1	78-120	20	
Analyst: MIT	D	ate Prepai	red: 04/17/201	19	•		Date A	nalyzed: ()4/17/2019	+	
Lab Batch ID: 3086429 Sample: 7676032-1	-BKS	Batc	h #: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE / 1	BLANK S	SPIKE DUP	LICATE	RECOVI	ERY STUI	DY	
DRO-ORO By SW8015B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Diesel Range Organics (DRO)	11.7	100	118	118	100	122	122	3	63-139	20	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries



Project Name: NM Moore Sweet

Work Order #: 621277							Pro	ject ID:			
Analyst: JYM	D	ate Prepar	ed: 04/17/20	19			Date A	nalyzed: (04/17/2019		
Lab Batch ID: 3086040 Sample: 7675946-1	-BKS	Batcl	n #: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE / 1	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	< 0.354	100	102	102	100	102	102	0	80-120	20	
Analyst: MIT	D	Date Prepared: 04/17/2019 Date Analyzed: 04/17/2019									
Lab Batch ID: 3086074 Sample: 7676005-1	-BKS	Batcl	n #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE /]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
TPH GRO by EPA 8015 Mod. Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
TPH-GRO	<0.271	20.0	19.4	97	20.0	21.0	105	8	35-129	20	
Analyst: MIT	D	ate Prepar	ed: 04/18/20	19	4	1	Date A	nalyzed: (04/20/2019	1	-
Lab Batch ID: 3086410 Sample: 7676207-1	-BKS	Batcl	n #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE /]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
TPH GRO by EPA 8015 Mod.	Blank Sample Result	Spike Added	Blank Spike	Blank Spike	Spike Added	Blank Spike	Blk. Spk Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	[A]	[B]	Result [C]	%R [D]	[E]	Duplicate Result [F]	%R [G]	%	%R	%RPD	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: NM Moore Sweet



Work Order # :	621277						Project II):				
Lab Batch ID:	3086071	OC- Sample ID:	621277	-001 S	Ba	tch #:	1 Matrix					
Date Analyzed:	04/17/2019	Date Prepared:				nalyst: N						
Reporting Units:	mg/kg					•	KE DUPLICA	TE REC	OVERY	STUDY		
	BTEX by EPA 8021	Parent Sample Result	Spike Added	Spiked Sample Result [C]		Spike Added	Duplicate Spiked Sample Result [F]	Spiked	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]		⁷ 6K [D]	E]	Kesunt [r]	56K [G]	70	70K	70KPD	
Benzene		<0.0179	3.96	1.78	45	3.98	1.77	44	1	54-120	25	X
Toluene		<0.00927	3.96	1.70	43	3.98	1.69	42	1	57-120	25	Х
Ethylbenzene		0.0200	3.96	1.73	43	3.98	1.78	44	3	58-131	25	Х
m_p-Xylenes		0.364	7.92	3.87	44	7.95	4.09	47	6	62-124	25	Х
o-Xylene		< 0.0135	3.96	1.96	49	3.98	1.98	50	1	62-124	25	Х
Lab Batch ID:	3086429	QC- Sample ID:	621277	-001 S	Ba	tch #:	1 Matrix	k: Soil	•			
Date Analyzed:	04/17/2019	Date Prepared:	04/17/2	019	Ar	nalyst: N	TIM					
Reporting Units:	mg/kg		Ν	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
D]	RO-ORO By SW8015B	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample		RPD	Control Limits	Control Limits	Flag
	Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Diesel Range Or	rganics (DRO)	1210	100	1480	270	101	1570	356	6	63-139	20	Х
Lab Batch ID:	3086040	QC- Sample ID:	620960	-001 S	Ba	tch #:	1 Matrix	k: Soil				
Data Amalamad	04/17/2019	Date Prepared:	04/17/2	019	Ar	nalyst: J	YM					
Date Analyzed:	0.01/2012							TE DEC	OVERY	STUDY		
v	mg/kg		\mathbf{N}	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	IE KEU				
Reporting Units:		Parent Sample Bosult	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Date Analyzed: Reporting Units: Inorgan	mg/kg			Spiked Sample	Spiked		Duplicate	Spiked		Control		Flag

Matrix Spike Percent Recovery $[D] = 100^{*}(C-A)/B$ Relative Percent Difference $RPD = 200^{*}|(C-F)/(C+F)|$ Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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Form 3 - MS / MSD Recoveries



Project Name: NM Moore Sweet

Work Order # :	621277						Project II):				
Lab Batch ID:	3086074	QC- Sample ID:	621277	-001 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	04/17/2019	Date Prepared:	04/17/2	019	An	alyst: N	MIT					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
ТРН	GRO by EPA 8015 Mod.	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]	[C]	[D]	[E]	Kesunt [F]	[G]	/0	70K	70KI D	
TPH-GRO		126	39.5	148	56	38.5	150	62	1	35-129	20	
Lab Batch ID:	3086410	QC- Sample ID:	621518	-001 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	04/20/2019	Date Prepared:	04/18/2	019	An	alyst: N	MIT					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
ТРН	GRO by EPA 8015 Mod.	Parent Sample Result	Spike Added	Spiked Sample Result	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Besult [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]	[C]	76K [D]	E]	Result [F]	%K [G]	/0	70K	70KPD	
TPH-GRO		<0.243	18.0	15.2	84	19.3	17.6	91	15	35-129	20	

Matrix Spike Percent Recovery $[D] = 100^{*}(C-A)/B$ Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Received by OCD: 1/31/2020 11:08:49 AM	Page 240 of 468
No: U.J. 277	Date/Time Bevised Date 051418 Rev. 2018.1
Order N ADapi Brow 163112 163112	
Program: UST/PS 94-12-620-2000) Program: UST/PS State of Project Reporting:Level II Deliverables: EDD REQUEST REQUEST Poly Mo Ni K Se Mo Ni Se Ag TI U	ssigns standard t le to circumstanco ced unless previo. (e) R6
Chain of Custody Housen, TX (281, 20-4-200 Dallas, TX (241) 902-0300 San Amone, TX (210) 900-3334 Housen, TX (281, 20-4-240) EL Faso, TX (960) 794-1286 Housen, TX (282) 700-340, EL Faso, TX (960) 794-1286 Housen, TX (282) 700-340, EL Faso, TX (960) 794-1286 Faso, TX (961) 588-343, LIDBOR, TX (960) 794-1286 Faso, TX (961) 588-343, LIDBOR, TX (961) 794-1286 Faso, TX (961) 588-343, LIDBOR, TX (961) 794-1286 Faso, TX (961) 588-343, LIDBOR, TX (961) 704 Faso, TX (961) 588-343, LIDBOR, TX (961) 704 Faso, TX (961) 704-880, TX (961) 704 Faso, TX (961) 704 <th< td=""><td>of service. Xence will be liable only for the cost of standard service and selecontractors. It assigns standard terms and conditions of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated. Relinquished by: (Signature) Redeived by: (Signature) Date/Time Relinquished by: (Signature) Received by: (Signature) A the other of the transmitted to each sample submitted to Xenco. But not analyzed. These terms will be enforced unless previously negotiated. Performed by: (Signature) Relinquished by: (Signature) A the transmitted to transmitted to transmitted to the transmitted</td></th<>	of service. Xence will be liable only for the cost of standard service and selecontractors. It assigns standard terms and conditions of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated. Relinquished by: (Signature) Redeived by: (Signature) Date/Time Relinquished by: (Signature) Received by: (Signature) A the other of the transmitted to each sample submitted to Xenco. But not analyzed. These terms will be enforced unless previously negotiated. Performed by: (Signature) Relinquished by: (Signature) A the transmitted to transmitted to transmitted to the transmitted
Houston, TX (281) 240-4200 Dallas Midland, TX (281) 240-4200 Dallas Midland, TX (322-7550) Phoenix, AZ (480-3; 575-382-7550) Phoenix, AZ (480-3; Bill to: (# different) Company Name: Address: City, State ZIP: Email: Email: Lurn Around Number of Containers City, State ZIP: Email: Lurn Around Rush: City, State ZIP: Email: Due Date: Net lde: Ves No Factor: Rush: Pometer ID Number of Containers City, State ZIP: Email: Lurn Around Rush: Rush: Pometer ID Number of Containers SC City State ZIP: Email: Lurn Around Bill to: (# different) City, State ZIP: Email: Lurn Around Rush:	se order from client con subility for any losses o each sample submitted Aft 10
Houston, TX (281) Midland, TX (432 Midland, TX (432 Midland, TX (432 Midland, TX (432 Midland, TX (432 Bill to: Addres S 250550, PH Addres S 25055	samples constitutes a valid purcha sand shall not assume any respon apph project and a charge of \$5 for Redeived by: (Signature)
Hobs. Ho	Tech the cost of samples contained to supples cost of samples and shall 00 will be applied to such project.
Project Manager: Company Name: Project Manager: Company Name: Address: IO	of service. Sence will be liable only for of Xenco. A minimum charge of \$75,00 t Relinquished by: (Signature)

Inter-Office Shipment

.

IOS Number : **37182**

Date/Time:	: 04.16.2019 15:37	Created by:	Brenda Ward		Please send report to	: Mike Kimm	el		
Lab# From	Lubbock	Delivery Priority	y:		Address:	6701 Aberde	een, Sui	te 9 Lubbock, TX 7942	24
Lab# To:	Houston	Air Bill No.:	774988381500)	E-Mail:	mike.kimme	el@xenc	co.com	
Sample Id	Matrix Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	РМ	Analytes	Sign
621277-001	S STT-NW-B @ 6'	04.16.2019 10:00 E30	0	Inorganic Anions by EPA 300/300.1	04.22.2019	05.14.2019	MKI	CL	
621277-002	S STT-EW-B @ 6'	04.16.2019 10:15 E30	0	Inorganic Anions by EPA 300/300.1	04.22.2019	05.14.2019	MKI	CL	
621277-003	S STT-SW-B @ 6'	04.16.2019 10:30 E30	0	Inorganic Anions by EPA 300/300.1	04.22.2019	05.14.2019	MKI	CL	
621277-004	S STT-WW-B @ 6'	04.16.2019 10:45 E30	0	Inorganic Anions by EPA 300/300.1	04.22.2019	05.14.2019	MKI	CL	

Inter Office Shipment or Sample Comments:

Relinquished By:

renda Ward

Brenda Ward

Date Relinquished: 04.16.2019

Received By: Taha Hedib Date Received: 04.17.2019 09:45 Cooler Temperature: 2.8

Received by OCD: 1/31/2020 11:08:49 AM

XENCO

XENCO Laboratories



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Inter Office Report- Sample Receipt Checklist

Sent To: Houston IOS #: 37182

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Temperature Measuring device used : hou-068

Sent By:	Brenda Ward	Date Sent:	04/16/2019 03:37 PM
Received By:	Taha Hedib	Date Received:	04/17/2019 09:45 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2.8
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	No
#5 *Custody Seals Signed and dated for Containers/coolers	N/A
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Contact:

Nonconformance Documentation

Contacted by :

Date:

Checklist reviewed by:

Taha Hedib

Date: 04/17/2019

Received by OCD: 1/31/2020 11:08:49 AM



XENCO Laboratories



Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions/Environmental Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 04/16/2019 02:13:00 PM Temperature Measuring device used : IR-3 Work Order #: 621277 Comments Sample Receipt Checklist 4.8 #1 *Temperature of cooler(s)? #2 *Shipping container in good condition? Yes #3 *Samples received on ice? Yes #4 *Custody Seals intact on shipping container/ cooler? N/A #5 Custody Seals intact on sample bottles? N/A #6*Custody Seals Signed and dated? N/A #7 *Chain of Custody present? Yes #8 Any missing/extra samples? No #9 Chain of Custody signed when relinquished/ received? Yes #10 Chain of Custody agrees with sample labels/matrix? Yes #11 Container label(s) legible and intact? Yes #12 Samples in proper container/ bottle? Yes #13 Samples properly preserved? Yes #14 Sample container(s) intact? Yes #15 Sufficient sample amount for indicated test(s)? Yes Yes #16 All samples received within hold time? #17 Subcontract of sample(s)? Yes Chlorides sent to Stafford #18 Water VOC samples have zero headspace? N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by: Brenda Ward Brenda Ward

Date: 04/16/2019

Checklist reviewed by:

Mobeti Mike Kimmel

Date: 04/19/2019

Analytical Report 621518

for TRC Solutions, Inc

Project Manager: Curt Stanley

NM Moore Sweet

30-APR-19

Collected By: Client





6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757) Xenco-Atlanta (LELAP Lab ID #04176) Xenco-Tampa: Florida (E87429), North Carolina (483) Xenco-Lakeland: Florida (E84098)



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30-APR-19

Project Manager: **Curt Stanley TRC Solutions, Inc** 2057 Commerce Midland, TX 79703

Reference: XENCO Report No(s): 621518 NM Moore Sweet Project Address: ---

Curt Stanley:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 621518. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 621518 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kalei Stout Lubbock Laboratory Director

> Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



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Sample Id

TT2-NW-B @ 1.5'
TT2-EW-B @ 1.5'
TT2 Comp 2 @ 4'
TT2-Comp 4 @ 4'
WTT-NW-C @ 2'
ETT-NW-C @ 2.5'
ETT-Comp 4 @ 5'
ETT- Comp 1 @ 6'

Sample Cross Reference 621518



TRC Solutions, Inc, Midland, TX

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	04-17-19 12:00	1.5 ft	621518-001
S	04-17-19 12:15	1.5 ft	621518-002
S	04-17-19 12:30	4 ft	621518-003
S	04-17-19 12:45	4 ft	621518-004
S	04-17-19 13:00	2 ft	621518-005
S	04-17-19 13:15	2.5 ft	621518-006
S	04-17-19 13:30	5 ft	621518-007
S	04-17-19 13:45	6 ft	621518-008



CASE NARRATIVE

XENCO LABORATORIES Ch

Client Name: TRC Solutions, Inc Project Name: NM Moore Sweet

Project ID: ---Work Order Number(s): 621518 Report Date: 30-APR-19 Date Received: 04/18/2019

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3086407 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3086410 TPH GRO by EPA 8015 Mod.

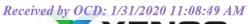
Surrogate a,a,a-Trifluorotoluene recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7676207-1-BLK,621518-001 SD,621518-002,621518-003,621518-004,621518-007,621518-001,621518-008.

Batch: LBA-3087200 DRO-ORO By SW8015B

Surrogate Tricosane recovered above QC limits. Matrix interferences is suspected; data confirmed by reanalysis.

Samples affected are: 621518-001 S,621518-001 SD,621518-004,621518-003,621518-006,621518-007. Surrogate n-Triacontane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 621518-003,621518-004,621518-007.







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Sample Id:	TT2-NW-B @ 1.5'		Matrix:	Soil		Sample	Depth: 1.5 ft		
Lab Sample Id	1: 621518-001		Date Collecte	ed: 04.17.19 12	2.00	Date Re	ceived: 04.18.	19 16.5	53
Analytical Me	ethod: Inorganic Anions by E	EPA 300/300.1				Prep Me	ethod: E300P	,	
Analyst:	JYM		% Moist:			Tech:	JYM		
Seq Number:	3086362		Date Prep: 04	4.19.19 12.29					
Subcontractor	: SUB: T104704215-19-29		Prep seq: 76	576142					
Parameter	r	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride		16887-00-6	136	10.0	0.354	mg/kg	04.19.19 14:46		1
Analytical Me	ethod: DRO-ORO By SW801	15B				Prep Me	ethod: 8015		
Analyst:	MIT		% Moist:			Tech:	MIT		
Seq Number:	3087200		Date Prep: 04	4.26.19 11.00					
			Prep seq: 76	576717					
Parameter	r	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Ran	ge Organics (DRO)	C10C28DRO	41.3	25.0	7.47	mg/kg	04.26.19 19:26		1
Oil Range I	Hydrocarbons (ORO)	PHCG2835	<7.47	25.0	7.47	mg/kg	04.26.19 19:26	U	1
Surrogate			% Recovery		Limits	Unit	ts Analysis	Date	Flag
Tricosane n-Triaconta	ane		134 123		65 - 46 -				
Analytical Me	thod: TPH GRO by EPA 80	15 Mod.				Prep Me	ethod: 5030B		
Analyst:	MIT		% Moist:			Tech:	MIT		
Seq Number:	3086410		Date Prep: 04	4.18.19 15.00					
			Prep seq: 76	676207					
Parameter	r	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO		8006-61-9	<0.260	3.83	0.260	mg/kg	04.20.19 17:04	U	19
Surrogate			% Recovery		Limits	Uni	ts Analysis	Date	Flag
	lorobenzene		98		76 -				
a,a,a-Triflu	lorotoluene		122		69 -	120 %			**





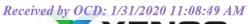


TRC Solutions, Inc, Midland, TX

Sample Id:	TT2-NW-B @ 1.5'		Matrix:	Soil	Sample Depth:	1.5 ft	
Lab Sample Id:	621518-001		Date Collected	: 04.17.19 12.00	Date Received:	04.18.19 16.53	3
Analytical Met	hod: BTEX by EPA 8021				Prep Method:	5030B	
Analyst:	MIT		% Moist:		Tech:	MIT	
Seq Number:	3086407		Date Prep: 04.	18.19 15.00			
			Prep seq: 767	6206			
		CAS			Ana	lvsis	Dil F

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00866	0.0192	0.00866	mg/kg	04.20.19 17:04	U	19
Toluene	108-88-3	< 0.00448	0.0192	0.00448	mg/kg	04.20.19 17:04	U	19
Ethylbenzene	100-41-4	< 0.00590	0.0192	0.00590	mg/kg	04.20.19 17:04	U	19
m_p-Xylenes	179601-23-1	< 0.00653	0.0383	0.00653	mg/kg	04.20.19 17:04	U	19
o-Xylene	95-47-6	< 0.00653	0.0192	0.00653	mg/kg	04.20.19 17:04	U	19
Xylenes, Total	1330-20-7	< 0.00653		0.00653	mg/kg	04.20.19 17:04	U	
Total BTEX		< 0.00448		0.00448	mg/kg	04.20.19 17:04	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

Surrogate	% Recovery	Linits	Units	Analysis Date	riag
4-Bromofluorobenzene	91	68 - 120	%		
a,a,a-Trifluorotoluene	99	71 - 121	%		





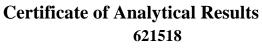


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Sample Id: TT2-EW-B @ 1.5 '		Matrix:	Soil		Sample	Depth: 1.5 ft		
Lab Sample Id: 621518-002		Date Collecte	ed: 04.17.19 12	2.15	Date Re	eceived: 04.18.	19 16.5	53
Analytical Method: Inorganic Anions by	EPA 300/300.1				Prep M	ethod: E300P		
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3086362		Date Prep: 04	4.19.19 12.29					
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	576142					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	51.4	9.98	0.353	mg/kg	04.19.19 14:58		1
Analytical Method: DRO-ORO By SW80	15B				Prep M	ethod: 8015		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3087200		Date Prep: 04	4.26.19 11.00					
-		Prep seq: 76	576717					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO)	C10C28DRO	17.7	25.2	7.54	mg/kg	04.26.19 22:04	J	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<7.54	25.2	7.54	mg/kg	04.26.19 22:04	U	1
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
Tricosane n-Triacontane		119 112		65 - 46 -				
Analytical Method: TPH GRO by EPA 80)15 Mod.				Prep M	ethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086410		Date Prep: 04	4.18.19 15.00					
		Prep seq: 76	676207					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	<0.232	3.43	0.232	mg/kg	04.20.19 19:55	U	17
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
4-Bromofluorobenzene		100		76 -				
a,a,a-Trifluorotoluene		126		69 -	120 %			**









TRC Solutions, Inc, Midland, TX

Sample Id:	TT2-EW-B @ 1.5'		Matrix:	Soil	Sample Depth:	1.5 ft	
Lab Sample Id	: 621518-002		Date Collected	1: 04.17.19 12.15	Date Received:	04.18.19 16	.53
Analytical Me	thod: BTEX by EPA 8021				Prep Method:	5030B	
Analyst:	MIT		% Moist:		Tech:	MIT	
Seq Number:	3086407		Date Prep: 04.	18.19 15.00			
			Prep seq: 767	76206			
		CAS			Ana	lysis	Dil F

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00775	0.0172	0.00775	mg/kg	04.20.19 19:55	U	17
Toluene	108-88-3	< 0.00401	0.0172	0.00401	mg/kg	04.20.19 19:55	U	17
Ethylbenzene	100-41-4	< 0.00528	0.0172	0.00528	mg/kg	04.20.19 19:55	U	17
m_p-Xylenes	179601-23-1	< 0.00585	0.0343	0.00585	mg/kg	04.20.19 19:55	U	17
o-Xylene	95-47-6	< 0.00585	0.0172	0.00585	mg/kg	04.20.19 19:55	U	17
Xylenes, Total	1330-20-7	< 0.00585		0.00585	mg/kg	04.20.19 19:55	U	
Total BTEX		< 0.00401		0.00401	mg/kg	04.20.19 19:55	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

a,a,a-Trifluorotoluene 103 71 - 121 %	4-Bromofluorobenzene	92	68 - 120 %
	a,a,a-Trifluorotoluene	103	71 - 121 %







Sample Id: TT2 Comp 2 @ 4'		Matrix:	Soil		Sample	Depth: 4 ft		
Lab Sample Id: 621518-003		Date Collecte	ed: 04.17.19 12	2.30	Date Re	eceived: 04.18.	19 16.5	53
Analytical Method: Inorganic Anions by H	EPA 300/300.1				Prep Me	ethod: E300P		
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3086362		Date Prep: 04	4.19.19 12.29					
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	576142					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	35.1	9.96	0.353	mg/kg	04.19.19 15:10		1
Analytical Method: DRO-ORO By SW80	15B				Prep Me	ethod: 8015		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3087200		Date Prep: 04	4.26.19 11.00					
-		Prep seq: 76	576717					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO)	C10C28DRO	399	124	37.2	mg/kg	04.26.19 22:46		5
Oil Range Hydrocarbons (ORO)	PHCG2835	<37.2	124	37.2	mg/kg	04.26.19 22:46	U	5
Surrogate		% Recovery		Limits	Unit	ts Analysis	Date	Flag
Tricosane n-Triacontane		236 177		65 - 46 -				**
Analytical Method: TPH GRO by EPA 80	15 Mod.				Prep Me	ethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086410		Date Prep: 04	4.18.19 15.00					
		Prep seq: 76	676207					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	0.340	3.40	0.230	mg/kg	04.21.19 00:44	J	17
Surrogate		% Recovery		Limits	Unit	ts Analysis	Date	Flag
4-Bromofluorobenzene		102		76 -				.t. t.
a,a,a-Trifluorotoluene		126		69 -	120 %			**





a,a,a-Trifluorotoluene



Certificate of Analytical Results 621518



TRC Solutions, Inc, Midland, TX

NM Moore Sweet

Sample Id: TT2 Comp 2 @ 4'	Matrix:	Soil	Sample Depth:	4 ft	
Lab Sample Id: 621518-003	Date Collected	1: 04.17.19 12.30	Date Received:	04.18.19 16.53	
Analytical Method: BTEX by EPA 8021			Prep Method:	5030B	
Analyst: MIT	% Moist:		Tech:	MIT	
Seq Number: 3086407	Date Prep: 04.	18.19 15.00			
	Prep seq: 76	76206			
	CAS		Ana	lysis Dil l	F

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00769	0.0170	0.00769	mg/kg	04.21.19 00:44	U	17
Toluene	108-88-3	< 0.00398	0.0170	0.00398	mg/kg	04.21.19 00:44	U	17
Ethylbenzene	100-41-4	< 0.00524	0.0170	0.00524	mg/kg	04.21.19 00:44	U	17
m_p-Xylenes	179601-23-1	< 0.00580	0.0340	0.00580	mg/kg	04.21.19 00:44	U	17
o-Xylene	95-47-6	< 0.00580	0.0170	0.00580	mg/kg	04.21.19 00:44	U	17
Xylenes, Total	1330-20-7	< 0.0058		0.0058	mg/kg	04.21.19 00:44	U	
Total BTEX		<0.00398		0.00398	mg/kg	04.21.19 00:44	U	
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
4-Bromofluorobenzene		94		68 - 1	120 %	5		

102

71 - 121

%

Received by OCD: 1/31/2020 11:08:49 AM



Certificate of Analytical Results 621518



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Sample Id:	TT2-Comp 4 @ 4'		Matrix:	Soil		Sample	Depth: 4 ft		
Lab Sample Id	: 621518-004		Date Collecte	ed: 04.17.19 12	2.45	Date Re	eceived: 04.18.	19 16.	53
Analytical Met	thod: Inorganic Anions by I	EPA 300/300.1				Prep M	ethod: E300F	,	
Analyst:	JYM		% Moist:			Tech:	JYM		
Seq Number:	3086362		Date Prep: 04	4.19.19 12.29					
Subcontractor:	SUB: T104704215-19-29		Prep seq: 76	576142					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride		16887-00-6	30.8	10.0	0.355	mg/kg	04.19.19 15:22		1
Analytical Met	hod: DRO-ORO By SW80	15B				Prep M	ethod: 8015		
Analyst:	MIT		% Moist:			Tech:	MIT		
Seq Number:	3087200		Date Prep: 04	4.26.19 11.00					
			Prep seq: 76	676717					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Rang	ge Organics (DRO)	C10C28DRO	275	126	37.7	mg/kg	04.26.19 23:21		5
Oil Range H	Iydrocarbons (ORO)	PHCG2835	<37.7	126	37.7	mg/kg	04.26.19 23:21	U	5
Surrogate			% Recovery		Limits	Uni	ts Analysis	Date	Flag
Tricosane			204		65 -				**
n-Triaconta	ne		164		46 -	152 %			**
Analytical Met	hod: TPH GRO by EPA 80	15 Mod.				Prep M	ethod: 5030B		
Analyst:	MIT		% Moist:			Tech:	MIT		
Seq Number:	3086410		Date Prep: 04	4.18.19 15.00					
			Prep seq: 76	676207					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO		8006-61-9	0.667	3.70	0.250	mg/kg	04.21.19 01:08	J	18
Surrogate			% Recovery		Limits	Uni	ts Analysis	Date	Flag
4-Bromoflue			96		76 -				
a,a,a-Trifluc	orotoluene		122		69 -	120 %			**



4-Bromofluorobenzene

a,a,a-Trifluorotoluene



Certificate of Analytical Results 621518



TRC Solutions, Inc, Midland, TX

NM Moore Sweet

Sample Id:	TT2-Comp 4 @ 4'		Matrix:	Soil	Sample Depth:	4 ft	
Lab Sample Io	1: 621518-004		Date Collected	1: 04.17.19 12.45	Date Received	: 04.18.19 16.	.53
Analytical Me	ethod: BTEX by EPA 8021				Prep Method:	5030B	
Analyst:	MIT		% Moist:		Tech:	MIT	
Seq Number:	3086407		Date Prep: 04.	18.19 15.00			
			Prep seq: 767	76206			
		CAS			Ana	lysis	Dil F

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00835	0.0185	0.00835	mg/kg	04.21.19 01:08	U	18
Toluene	108-88-3	< 0.00433	0.0185	0.00433	mg/kg	04.21.19 01:08	U	18
Ethylbenzene	100-41-4	< 0.00569	0.0185	0.00569	mg/kg	04.21.19 01:08	U	18
m_p-Xylenes	179601-23-1	< 0.00630	0.0370	0.00630	mg/kg	04.21.19 01:08	U	18
o-Xylene	95-47-6	< 0.00630	0.0185	0.00630	mg/kg	04.21.19 01:08	U	18
Xylenes, Total	1330-20-7	< 0.0063		0.0063	mg/kg	04.21.19 01:08	U	
Total BTEX		< 0.00433		0.00433	mg/kg	04.21.19 01:08	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

89

98

68 - 120

71 - 121

%

%







TRC Solutions, Inc, Midland, TX

Sample Id: WTT-NW-C @ 2'		Matrix:	Soil		Sample	Depth: 2 ft		
Lab Sample Id: 621518-005		Date Collecte	ed: 04.17.19 13	3.00	Date R	eceived: 04.18.	19 16.5	53
Analytical Method: Inorganic Anions by I	EPA 300/300.1				Prep M	ethod: E300P	•	
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3086362		Date Prep: 04	4.19.19 12.29					
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	676142					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	965	9.94	0.352	mg/kg	04.19.19 15:35		1
Analytical Method: DRO-ORO By SW80	15B				Prep M	ethod: 8015		
Analyst: MIT	150	% Moist:			Tech:	MIT		
Seq Number: 3087200		Date Prep: 04	4.26.19 11.00					
		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO)	C10C28DRO	12.5	24.8	7.42	mg/kg	04.26.19 23:57	J	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<7.42	24.8	7.42	mg/kg	04.26.19 23:57	U	1
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
Tricosane		131		65 -				
n-Triacontane		123		46 -	152 %	•		
Analytical Method: TPH GRO by EPA 80	015 Mod.				Prep M	ethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086410		Date Prep: 04	4.18.19 15.00					
		Prep seq: 76	676207					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	< 0.256	3.78	0.256	mg/kg	04.20.19 20:19	U	19
Surrogate		% Recovery		Limits	Uni	its Analysis	Date	Flag
4-Bromofluorobenzene		93		76 -)		
a,a,a-Trifluorotoluene		110		69 -	120 %)		







TRC Solutions, Inc, Midland, TX

Sample Id: WTT-NW-C @ 2'	Matrix:	Soil	Sample Depth	2 ft	
Lab Sample Id: 621518-005	Date Coll	ected: 04.17.19 13.00	Date Received	: 04.18.19 16	.53
Analytical Method: BTEX by EPA 8021			Prep Method:	5030B	
Analyst: MIT	% Moist:		Tech:	MIT	
Seq Number: 3086407	Date Prep	o: 04.18.19 15.00			
	Prep seq:	7676206			
	CAS		Ans	alvsis	Dil F

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00854	0.0189	0.00854	mg/kg	04.20.19 20:19	U	19
Toluene	108-88-3	< 0.00442	0.0189	0.00442	mg/kg	04.20.19 20:19	U	19
Ethylbenzene	100-41-4	< 0.00582	0.0189	0.00582	mg/kg	04.20.19 20:19	U	19
m_p-Xylenes	179601-23-1	< 0.00645	0.0378	0.00645	mg/kg	04.20.19 20:19	U	19
o-Xylene	95-47-6	< 0.00645	0.0189	0.00645	mg/kg	04.20.19 20:19	U	19
Xylenes, Total	1330-20-7	< 0.00645		0.00645	mg/kg	04.20.19 20:19	U	
Total BTEX		< 0.00442		0.00442	mg/kg	04.20.19 20:19	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

0	•			·	0
4-Bromofluorobenzene	86	68 - 120	%		
a,a,a-Trifluorotoluene	91	71 - 121	%		







Sample Id: ETT-NW-C @ 2.5'		Matrix:	Soil		Sample	Depth: 2.5 ft		
Lab Sample Id: 621518-006		Date Collecte	ed: 04.17.19 13	3.15	Date Re	eceived: 04.18.	19 16.5	53
Analytical Method: Inorganic Anions by I	EPA 300/300.1				Prep M	ethod: E300P	,	
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3086362		Date Prep: 04	4.19.19 12.29					
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	576142					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	197	9.98	0.353	mg/kg	04.19.19 15:47		1
Analytical Method: DRO-ORO By SW80	15B				Prep M	ethod: 8015		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3087200		Date Prep: 04	4.26.19 11.00					
-		Prep seq: 76	576717					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO)	C10C28DRO	359	250	74.7	mg/kg	04.27.19 00:38		10
Oil Range Hydrocarbons (ORO)	PHCG2835	<74.7	250	74.7	mg/kg	04.27.19 00:38	U	10
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
Tricosane n-Triacontane		284 91		65 - 1 46 - 1				**
Analytical Method: TPH GRO by EPA 80	015 Mod.				Prep M	ethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086410		Date Prep: 04	4.18.19 15.00					
		Prep seq: 76	576207					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	<0.232	3.42	0.232	mg/kg	04.21.19 01:33	U	17
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
4-Bromofluorobenzene		78		76 - 1				
a,a,a-Trifluorotoluene		91		69 - 1	120 %			









TRC Solutions, Inc, Midland, TX

Sample Id: ETT-NW-C @ 2.5'	Matrix: Soil	Sample Depth: 2.5 ft
Lab Sample Id: 621518-006	Date Collected: 04.17.19 13.15	Date Received: 04.18.19 16.53
Analytical Method: BTEX by EPA 8021		Prep Method: 5030B
Analyst: MIT	% Moist:	Tech: MIT
Seq Number: 3086407	Date Prep: 04.18.19 15.00	
	Prep seq: 7676206	

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00774	0.0171	0.00774	mg/kg	04.21.19 01:33	U	17
Toluene	108-88-3	< 0.00401	0.0171	0.00401	mg/kg	04.21.19 01:33	U	17
Ethylbenzene	100-41-4	< 0.00527	0.0171	0.00527	mg/kg	04.21.19 01:33	U	17
m_p-Xylenes	179601-23-1	< 0.00584	0.0342	0.00584	mg/kg	04.21.19 01:33	U	17
o-Xylene	95-47-6	< 0.00584	0.0171	0.00584	mg/kg	04.21.19 01:33	U	17
Xylenes, Total	1330-20-7	< 0.00584		0.00584	mg/kg	04.21.19 01:33	U	
Total BTEX		< 0.00401		0.00401	mg/kg	04.21.19 01:33	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

	74	(9, 100 ()
4-Bromofluorobenzene	/4	68 - 120 %
a,a,a-Trifluorotoluene	74	71 - 121 %







TRC Solutions, Inc, Midland, TX

Sample Id: ETT-Comp 4 @ 5'		Matrix:	Soil		Sample	Depth: 5 ft		
Lab Sample Id: 621518-007		Date Collecte	ed: 04.17.19 13	3.30	Date R	eceived: 04.18.	19 16.5	53
Analytical Method: Inorganic Anions by	EPA 300/300.1				Prep M	ethod: E300P		
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3086362		Date Prep: 04	4.19.19 12.29					
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	676142					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	724	10.0	0.354	mg/kg	04.19.19 15:59		1
	150				D 14			
Analytical Method: DRO-ORO By SW80	15B	% Moist:			Prep M			
Analyst: MIT		Date Prep: 04	1 26 10 11 00		Tech:	MIT		
Seq Number: 3087200		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO)	C10C28DRO	291	25.2	7.55	mg/kg	04.27.19 01:14		1
Oil Range Hydrocarbons (ORO)	PHCG2835	17.0	25.2	7.55	mg/kg	04.27.19 01:14	J	1
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
Tricosane n-Triacontane		260 193		65 - 46 -				**
Analytical Method: TPH GRO by EPA 80)15 Mod.				Prep M	ethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086410		Date Prep: 04	4.18.19 15.00					
		Prep seq: 76	676207					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	0.395	3.42	0.232	mg/kg	04.21.19 01:57	J	17
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
4-Bromofluorobenzene		106		76 -	123 %			
a,a,a-Trifluorotoluene		128		69 -	120 %			**



a,a,a-Trifluorotoluene



Certificate of Analytical Results 621518



TRC Solutions, Inc, Midland, TX

NM Moore Sweet

Sample Id:	ETT-Comp 4 @ 5'	Matrix:	Soil	Sample Depth:	5 ft
Lab Sample Id:	621518-007	Date Collected	: 04.17.19 13.30	Date Received:	04.18.19 16.53
Analytical Meth	nod: BTEX by EPA 8021			Prep Method:	5030B
Analyst:	MIT	% Moist:		Tech:	MIT
Seq Number:	3086407	Date Prep: 04.1	8.19 15.00		
		Prep seq: 767	6206		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00773	0.0171	0.00773	mg/kg	04.21.19 01:57	U	17
Toluene	108-88-3	< 0.00400	0.0171	0.00400	mg/kg	04.21.19 01:57	U	17
Ethylbenzene	100-41-4	< 0.00526	0.0171	0.00526	mg/kg	04.21.19 01:57	U	17
m_p-Xylenes	179601-23-1	< 0.00583	0.0342	0.00583	mg/kg	04.21.19 01:57	U	17
o-Xylene	95-47-6	< 0.00583	0.0171	0.00583	mg/kg	04.21.19 01:57	U	17
Xylenes, Total	1330-20-7	< 0.00583		0.00583	mg/kg	04.21.19 01:57	U	
Total BTEX		< 0.004		0.004	mg/kg	04.21.19 01:57	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
4-Bromofluorobenzene		101		68 - 1	120 %	ó		

106

71 - 121

%







TRC Solutions, Inc, Midland, TX

Sample Id: ETT- Comp 1 @ 6'		Matrix:	Soil		Sample	Depth: 6 ft		
Lab Sample Id: 621518-008		Date Collecte	ed: 04.17.19 13	3.45	Date R	eceived: 04.18.	19 16.5	53
Analytical Method: Inorganic Anions by I	EPA 300/300.1				Prep M	ethod: E300P		
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3086362		Date Prep: 04	4.19.19 12.29					
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	576142					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	615	9.98	0.353	mg/kg	04.19.19 16:11		1
	160							
Analytical Method: DRO-ORO By SW80	15B	% Moist:			Prep M	ethod: 8015 MIT		
Analyst: MIT		Date Prep: 04	1 26 19 11 00		Tech:	IVII I		
Seq Number: 3087200		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO)	C10C28DRO	29.3	24.8	7.41	mg/kg	04.27.19 01:49		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<7.41	24.8	7.41	mg/kg	04.27.19 01:49	U	1
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
Tricosane n-Triacontane		132 129		65 - 46 -				
Analytical Method: TPH GRO by EPA 80)15 Mod.				Prep M	ethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086410		Date Prep: 04	4.18.19 15.00					
		Prep seq: 76	676207					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	<0.242	3.57	0.242	mg/kg	04.20.19 19:30	U	18
Surrogate		% Recovery		Limits	Uni	ts Analysis	Date	Flag
4-Bromofluorobenzene		101		76 -	123 %	1		
a,a,a-Trifluorotoluene		123		69 -	120 %	I.		**



4-Bromofluorobenzene

a,a,a-Trifluorotoluene



Certificate of Analytical Results 621518



TRC Solutions, Inc, Midland, TX

NM Moore Sweet

Sample Id: ETT- Comp 1 @ 6'		Matrix:	Soil	Sample Depth:	6 ft	
Lab Sample Id: 621518-008		Date Collected	1: 04.17.19 13.45	Date Received	: 04.18.19 16.	53
Analytical Method: BTEX by EPA 8021				Prep Method:	5030B	
Analyst: MIT		% Moist:		Tech:	MIT	
Seq Number: 3086407		Date Prep: 04.	18.19 15.00			
		Prep seq: 76	76206			
	CAS			Δne	lvsis	Dil F

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00807	0.0179	0.00807	mg/kg	04.20.19 19:30	U	18
Toluene	108-88-3	< 0.00418	0.0179	0.00418	mg/kg	04.20.19 19:30	U	18
Ethylbenzene	100-41-4	< 0.00550	0.0179	0.00550	mg/kg	04.20.19 19:30	U	18
m_p-Xylenes	179601-23-1	< 0.00609	0.0357	0.00609	mg/kg	04.20.19 19:30	U	18
o-Xylene	95-47-6	< 0.00609	0.0179	0.00609	mg/kg	04.20.19 19:30	U	18
Xylenes, Total	1330-20-7	< 0.00609		0.00609	mg/kg	04.20.19 19:30	U	
Total BTEX		< 0.00418		0.00418	mg/kg	04.20.19 19:30	U	
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag

92

101

68 - 120

71 - 121

%

%







TRC Solutions, Inc, Midland, TX

Sample Id: 7676142-1-BLK		Matrix:	Solid		Sample	e Depth:		
Lab Sample Id: 7676142-1-BLK		Date Collecte	ed:		Date R	eceived:		
Analytical Method: Inorganic Anions by I	EPA 300/300.1				Prep M	lethod: E300P		
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3086362		Date Prep: 04	4.19.19 12.29					
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	676142					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	< 0.354	10.0	0.354	mg/kg	04.19.19 08:28	U	1
Sample Id: 7676206-1-BLK		Matrix:	Solid		Sample	e Depth:		
Lab Sample Id: 7676206-1-BLK		Date Collecte	ed:		Date R	eceived:		
Analytical Method: BTEX by EPA 8021					Prep M	Iethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086407		Date Prep: 04	4.18.19 15.00					
		Prep seq: 76	676206					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	< 0.00904	0.0200	0.00904	mg/kg	04.20.19 16:40	U	20
Toluene	108-88-3	< 0.00468	0.0200	0.00468	mg/kg	04.20.19 16:40	U	20
Ethylbenzene m_p-Xylenes	100-41-4 179601-23-1	<0.00616 <0.00682	0.0200 0.0400	0.00616 0.00682	mg/kg mg/kg	04.20.19 16:40 04.20.19 16:40	U U	20 20
o-Xylene	95-47-6	<0.00682	0.0200	0.00682	mg/kg	04.20.19 16:40	U	20
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
4-Bromofluorobenzene		97		68 - 1	20 %	6		-
a,a,a-Trifluorotoluene		105		71 - 1				
Sample Id: 7676207-1-BLK		Matrix:	Solid		Sample	e Depth:		
Lab Sample Id: 7676207-1-BLK		Date Collecte	ed:		Date R	eceived:		
Analytical Method: TPH GRO by EPA 80	015 Mod.				Prep M	Iethod: 5030B		
Analyst: MIT		% Moist:			Tech:	MIT		
Seq Number: 3086410		Date Prep: 04	4.18.19 15.00					
		Prep seq: 76	576207					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
TPH-GRO	8006-61-9	<0.271	4.00	0.271	mg/kg	04.20.19 16:40	U	20
Surrogate		% Recovery		Limits	Un	its Analysis	Date	Flag
4-Bromofluorobenzene		105		76 - 1	23 %	6		







TRC Solutions, Inc, Midland, TX

Sample Id: 7676717-1-BLK	Matrix:	Solid		Sample	e Depth:		
Lab Sample Id: 7676717-1-BLK	Date Collecte	ed:		Date R	eceived:		
Analytical Method: DRO-ORO By SW8015B				Prep M	lethod: 8015		
Analyst: MIT	% Moist:			Tech:	MIT		
Seq Number: 3087200	Date Prep: 04	Date Prep: 04.26.19 11.00					
	Prep seq: 7	676717					
Parameter CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range Organics (DRO) C10C28DF	RO <7.48	25.0	7.48	mg/kg	04.26.19 18:47	U	1
Oil Range Hydrocarbons (ORO) PHCG2835	5 <7.48	25.0	7.48	mg/kg	04.26.19 18:47	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
Tricosane	115	65 - 144	%		
n-Triacontane	100	46 - 152	%		



LABORATORIES

Flagging Criteria



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- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- **F** RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- ** Surrogate recovered outside laboratory control limit.
- **BRL** Below Reporting Limit.
- RL Reporting Limit
- MDL Method Detection LimitSDLSample Detection LimitLOD Limit of Detection
- PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- NC Non-Calculable

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	S Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory Control Sample Duplicate
MD/SD	Method Duplicate/Sample Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Project Name: NM Moore Sweet

Work Orders : 621518,			Project II			
Lab Batch #: 3086407	Sample: 7676206-1-BKS / 1		h: ¹ Matrix: RROGATE RE		STUDY	
	Date Analyzed: 04/20/19 14:16 X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.0963	0.100	96	68-120	 I
a,a,a-Trifluorotoluene		1.91	2.00	96	71-121	
Lab Batch #: 3086407	Sample: 7676206-1-BSD / 1	BSD Batcl	h: ¹ Matrix:	Solid	<u> </u>	
Units: mg/kg	Date Analyzed: 04/20/19 14:40		RROGATE RE		STUDY	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.0979	0.100	98	68-120	
a,a,a-Trifluorotoluene		1.95	2.00	98	71-121	
Lab Batch #: 3086407	Sample: 7676206-1-BLK / 1	BLK Batcl	h: ¹ Matrix:	Solid	<u>ı </u>	
Units: mg/kg	Date Analyzed: 04/20/19 16:40		RROGATE RE		STUDY	
	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.0972	0.100	97	68-120	
a,a,a-Trifluorotoluene		2.10	2.00	105	71-121	
Lab Batch #: 3086407	Sample: 621518-001 S / MS	S Batcl	h: 1 Matrix:	Soil	·	
Units: mg/kg	Date Analyzed: 04/20/19 17:29	SU	RROGATE RE	COVERY S	STUDY	
	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	Analytes	0.0020	0.100		<u>co 120</u>	
4-Bromofluorobenzene a,a,a-Trifluorotoluene		0.0938	0.100	94	68-120 71-121	1
Lab Batch #: 3086407	Sample: 621518-001 SD / N				/1-121	
Lab Batch #: 3086407 Units: mg/kg	Sample: 021518-001 SD / M Date Analyzed: 04/20/19 17:53		n: 1 Matrix: RROGATE RE		STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.0952	0.100	95	68-120	·
a,a,a-Trifluorotoluene		1.87	1.79	104	71-121	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: NM Moore Sweet

Vork Orders : 621518,	,		Project II):		
Lab Batch #: 3087200	Sample: 7676717-1-BKS / I	BKS Batel	h: ¹ Matrix:	:Solid		
Units: mg/kg	Date Analyzed: 04/26/19 16:03	SU	RROGATE RH	ECOVERY	STUDY	
	PRO By SW8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Tricosane	-	11.2	10.0	112	65-144	
n-Triacontane		9.42	10.0	94	46-152	
Lab Batch #: 3087200	Sample: 7676717-1-BSD / 1	BSD Batcl	h: ¹ Matrix:	Solid	<u> </u>	
Units: mg/kg	Date Analyzed: 04/26/19 16:44	SU	RROGATE RE	ECOVERY S	STUDY	
	PRO By SW8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Tricosane	Allalytes	11.4	10.0	114	65-144	
n-Triacontane		9.24	10.0	92	46-152	 I
Lab Batch #: 3087200	Sample: 7676717-1-BLK / 1		-			
	Sample: 7070717-1-BLK / J Date Analyzed: 04/26/19 18:47		RROGATE RE		STUDY	
Units: mg/kg DRO-O	PRO By SW8015B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes	[A]	լոյ	[D]	701	
Tricosane		11.5	10.0	115	65-144	
n-Triacontane		9.98	10.0	100	46-152	
Lab Batch #: 3087200	Sample: 621518-001 S / MS	S Batcl	h: 1 Matrix:	:Soil		
Units: mg/kg	Date Analyzed: 04/26/19 20:04	SU	RROGATE RE	ECOVERY	STUDY	
	PRO By SW8015B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		L
Tricosane		14.7	10.0	147	65-144	**
n-Triacontane		12.4	10.0	124	46-152	
Lab Batch #: 3087200	Sample: 621518-001 SD / N					
Units: mg/kg	Date Analyzed: 04/26/19 20:44	SU	RROGATE RE	ECOVERY S	STUDY	
	PRO By SW8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Tricosane		14.7	9.97	147	65-144	**
n-Triacontane		12.6	9.97	126	46-152	
1			1	1	1 1	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: NM Moore Sweet

Work Orders : 621518,			Project ID			
Lab Batch #: 3086410	Sample: 7676207-1-BKS / 1		h: ¹ Matrix: RROGATE RE		STUDY	
	Date Analyzed: 04/20/19 15:04 D by EPA 8015 Mod.	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
4-Bromofluorobenzene		0.0897	0.100	90	76-123	<u> </u>
a,a,a-Trifluorotoluene		2.07	2.00	104	69-120	<u> </u>
Lab Batch #: 3086410	Sample: 7676207-1-BSD / 1					
Units: mg/kg	Date Analyzed: 04/20/19 15:28	SU	RROGATE RE	COVERY	STUDY	
	D by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.0893	0.100	89	76-123	
a,a,a-Trifluorotoluene		2.12	2.00	106	69-120	
Lab Batch #: 3086410	Sample: 7676207-1-BLK / 1	BLK Batch	h: 1 Matrix:	:Solid	<u> </u>	
Units: mg/kg	Date Analyzed: 04/20/19 16:40		RROGATE RE		STUDY	
	D by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	Anarytes	0.105	0.100	105	76-123	
a,a,a-Trifluorotoluene		2.56	2.00	103	69-120	**
Lab Batch #: 3086410	Sample: 621518-001 S / MS			-	<u> </u>	
Units: mg/kg	Date Analyzed: 04/20/19 18:17		RROGATE RE		STUDY	
TPH GRO	D by EPA 8015 Mod.	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
4-Bromofluorobenzene		0.0820	0.100	82	76-123	_
a,a,a-Trifluorotoluene		1.71	1.80	95	69-120	ı
Lab Batch #: 3086410	Sample: 621518-001 SD / M					
Units: mg/kg	Date Analyzed: 04/20/19 18:42	SU	RROGATE RE	COVERY	STUDY	
	D by EPA 8015 Mod. Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene		0.109	0.100	109	76-123	
a,a,a-Trifluorotoluene		2.47	1.93	128	69-120	**

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



BS / BSD Recoveries



•

Project Name: NM Moore Sweet

Work Order #: 621518							Proj	ect ID: -			
Analyst: MIT	D	ate Prepar	red: 04/18/201	.9			Date A	nalyzed: (04/20/2019		
Lab Batch ID: 3086407 Sample: 7676206-1-	BKS	Batcl	h #: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K /BLANK S	SPIKE / I	BLANK S	SPIKE DUPI	LICATE	RECOVI	ERY STUI	ΟY	
BTEX by EPA 8021	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result	Blank Spike %R [D]	Spike Added	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[D]	[C]	נען	[E]	Kesuit [F]	[G]				
Benzene	< 0.00904	2.00	1.87	94	2.00	1.88	94	1	55-120	20	
Toluene	< 0.00468	2.00	1.79	90	2.00	1.80	90	1	77-120	20	
Ethylbenzene	< 0.00616	2.00	1.81	91	2.00	1.84	92	2	77-120	20	
m_p-Xylenes	< 0.00682	4.00	3.61	90	4.00	3.67	92	2	78-120	20	
o-Xylene	< 0.00682	2.00	1.84	92	2.00	1.87	94	2	78-120	20	
Analyst: MIT	D	ate Prepar	red: 04/26/201	.9	•		Date A	nalyzed: (4/26/2019		
Lab Batch ID: 3087200 Sample: 7676717-1-	BKS	Batcl	h #: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K /BLANK S	SPIKE / I	BLANK S	SPIKE DUPI	LICATE	RECOVI	ERY STUI	РY	
DRO-ORO By SW8015B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Diesel Range Organics (DRO)	<7.48	100	127	127	100	129	129	2	63-139	20	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries



Project Name: NM Moore Sweet

Work Order #: 621518								Proj	ect ID:			
Analyst: JYM		D	ate Prepai	red: 04/19/20	19			Date A	nalyzed: (04/19/2019		
Lab Batch ID: 3086362	Sample: 7676142-1	-BKS	Batc	h #: 1					Matrix: S	Solid		
Units: mg/kg			BLAN	K /BLANK	SPIKE / 1	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	ЭY	
Inorganic Anions by E Analytes	PA 300/300.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride		< 0.354	100	102	102	100	108	108	6	80-120	20	
Analyst: MIT		D	ate Prepai	red: 04/18/20	19	1		Date A	nalyzed: ()4/20/2019	+	··
Lab Batch ID: 3086410	Sample: 7676207-1	-BKS	Batc	h #: 1					Matrix:	Solid		
Units: mg/kg			BLAN	K /BLANK	SPIKE / 1	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	D Y	
TPH GRO by EPA Analytes	8015 Mod.	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
TPH-GRO		<0.271	20.0	19.1	96	20.0	18.3	92	4	35-129	20	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: NM Moore Sweet



Work Order # :												
	621518						Project II					
Lab Batch ID:	3086407	QC- Sample ID:	621518	-001 S		tch #:		k: Soil				
Date Analyzed:	04/20/2019	Date Prepared:	04/18/2	019	An	alyst: N	TIM					
Reporting Units:	mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	BTEX by EPA 8021	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]	[0]	[D]	[E]	riosuro [r]	[G]	, 0		,010.2	
Benzene		< 0.00876	1.94	1.73	89	1.79	1.65	92	5	54-120	25	
Toluene		< 0.00453	1.94	1.71	88	1.79	1.64	92	4	57-120	25	
Ethylbenzene		< 0.00597	1.94	1.69	87	1.79	1.65	92	2	58-131	25	
m_p-Xylenes		<0.00661	3.88	3.34	86	3.58	3.27	91	2	62-124	25	
o-Xylene		<0.00661	1.94	1.67	86	1.79	1.65	92	1	62-124	25	
Lab Batch ID:	3087200	QC- Sample ID:	621518	-001 S	Ba	tch #:	1 Matrix	x: Soil			<u>.</u>	
Date Analyzed:	04/26/2019	Date Prepared:	04/26/2	019	An	alyst: 1	TIM					
Reporting Units:	malia											
2	mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	RO-ORO By SW8015B	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
				Spiked Sample	Spiked		Duplicate	Spiked		Control		Flag
	RO-ORO By SW8015B Analytes	Sample Result	Spike Added	Spiked Sample Result	Spiked Sample %R	Spike Added	Duplicate Spiked Sample	Spiked Dup. %R	RPD	Control Limits	Limits	Flag
Diesel Range On	RO-ORO By SW8015B Analytes	Sample Result [A]	Spike Added [B]	Spiked Sample Result [C] 154	Spiked Sample %R [D] 113	Spike Added [E]	Duplicate Spiked Sample Result [F] 165	Spiked Dup. %R [G]	RPD %	Control Limits %R	Limits %RPD	Flag
Diesel Range Or Lab Batch ID:	RO-ORO By SW8015B Analytes rganics (DRO)	Sample Result [A] 41.3	Spike Added [B] 100 621050	Spiked Sample Result [C] 154 -002 S	Spiked Sample %R [D] 113 Ba	Spike Added [E] 99.7	Duplicate Spiked Sample Result [F] 165 1 Matrix	Spiked Dup. %R [G] 124	RPD %	Control Limits %R	Limits %RPD	Flag
Diesel Range Or Lab Batch ID: Date Analyzed:	RO-ORO By SW8015B Analytes rganics (DRO) 3086362	Sample Result [A] 41.3 QC- Sample ID:	Spike Added [B] 100 621050 04/19/2	Spiked Sample Result [C] 154 -002 S 019	Spiked Sample %R [D] 113 Ba An	Spike Added [E] 99.7 tch #: nalyst: J	Duplicate Spiked Sample Result [F] 165 1 Matrix	Spiked Dup. %R [G] 124 x: Soil	RPD %	Control Limits %R 63-139	Limits %RPD	Flag
Diesel Range On Lab Batch ID: Date Analyzed: Reporting Units:	RO-ORO By SW8015B Analytes rganics (DRO) 3086362 04/19/2019 mg/kg nic Anions by EPA 300/300.1	Sample Result [A] 41.3 QC- Sample ID:	Spike Added [B] 100 621050 04/19/2	Spiked Sample Result [C] 154 -002 S 019	Spiked Sample %R [D] 113 Ba An	Spike Added [E] 99.7 tch #: nalyst: J	Duplicate Spiked Sample Result [F] 165 1 Matrix YM	Spiked Dup. %R [G] 124 x: Soil TE REC Spiked	RPD %	Control Limits %R 63-139	Limits %RPD	
Diesel Range On Lab Batch ID: Date Analyzed: Reporting Units:	RO-ORO By SW8015B Analytes rganics (DRO) 3086362 04/19/2019 mg/kg	Sample Result [A] 41.3 QC- Sample ID: Date Prepared: Parent Sample	Spike Added [B] 100 621050 04/19/2 M Spike	Spiked Sample Result [C] 154 -002 S 019 ATRIX SPIK Spiked Sample Result	Spiked Sample %R [D] 113 Ba An E / MAT Spiked Sample	Spike Added [E] 99.7 tch #: nalyst: J RIX SPI Spike	Duplicate Spiked Sample Result [F] 165 1 Matrix YM KE DUPLICA Duplicate Spiked Sample	Spiked Dup. %R [G] 124 k: Soil TE REC Spiked Dup.	RPD % 7 OVERY S RPD	Control Limits %R 63-139 STUDY Control Limits	Limits %RPD 20 Control Limits	Flag

Matrix Spike Percent Recovery $[D] = 100^{*}(C-A)/B$ Relative Percent Difference RPD = $200^{*}[(C-F)/(C+F)]$ Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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Form 3 - MS / MSD Recoveries



Project Name: NM Moore Sweet

Work Order # :	621518						Project II):				
Lab Batch ID:	3086362	QC- Sample ID:	621050	-003 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	04/19/2019	Date Prepared:	04/19/2	019	An	alyst: J	YM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Inorgan	nic Anions by EPA 300/300.1	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]		[D]	[E]	Kesunt [F]	[G]	70	70K	70KF D	
Chloride		659	100	747	88	100	747	88	0	80-120	20	
Lab Batch ID:	3086410	QC- Sample ID:	621518	-001 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	04/20/2019	Date Prepared:	04/18/2	019	An	alyst: N	TIM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
TPH	GRO by EPA 8015 Mod.	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample	-	RPD	Control Limits	Control Limits	Flag
	Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
TPH-GRO		<0.243	18.0	15.2	84	19.3	17.6	91	15	35-129	20	

Matrix Spike Percent Recovery $[D] = 100^{*}(C-A)/B$ Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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Received l	by OCD: 1/31/2020	11:08:49 AM S S	Page 275 of
621518	ageof	Work Order Notes becarer Order Notes becarer Order Notes ALS accord by the ALS accord by the Iab, if received by the Iab, if received by the Iab, if received by the Bample Comments	TI Sn U V Zn 5.1/7470 /7471 : Hg Date/Time
Work Order No: 6215	www.xenco.c Work Ord TT PRP BI		o Ni K Se Ag SiO2 Na Sr T TI U 1631/245.1 ^{1 terns and conditions deusly negotiated. Received by: (Signature)}
*	13-620-2000) w Program: UST/PST State of Project: Reporting:Level II		Fe Pb Mg Mn Mo Ni In Mo Ni Se Ag TI U ctors. It assigns standard term sets are due to circumstrances by libe enforced unless previously Signature) Rece
Chain of Custody Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334 Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296	Allowers, NW (2012-032-1300) From Attanta, GA (770-449-8800) Tampa, FL (813-620-2000) Allowers, NW (2012-0300) Bill to: (if different) Company, Name; Planta, GA Allowers, NW (2012-0300) Company Name; Planta, Reverting Program Allowers, State ZIP; City, State ZIP; Planta, Cut, Lu, Cut, Cut, Cut, Cut, Lu, Cut, Lu		Co Cu Du Pb A subcontra subcontra if subcontra if subcont
Chain of Custody Dallas,TX (214) 902-0300 San Antonio, EL Paso,TX (915)585-3443 Lubbock,T	Atlanta, GA (770-449-880 mille Brgg leins Pygel	WNAXAWSIDS HEL	e B Cd Ca Cr Be Cd Cr Co (Be cd Cr Co (enco, its affiliates and incurred by the client out not analyzed. Thes and the client the client of the client of t
Chain of Dallas,TX (214) 91 DEL Paso,TX (915	(480-355-0900) At	57 KC23 X718	Sb As Ba Be E A Sb As Ba Be client company to Xenco losses or expenses inc losses or expense inc losses or expens
louston, TX (281) 240-4200 Midland, TX (432-704-5440)	Proentx.Az (a Bill to: (if different) Company Name: Address: City, State ZIP:	ne di rest no depth	e) e) e) e) e) e) e) e) e) e)
Houston, Midland	te 1806	Pu P	BRCRA 13PPM Texas Bread TCLP / SPLP 6010: Tesemples constitutes a valid purchase or es and shall not assume any responsibilit each phylect and a charge of \$5 for each Received by: (Signature)
	Sten le Dr. Su tris	Sun trix Samp	20: 8 be analyzed ispment of samples applied to each phy Receive
UQISIS XENCO LABORATORIES	Curt S TRC S 10 Dosk Dillenge	CA Lation Cation Carling	10 200.8 / 6020 and Metal(s) to be ocument and relinquish able only for the cost of rge of \$75.00 will be app Signature)
	Manager: ny Name: s: ate ZIP:	Project Name: Project Number: P.O. Number: P.O. Number: Sampler's Name: Sampler's Name: Sampler's Name: Sampler's Name: Sampler's Name: Sample (°C): Projection Cooler Custody Seals: Sample Custody Seals: Sample Identification Projection Sample Identification Projection Seample Identification	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed tice: Signature of this document and relinquisionent of samples and service. Xenco will be liable only for the cost of samples and Xenco. A minimum charge of \$75.00 will be applied to each p Relinquisiped by (Signature) Reco
	Project Compa Addres City, St Phone:	Same Constant Same	T Oof Sector

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Final 1.001

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Inter-Office Shipment

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IOS Number : **37317**

Date/Time	: 04.18	8.2019 09:42	Created by:		Brenda Ward		Please send report to	o: Kalei Stout	t			
Lab# From	n: Lub	bock	Delivery Pri	ority:			Address:	6701 Aber	deen, Sui	te 9 Lu	bbock, TX 79	9424
Lab# To:	Hou	ston	Air Bill No.	:	775011637307		E-Mail:	kalei.stout	@xenco.c	com		
Sample Id	Matrix	Client Sample Id	Sample Collection		Method	Method Name	Lab Due	HT Due	РМ		Analytes	Sign
621518-001	S	TT2-NW-B @ 1.5'	04.17.2019 12:00	E300	I	Inorganic Anions by EPA 300/300.1	04.24.2019	05.15.2019	KLS	CL		
621518-002	S	TT2-EW-B @ 1.5'	04.17.2019 12:15	E300	I	Inorganic Anions by EPA 300/300.1	04.24.2019	05.15.2019	KLS	CL		
621518-003	S	TT2 Comp 2 @ 4'	04.17.2019 12:30	E300	I	Inorganic Anions by EPA 300/300.1	04.24.2019	05.15.2019	KLS	CL		
621518-004	S	TT2-Comp 4 @ 4'	04.17.2019 12:45	E300	I	Inorganic Anions by EPA 300/300.1	04.24.2019	05.15.2019	KLS	CL		
621518-005	S	WTT-NW-C @ 2'	04.17.2019 13:00	E300	I	Inorganic Anions by EPA 300/300.1	04.24.2019	05.15.2019	KLS	CL		
621518-006	S	ETT-NW-C @ 2.5'	04.17.2019 13:15	E300	1	Inorganic Anions by EPA 300/300.1	04.24.2019	05.15.2019	KLS	CL		
621518-007	S	ETT-Comp 4 @ 5'	04.17.2019 13:30	E300	1	Inorganic Anions by EPA 300/300.1	04.24.2019	05.15.2019	KLS	CL		
621518-008	S	ETT- Comp 1 @ 6'	04.17.2019 13:45	E300	I	Inorganic Anions by EPA 300/300.1	04.24.2019	05.15.2019	KLS	CL		

Inter Office Shipment or Sample Comments:

Relinquished By:

Ward renda

Brenda Ward

Date Relinquished: 04.18.2019

Received By:

Monica Shakhshir

Date Received:

eceived: 04.19.2019 09:40

Cooler Temperature: 2.4

Received by OCD: 1/31/2020 11:08:49 AM

XENCO





BORATORIES Inter Office Report- Sample Receipt Checklist

Sent To: Houston IOS #: 37317

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Temperature Measuring device used : HOU-068

Sent By:	Brenda Ward	Date Sent:	04/18/2019 09:42 AM
Received By:	Monica Shakhshir	Date Received:	04/19/2019 09:40 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2.4	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received with appropriate temperature?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	Yes	
#5 *Custody Seals Signed and dated for Containers/coolers	Yes	
#6 *IOS present?	Yes	
#7 Any missing/extra samples?	No	
#8 IOS agrees with sample label(s)/matrix?	Yes	
#9 Sample matrix/ properties agree with IOS?	Yes	
#10 Samples in proper container/ bottle?	Yes	
#11 Samples properly preserved?	Yes	
#12 Sample container(s) intact?	Yes	
#13 Sufficient sample amount for indicated test(s)?	Yes	
#14 All samples received within hold time?	Yes	

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

NonConformance:

Corrective Action Taken:

Contact:

Nonconformance Documentation

Contacted by :

Date:

Checklist reviewed by: Autica

Date: 04/19/2019

Received by OCD: 1/31/2020 11:08:49 AM





Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 04/18/2019 04:53:00 PM Temperature Measuring device used : IR-3 Work Order #: 621518 Sample Receipt Checklist 4.6 #1 *Temperature of cooler(s)? #2 *Shipping container in good condition? Yes #3 *Samples received on ice? Yes #4 *Custody Seals intact on shipping container/ cooler? N/A #5 Custody Seals intact on sample bottles? N/A #6*Custody Seals Signed and dated? N/A #7 *Chain of Custody present? Yes #8 Any missing/extra samples? No #9 Chain of Custody signed when relinquished/ received? Yes #10 Chain of Custody agrees with sample labels/matrix? Yes #11 Container label(s) legible and intact? Yes #12 Samples in proper container/ bottle? Yes

#13 Samples properly preserved? Yes #14 Sample container(s) intact? Yes #15 Sufficient sample amount for indicated test(s)? Yes #16 All samples received within hold time? Yes #17 Subcontract of sample(s)? Yes Chlorides #18 Water VOC samples have zero headspace? N/A

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

Analyst:

PH Device/Lot#:

 Checklist completed by:
 Brenda Ward

 Brenda Ward
 Brenda Ward

 Checklist reviewed by:
 Facily Fact

 Kalei Stout
 Kalei Stout

Date: 04/18/2019

Comments

Date: 04/19/2019

. Released to Imaging: 7/29/2021 4:15:26 PM



Analytical Report 634062

for

Tasman Geosciences, LLC

Project Manager: Zach Conder

NM Moore Sweet

08.23.2019

Collected By: Client



6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142), North Carolina (681)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Atlanta (LELAP Lab ID #04176) Xenco-Tampa: Florida (E87429), North Carolina (483)



08.23.2019

Project Manager: Zach Conder Tasman Geosciences, LLC 2620 W. Marland Blvd. Hobbs, NM 88240

Reference: XENCO Report No(s): 634062 NM Moore Sweet Project Address:

Zach Conder:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 634062. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 634062 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

John Builes Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 634062

Tasman Geosciences, LLC, Hobbs, NM

NM Moore Sweet

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
ETT-NW-D @ 2.5'	S	08.14.2019 12:00	2.5 ft	634062-001
WTT-NW-D @ 2'	S	08.14.2019 12:15	2 ft	634062-002
TT2-Comp 2 @ 5'	S	08.14.2019 12:30	5 ft	634062-003
TT2-Comp 4 @ 5'	S	08.14.2019 12:45	5 ft	634062-004



CASE NARRATIVE

Client Name: Tasman Geosciences, LLC Project Name: NM Moore Sweet

Project ID: Work Order Number(s): 634062
 Report Date:
 08.23.2019

 Date Received:
 08.14.2019

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments: Batch: LBA-3098990 BTEX-MTBE by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030. Received by OCD: 1/31/2020 11:08:49 AM



Certificate of Analytical Results 634062

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Tasman Geosciences, LLC, Hobbs, NM

Sample Id: E	TT-NW-D @ 2.5'		Matrix:	Soil		Samp	le Depth: 2.5 ft		
Lab Sample Id: 63	34062-001		Date Collecte	d: 08.14.201	9 12:00	Date I	Received: 08.14.20	19 15:	13
Analytical Metho	d: Inorganic Anions by l	EPA 300/300.1				Prep M	Method: E300P		
Analyst: JY	YM		% Moist:			Tech:	JYM		
Seq Number: 30	098689		Date Prep: 08	.15.2019 10:	59				
-	UB: T104704215-19-29		Prep seq: 76	84283					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride		16887-00-6	861	9.98	0.353	mg/kg	08.15.2019 16:48		1
Analytical Metho	d: TPH by SW8015 Mod	d				Prep N	Method: 1005		
Analyst: IS	SU		% Moist:			Tech:	ISU		
•	098797		Date Prep: 08	.16.2019 09:	56				
-			Prep seq: 76						
Parameter	UB: T104704215-19-29	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Diesel Range (e Hydrocarbons (GRO) Organics (DRO) e Hydrocarbons (MRO)	PHC610 C10C28DRO PHCG2835 PHC635	<9.92 100 59.6 160	49.6 49.6 49.6	9.92 9.92 9.92 9.92	mg/kg mg/kg mg/kg mg/kg	08.16.2019 17:42 08.16.2019 17:42 08.16.2019 17:42 08.16.2019 17:42	U	1 1 1
Surrogate			% Recovery		Limits	Units	Analysis Date	e	Flag
1-Chlorooctane o-Terphenyl	2		82 86		70 - 135 70 - 135	% %			
Analytical Metho	d: BTEX by EPA 8021					Prep M	Method: 5030B		
-	ſIT		% Moist:			Tech:	MIT		
-	098990		Date Prep: 08	19 2019 14.	00	i com			
Seq Number. 50	098990		•						
			Thep seq. 70	04501					Dil Factor
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	
Parameter Benzene			Result	MQL 0.0178	SDL 0.00804	Units mg/kg		Flag U	18
Benzene Toluene		Number					Date		18 18
Benzene Toluene Ethylbenzene		Number 71-43-2 108-88-3 100-41-4	<0.00804 <0.00416 <0.00548	0.0178 0.0178 0.0178	0.00804 0.00416 0.00548	mg/kg mg/kg mg/kg	Date 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27	U U U U	18 18
Benzene Toluene Ethylbenzene m_p-Xylenes		Number 71-43-2 108-88-3 100-41-4 179601-23-1	<0.00804 <0.00416 <0.00548 <0.00607	0.0178 0.0178 0.0178 0.0356	0.00804 0.00416 0.00548 0.00607	mg/kg mg/kg mg/kg mg/kg	Date 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27	U U U U U	18 18 18
Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene		Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	<0.00804 <0.00416 <0.00548 <0.00607 <0.00607	0.0178 0.0178 0.0178	0.00804 0.00416 0.00548 0.00607 0.00607	mg/kg mg/kg mg/kg mg/kg mg/kg	Date 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27	U U U U U U	18 18
Benzene Toluene Ethylbenzene m_p-Xylenes		Number 71-43-2 108-88-3 100-41-4 179601-23-1	<0.00804 <0.00416 <0.00548 <0.00607	0.0178 0.0178 0.0178 0.0356	0.00804 0.00416 0.00548 0.00607	mg/kg mg/kg mg/kg mg/kg	Date 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27	U U U U U	18 18 18
Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total		Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	<0.00804 <0.00416 <0.00548 <0.00607 <0.00607 <0.00607	0.0178 0.0178 0.0178 0.0356	0.00804 0.00416 0.00548 0.00607 0.00607 0.00607	mg/kg mg/kg mg/kg mg/kg mg/kg	Date 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27	U U U U U U U U	18 18 18
Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total Total BTEX		Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	<0.00804 <0.00416 <0.00548 <0.00607 <0.00607 <0.00607 <0.00416	0.0178 0.0178 0.0178 0.0356	0.00804 0.00416 0.00548 0.00607 0.00607 0.00607 0.00607	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Date 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27 08.19.2019 18:27	U U U U U U U U	18 18 18 18

Received by OCD: 1/31/2020 11:08:49 AM



Certificate of Analytical Results 634062

Tasman Geosciences, LLC, Hobbs, NM

NM Moore Sweet

Sample Id: WTT-NW-D @ 2'		Matrix:	Soil		Samp	le Depth: 2 ft		
Lab Sample Id: 634062-002		Date Collecte	d: 08.14.201	9 12:15	Date I	Received: 08.14.20	19 15:	13
Analytical Method: Inorganic Anions by I	EPA 300/300.1				Prep M	Method: E300P		
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3098689		Date Prep: 08	3.15.2019 10:	:59				
Subcontractor: SUB: T104704215-19-29		Prep seq: 76						
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	130	9.94	0.352	mg/kg	08.15.2019 17:13		1
					88			
Analytical Method: TPH by SW8015 Mo	d				Prep M	Method: 1005		
Analyst: ISU		% Moist:			Tech:	ISU		
Seq Number: 3098797		Date Prep: 08	3.16.2019 09:	:59				
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	584305					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.98	49.9	9.98	mg/kg	08.16.2019 18:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	321	49.9	9.98	mg/kg	08.16.2019 18:01		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	138	49.9	9.98	mg/kg	08.16.2019 18:01		1
Total TPH	PHC635	459		9.98	mg/kg	08.16.2019 18:01		
Surrogate		% Recovery		Limits	Units	Analysis Date	e	Flag
Surrogate 1-Chlorooctane		79		70 - 135	%	Analysis Date	e	Flag
0		-				Analysis Date	e	Flag
1-Chlorooctane		79		70 - 135	% %	Analysis Date Method: 5030B	e	Flag
1-Chlorooctane o-Terphenyl		79		70 - 135	% %	·	2	Flag
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021		79 73	3.19.2019 14:	70 - 135 70 - 135	% % Prep M	Method: 5030B	e	Flag
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT		79 73 % Moist: Date Prep: 08	3.19.2019 14: 584501	70 - 135 70 - 135	% % Prep M	Method: 5030B	9	Flag
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT	CAS Number	79 73 % Moist: Date Prep: 08		70 - 135 70 - 135	% % Prep M	Method: 5030B	Flag	Flag Dil Factor
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene	Number 71-43-2	79 73 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00890	584501 MQL 0.0197	70 - 135 70 - 135	% % Prep M Tech: Units mg/kg	Method: 5030B MIT Analysis	Flag U	Dil Factor 20
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene	Number 71-43-2 108-88-3	79 73 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00890 <0.00461	584501 MQL 0.0197 0.0197	70 - 135 70 - 135 000 SDL 0.00890 0.00461	% % Prep M Tech: Units mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 20:15 08.19.2019 20:15	Flag U U	Dil Factor 20 20 20
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene Ethylbenzene	Number 71-43-2 108-88-3 100-41-4	79 73 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00890 <0.00461 <0.00606	584501 MQL 0.0197 0.0197 0.0197	70 - 135 70 - 135 000 SDL 0.00890 0.00461 0.00606	% % Prep M Tech: Units mg/kg mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15	Flag U U U	Dil Factor 20 20 20 20 20
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	Number 71-43-2 108-88-3 100-41-4 179601-23-1	79 73 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00890 <0.00461 <0.00606 <0.00671	584501 MQL 0.0197 0.0197 0.0197 0.0394	70 - 135 70 - 135 300 SDL 0.00890 0.00461 0.00606 0.00671	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15	Flag U U U U U	Dil Factor 20 20 20 20 20 20 20
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene	Number 71-43-2 108-88-3 100-41-4	79 73 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00890 <0.00461 <0.00606	584501 MQL 0.0197 0.0197 0.0197	70 - 135 70 - 135 000 SDL 0.00890 0.00461 0.00606	% % Prep M Tech: Units mg/kg mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15	Flag U U U	Dil Factor 20 20 20 20 20
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	79 73 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00890 <0.00461 <0.00606 <0.00671 <0.00671	584501 MQL 0.0197 0.0197 0.0197 0.0394	70 - 135 70 - 135 300 SDL 0.00890 0.00461 0.00606 0.00671 0.00671	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15	Flag U U U U U U U	Dil Factor 20 20 20 20 20 20 20
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	79 73 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00890 <0.00461 <0.00606 <0.00671 <0.00671 <0.00671	584501 MQL 0.0197 0.0197 0.0197 0.0394	70 - 135 70 - 135 200 SDL 0.00890 0.00461 0.00606 0.00671 0.00671 0.00671	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15	Flag U U U U U U U U U	Dil Factor 20 20 20 20 20 20 20
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total Total BTEX	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	79 73 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00890 <0.00461 <0.00671 <0.00671 <0.00671 <0.00671 <0.00671 <0.00671	584501 MQL 0.0197 0.0197 0.0197 0.0394	70 - 135 70 - 135 00 SDL 0.00890 0.00461 0.00606 0.00671 0.00671 0.00671 0.00461 Limits	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15	Flag U U U U U U U U U	Dil Factor 20 20 20 20 20 20
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total Total BTEX	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	79 73 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00890 <0.00461 <0.00606 <0.00671 <0.00671 <0.00671 <0.00671 <0.00461	584501 MQL 0.0197 0.0197 0.0197 0.0394	70 - 135 70 - 135 200 SDL 0.00890 0.00461 0.00606 0.00671 0.00671 0.00671 0.00461	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15 08.19.2019 20:15	Flag U U U U U U U U U	Dil Factor 20 20 20 20 20 20



NM Moore Sweet

Sample Id:	TT2-Comp 2 @ 5'		Matrix:	Soil		Sampl	e Depth: 5 ft		
Lab Sample Id	: 634062-003		Date Collecte	d: 08.14.201	9 12:30	Date I	Received: 08.14.201	9 15:	13
Analytical Met	thod: Inorganic Anions by E	EPA 300/300.1				Prep M	Aethod: E300P		
Analyst:	JYM		% Moist:			Tech:	JYM		
Seq Number:	3098689		Date Prep: 08	.15.2019 10:	59				
-	SUB: T104704215-19-29		Prep seq: 76	84283					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride		16887-00-6	53.3	9.96	0.353	mg/kg	08.15.2019 17:21		1
Analytical Met	thod: TPH by SW8015 Mod					Prep M	Aethod: 1005		
Analyst:	ISU		% Moist:			Tech:	ISU		
Seq Number:	3098797		Date Prep: 08	.16.2019 10:	02				
-	SUB: T104704215-19-29		Prep seq: 76	84305					
Parameter		CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline R	ange Hydrocarbons (GRO)	PHC610	10.4	50.0	10.0	mg/kg	08.19.2019 16:11	J	1
	ge Organics (DRO)	C10C28DRO	960	50.0	10.0	mg/kg	08.19.2019 16:11		1
	ange Hydrocarbons (MRO)	PHCG2835	218	50.0	10.0	mg/kg	08.19.2019 16:11		1
Total TPH		PHC635	1190		10.0	mg/kg	08.19.2019 16:11		
Surrogate			0/ D			T T .•4			Flog
			% Recovery		Limits	Units	Analysis Date	•	Flag
1-Chlorooct	tane		% Recovery 127		Limits 70 - 135	%	Analysis Date	•	гад
1-Chlorooct o-Terpheny							Analysis Date	;	гад
o-Terpheny			127		70 - 135	% %	Analysis Date Aethod: 5030B		riag
o-Terpheny	1		127		70 - 135	% %	·		гаа
o-Terpheny Analytical Met Analyst:	1 thod: BTEX by EPA 8021 MIT		127 103	.19.2019 14:	70 - 135 70 - 135	% % Prep N	Aethod: 5030B	2	riag
o-Terpheny Analytical Met	1 thod: BTEX by EPA 8021		127 103 % Moist:		70 - 135 70 - 135	% % Prep N	Aethod: 5030B		riag
o-Terpheny Analytical Met Analyst:	1 thod: BTEX by EPA 8021 MIT 3098990	CAS Number	127 103 % Moist: Date Prep: 08		70 - 135 70 - 135	% % Prep N	Aethod: 5030B	Flag	-
o-Terpheny Analytical Met Analyst: Seq Number:	1 thod: BTEX by EPA 8021 MIT 3098990		127 103 % Moist: Date Prep: 08 Prep seq: 76	84501	70 - 135 70 - 135 00	% % Prep N Tech:	Aethod: 5030B MIT Analysis		-
o-Terpheny Analytical Met Analyst: Seq Number: Parameter Benzene Toluene	1 thod: BTEX by EPA 8021 MIT 3098990	Number 71-43-2 108-88-3	127 103 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00868 <0.00449	84501 MQL 0.0192 0.0192	70 - 135 70 - 135 00 SDL 0.00868 0.00449	% % Prep M Tech: Units mg/kg mg/kg	Aethod: 5030B MIT Analysis Date 08.19.2019 20:42 08.19.2019 20:42	Flag U U	Dil Factor 19 19
o-Terpheny Analytical Met Analyst: Seq Number: Parameter Benzene Toluene Ethylbenzer	1 thod: BTEX by EPA 8021 MIT 3098990	Number 71-43-2 108-88-3 100-41-4	127 103 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00868 <0.00449 <0.00591	84501 MQL 0.0192 0.0192 0.0192	70 - 135 70 - 135 00 SDL 0.00868 0.00449 0.00591	% % Prep M Tech: Units mg/kg mg/kg mg/kg	Aethod: 5030B MIT Analysis Date 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42	Flag U U U	Dil Factor 19 19 19 19
o-Terpheny Analytical Met Analyst: Seq Number: Parameter Benzene Toluene Ethylbenzer m_p-Xylene	1 thod: BTEX by EPA 8021 MIT 3098990	Number 71-43-2 108-88-3 100-41-4 179601-23-1	127 103 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00868 <0.00449 <0.00591 <0.00655	84501 MQL 0.0192 0.0192 0.0192 0.0384	70 - 135 70 - 135 00 SDL 0.00868 0.00449 0.00591 0.00655	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg	Aethod: 5030B MIT Analysis Date 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42	Flag U U U U U	Dil Factor 19 19 19 19 19
o-Terpheny Analytical Met Analyst: Seq Number: Parameter Benzene Toluene Ethylbenzer m_p-Xylene o-Xylene	1 thod: BTEX by EPA 8021 MIT 3098990	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	127 103 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00868 <0.00449 <0.00591 <0.00655 <0.00655	84501 MQL 0.0192 0.0192 0.0192	70 - 135 70 - 135 00 SDL 0.00868 0.00449 0.00591 0.00655 0.00655	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg	Aethod: 5030B MIT Analysis Date 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42	Flag U U U U U U U	Dil Factor 19 19 19 19
o-Terpheny Analytical Met Analyst: Seq Number: Parameter Benzene Toluene Ethylbenzer m_p-Xylene	1 thod: BTEX by EPA 8021 MIT 3098990	Number 71-43-2 108-88-3 100-41-4 179601-23-1	127 103 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00868 <0.00449 <0.00591 <0.00655	84501 MQL 0.0192 0.0192 0.0192 0.0384	70 - 135 70 - 135 00 SDL 0.00868 0.00449 0.00591 0.00655	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg	Aethod: 5030B MIT Analysis Date 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42	Flag U U U U U	Dil Factor 19 19 19 19 19
o-Terpheny Analytical Met Analyst: Seq Number: Parameter Benzene Toluene Ethylbenzer m_p-Xylene o-Xylene Xylenes, To	1 thod: BTEX by EPA 8021 MIT 3098990	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	127 103 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00868 <0.00449 <0.00591 <0.00655 <0.00655 <0.00655	84501 MQL 0.0192 0.0192 0.0192 0.0384	70 - 135 70 - 135 00 SDL 0.00868 0.00449 0.00591 0.00655 0.00655 0.00655	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Aethod: 5030B MIT Analysis Date 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42	Flag U U U U U U U U U U	Dil Factor 19 19 19 19 19
o-Terpheny Analytical Met Analyst: Seq Number: Seq Number: Benzene Toluene Ethylbenzer m_p-Xylene Xylenes, To Total BTEX Surrogate	1 thod: BTEX by EPA 8021 MIT 3098990	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	127 103 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00868 <0.00449 <0.00551 <0.00655 <0.00655 <0.00655 <0.00655 <0.00449	84501 MQL 0.0192 0.0192 0.0192 0.0384	70 - 135 70 - 135 00 SDL 0.00868 0.00449 0.00591 0.00655 0.00655 0.00655 0.00655	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Aethod: 5030B MIT Analysis Date 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42 08.19.2019 20:42	Flag U U U U U U U U U U	Dil Factor 19 19 19 19 19 19



Tasman Geosciences, LLC, Hobbs, NM

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Sample Id: TT2-Comp 4 @ 5'		Matrix:	Soil		Samp	le Depth: 5 ft		
Lab Sample Id: 634062-004		Date Collecte	d: 08.14.201	9 12:45	Date I	Received: 08.14.20	19 15:	13
Analytical Method: Inorganic Anions by l	EPA 300/300.1				Prep M	Method: E300P		
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3098689		Date Prep: 08	15 2019 10	59				
Subcontractor: SUB: T104704215-19-29		Prep seq: 76		57				
Parameter	CAS	Result	MQL	SDL	Units	Analysis	Flag	Dil Factor
	Number					Date	1 149	
Chloride	16887-00-6	24.5	9.92	0.351	mg/kg	08.15.2019 17:29		1
Analytical Method: TPH by SW8015 Mod	d				Prep M	Method: 1005		
Analyst: ISU		% Moist:			Tech:	ISU		
Seq Number: 3098797		Date Prep: 08	.16.2019 10:	05				
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	84305					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	11.0	50.0	9.99	mg/kg	08.16.2019 18:39	J	1
Diesel Range Organics (DRO)	C10C28DRO	1900	50.0	9.99	mg/kg	08.16.2019 18:39		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	376	50.0	9.99	mg/kg	08.16.2019 18:39		1
Total TPH	PHC635	2290		9.99	mg/kg	08.16.2019 18:39		
S		0/ D		Limits	Units	Analysis Date		Flag
Surrogate		% Recovery		Linnts	Units	Analysis Daw	-	1
1-Chlorooctane		95		70 - 135	%	Analysis Dau	-	1 mg
-						Analysis Dau	-	1
1-Chlorooctane		95		70 - 135	% %	Analysis Dau Method: 5030B	-	- mg
1-Chlorooctane o-Terphenyl		95		70 - 135	% %		-	- mg
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021		95 81	3.19.2019 14:	70 - 135 70 - 135	% % Prep M	Method: 5030B	-	g
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT		95 81 % Moist: Date Prep: 08	3.19.2019 14: 84501	70 - 135 70 - 135	% % Prep M	Method: 5030B	-	g
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT	CAS Number	95 81 % Moist: Date Prep: 08		70 - 135 70 - 135	% % Prep M	Method: 5030B	Flag	Dil Factor
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990	Number 71-43-2	95 81 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00799	584501 MQL 0.0177	70 - 135 70 - 135 00 SDL 0.00799	% % Prep M Tech:	Method: 5030B MIT Analysis	Flag U	Dil Factor 18
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene	Number 71-43-2 108-88-3	95 81 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00799 <0.00413	84501 MQL 0.0177 0.0177	70 - 135 70 - 135 00 SDL 0.00799 0.00413	% % Prep M Tech: Units mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 21:09 08.19.2019 21:09	Flag U U	Dil Factor 18 18
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene Ethylbenzene	Number 71-43-2 108-88-3 100-41-4	95 81 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00799 <0.00413 <0.00544	84501 MQL 0.0177 0.0177 0.0177	70 - 135 70 - 135 00 SDL 0.00799 0.00413 0.00544	% % Prep M Tech: Units mg/kg mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09	Flag U U U	Dil Factor 18 18 18 18
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes	Number 71-43-2 108-88-3 100-41-4 179601-23-1	95 81 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00799 <0.00413 <0.00544 <0.00602	84501 MQL 0.0177 0.0177 0.0177 0.0353	70 - 135 70 - 135 00 SDL 0.00799 0.00413 0.00544 0.00602	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09	Flag U U U U U	Dil Factor 18 18 18 18 18
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	95 81 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00799 <0.00413 <0.00544 <0.00602 <0.00602	84501 MQL 0.0177 0.0177 0.0177	70 - 135 70 - 135 00 SDL 0.00799 0.00413 0.00544 0.00602 0.00602	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09	Flag U U U U U U U	Dil Factor 18 18 18 18
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total	Number 71-43-2 108-88-3 100-41-4 179601-23-1	95 81 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00799 <0.00413 <0.00544 <0.00602 <0.00602 <0.00602	84501 MQL 0.0177 0.0177 0.0177 0.0353	70 - 135 70 - 135 00 SDL 0.00799 0.00413 0.00544 0.00602 0.00602 0.00602	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09	Flag U U U U U U U U U	Dil Factor 18 18 18 18 18
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	95 81 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00799 <0.00413 <0.00544 <0.00602 <0.00602	84501 MQL 0.0177 0.0177 0.0177 0.0353	70 - 135 70 - 135 00 SDL 0.00799 0.00413 0.00544 0.00602 0.00602	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09	Flag U U U U U U U	Dil Factor 18 18 18 18 18
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	95 81 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00799 <0.00413 <0.00544 <0.00602 <0.00602 <0.00602	84501 MQL 0.0177 0.0177 0.0177 0.0353	70 - 135 70 - 135 00 SDL 0.00799 0.00413 0.00544 0.00602 0.00602 0.00602	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09	Flag U U U U U U U U U U	Dil Factor 18 18 18 18 18
1-Chlorooctane o-Terphenyl Analytical Method: BTEX by EPA 8021 Analyst: MIT Seq Number: 3098990 Parameter Benzene Toluene Ethylbenzene m_p-Xylenes o-Xylene Xylenes, Total Total BTEX	Number 71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	95 81 % Moist: Date Prep: 08 Prep seq: 76 Result <0.00799 <0.00413 <0.00544 <0.00602 <0.00602 <0.00602 <0.00602 <0.00602 <0.00602 <0.00413	84501 MQL 0.0177 0.0177 0.0177 0.0353	70 - 135 70 - 135 00 SDL 0.00799 0.00413 0.00544 0.00602 0.00602 0.00602 0.00602 0.00413	% % Prep M Tech: Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Method: 5030B MIT Analysis Date 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09 08.19.2019 21:09	Flag U U U U U U U U U U	Dil Factor 18 18 18 18 18 18 18



Tasman Geosciences, LLC, Hobbs, NM

NM Moore Sweet

Sample Id: 7684283-1-BLK		Matrix:	Solid		Samp	le Depth:		
Lab Sample Id: 7684283-1-BLK		Date Collecte	d:		Date I	Received:		
Analytical Method: Inorganic Anions by E	PA 300/300.1				Prep M	Method: SW9056	Р	
Analyst: JYM		% Moist:			Tech:	JYM		
Seq Number: 3098689		Date Prep: 08	3.15.2019 10:	59				
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	584283					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	< 0.354	10.0	0.354	mg/kg	08.15.2019 15:08	U	1
Sample Id: 7684305-1-BLK		Matrix:	Solid		Samp	le Depth:		
Lab Sample Id: 7684305-1-BLK		Date Collecte	d:		Date I	Received:		
Analytical Method: TPH by SW8015 Mod					Prep M	Method: 1005		
Analyst: ISU		% Moist:			Tech:	ISU		
Seq Number: 3098797		Date Prep: 08	3.15.2019 16:	30				
Subcontractor: SUB: T104704215-19-29		Prep seq: 76	584305					
Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<10.0	50.0	10.0	mg/kg	08.15.2019 17:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<10.0	50.0	10.0	mg/kg	08.15.2019 17:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<10.0	50.0	10.0	mg/kg	08.15.2019 17:54	U	1
Total TPH	PHC635	<10.0		10.0	mg/kg	08.15.2019 17:54	U	
Surrogate		% Recovery		Limits	Units	Analysis Dat	e	Flag
1-Chlorooctane		88		70 - 135	%			

88

o-Terphenyl

.

70 - 135

%



a,a,a-Trifluorotoluene

Certificate of Analytical Results 634062

Tasman Geosciences, LLC, Hobbs, NM

NM Moore Sweet

Parameter	CAS Number	Result	MQL	SDL	Unite	nalysis Date	Dil Factor Flag
		Prep seq: 76	84501				
Seq Number: 3098990		Date Prep: 08	.19.2019 14:00				
Analyst: MIT		% Moist:			Tech:	MIT	
Analytical Method: BTEX by EPA 8021					Prep Method:	5030B	
Lab Sample Id: 7684501-1-BLK		Date Collected	1:		Date Receive	d:	
Sample Id: 7684501-1-BLK		Matrix:	Solid		Sample Depth	1:	

1 arameter	Number	Result	mqL	JDL	Cinto	Date	Thas	
Benzene	71-43-2	< 0.00904	0.0200	0.00904	mg/kg	08.19.2019 18:00	U	20
Toluene	108-88-3	< 0.00468	0.0200	0.00468	mg/kg	08.19.2019 18:00	U	20
Ethylbenzene	100-41-4	< 0.00616	0.0200	0.00616	mg/kg	08.19.2019 18:00	U	20
m_p-Xylenes	179601-23-1	< 0.00682	0.0400	0.00682	mg/kg	08.19.2019 18:00	U	20
o-Xylene	95-47-6	< 0.00682	0.0200	0.00682	mg/kg	08.19.2019 18:00	U	20
Xylenes, Total	1330-20-7	< 0.00682		0.00682	mg/kg	08.19.2019 18:00	U	
Total BTEX		< 0.00468		0.00468	mg/kg	08.19.2019 18:00	U	
Surrogate		% Recovery		Limits	Units	Analysis Dat	te	Flag
4-Bromofluorobenzene		90		68 - 120	%			

93

71 - 121

%



Flagging Criteria

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- **F** RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

- RL Reporting Limit
- MDL Method Detection Limit SDL Sample Detection Limit LOD Limit of Detection
- PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- NC Non-Calculable

SMP Clier	nt Sample	BLK	Method Blank	
BKS/LCS	Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labor	ratory Control Sample Duplicate
MD/SD	Method Duplicate/Sample Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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

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Form 2 - Surrogate Recoveries

Project Name: NM Moore Sweet

	lers: 6340		Project ID:						
Lab Batch #	#: 3098990	Sample: 7684501-1-BKS / H							
Units:	mg/kg	Date Analyzed: 08.19.2019 16:12	SU	RROGATE RI	ECOVERY S	STUDY			
	BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
		Analytes			[D]				
4-Bromofluo			0.0956	0.100	96	68-120			
a,a,a-Trifluor	rotoluene		1.71	2.00	86	71-121			
Lab Batch #	#: 3098990	Sample: 7684501-1-BSD / H							
Units:	mg/kg	Date Analyzed: 08.19.2019 16:39	SU	RROGATE RI	ECOVERY S	STUDY			
	ВТЕ	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
4-Bromofluo	rohanzana	Analytes	0.0916	0.100	92	68-120			
a,a,a-Trifluor			1.73	2.00	87	71-121			
					I	/1-121			
Lab Batch #: 3098990Sample: 7684501-1-BLK / BLKBatch: 1Matrix: SolidUnits:mg/kgDate Analyzed: 08 19 2019 18:00SURROGATE RECOVERY STUDY									
Units:	mg/kg	Date Analyzed: 08.19.2019 18:00	50	KKUGATE KI					
	ВТЕ	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
4 Due ve e flere		Analytes	0.0005	0.100		60.120			
4-Bromofluo a,a,a-Trifluor			0.0895	0.100	90 93	68-120 71-121			
						/1-121			
Lab Batch #		Sample: 634062-001 S / MS							
Units:	mg/kg	Date Analyzed: 08.19.2019 18:54	SU	RROGATE RH	COVERY	STUDY			
	BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
4-Bromofluo	robanzana	Analytes	0.0060	0.100		68 120			
a,a,a-Trifluor			0.0969	0.100	97 87	68-120 71-121			
					I	/1 121			
Lab Batch #		Sample: 634062-001 SD / M		h: 1 Matrix: RROGATE RH		TUDV			
Units:	mg/kg	Date Analyzed: 08.19.2019 19:21		1		1	1		
	BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
4-Bromofluo	robenzene	J	0.0964	0.100	96	68-120			
a,a,a-Trifluor	rotoluene		1.54	1.82	85	71-121			

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / BAll results are based on MDL and validated for QC purposes.

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ENCO



Project Name: NM Moore Sweet

Work Ore		62		Project II			
Lab Batch	#: 3098797	Sample: 7684305-1-BLK / E					
Units:	mg/kg	Date Analyzed: 08.15.2019 17:54	SU	RROGATE RI	ECOVERY	STUDY	
	TPH	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1-Chlorooct	tane		88.1	100	88	70-135	
o-Terphenyl	1		44.0	50.0	88	70-135	
Lab Batch	#: 3098797	Sample: 7684305-1-BKS / B	KS Bate	h: 1 Matrix	:Solid		
Units:	mg/kg	Date Analyzed: 08.15.2019 18:14	SU	RROGATE RI	ECOVERY S	STUDY	
	TPH	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooct	ane	Analytes	91.2	100	91	70-135	
o-Terphenyl			42.7	50.0	85	70-135	
Lab Patah	#: 3098797	Sample: 7684305-1-BSD / B	SD Batc	h: 1 Matrix	•Solid		
	mg/kg	Date Analyzed: 08.15.2019 18:33		RROGATE RI		STUDY	
Units:	00	-					
	TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooct	ane		95.0	100	95	70-135	
o-Terphenyl			43.0	50.0	86	70-135	
	#: 3098797	Sample: 633722-001 SD / M	ISD Batcl	h: 1 Matrix	•Soil		
Units:	mg/kg	Date Analyzed: 08.15.2019 19:31		RROGATE RI		STUDY	
		by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooct	tane		94.5	99.3	95	70-135	
o-Terphenyl	1		37.6	49.7	76	70-135	
Lab Batch	#: 3098797	Sample: 633722-001 S / MS	Batc	h: 1 Matrix	:Soil		
Units:	mg/kg	Date Analyzed: 08.16.2019 12:32	SU	RROGATE RI	ECOVERYS	STUDY	
	TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooct	tane	-	86.6	99.6	87	70-135	
o-Terphenyl	1		35.1	49.8	70	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / BAll results are based on MDL and validated for QC purposes.



BS / BSD Recoveries

Project Name: NM Moore Sweet

Work Order #: 634062							Pro	ject ID:			
Analyst: MIT	D	ate Prepai	red: 08.19.20	19			Date A	nalyzed:	08.19.2019		
Lab Batch ID: 3098990 Sample: 7684501	-1-BKS	Batc	h #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE /	BLANK	SPIKE DUP	LICATE	RECOV	ERY STU	DY	
BTEX by EPA 8021	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
Benzene	< 0.00904	2.00	1.82	91	2.00	1.95	98	7	55-120	20	
Toluene	< 0.00468	2.00	1.97	99	2.00	1.95	98	1	77-120	20	
Ethylbenzene	< 0.00616	2.00	1.97	99	2.00	1.96	98	1	77-120	20	
m_p-Xylenes	< 0.00682	4.00	3.95	99	4.00	3.91	98	1	78-120	20	
o-Xylene	< 0.00682	2.00	1.96	98	2.00	1.96	98	0	78-120	20	
Analyst: JYM	D	ate Prepai	ed: 08.15.20	19	1		Date A	nalyzed:	08.15.2019		-
Lab Batch ID: 3098689 Sample: 7684283	-1-BKS	Batc	h #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE /	BLANK	SPIKE DUP	LICATE	RECOV	ERY STU	DY	
Inorganic Anions by EPA 300/300.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes					[E]						<u> </u>
Chloride	< 0.354	100	104	104	100	105	105	1	80-120	20	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: NM Moore Sweet

Work Order #: 634062								Proj	ect ID:				
	Analyst: ISU		D	ate Prepar	red: 08.15.201	9			Date A	nalyzed: (8.15.2019		
	Lab Batch ID: 3098797	Sample: 7684305-1-	BKS	Batc	h #: 1					Matrix: S	Solid		
	Units: mg/kg			BLAN	K /BLANK	SPIKE / I	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	ЭY	
	TPH by	y SW8015 Mod	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes			[B]	[C]	[D]	[E]	Result [F]	[G]				
	Gasoline Range Hydro	ocarbons (GRO)	<10.0	1000	915	92	1000	942	94	3	70-135	35	
	Diesel Range Organic	s (DRO)	<10.0	1000	855	86	1000	868	87	2	70-135	35	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes





Form 3 - MS / MSD Recoveries

Project Name: NM Moore Sweet

Work Order # :	634062				Project ID:
Lab Batch ID:	3098990	QC- Sample ID:	634062-001 S	Batch #: 1	Matrix: Soil
Date Analyzed:	08.19.2019	Date Prepared:	08.19.2019	Analyst: MIT	
Reporting Units:	mg/kg				

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

	BTEX by EPA 8021	Parent Sample Result	Spike Added	piked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]		[D]	[E]		[G]				
Benzene		<0.00885	1.96	1.81	92	1.82	1.63	90	10	54-120	25	
Toluene		< 0.00458	1.96	2.04	104	1.82	1.82	100	11	57-120	25	
Ethylbenzene		<0.00603	1.96	2.15	110	1.82	1.91	105	12	58-131	25	
m_p-Xylenes		<0.00667	3.91	4.32	110	3.64	3.86	106	11	62-124	25	
o-Xylene		<0.00667	1.96	2.12	108	1.82	1.90	104	11	62-124	25	
Lab Batch ID:	3098689	QC- Sample ID:	634062-00	01 S	Ba	tch #:	1 Matrix	c: Soil				
Date Analyzed:	08.15.2019	Date Prepared:	08.15.201	9	An	alyst: J	YM					
Donouting United	ma/ka											

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	861	100	944	83	100	950	89	1	80-120	20	

 $\begin{array}{l} Matrix \ Spike \ Percent \ Recovery \quad [D] = 100^{*}(C\text{-}A) \ / \ B \\ Relative \ Percent \ Difference \quad RPD = 200^{*}|(C\text{-}F) \ / \ (C\text{+}F)| \end{array}$

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A) / E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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Form 3 - MS / MSD Recoveries

Project Name: NM Moore Sweet

Work Order # :	634062				Project ID:
Lab Batch ID:	3098689	QC- Sample ID:	634076-003 S	Batch #: 1	Matrix: Soil
Date Analyzed:	08.15.2019	Date Prepared:	08.15.2019	Analyst: JYM	
Reporting Units:	mg/kg				

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorga	nic Anions by EPA 300/300.1	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample	-	RPD	Control Limits	Control Limits	Flag
	Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Chloride		101	114	214	99	113	212	98	1	80-120	20	
Lab Batch ID:	3098797	QC- Sample ID:	633722-0	001 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	08.16.2019	Date Prepared:	08.15.20	19	An	alyst: I	SU					
	··· - /l											

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons (GRO)	15.5	1040	910	86	1030	1020	98	11	70-135	35	
Diesel Range Organics (DRO)	967	1040	1580	59	1030	1840	85	15	70-135	35	X

 $\begin{array}{l} Matrix \ Spike \ Percent \ Recovery \quad [D] = 100^{*}(C\text{-}A) \ / \ B \\ Relative \ Percent \ Difference \quad RPD = 200^{*}|(C\text{-}F) \ / \ (C\text{+}F)| \end{array}$

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A) / E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Page 17 of 21

Received by OCD: 1/31/2020	11:08:49 AM	Page 296 of 468
Work Order No: 1/31/2020 Work Order No: 23 22 2 Work Order Comments ST PRP Brownfields RRC Superfund tet: Othor Othor	Work Order Notes ALG a west preserved by the ALG a west preserved by the ALG a west preserved by the ALG a west preserved by the ab, if received by 4:30pm Blacker of the shart of the ab, if received by 4:30pm Blacker of the shart of the ab, if received by 4:30pm Blacker of the shart of the ab, if received by 4:30pm Blacker of the shart of the ab, if received by 4:30pm Blacker of the shart of the ab, if received by 4:30pm Blacker of the shart of the ab, if received by 4:30pm Blacker of the shart of the ab, if received by 4:30pm Blacker of the shart of the ab, if received by 4:30pm Blacker of the shart of the ab and the shart of the shart of the shart of the ab and the sh	P) Date/Time Revised Date 051418 Rev. 2018.1
Work Order www.xenco.col work Ordei Bro of Project: of Project: Ana	1231111111111111	rstandard terms and conditions ircumstances beyond the control liess previously negotiated. Received by: (Signature)
Chain of Custody Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334 Midland, TX (322-704-5440) EL Paso, TX (215)565-3443 Lubbock, TX (806)794-1296 Hobbs,NM (575-392-7550) Phoenix, AZ (480-355-0900) Attanta, GA (770-449-8800) Tampa, FL (813-620-2000) Pobbs,NM (575-392-7550) Phoenix, AZ (480-355-0900) Attanta, GA (770-449-8800) Tampa, FL (813-620-2000) Program Company Name: Program Paso: Program State City, State ZIP:	ANALYSIS REQUEST ANALYSIS REQUEST ANALYS	client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions losses or expenses incurred by the client if such losses are due to circumstances beyond the control ubmitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated. Date/Time Relinquished by: (Signature) Received by: (Signature) 6
Chai Houston, TX (281) 240-4200 Dallas, T Midland, TX (281) 240-4200 Dallas, T Midland, TX (432-704-5440) EL Pas Hobbs, NM (575-392-7550) Phoenix, AZ (480-355- Bill to: (if different) Company Name: Company Name: Company Name: Company Name: City, State ZIP:	No No No Addition Andrew Blank: Ves No West los: Matrix Date Time Matrix Date Time S S/V 1218	ment of kemples constitutes a faild purchase order from c seamples and shall not assume any responsibility for any bred to leach projectand a charge of \$5 for each sample s. Recived by: (Bignature)
Manager: ny Name: s: ate ZIP:		Notice: Signature of this document and relinquist of service. Xenco will be liable only for the cost of Xenco. A minimum charge of \$75.00 will be ap Artinqoished by: (Signature) 3 3 5 5

Final 1.000

Inter-Office Shipment

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IOS Number : 46292

Date/Time	Date/Time: 08.14.2019 16:39 Created by: Brenda Ward		Please send report to							
Lab# From	n: Lubb	ock	Delivery Pri	iority:		Address:	6701 Aberc	leen, Sui	ite 9 Lubbock, TX 7942	24
Lab# To:	Hous	ton	Air Bill No.	: 77598915614	775989156149		john.builes	@xenco.	.com	
Sample Id	Matrix C	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
634062-001	S	ETT-NW-D @ 2.5'	08.14.2019 12:00	E300	Inorganic Anions by EPA 300/300.1	08.20.2019	09.11.2019	JHB	CL	
634062-001	S	ETT-NW-D @ 2.5'	08.14.2019 12:00	SW8015MOD_NM	TPH by SW8015 Mod	08.20.2019	08.28.2019	JHB	PHCC10C28 PHCC28C35	
634062-002	S	WTT-NW-D @ 2'	08.14.2019 12:15	E300	Inorganic Anions by EPA 300/300.1	08.20.2019	09.11.2019	JHB	CL	
634062-002	S	WTT-NW-D @ 2'	08.14.2019 12:15	SW8015MOD_NM	TPH by SW8015 Mod	08.20.2019	08.28.2019	JHB	PHCC10C28 PHCC28C35	
634062-003	S	TT2-Comp 2 @ 5'	08.14.2019 12:30	SW8015MOD_NM	TPH by SW8015 Mod	08.20.2019	08.28.2019	JHB	PHCC10C28 PHCC28C35	
634062-003	S	TT2-Comp 2 @ 5'	08.14.2019 12:30	E300	Inorganic Anions by EPA 300/300.1	08.20.2019	09.11.2019	JHB	CL	
634062-004	S	TT2-Comp 4 @ 5'	08.14.2019 12:45	SW8015MOD_NM	TPH by SW8015 Mod	08.20.2019	08.28.2019	JHB	PHCC10C28 PHCC28C35	
634062-004	S	TT2-Comp 4 @ 5'	08.14.2019 12:45	E300	Inorganic Anions by EPA 300/300.1	08.20.2019	09.11.2019	JHB	CL	

Inter Office Shipment or Sample Comments:

Relinquished By:

Ward renda

Brenda Ward

Date Relinquished: 08.14.2019

Received By:

uaux Jimmon

Travis Simmons

Date Received:

08.15.2019 09:30

Cooler Temperature: 2.9

Received by OCD: 1/31/2020 11:08:49 AM

ABORATORIES





Inter Office Report- Sample Receipt Checklist

Sent To: Houston IOS #: 46292

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Temperature Measuring device used : HOU-068

Sent By:	Brenda Ward	Date Sent:	08.14.2019 04.39 PM
Received By	: Travis Simmons	Date Received:	08.15.2019 09.30 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2.9	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received with appropriate temperature?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 *Custody Seals Signed and dated for Containers/coolers	N/A	
#6 *IOS present?	Yes	
#7 Any missing/extra samples?	No	
#8 IOS agrees with sample label(s)/matrix?	Yes	
#9 Sample matrix/ properties agree with IOS?	Yes	
#10 Samples in proper container/ bottle?	Yes	
#11 Samples properly preserved?	Yes	
#12 Sample container(s) intact?	Yes	
#13 Sufficient sample amount for indicated test(s)?	Yes	
#14 All samples received within hold time?	Yes	

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

NonConformance:

Corrective Action Taken:

Contact:

Nonconformance Documentation

Contacted by :

Date:

Checklist reviewed by:

Travis Simmons

Date: 08.15.2019

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Tasman Geosciences, LLC	Acceptable Temperature Range: 0 - 6 degC	
Date/ Time Received: 08.14.2019 03.13.00 PM	Air and Metal samples Acceptable Range: Ar	nbient
Work Order #: 634062	Temperature Measuring device used : IR-4	
Sampl	e Receipt Checklist Comments	
#1 *Temperature of cooler(s)?	4.4	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cool	er? N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6*Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	Νο	
#9 Chain of Custody signed when relinquished/ rece	ved? Yes	
#10 Chain of Custody agrees with sample labels/ma	rix? Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	Yes Chlorides & 8015	sent to Stafford
#18 Water VOC samples have zero headspace?	N/A	

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

Analyst:

PH Device/Lot#:

Checklist completed by: Brenda Ward Brenda Ward Checklist reviewed by: John Builes

Date: 08.14.2019

Date: 08.16.2019

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



Analytical Report

Prepared for:

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

Project: Plains - Moore Sweet Project Number: Moore Sweet Historical Location: Lea County, NM

Lab Order Number: 9I27014



NELAP/TCEQ # T104704516-18-9

Report Date: 10/05/19

Fax: (432) 520-7701

TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical
Midland TX, 79705	Project Manager:	Curt Stanley

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MN-S1C #1	9I27014-01	Soil	09/24/19 08:10	09-26-2019 16:23
MW-S1C	9I27014-02	Soil	09/24/19 08:20	09-26-2019 16:23
MW-F1C #1@ 5'	9I27014-03	Soil	09/24/19 08:30	09-26-2019 16:23
MW-F1C #2@ 5'	9I27014-04	Soil	09/24/19 08:40	09-26-2019 16:23
MSW-S1C	9I27014-05	Soil	09/24/19 08:50	09-26-2019 16:23
MSW-F1C @ 5'	9I27014-06	Soil	09/24/19 09:00	09-26-2019 16:23
MS-S1C	9I27014-07	Soil	09/24/19 09:10	09-26-2019 16:23
MS-F1C @ 5'	9I27014-08	Soil	09/24/19 09:20	09-26-2019 16:23
ME-S1C	9I27014-09	Soil	09/24/19 09:30	09-26-2019 16:23
ME-F1C #1 @ 4'	9I27014-10	Soil	09/24/19 09:40	09-26-2019 16:23
ME-F1C #2 @ 4'	9I27014-11	Soil	09/24/19 09:50	09-26-2019 16:23
MN-S1C #2	9I27014-12	Soil	09/24/19 10:00	09-26-2019 16:23
MNW-S2	9I27014-13	Soil	09/24/19 10:10	09-26-2019 16:23
MNW-F2 @ 10'	9I27014-14	Soil	09/24/19 10:20	09-26-2019 16:23
MW-S2	9I27014-15	Soil	09/24/19 10:30	09-26-2019 16:23
MW-F2 @ 10'	9I27014-16	Soil	09/24/19 10:40	09-26-2019 16:23
MSW-S2	9I27014-17	Soil	09/24/19 10:50	09-26-2019 16:23
MSW-F2 @ 10'	9I27014-18	Soil	09/24/19 11:00	09-26-2019 16:23
MS-S2	9I27014-19	Soil	09/24/19 11:10	09-26-2019 16:23
MS-F2 @ 10'	9I27014-20	Soil	09/24/19 11:20	09-26-2019 16:23
ME-S2	9I27014-21	Soil	09/24/19 11:40	09-26-2019 16:23
ME-F2 @ 10'	9I27014-22	Soil	09/24/19 11:50	09-26-2019 16:23
MN-S2	9I27014-23	Soil	09/24/19 12:00	09-26-2019 16:23
MN-F2 @ 10'	9I27014-24	Soil	09/24/19 12:10	09-26-2019 16:23

Rerun of Chloride analysis for sample MEF1C #2 @ 4' (9I27014-11) was requested by client on 10-04-19. The results of the rerun are immediately following the results of the initial sample and are denoted by "RE1"

TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

MN-S1C #1

		9127	014-01 (Soi	l)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environmer	ıtal Lab, I	P.				
Organics by GC									
Benzene	ND	0.00105	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Ethylbenzene	ND	0.00211	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (p/m)	ND	0.00105	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		103 %	75-1	25	P912706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		96.3 %	75-1	25	P912706	09/27/19	09/27/19	EPA 8021B	
General Chemistry Parameters by EPA /	Standard Method	ls							
Chloride	29.0	1.05	mg/kg dry	1	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	5.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 b	y EPA Method 8	015M							
C6-C12	ND	26.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		80.3 %	70-1	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		91.7 %	70-1	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		5	ect: Plains - ber: Moore S ger: Curt Sta	weet Histo				Fax: (432) 52	0-7701
			IW-S1C 014-02 (Soil)					
			014-02 (301)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Invironmen	tal Lab, I	P .				
Organics by GC									
Benzene	ND	0.00102	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Ethylbenzene	ND	0.00204	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (p/m)	ND	0.00102	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		102 %	75-12	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		113 %	75-12	25	P912706	09/27/19	09/27/19	EPA 8021B	
General Chemistry Parameters by EPA /	Standard Metho	ds							
Chloride	695	1.02	mg/kg dry	1	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	2.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
<u>Total Petroleum Hydrocarbons C6-C35 h</u>	oy EPA Method 8	015M							
C6-C12	ND	25.5	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		82.5 %	70-13	80	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		94.5 %	70-13	80	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		5	ect: Plains - ber: Moore S ger: Curt Sta	Sweet Histo				Fax: (432) 52	.0-7701
			F1C #1@ 014-03 (Soil						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin F	Invironmen	tal Lab, I	P .				
Organics by GC									
Benzene	ND	0.00106	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Toluene	ND	0.00106	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Ethylbenzene	ND	0.00213	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (p/m)	ND	0.00106	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		93.8 %	75-12	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		95.5 %	75-12	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
General Chemistry Parameters by EPA	Standard Metho	ds							
Chloride	59.2	1.06	mg/kg dry	1	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	6.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M							
C6-C12	ND	26.6	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	ND	26.6	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		83.0 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		95.4 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		5	ect: Plains - ber: Moore S ger: Curt Sta	Sweet Histo				Fax: (432) 52	.0-7701
			F1C #2@ 014-04 (Soil						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin F	Invironmen	tal Lab, I	P.				
Organics by GC									
Benzene	ND	0.00106	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Toluene	ND	0.00106	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Ethylbenzene	ND	0.00213	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (p/m)	ND	0.00106	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		97.5 %	75-12	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		106 %	75-12	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
General Chemistry Parameters by EPA /	Standard Metho	ds							
Chloride	42.6	1.06	mg/kg dry	1	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	6.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 b	y EPA Method 8	015M							
C6-C12	ND	26.6	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	ND	26.6	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		82.6 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		94.7 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

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TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705	Project: Plains - Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley								20-7701
			SW-S1C 014-05 (Soil	l)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environmen	ital Lab, I	L.P.				
Organics by GC									
Benzene	ND	0.00133	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Toluene	ND	0.00133	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Ethylbenzene	ND	0.00267	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (p/m)	ND	0.00133	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (o)	ND	0.00133	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		99 .7 %	75-1.	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		113 %	75-1.	25	P912706	09/27/19	09/27/19	EPA 8021B	
General Chemistry Parameters by EPA	Standard Metho	ds							
Chloride	86.7	1.33	mg/kg dry	1	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	25.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	oy EPA Method 8	015M							
C6-C12	ND	33.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	ND	33.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	33.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		84.8 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		100 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	33.3	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Fax: (432) 52	20-7701						
			V-F1C @ 5 014-06 (Soil						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Invironmen	tal Lab, I	P.				
Organics by GC									
Benzene	ND	0.00102	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Ethylbenzene	ND	0.00204	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (p/m)	ND	0.00102	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		92.5 %	75-1.	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		112 %	75-1.	25	P912706	09/27/19	09/27/19	EPA 8021B	
General Chemistry Parameters by EF	A / Standard Metho	ds							
Chloride	42.4	1.02	mg/kg dry	1	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	11.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 8	015M							
C6-C12	ND	25.5	mg/kg dry	1	P9I3004	09/30/19	10/04/19	TPH 8015M	
>C12-C28	186	25.5	mg/kg dry	1	P9I3004	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P9I3004	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		106 %	70-1.	30	P9I3004	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		121 %	70-1.	30	P9I3004	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	186	25.5	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

Permian Basin Environmental Lab, L.P.

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TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Fax: (432) 52	0-7701						
			MS-S1C 014-07 (Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environmen	tal Lab, I	P.				
Organics by GC									
Benzene	ND	0.00103	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Ethylbenzene	ND	0.00206	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (p/m)	ND	0.00103	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		90.7 %	75-1.	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		87.6 %	75-1.	25	P912706	09/27/19	09/27/19	EPA 8021B	
General Chemistry Parameters by EPA	Standard Metho	ds							
Chloride	596	1.03	mg/kg dry	1	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	3.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M							
C6-C12	ND	25.8	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		90.9 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		97.0 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Fax: (432) 52	:0-7701						
			-F1C @ 5 014-08 (Soi						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin H	Environmer	ital Lab, I	L.P.				
Organics by GC									
Benzene	ND	0.00109	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Ethylbenzene	ND	0.00217	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (p/m)	ND	0.00109	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		112 %	75-1	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		105 %	75-1	25	P912706	09/27/19	09/27/19	EPA 8021B	
General Chemistry Parameters by EPA	/ Standard Metho	ds							
Chloride	124	1.09	mg/kg dry	1	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	8.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M							
C6-C12	ND	27.2	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		79.3 %	70-1	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		95.2 %	70-1	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

Permian Basin Environmental Lab, L.P.

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TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705	Project: Plains - Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley								20-7701
			AE-S1C 014-09 (Soi	I)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Invironmer	ıtal Lab, I	P.				
Organics by GC									
Benzene	ND	0.00105	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Ethylbenzene	ND	0.00211	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (p/m)	ND	0.00105	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		102 %	75-1	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		103 %	75-1	25	P912706	09/27/19	09/27/19	EPA 8021B	
General Chemistry Parameters by EP.	A / Standard Method	ls							
Chloride	2100	26.3	mg/kg dry	25	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	5.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 8	015M							
C6-C12	ND	26.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	46.6	26.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		96.8 %	70-1	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		112 %	70-1	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	46.6	26.3	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705			Fax: (432) 52	20-7701					
			F1C #1 @ 014-10 (Soil						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin F	Invironmen	tal Lab, I	P .				
Organics by GC									
Benzene	ND	0.00112	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Toluene	ND	0.00112	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Ethylbenzene	ND	0.00225	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (p/m)	ND	0.00112	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (o)	ND	0.00112	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		93.8 %	75-1.	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		89.2 %	75-1.	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
General Chemistry Parameters by EPA	Standard Metho	ds							
Chloride	603	1.12	mg/kg dry	1	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	11.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M							
C6-C12	ND	28.1	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	ND	28.1	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	28.1	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		93.4 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		109 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	28.1	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705			Fax: (432) 52	20-7701					
			F1C #2 @ 014-11 (Soi						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin F	Environmer	ıtal Lab, I	L.P.				
Organics by GC									
Benzene	ND	0.00108	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Ethylbenzene	ND	0.00215	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (p/m)	ND	0.00108	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		86.5 %	75-1	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		111 %	75-1	25	P912706	09/27/19	09/27/19	EPA 8021B	
General Chemistry Parameters by EPA	Standard Metho	ds							
Chloride	4050	26.9	mg/kg dry	25	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	7.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M							
C6-C12	ND	26.9	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		92.6 %	70-1	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		108 %	70-1	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Proje Project Numb Project Manag		Fax: (432) 520-7701					
			T1C #2 @ -11RE1 (\$						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Permi	an Basin E	nvironme	ntal Lab, l	L.P.				
General Chemistry Parameters by EPA	A / Standard Methods								
Chloride	3650	26.9	mg/kg dry	25	P9J0108	10/01/19	10/05/19	EPA 300.0	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Fax: (432) 52	20-7701						
			N-S1C #2 014-12 (Soil	I)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin F	Environmen	ital Lab, I	P.				
Organics by GC									
Benzene	ND	0.00105	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Ethylbenzene	ND	0.00211	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (p/m)	ND	0.00105	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		109 %	75-1.	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		98.8 %	75-1.	25	P912706	09/27/19	09/27/19	EPA 8021B	
General Chemistry Parameters by EPA /	Standard Metho	ds							
Chloride	197	1.05	mg/kg dry	1	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	5.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 b	y EPA Method 8	015M							
C6-C12	ND	26.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		89.9 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		106 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

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TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705	Project: Plains - Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley								20-7701
			1NW-S2 014-13 (Soi	1)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environmer	ıtal Lab, I	P.				
Organics by GC									
Benzene	ND	0.00101	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Toluene	ND	0.00101	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Ethylbenzene	ND	0.00202	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (p/m)	ND	0.00101	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Xylene (o)	ND	0.00101	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		92.0 %	75-1	25	P9I2706	09/27/19	09/27/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		109 %	75-1	25	P912706	09/27/19	09/27/19	EPA 8021B	
General Chemistry Parameters by EP.	A / Standard Methoo	ds							
Chloride	214	1.01	mg/kg dry	1	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	1.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 8	015M							
C6-C12	ND	25.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	87.0	25.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	25.3	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		93.2 %	70-1	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		100 %	70-1	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	87.0	25.3	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705	Project:Plains - Moore SweetFax: (aProject Number:Moore Sweet HistoricalProject Manager:Curt Stanley									
			W-F2 @ 1(014-14 (Soil							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
	Perr	nian Basin F	Environmen	tal Lab, I	P.					
Organics by GC										
Benzene	ND	0.00109	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B		
Toluene	ND	0.00109	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B		
Ethylbenzene	ND	0.00217	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B		
Xylene (p/m)	ND	0.00109	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B		
Xylene (o)	ND	0.00109	mg/kg dry	1	P9I2706	09/27/19	09/27/19	EPA 8021B		
Surrogate: 4-Bromofluorobenzene		113 %	75-1.	25	P9I2706	09/27/19	09/27/19	EPA 8021B		
Surrogate: 1,4-Difluorobenzene		90.6 %	75-1.	25	P912706	09/27/19	09/27/19	EPA 8021B		
General Chemistry Parameters by EPA	Standard Metho	ds								
Chloride	9.26	1.09	mg/kg dry	1	P9J0108	10/01/19	10/02/19	EPA 300.0		
% Moisture	8.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216		
Total Petroleum Hydrocarbons C6-C35	oy EPA Method 8	015M								
C6-C12	ND	27.2	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M		
>C12-C28	ND	27.2	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M		
>C28-C35	ND	27.2	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M		
Surrogate: 1-Chlorooctane		85.0 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M		
Surrogate: o-Terphenyl		99.2 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M		
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc		

Permian Basin Environmental Lab, L.P.

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TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Fax: (432) 52	0-7701						
			MW-S2 014-15 (Soi	I)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environmer	ital Lab, I	P .				
Organics by GC									
Benzene	ND	0.00102	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00204	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00102	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		90.2 %	75-1	25	P9I2706	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		114 %	75-1	25	P912706	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EP.	A / Standard Metho	ds							
Chloride	109	1.02	mg/kg dry	1	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	2.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 8	015M							
C6-C12	ND	25.5	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	61.1	25.5	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		89.8 %	70-1	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		105 %	70-1	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	61.1	25.5	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705	Project: Plains - Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley							Fax: (432) 52	0-7701
			V-F2 @ 10' 014-16 (Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin F	Invironmen	tal Lab, I	P.				
Organics by GC									
Benzene	ND	0.00109	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00217	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00109	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		86.8 %	75-12	25	P9I2706	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		110 %	75-12	5	P912706	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA / St	tandard Metho	ds							
Chloride	33.7	1.09	mg/kg dry	1	P9J0108	10/01/19	10/02/19	EPA 300.0	
% Moisture	8.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by	EPA Method 8	015M							
C6-C12	ND	27.2	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		103 %	70-13	0	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		120 %	70-13	0	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

Midland TX, 79705		Project: Plains - Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley						
		/ISW-S2 014-17 (Soi	l)					
Analyte Rest	Reporting lt Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Permian Basin F	Environmen	ıtal Lab, I	P.				
Organics by GC								
Benzene N	D 0.00104	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Γoluene N	D 0.00104	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene N	D 0.00208	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m) N	D 0.00104	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Xylene (o) N	D 0.00104	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	103 %	75-1	25	P9I2706	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	93.2 %	75-1	25	P912706	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA / Standard N	lethods							
Chloride 50	9 1.04	mg/kg dry	1	P9J0210	10/02/19	10/02/19	EPA 300.0	
% Moisture 4	0 0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Fotal Petroleum Hydrocarbons C6-C35 by EPA Met	hod 8015M							
C6-C12 N	D 26.0	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28 N	D 26.0	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35 N	D 26.0	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane	99.5 %	70-1	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl	116 %	70-1	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Fotal Petroleum Hydrocarbon C6-C35 N	D 26.0	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project: Plains - Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley							20-7701
			W-F2 @ 1(014-18 (Soil						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environmen	ital Lab, I	P.				
Organics by GC									
Benzene	ND	0.00111	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00111	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00222	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00111	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00111	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		99.0 %	75-1	25	P912706	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		113 %	75-1.	25	P912706	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA /	Standard Metho	ds							
Chloride	353	1.11	mg/kg dry	1	P9J0210	10/02/19	10/02/19	EPA 300.0	
% Moisture	10.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 I	by EPA Method 8	015M							
C6-C12	ND	27.8	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C12-C28	ND	27.8	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: 1-Chlorooctane		105 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Surrogate: o-Terphenyl		122 %	70-1.	30	P9I3004	09/30/19	10/03/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	09/30/19	10/03/19	calc	

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TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project: Plains - Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley						Fax: (432) 52	0-7701
			MS-S2 014-19 (Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environmen	tal Lab, I	P.				
Organics by GC									
Benzene	ND	0.00108	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00215	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00108	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P9I2706	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		99.8 %	75-1.	25	P9I2706	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		115 %	75-1.	25	P9I2706	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA /	Standard Metho	ds							
Chloride	348	1.08	mg/kg dry	1	P9J0210	10/02/19	10/02/19	EPA 300.0	
% Moisture	7.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 I	oy EPA Method 8	015M							
C6-C12	ND	26.9	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		94.1 %	70-1.	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		108 %	70-1.	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Proj Project Num Project Mana				Fax: (432) 52	20-7701		
			5-F2 @ 10' 014-20 (Soi						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environmer	ital Lab, I	P.				
Organics by GC									
Benzene	ND	0.00108	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00215	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00108	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		105 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		96.4 %	75-1	25	P912707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EP	A / Standard Metho	ds							
Chloride	61.3	1.08	mg/kg dry	1	P9J0210	10/02/19	10/02/19	EPA 300.0	
% Moisture	7.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 8	015M							
C6-C12	ND	26.9	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	620	26.9	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	149	26.9	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		91.1 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		105 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	769	26.9	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

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TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project: Plains - Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley						Fax: (432) 52	0-7701
			ME-S2 014-21 (Soi	I)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environmen	ital Lab, I	P.				
Organics by GC									
Benzene	ND	0.00122	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00122	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00244	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00122	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00122	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		105 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		117 %	75-1	25	P912707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA	/ Standard Metho	ds							
Chloride	1030	1.22	mg/kg dry	1	P9J0210	10/02/19	10/02/19	EPA 300.0	
% Moisture	8.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M							
C6-C12	ND	30.5	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	ND	30.5	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	30.5	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		93.5 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		108 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	30.5	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705	Project: Plains - Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley							Fax: (432) 52	0-7701
			-F2 @ 10' 014-22 (Soi						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Per	mian Basin E	nvironmen	ital Lab, I	P.				
Organics by GC									
Benzene	ND	0.00112	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00112	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00225	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00112	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00112	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		93.1 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		110 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA / Standa	ard Metho	ds							
Chloride	372	1.12	mg/kg dry	1	P9J0210	10/02/19	10/02/19	EPA 300.0	
% Moisture	11.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by EPA	Method 8	8015M							
C6-C12	ND	28.1	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	ND	28.1	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	28.1	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		95.5 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		112 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	28.1	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

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TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		5	ect: Plains - ber: Moore S ger: Curt Sta	weet Histo				Fax: (432) 52	0-7701
			MN-S2 014-23 (Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environmen	tal Lab, I	P.				
Organics by GC									
Benzene	ND	0.00102	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00204	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00102	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		95.3 %	75-12	25	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		119 %	75-12	25	P912707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA /	Standard Metho	ds							
Chloride	1080	1.02	mg/kg dry	1	P9J0210	10/02/19	10/02/19	EPA 300.0	
% Moisture	2.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 I	oy EPA Method 8	015M							
C6-C12	ND	25.5	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		97.9 %	70-13	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		106 %	70-13	80	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Proj Project Num Project Mana		Sweet Histo				Fax: (432) 52	0-7701
			N-F2 @ 10' 014-24 (Soi						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin F	Environmen	ital Lab, I	L.P.				
Organics by GC									
Benzene	ND	0.00104	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00208	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00104	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		115 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		97.6 %	75-1	25	P912707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA	/ Standard Metho	ds							
Chloride	138	1.04	mg/kg dry	1	P9J0210	10/02/19	10/02/19	EPA 300.0	
% Moisture	4.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M							
C6-C12	ND	26.0	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		80.9 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		94.2 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9I2706 - General Preparation (GC)										
Blank (P9I2706-BLK1)				Prepared &	Analyzed:	09/27/19				
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00200	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	0.129		"	0.120		107	75-125			
Surrogate: 1,4-Difluorobenzene	0.108		"	0.120		90.1	75-125			
LCS (P912706-BS1)				Prepared &	Analyzed:	09/27/19				
Benzene	0.0814	0.00100	mg/kg wet	0.100		81.4	80-120			
Toluene	0.109	0.00100	"	0.100		109	80-120			
Ethylbenzene	0.114	0.00200	"	0.100		114	80-120			
Xylene (p/m)	0.224	0.00100	"	0.200		112	80-120			
Xylene (o)	0.109	0.00100	"	0.100		109	80-120			
Surrogate: 4-Bromofluorobenzene	0.133		"	0.120		111	75-125			
Surrogate: 1,4-Difluorobenzene	0.142		"	0.120		118	75-125			
LCS Dup (P9I2706-BSD1)				Prepared &	Analyzed:	09/27/19				
Benzene	0.0865	0.00100	mg/kg wet	0.100		86.5	80-120	6.10	20	
Toluene	0.105	0.00100	"	0.100		105	80-120	3.57	20	
Ethylbenzene	0.107	0.00200	"	0.100		107	80-120	6.54	20	
Xylene (p/m)	0.212	0.00100	"	0.200		106	80-120	5.77	20	
Xylene (o)	0.106	0.00100	"	0.100		106	80-120	2.85	20	
Surrogate: 4-Bromofluorobenzene	0.120		"	0.120		99.7	75-125			
Surrogate: 1,4-Difluorobenzene	0.127		"	0.120		106	75-125			
Calibration Blank (P9I2706-CCB1)				Prepared &	Analyzed:	09/27/19				
Benzene	0.00		mg/kg wet	-	-					
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	0.103		"	0.120		86.0	75-125			
Surrogate: 4-Bromofluorobenzene	0.115		"	0.120		95.9	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source	a/===	%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P912706 - General Preparation (GC)										
Calibration Blank (P9I2706-CCB2)				Prepared &	Analyzed:	09/27/19				
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.131		"	0.120		110	75-125			
Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		93.9	75-125			
Calibration Blank (P912706-CCB3)				Prepared: (9/27/19 A	nalyzed: 09	/28/19			
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		102	75-125			
Surrogate: 1,4-Difluorobenzene	0.109		"	0.120		91.0	75-125			
Calibration Check (P9I2706-CCV1)				Prepared &	Analyzed:	09/27/19				
Benzene	0.0832	0.00100	mg/kg wet				80-120			
Toluene	0.108	0.00100	"				80-120			
Ethylbenzene	0.108	0.00200	"				80-120			
Xylene (p/m)	0.237	0.00100	"				80-120			
Xylene (o)	0.106	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	0.139		"	0.120		116	75-125			
Surrogate: 1,4-Difluorobenzene	0.133		"	0.120		111	75-125			
Calibration Check (P9I2706-CCV2)				Prepared &	Analyzed:	09/27/19				
Benzene	0.0967	0.00100	mg/kg wet				80-120			
Toluene	0.109	0.00100	"				80-120			
Ethylbenzene	0.119	0.00200	"				80-120			
Xylene (p/m)	0.215	0.00100	"				80-120			
Xylene (o)	0.106	0.00100	"				80-120			
Surrogate: 1,4-Difluorobenzene	0.135		"	0.120		112	75-125			
Surrogate: 4-Bromofluorobenzene	0.124		"	0.120		104	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P912706 - General Preparation (GC)										
Calibration Check (P9I2706-CCV3)				Prepared: (09/27/19 A	nalyzed: 09	/28/19			
Benzene	0.0950	0.00100	mg/kg wet				80-120			
Toluene	0.114	0.00100	"				80-120			
Ethylbenzene	0.124	0.00200	"				80-120			
Xylene (p/m)	0.218	0.00100	"				80-120			
Xylene (o)	0.120	0.00100	"				80-120			
Surrogate: 1,4-Difluorobenzene	0.144		"	0.120		120	75-125			
Surrogate: 4-Bromofluorobenzene	0.140		"	0.120		116	75-125			
Matrix Spike (P9I2706-MS1)	Sou	rce: 9I27014-	-01	Prepared: (09/27/19 A	nalyzed: 09	/28/19			
Benzene	0.0728	0.00105	mg/kg dry	0.105	ND	69.1	80-120			QM-0
Toluene	0.0803	0.00105	"	0.105	ND	76.3	80-120			QM-0
Ethylbenzene	0.0928	0.00211	"	0.105	ND	88.2	80-120			
Xylene (p/m)	0.155	0.00105	"	0.211	ND	73.4	80-120			QM-0
Xylene (o)	0.0733	0.00105	"	0.105	ND	69.6	80-120			QM-0
Surrogate: 1,4-Difluorobenzene	0.139		"	0.126		110	75-125			
Surrogate: 4-Bromofluorobenzene	0.123		"	0.126		97.1	75-125			
Matrix Spike Dup (P9I2706-MSD1)	Sou	rce: 9I27014-	-01	Prepared: (09/27/19 A	nalyzed: 09	/28/19			
Benzene	0.0809	0.00105	mg/kg dry	0.105	ND	76.8	80-120	10.5	20	QM-0
Toluene	0.0882	0.00105	"	0.105	ND	83.8	80-120	9.38	20	
Ethylbenzene	0.100	0.00211	"	0.105	ND	95.0	80-120	7.41	20	
Xylene (p/m)	0.166	0.00105	"	0.211	ND	78.9	80-120	7.21	20	QM-0
Xylene (o)	0.0805	0.00105	"	0.105	ND	76.5	80-120	9.42	20	QM-0
Surrogate: 1,4-Difluorobenzene	0.149		"	0.126		118	75-125			
Surrogate: 4-Bromofluorobenzene	0.131		"	0.126		103	75-125			
Batch P9I2707 - General Preparation (GC)										
Blank (P9I2707-BLK1)				Prepared: (09/27/19 A	nalyzed: 09	/28/19			
Benzene	ND	0.00100	mg/kg wet	1		5				
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00200	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100								
Surrogate: 4-Bromofluorobenzene	0.128		"	0.120		106	75-125			
Surrogate: 1,4-Difluorobenzene	0.105		"	0.120		87.6	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

Analyta	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	KPD	Limit	Notes
Batch P9I2707 - General Preparation (GG	C)									
LCS (P9I2707-BS1)				Prepared: 0	9/27/19 A	nalyzed: 09	/28/19			
Benzene	0.0886	0.00100	mg/kg wet	0.100		88.6	80-120			
Toluene	0.102	0.00100	"	0.100		102	80-120			
Ethylbenzene	0.103	0.00200	"	0.100		103	80-120			
Xylene (p/m)	0.189	0.00100	"	0.200		94.5	80-120			
Xylene (o)	0.0941	0.00100	"	0.100		94.1	80-120			
Surrogate: 4-Bromofluorobenzene	0.126		"	0.120		105	75-125			
Surrogate: 1,4-Difluorobenzene	0.132		"	0.120		110	75-125			
LCS Dup (P9I2707-BSD1)				Prepared: 0	9/27/19 A	nalyzed: 09	/28/19			
Benzene	0.0900	0.00100	mg/kg wet	0.100		90.0	80-120	1.47	20	
Toluene	0.110	0.00100	"	0.100		110	80-120	7.37	20	
Ethylbenzene	0.115	0.00200	"	0.100		115	80-120	11.0	20	
Xylene (p/m)	0.204	0.00100	"	0.200		102	80-120	7.54	20	
Xylene (o)	0.104	0.00100	"	0.100		104	80-120	10.2	20	
Surrogate: 1,4-Difluorobenzene	0.141		"	0.120		118	75-125			
Surrogate: 4-Bromofluorobenzene	0.136		"	0.120		113	75-125			
Calibration Blank (P9I2707-CCB1)				Prepared: 0	9/27/19 A	nalyzed: 09	/28/19			
Benzene	0.00		mg/kg wet	1		5				
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	0.109		"	0.120		91.0	75-125			
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		102	75-125			
Calibration Blank (P9I2707-CCB2)				Prepared: 0	9/27/19 A	nalyzed: 09	/28/19			
Benzene	0.00		mg/kg wet	-		-				
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.121		"	0.120		101	75-125			
Surrogate: 1,4-Difluorobenzene	0.105		"	0.120		87.6	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9I2707 - General Preparation (GC	C)									
Calibration Blank (P9I2707-CCB3)				Prepared: (09/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.131		"	0.120		109	75-125			
Surrogate: 1,4-Difluorobenzene	0.114		"	0.120		94.7	75-125			
Calibration Check (P9I2707-CCV1)				Prepared: (09/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.0950	0.00100	mg/kg wet				80-120			
Toluene	0.114	0.00100	"				80-120			
Ethylbenzene	0.124	0.00200	"				80-120			
Xylene (p/m)	0.218	0.00100	"				80-120			
Xylene (o)	0.120	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	0.140		"	0.120		116	75-125			
Surrogate: 1,4-Difluorobenzene	0.144		"	0.120		120	75-125			
Calibration Check (P9I2707-CCV2)				Prepared: (09/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.0972	0.00100	mg/kg wet	*			80-120			
Toluene	0.110	0.00100	"				80-120			
Ethylbenzene	0.112	0.00200	"				80-120			
Xylene (p/m)	0.203	0.00100	"				80-120			
Xylene (o)	0.113	0.00100	"				80-120			
Surrogate: 1,4-Difluorobenzene	0.136		"	0.120		113	75-125			
Surrogate: 4-Bromofluorobenzene	0.131		"	0.120		109	75-125			
Calibration Check (P9I2707-CCV3)				Prepared: (09/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.107	0.00100	mg/kg wet	-			80-120			
Toluene	0.115	0.00100	"				80-120			
Ethylbenzene	0.110	0.00200	"				80-120			
Xylene (p/m)	0.206	0.00100	"				80-120			
Xylene (o)	0.116	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	0.119		"	0.120		99.3	75-125			
Surrogate: 1,4-Difluorobenzene	0.139		"	0.120		116	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

Analyte Result Limit Units Level Result %REC Limits RPD Limit Notes			Reporting		Spike	Source		%REC		RPD	
	Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch P9I2707 - General Preparation (GC)

Matrix Spike (P9I2707-MS1)	Sour	ce: 9I27014-	-20	Prepared: 0	9/27/19 A	nalyzed: 09	9/28/19			
Benzene	0.0471	0.00108	mg/kg dry	0.108	ND	43.8	80-120			QM-05
Toluene	0.0531	0.00108	"	0.108	ND	49.4	80-120			QM-05
Ethylbenzene	0.0595	0.00215	"	0.108	ND	55.3	80-120			QM-05
Xylene (p/m)	0.107	0.00108	"	0.215	ND	49.6	80-120			QM-05
Xylene (o)	0.0521	0.00108	"	0.108	ND	48.4	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	0.128		"	0.129		99.3	75-125			
Surrogate: 1,4-Difluorobenzene	0.150		"	0.129		116	75-125			
Matrix Spike Dup (P9I2707-MSD1)	Sour	ce: 9I27014-	-20	Prepared: 0	9/27/19 A	nalyzed: 09	9/28/19			
Benzene	0.0645	0.00108	mg/kg dry	0.108	ND	60.0	80-120	31.3	20	QM-05
Toluene	0.0737	0.00108	"	0.108	ND	68.6	80-120	32.5	20	QM-05
Ethylbenzene	0.0798	0.00215	"	0.108	ND	74.2	80-120	29.2	20	QM-05
Xylene (p/m)	0.117	0.00108	"	0.215	ND	54.3	80-120	9.00	20	QM-05
Xylene (o)	0.0564	0.00108	"	0.108	ND	52.4	80-120	7.99	20	QM-05
Surrogate: 1,4-Difluorobenzene	0.151		"	0.129		117	75-125			
Surrogate: 4-Bromofluorobenzene	0.146		"	0.129		113	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet	Fax: (432) 520-7701	
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical		
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 P9I2901 - *** DEFAULT PREP ***										
Blank (P9I2901-BLK2)				Prepared &	k Analyzed	09/29/19				
% Moisture	ND	0.1	%							
Duplicate (P9I2901-DUP1)	Sour	ce: 9127004-0	5	Prepared &	k Analyzed	09/29/19				
% Moisture	8.0	0.1	%		8.0			0.00	20	
Duplicate (P9I2901-DUP2)	Sour	rce: 9127005-2	4	Prepared &	k Analyzed	09/29/19				
% Moisture	5.0	0.1	%		5.0			0.00	20	
Duplicate (P9I2901-DUP3)	Sour	rce: 9127007-0	07	Prepared &	z Analyzed	09/29/19				
% Moisture	2.0	0.1	%		3.0			40.0	20	
Duplicate (P9I2901-DUP4)	Sour	ce: 9127009-1	4	Prepared &	k Analyzed	09/29/19				
% Moisture	14.0	0.1	%		14.0			0.00	20	
Duplicate (P9I2901-DUP5)	Sour	rce: 9127011-0	5	Prepared &	k Analyzed	09/29/19				
% Moisture	7.0	0.1	%		6.0			15.4	20	
Duplicate (P9I2901-DUP6)	Sour	ce: 9I27014-1	1	Prepared &	k Analyzed	09/29/19				
% Moisture	8.0	0.1	%	*	7.0			13.3	20	
Duplicate (P9I2901-DUP7)	Sour)1	Prepared &	k Analyzed	09/29/19				
% Moisture	12.0	0.1	%	*	19.0			45.2	20	
Batch P9J0108 - *** DEFAULT PREP ***										
Blank (P9J0108-BLK1)				Prepared:	10/01/19 A	nalyzed: 10	/02/19			
Chloride	ND	1.00	mg/kg we	t						

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
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 C Limits	RPD	RPD Limit	Notes
Analyte	Result	Liint	Ollits	Level	Resul	t /orek	Linits	KI D	Liiiit	Notes
Batch P9J0108 - *** DEFAULT PREP ***										
LCS (P9J0108-BS1)				Prepared:	10/01/19	Analyzed:	10/02/19			
Chloride	430	1.00	mg/kg wet	400		108	80-120			
LCS Dup (P9J0108-BSD1)				Prepared:	10/01/19	Analyzed:	10/02/19			
Chloride	423	1.00	mg/kg wet	400		106	80-120	1.71	20	
Calibration Blank (P9J0108-CCB1)				Prepared:	10/01/19	Analyzed:	10/02/19			
Chloride	0.00		mg/kg wet							
Calibration Blank (P9J0108-CCB2)				Prepared:	10/01/19	Analyzed:	10/02/19			
Chloride	0.00		mg/kg wet							
Calibration Check (P9J0108-CCV1)				Prepared:	10/01/19	Analyzed:	10/02/19			
Chloride	20.6		mg/kg	20.0		103	0-200			
Calibration Check (P9J0108-CCV2)				Prepared:	10/01/19	Analyzed:	10/02/19			
Chloride	19.3		mg/kg	20.0		96.7	0-200			
Calibration Check (P9J0108-CCV3)				Prepared:	10/01/19	Analyzed:	10/02/19			
Chloride	22.1		mg/kg	20.0		110	0-200			
Matrix Spike (P9J0108-MS1)	Sou	rce: 9I27010-	-14	Prepared:	10/01/19	Analyzed:	10/02/19			
Chloride	1360	6.10	mg/kg dry	610	728	104	80-120			
Matrix Spike (P9J0108-MS2)	Sou	rce: 9127014-	.09	Prepared:	10/01/19	Analyzed:	10/02/19			
Chloride	5000		mg/kg dry	2630	2100	110	80-120			
Matrix Spike Dup (P9J0108-MSD1)	Sou	rce: 9I27010-	.14	Prepared:	10/01/19	Analyzed	10/02/19			
Chloride	1350		mg/kg dry	610	728	102	80-120	0.711	20	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project Nu		ins - Moore ore Sweet H t Stanley					Fax: (432)	520-7701
General Ch	emistry Para Perm	ameters by ian Basin				_	lity Con	trol		
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P9J0108 - *** DEFAULT PREP *	**									
Matrix Spike Dup (P9J0108-MSD2)	Sou	rce: 9I27014-	09	Prepared: 1	10/01/19 A	nalyzed: 10	/02/19			
Chloride	5110	26.3	mg/kg dry	2630	2100	114	80-120	2.21	20	
Batch P9J0210 - *** DEFAULT PREP *	**									
Blank (P9J0210-BLK1)				Prepared &	Analyzed:	10/02/19				
Chloride	ND	1.00	mg/kg wet							
LCS (P9J0210-BS1)				Prepared &	Analyzed:	10/02/19				
Chloride	420	1.00	mg/kg wet	400		105	80-120			
LCS Dup (P9J0210-BSD1)				Prepared &	Analyzed:	10/02/19				
Chloride	439	1.00	mg/kg wet	400		110	80-120	4.46	20	
Calibration Blank (P9J0210-CCB1)				Prepared &	Analyzed:	10/02/19				
Chloride	0.00		mg/kg wet	*						
Calibration Blank (P9J0210-CCB2)				Prepared &	Analyzed:	10/02/19				
Chloride	0.00		mg/kg wet	1						
Calibration Check (P9J0210-CCV1)				Prepared &	Analyzed:	10/02/19				
Chloride	22.1		mg/kg	20.0		110	0-200			
Calibration Check (P9J0210-CCV2)				Prepared &	Analyzed:	10/02/19				
Chloride	21.5		mg/kg	20.0		107	0-200			
Calibration Check (P9J0210-CCV3)				Prepared:	10/02/19 A	nalyzed: 10	/03/19			
Chloride	21.4		mg/kg	20.0		107	0-200			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

	Reporting	Spike	Source		%REC		RPD	
Result	Limit Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Sourc	e: 9I27014-17	Prepared 8	Analyzed:	10/02/19				
1040	1.04 mg/kg dry	521	509	101	80-120			
Sourc	e: 9I27015-03	Prepared &	Analyzed:	10/02/19				
1180	1.01 mg/kg dry	505	741	86.8	80-120			
Sourc	e: 9I27014-17	Prepared &	Analyzed:	10/02/19				
969	1.04 mg/kg dry	521	509	88.2	80-120	6.87	20	
	1.04 mg/kg dry e: 9127015-03		509 x Analyzed:		80-120	6.87	20	
	Sourc 1040 Sourc 1180	Result Limit Units Source: 9127014-17 1040 1.04 mg/kg dry Source: 9127015-03	Result Limit Units Level Source: 9127014-17 Prepared & 1040 1.04 mg/kg dry 521 Source: 9127015-03 Prepared & 1180 1.01 mg/kg dry	Result Limit Units Level Result Source: 9127014-17 Prepared & Analyzed: 1040 1.04 mg/kg dry 521 509 Source: 9127015-03 Prepared & Analyzed: 1180 1.01 mg/kg dry 505 741	Result Limit Units Level Result %REC Source: 9127014-17 Prepared & Analyzed: 10/02/19 1040 1.04 mg/kg dry 521 509 101 Source: 9127015-03 Prepared & Analyzed: 10/02/19 1180 1.01 mg/kg dry 505 741 86.8	Result Limit Units Level Result %REC Limits Source: 9127014-17 Prepared & Analyzed: 10/02/19 10/02/19 1040 1.04 mg/kg dry 521 509 101 80-120 Source: 9127015-03 Prepared & Analyzed: 10/02/19 1180 1.01 mg/kg dry 505 741 86.8 80-120	Result Limit Units Level Result %REC Limits RPD Source: 9127014-17 Prepared & Analyzed: 10/02/19 1040 1.04 mg/kg dry 521 509 101 80-120 Source: 9127015-03 Prepared & Analyzed: 10/02/19 1180 1.01 mg/kg dry 505 741 86.8 80-120	Result Limit Units Level Result %REC Limits RPD Limit Source: 9127014-17 Prepared & Analyzed: 10/02/19

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
-	Result	Linit	Cints	Level	Result	Juitee	Linits	МЪ	Linit	110103
Batch P9I3004 - TX 1005										
Blank (P9I3004-BLK1)				Prepared: (09/30/19 A	nalyzed: 10	/03/19			
C6-C12	ND	25.0	mg/kg wet							-
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	151		"	140		108	70-130			
Surrogate: o-Terphenyl	85.3		"	70.0		122	70-130			
LCS (P9I3004-BS1)				Prepared: (09/30/19 A	nalyzed: 10	/03/19			
C6-C12	945	25.0	mg/kg wet	1000		94.5	75-125			
>C12-C28	1010	25.0	"	1000		101	75-125			
Surrogate: 1-Chlorooctane	126		"	140		90.3	70-130			
Surrogate: o-Terphenyl	63.0		"	70.0		90.1	70-130			
LCS Dup (P9I3004-BSD1)				Prepared: (09/30/19 A	nalyzed: 10	/03/19			
C6-C12	1150	25.0	mg/kg wet	1000		115	75-125	19.5	20	
>C12-C28	1160	25.0	"	1000		116	75-125	13.6	20	
Surrogate: 1-Chlorooctane	145		"	140		103	70-130			
Surrogate: o-Terphenyl	80.5		"	70.0		115	70-130			
Calibration Blank (P9I3004-CCB1)				Prepared: (09/30/19 A	nalyzed: 10	/03/19			
C6-C12	4.77		mg/kg wet							
>C12-C28	6.00		"							
Surrogate: 1-Chlorooctane	133		"	140		95.1	70-130			
Surrogate: o-Terphenyl	74.2		"	70.0		106	70-130			
Calibration Blank (P9I3004-CCB2)				Prepared: (09/30/19 A	nalyzed: 10	/03/19			
C6-C12	7.16		mg/kg wet	*		•				
>C12-C28	12.2		"							
Surrogate: 1-Chlorooctane	136		"	140		97.4	70-130			
Surrogate: o-Terphenyl	77.2		"	70.0		110	70-130			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project: Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: Moore Sweet Historical	
Midland TX, 79705	Project Manager: Curt Stanley	

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
-	Result	Emit	Onits	Level	Result	JULLE	Linits	KI D	Linit	itotes
Batch P913004 - TX 1005										
Calibration Check (P9I3004-CCV1)				1	09/30/19 A					
C6-C12	483	25.0	mg/kg wet	500		96.5	85-115			
>C12-C28	518	25.0	"	500		104	85-115			
Surrogate: 1-Chlorooctane	112		"	100		112	70-130			
Surrogate: o-Terphenyl	52.5		"	50.0		105	70-130			
Calibration Check (P9I3004-CCV2)				Prepared: (09/30/19 A	nalyzed: 10	/03/19			
C6-C12	487	25.0	mg/kg wet	500		97.4	85-115			
>C12-C28	519	25.0	"	500		104	85-115			
Surrogate: 1-Chlorooctane	112		"	100		112	70-130			
Surrogate: o-Terphenyl	50.8		"	50.0		102	70-130			
Calibration Check (P9I3004-CCV3)				Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	516	25.0	mg/kg wet	500		103	85-115			
>C12-C28	561	25.0	"	500		112	85-115			
Surrogate: 1-Chlorooctane	121		"	100		121	70-130			
Surrogate: o-Terphenyl	55.2		"	50.0		110	70-130			
Matrix Spike (P9I3004-MS1)	Sou	rce: 9I27014	-18	Prepared: (09/30/19 A	nalyzed: 10	/03/19			
C6-C12	1020	27.8	mg/kg dry	1110	ND	92.2	75-125			
>C12-C28	1080	27.8	"	1110	17.7	96.0	75-125			
Surrogate: 1-Chlorooctane	123		"	111		111	70-130			
Surrogate: o-Terphenyl	61.2		"	55.6		110	70-130			
Matrix Spike Dup (P9I3004-MSD1)	Sou	rce: 9127014	-18	Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	1020	27.8	mg/kg dry	1110	ND	91.4	75-125	0.911	20	
>C12-C28	1050	27.8	"	1110	17.7	93.0	75-125	3.14	20	
Surrogate: 1-Chlorooctane	119		"	111		107	70-130			
Surrogate: o-Terphenyl	62.8		"	55.6		113	70-130			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P9J0206 - TX 1005										
Blank (P9J0206-BLK1)				Prepared: ()9/30/19 Ai	nalyzed: 10)/04/19			
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	98.4		"	140		70.3	70-130			
Surrogate: o-Terphenyl	52.8		"	70.0		75.4	70-130			
LCS (P9J0206-BS1)				Prepared: ()9/30/19 Ai	nalyzed: 10)/04/19			
C6-C12	936	25.0	mg/kg wet	1000		93.6	75-125			
>C12-C28	1000	25.0	"	1000		100	75-125			
Surrogate: 1-Chlorooctane	127		"	140		90.7	70-130			
Surrogate: o-Terphenyl	50.6		"	70.0		72.3	70-130			
LCS Dup (P9J0206-BSD1)				Prepared: ()9/30/19 Ai	nalyzed: 10)/04/19			
C6-C12	954	25.0	mg/kg wet	1000		95.4	75-125	1.92	20	
>C12-C28	1020	25.0	"	1000		102	75-125	2.05	20	
Surrogate: 1-Chlorooctane	125		"	140		89.2	70-130			
Surrogate: o-Terphenyl	51.0		"	70.0		72.8	70-130			
Calibration Blank (P9J0206-CCB1)				Prepared: ()9/30/19 Ai	nalyzed: 10)/04/19			
C6-C12	10.9		mg/kg wet							
>C12-C28	11.5		"							
Surrogate: 1-Chlorooctane	95.9		"	140		68.5	70-130			S-G
Surrogate: o-Terphenyl	51.4		"	70.0		73.4	70-130			
Calibration Blank (P9J0206-CCB2)				Prepared: (09/30/19 Ai	nalyzed: 10	0/04/19			
C6-C12	5.35		mg/kg wet							
>C12-C28	13.6		"							
Surrogate: 1-Chlorooctane	102		"	140		72.6	70-130			
Surrogate: o-Terphenyl	53.9		"	70.0		77.0	70-130			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project: Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: Moore Sweet Historical	
Midland TX, 79705	Project Manager: Curt Stanley	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J0206 - TX 1005										
Calibration Check (P9J0206-CCV1)				Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	536	25.0	mg/kg wet	500		107	85-115			
>C12-C28	547	25.0	"	500		109	85-115			
Surrogate: 1-Chlorooctane	122		"	140		87.3	70-130			
Surrogate: o-Terphenyl	56.0		"	70.0		80.0	70-130			
Calibration Check (P9J0206-CCV2)				Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	544	25.0	mg/kg wet	500		109	85-115			
>C12-C28	546	25.0		500		109	85-115			
Surrogate: 1-Chlorooctane	124		"	140		88.9	70-130			
Surrogate: o-Terphenyl	55.1		"	70.0		78.7	70-130			
Matrix Spike (P9J0206-MS1)	Sou	rce: 9I27014	-23	Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	834	25.5	mg/kg dry	1020	10.5	80.7	75-125			
>C12-C28	881	25.5	"	1020	10.2	85.3	75-125			
Surrogate: 1-Chlorooctane	125		"	143		87.8	70-130			
Surrogate: o-Terphenyl	51.5		"	71.4		72.1	70-130			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
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:

Sun Barron

Date:

Brent Barron, Laboratory Director/Technical Director

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

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

<u>10/5/2</u>019

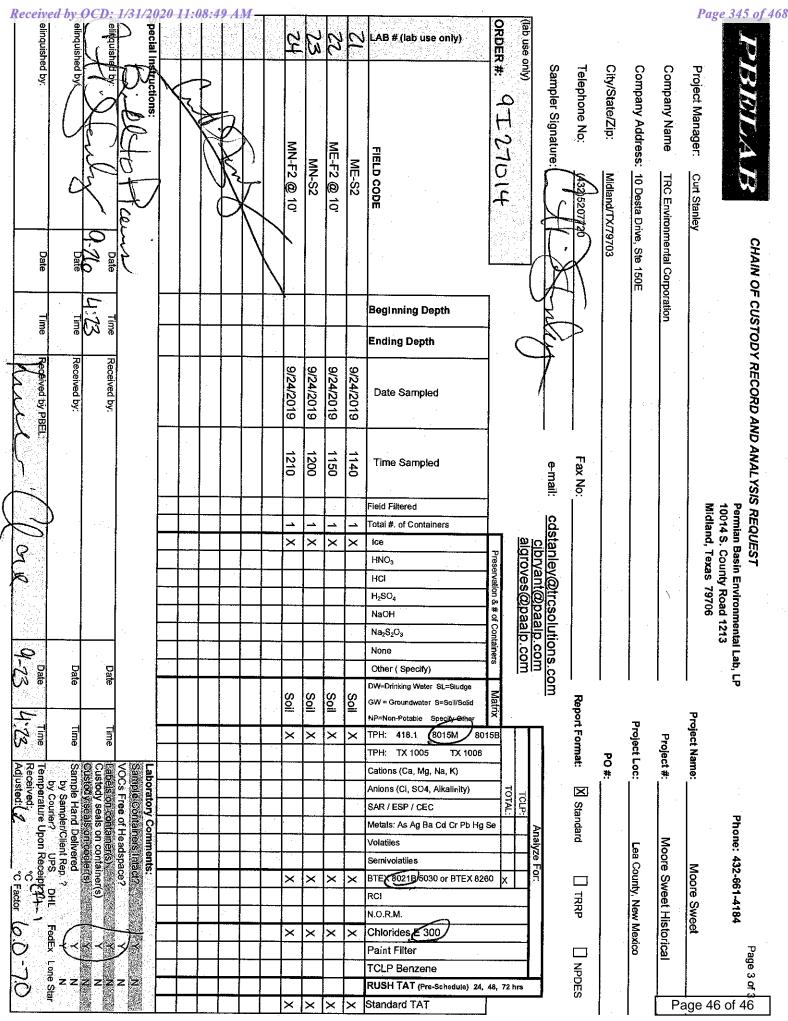
TRC Solutions- Midland, Texas	Project:	Plains - Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

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



Analytical Report

Prepared for:

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

Project: Moore Sweet Project Number: Moore Sweet Historical Location: Lea Co NM

Lab Order Number: 9I27016



NELAP/TCEQ # T104704516-18-9

Report Date: 10/05/19

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Sample #1 @ 17'	9I27016-01	Soil	09/24/19 16:00	09-26-2019 16:23
Sample #2 @ 17'	9I27016-02	Soil	09/24/19 16:15	09-26-2019 16:23
Sample #3 @ 17'	9I27016-03	Soil	09/24/19 16:30	09-26-2019 16:23
Sample #4 @ 17'	9I27016-04	Soil	09/24/19 16:45	09-26-2019 16:23
Sample #5 @ 17'	9I27016-05	Soil	09/24/19 17:00	09-26-2019 16:23

Rerun of Chloride analysis for Sample #5 @ 17' (9I27016-05) was requested by client on 10-04-19. The results of the rerun are immediately following the results of the initial sample and are denoted by "RE1"

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Sample #1 @ 17' 9I27016-01 (Soil)

		9127	010-01 (501	1)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin E	Invironmer	ital Lab, I					
Organics by GC									
Benzene	ND	0.00111	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00111	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00222	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00111	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00111	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		102 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		90.7 %	75-1	25	P912707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA	Standard Metho	ds							
Chloride	83.5	1.11	mg/kg dry	1	P9J0210	10/02/19	10/03/19	EPA 300.0	
% Moisture	10.0	0.1	%	1	P9I3005	09/30/19	09/30/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M							
C6-C12	ND	27.8	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	ND	27.8	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		88.1 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		97.7 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project Num	ect: Moore S ber: Moore S ger: Curt Star	weet Histo	orical			Fax: (432) 52	.0-7701
		Samj	ple #2 @ 17 016-02 (Soil)	7 '					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environment	tal Lab, I	P.				
Organics by GC									
Benzene	ND	0.00109	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00217	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00109	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		93.9 %	75-12	5	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		113 %	75-12	5	P912707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA /	Standard Metho	ds							
Chloride	46.4	1.09	mg/kg dry	1	P9J0210	10/02/19	10/03/19	EPA 300.0	
% Moisture	8.0	0.1	%	1	P9I3005	09/30/19	09/30/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 k	oy EPA Method 8	015M							
C6-C12	ND	27.2	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		88.7 %	70-13	0	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		103 %	70-13	0	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		5	ect: Moore S ber: Moore S ger: Curt Sta	Sweet Histo	orical			Fax: (432) 52	0-7701
			ple #3 @ 1' 016-03 (Soil						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Invironmen	tal Lab, l	P.				
Organics by GC									
Benzene	ND	0.00110	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00110	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00220	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00110	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00110	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		98.4 %	75-12	25	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		102 %	75-12	25	P912707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA /	Standard Metho	ds							
Chloride	383	1.10	mg/kg dry	1	P9J0210	10/02/19	10/03/19	EPA 300.0	
% Moisture	9.0	0.1	%	1	P9I3005	09/30/19	09/30/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 I	oy EPA Method 8	015M							
C6-C12	ND	27.5	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		104 %	70-1.	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		123 %	70-1.	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project Num	ect: Moore S ber: Moore S ger: Curt Star	weet Histo	orical			Fax: (432) 52	0-7701
			ole #4 @ 17 016-04 (Soil)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Invironment	al Lab, I	P.				
Organics by GC									
Benzene	ND	0.00111	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00111	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00222	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00111	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00111	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		115 %	75-12	5	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		94.0 %	75-12	5	P9I2707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA /	Standard Metho	ds							
Chloride	150	1.11	mg/kg dry	1	P9J0211	10/02/19	10/03/19	EPA 300.0	
% Moisture	10.0	0.1	%	1	P9I3005	09/30/19	09/30/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 k	ov EPA Method 8	015M							
C6-C12	ND	27.8	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	ND	27.8	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		87.7 %	70-13	0	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		101 %	70-13	0	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project Num	ect: Moore S ber: Moore S ger: Curt Star	weet Histo	orical			Fax: (432) 52	0-7701
		Samj	ple #5 @ 17	· · ·					
		9127	016-05 (Soil)	1					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environment	al Lab, I	L.P.				
Organics by GC									
Benzene	ND	0.00109	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00217	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00109	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		104 %	75-12	5	P912707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		87.1 %	75-12	5	P912707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA	/ Standard Metho	ds							
Chloride	801	1.09	mg/kg dry	1	P9J0211	10/02/19	10/03/19	EPA 300.0	
% Moisture	8.0	0.1	%	1	P9I3005	09/30/19	09/30/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M							
C6-C12	ND	27.2	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		89.7 %	70-13	0	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		103 %	70-13	0	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Proje Project Numb roject Manag		Sweet Histo	orical			Fax: (432) 5	20-7701
		-	ole #5 @ 1 5-05RE1 (\$						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Permi	an Basin E	nvironme	ntal Lab, I	P .				
General Chemistry Parameters by EPA	A / Standard Methods								
Chloride	1040	1.09	mg/kg dry	1	P9J0211	10/02/19	10/05/19	EPA 300.0	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9I2707 - General Preparation (G	C)									
Blank (P9I2707-BLK1)				Prepared: 0	9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00200	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	0.128		"	0.120		106	75-125			
Surrogate: 1,4-Difluorobenzene	0.105		"	0.120		87.6	75-125			
LCS (P9I2707-BS1)				Prepared: 0)9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.0886	0.00100	mg/kg wet	0.100		88.6	80-120			
Toluene	0.102	0.00100	"	0.100		102	80-120			
Ethylbenzene	0.103	0.00200	"	0.100		103	80-120			
Xylene (p/m)	0.189	0.00100	"	0.200		94.5	80-120			
Xylene (o)	0.0941	0.00100	"	0.100		94.1	80-120			
Surrogate: 4-Bromofluorobenzene	0.126		"	0.120		105	75-125			
Surrogate: 1,4-Difluorobenzene	0.132		"	0.120		110	75-125			
LCS Dup (P912707-BSD1)				Prepared: 0)9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.0900	0.00100	mg/kg wet	0.100		90.0	80-120	1.47	20	
Toluene	0.110	0.00100	"	0.100		110	80-120	7.37	20	
Ethylbenzene	0.115	0.00200	"	0.100		115	80-120	11.0	20	
Xylene (p/m)	0.204	0.00100	"	0.200		102	80-120	7.54	20	
Xylene (o)	0.104	0.00100	"	0.100		104	80-120	10.2	20	
Surrogate: 4-Bromofluorobenzene	0.136		"	0.120		113	75-125			
Surrogate: 1,4-Difluorobenzene	0.141		"	0.120		118	75-125			
Calibration Blank (P9I2707-CCB1)				Prepared: 0)9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		102	75-125			
Surrogate: 1,4-Difluorobenzene	0.109		"	0.120		91.0	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

A	D. I	Reporting	I.L. 'r	Spike	Source	0/ DEC	%REC	DPD	RPD	NT (
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9I2707 - General Preparation (GC)										
Calibration Blank (P9I2707-CCB2)				Prepared: (9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.121		"	0.120		101	75-125			
Surrogate: 1,4-Difluorobenzene	0.105		"	0.120		87.6	75-125			
Calibration Blank (P9I2707-CCB3)				Prepared: ()9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.131		"	0.120		109	75-125			
Surrogate: 1,4-Difluorobenzene	0.114		"	0.120		94.7	75-125			
Calibration Check (P9I2707-CCV1)				Prepared: ()9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.0950	0.00100	mg/kg wet				80-120			
Toluene	0.114	0.00100	"				80-120			
Ethylbenzene	0.124	0.00200	"				80-120			
Xylene (p/m)	0.218	0.00100	"				80-120			
Xylene (o)	0.120	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	0.140		"	0.120		116	75-125			
Surrogate: 1,4-Difluorobenzene	0.144		"	0.120		120	75-125			
Calibration Check (P9I2707-CCV2)				Prepared: ()9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.0972	0.00100	mg/kg wet				80-120			
Toluene	0.110	0.00100	"				80-120			
Ethylbenzene	0.112	0.00200	"				80-120			
Xylene (p/m)	0.203	0.00100	"				80-120			
Xylene (o)	0.113	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	0.131		"	0.120		109	75-125			
Surrogate: 1,4-Difluorobenzene	0.136		"	0.120		113	75-125			

Permian Basin Environmental Lab, L.P.

(432) 520-7701

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
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 P9I2707 - General Preparation (GC)										
Calibration Check (P9I2707-CCV3)				Prepared: ()9/27/19 A	nalyzed: 09	/28/19			
Benzene	0.107	0.00100	mg/kg wet				80-120			
Toluene	0.115	0.00100	"				80-120			
Ethylbenzene	0.110	0.00200	"				80-120			
Xylene (p/m)	0.206	0.00100	"				80-120			
Xylene (o)	0.116	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	0.119		"	0.120		99.3	75-125			
Surrogate: 1,4-Difluorobenzene	0.139		"	0.120		116	75-125			
Matrix Spike (P9I2707-MS1)	-20	Prepared: 09/27/19 Analyzed: 09/28/19								
Benzene	0.0471	0.00108	mg/kg dry	0.108	ND	43.8	80-120			QM-0:
Toluene	0.0531	0.00108	"	0.108	ND	49.4	80-120			QM-03
Ethylbenzene	0.0595	0.00215	"	0.108	ND	55.3	80-120			QM-03
Xylene (p/m)	0.107	0.00108	"	0.215	ND	49.6	80-120			QM-03
Xylene (o)	0.0521	0.00108	"	0.108	ND	48.4	80-120			QM-0:
Surrogate: 1,4-Difluorobenzene	0.150		"	0.129		116	75-125			
Surrogate: 4-Bromofluorobenzene	0.128		"	0.129		99.3	75-125			
Matrix Spike Dup (P9I2707-MSD1)	Sou	rce: 9I27014-	-20	Prepared: (09/27/19 A	nalyzed: 09	/28/19			
Benzene	0.0645	0.00108	mg/kg dry	0.108	ND	60.0	80-120	31.3	20	QM-03
Toluene	0.0737	0.00108	"	0.108	ND	68.6	80-120	32.5	20	QM-03
Ethylbenzene	0.0798	0.00215	"	0.108	ND	74.2	80-120	29.2	20	QM-03
Xylene (p/m)	0.117	0.00108	"	0.215	ND	54.3	80-120	9.00	20	QM-0:
Xylene (o)	0.0564	0.00108	"	0.108	ND	52.4	80-120	7.99	20	QM-0:
Surrogate: 4-Bromofluorobenzene	0.146		"	0.129		113	75-125			

0.129

0.151

Permian Basin Environmental Lab, L.P.

Surrogate: 1,4-Difluorobenzene

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

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75-125

CRC Solutions- Midland, TexasProject:Moore Sweet0 Desta Dr STE 150EProject Number:Moore Sweet HistoricalMidland TX, 79705Project Manager:Curt Stanley									Fax: (432) 520-7701		
General C	Chemistry Para Perm	imeters by ian Basin					lity Con	trol			
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch P9I3005 - *** DEFAULT PREP	***										
Blank (P9I3005-BLK1)				Prepared &	Analyzed:	09/30/19					
% Moisture	ND	0.1	%								
Duplicate (P9I3005-DUP2)	Sou	rce: 9I27030-	-02	Prepared & Analyzed: 09/30/19							
% Moisture	19.0	0.1	%		19.0			0.00	20		
Batch P9J0210 - *** DEFAULT PREP	***			D 10		10/02/10					
Blank (P9J0210-BLK1) Chloride	ND	1.00	mg/kg wet	Prepared &	Analyzed:	10/02/19					
	ND	1.00	iiig/kg wet								
LCS (P9J0210-BS1)				Prepared &	Analyzed:						
Chloride	420	1.00	mg/kg wet	400		105	80-120				
LCS Dup (P9J0210-BSD1)				Prepared &	Analyzed:	10/02/19					
Chloride	439	1.00	mg/kg wet	400		110	80-120	4.46	20		
Calibration Blank (P9J0210-CCB1)				Prepared &	Analyzed:	10/02/19					
Chloride	0.00		mg/kg wet								
Calibration Blank (P9J0210-CCB2)				Prepared &	Analyzad	10/02/19					
Chloride	0.00		mg/kg wet	i reparcu a	anaryzeu.	10/02/17					
			0 0								
Calibration Check (P9J0210-CCV1)	22.1			Prepared &	Analyzed:		0.200				
Chloride	22.1		mg/kg	20.0		110	0-200				
Calibration Check (P9J0210-CCV2)				Prepared &	Analyzed:	10/02/19					
Chloride	21.5		mg/kg	20.0		107	0-200				

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas		Р	roject: Mo	ore Sweet					Fax: (432)	520-7701
10 Desta Dr STE 150E		Project N	umber: Mo	ore Sweet H	listorical					
Midland TX, 79705		Project Ma	anager: Cur	t Stanley						
General Ch	emistry Parai	neters by	y EPA / S	Standard	l Method	ls - Qua	lity Con	trol		
	Permi	an Basin	Environ	imental l	Lab, L.P	•				
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J0210 - *** DEFAULT PREP *	**									
Calibration Check (P9J0210-CCV3)				Prepared:	10/02/19 A	nalyzed: 10	/03/19			
Chloride	21.4		mg/kg	20.0		107	0-200			
Matrix Spike (P9J0210-MS1)	Sour	ce: 9I27014-	-17	Prepared &	analyzed:	10/02/19				
Chloride	1040	1.04	mg/kg dry	521	509	101	80-120			
Matrix Spike (P9J0210-MS2)	Sour	ce: 9I27015-	-03	Prepared &	analyzed:	10/02/19				
Chloride	1180	1.01	mg/kg dry	505	741	86.8	80-120			
Matrix Spike Dup (P9J0210-MSD1)	Sour	ce: 9I27014-	-17	Prepared &	2 Analyzed:	10/02/19				
Chloride	969	1.04	mg/kg dry	521	509	88.2	80-120	6.87	20	
Matrix Spike Dup (P9J0210-MSD2)	Sour	ce: 9127015-	-03	Prepared 8	د Analyzed	10/02/19				
Chloride	1230	1.01	mg/kg dry	505	741	96.1	80-120	3.88	20	
Batch P9J0211 - *** DEFAULT PREP *	**									
Blank (P9J0211-BLK1)				Prepared:	10/02/19 A	nalyzed: 10	/03/19			
Chloride	ND	1.00	mg/kg wet							
LCS (P9J0211-BS1)				Prepared:	10/02/19 A	nalyzed: 10	/03/19			
Chloride	438	1.00	mg/kg wet	400		109	80-120			
LCS Dup (P9J0211-BSD1)				Prepared:	10/02/19 A	nalyzed: 10	/03/19			
Chloride	428	1.00	mg/kg wet	400		107	80-120	2.27	20	

Calibration Blank (P9J0211-CCB1) Prepared: 10/02/19 Analyzed: 10/03/19

Chloride 0.00 mg/kg wet

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

		р. ([.]		с 1	G		0/DEC		DDD	
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result		%REC Limits	RPD	RPD Limit	Notes
	rtebult	Linin	onno	Lever	itebuit	, orale	Dillito	iu b	Linny	110100
Batch P9J0211 - *** DEFAULT PREP ***										
Calibration Blank (P9J0211-CCB2)				Prepared:	10/02/19	Analyzed:	10/03/19			
Chloride	0.00		mg/kg wet							
Calibration Check (P9J0211-CCV1)				Prepared:	10/02/19	Analyzed:	10/03/19			
Chloride	21.4		mg/kg	20.0		107	0-200			
Calibration Check (P9J0211-CCV2)				Prepared:	10/02/19	Analyzed:	10/03/19			
Chloride	21.5		mg/kg	20.0		107	0-200			
Calibration Check (P9J0211-CCV3)				Prepared:	10/02/19	Analyzed:	10/03/19			
Chloride	19.7		mg/kg	20.0		98.3	0-200			
Matrix Spike (P9J0211-MS1)	Sour	ce: 9127017-	-03	Prepared:	10/02/19	Analyzed:	10/03/19			
Chloride	1380	5.10	mg/kg dry	510	962	81.9	80-120			
Matrix Spike (P9J0211-MS2)	Sour	ce: 9127020-	-01	Prepared:	10/02/19	Analyzed:	10/03/19			
Chloride	4030	12.5	mg/kg dry	1250	2900	90.1	80-120			
Matrix Spike Dup (P9J0211-MSD1)	Sour	ce: 9I27017-	.03	Prepared:	10/02/19	Analyzed:	10/03/19			
Chloride	1390	5.10	mg/kg dry	510	962	83.6	80-120	0.623	20	
Matrix Spike Dup (P9J0211-MSD2)	Sour	ce: 9127020-	-01	Prepared:	Prepared: 10/02/19 Analyzed: 10/03/19					
Chloride	4040	12.5	mg/kg dry	1250	2900	90.6	80-120	0.171	20	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J0206 - TX 1005										
Blank (P9J0206-BLK1)				Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	98.4		"	140		70.3	70-130			
Surrogate: o-Terphenyl	52.8		"	70.0		75.4	70-130			
LCS (P9J0206-BS1)				Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	936	25.0	mg/kg wet	1000		93.6	75-125			
>C12-C28	1000	25.0	"	1000		100	75-125			
Surrogate: 1-Chlorooctane	127		"	140		90.7	70-130			
Surrogate: o-Terphenyl	50.6		"	70.0		72.3	70-130			
LCS Dup (P9J0206-BSD1)				Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	954	25.0	mg/kg wet	1000		95.4	75-125	1.92	20	
>C12-C28	1020	25.0	"	1000		102	75-125	2.05	20	
Surrogate: 1-Chlorooctane	125		"	140		89.2	70-130			
Surrogate: o-Terphenyl	51.0		"	70.0		72.8	70-130			
Calibration Blank (P9J0206-CCB1)				Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	10.9		mg/kg wet							
>C12-C28	11.5		"							
Surrogate: 1-Chlorooctane	95.9		"	140		68.5	70-130			S-0
Surrogate: o-Terphenyl	51.4		"	70.0		73.4	70-130			
Calibration Blank (P9J0206-CCB2)				Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	5.35		mg/kg wet							
>C12-C28	13.6		"							
Surrogate: 1-Chlorooctane	102		"	140		72.6	70-130			
Surrogate: o-Terphenyl	53.9		"	70.0		77.0	70-130			

Permian Basin Environmental Lab, L.P.

520-7701

TRC Solutions- Midland, Texas	Project: Moore Sweet	Fax: (432) 5
10 Desta Dr STE 150E	Project Number: Moore Sweet Historical	
Midland TX, 79705	Project Manager: Curt Stanley	

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

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J0206 - TX 1005										
Calibration Check (P9J0206-CCV1)				Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	536	25.0	mg/kg wet	500		107	85-115			
>C12-C28	547	25.0		500		109	85-115			
Surrogate: 1-Chlorooctane	122		"	140		87.3	70-130			
Surrogate: o-Terphenyl	56.0		"	70.0		80.0	70-130			
Calibration Check (P9J0206-CCV2)				Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	544	25.0	mg/kg wet	500		109	85-115			
>C12-C28	546	25.0	"	500		109	85-115			
Surrogate: 1-Chlorooctane	124		"	140		88.9	70-130			
Surrogate: o-Terphenyl	55.1		"	70.0		78.7	70-130			
Matrix Spike (P9J0206-MS1)	Sou	rce: 9I27014	-23	Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	834	25.5	mg/kg dry	1020	10.5	80.7	75-125			
>C12-C28	881	25.5	"	1020	10.2	85.3	75-125			
Surrogate: 1-Chlorooctane	125		"	143		87.8	70-130			
Surrogate: o-Terphenyl	51.5		"	71.4		72.1	70-130			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Notes and Definitions

0.00		TTL 1 / 11 1	1.1 6.4
S-GC	Surrogate recovery outside of control limits.	The data was accepted based on v	alid recovery of the remaining surrogate.

- 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

Report Approved By:

Dup Duplicate

Sun Barron

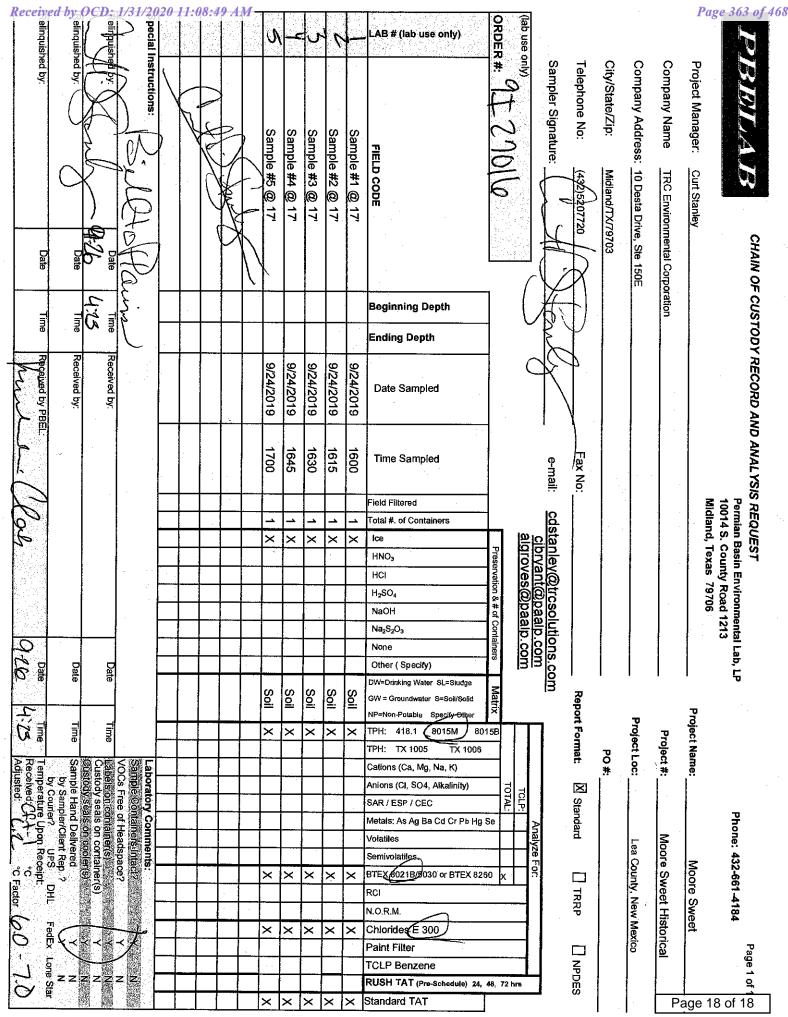
Date: 10/5/2019

Brent Barron, Laboratory Director/Technical Director

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Permian Basin Environmental Lab, L.P.



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



Analytical Report

Prepared for:

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

Project: Moore Sweet Project Number: Moore Sweet Historical Location: Lea Co NM

Lab Order Number: 9I27015



NELAP/TCEQ # T104704516-18-9

Report Date: 10/04/19

TRC Solutions- Midland, Texas	Project: Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: Moore Sweet Historical	
Midland TX, 79705	Project Manager: Curt Stanley	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
M Ramp ES2	9I27015-01	Soil	09/24/19 13:00	09-26-2019 16:23
M Ramp E FL @ 10'	9127015-02	Soil	09/24/19 13:10	09-26-2019 16:23
M Ramp ES3	9127015-03	Soil	09/24/19 13:20	09-26-2019 16:23
M Ramp WS3	9I27015-04	Soil	09/24/19 13:30	09-26-2019 16:23
M Ramp WS2	9127015-05	Soil	09/24/19 13:40	09-26-2019 16:23
M Ramp W FL @ 10'	9127015-06	Soil	09/24/19 13:50	09-26-2019 16:23
M Ramp Floor #1 Comp	9127015-07	Soil	09/24/19 14:00	09-26-2019 16:23
M Ramp Floor #2 Comp	9127015-08	Soil	09/24/19 14:10	09-26-2019 16:23
M Ramp Floor #3 Comp	9I27015-09	Soil	09/24/19 14:20	09-26-2019 16:23

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

M Ramp ES2 9I27015-01 (Soil)

		9127	015-01 (501	1)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
	Perr	nian Basin F	Invironmer	ıtal Lab, l	L .P.				
Organics by GC									
Benzene	ND	0.00104	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00208	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00104	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		98.2 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		88.8 %	75-1	25	P912707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA /	Standard Metho	ds							
Chloride	31.2	1.04	mg/kg dry	1	P9J0210	10/02/19	10/02/19	EPA 300.0	
% Moisture	4.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 I	by EPA Method 8	015M							
C6-C12	ND	26.0	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		99.2 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		111 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project: Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley								
			np E FL @ 015-02 (Soil							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
	Perr	nian Basin F	Environmen	tal Lab, I	P .					
Organics by GC										
Benzene	ND	0.00106	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B		
Toluene	ND	0.00106	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B		
Ethylbenzene	ND	0.00213	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B		
Xylene (p/m)	ND	0.00106	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B		
Xylene (o)	ND	0.00106	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B		
Surrogate: 1,4-Difluorobenzene		90.8 %	75-1.	25	P912707	09/27/19	09/28/19	EPA 8021B		
Surrogate: 4-Bromofluorobenzene		116 %	75-1.	25	P9I2707	09/27/19	09/28/19	EPA 8021B		
General Chemistry Parameters by EPA	/ Standard Metho	ds								
Chloride	36.3	1.06	mg/kg dry	1	P9J0210	10/02/19	10/02/19	EPA 300.0		
% Moisture	6.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216		
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M								
C6-C12	ND	26.6	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M		
>C12-C28	ND	26.6	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M		
>C28-C35	ND	26.6	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M		
Surrogate: 1-Chlorooctane		93.6 %	70-1.	30	P9J0206	09/30/19	10/04/19	TPH 8015M		
Surrogate: o-Terphenyl		110 %	70-1.	30	P9J0206	09/30/19	10/04/19	TPH 8015M		
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc		

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Proj Project Num Project Mana		Sweet Histo	orical			Fax: (432) 52	.0-7701
			Ramp ES3 015-03 (Soi						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin H	Environmer	ıtal Lab, I	P.				
Organics by GC									
Benzene	ND	0.00101	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00101	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00202	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00101	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00101	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		116 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		102 %	75-1	25	P912707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA	Standard Metho	ds							
Chloride	741	1.01	mg/kg dry	1	P9J0210	10/02/19	10/02/19	EPA 300.0	
% Moisture	1.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M							
C6-C12	ND	25.3	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	ND	25.3	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	25.3	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		114 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		118 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	25.3	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Proj Project Num Project Mana		Sweet Histo	orical			Fax: (432) 52	20-7701
			Ramp WS3 015-04 (Soil						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin F	Environmen	tal Lab, I	P.				
Organics by GC									
Benzene	ND	0.00101	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00101	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00202	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00101	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00101	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		113 %	75-1.	25	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		95.2 %	75-1.	25	P912707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA	Standard Metho	ds							
Chloride	304	1.01	mg/kg dry	1	P9J0210	10/02/19	10/03/19	EPA 300.0	
% Moisture	1.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M							
C6-C12	ND	25.3	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	ND	25.3	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	25.3	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		99.9 %	70-1.	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		105 %	70-1.	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	25.3	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705	Project: Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley							Fax: (432) 520-7701	
		MI	Ramp WS2	2					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	1ian Basin E	nvironmen	ital Lab, I	P.				
Organics by GC									
Benzene	ND	0.00106	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00106	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00213	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00106	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		102 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		111 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EP	A / Standard Method	ls							
Chloride	9.69	1.06	mg/kg dry	1	P9J0210	10/02/19	10/03/19	EPA 300.0	
% Moisture	6.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C3	35 by EPA Method 80	015M							
C6-C12	ND	26.6	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C12-C28	136	26.6	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: 1-Chlorooctane		110 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Surrogate: o-Terphenyl		124 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	136	26.6	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project: Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley								
			p W FL @ 015-06 (Soil	·						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
	Perr	nian Basin F	Invironmen	tal Lab, I	P.					
Organics by GC										
Benzene	ND	0.00106	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B		
Toluene	ND	0.00106	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B		
Ethylbenzene	ND	0.00213	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B		
Xylene (p/m)	ND	0.00106	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B		
Xylene (o)	ND	0.00106	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B		
Surrogate: 1,4-Difluorobenzene		93.9 %	75-1	25	P912707	09/27/19	09/28/19	EPA 8021B		
Surrogate: 4-Bromofluorobenzene		117 %	75-1.	25	P912707	09/27/19	09/28/19	EPA 8021B		
General Chemistry Parameters by EPA	/ Standard Metho	ds								
Chloride	34.5	1.06	mg/kg dry	1	P9J0210	10/02/19	10/03/19	EPA 300.0		
% Moisture	6.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216		
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M								
C6-C12	ND	26.6	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M		
>C12-C28	ND	26.6	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M		
>C28-C35	ND	26.6	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M		
Surrogate: 1-Chlorooctane		86.1 %	70-1.	30	P9J0206	09/30/19	10/04/19	TPH 8015M		
Surrogate: o-Terphenyl		99.3 %	70-1.	30	P9J0206	09/30/19	10/04/19	TPH 8015M		
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc		

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project: Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley									
		•	Floor #1 015-07 (Soi	•							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
	Pern	nian Basin F	Environmer	ıtal Lab, I	P.						
Organics by GC											
Benzene	ND	0.00111	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Toluene	ND	0.00111	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Ethylbenzene	ND	0.00222	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Xylene (p/m)	ND	0.00111	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Xylene (o)	ND	0.00111	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Surrogate: 1,4-Difluorobenzene		90.9 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B			
Surrogate: 4-Bromofluorobenzene		119 %	75-1	25	P912707	09/27/19	09/28/19	EPA 8021B			
General Chemistry Parameters by EP	A / Standard Metho	ds									
Chloride	165	1.11	mg/kg dry	1	P9J0210	10/02/19	10/03/19	EPA 300.0			
% Moisture	10.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216			
Total Petroleum Hydrocarbons C6-C3	35 by EPA Method 8	015M									
C6-C12	ND	27.8	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M			
>C12-C28	108	27.8	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M			
>C28-C35	ND	27.8	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M			
Surrogate: 1-Chlorooctane		90.3 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M			
Surrogate: o-Terphenyl		104 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M			
Total Petroleum Hydrocarbon C6-C35	108	27.8	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc			

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project: Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley									
		•	Floor #2 (015-08 (Soi	•							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
	Pern	nian Basin F	Environmen	ital Lab, I	P.						
Organics by GC											
Benzene	ND	0.00105	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Toluene	ND	0.00105	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Ethylbenzene	ND	0.00211	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Xylene (p/m)	ND	0.00105	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Xylene (o)	ND	0.00105	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Surrogate: 1,4-Difluorobenzene		84.5 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B			
Surrogate: 4-Bromofluorobenzene		103 %	75-1	25	P912707	09/27/19	09/28/19	EPA 8021B			
General Chemistry Parameters by EP	A / Standard Metho	ds									
Chloride	288	1.05	mg/kg dry	1	P9J0210	10/02/19	10/03/19	EPA 300.0			
% Moisture	5.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216			
Total Petroleum Hydrocarbons C6-C3	35 by EPA Method 8	015M									
C6-C12	ND	26.3	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M			
>C12-C28	179	26.3	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M			
>C28-C35	ND	26.3	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M			
Surrogate: 1-Chlorooctane		101 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M			
Surrogate: o-Terphenyl		115 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M			
Total Petroleum Hydrocarbon C6-C35	179	26.3	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc			

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project: Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley									
		M Ramp	Floor #3 (015-09 (Soi	Comp							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
	Pern	nian Basin F	Environmer	ıtal Lab, I							
Organics by GC											
Benzene	ND	0.00102	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Toluene	ND	0.00102	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Ethylbenzene	ND	0.00204	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Xylene (p/m)	ND	0.00102	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Xylene (o)	ND	0.00102	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B			
Surrogate: 4-Bromofluorobenzene		101 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B			
Surrogate: 1,4-Difluorobenzene		86.0 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B			
General Chemistry Parameters by EF	A / Standard Metho	ds									
Chloride	149	1.02	mg/kg dry	1	P9J0210	10/02/19	10/03/19	EPA 300.0			
% Moisture	2.0	0.1	%	1	P9I2901	09/29/19	09/29/19	ASTM D2216			
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 8	015M									
C6-C12	ND	25.5	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M			
>C12-C28	117	25.5	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M			
>C28-C35	ND	25.5	mg/kg dry	1	P9J0206	09/30/19	10/04/19	TPH 8015M			
Surrogate: 1-Chlorooctane		89.8 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M			
Surrogate: o-Terphenyl		98.3 %	70-1	30	P9J0206	09/30/19	10/04/19	TPH 8015M			
Total Petroleum Hydrocarbon C6-C35	117	25.5	mg/kg dry	1	[CALC]	09/30/19	10/04/19	calc			

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

Amelada	D L	Reporting	T In 't	Spike	Source	0/ DEC	%REC	DPD	RPD	NT /
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P912707 - General Preparation (G	C)									
Blank (P9I2707-BLK1)				Prepared: 0	9/27/19 Ar	nalyzed: 09	/28/19			
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00200	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	0.105		"	0.120		87.6	75-125			
Surrogate: 4-Bromofluorobenzene	0.128		"	0.120		106	75-125			
LCS (P9I2707-BS1)				Prepared: 0	9/27/19 Ar	nalyzed: 09	/28/19			
Benzene	0.0886	0.00100	mg/kg wet	0.100		88.6	80-120			
Toluene	0.102	0.00100	"	0.100		102	80-120			
Ethylbenzene	0.103	0.00200	"	0.100		103	80-120			
Xylene (p/m)	0.189	0.00100	"	0.200		94.5	80-120			
Xylene (o)	0.0941	0.00100	"	0.100		94.1	80-120			
Surrogate: 4-Bromofluorobenzene	0.126		"	0.120		105	75-125			
Surrogate: 1,4-Difluorobenzene	0.132		"	0.120		110	75-125			
LCS Dup (P9I2707-BSD1)				Prepared: 0	9/27/19 Ar	nalyzed: 09	/28/19			
Benzene	0.0900	0.00100	mg/kg wet	0.100		90.0	80-120	1.47	20	
Toluene	0.110	0.00100	"	0.100		110	80-120	7.37	20	
Ethylbenzene	0.115	0.00200	"	0.100		115	80-120	11.0	20	
Xylene (p/m)	0.204	0.00100	"	0.200		102	80-120	7.54	20	
Xylene (o)	0.104	0.00100	"	0.100		104	80-120	10.2	20	
Surrogate: 1,4-Difluorobenzene	0.141		"	0.120		118	75-125			
Surrogate: 4-Bromofluorobenzene	0.136		"	0.120		113	75-125			
Calibration Blank (P9I2707-CCB1)				Prepared: 0	9/27/19 Ar	nalyzed: 09	/28/19			
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	0.109		"	0.120		91.0	75-125			
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		102	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

A	D14	Reporting	T	Spike	Source	0/DEC	%REC	DDD	RPD	NI-4
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9I2707 - General Preparation (GC)										
Calibration Blank (P9I2707-CCB2)				Prepared: ()9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	0.105		"	0.120		87.6	75-125			
Surrogate: 4-Bromofluorobenzene	0.121		"	0.120		101	75-125			
Calibration Blank (P9I2707-CCB3)				Prepared: ()9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	0.114		"	0.120		94.7	75-125			
Surrogate: 4-Bromofluorobenzene	0.131		"	0.120		109	75-125			
Calibration Check (P9I2707-CCV1)				Prepared: ()9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.0950	0.00100	mg/kg wet				80-120			
Toluene	0.114	0.00100	"				80-120			
Ethylbenzene	0.124	0.00200	"				80-120			
Xylene (p/m)	0.218	0.00100	"				80-120			
Xylene (o)	0.120	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	0.140		"	0.120		116	75-125			
Surrogate: 1,4-Difluorobenzene	0.144		"	0.120		120	75-125			
Calibration Check (P9I2707-CCV2)				Prepared: ()9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.0972	0.00100	mg/kg wet				80-120			
Toluene	0.110	0.00100	"				80-120			
Ethylbenzene	0.112	0.00200	"				80-120			
Xylene (p/m)	0.203	0.00100	"				80-120			
Xylene (o)	0.113	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	0.131		"	0.120		109	75-125			
Surrogate: 1,4-Difluorobenzene	0.136		"	0.120		113	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P9I2707 - General Preparation (GC)										
Calibration Check (P9I2707-CCV3)				Prepared: ()9/27/19 A	nalyzed: 09	/28/19			
Benzene	0.107	0.00100	mg/kg wet				80-120			
Toluene	0.115	0.00100	"				80-120			
Ethylbenzene	0.110	0.00200	"				80-120			
Xylene (p/m)	0.206	0.00100	"				80-120			
Xylene (o)	0.116	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	0.119		"	0.120		99.3	75-125			
Surrogate: 1,4-Difluorobenzene	0.139		"	0.120		116	75-125			
Matrix Spike (P9I2707-MS1)	Sou	rce: 9I27014	-20	Prepared: ()9/27/19 A	nalyzed: 09	/28/19			
Benzene	0.0471	0.00108	mg/kg dry	0.108	ND	43.8	80-120			QM-0
Toluene	0.0531	0.00108	"	0.108	ND	49.4	80-120			QM-0
Ethylbenzene	0.0595	0.00215	"	0.108	ND	55.3	80-120			QM-0
Xylene (p/m)	0.107	0.00108	"	0.215	ND	49.6	80-120			QM-0
Xylene (o)	0.0521	0.00108	"	0.108	ND	48.4	80-120			QM-0
Surrogate: 4-Bromofluorobenzene	0.128		"	0.129		<i>99.3</i>	75-125			
Surrogate: 1,4-Difluorobenzene	0.150		"	0.129		116	75-125			
Matrix Spike Dup (P9I2707-MSD1)	Sou	rce: 9I27014	-20	Prepared: ()9/27/19 A	nalyzed: 09	/28/19			
Benzene	0.0645	0.00108	mg/kg dry	0.108	ND	60.0	80-120	31.3	20	QM-0
Toluene	0.0737	0.00108	"	0.108	ND	68.6	80-120	32.5	20	QM-0
Ethylbenzene	0.0798	0.00215	"	0.108	ND	74.2	80-120	29.2	20	QM-0
Xylene (p/m)	0.117	0.00108	"	0.215	ND	54.3	80-120	9.00	20	QM-0
Xylene (o)	0.0564	0.00108	"	0.108	ND	52.4	80-120	7.99	20	QM-0
Surrogate: 4-Bromofluorobenzene	0.146		"	0.129		113	75-125			
Surrogate: 1,4-Difluorobenzene	0.151		"	0.129		117	75-125			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	
Conoral Cha	mistry Davamatars by FD	Standard Mathada Quality	Control

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 P9I2901 - *** DEFAULT PREP ***										
Blank (P9I2901-BLK2)				Prepared &	Analyzed:	09/29/19				
% Moisture	ND	0.1	%							
Duplicate (P9I2901-DUP1)	Sour	·ce: 9127004-0	5	Prepared 8	Analyzed:	09/29/19				
% Moisture	8.0	0.1	%		8.0			0.00	20	
Duplicate (P9I2901-DUP2)	Sour	·ce: 9127005-2	4	Prepared &	Analyzed:	09/29/19				
% Moisture	5.0	0.1	%	*	5.0			0.00	20	
Duplicate (P9I2901-DUP3)	Sour	·ce: 9127007-0	07	Prepared &	Analyzed:	09/29/19				
% Moisture	2.0	0.1	%		3.0			40.0	20	
Duplicate (P9I2901-DUP4)	Sour	·ce: 9127009-1	4	Prepared 8	Analyzed:	09/29/19				
% Moisture	14.0	0.1	%		14.0			0.00	20	
Duplicate (P9I2901-DUP5)	Sour	·ce: 9127011-0	5	Prepared &	Analyzed:	09/29/19				
% Moisture	7.0	0.1	%		6.0			15.4	20	
Duplicate (P9I2901-DUP6)	Sour	-ce: 9I27014-1	1	Prepared &	Analyzed:	09/29/19				
% Moisture	8.0	0.1	%	1	7.0			13.3	20	
Duplicate (P9I2901-DUP7)	Sour	·ce: 9127022-0)1	Prepared &	Analyzed:	09/29/19				
% Moisture	12.0	0.1	%	*	19.0			45.2	20	
Batch P9J0210 - *** DEFAULT PREP ***										
Blank (P9J0210-BLK1)				Prepared &	Analyzed:	10/02/19				
Chloride	ND	1.00	mg/kg we							

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
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 P9J0210 - *** DEFAULT PREP ***										
LCS (P9J0210-BS1)				Prepared &	& Analyzed	: 10/02/19				
Chloride	420	1.00	mg/kg wet	400		105	80-120			
LCS Dup (P9J0210-BSD1)				Prepared &	& Analyzed	: 10/02/19				
Chloride	439	1.00	mg/kg wet	400		110	80-120	4.46	20	
Calibration Blank (P9J0210-CCB1)				Prepared &	& Analyzed	: 10/02/19				
Chloride	0.00		mg/kg wet							
Calibration Blank (P9J0210-CCB2)				Prepared &	k Analyzed	: 10/02/19				
Chloride	0.00		mg/kg wet							
Calibration Check (P9J0210-CCV1)				Prepared &	k Analyzed	: 10/02/19				
Chloride	22.1		mg/kg	20.0		110	0-200			
Calibration Check (P9J0210-CCV2)				Prepared &	& Analyzed	: 10/02/19				
Chloride	21.5		mg/kg	20.0		107	0-200			
Calibration Check (P9J0210-CCV3)				Prepared:	10/02/19 A	nalyzed: 10	/03/19			
Chloride	21.4		mg/kg	20.0		107	0-200			
Matrix Spike (P9J0210-MS1)	Sou	rce: 9I27014	-17	Prepared &	& Analyzed	: 10/02/19				
Chloride	1040	1.04	mg/kg dry	521	509	101	80-120			
Matrix Spike (P9J0210-MS2)	Sou	rce: 9I27015	-03	Prepared &	k Analyzed	: 10/02/19				
Chloride	1180	1.01	mg/kg dry	505	741	86.8	80-120			
Matrix Spike Dup (P9J0210-MSD1)	Sou	rce: 9I27014	-17	Prepared &	k Analyzed	: 10/02/19				
Chloride	969	1.04	mg/kg dry	521	509	88.2	80-120	6.87	20	

Permian Basin Environmental Lab, L.P.

10 Desta Dr STE 150EProject Number: Moore Sweet HistoricalMidland TX, 79705Project Manager: Curt Stanley	TRC Solutions- Midland, Texas	Project: Moore Sweet	Fax: (432) 520-7701
Midland TX, 79705 Project Manager: Curt Stanley	10 Desta Dr STE 150E	Project Number: Moore Sweet Historical	
	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 P9J0210 - *** DEFAULT PREP ***										
Matrix Spike Dup (P9J0210-MSD2)	Sour		03	Prepared &	Analyzed:	10/02/19				
Chloride	1230	1.01	mg/kg dry	505	741	96.1	80-120	3.88	20	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

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

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J0206 - TX 1005										
Blank (P9J0206-BLK1)				Prepared: (09/30/19 A	nalyzed: 10)/04/19			
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	98.4		"	140		70.3	70-130			
Surrogate: o-Terphenyl	52.8		"	70.0		75.4	70-130			
LCS (P9J0206-BS1)				Prepared: (09/30/19 A	nalyzed: 10)/04/19			
C6-C12	936	25.0	mg/kg wet	1000		93.6	75-125			
>C12-C28	1000	25.0	"	1000		100	75-125			
Surrogate: 1-Chlorooctane	127		"	140		90.7	70-130			
Surrogate: o-Terphenyl	50.6		"	70.0		72.3	70-130			
LCS Dup (P9J0206-BSD1)				Prepared: (09/30/19 A	nalyzed: 10)/04/19			
C6-C12	954	25.0	mg/kg wet	1000		95.4	75-125	1.92	20	
>C12-C28	1020	25.0		1000		102	75-125	2.05	20	
Surrogate: 1-Chlorooctane	125		"	140		89.2	70-130			
Surrogate: o-Terphenyl	51.0		"	70.0		72.8	70-130			
Calibration Blank (P9J0206-CCB1)				Prepared: (09/30/19 A	nalyzed: 10)/04/19			
C6-C12	10.9		mg/kg wet							
>C12-C28	11.5									
Surrogate: 1-Chlorooctane	95.9		"	140		68.5	70-130			S-G
Surrogate: o-Terphenyl	51.4		"	70.0		73.4	70-130			
Calibration Blank (P9J0206-CCB2)				Prepared: (09/30/19 A	nalyzed: 10)/04/19			
C6-C12	5.35		mg/kg wet			•				
>C12-C28	13.6		"							
Surrogate: 1-Chlorooctane	102		"	140		72.6	70-130			
Surrogate: o-Terphenyl	53.9		"	70.0		77.0	70-130			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

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

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J0206 - TX 1005										
Calibration Check (P9J0206-CCV1)				Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	536	25.0	mg/kg wet	500		107	85-115			
>C12-C28	547	25.0	"	500		109	85-115			
Surrogate: 1-Chlorooctane	122		"	140		87.3	70-130			
Surrogate: o-Terphenyl	56.0		"	70.0		80.0	70-130			
Calibration Check (P9J0206-CCV2)				Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	544	25.0	mg/kg wet	500		109	85-115			
>C12-C28	546	25.0		500		109	85-115			
Surrogate: 1-Chlorooctane	124		"	140		88.9	70-130			
Surrogate: o-Terphenyl	55.1		"	70.0		78.7	70-130			
Matrix Spike (P9J0206-MS1)	Sou	rce: 9I27014	-23	Prepared: (09/30/19 A	nalyzed: 10	/04/19			
C6-C12	834	25.5	mg/kg dry	1020	10.5	80.7	75-125			
>C12-C28	881	25.5	"	1020	10.2	85.3	75-125			
Surrogate: 1-Chlorooctane	125		"	143		87.8	70-130			
Surrogate: o-Terphenyl	51.5		"	71.4		72.1	70-130			

Permian Basin Environmental Lab, L.P.

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10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Notes and Definitions

0.00		TTL 1 / 11 1	1.1 6.4
S-GC	Surrogate recovery outside of control limits.	The data was accepted based on v	alid recovery of the remaining surrogate.

- 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

Sun Barron

Report Approved By:

Date: 10/4/2019

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.

Permian Basin Environmental Lab, L.P.

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роп	Clien	30 OC 30 UC	ners lead	mm							·				Volatíles			Analyze	ā		6	-	Mo		ine:	
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°C Factor	DHL	Ű		1000				-							RCI				TRRP		Lea County, New Mexico		Moore Sweet Historical	Moore Sweet	Phone: 432-661-4184	
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PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



Analytical Report

Prepared for:

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

Project: Moore Sweet Project Number: Moore Sweet Historical Location: Lea Co NM

Lab Order Number: 9I27017



NELAP/TCEQ # T104704516-18-9

Report Date: 10/05/19

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MS3 #1	9I27017-01	Soil	09/24/19 15:00	09-26-2019 16:23
MS3 #2	9I27017-02	Soil	09/24/19 15:15	09-26-2019 16:23
MS3 #3	9I27017-03	Soil	09/24/19 15:30	09-26-2019 16:23

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

MS3 #1 9I27017-01 (Soil)

		9127	017-01 (501)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
	Perr	nian Basin F	Invironmer	ital Lab, I	L.P.				
Organics by GC									
Benzene	ND	0.00101	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Toluene	ND	0.00101	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Ethylbenzene	ND	0.00202	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (p/m)	ND	0.00101	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Xylene (o)	ND	0.00101	mg/kg dry	1	P9I2707	09/27/19	09/28/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		109 %	75-1	25	P9I2707	09/27/19	09/28/19	EPA 8021B	-
Surrogate: 1,4-Difluorobenzene		87.2 %	75-1	25	P912707	09/27/19	09/28/19	EPA 8021B	
General Chemistry Parameters by EPA	Standard Metho	ds							
Chloride	48.8	1.01	mg/kg dry	1	P9J0211	10/02/19	10/03/19	EPA 300.0	
% Moisture	1.0	0.1	%	1	P9I3005	09/30/19	09/30/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M							
C6-C12	ND	25.3	mg/kg dry	1	P9J0207	10/01/19	10/05/19	TPH 8015M	
>C12-C28	ND	25.3	mg/kg dry	1	P9J0207	10/01/19	10/05/19	TPH 8015M	
>C28-C35	ND	25.3	mg/kg dry	1	P9J0207	10/01/19	10/05/19	TPH 8015M	
Surrogate: 1-Chlorooctane		95.3 %	70-1	30	P9J0207	10/01/19	10/05/19	TPH 8015M	
Surrogate: o-Terphenyl		97.3 %	70-1	30	P9J0207	10/01/19	10/05/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	25.3	mg/kg dry	1	[CALC]	10/01/19	10/05/19	calc	

Permian Basin Environmental Lab, L.P.

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TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		-	ect: Moore S ber: Moore S ger: Curt Sta	Sweet Histo	orical			Fax: (432) 52	.0-7701
			MS3 #2 017-02 (Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perr	nian Basin F	Environmen	tal Lab, I	P.				
Organics by GC									
Benzene	ND	0.00106	mg/kg dry	1	P9J0106	10/01/19	10/01/19	EPA 8021B	
Toluene	ND	0.00106	mg/kg dry	1	P9J0106	10/01/19	10/01/19	EPA 8021B	
Ethylbenzene	ND	0.00106	mg/kg dry	1	P9J0106	10/01/19	10/01/19	EPA 8021B	
Xylene (p/m)	ND	0.00213	mg/kg dry	1	P9J0106	10/01/19	10/01/19	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P9J0106	10/01/19	10/01/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		93.0 %	75-12	25	P9J0106	10/01/19	10/01/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		117 %	75-12	25	P9J0106	10/01/19	10/01/19	EPA 8021B	
General Chemistry Parameters by EPA	Standard Metho	ds							
Chloride	551	1.06	mg/kg dry	1	P9J0211	10/02/19	10/03/19	EPA 300.0	
% Moisture	6.0	0.1	%	1	P9I3005	09/30/19	09/30/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 8	015M							
C6-C12	ND	26.6	mg/kg dry	1	P9J0207	10/01/19	10/05/19	TPH 8015M	
>C12-C28	ND	26.6	mg/kg dry	1	P9J0207	10/01/19	10/05/19	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P9J0207	10/01/19	10/05/19	TPH 8015M	
Surrogate: 1-Chlorooctane		94.2 %	70-1.	30	P9J0207	10/01/19	10/05/19	TPH 8015M	
Surrogate: o-Terphenyl		109 %	70-1.	30	P9J0207	10/01/19	10/05/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	10/01/19	10/05/19	calc	

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TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Proj Project Num Project Mana		Sweet Histo	orical			Fax: (432) 52	0-7701
			MS3 #3 017-03 (Soi	I)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environmer	ıtal Lab, I	L.P.				
Organics by GC									
Benzene	ND	0.00102	mg/kg dry	1	P9J0106	10/01/19	10/01/19	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P9J0106	10/01/19	10/01/19	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P9J0106	10/01/19	10/01/19	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P9J0106	10/01/19	10/01/19	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P9J0106	10/01/19	10/01/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		114 %	75-1	25	P9J0106	10/01/19	10/01/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		93.4 %	75-1	25	P9J0106	10/01/19	10/01/19	EPA 8021B	
General Chemistry Parameters by EPA	Standard Metho	ds							
Chloride	962	5.10	mg/kg dry	5	P9J0211	10/02/19	10/03/19	EPA 300.0	
% Moisture	2.0	0.1	%	1	P9I3005	09/30/19	09/30/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	oy EPA Method 8	015M							
C6-C12	ND	25.5	mg/kg dry	1	P9J0207	10/01/19	10/05/19	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P9J0207	10/01/19	10/05/19	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P9J0207	10/01/19	10/05/19	TPH 8015M	
Surrogate: 1-Chlorooctane		107 %	70-1	30	P9J0207	10/01/19	10/05/19	TPH 8015M	
Surrogate: o-Terphenyl		106 %	70-1	30	P9J0207	10/01/19	10/05/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	10/01/19	10/05/19	calc	

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9I2707 - General Preparation (G	C)									
Blank (P9I2707-BLK1)				Prepared: 0	9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00200	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	0.105		"	0.120		87.6	75-125			
Surrogate: 4-Bromofluorobenzene	0.128		"	0.120		106	75-125			
LCS (P9I2707-BS1)				Prepared: 0)9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.0886	0.00100	mg/kg wet	0.100		88.6	80-120			
Toluene	0.102	0.00100	"	0.100		102	80-120			
Ethylbenzene	0.103	0.00200	"	0.100		103	80-120			
Xylene (p/m)	0.189	0.00100	"	0.200		94.5	80-120			
Xylene (o)	0.0941	0.00100	"	0.100		94.1	80-120			
Surrogate: 4-Bromofluorobenzene	0.126		"	0.120		105	75-125			
Surrogate: 1,4-Difluorobenzene	0.132		"	0.120		110	75-125			
LCS Dup (P9I2707-BSD1)				Prepared: 0)9/27/19 Aı	nalyzed: 09	/28/19			
Benzene	0.0900	0.00100	mg/kg wet	0.100		90.0	80-120	1.47	20	
Toluene	0.110	0.00100	"	0.100		110	80-120	7.37	20	
Ethylbenzene	0.115	0.00200	"	0.100		115	80-120	11.0	20	
Xylene (p/m)	0.204	0.00100	"	0.200		102	80-120	7.54	20	
Xylene (o)	0.104	0.00100	"	0.100		104	80-120	10.2	20	
Surrogate: 4-Bromofluorobenzene	0.136		"	0.120		113	75-125			
Surrogate: 1,4-Difluorobenzene	0.141		"	0.120		118	75-125			
Calibration Blank (P9I2707-CCB1)				Prepared: 0)9/27/19 Aı	nalyzed: 09	/28/19			
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		102	75-125			
Surrogate: 1,4-Difluorobenzene	0.109		"	0.120		91.0	75-125			

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

		Reporting	TT '4	Spike	Source	A/DEC	%REC	DDD	RPD	N. (
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9I2707 - General Preparation (GC)										
Calibration Blank (P9I2707-CCB2)				Prepared: 0	9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.121		"	0.120		101	75-125			
Surrogate: 1,4-Difluorobenzene	0.105		"	0.120		87.6	75-125			
Calibration Blank (P9I2707-CCB3)				Prepared: 0	9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	0.114		"	0.120		94.7	75-125			
Surrogate: 4-Bromofluorobenzene	0.131		"	0.120		109	75-125			
Calibration Check (P9I2707-CCV1)				Prepared: 0	9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.0950	0.00100	mg/kg wet				80-120			
Toluene	0.114	0.00100	"				80-120			
Ethylbenzene	0.124	0.00200	"				80-120			
Xylene (p/m)	0.218	0.00100	"				80-120			
Xylene (o)	0.120	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	0.140		"	0.120		116	75-125			
Surrogate: 1,4-Difluorobenzene	0.144		"	0.120		120	75-125			
Calibration Check (P9I2707-CCV2)				Prepared: 0	9/27/19 Ai	nalyzed: 09	/28/19			
Benzene	0.0972	0.00100	mg/kg wet				80-120			
Toluene	0.110	0.00100	"				80-120			
Ethylbenzene	0.112	0.00200	"				80-120			
Xylene (p/m)	0.203	0.00100	"				80-120			
Xylene (o)	0.113	0.00100	"				80-120			
Surrogate: 4-Bromofluorobenzene	0.131		"	0.120		109	75-125			
Surrogate: 1,4-Difluorobenzene	0.136		"	0.120		113	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P9I2707 - General Preparation (GC)										
Calibration Check (P9I2707-CCV3)				Prepared: (09/27/19 A	nalyzed: 09	/28/19			
Benzene	0.107	0.00100	mg/kg wet				80-120			
Toluene	0.115	0.00100	"				80-120			
Ethylbenzene	0.110	0.00200	"				80-120			
Xylene (p/m)	0.206	0.00100	"				80-120			
Xylene (o)	0.116	0.00100	"				80-120			
Surrogate: 1,4-Difluorobenzene	0.139		"	0.120		116	75-125			
Surrogate: 4-Bromofluorobenzene	0.119		"	0.120		99.3	75-125			
Matrix Spike (P9I2707-MS1)	Sou	ırce: 9I27014	-20	Prepared: ()9/27/19 A	nalyzed: 09	/28/19			
Benzene	0.0471	0.00108	mg/kg dry	0.108	ND	43.8	80-120			QM-0:
Toluene	0.0531	0.00108	"	0.108	ND	49.4	80-120			QM-03
Ethylbenzene	0.0595	0.00215	"	0.108	ND	55.3	80-120			QM-03
Xylene (p/m)	0.107	0.00108	"	0.215	ND	49.6	80-120			QM-03
Xylene (o)	0.0521	0.00108	"	0.108	ND	48.4	80-120			QM-0:
Surrogate: 4-Bromofluorobenzene	0.128		"	0.129		99.3	75-125			
Surrogate: 1,4-Difluorobenzene	0.150		"	0.129		116	75-125			
Matrix Spike Dup (P9I2707-MSD1)	Sou	ırce: 9I27014	-20	Prepared: (09/27/19 A	nalyzed: 09	/28/19			
Benzene	0.0645	0.00108	mg/kg dry	0.108	ND	60.0	80-120	31.3	20	QM-03
Toluene	0.0737	0.00108	"	0.108	ND	68.6	80-120	32.5	20	QM-03
Ethylbenzene	0.0798	0.00215	"	0.108	ND	74.2	80-120	29.2	20	QM-03
Xylene (p/m)	0.117	0.00108	"	0.215	ND	54.3	80-120	9.00	20	QM-03
Xylene (o)	0.0564	0.00108	"	0.108	ND	52.4	80-120	7.99	20	QM-0:
Surrogate: 1,4-Difluorobenzene	0.151		"	0.129		117	75-125			
Surrogate: 4-Bromofluorobenzene	0.146		"	0.129		113	75-125			
Batch P9J0106 - General Preparation (GC)										
				Prepared &	Analyzed:	: 10/01/19				
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	0.107		"	0.120		89.0	75-125			
Surrogate: 4-Bromofluorobenzene	0.138		"	0.120		115	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J0106 - General Preparation (GC)									
LCS (P9J0106-BS1)				Prepared &	Analyzed:	10/01/19				
Benzene	0.0968	0.00100	mg/kg wet	0.100		96.8	70-130			
Toluene	0.112	0.00100	"	0.100		112	70-130			
Ethylbenzene	0.117	0.00100	"	0.100		117	70-130			
Xylene (p/m)	0.237	0.00200	"	0.200		119	70-130			
Xylene (o)	0.115	0.00100	"	0.100		115	70-130			
Surrogate: 4-Bromofluorobenzene	0.112		"	0.120		93.6	75-125			
Surrogate: 1,4-Difluorobenzene	0.112		"	0.120		93.2	75-125			
LCS Dup (P9J0106-BSD1)				Prepared &	Analyzed:	10/01/19				
Benzene	0.0948	0.00100	mg/kg wet	0.100		94.8	70-130	2.06	20	
Toluene	0.110	0.00100	"	0.100		110	70-130	1.03	20	
Ethylbenzene	0.115	0.00100	"	0.100		115	70-130	1.63	20	
Xylene (p/m)	0.226	0.00200	"	0.200		113	70-130	4.74	20	
Xylene (o)	0.110	0.00100	"	0.100		110	70-130	4.33	20	
Surrogate: 4-Bromofluorobenzene	0.103		"	0.120		86.1	75-125			
Surrogate: 1,4-Difluorobenzene	0.107		"	0.120		89.2	75-125			
Calibration Blank (P9J0106-CCB1)				Prepared &	Analyzed:	10/01/19				
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.106		"	0.120		88.3	75-125			
Surrogate: 1,4-Difluorobenzene	0.111		"	0.120		92.4	75-125			
Calibration Blank (P9J0106-CCB2)				Prepared &	Analyzed:	10/01/19				
Benzene	0.00		mg/kg wet	-						
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.132		"	0.120		110	75-125			
Surrogate: 1,4-Difluorobenzene	0.102		"	0.120		85.3	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J0106 - General Preparation (GC	C)									
Calibration Blank (P9J0106-CCB3)				Prepared: 1	0/01/19 Ai	nalyzed: 10	/02/19			
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	0.121		"	0.120		100	75-125			
Surrogate: 4-Bromofluorobenzene	0.128		"	0.120		107	75-125			
Calibration Check (P9J0106-CCV1)				Prepared &	Analyzed:	10/01/19				
Benzene	0.110	0.00100	mg/kg wet	0.100		110	80-120			
Toluene	0.109	0.00100	"	0.100		109	80-120			
Ethylbenzene	0.105	0.00100	"	0.100		105	80-120			
Xylene (p/m)	0.228	0.00200	"	0.200		114	80-120			
Xylene (o)	0.118	0.00100	"	0.100		118	80-120			
Surrogate: 4-Bromofluorobenzene	0.116		"	0.120		97.0	75-125			
Surrogate: 1,4-Difluorobenzene	0.124		"	0.120		104	75-125			
Calibration Check (P9J0106-CCV2)				Prepared &	Analyzed:	10/01/19				
Benzene	0.0940	0.00100	mg/kg wet	0.100		94.0	80-120			
Toluene	0.116	0.00100	"	0.100		116	80-120			
Ethylbenzene	0.118	0.00100	"	0.100		118	80-120			
Xylene (p/m)	0.207	0.00200	"	0.200		103	80-120			
Xylene (o)	0.103	0.00100	"	0.100		103	80-120			
Surrogate: 4-Bromofluorobenzene	0.139		"	0.120		116	75-125			
Surrogate: 1,4-Difluorobenzene	0.123		"	0.120		103	75-125			
Calibration Check (P9J0106-CCV3)				Prepared: 1	10/01/19 Ai	nalyzed: 10	/02/19			
Benzene	0.0914	0.00100	mg/kg wet	0.100		91.4	80-120			
Toluene	0.108	0.00100	"	0.100		108	80-120			
Ethylbenzene	0.114	0.00100	"	0.100		114	80-120			
Xylene (p/m)	0.208	0.00200	"	0.200		104	80-120			
Xylene (o)	0.113	0.00100	"	0.100		113	80-120			
Surrogate: 1,4-Difluorobenzene	0.122		"	0.120		102	75-125			
Surrogate: 4-Bromofluorobenzene	0.130		"	0.120		108	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P9J0106 - General Preparation (GC)										

Matrix Spike (P9J0106-MS1)	Sour	ce: 9I27017-	02	Prepared: 1	0/01/19 A	nalyzed: 10	0/02/19			
Benzene	0.0611	0.00106	mg/kg dry	0.106	ND	57.4	80-120			QM-07
Toluene	0.0848	0.00106	"	0.106	ND	79.7	80-120			QM-07
Ethylbenzene	0.113	0.00106	"	0.106	ND	107	80-120			
Xylene (p/m)	0.173	0.00213	"	0.213	ND	81.5	80-120			
Xylene (o)	0.0867	0.00106	"	0.106	ND	81.5	80-120			
Surrogate: 1,4-Difluorobenzene	0.139		"	0.128		109	75-125			
Surrogate: 4-Bromofluorobenzene	0.147		"	0.128		115	75-125			
Matrix Spike Dup (P9J0106-MSD1)	Sour	-ce: 9I27017-	-02	Prepared: 1	0/01/19 A	nalyzed: 10	0/02/19			
Benzene	0.0785	0.00106	mg/kg dry	0.106	ND	73.8	80-120	25.0	20	QM-07
Toluene	0.0960	0.00106	"	0.106	ND	90.2	80-120	12.3	20	
Ethylbenzene	0.121	0.00106	"	0.106	ND	114	80-120	6.38	20	
Xylene (p/m)	0.196	0.00213	"	0.213	ND	91.9	80-120	12.0	20	
Xylene (o)	0.102	0.00106	"	0.106	ND	96.1	80-120	16.5	20	
Surrogate: 1,4-Difluorobenzene	0.147		"	0.128		115	75-125			
Surrogate: 4-Bromofluorobenzene	0.144		"	0.128		113	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	, Texas Project: Moore Sweet									Fax: (432) 520-7701		
10 Desta Dr STE 150E	Project Number: Moore Sweet Historical											
Midland TX, 79705		inager: Cur	t Stanley									
General C	hemistry Para					-	lity Con	trol				
	Perm	ian Basin	Environ	imental I	Lab, L.P	•						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes		
Batch P913005 - *** DEFAULT PREP	***											
Blank (P9I3005-BLK1)				Prepared &	Analyzed:	: 09/30/19						
% Moisture	ND	0.1	%									
Duplicate (P9I3005-DUP2)	Sou	rce: 9127030-	02	Prepared &	Analyzed:							
% Moisture	19.0	0.1	%		19.0			0.00	20			
Batch P9J0211 - *** DEFAULT PREP	***											
Blank (P9J0211-BLK1)				Prepared: 1	0/02/19 A	nalyzed: 10	0/03/19					
Chloride	ND	1.00	mg/kg wet									
LCS (P9J0211-BS1)				Prepared: 1	0/02/19 A	nalyzed: 10)/03/19					
Chloride	438	1.00	mg/kg wet	400		109	80-120					
LCS Dup (P9J0211-BSD1)				Prepared: 1	10/02/19 A	nalyzed: 10)/03/19					
Chloride	428	1.00	mg/kg wet	400		107	80-120	2.27	20			
Calibration Blank (P9J0211-CCB1)				Prepared: 1	0/02/19 A	nalyzed: 10)/03/19					
Chloride	0.00		mg/kg wet	· r · · · · · ·								
Calibration Blank (P9J0211-CCB2)				Prepared: 1	10/02/19 A	nalyzed: 10)/03/19					
Chloride	0.00		mg/kg wet	1								
Calibration Check (P9J0211-CCV1)				Prepared: 1	0/02/19 A	nalvzed 10)/03/19					
Chloride	21.4		mg/kg	20.0	0,02,19 11	107	0-200					
Calibration Check (P9J0211-CCV2)				Prenarad 1	10/02/19 A	naluzad. 11	0/03/10					

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J0211 - *** DEFAULT PREP ***										
Calibration Check (P9J0211-CCV3)				Prepared:	10/02/19	Analyzed: 10)/03/19			
Chloride	19.7		mg/kg	20.0		98.3	0-200			
Matrix Spike (P9J0211-MS1)	Sourc	Source: 9127017-03 Pre				Analyzed: 10	0/03/19			
Chloride	1380	5.10	mg/kg dry	510	962	81.9	80-120			
Matrix Spike (P9J0211-MS2)	Sourc	e: 9127020-	-01	Prepared:	10/02/19	Analyzed: 10	0/03/19			
Chloride	4030	12.5	mg/kg dry	1250	2900	90.1	80-120			
Matrix Spike Dup (P9J0211-MSD1)	Sourc	e: 9127017-	-03	Prepared:	10/02/19	Analyzed: 10	0/03/19			
Chloride	1390	5.10	mg/kg dry	510	962	83.6	80-120	0.623	20	
Matrix Spike Dup (P9J0211-MSD2)	Sourc	e: 9127020-	-01	Prepared:	10/02/19	Analyzed: 10)/03/19			
Chloride	4040	12.5	mg/kg dry	1250	2900	90.6	80-120	0.171	20	

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

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

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J0207 - TX 1005										
Blank (P9J0207-BLK1)				Prepared:	10/01/19 A	nalyzed: 10	/05/19			
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	102		"	100		102	70-130			
Surrogate: o-Terphenyl	54.2		"	50.0		108	70-130			
LCS (P9J0207-BS1)				Prepared: 1	10/01/19 A	nalyzed: 10	/05/19			
C6-C12	992	25.0	mg/kg wet	1000		99.2	75-125			
>C12-C28	1070	25.0	"	1000		107	75-125			
Surrogate: 1-Chlorooctane	129		"	100		129	70-130			
Surrogate: o-Terphenyl	49.2		"	50.0		98.5	70-130			
LCS Dup (P9J0207-BSD1)				Prepared: 1	10/01/19 A	nalyzed: 10	/05/19			
C6-C12	983	25.0	mg/kg wet	1000		98.3	75-125	0.908	20	
>C12-C28	1050	25.0	"	1000		105	75-125	2.11	20	
Surrogate: 1-Chlorooctane	127		"	100		127	70-130			
Surrogate: o-Terphenyl	49.4		"	50.0		98.8	70-130			
Calibration Blank (P9J0207-CCB1)				Prepared: 1	10/01/19 A	nalyzed: 10	/05/19			
C6-C12	6.76		mg/kg wet							
>C12-C28	15.2		"							
Surrogate: 1-Chlorooctane	102		"	100		102	70-130			
Surrogate: o-Terphenyl	53.8		"	50.0		108	70-130			
Calibration Blank (P9J0207-CCB2)				Prepared: 1	10/01/19 A	nalyzed: 10	/05/19			
C6-C12	9.57		mg/kg wet							
>C12-C28	22.4									
Surrogate: 1-Chlorooctane	99.4		"	100		99.4	70-130			
Surrogate: o-Terphenyl	53.1		"	50.0		106	70-130			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

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

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J0207 - TX 1005										
Calibration Check (P9J0207-CCV1)				Prepared:	10/01/19 A	nalyzed: 10	/05/19			
C6-C12	515	25.0	mg/kg wet	500		103	85-115			
>C12-C28	537	25.0	"	500		107	85-115			
Surrogate: 1-Chlorooctane	116		"	100		116	70-130			
Surrogate: o-Terphenyl	52.1		"	50.0		104	70-130			
Calibration Check (P9J0207-CCV2)				Prepared:	10/01/19 A	nalyzed: 10	/05/19			
C6-C12	511	25.0	mg/kg wet	500		102	85-115			
>C12-C28	542	25.0	"	500		108	85-115			
Surrogate: 1-Chlorooctane	116		"	100		116	70-130			
Surrogate: o-Terphenyl	51.8		"	50.0		104	70-130			
Matrix Spike (P9J0207-MS1)	Sou	rce: 9I27017	-01	Prepared:	10/01/19 A	nalyzed: 10	/05/19			
C6-C12	983	25.3	mg/kg dry	1010	10.5	96.2	75-125			
>C12-C28	1030	25.3	"	1010	12.2	101	75-125			
Surrogate: 1-Chlorooctane	121		"	101		120	70-130			
Surrogate: o-Terphenyl	64.3		"	50.5		127	70-130			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
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.
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:

Barron

Date: 10/5/2019

Brent Barron, Laboratory Director/Technical Director

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

Permian Basin Environmental Lab, L.P.

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



Analytical Report

Prepared for:

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

Project: Moore Sweet Project Number: Moore Sweet Historical Location: Lea County, NM

Lab Order Number: 9J21006



NELAP/TCEQ # T104704516-18-9

Report Date: 10/30/19

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-S1C-A	9J21006-01	Soil	10/17/19 10:40	10-21-2019 11:26
MSW-F1C @ 7'	9J21006-02	Soil	10/17/19 11:19	10-21-2019 11:26
MS-F2 @ 13'	9J21006-03	Soil	10/17/19 14:02	10-21-2019 11:26
ME-S1C-A	9J21006-04	Soil	10/18/19 15:00	10-21-2019 11:26
ME-F1C #2 @ 7'	9J21006-05	Soil	10/18/19 15:10	10-21-2019 11:26
ME-F1C #1 @ 7'	9J21006-06	Soil	10/18/19 15:20	10-21-2019 11:26
ME-S2-A	9J21006-07	Soil	10/18/19 15:30	10-21-2019 11:26

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

MW-S1C-A

9J21006-01 (Soil)											
		Reporting	T T 1.	D 11 - 1	D . 1	D					
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
General Chemistry Parameters by	Permian Basin Environmental Lab, L.P. General Chemistry Parameters by EPA / Standard Methods										
Chloride	114	1.12	mg/kg dry	1	P9J2806	10/28/19	10/29/19	EPA 300.0			
% Moisture	11.0	0.1	%	1	P9J2201	10/22/19	10/22/19	ASTM D2216			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas		Proj	ect: Moore S	Sweet				Fax: (432) 52	20-7701	
10 Desta Dr STE 150E]	Project Number: Moore Sweet Historical								
Midland TX, 79705	Р	roject Mana	ger: Curt Sta	inley						
		MSV	V-F1C @ 2	7'						
			006-02 (Soi							
		Reporting								
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
<u>General Chemistry Parameters by EPA</u>			Environmen	ital Lab, I	L .P.					
% Moisture	11.0	0.1	%	1	P9J2201	10/22/19	10/22/19	ASTM D2216		
Total Petroleum Hydrocarbons C6-C35	by EPA Method 801	5M								
C6-C12	ND	28.1	mg/kg dry	1	P9J2308	10/23/19	10/24/19	TPH 8015M		
>C12-C28	83.6	28.1	mg/kg dry	1	P9J2308	10/23/19	10/24/19	TPH 8015M		
>C28-C35	ND	28.1	mg/kg dry	1	P9J2308	10/23/19	10/24/19	TPH 8015M		
Surrogate: 1-Chlorooctane		130 %	70-1.	30	P9J2308	10/23/19	10/24/19	TPH 8015M		
Surrogate: o-Terphenyl		143 %	70-1.	30	P9J2308	10/23/19	10/24/19	TPH 8015M	S-GC	
Total Petroleum Hydrocarbon C6-C35	83.6	28.1	mg/kg dry	1	[CALC]	10/23/19	10/24/19	calc		

TRC Solutions- Midland, Texas		Proj	ect: Moore S	Sweet				Fax: (432) 52	20-7701
10 Desta Dr STE 150E]	Project Num	ber: Moore S	Sweet Histo	orical				
Midland TX, 79705	Р	roject Mana	ger: Curt Sta	nley					
		MS	5-F2 @ 13'						
			006-03 (Soi						
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
General Chemistry Parameters by EPA			Environmen	itai Lad, I	L. r.				
% Moisture	13.0	0.1	%	1	P9J2201	10/22/19	10/22/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 801	5M							
C6-C12	ND	28.7	mg/kg dry	1	P9J2308	10/23/19	10/24/19	TPH 8015M	
>C12-C28	485	28.7	mg/kg dry	1	P9J2308	10/23/19	10/24/19	TPH 8015M	
>C28-C35	65.0	28.7	mg/kg dry	1	P9J2308	10/23/19	10/24/19	TPH 8015M	
Surrogate: 1-Chlorooctane		122 %	70-1.	30	P9J2308	10/23/19	10/24/19	TPH 8015M	
Surrogate: o-Terphenyl		134 %	70-1.	30	P9J2308	10/23/19	10/24/19	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	550	28.7	mg/kg dry	1	[CALC]	10/23/19	10/24/19	calc	

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project: Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley							20-7701		
	ME-S1C-A 9J21006-04 (Soil)										
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
	Permi	an Basin F	Environme	ntal Lab, I	L .P.						
General Chemistry Parameters by EPA	/ Standard Methods										
Chloride	439	1.16	mg/kg dry	1	P9J2806	10/28/19	10/29/19	EPA 300.0			
% Moisture	14.0	0.1	%	1	P9J2201	10/22/19	10/22/19	ASTM D2216			

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project: Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley							20-7701	
ME-F1C #2 @ 7' 9J21006-05 (Soil)										
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
	Permi	an Basin E	nvironme	ntal Lab, I	P.					
General Chemistry Parameters by EPA	A / Standard Methods									
Chloride % Moisture	158 10.0	1.11 0.1	mg/kg dry %	1 1	P9J2806 P9J2201	10/28/19 10/22/19	10/29/19 10/22/19	EPA 300.0 ASTM D2216		

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project: Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley						Fax: (432) 52	20-7701	
ME-F1C #1 @ 7' 9J21006-06 (Soil)										
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
	Permi	an Basin E	nvironme	ntal Lab, I	P.					
General Chemistry Parameters by EPA	/ Standard Methods									
Chloride % Moisture	72.2 12.0	1.14 0.1	mg/kg dry %	1 1	P9J2806 P9J2201	10/28/19 10/22/19	10/29/19 10/22/19	EPA 300.0 ASTM D2216		

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project: Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley						Fax: (432) 52	20-7701
ME-S2-A 9J21006-07 (Soil)									
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Permi	an Basin E	nvironme	ntal Lab, I	P.				
General Chemistry Parameters by EPA	/ Standard Methods								
Chloride	285	1.12	mg/kg dry	1	P9J2806	10/28/19	10/29/19	EPA 300.0	
% Moisture	11.0	0.1	%	1	P9J2201	10/22/19	10/22/19	ASTM D2216	

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
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 P9J2201 - *** DEFAULT PREP ***										
Blank (P9J2201-BLK1)				Prepared &	Analyzed:	10/22/19				
% Moisture	ND	0.1	%							
Duplicate (P9J2201-DUP1)	Sou	rce: 9J19005-1	13	Prepared &	Analyzed:	10/22/19				
% Moisture	8.0	0.1	%		10.0			22.2	20	R
Duplicate (P9J2201-DUP2)	Sou)9	Prepared &	Analyzed:	10/22/19				
% Moisture	11.0	0.1	%		7.0			44.4	20	R
Duplicate (P9J2201-DUP3)	Sou)4	Prepared &	Analyzed:	10/22/19				
% Moisture	4.0	0.1	%	-	4.0			0.00	20	
Duplicate (P9J2201-DUP4)	Sou	rce: 9J19008-1	11	Prepared &	Analyzed:	10/22/19				
% Moisture	4.0	0.1	%		4.0			0.00	20	
Duplicate (P9J2201-DUP5)	Sou		38	Prepared &	Analyzed:	10/22/19				
% Moisture	7.0	0.1	%		8.0			13.3	20	
Duplicate (P9J2201-DUP6)	Sou	rce: 9J21001-1	17	Prepared &	Analyzed:	10/22/19				
% Moisture	10.0	0.1	%		7.0			35.3	20	R
Duplicate (P9J2201-DUP7)	Sou)7	Prepared &	Analyzed:	10/22/19				
% Moisture	11.0	0.1	%	*	11.0			0.00	20	
Batch P9J2806 - *** DEFAULT PREP ***										
Blank (P9J2806-BLK1)				Prepared:	10/28/19 A	nalyzed: 10	/29/19			
Chloride	ND	0.100	mg/kg we	t						

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

		Donoutin		Smilto	Cours-		%REC		RPD	
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result		%REC Limits	RPD	Limit	Notes
Batch P9J2806 - *** DEFAULT PREP ***										
LCS (P9J2806-BS1)				Prepared: 1	0/28/19	Analyzed: 10	/29/19			
Chloride	433	1.00	mg/kg wet	400		108	80-120			
LCS Dup (P9J2806-BSD1)				Prepared: 1	0/28/19	Analyzed: 10	/29/19			
Chloride	438	1.00	mg/kg wet	400		109	80-120	1.07	20	
Calibration Blank (P9J2806-CCB1)				Prepared: 1	0/28/19	Analyzed: 10	/29/19			
Chloride	0.00		mg/kg wet							
Calibration Blank (P9J2806-CCB2)				Prepared: 1	0/28/19	Analyzed: 10	/29/19			
Chloride	0.00		mg/kg wet							
Calibration Check (P9J2806-CCV1)				Prepared: 1	0/28/19	Analyzed: 10	/29/19			
Chloride	20.7		mg/kg	20.0		104	0-200			
Calibration Check (P9J2806-CCV2)				Prepared: 1	0/28/19	Analyzed: 10	/29/19			
Chloride	20.7		mg/kg	20.0		104	0-200			
Calibration Check (P9J2806-CCV3)				Prepared: 1	0/28/19	Analyzed: 10	/29/19			
Chloride	21.2		mg/kg	20.0		106	0-200			
Matrix Spike (P9J2806-MS1)	Sou	rce: 9J28001-	-01	Prepared: 1	0/28/19	Analyzed: 10	/29/19			
Chloride	519	1.00	mg/kg dry	500	37.9	96.2	80-120			
Matrix Spike (P9J2806-MS2)	Sou	rce: 9J22003-	-02	Prepared: 1	0/28/19	Analyzed: 10	/29/19			
Chloride	12000	29.4	mg/kg dry	2940	8820	108	80-120			
Matrix Spike Dup (P9J2806-MSD1)	Sou	rce: 9J28001-	-01	Prepared: 1	0/28/19	Analyzed: 10	/29/19			
Chloride	516	1.00	mg/kg dry	500	37.9	95.6	80-120	0.512	20	

TRC Solutions- Midland, Texas	Project: Moore Sweet	Fax: (432) 520-7701					
10 Desta Dr STE 150E Midland TX, 79705	Project Number: Moore Sweet Historical Project Manager: Curt Stanley						
General Chemistry Parameters by EPA / Standard Methods - Quality Control							

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P9J2806 - *** DEFAULT PREP ***										
Matrix Spike Dup (P9J2806-MSD2)	Sou	rce: 9J22003-02	Prepared: 1	0/28/19 At	nalyzed: 10	/29/19				
Chloride	11700	29.4 mg	g/kg dry	2940	8820	98.2	80-120	2.50	20	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

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

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J2308 - TX 1005										
Blank (P9J2308-BLK1)				Prepared: 1	10/23/19 Ai	nalyzed: 10	/24/19			
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	121		"	100		121	70-130			
Surrogate: o-Terphenyl	64.4		"	50.0		129	70-130			
LCS (P9J2308-BS1)				Prepared: 1	10/23/19 Ai	nalyzed: 10	/24/19			
C6-C12	893	25.0	mg/kg wet	1000		89.3	75-125			
>C12-C28	882	25.0	"	1000		88.2	75-125			
Surrogate: 1-Chlorooctane	99.0		"	100		99.0	70-130			
Surrogate: o-Terphenyl	51.7		"	50.0		103	70-130			
LCS Dup (P9J2308-BSD1)				Prepared: 1	10/23/19 Ai	nalyzed: 10	/24/19			
C6-C12	933	25.0	mg/kg wet	1000		93.3	75-125	4.41	20	
>C12-C28	925	25.0	"	1000		92.5	75-125	4.71	20	
Surrogate: 1-Chlorooctane	105		"	100		105	70-130			
Surrogate: o-Terphenyl	54.6		"	50.0		109	70-130			
Calibration Blank (P9J2308-CCB1)				Prepared: 1	0/23/19 Ai	nalyzed: 10	/24/19			
C6-C12	7.29		mg/kg wet							
>C12-C28	5.45		"							
Surrogate: 1-Chlorooctane	111		"	100		111	70-130			
Surrogate: o-Terphenyl	60.2		"	50.0		120	70-130			
Calibration Blank (P9J2308-CCB2)				Prepared: 1	10/23/19 Ai	nalyzed: 10	/24/19			
C6-C12	8.19		mg/kg wet	-						
>C12-C28	15.3		"							
Surrogate: 1-Chlorooctane	106		"	100		106	70-130			
Surrogate: o-Terphenyl	56.6		"	50.0		113	70-130			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

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

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J2308 - TX 1005										
Calibration Check (P9J2308-CCV1)				Prepared:	10/23/19 A	nalyzed: 10	/24/19			
C6-C12	491	25.0	mg/kg wet	500		98.3	85-115			
>C12-C28	484	25.0	"	500		96.7	85-115			
Surrogate: 1-Chlorooctane	102		"	100		102	70-130			
Surrogate: o-Terphenyl	54.5		"	50.0		109	70-130			
Calibration Check (P9J2308-CCV2)				Prepared:	10/23/19 A	nalyzed: 10	/24/19			
C6-C12	438	25.0	mg/kg wet	500		87.5	85-115			
>C12-C28	446	25.0	"	500		89.1	85-115			
Surrogate: 1-Chlorooctane	92.9		"	100		92.9	70-130			
Surrogate: o-Terphenyl	49.6		"	50.0		99.2	70-130			
Matrix Spike (P9J2308-MS1)	Sou	rce: 9J22001	-09	Prepared:	10/23/19 A	nalyzed: 10	/24/19			
C6-C12	871	25.0	mg/kg dry	1000	ND	87.1	75-125			
>C12-C28	862	25.0	"	1000	461	40.1	75-125			QM-0
Surrogate: 1-Chlorooctane	91.1		"	100		91.1	70-130			
Surrogate: o-Terphenyl	46.0		"	50.0		92.1	70-130			
Matrix Spike Dup (P9J2308-MSD1)	Sou	rce: 9J22001	-09	Prepared:	10/23/19 A	nalyzed: 10	/24/19			
C6-C12	879	25.0	mg/kg dry	1000	ND	87.9	75-125	0.900	20	
>C12-C28	898	25.0	"	1000	461	43.7	75-125	8.45	20	QM-0
Surrogate: 1-Chlorooctane	92.5		"	100		92.5	70-130			
Surrogate: o-Terphenyl	46.5		"	50.0		92.9	70-130			

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
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
R2	The RPD exceeded the acceptance limit.
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:

Sun Barron

Date: 10/30/2019

Brent Barron, Laboratory Director/Technical Director

Permian Basin Environmental Lab, L.P.

	TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
l	10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
	Midland TX, 79705	Project Manager:	Curt Stanley	

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

Permian Basin Environmental Lab, L.P.

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



Analytical Report

Prepared for:

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

Project: Moore Sweet Project Number: Moore Sweet Historical Location: Lea County, NM

Lab Order Number: 9J22004



NELAP/TCEQ # T104704516-18-9

Report Date: 10/30/19

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MN-S2-A	9J22004-01	Soil	10/21/19 11:32	10-22-2019 15:34
MS3 #3-A	9J22004-02	Soil	10/21/19 12:31	10-22-2019 15:34
Sample #5A @ 17'	9J22004-03	Soil	10/21/19 14:02	10-22-2019 15:34

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

MN-S2-A

		9J22(004-01 (So	il)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	100000	Diiiit					j		
	Permian	Basin E	nvironme	ntal Lab, I	P.				
General Chemistry Parameters by	EPA / Standard Methods								
Chloride	78.1	1.04	mg/kg dry	1	P9J2806	10/28/19	10/29/19	EPA 300.0	
% Moisture	4.0	0.1	%	1	P9J2403	10/24/19	10/24/19	ASTM D2216	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project: Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley										
	MS3 #3-A 9J22004-02 (Soil)											
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes			
	Permi	an Basin E	nvironme	ntal Lab, I	L.P.							
General Chemistry Parameters by EPA	/ Standard Methods											
Chloride % Moisture	75.1 11.0	1.12 0.1	mg/kg dry %	1 1	P9J2806 P9J2403	10/28/19 10/24/19	10/29/19 10/24/19	EPA 300.0 ASTM D2216				

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705	Fax: (432) 5	20-7701									
	Sample #5A @ 17' 9J22004-03 (Soil)										
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
	Permi	an Basin E	nvironme	ntal Lab, I	P.						
General Chemistry Parameters by EPA	/ Standard Methods										
Chloride % Moisture	13.9 12.0	1.14 0.1	mg/kg dry %	1 1	P9J2806 P9J2403	10/28/19 10/24/19	10/29/19 10/24/19	EPA 300.0 ASTM D2216			

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
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
	resur	Linit	onto	Level	result	, with c	Emitto	iu D	Linit	1,0003
Batch P9J2403 - *** DEFAULT PREP ***										
Blank (P9J2403-BLK1)				Prepared &	& Analyzed:	: 10/24/19				
% Moisture	ND	0.1	%							
Duplicate (P9J2403-DUP1)	Sou	rce: 9J23001-	09	Prepared &	analyzed:	: 10/24/19				
% Moisture	8.0	0.1	%		8.0			0.00	20	
Duplicate (P9J2403-DUP2)	Sou	rce: 9J23006-	03	Prepared &	& Analyzed:	: 10/24/19				
% Moisture	8.0	0.1	%		8.0			0.00	20	
Duplicate (P9J2403-DUP3)	Sou	rce: 9J23006-	05	Prepared &	د Analyzed	: 10/24/19				
% Moisture	10.0	0.1	%		9.0			10.5	20	
Batch P9J2806 - *** DEFAULT PREP ***										
Blank (P9J2806-BLK1)				Prepared:	10/28/19 A	nalyzed: 10	0/29/19			
Chloride	ND	0.100	mg/kg wet							
LCS (P9J2806-BS1)				Prepared:	10/28/19 A	nalyzed: 10)/29/19			
Chloride	433	1.00	mg/kg wet	400		108	80-120			
LCS Dup (P9J2806-BSD1)				Prepared:	10/28/19 A	nalyzed: 1()/29/19			
Chloride	438	1.00	mg/kg wet	400		109	80-120	1.07	20	
Calibration Blank (P9J2806-CCB1)				Prepared:	10/28/19 A	nalyzed: 10)/29/19			
Chloride	0.00		mg/kg wet							
Calibration Blank (P9J2806-CCB2)				Prepared:	10/28/19 A	nalyzed: 1()/29/19			
Chloride	0.00		mg/kg wet			-				

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project: Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: Moore Sweet Historical	
Midland TX, 79705	Project Manager: Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

	Reporting		Spike	Source		%REC		RPD	
Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
			Prepared:	10/28/19	Analyzed: 10)/29/19			
20.7		mg/kg	20.0		104	0-200			
			Prepared:	10/28/19	Analyzed: 10)/29/19			
20.7		mg/kg	20.0		104	0-200			
			Prepared:	10/28/19	Analyzed: 10)/29/19			
21.2		mg/kg	20.0		106	0-200			
Sour	ce: 9J28001-	-01	Prepared:	10/28/19	Analyzed: 10)/29/19			
519	1.00	mg/kg dry	500	37.9	96.2	80-120			
Sour	ce: 9J22003-	-02	Prepared:	10/28/19	Analyzed: 10)/29/19			
12000	29.4	mg/kg dry	2940	8820	108	80-120			
Sour	ce: 9J28001-	-01	Prepared:	10/28/19	Analyzed: 10)/29/19			
516	1.00	mg/kg dry	500	37.9	95.6	80-120	0.512	20	
Source: 9J22003-02				10/28/19	Analyzed: 10				
11700	29.4	mg/kg dry	2940	8820	98.2	80-120	2.50	20	
	20.7 20.7 21.2 Sour 519 Sour 12000 Sour 516 Sour	Result Limit 20.7 20.7 20.7 20.7 21.2 Source: 9J28001- 519 1.00 Source: 9J22003- 12000 12000 29.4 Source: 9J28001- 516 516 1.00 Source: 9J22003-	Result Limit Units 20.7 mg/kg 20.7 mg/kg 20.7 mg/kg 21.2 mg/kg 519 1.00 mg/kg dry 519 1.00 mg/kg dry 12000 29.4 mg/kg dry 516 1.00 mg/kg dry 516 1.00 mg/kg dry	Result Limit Units Level Limit Units Level Limit Units Level 20.7 mg/kg 20.0 21.2 mg/kg 20.0 Source: 9J28001-01 Prepared: 519 1.00 mg/kg dry 510 1.00 mg/kg dry 12000 29.4 mg/kg dry 2940 Source: 9J28001-01 Prepared: 516 1.00 mg/kg dry 516 1.00 mg/kg dry 500 Source: 9J22003-02 Prepared:	Result Limit Units Level Result Limit Units Level Result Prepared: 10/28/19 20.0 Prepared: 10/28/19 20.7 mg/kg 20.0 Prepared: 10/28/19 21.2 mg/kg 20.0 37.9 Source: 9J22003-02 Prepared: 10/28/19 12000 29.4 mg/kg dry 2940 8820 Source: 9J28001-01 Prepared: 10/28/19 516 1.00 mg/kg dry 500 37.9 516 1.00 mg/kg dry 500 37.9 Source: 9J22003-02 Prepared: 10/28/19 516 1.00 mg/kg dry 500 37.9	Result Limit Units Level Result %REC Prepared: 10/28/19 Analyzed: 10 20.7 mg/kg 20.0 104 21.2 mg/kg 20.0 106 Source: 9J28001-01 Prepared: 10/28/19 Analyzed: 10 519 1.00 mg/kg dry 500 37.9 96.2 Source: 9J22003-02 Prepared: 10/28/19 Analyzed: 10 108 Source: 9J28001-01 Prepared: 10/28/19 Analyzed: 10 516 1.00 mg/kg dry 500 37.9 95.6 Source: 9J22003-02 Prepared: 10/28/19 Analyzed: 10 10	Result Limit Units Level Result %REC Limits Prepared: $10/28/19$ Analyzed: $10/29/19$ 20.7 mg/kg 20.0 104 $0-200$ Prepared: $10/28/19$ Analyzed: $10/29/19$ 20.7 mg/kg 20.0 104 $0-200$ Prepared: $10/28/19$ Analyzed: $10/29/19$ 20.7 mg/kg 20.0 104 $0-200$ Prepared: $10/28/19$ Analyzed: $10/29/19$ 20.7 mg/kg 20.0 106 $0-200$ Prepared: $10/28/19$ Analyzed: $10/29/19$ 21.2 mg/kg 20.0 106 $0-200$ Source: $9J28001-01$ Prepared: $10/28/19$ Analyzed: $10/29/19$ 519 1.00 mg/kg dry 500 37.9 96.2 $80-120$ Source: $9J28001-01$ Prepared: $10/28/19$ Analyzed: $10/29/19$ 12000 29.4 mg/kg dry 2940 8820 108 $80-120$ Source: $9J28001-01$ Prepared: $10/28/19$ Analyzed: $10/29/19$ Source: $9J22003-02$ Prep	Result Limit Units Level Result %REC Limits RPD Result Limit Units Level Result %REC Limits RPD Prepared: 10/28/19 Analyzed: 10/29/19 104 0-200 20.7 mg/kg 20.0 104 0-200 104 0-200 21.2 mg/kg 20.0 106 0-200 106 0-200 519 1.00 mg/kg dry 500 37.9 96.2 80-120 519 1.00 mg/kg dry 2940 8820 108 80-120 12000 29.4 mg/kg dry 2940 8820 108 80-120 516 1.00 mg/kg dry 500 37.9 95.6 80-120 0.512 516 </td <td>Result Limit Units Level Result %REC Limits RPD Limit Prepared: $10/28/19$ Analyzed: $10/29/19$ 20.7 mg/kg 20.0 104 $0-200$ $$</td>	Result Limit Units Level Result %REC Limits RPD Limit Prepared: $10/28/19$ Analyzed: $10/29/19$ 20.7 mg/kg 20.0 104 $0-200$ $$

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Notes and Definitions

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

Barron

Report Approved By:

Date:

10/30/2019

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.

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



Analytical Report

Prepared for:

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

Project: Moore Sweet Project Number: Moore Sweet Historical Location: Lea County,NM

Lab Order Number: 9J23006



NELAP/TCEQ # T104704516-17-8

Report Date: 10/30/19

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
M Ramp ES3-A	9J23006-01	Soil	10/22/19 12:30	10-23-2019 11:11
M Ramp WS2-A	9J23006-02	Soil	10/22/19 12:35	10-23-2019 11:11
M Ramp Floor #1A Comp.	9J23006-03	Soil	10/22/19 14:10	10-23-2019 11:11
M Ramp Floor #2A Comp.	9J23006-04	Soil	10/22/19 14:15	10-23-2019 11:11
M Ramp Floor #3A Comp.	9J23006-05	Soil	10/22/19 14:20	10-23-2019 11:11

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

M Ramp ES3-A

9J23006-01 (Soil)										
		Reporting								
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
Permian Basin Environmental Lab, L.P. General Chemistry Parameters by EPA / Standard Methods										
Chloride	21.8	1.10	mg/kg dry	1	P9J2807	10/28/19	10/30/19	EPA 300.0		
% Moisture	9.0	0.1	%	1	P9J2403	10/24/19	10/24/19	ASTM D2216		

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project: Moore Sweet Project Number: Moore Sweet Historical Project Manager: Curt Stanley						Fax: (432) 52	20-7701		
M Ramp WS2-A 9J23006-02 (Soil)											
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
Permian Basin Environmental Lab, L.P.											
General Chemistry Parameters by EPA / S % Moisture	t <u>andard Method</u> 10.0	s 0.1	%	1	P9J2403	10/24/19	10/24/19	ASTM D2216			
Total Petroleum Hydrocarbons C6-C35 by	Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M										
C6-C12	ND	27.8	mg/kg dry	1	P9J2401	10/24/19	10/30/19	TPH 8015M			
>C12-C28	ND	27.8	mg/kg dry	1	P9J2401	10/24/19	10/30/19	TPH 8015M			
>C28-C35	ND	27.8	mg/kg dry	1	P9J2401	10/24/19	10/30/19	TPH 8015M			
Surrogate: 1-Chlorooctane		102 %	70-1	30	P9J2401	10/24/19	10/30/19	TPH 8015M			
Surrogate: o-Terphenyl		124 %	70-1	30	P9J2401	10/24/19	10/30/19	TPH 8015M			
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	10/24/19	10/30/19	calc			

TRC Solutions- Midland, Texas	Solutions- Midland, Texas Project:			Moore Sweet					Fax: (432) 520-7701		
10 Desta Dr STE 150E		Project Num	ber: Moore	Sweet Histo	orical						
Midland TX, 79705	I	Project Mana	ger: Curt Sta	anley							
M Ramp Floor #1A Comp.											
9J23006-03 (Soil)											
		Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
Permian Basin Environmental Lab, L.P.											
General Chemistry Parameters by EPA / Standard Methods											
% Moisture	8.0	0.1	%	1	P9J2403	10/24/19	10/24/19	ASTM D2216			
Total Petroleum Hydrocarbons C6-C35 by	EPA Method 80	15M									
C6-C12	ND	27.2	mg/kg dry	1	P9J2401	10/24/19	10/30/19	TPH 8015M			
>C12-C28	ND	27.2	mg/kg dry	1	P9J2401	10/24/19	10/30/19	TPH 8015M			
>C28-C35	ND	27.2	mg/kg dry	1	P9J2401	10/24/19	10/30/19	TPH 8015M			
Surrogate: 1-Chlorooctane		109 %	70-1	30	P9J2401	10/24/19	10/30/19	TPH 8015M			
Surrogate: o-Terphenyl		131 %	70-1	30	P9J2401	10/24/19	10/30/19	TPH 8015M	S-GC		
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	10/24/19	10/30/19	calc			

TRC Solutions- Midland, Texas		Proj	ect: Moore S	Sweet				Fax: (432) 52	0-7701
10 Desta Dr STE 150E		Project Num	ber: Moore S	Sweet Histo	orical				
Midland TX, 79705	I	Project Mana	ger: Curt Sta	inley					
		M Ramp 1	Floor #2A	Comp.					
		9J23	006-04 (Soi	l)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
General Chemistry Parameters by EPA % Moisture	/ Standard Method 8.0	s 0.1	%	1	P9J2403	10/24/19	10/24/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35			,,,		1702100	10/24/19	10/24/19		
C6-C12	ND	27.2	mg/kg dry	1	P9J2401	10/24/19	10/30/19	TPH 8015M	
>C12-C28	115	27.2	mg/kg dry	1	P9J2401	10/24/19	10/30/19	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P9J2401	10/24/19	10/30/19	TPH 8015M	
Surrogate: 1-Chlorooctane		107 %	70-1.	30	P9J2401	10/24/19	10/30/19	TPH 8015M	
Surrogate: o-Terphenyl		131 %	70-1.	30	P9J2401	10/24/19	10/30/19	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	115	27.2	mg/kg dry	1	[CALC]	10/24/19	10/30/19	calc	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas		5	ect: Moore					Fax: (432) 52	0-7701
10 Desta Dr STE 150E		Project Num			orical				
Midland TX, 79705	I	Project Mana	ger: Curt Sta	anley					
		M Ramp l	Floor #3A	Comp.					
		9J23	006-05 (Soi	l)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	ian Basin E	nvironmer	ıtal Lab, I	P .				
General Chemistry Parameters by EPA / S	Standard Method	s							
% Moisture	9.0	0.1	%	1	P9J2403	10/24/19	10/24/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 by	y EPA Method 80	15M							
C6-C12	ND	27.5	mg/kg dry	1	P9J2404	10/24/19	10/30/19	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P9J2404	10/24/19	10/30/19	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P9J2404	10/24/19	10/30/19	TPH 8015M	
Surrogate: 1-Chlorooctane		119 %	70-1	30	P9J2404	10/24/19	10/30/19	TPH 8015M	
Surrogate: o-Terphenyl		129 %	70-1	30	P9J2404	10/24/19	10/30/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	10/24/19	10/30/19	calc	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
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 P9J2403 - *** DEFAULT PREP ***										
Blank (P9J2403-BLK1)				Prepared &	Analyzed:	: 10/24/19				
% Moisture	ND	0.1	%							
Duplicate (P9J2403-DUP1)	Sou	-ce: 9J23001-	09	Prepared &	Analyzed:	: 10/24/19				
% Moisture	8.0	0.1	%		8.0			0.00	20	
Duplicate (P9J2403-DUP2)	Sou	-ce: 9J23006-	03	Prepared &	Analyzed:	: 10/24/19				
% Moisture	8.0	0.1	%		8.0			0.00	20	
Duplicate (P9J2403-DUP3)	Sou	-ce: 9J23006-	05	Prepared &	Analyzed:	: 10/24/19				
% Moisture	10.0	0.1	%		9.0			10.5	20	
Batch P9J2807 - *** DEFAULT PREP ***										
Blank (P9J2807-BLK1)				Prepared:	0/28/19 A	nalyzed: 10)/29/19			
Chloride	ND	0.100	mg/kg wet							
LCS (P9J2807-BS1)				Prepared:	0/28/19 A	nalyzed: 10)/29/19			
Chloride	436	1.00	mg/kg wet	400		109	80-120			
LCS Dup (P9J2807-BSD1)				Prepared:	0/28/19 A	nalyzed: 1()/29/19			
Chloride	442	1.00	mg/kg wet	400		110	80-120	1.25	20	
Calibration Blank (P9J2807-CCB1)				Prepared:	0/28/19 A	nalyzed: 10)/29/19			
Chloride	0.00		mg/kg wet							
Calibration Blank (P9J2807-CCB2)				Prepared:	0/28/19 A	nalyzed: 10)/29/19			
Chloride	0.00		mg/kg wet							

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

	Reporting		Spike	Source	e	%REC		RPD	
Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
			Prepared:	10/28/19	Analyzed:	10/29/19			
21.2		mg/kg	20.0		106	0-200			
			Prepared:	10/28/19	Analyzed:	10/29/19			
20.5		mg/kg	20.0		103	0-200			
			Prepared:	10/28/19	Analyzed:	10/30/19			
20.9		mg/kg	20.0		105	0-200			
Sour	ce: 9J22005-	-04	Prepared:	10/28/19	Analyzed:	10/29/19			
1190	11.2	mg/kg dry	1120	2.84	105	80-120			
Sour	ce: 9J22005-	-13	Prepared:	10/28/19	Analyzed:	10/30/19			
745	5.38	mg/kg dry	538	223	97.2	80-120			
Sour	ce: 9J22005-	-04	Prepared:	10/28/19	Analyzed:	10/29/19			
1140	11.2	mg/kg dry	1120	2.84	101	80-120	4.32	20	
atrix Spike Dup (P9J2807-MSD2) Source: 9J22005-13			Prepared:	10/28/19	Analyzed:	10/30/19			
765	5.38	mg/kg dry	538	223	101	80-120	2.66	20	
	21.2 20.5 20.9 Sourc 745 Sourc 1140 Sourc	Result Limit 21.2 20.5 20.9 20.9 20.9 11.2 Source: 9J22005- 745 5.38 Source: 9J22005- 1140 11.2 Source: 9J22005-	Result Limit Units 21.2 mg/kg 21.2 mg/kg 20.5 mg/kg 20.5 mg/kg 20.9 mg/kg 20.9 mg/kg 20.9 mg/kg 1190 11.2 745 5.38 Source: 9J22005-U 745 5.38 Source: 9J22005-U 1140 11.2 Source: 9J22005-U	Result Limit Units Level Result Limit Units Level Limit Units Level 20.7 mg/kg 20.0 21.2 mg/kg 20.0 21.2 mg/kg 20.0 20.5 mg/kg 20.0 20.5 mg/kg 20.0 20.9 mg/kg 20.0 Source: 9J22005-U Prepared: 1190 11.2 mg/kg dry 745 5.38 mg/kg dry 745 5.38 mg/kg dry 745 5.38 mg/kg dry 1140 11.2 mg/kg dry 1140 11.2 mg/kg dry	Result Limit Units Level Result Result Limit Units Level Result Prepared: 10/28/19 20.0 Prepared: 10/28/19 21.2 mg/kg 20.0 Prepared: 10/28/19 20.5 mg/kg 20.0 Prepared: 10/28/19 20.5 mg/kg 20.0 Prepared: 10/28/19 20.9 mg/kg 20.0 Prepared: 10/28/19 20.9 mg/kg 20.0 2.84 Source: 9J22005-U Prepared: 10/28/19 1190 11.2 mg/kg dry 538 223 745 5.38 mg/kg dry 538 223 Source: 9J22005-U Prepared: 10/28/19 1140 11.2 mg/kg dry 1120 2.84 Source: 9J22005-U Prepared: 10/28/19	Result Limit Units Level Result %REC Prepared: $10/28/19$ Analyzed: 1 21.2 mg/kg 20.0 106 21.2 mg/kg 20.0 106 Prepared: $10/28/19$ Analyzed: 1 20.5 mg/kg 20.0 103 Prepared: $10/28/19$ Analyzed: 1 20.9 mg/kg 20.0 105 Source: $9J22005-04$ Prepared: $10/28/19$ Analyzed: 1 1190 11.2 mg/kg dry 1120 2.84 105 Source: $9J22005-04$ Prepared: $10/28/19$ Analyzed: 1 745 5.38 mg/kg dry 538 223 97.2 Source: $9J22005-04$ Prepared: $10/28/19$ Analyzed: 1 1140 11.2 mg/kg dry 1120 2.84 101 Source: $9J22005-04$ Prepared: $10/28/19$ Analyzed: 1 1140 11.2 mg/kg dry 1120 2.84 101	ResultLimitUnitsLevelResult%RECLimitsResultLimitsUnitsLevelResult%RECLimitsPrepared:10/28/19Analyzed:10/29/1910/29/1921.2mg/kg20.01060-200Prepared:10/28/19Analyzed:10/29/1920.5mg/kg20.01030-200Prepared:10/28/19Analyzed:10/29/1920.9mg/kg20.01050-200Prepared:10/28/19Analyzed:10/29/1920.9mg/kg20.01050-200Prepared:10/28/19Analyzed:10/29/1920.9mg/kg dry11202.8410580-120Source:9/22005-1Prepared:10/28/19Analyzed:10/29/197455.38mg/kg dry53822397.280-120Prepared:10/28/19Analyzed:10/29/19114011.2mg/kg dry11202.8410180-120Source:9/22005-1Prepared:10/28/19Analyzed:10/29/19114011.2mg/kg dry11202.8410180-120Source:9/22005-1Prepared:10/28/19Analyzed:10/29/19114011.2mg/kg dry11202.8410180-120Source:9/22005-1Prepared:10/28/19Analyzed:10/30/	Result Limit Units Level Result %REC Limits RPD Result Limit Units Level Result %REC Limits RPD Prepared: 10/28/19 Analyzed: 10/29/19 106 0-200 0 21.2 mg/kg 20.0 106 0-200 0 0 0 21.2 mg/kg 20.0 103 0-200 0 <td>ResultLimitUnitsLevelResult$%REC$LimitsRPDLimitResultLimitLimitsLimitsRPDLimitsRPDLimits21.2mg/kg$20.0$$106$$0-200$$-200$$-200$$-200$$-200$21.2mg/kg$20.0$$106$$0-200$$-200$<</td>	ResultLimitUnitsLevelResult $%REC$ LimitsRPDLimitResultLimitLimitsLimitsRPDLimitsRPDLimits21.2mg/kg 20.0 106 $0-200$ -200 -200 -200 -200 21.2mg/kg 20.0 106 $0-200$ -200 <

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project: Moore S	Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: Moore S	Sweet Historical	
Midland TX, 79705	Project Manager: Curt Sta	anley	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J2401 - TX 1005										
Blank (P9J2401-BLK1)				Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0								
>C28-C35	ND	25.0								
Surrogate: 1-Chlorooctane	116		"	100		116	70-130			
Surrogate: o-Terphenyl	70.4		"	50.0		141	70-130			S-GC
LCS (P9J2401-BS1)				Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	895	25.0	mg/kg wet	1000		89.5	75-125			
>C12-C28	1010	25.0	"	1000		101	75-125			
Surrogate: 1-Chlorooctane	110		"	100		110	70-130			
Surrogate: o-Terphenyl	58.9		"	50.0		118	70-130			
LCS Dup (P9J2401-BSD1)				Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	883	25.0	mg/kg wet	1000		88.3	75-125	1.34	20	
>C12-C28	994	25.0	"	1000		99.4	75-125	1.89	20	
Surrogate: 1-Chlorooctane	108		"	100		108	70-130			
Surrogate: o-Terphenyl	58.5		"	50.0		117	70-130			
Calibration Blank (P9J2401-CCB1)				Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	0.00		mg/kg wet							
>C12-C28	0.00									
Surrogate: 1-Chlorooctane	104		"	100		104	70-130			
Surrogate: o-Terphenyl	62.7		"	50.0		125	70-130			
Calibration Blank (P9J2401-CCB2)				Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	0.00		mg/kg wet			•				
>C12-C28	0.00		"							
Surrogate: 1-Chlorooctane	109		"	100		109	70-130			
Surrogate: o-Terphenyl	65.7		"	50.0		131	70-130			S-GC

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J2401 - TX 1005										
Calibration Check (P9J2401-CCV1)				Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	490	25.0	mg/kg wet	500		97.9	85-115			
>C12-C28	549	25.0	"	500		110	85-115			
Surrogate: 1-Chlorooctane	111		"	100		111	70-130			
Surrogate: o-Terphenyl	60.8		"	50.0		122	70-130			
Calibration Check (P9J2401-CCV2)				Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	506	25.0	mg/kg wet	500		101	85-115			
>C12-C28	557	25.0	"	500		111	85-115			
Surrogate: 1-Chlorooctane	117		"	100		117	70-130			
Surrogate: o-Terphenyl	63.4		"	50.0		127	70-130			
Matrix Spike (P9J2401-MS1)	Sou	rce: 9J23004	-02	Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	882	26.0	mg/kg dry	1040	ND	84.7	75-125			
>C12-C28	964	26.0	"	1040	ND	92.5	75-125			
Surrogate: 1-Chlorooctane	111		"	104		106	70-130			
Surrogate: o-Terphenyl	50.0		"	52.1		96.1	70-130			
Matrix Spike Dup (P9J2401-MSD1)	Sou	rce: 9J23004	-02	Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	901	26.0	mg/kg dry	1040	ND	86.5	75-125	2.12	20	
>C12-C28	978	26.0	"	1040	ND	93.9	75-125	1.46	20	
Surrogate: 1-Chlorooctane	101		"	104		96.8	70-130			
Surrogate: o-Terphenyl	50.1		"	52.1		96.2	70-130			
Batch P9J2404 - TX 1005										
Blank (P9J2404-BLK1)				Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							

140

70.0

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0.00

0.00

Permian Basin Environmental Lab, L.P.

Surrogate: 1-Chlorooctane

Surrogate: o-Terphenyl

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

70-130

70-130

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J2404 - TX 1005										
LCS (P9J2404-BS1)				Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	ND	25.0	mg/kg wet	1000			75-125			
>C12-C28	ND	25.0	"	1000			75-125			
Surrogate: 1-Chlorooctane	0.00		"	100			70-130			
Surrogate: o-Terphenyl	0.00		"	50.0			70-130			
LCS Dup (P9J2404-BSD1)				Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	ND	25.0	mg/kg wet	1000			75-125		20	
>C12-C28	ND	25.0	"	1000			75-125		20	
Surrogate: 1-Chlorooctane	0.00		"	100			70-130			
Surrogate: o-Terphenyl	0.00		"	50.0			70-130			
Calibration Blank (P9J2404-CCB1)				Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	0.00		mg/kg wet							
>C12-C28	0.00		"							
Surrogate: 1-Chlorooctane	0.00		"	100			70-130			
Surrogate: o-Terphenyl	0.00		"	50.0			70-130			
Calibration Check (P9J2404-CCV1)				Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	ND	25.0	mg/kg wet	500			85-115			
>C12-C28	ND	25.0	"	500			85-115			
Surrogate: 1-Chlorooctane	0.00		"	100			70-130			
Surrogate: o-Terphenyl	0.00		"	50.0			70-130			
Calibration Check (P9J2404-CCV2)				Prepared:	10/24/19 A	nalyzed: 10	/30/19			
C6-C12	ND	25.0	mg/kg wet	500			85-115			
>C12-C28	ND	25.0	"	500			85-115			
Surrogate: 1-Chlorooctane	0.00		"	100			70-130			
Surrogate: o-Terphenyl	0.00		"	50.0			70-130			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J2404 - TX 1005										
Matrix Spike (P9J2404-MS1)	Sour	ce: 9J24001-0	04	Prepared: 1	10/24/19 A	nalyzed: 10/	/30/19			
C6-C12	ND	25.0	mg/kg dry	1000	ND		75-125			
>C12-C28	ND	25.0	"	1000	ND		75-125			
Surrogate: 1-Chlorooctane	0.00		"	100			70-130			
Surrogate: o-Terphenyl	0.00		"	50.0			70-130			
Matrix Spike Dup (P9J2404-MSD1)	Sour	ce: 9J24001-0	04	Prepared:	10/24/19 A	nalyzed: 10/	/30/19			
C6-C12	ND	25.0	mg/kg dry	1000	ND		75-125		20	
>C12-C28	ND	25.0	"	1000	ND		75-125		20	
Surrogate: 1-Chlorooctane	0.00		"	100			70-130			
Surrogate: o-Terphenyl	0.00		"	50.0			70-130			

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10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Notes and Definitions

S CC	Suma gata reasonant outside of control limits	The date was accorded based on	valid reservery of the remaining surragets
S-GC	Surrogate recovery outside of control limits.	The data was accepted based on	valid recovery of the remaining surrogate.

- 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

Sun Barron

Report Approved By:

Date:

10/30/2019

Brent Barron, Laboratory Director/Technical Director

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

Permian Basin Environmental Lab, L.P.

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



Analytical Report

Prepared for:

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

Project: Moore Sweet Project Number: Moore Sweet Historical Location: Lea County, NM

Lab Order Number: 9J25005



NELAP/TCEQ # T104704516-17-8

Report Date: 10/31/19

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
South Stockpile	9J25005-01	Soil	10/23/19 11:50	10-25-2019 12:08
North Stockpile	9J25005-02	Soil	10/23/19 12:00	10-25-2019 12:08

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

South Stockpile 9J25005-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
	Pern	1ian Basin E	nvironmen	ital Lab, I	L.P.				
Organics by GC									
Benzene	ND	0.00106	mg/kg dry	1	P9J2504	10/25/19	10/25/19	EPA 8021B	
Toluene	ND	0.00106	mg/kg dry	1	P9J2504	10/25/19	10/25/19	EPA 8021B	
Ethylbenzene	ND	0.00106	mg/kg dry	1	P9J2504	10/25/19	10/25/19	EPA 8021B	
Xylene (p/m)	ND	0.00213	mg/kg dry	1	P9J2504	10/25/19	10/25/19	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P9J2504	10/25/19	10/25/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		97.0 %	75-1	25	P9J2504	10/25/19	10/25/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		89.9 %	75-1	25	P9J2504	10/25/19	10/25/19	EPA 8021B	
General Chemistry Parameters by EF	PA / Standard Methoo	ls							
Chloride	209	1.06	mg/kg dry	1	P9J3010	10/30/19	10/31/19	EPA 300.0	
% Moisture	6.0	0.1	%	1	P9J2802	10/28/19	10/28/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 80	015M							
C6-C12	ND	26.6	mg/kg dry	1	P9J2513	10/25/19	10/28/19	TPH 8015M	
>C12-C28	74.6	26.6	mg/kg dry	1	P9J2513	10/25/19	10/28/19	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P9J2513	10/25/19	10/28/19	TPH 8015M	
Surrogate: 1-Chlorooctane		80.5 %	70-1	30	P9J2513	10/25/19	10/28/19	TPH 8015M	
Surrogate: o-Terphenyl		103 %	70-1	30	P9J2513	10/25/19	10/28/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	74.6	26.6	mg/kg dry	1	[CALC]	10/25/19	10/28/19	calc	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas 10 Desta Dr STE 150E Midland TX, 79705		Project Num		Sweet Histo	orical			Fax: (432) 52	0-7701
	Mart TX, 79705 Project Manager: Curt Stanley North Stockpile 9J25005-02 (Soil) North Stockpile 9J25005-02 (Soil) Reporting E Prepared Analyzed Method Notes Permian Basin Environmental Lab, L.P. is by GC e ND 0.00103 mg/kg dry 1 P912504 1025/19 EPA 8021B e ND 0.00103 mg/kg dry 1 P912504 1025/19 EPA 8021B e ND 0.00103 mg/kg dry 1 P912504 1025/19 EPA 8021B invarie ND 0.00103 mg/kg dry 1 P912504 1025/19 EPA 8021B invarie ND 0.00103 Mg/kg dry 1 <th cols<="" th=""></th>								
Analyte	Result		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environmen	tal Lab, I	P.				
Organics by GC									
Benzene	ND	0.00103	mg/kg dry	1	P9J2504	10/25/19	10/25/19	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P9J2504	10/25/19	10/25/19	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P9J2504	10/25/19	10/25/19	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P9J2504	10/25/19	10/25/19	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P9J2504	10/25/19	10/25/19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		102 %	75-1.	25	P9J2504	10/25/19	10/25/19	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		106 %	75-1.	25	P9J2504	10/25/19	10/25/19	EPA 8021B	
General Chemistry Parameters by EF	A / Standard Metho	ds							
Chloride	164	1.03	mg/kg dry	1	P9J3010	10/30/19	10/31/19	EPA 300.0	
% Moisture	3.0	0.1	%	1	P9J2802	10/28/19	10/28/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 8	015M							
C6-C12	ND	25.8	mg/kg dry	1	P9J2513	10/25/19	10/28/19	TPH 8015M	
>C12-C28	50.9	25.8	mg/kg dry	1	P9J2513	10/25/19	10/28/19	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P9J2513	10/25/19	10/28/19	TPH 8015M	
Surrogate: 1-Chlorooctane		89.1 %	70-1.	30	P9J2513	10/25/19	10/28/19	TPH 8015M	
Surrogate: o-Terphenyl		111 %	70-1.	30	P9J2513	10/25/19	10/28/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	50.9	25.8	mg/kg dry	1	[CALC]	10/25/19	10/28/19	calc	

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J2504 - General Preparation (G	C)									
Blank (P9J2504-BLK1)				Prepared &	Analyzed:	10/25/19				
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	0.143		"	0.120		120	75-125			
Surrogate: 1,4-Difluorobenzene	0.128		"	0.120		107	75-125			
LCS (P9J2504-BS1)				Prepared &	Analyzed:	10/25/19				
Benzene	0.102	0.00100	mg/kg wet	0.100		102	70-130			
Toluene	0.109	0.00100	"	0.100		109	70-130			
Ethylbenzene	0.119	0.00100	"	0.100		119	70-130			
Xylene (p/m)	0.206	0.00200	"	0.200		103	70-130			
Xylene (o)	0.0966	0.00100	"	0.100		96.6	70-130			
Surrogate: 1,4-Difluorobenzene	0.123		"	0.120		102	75-125			
Surrogate: 4-Bromofluorobenzene	0.127		"	0.120		106	75-125			
LCS Dup (P9J2504-BSD1)				Prepared &	Analyzed:	10/25/19				
Benzene	0.0985	0.00100	mg/kg wet	0.100		98.5	70-130	3.37	20	
Toluene	0.105	0.00100	"	0.100		105	70-130	3.58	20	
Ethylbenzene	0.108	0.00100	"	0.100		108	70-130	9.45	20	
Xylene (p/m)	0.208	0.00200	"	0.200		104	70-130	0.647	20	
Xylene (o)	0.110	0.00100	"	0.100		110	70-130	13.1	20	
Surrogate: 1,4-Difluorobenzene	0.120		"	0.120		100	75-125			
Surrogate: 4-Bromofluorobenzene	0.106		"	0.120		88.0	75-125			
Calibration Blank (P9J2504-CCB1)				Prepared &	Analyzed:	10/25/19				
Benzene	0.00		mg/kg wet		-					
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.132		"	0.120		110	75-125			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120		96.6	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J2504 - General Preparation (GC	()									
Calibration Blank (P9J2504-CCB3)				Prepared: 1	10/25/19 A	nalyzed: 10	/26/19			
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	0.112		"	0.120		93.0	75-125			
Surrogate: 4-Bromofluorobenzene	0.125		"	0.120		105	75-125			
Calibration Check (P9J2504-CCV1)				Prepared &	Analyzed:	10/25/19				
Benzene	0.109	0.00100	mg/kg wet	0.100		109	80-120			
Toluene	0.113	0.00100	"	0.100		113	80-120			
Ethylbenzene	0.119	0.00100	"	0.100		119	80-120			
Xylene (p/m)	0.213	0.00200	"	0.200		106	80-120			
Xylene (o)	0.117	0.00100	"	0.100		117	80-120			
Surrogate: 1,4-Difluorobenzene	0.135		"	0.120		113	75-125			
Surrogate: 4-Bromofluorobenzene	0.115		"	0.120		96.1	75-125			
Calibration Check (P9J2504-CCV3)				Prepared: 1	10/25/19 A	nalyzed: 10	/26/19			
Benzene	0.101	0.00100	mg/kg wet	0.100		101	80-120			
Toluene	0.102	0.00100	"	0.100		102	80-120			
Ethylbenzene	0.114	0.00100	"	0.100		114	80-120			
Xylene (p/m)	0.186	0.00200	"	0.200		93.1	80-120			
Xylene (o)	0.105	0.00100	"	0.100		105	80-120			
Surrogate: 4-Bromofluorobenzene	0.132		"	0.120		110	75-125			
Surrogate: 1,4-Difluorobenzene	0.138		"	0.120		115	75-125			
Matrix Spike (P9J2504-MS1)	Sou	rce: 9J25001	-01	Prepared: 1	10/25/19 A	nalyzed: 10	/26/19			
Benzene	0.0784	0.00104	mg/kg dry	0.104	ND	75.2	80-120			QM-0
Toluene	0.0745	0.00104	"	0.104	ND	71.5	80-120			QM-0
Ethylbenzene	0.0676	0.00104	"	0.104	ND	64.9	80-120			QM-0
Xylene (p/m)	0.0981	0.00208	"	0.208	ND	47.1	80-120			QM-0
Xylene (o)	0.0486	0.00104	"	0.104	ND	46.6	80-120			QM-0
Surrogate: 1,4-Difluorobenzene	0.122		"	0.125		97.5	75-125			
Surrogate: 4-Bromofluorobenzene	0.104		"	0.125		83.1	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Organics by GC - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte Result Limit Units Level Result %REC Limits RPD Limit Notes			Reporting		Spike	Source		%REC		RPD	
	Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch P9J2504 - General Preparation (GC)

Matrix Spike Dup (P9J2504-MSD1)	Sour	ce: 9J25001	-01	Prepared: 1	0/25/19 A	nalyzed: 10	0/26/19			
Benzene	0.0805	0.00104	mg/kg dry	0.104	ND	77.2	80-120	2.65	20	QM-05
Toluene	0.0794	0.00104	"	0.104	ND	76.3	80-120	6.39	20	QM-05
Ethylbenzene	0.0920	0.00104	"	0.104	ND	88.3	80-120	30.5	20	QM-05
Xylene (p/m)	0.135	0.00208	"	0.208	ND	64.6	80-120	31.4	20	QM-05
Xylene (o)	0.0662	0.00104	"	0.104	ND	63.5	80-120	30.7	20	QM-05
Surrogate: 4-Bromofluorobenzene	0.114		"	0.125		91.2	75-125			
Surrogate: 1,4-Difluorobenzene	0.137		"	0.125		109	75-125			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas		Р	roject: Mo	ore Sweet					Fax: (432)	520-7701
10 Desta Dr STE 150E Project Number: Moore Sweet Historical										
Midland TX, 79705		Project Ma	inager: Cui	rt Stanley						
General Che	•	•				_	lity Cont	trol		
	Perm	ian Basin	Enviror	nmental I	Lab, L.P	•				
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P9J2802 - *** DEFAULT PREP **	*									
Blank (P9J2802-BLK1)				Prepared &	Analyzed:	10/28/19				
% Moisture	ND	0.1	%							
Duplicate (P9J2802-DUP1)	Sou	rce: 9J25004-	-16	Prepared &	Analyzed:	10/28/19				
% Moisture	2.0	0.1	%		2.0			0.00	20	
Duplicate (P9J2802-DUP2)	Sou	rce: 9J25009-	-10	Prepared &	Analyzed:	10/28/19				
% Moisture	5.0	0.1	%		6.0			18.2	20	
Batch P9J3010 - *** DEFAULT PREP **	*									
Blank (P9J3010-BLK1)				Prepared &	Analyzed:	10/30/19				
Chloride	ND	0.100	mg/kg wet							
LCS (P9J3010-BS1)				Prepared &	Analyzed:	10/30/19				
Chloride	424	1.00	mg/kg wet	400		106	80-120			
LCS Dup (P9J3010-BSD1)				Prepared &	Analyzed:	10/30/19				
Chloride	418	1.00	mg/kg wet	400		105	80-120	1.45	20	
Calibration Blank (P9J3010-CCB1)				Prepared &	Analyzed:	10/30/19				
Chloride	0.00		mg/kg wet							
Calibration Blank (P9J3010-CCB2)				Prepared: 1	0/30/19 A	nalyzed: 10	/31/19			

mg/kg wet

Calibration Check (P9J3010-CCV1)		F	Prepared & A	nalyzed: 10/30/19
Chloride	19.8	mg/kg	20.0	98.9 0-200

0.00

Permian Basin Environmental Lab, L.P.

Chloride

TRC Solutions- Midland, Texas	Project: Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number: Moore Sweet Historical	
Midland TX, 79705	Project Manager: Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J3010 - *** DEFAULT PREP ***										
Calibration Check (P9J3010-CCV2)		Prepared: 10/30/19 Analyzed: 10/31/19								
Chloride	19.7		mg/kg	20.0		98.6	0-200			
Calibration Check (P9J3010-CCV3)				Prepared:	10/30/19 A	nalyzed: 10	/31/19			
Chloride	18.8		mg/kg	20.0		93.8	0-200			
Matrix Spike (P9J3010-MS1)	Source: 9J30005-01			Prepared &	Analyzed:	10/30/19				
Chloride	1560	11.6	mg/kg dry	1160	402	99.4	80-120			
Matrix Spike (P9J3010-MS2)	Sour	ce: 9J25001	-02	Prepared: 10/30/19 Analyzed: 10/31/19						
Chloride	17700	54.9	mg/kg dry	5490	12400	97.4	80-120			
Matrix Spike Dup (P9J3010-MSD1)	Source: 9J30005-01			Prepared &	Analyzed:	10/30/19				
Chloride	1500	11.6	mg/kg dry	1160	402	94.5	80-120	3.77	20	
Matrix Spike Dup (P9J3010-MSD2)	Source: 9J25001-02			Prepared:	10/30/19 A	nalyzed: 10	/31/19			
Chloride	17300	54.9	mg/kg dry	5490	12400	90.6	80-120	2.14	20	

Permian Basin Environmental Lab, L.P.

520-7701

TRC Solutions- Midland, Texas	Project	Moore Sweet	Fax: (432) 5
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

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

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9J2513 - TX 1005										
Blank (P9J2513-BLK1)				Prepared: 1	0/25/19 A	nalyzed: 10)/28/19			
C6-C12	ND	25.0	mg/kg wet							-
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	96.8		"	100		96.8	70-130			
Surrogate: o-Terphenyl	57.8		"	50.0		116	70-130			
LCS (P9J2513-BS1)				Prepared: 1	0/25/19 A	nalyzed: 10)/28/19			
C6-C12	1090	25.0	mg/kg wet	1000		109	75-125			
>C12-C28	1180	25.0	"	1000		118	75-125			
Surrogate: 1-Chlorooctane	110		"	100		110	70-130			
Surrogate: o-Terphenyl	57.6		"	50.0		115	70-130			
LCS Dup (P9J2513-BSD1)	Prepared: 10/25/19 Analyzed: 10/28/19									
C6-C12	1070	25.0	mg/kg wet	1000		107	75-125	2.38	20	
>C12-C28	1170	25.0	"	1000		117	75-125	0.608	20	
Surrogate: 1-Chlorooctane	107		"	100		107	70-130			
Surrogate: o-Terphenyl	56.2		"	50.0		112	70-130			
Calibration Blank (P9J2513-CCB1)				Prepared: 1	0/25/19 A	nalyzed: 10)/28/19			
C6-C12	19.8		mg/kg wet							
>C12-C28	22.4		"							
Surrogate: 1-Chlorooctane	99.9		"	100		99.9	70-130			
Surrogate: o-Terphenyl	59.3		"	50.0		119	70-130			
Calibration Blank (P9J2513-CCB2)	Prepared: 10/25/19 Analyzed: 10/28/19									
C6-C12	23.0		mg/kg wet	-		-				
>C12-C28	18.2									
Surrogate: 1-Chlorooctane	98.1		"	100		98.1	70-130			
Surrogate: o-Terphenyl	58.7		"	50.0		117	70-130			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P9J2513 - TX 1005	Tesur	2	Cinto	Lever	Tessur	, ville	Linito	nu b	2	110000
Calibration Check (P9J2513-CCV1)				Prepared:	10/25/19 A	nalvzed: 10)/28/19			
C6-C12	541	25.0	mg/kg wet	500		108	85-115			
>C12-C28	536	25.0	"	500		107	85-115			
Surrogate: 1-Chlorooctane	98.2		"	100		98.2	70-130			
Surrogate: o-Terphenyl	54.4		"	50.0		109	70-130			
Calibration Check (P9J2513-CCV2)				Prepared:	10/25/19 A	nalyzed: 10	/28/19			
C6-C12	527	25.0	mg/kg wet	500		105	85-115			
>C12-C28	547	25.0	"	500		109	85-115			
Surrogate: 1-Chlorooctane	95.7		"	100		95.7	70-130			
Surrogate: o-Terphenyl	53.2		"	50.0		106	70-130			
Calibration Check (P9J2513-CCV3)				Prepared:	10/25/19 A	nalyzed: 10	/28/19			
C6-C12	523	25.0	mg/kg wet	500		105	85-115			
>C12-C28	558	25.0	"	500		112	85-115			
Surrogate: 1-Chlorooctane	104		"	100		104	70-130			
Surrogate: o-Terphenyl	58.5		"	50.0		117	70-130			
Matrix Spike (P9J2513-MS1)	Sou	rce: 9J25006	-04	Prepared:	10/25/19 A	nalyzed: 10	/28/19			
C6-C12	7170	145	mg/kg dry	1160	1820	460	75-125			QM-0
>C12-C28	7570	145	"	1160	4260	285	75-125			QM-0
Surrogate: 1-Chlorooctane	145		"	116		125	70-130			
Surrogate: o-Terphenyl	70.5		"	58.1		121	70-130			
Matrix Spike Dup (P9J2513-MSD1)	Sou	rce: 9J25006	-04	Prepared:	10/25/19 A	nalyzed: 10	/28/19			
C6-C12	7230	145	mg/kg dry	1160	1820	465	75-125	1.03	20	QM-0
>C12-C28	10500	145	"	1160	4260	536	75-125	61.3	20	QM-0
Surrogate: 1-Chlorooctane	145		"	116		125	70-130			
Surrogate: o-Terphenyl	65.1		"	58.1		112	70-130			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
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:

Barron Date: 10

10/31/2019

Brent Barron, Laboratory Director/Technical Director

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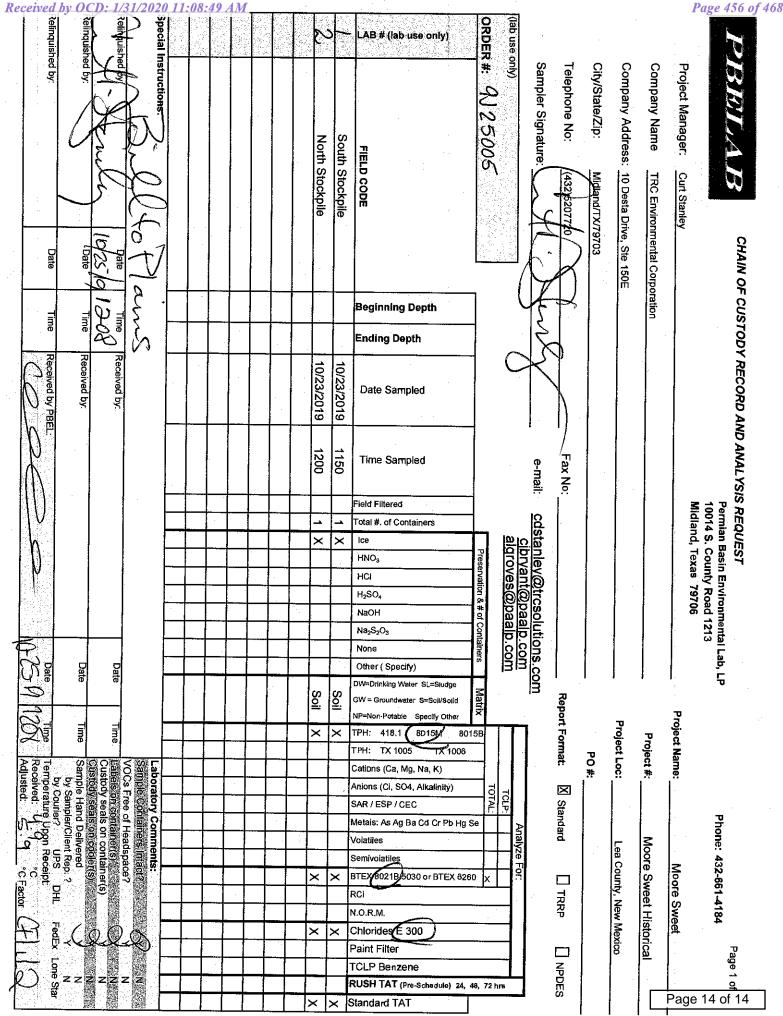
If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

	TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
l	10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
	Midland TX, 79705	Project Manager:	Curt Stanley	



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



Revised Analytical Report

Prepared for:

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

Project: Moore Sweet Project Number: Moore Sweet Historical Location: Lea County, NM

Lab Order Number: 9K08002



NELAP/TCEQ # T104704516-17-8

Report Date: 11/14/19

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
M Ramp Floor #2B Comp	9K08002-01	Soil	11/07/19 11:05	11-07-2019 16:20
MS-F2 @ 14'	9K08002-02	Soil	11/07/19 09:30	11-07-2019 16:20

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

M Ramp Floor #2B Comp 9K08002-01 (Soil)

				,					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
	Porm	ian Basin F	nvironmor	ntal I ab 1	ГР				
			in vir omner	itai Lab, I	L),I ,				
General Chemistry Parameters by EPA /	Standard Method	S							
% Moisture	16.0	0.1	%	1	P9K1202	11/12/19	11/12/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C35 I	by EPA Method 80	15M							
C6-C12	ND	29.8	mg/kg dry	1	P9K0806	11/08/19	11/11/19	TPH 8015M	
>C12-C28	ND	29.8	mg/kg dry	1	P9K0806	11/08/19	11/11/19	TPH 8015M	
>C28-C35	ND	29.8	mg/kg dry	1	P9K0806	11/08/19	11/11/19	TPH 8015M	
Surrogate: 1-Chlorooctane		113 %	70-1	30	P9K0806	11/08/19	11/11/19	TPH 8015M	
Surrogate: o-Terphenyl		117 %	70-1	30	P9K0806	11/08/19	11/11/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	29.8	mg/kg dry	1	[CALC]	11/08/19	11/11/19	calc	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas		Proj	ect: Moore S	Sweet				Fax: (432) 52	20-7701
10 Desta Dr STE 150E		·	ber: Moore S		orical				
Midland TX, 79705			ger: Curt Sta						
		MS	5-F2 @ 14'						
			002-02 (Soi						
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
General Chemistry Parameters by EPA % Moisture	<u>A / Standard Method</u> 9.0	s 0.1	%	1	P9K1202	11/12/19	11/12/19	ASTM D2216	
Total Petroleum Hydrocarbons C6-C3						11,12,19	11/12/17		
C6-C12	ND	27.5	mg/kg dry	1	P9K0806	11/08/19	11/11/19	TPH 8015M	
>C12-C28	38.3	27.5	mg/kg dry	1	P9K0806	11/08/19	11/11/19	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P9K0806	11/08/19	11/11/19	TPH 8015M	
Surrogate: 1-Chlorooctane		114 %	70-1.	30	P9K0806	11/08/19	11/11/19	TPH 8015M	
Surrogate: o-Terphenyl		121 %	70-1.	30	P9K0806	11/08/19	11/11/19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	38.3	27.5	mg/kg dry	1	[CALC]	11/08/19	11/11/19	calc	

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

	Reporting		Spike	Source		%REC		RPD	
Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
			Prepared &	Analyzed:	11/12/19				
ND	0.1	%							
Sour	-ce: 9K08011-	12	Prepared &	Analyzed	11/12/19				
7.0	0.1	%		20.0			96.3	20	
Source: 9K08006-04		Prepared & Analyzed: 11/12/19							
18.0	0.1	%	6.0			100	20		
Sour	-ce: 9K08012-	24	Prepared &	Analyzed	11/12/19				
11.0	0.1	%		9.0			20.0	20	
Sour	-ce: 9K08019-	01	Prepared &	Analyzed	11/12/19				
14.0	0.1	%		15.0			6.90	20	
Sour	ce: 9K08023-	18	Prepared &	Analyzed	11/12/19				
5.0	0.1	%		11.0			75.0	20	
Sour	-ce: 9K11001-	06	Prepared &	Analyzed:	11/12/19				
3.0	0.1	%		3.0			0.00	20	
	ND Sour 7.0 Sour 18.0 Sour 14.0 Sour 5.0 Sour	Result Limit ND 0.1 Source: 9K08011- 7.0 0.1 Source: 9K08006- 18.0 0.1 Source: 9K08012- 11.0 0.1 Source: 9K08012- 11.0 0.1 Source: 9K08019- 14.0 0.1 Source: 9K08023- 5.0 0.1 Source: 9K11001-	Result Limit Units ND 0.1 % Source: 9K08011-12 7.0 0.1 % Source: 9K08006-04 18.0 0.1 % Source: 9K08012-24 11.0 0.1 % Source: 9K08019-01 14.0 0.1 % Source: 9K08023-18 5.0 0.1 %	Result Limit Units Level ND 0.1 % % Source: 9K08011-12 Prepared & 7.0 0.1 % % Source: 9K08006-04 Prepared & 18.0 0.1 % % Source: 9K08012-24 Prepared & 11.0 0.1 % % Source: 9K08019-01 Prepared & 14.0 0.1 % % 5.0 0.1 % % Source: 9K08023-18 Prepared & 5.0 0.1 % %	Result Limit Units Level Result Prepared & Analyzed: Prepared & Analyzed: Prepared & Analyzed: Prepared & Analyzed: ND 0.1 % Prepared & Analyzed: Prepared & Analyzed: 7.0 0.1 % 20.0 Prepared & Analyzed: 18.0 0.1 % 6.0 Prepared & Analyzed: 11.0 0.1 % 9.0 9.0 Source: 9K08019-01 Prepared & Analyzed: 11.0 14.0 0.1 % 15.0 15.0 5.0 0.1 % 11.0 11.0	Result Limit Units Level Result %REC Prepared & Analyzed: 11/12/19 ND 0.1 % Source: 9K08011-12 Prepared & Analyzed: 11/12/19 7.0 0.1 % 20.0 Source: 9K08006-04 Prepared & Analyzed: 11/12/19 18.0 0.1 % 6.0 Source: 9K08012-24 Prepared & Analyzed: 11/12/19 11.0 0.1 % 9.0 11/12/19 14.0 0.1 % 15.0 15.0 Source: 9K08023-18 Prepared & Analyzed: 11/12/19 5.0 0.1 % 11.0 11.0	Result Limit Units Level Result %REC Limits Prepared & Analyzed: 11/12/19 ND 0.1 % Source: 9K08011-12 Prepared & Analyzed: 11/12/19 7.0 0.1 % 20.0 Source: 9K08006-04 Prepared & Analyzed: 11/12/19 18.0 0.1 % 6.0 Source: 9K08012-24 Prepared & Analyzed: 11/12/19 11.0 0.1 % 9.0 Source: 9K08019-01 Prepared & Analyzed: 11/12/19 14.0 0.1 % 15.0 Source: 9K08023-18 Prepared & Analyzed: 11/12/19 5.0 0.1 % 11.0	Result Limit Units Level Result %REC Limits RPD Result Limits Units Level Result %REC Limits RPD Prepared & Analyzed: 11/12/19 Prepared & Analyzed: 11/12/19 11/12/19 11/12/19 ND 0.1 % 20.0 96.3 96.3 96.3 Source: 9K08006-04 Prepared & Analyzed: 11/12/19 100 96.3 18.0 0.1 % 6.0 100	Result Limit Units Level Result %REC Limits RPD Limit ND 0.1 %

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9K0806 - TX 1005										
Blank (P9K0806-BLK1)				Prepared: 1	1/08/19 A	nalyzed: 11	/10/19			
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	113		"	100		113	70-130			
Surrogate: o-Terphenyl	57.9		"	50.0		116	70-130			
LCS (P9K0806-BS1)				Prepared: 1	1/08/19 A	nalyzed: 11	/10/19			
C6-C12	1060	25.0	mg/kg wet	1000		106	75-125			
>C12-C28	1070	25.0	"	1000		107	75-125			
Surrogate: 1-Chlorooctane	111		"	100		111	70-130			
Surrogate: o-Terphenyl	53.1		"	50.0		106	70-130			
LCS Dup (P9K0806-BSD1)				Prepared: 1	1/08/19 A	nalyzed: 11	/10/19			
C6-C12	995	25.0	mg/kg wet	1000		99.5	75-125	6.37	20	
>C12-C28	988	25.0	"	1000		98.8	75-125	7.94	20	
Surrogate: 1-Chlorooctane	103		"	100		103	70-130			
Surrogate: o-Terphenyl	51.2		"	50.0		102	70-130			
Calibration Blank (P9K0806-CCB1)				Prepared: 1	1/08/19 A	nalyzed: 11	/10/19			
C6-C12	7.69		mg/kg wet							
>C12-C28	42.0		"							
Surrogate: 1-Chlorooctane	122		"	100		122	70-130			
Surrogate: o-Terphenyl	60.6		"	50.0		121	70-130			
Calibration Blank (P9K0806-CCB2)				Prepared: 1	1/08/19 A	nalyzed: 11	/11/19			
C6-C12	9.12		mg/kg wet	-						
>C12-C28	53.9		"							
Surrogate: 1-Chlorooctane	119		"	100		119	70-130			
Surrogate: o-Terphenyl	61.7		"	50.0		123	70-130			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Permian Basin Environmental Lab, L.P.

Amelyte	Pagult	Reporting Limit	Units	Spike	Source	%REC	%REC	RPD	RPD Limit	Not
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P9K0806 - TX 1005										
Calibration Check (P9K0806-CCV1)				Prepared:	11/08/19 A	nalyzed: 11	/10/19			
C6-C12	562	25.0	mg/kg wet	500		112	85-115			
>C12-C28	563	25.0	"	500		113	85-115			
Surrogate: 1-Chlorooctane	107		"	100		107	70-130			
Surrogate: o-Terphenyl	53.5		"	50.0	50.0 107 70-130					
Calibration Check (P9K0806-CCV2)				Prepared:	11/08/19 A	nalyzed: 11	/11/19			
C6-C12	524	25.0	mg/kg wet	500		105	85-115			
>C12-C28	558	25.0	"	500		112	85-115			
Surrogate: 1-Chlorooctane	101		"	100		101	70-130			
Surrogate: o-Terphenyl	52.4		"	50.0		105	70-130			
Calibration Check (P9K0806-CCV3)				Prepared:	11/08/19 A	nalyzed: 11	/11/19			
C6-C12	561	25.0	mg/kg wet	500		112	85-115			
>C12-C28	556	25.0	"	500		111	85-115			
Surrogate: 1-Chlorooctane	108		"	100		108	70-130			
Surrogate: o-Terphenyl	55.3		"	50.0		111	70-130			
Matrix Spike (P9K0806-MS1)	Sourc	e: 9K08004	1-02	Prepared: 1	11/08/19 A	nalyzed: 11	/11/19			
C6-C12	987	27.2	mg/kg dry	1090	ND	90.8	75-125			
>C12-C28	921	27.2	"	1090	14.0	83.5	75-125			
Surrogate: 1-Chlorooctane	102		"	109		93.5	70-130			
Surrogate: o-Terphenyl	52.9		"	54.3		97.3	70-130			
Matrix Spike Dup (P9K0806-MSD1)	Sourc	e: 9K08004	4-02	Prepared:	11/08/19 A	nalyzed: 11	/11/19			
C6-C12	996	27.2	mg/kg dry	1090	ND	91.7	75-125	0.974	20	
>C12-C28	960	27.2	"	1090	14.0	87.0	75-125	4.21	20	
Surrogate: 1-Chlorooctane	102		"	109		94.3	70-130			
Surrogate: o-Terphenyl	53.9		"	54.3		<i>99.2</i>	70-130			

Permian Basin Environmental Lab, L.P.

TRC Solutions- Midland, Texas	Project:	Moore Sweet	Fax: (432) 520-7701
10 Desta Dr STE 150E	Project Number:	Moore Sweet Historical	
Midland TX, 79705	Project Manager:	Curt Stanley	

Notes and Definitions

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

Barron

Report Approved By:

Date: _____11/14/2019

Brent Barron, Laboratory Director/Technical Director

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Permian Basin Environmental Lab, L.P.

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

Received by OCD: 1/31/2020 11:08:49 AM 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

PRINT NAME:

SIGNATURE:

Kimberly, Murpi

Kindertahy

Released to Imaging: 7/29/2021 4:15/26 PM

State of New Mexico Energy Minerals and Natural Resources

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

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GMI DATE: 1/2-18

TELEPHONE NO .: 575-347-0434

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE
 Generator Name and Address: Plains Marketing, LP 505 Big Spring St, Suite 600 Midland, Texas 79701
2. Originating Site: Moore Sweet Historical
3. Location of Material (Street Address, City, State or ULSTR): UL "A&H", Sec. 13, T11S, R32E
4. Source and Description of Waste: Waste was generated due to a crude oil release.
Estimated Volume 2,500 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) yd³ / bbls 5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
I, <u>Amber Groves</u> , representative or authorized agent for <u>Plains Marketing, LP</u> 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 Image: Monthly Image: Weekly Image: 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
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
I, <u>Amber Groves</u> , representative for <u>Plains Marketing, LP</u> 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: Gandy, Corp.
OCD Permitted Surface Waste Management Facility
Name and Facility Permit #: Gandy Marley, Inc. – NMOCD Permit #NM-1-019
Address of Facility: Section 4, T11S, R31E
Method of Treatment and/or Disposal:
Evaporation Injection Treating Plant Landfarm 📈 Landfill Other
Waste Acceptance Status:

TITLE:

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

Operator:	OGRID:
PLAINS MARKETING L.P.	34053
333 Clay St, Ste 1600	Action Number:
Houston, TX 77002	3685
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bbillings	None	7/29/2021

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Action 3685