



SITE CHARACTERIZATION REPORT AND REMEDIATION WORKPLAN

Eunice EMSU 6-Inch Pipeline Release
NMOCD No. nAPP2102856493
June 2021

A blue ink signature of Dana Helbert, written in a cursive style.

Dana Helbert, PG
Associate Project Manager

Project Number: 428993

Prepared For:

Holly Energy Partners – Operating, L.P.
2828 North Harwood Street, Suite 1300
Dallas, Texas 75201

Prepared By:

TRC Environmental Corporation
505 East Huntland Drive, Suite 250
Austin, Texas 78752

A blue ink signature of Shannon Hoover, written in a cursive style.

Shannon Hoover, PG
Principal Project Manager

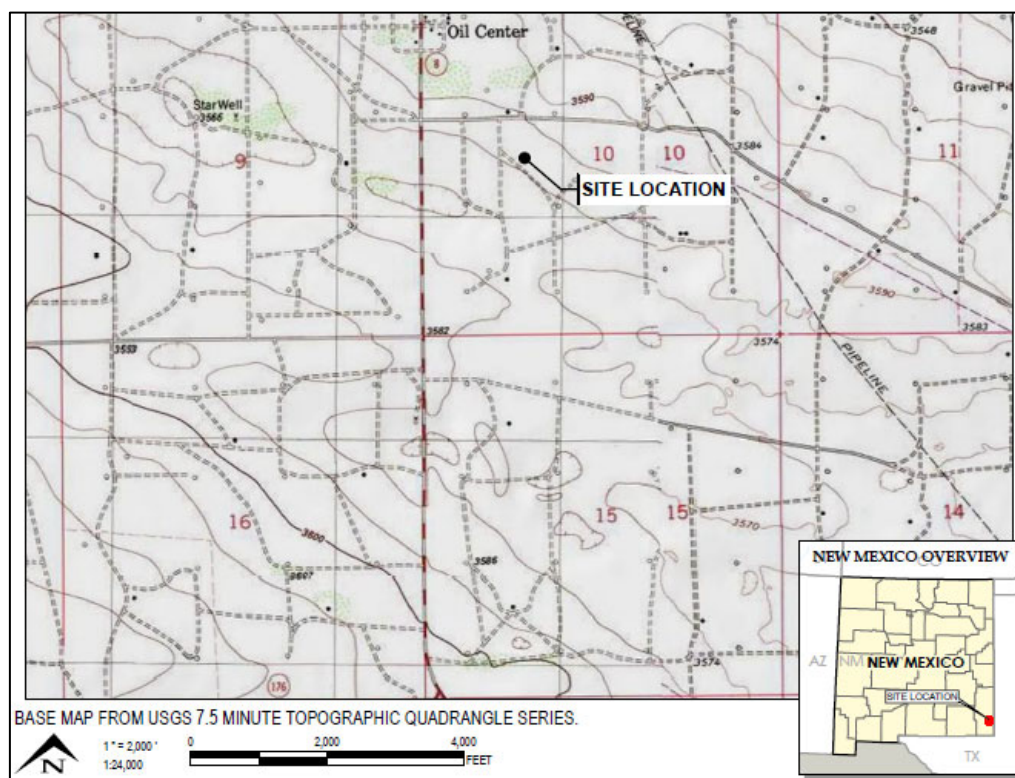




Table of Contents

1.0	INTRODUCTION.....	1
2.0	BACKGROUND.....	1
3.0	NMOCD CLOSURE CRITERIA	1
3.1	Groundwater Evaluation.....	2
3.2	Surface Features and Other Development.....	3
3.3	Wetlands, Floodplain, and Karst Geology	4
3.4	Closure Criteria Currently Assumed Applicable to the Site	4
4.0	SITE ASSESSMENT/CHARACTERIZATION RESULTS.....	6
4.1	Site Map	6
4.2	Depth to Groundwater	6
4.3	Wellhead Protection Area.....	6
4.4	Distance to Nearest Significant Watercourse	7
4.5	Soil Characteristics.....	7
4.5.1	Summary of January 2021 Excavation and March 2021 Investigation and Soil Sampling.....	7
4.5.2	Summary of March 2021 Analytical Results	8
4.5.3	Laboratory Analytical Data Quality Assurance/Quality Control Results...	10
5.0	PROPOSED REMEDIATION WORKPLAN.....	10
5.1	Proposed Remedial Activities.....	10
6.0	DISTRIBUTION.....	11

Table

Table 1: Summary of Soil Sample Analytical Results

Figures

Figure 1 – Site Location Map

Figure 2 – Wellhead Protection Area Map

Figure 3 – Wetlands and FEMA Floodplain Map

Figure 4 – Karst Potential Map

Figure 5 – Soil Sample Analytical Results Map



Appendices

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

Appendix B – Photographic Documentation

Appendix C – Trench Logs

Appendix D – Laboratory Analytical Reports



1.0 INTRODUCTION

TRC Environmental Corporation (TRC), on behalf of Holly Energy Partners – Operating, L.P. (HEP), has prepared this *Site Characterization Report and Remediation Workplan* for a crude oil release at the Eunice EMSU 6-Inch Pipeline (Release Site). On January 26, 2021, a release was discovered at the Eunice EMSU 6-Inch Pipeline (Release Site) located near Eunice, New Mexico. The Site is in Unit Letter K, Section 10, Township 21 South, Range 36 East, Lea County, New Mexico. The surface is privately owned by the Deck Millard Estate #4193. The global positioning system (GPS) coordinates for the approximate center of the Release Site are 32.492667, -103.256611. The GPS coordinates of the release point are 32.493419, -103.257089. The area surrounding the Release Site is used for oil and gas exploration and production activities. The location of the Release Site is depicted on Figures 1 to 5.

2.0 BACKGROUND

On January 26, 2021, a crude oil release was discovered at the Eunice EMSU 6-Inch Pipeline Site. HEP's Eunice EMSU 6-Inch Pipeline was taken out of service after the release. Initial verbal notification of the release was provided to Mr. Gilbert Cordero of the New Mexico Oil Conservation Division (NMOCD) by Ms. Melanie Nolan of HEP on January 26, 2021. The Release Notification and Corrective Action Form (Form C-141) was submitted to NMOCD on January 28, 2021. A copy of the Form C-141 is included as Appendix A. The volume of crude oil released was approximately 821 barrels (bbl). Approximately 390 bbl of free standing crude oil were recovered from the spill area by vacuum truck. The affected area footprint appeared to be approximately 19,275 square feet, as shown on Figure 5. Approximately 1,500 cubic yards (cy) of affected soil were excavated from the release area between January 27 and 31, 2021, and stockpiled on plastic sheeting pending waste characterization and disposal. The stockpile of affected soil was transported to an NMOCD-approved facility for disposal in May 2021.

Photographic documentation of the Release Site is provided in Appendix B. The NMOCD assigned tracking number nAPP2102856493 to the release.

This *Site Characterization Report and Remediation Workplan* was initially due within 90 days of reporting the release (April 26, 2021) in accordance with 19.15.29.11 New Mexico Administrative Code (NMAC). In April 2021, the NMOCD approved an extension request for an additional 90 days to June 25, 2021.

3.0 NMOCD CLOSURE CRITERIA

Cleanup standards for crude oil releases are provided in 19.15.29 NMAC. The cleanup standards (described in the rule as "Closure Criteria") are based primarily on depth to groundwater but are also based on other criteria. Three different Closure Criteria are provided



in the rule. The most stringent apply to sites where groundwater is found within 50 feet of the ground surface or if the release occurred within one of the following areas: s:

- Within 300 feet of any continuously flowing watercourse or any other significant watercourse.
- Within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary highwater mark).
- Within 300 feet from an occupied permanent residence, school, hospital, institution, or church.
- Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes.
- Within 1,000 feet of any fresh water well or spring.
- Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended.
- Within 300 feet of a wetland.
- Within the area overlying a subsurface mine.
- Within an unstable area such as a karst formation.
- Within a 100-year floodplain.

TRC reviewed available information to determine the Closure Criteria for the Site. The findings of this evaluation are summarized below.

3.1 Groundwater Evaluation

Review of the New Mexico Office of the State Engineer (NMOSE) records indicated six water wells have been drilled and completed within 0.5-mile of the Release Site, as depicted on Figure 2, and described below. The shallowest recorded depth to groundwater is 161 feet below ground surface (bgs) in domestic water well L-14815, located 0.5-mile to the northwest of the Release Site. There are no municipal water wells listed within a 0.5-mile radius of the release site. Well CP-00147 was drilled in 1936 and precise location information is not available. Four wells are domestic household wells, with total depths ranging from 200 to 215 feet bgs. Depth to groundwater in the domestic wells ranges from 161 feet bgs (well L-14815) to 200 feet bgs (CP-00734). The depth to groundwater in domestic water well CP-01039 was not recorded. Two commercial or water supply wells have been drilled within a 0.5-mile radius of the Release Site. Depth to water in the commercial wells is recorded as unknown (CP-00147) and approximately 924 feet bgs (CP-00695).



Water Wells Drilled within a 0.5-mile Radius as listed in NMOSE Database

Well ID	Distance and Direction from Release Site	Owner	Use	Well Depth (feet bgs)	Depth to Water (feet bgs)
L-14815	0.50 miles northwest	Michael McNeil	Domestic	213	161
CP-01039	0.45 miles north-northwest	Wayne Baggs	Domestic	200 (approximate)	Unknown
CP-00147	0.41 miles north	Humble Oil and Refining Company	Commercial	495	Unknown
CP-00692	0.35 miles northwest	W.L. Van Noy	Domestic	215	195
CP-00734	0.23 miles north	W.L. Van Noy	Domestic	215	200
CP-00695	0.50 miles southwest	Chevron USA	Water Supply	5,000	924

3.2 Surface Features and Other Development

TRC reviewed recent aerial photographs, topographic maps, the NMOSE Point of Discharge (POD) GIS website, and information available from the Lea County, New Mexico Central Appraisal District website. Based on this review, the Site is **not** located:

- Within 300 feet of any continuously flowing watercourse or any other significant watercourse.
 - No continuously flowing watercourses (rivers, streams, arroyos, etc.) are apparent within 300 feet of the Site in the aerial photography shown on Figure 2 or appear on the topographic map (Figure 1).
- Within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary highwater mark).
 - The topographic map, aerial photography, and floodplain maps (Figures 1, 2, and 3, respectively) indicate there is not a lakebed, sinkhole, or playa lake located within 200 feet of the Site.
- Within 300 feet from an occupied permanent residence, school, hospital, institution, or church.
 - The aerial photography shown on Figure 2 and information available from the Lea County, New Mexico Central Appraisal District do not show or list any permanent residence, school, hospital, institution, or church within 300 feet of the Site. As shown on the aerial base map of Figure 2, the nearest permanent residence is located approximately 2,100 feet to the northwest.



- Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes.
 - No wells or springs located within 500 feet of the Site appear in the NMOSE records reviewed by TRC. The nearest domestic water well (CP-00734) is located approximately 1,214 feet north of the release area.
- Within 1,000 feet of any fresh water well or spring.
 - No freshwater wells or springs located within 1,000 feet of the Site appear in the NMOSE records reviewed by TRC. The nearest domestic water well (CP-00734) is located approximately 1,214 feet north of the release area.
- Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended.
 - Based on the property and other records reviewed by TRC, the Site is not located within a municipal freshwater well field.
- Within the area overlying a subsurface mine.
 - Based on the property and other records reviewed by TRC, the Site is not within the area overlying a subsurface mine.

3.3 Wetlands, Floodplain, and Karst Geology

A review of the United States Fish and Wildlife Service (USFWS) wetlands map indicated the Site is not located within 300 feet of a wetland. The New Mexico Bureau of Land Management (BLM) karst potential map indicates the Site is located within the “low karst potential” area. Finally, review of the Federal Emergency Management Act (FEMA) floodplain map indicates the release at the Site is located outside of a 100-year floodplain. Figure 3 and Figure 4 depict the wetlands and FEMA floodplain information, and the karst potential data, respectively.

3.4 Closure Criteria Currently Assumed Applicable to the Site

The closure criteria for the Site was evaluated based on depth to groundwater, surface features, and other information, as described above. A summary of the NMOCD Closure Criteria is provided in the table below and in Table 1.



NMOCD Closure Criteria

Constituent of Concern		Closure Criteria Based on Depth to Groundwater (mg/kg)		
		≤ 50 feet bgs	51 feet to 100 feet bgs	> 100 feet bgs
Chloride (EPA 300)		600	10,000	20,000
TPH (EPA 8015M)	GRO + DRO + MRO	100	2,500	2,500
	GRO + DRO	NA	1,000	1,000
Total BTEX (EPA 8021 or 8260)		50	50	50
Benzene (EPA 8021 or 8260)		10	10	10

Notes:

NA = not applicable

mg/kg = milligrams per kilogram

bgs = below ground surface

TPH = total petroleum hydrocarbons

GRO = gasoline range organics

DRO = diesel range organics

MRO = motor oil range organics

BTEX = benzene, toluene, ethylbenzene, and total xylenes

As described above, depth to groundwater is over 100 feet bgs, and the Release Site is not within a municipal freshwater well field, is not within or near a wetland, is not within a 100-year floodplain, is in a low karst potential area, and is not close to a waterway, spring, permanent residence, church, school, hospital, or domestic water well.

NMOCD Closure Criteria for surface to 4 feet bgs will be based on the most stringent NMOCD Closure Criteria for soil affected by a release as follows:

- Benzene – 10 mg/kg
- Total BTEX – 50 mg/kg
- Total TPH – 100 mg/kg
- Chloride – 600 mg/kg

From a depth of 4 feet bgs to the total depth of affected soil, the applicable NMOCD Closure Criteria based on depth to groundwater is as follows:

- Benzene – 10 mg/kg
- Total BTEX – 50 mg/kg
- Total TPH – 2,500 mg/kg
- TPH GRO+DRO – 1,000 mg/kg
- Chloride – 20,000 mg/kg



4.0 SITE ASSESSMENT/CHARACTERIZATION RESULTS

As per 19.15.29.11 NMAC, a Site Characterization Report will have the components described in Sections 4.1 through 4.5 of this document.

4.1 Site Map

As required by 19.15.29.11 NMAC, a scaled diagram showing significant Site infrastructure, and trench and soil sample locations is provided as Figure 5. As shown on Figure 5, five active pipelines or flowlines are located in or near the release area:

- HEP Pipeline (inactive),
- ETC Pipeline,
- Plains Pipeline,
- XTO Flowline, and,
- XTO Pipeline.

4.2 Depth to Groundwater

As discussed in Section 3.1, a 0.5-mile review of the NMOSE water well records indicates the shallowest recorded depth to groundwater in a domestic water well (L-14815, located 0.5 miles northwest) is 161 feet bgs. During investigation activities in March 2021, a maximum depth of approximately 7 to 7.5 feet bgs was reached by test trenches TT-1 and TT-2; a maximum depth of approximately 5 to 6 feet was reached by test trenches TT-4, TT-10, and TT-11; and, a maximum depth of approximately 1.5 to 3 feet bgs was reached by test trenches TT-3 and TT-5 through TT-9. Groundwater was not encountered in any of the test trenches.

According to the United States Geological Survey (USGS), surface soils at the site consist of Tertiary-age alluvium, interlayered eolian sands, and petrocalcic soil deposits. Under the interlayered eolian deposits is a dense caliche layer. According to the USGS, the caliche layer is known to form in the Ogallala Formation and can range from approximately a few feet to as much as 60 feet in thickness. Soils beneath the Release Site were observed in the test trenches to consist of unconsolidated red/brown coarse well-sorted sand at thicknesses of approximately 1 to 7 feet, underlain by a dense caliche layer that was encountered at depths of approximately 1.5 to 7.5 feet bgs at test trenches TT-3 through TT-8 and TT-10.

4.3 Wellhead Protection Area

The 0.5-mile Wellhead Protection Area is shown on Figure 2. Four domestic and two commercial water wells have been drilled within 0.5 mile of the Site. No city-owned or municipal wells are located within 0.5 mile of the Site.



4.4 Distance to Nearest Significant Watercourse

The horizontal distance to the nearest significant watercourse as defined in Subsection P of 19.15.17.7 NMAC is greater than 0.5-mile from the Release Site.

4.5 Soil Characteristics

4.5.1 Summary of January 2021 Excavation and March 2021 Investigation and Soil Sampling

After the January 2021 release, a vacuum truck was dispatched in response to the release, and approximately 390 bbl of free standing crude oil were recovered from the spill area by vacuum truck. Between January 27 and 31, 2021, HEP excavated the upper 1 to 3 feet of affected soil throughout the affected area, which was based on visual observations of stained soil. Approximately 1,500 cy of affected soil were excavated during this activity and stockpiled on plastic sheeting pending further waste characterization and disposal. The affected area and former soil stockpile location are shown on Figure 5. Samples of stockpiled soil were collected for waste characterization on February 2, 2021, and results are shown in Table 1. The stockpiled soil was transported to an NMOCD-approved facility for disposal in May 2021.

On March 18, 2021, investigation activities were conducted to assess the extent of remaining affected soil associated with the January 2021 crude oil release. To determine the vertical extent of the affected area, a total of 11 test trenches (TT-1 through TT-11) were advanced utilizing a backhoe across the surface extent of the affected area. Surface samples (SS-1 to SS-11) were collected at the base of the area excavated in January 2021 prior to completing each test trench. Additionally, a surface sample, SS-12, was collected in an area east of the excavated area, where surface soil staining associated with parked equipment was observed.

The test trenches were approximately 5 to 7 feet in length by 3 feet wide. The total depth of the trenches ranged from 1.5 feet bgs to 7.5 feet bgs, as measured from original ground surface, not the grade of the base of the January 2021 excavation. A hard caliche layer was encountered at the total excavated depth of each trench, which resulted in backhoe refusal in each test trench. Lithology and field observations of hydrocarbons (i.e., odor, staining, and photoionization detector [PID] readings) were recorded every 1 vertical foot in each trench. The general lithology observed was unconsolidated red/brown coarse well-sorted sand at thicknesses of approximately 1 to 7 feet, underlain by a dense caliche layer, which was observed at a depth of approximately 1.5 to 7.5 feet bgs at each test trench. The surface sample/test trench locations are depicted on Figure 5. The trench logs are provided in Appendix C.

Discrete soil samples were collected from the surface of the January 2021 excavation by hand using a shovel or from the trenches using the backhoe bucket. Non-dedicated sampling equipment was decontaminated between each sampling location. Surface samples (SS-1 through SS-11) were collected at the base of the January 2021 excavated area prior to



completing each test trench. In each case for SS-1 through SS-11, surface soil samples were collected below the original grade of the surrounding area (i.e., at the base of the January 2021 excavation), and the depths of the surface soil and test trench samples are given relative to original grade. Test trench soil samples were collected from the backhoe bucket at 1-foot intervals until refusal was encountered at each location, as shown on the Trench Logs in Appendix C. If refusal was encountered above the next whole-foot increment, a sample was collected at the maximum depth of excavation.

All samples collected were sent to the laboratory, and the uppermost two to three samples were initially analyzed. The remainder of the samples were held, pending comparison of the initial sample results to Closure Criteria. If concentrations of the initial samples exceeded Closure Criteria, subsequent deeper samples were analyzed, until concentrations below Closure Criteria were achieved or until the bottommost sample (i.e., at refusal) from each location was analyzed. Table 1 lists results from samples that were analyzed.

Samples selected for laboratory analysis to assess the vertical extent of affected soil were collected as follows:

- SS-1 to SS-11: These samples were collected at the base of the January 2021 excavation, which was 1 to 3 feet below the original ground surface, prior to advancement of each test trench.
- SS-12 @ 6": A surface soil sample collected in an un-excavated equipment storage area east of the affected area where visual observations indicated a small hydrocarbon stained area at the surface. A test trench was not performed at this area.
- Test Trench (TT) samples: Samples were collected from each test trench at 1-foot intervals using a backhoe. TT samples were collected at 1-foot intervals below respective SS-1 to SS-11 samples. As described above, only a portion of these samples were analyzed.

Soil samples were submitted to Eurofins Xenco Laboratory in Midland, Texas for laboratory analysis of TPH by Environmental Protection Agency (EPA) Method 8015; benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8260; and chloride by EPA Method 300.0. The locations of the trenches and soil samples, and the soil analytical results are depicted in Figure 5. The sample depths and analytical results for the soil samples are provided in Table 1. Laboratory analytical results are provided in Appendix D.

Following investigation and soil sampling activities, the trenches were backfilled with the originally excavated material by depth order removed.

4.5.2 Summary of March 2021 Analytical Results

Based on the analytical results, concentrations of TPH in soil exceeded Closure Criteria at each surface soil/test trench location. Concentrations of chloride only exceeded Closure Criteria at test trench TT-1, nearest the release point. Concentrations of benzene and total



BTEX did not exceed the Closure Criteria. A brief summary of the soil analytical results for each parameter is discussed below. Soils with Closure Criteria exceedances will be addressed in accordance with the Remediation Workplan discussed in Section 5.0.

TPH

- TPH concentrations that exceeded the Closure Criteria are shown on Table 1 and Figure 5.
- As expected, the highest TPH concentrations were generally observed in the uppermost (shallowest) samples and concentrations decreased with depth.
- At locations SS-1/TT-1, SS-2/TT-2, SS-9/TT-9, and SS-11/TT-11, TPH was vertically delineated to below the Closure Criteria and a hard caliche layer was not encountered at the total depth of the test trench.
- At locations SS-3/TT-3, SS-5/TT-5, SS-6/TT-6, and SS-8/TT-8, refusal due to the hard caliche layer was encountered at a shallow depth—1.5 feet bgs to 3 feet bgs—and deeper samples were unable to be collected. The deepest sample in each of these test trenches exhibited TPH concentrations above the Closure Criteria.
- At locations SS-4/TT-4, SS-7/TT-7, SS-10/TT-10, refusal due to the hard caliche layer was encountered at the total depth of the test trench but TPH was vertically delineated to below Closure Criteria above the hard caliche layer.
- The total TPH concentration at the SS-12 location was above Closure Criteria and was not vertically delineated. Only one soil sample was collected at this location.

BTEX and Benzene

- Total BTEX and benzene concentrations were below Closure Criteria in all samples collected at the Release Site.

Chloride

- Chloride concentrations were detected above the Closure Criteria at depths of 3 and 4 feet bgs at the SS-1/TT-1 location (samples TT-1 @ 3' and TT-1 @ 4'), which is the test trench closest to the release point. The chloride concentration in sample TT-1 @ 5' was below Closure Criteria, thus providing vertical delineation at 5 feet bgs.
- Chloride concentrations were below Closure Criteria in all other samples collected at the Release Site.

Additionally, barium and pH were analyzed in select samples collected at locations SS-1/TT-1 and SS-11/TT-11, respectively. A historical aerial photo identified a possible former drilling pit in the area immediately east of the former stockpile location and north of the release area. Barium was analyzed at the SS-1/TT-1 location, nearest the possible former pit location. Barium concentrations in samples SS-1 @ 2' and TT-1 @ 3' were 70.1 mg/kg and 102 mg/kg, respectively. Barium concentrations do not indicate the former drilling pit overlaps HEP's release area. Samples from the SS-11/TT-11 location were analyzed for pH in order to identify



if corrosion was an issue related to the release. Samples SS-11 @ 2' and TT-11 @ 3' exhibited pH values of 8.0 standard units (S.U.) and 8.7 S.U., respectively.

4.5.3 Laboratory Analytical Data Quality Assurance/Quality Control Results

Data reported in work orders 687139, 880-480-1, 880-770-1, and 880-954-1, generated by Eurofins Xenco Laboratory in Midland, Texas, were reviewed to ensure that reported analytical results met data quality objectives. It was determined by quality control data associated with analytical results that reported concentrations of target analytes were defensible and that measurement data reliability is within the expected limits of sampling and analytical error. All analytical results are usable for characterization of affected media at the Site. The laboratory analytical results are provided as Appendix D.

5.0 PROPOSED REMEDIATION WORKPLAN

5.1 Proposed Remedial Activities

Soil with TPH concentrations above the NMOCD Closure Criteria was observed at each surface sample/test trench location and at surface sample location SS-12. Soil with chloride concentrations above the NMOCD Closure Criteria was observed at the surface sample/test trench SS-1/TT-1 location. Following approval of this workplan by the NMOCD, remediation activities will commence. Soils with TPH or chloride concentrations above the Closure Criteria will be excavated and transported under manifest to a NMOCD-approved disposal facility.

Excavation activities will extend horizontally to the margins of the affected area until PID readings, as well as visual and olfactory evidence, indicates TPH concentrations are likely below Closure Criteria. In areas that are vertically delineated, the excavation will extend vertically to the depth of vertical delineation. In areas representative of SS-3/TT-3, SS-5/TT-5, SS-6/TT-6, SS-8/TT-8, and SS-12, where vertical delineation of TPH was not achieved prior to encountering the hard caliche layer, the excavation will extend into the hard caliche layer until mechanical excavation is no longer feasible; at this point, confirmation samples will be collected for laboratory analysis.

Four pipelines and one flowline are present within the affected area as shown on Figure 5. An attempt will be made to remove the affected soil from around the existing subsurface pipelines either by hand and/or hydro-excavation.

Confirmation soil samples will be collected from the base and sidewalls of the excavation to confirm that soil concentrations in exceedance of the Closure Criteria were removed. Pursuant to 19.15.29.12(D) NMAC, confirmation samples will consist of five-point composite samples, and discrete grab samples will be collected from any wet or discolored areas. HEP will collect one soil sample per 200 square feet of excavation floor for confirmation sampling. Additionally, sidewall confirmation soil samples will be collected from the excavated areas on a basis of one



soil sample per 100 linear feet of sidewall. Each confirmation sample will be analyzed for TPH by EPA Method 8015. Confirmation samples collected around the SS-1/TT-1 location will also be analyzed for chlorides by EPA Method 300.0. Based on the site characterization results, excavation depths are expected to range from approximately 1.5 to 5 feet bgs.

If confirmation sample results report concentrations of TPH or chloride above the Closure Criteria, additional excavation will be performed until additional confirmation samples indicate TPH or chloride is below the Closure Criteria, or until backhoe refusal is encountered in the hard caliche layer or further excavation around the pipelines is not feasible. If TPH or chloride still exceeds the Closure Criteria and further excavation is not feasible within the hard caliche layer, or around the pipelines, these areas will be sprayed with MicroBlaze® to promote natural attenuation. The excavation will remain open for approximately 30 days at which time additional confirmation samples will be collected. If that sample(s) is(are) not below the Closure Criteria, an additional application of MicroBlaze® will be performed and the excavation will be backfilled to grade with non-impacted similar material because further excavation of the hard caliche layer is not feasible. The hard caliche layer represents a low permeability unit that will impede further vertical migration of residual impacts. Once confirmation samples are below the Closure Criteria and up to two rounds of MicroBlaze® application are complete, if necessary, the excavation will be backfilled to grade with non-impacted similar material. Pursuant to 19.15.29.13 NMAC, the affected surface areas will be restored to pre-release conditions by surface grading to near original conditions and contouring to prevent erosion and ponding, promote stability, and preserve storm water flow patterns.

Excavated soil will be stockpiled on plastic sheeting during the excavation, and characterized and disposed of at an NMOCD approved disposal facility at the completion of excavation activities.

HEP requests a remediation schedule of 150 days from the date of NMOCD approval of this Remediation Workplan to complete the remediation activities and submit a *Remediation Summary and Closure Report* for NMOCD approval. The closure report will summarize remedial activities and confirmation sampling results and will include the final Form C-141.

6.0 DISTRIBUTION

Copy 1: Mike Bratcher
New Mexico Energy, Minerals, and Natural Resources Department
Oil Conservation Division, District 2
811 S. First Street
Artesia, NM 88210

Copy 2: Mark Shemaria
Holly Energy Partners – Operating, L.P.
2828 N. Harwood Street, Suite 1300



Dallas, TX 75201

Copy 3: Arsin Sahba
HollyFrontier Corporation
2828 N. Harwood Street, Suite 1300
Dallas, TX 75201

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
HOLLY ENERGY PARTNERS - OPERATING, L.P.
Eunice EMSU Pipeline Release
NMOCD Tracking No.: nAPP2102856493

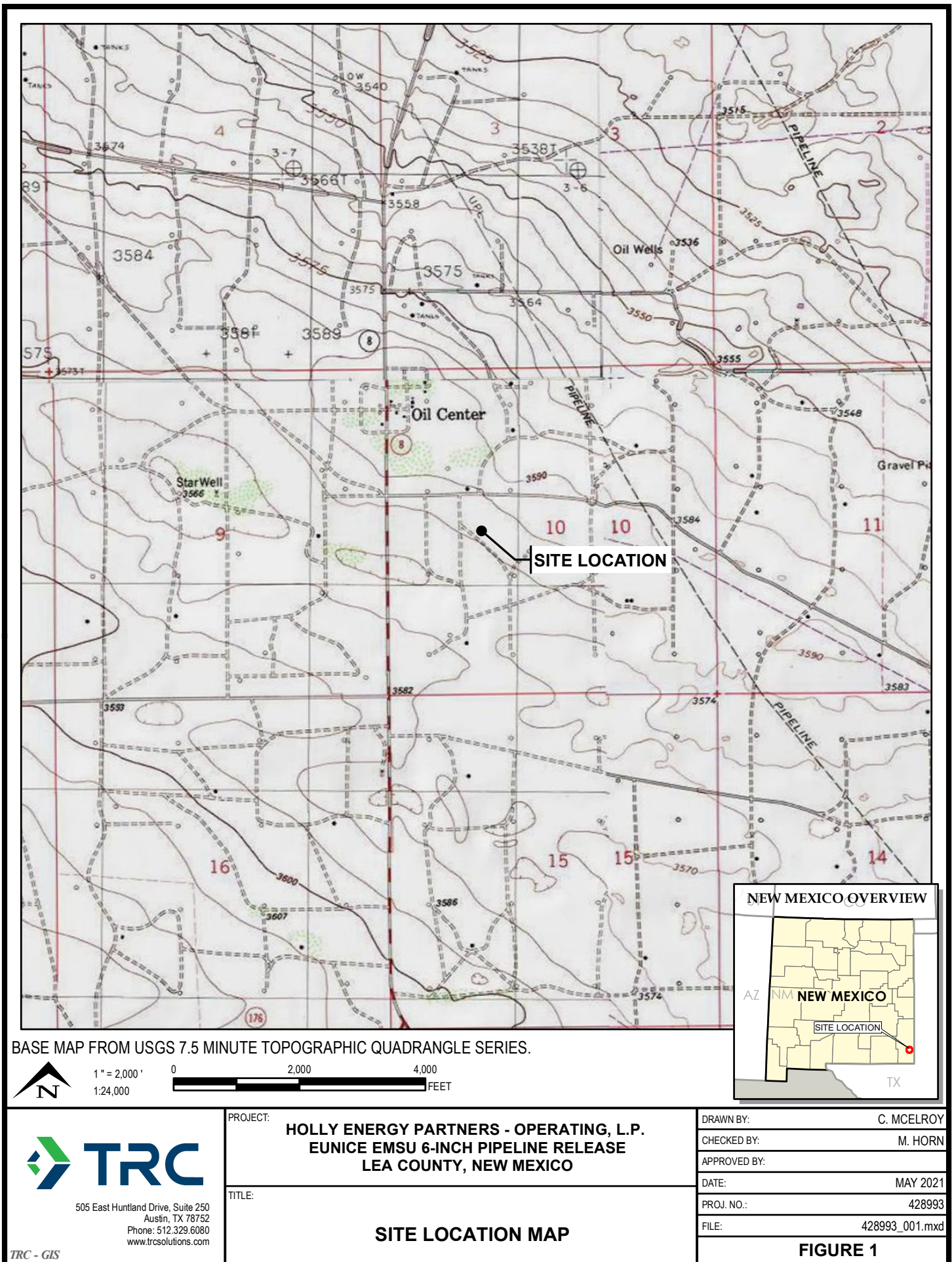
Sample ID	Sample Date	Sample Depth (feet bgs)	PID (ppm)	TPH (GRO)	TPH (DRO)	TPH (MRO)	Total TPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	Chloride
				milligrams per kilogram (mg/kg)									
NMOCD Closure Criteria (Surface to 4 Feet bgs)				-	-	-	100	10	-	-	-	50	600
NMOCD Closure Criteria (Below 4 Feet bgs)				1,000		-	2,500	10	-	-	-	50	20,000
SS-1 @ 2'	3/18/2021	2	208	<258 U	16,700	2,280	19,000	<0.104 U	<0.104 U	0.301	0.945	1.25	483
TT-1 @ 3'	3/18/2021	3	40.0	<53.3 U	<53.3 U	<53.3 U	<53.3 U	<0.00215 U	<0.00215 U	<0.00215 U	<0.00429 U	<0.00215 U	952
TT-1 @ 4'	3/18/2021	4	106	<49.9 U	<49.9 U	<49.9 U	<49.9 U	--	--	--	--	--	825
TT-1 @ 5'	3/18/2021	5	22.0	60.3	<49.9 U	<49.9 U	60.3	--	--	--	--	--	949
SS-2 @ 2'	3/18/2021	2	244	<252 U	14,600	2,120	16,700	<0.102 U	<0.102 U	0.387	1.09	1.47	20.7
TT-2 @ 3'	3/18/2021	3	416	<52.4 U	56.8	<52.4 U	56.8 U	<0.0209 U	<0.0209 U	<0.0209 U	<0.0419 U	<0.0209 U	12.3
SS-3 @ 2'	3/18/2021	2	674.2	682	24,800	3,710	29,200	<0.102 U	0.466	1.76	5.38	7.61	7.39
Duplicate-1 [SS-3 @ 2']	3/18/2021	2	674.2	674	19,400	3,950	24,000	<0.00204 U	<0.00204 U	<0.00204 U	<0.00408 U	<0.00204 U	<5.05 U
TT-3 @ 3'R	3/18/2021	3	270.2	<52.2 U	213	<52.2 U	213	<0.00208 U	<0.00208 U	<0.00208 U	<0.00416 U	<0.00208 U	121
SS-4 @ 1'	3/18/2021	1	670	573	25,400	3,810	29,800	<0.102 U	0.406	2.20	6.10	8.71	25.7
TT-4 @ 2'	3/18/2021	2	1,259	<51.7 U	724	83.9	808	<0.0208 U	<0.0208 U	<0.0208 U	<0.416 U	<0.0208 U	13.1
TT-4 @ 3'	3/18/2021	3	202	<51.8 U	<51.8 U	<51.8 U	<51.8 U	<0.00208 U	<0.00208 U	<0.00208 U	<0.00416 U	<0.00208 U	16.9
TT-4 @ 4'	3/18/2021	4	156	107 B	64.1	<51.5 U	171 B	<0.00206 U	<0.00206 U	<0.00206 U	<0.00412 U	<0.00206 U	164
TT-4 @ 5'	3/18/2021	5	1,118	<51.6 U	764	112	876 B	<0.00207 U	<0.00207 U	<0.00207 U	<0.00413 U	<0.00207 U	181
TT-4 @ 5.5'	3/18/2021	5.5	555	51.8 B	93.2	<51.6	145 B	<0.00207 U	<0.00207 U	<0.00207 U	<0.00414 U	<0.00207 U	92.5
TT-4 @ 6'R	3/18/2021	6	1,276	<51.5 U	895	132	1,030 B	<0.00207 U	0.00415	0.00488	0.00489	0.0139	53.9
SS-5 @ 2'	3/18/2021	2	421	575	27,200	3,990	31,800	<0.101 U	0.858	2.55	9.04	12.4	71.8
TT-5 @ 3'R	3/18/2021	3	289	11,600	19,600	2,520	33,700	<0.216 U	1.11	2.61	8.95	12.7	18.4
SS-6 @ 1'	3/18/2021	1	368	311	13,200	1,790	15,300	<0.102 U	0.356	0.895	4.04	5.29	22.1
TT-6 @ 1.5'R	3/18/2021	1.5	1,580	7,040	12,900	1,590	21,500	<0.108 U	0.522	1.72	5.77	8.01	71.8
SS-7 @ 1'	3/18/2021	1	165	<253 U	18,300	2,920	21,200	<0.100 U	<0.100 U	0.217	1.08	1.30	12.6
TT-7 @ 2'	3/18/2021	2	399	<51.9 U	112	<51.9 U	112	<0.00208 U	<0.00208 U	<0.00208 U	<0.00416 U	<0.00208 U	6.89
TT-7 @ 3'R	3/18/2021	3	137	<50.0 U	<50.0 U	<50.0 U	<50.0 U	--	--	--	--	--	--
SS-8 @ 2'	3/18/2021	2	235	277	19,200	2,640	22,100	<0.101 U	0.297	0.793	3.54	4.63	7.31
TT-8 @ 3'R	3/18/2021	3	1,173	9,280	16,000	2,120	27,400	<0.107 U	0.669	1.76	6.08	8.51	12.4
SS-9 @ 1'	3/18/2021	1	82	<50.5 U	235	<50.5 U	235	<0.00201 U	<0.00201 U	0.0101	0.0533	0.0634	5.34
TT-9 @ 2'	3/18/2021	2	360	<51.9 U	665	92.5	758	<0.0207 U	<0.0207 U	<0.0207 U	<0.0415 U	<0.0207 U	<4.97 U
TT-9 @ 3'	3/18/2021	3	82.0	<50.0 U	<50.0 U	<50.0 U	<50.0 U	--	--	--	--	--	--
SS-10 @ 3'	3/18/2021	3	704	1,350	44,700	6,260	52,300	<0.103 U	0.483	2.94	11.6	15.0	9.84
TT-10 @ 4'	3/18/2021	4	1,258	84.3	1,080	140	1,300	<0.0209 U	0.0258	0.180	0.252	0.457	<4.98 U F1
TT-10 @ 5'	3/18/2021	5	261	<53.0 U	<53.0 U	<53.0 U	<53.0 U	<0.00210 U	<0.00210 U	<0.00210 U	<0.00419 U	<0.00210 U	<5.05 U
TT-10 @ 6'R	3/18/2021	6	626	<53.3 U	<53.3 U	<53.3 U	<53.3 U	<0.00212 U	<0.00212 U	<0.00212 U	<0.00424 U	<0.00212 U	35.0
SS-11 @ 2'	3/18/2021	2	433	271	16,500	2,360	19,100	<0.102 U	<0.102 U	0.671	2.35	3.02	<5.02 U
TT-11 @ 3'	3/18/2021	3	259	<52.5 U	<52.5 U	<52.5 U	<52.5 U	<0.00210 U	<0.00210 U	<0.00210 U	<0.00420 U	<0.00210 U	<4.99 U
SS-12 @ 6"	3/18/2021	0.5	183	<50.1 U	565	143	708	<0.00202 U	<0.00202 U	<0.00202 U	<0.00403 U	<0.00202 U	<4.95 U
Stockpile-1	2/2/2021	--	--	4,780	14,000	1,630	20,410	3.42	16.8	27.9	108.2	156.3	57.0
Stockpile-2	2/2/2021	--	--	3,490	11,700	1,490	16,680	1.30	9.10	13.2	72.6	96.2	68.7

Notes:

bgs: below ground surface
BTEX: benzene, toluene, ethylbenzene, xylenes
DRO: Diesel Range Organics
GRO: Gasoline Range Organics
MRO: Motor Oil Range Organics
NMOCD: New Mexico Oil Conservation Division
PID: Photoionization Detector
ppm: parts per million
R suffix indicates refusal at Test Trench location
SS: Surface Sample; collected at the surface of the excavated area
TPH: Total Petroleum Hydrocarbons
TT: Test Trench Sample; collected below the surface of the excavated area

Bold indicates the parameter was detected above the laboratory method/sample detection limit.
Orange highlight indicates sampled location and interval will be excavated during remedial activities.
Yellow highlight indicates the parameter is above the NMOCD Closure Criteria.
-- indicates data not collected.
< indicates the parameter was below the appropriate laboratory method/sample detection limit.

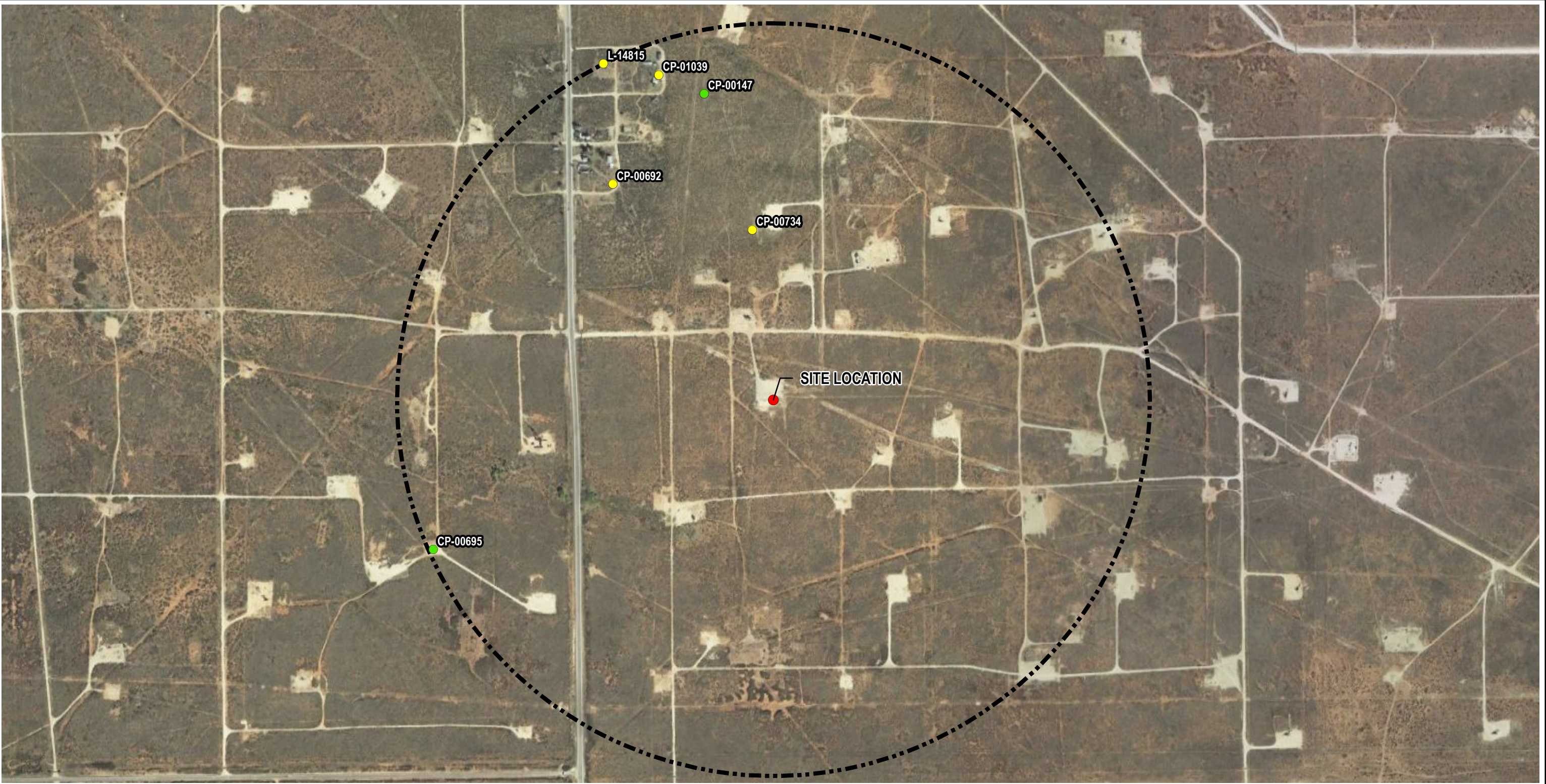
U: Indicates the analyte was analyzed for but not detected.
B: Compound was found in the blank and sample.
F1: Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) recovery exceeds control limits.



TRC - GIS


Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

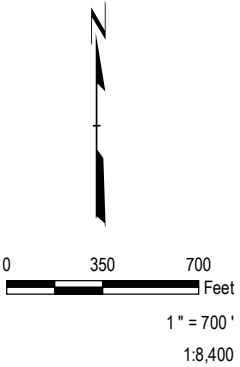
Plot Date: 5/27/2021 09:46:57 AM by SRAY -- LAYOUT: ANSI B(11"x17")
Path: S:\PROJECTS\HOLLY ENERGY PARTNERS\Navajo_Lovington\428993_EMSU_Pipeline_Release6-MXD\428993_002.mxd

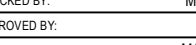


BASEMAP FROM GOOGLE AND THEIR DATA PARTNERS

LEGEND

- SITE LOCATION
- COMMERICAL WELL
- DOMESTIC WELL
-  1/2 MILE RELEASE AREA RADIUS



PROJECT:		HOLLY ENERGY PARTNERS - OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO	
TITLE:		WELLHEAD PROTECTION AREA MAP	
DRAWN BY:	C. MCELROY	PROJ NO.:	428993
CHECKED BY:	M. HORN	FIGURE 2	
APPROVED BY:			
DATE:	MAY 2021		
		505 East Huntland Drive, Suite 250 Austin, TX 78752 Phone: 512.329.6080 www.trcsolutions.com	
FILE NO.:		428993_002.mxd	

Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

Plot Date: 5/24/2021 1:15:02:35 PM by CMCELROY -- LAYOUT: ANSI B(11"x17")
Path: \\anpoyee\gis\GIS1-PROJECTS\HOLLY ENERGY_PARTNERS\Navajo_Lovington\428993_EMSU_Pipeline_Release\6-MXD\428993_003.mxd

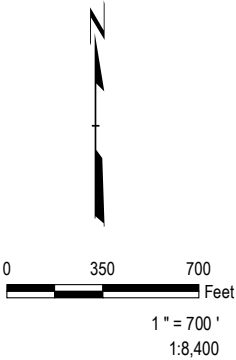
TRC - GIS




BASEMAP FROM GOOGLE AND THEIR DATA PARTNERS.

FEMA FLOODPLAIN DATA NOT PRESENT AT CURRENT SCALE.

USFW WETLANDS DATA NOT PRESENT AT CURRENT SCALE.



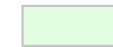
PROJECT:		HOLLY ENERGY PARTNERS - OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO	
TITLE:			
WETLANDS AND FEMA FLOODPLAIN MAP			
DRAWN BY:		C. MCELROY	PROJ NO.: 428993
CHECKED BY:		M. HORN	FIGURE 3
APPROVED BY:			
DATE:		MAY 2021	
		505 East Huntland Drive, Suite 250 Austin, TX 78752 Phone: 512.329.6080 www.trcsolutions.com	
		FILE NO.: 428993_003.mxd	

Plot Date: 5/25/2021 10:55:10 AM by CMCELROY -- LAYOUT: ANS\B(11"x17")
Path: \\anp\p\ees\gis\PROJECTS\HOLLY ENERGY_PARTNERS\Navajo_Lovington\428993_EMSU_Pipeline_Release\6-MXD\428993_004.mxd
Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0
TRC - GIS

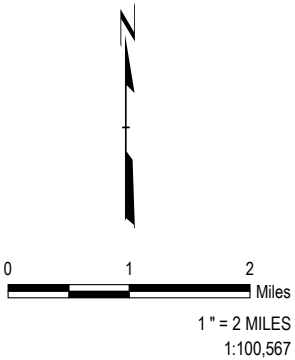



BASEMAP FROM GOOGLE AND THEIR DATA PARTNERS.
KARST DATA FROM NEW MEXICO BUREAU OF LAND MANAGEMENT.

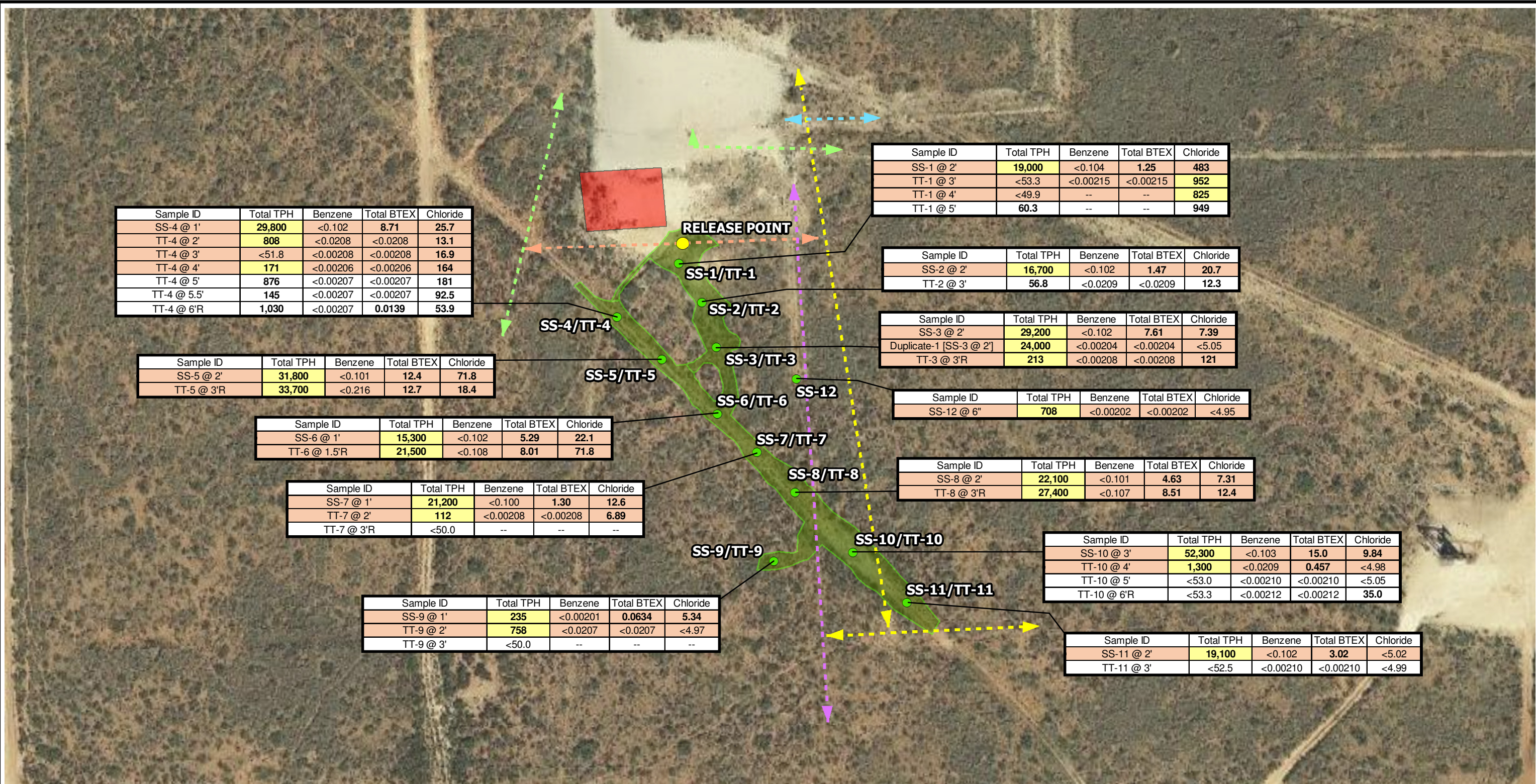
LEGEND

 Low Karst Potential

MEDIUM AND HIGH KARST DATA NOT PRESENT AT CURRENT SCALE.



PROJECT:		HOLLY ENERGY PARTNERS - OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO	
TITLE:			
KARST POTENTIAL MAP			
DRAWN BY:	C. MCELROY	PROJ NO.:	428993
CHECKED BY:	M. HORN	FIGURE 4	
APPROVED BY:			
DATE:	MAY 2021		
		505 East Huntland Drive, Suite 250 Austin, TX 78752 Phone: 512.329.6080 www.trcsolutions.com	
FILE NO.:		428993_004.mxd	



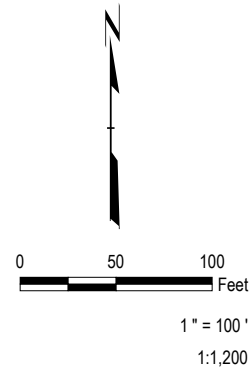
BASEMAP FROM GOOGLE AND THEIR DATA PARTNERS. IMAGE DATE 11/2/2017.

- RELEASE POINT
- TEST TRENCH AND SOIL SAMPLE LOCATION, MARCH 2021
- ETC PIPELINE
- HEP PIPELINE (INACTIVE)
- PLAINS PIPELINE
- XTO FLOWLINE
- XTO PIPELINE
- FORMER SOIL STOCKPILE
- AFFECTED AREA

	GRO+DRO *	Total TPH	Benzene	Total BTEX	Chloride
NMOCD Closure Criteria (Surface to 4 Feet bgs)	--	100	10	50	600
NMOCD Closure Criteria (Below 4 Feet bgs)	1,000 *	2,500	10	50	20,000

* See Table 1 for GRO and DRO concentrations. No samples collected below 4 feet bgs exceeded GRO+DRO Closure Criteria.

Notes:
bgs: below ground surface
BTEX: benzene, toluene, ethylbenzene, xylenes
DRO: Diesel Range Organics
GRO: Gasoline Range Organics
mg/kg: milligrams per kilogram
NMOCD: New Mexico Oil Conservation Division
R suffix indicates refusal at Test Trench location
SS: Surface Sample; collected at the surface of the excavated area
TPH: Total Petroleum Hydrocarbons
TT: Test Trench Sample; collected below the surface of the excavated area
All concentrations in mg/kg
Bold indicates the parameter was detected above the laboratory method/sample detection limit.
Orange highlight indicates sampled location and interval will be excavated during remedial activities.
Yellow highlight indicates the parameter is above the NMOCD Closure Criteria.
-- indicates data not collected.
< indicates the parameter was below the appropriate laboratory method/sample detection limit.



PROJECT:
HOLLY ENERGY PARTNERS - OPERATING, L.P.
EUNICE EMSU 6-INCH PIPELINE RELEASE
LEA COUNTY, NEW MEXICO

TITLE:
SOIL SAMPLE ANALYTICAL RESULTS MAP

DRAWN BY: C. MCELROY
CHECKED BY: M. HORN
APPROVED BY:
DATE: JUNE 2021

PROJ NO.: 428993
FIGURE 5

505 East Huntland Drive, Suite 250
Austin, TX 78752
Phone: 512.329.6080
www.trcsolutions.com

FILE NO.: 428993_005.mxd

Received by OCD: 6/23/2021 11:54:08 AM

Page 21 of 171



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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Holly Energy Partners, LLC	OGRID 282505
Contact Name Melanie Nolan	Contact Telephone 214-605-8303
Contact email Melanie.Nolan@hollyenergy.com	Incident # (assigned by OCD) nAPP2102856493
Contact mailing address 1602 W. Main, Artesia, NM 88210	

Location of Release Source

Latitude 32.492667 Longitude -103.256611
(NAD 83 in decimal degrees to 5 decimal places)

Site Name EMSU 6in Pipeline	Site Type Right of Way
Date Release Discovered 1/26/2021	API# (if applicable)

Unit Letter	Section	Township	Range	County
K	10	21S	36E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: Deck Millard Estate #4193)

Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 821	Volume Recovered (bbls) 390
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Cause of release is believed to be corrosion and an internal investigation is on-going.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Release of 821 Barrels
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Notification was given to Gilbert Cordero at 1236MST on 1/26 by Melanie Nolan telephonically. A follow-up email was sent following telephonic notification to Mike Bratcher, Gilbert Cordero, Robert Hamlet and Chad Hensley with NMOCD with release details and actions.	

Initial Response

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

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

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

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

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

Printed Name: Melanie Nolan Title: Environmental Specialist
Signature:  Date: 1/28/2021
email: Melanie.Nolan@hollyenergy.com Telephone: 214-605-8303

OCD Only

Received by: _____ Date: _____

OCD Permitting

Home Searches Incidents Incident Details

NAPP2102856493 EMSU 6IN PIPELINE @ K-10-21S-36E ON 0E

General Incident Information

Site Name: EMSU 6IN PIPELINE
Well:
Facility:
Operator: 282505 HOLLY ENERGY PARTNERS
Status: Closure Not Approved
Type: Oil Release
District: Hobbs
Severity: Major
Surface Owner: Private
County: Lea (25)
Incident Location: K-10-21S-36E 0 FNL 0 FEL
Lat/Long: 32.492667,-103.256611 NAD83
Directions:

- Quick
- Gene
 - Material
 - Event
 - Order
- Assoc
- Incident
- New
- New
 - New
 - New
 - New
 - New
 - New
 - New

Notes

Source of Referral: Industry Rep
Action / Escalation:
Resulted In Fire:
Will or Has Reached Watercourse:
Endangered Public Health:
Property Or Environmental Damage:
Fresh Water Contamination:

Contact Details

Contact Name: Contact Title:

Event Dates

Date of Discovery: 01/26/2021
OCD Notified of Major Release: 01/28/2021
Extension Date:
Cancelled Date:
Initial C-141 Received:
Characterization Report Approved:
Characterization Report Received:
Remediation Plan Approved:
Remediation Plan Received:
Remediation Due:
Closure Report Received:
Closure Report Approved:

Incidents Materials

Cause	Source	Material	Volume				Units
			Unk.	Spilled	Recovered	Lost	
Corrosion	Pipeline (Any)	Crude Oil		821	390	431	BBL

Incident Events

Date	Detail
------	--------

MNOLAN (ENVIRONMENTAL SPECIALIST FOR HOLLY ENERGY PARTNERS) SIGN OUT HELP

Searches Operator Data Submissions Administration

01/28/2021	The (01/28/2021, C-141A) application was assigned to this incident.
01/28/2021	Initial Response question & answers at the time of notification were as follows. <ul style="list-style-type: none">The source of the release has been stopped: True.The impacted area has been secured to protect human health and the environment: True.Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices: True.All free liquids and recoverable materials have been removed and managed appropriately: True.
01/28/2021	New incident created by the operator, upon the submission of notification of release.
01/26/2021	Release discovered by the operator.

Orders

No Orders Found

New Mexico Energy, Minerals and Natural Resources Department | Copyright 2012
1220 South St. Francis Drive | Santa Fe, NM 87505 | P: (505) 476-3200 | F: (505) 476-3220

EMNRD Home OCD Main Page OCD Rules Help

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>161</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Melanie Nolan Title: Environmental Specialist

Signature: Melanie Nolan Date: 6/24/2021

email: Melanie.Nolan@hollyenergy.com Telephone: 214-605-8303

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

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

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Melanie Nolan Title: Environmental Specialist

Signature: Melanie Nolan Date: 6/24/2021

email: Melanie.Nolan@hollyenergy.com Telephone: 214-605-8303

OCD Only

Received by: Chad Hensley Date: 07/16/2021

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

Signature: Chad Hensley Date: 07/16/2021



Appendix B: Photographic Documentation

Appendix B
Photographic Documentation

Photograph No. 1 Date: 3/18/2021 Direction: West Description: View of delineation activities in TT-1. south of HEP pipeline	
Photograph No. 3 Date: 3/18/2021 Direction: South Description: View of delineation activities in TT-2.	

Appendix B
Photographic Documentation

Photograph No. 2

Date:
3/18/2021

Direction:
West

Description:
View of
delineation
activities in TT-1.

**Photograph No. 4**

Date:
3/18/2021

Direction:
South

Description:
View of
delineation
activities in TT-3.





Appendix C: Trench Logs



LOG OF SOIL BORING

PROJECT NAME: HEP EMSU		SOIL BORING ID: TT-1	
PROJECT NUMBER: 428993		LOCATION: Lea County, NM	SHEET 1 OF 1
LOGGED BY: Misti Tenert		SURFACE ELEV.: 	
PROJECT LOCATION: Eunice, NM		N: 32.493391° W: -103.257093	DATE STARTED: 3/18/21
DRILLED BY: TRC Backhoe		DRILLER NAME: Julian Puentez	DATE COMPLETED: 3/18/21

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
				(PPM)			
						Previously removed ↓	Sample ID: (submitted)
				208	2.5	Surface, red/brown coarse grained sand, well sorted	SS-1 @ 2'
				40		Mild staining, heavy odor	
				106		Soft/medium caliche layer, Tan / off-white, mild odor	TT-1 @ 3'
				22		no staining	
				16.6	5.0		
				18.7			
					7.5	Hard caliche layer, off-white, no staining, mild odor. Refusal, torch terminated	
					10.0		
					12.5		
					15.0		
					17.5		
					20.0		

DRILLING METHOD Trenching
DRILL RIG NA
BORING DIAMETER NA

WATER LEVEL OBSERVATIONS			
FIRST OCCURRENCE: N/A			
DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

SIGNED Misti Tenert DATE 3/19/21
REVISID 06/2011

CHECKED _____ DATE _____



LOG OF SOIL BORING

PROJECT NAME: HEP EMSU		SOIL BORING ID: TT-2	
PROJECT NUMBER: 428993		LOCATION: Lea County, NM	SHEET 1 OF 1
LOGGED BY: Misti Tenert		SURFACE ELEV.: 	
PROJECT LOCATION: Eunice, NM		N: 32.493248° W: -103.257026	DATE STARTED: 3/18/21
DRILLED BY: TRC Backhoe		DRILLER NAME: Julian Renter	DATE COMPLETED: 3/18/21

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
				(BPM)			
						Previously Removed	Sample ID: (Submitted)
						↓	
				244	2.5	Surface, Red/Brown coarse grained sand, well sorted, mild staining & odor	SS-2 @ 2'
				415.7		Soft/medium caliche, Tan/off white, mild odor, no staining	TT-2 @ 3'
				1348			
				107.8	5.0		
				91.8		Medium/hard caliche layer, off-white mild odor no staining	
				49.1			
				50.7	7.5	Hard caliche layer, off white, mild odor no staining, Refusal, trench terminated	
					10.0		
					12.5		
					15.0		
					17.5		
					20.0		

DRILLING METHOD Trenching
DRILL RIG NA
BORING DIAMETER NA

WATER LEVEL OBSERVATIONS			
FIRST OCCURRENCE: N/A			
DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

SIGNED Misti Tenert DATE 3/19/21

CHECKED _____ DATE _____

REVISED 06/2011



LOG OF SOIL BORING

PROJECT NAME: HEP EMSU		SOIL BORING ID: TT-3	
PROJECT NUMBER: 428993		LOCATION: Lea County, NM	SHEET 1 OF 1
LOGGED BY: Misti Trivett		SURFACE ELEV.: 	
PROJECT LOCATION: Funice, NM		N: 32.493115 W: 103.256985	DATE STARTED: 3/18/21
DRILLED BY: TRC Backhoe		DRILLER NAME: Julian Puentez	DATE COMPLETED: 3/18/21

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
				(PPM)			
						Previously removed	Sample ID: (submitted)
					67.4.2	Surface, red/brown coarse grained sand, well sorted	
					2.5	Strong odor, heavy staining	SS-302'
					270.2	Hard caliche layer, off-white/tan, mild staining and odor, Refusal, Trench terminated	TT-303'
					5.0		
					7.5		
					10.0		
					12.5		
					15.0		
					17.5		
					20.0		

DRILLING METHOD
Trenching
DRILL RIG
NA
BORING DIAMETER
NA

WATER LEVEL OBSERVATIONS			
FIRST OCCURRENCE: N/A			
DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

SIGNED Misti Trivett DATE 3/19/21

CHECKED _____ DATE _____



LOG OF SOIL BORING

PROJECT NAME: HEP EMSU	SOIL BORING ID: TT-4	
PROJECT NUMBER: 428993	LOCATION: Lea County, NM	SHEET 1 OF 1
LOGGED BY: Misti Teichert	SURFACE ELEV.: _____	
PROJECT LOCATION: Eunice, NM	N: 32.493221 W: -103.257323	DATE STARTED: 3/18/21
DRILLED BY: TRC Backhoe	DRILLER NAME: Julian Renteria	DATE COMPLETED: 3/18/21

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
				(ft)		- Previously Removed	Sample ID: (submitted) SS-4 @ 1'
			670			Surface, Red/brown coarse grained sand, well sorted	
			1,259		2.5'	Strong odor, heavy staining	
			202			Soft/medium caliche layer, off white/tan, mild staining, strong odor	TT-4 @ 2'
			155.8				TT-4 @ 3'
			1,118		5.0'	Medium caliche layer, off white, no staining, mild odor	
			555			Hard caliche layer, off white, no staining, mild odor, Refusal, Trench terminated	
			1,276		7.5'		
					10.0'		
					12.5'		
					15.0'		
					17.5'		
					20.0'		

DRILLING METHOD Trenching
DRILL RIG NA
BORING DIAMETER NA

WATER LEVEL OBSERVATIONS			
FIRST OCCURRENCE: N/A			
DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

SIGNED Misti Teichert DATE 3/19/21

CHECKED _____ DATE _____

REVISED 06/2011



LOG OF SOIL BORING

PROJECT NAME: HEP EMSU		SOIL BORING ID: TT-5	
PROJECT NUMBER: 428993		LOCATION: Lea County, NM	SHEET 1 OF 1
LOGGED BY: Misti Teinert		SURFACE ELEV.: 	
PROJECT LOCATION: Eunice, NM		N: 32.493076 W: 103.257147	DATE STARTED: 3/18/21
DRILLED BY: TRC Backhoe	DRILLER NAME: Julian Puentez		DATE COMPLETED: 3/18/21

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
				(PPM)			
				421	2.5	Previously Removed	Sample ID: (submitted)
				289		Surface, Red/brown coarse grained sand, well sorted, heavy staining and strong odor	SS-5 @ 2'
						Hard caliche layer, Tan/off white, mild staining, strong odor, Refusal, trench terminated	TT-5 @ 3'R
					5.0		
					7.5		
					10.0		
					12.5		
					15.0		
					17.5		
					20.0		

DRILLING METHOD Trenching
DRILL RIG NA
BORING DIAMETER NA

WATER LEVEL OBSERVATIONS			
FIRST OCCURRENCE: N/A			
DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

SIGNED Misti Teinert DATE 3/19/21

CHECKED _____ DATE _____



LOG OF SOIL BORING

PROJECT NAME: HEP EMSU		SOIL BORING ID: TT-6	
PROJECT NUMBER: 428993		LOCATION: Lea County, NM	SHEET 1 OF 1
LOGGED BY: Misti Teichert		SURFACE ELEV.: 	
PROJECT LOCATION: Eunice, NM		N: 32.492941 W: -103.256976	DATE STARTED: 3/18/21
DRILLED BY: FRC Backhoe		DRILLER NAME: Julian Puentez	DATE COMPLETED: 3/18/21

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
				(PPM)			
				368.1		Previously Removed ↓ Surface	Sample ID: (submitted)
				1580		Medium-hard calcine layer, mild staining, + odor Tan/off white, Refusal, trench terminated	SS-6 @ 1' TT-6 @ 1.5'R
					2.5		
					5.0		
					7.5		
					10.0		
					12.5		
					15.0		
					17.5		
					20.0		

DRILLING METHOD Trenching
DRILL RIG NA
BORING DIAMETER NA

WATER LEVEL OBSERVATIONS			
FIRST OCCURRENCE: N/A			
DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

SIGNED Misti Teichert 3/19/21
DATE

REVISED 06/2011

CHECKED _____ DATE _____



LOG OF SOIL BORING

PROJECT NAME: HEP EMSU		SOIL BORING ID: TT-7	
PROJECT NUMBER: 428993		LOCATION: Lea County, NM	SHEET 1 OF 1
LOGGED BY: Misti Teichert		SURFACE ELEV.: 	
PROJECT LOCATION: Eunice, NM		N: 32.492845 W: -103.256879	DATE STARTED: 3/18/21
DRILLED BY: TRC Balkhore	DRILLER NAME: Julian Puentez		DATE COMPLETED: 3/18/21

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
				(PPM)		- Previously Remed -	Sample ID: (Submitted)
			164.5			Surface	
			399			Soft caliche layer, mild staining & odor, off white/tan	SS-7 @ 1'
			137		2.5'	Hard caliche layer, no staining, mild odor, off white/tan	TT-7 @ 2'
						Refusal, Trench terminated	
					5.0'		
					7.5'		
					10.0'		
					12.5'		
					15.0'		
					17.5'		
					20.0'		

DRILLING METHOD Trenching
DRILL RIG NA
BORING DIAMETER NA

WATER LEVEL OBSERVATIONS			
FIRST OCCURRENCE: NA			
DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

SIGNED Misti Teichert DATE 3/19/21

CHECKED _____ DATE _____



LOG OF SOIL BORING

PROJECT NAME: HEP EMSU		SOIL BORING ID: TT-8	
PROJECT NUMBER: 428993		LOCATION: Lea County, NM	SHEET 1 OF 1
LOGGED BY: Misti Teinert		SURFACE ELEV.: _____	
PROJECT LOCATION: Eunice, NM		N: 32.492708 W: 103.256736	DATE STARTED: 3/16/21
DRILLED BY: TRC Backhoe		DRILLER NAME: Julian Puentes	DATE COMPLETED: 3/16/21

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
				(DPM)		Previously Remanded ↓	Sample ID: (submitted)
				235.1	Surface		SS-8 02'
				1,173	2.5'	Hard caliche layer, heavy staining and odor tan/off white.	TT-8 03'R
						Refusal, Trench terminated	
					5.0'		
					7.5'		
					10.0'		
					12.5'		
					15.0'		
					17.5'		
					20.0'		

DRILLING METHOD Trenching
DRILL RIG NA
BORING DIAMETER NA

WATER LEVEL OBSERVATIONS			
FIRST OCCURRENCE: NA			
DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

SIGNED Misti Teinert DATE 3/19/21

CHECKED _____ DATE _____

REVISED 06/2011



LOG OF SOIL BORING

PROJECT NAME: HEP EMSU		SOIL BORING ID: TT-9	
PROJECT NUMBER: 428993		LOCATION: Lea County, NM	SHEET 1 OF 1
LOGGED BY: Mist Teichert		SURFACE ELEV.: 	
PROJECT LOCATION: Eunice, NM		N: 32.492512 W: -103.256784	DATE STARTED: 3/18/21
DRILLED BY: TRC Backhoe		DRILLER NAME: Julian Drentez	DATE COMPLETED: 3/18/21

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
				(RPM)			
				82		Surface ↓ Soft caliche layer, mild staining and odor, off white/tan	Sample 10: (submitted) SS-901'
			360		2.5	↓ Medium caliche layer, no staining, mild odor, off white/tan	TT-902'
			83			↓ Hard caliche layer, no staining or odor, off white/tan	
						Pretest, trench terminated	
					5.0		
					7.5		
					10.0		
					12.5		
					15.0		
					17.5		
					20.0		

DRILLING METHOD Trenching
DRILL RIG NA
BORING DIAMETER NA

WATER LEVEL OBSERVATIONS			
FIRST OCCURRENCE: NA			
DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

SIGNED Mist Teichert 3/19/21
DATE

CHECKED _____ DATE

REVISED 06/2011



LOG OF SOIL BORING

PROJECT NAME: HEP EMSU		SOIL BORING ID: TT-10	
PROJECT NUMBER: 428993		LOCATION: Lea County, NM	SHEET 1 OF 1
LOGGED BY: Misti Trivett		SURFACE ELEV.: 	
PROJECT LOCATION: Eunice, NM		N: 32.492544 W: -103.256521	DATE STARTED: 3/18/21
DRILLED BY: TRC Backhoe		DRILLER NAME: Julia Alvarez	DATE COMPLETED: 3/18/21

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
				(KPM)			Sample ID: (submitted)
						Previously Removed	
				704	2.5	Surface	SS-10 @ 3'
				1,258		Red/brown coarse grained sand, well sorted, mild staining odor	TT-10 @ 4'
				2607	5.0	Medium calcareous layer, off white/tan, mild staining/odor	TT-10 @ 5'
				626.2		Hard calcareous layer, off white, no staining, mild odor	
						Refusal, train terminated	
					7.5		
					10.0		
					12.5		
					15.0		
					17.5		
					20.0		

DRILLING METHOD Trenching
DRILL RIG NA
BORING DIAMETER NA

WATER LEVEL OBSERVATIONS			
FIRST OCCURRENCE: NA			
DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

SIGNED Misti Trivett DATE 3/19/21

CHECKED _____ DATE _____



LOG OF SOIL BORING

PROJECT NAME: HFP EMSU		SOIL BORING ID: TT-11	
PROJECT NUMBER: 428993		LOCATION: Lea County, NM	SHEET 1 OF 1
LOGGED BY: Mist Telnert		SURFACE ELEV.: 	
PROJECT LOCATION: Eunice, NM		N: 32.492378 W: -103.256326	DATE STARTED: 3/18/21
DRILLED BY: TRC Backhoe		DRILLER NAME: Julian Puentes	DATE COMPLETED: 3/18/21

NO.	TYPE	%	BLOWS	PID	DEPTH	VISUAL CLASSIFICATION AND OBSERVATIONS	COMMENT
				(PDM)			Sample ID: (Submitted)
						Previously Removed	
						Surface	
				433	2.5	Soft caliche layer, heavy staining, heavy odor, tan/off white	SS-11 @ 2'
				259		Medium caliche layer, mild staining, mild odor, off white	TT-11 @ 3'
				198			
				190	5.0	Hard caliche layer, no staining, mild odor, off white	
						Refused, Trench terminated	
					7.5		
					10.0		
					12.5		
					15.0		
					17.5		
					20.0		

DRILLING METHOD Trenching
DRILL RIG NA
BORING DIAMETER NA

WATER LEVEL OBSERVATIONS			
FIRST OCCURRENCE: NA			
DATE	TIME	DEPTH TO WATER	DEPTH TO BOTTOM

SIGNED Mist Telnert DATE 3/19/21

CHECKED _____ DATE _____



Appendix D: Laboratory Analytical Reports



Environment Testing
America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-480-1

Laboratory Sample Delivery Group: Eunice NM
Client Project/Site: HEP EMSU
Revision: 1

For:

TRC Solutions, Inc.
2057 Commerce Drive
Midland, Texas 79703

Attn: Cindy Crain

A handwritten signature in cursive script that reads "Jessica Kramer".

Authorized for release by:
4/2/2021 7:33:17 AM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Laboratory Job ID: 880-480-1
SDG: Eunice NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Detection Summary	5
Client Sample Results	11
Surrogate Summary	29
QC Sample Results	31
QC Association Summary	41
Lab Chronicle	48
Certification Summary	59
Method Summary	60
Sample Summary	61
Chain of Custody	62
Receipt Checklists	67

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Definitions/Glossary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Eurofins Xenco, Midland

Case Narrative

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Job ID: 880-480-1**Laboratory: Eurofins Xenco, Midland****Narrative****Job Narrative
880-480-1****Comments**

No additional comments.

Receipt

The samples were received on 3/19/2021 8:31 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.8° C.

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-979 and 880-980 and analytical batch 880-981 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate 4-Bromofluorobenzene (Surr) recovery for the following samples were outside control limits: SS-12 @ 6" (880-480-25), Duplicate-1 (880-480-26), (CCV 880-986/2), (CCV 880-986/20), (LCS 880-985/1-A), (MB 880-985/5-A), (880-509-A-1-D) and (880-509-A-1-D MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

General Chemistry

Method 300.0: The matrix spike (MS) recoveries for preparation batch 880-751 and analytical batch 880-988 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Detection Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-1 @ 2'

Lab Sample ID: 880-480-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.301		0.104	mg/Kg	50	✱	8021B	Total/NA
m-Xylene & p-Xylene	0.719		0.207	mg/Kg	50	✱	8021B	Total/NA
o-Xylene	0.226		0.104	mg/Kg	50	✱	8021B	Total/NA
Xylenes, Total	0.945		0.207	mg/Kg	50	✱	8021B	Total/NA
Total BTEX	1.25		0.104	mg/Kg	50	✱	8021B	Total/NA
Diesel Range Organics (Over C10-C28)	16700		258	mg/Kg	5	✱	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	2280		258	mg/Kg	5	✱	8015B NM	Total/NA
Total TPH	19000		258	mg/Kg	5	✱	8015B NM	Total/NA
Chloride	483		4.98	mg/Kg	1		300.0	Soluble
Barium	70.1		3.70	mg/kg	10		Barium	Total/NA

Client Sample ID: TT-1 @ 3'

Lab Sample ID: 880-480-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	952		4.97	mg/Kg	1		300.0	Soluble
Barium	102		3.85	mg/kg	10		Barium	Total/NA

Client Sample ID: SS-2 @ 2'

Lab Sample ID: 880-480-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.387		0.102	mg/Kg	50	✱	8021B	Total/NA
m-Xylene & p-Xylene	0.789		0.204	mg/Kg	50	✱	8021B	Total/NA
o-Xylene	0.296		0.102	mg/Kg	50	✱	8021B	Total/NA
Xylenes, Total	1.09		0.204	mg/Kg	50	✱	8021B	Total/NA
Total BTEX	1.47		0.102	mg/Kg	50	✱	8021B	Total/NA
Diesel Range Organics (Over C10-C28)	14600		252	mg/Kg	5	✱	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	2120		252	mg/Kg	5	✱	8015B NM	Total/NA
Total TPH	16700		252	mg/Kg	5	✱	8015B NM	Total/NA
Chloride	20.7		4.95	mg/Kg	1		300.0	Soluble

Client Sample ID: TT-2 @ 3'

Lab Sample ID: 880-480-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics (Over C10-C28)	56.8		52.4	mg/Kg	1	✱	8015B NM	Total/NA
Total TPH	56.8		52.4	mg/Kg	1	✱	8015B NM	Total/NA
Chloride	12.3		4.95	mg/Kg	1		300.0	Soluble

Client Sample ID: SS-3 @ 2'

Lab Sample ID: 880-480-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.466		0.102	mg/Kg	50	✱	8021B	Total/NA
Ethylbenzene	1.76		0.102	mg/Kg	50	✱	8021B	Total/NA
m-Xylene & p-Xylene	4.50		0.204	mg/Kg	50	✱	8021B	Total/NA
o-Xylene	0.879		0.102	mg/Kg	50	✱	8021B	Total/NA
Xylenes, Total	5.38		0.204	mg/Kg	50	✱	8021B	Total/NA
Total BTEX	7.61		0.102	mg/Kg	50	✱	8021B	Total/NA
Gasoline Range Organics (GRO)-C6-C10	682		512	mg/Kg	10	✱	8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	24800		512	mg/Kg	10	✱	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	3710		512	mg/Kg	10	✱	8015B NM	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Midland

Detection Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-3 @ 2' (Continued)

Lab Sample ID: 880-480-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Total TPH	29200		512	mg/Kg	10	✱	8015B NM	Total/NA
Chloride	7.39		5.00	mg/Kg	1		300.0	Soluble

Client Sample ID: TT-3 @ 3'R

Lab Sample ID: 880-480-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics (Over C10-C28)	213		52.2	mg/Kg	1	✱	8015B NM	Total/NA
Total TPH	213		52.2	mg/Kg	1	✱	8015B NM	Total/NA
Chloride	121		4.99	mg/Kg	1		300.0	Soluble

Client Sample ID: SS-4 @ 1'

Lab Sample ID: 880-480-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.406		0.102	mg/Kg	50	✱	8021B	Total/NA
Ethylbenzene	2.20		0.102	mg/Kg	50	✱	8021B	Total/NA
m-Xylene & p-Xylene	4.80		0.204	mg/Kg	50	✱	8021B	Total/NA
o-Xylene	1.30		0.102	mg/Kg	50	✱	8021B	Total/NA
Xylenes, Total	6.10		0.204	mg/Kg	50	✱	8021B	Total/NA
Total BTEX	8.71		0.102	mg/Kg	50	✱	8021B	Total/NA
Gasoline Range Organics (GRO)-C6-C10	573		511	mg/Kg	10	✱	8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	25400		511	mg/Kg	10	✱	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	3810		511	mg/Kg	10	✱	8015B NM	Total/NA
Total TPH	29800		511	mg/Kg	10	✱	8015B NM	Total/NA
Chloride	25.7		5.04	mg/Kg	1		300.0	Soluble

Client Sample ID: TT-4 @ 2'

Lab Sample ID: 880-480-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics (Over C10-C28)	724		51.7	mg/Kg	1	✱	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	83.9		51.7	mg/Kg	1	✱	8015B NM	Total/NA
Total TPH	808		51.7	mg/Kg	1	✱	8015B NM	Total/NA
Chloride	13.1		5.05	mg/Kg	1		300.0	Soluble

Client Sample ID: TT-4@ 3'

Lab Sample ID: 880-480-9

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	16.9		5.02	mg/Kg	1		300.0	Soluble

Client Sample ID: SS-5 @ 2'

Lab Sample ID: 880-480-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.858		0.101	mg/Kg	50	✱	8021B	Total/NA
Ethylbenzene	2.55		0.101	mg/Kg	50	✱	8021B	Total/NA
m-Xylene & p-Xylene	7.55		0.203	mg/Kg	50	✱	8021B	Total/NA
o-Xylene	1.49		0.101	mg/Kg	50	✱	8021B	Total/NA
Xylenes, Total	9.04		0.203	mg/Kg	50	✱	8021B	Total/NA
Total BTEX	12.4		0.101	mg/Kg	50	✱	8021B	Total/NA
Gasoline Range Organics (GRO)-C6-C10	575		254	mg/Kg	5	✱	8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	27200		254	mg/Kg	5	✱	8015B NM	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Midland

Detection Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-5 @ 2' (Continued)

Lab Sample ID: 880-480-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Oil Range Organics (Over C28-C36)	3990		254	mg/Kg	5	✱	8015B NM	Total/NA
Total TPH	31800		254	mg/Kg	5	✱	8015B NM	Total/NA
Chloride	71.8		4.98	mg/Kg	1		300.0	Soluble

Client Sample ID: TT-5 @ 3'R

Lab Sample ID: 880-480-11

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Toluene	1.11		0.216	mg/Kg	100	✱	8021B	Total/NA
Ethylbenzene	2.61		0.216	mg/Kg	100	✱	8021B	Total/NA
m-Xylene & p-Xylene	7.57		0.432	mg/Kg	100	✱	8021B	Total/NA
o-Xylene	1.38		0.216	mg/Kg	100	✱	8021B	Total/NA
Xylenes, Total	8.95		0.432	mg/Kg	100	✱	8021B	Total/NA
Total BTEX	12.7		0.216	mg/Kg	100	✱	8021B	Total/NA
Gasoline Range Organics (GRO)-C6-C10	11600		271	mg/Kg	5	✱	8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	19600		271	mg/Kg	5	✱	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	2520		271	mg/Kg	5	✱	8015B NM	Total/NA
Total TPH	33700		271	mg/Kg	5	✱	8015B NM	Total/NA
Chloride	18.4		5.05	mg/Kg	1		300.0	Soluble

Client Sample ID: SS-6 @ 1'

Lab Sample ID: 880-480-12

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.356		0.102	mg/Kg	50	✱	8021B	Total/NA
Ethylbenzene	0.895		0.102	mg/Kg	50	✱	8021B	Total/NA
m-Xylene & p-Xylene	3.26		0.203	mg/Kg	50	✱	8021B	Total/NA
o-Xylene	0.776		0.102	mg/Kg	50	✱	8021B	Total/NA
Xylenes, Total	4.04		0.203	mg/Kg	50	✱	8021B	Total/NA
Total BTEX	5.29		0.102	mg/Kg	50	✱	8021B	Total/NA
Gasoline Range Organics (GRO)-C6-C10	311		254	mg/Kg	5	✱	8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	13200		254	mg/Kg	5	✱	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	1790		254	mg/Kg	5	✱	8015B NM	Total/NA
Total TPH	15300		254	mg/Kg	5	✱	8015B NM	Total/NA
Chloride	22.1		4.99	mg/Kg	1		300.0	Soluble

Client Sample ID: TT-6 @ 1.5'R

Lab Sample ID: 880-480-13

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.522		0.108	mg/Kg	50	✱	8021B	Total/NA
Ethylbenzene	1.72		0.108	mg/Kg	50	✱	8021B	Total/NA
m-Xylene & p-Xylene	4.85		0.216	mg/Kg	50	✱	8021B	Total/NA
o-Xylene	0.919		0.108	mg/Kg	50	✱	8021B	Total/NA
Xylenes, Total	5.77		0.216	mg/Kg	50	✱	8021B	Total/NA
Total BTEX	8.01		0.108	mg/Kg	50	✱	8021B	Total/NA
Gasoline Range Organics (GRO)-C6-C10	7040		269	mg/Kg	5	✱	8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	12900		269	mg/Kg	5	✱	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	1590		269	mg/Kg	5	✱	8015B NM	Total/NA
Total TPH	21500		269	mg/Kg	5	✱	8015B NM	Total/NA
Chloride	71.8		4.98	mg/Kg	1		300.0	Soluble

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Midland

Detection Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-7 @ 1'

Lab Sample ID: 880-480-14

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.217		0.100	mg/Kg	50	✱	8021B	Total/NA
m-Xylene & p-Xylene	0.705		0.201	mg/Kg	50	✱	8021B	Total/NA
o-Xylene	0.379		0.100	mg/Kg	50	✱	8021B	Total/NA
Xylenes, Total	1.08		0.201	mg/Kg	50	✱	8021B	Total/NA
Total BTEX	1.30		0.100	mg/Kg	50	✱	8021B	Total/NA
Diesel Range Organics (Over C10-C28)	18300		253	mg/Kg	5	✱	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	2920		253	mg/Kg	5	✱	8015B NM	Total/NA
Total TPH	21200		253	mg/Kg	5	✱	8015B NM	Total/NA
Chloride	12.6		4.95	mg/Kg	1		300.0	Soluble

Client Sample ID: TT- 7@ 2'

Lab Sample ID: 880-480-15

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics (Over C10-C28)	112		51.9	mg/Kg	1	✱	8015B NM	Total/NA
Total TPH	112		51.9	mg/Kg	1	✱	8015B NM	Total/NA
Chloride	6.89		5.04	mg/Kg	1		300.0	Soluble

Client Sample ID: SS-8 @ 2'

Lab Sample ID: 880-480-16

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.297		0.101	mg/Kg	50	✱	8021B	Total/NA
Ethylbenzene	0.793		0.101	mg/Kg	50	✱	8021B	Total/NA
m-Xylene & p-Xylene	2.85		0.202	mg/Kg	50	✱	8021B	Total/NA
o-Xylene	0.686		0.101	mg/Kg	50	✱	8021B	Total/NA
Xylenes, Total	3.54		0.202	mg/Kg	50	✱	8021B	Total/NA
Total BTEX	4.63		0.101	mg/Kg	50	✱	8021B	Total/NA
Gasoline Range Organics (GRO)-C6-C10	277		255	mg/Kg	5	✱	8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	19200		255	mg/Kg	5	✱	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	2640		255	mg/Kg	5	✱	8015B NM	Total/NA
Total TPH	22100		255	mg/Kg	5	✱	8015B NM	Total/NA
Chloride	7.31		5.00	mg/Kg	1		300.0	Soluble

Client Sample ID: TT-8@ 3'R

Lab Sample ID: 880-480-17

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.669		0.107	mg/Kg	50	✱	8021B	Total/NA
Ethylbenzene	1.76		0.107	mg/Kg	50	✱	8021B	Total/NA
m-Xylene & p-Xylene	5.07		0.214	mg/Kg	50	✱	8021B	Total/NA
o-Xylene	1.01		0.107	mg/Kg	50	✱	8021B	Total/NA
Xylenes, Total	6.08		0.214	mg/Kg	50	✱	8021B	Total/NA
Total BTEX	8.51		0.107	mg/Kg	50	✱	8021B	Total/NA
Gasoline Range Organics (GRO)-C6-C10	9280		270	mg/Kg	5	✱	8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	16000		270	mg/Kg	5	✱	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	2120		270	mg/Kg	5	✱	8015B NM	Total/NA
Total TPH	27400		270	mg/Kg	5	✱	8015B NM	Total/NA
Chloride	12.4		4.96	mg/Kg	1		300.0	Soluble

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Midland

Detection Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-9 @ 1'

Lab Sample ID: 880-480-18

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.0101		0.00201	mg/Kg	1	✱	8021B	Total/NA
m-Xylene & p-Xylene	0.0443		0.00401	mg/Kg	1	✱	8021B	Total/NA
o-Xylene	0.00903		0.00201	mg/Kg	1	✱	8021B	Total/NA
Xylenes, Total	0.0533		0.00401	mg/Kg	1	✱	8021B	Total/NA
Total BTEX	0.0634		0.00201	mg/Kg	1	✱	8021B	Total/NA
Diesel Range Organics (Over C10-C28)	235		50.5	mg/Kg	1	✱	8015B NM	Total/NA
Total TPH	235		50.5	mg/Kg	1	✱	8015B NM	Total/NA
Chloride	5.34		4.99	mg/Kg	1		300.0	Soluble

Client Sample ID: TT-9 @ 2'

Lab Sample ID: 880-480-19

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics (Over C10-C28)	665		51.9	mg/Kg	1	✱	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	92.5		51.9	mg/Kg	1	✱	8015B NM	Total/NA
Total TPH	758		51.9	mg/Kg	1	✱	8015B NM	Total/NA

Client Sample ID: SS-10 @ 3'

Lab Sample ID: 880-480-20

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.483		0.103	mg/Kg	50	✱	8021B	Total/NA
Ethylbenzene	2.94		0.103	mg/Kg	50	✱	8021B	Total/NA
m-Xylene & p-Xylene	9.68		0.205	mg/Kg	50	✱	8021B	Total/NA
o-Xylene	1.91		0.103	mg/Kg	50	✱	8021B	Total/NA
Xylenes, Total	11.6		0.205	mg/Kg	50	✱	8021B	Total/NA
Total BTEX	15.0		0.103	mg/Kg	50	✱	8021B	Total/NA
Gasoline Range Organics (GRO)-C6-C10	1350		513	mg/Kg	10	✱	8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	44700		513	mg/Kg	10	✱	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	6260		513	mg/Kg	10	✱	8015B NM	Total/NA
Total TPH	52300		513	mg/Kg	10	✱	8015B NM	Total/NA
Chloride	9.84		4.95	mg/Kg	1		300.0	Soluble

Client Sample ID: TT-10 @ 4'

Lab Sample ID: 880-480-21

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.0258		0.0209	mg/Kg	10	✱	8021B	Total/NA
Ethylbenzene	0.180		0.0209	mg/Kg	10	✱	8021B	Total/NA
m-Xylene & p-Xylene	0.169		0.0419	mg/Kg	10	✱	8021B	Total/NA
o-Xylene	0.0826		0.0209	mg/Kg	10	✱	8021B	Total/NA
Xylenes, Total	0.252		0.0419	mg/Kg	10	✱	8021B	Total/NA
Total BTEX	0.457		0.0209	mg/Kg	10	✱	8021B	Total/NA
Gasoline Range Organics (GRO)-C6-C10	84.3		53.0	mg/Kg	1	✱	8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	1080		53.0	mg/Kg	1	✱	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	140		53.0	mg/Kg	1	✱	8015B NM	Total/NA
Total TPH	1300		53.0	mg/Kg	1	✱	8015B NM	Total/NA

Client Sample ID: TT-10 @ 5'

Lab Sample ID: 880-480-22

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Midland

Detection Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-11 @ 2'

Lab Sample ID: 880-480-23

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.671		0.102	mg/Kg	50	✧	8021B	Total/NA
m-Xylene & p-Xylene	1.93		0.205	mg/Kg	50	✧	8021B	Total/NA
o-Xylene	0.416		0.102	mg/Kg	50	✧	8021B	Total/NA
Xylenes, Total	2.35		0.205	mg/Kg	50	✧	8021B	Total/NA
Total BTEX	3.02		0.102	mg/Kg	50	✧	8021B	Total/NA
Gasoline Range Organics (GRO)-C6-C10	271		255	mg/Kg	5	✧	8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	16500		255	mg/Kg	5	✧	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	2360		255	mg/Kg	5	✧	8015B NM	Total/NA
Total TPH	19100		255	mg/Kg	5	✧	8015B NM	Total/NA
pH	8.0	H	0.01	S.U.	1		9045D	Soluble
Temperature	22.4	H	0.01	Deg. C	1		9045D	Soluble

Client Sample ID: TT-11 @3'

Lab Sample ID: 880-480-24

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
pH	8.7	H	0.01	S.U.	1		9045D	Soluble
Temperature	21.7	H	0.01	Deg. C	1		9045D	Soluble

Client Sample ID: SS-12 @ 6"

Lab Sample ID: 880-480-25

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics (Over C10-C28)	565		50.1	mg/Kg	1	✧	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	143		50.1	mg/Kg	1	✧	8015B NM	Total/NA
Total TPH	708		50.1	mg/Kg	1	✧	8015B NM	Total/NA

Client Sample ID: Duplicate-1

Lab Sample ID: 880-480-26

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO)-C6-C10	674		509	mg/Kg	10	✧	8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	19400		509	mg/Kg	10	✧	8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	3950		509	mg/Kg	10	✧	8015B NM	Total/NA
Total TPH	24000		509	mg/Kg	10	✧	8015B NM	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-1 @ 2'

Lab Sample ID: 880-480-1

Date Collected: 03/18/21 10:45

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 96.6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.104	U	0.104	mg/Kg	☆	03/28/21 14:06	03/29/21 13:49	50
Toluene	<0.104	U	0.104	mg/Kg	☆	03/28/21 14:06	03/29/21 13:49	50
Ethylbenzene	0.301		0.104	mg/Kg	☆	03/28/21 14:06	03/29/21 13:49	50
m-Xylene & p-Xylene	0.719		0.207	mg/Kg	☆	03/28/21 14:06	03/29/21 13:49	50
o-Xylene	0.226		0.104	mg/Kg	☆	03/28/21 14:06	03/29/21 13:49	50
Xylenes, Total	0.945		0.207	mg/Kg	☆	03/28/21 14:06	03/29/21 13:49	50
Total BTEX	1.25		0.104	mg/Kg	☆	03/28/21 14:06	03/29/21 13:49	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/28/21 14:06	03/29/21 13:49	50
1,4-Difluorobenzene (Surr)	89		70 - 130	03/28/21 14:06	03/29/21 13:49	50

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<258	U	258	mg/Kg	☆	03/27/21 15:18	03/29/21 01:13	5
Diesel Range Organics (Over C10-C28)	16700		258	mg/Kg	☆	03/27/21 15:18	03/29/21 01:13	5
Oil Range Organics (Over C28-C36)	2280		258	mg/Kg	☆	03/27/21 15:18	03/29/21 01:13	5
Total TPH	19000		258	mg/Kg	☆	03/27/21 15:18	03/29/21 01:13	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	03/27/21 15:18	03/29/21 01:13	5
o-Terphenyl	94		70 - 130	03/27/21 15:18	03/29/21 01:13	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	483		4.98	mg/Kg	-		03/29/21 13:49	1

Method: Barium - SW846 6020 Metals by ICPMS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	70.1		3.70		mg/kg	-	03/25/21 13:05	03/25/21 16:39	10

Client Sample ID: TT-1 @ 3'

Lab Sample ID: 880-480-2

Date Collected: 03/18/21 10:40

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 93.6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00215	U	0.00215	mg/Kg	☆	03/28/21 14:06	03/29/21 12:07	1
Toluene	<0.00215	U	0.00215	mg/Kg	☆	03/28/21 14:06	03/29/21 12:07	1
Ethylbenzene	<0.00215	U	0.00215	mg/Kg	☆	03/28/21 14:06	03/29/21 12:07	1
m-Xylene & p-Xylene	<0.00429	U	0.00429	mg/Kg	☆	03/28/21 14:06	03/29/21 12:07	1
o-Xylene	<0.00215	U	0.00215	mg/Kg	☆	03/28/21 14:06	03/29/21 12:07	1
Xylenes, Total	<0.00429	U	0.00429	mg/Kg	☆	03/28/21 14:06	03/29/21 12:07	1
Total BTEX	<0.00215	U	0.00215	mg/Kg	☆	03/28/21 14:06	03/29/21 12:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	03/28/21 14:06	03/29/21 12:07	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/28/21 14:06	03/29/21 12:07	1

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: TT-1 @ 3'

Lab Sample ID: 880-480-2

Date Collected: 03/18/21 10:40

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 93.6

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<53.3	U	53.3	mg/Kg	✱	03/27/21 15:18	03/28/21 22:26	1
Diesel Range Organics (Over C10-C28)	<53.3	U	53.3	mg/Kg	✱	03/27/21 15:18	03/28/21 22:26	1
Oil Range Organics (Over C28-C36)	<53.3	U	53.3	mg/Kg	✱	03/27/21 15:18	03/28/21 22:26	1
Total TPH	<53.3	U	53.3	mg/Kg	✱	03/27/21 15:18	03/28/21 22:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			03/27/21 15:18	03/28/21 22:26	1
o-Terphenyl	107		70 - 130			03/27/21 15:18	03/28/21 22:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	952		4.97	mg/Kg	-		03/29/21 13:54	1

Method: Barium - SW846 6020 Metals by ICPMS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	102		3.85		mg/kg	-	03/25/21 13:05	03/25/21 16:42	10

Client Sample ID: SS-2 @ 2'

Lab Sample ID: 880-480-3

Date Collected: 03/18/21 11:30

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 98.7

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.102	U	0.102	mg/Kg	✱	03/28/21 14:06	03/29/21 14:10	50
Toluene	<0.102	U	0.102	mg/Kg	✱	03/28/21 14:06	03/29/21 14:10	50
Ethylbenzene	0.387		0.102	mg/Kg	✱	03/28/21 14:06	03/29/21 14:10	50
m-Xylene & p-Xylene	0.789		0.204	mg/Kg	✱	03/28/21 14:06	03/29/21 14:10	50
o-Xylene	0.296		0.102	mg/Kg	✱	03/28/21 14:06	03/29/21 14:10	50
Xylenes, Total	1.09		0.204	mg/Kg	✱	03/28/21 14:06	03/29/21 14:10	50
Total BTEX	1.47		0.102	mg/Kg	✱	03/28/21 14:06	03/29/21 14:10	50
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130			03/28/21 14:06	03/29/21 14:10	50
1,4-Difluorobenzene (Surr)	91		70 - 130			03/28/21 14:06	03/29/21 14:10	50

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<252	U	252	mg/Kg	✱	03/27/21 15:18	03/29/21 01:35	5
Diesel Range Organics (Over C10-C28)	14600		252	mg/Kg	✱	03/27/21 15:18	03/29/21 01:35	5
Oil Range Organics (Over C28-C36)	2120		252	mg/Kg	✱	03/27/21 15:18	03/29/21 01:35	5
Total TPH	16700		252	mg/Kg	✱	03/27/21 15:18	03/29/21 01:35	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			03/27/21 15:18	03/29/21 01:35	5
o-Terphenyl	98		70 - 130			03/27/21 15:18	03/29/21 01:35	5

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-2 @ 2'

Lab Sample ID: 880-480-3

Date Collected: 03/18/21 11:30

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 98.7

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.7		4.95	mg/Kg			03/29/21 14:09	1

Client Sample ID: TT-2 @ 3'

Lab Sample ID: 880-480-4

Date Collected: 03/18/21 11:40

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 95.3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0209	U	0.0209	mg/Kg	✱	03/28/21 14:06	03/29/21 13:08	10
Toluene	<0.0209	U	0.0209	mg/Kg	✱	03/28/21 14:06	03/29/21 13:08	10
Ethylbenzene	<0.0209	U	0.0209	mg/Kg	✱	03/28/21 14:06	03/29/21 13:08	10
m-Xylene & p-Xylene	<0.0419	U	0.0419	mg/Kg	✱	03/28/21 14:06	03/29/21 13:08	10
o-Xylene	<0.0209	U	0.0209	mg/Kg	✱	03/28/21 14:06	03/29/21 13:08	10
Xylenes, Total	<0.0419	U	0.0419	mg/Kg	✱	03/28/21 14:06	03/29/21 13:08	10
Total BTEX	<0.0209	U	0.0209	mg/Kg	✱	03/28/21 14:06	03/29/21 13:08	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	49	S1-	70 - 130	03/28/21 14:06	03/29/21 13:08	10
1,4-Difluorobenzene (Surr)	96		70 - 130	03/28/21 14:06	03/29/21 13:08	10

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<52.4	U	52.4	mg/Kg	✱	03/27/21 15:18	03/28/21 23:29	1
Diesel Range Organics (Over C10-C28)	56.8		52.4	mg/Kg	✱	03/27/21 15:18	03/28/21 23:29	1
Oil Range Organics (Over C28-C36)	<52.4	U	52.4	mg/Kg	✱	03/27/21 15:18	03/28/21 23:29	1
Total TPH	56.8		52.4	mg/Kg	✱	03/27/21 15:18	03/28/21 23:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130	03/27/21 15:18	03/28/21 23:29	1
o-Terphenyl	75		70 - 130	03/27/21 15:18	03/28/21 23:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.3		4.95	mg/Kg			03/29/21 14:14	1

Client Sample ID: SS-3 @ 2'

Lab Sample ID: 880-480-5

Date Collected: 03/18/21 11:50

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 97.6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.102	U	0.102	mg/Kg	✱	03/28/21 14:06	03/29/21 14:30	50
Toluene	0.466		0.102	mg/Kg	✱	03/28/21 14:06	03/29/21 14:30	50
Ethylbenzene	1.76		0.102	mg/Kg	✱	03/28/21 14:06	03/29/21 14:30	50
m-Xylene & p-Xylene	4.50		0.204	mg/Kg	✱	03/28/21 14:06	03/29/21 14:30	50
o-Xylene	0.879		0.102	mg/Kg	✱	03/28/21 14:06	03/29/21 14:30	50
Xylenes, Total	5.38		0.204	mg/Kg	✱	03/28/21 14:06	03/29/21 14:30	50
Total BTEX	7.61		0.102	mg/Kg	✱	03/28/21 14:06	03/29/21 14:30	50

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-3 @ 2'

Lab Sample ID: 880-480-5

Date Collected: 03/18/21 11:50

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 97.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	03/28/21 14:06	03/29/21 14:30	50
1,4-Difluorobenzene (Surr)	84		70 - 130	03/28/21 14:06	03/29/21 14:30	50

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	682		512	mg/Kg	☆	03/27/21 15:18	03/29/21 02:58	10
Diesel Range Organics (Over C10-C28)	24800		512	mg/Kg	☆	03/27/21 15:18	03/29/21 02:58	10
Oil Range Organics (Over C28-C36)	3710		512	mg/Kg	☆	03/27/21 15:18	03/29/21 02:58	10
Total TPH	29200		512	mg/Kg	☆	03/27/21 15:18	03/29/21 02:58	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	03/27/21 15:18	03/29/21 02:58	10
o-Terphenyl	99		70 - 130	03/27/21 15:18	03/29/21 02:58	10

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.39		5.00	mg/Kg	-		03/29/21 14:19	1

Client Sample ID: TT-3 @ 3'R

Lab Sample ID: 880-480-6

Date Collected: 03/18/21 11:55

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 95.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:06	03/29/21 12:28	1
Toluene	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:06	03/29/21 12:28	1
Ethylbenzene	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:06	03/29/21 12:28	1
m-Xylene & p-Xylene	<0.00416	U	0.00416	mg/Kg	☆	03/28/21 14:06	03/29/21 12:28	1
o-Xylene	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:06	03/29/21 12:28	1
Xylenes, Total	<0.00416	U	0.00416	mg/Kg	☆	03/28/21 14:06	03/29/21 12:28	1
Total BTEX	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:06	03/29/21 12:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	03/28/21 14:06	03/29/21 12:28	1
1,4-Difluorobenzene (Surr)	98		70 - 130	03/28/21 14:06	03/29/21 12:28	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<52.2	U	52.2	mg/Kg	☆	03/27/21 15:18	03/28/21 23:50	1
Diesel Range Organics (Over C10-C28)	213		52.2	mg/Kg	☆	03/27/21 15:18	03/28/21 23:50	1
Oil Range Organics (Over C28-C36)	<52.2	U	52.2	mg/Kg	☆	03/27/21 15:18	03/28/21 23:50	1
Total TPH	213		52.2	mg/Kg	☆	03/27/21 15:18	03/28/21 23:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	03/27/21 15:18	03/28/21 23:50	1
o-Terphenyl	102		70 - 130	03/27/21 15:18	03/28/21 23:50	1

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: TT-3 @ 3'R

Lab Sample ID: 880-480-6

Date Collected: 03/18/21 11:55

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 95.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	121		4.99	mg/Kg			03/25/21 19:34	1

Client Sample ID: SS-4 @ 1'

Lab Sample ID: 880-480-7

Date Collected: 03/18/21 12:00

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 97.7

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.102	U	0.102	mg/Kg	☆	03/28/21 14:06	03/29/21 14:51	50
Toluene	0.406		0.102	mg/Kg	☆	03/28/21 14:06	03/29/21 14:51	50
Ethylbenzene	2.20		0.102	mg/Kg	☆	03/28/21 14:06	03/29/21 14:51	50
m-Xylene & p-Xylene	4.80		0.204	mg/Kg	☆	03/28/21 14:06	03/29/21 14:51	50
o-Xylene	1.30		0.102	mg/Kg	☆	03/28/21 14:06	03/29/21 14:51	50
Xylenes, Total	6.10		0.204	mg/Kg	☆	03/28/21 14:06	03/29/21 14:51	50
Total BTEX	8.71		0.102	mg/Kg	☆	03/28/21 14:06	03/29/21 14:51	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	145	S1+	70 - 130	03/28/21 14:06	03/29/21 14:51	50
1,4-Difluorobenzene (Surr)	133	S1+	70 - 130	03/28/21 14:06	03/29/21 14:51	50

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	573		511	mg/Kg	☆	03/27/21 15:18	03/29/21 03:19	10
Diesel Range Organics (Over C10-C28)	25400		511	mg/Kg	☆	03/27/21 15:18	03/29/21 03:19	10
Oil Range Organics (Over C28-C36)	3810		511	mg/Kg	☆	03/27/21 15:18	03/29/21 03:19	10
Total TPH	29800		511	mg/Kg	☆	03/27/21 15:18	03/29/21 03:19	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	03/27/21 15:18	03/29/21 03:19	10
o-Terphenyl	106		70 - 130	03/27/21 15:18	03/29/21 03:19	10

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.7		5.04	mg/Kg			03/25/21 19:50	1

Client Sample ID: TT-4 @ 2'

Lab Sample ID: 880-480-8

Date Collected: 03/18/21 12:10

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 96.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0208	U	0.0208	mg/Kg	☆	03/28/21 14:06	03/29/21 13:29	10
Toluene	<0.0208	U	0.0208	mg/Kg	☆	03/28/21 14:06	03/29/21 13:29	10
Ethylbenzene	<0.0208	U	0.0208	mg/Kg	☆	03/28/21 14:06	03/29/21 13:29	10
m-Xylene & p-Xylene	<0.0416	U	0.0416	mg/Kg	☆	03/28/21 14:06	03/29/21 13:29	10
o-Xylene	<0.0208	U	0.0208	mg/Kg	☆	03/28/21 14:06	03/29/21 13:29	10
Xylenes, Total	<0.0416	U	0.0416	mg/Kg	☆	03/28/21 14:06	03/29/21 13:29	10
Total BTEX	<0.0208	U	0.0208	mg/Kg	☆	03/28/21 14:06	03/29/21 13:29	10

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: TT-4 @ 2'

Lab Sample ID: 880-480-8

Date Collected: 03/18/21 12:10

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 96.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130	03/28/21 14:06	03/29/21 13:29	10
1,4-Difluorobenzene (Surr)	88		70 - 130	03/28/21 14:06	03/29/21 13:29	10

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<51.7	U	51.7	mg/Kg	☆	03/27/21 15:18	03/29/21 00:11	1
Diesel Range Organics (Over C10-C28)	724		51.7	mg/Kg	☆	03/27/21 15:18	03/29/21 00:11	1
Oil Range Organics (Over C28-C36)	83.9		51.7	mg/Kg	☆	03/27/21 15:18	03/29/21 00:11	1
Total TPH	808		51.7	mg/Kg	☆	03/27/21 15:18	03/29/21 00:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	03/27/21 15:18	03/29/21 00:11	1
o-Terphenyl	95		70 - 130	03/27/21 15:18	03/29/21 00:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.1		5.05	mg/Kg			03/25/21 19:55	1

Client Sample ID: TT-4@ 3'

Lab Sample ID: 880-480-9

Date Collected: 03/18/21 12:20

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 96.3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:06	03/29/21 12:48	1
Toluene	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:06	03/29/21 12:48	1
Ethylbenzene	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:06	03/29/21 12:48	1
m-Xylene & p-Xylene	<0.00416	U	0.00416	mg/Kg	☆	03/28/21 14:06	03/29/21 12:48	1
o-Xylene	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:06	03/29/21 12:48	1
Xylenes, Total	<0.00416	U	0.00416	mg/Kg	☆	03/28/21 14:06	03/29/21 12:48	1
Total BTEX	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:06	03/29/21 12:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	03/28/21 14:06	03/29/21 12:48	1
1,4-Difluorobenzene (Surr)	100		70 - 130	03/28/21 14:06	03/29/21 12:48	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<51.8	U	51.8	mg/Kg	☆	03/27/21 15:18	03/29/21 00:32	1
Diesel Range Organics (Over C10-C28)	<51.8	U	51.8	mg/Kg	☆	03/27/21 15:18	03/29/21 00:32	1
Oil Range Organics (Over C28-C36)	<51.8	U	51.8	mg/Kg	☆	03/27/21 15:18	03/29/21 00:32	1
Total TPH	<51.8	U	51.8	mg/Kg	☆	03/27/21 15:18	03/29/21 00:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	03/27/21 15:18	03/29/21 00:32	1
o-Terphenyl	102		70 - 130	03/27/21 15:18	03/29/21 00:32	1

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: TT-4@ 3'

Lab Sample ID: 880-480-9

Date Collected: 03/18/21 12:20

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 96.3

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.9		5.02	mg/Kg			03/25/21 20:00	1

Client Sample ID: SS-5 @ 2'

Lab Sample ID: 880-480-10

Date Collected: 03/18/21 12:40

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 98.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.101	U	0.101	mg/Kg	☆	03/28/21 14:13	03/29/21 00:32	50
Toluene	0.858		0.101	mg/Kg	☆	03/28/21 14:13	03/29/21 00:32	50
Ethylbenzene	2.55		0.101	mg/Kg	☆	03/28/21 14:13	03/29/21 00:32	50
m-Xylene & p-Xylene	7.55		0.203	mg/Kg	☆	03/28/21 14:13	03/29/21 00:32	50
o-Xylene	1.49		0.101	mg/Kg	☆	03/28/21 14:13	03/29/21 00:32	50
Xylenes, Total	9.04		0.203	mg/Kg	☆	03/28/21 14:13	03/29/21 00:32	50
Total BTEX	12.4		0.101	mg/Kg	☆	03/28/21 14:13	03/29/21 00:32	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	03/28/21 14:13	03/29/21 00:32	50
1,4-Difluorobenzene (Surr)	86		70 - 130	03/28/21 14:13	03/29/21 00:32	50

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	575		254	mg/Kg	☆	03/27/21 15:18	03/29/21 03:41	5
Diesel Range Organics (Over C10-C28)	27200		254	mg/Kg	☆	03/27/21 15:18	03/29/21 03:41	5
Oil Range Organics (Over C28-C36)	3990		254	mg/Kg	☆	03/27/21 15:18	03/29/21 03:41	5
Total TPH	31800		254	mg/Kg	☆	03/27/21 15:18	03/29/21 03:41	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	03/27/21 15:18	03/29/21 03:41	5
o-Terphenyl	103		70 - 130	03/27/21 15:18	03/29/21 03:41	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71.8		4.98	mg/Kg			03/25/21 20:05	1

Client Sample ID: TT-5 @ 3'R

Lab Sample ID: 880-480-11

Date Collected: 03/18/21 13:00

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 92.2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.216	U	0.216	mg/Kg	☆	03/28/21 14:13	03/29/21 00:52	100
Toluene	1.11		0.216	mg/Kg	☆	03/28/21 14:13	03/29/21 00:52	100
Ethylbenzene	2.61		0.216	mg/Kg	☆	03/28/21 14:13	03/29/21 00:52	100
m-Xylene & p-Xylene	7.57		0.432	mg/Kg	☆	03/28/21 14:13	03/29/21 00:52	100
o-Xylene	1.38		0.216	mg/Kg	☆	03/28/21 14:13	03/29/21 00:52	100
Xylenes, Total	8.95		0.432	mg/Kg	☆	03/28/21 14:13	03/29/21 00:52	100
Total BTEX	12.7		0.216	mg/Kg	☆	03/28/21 14:13	03/29/21 00:52	100

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: TT-5 @ 3'R

Lab Sample ID: 880-480-11

Date Collected: 03/18/21 13:00

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 92.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	10	S1-	70 - 130	03/28/21 14:13	03/29/21 00:52	100
1,4-Difluorobenzene (Surr)	7	S1-	70 - 130	03/28/21 14:13	03/29/21 00:52	100

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	11600		271	mg/Kg	☆	03/27/21 15:18	03/29/21 04:01	5
Diesel Range Organics (Over C10-C28)	19600		271	mg/Kg	☆	03/27/21 15:18	03/29/21 04:01	5
Oil Range Organics (Over C28-C36)	2520		271	mg/Kg	☆	03/27/21 15:18	03/29/21 04:01	5
Total TPH	33700		271	mg/Kg	☆	03/27/21 15:18	03/29/21 04:01	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	03/27/21 15:18	03/29/21 04:01	5
o-Terphenyl	98		70 - 130	03/27/21 15:18	03/29/21 04:01	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.4		5.05	mg/Kg			03/25/21 20:21	1

Client Sample ID: SS-6 @ 1'

Lab Sample ID: 880-480-12

Date Collected: 03/18/21 13:20

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 98.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.102	U	0.102	mg/Kg	☆	03/28/21 14:13	03/29/21 01:13	50
Toluene	0.356		0.102	mg/Kg	☆	03/28/21 14:13	03/29/21 01:13	50
Ethylbenzene	0.895		0.102	mg/Kg	☆	03/28/21 14:13	03/29/21 01:13	50
m-Xylene & p-Xylene	3.26		0.203	mg/Kg	☆	03/28/21 14:13	03/29/21 01:13	50
o-Xylene	0.776		0.102	mg/Kg	☆	03/28/21 14:13	03/29/21 01:13	50
Xylenes, Total	4.04		0.203	mg/Kg	☆	03/28/21 14:13	03/29/21 01:13	50
Total BTEX	5.29		0.102	mg/Kg	☆	03/28/21 14:13	03/29/21 01:13	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	03/28/21 14:13	03/29/21 01:13	50
1,4-Difluorobenzene (Surr)	71		70 - 130	03/28/21 14:13	03/29/21 01:13	50

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	311		254	mg/Kg	☆	03/27/21 15:18	03/29/21 04:22	5
Diesel Range Organics (Over C10-C28)	13200		254	mg/Kg	☆	03/27/21 15:18	03/29/21 04:22	5
Oil Range Organics (Over C28-C36)	1790		254	mg/Kg	☆	03/27/21 15:18	03/29/21 04:22	5
Total TPH	15300		254	mg/Kg	☆	03/27/21 15:18	03/29/21 04:22	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	03/27/21 15:18	03/29/21 04:22	5
o-Terphenyl	93		70 - 130	03/27/21 15:18	03/29/21 04:22	5

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-6 @ 1'

Date Collected: 03/18/21 13:20

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-12

Matrix: Solid

Percent Solids: 98.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.1		4.99	mg/Kg			03/25/21 20:26	1

Client Sample ID: TT-6 @ 1.5'R

Date Collected: 03/18/21 13:30

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-13

Matrix: Solid

Percent Solids: 92.4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.108	U	0.108	mg/Kg	☆	03/28/21 14:13	03/29/21 01:33	50
Toluene	0.522		0.108	mg/Kg	☆	03/28/21 14:13	03/29/21 01:33	50
Ethylbenzene	1.72		0.108	mg/Kg	☆	03/28/21 14:13	03/29/21 01:33	50
m-Xylene & p-Xylene	4.85		0.216	mg/Kg	☆	03/28/21 14:13	03/29/21 01:33	50
o-Xylene	0.919		0.108	mg/Kg	☆	03/28/21 14:13	03/29/21 01:33	50
Xylenes, Total	5.77		0.216	mg/Kg	☆	03/28/21 14:13	03/29/21 01:33	50
Total BTEX	8.01		0.108	mg/Kg	☆	03/28/21 14:13	03/29/21 01:33	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	12	S1-	70 - 130	03/28/21 14:13	03/29/21 01:33	50
1,4-Difluorobenzene (Surr)	7	S1-	70 - 130	03/28/21 14:13	03/29/21 01:33	50

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	7040		269	mg/Kg	☆	03/27/21 15:18	03/29/21 04:43	5
Diesel Range Organics (Over C10-C28)	12900		269	mg/Kg	☆	03/27/21 15:18	03/29/21 04:43	5
Oil Range Organics (Over C28-C36)	1590		269	mg/Kg	☆	03/27/21 15:18	03/29/21 04:43	5
Total TPH	21500		269	mg/Kg	☆	03/27/21 15:18	03/29/21 04:43	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	159	S1+	70 - 130	03/27/21 15:18	03/29/21 04:43	5
o-Terphenyl	92		70 - 130	03/27/21 15:18	03/29/21 04:43	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71.8		4.98	mg/Kg			03/25/21 20:31	1

Client Sample ID: SS-7 @ 1'

Date Collected: 03/18/21 13:50

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-14

Matrix: Solid

Percent Solids: 98.7

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.100	U	0.100	mg/Kg	☆	03/28/21 14:13	03/29/21 01:53	50
Toluene	<0.100	U	0.100	mg/Kg	☆	03/28/21 14:13	03/29/21 01:53	50
Ethylbenzene	0.217		0.100	mg/Kg	☆	03/28/21 14:13	03/29/21 01:53	50
m-Xylene & p-Xylene	0.705		0.201	mg/Kg	☆	03/28/21 14:13	03/29/21 01:53	50
o-Xylene	0.379		0.100	mg/Kg	☆	03/28/21 14:13	03/29/21 01:53	50
Xylenes, Total	1.08		0.201	mg/Kg	☆	03/28/21 14:13	03/29/21 01:53	50
Total BTEX	1.30		0.100	mg/Kg	☆	03/28/21 14:13	03/29/21 01:53	50

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-7 @ 1'

Lab Sample ID: 880-480-14

Date Collected: 03/18/21 13:50

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 98.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	03/28/21 14:13	03/29/21 01:53	50
1,4-Difluorobenzene (Surr)	89		70 - 130	03/28/21 14:13	03/29/21 01:53	50

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<253	U	253	mg/Kg	☆	03/27/21 15:18	03/29/21 05:04	5
Diesel Range Organics (Over C10-C28)	18300		253	mg/Kg	☆	03/27/21 15:18	03/29/21 05:04	5
Oil Range Organics (Over C28-C36)	2920		253	mg/Kg	☆	03/27/21 15:18	03/29/21 05:04	5
Total TPH	21200		253	mg/Kg	☆	03/27/21 15:18	03/29/21 05:04	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	03/27/21 15:18	03/29/21 05:04	5
o-Terphenyl	110		70 - 130	03/27/21 15:18	03/29/21 05:04	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.6		4.95	mg/Kg			03/25/21 20:36	1

Client Sample ID: TT- 7@ 2'

Lab Sample ID: 880-480-15

Date Collected: 03/18/21 14:00

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 96.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:13	03/28/21 21:00	1
Toluene	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:13	03/28/21 21:00	1
Ethylbenzene	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:13	03/28/21 21:00	1
m-Xylene & p-Xylene	<0.00416	U	0.00416	mg/Kg	☆	03/28/21 14:13	03/28/21 21:00	1
o-Xylene	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:13	03/28/21 21:00	1
Xylenes, Total	<0.00416	U	0.00416	mg/Kg	☆	03/28/21 14:13	03/28/21 21:00	1
Total BTEX	<0.00208	U	0.00208	mg/Kg	☆	03/28/21 14:13	03/28/21 21:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	03/28/21 14:13	03/28/21 21:00	1
1,4-Difluorobenzene (Surr)	95		70 - 130	03/28/21 14:13	03/28/21 21:00	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<51.9	U	51.9	mg/Kg	☆	03/27/21 15:18	03/29/21 00:53	1
Diesel Range Organics (Over C10-C28)	112		51.9	mg/Kg	☆	03/27/21 15:18	03/29/21 00:53	1
Oil Range Organics (Over C28-C36)	<51.9	U	51.9	mg/Kg	☆	03/27/21 15:18	03/29/21 00:53	1
Total TPH	112		51.9	mg/Kg	☆	03/27/21 15:18	03/29/21 00:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	03/27/21 15:18	03/29/21 00:53	1
o-Terphenyl	105		70 - 130	03/27/21 15:18	03/29/21 00:53	1

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: TT- 7@ 2'

Date Collected: 03/18/21 14:00

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-15

Matrix: Solid

Percent Solids: 96.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.89		5.04	mg/Kg			03/25/21 20:42	1

Client Sample ID: SS-8 @ 2'

Date Collected: 03/18/21 14:10

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-16

Matrix: Solid

Percent Solids: 97.9

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.101	U	0.101	mg/Kg	☆	03/28/21 14:13	03/29/21 02:14	50
Toluene	0.297		0.101	mg/Kg	☆	03/28/21 14:13	03/29/21 02:14	50
Ethylbenzene	0.793		0.101	mg/Kg	☆	03/28/21 14:13	03/29/21 02:14	50
m-Xylene & p-Xylene	2.85		0.202	mg/Kg	☆	03/28/21 14:13	03/29/21 02:14	50
o-Xylene	0.686		0.101	mg/Kg	☆	03/28/21 14:13	03/29/21 02:14	50
Xylenes, Total	3.54		0.202	mg/Kg	☆	03/28/21 14:13	03/29/21 02:14	50
Total BTEX	4.63		0.101	mg/Kg	☆	03/28/21 14:13	03/29/21 02:14	50
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130			03/28/21 14:13	03/29/21 02:14	50
1,4-Difluorobenzene (Surr)	72		70 - 130			03/28/21 14:13	03/29/21 02:14	50

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	277		255	mg/Kg	☆	03/27/21 15:18	03/29/21 05:25	5
Diesel Range Organics (Over C10-C28)	19200		255	mg/Kg	☆	03/27/21 15:18	03/29/21 05:25	5
Oil Range Organics (Over C28-C36)	2640		255	mg/Kg	☆	03/27/21 15:18	03/29/21 05:25	5
Total TPH	22100		255	mg/Kg	☆	03/27/21 15:18	03/29/21 05:25	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			03/27/21 15:18	03/29/21 05:25	5
o-Terphenyl	97		70 - 130			03/27/21 15:18	03/29/21 05:25	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.31		5.00	mg/Kg			03/25/21 20:47	1

Client Sample ID: TT-8@ 3'R

Date Collected: 03/18/21 14:30

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-17

Matrix: Solid

Percent Solids: 92.8

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.107	U	0.107	mg/Kg	☆	03/28/21 14:13	03/29/21 02:34	50
Toluene	0.669		0.107	mg/Kg	☆	03/28/21 14:13	03/29/21 02:34	50
Ethylbenzene	1.76		0.107	mg/Kg	☆	03/28/21 14:13	03/29/21 02:34	50
m-Xylene & p-Xylene	5.07		0.214	mg/Kg	☆	03/28/21 14:13	03/29/21 02:34	50
o-Xylene	1.01		0.107	mg/Kg	☆	03/28/21 14:13	03/29/21 02:34	50
Xylenes, Total	6.08		0.214	mg/Kg	☆	03/28/21 14:13	03/29/21 02:34	50
Total BTEX	8.51		0.107	mg/Kg	☆	03/28/21 14:13	03/29/21 02:34	50

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: TT-8@ 3'R

Lab Sample ID: 880-480-17

Date Collected: 03/18/21 14:30

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 92.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	9	S1-	70 - 130	03/28/21 14:13	03/29/21 02:34	50
1,4-Difluorobenzene (Surr)	5	S1-	70 - 130	03/28/21 14:13	03/29/21 02:34	50

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	9280		270	mg/Kg	☆	03/27/21 15:18	03/29/21 05:46	5
Diesel Range Organics (Over C10-C28)	16000		270	mg/Kg	☆	03/27/21 15:18	03/29/21 05:46	5
Oil Range Organics (Over C28-C36)	2120		270	mg/Kg	☆	03/27/21 15:18	03/29/21 05:46	5
Total TPH	27400		270	mg/Kg	☆	03/27/21 15:18	03/29/21 05:46	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	03/27/21 15:18	03/29/21 05:46	5
o-Terphenyl	102		70 - 130	03/27/21 15:18	03/29/21 05:46	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.4		4.96	mg/Kg			03/25/21 21:02	1

Client Sample ID: SS-9 @ 1'

Lab Sample ID: 880-480-18

Date Collected: 03/18/21 14:50

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 99.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg	☆	03/28/21 14:13	03/28/21 21:20	1
Toluene	<0.00201	U	0.00201	mg/Kg	☆	03/28/21 14:13	03/28/21 21:20	1
Ethylbenzene	0.0101		0.00201	mg/Kg	☆	03/28/21 14:13	03/28/21 21:20	1
m-Xylene & p-Xylene	0.0443		0.00401	mg/Kg	☆	03/28/21 14:13	03/28/21 21:20	1
o-Xylene	0.00903		0.00201	mg/Kg	☆	03/28/21 14:13	03/28/21 21:20	1
Xylenes, Total	0.0533		0.00401	mg/Kg	☆	03/28/21 14:13	03/28/21 21:20	1
Total BTEX	0.0634		0.00201	mg/Kg	☆	03/28/21 14:13	03/28/21 21:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	03/28/21 14:13	03/28/21 21:20	1
1,4-Difluorobenzene (Surr)	97		70 - 130	03/28/21 14:13	03/28/21 21:20	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg	☆	03/27/21 15:18	03/29/21 02:16	1
Diesel Range Organics (Over C10-C28)	235		50.5	mg/Kg	☆	03/27/21 15:18	03/29/21 02:16	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg	☆	03/27/21 15:18	03/29/21 02:16	1
Total TPH	235		50.5	mg/Kg	☆	03/27/21 15:18	03/29/21 02:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	03/27/21 15:18	03/29/21 02:16	1
o-Terphenyl	87		70 - 130	03/27/21 15:18	03/29/21 02:16	1

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-9 @ 1'

Date Collected: 03/18/21 14:50

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-18

Matrix: Solid

Percent Solids: 99.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.34		4.99	mg/Kg			03/25/21 21:08	1

Client Sample ID: TT-9 @ 2'

Date Collected: 03/18/21 15:00

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-19

Matrix: Solid

Percent Solids: 96.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0207	U	0.0207	mg/Kg	☆	03/28/21 14:13	03/28/21 22:21	10
Toluene	<0.0207	U	0.0207	mg/Kg	☆	03/28/21 14:13	03/28/21 22:21	10
Ethylbenzene	<0.0207	U	0.0207	mg/Kg	☆	03/28/21 14:13	03/28/21 22:21	10
m-Xylene & p-Xylene	<0.0415	U	0.0415	mg/Kg	☆	03/28/21 14:13	03/28/21 22:21	10
o-Xylene	<0.0207	U	0.0207	mg/Kg	☆	03/28/21 14:13	03/28/21 22:21	10
Xylenes, Total	<0.0415	U	0.0415	mg/Kg	☆	03/28/21 14:13	03/28/21 22:21	10
Total BTEX	<0.0207	U	0.0207	mg/Kg	☆	03/28/21 14:13	03/28/21 22:21	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	41	S1-	70 - 130			03/28/21 14:13	03/28/21 22:21	10
1,4-Difluorobenzene (Surr)	99		70 - 130			03/28/21 14:13	03/28/21 22:21	10

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<51.9	U	51.9	mg/Kg	☆	03/27/21 15:18	03/29/21 01:55	1
Diesel Range Organics (Over C10-C28)	665		51.9	mg/Kg	☆	03/27/21 15:18	03/29/21 01:55	1
Oil Range Organics (Over C28-C36)	92.5		51.9	mg/Kg	☆	03/27/21 15:18	03/29/21 01:55	1
Total TPH	758		51.9	mg/Kg	☆	03/27/21 15:18	03/29/21 01:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			03/27/21 15:18	03/29/21 01:55	1
o-Terphenyl	104		70 - 130			03/27/21 15:18	03/29/21 01:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97	mg/Kg			03/25/21 21:23	1

Client Sample ID: SS-10 @ 3'

Date Collected: 03/18/21 15:30

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-20

Matrix: Solid

Percent Solids: 97.2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.103	U	0.103	mg/Kg	☆	03/28/21 14:13	03/29/21 02:55	50
Toluene	0.483		0.103	mg/Kg	☆	03/28/21 14:13	03/29/21 02:55	50
Ethylbenzene	2.94		0.103	mg/Kg	☆	03/28/21 14:13	03/29/21 02:55	50
m-Xylene & p-Xylene	9.68		0.205	mg/Kg	☆	03/28/21 14:13	03/29/21 02:55	50
o-Xylene	1.91		0.103	mg/Kg	☆	03/28/21 14:13	03/29/21 02:55	50
Xylenes, Total	11.6		0.205	mg/Kg	☆	03/28/21 14:13	03/29/21 02:55	50
Total BTEX	15.0		0.103	mg/Kg	☆	03/28/21 14:13	03/29/21 02:55	50

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-10 @ 3'

Lab Sample ID: 880-480-20

Date Collected: 03/18/21 15:30

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 97.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	03/28/21 14:13	03/29/21 02:55	50
1,4-Difluorobenzene (Surr)	87		70 - 130	03/28/21 14:13	03/29/21 02:55	50

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1350		513	mg/Kg	☆	03/27/21 15:18	03/29/21 06:07	10
Diesel Range Organics (Over C10-C28)	44700		513	mg/Kg	☆	03/27/21 15:18	03/29/21 06:07	10
Oil Range Organics (Over C28-C36)	6260		513	mg/Kg	☆	03/27/21 15:18	03/29/21 06:07	10
Total TPH	52300		513	mg/Kg	☆	03/27/21 15:18	03/29/21 06:07	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	03/27/21 15:18	03/29/21 06:07	10
o-Terphenyl	110		70 - 130	03/27/21 15:18	03/29/21 06:07	10

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.84		4.95	mg/Kg	-		03/25/21 21:28	1

Client Sample ID: TT-10 @ 4'

Lab Sample ID: 880-480-21

Date Collected: 03/18/21 15:40

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 94.6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0209	U	0.0209	mg/Kg	☆	03/28/21 14:13	03/29/21 00:11	10
Toluene	0.0258		0.0209	mg/Kg	☆	03/28/21 14:13	03/29/21 00:11	10
Ethylbenzene	0.180		0.0209	mg/Kg	☆	03/28/21 14:13	03/29/21 00:11	10
m-Xylene & p-Xylene	0.169		0.0419	mg/Kg	☆	03/28/21 14:13	03/29/21 00:11	10
o-Xylene	0.0826		0.0209	mg/Kg	☆	03/28/21 14:13	03/29/21 00:11	10
Xylenes, Total	0.252		0.0419	mg/Kg	☆	03/28/21 14:13	03/29/21 00:11	10
Total BTEX	0.457		0.0209	mg/Kg	☆	03/28/21 14:13	03/29/21 00:11	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	03/28/21 14:13	03/29/21 00:11	10
1,4-Difluorobenzene (Surr)	90		70 - 130	03/28/21 14:13	03/29/21 00:11	10

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	84.3		53.0	mg/Kg	☆	03/27/21 14:37	03/28/21 19:37	1
Diesel Range Organics (Over C10-C28)	1080		53.0	mg/Kg	☆	03/27/21 14:37	03/28/21 19:37	1
Oil Range Organics (Over C28-C36)	140		53.0	mg/Kg	☆	03/27/21 14:37	03/28/21 19:37	1
Total TPH	1300		53.0	mg/Kg	☆	03/27/21 14:37	03/28/21 19:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	03/27/21 14:37	03/28/21 19:37	1
o-Terphenyl	82		70 - 130	03/27/21 14:37	03/28/21 19:37	1

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: TT-10 @ 4'

Date Collected: 03/18/21 15:40

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-21

Matrix: Solid

Percent Solids: 94.6

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U F1	4.98	mg/Kg			03/29/21 14:33	1

Client Sample ID: TT-10 @ 5'

Date Collected: 03/18/21 15:50

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-22

Matrix: Solid

Percent Solids: 94.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00210	U	0.00210	mg/Kg	☆	03/28/21 14:13	03/28/21 21:40	1
Toluene	<0.00210	U	0.00210	mg/Kg	☆	03/28/21 14:13	03/28/21 21:40	1
Ethylbenzene	<0.00210	U	0.00210	mg/Kg	☆	03/28/21 14:13	03/28/21 21:40	1
m-Xylene & p-Xylene	<0.00419	U	0.00419	mg/Kg	☆	03/28/21 14:13	03/28/21 21:40	1
o-Xylene	<0.00210	U	0.00210	mg/Kg	☆	03/28/21 14:13	03/28/21 21:40	1
Xylenes, Total	<0.00419	U	0.00419	mg/Kg	☆	03/28/21 14:13	03/28/21 21:40	1
Total BTEX	<0.00210	U	0.00210	mg/Kg	☆	03/28/21 14:13	03/28/21 21:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	03/28/21 14:13	03/28/21 21:40	1
1,4-Difluorobenzene (Surr)	100		70 - 130	03/28/21 14:13	03/28/21 21:40	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<53.0	U	53.0	mg/Kg	☆	03/27/21 14:37	03/28/21 20:19	1
Diesel Range Organics (Over C10-C28)	<53.0	U	53.0	mg/Kg	☆	03/27/21 14:37	03/28/21 20:19	1
Oil Range Organics (Over C28-C36)	<53.0	U	53.0	mg/Kg	☆	03/27/21 14:37	03/28/21 20:19	1
Total TPH	<53.0	U	53.0	mg/Kg	☆	03/27/21 14:37	03/28/21 20:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	03/27/21 14:37	03/28/21 20:19	1
o-Terphenyl	95		70 - 130	03/27/21 14:37	03/28/21 20:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.05	U	5.05	mg/Kg			03/29/21 14:50	1

Client Sample ID: SS-11 @ 2'

Date Collected: 03/18/21 16:00

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-23

Matrix: Solid

Percent Solids: 97.9

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.102	U	0.102	mg/Kg	☆	03/28/21 14:13	03/29/21 03:15	50
Toluene	<0.102	U	0.102	mg/Kg	☆	03/28/21 14:13	03/29/21 03:15	50
Ethylbenzene	0.671		0.102	mg/Kg	☆	03/28/21 14:13	03/29/21 03:15	50
m-Xylene & p-Xylene	1.93		0.205	mg/Kg	☆	03/28/21 14:13	03/29/21 03:15	50
o-Xylene	0.416		0.102	mg/Kg	☆	03/28/21 14:13	03/29/21 03:15	50
Xylenes, Total	2.35		0.205	mg/Kg	☆	03/28/21 14:13	03/29/21 03:15	50
Total BTEX	3.02		0.102	mg/Kg	☆	03/28/21 14:13	03/29/21 03:15	50

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-11 @ 2'

Date Collected: 03/18/21 16:00

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-23

Matrix: Solid

Percent Solids: 97.9

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130			03/28/21 14:13	03/29/21 03:15	50
1,4-Difluorobenzene (Surr)	88		70 - 130			03/28/21 14:13	03/29/21 03:15	50
Method: 8015B NM - Diesel Range Organics (DRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	271		255	mg/Kg	☆	03/27/21 14:37	03/28/21 19:57	5
Diesel Range Organics (Over C10-C28)	16500		255	mg/Kg	☆	03/27/21 14:37	03/28/21 19:57	5
Oil Range Organics (Over C28-C36)	2360		255	mg/Kg	☆	03/27/21 14:37	03/28/21 19:57	5
Total TPH	19100		255	mg/Kg	☆	03/27/21 14:37	03/28/21 19:57	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			03/27/21 14:37	03/28/21 19:57	5
o-Terphenyl	97		70 - 130			03/27/21 14:37	03/28/21 19:57	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.02	U	5.02	mg/Kg	-		03/29/21 14:55	1
General Chemistry - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.0	H	0.01	S.U.	-		03/31/21 14:06	1
Temperature	22.4	H	0.01	Deg. C	-		03/31/21 14:06	1

Client Sample ID: TT-11 @3'

Date Collected: 03/18/21 16:10

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-24

Matrix: Solid

Percent Solids: 95.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00210	U	0.00210	mg/Kg	☆	03/28/21 14:13	03/28/21 22:01	1
Toluene	<0.00210	U	0.00210	mg/Kg	☆	03/28/21 14:13	03/28/21 22:01	1
Ethylbenzene	<0.00210	U	0.00210	mg/Kg	☆	03/28/21 14:13	03/28/21 22:01	1
m-Xylene & p-Xylene	<0.00420	U	0.00420	mg/Kg	☆	03/28/21 14:13	03/28/21 22:01	1
o-Xylene	<0.00210	U	0.00210	mg/Kg	☆	03/28/21 14:13	03/28/21 22:01	1
Xylenes, Total	<0.00420	U	0.00420	mg/Kg	☆	03/28/21 14:13	03/28/21 22:01	1
Total BTEX	<0.00210	U	0.00210	mg/Kg	☆	03/28/21 14:13	03/28/21 22:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130			03/28/21 14:13	03/28/21 22:01	1
1,4-Difluorobenzene (Surr)	100		70 - 130			03/28/21 14:13	03/28/21 22:01	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<52.5	U	52.5	mg/Kg	☆	03/27/21 14:37	03/28/21 20:40	1
Diesel Range Organics (Over C10-C28)	<52.5	U	52.5	mg/Kg	☆	03/27/21 14:37	03/28/21 20:40	1
Oil Range Organics (Over C28-C36)	<52.5	U	52.5	mg/Kg	☆	03/27/21 14:37	03/28/21 20:40	1
Total TPH	<52.5	U	52.5	mg/Kg	☆	03/27/21 14:37	03/28/21 20:40	1

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: TT-11 @3'

Lab Sample ID: 880-480-24

Date Collected: 03/18/21 16:10

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 95.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	03/27/21 14:37	03/28/21 20:40	1
o-Terphenyl	105		70 - 130	03/27/21 14:37	03/28/21 20:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99	mg/Kg			03/29/21 15:01	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.7	H	0.01	S.U.			03/31/21 14:06	1
Temperature	21.7	H	0.01	Deg. C			03/31/21 14:06	1

Client Sample ID: SS-12 @ 6"

Lab Sample ID: 880-480-25

Date Collected: 03/18/21 16:30

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 99.6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg	✱	03/30/21 09:18	03/30/21 20:00	1
Toluene	<0.00202	U	0.00202	mg/Kg	✱	03/30/21 09:18	03/30/21 20:00	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg	✱	03/30/21 09:18	03/30/21 20:00	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg	✱	03/30/21 09:18	03/30/21 20:00	1
o-Xylene	<0.00202	U	0.00202	mg/Kg	✱	03/30/21 09:18	03/30/21 20:00	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg	✱	03/30/21 09:18	03/30/21 20:00	1
Total BTEX	<0.00202	U	0.00202	mg/Kg	✱	03/30/21 09:18	03/30/21 20:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	03/30/21 09:18	03/30/21 20:00	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/30/21 09:18	03/30/21 20:00	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1	mg/Kg	✱	03/29/21 10:13	03/29/21 20:03	1
Diesel Range Organics (Over C10-C28)	565		50.1	mg/Kg	✱	03/29/21 10:13	03/29/21 20:03	1
Oil Range Organics (Over C28-C36)	143		50.1	mg/Kg	✱	03/29/21 10:13	03/29/21 20:03	1
Total TPH	708		50.1	mg/Kg	✱	03/29/21 10:13	03/29/21 20:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	03/29/21 10:13	03/29/21 20:03	1
o-Terphenyl	96		70 - 130	03/29/21 10:13	03/29/21 20:03	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95	mg/Kg			03/29/21 15:06	1

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: Duplicate-1

Lab Sample ID: 880-480-26

Date Collected: 03/18/21 00:00

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 97.9

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00204	U	0.00204	mg/Kg	✱	03/30/21 09:18	03/30/21 20:21	1
Toluene	<0.00204	U	0.00204	mg/Kg	✱	03/30/21 09:18	03/30/21 20:21	1
Ethylbenzene	<0.00204	U	0.00204	mg/Kg	✱	03/30/21 09:18	03/30/21 20:21	1
m-Xylene & p-Xylene	<0.00408	U	0.00408	mg/Kg	✱	03/30/21 09:18	03/30/21 20:21	1
o-Xylene	<0.00204	U	0.00204	mg/Kg	✱	03/30/21 09:18	03/30/21 20:21	1
Xylenes, Total	<0.00408	U	0.00408	mg/Kg	✱	03/30/21 09:18	03/30/21 20:21	1
Total BTEX	<0.00204	U	0.00204	mg/Kg	✱	03/30/21 09:18	03/30/21 20:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	03/30/21 09:18	03/30/21 20:21	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/30/21 09:18	03/30/21 20:21	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	674		509	mg/Kg	✱	03/29/21 10:13	03/29/21 19:42	10
Diesel Range Organics (Over C10-C28)	19400		509	mg/Kg	✱	03/29/21 10:13	03/29/21 19:42	10
Oil Range Organics (Over C28-C36)	3950		509	mg/Kg	✱	03/29/21 10:13	03/29/21 19:42	10
Total TPH	24000		509	mg/Kg	✱	03/29/21 10:13	03/29/21 19:42	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	03/29/21 10:13	03/29/21 19:42	10
o-Terphenyl	123		70 - 130	03/29/21 10:13	03/29/21 19:42	10

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.05	U	5.05	mg/Kg			03/29/21 15:23	1

Eurofins Xenco, Midland

Surrogate Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-475-A-1-G MS	Matrix Spike	112	101
880-475-A-1-H MSD	Matrix Spike Duplicate	113	96
880-476-A-1-C MS	Matrix Spike	97	98
880-476-A-1-D MSD	Matrix Spike Duplicate	100	102
880-480-1	SS-1 @ 2'	96	89
880-480-2	TT-1 @ 3'	108	103
880-480-3	SS-2 @ 2'	101	91
880-480-4	TT-2 @ 3'	49 S1-	96
880-480-5	SS-3 @ 2'	94	84
880-480-6	TT-3 @ 3'R	108	98
880-480-7	SS-4 @ 1'	145 S1+	133 S1+
880-480-8	TT-4 @ 2'	76	88
880-480-9	TT-4@ 3'	116	100
880-480-10	SS-5 @ 2'	101	86
880-480-11	TT-5 @ 3'R	10 S1-	7 S1-
880-480-12	SS-6 @ 1'	91	71
880-480-13	TT-6 @ 1.5'R	12 S1-	7 S1-
880-480-14	SS-7 @ 1'	121	89
880-480-15	TT- 7@ 2'	110	95
880-480-16	SS-8 @ 2'	82	72
880-480-17	TT-8@ 3'R	9 S1-	5 S1-
880-480-18	SS-9 @ 1'	111	97
880-480-19	TT-9 @ 2'	41 S1-	99
880-480-20	SS-10 @ 3'	117	87
880-480-21	TT-10 @ 4'	119	90
880-480-22	TT-10 @ 5'	114	100
880-480-23	SS-11 @ 2'	111	88
880-480-24	TT-11 @ 3'	111	100
880-480-25	SS-12 @ 6"	117	104
880-480-26	Duplicate-1	123	103
880-758-A-34-D MS	Matrix Spike	127	110
880-758-A-34-E MSD	Matrix Spike Duplicate	129	111
890-419-A-1-F MS	Matrix Spike	125	111
890-419-A-1-G MSD	Matrix Spike Duplicate	115	104
LCS 880-1037/1-A	Lab Control Sample	97	101
LCS 880-1052/1-A	Lab Control Sample	97	206 S1+
LCS 880-979/1-A	Lab Control Sample	105	99
LCS 880-980/1-A	Lab Control Sample	103	99
LCSD 880-1037/2-A	Lab Control Sample Dup	101	104
LCSD 880-1052/2-A	Lab Control Sample Dup	99	103
LCSD 880-979/2-A	Lab Control Sample Dup	104	100
LCSD 880-980/2-A	Lab Control Sample Dup	99	98
MB 880-1037/5-A	Method Blank	99	102
MB 880-1052/5-A	Method Blank	100	101
MB 880-979/5-A	Method Blank	103	97
MB 880-980/5-A	Method Blank	103	98

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Eurofins Xenco, Midland

Surrogate Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-480-1	SS-1 @ 2'	93	94
880-480-2	TT-1 @ 3'	105	107
880-480-2 MS	TT-1 @ 3'	96	88
880-480-2 MSD	TT-1 @ 3'	112	101
880-480-3	SS-2 @ 2'	98	98
880-480-4	TT-2 @ 3'	77	75
880-480-5	SS-3 @ 2'	86	99
880-480-6	TT-3 @ 3'R	100	102
880-480-7	SS-4 @ 1'	96	106
880-480-8	TT-4 @ 2'	97	95
880-480-9	TT-4 @ 3'	101	102
880-480-10	SS-5 @ 2'	102	103
880-480-11	TT-5 @ 3'R	97	98
880-480-12	SS-6 @ 1'	98	93
880-480-13	TT-6 @ 1.5'R	159 S1+	92
880-480-14	SS-7 @ 1'	108	110
880-480-15	TT- 7 @ 2'	104	105
880-480-16	SS-8 @ 2'	93	97
880-480-17	TT-8 @ 3'R	117	102
880-480-18	SS-9 @ 1'	90	87
880-480-19	TT-9 @ 2'	103	104
880-480-20	SS-10 @ 3'	113	110
880-480-21	TT-10 @ 4'	91	82
880-480-22	TT-10 @ 5'	93	95
880-480-23	SS-11 @ 2'	92	97
880-480-24	TT-11 @ 3'	107	105
880-480-25	SS-12 @ 6"	96	96
880-480-26	Duplicate-1	106	123
890-426-A-121-D MS	Matrix Spike	109	96
890-426-A-121-E MSD	Matrix Spike Duplicate	106	95
890-428-A-1-I MS	Matrix Spike	109	101
890-428-A-1-J MSD	Matrix Spike Duplicate	116	106
LCS 880-957/2-A	Lab Control Sample	120	113
LCS 880-959/2-A	Lab Control Sample	102	96
LCS 880-989/2-A	Lab Control Sample	105	100
LCSD 880-957/3-A	Lab Control Sample Dup	105	98
LCSD 880-959/3-A	Lab Control Sample Dup	98	93
LCSD 880-989/3-A	Lab Control Sample Dup	112	106
MB 880-957/1-A	Method Blank	99	104
MB 880-959/1-A	Method Blank	100	105
MB 880-989/1-A	Method Blank	104	114

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1037/5-A

Matrix: Solid

Analysis Batch: 1038

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1037

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/29/21 18:30	03/29/21 21:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/29/21 18:30	03/29/21 21:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/29/21 18:30	03/29/21 21:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/29/21 18:30	03/29/21 21:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/29/21 18:30	03/29/21 21:51	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/29/21 18:30	03/29/21 21:51	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/29/21 18:30	03/29/21 21:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	03/29/21 18:30	03/29/21 21:51	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/29/21 18:30	03/29/21 21:51	1

Lab Sample ID: LCS 880-1037/1-A

Matrix: Solid

Analysis Batch: 1038

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1037

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07967		mg/Kg		80	70 - 130
Toluene	0.100	0.07787		mg/Kg		78	70 - 130
Ethylbenzene	0.100	0.08067		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	0.200	0.1593		mg/Kg		80	70 - 130
o-Xylene	0.100	0.08008		mg/Kg		80	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-1037/2-A

Matrix: Solid

Analysis Batch: 1038

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1037

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08930		mg/Kg		89	70 - 130	11	35
Toluene	0.100	0.08493		mg/Kg		85	70 - 130	9	35
Ethylbenzene	0.100	0.08741		mg/Kg		87	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1739		mg/Kg		87	70 - 130	9	35
o-Xylene	0.100	0.08945		mg/Kg		89	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: MB 880-1052/5-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1052

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-1052/5-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1052

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/30/21 09:18	03/30/21 13:44	1
1,4-Difluorobenzene (Surr)	101		70 - 130	03/30/21 09:18	03/30/21 13:44	1

Lab Sample ID: LCS 880-1052/1-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07624		mg/Kg		76	70 - 130
Toluene	0.100	0.07294		mg/Kg		73	70 - 130
Ethylbenzene	0.100	0.07393		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	0.200	0.1479		mg/Kg		74	70 - 130
o-Xylene	0.100	0.07621		mg/Kg		76	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	206	S1+	70 - 130

Lab Sample ID: LCSD 880-1052/2-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1052

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08614		mg/Kg		86	70 - 130	12	35
Toluene	0.100	0.08256		mg/Kg		83	70 - 130	12	35
Ethylbenzene	0.100	0.08574		mg/Kg		86	70 - 130	15	35
m-Xylene & p-Xylene	0.200	0.1714		mg/Kg		86	70 - 130	15	35
o-Xylene	0.100	0.08727		mg/Kg		87	70 - 130	14	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: MB 880-979/5-A

Matrix: Solid

Analysis Batch: 981

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 979

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/28/21 14:06	03/29/21 06:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/28/21 14:06	03/29/21 06:24	1

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-979/5-A

Matrix: Solid

Analysis Batch: 981

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 979

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/28/21 14:06	03/29/21 06:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/28/21 14:06	03/29/21 06:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/28/21 14:06	03/29/21 06:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/28/21 14:06	03/29/21 06:24	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/28/21 14:06	03/29/21 06:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	03/28/21 14:06	03/29/21 06:24	1
1,4-Difluorobenzene (Surr)	97		70 - 130	03/28/21 14:06	03/29/21 06:24	1

Lab Sample ID: LCS 880-979/1-A

Matrix: Solid

Analysis Batch: 981

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 979

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1046		mg/Kg		105	70 - 130
Toluene	0.100	0.1103		mg/Kg		110	70 - 130
Ethylbenzene	0.100	0.1116		mg/Kg		112	70 - 130
m-Xylene & p-Xylene	0.200	0.2257		mg/Kg		113	70 - 130
o-Xylene	0.100	0.1086		mg/Kg		109	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-979/2-A

Matrix: Solid

Analysis Batch: 981

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 979

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.1090		mg/Kg		109	70 - 130	4	35
Toluene	0.100	0.1110		mg/Kg		111	70 - 130	1	35
Ethylbenzene	0.100	0.1126		mg/Kg		113	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2282		mg/Kg		114	70 - 130	1	35
o-Xylene	0.100	0.1100		mg/Kg		110	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: MB 880-980/5-A

Matrix: Solid

Analysis Batch: 981

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 980

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/28/21 14:13	03/28/21 18:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/28/21 14:13	03/28/21 18:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/28/21 14:13	03/28/21 18:49	1

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-980/5-A

Matrix: Solid

Analysis Batch: 981

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 980

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/28/21 14:13	03/28/21 18:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/28/21 14:13	03/28/21 18:49	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/28/21 14:13	03/28/21 18:49	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/28/21 14:13	03/28/21 18:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	03/28/21 14:13	03/28/21 18:49	1
1,4-Difluorobenzene (Surr)	98		70 - 130	03/28/21 14:13	03/28/21 18:49	1

Lab Sample ID: LCS 880-980/1-A

Matrix: Solid

Analysis Batch: 981

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 980

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1118		mg/Kg		112	70 - 130
Toluene	0.100	0.1151		mg/Kg		115	70 - 130
Ethylbenzene	0.100	0.1186		mg/Kg		119	70 - 130
m-Xylene & p-Xylene	0.200	0.2414		mg/Kg		121	70 - 130
o-Xylene	0.100	0.1167		mg/Kg		117	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-980/2-A

Matrix: Solid

Analysis Batch: 981

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 980

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1102		mg/Kg		110	70 - 130	1	35
Toluene	0.100	0.1129		mg/Kg		113	70 - 130	2	35
Ethylbenzene	0.100	0.1164		mg/Kg		116	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2359		mg/Kg		118	70 - 130	2	35
o-Xylene	0.100	0.1137		mg/Kg		114	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-957/1-A

Matrix: Solid

Analysis Batch: 967

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 957

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/27/21 14:37	03/28/21 11:53	1

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-957/1-A

Matrix: Solid

Analysis Batch: 967

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 957

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/27/21 14:37	03/28/21 11:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/27/21 14:37	03/28/21 11:53	1
Total TPH	<50.0	U	50.0	mg/Kg		03/27/21 14:37	03/28/21 11:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	03/27/21 14:37	03/28/21 11:53	1
o-Terphenyl	104		70 - 130	03/27/21 14:37	03/28/21 11:53	1

Lab Sample ID: LCS 880-957/2-A

Matrix: Solid

Analysis Batch: 967

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1244		mg/Kg		124	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1165		mg/Kg		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: LCSD 880-957/3-A

Matrix: Solid

Analysis Batch: 967

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1230		mg/Kg		123	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	992.9		mg/Kg		99	70 - 130	16	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: MB 880-959/1-A

Matrix: Solid

Analysis Batch: 967

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 959

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/27/21 15:18	03/28/21 21:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/27/21 15:18	03/28/21 21:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/27/21 15:18	03/28/21 21:22	1
Total TPH	<50.0	U	50.0	mg/Kg		03/27/21 15:18	03/28/21 21:22	1

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-959/1-A

Matrix: Solid

Analysis Batch: 967

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 959

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	03/27/21 15:18	03/28/21 21:22	1
o-Terphenyl	105		70 - 130	03/27/21 15:18	03/28/21 21:22	1

Lab Sample ID: LCS 880-959/2-A

Matrix: Solid

Analysis Batch: 967

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 959

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1095		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	997.7		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: LCSD 880-959/3-A

Matrix: Solid

Analysis Batch: 967

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 959

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1207		mg/Kg		121	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	1000	958.3		mg/Kg		96	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: 880-480-2 MS

Matrix: Solid

Analysis Batch: 967

Client Sample ID: TT-1 @ 3'

Prep Type: Total/NA

Prep Batch: 959

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<53.3	U	1070	1080		mg/Kg	☼	101	70 - 130
Diesel Range Organics (Over C10-C28)	<53.3	U	1070	974.0		mg/Kg	☼	91	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	88		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-480-2 MSD

Matrix: Solid

Analysis Batch: 967

Client Sample ID: TT-1 @ 3'

Prep Type: Total/NA

Prep Batch: 959

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<53.3	U	1070	1260		mg/Kg	☼	118	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	<53.3	U	1070	1122		mg/Kg	☼	105	70 - 130	14	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	112		70 - 130								
o-Terphenyl	101		70 - 130								

Lab Sample ID: MB 880-989/1-A

Matrix: Solid

Analysis Batch: 996

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 989

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/29/21 10:13	03/29/21 13:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/29/21 10:13	03/29/21 13:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/29/21 10:13	03/29/21 13:35	1
Total TPH	<50.0	U	50.0	mg/Kg		03/29/21 10:13	03/29/21 13:35	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			03/29/21 10:13	03/29/21 13:35	1
o-Terphenyl	114		70 - 130			03/29/21 10:13	03/29/21 13:35	1

Lab Sample ID: LCS 880-989/2-A

Matrix: Solid

Analysis Batch: 996

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 989

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1041		mg/Kg		104	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	916.5		mg/Kg		92	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	105		70 - 130						
o-Terphenyl	100		70 - 130						

Lab Sample ID: LCSD 880-989/3-A

Matrix: Solid

Analysis Batch: 996

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 989

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1096		mg/Kg		110	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	981.3		mg/Kg		98	70 - 130	7	20

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-989/3-A

Matrix: Solid

Analysis Batch: 996

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 989

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	106		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-684/1-A

Matrix: Solid

Analysis Batch: 877

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			03/25/21 19:19	1

Lab Sample ID: LCS 880-684/2-A

Matrix: Solid

Analysis Batch: 877

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	242.4		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-684/3-A

Matrix: Solid

Analysis Batch: 877

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	230.5		mg/Kg		92	90 - 110	5	20

Lab Sample ID: 880-480-6 MS

Matrix: Solid

Analysis Batch: 877

Client Sample ID: TT-3 @ 3'R

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	121		250	355.5		mg/Kg		94	90 - 110

Lab Sample ID: 880-480-6 MSD

Matrix: Solid

Analysis Batch: 877

Client Sample ID: TT-3 @ 3'R

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	121		250	382.7		mg/Kg		105	90 - 110	7	20

Lab Sample ID: 880-480-16 MS

Matrix: Solid

Analysis Batch: 877

Client Sample ID: SS-8 @ 2'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	7.31		250	252.0		mg/Kg		98	90 - 110

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-480-16 MSD

Matrix: Solid

Analysis Batch: 877

Client Sample ID: SS-8 @ 2'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7.31		250	277.6		mg/Kg		108	90 - 110	10	20

Lab Sample ID: MB 880-751/1-A

Matrix: Solid

Analysis Batch: 988

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			03/29/21 14:16	1

Lab Sample ID: LCS 880-751/2-A

Matrix: Solid

Analysis Batch: 988

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	272.8		mg/Kg		109	90 - 110

Lab Sample ID: LCSD 880-751/3-A

Matrix: Solid

Analysis Batch: 988

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	271.7		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 880-480-21 MS

Matrix: Solid

Analysis Batch: 988

Client Sample ID: TT-10 @ 4'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<4.98	U F1	249	289.1	F1	mg/Kg		115	90 - 110

Lab Sample ID: 880-480-21 MSD

Matrix: Solid

Analysis Batch: 988

Client Sample ID: TT-10 @ 4'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<4.98	U F1	249	273.2		mg/Kg		109	90 - 110	6	20

Lab Sample ID: MB 880-990/1-A

Matrix: Solid

Analysis Batch: 991

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			03/29/21 13:09	1

Lab Sample ID: LCS 880-990/2-A

Matrix: Solid

Analysis Batch: 991

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	273.0		mg/Kg		109	90 - 110

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-990/3-A

Matrix: Solid

Analysis Batch: 991

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	274.2		mg/Kg		110	90 - 110	0	20

Method: 9045D - pH

Lab Sample ID: 880-480-23 DU

Matrix: Solid

Analysis Batch: 1111

Client Sample ID: SS-11 @ 2'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.0	H	8.0		S.U.		0.4	10
Temperature	22.4	H	22.8		Deg. C		2	20

Method: Barium - SW846 6020 Metals by ICPMS

Lab Sample ID: 7724003-1-BLK

Matrix: SOIL

Analysis Batch: 3154689

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3154689_P

Analyte	BLANK Result	BLANK Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<.4		.4		mg/kg		03/25/21 13:05	03/25/21 16:07	1

Lab Sample ID: 7724003-1-BKS

Matrix: SOIL

Analysis Batch: 3154689

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3154689_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD
Barium	10	9.63		mg/kg		96	75 - 125	

Lab Sample ID: 7724003-1-BSD

Matrix: SOIL

Analysis Batch: 3154689

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3154689_P

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	10	9.61		mg/kg		96	75 - 125	0	20

Eurofins Xenco, Midland

QC Association Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

GC VOA

Prep Batch: 979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-1	SS-1 @ 2'	Total/NA	Solid	5035	
880-480-2	TT-1 @ 3'	Total/NA	Solid	5035	
880-480-3	SS-2 @ 2'	Total/NA	Solid	5035	
880-480-4	TT-2 @ 3'	Total/NA	Solid	5035	
880-480-5	SS-3 @ 2'	Total/NA	Solid	5035	
880-480-6	TT-3 @ 3'R	Total/NA	Solid	5035	
880-480-7	SS-4 @ 1'	Total/NA	Solid	5035	
880-480-8	TT-4 @ 2'	Total/NA	Solid	5035	
880-480-9	TT-4@ 3'	Total/NA	Solid	5035	
MB 880-979/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-979/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-979/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-10	SS-5 @ 2'	Total/NA	Solid	5035	
880-480-11	TT-5 @ 3'R	Total/NA	Solid	5035	
880-480-12	SS-6 @ 1'	Total/NA	Solid	5035	
880-480-13	TT-6 @ 1.5'R	Total/NA	Solid	5035	
880-480-14	SS-7 @ 1'	Total/NA	Solid	5035	
880-480-15	TT- 7 @ 2'	Total/NA	Solid	5035	
880-480-16	SS-8 @ 2'	Total/NA	Solid	5035	
880-480-17	TT-8@ 3'R	Total/NA	Solid	5035	
880-480-18	SS-9 @ 1'	Total/NA	Solid	5035	
880-480-19	TT-9 @ 2'	Total/NA	Solid	5035	
880-480-20	SS-10 @ 3'	Total/NA	Solid	5035	
880-480-21	TT-10 @ 4'	Total/NA	Solid	5035	
880-480-22	TT-10 @ 5'	Total/NA	Solid	5035	
880-480-23	SS-11 @ 2'	Total/NA	Solid	5035	
880-480-24	TT-11 @ 3'	Total/NA	Solid	5035	
MB 880-980/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-980/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-980/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-1	SS-1 @ 2'	Total/NA	Solid	8021B	979
880-480-2	TT-1 @ 3'	Total/NA	Solid	8021B	979
880-480-3	SS-2 @ 2'	Total/NA	Solid	8021B	979
880-480-4	TT-2 @ 3'	Total/NA	Solid	8021B	979
880-480-5	SS-3 @ 2'	Total/NA	Solid	8021B	979
880-480-6	TT-3 @ 3'R	Total/NA	Solid	8021B	979
880-480-7	SS-4 @ 1'	Total/NA	Solid	8021B	979
880-480-8	TT-4 @ 2'	Total/NA	Solid	8021B	979
880-480-9	TT-4@ 3'	Total/NA	Solid	8021B	979
880-480-10	SS-5 @ 2'	Total/NA	Solid	8021B	980
880-480-11	TT-5 @ 3'R	Total/NA	Solid	8021B	980
880-480-12	SS-6 @ 1'	Total/NA	Solid	8021B	980
880-480-13	TT-6 @ 1.5'R	Total/NA	Solid	8021B	980
880-480-14	SS-7 @ 1'	Total/NA	Solid	8021B	980
880-480-15	TT- 7 @ 2'	Total/NA	Solid	8021B	980

Eurofins Xenco, Midland

QC Association Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

GC VOA (Continued)

Analysis Batch: 981 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-16	SS-8 @ 2'	Total/NA	Solid	8021B	980
880-480-17	TT-8@ 3'R	Total/NA	Solid	8021B	980
880-480-18	SS-9 @ 1'	Total/NA	Solid	8021B	980
880-480-19	TT-9 @ 2'	Total/NA	Solid	8021B	980
880-480-20	SS-10 @ 3'	Total/NA	Solid	8021B	980
880-480-21	TT-10 @ 4'	Total/NA	Solid	8021B	980
880-480-22	TT-10 @ 5'	Total/NA	Solid	8021B	980
880-480-23	SS-11 @ 2'	Total/NA	Solid	8021B	980
880-480-24	TT-11 @ 3'	Total/NA	Solid	8021B	980
MB 880-979/5-A	Method Blank	Total/NA	Solid	8021B	979
MB 880-980/5-A	Method Blank	Total/NA	Solid	8021B	980
LCS 880-979/1-A	Lab Control Sample	Total/NA	Solid	8021B	979
LCS 880-980/1-A	Lab Control Sample	Total/NA	Solid	8021B	980
LCSD 880-979/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	979
LCSD 880-980/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	980

Prep Batch: 1037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1037/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1037/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1037/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 1038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1037/5-A	Method Blank	Total/NA	Solid	8021B	1037
LCS 880-1037/1-A	Lab Control Sample	Total/NA	Solid	8021B	1037
LCSD 880-1037/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1037

Prep Batch: 1052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-25	SS-12 @ 6"	Total/NA	Solid	5035	
880-480-26	Duplicate-1	Total/NA	Solid	5035	
MB 880-1052/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1052/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1052/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 1053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-25	SS-12 @ 6"	Total/NA	Solid	8021B	1052
880-480-26	Duplicate-1	Total/NA	Solid	8021B	1052
MB 880-1052/5-A	Method Blank	Total/NA	Solid	8021B	1052
LCS 880-1052/1-A	Lab Control Sample	Total/NA	Solid	8021B	1052
LCSD 880-1052/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1052

GC Semi VOA

Prep Batch: 957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-21	TT-10 @ 4'	Total/NA	Solid	8015NM Prep	
880-480-22	TT-10 @ 5'	Total/NA	Solid	8015NM Prep	
880-480-23	SS-11 @ 2'	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Midland

QC Association Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

GC Semi VOA (Continued)

Prep Batch: 957 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-24	TT-11 @ 3'	Total/NA	Solid	8015NM Prep	
MB 880-957/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-957/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-957/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-1	SS-1 @ 2'	Total/NA	Solid	8015NM Prep	
880-480-2	TT-1 @ 3'	Total/NA	Solid	8015NM Prep	
880-480-3	SS-2 @ 2'	Total/NA	Solid	8015NM Prep	
880-480-4	TT-2 @ 3'	Total/NA	Solid	8015NM Prep	
880-480-5	SS-3 @ 2'	Total/NA	Solid	8015NM Prep	
880-480-6	TT-3 @ 3'R	Total/NA	Solid	8015NM Prep	
880-480-7	SS-4 @ 1'	Total/NA	Solid	8015NM Prep	
880-480-8	TT-4 @ 2'	Total/NA	Solid	8015NM Prep	
880-480-9	TT-4@ 3'	Total/NA	Solid	8015NM Prep	
880-480-10	SS-5 @ 2'	Total/NA	Solid	8015NM Prep	
880-480-11	TT-5 @ 3'R	Total/NA	Solid	8015NM Prep	
880-480-12	SS-6 @ 1'	Total/NA	Solid	8015NM Prep	
880-480-13	TT-6 @ 1.5'R	Total/NA	Solid	8015NM Prep	
880-480-14	SS-7 @ 1'	Total/NA	Solid	8015NM Prep	
880-480-15	TT- 7@ 2'	Total/NA	Solid	8015NM Prep	
880-480-16	SS-8 @ 2'	Total/NA	Solid	8015NM Prep	
880-480-17	TT-8@ 3'R	Total/NA	Solid	8015NM Prep	
880-480-18	SS-9 @ 1'	Total/NA	Solid	8015NM Prep	
880-480-19	TT-9 @ 2'	Total/NA	Solid	8015NM Prep	
880-480-20	SS-10 @ 3'	Total/NA	Solid	8015NM Prep	
MB 880-959/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-959/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-959/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-480-2 MS	TT-1 @ 3'	Total/NA	Solid	8015NM Prep	
880-480-2 MSD	TT-1 @ 3'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-1	SS-1 @ 2'	Total/NA	Solid	8015B NM	959
880-480-2	TT-1 @ 3'	Total/NA	Solid	8015B NM	959
880-480-3	SS-2 @ 2'	Total/NA	Solid	8015B NM	959
880-480-4	TT-2 @ 3'	Total/NA	Solid	8015B NM	959
880-480-5	SS-3 @ 2'	Total/NA	Solid	8015B NM	959
880-480-6	TT-3 @ 3'R	Total/NA	Solid	8015B NM	959
880-480-7	SS-4 @ 1'	Total/NA	Solid	8015B NM	959
880-480-8	TT-4 @ 2'	Total/NA	Solid	8015B NM	959
880-480-9	TT-4@ 3'	Total/NA	Solid	8015B NM	959
880-480-10	SS-5 @ 2'	Total/NA	Solid	8015B NM	959
880-480-11	TT-5 @ 3'R	Total/NA	Solid	8015B NM	959
880-480-12	SS-6 @ 1'	Total/NA	Solid	8015B NM	959
880-480-13	TT-6 @ 1.5'R	Total/NA	Solid	8015B NM	959
880-480-14	SS-7 @ 1'	Total/NA	Solid	8015B NM	959
880-480-15	TT- 7@ 2'	Total/NA	Solid	8015B NM	959
880-480-16	SS-8 @ 2'	Total/NA	Solid	8015B NM	959

Eurofins Xenco, Midland

QC Association Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

GC Semi VOA (Continued)

Analysis Batch: 967 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-17	TT-8@ 3'R	Total/NA	Solid	8015B NM	959
880-480-18	SS-9 @ 1'	Total/NA	Solid	8015B NM	959
880-480-19	TT-9 @ 2'	Total/NA	Solid	8015B NM	959
880-480-20	SS-10 @ 3'	Total/NA	Solid	8015B NM	959
880-480-21	TT-10 @ 4'	Total/NA	Solid	8015B NM	957
880-480-22	TT-10 @ 5'	Total/NA	Solid	8015B NM	957
880-480-23	SS-11 @ 2'	Total/NA	Solid	8015B NM	957
880-480-24	TT-11 @ 3'	Total/NA	Solid	8015B NM	957
MB 880-957/1-A	Method Blank	Total/NA	Solid	8015B NM	957
MB 880-959/1-A	Method Blank	Total/NA	Solid	8015B NM	959
LCS 880-957/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	957
LCS 880-959/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	959
LCSD 880-957/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	957
LCSD 880-959/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	959
880-480-2 MS	TT-1 @ 3'	Total/NA	Solid	8015B NM	959
880-480-2 MSD	TT-1 @ 3'	Total/NA	Solid	8015B NM	959

Prep Batch: 989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-25	SS-12 @ 6"	Total/NA	Solid	8015NM Prep	
880-480-26	Duplicate-1	Total/NA	Solid	8015NM Prep	
MB 880-989/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-989/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-989/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-25	SS-12 @ 6"	Total/NA	Solid	8015B NM	989
880-480-26	Duplicate-1	Total/NA	Solid	8015B NM	989
MB 880-989/1-A	Method Blank	Total/NA	Solid	8015B NM	989
LCS 880-989/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	989
LCSD 880-989/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	989

HPLC/IC

Leach Batch: 684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-6	TT-3 @ 3'R	Soluble	Solid	DI Leach	
880-480-7	SS-4 @ 1'	Soluble	Solid	DI Leach	
880-480-8	TT-4 @ 2'	Soluble	Solid	DI Leach	
880-480-9	TT-4@ 3'	Soluble	Solid	DI Leach	
880-480-10	SS-5 @ 2'	Soluble	Solid	DI Leach	
880-480-11	TT-5 @ 3'R	Soluble	Solid	DI Leach	
880-480-12	SS-6 @ 1'	Soluble	Solid	DI Leach	
880-480-13	TT-6 @ 1.5'R	Soluble	Solid	DI Leach	
880-480-14	SS-7 @ 1'	Soluble	Solid	DI Leach	
880-480-15	TT- 7@ 2'	Soluble	Solid	DI Leach	
880-480-16	SS-8 @ 2'	Soluble	Solid	DI Leach	
880-480-17	TT-8@ 3'R	Soluble	Solid	DI Leach	
880-480-18	SS-9 @ 1'	Soluble	Solid	DI Leach	
880-480-19	TT-9 @ 2'	Soluble	Solid	DI Leach	

Eurofins Xenco, Midland

QC Association Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

HPLC/IC (Continued)

Leach Batch: 684 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-20	SS-10 @ 3'	Soluble	Solid	DI Leach	
MB 880-684/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-684/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-684/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-480-6 MS	TT-3 @ 3'R	Soluble	Solid	DI Leach	
880-480-6 MSD	TT-3 @ 3'R	Soluble	Solid	DI Leach	
880-480-16 MS	SS-8 @ 2'	Soluble	Solid	DI Leach	
880-480-16 MSD	SS-8 @ 2'	Soluble	Solid	DI Leach	

Leach Batch: 751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-21	TT-10 @ 4'	Soluble	Solid	DI Leach	
880-480-22	TT-10 @ 5'	Soluble	Solid	DI Leach	
880-480-23	SS-11 @ 2'	Soluble	Solid	DI Leach	
880-480-24	TT-11 @ 3'	Soluble	Solid	DI Leach	
880-480-25	SS-12 @ 6"	Soluble	Solid	DI Leach	
880-480-26	Duplicate-1	Soluble	Solid	DI Leach	
MB 880-751/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-751/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-751/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-480-21 MS	TT-10 @ 4'	Soluble	Solid	DI Leach	
880-480-21 MSD	TT-10 @ 4'	Soluble	Solid	DI Leach	

Analysis Batch: 877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-6	TT-3 @ 3'R	Soluble	Solid	300.0	684
880-480-7	SS-4 @ 1'	Soluble	Solid	300.0	684
880-480-8	TT-4 @ 2'	Soluble	Solid	300.0	684
880-480-9	TT-4 @ 3'	Soluble	Solid	300.0	684
880-480-10	SS-5 @ 2'	Soluble	Solid	300.0	684
880-480-11	TT-5 @ 3'R	Soluble	Solid	300.0	684
880-480-12	SS-6 @ 1'	Soluble	Solid	300.0	684
880-480-13	TT-6 @ 1.5'R	Soluble	Solid	300.0	684
880-480-14	SS-7 @ 1'	Soluble	Solid	300.0	684
880-480-15	TT- 7 @ 2'	Soluble	Solid	300.0	684
880-480-16	SS-8 @ 2'	Soluble	Solid	300.0	684
880-480-17	TT-8 @ 3'R	Soluble	Solid	300.0	684
880-480-18	SS-9 @ 1'	Soluble	Solid	300.0	684
880-480-19	TT-9 @ 2'	Soluble	Solid	300.0	684
880-480-20	SS-10 @ 3'	Soluble	Solid	300.0	684
MB 880-684/1-A	Method Blank	Soluble	Solid	300.0	684
LCS 880-684/2-A	Lab Control Sample	Soluble	Solid	300.0	684
LCSD 880-684/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	684
880-480-6 MS	TT-3 @ 3'R	Soluble	Solid	300.0	684
880-480-6 MSD	TT-3 @ 3'R	Soluble	Solid	300.0	684
880-480-16 MS	SS-8 @ 2'	Soluble	Solid	300.0	684
880-480-16 MSD	SS-8 @ 2'	Soluble	Solid	300.0	684

Analysis Batch: 988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-21	TT-10 @ 4'	Soluble	Solid	300.0	751

Eurofins Xenco, Midland

QC Association Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

HPLC/IC (Continued)

Analysis Batch: 988 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-22	TT-10 @ 5'	Soluble	Solid	300.0	751
880-480-23	SS-11 @ 2'	Soluble	Solid	300.0	751
880-480-24	TT-11 @ 3'	Soluble	Solid	300.0	751
880-480-25	SS-12 @ 6"	Soluble	Solid	300.0	751
880-480-26	Duplicate-1	Soluble	Solid	300.0	751
MB 880-751/1-A	Method Blank	Soluble	Solid	300.0	751
LCS 880-751/2-A	Lab Control Sample	Soluble	Solid	300.0	751
LCSD 880-751/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	751
880-480-21 MS	TT-10 @ 4'	Soluble	Solid	300.0	751
880-480-21 MSD	TT-10 @ 4'	Soluble	Solid	300.0	751

Leach Batch: 990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-1	SS-1 @ 2'	Soluble	Solid	DI Leach	
880-480-2	TT-1 @ 3'	Soluble	Solid	DI Leach	
880-480-3	SS-2 @ 2'	Soluble	Solid	DI Leach	
880-480-4	TT-2 @ 3'	Soluble	Solid	DI Leach	
880-480-5	SS-3 @ 2'	Soluble	Solid	DI Leach	
MB 880-990/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-990/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-990/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-1	SS-1 @ 2'	Soluble	Solid	300.0	990
880-480-2	TT-1 @ 3'	Soluble	Solid	300.0	990
880-480-3	SS-2 @ 2'	Soluble	Solid	300.0	990
880-480-4	TT-2 @ 3'	Soluble	Solid	300.0	990
880-480-5	SS-3 @ 2'	Soluble	Solid	300.0	990
MB 880-990/1-A	Method Blank	Soluble	Solid	300.0	990
LCS 880-990/2-A	Lab Control Sample	Soluble	Solid	300.0	990
LCSD 880-990/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	990

General Chemistry

Analysis Batch: 1035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-1	SS-1 @ 2'	Total/NA	Solid	D2216	
880-480-2	TT-1 @ 3'	Total/NA	Solid	D2216	
880-480-3	SS-2 @ 2'	Total/NA	Solid	D2216	
880-480-4	TT-2 @ 3'	Total/NA	Solid	D2216	
880-480-5	SS-3 @ 2'	Total/NA	Solid	D2216	
880-480-6	TT-3 @ 3'R	Total/NA	Solid	D2216	
880-480-7	SS-4 @ 1'	Total/NA	Solid	D2216	
880-480-8	TT-4 @ 2'	Total/NA	Solid	D2216	
880-480-9	TT-4 @ 3'	Total/NA	Solid	D2216	
880-480-10	SS-5 @ 2'	Total/NA	Solid	D2216	
880-480-11	TT-5 @ 3'R	Total/NA	Solid	D2216	
880-480-12	SS-6 @ 1'	Total/NA	Solid	D2216	
880-480-13	TT-6 @ 1.5'R	Total/NA	Solid	D2216	
880-480-14	SS-7 @ 1'	Total/NA	Solid	D2216	

Eurofins Xenco, Midland

QC Association Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

General Chemistry (Continued)

Analysis Batch: 1035 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-15	TT- 7 @ 2'	Total/NA	Solid	D2216	
880-480-16	SS-8 @ 2'	Total/NA	Solid	D2216	
880-480-17	TT-8 @ 3'R	Total/NA	Solid	D2216	
880-480-18	SS-9 @ 1'	Total/NA	Solid	D2216	
880-480-19	TT-9 @ 2'	Total/NA	Solid	D2216	
880-480-20	SS-10 @ 3'	Total/NA	Solid	D2216	
MB 880-1035/1	Method Blank	Total/NA	Solid	D2216	
880-480-1 DU	SS-1 @ 2'	Total/NA	Solid	D2216	
880-480-11 DU	TT-5 @ 3'R	Total/NA	Solid	D2216	

Analysis Batch: 1040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-21	TT-10 @ 4'	Total/NA	Solid	D2216	
880-480-22	TT-10 @ 5'	Total/NA	Solid	D2216	
880-480-23	SS-11 @ 2'	Total/NA	Solid	D2216	
880-480-24	TT-11 @ 3'	Total/NA	Solid	D2216	
880-480-25	SS-12 @ 6"	Total/NA	Solid	D2216	
880-480-26	Duplicate-1	Total/NA	Solid	D2216	
MB 880-1040/1	Method Blank	Total/NA	Solid	D2216	
880-480-21 DU	TT-10 @ 4'	Total/NA	Solid	D2216	

Analysis Batch: 1111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-23	SS-11 @ 2'	Soluble	Solid	9045D	1127
880-480-24	TT-11 @ 3'	Soluble	Solid	9045D	1127
880-480-23 DU	SS-11 @ 2'	Soluble	Solid	9045D	1127

Leach Batch: 1127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-23	SS-11 @ 2'	Soluble	Solid	DI Leach	
880-480-24	TT-11 @ 3'	Soluble	Solid	DI Leach	
880-480-23 DU	SS-11 @ 2'	Soluble	Solid	DI Leach	

Subcontract

Analysis Batch: 3154689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-1	SS-1 @ 2'	Total/NA	Solid	Barium	3154689_P
880-480-2	TT-1 @ 3'	Total/NA	Solid	Barium	3154689_P
7724003-1-BLK	Method Blank	Total/NA	SOIL	Barium	3154689_P
7724003-1-BKS	Lab Control Sample	Total/NA	SOIL	Barium	3154689_P
7724003-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	Barium	3154689_P

Prep Batch: 3154689_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-480-1	SS-1 @ 2'	Total/NA	Solid	SW3051	
880-480-2	TT-1 @ 3'	Total/NA	Solid	SW3051	
7724003-1-BLK	Method Blank	Total/NA	SOIL	SW3051	
7724003-1-BKS	Lab Control Sample	Total/NA	SOIL	SW3051	
7724003-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	SW3051	

Eurofins Xenco, Midland

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-1 @ 2'

Lab Sample ID: 880-480-1

Date Collected: 03/18/21 10:45

Matrix: Solid

Date Received: 03/19/21 08:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			990	03/29/21 10:13	CH	XM
Soluble	Analysis	300.0		1	991	03/29/21 13:49	CH	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM
Total/NA	Prep	SW3051		1	3154689_P	03/25/21 13:05		XS
Total/NA	Analysis	Barium		10	3154689	03/25/21 16:39	DEP	XS

Client Sample ID: SS-1 @ 2'

Lab Sample ID: 880-480-1

Date Collected: 03/18/21 10:45

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 96.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			979	03/28/21 14:06	MR	XM
Total/NA	Analysis	8021B		50	981	03/29/21 13:49	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		5	967	03/29/21 01:13	AJ	XM

Client Sample ID: TT-1 @ 3'

Lab Sample ID: 880-480-2

Date Collected: 03/18/21 10:40

Matrix: Solid

Date Received: 03/19/21 08:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			990	03/29/21 10:13	CH	XM
Soluble	Analysis	300.0		1	991	03/29/21 13:54	CH	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM
Total/NA	Prep	SW3051		1	3154689_P	03/25/21 13:05		XS
Total/NA	Analysis	Barium		10	3154689	03/25/21 16:42	DEP	XS

Client Sample ID: TT-1 @ 3'

Lab Sample ID: 880-480-2

Date Collected: 03/18/21 10:40

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			979	03/28/21 14:06	MR	XM
Total/NA	Analysis	8021B		1	981	03/29/21 12:07	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		1	967	03/28/21 22:26	AJ	XM

Client Sample ID: SS-2 @ 2'

Lab Sample ID: 880-480-3

Date Collected: 03/18/21 11:30

Matrix: Solid

Date Received: 03/19/21 08:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			990	03/29/21 10:13	CH	XM
Soluble	Analysis	300.0		1	991	03/29/21 14:09	CH	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-2 @ 2'

Lab Sample ID: 880-480-3

Date Collected: 03/18/21 11:30

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 98.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			979	03/28/21 14:06	MR	XM
Total/NA	Analysis	8021B		50	981	03/29/21 14:10	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		5	967	03/29/21 01:35	AJ	XM

Client Sample ID: TT-2 @ 3'

Lab Sample ID: 880-480-4

Date Collected: 03/18/21 11:40

Matrix: Solid

Date Received: 03/19/21 08:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			990	03/29/21 10:13	CH	XM
Soluble	Analysis	300.0		1	991	03/29/21 14:14	CH	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Client Sample ID: TT-2 @ 3'

Lab Sample ID: 880-480-4

Date Collected: 03/18/21 11:40

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 95.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			979	03/28/21 14:06	MR	XM
Total/NA	Analysis	8021B		10	981	03/29/21 13:08	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		1	967	03/28/21 23:29	AJ	XM

Client Sample ID: SS-3 @ 2'

Lab Sample ID: 880-480-5

Date Collected: 03/18/21 11:50

Matrix: Solid

Date Received: 03/19/21 08:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			990	03/29/21 10:13	CH	XM
Soluble	Analysis	300.0		1	991	03/29/21 14:19	CH	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Client Sample ID: SS-3 @ 2'

Lab Sample ID: 880-480-5

Date Collected: 03/18/21 11:50

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 97.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			979	03/28/21 14:06	MR	XM
Total/NA	Analysis	8021B		50	981	03/29/21 14:30	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		10	967	03/29/21 02:58	AJ	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: TT-3 @ 3'R

Lab Sample ID: 880-480-6

Date Collected: 03/18/21 11:55

Matrix: Solid

Date Received: 03/19/21 08:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 19:34	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Client Sample ID: TT-3 @ 3'R

Lab Sample ID: 880-480-6

Date Collected: 03/18/21 11:55

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			979	03/28/21 14:06	MR	XM
Total/NA	Analysis	8021B		1	981	03/29/21 12:28	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		1	967	03/28/21 23:50	AJ	XM

Client Sample ID: SS-4 @ 1'

Lab Sample ID: 880-480-7

Date Collected: 03/18/21 12:00

Matrix: Solid

Date Received: 03/19/21 08:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 19:50	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Client Sample ID: SS-4 @ 1'

Lab Sample ID: 880-480-7

Date Collected: 03/18/21 12:00

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			979	03/28/21 14:06	MR	XM
Total/NA	Analysis	8021B		50	981	03/29/21 14:51	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		10	967	03/29/21 03:19	AJ	XM

Client Sample ID: TT-4 @ 2'

Lab Sample ID: 880-480-8

Date Collected: 03/18/21 12:10

Matrix: Solid

Date Received: 03/19/21 08:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 19:55	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: TT-4 @ 2'

Lab Sample ID: 880-480-8

Date Collected: 03/18/21 12:10

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 96.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			979	03/28/21 14:06	MR	XM
Total/NA	Analysis	8021B		10	981	03/29/21 13:29	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		1	967	03/29/21 00:11	AJ	XM

Client Sample ID: TT-4@ 3'

Lab Sample ID: 880-480-9

Date Collected: 03/18/21 12:20

Matrix: Solid

Date Received: 03/19/21 08:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 20:00	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Client Sample ID: TT-4@ 3'

Lab Sample ID: 880-480-9

Date Collected: 03/18/21 12:20

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 96.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			979	03/28/21 14:06	MR	XM
Total/NA	Analysis	8021B		1	981	03/29/21 12:48	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		1	967	03/29/21 00:32	AJ	XM

Client Sample ID: SS-5 @ 2'

Lab Sample ID: 880-480-10

Date Collected: 03/18/21 12:40

Matrix: Solid

Date Received: 03/19/21 08:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 20:05	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Client Sample ID: SS-5 @ 2'

Lab Sample ID: 880-480-10

Date Collected: 03/18/21 12:40

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 98.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		50	981	03/29/21 00:32	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		5	967	03/29/21 03:41	AJ	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: TT-5 @ 3'R

Date Collected: 03/18/21 13:00

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 20:21	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Client Sample ID: TT-5 @ 3'R

Date Collected: 03/18/21 13:00

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-11

Matrix: Solid

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		100	981	03/29/21 00:52	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		5	967	03/29/21 04:01	AJ	XM

Client Sample ID: SS-6 @ 1'

Date Collected: 03/18/21 13:20

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 20:26	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Client Sample ID: SS-6 @ 1'

Date Collected: 03/18/21 13:20

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-12

Matrix: Solid

Percent Solids: 98.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		50	981	03/29/21 01:13	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		5	967	03/29/21 04:22	AJ	XM

Client Sample ID: TT-6 @ 1.5'R

Date Collected: 03/18/21 13:30

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 20:31	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: TT-6 @ 1.5'R

Lab Sample ID: 880-480-13

Date Collected: 03/18/21 13:30

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		50	981	03/29/21 01:33	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		5	967	03/29/21 04:43	AJ	XM

Client Sample ID: SS-7 @ 1'

Lab Sample ID: 880-480-14

Date Collected: 03/18/21 13:50

Matrix: Solid

Date Received: 03/19/21 08:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 20:36	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Client Sample ID: SS-7 @ 1'

Lab Sample ID: 880-480-14

Date Collected: 03/18/21 13:50

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 98.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		50	981	03/29/21 01:53	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		5	967	03/29/21 05:04	AJ	XM

Client Sample ID: TT- 7@ 2'

Lab Sample ID: 880-480-15

Date Collected: 03/18/21 14:00

Matrix: Solid

Date Received: 03/19/21 08:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 20:42	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Client Sample ID: TT- 7@ 2'

Lab Sample ID: 880-480-15

Date Collected: 03/18/21 14:00

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		1	981	03/28/21 21:00	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		1	967	03/29/21 00:53	AJ	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-8 @ 2'

Date Collected: 03/18/21 14:10

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 20:47	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Client Sample ID: SS-8 @ 2'

Date Collected: 03/18/21 14:10

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-16

Matrix: Solid

Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		50	981	03/29/21 02:14	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		5	967	03/29/21 05:25	AJ	XM

Client Sample ID: TT-8@ 3'R

Date Collected: 03/18/21 14:30

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 21:02	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Client Sample ID: TT-8@ 3'R

Date Collected: 03/18/21 14:30

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-17

Matrix: Solid

Percent Solids: 92.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		50	981	03/29/21 02:34	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		5	967	03/29/21 05:46	AJ	XM

Client Sample ID: SS-9 @ 1'

Date Collected: 03/18/21 14:50

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 21:08	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-9 @ 1'

Date Collected: 03/18/21 14:50

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-18

Matrix: Solid

Percent Solids: 99.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		1	981	03/28/21 21:20	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		1	967	03/29/21 02:16	AJ	XM

Client Sample ID: TT-9 @ 2'

Date Collected: 03/18/21 15:00

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-19

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 21:23	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Client Sample ID: TT-9 @ 2'

Date Collected: 03/18/21 15:00

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-19

Matrix: Solid

Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		10	981	03/28/21 22:21	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		1	967	03/29/21 01:55	AJ	XM

Client Sample ID: SS-10 @ 3'

Date Collected: 03/18/21 15:30

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-20

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			684	03/22/21 11:08	CH	XM
Soluble	Analysis	300.0		1	877	03/25/21 21:28	WP	XM
Total/NA	Analysis	D2216		1	1035	03/29/21 17:56	SC	XM

Client Sample ID: SS-10 @ 3'

Date Collected: 03/18/21 15:30

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-20

Matrix: Solid

Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		50	981	03/29/21 02:55	MR	XM
Total/NA	Prep	8015NM Prep			959	03/27/21 15:18	DM	XM
Total/NA	Analysis	8015B NM		10	967	03/29/21 06:07	AJ	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: TT-10 @ 4'

Date Collected: 03/18/21 15:40

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-21

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			751	03/23/21 11:09	CH	XM
Soluble	Analysis	300.0		1	988	03/29/21 14:33	WP	XM
Total/NA	Analysis	D2216		1	1040	03/29/21 19:08	SC	XM

Client Sample ID: TT-10 @ 4'

Date Collected: 03/18/21 15:40

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-21

Matrix: Solid

Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		10	981	03/29/21 00:11	MR	XM
Total/NA	Prep	8015NM Prep			957	03/27/21 14:37	DM	XM
Total/NA	Analysis	8015B NM		1	967	03/28/21 19:37	AJ	XM

Client Sample ID: TT-10 @ 5'

Date Collected: 03/18/21 15:50

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-22

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			751	03/23/21 11:09	CH	XM
Soluble	Analysis	300.0		1	988	03/29/21 14:50	WP	XM
Total/NA	Analysis	D2216		1	1040	03/29/21 19:08	SC	XM

Client Sample ID: TT-10 @ 5'

Date Collected: 03/18/21 15:50

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-22

Matrix: Solid

Percent Solids: 94.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		1	981	03/28/21 21:40	MR	XM
Total/NA	Prep	8015NM Prep			957	03/27/21 14:37	DM	XM
Total/NA	Analysis	8015B NM		1	967	03/28/21 20:19	AJ	XM

Client Sample ID: SS-11 @ 2'

Date Collected: 03/18/21 16:00

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-23

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			751	03/23/21 11:09	CH	XM
Soluble	Analysis	300.0		1	988	03/29/21 14:55	WP	XM
Soluble	Leach	DI Leach			1127	03/31/21 10:05	SC	XM
Soluble	Analysis	9045D		1	1111	03/31/21 14:06	SC	XM
Total/NA	Analysis	D2216		1	1040	03/29/21 19:08	SC	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: SS-11 @ 2'

Date Collected: 03/18/21 16:00

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-23

Matrix: Solid

Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		50	981	03/29/21 03:15	MR	XM
Total/NA	Prep	8015NM Prep			957	03/27/21 14:37	DM	XM
Total/NA	Analysis	8015B NM		5	967	03/28/21 19:57	AJ	XM

Client Sample ID: TT-11 @3'

Date Collected: 03/18/21 16:10

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			751	03/23/21 11:09	CH	XM
Soluble	Analysis	300.0		1	988	03/29/21 15:01	WP	XM
Soluble	Leach	DI Leach			1127	03/31/21 10:05	SC	XM
Soluble	Analysis	9045D		1	1111	03/31/21 14:06	SC	XM
Total/NA	Analysis	D2216		1	1040	03/29/21 19:08	SC	XM

Client Sample ID: TT-11 @3'

Date Collected: 03/18/21 16:10

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-24

Matrix: Solid

Percent Solids: 95.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			980	03/28/21 14:13	MR	XM
Total/NA	Analysis	8021B		1	981	03/28/21 22:01	MR	XM
Total/NA	Prep	8015NM Prep			957	03/27/21 14:37	DM	XM
Total/NA	Analysis	8015B NM		1	967	03/28/21 20:40	AJ	XM

Client Sample ID: SS-12 @ 6"

Date Collected: 03/18/21 16:30

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-25

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			751	03/23/21 11:09	CH	XM
Soluble	Analysis	300.0		1	988	03/29/21 15:06	WP	XM
Total/NA	Analysis	D2216		1	1040	03/29/21 19:08	SC	XM

Client Sample ID: SS-12 @ 6"

Date Collected: 03/18/21 16:30

Date Received: 03/19/21 08:31

Lab Sample ID: 880-480-25

Matrix: Solid

Percent Solids: 99.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1052	03/30/21 09:18	KL	XM
Total/NA	Analysis	8021B		1	1053	03/30/21 20:00	KL	XM
Total/NA	Prep	8015NM Prep			989	03/29/21 10:13	DM	XM
Total/NA	Analysis	8015B NM		1	996	03/29/21 20:03	T1S	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Client Sample ID: Duplicate-1

Lab Sample ID: 880-480-26

Date Collected: 03/18/21 00:00

Matrix: Solid

Date Received: 03/19/21 08:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			751	03/23/21 11:09	CH	XM
Soluble	Analysis	300.0		1	988	03/29/21 15:23	WP	XM
Total/NA	Analysis	D2216		1	1040	03/29/21 19:15	SC	XM

Client Sample ID: Duplicate-1

Lab Sample ID: 880-480-26

Date Collected: 03/18/21 00:00

Matrix: Solid

Date Received: 03/19/21 08:31

Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1052	03/30/21 09:18	KL	XM
Total/NA	Analysis	8021B		1	1053	03/30/21 20:21	KL	XM
Total/NA	Prep	8015NM Prep			989	03/29/21 10:13	DM	XM
Total/NA	Analysis	8015B NM		10	996	03/29/21 19:42	T1S	XM

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

XS = Eurofins Stafford, 4147 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX
9045D		Solid	Temperature
D2216		Solid	Percent Solids

Laboratory: Eurofins Stafford

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	20-025-0	08-04-21
Florida	NELAP	E871002	06-30-21
Louisiana	NELAP	03054	06-30-21
North Carolina (WW/SW)	State	681	12-31-21
Oklahoma	State	1306	08-31-21
Texas	NELAP	T104704215-21-39	06-30-21

Eurofins Xenco, Midland

Method Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XM
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XM
300.0	Anions, Ion Chromatography	MCAWW	XM
9045D	pH	SW846	XM
D2216	Percent Moisture	ASTM	XM
6020	SW846 6020 Metals by ICPMS	SW846	XS
5035	Closed System Purge and Trap	SW846	XM
8015NM Prep	Microextraction	SW846	XM
DI Leach	Deionized Water Leaching Procedure	ASTM	XM

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

XS = Eurofins Stafford, 4147 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Eurofins Xenco, Midland

Sample Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-480-1
SDG: Eunice NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-480-1	SS-1 @ 2'	Solid	03/18/21 10:45	03/19/21 08:31	
880-480-2	TT-1 @ 3'	Solid	03/18/21 10:40	03/19/21 08:31	
880-480-3	SS-2 @ 2'	Solid	03/18/21 11:30	03/19/21 08:31	
880-480-4	TT-2 @ 3'	Solid	03/18/21 11:40	03/19/21 08:31	
880-480-5	SS-3 @ 2'	Solid	03/18/21 11:50	03/19/21 08:31	
880-480-6	TT-3 @ 3'R	Solid	03/18/21 11:55	03/19/21 08:31	
880-480-7	SS-4 @ 1'	Solid	03/18/21 12:00	03/19/21 08:31	
880-480-8	TT-4 @ 2'	Solid	03/18/21 12:10	03/19/21 08:31	
880-480-9	TT-4@ 3'	Solid	03/18/21 12:20	03/19/21 08:31	
880-480-10	SS-5 @ 2'	Solid	03/18/21 12:40	03/19/21 08:31	
880-480-11	TT-5 @ 3'R	Solid	03/18/21 13:00	03/19/21 08:31	
880-480-12	SS-6 @ 1'	Solid	03/18/21 13:20	03/19/21 08:31	
880-480-13	TT-6 @ 1.5'R	Solid	03/18/21 13:30	03/19/21 08:31	
880-480-14	SS-7 @ 1'	Solid	03/18/21 13:50	03/19/21 08:31	
880-480-15	TT- 7@ 2'	Solid	03/18/21 14:00	03/19/21 08:31	
880-480-16	SS-8 @ 2'	Solid	03/18/21 14:10	03/19/21 08:31	
880-480-17	TT-8@ 3'R	Solid	03/18/21 14:30	03/19/21 08:31	
880-480-18	SS-9 @ 1'	Solid	03/18/21 14:50	03/19/21 08:31	
880-480-19	TT-9 @ 2'	Solid	03/18/21 15:00	03/19/21 08:31	
880-480-20	SS-10 @ 3'	Solid	03/18/21 15:30	03/19/21 08:31	
880-480-21	TT-10 @ 4'	Solid	03/18/21 15:40	03/19/21 08:31	
880-480-22	TT-10 @ 5'	Solid	03/18/21 15:50	03/19/21 08:31	
880-480-23	SS-11 @ 2'	Solid	03/18/21 16:00	03/19/21 08:31	
880-480-24	TT-11 @3'	Solid	03/18/21 16:10	03/19/21 08:31	
880-480-25	SS-12 @ 6"	Solid	03/18/21 16:30	03/19/21 08:31	
880-480-26	Duplicate-1	Solid	03/18/21 00:00	03/19/21 08:31	

Eurofins Xenco, Midland



eurofins

Environment Testing

Houston, TX (281) 240-4200, Dallas TX (214) 902-0300
Midland, TX (432) 704-5440 San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody



880-480 Chain of Custody

www.xenco.com

Page 1 of 3

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project: NM

Reporting Level II	<input type="checkbox"/>	Level III	<input type="checkbox"/>	PST/UST	<input type="checkbox"/>	TRRP	<input type="checkbox"/>	Level IV	<input type="checkbox"/>
Deliverables	EDD	<input type="checkbox"/>	ADAPT	<input type="checkbox"/>	Other				

Project Manager:		Lindy Chain		Bill to: (if different)			
Company Name:		TEC		Company Name			
Address:		10 Drake Dr. Ste 150E		Address			
City, State ZIP:		Milledale, TX 79105		City, State ZIP:			
Phone:		432-215-6730		Email:		Lindy.Mitch	
Project Name:		HEP EMSU		Turn Around			
Project Number:		428993		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		Pres. Code	
Project Location:		Eunice NM		Due Date			
Sampler's Name:		Mitt Trewett		TAT starts the day received by the lab, if received by 4:30pm			
P.O. #							
SAMPLE RECEIPT		Temp Blank:		Yes No		Wet Ice: Yes No	
Samples Received Intact:		Yes No		Thermometer ID		1148	
Cooler Custody Seals:		Yes No N/A		Correction Factor		0.5	
Sample Custody Seals:		Yes No N/A		Temperature Reading		3.3	
Total Containers:				Corrected Temperature:		3.8	
Sample Identification		Matrix		Date Sampled		Time Sampled	
SS-1 @ 2'		S		3/18/21		1045	
SS-1 @ 3'						1050	
SS-2 @ 2'						1130	
SS-2 @ 3'						1140	
SS-3 @ 2'						1150	
SS-3 @ 3'R						1155	
SS-4 @ 1'						1200	
SS-4 @ 2'						1210	
SS-4 @ 3'						1220	
SS-5 @ 2'						1240	
Total 200.7 / 6010		200.8 / 6020:		8RCRA 13PPM Texas 11		Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed		TCRP / SPLP 6010		8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U		Hg 1631 / 245 1 / 7470 / 7471	
Relinquished by: (Signature)		Received by: (Signature)		Date/Time		Relinquished by: (Signature)	
Mitt Trewett		Lindy Chain		3/19/21 8:29			
3				4			
5				6			
Work Order Comments		Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>		State of Project: NM		Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables		EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>					
Preservative Codes		None NO		DI Water- H ₂ O			
Cool Cool		MeOH Me					
HCL HC		HNO ₃ HN					
H ₂ SO ₄ H ₂		NaOH Na					
H ₃ PO ₄ HP							
NaHSO ₄ NABIS							
Na ₂ S ₂ O ₃ NaSO ₃							
Zn Acetate+NaOH Zn							
NaOH+Ascorbic Acid SAPC							
Sample Comments							



Environment Testing
Xenco

Chain of Custody
Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440 San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550 Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 2 of 3

Project Manager:	Cindy Crain	Bill to (if different)	
Company Name:	TOL Laboratories	Company Name:	
Address:	10 West Dr. Ste 150E	Address:	
City, State ZIP	Midland, TX 79705	City, State ZIP	
Phone	432-215-6730	Email	Cindy.Mish

Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	NM
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other

Project Name	HED EMSU	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code	
Project Number	428993	Due Date			
Project Location	Envic, NM	TAI starts the day received by the lab, if received by 4:30pm			
Sampler's Name	Mish Trinit				
P.O. #					
SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice	(Yes) No	
Samples Received Intact:	Yes No	Thermometer ID:			
Cooler Custody Seals:	Yes No N/A	Correction Factor:			
Sample Custody Seals:	Yes No N/A	Temperature Reading			
Total Containers		Corrected Temperature:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	ANALYSIS REQUEST	Preservative Codes	Sample Comments
TT-5 0 3'R	S	3/18/21	1300	3'	G	1	BTEX 80213		None NO	
SS-6 0 1'			1320	1'			TPH 8015M		Cool Cool	DI Water H ₂ O
TT-6 0 1.5'R			1330	1.5'			Chlorides EPA 300		HCL HC	MeOH Me
SS-7 0 1'			1350	1'			0% Moisture		H ₂ SO 4 H ₂	HNO 3 HN
TT-7 0 2'			1400	2'					H ₃ PO 4 HP	NaOH Na
SS-8 0 2'			1410	2'					NaHSO 4 NABIS	
TT-8 0 3'R			1430	3'					Na ₂ S ₂ O ₃ NaSO 3	
SS-9 0 1'			1450	1'					Zn Acetate+NaOH Zn	
TT-9 0 2'			1500	2'					NaOH+Ascorbic Acid SAPC	
SS-10 0 3'			1530	3'						

Total 200.7 / 6010	200.8 / 6020	8RCRA 13PPM Texas 11	AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 2451 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
Mish Trinit	Wendy Duran	3/19/21 8:29			



eurofins

Environment Testing
Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas TX (214) 902-0300
Midland, TX (432) 704-5440 San Antonio, TX (210) 509-3334
El Paso TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550 Carlsbad, NM (575) 988-3199



880-480 Chain of Custody

www.xenco.com Page 1 of 3

Project Manager	Lindy Crain	Bill to: (if different)	
Company Name	TEC	Company Name	
Address	10 Deke Dr. Ste 150E	Address	
City, State ZIP	Midland, TX 79705	City State ZIP	
Phone	432-215-6730	Email	Lindy, Misti

Work Order Comments			
Program:	UST/PST	PRP	Brownfields
State of Project:	NM		
Reporting Level II	<input type="checkbox"/>	Level III	<input type="checkbox"/>
Deliverables	EDD	ADAPT	Other

Project Name	HEP EMSU	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code	
Project Number	428993	Due Date			
Project Location	Bunilla NM	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name	Misti Tivels				
P.O. #					
SAMPLE RECEIPT	Temp Blank	Yes No	Wet Ice	Yes No	
Samples Received In tact:	Yes No	Thermometer ID			
Cooler Custody Seals:	Yes No N/A	Correction Factor			
Sample Custody Seals:	Yes No N/A	Temperature Reading			
Total Containers:		Corrected Temperature			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	ANALYSIS REQUEST	Preservative Codes	Sample Comments
SS-1 0 2'	S	3/18/21	1045	2'	G	2	X	BTEX 8021B	None NO	
TT-1 0 3'			1050	3'		2	X	TPH 8015m	Cool Cool	
SS-2 0 2'			1130	2'		1	X	Chlorides EPA 300	HCL, HC	
TT-2 0 3'			1140	3'			X	% Moisture	H ₂ SO ₄ , H ₂	
SS-3 0 2'			1150	2'			X	Barium	H ₂ PO ₄ , HP	
TT-3 0 3'R			1155	3'			X		NaHSO ₄ , NABIS	
SS-4 0 1'			1200	1'			X		Na ₂ S ₂ O ₃ , NaSO ₃	
TT-4 0 2'			1210	2'			X		Zn Acetate+NaOH Zn	
TT-4 0 3'			1220	3'			X		NaOH+Ascorbic Acid SAPC	
SS-5 0 2'			1240	2'			X			

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM	Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Pb Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg 1631 / 2451 / 7470 / 7471	

Note: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Misti Tivels	Lindy Crain	3/19/21 8:29			



Environment Testing Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: _____

www.xenco.com Page 2 of 3

Project Manager	Cindy Crain	Bill to (if different)	
Company Name	TAC Laboratories	Company Name	
Address	10 Deste Dr. Ste 150E	Address	
City, State ZIP	Midland, TX 79705	City, State ZIP	
Phone	432-215-6130	Email	Cindy.McIntosh

Work Order Comments			
Program:	UST/PST	PRP	Brownfields
State of Project:	NM		
Reporting Level II	<input type="checkbox"/>	Level III	<input type="checkbox"/>
Deliverables	EDD	<input type="checkbox"/>	ADAPT
		<input type="checkbox"/>	Other

Project Name	HEP EMSU	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST																Preservative Codes		
Project Number	428993	Due Date																				None NO	DI Water H ₂ O	
Project Location	Euclid, NM	TAI starts the day received by the lab, if received by 4:30pm																				Cool Cool	MeOH Me	
Sampler's Name:	Misha Trinit																					HCL HC	HNO ₃ HN	
P.O. #																						H ₂ SO ₄ H ₂	NaOH Na	
SAMPLE RECEIPT	Temp Blank	Yes No	Wet Ice	(Yes) No																		H ₃ PO ₄ HP		
Samples Received Intact:	Yes No	Thermometer ID																				NaHSO ₄ NABIS		
Cooler Custody Seals:	Yes No N/A	Correction Factor																				Na ₂ S ₂ O ₃ NaSO ₃		
Sample Custody Seals:	Yes No N/A	Temperature Reading																				Zn Acetate+NaOH Zn		
Total Containers		Corrected Temperature																				NaOH+Ascorbic Acid SAPC		
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont																	Sample Comments	
TT-5 @ 3'R	S	3/18/21	1300	3'	G	1	X	X	X	X														
SS-6 @ 1'			1320	1'																				
TT-6 @ 1.5'R			1330	1.5'																				
SS-7 @ 1'			1350	1'																				
TT-7 @ 2'			1400	2'																				
SS-8 @ 2'			1410	2'																				
TT-8 @ 3'R			1430	3'																				
SS-9 @ 1'			1450	1'																				
TT-9 @ 2'			1500	2'																				
SS-10 @ 3'			1530	3'																				

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Pb Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
Misha Trinit	Cynthia Crain	3/19/21 8:29			



Environment Testing

Xenoco

Chain of Custody

Houston, TX (281) 240-4200, Dallas TX (214) 902-0300
 Midland TX (432) 704-5440, San Antonio TX (210) 509-3334
 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550 Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenoco.com Page 3 of 3

Project Manager	Cindy Crain	Bill to (if different)	
Company Name	TEL	Company Name	
Address	10 Delta Dr, Ste 150E	Address	
City State Zip	Midland, TX 79705	City State Zip	
Phone	432-215-6730	Email	Cindy, Mish

Work Order Comments			
Program	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>		
State of Project	NM		
Reporting Level	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>		
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other		

Project Name	HEP EMSU	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST																Preservative Codes																
Project Number	428993	Due Date																				None NO DI Water H ₂ O Cool Cool MeOH Me HCL HC HNO ₃ HN H ₂ SO ₄ H ₂ NaOH Na H ₃ PO ₄ HP NaHSO ₄ NABIS Na ₂ S ₂ O ₃ NaSO ₃ Zn Acetate+NaOH Zn NaOH+Ascorbic Acid SAPC																
Project Location	Euclid, NM	TAT starts the day received by the lab, if received by 4:30pm																																				
Sampler's Name	Mish Tervet																																					
P.O. #																																						
SAMPLE RECEIPT	Temp Blank: Yes No	Wet Ice	(Yes) No																																			
Samples Received Intact	Yes No	Thermometer ID																																				
Cooler Custody Seals	Yes No N/A	Correction Factor																																				
Sample Custody Seals	Yes No N/A	Temperature Reading																																				
Total Containers		Corrected Temperature																																				
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters																Sample Comments															
TT-10 @ 4'	S	3/18/21	1540	4'	G	1	BTEX 8021B																															
TT-10 @ 5'			1550	5'		1	TPH 8015M																															
SS-11 @ 2'			1600	2'		2	Chlorides EPA300																															
TT-11 @ 3'			1610	3'		2	0% Moisture																															
SS-12 @ 6"			1630	6"		1	pH																															
Duplicate-1						1																																

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 2451 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenoco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenoco 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 Eurofins Xenoco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenoco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
Mish Tervet	Mish Tervet	3/19/21 8:29			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-480-1

SDG Number: Eunice NM

Login Number: 480

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		



Environment Testing
America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-770-1

Laboratory Sample Delivery Group: Eunice NM

Client Project/Site: HEP EMSU

Revision: 1

For:

TRC Solutions, Inc.
2057 Commerce Drive
Midland, Texas 79703

Attn: Cindy Crain

A handwritten signature in cursive script that reads "Jessica Kramer".

Authorized for release by:
6/2/2021 8:24:07 AM

Jessica Kramer, Project Manager
(432)704-5440

jessica.kramer@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Laboratory Job ID: 880-770-1
SDG: Eunice NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	9
QC Sample Results	10
QC Association Summary	14
Lab Chronicle	16
Certification Summary	18
Method Summary	19
Sample Summary	20
Chain of Custody	21
Receipt Checklists	22

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Definitions/Glossary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Eurofins Xenco, Midland

Case Narrative

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Job ID: 880-770-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-770-1

Comments

No additional comments.

Revision

The report being provided is a revision of the original report sent on 4/5/2021. The report (revision 1) is being revised due to: Corrected TPH narrative regarding MB.

Receipt

The samples were received on 3/26/2021 4:33 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.0° C.

Receipt Exceptions

Corrected TPH narrative regarding MB

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Client Sample ID: TT-4 @ 4'

Lab Sample ID: 880-770-1

Date Collected: 03/18/21 12:25

Matrix: Solid

Date Received: 03/29/21 16:33

Percent Solids: 97.0

Sample Depth: - 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00206	U	0.00206	mg/Kg	☆	03/30/21 16:35	03/31/21 02:05	1
Toluene	<0.00206	U	0.00206	mg/Kg	☆	03/30/21 16:35	03/31/21 02:05	1
Ethylbenzene	<0.00206	U	0.00206	mg/Kg	☆	03/30/21 16:35	03/31/21 02:05	1
m-Xylene & p-Xylene	<0.00412	U	0.00412	mg/Kg	☆	03/30/21 16:35	03/31/21 02:05	1
o-Xylene	<0.00206	U	0.00206	mg/Kg	☆	03/30/21 16:35	03/31/21 02:05	1
Xylenes, Total	<0.00412	U	0.00412	mg/Kg	☆	03/30/21 16:35	03/31/21 02:05	1
Total BTEX	<0.00206	U	0.00206	mg/Kg	☆	03/30/21 16:35	03/31/21 02:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	03/30/21 16:35	03/31/21 02:05	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/30/21 16:35	03/31/21 02:05	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	107		51.5	mg/Kg	☆	03/31/21 11:52	03/31/21 21:01	1
Diesel Range Organics (Over C10-C28)	64.1		51.5	mg/Kg	☆	03/31/21 11:52	03/31/21 21:01	1
Oil Range Organics (Over C28-C36)	<51.5	U	51.5	mg/Kg	☆	03/31/21 11:52	03/31/21 21:01	1
Total TPH	171		51.5	mg/Kg	☆	03/31/21 11:52	03/31/21 21:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130	03/31/21 11:52	03/31/21 21:01	1
o-Terphenyl	130		70 - 130	03/31/21 11:52	03/31/21 21:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	164		4.98	mg/Kg			04/03/21 00:00	1

Client Sample ID: TT-4 @ 5'

Lab Sample ID: 880-770-2

Date Collected: 03/18/21 12:30

Matrix: Solid

Date Received: 03/29/21 16:33

Percent Solids: 96.5

Sample Depth: - 5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00207	U	0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 02:26	1
Toluene	<0.00207	U	0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 02:26	1
Ethylbenzene	<0.00207	U	0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 02:26	1
m-Xylene & p-Xylene	<0.00413	U	0.00413	mg/Kg	☆	03/30/21 16:35	03/31/21 02:26	1
o-Xylene	<0.00207	U	0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 02:26	1
Xylenes, Total	<0.00413	U	0.00413	mg/Kg	☆	03/30/21 16:35	03/31/21 02:26	1
Total BTEX	<0.00207	U	0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 02:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130	03/30/21 16:35	03/31/21 02:26	1
1,4-Difluorobenzene (Surr)	110		70 - 130	03/30/21 16:35	03/31/21 02:26	1

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Client Sample ID: TT-4 @ 5'

Lab Sample ID: 880-770-2

Date Collected: 03/18/21 12:30

Matrix: Solid

Date Received: 03/29/21 16:33

Percent Solids: 96.5

Sample Depth: - 5'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<51.6	U	51.6	mg/Kg	☆	03/31/21 11:52	03/31/21 22:05	1
Diesel Range Organics (Over C10-C28)	764		51.6	mg/Kg	☆	03/31/21 11:52	03/31/21 22:05	1
Oil Range Organics (Over C28-C36)	112		51.6	mg/Kg	☆	03/31/21 11:52	03/31/21 22:05	1
Total TPH	876		51.6	mg/Kg	☆	03/31/21 11:52	03/31/21 22:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	03/31/21 11:52	03/31/21 22:05	1
o-Terphenyl	110		70 - 130	03/31/21 11:52	03/31/21 22:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	181		24.8	mg/Kg	-		04/03/21 00:05	5

Client Sample ID: TT-4 @ 5.5'

Lab Sample ID: 880-770-3

Date Collected: 03/18/21 12:35

Matrix: Solid

Date Received: 03/29/21 16:33

Percent Solids: 96.8

Sample Depth: - 5.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00207	U	0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 02:46	1
Toluene	<0.00207	U	0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 02:46	1
Ethylbenzene	<0.00207	U	0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 02:46	1
m-Xylene & p-Xylene	<0.00414	U	0.00414	mg/Kg	☆	03/30/21 16:35	03/31/21 02:46	1
o-Xylene	<0.00207	U	0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 02:46	1
Xylenes, Total	<0.00414	U	0.00414	mg/Kg	☆	03/30/21 16:35	03/31/21 02:46	1
Total BTEX	<0.00207	U	0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 02:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	03/30/21 16:35	03/31/21 02:46	1
1,4-Difluorobenzene (Surr)	109		70 - 130	03/30/21 16:35	03/31/21 02:46	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	51.8		51.6	mg/Kg	☆	03/31/21 11:52	03/31/21 22:26	1
Diesel Range Organics (Over C10-C28)	93.2		51.6	mg/Kg	☆	03/31/21 11:52	03/31/21 22:26	1
Oil Range Organics (Over C28-C36)	<51.6	U	51.6	mg/Kg	☆	03/31/21 11:52	03/31/21 22:26	1
Total TPH	145		51.6	mg/Kg	☆	03/31/21 11:52	03/31/21 22:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	03/31/21 11:52	03/31/21 22:26	1
o-Terphenyl	103		70 - 130	03/31/21 11:52	03/31/21 22:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92.5		4.95	mg/Kg	-		04/03/21 00:10	1

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Client Sample ID: TT-4 @ 6'R

Lab Sample ID: 880-770-4

Date Collected: 03/18/21 12:37

Matrix: Solid

Date Received: 03/29/21 16:33

Percent Solids: 97.2

Sample Depth: - 6'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00207	U	0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 03:07	1
Toluene	0.00415		0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 03:07	1
Ethylbenzene	0.00488		0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 03:07	1
m-Xylene & p-Xylene	0.00489		0.00415	mg/Kg	☆	03/30/21 16:35	03/31/21 03:07	1
o-Xylene	<0.00207	U	0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 03:07	1
Xylenes, Total	0.00489		0.00415	mg/Kg	☆	03/30/21 16:35	03/31/21 03:07	1
Total BTEX	0.0139		0.00207	mg/Kg	☆	03/30/21 16:35	03/31/21 03:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	145	S1+	70 - 130	03/30/21 16:35	03/31/21 03:07	1
1,4-Difluorobenzene (Surr)	111		70 - 130	03/30/21 16:35	03/31/21 03:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<51.5	U	51.5	mg/Kg	☆	03/31/21 11:52	03/31/21 22:47	1
Diesel Range Organics (Over C10-C28)	895		51.5	mg/Kg	☆	03/31/21 11:52	03/31/21 22:47	1
Oil Range Organics (Over C28-C36)	132		51.5	mg/Kg	☆	03/31/21 11:52	03/31/21 22:47	1
Total TPH	1030		51.5	mg/Kg	☆	03/31/21 11:52	03/31/21 22:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	03/31/21 11:52	03/31/21 22:47	1
o-Terphenyl	107		70 - 130	03/31/21 11:52	03/31/21 22:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	53.9		5.01	mg/Kg			04/03/21 00:25	1

Client Sample ID: TT-10 @ 6'R

Lab Sample ID: 880-770-5

Date Collected: 03/18/21 15:55

Matrix: Solid

Date Received: 03/29/21 16:33

Percent Solids: 93.9

Sample Depth: - 6'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00212	U	0.00212	mg/Kg	☆	03/30/21 16:35	03/31/21 03:27	1
Toluene	<0.00212	U	0.00212	mg/Kg	☆	03/30/21 16:35	03/31/21 03:27	1
Ethylbenzene	<0.00212	U	0.00212	mg/Kg	☆	03/30/21 16:35	03/31/21 03:27	1
m-Xylene & p-Xylene	<0.00424	U	0.00424	mg/Kg	☆	03/30/21 16:35	03/31/21 03:27	1
o-Xylene	<0.00212	U	0.00212	mg/Kg	☆	03/30/21 16:35	03/31/21 03:27	1
Xylenes, Total	<0.00424	U	0.00424	mg/Kg	☆	03/30/21 16:35	03/31/21 03:27	1
Total BTEX	<0.00212	U	0.00212	mg/Kg	☆	03/30/21 16:35	03/31/21 03:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	03/30/21 16:35	03/31/21 03:27	1
1,4-Difluorobenzene (Surr)	106		70 - 130	03/30/21 16:35	03/31/21 03:27	1

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Client Sample ID: TT-10 @ 6'R

Lab Sample ID: 880-770-5

Date Collected: 03/18/21 15:55

Matrix: Solid

Date Received: 03/29/21 16:33

Percent Solids: 93.9

Sample Depth: - 6'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<53.3	U	53.3	mg/Kg	☼	03/31/21 11:52	03/31/21 23:09	1
Diesel Range Organics (Over C10-C28)	<53.3	U	53.3	mg/Kg	☼	03/31/21 11:52	03/31/21 23:09	1
Oil Range Organics (Over C28-C36)	<53.3	U	53.3	mg/Kg	☼	03/31/21 11:52	03/31/21 23:09	1
Total TPH	<53.3	U	53.3	mg/Kg	☼	03/31/21 11:52	03/31/21 23:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	03/31/21 11:52	03/31/21 23:09	1
o-Terphenyl	113		70 - 130	03/31/21 11:52	03/31/21 23:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.0		5.05	mg/Kg	—		04/03/21 00:30	1

Eurofins Xenco, Midland

Surrogate Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-770-1	TT-4 @ 4'	119	104
880-770-2	TT-4 @ 5'	135 S1+	110
880-770-3	TT-4 @ 5.5'	123	109
880-770-4	TT-4 @ 6'R	145 S1+	111
880-770-5	TT-10 @ 6'R	128	106
LCS 880-1052/1-A	Lab Control Sample	97	206 S1+
LCS 880-1081/1-A	Lab Control Sample	105	103
LCSD 880-1052/2-A	Lab Control Sample Dup	99	103
LCSD 880-1081/2-A	Lab Control Sample Dup	100	101
MB 880-1052/5-A	Method Blank	100	101
MB 880-1081/5-A	Method Blank	103	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-770-1	TT-4 @ 4'	126	130
880-770-1 MS	TT-4 @ 4'	99	103
880-770-1 MSD	TT-4 @ 4'	96	96
880-770-2	TT-4 @ 5'	105	110
880-770-3	TT-4 @ 5.5'	93	103
880-770-4	TT-4 @ 6'R	98	107
880-770-5	TT-10 @ 6'R	109	113
LCS 880-1103/2-A	Lab Control Sample	110	119
LCSD 880-1103/3-A	Lab Control Sample Dup	105	109
MB 880-1103/1-A	Method Blank	105	119

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1052/5-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1052

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 09:18	03/30/21 13:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/30/21 09:18	03/30/21 13:44	1
1,4-Difluorobenzene (Surr)	101		70 - 130	03/30/21 09:18	03/30/21 13:44	1

Lab Sample ID: LCS 880-1052/1-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07624		mg/Kg		76	70 - 130
Toluene	0.100	0.07294		mg/Kg		73	70 - 130
Ethylbenzene	0.100	0.07393		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	0.200	0.1479		mg/Kg		74	70 - 130
o-Xylene	0.100	0.07621		mg/Kg		76	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	206	S1+	70 - 130

Lab Sample ID: LCSD 880-1052/2-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1052

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08614		mg/Kg		86	70 - 130	12	35
Toluene	0.100	0.08256		mg/Kg		83	70 - 130	12	35
Ethylbenzene	0.100	0.08574		mg/Kg		86	70 - 130	15	35
m-Xylene & p-Xylene	0.200	0.1714		mg/Kg		86	70 - 130	15	35
o-Xylene	0.100	0.08727		mg/Kg		87	70 - 130	14	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: MB 880-1081/5-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1081

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 01:03	1

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-1081/5-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1081

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 01:03	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 01:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/30/21 16:35	03/31/21 01:03	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 01:03	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/30/21 16:35	03/31/21 01:03	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/30/21 16:35	03/31/21 01:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	03/30/21 16:35	03/31/21 01:03	1
1,4-Difluorobenzene (Surr)	100		70 - 130	03/30/21 16:35	03/31/21 01:03	1

Lab Sample ID: LCS 880-1081/1-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09510		mg/Kg		95	70 - 130
Toluene	0.100	0.09054		mg/Kg		91	70 - 130
Ethylbenzene	0.100	0.09514		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.1886		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09415		mg/Kg		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-1081/2-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1081

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08885		mg/Kg		89	70 - 130	7	35
Toluene	0.100	0.08513		mg/Kg		85	70 - 130	6	35
Ethylbenzene	0.100	0.08844		mg/Kg		88	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1745		mg/Kg		87	70 - 130	8	35
o-Xylene	0.100	0.08637		mg/Kg		86	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-1103/1-A

Matrix: Solid

Analysis Batch: 1088

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1103

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/31/21 11:52	03/31/21 19:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/31/21 11:52	03/31/21 19:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/31/21 11:52	03/31/21 19:58	1
Total TPH	<50.0	U	50.0	mg/Kg		03/31/21 11:52	03/31/21 19:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	03/31/21 11:52	03/31/21 19:58	1
o-Terphenyl	119		70 - 130	03/31/21 11:52	03/31/21 19:58	1

Lab Sample ID: LCS 880-1103/2-A

Matrix: Solid

Analysis Batch: 1088

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1103

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1111		mg/Kg		111	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1078		mg/Kg		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	119		70 - 130

Lab Sample ID: LCSD 880-1103/3-A

Matrix: Solid

Analysis Batch: 1088

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1103

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1067		mg/Kg		107	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	1010		mg/Kg		101	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: 880-770-1 MS

Matrix: Solid

Analysis Batch: 1088

Client Sample ID: TT-4 @ 4'

Prep Type: Total/NA

Prep Batch: 1103

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	107		1030	1047		mg/Kg	☼	91	70 - 130
Diesel Range Organics (Over C10-C28)	64.1		1030	1039		mg/Kg	☼	95	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-770-1 MS

Matrix: Solid

Analysis Batch: 1088

Client Sample ID: TT-4 @ 4'

Prep Type: Total/NA

Prep Batch: 1103

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: 880-770-1 MSD

Matrix: Solid

Analysis Batch: 1088

Client Sample ID: TT-4 @ 4'

Prep Type: Total/NA

Prep Batch: 1103

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	107		1030	1132		mg/Kg	☼	100	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	64.1		1030	981.6		mg/Kg	☼	89	70 - 130	6	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	96		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1199/1-A

Matrix: Solid

Analysis Batch: 1246

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/02/21 23:25	1

Lab Sample ID: LCS 880-1199/2-A

Matrix: Solid

Analysis Batch: 1246

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	241.3		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-1199/3-A

Matrix: Solid

Analysis Batch: 1246

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	241.2		mg/Kg		96	90 - 110	0	20

Eurofins Xenco, Midland

QC Association Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

GC VOA

Prep Batch: 1052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1052/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1052/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1052/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 1053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-770-1	TT-4 @ 4'	Total/NA	Solid	8021B	1081
880-770-2	TT-4 @ 5'	Total/NA	Solid	8021B	1081
880-770-3	TT-4 @ 5.5'	Total/NA	Solid	8021B	1081
880-770-4	TT-4 @ 6'R	Total/NA	Solid	8021B	1081
880-770-5	TT-10 @ 6'R	Total/NA	Solid	8021B	1081
MB 880-1052/5-A	Method Blank	Total/NA	Solid	8021B	1052
MB 880-1081/5-A	Method Blank	Total/NA	Solid	8021B	1081
LCS 880-1052/1-A	Lab Control Sample	Total/NA	Solid	8021B	1052
LCS 880-1081/1-A	Lab Control Sample	Total/NA	Solid	8021B	1081
LCSD 880-1052/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1052
LCSD 880-1081/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1081

Prep Batch: 1081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-770-1	TT-4 @ 4'	Total/NA	Solid	5035	
880-770-2	TT-4 @ 5'	Total/NA	Solid	5035	
880-770-3	TT-4 @ 5.5'	Total/NA	Solid	5035	
880-770-4	TT-4 @ 6'R	Total/NA	Solid	5035	
880-770-5	TT-10 @ 6'R	Total/NA	Solid	5035	
MB 880-1081/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1081/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1081/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 1088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-770-1	TT-4 @ 4'	Total/NA	Solid	8015B NM	1103
880-770-2	TT-4 @ 5'	Total/NA	Solid	8015B NM	1103
880-770-3	TT-4 @ 5.5'	Total/NA	Solid	8015B NM	1103
880-770-4	TT-4 @ 6'R	Total/NA	Solid	8015B NM	1103
880-770-5	TT-10 @ 6'R	Total/NA	Solid	8015B NM	1103
MB 880-1103/1-A	Method Blank	Total/NA	Solid	8015B NM	1103
LCS 880-1103/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1103
LCSD 880-1103/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1103
880-770-1 MS	TT-4 @ 4'	Total/NA	Solid	8015B NM	1103
880-770-1 MSD	TT-4 @ 4'	Total/NA	Solid	8015B NM	1103

Prep Batch: 1103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-770-1	TT-4 @ 4'	Total/NA	Solid	8015NM Prep	
880-770-2	TT-4 @ 5'	Total/NA	Solid	8015NM Prep	
880-770-3	TT-4 @ 5.5'	Total/NA	Solid	8015NM Prep	
880-770-4	TT-4 @ 6'R	Total/NA	Solid	8015NM Prep	
880-770-5	TT-10 @ 6'R	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Midland

QC Association Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

GC Semi VOA (Continued)

Prep Batch: 1103 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1103/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1103/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1103/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-770-1 MS	TT-4 @ 4'	Total/NA	Solid	8015NM Prep	
880-770-1 MSD	TT-4 @ 4'	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 1199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-770-1	TT-4 @ 4'	Soluble	Solid	DI Leach	
880-770-2	TT-4 @ 5'	Soluble	Solid	DI Leach	
880-770-3	TT-4 @ 5.5'	Soluble	Solid	DI Leach	
880-770-4	TT-4 @ 6'R	Soluble	Solid	DI Leach	
880-770-5	TT-10 @ 6'R	Soluble	Solid	DI Leach	
MB 880-1199/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1199/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1199/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-770-1	TT-4 @ 4'	Soluble	Solid	300.0	1199
880-770-2	TT-4 @ 5'	Soluble	Solid	300.0	1199
880-770-3	TT-4 @ 5.5'	Soluble	Solid	300.0	1199
880-770-4	TT-4 @ 6'R	Soluble	Solid	300.0	1199
880-770-5	TT-10 @ 6'R	Soluble	Solid	300.0	1199
MB 880-1199/1-A	Method Blank	Soluble	Solid	300.0	1199
LCS 880-1199/2-A	Lab Control Sample	Soluble	Solid	300.0	1199
LCSD 880-1199/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1199

Eurofins Xenco, Midland

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Client Sample ID: TT-4 @ 4'

Date Collected: 03/18/21 12:25

Date Received: 03/29/21 16:33

Lab Sample ID: 880-770-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	1199	04/01/21 14:35	SC	XEN MID
Soluble	Analysis	300.0		1			1246	04/03/21 00:00	CH	XEN MID

Client Sample ID: TT-4 @ 4'

Date Collected: 03/18/21 12:25

Date Received: 03/29/21 16:33

Lab Sample ID: 880-770-1

Matrix: Solid

Percent Solids: 97.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	1081	03/30/21 16:35	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	1053	03/31/21 02:05	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	1103	03/31/21 11:52	DM	XEN MID
Total/NA	Analysis	8015B NM		1			1088	03/31/21 21:01	T1S	XEN MID

Client Sample ID: TT-4 @ 5'

Date Collected: 03/18/21 12:30

Date Received: 03/29/21 16:33

Lab Sample ID: 880-770-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	1199	04/01/21 14:35	SC	XEN MID
Soluble	Analysis	300.0		5			1246	04/03/21 00:05	CH	XEN MID

Client Sample ID: TT-4 @ 5'

Date Collected: 03/18/21 12:30

Date Received: 03/29/21 16:33

Lab Sample ID: 880-770-2

Matrix: Solid

Percent Solids: 96.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	1081	03/30/21 16:35	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	1053	03/31/21 02:26	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	1103	03/31/21 11:52	DM	XEN MID
Total/NA	Analysis	8015B NM		1			1088	03/31/21 22:05	T1S	XEN MID

Client Sample ID: TT-4 @ 5.5'

Date Collected: 03/18/21 12:35

Date Received: 03/29/21 16:33

Lab Sample ID: 880-770-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	1199	04/01/21 14:35	SC	XEN MID
Soluble	Analysis	300.0		1			1246	04/03/21 00:10	CH	XEN MID

Client Sample ID: TT-4 @ 5.5'

Date Collected: 03/18/21 12:35

Date Received: 03/29/21 16:33

Lab Sample ID: 880-770-3

Matrix: Solid

Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	1081	03/30/21 16:35	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	1053	03/31/21 02:46	KL	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Client Sample ID: TT-4 @ 5.5'

Date Collected: 03/18/21 12:35

Date Received: 03/29/21 16:33

Lab Sample ID: 880-770-3

Matrix: Solid

Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	1103	03/31/21 11:52	DM	XEN MID
Total/NA	Analysis	8015B NM		1			1088	03/31/21 22:26	T1S	XEN MID

Client Sample ID: TT-4 @ 6'R

Date Collected: 03/18/21 12:37

Date Received: 03/29/21 16:33

Lab Sample ID: 880-770-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	1199	04/01/21 14:35	SC	XEN MID
Soluble	Analysis	300.0		1			1246	04/03/21 00:25	CH	XEN MID

Client Sample ID: TT-4 @ 6'R

Date Collected: 03/18/21 12:37

Date Received: 03/29/21 16:33

Lab Sample ID: 880-770-4

Matrix: Solid

Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	1081	03/30/21 16:35	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	1053	03/31/21 03:07	KL	XEN MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	1103	03/31/21 11:52	DM	XEN MID
Total/NA	Analysis	8015B NM		1			1088	03/31/21 22:47	T1S	XEN MID

Client Sample ID: TT-10 @ 6'R

Date Collected: 03/18/21 15:55

Date Received: 03/29/21 16:33

Lab Sample ID: 880-770-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	1199	04/01/21 14:35	SC	XEN MID
Soluble	Analysis	300.0		1			1246	04/03/21 00:30	CH	XEN MID

Client Sample ID: TT-10 @ 6'R

Date Collected: 03/18/21 15:55

Date Received: 03/29/21 16:33

Lab Sample ID: 880-770-5

Matrix: Solid

Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	1081	03/30/21 16:35	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	1053	03/31/21 03:27	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	1103	03/31/21 11:52	DM	XEN MID
Total/NA	Analysis	8015B NM		1			1088	03/31/21 23:09	T1S	XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Sample Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-770-1
SDG: Eunice NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-770-1	TT-4 @ 4'	Solid	03/18/21 12:25	03/29/21 16:33	- 4'
880-770-2	TT-4 @ 5'	Solid	03/18/21 12:30	03/29/21 16:33	- 5'
880-770-3	TT-4 @ 5.5'	Solid	03/18/21 12:35	03/29/21 16:33	- 5.5'
880-770-4	TT-4 @ 6'R	Solid	03/18/21 12:37	03/29/21 16:33	- 6'
880-770-5	TT-10 @ 6'R	Solid	03/18/21 15:55	03/29/21 16:33	- 6'

Eurofins Xenco, Midland



Environment Testing
Xenco

Chc
Houston, TX (21)
Midland, TX (432)
El Paso, TX (915)
Hobbs, NM (57)



880-770 Chain of Custody

Work Order No:

880-770

www.xenco.com Page of

Project Manager	Lindy Crain	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 Delta Dr, Ste 150E	Address	
City, State Zip	Midland, TX 79705	City State Zip	
Phone		Email	Lindy, misti

Program	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project	MM
Reporting Level	Level I <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>

Project Name	HEP EMSU	<input checked="" type="checkbox"/> Turn Around	
Project Number	428993	<input type="checkbox"/> Routine <input type="checkbox"/> Rush	
Project Location	Brace NM	Due Date	
Sampler's Name	Misti Tarent	TAT starts the day received by the lab, if received by 4:30pm	
PO #			
SAMPLE RECEIPT	Temp Blank	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Ice
Samples Received Intact	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID	0.5
Cooler Custody Seals	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Correction Factor	0.5
Sample Custody Seals	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Temperature Reading	1.5
Total Containers		Corrected Temperature	8.0

Sample Identification	Matrix	Date Sampled	Time	Depth	Grab/Comp	# of Cont	Parameters	ANALYSIS REQUEST	Preservative Codes	Sample Comments
TT-4 04'	S	3/8/21	1225	4'	G	1	BTEX 8021B		None NO	DI Water- H ₂ O
TT-4 05'			1230	5'			TPH 8015M		Cool Cool	MeOH Me
TT-4 05.5'			1235	5.5'			Chloride EPA 300		HCL HC	HNO ₃ HN
TT-4 06'R			1237	6'			Moisture %		H ₂ SO ₄ H ₂	NaOH Na
TT-10 06'R			1555	6'					H ₃ PO ₄ HP	
									NaHSO ₄ NABIS	
									Na ₂ S ₂ O ₃ NaSO ₃	
									Zn Acetate+NaOH Zn	
									NaOH+Ascorbic Acid SAPC	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TGLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245 1 / 7470 / 7471

Note: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
Misti Tarent		3/8/21			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-770-1

SDG Number: Eunice NM

Login Number: 770**List Number: 1****Creator: Teel, Brianna****List Source: Eurofins Xenco, Midland**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing
America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-954-1

Laboratory Sample Delivery Group: Eunice, NM
Client Project/Site: HEP EMSU

For:

TRC Solutions, Inc.
2057 Commerce Drive
Midland, Texas 79703

Attn: Cindy Crain

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
4/6/2021 4:58:44 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Laboratory Job ID: 880-954-1
SDG: Eunice, NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	10
Lab Chronicle	11
Certification Summary	12
Method Summary	13
Sample Summary	14
Chain of Custody	15
Receipt Checklists	16

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Definitions/Glossary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-954-1
SDG: Eunice, NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-954-1
SDG: Eunice, NM

Job ID: 880-954-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-954-1

Receipt

The samples were received on 3/31/2021 4:05 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.1°C

GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-954-1
SDG: Eunice, NM

Client Sample ID: TT-1 @ 4'

Lab Sample ID: 880-954-1

Date Collected: 03/18/21 10:55

Matrix: Solid

Date Received: 03/31/21 16:05

Sample Depth: - 4'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		04/01/21 14:29	04/02/21 16:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/01/21 14:29	04/02/21 16:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/01/21 14:29	04/02/21 16:54	1
Total TPH	<49.9	U	49.9	mg/Kg		04/01/21 14:29	04/02/21 16:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	04/01/21 14:29	04/02/21 16:54	1
o-Terphenyl	93		70 - 130	04/01/21 14:29	04/02/21 16:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	825		5.03	mg/Kg			04/06/21 03:44	1

Client Sample ID: TT-1 @ 5'

Lab Sample ID: 880-954-2

Date Collected: 03/18/21 11:00

Matrix: Solid

Date Received: 03/31/21 16:05

Sample Depth: - 5'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	60.3		49.9	mg/Kg		04/01/21 14:29	04/02/21 17:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/01/21 14:29	04/02/21 17:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/01/21 14:29	04/02/21 17:58	1
Total TPH	60.3		49.9	mg/Kg		04/01/21 14:29	04/02/21 17:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	04/01/21 14:29	04/02/21 17:58	1
o-Terphenyl	99		70 - 130	04/01/21 14:29	04/02/21 17:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	949		5.05	mg/Kg			04/06/21 03:49	1

Client Sample ID: TT-7 @ 3'R

Lab Sample ID: 880-954-3

Date Collected: 03/18/21 14:05

Matrix: Solid

Date Received: 03/31/21 16:05

Sample Depth: - 3'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/01/21 14:29	04/02/21 18:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/01/21 14:29	04/02/21 18:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/01/21 14:29	04/02/21 18:19	1
Total TPH	<50.0	U	50.0	mg/Kg		04/01/21 14:29	04/02/21 18:19	1

Eurofins Xenco, Midland

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-954-1
SDG: Eunice, NM

Client Sample ID: TT-7 @ 3'R

Lab Sample ID: 880-954-3

Date Collected: 03/18/21 14:05

Matrix: Solid

Date Received: 03/31/21 16:05

Sample Depth: - 3'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	04/01/21 14:29	04/02/21 18:19	1
o-Terphenyl	98		70 - 130	04/01/21 14:29	04/02/21 18:19	1

Client Sample ID: TT-9 @ 3'R

Lab Sample ID: 880-954-4

Date Collected: 03/18/21 15:10

Matrix: Solid

Date Received: 03/31/21 16:05

Sample Depth: - 3'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/01/21 14:29	04/02/21 18:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/01/21 14:29	04/02/21 18:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/01/21 14:29	04/02/21 18:41	1
Total TPH	<50.0	U	50.0	mg/Kg		04/01/21 14:29	04/02/21 18:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			04/01/21 14:29	04/02/21 18:41	1
o-Terphenyl	95		70 - 130			04/01/21 14:29	04/02/21 18:41	1

Eurofins Xenco, Midland

Surrogate Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-954-1
SDG: Eunice, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC)**Matrix: Solid****Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-954-1	TT-1 @ 4'	90	93
880-954-1 MS	TT-1 @ 4'	102	91
880-954-1 MSD	TT-1 @ 4'	104	92
880-954-2	TT-1 @ 5'	95	99
880-954-3	TT-7 @ 3'R	95	98
880-954-4	TT-9 @ 3'R	93	95
LCS 880-1198/2-A	Lab Control Sample	102	94
LCSD 880-1198/3-A	Lab Control Sample Dup	100	88
MB 880-1198/1-A	Method Blank	88	92
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-954-1
SDG: Eunice, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-1198/1-A

Matrix: Solid

Analysis Batch: 1225

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1198

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/01/21 14:29	04/02/21 15:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/01/21 14:29	04/02/21 15:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/01/21 14:29	04/02/21 15:43	1
Total TPH	<50.0	U	50.0	mg/Kg		04/01/21 14:29	04/02/21 15:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	04/01/21 14:29	04/02/21 15:43	1
o-Terphenyl	92		70 - 130	04/01/21 14:29	04/02/21 15:43	1

Lab Sample ID: LCS 880-1198/2-A

Matrix: Solid

Analysis Batch: 1225

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1198

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	899.0		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	1000	834.0		mg/Kg		83	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: LCSD 880-1198/3-A

Matrix: Solid

Analysis Batch: 1225

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1198

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	935.1		mg/Kg		94	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	843.2		mg/Kg		84	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: 880-954-1 MS

Matrix: Solid

Analysis Batch: 1225

Client Sample ID: TT-1 @ 4'

Prep Type: Total/NA

Prep Batch: 1198

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	933.6		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	841.8		mg/Kg		82	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-954-1
SDG: Eunice, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-954-1 MS

Matrix: Solid

Analysis Batch: 1225

Client Sample ID: TT-1 @ 4'

Prep Type: Total/NA

Prep Batch: 1198

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: 880-954-1 MSD

Matrix: Solid

Analysis Batch: 1225

Client Sample ID: TT-1 @ 4'

Prep Type: Total/NA

Prep Batch: 1198

	Sample	Sample	Spike	MSD	MSD				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	947.5		mg/Kg		93	70 - 130	1
Diesel Range Organics (Over C10-C28)	<49.9	U	998	847.2		mg/Kg		83	70 - 130	1
	MSD	MSD								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	104		70 - 130							
o-Terphenyl	92		70 - 130							

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1345/1-A

Matrix: Solid

Analysis Batch: 1355

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	<5.00	U	5.00	mg/Kg			04/06/21 02:10	1		

Lab Sample ID: LCS 880-1345/2-A

Matrix: Solid

Analysis Batch: 1355

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	250	258.2		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-1345/3-A

Matrix: Solid

Analysis Batch: 1355

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

	Spike	LCSD	LCSD					%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	258.0		mg/Kg		103	90 - 110	0	20	

Eurofins Xenco, Midland

QC Association Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-954-1
SDG: Eunice, NM

GC Semi VOA

Prep Batch: 1198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-954-1	TT-1 @ 4'	Total/NA	Solid	8015NM Prep	
880-954-2	TT-1 @ 5'	Total/NA	Solid	8015NM Prep	
880-954-3	TT-7 @ 3'R	Total/NA	Solid	8015NM Prep	
880-954-4	TT-9 @ 3'R	Total/NA	Solid	8015NM Prep	
MB 880-1198/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1198/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1198/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-954-1 MS	TT-1 @ 4'	Total/NA	Solid	8015NM Prep	
880-954-1 MSD	TT-1 @ 4'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 1225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-954-1	TT-1 @ 4'	Total/NA	Solid	8015B NM	1198
880-954-2	TT-1 @ 5'	Total/NA	Solid	8015B NM	1198
880-954-3	TT-7 @ 3'R	Total/NA	Solid	8015B NM	1198
880-954-4	TT-9 @ 3'R	Total/NA	Solid	8015B NM	1198
MB 880-1198/1-A	Method Blank	Total/NA	Solid	8015B NM	1198
LCS 880-1198/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1198
LCSD 880-1198/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1198
880-954-1 MS	TT-1 @ 4'	Total/NA	Solid	8015B NM	1198
880-954-1 MSD	TT-1 @ 4'	Total/NA	Solid	8015B NM	1198

HPLC/IC

Leach Batch: 1345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-954-1	TT-1 @ 4'	Soluble	Solid	DI Leach	
880-954-2	TT-1 @ 5'	Soluble	Solid	DI Leach	
MB 880-1345/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1345/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1345/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-954-1	TT-1 @ 4'	Soluble	Solid	300.0	1345
880-954-2	TT-1 @ 5'	Soluble	Solid	300.0	1345
MB 880-1345/1-A	Method Blank	Soluble	Solid	300.0	1345
LCS 880-1345/2-A	Lab Control Sample	Soluble	Solid	300.0	1345
LCSD 880-1345/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1345

Eurofins Xenco, Midland

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-954-1
SDG: Eunice, NM

Client Sample ID: TT-1 @ 4'

Lab Sample ID: 880-954-1

Date Collected: 03/18/21 10:55

Matrix: Solid

Date Received: 03/31/21 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			1198	04/01/21 14:29	DM	XM
Total/NA	Analysis	8015B NM		1	1225	04/02/21 16:54	AJ	XM
Soluble	Leach	DI Leach			1345	04/05/21 17:22	SC	XM
Soluble	Analysis	300.0		1	1355	04/06/21 03:44	CH	XM

Client Sample ID: TT-1 @ 5'

Lab Sample ID: 880-954-2

Date Collected: 03/18/21 11:00

Matrix: Solid

Date Received: 03/31/21 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			1198	04/01/21 14:29	DM	XM
Total/NA	Analysis	8015B NM		1	1225	04/02/21 17:58	AJ	XM
Soluble	Leach	DI Leach			1345	04/05/21 17:22	SC	XM
Soluble	Analysis	300.0		1	1355	04/06/21 03:49	CH	XM

Client Sample ID: TT-7 @ 3'R

Lab Sample ID: 880-954-3

Date Collected: 03/18/21 14:05

Matrix: Solid

Date Received: 03/31/21 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			1198	04/01/21 14:29	DM	XM
Total/NA	Analysis	8015B NM		1	1225	04/02/21 18:19	AJ	XM

Client Sample ID: TT-9 @ 3'R

Lab Sample ID: 880-954-4

Date Collected: 03/18/21 15:10

Matrix: Solid

Date Received: 03/31/21 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			1198	04/01/21 14:29	DM	XM
Total/NA	Analysis	8015B NM		1	1225	04/02/21 18:41	AJ	XM

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-954-1
SDG: Eunice, NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH

Method Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-954-1
SDG: Eunice, NM

Method	Method Description	Protocol	Laboratory
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XM
300.0	Anions, Ion Chromatography	MCAWW	XM
8015NM Prep	Microextraction	SW846	XM
DI Leach	Deionized Water Leaching Procedure	ASTM	XM

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Sample Summary

Client: TRC Solutions, Inc.
Project/Site: HEP EMSU

Job ID: 880-954-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-954-1	TT-1 @ 4'	Solid	03/18/21 10:55	03/31/21 16:05	- 4'
880-954-2	TT-1 @ 5'	Solid	03/18/21 11:00	03/31/21 16:05	- 5'
880-954-3	TT-7 @ 3'R	Solid	03/18/21 14:05	03/31/21 16:05	- 3'
880-954-4	TT-9 @ 3'R	Solid	03/18/21 15:10	03/31/21 16:05	- 3'



Environment Testing
Xenco



880-954 Chain of Custody

Work Order No: 954

www.xenco.com Page _____ of _____

Project Manager	Lundy Crain	Bill to (if different)	
Company Name	TRC Companies	Company Name	
Address	10 Dester Dr Ste 150E	Address	
City State ZIP	Midland TX 79701	City State ZIP	
Phone	432-215-6730	Email	Lundy.Mish

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project: NM	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____	

Project Name	HEP EMSU	<input checked="" type="checkbox"/> Turn Around	Pres. Code	
Project Number		<input type="checkbox"/> Routine <input type="checkbox"/> Rush		
Project Location	Evans, NM	Due Date		
Sampler's Name	Mish, Traverst	TAT starts the day received by the lab, if received by 4:30pm		
P.O. #				
SAMPLE RECEIPT		Temp Blank	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Ice
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID		Yes <input type="checkbox"/> No <input type="checkbox"/>
Cooler Custody Seals	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Correction Factor		Yes <input type="checkbox"/> No <input type="checkbox"/>
Sample Custody Seals	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Temperature Reading		Yes <input type="checkbox"/> No <input type="checkbox"/>
Total Containers:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Corrected Temperature		Yes <input type="checkbox"/> No <input type="checkbox"/>

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	ANALYSIS REQUEST	Preservative Codes	Sample Comments
TT-1 04'	S	3/18/21	1055	4'	G	1	TPH 8015M		None NO	DI Water H ₂ O
II-1 05'							Chlorides E 300		Cool Cool	MeOH Me
II-7 03'R									HCL HC	HNO ₃ HN
TT-9 03'R									H ₂ SO ₄ H ₂	NaOH Na
									H ₃ PO ₄ HP	
									NaHSO ₄ 4 NABIS	
									Na ₂ S ₂ O ₃ NaSO ₃	
									Zn Acetate+NaOH Zn	
									NaOH+Ascorbic Acid SABC	

Total 2007 / 6010 2008 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 2451 / 7470 / 7471

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
Mish Traverst	RLC	4:05			
		3/31/21			

Note: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-954-1

SDG Number: Eunice, NM

Login Number: 954

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Certificate of Analysis Summary 687139

TRC Solutions, Inc, Midland, TX

Project Name: HEP:E MSUP Pipeline Release

Project Id: 421993
 Contact: Cindy Crain
 Project Location: Oil Center, NM

Date Received in Lab: Wed 02.03.2021 12:35
 Report Date: 02.11.2021 14:32
 Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	687139-001	687139-002				
	Field Id:	Stockpile-1	Stockpile-2				
	Depth:						
	Matrix:	SOIL	SOIL				
	Sampled:	02.02.2021 15:50	02.02.2021 15:55				
BTEX by EPA 8021B	Extracted:	02.04.2021 08:00	02.04.2021 08:00				
	Analyzed:	02.04.2021 21:55	02.04.2021 22:20				
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		3.42 0.201	1.30 0.200				
Toluene		16.8 0.201	9.10 0.200				
Ethylbenzene		27.9 0.201	13.2 0.200				
m,p-Xylenes		87.0 D 0.803	60.8 0.401				
o-Xylene		21.2 0.201	11.8 0.200				
Xylenes, Total		108.2 0.201	72.6 0.2				
Total BTEX		156.32 0.201	96.2 0.2				
Chloride by EPA 300	Extracted:	02.03.2021 14:00	02.03.2021 14:00				
	Analyzed:	02.03.2021 15:47	02.03.2021 15:52				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		57.1 4.97	68.7 4.97				
Flash Point (CC) SW-846 1010 SUB: T104704215-20-39	Extracted:						
	Analyzed:	02.10.2021 12:13	02.10.2021 12:29				
	Units/RL:	Deg F RL	Deg F RL				
Flash Point		80.0	118				
Reactive Cyanide by SW 846- Section 7.3.3 SUB: T104704215-20-39	Extracted:	02.10.2021 16:22	02.10.2021 16:22				
	Analyzed:	02.10.2021 18:23	02.10.2021 18:27				
	Units/RL:	mg/kg RL	mg/kg RL				
Cyanide		<0.0249 0.0249	<0.0249 0.0249				

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 687139

TRC Solutions, Inc, Midland, TX

Project Name: HEP:E MSUP Pipeline Release

Project Id: 421993
 Contact: Cindy Crain
 Project Location: Oil Center, NM

Date Received in Lab: Wed 02.03.2021 12:35
 Report Date: 02.11.2021 14:32
 Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	687139-001	687139-002				
	Field Id:	Stockpile-1	Stockpile-2				
	Depth:						
	Matrix:	SOIL	SOIL				
	Sampled:	02.02.2021 15:50	02.02.2021 15:55				
Reactive Sulfide by SW9034 SUB: T104704215-20-39	Extracted:	02.10.2021 09:00	02.10.2021 09:00				
	Analyzed:	02.10.2021 17:04	02.10.2021 17:04				
	Units/RL:	mg/kg RL	mg/kg RL				
Reactive Sulfide		<25.0 25.0	<25.0 25.0				
Soil pH by EPA 9045C SUB: T104704215-20-39	Extracted:						
	Analyzed:	02.10.2021 17:02	02.10.2021 17:02				
	Units/RL:	Deg C RL	Deg C RL				
Soil pH meas. in water at		21.7	21.2				
Soil pH by EPA 9045C SUB: T104704215-20-39	Extracted:						
	Analyzed:	02.10.2021 17:02	02.10.2021 17:02				
	Units/RL:	SU RL	SU RL				
pH		8.92	8.79				
TPH by SW8015 Mod	Extracted:	02.06.2021 09:00	02.06.2021 09:00				
	Analyzed:	02.06.2021 20:13	02.06.2021 20:35				
	Units/RL:	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		4780 500	3490 499				
Diesel Range Organics (DRO)		14000 500	11700 499				
Motor Oil Range Hydrocarbons (MRO)		1630 500	1490 499				
Total TPH		20410 500	16680 499				

BRL - Below Reporting Limit

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





Analytical Report 687139

for

TRC Solutions, Inc

Project Manager: Cindy Crain

HEP:E MSUP Pipeline Release

421993

02.11.2021

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



02.11.2021

Project Manager: **Cindy Crain**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: Eurofins Xenco, LLC Report No(s): **687139**

HEP:E MSUP Pipeline Release

Project Address: Oil Center, NM

Cindy Crain:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 687139. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 687139 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 687139

TRC Solutions, Inc, Midland, TX

HEP:E MSUP Pipeline Release

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Stockpile-1	S	02.02.2021 15:50		687139-001
Stockpile-2	S	02.02.2021 15:55		687139-002



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: HEP:E MSUP Pipeline Release

Project ID: 421993
Work Order Number(s): 687139

Report Date: 02.11.2021
Date Received: 02.03.2021

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3150089 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected;

Samples affected are: 687139-002,687139-001.



Certificate of Analytical Results 687139

TRC Solutions, Inc, Midland, TX

HEP:E MSUP Pipeline Release

Sample Id: **Stockpile-1**

Matrix: Soil

Date Received: 02.03.2021 12:35

Lab Sample Id: 687139-001

Date Collected: 02.02.2021 15:50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.03.2021 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149967

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	57.1	4.97	mg/kg	02.03.2021 15:47		1

Analytical Method: Reactive Cyanide by SW 846-Section 7.3.3

Prep Method: SW7.3.3.2P

Tech: YAV

Analyst: YAV

Date Prep: 02.10.2021 16:22

% Moisture:
Basis: Wet Weight
SUB: T104704215-20-39

Seq Number: 3150666

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Cyanide	57-12-5	<0.0249	0.0249	mg/kg	02.10.2021 18:23	U+	1

Analytical Method: Flash Point (CC) SW-846 1010

Tech: LCH

Analyst: LCH

% Moisture:
Basis: Wet Weight
SUB: T104704215-20-39

Seq Number: 3150631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Flash Point		80.0		Deg F	02.10.2021 12:13		1

Analytical Method: Reactive Sulfide by SW9034

Prep Method: SW7.3.4.2P

Tech: LCH

Analyst: LCH

Date Prep: 02.10.2021 09:00

% Moisture:
Basis: Wet Weight
SUB: T104704215-20-39

Seq Number: 3150656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Reactive Sulfide	18496-25-8	<25.0	25.0	mg/kg	02.10.2021 17:04	U	1



Certificate of Analytical Results 687139

TRC Solutions, Inc, Midland, TX

HEP:E MSUP Pipeline Release

Sample Id: **Stockpile-1**

Matrix: Soil

Date Received: 02.03.2021 12:35

Lab Sample Id: 687139-001

Date Collected: 02.02.2021 15:50

Analytical Method: Soil pH by EPA 9045C

Tech: ANP

Analyst: ANP

Seq Number: 3150637

% Moisture:

Basis: Wet Weight

SUB: T104704215-20-39

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
pH	12408-02-5	8.92		SU	02.10.2021 17:02		1
Soil pH meas. in water at	TEMP	21.7		Deg C	02.10.2021 17:02		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:

Basis: Wet Weight

Seq Number: 3150326

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	4780	500	mg/kg	02.06.2021 20:13		10
Diesel Range Organics (DRO)	C10C28DRO	14000	500	mg/kg	02.06.2021 20:13		10
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	1630	500	mg/kg	02.06.2021 20:13		10
Total TPH	PHC635	20410	500	mg/kg	02.06.2021 20:13		10

Surrogate

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-130	02.06.2021 20:13	
o-Terphenyl	84-15-1	96	%	70-130	02.06.2021 20:13	



Certificate of Analytical Results 687139

TRC Solutions, Inc, Midland, TX

HEP:E MSUP Pipeline Release

Sample Id: **Stockpile-1**

Matrix: Soil

Date Received: 02.03.2021 12:35

Lab Sample Id: 687139-001

Date Collected: 02.02.2021 15:50

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.04.2021 08:00

% Moisture:

Seq Number: 3150089

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	3.42	0.201	mg/kg	02.04.2021 21:55		100
Toluene	108-88-3	16.8	0.201	mg/kg	02.04.2021 21:55		100
Ethylbenzene	100-41-4	27.9	0.201	mg/kg	02.04.2021 21:55		100
m,p-Xylenes	179601-23-1	87.0	0.803	mg/kg	02.09.2021 13:46	D	200
o-Xylene	95-47-6	21.2	0.201	mg/kg	02.04.2021 21:55		100
Xylenes, Total	1330-20-7	108.2	0.201	mg/kg	02.09.2021 13:46		200
Total BTEX		156.32	0.201	mg/kg	02.09.2021 13:46		200
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	760	%	70-130	02.04.2021 21:55	**	
1,4-Difluorobenzene	540-36-3	117	%	70-130	02.04.2021 21:55		



Certificate of Analytical Results 687139

TRC Solutions, Inc, Midland, TX

HEP:E MSUP Pipeline Release

Sample Id: **Stockpile-2**

Matrix: Soil

Date Received: 02.03.2021 12:35

Lab Sample Id: 687139-002

Date Collected: 02.02.2021 15:55

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.03.2021 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149967

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	68.7	4.97	mg/kg	02.03.2021 15:52		1

Analytical Method: Reactive Cyanide by SW 846-Section 7.3.3

Prep Method: SW7.3.3.2P

Tech: YAV

Analyst: YAV

Date Prep: 02.10.2021 16:22

% Moisture:
Basis: Wet Weight
SUB: T104704215-20-39

Seq Number: 3150666

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Cyanide	57-12-5	<0.0249	0.0249	mg/kg	02.10.2021 18:27	U+	1

Analytical Method: Flash Point (CC) SW-846 1010

Tech: LCH

Analyst: LCH

% Moisture:
Basis: Wet Weight
SUB: T104704215-20-39

Seq Number: 3150631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Flash Point		118		Deg F	02.10.2021 12:29		1

Analytical Method: Reactive Sulfide by SW9034

Prep Method: SW7.3.4.2P

Tech: LCH

Analyst: LCH

Date Prep: 02.10.2021 09:00

% Moisture:
Basis: Wet Weight
SUB: T104704215-20-39

Seq Number: 3150656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Reactive Sulfide	18496-25-8	<25.0	25.0	mg/kg	02.10.2021 17:04	U	1



Certificate of Analytical Results 687139

TRC Solutions, Inc, Midland, TX

HEP:E MSUP Pipeline Release

Sample Id: **Stockpile-2**

Matrix: Soil

Date Received: 02.03.2021 12:35

Lab Sample Id: 687139-002

Date Collected: 02.02.2021 15:55

Analytical Method: Soil pH by EPA 9045C

Tech: ANP

Analyst: ANP

Seq Number: 3150637

% Moisture:

Basis: Wet Weight

SUB: T104704215-20-39

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
pH	12408-02-5	8.79		SU	02.10.2021 17:02		1
Soil pH meas. in water at	TEMP	21.2		Deg C	02.10.2021 17:02		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:

Basis: Wet Weight

Seq Number: 3150326

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	3490	499	mg/kg	02.06.2021 20:35		10
Diesel Range Organics (DRO)	C10C28DRO	11700	499	mg/kg	02.06.2021 20:35		10
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	1490	499	mg/kg	02.06.2021 20:35		10
Total TPH	PHC635	16680	499	mg/kg	02.06.2021 20:35		10

Surrogate

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	129	%	70-130	02.06.2021 20:35	
o-Terphenyl	84-15-1	98	%	70-130	02.06.2021 20:35	



Certificate of Analytical Results 687139

TRC Solutions, Inc, Midland, TX

HEP:E MSUP Pipeline Release

Sample Id: **Stockpile-2**

Matrix: Soil

Date Received: 02.03.2021 12:35

Lab Sample Id: 687139-002

Date Collected: 02.02.2021 15:55

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.04.2021 08:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150089

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	1.30	0.200	mg/kg	02.04.2021 22:20		100
Toluene	108-88-3	9.10	0.200	mg/kg	02.04.2021 22:20		100
Ethylbenzene	100-41-4	13.2	0.200	mg/kg	02.04.2021 22:20		100
m,p-Xylenes	179601-23-1	60.8	0.401	mg/kg	02.04.2021 22:20		100
o-Xylene	95-47-6	11.8	0.200	mg/kg	02.04.2021 22:20		100
Xylenes, Total	1330-20-7	72.6	0.2	mg/kg	02.04.2021 22:20		100
Total BTEX		96.2	0.2	mg/kg	02.04.2021 22:20		100
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	573	%	70-130	02.04.2021 22:20	**	
1,4-Difluorobenzene	540-36-3	88	%	70-130	02.04.2021 22:20		



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



TRC Solutions, Inc
HEP:E MSUP Pipeline Release

Analytical Method: Chloride by EPA 300

Seq Number: 3149967

Matrix: Solid

Prep Method: E300P

Date Prep: 02.03.2021

MB Sample Id: 7720702-1-BLK

LCS Sample Id: 7720702-1-BKS

LCSD Sample Id: 7720702-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	254	102	249	100	90-110	2	20	mg/kg	02.03.2021 13:42	

Analytical Method: Chloride by EPA 300

Seq Number: 3149967

Matrix: Soil

Prep Method: E300P

Date Prep: 02.03.2021

Parent Sample Id: 687095-001

MS Sample Id: 687095-001 S

MSD Sample Id: 687095-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1020	252	1260	95	1250	91	90-110	1	20	mg/kg	02.03.2021 13:57	

Analytical Method: Chloride by EPA 300

Seq Number: 3149967

Matrix: Soil

Prep Method: E300P

Date Prep: 02.03.2021

Parent Sample Id: 687098-010

MS Sample Id: 687098-010 S

MSD Sample Id: 687098-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1560	1250	2880	106	2860	104	90-110	1	20	mg/kg	02.03.2021 15:10	

Analytical Method: Reactive Cyanide by SW 846-Section 7.3.3

Seq Number: 3150666

Matrix: Solid

Prep Method: SW7.3.3.2P

Date Prep: 02.10.2021

MB Sample Id: 7721249-1-BLK

LCS Sample Id: 7721249-1-BKS

LCSD Sample Id: 7721249-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Cyanide	<0.125	20.0	2.46	12	2.33	12	5-40	5	20	mg/kg	02.10.2021 18:03	

Analytical Method: Reactive Cyanide by SW 846-Section 7.3.3

Seq Number: 3150666

Matrix: Waste Water

Prep Method: SW7.3.3.2P

Date Prep: 02.10.2021

Parent Sample Id: 687189-001

MD Sample Id: 687189-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Cyanide	<0.0249	<0.0249	0	20	mg/kg	02.10.2021 18:07	

Analytical Method: Reactive Cyanide by SW 846-Section 7.3.3

Seq Number: 3150666

Matrix: Product

Prep Method: SW7.3.3.2P

Date Prep: 02.10.2021

Parent Sample Id: 687499-001

MD Sample Id: 687499-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Cyanide	<0.0248	<0.0248	0	20	mg/kg	02.10.2021 18:25	

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

$[D] = 100 * (C-A) / B$
 $RPD = 200 * |(C-E) / (C+E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



TRC Solutions, Inc
HEP:E MSUP Pipeline Release

Analytical Method: Flash Point (CC) SW-846 1010

Seq Number: 3150631

Matrix: Oil

Parent Sample Id: 687237-001

MD Sample Id: 687237-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Flash Point	<75	<75	0	25	Deg F	02.10.2021 11:40	

Analytical Method: Reactive Sulfide by SW9034

Seq Number: 3150656

Matrix: Solid

MB Sample Id: 7721245-1-BLK

LCS Sample Id: 7721245-1-BKS

Prep Method: SW7.3.4.2P
Date Prep: 02.10.2021
LCSD Sample Id: 7721245-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Reactive Sulfide	<25.0	50.0	44.0	88	48.0	96	30-120	9	20	mg/kg	02.10.2021 17:04	

Analytical Method: Reactive Sulfide by SW9034

Seq Number: 3150656

Matrix: Waste Water

Parent Sample Id: 687189-001

MD Sample Id: 687189-001 D

Prep Method: SW7.3.4.2P
Date Prep: 02.10.2021

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Reactive Sulfide	<25.0	<25.0	0	20	mg/kg	02.10.2021 17:04	

Analytical Method: Reactive Sulfide by SW9034

Seq Number: 3150656

Matrix: Product

Parent Sample Id: 687499-001

MD Sample Id: 687499-001 D

Prep Method: SW7.3.4.2P
Date Prep: 02.10.2021

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Reactive Sulfide	<25.0	<25.0	0	20	mg/kg	02.10.2021 17:04	

Analytical Method: Soil pH by EPA 9045C

Seq Number: 3150637

Matrix: Soil

Parent Sample Id: 687550-001

MD Sample Id: 687550-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
pH	9.51	9.59	1	20	SU	02.10.2021 17:02	
Soil pH meas. in water at	21.1	21.1	0	25	Deg C	02.10.2021 17:02	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



TRC Solutions, Inc
HEP:E MSUP Pipeline Release

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150326

MB Sample Id: 7721014-1-BLK

Matrix: Solid

LCS Sample Id: 7721014-1-BKS

Prep Method: SW8015P

Date Prep: 02.06.2021

LCSD Sample Id: 7721014-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1090	109	1020	102	70-130	7	20	mg/kg	02.06.2021 12:28	
Diesel Range Organics (DRO)	<50.0	1000	1020	102	950	95	70-130	7	20	mg/kg	02.06.2021 12:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		98		92		70-130	%	02.06.2021 12:28
o-Terphenyl	106		100		92		70-130	%	02.06.2021 12:28

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150326

Matrix: Solid

MB Sample Id: 7721014-1-BLK

Prep Method: SW8015P

Date Prep: 02.06.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.06.2021 12:07	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150326

Matrix: Soil

Parent Sample Id: 687058-041

MS Sample Id: 687058-041 S

Prep Method: SW8015P

Date Prep: 02.06.2021

MSD Sample Id: 687058-041 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	973	98	980	98	70-130	1	20	mg/kg	02.06.2021 13:31	
Diesel Range Organics (DRO)	<49.9	997	921	92	922	93	70-130	0	20	mg/kg	02.06.2021 13:31	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	83		84		70-130	%	02.06.2021 13:31
o-Terphenyl	84		85		70-130	%	02.06.2021 13:31

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150089

Matrix: Solid

MB Sample Id: 7720791-1-BLK

LCS Sample Id: 7720791-1-BKS

Prep Method: SW5035A

Date Prep: 02.04.2021

LCSD Sample Id: 7720791-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0834	83	0.109	109	70-130	27	35	mg/kg	02.04.2021 10:01	
Toluene	<0.00200	0.100	0.0856	86	0.0990	99	70-130	15	35	mg/kg	02.04.2021 10:01	
Ethylbenzene	<0.00200	0.100	0.0882	88	0.0961	96	70-130	9	35	mg/kg	02.04.2021 10:01	
m,p-Xylenes	<0.00400	0.200	0.182	91	0.209	105	70-130	14	35	mg/kg	02.04.2021 10:01	
o-Xylene	<0.00200	0.100	0.0889	89	0.101	101	70-130	13	35	mg/kg	02.04.2021 10:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		87		112		70-130	%	02.04.2021 10:01
4-Bromofluorobenzene	85		102		118		70-130	%	02.04.2021 10:01

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

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



TRC Solutions, Inc
HEP:E MSUP Pipeline Release

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150089

Parent Sample Id: 687047-005

Matrix: Soil

MS Sample Id: 687047-005 S

Prep Method: SW5035A

Date Prep: 02.04.2021

MSD Sample Id: 687047-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0515	52	0.0733	73	70-130	35	35	mg/kg	02.04.2021 10:53	X
Toluene	<0.00201	0.100	0.0556	56	0.0798	79	70-130	36	35	mg/kg	02.04.2021 10:53	XF
Ethylbenzene	<0.00201	0.100	0.0552	55	0.0841	83	70-130	41	35	mg/kg	02.04.2021 10:53	XF
m,p-Xylenes	<0.00402	0.201	0.113	56	0.172	86	70-130	41	35	mg/kg	02.04.2021 10:53	XF
o-Xylene	<0.00201	0.100	0.0552	55	0.0850	84	70-130	43	35	mg/kg	02.04.2021 10:53	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		110		70-130	%	02.04.2021 10:53
4-Bromofluorobenzene	123		117		70-130	%	02.04.2021 10:53

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Environment Testing

Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0360
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-333-
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1266
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: 00 1127

www.xenico.com Page _____ of _____

Project Manager:	Cindy Chain	Bill to: (if different)	TRC
Company Name:	TRC	Company Name:	
Address:	10 West Dr Ste 150F	Address:	
City, State ZIP:	Milford, TX 79705	City, State ZIP:	
Phone:		Email:	CKire11@TRCcompanies.com

Work Order Comments	
Program:	<input type="checkbox"/> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund
State of Project:	
Reporting:	level II <input type="checkbox"/> level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> level IV <input type="checkbox"/>
Deliverables:	<input type="checkbox"/> EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

[illegible]

Inter-Office Shipment

IOS Number : **77622**

Date/Time: 02.03.2021

Created by: Jessica Kramer

Please send report to: Jessica Kramer

Lab# From: **Midland**

Delivery Priority:

Address: 1211 W. Florida Ave

Lab# To: **Houston**

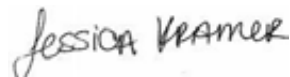
Air Bill No.: 772814844258

E-Mail: jessica.kramer@eurofinset.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
687139-001	S	Stockpile-1	02.02.2021 15:50	SW1010	Flash Point (CC) SW-846 1010	02.09.2021	03.04.2021	JKR	FLASHPT	
687139-001	S	Stockpile-1	02.02.2021 15:50	SW9012_RCI	Reactive Cyanide by SW 846-Section7.3	02.09.2021	02.16.2021	JKR	CN	
687139-001	S	Stockpile-1	02.02.2021 15:50	SW9034_RCI	Reactive Sulfide by SW9034	02.09.2021	02.16.2021	JKR	RS	
687139-001	S	Stockpile-1	02.02.2021 15:50	SW9045C	Soil pH by EPA 9045C	02.09.2021	03.02.2021	JKR		
687139-002	S	Stockpile-2	02.02.2021 15:55	SW1010	Flash Point (CC) SW-846 1010	02.09.2021	03.04.2021	JKR	FLASHPT	
687139-002	S	Stockpile-2	02.02.2021 15:55	SW9012_RCI	Reactive Cyanide by SW 846-Section7.3	02.09.2021	02.16.2021	JKR	CN	
687139-002	S	Stockpile-2	02.02.2021 15:55	SW9034_RCI	Reactive Sulfide by SW9034	02.09.2021	02.16.2021	JKR	RS	
687139-002	S	Stockpile-2	02.02.2021 15:55	SW9045C	Soil pH by EPA 9045C	02.09.2021	03.02.2021	JKR		

Inter Office Shipment or Sample Comments:

Relinquished By:



Jessica Kramer

Date Relinquished: 02.03.2021

Received By:



Jose Londono

Date Received: 02.04.2021

Cooler Temperature: 2.2



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 77622

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : HOU-272

Sent By: Jessica Kramer

Date Sent: 02.03.2021 02.15 PM

Received By: Jose Londono

Date Received: 02.04.2021 09.30 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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


NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:


 Jose Londono

Date: 02.04.2021

District I

1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 33793

CONDITIONS

Operator: HOLLY ENERGY PARTNERS 1602 W. Main St. Artesia, NM 88210	OGRID: 282505
	Action Number: 33793
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	Although, horizontal delineation has not been accomplished. Please continue to horizontally delineate sample points to 100 mg/kg for TPH on the outer edges/periphery and include sample points in your next report after closure criteria limits have been met.	7/16/2021
chensley	Various sample points do not indicate closure criteria sampling vertically. Please ensure on your next report you prove closure past contamination depth.	7/16/2021
chensley	Closure report due by 11/12/2021	7/16/2021