



**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

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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: _____

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.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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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.

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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: _____

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

Signature: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Melanie Nolan Title: Environmental Specialist

Signature: Melanie Nolan Date: 2/25/2022

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

OCD Only

Received by: Chad Hensley Date: 03/24/2022

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

Closure Approved by: Chad Hensley Date: 03/24/2022

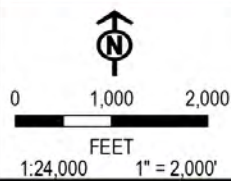
Printed Name: Chad Hensley Title: Environmental Specialist Advanced



FIGURES



● SITE LOCATION



BASE MAP: USGS COLOR ORTHO IMAGERY
DATA SOURCES: TRC

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

TITLE:

SITE LOCATION MAP

DRAWN BY: M. HORN

PROJ. NO.: 466952

CHECKED BY: D. CLARK

APPROVED BY: S. HOOVER

DATE: FEBRUARY 2022

FIGURE 1

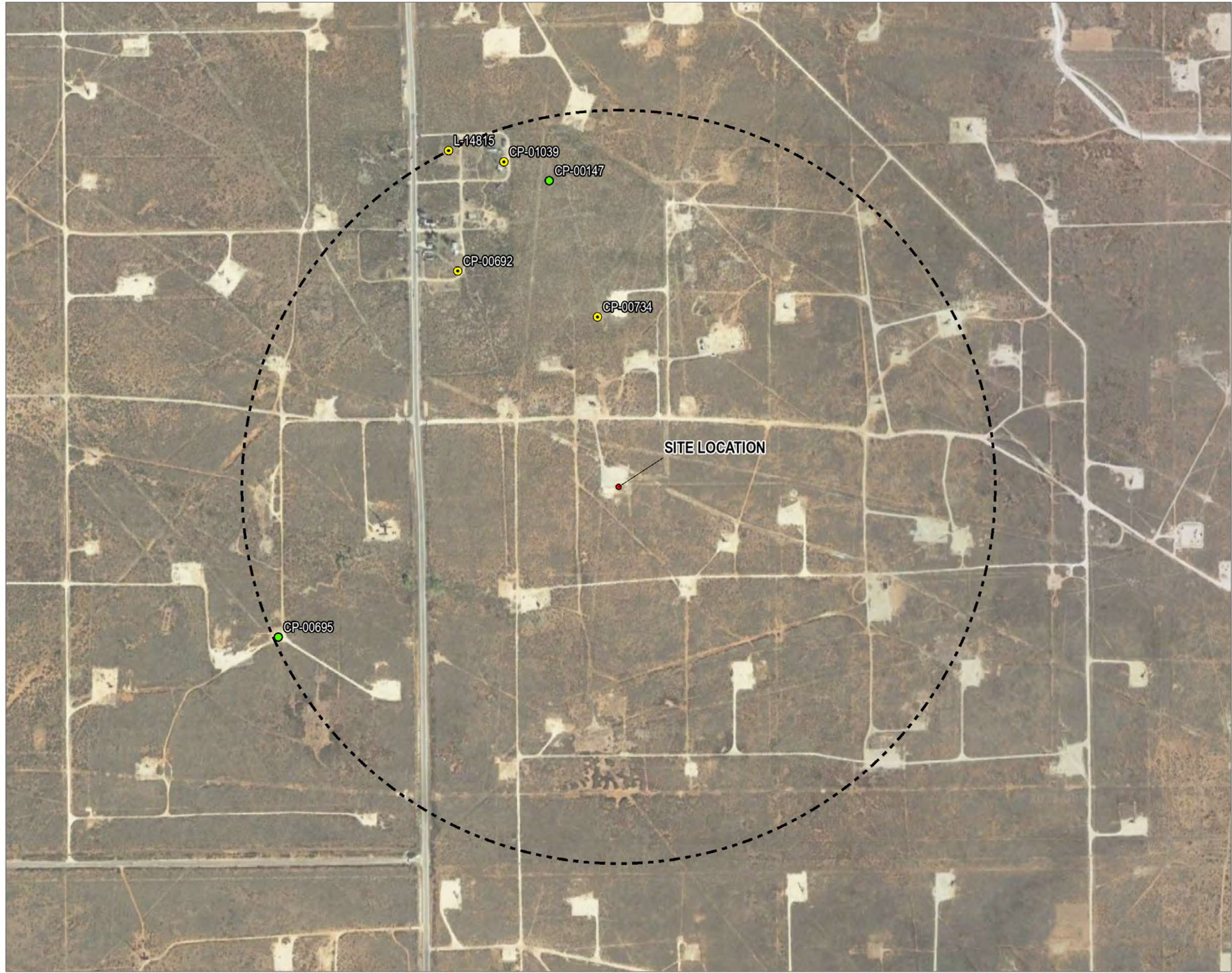


505 EAST HUNTLAND DRIVE
SUITE #250
AUSTIN, TX 78752
PHONE: 512.329.6080

FILE:

EUNICE

Coordinate System: NAD 1983 StatePlane New Mexico East FIPS 3001 Feet, Map Rotation: 0
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- LEGEND
- SITE LOCATION
 - COMMERCIAL WELL
 - DOMESTIC WELL
 - 1/2 MILE RELEASE AREA RADIUS

BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP



1:8,400
1" = 700'
0 350 700
FEET

PROJECT: HOLLY ENERGY PARTNERS – OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO	
TITLE: AERIAL MAP	
DRAWN BY: M. HORN	PROJ. NO.: 466952
CHECKED BY: D. CLARK	FIGURE 2
APPROVED BY: S. HOOVER	
DATE: FEBRUARY 2022	
	505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6C80
	FILE: Eunice.aprx

Coordinate System: NAD 1983 StatePlane New Mexico East FIPS 3001 Feet, Map Rotation: 0
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SITE LOCATION

LEGEND


- SITE LOCATION
- 1/2 MILE RELEASE AREA RADIUS

NO FEMA FLOODPLAINS OR WETLANDS ARE LOCATED IN THIS AREA.

BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP



1:8,400
1" = 700'
0 350 700 FEET

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: M. HORN	PROJ. NO.: 466952
CHECKED BY: D. CLARK	FIGURE 3
APPROVED BY: S. HOOVER	
DATE: FEBRUARY 2022	
 505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6C80	
FILE:	Eunice.aprx

Coordinate System: NAD 1983 StatePlane New Mexico East FIPS 3001 Feet, Map Rotation: 0
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LEGEND

- SITE LOCATION
- LOW KARST POTENTIAL

BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP

1:8,400
1" = 700'

0

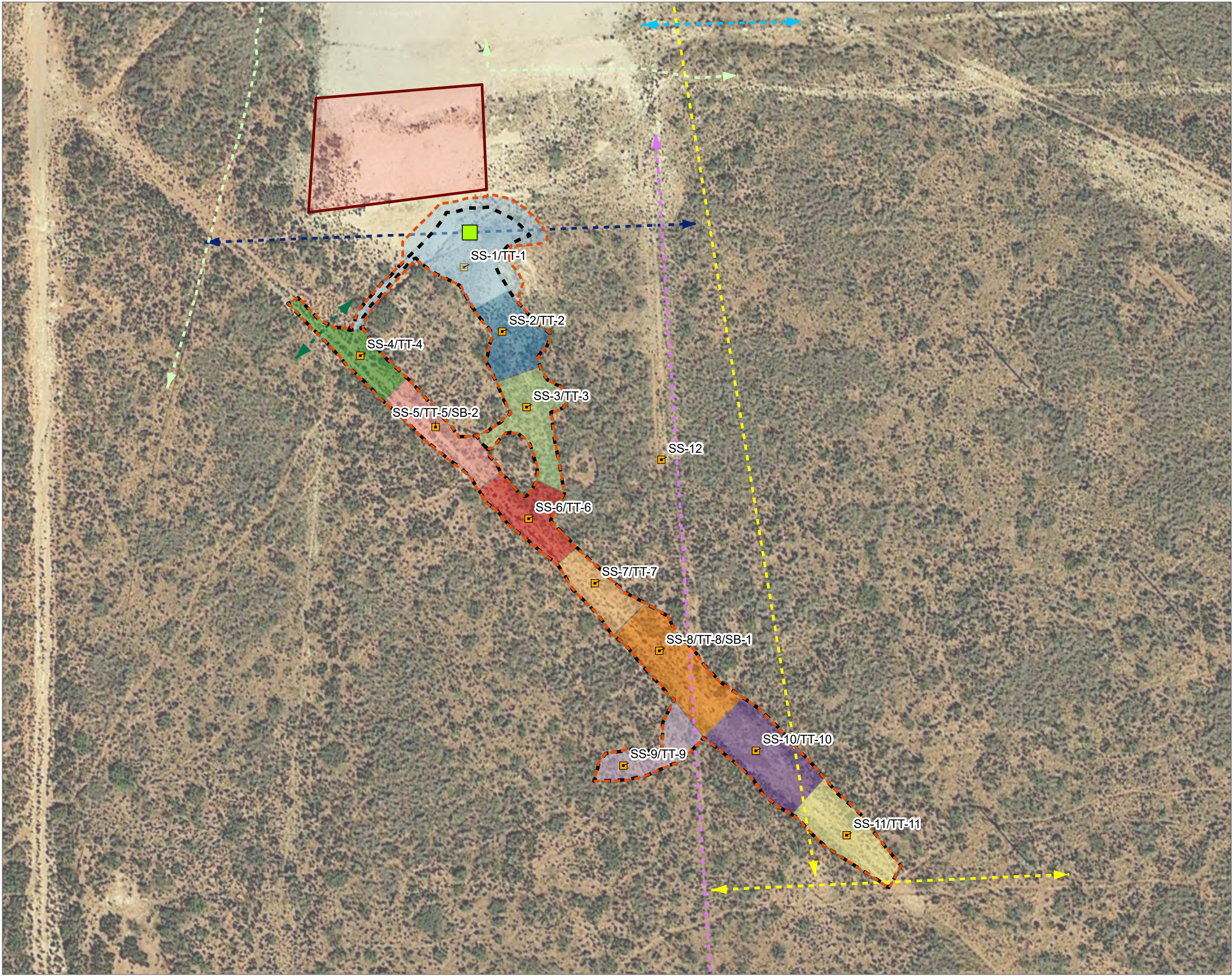
350

700

FEET

PROJECT: HOLLY ENERGY PARTNERS – OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO	
TITLE: KARST POTENTIAL MAP	
DRAWN BY: M. HORN	PROJ. NO.: 466952
CHECKED BY: D. CLARK	FIGURE 4
APPROVED BY: S. HOOVER	
DATE: FEBRUARY 2022	
<div><div>505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6C80</div></div>	
FILE:	Eunice.aprx

Coordinate System: NAD 1983 StatePlane New Mexico East FIPS 3001 Feet, Map Rotation: 0
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LEGEND

- RELEASE POINT
- RELEASE AREA
- EXCAVATION LIMITS
- FORMER SOIL STOCKPILE
- AREA 1
- AREA 2
- AREA 3
- AREA 4
- AREA 5
- AREA 6
- AREA 7
- AREA 8
- AREA 9
- AREA 10
- AREA 11
- HEP PIPELINE (INACTIVE)
- ETC PIPELINE
- PLAINS PIPELINE
- XTO FLOWLINE
- XTO PIPELINE
- FRESHWATER LIVESTOCK LINE
- TEST TRENCH, SOIL SAMPLE OR SOIL BORING LOCATION

NOTES:
SS: SURFACE SAMPLE
TT: TEST TRENCH SAMPLE
SB: SOIL BORING

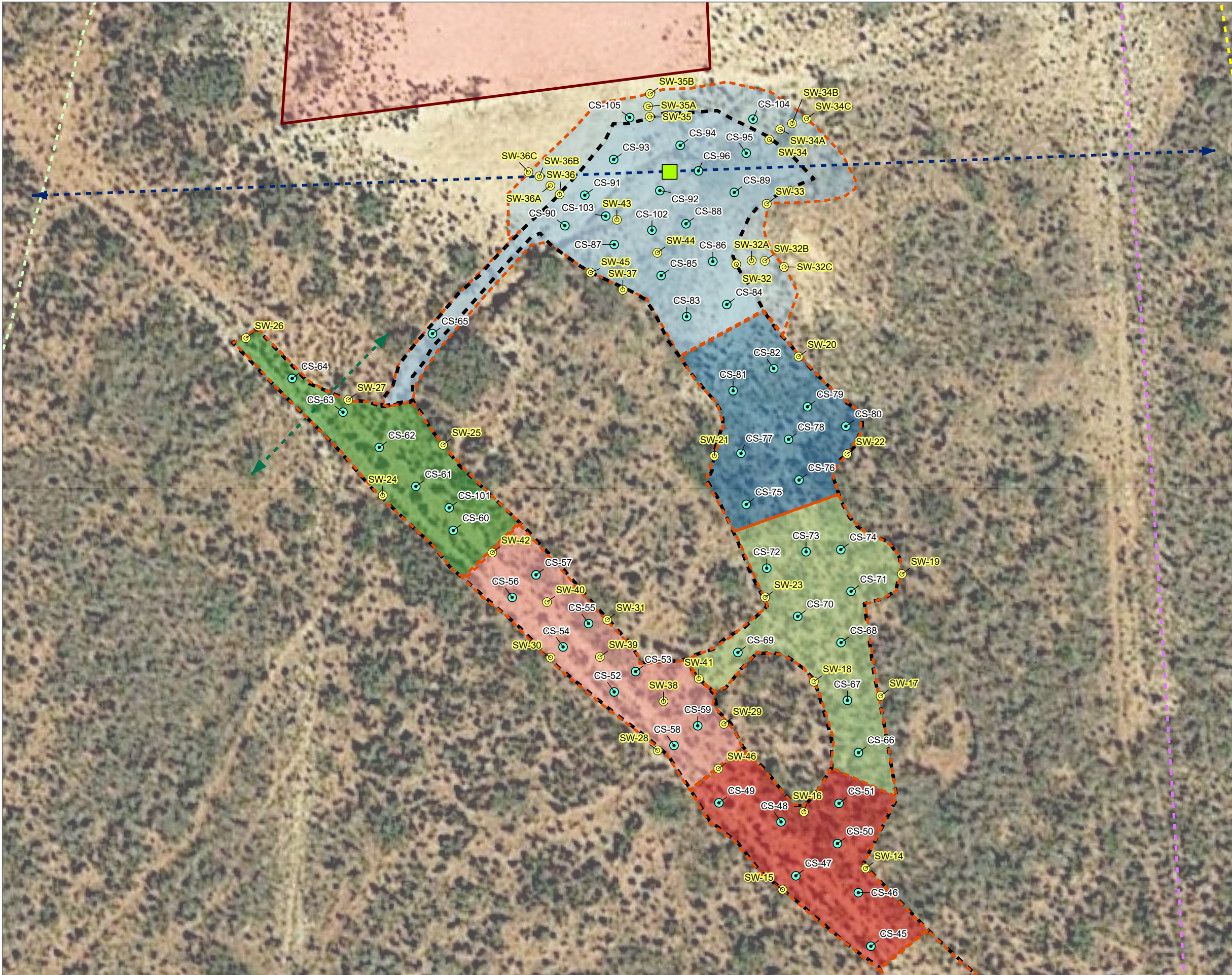
BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP

1:720
1" = 60'

0 60 120 FEET

PROJECT: HOLLY ENERGY PARTNERS – OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO	
TITLE: RELEASE AREA AND DELINEATION SAMPLE LOCATION MAP	
DRAWN BY: M. HORN	PROJ. NO.: 466952
CHECKED BY: D. CLARK	FIGURE 5A
APPROVED BY: S. HOOVER	
DATE: FEBRUARY 2022	
505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6080	
FILE:	Eunice.aprx

Coordinate System: NAD 1983 StatePlane New Mexico East FIPS 3001 Feet, Map Rotation: 0
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- LEGEND
- RELEASE POINT
 - RELEASE AREA
 - EXCAVATION LIMITS
 - FORMER SOIL STOCKPILE
 - AREA 1
 - AREA 2
 - AREA 3
 - AREA 4
 - AREA 5
 - AREA 6
 - HEP PIPELINE
 - ETC PIPELINE
 - PLAINS PIPELINE
 - XTO FLOWLINE
 - FRESHWATER LIVESTOCK LINE
 - FLOOR SAMPLE
 - SIDEWALL SAMPLE

NOTES:
CS: BOTTOM CONFIRMATION SAMPLE
SW: SIDEWALL CONFIRMATION SAMPLE
ALL SIDEWALL AND BOTTOM CONFIRMATION SAMPLE LOCATIONS
SHOWN FOR AREAS 1-6, INCLUDING SIDEWALL SAMPLE LOCATIONS
FROM EXCAVATED SOIL.

BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP

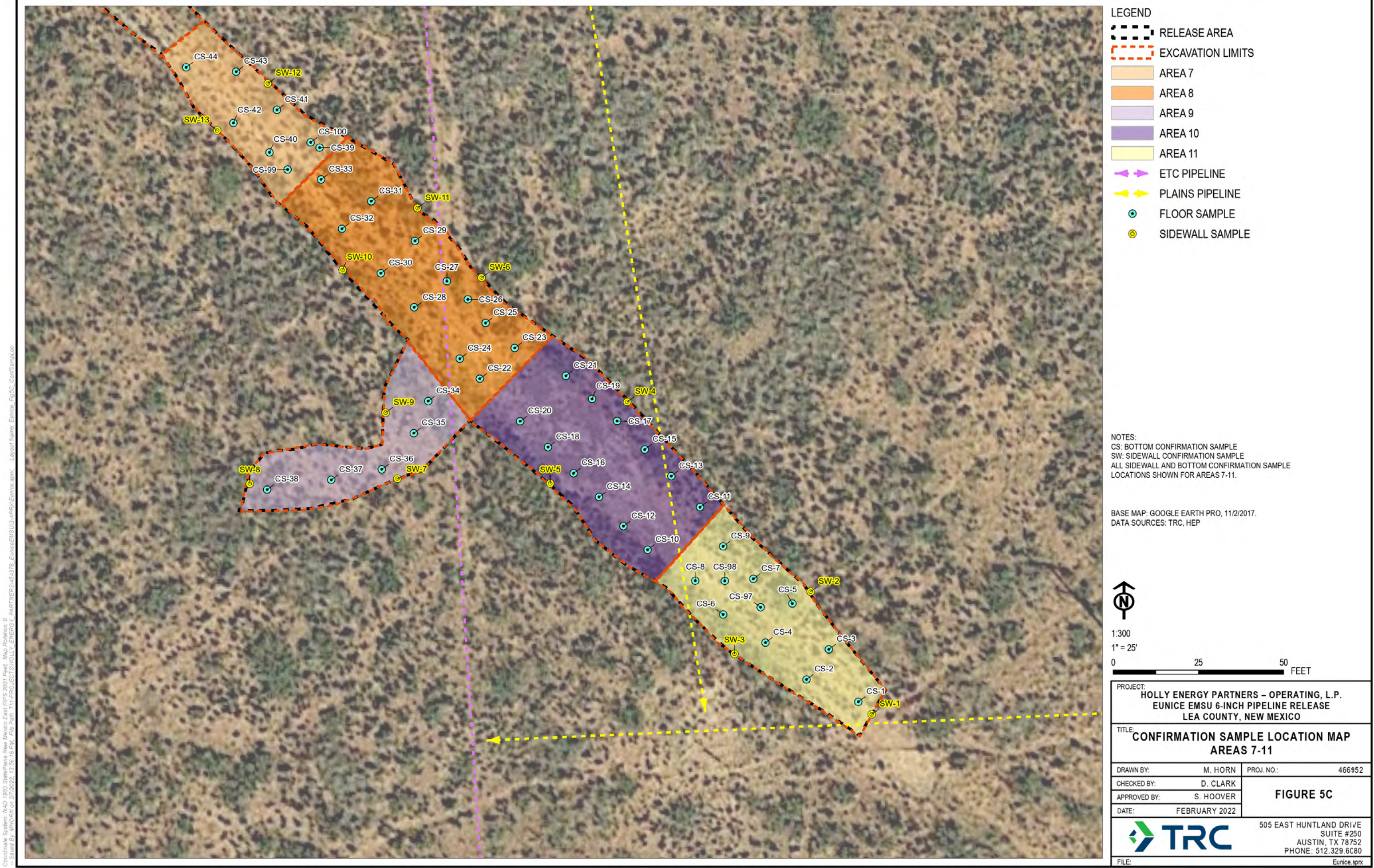


1:300

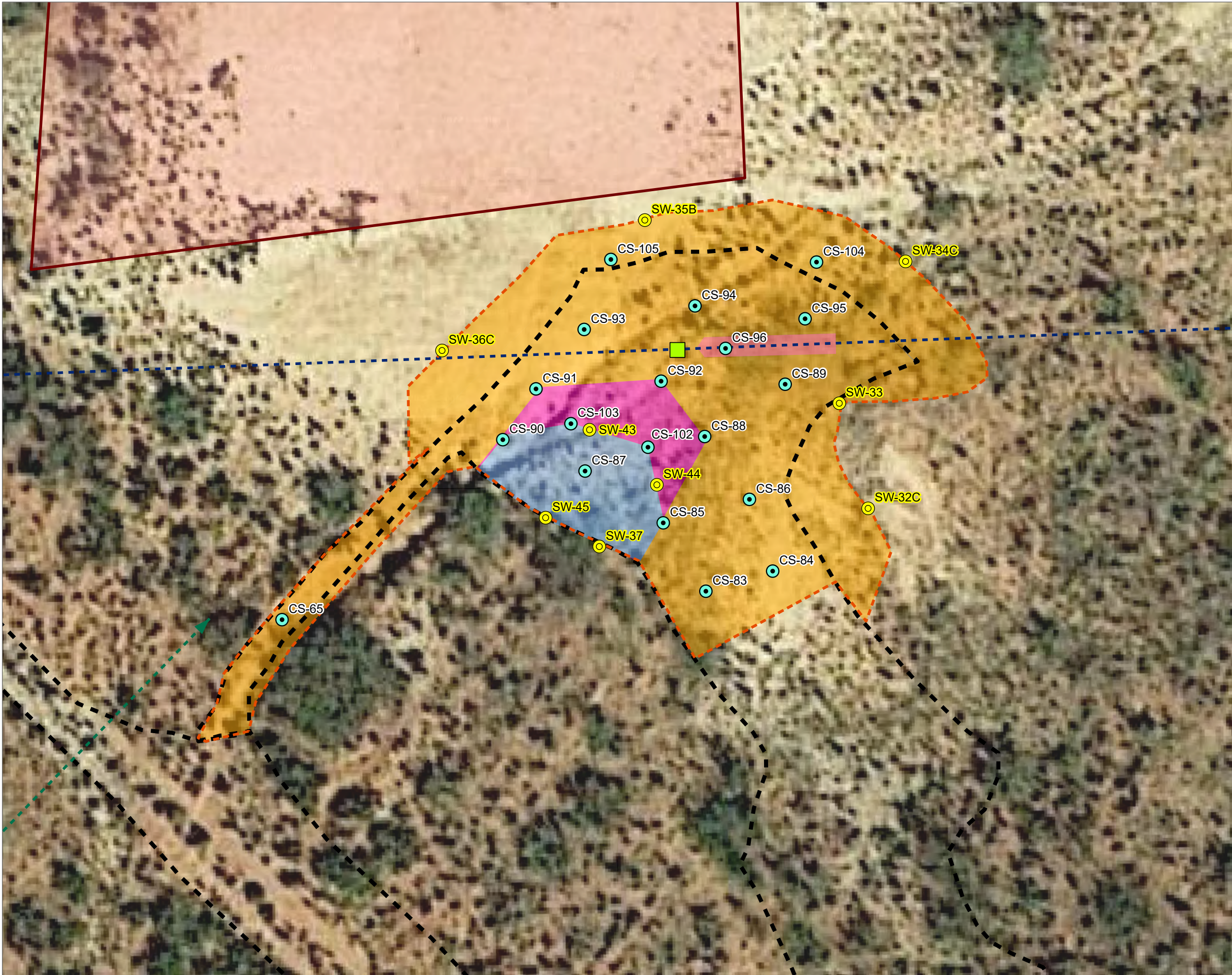
1" = 25'



PROJECT: HOLLY ENERGY PARTNERS – OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO			
TITLE: CONFIRMATION SAMPLE LOCATION MAP AREAS 1-6			
DRAWN BY:	M. HORN	PROJ. NO.:	466952
CHECKED BY:	D. CLARK	FIGURE 5B	
APPROVED BY:	S. HOOVER		
DATE:	FEBRUARY 2022		
		505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6080	
FILE:		Eunice.aprx	



Coordinate System: NAD 1983 StatePlane New Mexico East FIPS 3001 Feet, Map Rotation: 0
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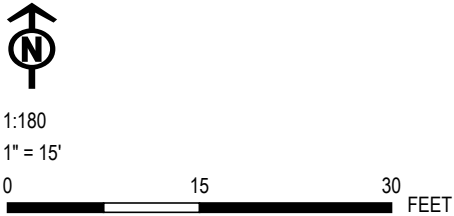



- LEGEND
- RELEASE POINT
 - FLOOR SAMPLE
 - SIDEWALL SAMPLE
 - RELEASE AREA
 - FORMER SOIL STOCKPILE
 - EXCAVATED TO APPROXIMATELY 4.5 FEET BGS
 - EXCAVATED TO APPROXIMATELY 5 FEET BGS
 - EXCAVATED TO APPROXIMATELY 6 FEET BGS
 - EXCAVATED TO APPROXIMATELY 10 FEET BGS
 - EXCAVATION LIMITS
 - HEP PIPELINE
 - FRESHWATER LIVESTOCK LINE

NOTES:
CS: BOTTOM CONFIRMATION SAMPLE
SW: SIDEWALL CONFIRMATION SAMPLE
BGS: BELOW GROUND SURFACE
COCS: CHEMICALS OF CONCERN

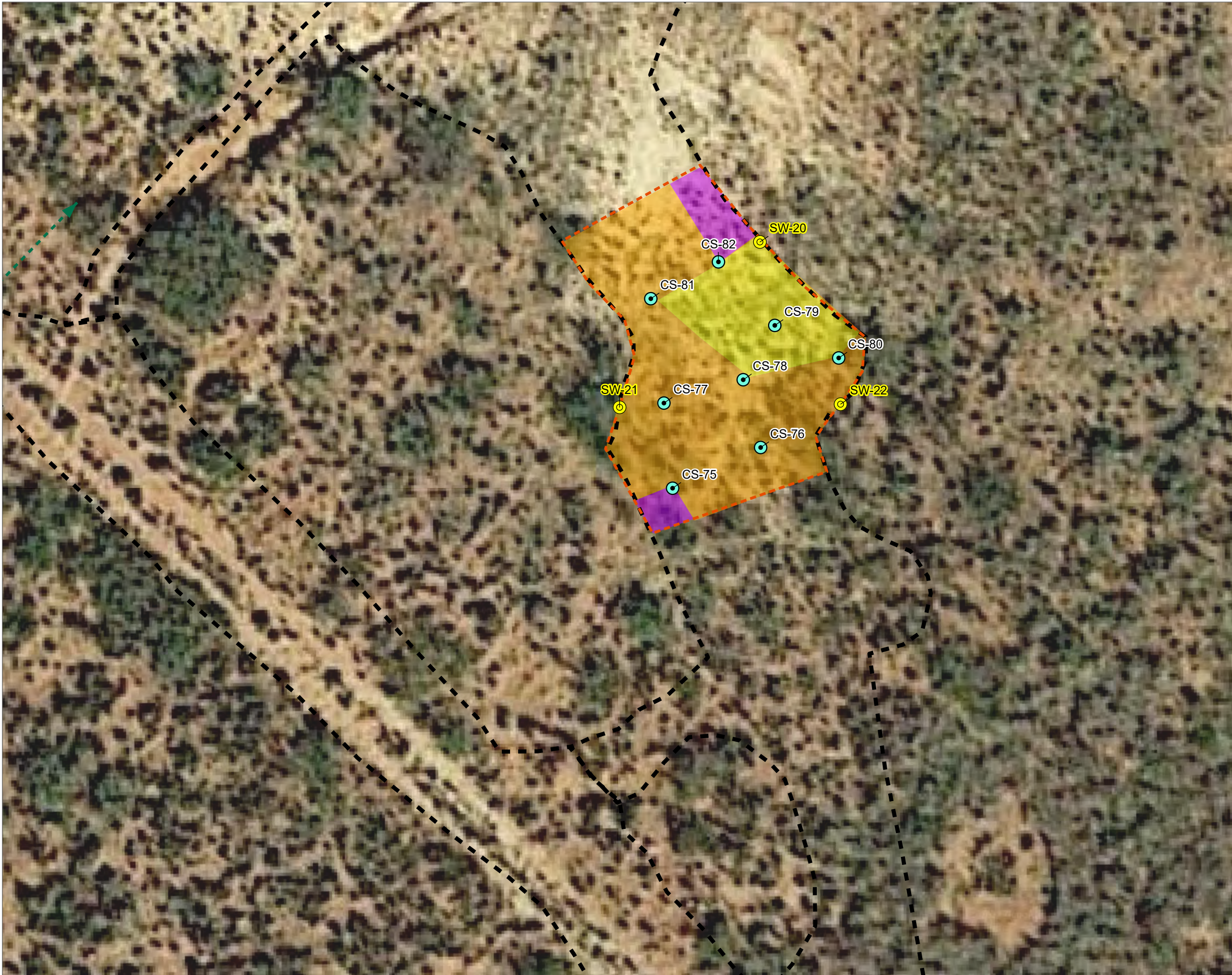
COCS AT ALL FINAL CONFIRMATION SAMPLE LOCATIONS WERE BELOW NMOCD CLOSURE CRITERIA.

BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP



PROJECT: HOLLY ENERGY PARTNERS – OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO		
TITLE: FINAL EXCAVATION AND CONFIRMATION SAMPLE LOCATIONS AREA 1		
DRAWN BY:	M. HORN	PROJ. NO.: 466952
CHECKED BY:	D. CLARK	FIGURE 6A
APPROVED BY:	S. HOOVER	
DATE:	FEBRUARY 2022	
		505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6080
FILE:	Eunice.aprx	

Coordinate System: NAD 1983 StatePlane New Mexico East FIPS 3001 Feet, Map Rotation: 0
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- LEGEND
- FLOOR SAMPLE
 - SIDEWALL SAMPLE
 - RELEASE AREA
 - EXCAVATED TO APPROXIMATELY 3 FEET BGS
 - EXCAVATED TO APPROXIMATELY 4.5 FEET BGS
 - EXCAVATED TO APPROXIMATELY 5.5 FEET BGS
 - EXCAVATION LIMITS
 - FRESHWATER LIVESTOCK LINE


NOTES:
CS: BOTTOM CONFIRMATION SAMPLE
SW: SIDEWALL CONFIRMATION SAMPLE
BGS: BELOW GROUND SURFACE
COCs: CHEMICALS OF CONCERN

COCs AT ALL FINAL CONFIRMATION SAMPLE LOCATIONS WERE BELOW NMOCd CLOSURE CRITERIA.

BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP



1:180
1" = 15'
0 15 30 FEET

PROJECT: HOLLY ENERGY PARTNERS – OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO		
TITLE: FINAL EXCAVATION AND CONFIRMATION SAMPLE LOCATIONS AREA 2		
DRAWN BY:	M. HORN	PROJ. NO.: 466952
CHECKED BY:	D. CLARK	FIGURE 6B
APPROVED BY:	S. HOOVER	
DATE:	FEBRUARY 2022	
		505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6080
FILE:	Eunice.aprx	

Coordinate System: NAD 1983 StatePlane New Mexico East FIPS 3001 Feet, Map Rotation: 0
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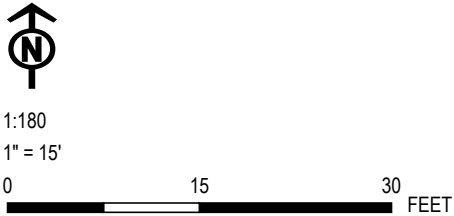



- LEGEND
- FLOOR SAMPLE
 - SIDEWALL SAMPLE
 - RELEASE AREA
 - EXCAVATED TO APPROXIMATELY 4.5 FEET BGS
 - EXCAVATION LIMITS
 - ETC PIPELINE

NOTES:
CS: BOTTOM CONFIRMATION SAMPLE
SW: SIDEWALL CONFIRMATION SAMPLE
BGS: BELOW GROUND SURFACE
COCs: CHEMICALS OF CONCERN

COCs AT ALL FINAL CONFIRMATION SAMPLE LOCATIONS WERE BELOW NMOCD CLOSURE CRITERIA.

BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP



PROJECT: HOLLY ENERGY PARTNERS – OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO		
TITLE: FINAL EXCAVATION AND CONFIRMATION SAMPLE LOCATIONS AREA 3		
DRAWN BY:	M. HORN	PROJ. NO.: 466952
CHECKED BY:	D. CLARK	FIGURE 6C
APPROVED BY:	S. HOOVER	
DATE:	FEBRUARY 2022	
		505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6080
FILE:	Eunice.aprx	

Coordinate System: NAD 1983 StatePlane New Mexico East FIPS 3001 Feet; Map Rotation: 0
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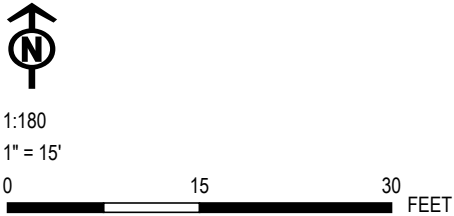



- LEGEND
- FLOOR SAMPLE
 - SIDEWALL SAMPLE
 - RELEASE AREA
 - EXCAVATED TO APPROXIMATELY 4.5 FEET BGS
 - EXCAVATED TO APPROXIMATELY 5.5 FEET BGS
 - EXCAVATION LIMITS
 - FRESHWATER LIVESTOCK LINE

NOTES:
CS: BOTTOM CONFIRMATION SAMPLE
SW: SIDEWALL CONFIRMATION SAMPLE
BGS: BELOW GROUND SURFACE
COCs: CHEMICALS OF CONCERN

COCs AT ALL FINAL CONFIRMATION SAMPLE LOCATIONS WERE BELOW NMOCD CLOSURE CRITERIA.

BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP



PROJECT: HOLLY ENERGY PARTNERS – OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO		
TITLE: FINAL EXCAVATION AND CONFIRMATION SAMPLE LOCATIONS AREA 4		
DRAWN BY:	M. HORN	PROJ. NO.: 466952
CHECKED BY:	R. SEBRING	FIGURE 6D
APPROVED BY:	S. HOOVER	
DATE:	FEBRUARY 2022	
		505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6080
FILE:	Eunice.aprx	

Coordinate System: NAD 1983 StatePlane New Mexico East FIPS 3001 Feet, Map Rotation: 0
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- LEGEND
- FLOOR SAMPLE
 - SIDEWALL SAMPLE
 - RELEASE AREA
 - EXCAVATED TO APPROXIMATELY 8 FEET BGS
 - EXCAVATED TO APPROXIMATELY 9 FEET BGS
 - EXCAVATED TO APPROXIMATELY 10 FEET BGS
 - EXCAVATION LIMITS
 - FRESHWATER LIVESTOCK LINE


NOTES:
CS: BOTTOM CONFIRMATION SAMPLE
SW: SIDEWALL CONFIRMATION SAMPLE
BGS: BELOW GROUND SURFACE
COCs: CHEMICALS OF CONCERN

COCs AT ALL FINAL CONFIRMATION SAMPLE LOCATIONS WERE BELOW NMOC D CLOSURE CRITERIA.

BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP



1:180
1" = 15'
0 15 30 FEET

PROJECT: HOLLY ENERGY PARTNERS – OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO		
TITLE: FINAL EXCAVATION AND CONFIRMATION SAMPLE LOCATIONS AREA 5		
DRAWN BY:	M. HORN	PROJ. NO.: 466952
CHECKED BY:	D. CLARK	FIGURE 6E
APPROVED BY:	S. HOOVER	
DATE:	FEBRUARY 2022	
		505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6080
FILE:	Eunice.aprx	

Coordinate System: NAD 1983 StatePlane New Mexico East FIPS 3001 Feet; Map Rotation: 0
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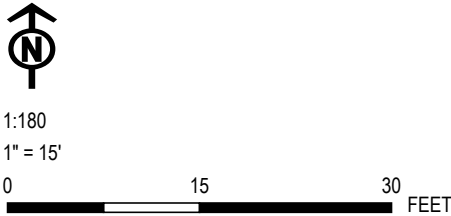



- LEGEND
- FLOOR SAMPLE
 - SIDEWALL SAMPLE
 - RELEASE AREA
 - EXCAVATED TO APPROXIMATELY 4.5 FEET BGS
 - EXCAVATION LIMITS

NOTES:
CS: BOTTOM CONFIRMATION SAMPLE
SW: SIDEWALL CONFIRMATION SAMPLE
BGS: BELOW GROUND SURFACE
COCS: CHEMICALS OF CONCERN

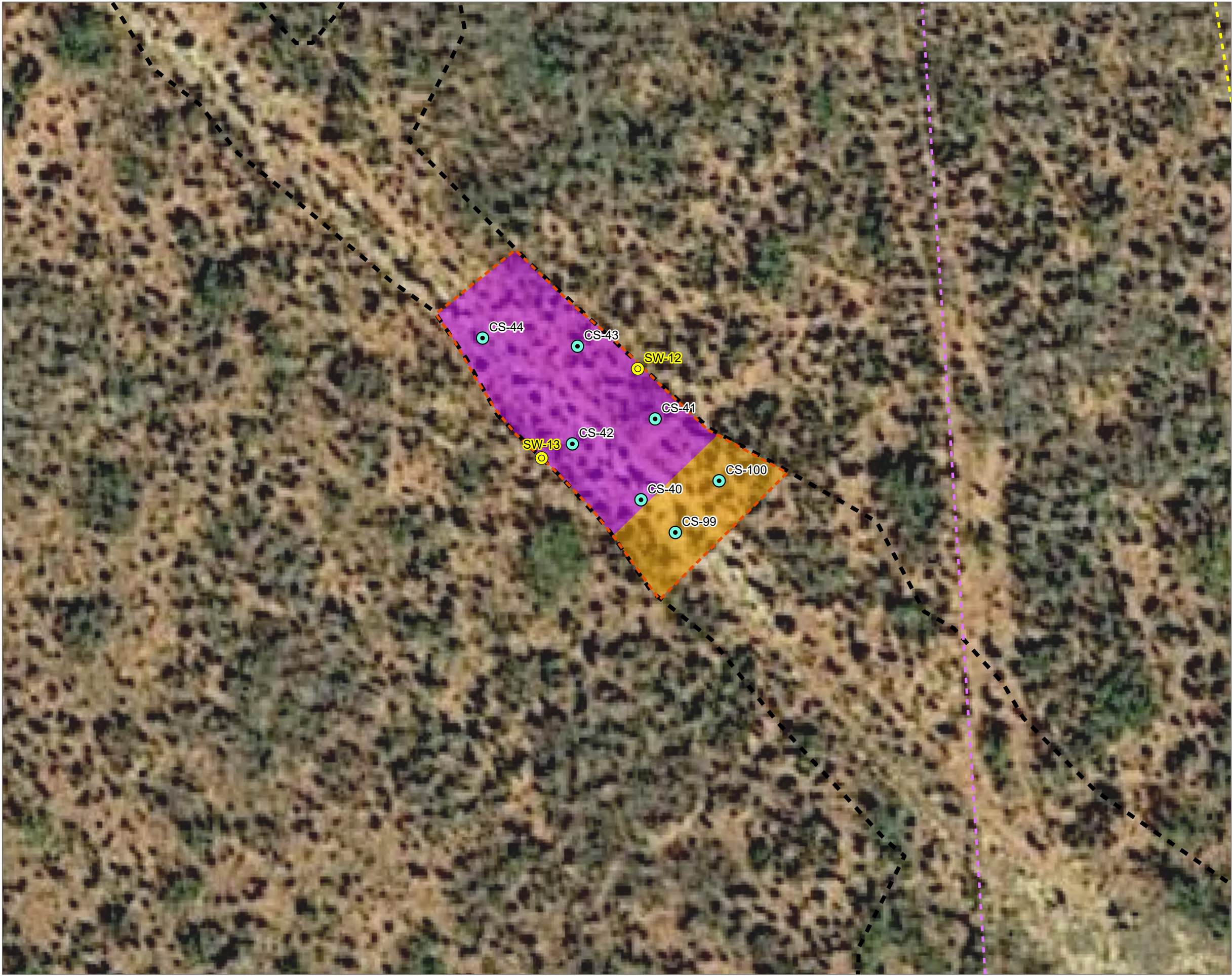
COCS AT ALL FINAL CONFIRMATION SAMPLE LOCATIONS WERE BELOW NMOC D CLOSURE CRITERIA.

BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP



PROJECT: HOLLY ENERGY PARTNERS – OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO		
TITLE: FINAL EXCAVATION AND CONFIRMATION SAMPLE LOCATIONS AREA 6		
DRAWN BY:	M. HORN	PROJ. NO.: 466952
CHECKED BY:	D. CLARK	FIGURE 6F
APPROVED BY:	S. HOOVER	
DATE:	FEBRUARY 2022	
		505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6080
FILE:	Eunice.aprx	

Coordinate System: NAD 1983 StatePlane New Mexico East FIPS 3001 Feet; Map Rotation: 0
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- LEGEND
- FLOOR SAMPLE
 - SIDEWALL SAMPLE
 - RELEASE AREA
 - EXCAVATED TO APPROXIMATELY 3 FEET BGS
 - EXCAVATED TO APPROXIMATELY 4.5 FEET BGS
 - EXCAVATION LIMITS
 - ETC PIPELINE
 - PLAINS PIPELINE


NOTES:
CS: BOTTOM CONFIRMATION SAMPLE
SW: SIDEWALL CONFIRMATION SAMPLE
BGS: BELOW GROUND SURFACE
COCS: CHEMICALS OF CONCERN

COCS AT ALL FINAL CONFIRMATION SAMPLE LOCATIONS WERE BELOW NMOCD CLOSURE CRITERIA.

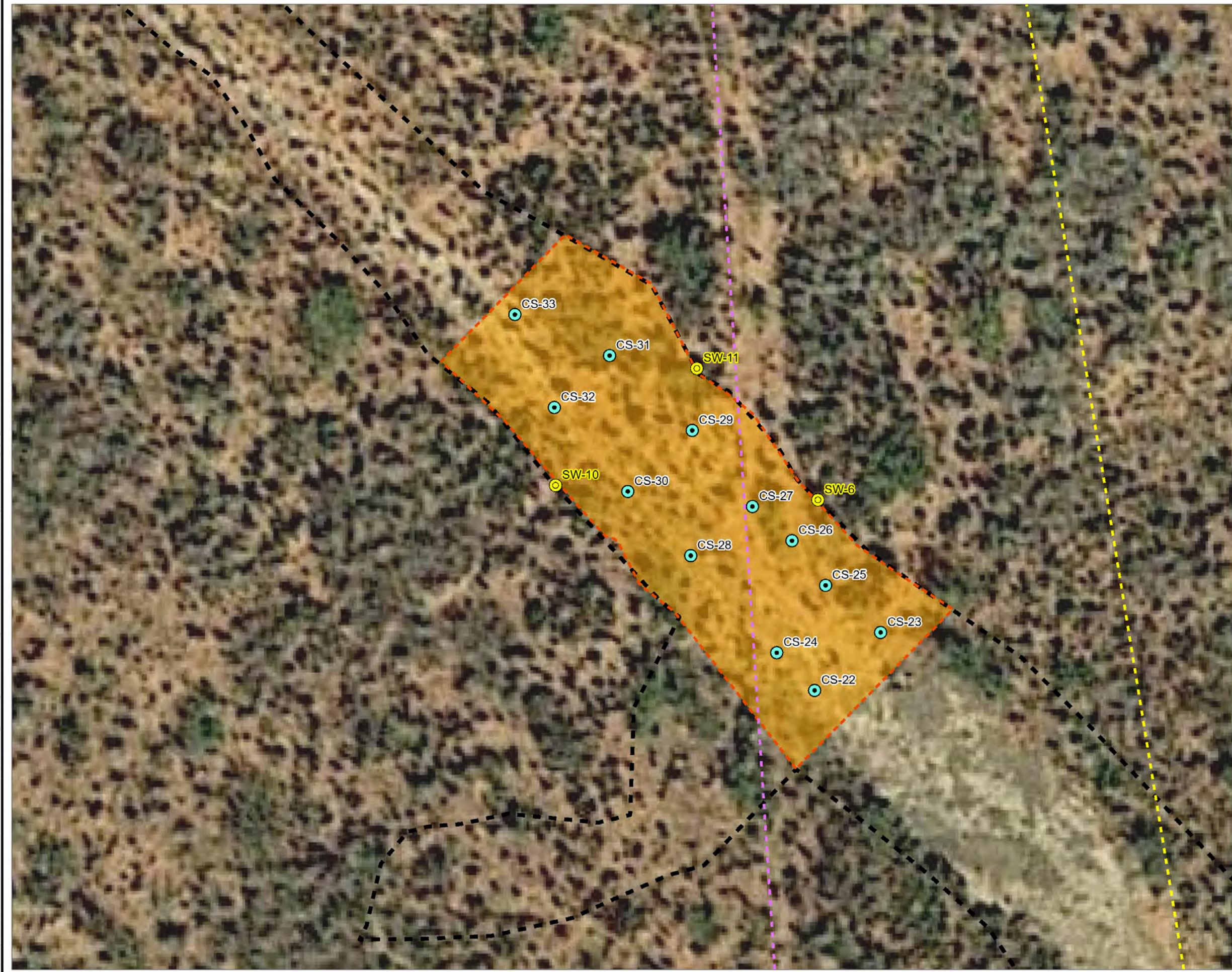
BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP



1:180
1" = 15'
0 15 30 FEET

PROJECT: HOLLY ENERGY PARTNERS – OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO		
TITLE: FINAL EXCAVATION AND CONFIRMATION SAMPLE LOCATIONS AREA 7		
DRAWN BY:	M. HORN	PROJ. NO.: 466952
CHECKED BY:	D. CLARK	FIGURE 6G
APPROVED BY:	S. HOOVER	
DATE:	FEBRUARY 2022	
		505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6080
FILE:	Eunice.aprx	

Coordinate System: NAD 1983 StatePlane New Mexico East FIPS 3001 Feet, Map Rotation: 0
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LEGEND

- FLOOR SAMPLE
- SIDEWALL SAMPLE
- RELEASE AREA
- EXCAVATED TO APPROXIMATELY 4.5 FEET BGS
- EXCAVATION LIMITS
- ETC PIPELINE
- PLAINS PIPELINE


NOTES:
CS: BOTTOM CONFIRMATION SAMPLE
SW: SIDEWALL CONFIRMATION SAMPLE
BGS: BELOW GROUND SURFACE
COCs: CHEMICALS OF CONCERN

COCs AT ALL FINAL CONFIRMATION SAMPLE LOCATIONS WERE BELOW NMOCD CLOSURE CRITERIA.

BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP

Scale and Orientation:
1:180
1" = 15'
0 15 30 FEET

North Arrow

PROJECT: HOLLY ENERGY PARTNERS – OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO	
TITLE: FINAL EXCAVATION AND CONFIRMATION SAMPLE LOCATIONS AREA 8	
DRAWN BY: M. HORN	PROJ. NO.: 466952
CHECKED BY: D. CLARK	FIGURE 6H
APPROVED BY: S. HOOVER	
DATE: FEBRUARY 2022	
 505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6C80	
FILE:	Eunice.aprx

C:\Users\mhorn\OneDrive\Documents\Holly\Holly_EMSU_6-Inch_Pipeline_Release\Area 9\Final Excavation and Confirmation Sample Locations.mxd
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Layout Name: Emsu_6inch_Area9



LEGEND

- FLOOR SAMPLE
- SIDEWALL SAMPLE
- RELEASE AREA
- EXCAVATED TO APPROXIMATELY 3 FEET BGS
- EXCAVATION LIMITS
- ETC PIPELINE
- PLAINS PIPELINE

NOTES:
CS: BOTTOM CONFIRMATION SAMPLE
SW: SIDEWALL CONFIRMATION SAMPLE
BGS: BELOW GROUND SURFACE
COCs: CHEMICALS OF CONCERN

COCs AT ALL FINAL CONFIRMATION SAMPLE LOCATIONS WERE BELOW NMOC CLOSURE CRITERIA.

BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP

1:180
1" = 15'
0 15 30 FEET

PROJECT: HOLLY ENERGY PARTNERS – OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO	
TITLE: FINAL EXCAVATION AND CONFIRMATION SAMPLE LOCATIONS AREA 9	
DRAWN BY: M. HORN	PROJ. NO.: 466952
CHECKED BY: D. CLARK	FIGURE 61
APPROVED BY: S. HOOVER	
DATE: FEBRUARY 2022	
505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6C80	
FILE:	Eunice.sprx



Coordinate System: NAD 1983 StatePlane New Mexico East FIPS 3001 Feet, Map Rotation: 0
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- LEGEND
- FLOOR SAMPLE
 - SIDEWALL SAMPLE
 - RELEASE AREA
 - EXCAVATED TO APPROXIMATELY 3 FEET BGS
 - EXCAVATED TO APPROXIMATELY 4.5 FEET BGS
 - EXCAVATION LIMITS
 - ETC PIPELINE
 - PLAINS PIPELINE

NOTES:
CS: BOTTOM CONFIRMATION SAMPLE
SW: SIDEWALL CONFIRMATION SAMPLE
BGS: BELOW GROUND SURFACE
COCS: CHEMICALS OF CONCERN

COCS AT ALL FINAL CONFIRMATION SAMPLE LOCATIONS WERE BELOW NMOC CLOSURE CRITERIA.

BASE MAP: GOOGLE EARTH PRO, 11/2/2017.
DATA SOURCES: TRC, HEP



PROJECT: HOLLY ENERGY PARTNERS – OPERATING, L.P. EUNICE EMSU 6-INCH PIPELINE RELEASE LEA COUNTY, NEW MEXICO		
TITLE: FINAL EXCAVATION AND CONFIRMATION SAMPLE LOCATIONS AREA 11		
DRAWN BY:	M. HORN	PROJ. NO.: 466952
CHECKED BY:	R. SEBRING	FIGURE 6K
APPROVED BY:	S. HOOVER	
DATE:	FEBRUARY 2022	
		505 EAST HUNTLAND DRIVE SUITE #250 AUSTIN, TX 78752 PHONE: 512.329.6C80
FILE:	Eunice.aprx	



TABLES

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

Sample ID	Sample Depth (feet bgs)	Sample Date	Soil Status	PID Reading (ppm)	TPH (GRO)	TPH (DRO)	TPH GRO & DRO	TPH (MRO)	Total TPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	Chloride
					(mg/kg)										
NMOCD Closure Criteria (Surface to 4 Feet bgs)					NA	NA	NA	NA	100	10	NA	NA	NA	50	600
NMOCD Closure Criteria (Below 4 Feet bgs)					NA	NA	1,000	NA	2,500	10	NA	NA	NA	50	20,000
Area 1 Delineation Samples															
SS-1 @ 2'	2	3/18/2021	Excavated	208	<258	16,700	16,700	2,280	19,000	<0.104	<0.104	0.301	0.945	1.25	483
TT-1 @ 3'	3	3/18/2021	Excavated	40.0	<53.3	<53.3	<53.3	<53.3	<53.3	<0.00215	<0.00215	<0.00215	<0.00429	<0.00215	952
TT-1 @ 4'	4	3/18/2021	Excavated	106	<49.9	<49.9	<49.9	<49.9	<49.9	--	--	--	--	--	825
TT-1 @ 5'	5	3/18/2021	In Situ	22.0	60.3	<49.9	60.3	<49.9	60.3	--	--	--	--	--	949
Area 2 Delineation Samples															
SS-2 @ 2'	2	3/18/2021	Excavated	244	<252	14,600	14,600	2,120	16,700	<0.102	<0.102	0.387	1.09	1.47	20.7
TT-2 @ 3'	3	3/18/2021	In Situ	416	<52.4	56.8	56.8	<52.4	56.8	<0.0209	<0.0209	<0.0209	<0.0419	<0.0209	12.3
Area 3 Delineation Samples															
SS-3 @ 2'	2	3/18/2021	Excavated	674.2	682	24,800	25,482	3,710	29,200	<0.102	0.466	1.76	5.38	7.61	7.39
Duplicate-1 [SS-3 @ 2']	2	3/18/2021	Excavated	674.2	674	19,400	20,074	3,950	24,000	<0.00204	<0.00204	<0.00204	<0.00408	<0.00204	<5.05
TT-3 @ 3'R	3	3/18/2021	Excavated	270.2	<52.2	213	213	<52.2	213	<0.00208	<0.00208	<0.00208	<0.00416	<0.00208	121
Area 4 Delineation Samples															
SS-4 @ 1'	1	3/18/2021	Excavated	670	573	25,400	25,973	3,810	29,800	<0.102	0.406	2.20	6.10	8.71	25.7
TT-4 @ 2'	2	3/18/2021	Excavated	1,259	<51.7	724	724	83.9	808	<0.0208	<0.0208	<0.0208	<0.416	<0.0208	13.1
TT-4 @ 3'	3	3/18/2021	Excavated	202	<51.8	<51.8	<51.8	<51.8	<51.8	<0.00208	<0.00208	<0.00208	<0.00416	<0.00208	16.9
TT-4 @ 4'	4	3/18/2021	Excavated	156	107	64.1	171	<51.5	171	<0.00206	<0.00206	<0.00206	<0.00412	<0.00206	164
TT-4 @ 5'	5	3/18/2021	In Situ	1,118	<51.6	764	764	112	876	<0.00207	<0.00207	<0.00207	<0.00413	<0.00207	181
TT-4 @ 5.5'	5.5	3/18/2021	In Situ	555	51.8	93.2	145	<51.6	145	<0.00207	<0.00207	<0.00207	<0.00414	<0.00207	92.5
TT-4 @ 6'R	6	3/18/2021	In Situ	1,276	<51.5	895	895	132	1,030	<0.00207	0.00415	0.00488	0.00489	0.0139	53.9
Area 5 Delineation Samples															
SS-5 @ 2'	2	3/18/2021	Excavated	421	575	27,200	27,775	3,990	31,800	<0.101	0.858	2.55	9.04	12.4	71.8
TT-5 @ 3'R	3	3/18/2021	Excavated	289	11,600	19,600	31,200	2,520	33,700	<0.216	1.11	2.61	8.95	12.7	18.4
TT-5 @ 7-8'	7-8	9/21/2021	Excavated	--	<249	2,860	2,860	294	3,150	0.792	0.674	1.46	2.49	5.42	11.8
TT-5 @ 8-9'	8-9	9/21/2021	Excavated	--	<249	1,780	1,780	<249	1,780	0.138	<0.0404	0.699	1.03	1.87	13.4
TT-5 @ 9-10'	9-10	9/21/2021	Excavated	--	115	422	537	<49.8	537	0.0895	0.0941	0.153	0.229	0.566	11.3
SB-2 @ 3-4'	3-4	9/15/2021	Excavated	607	<249	3,230	3,230	389	3,620	<0.202	0.2440	1.020	1.470	2.730	10.0
SB-2 @ 4-5'	4-5	9/15/2021	Excavated	1,438	1,150	3,980	5,130	466	5,600	<0.101	<0.0101	0.758	1.750	2.510	22.4
SB-2 @ 5-6'	5-6	9/15/2021	Excavated	1,605	1,140	5,930	7,070	643	7,710	<0.201	<0.201	1.050	3.910	4.960	13.1
SB-2 @ 6-7'	6-7	9/15/2021	Excavated	1,150	1,720	6,580	8,300	715	9,020	<0.199	0.2540	1.440	5.190	6.880	12.5
SB-2 @ 10-11'	10-11	9/15/2021	In Situ	98	<49.9	166	166	<49.9	166	<0.00200	<0.00200	0.00316	0.00406	0.00722	181.0
SB-2 @ 11-12'	11-12	9/15/2021	In Situ	68	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	167.0
SB-2 @ 15-16'	15-16	9/15/2021	In Situ	128	<50.0	519	519	84.3	603	<0.0401	<0.00401	0.0644	0.175	0.240	76.1
SB-2 @ 16-17'	16-17	9/15/2021	In Situ	56	<49.9	<49.9	<49.9	<49.9	<49.9	0.00729	<0.00200	0.00349	0.0057	0.0165	58.9
Area 6 Delineation Samples															
SS-6 @ 1'	1	3/18/2021	Excavated	368	311	13,200	13,511	1,790	15,300	<0.102	0.356	0.895	4.04	5.29	22.1
TT-6 @ 1.5'R	1.5	3/18/2021	Excavated	1,580	7,040	12,900	19,940	1,590	21,500	<0.108	0.522	1.72	5.77	8.01	71.8
Area 7 Delineation Samples															
SS-7 @ 1'	1	3/18/2021	Excavated	165	<253	18,300	18,300	2,920	21,200	<0.100	<0.100	0.217	1.08	1.30	12.6
TT-7 @ 2'	2	3/18/2021	Excavated	399	<51.9	112	112	<51.9	112	<0.00208	<0.00208	<0.00208	<0.00416	<0.00208	6.89
TT-7 @ 3'R	3	3/18/2021	In Situ	137	<50.0	<50.0	<50.0	<50.0	<50.0	--	--	--	--	--	--

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

Sample ID	Sample Depth (feet bgs)	Sample Date	Soil Status	PID Reading (ppm)	TPH (GRO)	TPH (DRO)	TPH GRO & DRO	TPH (MRO)	Total TPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	Chloride
					(mg/kg)										
NMOCD Closure Criteria (Surface to 4 Feet bgs)					NA	NA	NA	NA	100	10	NA	NA	NA	50	600
NMOCD Closure Criteria (Below 4 Feet bgs)					NA	NA	1,000	NA	2,500	10	NA	NA	NA	50	20,000
Area 8 Delineation Samples															
SS-8 @ 2'	2	3/18/2021	Excavated	235	277	19,200	19,477	2,640	22,100	<0.101	0.297	0.793	3.54	4.63	7.31
TT-8 @ 3'R	3	3/18/2021	Excavated	1,173	9,280	16,000	25,280	2,120	27,400	<0.107	0.669	1.76	6.08	8.51	12.4
SB-1 @ 3-4'	3-4	9/15/2021	Excavated	370	<50.0	649	649	87.8	737	<0.0400	<0.0400	0.0951	0.295	0.390	10.70
SB-1 @ 4-5'	4-5	9/15/2021	In Situ	258	<49.9	91.5	91.5	<49.9	91.5	<0.0399	<0.0399	0.1130	0.474	0.587	8.75
SB-1 @ 5-6'	5-6	9/15/2021	In Situ	148	<49.8	78.1	78.1	<49.8	78.1	<0.0402	<0.0402	<0.0402	<0.0805	<0.0803	9.5
SB-1 @ 6-7'	6-7	9/15/2021	In Situ	125	<49.9	<49.9	<49.9	<49.9	<49.9	<0.0402	<0.0402	0.0407	<0.0803	<0.0803	10.7
Area 9 Delineation Samples															
SS-9 @ 1'	1	3/18/2021	Excavated	82	<50.5	235	235	<50.5	235	<0.00201	<0.00201	0.0101	0.0533	0.0634	5.34
TT-9 @ 2'	2	3/18/2021	Excavated	360	<51.9	665	665	92.5	758	<0.0207	<0.0207	<0.0207	<0.0415	<0.0207	<4.97
TT-9 @ 3'	3	3/18/2021	In Situ	82.0	<50.0	<50.0	<50.0	<50.0	<50.0	--	--	--	--	--	--
Area 10 Delineation Samples															
SS-10 @ 3'	3	3/18/2021	Excavated	704	1,350	44,700	46,050	6,260	52,300	<0.103	0.483	2.94	11.6	15.0	9.84
TT-10 @ 4'	4	3/18/2021	Excavated	1,258	84.3	1,080	1,164	140	1,300	<0.0209	0.0258	0.180	0.252	0.457	<4.98
TT-10 @ 5'	5	3/18/2021	In Situ	261	<53.0	<53.0	<53.0	<53.0	<53.0	<0.00210	<0.00210	<0.00210	<0.00419	<0.00210	<5.05
TT-10 @ 6'R	6	3/18/2021	In Situ	626	<53.3	<53.3	<53.0	<53.3	<53.3	<0.00212	<0.00212	<0.00212	<0.00424	<0.00212	35.0
Area 11 Delineation Samples															
SS-11 @ 2'	2	3/18/2021	Excavated	433	271	16,500	16,771	2,360	19,100	<0.102	<0.102	0.671	2.35	3.02	<5.02
TT-11 @ 3'	3	3/18/2021	In Situ	259	<52.5	<52.5	<52.5	<52.5	<52.5	<0.00210	<0.00210	<0.00210	<0.00420	<0.00210	<4.99
Miscellaneous Delineation Samples															
SS-12 @ 6"	0.5	3/18/2021	In Situ*	183	<50.1	565	565	143	708	<0.00202	<0.00202	<0.00202	<0.00403	<0.00202	<4.95
Stockpile Samples															
Stockpile-1	--	2/2/2021	Disposed	--	4,780	14,000	18,780	1,630	20,410	3.42	16.8	27.9	108.2	156.3	57.0
Stockpile-2	--	2/2/2021	Disposed	--	3,490	11,700	15,190	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
mg/kg milligrams per kilogram
PID Photo-Ionization Detector
ppm parts per million
TPH Total Petroleum Hydrocarbons
NA Not Applicable - No NMOCD Closure Criteria for parameter
NMOCD New Mexico Oil Conservation Division
R Suffix indicates refusal at Test Trench location
SS Surface Sample
TT Test Trench Sample
SB Soil Boring Sample
Bold Parameter detected above the laboratory reporting limit
Yellow Concentration is above the applicable NMOCD Closure Criteria
Pink Soil excavated and removed
-- Not Analyzed
< Parameter not detected above laboratory reporting limit
* Soil associated with sample SS-12 determined to be associated with a release from a third-party pipeline and is not associated with HEP

TABLE 2
SUMMARY OF CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS
HOLLY ENERGY PARTNERS - OPERATING, L.P.
 Eunice EMSU Pipeline Release
 NMOCD Tracking No.: nAPP2102856493

Sample ID	Sample Depth (feet bgs)	Sample Date	Soil Status	Area	TPH (GRO)	TPH (DRO)	TPH GRO & DRO	TPH (MRO)	Total TPH	Chloride
					(mg/kg)					
NMOCD Closure Criteria (Surface to 4 Feet bgs)					NA	NA	NA	NA	100	600
NMOCD Closure Criteria (Below 4 Feet bgs)					NA	NA	1,000	NA	2,500	20,000
Area 1 Floor Confirmation Samples										
CS-65 @ 4.5	4.5	10/4/2021	In Situ	1	<49.8	188	188	<49.8	188	--
CS-83 @ 4.5	4.5	10/7/2021	In Situ	1	<49.9	100	100	<49.9	100	16.4
CS-84 @ 4.5	4.5	10/7/2021	In Situ	1	<49.8	<49.8	<49.8	<49.8	<49.8	221
CS-85 @ 4.5	4.5	10/7/2021	In Situ	1	<49.9	317	317	51.5	369	132
CS-86 @ 4.5	4.5	10/7/2021	In Situ	1	<49.8	113	113	<49.8	113	380
CS-87 @ 4.5	4.5	10/7/2021	Excavated	1	643	2,880	3,523	334	3,860	865
CS-87 @ 6.5	6.5	10/21/2021	Excavated	1	1,530	4,790	6,320	496	6,820	542
CS-87 @ 7.5	7.5	10/21/2021	Excavated	1	349	1,220	1,569	109	1,680	--
CS-87 @ 8	8.0	10/22/2021	Excavated	1	1,330	3,650	4,980	<249	4,980	--
CS-87 @ 9	9.0	10/22/2021	Excavated	1	658	1,420	2,078	<249	2,080	--
CS-87 @ 10	10.0	10/22/2021	In Situ	1	49.9	392	441.9	<49.9	442	--
CS-88 @ 4.5	4.5	10/7/2021	In Situ	1	<49.8	113	113	<49.8	113	1,050
CS-89 @ 4.5	4.5	10/7/2021	In Situ	1	<49.9	<49.9	<49.9	<49.9	<49.9	893
CS-90 @ 4.5	4.5	10/7/2021	In Situ	1	<49.9	134	134	<49.9	134	357
CS-91 @ 4.5	4.5	10/7/2021	In Situ	1	<49.8	152	152	<49.8	152	42.9
CS-92 @ 4.5	4.5	10/7/2021	In Situ	1	50.0	338	388	<49.9	388	305
CS-93 @ 4.5	4.5	10/7/2021	In Situ	1	<49.8	<49.8	<49.8	<49.8	<49.8	488
CS-94 @ 4.5	4.5	10/7/2021	In Situ	1	<49.9	<49.9	<49.9	<49.9	<49.9	1,870
CS-95 @ 4.5	4.5	10/7/2021	In Situ	1	<49.8	<49.8	<49.8	<49.8	<49.8	3,470
CS-96 @ 4.5	4.5	10/7/2021	Excavated	1	<249	3,690	3,690	536	4,230	203
CS-96 @ 5	5.0	10/22/2021	In Situ	1	<50.0	<50.0	<50.0	<50.0	<50.0	<10.0
CS-102 @ 6	6.0	10/21/2021	In Situ	1	<49.9	537	537	75.2	612	1,060
CS-103 @ 6	6.0	10/21/2021	In Situ	1	<50.0	946	946	125	1,070	792
CS-104 @ 4.5	4.5	10/21/2021	In Situ	1	<49.8	74	74	<49.8	74	23.6
CS-105 @ 4.5	4.5	10/21/2021	In Situ	1	<49.9	<49.9	<49.9	<49.9	<49.9	17
Area 1 Sidewall Confirmation Samples										
SW-32 @ 2.25	2.25	10/7/2021	Excavated	1	<49.9	<49.9	<49.9	<49.9	<49.9	1,700
SW-32A @ 2.25	2.25	10/21/2021	Excavated	1	<49.8	<49.8	<49.8	<49.8	<49.8	3,170
SW-32B @ 2.25	2.25	10/21/2021	Excavated	1	--	--	--	--	--	2,270
SW-32C @ 2.25	2.25	10/21/2021	In Situ	1	--	--	--	--	--	275
SW-33 @ 2.25	2.25	10/7/2021	In Situ	1	<49.8	<49.8	<49.8	<49.8	<49.8	193
SW-34 @ 2.25	2.25	10/7/2021	Excavated	1	171	66.8	237.8	<49.9	238	1,180
SW-34A @ 2.25	2.25	10/21/2021	Excavated	1	<50.0	<50.0	<50.0	<50.0	<50.0	1,070
SW-34B @ 2.25	2.25	10/21/2021	Excavated	1	--	--	--	--	--	1,070

TABLE 2
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HOLLY ENERGY PARTNERS - OPERATING, L.P.
 Eunice EMSU Pipeline Release
 NMOCD Tracking No.: nAPP2102856493

Sample ID	Sample Depth (feet bgs)	Sample Date	Soil Status	Area	TPH (GRO)	TPH (DRO)	TPH GRO & DRO	TPH (MRO)	Total TPH	Chloride
					(mg/kg)					
NMOCD Closure Criteria (Surface to 4 Feet bgs)					NA	NA	NA	NA	100	600
NMOCD Closure Criteria (Below 4 Feet bgs)					NA	NA	1,000	NA	2,500	20,000
SW-34C @ 2.25	2.25	10/21/2021	In Situ	1	--	--	--	--	--	36.8
SW-35 @ 2.25	2.25	10/7/2021	Excavated	1	117	76.9	193.9	<49.8	194	126
SW-35A @ 2.25	2.25	10/21/2021	Excavated	1	<49.9	<49.9	<49.9	<49.9	<49.9	1,650
SW-35B @ 2.25	2.25	10/21/2021	In Situ	1	--	--	--	--	--	365
SW-36 @ 2.25	2.25	10/7/2021	Excavated	1	<49.9	<49.9	<49.9	<49.9	<49.9	1,100
SW-36A @ 2.25	2.25	10/21/2021	Excavated	1	<49.9	<49.9	<49.9	<49.9	<49.9	1,180
SW-36B @ 2.25	2.25	10/21/2021	Excavated	1	--	--	--	--	--	787
SW-36C @ 2.25	2.25	10/21/2021	In Situ	1	--	--	--	--	--	180
SW-37 @ 2.25	2.25	10/7/2021	In Situ	1	<49.9	<49.9	<49.9	<49.9	<49.9	63.6
SW-43 @ 8*	8.0	11/4/2021	In Situ	1	<49.9	<49.9	<49.9	<49.9	<49.9	360
SW-44 @ 8*	8.0	11/4/2021	In Situ	1	<49.9	50.2	50.2	<49.9	50.2	390
SW-45 @ 8	8.0	11/4/2021	In Situ	1	<49.8	<49.8	<49.8	<49.8	<49.8	163
Area 2 Floor Confirmation Samples										
CS-75 @ 3	3.0	10/6/2021	In Situ	2	<49.9	53.8	53.8	<49.9	53.8	--
CS-76 @ 3	3.0	10/6/2021	Excavated	2	<49.8	326	326	<49.8	326	--
CS-76 @ 4.5	4.5	10/19/2021	In Situ	2	<49.9	349	349	59.1	408	--
CS-77 @ 3	3.0	10/6/2021	Excavated	2	764	3,350	4,114	417	4,530	--
CS-77 @ 4.5	4.5	10/19/2021	In Situ	2	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-78 @ 3	3.0	10/6/2021	Excavated	2	289	2,220	2,509	271	2,780	--
CS-78 @ 4.5	4.5	10/19/2021	In Situ	2	<49.8	409	409	71.4	480	--
CS-79 @ 3	3.0	10/6/2021	Excavated	2	<49.9	1,140	1,140	123	1,260	--
CS-79 @ 4.5	4.5	10/19/2021	Excavated	2	1,070	3,480	4,550	418	4,970	--
CS-79 @ 5.5	5.5	10/19/2021	In Situ	2	<49.9	336	336	62.5	399	--
CS-80 @ 3	3.0	10/6/2021	Excavated	2	<50.0	210	210	<50.0	210	--
CS-80 @ 4.5	4.5	10/19/2021	In Situ	2	<49.8	<49.8	<49.8	<49.8	<49.8	--
CS-81 @ 3	3.0	10/6/2021	Excavated	2	<50.0	511	511	64.3	575	--
CS-81 @ 4.5	4.5	10/19/2021	In Situ	2	<49.8	<49.8	<49.8	<49.8	<49.8	--
CS-82 @ 3	3.0	10/6/2021	In Situ	2	<49.8	55.5	55.5	<49.8	55.5	--
Area 2 Sidewall Confirmation Samples										
SW-20 @ 1.5	1.5	10/1/2021	In Situ	2	<49.8	<49.8	<49.8	<49.8	<50.0	--
SW-21 @ 1.5	1.5	10/1/2021	In Situ	2	<50.0	<50.0	<50.0	<50.0	<50.0	--
SW-22 @ 1.5	1.5	10/1/2021	In Situ	2	<49.9	<49.9	<49.9	<49.9	<50.0	--
Area 3 Floor Confirmation Samples										
CS-66 @ 4.5	4.5	10/6/2021	In Situ	3	<49.9	58.9	58.9	<49.9	58.9	--

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HOLLY ENERGY PARTNERS - OPERATING, L.P.
 Eunice EMSU Pipeline Release
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Sample ID	Sample Depth (feet bgs)	Sample Date	Soil Status	Area	TPH (GRO)	TPH (DRO)	TPH GRO & DRO	TPH (MRO)	Total TPH	Chloride
					(mg/kg)					
NMOCD Closure Criteria (Surface to 4 Feet bgs)					NA	NA	NA	NA	100	600
NMOCD Closure Criteria (Below 4 Feet bgs)					NA	NA	1,000	NA	2,500	20,000
CS-67 @ 4.5	4.5	10/6/2021	In Situ	3	<49.8	54.3	54.3	<49.8	54.3	--
CS-68 @ 4.5	4.5	10/6/2021	In Situ	3	<49.9	112	112	<49.9	112	--
CS-69 @ 4.5	4.5	10/6/2021	In Situ	3	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-70 @ 4.5	4.5	10/6/2021	In Situ	3	<49.9	<49.9	<49.9	<49.9	<49.9	--
CS-71 @ 4.5	4.5	10/6/2021	In Situ	3	<49.8	230	230	<49.8	230	--
CS-72 @ 4.5	4.5	10/6/2021	In Situ	3	<50.0	451	451	51.5	503	--
CS-73 @ 4.5	4.5	10/6/2021	In Situ	3	<49.9	57.1	57.1	<49.9	57.1	--
CS-74 @ 4.5	4.5	10/6/2021	In Situ	3	<49.8	142	142	<49.8	142	--
Area 3 Sidewall Confirmation Samples										
SW-17 @ 2.25	2.25	10/1/2021	In Situ	3	<49.9	<49.9	<49.9	<49.9	<50.0	--
SW-18 @ 2.25	2.25	10/1/2021	In Situ	3	<50.0	<50.0	<50.0	<50.0	<50.0	--
SW-19 @ 2.25	2.25	10/1/2021	In Situ	3	<49.9	<49.9	<49.9	<49.9	<50.0	--
SW-23 @ 2.25	2.25	10/1/2021	In Situ	3	<49.8	<49.8	<49.8	<49.8	<50.0	--
Area 4 Floor Confirmation Samples										
CS-60 @ 4.5	4.5	10/4/2021	Excavated	4	317	1,000	1,317	124	1,440	--
CS-60 @ 5.5	5.5	10/19/2021	In Situ	4	<49.8	467	467	54.1	521	--
CS-101 @5.5	5.5	10/19/2021	In Situ	4	<49.9	389	389	<49.9	389	--
CS-61 @ 4.5	4.5	10/4/2021	In Situ	4	<50.0	618	618	72.0	690	--
CS-62 @ 4.5	4.5	10/4/2021	In Situ	4	56.5	679	735.5	81.1	817	--
CS-63 @ 4.5	4.5	10/4/2021	In Situ	4	<49.8	136	136	<49.8	136	--
CS-64 @ 4.5	4.5	10/4/2021	In Situ	4	<49.9	145	145	<49.9	145	--
Area 4 Sidewall Confirmation Samples										
SW-24 @ 2.25	2.25	10/1/2021	In Situ	4	<49.8	<49.8	<49.8	<49.8	<50.0	--
SW-25 @ 2.25	2.25	10/1/2021	In Situ	4	<49.9	<49.9	<49.9	<49.9	<50.0	--
SW-26 @ 2.25	2.25	10/1/2021	In Situ	4	<49.9	<49.9	<49.9	<49.9	<50.0	--
SW-27 @ 2.25	2.25	10/1/2021	In Situ	4	<49.8	<49.8	<49.8	<49.8	<50.0	--
Area 5 Floor Confirmation Samples										
CS-52 @ 8	8.0	10/4/2021	In Situ	5	<49.9	<49.9	<49.9	<49.9	<49.9	--
CS-53 @ 8	8.0	10/4/2021	In Situ	5	<49.8	<49.8	<49.8	<49.8	<49.8	--
CS-54 @ 9	9.0	10/4/2021	Excavated	5	588	3,690	4,278	472	4,750	--
CS-54 @ 10	10.0	10/19/2021	In Situ	5	<50.0	59.1	59.1	<50.0	59.1	--
CS-55 @ 9	9.0	10/4/2021	Excavated	5	1,190	3,770	4,960	520	5,480	--
CS-55 @ 10	10.0	10/19/2021	In Situ	5	<49.9	52.8	52.8	<49.9	52.8	--
CS-56 @ 8	8.0	10/4/2021	In Situ	5	<49.9	<49.9	<49.9	<49.9	<49.9	--

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 Eunice EMSU Pipeline Release
 NMOCD Tracking No.: nAPP2102856493

Sample ID	Sample Depth (feet bgs)	Sample Date	Soil Status	Area	TPH (GRO)	TPH (DRO)	TPH GRO & DRO	TPH (MRO)	Total TPH	Chloride
					(mg/kg)					
NMOCD Closure Criteria (Surface to 4 Feet bgs)					NA	NA	NA	NA	100	600
NMOCD Closure Criteria (Below 4 Feet bgs)					NA	NA	1,000	NA	2,500	20,000
CS-57 @ 8	8.0	10/4/2021	In Situ	5	<49.8	<49.8	<49.8	<49.8	<49.8	--
CS-58 @ 9	9.0	10/4/2021	In Situ	5	64.8	562	626.8	65.0	692	--
CS-59 @ 9	9.0	10/4/2021	Excavated	5	505	1,470	1,975	<249	1,980	--
CS-59 @ 10	10.0	10/19/2021	In Situ	5	<50.0	69.3	69.3	<50.0	69.3	--
Area 5 Sidewall Confirmation Samples										
SW-28 @ 2	2.0	10/1/2021	In Situ	5	<50.0	<50.0	<50.0	<50.0	<50.0	--
SW-28 @ 5	5.0	10/1/2021	In Situ	5	<49.9	<49.9	<49.9	<49.9	<50.0	--
SW-29 @ 2	2.0	10/1/2021	In Situ	5	<49.8	<49.8	<49.8	<49.8	<50.0	--
SW-29 @ 5	5.0	10/1/2021	In Situ	5	<50.0	<50.0	<50.0	<50.0	<50.0	--
SW-30 @ 2	2.0	10/1/2021	In Situ	5	<49.8	<49.8	<49.8	<49.8	<50.0	--
SW-30 @ 5	5.0	10/1/2021	In Situ	5	<49.8	<49.8	<49.8	<49.8	<50.0	--
SW-31 @ 2	2.0	10/1/2021	In Situ	5	<49.9	<49.9	<49.9	<49.9	<50.0	--
SW-31 @ 5	5.0	10/1/2021	In Situ	5	<49.9	<49.9	<49.9	<49.9	<50.0	--
SW-38 @ 9*	9.0	10/19/2021	In Situ	5	<50.0	414	414	54.9	469	--
SW-39 @ 9*	9.0	10/19/2021	In Situ	5	<49.8	<49.8	<49.8	<49.8	<49.8	--
SW-40 @ 9*	9.0	10/19/2021	In Situ	5	<49.8	<49.8	<49.8	<49.8	<49.8	--
SW-41 @ 9*	9.0	10/19/2021	In Situ	5	<50.0	<50.0	<50.0	<50.0	<50.0	--
SW-42 @ 6*	6.0	10/19/2021	In Situ	5	<49.9	<49.9	<49.9	<49.9	<49.9	--
SW-46 @ 9*	9.0	10/19/2021	In Situ	5	<50.0	<50.0	<50.0	<50.0	<50.0	--
Area 6 Floor Confirmation Samples										
CS-45 @ 4.5	4.5	9/30/2021	In Situ	6	<49.9	<49.9	<49.9	<49.9	<50.0	--
CS-46 @ 4.5	4.5	9/30/2021	In Situ	6	<49.9	<49.9	<49.9	<49.9	<50.0	--
CS-47 @ 4.5	4.5	9/30/2021	In Situ	6	<49.8	<49.8	<49.8	<49.8	<50.0	--
CS-48 @ 4.5	4.5	9/30/2021	In Situ	6	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-49 @ 4.5	4.5	9/30/2021	In Situ	6	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-50 @ 4.5	4.5	9/30/2021	In Situ	6	<49.8	<49.8	<49.8	<49.8	<50.0	--
CS-51 @ 4.5	4.5	9/30/2021	In Situ	6	<50.0	<50.0	<50.0	<50.0	<50.0	--
Area 6 Sidewall Confirmation Samples										
SW-14 @ 2.25	2.25	9/30/2021	In Situ	6	<49.9	<49.9	<49.9	<49.9	<50.0	--
SW-15 @ 2.25	2.25	9/30/2021	In Situ	6	<49.9	<49.9	<49.9	<49.9	<50.0	--
SW-16 @ 2.25	2.25	9/30/2021	In Situ	6	<49.9	<49.9	<49.9	<49.9	<50.0	--
Area 7 Floor Confirmation Samples										
CS-39 @ 3**	3.0	9/30/2021	Excavated	7	1,410	3,580	4,990	287	5,280	--
CS-99 @ 4.5**	4.5	10/19/2021	In Situ	7	<50.0	91	91	<50.0	91	--

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 NMOCD Tracking No.: nAPP2102856493

Sample ID	Sample Depth (feet bgs)	Sample Date	Soil Status	Area	TPH (GRO)	TPH (DRO)	TPH GRO & DRO	TPH (MRO)	Total TPH	Chloride
					(mg/kg)					
NMOCD Closure Criteria (Surface to 4 Feet bgs)					NA	NA	NA	NA	100	600
NMOCD Closure Criteria (Below 4 Feet bgs)					NA	NA	1,000	NA	2,500	20,000
CS-100 @ 4.5**	4.5	10/19/2021	In Situ	7	<49.8	142	142	<49.8	142	--
CS-40 @ 3	3.0	9/30/2021	In Situ	7	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-41 @ 3	3.0	9/30/2021	In Situ	7	<49.9	<49.9	<49.9	<49.9	<50.0	--
CS-42 @ 3	3.0	9/30/2021	In Situ	7	<49.8	<49.8	<49.8	<49.8	<50.0	--
CS-43 @ 3	3.0	9/30/2021	In Situ	7	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-44 @ 3	3.0	9/30/2021	In Situ	7	<49.9	<49.9	<49.9	<49.9	<50.0	--
Area 7 Sidewall Confirmation Samples										
SW-12 @ 1.5	1.5	9/30/2021	In Situ	7	<49.8	<49.8	<49.8	<49.8	<50.0	--
SW-13 @ 1.5	1.5	9/30/2021	In Situ	7	<50.0	<50.0	<50.0	<50.0	<50.0	--
Area 8 Floor Confirmation Samples										
CS-22 @ 4.5	4.5	9/29/2021	In Situ	8	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-23 @ 4.5	4.5	9/29/2021	In Situ	8	<49.8	<49.8	<49.8	<49.8	<50.0	--
CS-24 @ 4.5	4.5	10/6/2021	In Situ	8	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-25 @ 4.5	4.5	10/6/2021	In Situ	8	<49.8	<49.8	<49.8	<49.8	<49.8	--
CS-26 @ 4.5	4.5	9/29/2021	In Situ	8	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-27 @ 4.5	4.5	9/29/2021	In Situ	8	<49.8	<49.8	<49.8	<49.8	<50.0	--
CS-28 @ 4.5	4.5	9/29/2021	In Situ	8	<49.8	<49.8	<49.8	<49.8	<50.0	--
CS-29 @ 4.5	4.5	9/29/2021	In Situ	8	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-30 @ 4.5	4.5	9/29/2021	In Situ	8	<49.9	<49.9	<49.9	<49.9	<50.0	--
CS-31 @ 4.5	4.5	9/29/2021	In Situ	8	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-32 @ 4.5	4.5	9/29/2021	In Situ	8	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-33 @ 4.5	4.5	9/29/2021	In Situ	8	<49.8	222	222	<49.8	222	--
Area 8 Sidewall Confirmation Samples										
SW-6 @ 2.25	2.25	9/29/2021	In Situ	8	<49.9	<49.9	<49.9	<49.9	<50.0	--
SW-10 @ 2.25	2.25	9/29/2021	In Situ	8	<50.0	<50.0	<50.0	<50.0	<50.0	--
SW-11 @ 2.25	2.25	9/29/2021	In Situ	8	<49.9	<49.9	<49.9	<49.9	<50.0	--
Area 9 Floor Confirmation Samples										
CS-34 @ 3	3.0	9/30/2021	In Situ	9	<49.8	<49.8	<49.8	<49.8	<50.0	--
CS-35 @ 3	3.0	9/30/2021	In Situ	9	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-36 @ 3	3.0	9/30/2021	In Situ	9	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-37 @ 3	3.0	9/30/2021	In Situ	9	<49.8	<49.8	<49.8	<49.8	<50.0	--
CS-38 @ 3	3.0	9/30/2021	In Situ	9	<50.0	<50.0	<50.0	<50.0	<50.0	--
Area 9 Sidewall Confirmation Samples										
SW-7 @ 1.5	1.5	9/29/2021	In Situ	9	<49.9	<49.9	<49.9	<49.9	<50.0	--

TABLE 2
SUMMARY OF CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS
HOLLY ENERGY PARTNERS - OPERATING, L.P.
 Eunice EMSU Pipeline Release
 NMOCD Tracking No.: nAPP2102856493

Sample ID	Sample Depth (feet bgs)	Sample Date	Soil Status	Area	TPH (GRO)	TPH (DRO)	TPH GRO & DRO	TPH (MRO)	Total TPH	Chloride
					(mg/kg)					
NMOCD Closure Criteria (Surface to 4 Feet bgs)					NA	NA	NA	NA	100	600
NMOCD Closure Criteria (Below 4 Feet bgs)					NA	NA	1,000	NA	2,500	20,000
SW-8 @ 1.5	1.5	9/29/2021	In Situ	9	<49.8	<49.8	<49.8	<49.8	<50.0	--
SW-9 @ 1.5	1.5	9/29/2021	In Situ	9	<49.8	<49.8	<49.8	<49.8	<50.0	--
Area 10 Floor Confirmation Samples										
CS-10 @ 4.5	4.5	9/28/2021	In Situ	10	<49.9	56.3	56.3	<49.9	56.3	--
CS-11 @ 4.5	4.5	9/28/2021	In Situ	10	<49.9	<49.9	<49.9	<49.9	<50.0	--
CS-12 @ 4.5	4.5	9/28/2021	In Situ	10	<49.8	<49.8	<49.8	<49.8	<50.0	--
CS-13 @ 4.5	4.5	9/28/2021	In Situ	10	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-14 @ 4.5	4.5	9/28/2021	In Situ	10	<49.9	<49.9	<49.9	<49.9	<50.0	--
CS-15 @ 4.5	4.5	9/28/2021	In Situ	10	205	481	686	52.6	739	--
CS-16 @ 4.5***	4.5	9/28/2021	In Situ	10	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-16 @ 5***	5.0	9/28/2021	In Situ	10	<49.9	<49.9	<49.9	<49.9	<50.0	--
CS-17 @ 4.5	4.5	9/28/2021	In Situ	10	<49.9	<49.9	<49.9	<49.9	<49.9	--
CS-18 @ 4.5	4.5	9/28/2021	In Situ	10	<49.8	245	245	<49.8	245	--
CS-19 @ 4.5***	4.5	9/28/2021	In Situ	10	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-19 @ 5***	5.0	9/28/2021	In Situ	10	<49.9	<49.9	<49.9	<49.9	<50.0	--
CS-20 @ 4.5	4.5	9/28/2021	In Situ	10	<49.9	<49.9	<49.9	<49.9	<49.9	--
CS-21 @ 4.5***	4.5	9/28/2021	In Situ	10	<49.8	<49.8	<49.8	<49.8	<50.0	--
CS-21 @ 5***	5.0	9/28/2021	In Situ	10	<50.0	<50.0	<50.0	<50.0	<50.0	--
Area 10 Sidewall Confirmation Samples										
SW-4 @ 2.25	2.25	9/29/2021	In Situ	10	<49.8	<49.8	<49.8	<49.8	<50.0	--
SW-5 @ 2.25	2.25	9/29/2021	In Situ	10	<50.0	<50.0	<50.0	<50.0	<50.0	--
Area 11 Floor Confirmation Samples										
CS-1 @ 3	3.0	9/28/2021	In Situ	11	<49.9	<49.9	<49.9	<49.9	<50.0	--
CS-2 @ 3	3.0	9/28/2021	In Situ	11	<49.9	<49.9	<49.9	<49.9	<50.0	--
CS-3 @ 3	3.0	9/28/2021	In Situ	11	<49.8	<49.8	<49.8	<49.8	<50.0	--
CS-4 @ 3	3.0	9/28/2021	In Situ	11	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-5 @ 3	3.0	9/28/2021	In Situ	11	<50.0	60.3	60.3	<50.0	60.3	--
CS-6 @ 3	3.0	9/28/2021	In Situ	11	<49.8	<49.8	<49.8	<49.8	<50.0	--
CS-7 @ 3	3.0	9/28/2021	Excavated	11	<50.0	189	189	<50.0	189	--
CS-7 @ 3.5	3.5	9/28/2021	Excavated	11	61.8	474	535.8	57.0	593	--
CS-7 @ 4.5	4.5	10/19/2021	In Situ	11	<50.0	140	140	<50.0	140	--
CS-8 @ 3	3.0	9/28/2021	In Situ	11	<49.8	<49.8	<49.8	<49.8	<50.0	--
CS-9 @ 3	3.0	9/28/2021	In Situ	11	<50.0	<50.0	<50.0	<50.0	<50.0	--
CS-97 @ 4.5	4.5	10/19/2021	In Situ	11	<49.9	154	154	<49.9	154	--

TABLE 2
SUMMARY OF CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS
HOLLY ENERGY PARTNERS - OPERATING, L.P.
Eunice EMSU Pipeline Release
NMOCD Tracking No.: nAPP2102856493

Sample ID	Sample Depth (feet bgs)	Sample Date	Soil Status	Area	TPH (GRO)	TPH (DRO)	TPH GRO & DRO	TPH (MRO)	Total TPH	Chloride
					(mg/kg)					
NMOCD Closure Criteria (Surface to 4 Feet bgs)					NA	NA	NA	NA	100	600
NMOCD Closure Criteria (Below 4 Feet bgs)					NA	NA	1,000	NA	2,500	20,000
CS-98 @ 4.5	4.5	10/19/2021	In Situ	11	<50.0	128	128	<50.0	128	--
Area 11 Sidewall Confirmation Samples										
SW-1 @ 1.5	1.5	9/28/2021	In Situ	11	<50.0	<50.0	<50.0	<50.0	<50.0	--
SW-2 @ 1.5	1.5	9/28/2021	In Situ	11	<50.0	<50.0	<50.0	<50.0	<50.0	--
SW-3 @ 1.5	1.5	9/28/2021	In Situ	11	<49.8	70.9	70.9	<49.8	70.9	--

Notes:

- bgs below ground surface
- BTEX benzene, toluene, ethylbenzene, xylenes
- DRO Diesel Range Organics
- GRO Gasoline Range Organics
- MRO Motor Oil Range Organics
- mg/kg milligrams per kilogram
- TPH Total Petroleum Hydrocarbons
- NA Not Applicable - No NMOCD Closure Criteria for parameter
- NMOCD New Mexico Oil Conservation Division
- CS Bottom Sample
- SW Sidewall Sample
- Bold** Parameter detected above the laboratory reporting limit
- Yellow** Concentration is above the applicable NMOCD Closure Criteria
- Pink** Soil excavated and removed
- Not Analyzed
- < Parameter not detected above laboratory reporting limit
- * Sidewall sample collected from interior of excavation area along sidewall of deeper section of excavation (i.e., not from periphery of excavation)
- ** Bottom sample CS-39 @ 3 feet bgs resolved and replaced by two underlying and adjacent bottom samples CS-99 @ 4.5 feet bgs and CS-100 @ 4.5 feet bgs
- *** Bottom sample locations CS-16, CS-19, and CS-21 collected at 4.5 feet bgs from excavation bottom and from 5 feet bgs from test trenches beneath excavation bottom



REMEDIATION SUMMARY AND SITE CLOSURE REQUEST

Eunice EMSU 6-Inch Pipeline Release
Latitude 32.492667, Longitude -103.256611
Lea County, New Mexico
NMOCD No. nAPP2102856493

February 25, 2022

Prepared For:

Holly Energy Partners – Operating, L.P.
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Prepared by:
Russell Sebring
Senior Project Manager

A handwritten signature in blue ink, appearing to read "B. Gilbert".

Reviewed and Approved by:
Bryan Gilbert, P.G.
Austin Office ECW Practice Leader

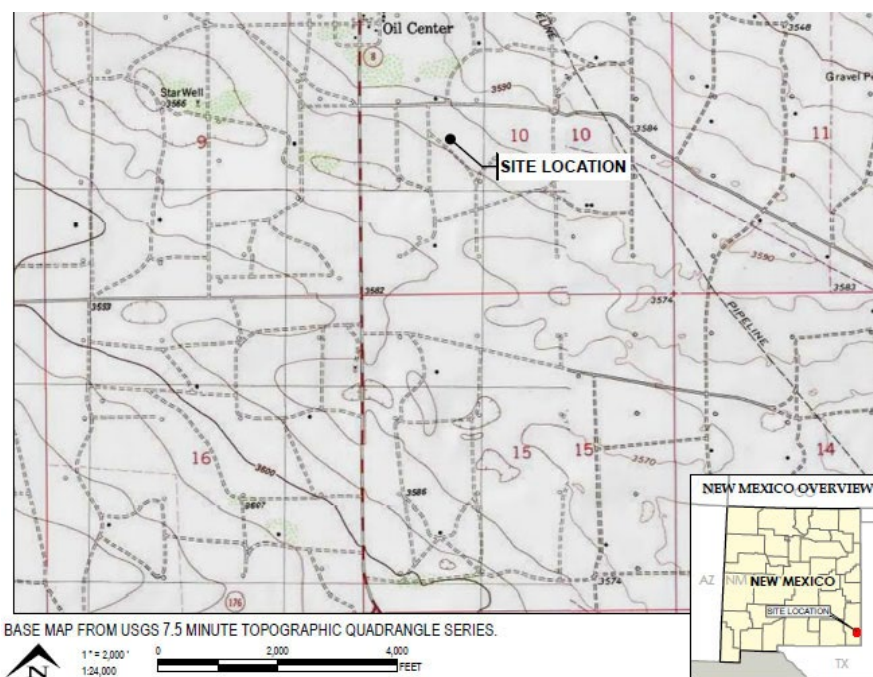




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APPENDICES

- Appendix A Release Notification and Corrective Action Form (NMOCD Form C-141)
- Appendix B Disposal Tickets and Transporter Manifests
- Appendix C Soil Boring Logs (SB-1 and SB-2)
- Appendix D Laboratory Analytical Reports
- Appendix E Photographic Documentation



1.0 INTRODUCTION

TRC Environmental Corporation (TRC), on behalf of Holly Energy Partners – Operating, L.P. (HEP), has prepared this *Remediation Summary and Site Closure Request* for a crude oil release at the Eunice EMSU 6-Inch Pipeline (site). 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 release point are 32.493419, -103.257089. The GPS coordinates for the approximate center of the affected soil footprint are 32.492667, -103.256611. The area surrounding the site is used for oil and gas exploration and production activities. The location of the site is depicted on Figure 1.

2.0 BACKGROUND

2.1 Release Discovery and Initial Release Response

On January 26, 2021, a crude oil release was discovered near HEP's Eunice EMSU 6-Inch Pipeline at the above-referenced GPS coordinates. The Eunice EMSU 6-Inch Pipeline was taken out of service after the release. Initial verbal notification of the release was provided to Gilbert Cordero of the New Mexico Oil Conservation Division (NMOCD) by 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. An updated and signed Form C-141 is included in Appendix A. The volume of crude oil released was approximately 821 barrels (bbls). The NMOCD assigned tracking number nAPP2102856493 to the release. A vacuum truck was dispatched in response to the release, and approximately 390 bbls of crude oil were recovered during initial response activities and returned to the nearest production vessel.

The release location relative to nearby wells, wetlands and floodplains, and karst potential are depicted in Figures 2 through 4, respectively. The affected soil footprint (Release Area) is approximately 19,275 square feet and is shown on Figure 5A.

Immediately after the release, between January 27 and 31, 2021, HEP excavated the upper 1 to 3 feet of affected soil throughout the Release Area based on visual observations of crude oil-stained soil. Approximately 1,380 cubic yards (cy) of affected soil were excavated and stockpiled on plastic sheeting pending waste characterization and disposal. Two samples were collected from the stockpiled soil on February 2, 2021, for waste characterization and profiling. The stockpile analytical results are shown on Table 1. The stockpile of affected soil was transported to J&L Landfarm Inc., in Hobbs, New Mexico under manifest for disposal as non-hazardous waste in May 2021. The volume of excavated soil was initially estimated as 1,500 cy in the June 2021 *Site Characterization Report and Remediation Workplan* (Remediation Workplan); the revised volume of 1,380 cy is based on disposal tickets and transporter manifests. The May 2021 waste manifests are provided in Appendix B.

2.2 March 2021 Delineation Activities

Delineation activities were conducted on March 18, 2021, to assess the extent of remaining affected soil within the Release Area. Soil samples SS-1 to SS-11 were collected from the bottom of the January 2021 excavation, and soil sample SS-12 was collected east of the January 2021 excavation where surface soil staining was observed associated with parked equipment. A total of 11 test trenches (TT-1 through TT-11) were advanced using a backhoe



across the Release Area in the locations of soil samples SS-1 through SS-11 to assess the vertical extent of affected soil. The test trenches were approximately 5 to 7 feet long and 3 feet wide. The total depth of the trenches ranged from 1.5 feet below ground surface (bgs) to 7.5 feet bgs, as measured from original ground surface (not the bottom of the January 2021 excavation). The test trenches were excavated until a hard caliche layer was encountered which prevented further backhoe excavation (refusal). Lithology and field observations of hydrocarbons including odor, staining, and photoionization detector (PID) readings were recorded every 1 vertical foot during trench excavation. Soil samples were collected at 1-foot intervals during trench excavation. Following investigation and soil sampling activities, the trenches were backfilled with the originally excavated material. The locations of the March 2021 trenches and soil samples are depicted on Figure 5A.

General site lithology was observed to consist of unconsolidated red/brown, coarse, well-sorted sand to depths of approximately 1 to 3 feet underlain by soft to hard caliche until refusal was encountered at depths of 1.5 to 7.5 feet bgs. The depth to the caliche was initially reported as 1 to 7 feet bgs in the June 2021 Remediation Workplan; the updated depth of 1 to 3 feet bgs to the caliche is based on further review of site lithology and the March 2021 test trench logs.

Soil samples were submitted to Eurofins Xenco Laboratory in Midland, Texas for laboratory analysis of total petroleum hydrocarbons (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. Initially, the uppermost two to three soil samples from each test trench were analyzed, and the results were compared to NMOCD Closure Criteria (Closure Criteria). If concentrations of the initial samples exceeded Closure Criteria, deeper samples were analyzed until concentrations were below Closure Criteria or until the bottommost sample (i.e., at backhoe refusal) from each location was analyzed. The March 2021 soil sample analytical results are presented on Table 1.

TPH was detected at concentrations above the Closure Criteria in the uppermost (shallowest) soil sample at each sample/test trench location within the Release Area and at surface sample location SS-12, which was collected east of the Release Area where oil-stained surface soils were observed adjacent to but outside the Release Area. Chloride was detected at concentrations above the Closure Criterion at depths of 3 and 4 feet bgs at the sample/test trench SS-1/TT-1 location, which is located closest to the Release Area. Underlying samples with TPH and/or chloride concentrations below the Closure Criteria provided vertical delineation of affected soil at test trenches TT-1 (at 5 feet bgs), TT-2 (at 3 feet bgs), TT-4 (at 5 feet bgs), TT-7 (at 3 feet bgs), TT-9 (at 3 feet bgs), TT-10 (at 5 feet bgs), and TT-11 (at 3 feet bgs). Benzene and total BTEX concentrations were not detected above the Closure Criteria in any of the March 2021 samples. The March 2021 delineation results were summarized in the June 2021 Remediation Workplan.

As discussed below in Section 4.2, it was determined that the soil staining observed at surface sample location SS-12, located east of the Release Area, was associated with a release from a nearby third-party pipeline (Energy Transfer) and is not related to the Eunice EMSU 6-Inch Pipeline Release site. HEP notified Energy Transfer who subsequently confirmed that a release had occurred from their pipeline. No additional delineation or excavation associated with surface sample location SS-12 was conducted by HEP. The Energy Transfer pipeline is depicted on Figure 5A (identified as "ETC Pipeline").



2.3 June 2021 Site Characterization Report and Remediation Workplan

The Remediation Workplan was submitted to the NMOCD on June 25, 2021. The report provided information regarding the initial release response, soil sampling, completion of test trenches, and determination of the Closure Criteria applicable to the site, and proposed remediation activities as follows:

- Excavation activities would extend horizontally to the margins of the affected area until PID readings, as well as visual and olfactory evidence, indicated TPH concentrations were likely below Closure Criteria. In areas that were vertically delineated by test trench samples, the excavation would extend vertically to the depth of vertical delineation. In areas where vertical delineation of TPH was not achieved prior to encountering the hard caliche layer (i.e., areas represented by SS-3/TT-3, SS-5/TT-5, SS-6/TT-6, and SS-8/TT-8), the excavation would extend into the hard caliche layer until mechanical excavation was no longer feasible, and confirmation samples would be collected for laboratory analysis. As discussed below in Section 4.2, it was determined that the soil staining observed at surface sample location SS-12, located east of the Release Area, was associated with a release from a nearby third-party pipeline and was not related to the Eunice EMSU 6-Inch Pipeline Release site.
- Four pipelines and one flowline are present within the affected area as shown on Figure 5A. An attempt would be made to remove the affected soil from around the existing subsurface pipelines either by hand and/or hydro-excavation.
- Confirmation soil samples would be collected from the bottom and sidewalls of the excavation to confirm that TPH and/or chloride soil concentrations in exceedance of Closure Criteria were removed. Pursuant to 19.15.29.12(D) NMAC, confirmation samples would consist of five-point composite samples, and discrete grab samples would be collected from any wet or discolored areas. One confirmation soil sample would be collected per 200 square feet of excavation bottom. One sidewall confirmation soil sample would be collected per 100 linear feet of excavation sidewall. Each confirmation sample would be analyzed for TPH by EPA Method 8015. Confirmation samples collected around the SS-1/TT-1 location (i.e., within Area 1) would be additionally analyzed for chloride by EPA Method 300.0, because this was the only area where chloride exceeded the Closure Criterion during delineation activities.
- If confirmation sample TPH or chloride concentrations exceeded Closure Criteria, additional excavation would be performed until: (1) additional confirmation samples indicated TPH and chloride concentrations were below Closure Criteria; (2) backhoe refusal was encountered in the hard caliche layer; or (3) further excavation around the pipelines was not feasible. It should be noted that because a larger excavator was used during excavation activities conducted from September through December 2021, refusal was not encountered and all site soils (including caliche) above Closure Criteria were removed. Also, all soils above Closure Criteria around and beneath the pipelines was removed.
- If confirmation sample TPH or chloride concentrations exceeded the Closure Criteria and further excavation was not feasible within the hard caliche layer and/or around the pipelines, these areas would be sprayed with MicroBlaze® to promote natural attenuation. It should be noted that because a larger excavator was used, refusal was not encountered during remedial activities conducted from September to December



2021. All soils (including caliche) above Closure Criteria were excavated and removed, including adjacent to and beneath the underground pipelines. Thus, application of MicroBlaze® was not required.

- The excavation would be backfilled to grade with clean fill material once confirmation sample analytical results were below the Closure Criteria. Pursuant to 19.15.29.13 NMAC, the affected surface areas would 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 would be stockpiled on plastic sheeting during the excavation, characterized, and disposed at an NMOCD-approved disposal facility at the completion of excavation activities.

The June 2021 Remediation Workplan was approved by the NMOCD in a July 16, 2021, e-mail with the following conditions:

- “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.”
- “Various sample points do not indicate closure criteria sampling vertically. Please ensure on your next report you prove closure past contamination depth.”

This *Remediation Summary and Site Closure Request* presents information regarding the additional delineation and remediation activities conducted to achieve NMOCD closure of the site and also addresses NMOCD’s conditions emailed on July 16, 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 such as distance to the nearest surface water body or wetland, karst potential, distance to nearest flood-plain, or whether the site is located within incorporated municipal boundaries or a defined freshwater field. The evaluation of the applicable Closure Criteria was documented in the June 2021 Remediation Workplan. A summary of this evaluation is provided below.

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 site, as depicted on Figure 2. The shallowest recorded depth to groundwater of these wells is 161 feet bgs in domestic water well L-14815, located 0.5 mile to the northwest of the site. This demonstrates that the depth to groundwater beneath the site is greater than 100 feet bgs. Additionally, and as shown on Figure 2, the site is not located in close proximity to a waterway, spring, permanent residence, church, school, hospital, or domestic water well.

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 a “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. Figures 3 depicts the wetlands and FEMA floodplain information while Figure 4 depicts the karst potential data.



A summary of the NMOCD Closure Criteria is provided in the table below.

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: 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
 NA = not applicable
 BTEX = benzene, toluene, ethylbenzene, and total xylenes

As discussed above, depth to groundwater is over 100 feet bgs and the 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. Therefore, the Closure Criteria applicable for the site are summarized below.

- Surface to 4 feet bgs:
 - Benzene – 10 mg/kg
 - Total BTEX – 50 mg/kg
 - Total TPH – 100 mg/kg
 - Chloride – 600 mg/kg
- Greater than 4 feet bgs:
 - Benzene – 10 mg/kg
 - Total BTEX – 50 mg/kg
 - Total TPH – 2,500 mg/kg
 - TPH Gasoline Range Organics (GRO) + Diesel Range Organics (DRO) – 1,000 mg/kg
 - Chloride – 20,000 mg/kg

The Closure Criteria applicable for the site are also shown on Tables 1 and 2.

4.0 SUMMARY OF REMEDIATION ACTIVITIES

Delineation, remediation, disposal, backfilling, and restoration activities performed at the site from September to December 2021 are summarized below and are further described in Sections 4.1 through 4.4.

- On September 15, 2021, two soil borings (SB-1 and SB-2) were drilled using air rotary drilling methods to delineate the total depth of affected soil. Additionally, test trench TT-5, which is co-located with boring SB-2, was re-excavated on September 21, 2021, to provide additional vertical delineation of affected soils in that location. The locations of



soil borings SB-1 and SB-2 and test trench TT-5 are shown on Figure 5A. September 2021 delineation activities are further described below in Section 4.1.

- From September 27 through November 4, 2021, additional excavation was performed within the Release Area and confirmation soil samples were collected from the excavation bottom and sidewalls. The lateral and vertical extents of the excavation were extended as needed until TPH and/or chloride concentrations in confirmation samples were below Closure Criteria. Approximately 3,360 cy of affected soil were excavated from September to November 2021 (not including the 1,380 cy of affected soil excavated in January 2021).
- From November 1 through November 12, 2021, stockpiled excavated soil was transported to J&L Landfarm Inc. in Hobbs, New Mexico for disposal under the non-hazardous waste profile previously approved for the initial soil excavation (the 1,380 cy of stockpiled soil excavated in January 2021 and transported to J&L Landfarm Inc. in May 2021). Waste transportation and disposal activities are further described below in Section 4.3.
- From November 1 through November 17, 2021, the excavated area was backfilled with clean fill. Backfilling is further described below in Section 4.4.
- On December 21, 2021, re-seeding and surface restoration was performed in areas disturbed by remedial activities. Re-seeding and restoration are further described in below in Section 4.4.

Delineation and remediation activities performed at the site from January to March 2021 are summarized in the June 2021 Remediation Workplan.

4.1 September 2021 Delineation Activities

On September 15, 2021, two soil borings were drilled using air rotary drilling methods to vertically delineate the total depth of soil above Closure Criteria in accordance with NMOCD's July 16, 2021, e-mail. Soil boring SB-1 was drilled in Area 8 at or immediately adjacent to SS-8/TT-8 to a total depth of 17 feet bgs, and soil boring SB-2 was drilled in Area 5 at or immediately adjacent to SS-5/TT-5 to a total depth of 22 feet bgs. Soil samples were collected using a 2-foot split spoon sampler. The locations of soil borings SB-1 and SB-2 are shown on Figure 5A. Soil samples were collected for laboratory analysis continuously from 3 to 7 feet bgs in both borings, and additionally from 10 to 11 feet bgs, 11 to 12 feet bgs, 15 to 16 feet bgs, and 16 to 17 feet bgs in boring SB-2. Upon completion, the boreholes were plugged with hydrated bentonite chips. Soil samples were submitted to Eurofins Xenco Laboratory in Midland, Texas for laboratory analysis of TPH by EPA Method 8015, BTEX by EPA Method 8260, and chloride by EPA Method 300.0.

The lithology observed in borings SB-1 and SB-2 was generally consistent with the lithology observed in the March 2021 test trenches. Because the borings were drilled within the existing January 2021 excavation, the upper 2 feet of soil had been removed. Caliche was observed to depths of 5 feet bgs, underlain by fine sand to depths of 13 to 16 feet bgs, then underlain by very hard caliche to the total depth investigated of 22 feet bgs. Boring logs for soil borings SB-1 and SB-2 are included in Appendix C.

Soil sample analytical results for SB-1 and SB-2 are summarized on Table 1. As shown, TPH was detected at concentrations above the Closure Criteria in boring SB-1 from 3 to 4 feet bgs



and in boring SB-2 from 3 to 7 feet bgs. Underlying samples with TPH concentrations below the Closure Criteria provided vertical delineation of affected soil in both borings, including three consecutive samples from the 4 to 7 feet bgs interval in SB-1 and four samples from the 10 to 17 feet bgs interval in SB-2. Benzene, total BTEX, and chloride were not detected above Closure Criteria in any of the samples collected from borings SB-1 and SB-2.

On September 21, 2021, test trench TT-5, which was sampled to a depth of 3 feet bgs in March 2021 and is co-located with boring SB-2, was re-excavated to a depth of approximately 10 feet bgs to provide further vertical delineation of affected soils within the interval of 7 to 10 feet bgs. The 7 to 10 feet bgs interval was not sampled in boring SB-2. The locations of test trench TT-5 and boring SB-2 are shown on Figure 5A. Soil samples were continuously collected for laboratory analysis from 7 to 10 feet bgs. Upon completion, the test trench was backfilled with the excavated material (pending eventual excavation and removal during remedial activities conducted from September 27 through November 4, 2021). Soil samples were submitted to Eurofins Xenco Laboratory in Midland, Texas for laboratory analysis of TPH by EPA Method 8015, BTEX by EPA Method 8260, and chloride by EPA Method 300.0.

The September 2021 soil sample analytical results for TT-5 are summarized on Table 1. As shown, TPH was detected at concentrations above the Closure Criteria in all three samples collected from 7 to 10 feet bgs. Underlying samples with TPH concentrations below the Closure Criteria at co-located boring SB-2 (from 10 to 17 feet bgs) provided vertical delineation of affected soil at this location. Benzene, total BTEX, and chloride were not detected above Closure Criteria in any of the September 2021 samples collected from test trench TT-5.

The laboratory analytical reports and chain-of-custody documentation for the delineation samples collected in September 2021 are provided in Appendix D. Laboratory analytical reports for samples collected from February through March 2021 were provided in the June 2021 Remediation Workplan.

4.2 Remedial Activities

The Release Area was approximately 19,275 square feet and was located generally southeast, south, and southwest of the release location. The Release Area was divided into Areas 1 through 11 based on the locations of March 2021 soil samples SS-1 through SS-11 and test trenches TT-1 through TT-11 in order to better manage remediation activities. The Release Area and final excavation extents for Areas 1 through 11 are shown on Figures 5A, 5B, and 5C.

The soil staining observed near surface sample SS-12 was determined to be associated with a release from a nearby third-party pipeline (Energy Transfer) and is not related to the Eunice EMSU 6-Inch Pipeline Release site. The area around sample SS-12 was not addressed as part of these remedial activities. HEP notified Energy Transfer who subsequently confirmed that a release had occurred from their pipeline. The Energy Transfer pipeline is depicted on Figure 5A (identified as "ETC Pipeline").

Several underground crude transmission lines, a natural gas pipeline, and a freshwater agricultural (livestock) line are located within the Release Area as follows:

- The HEP subsurface crude line is located within the northern portion of the Release Area; the line is currently inactive.



- One subsurface natural gas pipeline, operated by ETC, is located in the southeastern portion of the Release Area.
- One subsurface crude line, operated by Plains, is located in the southeastern portion of the Release Area.
- Two surface crude flowlines and one subsurface crude line, operated by XTO, are located north of the Release Area.
- One freshwater livestock line is located at the northwestern portion of the Release Area.

With the exception of the underground freshwater livestock line, which was unmarked/unknown and discovered during remediation activities, the underground lines were daylighted prior to excavation via hydro-excavation and potholing. The locations of the underground lines are shown on Figure 5A.

Remediation activities were conducted from September 27 through November 4, 2021, and included excavation of affected soil within or adjacent to the Release Area and confirmation sampling from the excavation bottom (also referred to as floor) and sidewalls. An excavator was used for excavation activities in areas away from underground lines, while hydro-excavation and/or excavation using hand tools were conducted in the immediate vicinity of and beneath underground lines. The excavation was extended laterally and vertically until PID readings and visual and olfactory evidence indicated TPH concentrations were likely to be below Closure Criteria, at which point confirmation samples were collected for laboratory analysis. Confirmation soil samples were collected and placed in laboratory-prepared containers, immediately placed on ice, and delivered to Eurofins Xenco Laboratory in Midland, Texas for analysis of TPH by EPA Method 8015M. Confirmation samples collected from Area 1 were additionally analyzed for chloride by EPA Method 300 with the following exceptions:

- Bottom sample location CS-87 at depths of 7.5 feet bgs, 8 feet bgs, 9 feet bgs, and 10 feet bgs were not analyzed for chloride because vertical delineation to below the Closure Criterion was already achieved in overlying samples collected at 4.5 feet bgs and 6.5 feet bgs.
- Bottom sample location CS-65 at a depth of 4.5 feet bgs was not analyzed for chloride due to the distance of the sample location (approximately 60 feet to the west-southwest) from sample/test trench location SS-1/TT-1, where chloride was initially detected above the Closure Criterion during March 2021 delineation activities.

Where confirmation sample analytical results indicated TPH and/or chloride concentrations were above Closure Criteria, additional excavation was performed until all subsequent confirmation samples exhibited TPH and/or chloride concentrations below Closure Criteria. As requested by NMOCD in their e-mail approval of the Remediation Workplan dated July 16, 2021, total TPH concentrations in sidewall samples collected along the excavation periphery were also evaluated to ensure concentrations were below 100 mg/kg, regardless of depth. Portions of Areas 1 and 5 required additional vertical excavation, thus interior sidewall samples were collected from the deeper excavations to demonstrate lateral compliance with Closure Criteria within the interior portion of the excavation. While Area 5 sidewall confirmation sample SW-38 at 9 feet bgs had a total TPH concentration of 469 mg/kg, this sample was collected from an interior sidewall and not from the excavation periphery sidewall, thus demonstrating compliance with the Closure Criterion (2,500 mg/kg for total TPH below 4 feet bgs) but not being subject to the 100 mg/kg excavation periphery objective. TPH concentrations in the remaining interior



sidewall confirmation samples collected from Area 1 (SW-43 at 8 feet bgs and SW-44 at 8 feet bgs) and Area 5 (SW-39 at 9 feet bgs, SW-40 at 9 feet bgs, SW-41 at 9 feet bgs, SW-42 at 6 feet bgs, and SW-46 at 9 feet bgs) were below both the 100 mg/kg threshold for the excavation periphery and the Closure Criteria.

In Area 10, bottom confirmation samples were collected at a depth of 4.5 feet bgs at 12 locations throughout the area to confirm TPH concentrations were below the Closure Criteria. At three of these locations (CS-16, CS-19, and CS-21), test trenches were excavated to 5 feet bgs and soil samples were collected at a depth of 5 feet bgs for analysis of TPH to further confirm vertical delineation of TPH concentrations below the Closure Criteria in this area. TPH concentrations in all Area 10 confirmation samples, including the 12 bottom confirmation samples collected at 4.5 feet bgs and the three test trench samples collected at 5 feet bgs, were below the Closure Criteria.

A summary of confirmation bottom and sidewall soil sample analytical results organized by area is provided in Table 2. As shown, all final (designated soil status as "in situ") bottom and sidewall confirmation samples exhibited TPH and chloride concentrations below Closure Criteria, while all soil with TPH and/or chloride concentrations above Closure Criteria was excavated.

All confirmation sample locations, including sidewall and bottom sample locations that were excavated due to the presence of TPH and/or chloride at concentrations above Closure Criteria, are shown on Figures 5B (Areas 1 through 6) and 5C (Areas 7 through 11). Final confirmation sample locations, excavation extents, and excavation depths for Areas 1 through 11 are depicted on Figures 6A through 6K, respectively. As shown on Figures 5B and 6A, Area 1 was the only area that required lateral excavation beyond the Release Area.

It should be noted that in Area 7, bottom confirmation sample CS-39 collected at a depth of 3 feet bgs exceeded the Closure Criterion for total TPH. The portion of the excavation represented by bottom confirmation sample location CS-39 at 3 feet bgs was further excavated to a depth of 4.5 feet bgs, and bottom confirmation sample location CS-39 at 3 feet bgs was replaced by two new bottom confirmation samples CS-99 and CS-100, which were sampled at a depth of 4.5 feet bgs. The area of the deeper portion of the excavation (4.5 feet bgs) within Area 7 exceeded 200 square feet, thus requiring two bottom confirmation samples (CS-99 at 4.5 feet bgs and CS-100 at 4.5 feet bgs) rather than the original one bottom confirmation sample (CS-39 at 3 feet bgs). Thus, the Closure Criteria exceedance at CS-39 at 3 feet bgs was resolved by excavation. Bottom confirmation sample locations CS-39, CS-99, and CS-100 are shown on Figure 5C while bottom confirmation sample locations CS-99 and CS-100 are shown on Figure 6G.

A total of 4,740 cy of affected soil (ex situ) was excavated from within or immediately adjacent to the Release Area. This includes 1,380 cy of affected soil excavated in January 2021 and 3,360 cy of affected soil excavated from September through November 2021. The final excavation area was approximately 20,900 square feet. Final excavation depths ranged from 3 to 10 feet bgs. A table summarizing the final excavation depth and volume (ex situ) for each area is provided below.



Total Volume of Soil Excavated by Area – January to November 2021

Area	Figure No.	Excavation Depth (Feet bgs)	Final Ex Situ Volume (Cubic Yards)
1	6A	4.5 to 10	928
2	6B	3 to 5.5	326
3	6C	4.5	415
4	6D	4.5 to 5.5	305
5	6E	8 to 10	655
6	6F	4.5	337
7	6G	3 to 4.5	195
8	6H	4.5	551
9	6I	3	188
10	6J	4.5	535
11	6K	3 to 4.5	305
Total Ex Situ Volume Excavated			4,740

The laboratory analytical reports and chain-of-custody documentation for the confirmation samples collected from September through November 2021 are provided in Appendix D. Laboratory analytical reports for samples collected from February through March 2021 were provided in the June 2021 Remediation Workplan. Photographs of the excavation are shown in Appendix E.

The final number of soil samples and sampling locations for investigation and remediation at the site from February to November 2021 are as follows:

- 50 original excavation floor, test trench, or soil boring samples from 12 locations were collected for the purposes of vertical and horizontal delineation throughout and adjacent to the Release Area, including duplicate samples (see Table 1).
- 2 stockpile soil samples were collected from excavated soil for waste characterization and profiling (see Table 1).
- 127 excavation bottom (floor) confirmation samples from 105 locations to guide excavation efforts and vertically confirm affected soil was removed to below Closure Criteria (see Table 2).
- 61 excavation sidewall confirmation samples from 46 locations to guide excavation efforts and laterally confirm affected soil was removed to below Closure Criteria (see Table 2).

Stockpile soil samples were not collected from the remediation soil stockpiles generated from September through November 2021 because the disposal facility (J&L Landfarm Inc.) accepted the soil under the waste profile generated via the February 2021 stockpile characterization samples.



4.3 Excavated Soil Disposal

From November 1 through November 12, 2021, approximately 3,360 cy (ex situ) of affected soil excavated during the September to November 2021 remedial activities were transported under non-hazardous waste manifests to J&L Landfarm Inc., in Hobbs, New Mexico. As approved by J&L Landfarm, Inc., stockpile samples collected from the response activities in February 2021 were used to characterize the waste as non-hazardous for disposal. Results are shown on Table 1. Including the 1,380 cy of affected soil transported to J&L Landfarm Inc., in May 2021, a total of 4,740 cy of affected soil were removed from the site. Waste manifests are provided in Appendix B.

4.4 Backfilling, Reseeding, and Restoration

Clean backfill material similar to the excavated material was mined from the McNabb Partners Pit located near Nadine, New Mexico (32.59324, -103.12100). In May 2021, approximately 1,380 cy of clean topsoil were transported to the site and stockpiled pending completion of remedial activities and backfilling. In November 2021, approximately 250 cy of clean topsoil and 3,110 cy of clean caliche were transported to the site and stockpiled pending backfilling. The clean fill was used to backfill the excavated area from November 1 through 17, 2021, concurrent with and following excavation activities (see photographs in Appendix E). Final site grading and re-seeding were performed on December 21, 2021.

HEP has restored the area disturbed during remedial activities to a similar condition that existed prior to the release in accordance with 19.15.29.13 NMAC. The area was re-seeded with an appropriate seed blend, and road areas were watered and packed for erosion control purposes (see photographs in Appendix E).

4.5 Laboratory Analytical Data Quality Assurance/Quality Control Results

Data reports generated by Eurofins Xenco Laboratory in Midland, Texas for the confirmation sampling activities conducted from September through November 2021 were reviewed to ensure that reported analytical results met data quality objectives.

Based on the data review, it was determined that analytical results for reported concentrations of target analytes are defensible and that measurement data reliability is within the expected limits of sampling and analytical error. All analytical results are usable for characterization of soil at the site. The laboratory analytical results are provided as Appendix D.

5.0 SITE CLOSURE REQUEST

Remediation activities were conducted in accordance with NMOCD guidelines, the June 2021 Remediation Workplan, and NMOCD's July 16, 2021, conditional approval of the June 2021 Remediation Workplan. Affected soil with TPH and chloride concentrations above Closure Criteria were excavated and transported to an appropriate disposal facility (benzene and total BTEX were not detected above Closure Criteria in affected soils at the site). The excavation was backfilled with similar clean fill material, and the surface was regraded and re-seeded with an appropriate seed blend. As documented in this report, all final (in situ) confirmation soil samples exhibited TPH and chloride concentrations below Closure Criteria.




Based on completion of the remedial activities in accordance with the June 2021 Remediation Workplan and NMOCD's July 16, 2021, conditional approval, HEP respectfully requests that the NMOCD grant closure of the Eunice EMSU 6-Inch Pipeline Release (NMOCD tracking number nAPP2102856493).

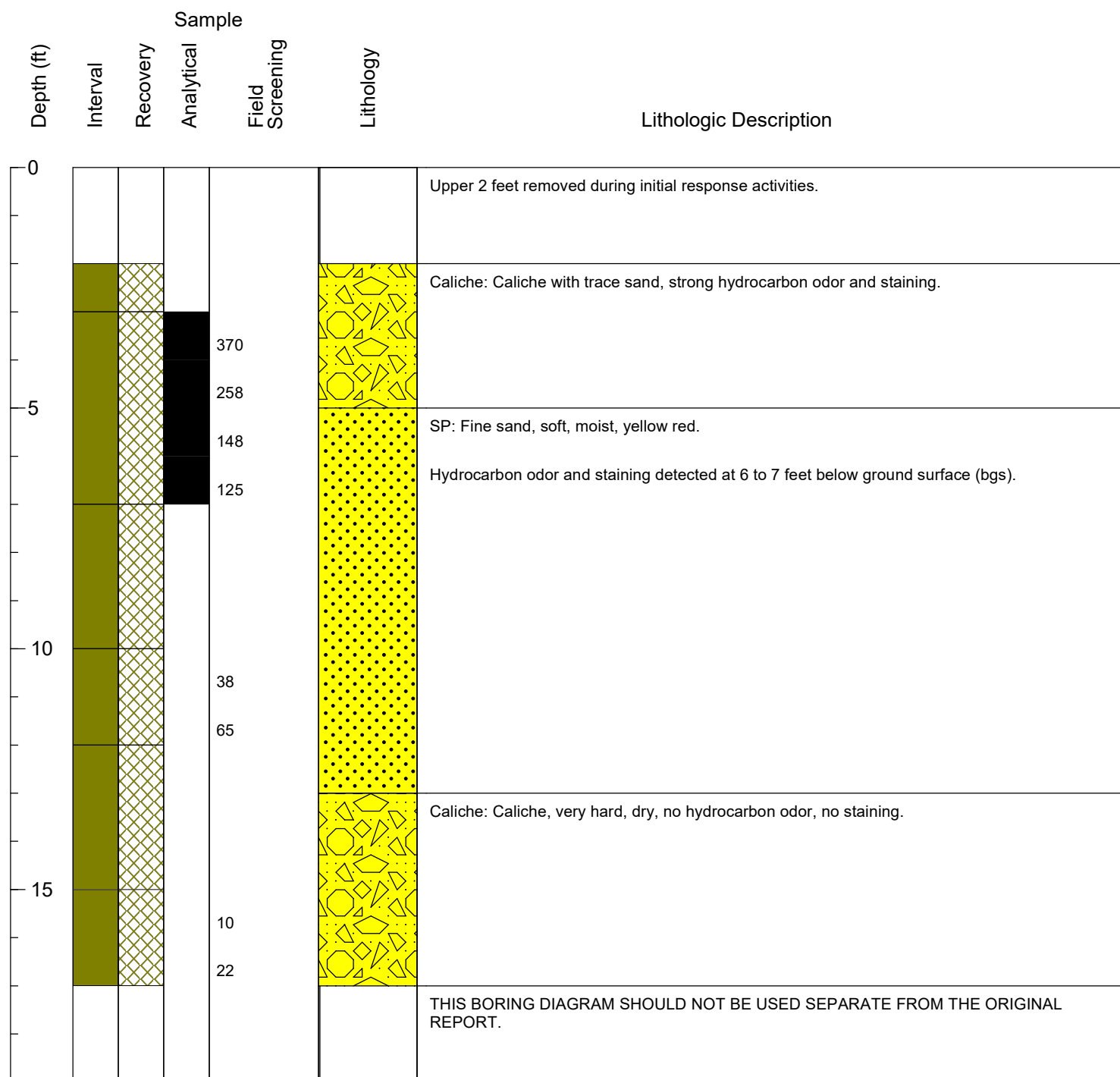
6.0 DISTRIBUTION


- 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: Trevor Baird
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

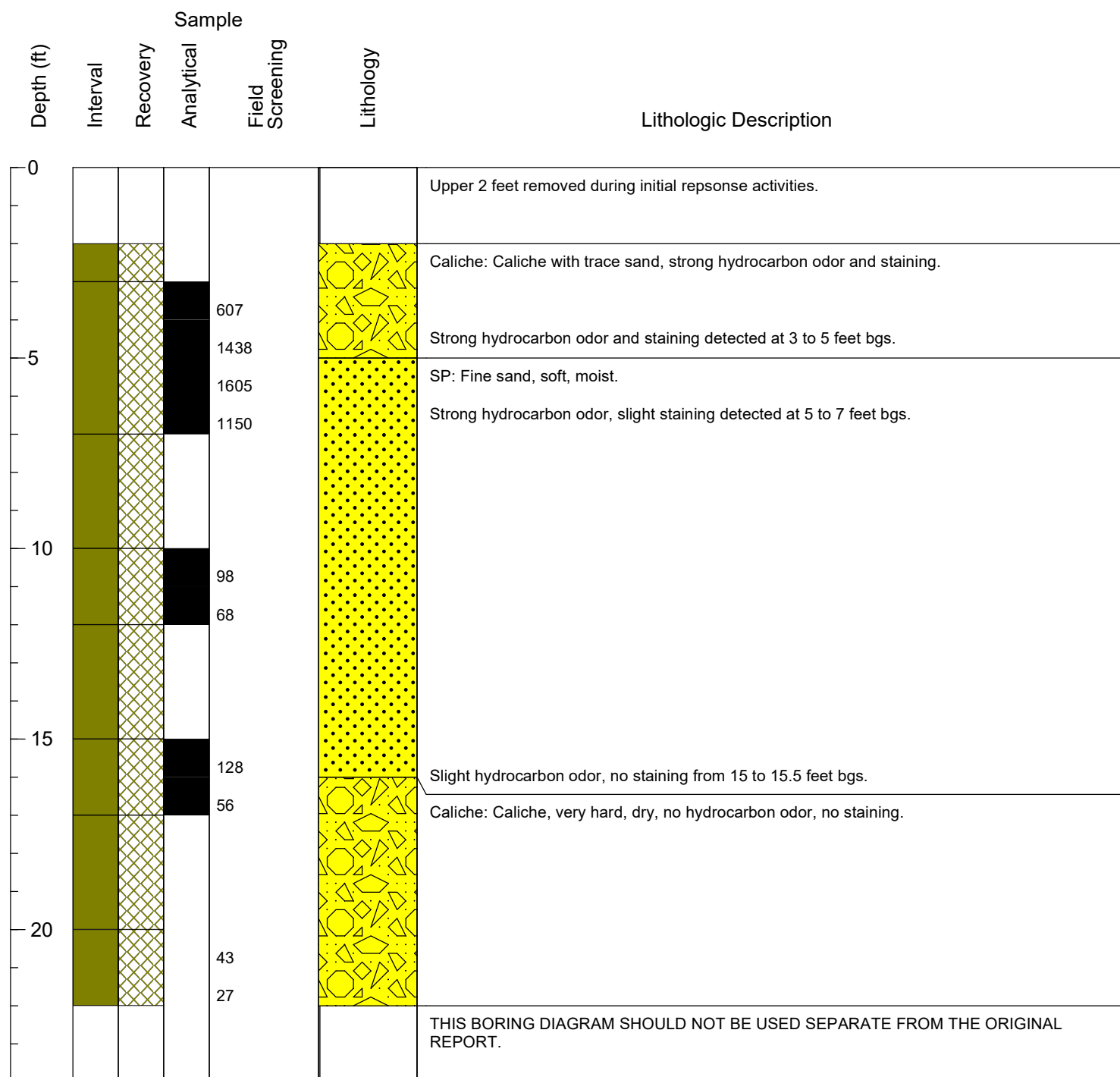


Appendix C: Soil Boring Logs (SB-1 and SB-2)

 BORING LOG		SB-1	
Client: HEP Site: Eunice EMSU 6" Pipeline Release Address: 32.493419, -103.257089 Project: Delineation		TRC Project #: 466952 Start Date: 9/15/21 Finish Date: 9/15/21	
Drilling Company: HCI Drilling Drilling Method: Air Rotary Boring Diameter (in): 6 Boring Depth (ft bgs): 17		TRC Site Rep.: Russell Sebring TRC Reviewer: Bryan Gilbert	
Sampling Method: 2-ft Split Spoon Sampler Blow Count Method: Not Applicable Grout: Hydrated bentonite chips			
Field Screening Parameter: Volatile Organic Compounds Meter: PID Units: ppm			



 BORING LOG		SB-2	
Client: HEP Site: Eunice EMSU 6" Pipeline Release Address: 32.493419, -103.257089 Project: Delineation		TRC Project #: 466952 Start Date: 9/15/21 Finish Date: 9/15/21	
Drilling Company: HCI Drilling Drilling Method: Air Rotary Boring Diameter (in): 6 Boring Depth (ft bgs): 22		TRC Site Rep.: Russell Sebring TRC Reviewer: Bryan Gilbert	
Sampling Method: 2-ft Split Spoon Sampler Blow Count Method: Not Applicable Grout: Hydrated bentonite chips			
Field Screening Parameter: Volatile Organic Compounds Meter: PID Units: ppm			





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: 880-6226-1

Laboratory Sample Delivery Group: Eunice, NM

Client Project/Site: HEP:Eunice EMSU Remediation

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
9/20/2021 9:05:59 PM

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

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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:Eunice EMSU Remediation

Laboratory Job ID: 880-6226-1
SDG: Eunice, NM

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Definitions/Glossary

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

Job ID: 880-6226-1
SDG: Eunice, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
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
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

Case Narrative

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

Job ID: 880-6226-1
SDG: Eunice, NM

Job ID: 880-6226-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-6226-1

Comments

No additional comments.

Receipt

The samples were received on 9/17/2021 8:58 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 5.6° C.

GC VOA

Method 8021B: The following samples were diluted due to the nature of the sample matrix: SB-1 @ 3-4' (880-6226-1), SB-1 @ 4-5' (880-6226-2), SB-1 @ 5-6' (880-6226-3), SB-1 @ 6-7' (880-6226-4), SB-2 @ 3-4' (880-6226-9), SB-2 @ 5-6' (880-6226-10), SB-2 @ 6-7' (880-6226-11), SB-2 @ 15-16' (880-6226-14) and SB-2 @ 4.5' (880-6226-18) at 20.0, 20.0, 20.0, 20.0, 100.0, 100.0, 100.0, 20.0 and 50.0. Elevated reporting limits (RLs) are provided.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-8021 and analytical batch 880-8018 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SB-2 @ 5-6' (880-6226-10), SB-2 @ 6-7' (880-6226-11), SB-2 @ 15-16' (880-6226-14), SB-2 @ 16-17' (880-6226-15), SB-2 @ 4.5' (880-6226-18), (880-6227-A-1-C), (880-6227-A-1-A MS) and (880-6227-A-1-B MSD). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or 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:Eunice EMSU Remediation

Job ID: 880-6226-1
SDG: Eunice, NM

Client Sample ID: SB-1 @ 3-4'

Lab Sample ID: 880-6226-1

Date Collected: 09/15/21 09:00

Matrix: Solid

Date Received: 09/17/21 09:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0400	U	0.0400	mg/Kg		09/17/21 09:44	09/17/21 15:11	20
Toluene	<0.0400	U	0.0400	mg/Kg		09/17/21 09:44	09/17/21 15:11	20
Ethylbenzene	0.0951		0.0400	mg/Kg		09/17/21 09:44	09/17/21 15:11	20
m-Xylene & p-Xylene	0.200		0.0800	mg/Kg		09/17/21 09:44	09/17/21 15:11	20
o-Xylene	0.0948		0.0400	mg/Kg		09/17/21 09:44	09/17/21 15:11	20
Xylenes, Total	0.295		0.0800	mg/Kg		09/17/21 09:44	09/17/21 15:11	20
Total BTEX	0.390		0.0800	mg/Kg		09/17/21 09:44	09/17/21 15:11	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	09/17/21 09:44	09/17/21 15:11	20
1,4-Difluorobenzene (Surr)	80		70 - 130	09/17/21 09:44	09/17/21 15:11	20

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		09/17/21 10:40	09/17/21 14:38	1
Diesel Range Organics (Over C10-C28)	649		50.0	mg/Kg		09/17/21 10:40	09/17/21 14:38	1
Oil Range Organics (Over C28-C36)	87.8		50.0	mg/Kg		09/17/21 10:40	09/17/21 14:38	1
Total TPH	737		50.0	mg/Kg		09/17/21 10:40	09/17/21 14:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	09/17/21 10:40	09/17/21 14:38	1
o-Terphenyl	105		70 - 130	09/17/21 10:40	09/17/21 14:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.7		5.04	mg/Kg			09/20/21 03:44	1

Client Sample ID: SB-1 @ 4-5'

Lab Sample ID: 880-6226-2

Date Collected: 09/15/21 09:10

Matrix: Solid

Date Received: 09/17/21 09:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0399	U	0.0399	mg/Kg		09/17/21 09:44	09/17/21 15:31	20
Toluene	<0.0399	U	0.0399	mg/Kg		09/17/21 09:44	09/17/21 15:31	20
Ethylbenzene	0.113		0.0399	mg/Kg		09/17/21 09:44	09/17/21 15:31	20
m-Xylene & p-Xylene	0.290		0.0798	mg/Kg		09/17/21 09:44	09/17/21 15:31	20
o-Xylene	0.184		0.0399	mg/Kg		09/17/21 09:44	09/17/21 15:31	20
Xylenes, Total	0.474		0.0798	mg/Kg		09/17/21 09:44	09/17/21 15:31	20
Total BTEX	0.587		0.0798	mg/Kg		09/17/21 09:44	09/17/21 15:31	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	09/17/21 09:44	09/17/21 15:31	20
1,4-Difluorobenzene (Surr)	86		70 - 130	09/17/21 09:44	09/17/21 15:31	20

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		09/17/21 10:40	09/17/21 15:01	1

Eurofins Xenco, Midland

Client Sample Results

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

Job ID: 880-6226-1
SDG: Eunice, NM

Client Sample ID: SB-1 @ 4-5'

Lab Sample ID: 880-6226-2

Date Collected: 09/15/21 09:10

Matrix: Solid

Date Received: 09/17/21 09:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	91.5		49.9	mg/Kg		09/17/21 10:40	09/17/21 15:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/17/21 10:40	09/17/21 15:01	1
Total TPH	91.5		49.9	mg/Kg		09/17/21 10:40	09/17/21 15:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			09/17/21 10:40	09/17/21 15:01	1
o-Terphenyl	111		70 - 130			09/17/21 10:40	09/17/21 15:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.75		4.98	mg/Kg			09/20/21 03:49	1

Client Sample ID: SB-1 @ 5-6'

Lab Sample ID: 880-6226-3

Date Collected: 09/15/21 09:20

Matrix: Solid

Date Received: 09/17/21 09:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0402	U	0.0402	mg/Kg		09/17/21 09:44	09/17/21 14:30	20
Toluene	<0.0402	U	0.0402	mg/Kg		09/17/21 09:44	09/17/21 14:30	20
Ethylbenzene	<0.0402	U	0.0402	mg/Kg		09/17/21 09:44	09/17/21 14:30	20
m-Xylene & p-Xylene	<0.0803	U	0.0803	mg/Kg		09/17/21 09:44	09/17/21 14:30	20
o-Xylene	<0.0402	U	0.0402	mg/Kg		09/17/21 09:44	09/17/21 14:30	20
Xylenes, Total	<0.0803	U	0.0803	mg/Kg		09/17/21 09:44	09/17/21 14:30	20
Total BTEX	<0.0803	U	0.0803	mg/Kg		09/17/21 09:44	09/17/21 14:30	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130			09/17/21 09:44	09/17/21 14:30	20
1,4-Difluorobenzene (Surr)	85		70 - 130			09/17/21 09:44	09/17/21 14:30	20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		09/17/21 10:40	09/17/21 13:29	1
Diesel Range Organics (Over C10-C28)	78.1		49.8	mg/Kg		09/17/21 10:40	09/17/21 13:29	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/17/21 10:40	09/17/21 13:29	1
Total TPH	78.1		49.8	mg/Kg		09/17/21 10:40	09/17/21 13:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			09/17/21 10:40	09/17/21 13:29	1
o-Terphenyl	106		70 - 130			09/17/21 10:40	09/17/21 13:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.50		5.00	mg/Kg			09/20/21 03:55	1

Eurofins Xenco, Midland

Client Sample Results

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

Job ID: 880-6226-1
SDG: Eunice, NM

Client Sample ID: SB-1 @ 6-7'

Lab Sample ID: 880-6226-4

Date Collected: 09/15/21 09:30

Matrix: Solid

Date Received: 09/17/21 09:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0402	U	0.0402	mg/Kg		09/17/21 09:44	09/17/21 14:50	20
Toluene	<0.0402	U	0.0402	mg/Kg		09/17/21 09:44	09/17/21 14:50	20
Ethylbenzene	0.0407		0.0402	mg/Kg		09/17/21 09:44	09/17/21 14:50	20
m-Xylene & p-Xylene	<0.0805	U	0.0805	mg/Kg		09/17/21 09:44	09/17/21 14:50	20
o-Xylene	<0.0402	U	0.0402	mg/Kg		09/17/21 09:44	09/17/21 14:50	20
Xylenes, Total	<0.0805	U	0.0805	mg/Kg		09/17/21 09:44	09/17/21 14:50	20
Total BTEX	<0.0805	U	0.0805	mg/Kg		09/17/21 09:44	09/17/21 14:50	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	09/17/21 09:44	09/17/21 14:50	20
1,4-Difluorobenzene (Surr)	86		70 - 130	09/17/21 09:44	09/17/21 14:50	20

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		09/17/21 10:40	09/17/21 15:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/17/21 10:40	09/17/21 15:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/17/21 10:40	09/17/21 15:26	1
Total TPH	<49.9	U	49.9	mg/Kg		09/17/21 10:40	09/17/21 15:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	09/17/21 10:40	09/17/21 15:26	1
o-Terphenyl	112		70 - 130	09/17/21 10:40	09/17/21 15:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.7		4.99	mg/Kg			09/20/21 04:12	1

Client Sample ID: SB-2 @ 3-4'

Lab Sample ID: 880-6226-9

Date Collected: 09/15/21 10:30

Matrix: Solid

Date Received: 09/17/21 09:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.202	U	0.202	mg/Kg		09/17/21 09:44	09/17/21 15:52	100
Toluene	0.244		0.202	mg/Kg		09/17/21 09:44	09/17/21 15:52	100
Ethylbenzene	1.02		0.202	mg/Kg		09/17/21 09:44	09/17/21 15:52	100
m-Xylene & p-Xylene	1.16		0.403	mg/Kg		09/17/21 09:44	09/17/21 15:52	100
o-Xylene	0.305		0.202	mg/Kg		09/17/21 09:44	09/17/21 15:52	100
Xylenes, Total	1.47		0.403	mg/Kg		09/17/21 09:44	09/17/21 15:52	100
Total BTEX	2.73		0.403	mg/Kg		09/17/21 09:44	09/17/21 15:52	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	09/17/21 09:44	09/17/21 15:52	100
1,4-Difluorobenzene (Surr)	81		70 - 130	09/17/21 09:44	09/17/21 15:52	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	<249	U	249	mg/Kg		09/17/21 10:40	09/17/21 15:51	5

Eurofins Xenco, Midland

Client Sample Results

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

Job ID: 880-6226-1
SDG: Eunice, NM

Client Sample ID: SB-2 @ 3-4'

Lab Sample ID: 880-6226-9

Date Collected: 09/15/21 10:30

Matrix: Solid

Date Received: 09/17/21 09:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	3230		249	mg/Kg		09/17/21 10:40	09/17/21 15:51	5
Oil Range Organics (Over C28-C36)	389		249	mg/Kg		09/17/21 10:40	09/17/21 15:51	5
Total TPH	3620		249	mg/Kg		09/17/21 10:40	09/17/21 15:51	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	09/17/21 10:40	09/17/21 15:51	5
o-Terphenyl	112		70 - 130	09/17/21 10:40	09/17/21 15:51	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.0		4.95	mg/Kg			09/20/21 04:17	1

Client Sample ID: SB-2 @ 5-6'

Lab Sample ID: 880-6226-10

Date Collected: 09/15/21 10:50

Matrix: Solid

Date Received: 09/17/21 09:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.201	U	0.201	mg/Kg		09/17/21 09:44	09/17/21 16:12	100
Toluene	<0.201	U	0.201	mg/Kg		09/17/21 09:44	09/17/21 16:12	100
Ethylbenzene	1.05		0.201	mg/Kg		09/17/21 09:44	09/17/21 16:12	100
m-Xylene & p-Xylene	3.16		0.402	mg/Kg		09/17/21 09:44	09/17/21 16:12	100
o-Xylene	0.746		0.201	mg/Kg		09/17/21 09:44	09/17/21 16:12	100
Xylenes, Total	3.91		0.402	mg/Kg		09/17/21 09:44	09/17/21 16:12	100
Total BTEX	4.96		0.402	mg/Kg		09/17/21 09:44	09/17/21 16:12	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	22	S1-	70 - 130	09/17/21 09:44	09/17/21 16:12	100
1,4-Difluorobenzene (Surr)	18	S1-	70 - 130	09/17/21 09:44	09/17/21 16:12	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	1140		250	mg/Kg		09/17/21 10:40	09/17/21 16:15	5
Diesel Range Organics (Over C10-C28)	5930		250	mg/Kg		09/17/21 10:40	09/17/21 16:15	5
Oil Range Organics (Over C28-C36)	643		250	mg/Kg		09/17/21 10:40	09/17/21 16:15	5
Total TPH	7710		250	mg/Kg		09/17/21 10:40	09/17/21 16:15	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130	09/17/21 10:40	09/17/21 16:15	5
o-Terphenyl	98		70 - 130	09/17/21 10:40	09/17/21 16:15	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.1		5.03	mg/Kg			09/20/21 04:34	1

Eurofins Xenco, Midland

Client Sample Results

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

Job ID: 880-6226-1
SDG: Eunice, NM

Client Sample ID: SB-2 @ 6-7'

Lab Sample ID: 880-6226-11

Date Collected: 09/15/21 11:00

Matrix: Solid

Date Received: 09/17/21 09:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.199	U	0.199	mg/Kg		09/17/21 09:44	09/17/21 16:32	100
Toluene	0.254		0.199	mg/Kg		09/17/21 09:44	09/17/21 16:32	100
Ethylbenzene	1.44		0.199	mg/Kg		09/17/21 09:44	09/17/21 16:32	100
m-Xylene & p-Xylene	4.07		0.398	mg/Kg		09/17/21 09:44	09/17/21 16:32	100
o-Xylene	1.12		0.199	mg/Kg		09/17/21 09:44	09/17/21 16:32	100
Xylenes, Total	5.19		0.398	mg/Kg		09/17/21 09:44	09/17/21 16:32	100
Total BTEX	6.88		0.398	mg/Kg		09/17/21 09:44	09/17/21 16:32	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	22	S1-	70 - 130	09/17/21 09:44	09/17/21 16:32	100
1,4-Difluorobenzene (Surr)	21	S1-	70 - 130	09/17/21 09:44	09/17/21 16:32	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	1720		250	mg/Kg		09/17/21 10:40	09/17/21 16:39	5
Diesel Range Organics (Over C10-C28)	6580		250	mg/Kg		09/17/21 10:40	09/17/21 16:39	5
Oil Range Organics (Over C28-C36)	715		250	mg/Kg		09/17/21 10:40	09/17/21 16:39	5
Total TPH	9020		250	mg/Kg		09/17/21 10:40	09/17/21 16:39	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	143	S1+	70 - 130	09/17/21 10:40	09/17/21 16:39	5
o-Terphenyl	101		70 - 130	09/17/21 10:40	09/17/21 16:39	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.5		4.98	mg/Kg			09/20/21 04:40	1

Client Sample ID: SB-2 @ 10-11'

Lab Sample ID: 880-6226-12

Date Collected: 09/15/21 11:10

Matrix: Solid

Date Received: 09/17/21 09:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:44	09/17/21 18:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:44	09/17/21 18:23	1
Ethylbenzene	0.00316		0.00200	mg/Kg		09/17/21 09:44	09/17/21 18:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/17/21 09:44	09/17/21 18:23	1
o-Xylene	0.00406		0.00200	mg/Kg		09/17/21 09:44	09/17/21 18:23	1
Xylenes, Total	0.00406		0.00399	mg/Kg		09/17/21 09:44	09/17/21 18:23	1
Total BTEX	0.00722		0.00399	mg/Kg		09/17/21 09:44	09/17/21 18:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	09/17/21 09:44	09/17/21 18:23	1
1,4-Difluorobenzene (Surr)	94		70 - 130	09/17/21 09:44	09/17/21 18:23	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	<49.9	U	49.9	mg/Kg		09/17/21 10:40	09/17/21 17:50	1

Eurofins Xenco, Midland

Client Sample Results

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

Job ID: 880-6226-1
SDG: Eunice, NM

Client Sample ID: SB-2 @ 10-11'

Lab Sample ID: 880-6226-12

Date Collected: 09/15/21 11:10

Matrix: Solid

Date Received: 09/17/21 09:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	166		49.9	mg/Kg		09/17/21 10:40	09/17/21 17:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/17/21 10:40	09/17/21 17:50	1
Total TPH	166		49.9	mg/Kg		09/17/21 10:40	09/17/21 17:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130			09/17/21 10:40	09/17/21 17:50	1
o-Terphenyl	110		70 - 130			09/17/21 10:40	09/17/21 17:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	181		5.00	mg/Kg			09/20/21 04:45	1

Client Sample ID: SB-2 @ 11-12'

Lab Sample ID: 880-6226-13

Date Collected: 09/15/21 11:20

Matrix: Solid

Date Received: 09/17/21 09:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/17/21 09:44	09/17/21 18:43	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/17/21 09:44	09/17/21 18:43	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/17/21 09:44	09/17/21 18:43	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/17/21 09:44	09/17/21 18:43	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/17/21 09:44	09/17/21 18:43	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/17/21 09:44	09/17/21 18:43	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		09/17/21 09:44	09/17/21 18:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130			09/17/21 09:44	09/17/21 18:43	1
1,4-Difluorobenzene (Surr)	107		70 - 130			09/17/21 09:44	09/17/21 18:43	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	<49.8	U	49.8	mg/Kg		09/17/21 10:40	09/17/21 18:36	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/17/21 10:40	09/17/21 18:36	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/17/21 10:40	09/17/21 18:36	1
Total TPH	<49.8	U	49.8	mg/Kg		09/17/21 10:40	09/17/21 18:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			09/17/21 10:40	09/17/21 18:36	1
o-Terphenyl	106		70 - 130			09/17/21 10:40	09/17/21 18:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	167		4.97	mg/Kg			09/20/21 04:51	1

Eurofins Xenco, Midland

Client Sample Results

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

Job ID: 880-6226-1
SDG: Eunice, NM

Client Sample ID: SB-2 @ 15-16'

Lab Sample ID: 880-6226-14

Date Collected: 09/15/21 11:30

Matrix: Solid

Date Received: 09/17/21 09:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0401	U	0.0401	mg/Kg		09/17/21 09:44	09/17/21 21:06	20
Toluene	<0.0401	U	0.0401	mg/Kg		09/17/21 09:44	09/17/21 21:06	20
Ethylbenzene	0.0644		0.0401	mg/Kg		09/17/21 09:44	09/17/21 21:06	20
m-Xylene & p-Xylene	0.120		0.0802	mg/Kg		09/17/21 09:44	09/17/21 21:06	20
o-Xylene	0.0554		0.0401	mg/Kg		09/17/21 09:44	09/17/21 21:06	20
Xylenes, Total	0.175		0.0802	mg/Kg		09/17/21 09:44	09/17/21 21:06	20
Total BTEX	0.240		0.0802	mg/Kg		09/17/21 09:44	09/17/21 21:06	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	09/17/21 09:44	09/17/21 21:06	20
1,4-Difluorobenzene (Surr)	76		70 - 130	09/17/21 09:44	09/17/21 21:06	20

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		09/17/21 10:40	09/17/21 17:26	1
Diesel Range Organics (Over C10-C28)	519		50.0	mg/Kg		09/17/21 10:40	09/17/21 17:26	1
Oil Range Organics (Over C28-C36)	84.3		50.0	mg/Kg		09/17/21 10:40	09/17/21 17:26	1
Total TPH	603		50.0	mg/Kg		09/17/21 10:40	09/17/21 17:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	09/17/21 10:40	09/17/21 17:26	1
o-Terphenyl	110		70 - 130	09/17/21 10:40	09/17/21 17:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	76.1		5.00	mg/Kg			09/20/21 04:57	1

Client Sample ID: SB-2 @ 16-17'

Lab Sample ID: 880-6226-15

Date Collected: 09/15/21 11:40

Matrix: Solid

Date Received: 09/17/21 09:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00729		0.00200	mg/Kg		09/17/21 09:44	09/17/21 19:04	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:44	09/17/21 19:04	1
Ethylbenzene	0.00349		0.00200	mg/Kg		09/17/21 09:44	09/17/21 19:04	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/17/21 09:44	09/17/21 19:04	1
o-Xylene	0.00570		0.00200	mg/Kg		09/17/21 09:44	09/17/21 19:04	1
Xylenes, Total	0.00570		0.00399	mg/Kg		09/17/21 09:44	09/17/21 19:04	1
Total BTEX	0.0165		0.00399	mg/Kg		09/17/21 09:44	09/17/21 19:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	150	S1+	70 - 130	09/17/21 09:44	09/17/21 19:04	1
1,4-Difluorobenzene (Surr)	111		70 - 130	09/17/21 09:44	09/17/21 19:04	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	<49.9	U	49.9	mg/Kg		09/17/21 10:40	09/17/21 18:57	1

Eurofins Xenco, Midland

Client Sample Results

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

Job ID: 880-6226-1
SDG: Eunice, NM

Client Sample ID: SB-2 @ 16-17'

Lab Sample ID: 880-6226-15

Date Collected: 09/15/21 11:40

Matrix: Solid

Date Received: 09/17/21 09:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/17/21 10:40	09/17/21 18:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/17/21 10:40	09/17/21 18:57	1
Total TPH	<49.9	U	49.9	mg/Kg		09/17/21 10:40	09/17/21 18:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			09/17/21 10:40	09/17/21 18:57	1
o-Terphenyl	110		70 - 130			09/17/21 10:40	09/17/21 18:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58.9		5.00	mg/Kg			09/20/21 05:02	1

Client Sample ID: SB-2 @ 4.5'

Lab Sample ID: 880-6226-18

Date Collected: 09/15/21 10:40

Matrix: Solid

Date Received: 09/17/21 08:58

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.101	U	0.101	mg/Kg		09/17/21 09:44	09/17/21 21:27	50
Toluene	<0.101	U	0.101	mg/Kg		09/17/21 09:44	09/17/21 21:27	50
Ethylbenzene	0.758		0.101	mg/Kg		09/17/21 09:44	09/17/21 21:27	50
m-Xylene & p-Xylene	1.33		0.202	mg/Kg		09/17/21 09:44	09/17/21 21:27	50
o-Xylene	0.424		0.101	mg/Kg		09/17/21 09:44	09/17/21 21:27	50
Xylenes, Total	1.75		0.202	mg/Kg		09/17/21 09:44	09/17/21 21:27	50
Total BTEX	2.51		0.202	mg/Kg		09/17/21 09:44	09/17/21 21:27	50
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	21	S1-	70 - 130			09/17/21 09:44	09/17/21 21:27	50
1,4-Difluorobenzene (Surr)	12	S1-	70 - 130			09/17/21 09:44	09/17/21 21:27	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	1150		249	mg/Kg		09/17/21 10:40	09/17/21 17:03	5
Diesel Range Organics (Over C10-C28)	3980		249	mg/Kg		09/17/21 10:40	09/17/21 17:03	5
Oil Range Organics (Over C28-C36)	466		249	mg/Kg		09/17/21 10:40	09/17/21 17:03	5
Total TPH	5600		249	mg/Kg		09/17/21 10:40	09/17/21 17:03	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130			09/17/21 10:40	09/17/21 17:03	5
o-Terphenyl	99		70 - 130			09/17/21 10:40	09/17/21 17:03	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.4		5.00	mg/Kg			09/20/21 05:08	1

Eurofins Xenco, Midland

Surrogate Summary

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

Job ID: 880-6226-1
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)
880-6226-1	SB-1 @ 3-4'	86	80
880-6226-2	SB-1 @ 4-5'	103	86
880-6226-3	SB-1 @ 5-6'	94	85
880-6226-4	SB-1 @ 6-7'	106	86
880-6226-9	SB-2 @ 3-4'	108	81
880-6226-10	SB-2 @ 5-6'	22 S1-	18 S1-
880-6226-11	SB-2 @ 6-7'	22 S1-	21 S1-
880-6226-12	SB-2 @ 10-11'	90	94
880-6226-13	SB-2 @ 11-12'	122	107
880-6226-14	SB-2 @ 15-16'	80	76
880-6226-15	SB-2 @ 16-17'	150 S1+	111
880-6226-18	SB-2 @ 4.5'	21 S1-	12 S1-
880-6227-A-1-A MS	Matrix Spike	121	87
880-6227-A-1-B MSD	Matrix Spike Duplicate	105	2 S1-
LCS 880-8021/1-A	Lab Control Sample	94	89
LCSD 880-8021/2-A	Lab Control Sample Dup	102	84
MB 880-8021/5-A	Method Blank	114	101
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)
880-6226-1	SB-1 @ 3-4'	104	105
880-6226-2	SB-1 @ 4-5'	107	111
880-6226-3	SB-1 @ 5-6'	104	106
880-6226-3 MS	SB-1 @ 5-6'	101	94
880-6226-3 MSD	SB-1 @ 5-6'	100	94
880-6226-4	SB-1 @ 6-7'	107	112
880-6226-9	SB-2 @ 3-4'	119	112
880-6226-10	SB-2 @ 5-6'	135 S1+	98
880-6226-11	SB-2 @ 6-7'	143 S1+	101
880-6226-12	SB-2 @ 10-11'	109	110
880-6226-13	SB-2 @ 11-12'	102	106
880-6226-14	SB-2 @ 15-16'	110	110
880-6226-15	SB-2 @ 16-17'	108	110
880-6226-18	SB-2 @ 4.5'	124	99
LCS 880-8033/2-A	Lab Control Sample	110	105
LCSD 880-8033/3-A	Lab Control Sample Dup	109	104
MB 880-8033/1-A	Method Blank	101	106
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-6226-1
SDG: Eunice, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8021/5-A

Matrix: Solid

Analysis Batch: 8018

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8021

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:44	09/17/21 13:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:44	09/17/21 13:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:44	09/17/21 13:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/17/21 09:44	09/17/21 13:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:44	09/17/21 13:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/17/21 09:44	09/17/21 13:00	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/17/21 09:44	09/17/21 13:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	09/17/21 09:44	09/17/21 13:00	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/17/21 09:44	09/17/21 13:00	1

Lab Sample ID: LCS 880-8021/1-A

Matrix: Solid

Analysis Batch: 8018

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8021

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08392		mg/Kg		84	70 - 130
Toluene	0.100	0.09398		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09569		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	0.200	0.1710		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08522		mg/Kg		85	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: LCSD 880-8021/2-A

Matrix: Solid

Analysis Batch: 8018

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8021

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09187		mg/Kg		92	70 - 130	9	35
Toluene	0.100	0.1003		mg/Kg		100	70 - 130	6	35
Ethylbenzene	0.100	0.1076		mg/Kg		108	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1881		mg/Kg		94	70 - 130	10	35
o-Xylene	0.100	0.09564		mg/Kg		96	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	84		70 - 130

Lab Sample ID: 880-6227-A-1-A MS

Matrix: Solid

Analysis Batch: 8018

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8021

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.00211	F1 F2	0.0998	0.05296	F1	mg/Kg		51	70 - 130

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-6226-1
SDG: Eunice, NM

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

Lab Sample ID: 880-6227-A-1-A MS

Matrix: Solid

Analysis Batch: 8018

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8021

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00201	U	0.0998	0.07410		mg/Kg		74	70 - 130
Ethylbenzene	<0.00201	U	0.0998	0.08223		mg/Kg		82	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.1529		mg/Kg		75	70 - 130
o-Xylene	0.00597		0.0998	0.07798		mg/Kg		72	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	121		70 - 130						
1,4-Difluorobenzene (Surr)	87		70 - 130						

Lab Sample ID: 880-6227-A-1-B MSD

Matrix: Solid

Analysis Batch: 8018

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8021

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.00211	F1 F2	0.0994	0.002296	F1 F2	mg/Kg		0.2	70 - 130	183	35
Toluene	<0.00201	U	0.0994	0.08534		mg/Kg		86	70 - 130	14	35
Ethylbenzene	<0.00201	U	0.0994	0.08926		mg/Kg		90	70 - 130	8	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1296	F1	mg/Kg		64	70 - 130	16	35
o-Xylene	0.00597		0.0994	0.07718		mg/Kg		72	70 - 130	1	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	105		70 - 130								
1,4-Difluorobenzene (Surr)	2	S1-	70 - 130								

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

Lab Sample ID: MB 880-8033/1-A

Matrix: Solid

Analysis Batch: 8022

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8033

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		09/17/21 10:40	09/17/21 12:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/17/21 10:40	09/17/21 12:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/17/21 10:40	09/17/21 12:19	1
Total TPH	<50.0	U	50.0	mg/Kg		09/17/21 10:40	09/17/21 12:19	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			09/17/21 10:40	09/17/21 12:19	1
o-Terphenyl	106		70 - 130			09/17/21 10:40	09/17/21 12:19	1

Lab Sample ID: LCS 880-8033/2-A

Matrix: Solid

Analysis Batch: 8022

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8033

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	975.7		mg/Kg		98	70 - 130

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-6226-1
SDG: Eunice, NM

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

Lab Sample ID: LCS 880-8033/2-A

Matrix: Solid

Analysis Batch: 8022

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8033

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics (Over C10-C28)			1000	857.5		mg/Kg		86	70 - 130		
			LCS		LCS						
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	110		70 - 130								
o-Terphenyl	105		70 - 130								

Lab Sample ID: LCSD 880-8033/3-A

Matrix: Solid

Analysis Batch: 8022

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8033

Top Data: 0000											
Analyte			Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD
			Added	Result	Qualifier			Limits	Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	833.5		mg/Kg		83	70 - 130	16	20
Diesel Range Organics (Over C10-C28)			1000	858.4		mg/Kg		86	70 - 130	0	20
Bottom Data: 0000											
Surrogate	%Recovery	LCSD	LCSD	Limits							
					Qualifier	Qualifier					
1-Chlorooctane	109			70 - 130							
o-Terphenyl	104			70 - 130							

Lab Sample ID: 880-6226-3 MS

Matrix: Solid

Analysis Batch: 8022

Client Sample ID: SB-1 @ 5-6'

Prep Type: Total/NA

Prep Batch: 8033

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	993.2		mg/Kg		100	70 - 130		
Diesel Range Organics (Over C10-C28)	78.1		997	946.3		mg/Kg		87	70 - 130		

Lab Sample ID: 880-6226-3 MSD

Matrix: Solid

Analysis Batch: 8022

Client Sample ID: SB-1 @ 5-6'

Prep Type: Total/NA

Prep Batch: 8033

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	964.9		mg/Kg		97	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	78.1		999	937.0		mg/Kg		86	70 - 130	1	20

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-6226-1
SDG: Eunice, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-8035/1-A

Matrix: Solid

Analysis Batch: 8090

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			09/20/21 02:20	1

Lab Sample ID: LCS 880-8035/2-A

Matrix: Solid

Analysis Batch: 8090

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	252.1		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-8035/3-A

Matrix: Solid

Analysis Batch: 8090

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	252.3		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-6226-3 MS

Matrix: Solid

Analysis Batch: 8090

Client Sample ID: SB-1 @ 5-6'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.50		250	272.4		mg/Kg		105	90 - 110

Lab Sample ID: 880-6226-3 MSD

Matrix: Solid

Analysis Batch: 8090

Client Sample ID: SB-1 @ 5-6'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	9.50		250	273.2		mg/Kg		105	90 - 110	0	20

Eurofins Xenco, Midland

QC Association Summary

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

Job ID: 880-6226-1
SDG: Eunice, NM

GC VOA

Analysis Batch: 8018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6226-1	SB-1 @ 3-4'	Total/NA	Solid	8021B	8021
880-6226-2	SB-1 @ 4-5'	Total/NA	Solid	8021B	8021
880-6226-3	SB-1 @ 5-6'	Total/NA	Solid	8021B	8021
880-6226-4	SB-1 @ 6-7'	Total/NA	Solid	8021B	8021
880-6226-9	SB-2 @ 3-4'	Total/NA	Solid	8021B	8021
880-6226-10	SB-2 @ 5-6'	Total/NA	Solid	8021B	8021
880-6226-11	SB-2 @ 6-7'	Total/NA	Solid	8021B	8021
880-6226-12	SB-2 @ 10-11'	Total/NA	Solid	8021B	8021
880-6226-13	SB-2 @ 11-12'	Total/NA	Solid	8021B	8021
880-6226-14	SB-2 @ 15-16'	Total/NA	Solid	8021B	8021
880-6226-15	SB-2 @ 16-17'	Total/NA	Solid	8021B	8021
880-6226-18	SB-2 @ 4.5'	Total/NA	Solid	8021B	8021
MB 880-8021/5-A	Method Blank	Total/NA	Solid	8021B	8021
LCS 880-8021/1-A	Lab Control Sample	Total/NA	Solid	8021B	8021
LCSD 880-8021/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8021
880-6227-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	8021
880-6227-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8021

Prep Batch: 8021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6226-1	SB-1 @ 3-4'	Total/NA	Solid	5035	
880-6226-2	SB-1 @ 4-5'	Total/NA	Solid	5035	
880-6226-3	SB-1 @ 5-6'	Total/NA	Solid	5035	
880-6226-4	SB-1 @ 6-7'	Total/NA	Solid	5035	
880-6226-9	SB-2 @ 3-4'	Total/NA	Solid	5035	
880-6226-10	SB-2 @ 5-6'	Total/NA	Solid	5035	
880-6226-11	SB-2 @ 6-7'	Total/NA	Solid	5035	
880-6226-12	SB-2 @ 10-11'	Total/NA	Solid	5035	
880-6226-13	SB-2 @ 11-12'	Total/NA	Solid	5035	
880-6226-14	SB-2 @ 15-16'	Total/NA	Solid	5035	
880-6226-15	SB-2 @ 16-17'	Total/NA	Solid	5035	
880-6226-18	SB-2 @ 4.5'	Total/NA	Solid	5035	
MB 880-8021/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8021/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8021/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-6227-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-6227-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 8022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6226-1	SB-1 @ 3-4'	Total/NA	Solid	8015B NM	8033
880-6226-2	SB-1 @ 4-5'	Total/NA	Solid	8015B NM	8033
880-6226-3	SB-1 @ 5-6'	Total/NA	Solid	8015B NM	8033
880-6226-4	SB-1 @ 6-7'	Total/NA	Solid	8015B NM	8033
880-6226-9	SB-2 @ 3-4'	Total/NA	Solid	8015B NM	8033
880-6226-10	SB-2 @ 5-6'	Total/NA	Solid	8015B NM	8033
880-6226-11	SB-2 @ 6-7'	Total/NA	Solid	8015B NM	8033
880-6226-12	SB-2 @ 10-11'	Total/NA	Solid	8015B NM	8033
880-6226-13	SB-2 @ 11-12'	Total/NA	Solid	8015B NM	8033

Eurofins Xenco, Midland

QC Association Summary

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

Job ID: 880-6226-1
SDG: Eunice, NM

GC Semi VOA (Continued)

Analysis Batch: 8022 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6226-14	SB-2 @ 15-16'	Total/NA	Solid	8015B NM	8033
880-6226-15	SB-2 @ 16-17'	Total/NA	Solid	8015B NM	8033
880-6226-18	SB-2 @ 4.5'	Total/NA	Solid	8015B NM	8033
MB 880-8033/1-A	Method Blank	Total/NA	Solid	8015B NM	8033
LCS 880-8033/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8033
LCSD 880-8033/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8033
880-6226-3 MS	SB-1 @ 5-6'	Total/NA	Solid	8015B NM	8033
880-6226-3 MSD	SB-1 @ 5-6'	Total/NA	Solid	8015B NM	8033

Prep Batch: 8033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6226-1	SB-1 @ 3-4'	Total/NA	Solid	8015NM Prep	
880-6226-2	SB-1 @ 4-5'	Total/NA	Solid	8015NM Prep	
880-6226-3	SB-1 @ 5-6'	Total/NA	Solid	8015NM Prep	
880-6226-4	SB-1 @ 6-7'	Total/NA	Solid	8015NM Prep	
880-6226-9	SB-2 @ 3-4'	Total/NA	Solid	8015NM Prep	
880-6226-10	SB-2 @ 5-6'	Total/NA	Solid	8015NM Prep	
880-6226-11	SB-2 @ 6-7'	Total/NA	Solid	8015NM Prep	
880-6226-12	SB-2 @ 10-11'	Total/NA	Solid	8015NM Prep	
880-6226-13	SB-2 @ 11-12'	Total/NA	Solid	8015NM Prep	
880-6226-14	SB-2 @ 15-16'	Total/NA	Solid	8015NM Prep	
880-6226-15	SB-2 @ 16-17'	Total/NA	Solid	8015NM Prep	
880-6226-18	SB-2 @ 4.5'	Total/NA	Solid	8015NM Prep	
MB 880-8033/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8033/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8033/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6226-3 MS	SB-1 @ 5-6'	Total/NA	Solid	8015NM Prep	
880-6226-3 MSD	SB-1 @ 5-6'	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 8035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6226-1	SB-1 @ 3-4'	Soluble	Solid	DI Leach	
880-6226-2	SB-1 @ 4-5'	Soluble	Solid	DI Leach	
880-6226-3	SB-1 @ 5-6'	Soluble	Solid	DI Leach	
880-6226-4	SB-1 @ 6-7'	Soluble	Solid	DI Leach	
880-6226-9	SB-2 @ 3-4'	Soluble	Solid	DI Leach	
880-6226-10	SB-2 @ 5-6'	Soluble	Solid	DI Leach	
880-6226-11	SB-2 @ 6-7'	Soluble	Solid	DI Leach	
880-6226-12	SB-2 @ 10-11'	Soluble	Solid	DI Leach	
880-6226-13	SB-2 @ 11-12'	Soluble	Solid	DI Leach	
880-6226-14	SB-2 @ 15-16'	Soluble	Solid	DI Leach	
880-6226-15	SB-2 @ 16-17'	Soluble	Solid	DI Leach	
880-6226-18	SB-2 @ 4.5'	Soluble	Solid	DI Leach	
MB 880-8035/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8035/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8035/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6226-3 MS	SB-1 @ 5-6'	Soluble	Solid	DI Leach	
880-6226-3 MSD	SB-1 @ 5-6'	Soluble	Solid	DI Leach	

Eurofins Xenco, Midland

QC Association Summary

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

Job ID: 880-6226-1
SDG: Eunice, NM

HPLC/IC

Analysis Batch: 8090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6226-1	SB-1 @ 3-4'	Soluble	Solid	300.0	8035
880-6226-2	SB-1 @ 4-5'	Soluble	Solid	300.0	8035
880-6226-3	SB-1 @ 5-6'	Soluble	Solid	300.0	8035
880-6226-4	SB-1 @ 6-7'	Soluble	Solid	300.0	8035
880-6226-9	SB-2 @ 3-4'	Soluble	Solid	300.0	8035
880-6226-10	SB-2 @ 5-6'	Soluble	Solid	300.0	8035
880-6226-11	SB-2 @ 6-7'	Soluble	Solid	300.0	8035
880-6226-12	SB-2 @ 10-11'	Soluble	Solid	300.0	8035
880-6226-13	SB-2 @ 11-12'	Soluble	Solid	300.0	8035
880-6226-14	SB-2 @ 15-16'	Soluble	Solid	300.0	8035
880-6226-15	SB-2 @ 16-17'	Soluble	Solid	300.0	8035
880-6226-18	SB-2 @ 4.5'	Soluble	Solid	300.0	8035
MB 880-8035/1-A	Method Blank	Soluble	Solid	300.0	8035
LCS 880-8035/2-A	Lab Control Sample	Soluble	Solid	300.0	8035
LCSD 880-8035/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8035
880-6226-3 MS	SB-1 @ 5-6'	Soluble	Solid	300.0	8035
880-6226-3 MSD	SB-1 @ 5-6'	Soluble	Solid	300.0	8035

Lab Chronicle

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

Job ID: 880-6226-1
SDG: Eunice, NM

Client Sample ID: SB-1 @ 3-4'

Lab Sample ID: 880-6226-1

Date Collected: 09/15/21 09:00

Matrix: Solid

Date Received: 09/17/21 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	8021	09/17/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	8018	09/17/21 15:11	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	8033	09/17/21 10:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8022	09/17/21 14:38	AM	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	8035	09/17/21 10:51	CH	XEN MID
Soluble	Analysis	300.0		1			8090	09/20/21 03:44	CH	XEN MID

Client Sample ID: SB-1 @ 4-5'

Lab Sample ID: 880-6226-2

Date Collected: 09/15/21 09:10

Matrix: Solid

Date Received: 09/17/21 09:00

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	8021	09/17/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	8018	09/17/21 15:31	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8033	09/17/21 10:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8022	09/17/21 15:01	AM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	8035	09/17/21 10:51	CH	XEN MID
Soluble	Analysis	300.0		1			8090	09/20/21 03:49	CH	XEN MID

Client Sample ID: SB-1 @ 5-6'

Lab Sample ID: 880-6226-3

Date Collected: 09/15/21 09:20

Matrix: Solid

Date Received: 09/17/21 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	8021	09/17/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	8018	09/17/21 14:30	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8033	09/17/21 10:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8022	09/17/21 13:29	AM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	8035	09/17/21 10:51	CH	XEN MID
Soluble	Analysis	300.0		1			8090	09/20/21 03:55	CH	XEN MID

Client Sample ID: SB-1 @ 6-7'

Lab Sample ID: 880-6226-4

Date Collected: 09/15/21 09:30

Matrix: Solid

Date Received: 09/17/21 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	8021	09/17/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	8018	09/17/21 14:50	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8033	09/17/21 10:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8022	09/17/21 15:26	AM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	8035	09/17/21 10:51	CH	XEN MID
Soluble	Analysis	300.0		1			8090	09/20/21 04:12	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

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

Job ID: 880-6226-1
SDG: Eunice, NM

Client Sample ID: SB-2 @ 3-4'

Lab Sample ID: 880-6226-9

Date Collected: 09/15/21 10:30

Matrix: Solid

Date Received: 09/17/21 09:00

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	8021	09/17/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	8018	09/17/21 15:52	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8033	09/17/21 10:40	DM	XEN MID
Total/NA	Analysis	8015B NM		5			8022	09/17/21 15:51	AM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	8035	09/17/21 10:51	CH	XEN MID
Soluble	Analysis	300.0		1			8090	09/20/21 04:17	CH	XEN MID

Client Sample ID: SB-2 @ 5-6'

Lab Sample ID: 880-6226-10

Date Collected: 09/15/21 10:50

Matrix: Solid

Date Received: 09/17/21 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	8021	09/17/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	8018	09/17/21 16:12	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	8033	09/17/21 10:40	DM	XEN MID
Total/NA	Analysis	8015B NM		5			8022	09/17/21 16:15	AM	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	8035	09/17/21 10:51	CH	XEN MID
Soluble	Analysis	300.0		1			8090	09/20/21 04:34	CH	XEN MID

Client Sample ID: SB-2 @ 6-7'

Lab Sample ID: 880-6226-11

Date Collected: 09/15/21 11:00

Matrix: Solid

Date Received: 09/17/21 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	8021	09/17/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	8018	09/17/21 16:32	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8033	09/17/21 10:40	DM	XEN MID
Total/NA	Analysis	8015B NM		5			8022	09/17/21 16:39	AM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	8035	09/17/21 10:51	CH	XEN MID
Soluble	Analysis	300.0		1			8090	09/20/21 04:40	CH	XEN MID

Client Sample ID: SB-2 @ 10-11'

Lab Sample ID: 880-6226-12

Date Collected: 09/15/21 11:10

Matrix: Solid

Date Received: 09/17/21 09:00

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	8021	09/17/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	8018	09/17/21 18:23	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8033	09/17/21 10:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8022	09/17/21 17:50	AM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	8035	09/17/21 10:51	CH	XEN MID
Soluble	Analysis	300.0		1			8090	09/20/21 04:45	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

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

Job ID: 880-6226-1
SDG: Eunice, NM

Client Sample ID: SB-2 @ 11-12'

Lab Sample ID: 880-6226-13

Date Collected: 09/15/21 11:20

Matrix: Solid

Date Received: 09/17/21 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	8021	09/17/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	8018	09/17/21 18:43	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	8033	09/17/21 10:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8022	09/17/21 18:36	AM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	8035	09/17/21 10:51	CH	XEN MID
Soluble	Analysis	300.0		1			8090	09/20/21 04:51	CH	XEN MID

Client Sample ID: SB-2 @ 15-16'

Lab Sample ID: 880-6226-14

Date Collected: 09/15/21 11:30

Matrix: Solid

Date Received: 09/17/21 09:00

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	8021	09/17/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	8018	09/17/21 21:06	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8033	09/17/21 10:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8022	09/17/21 17:26	AM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	8035	09/17/21 10:51	CH	XEN MID
Soluble	Analysis	300.0		1			8090	09/20/21 04:57	CH	XEN MID

Client Sample ID: SB-2 @ 16-17'

Lab Sample ID: 880-6226-15

Date Collected: 09/15/21 11:40

Matrix: Solid

Date Received: 09/17/21 09:00

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	8021	09/17/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	8018	09/17/21 19:04	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8033	09/17/21 10:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8022	09/17/21 18:57	AM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	8035	09/17/21 10:51	CH	XEN MID
Soluble	Analysis	300.0		1			8090	09/20/21 05:02	CH	XEN MID

Client Sample ID: SB-2 @ 4.5'

Lab Sample ID: 880-6226-18

Date Collected: 09/15/21 10:40

Matrix: Solid

Date Received: 09/17/21 08:58

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	8021	09/17/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	8018	09/17/21 21:27	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8033	09/17/21 10:40	DM	XEN MID
Total/NA	Analysis	8015B NM		5			8022	09/17/21 17:03	AM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	8035	09/17/21 10:51	CH	XEN MID
Soluble	Analysis	300.0		1			8090	09/20/21 05:08	CH	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:Eunice EMSU Remediation

Job ID: 880-6226-1
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	T104704400-21-22	06-30-22

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:Eunice EMSU Remediation

Job ID: 880-6226-1
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:Eunice EMSU Remediation

Job ID: 880-6226-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-6226-1	SB-1 @ 3-4'	Solid	09/15/21 09:00	09/17/21 09:00
880-6226-2	SB-1 @ 4-5'	Solid	09/15/21 09:10	09/17/21 09:00
880-6226-3	SB-1 @ 5-6'	Solid	09/15/21 09:20	09/17/21 09:00
880-6226-4	SB-1 @ 6-7'	Solid	09/15/21 09:30	09/17/21 09:00
880-6226-9	SB-2 @ 3-4'	Solid	09/15/21 10:30	09/17/21 09:00
880-6226-10	SB-2 @ 5-6'	Solid	09/15/21 10:50	09/17/21 09:00
880-6226-11	SB-2 @ 6-7'	Solid	09/15/21 11:00	09/17/21 09:00
880-6226-12	SB-2 @ 10-11'	Solid	09/15/21 11:10	09/17/21 09:00
880-6226-13	SB-2 @ 11-12'	Solid	09/15/21 11:20	09/17/21 09:00
880-6226-14	SB-2 @ 15-16'	Solid	09/15/21 11:30	09/17/21 09:00
880-6226-15	SB-2 @ 16-17'	Solid	09/15/21 11:40	09/17/21 09:00
880-6226-18	SB-2 @ 4.5'	Solid	09/15/21 10:40	09/17/21 08:58



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) 986-3199

Chain of Custody



880-6226 Chain of Custody

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Project Manager	Russell Sebring	Bill to: (if different)	
Company Name	TRC	Company Name	
Address	10 Destia Drive, Suite 130E	Address	
City, State ZIP	Midland, TX 79705	City, State ZIP	
Phone	432 250 4465	Email	rsebring@trccompanies.com

Program: <input type="checkbox"/> UT/PT <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
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 EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other

Project Name	HEP Eunice EMSU Remediation	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code	
Project Number	454378	Due Date			
Project Location	Eunice NM	TAT starts the day received by the lab if received by 4 30pm			
Sampler's Name	Russell Sebring				
PO #:					
SAMPLE RECEIPT	Temp Blank	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID	188		
Cooler Custody Seals	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor	0.5		
Sample Custody Seals	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature Reading	5.1		
Total Containers	18	Corrected Temperature	5.4		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH	BTEX	Chloride	Hold																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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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	TCPLP / 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

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Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
		9 17 21			
		858			



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) 986-3199

Work Order No. _____

Loc: 880
6226

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Page _____ of _____

Project Manager	Russell Sebring	Bill to: (if different)	
Company Name	TRC	Company Name	
Address	10 Desta Drive, Suite 130E	Address	
City, State ZIP	Midland, TX 79705	City, State ZIP	
Phone	432 250 4465	Email	rsebring@trccompanies.com

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:	
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 Eunice EMSU Remediation	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST										Preservative Codes	
Project Number	454378															None NO	
Project Location	Eunice NM	Due Date														DI Water H ₂ O	
Sample's Name	Russell Sebring	TAT starts the day received by the lab, if received by 4:30pm														Cool Cool	
PO #:																HCL HC	
SAMPLE RECEIPT	Temp Blank	Yes	No	Wet Ice	Yes	No											H ₂ SO ₄ H ₂
	Samples Received Intact	Yes	No	Thermometer ID													NaHSO ₄ HP
	Cooler Custody Seals	Yes	No	Correction Factor													NaHSO ₄ NABIS
	Sample Custody Seals	Yes	No	Temperature Reading													Na ₂ S ₂ O ₃ NaSO ₃
Total Containers		Corrected Temperature														Zn Acetate+NaOH Zn	
																NaOH+Ascorbic Acid SACP	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH	BTEX	Chloride	Hold																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	[Signature]	9/17/21	2		
3		858	4		
5			6		

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6226-1

SDG Number: Eunice, NM

Login Number: 6226

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: 880-6404-1

Laboratory Sample Delivery Group: Eunice NM
Client Project/Site: HEP Eunice EMSU Remediation
Revision: 2

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/3/2022 1:47:07 PM

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

LINKS

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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 Eunice EMSU Remediation

Laboratory Job ID: 880-6404-1
SDG: Eunice NM

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Definitions/Glossary

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

Job ID: 880-6404-1
SDG: Eunice NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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
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

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Case Narrative

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

Job ID: 880-6404-1
SDG: Eunice NM

Job ID: 880-6404-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-6404-1

REVISION

The report being provided is a revision of the original report sent on 9/28/2021. The report (revision 2) is being revised due to Per client email, removed sample depths on sample IDs.

Report revision history

The report being provided is a revision of the original report sent on 9/28/2021. The report (revision 2) is being revised due to Per client email, removed sample depths on sample IDs.

Revision 1 - 9/30/2021 - Reason - Incorrect TPH method reported on original report.

Receipt

The samples were received on 9/23/2021 4:42 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 2.7°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-8359 and analytical batch 880-8365 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 recovery for the following samples were outside control limits: TT-5 (880-6404-1) and TT-5 (880-6404-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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 Eunice EMSU Remediation

Job ID: 880-6404-1
SDG: Eunice NM

Client Sample ID: TT-5

Lab Sample ID: 880-6404-1

Date Collected: 09/21/21 13:30

Matrix: Solid

Date Received: 09/23/21 16:42

Sample Depth: 7 - 8

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.792		0.0402	mg/Kg		09/24/21 10:53	09/24/21 20:34	20
Toluene	0.674		0.0402	mg/Kg		09/24/21 10:53	09/24/21 20:34	20
Ethylbenzene	1.46		0.0402	mg/Kg		09/24/21 10:53	09/24/21 20:34	20
m-Xylene & p-Xylene	2.28		0.0803	mg/Kg		09/24/21 10:53	09/24/21 20:34	20
o-Xylene	0.212		0.0402	mg/Kg		09/24/21 10:53	09/24/21 20:34	20
Xylenes, Total	2.49		0.0803	mg/Kg		09/24/21 10:53	09/24/21 20:34	20
Total BTEX	5.42		0.0803	mg/Kg		09/24/21 10:53	09/24/21 20:34	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	09/24/21 10:53	09/24/21 20:34	20
1,4-Difluorobenzene (Surr)	63	S1-	70 - 130	09/24/21 10:53	09/24/21 20:34	20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<249	U	249	mg/Kg		09/24/21 14:35	09/25/21 01:28	5
Diesel Range Organics (Over C10-C28)	2860		249	mg/Kg		09/24/21 14:35	09/25/21 01:28	5
Oil Range Organics (Over C28-C36)	294		249	mg/Kg		09/24/21 14:35	09/25/21 01:28	5
Total TPH	3150		249	mg/Kg		09/24/21 14:35	09/25/21 01:28	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130	09/24/21 14:35	09/25/21 01:28	5
o-Terphenyl	114		70 - 130	09/24/21 14:35	09/25/21 01:28	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.8		4.97	mg/Kg			09/27/21 21:15	1

Client Sample ID: TT-5

Lab Sample ID: 880-6404-2

Date Collected: 09/21/21 13:40

Matrix: Solid

Date Received: 09/23/21 16:42

Sample Depth: 8 - 9

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.138		0.0404	mg/Kg		09/24/21 10:53	09/24/21 20:54	20
Toluene	<0.0404	U	0.0404	mg/Kg		09/24/21 10:53	09/24/21 20:54	20
Ethylbenzene	0.699		0.0404	mg/Kg		09/24/21 10:53	09/24/21 20:54	20
m-Xylene & p-Xylene	0.844		0.0808	mg/Kg		09/24/21 10:53	09/24/21 20:54	20
o-Xylene	0.185		0.0404	mg/Kg		09/24/21 10:53	09/24/21 20:54	20
Xylenes, Total	1.03		0.0808	mg/Kg		09/24/21 10:53	09/24/21 20:54	20
Total BTEX	1.87		0.0808	mg/Kg		09/24/21 10:53	09/24/21 20:54	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	09/24/21 10:53	09/24/21 20:54	20
1,4-Difluorobenzene (Surr)	85		70 - 130	09/24/21 10:53	09/24/21 20:54	20

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Client Sample Results

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

Job ID: 880-6404-1
SDG: Eunice NM

Client Sample ID: TT-5

Lab Sample ID: 880-6404-2

Date Collected: 09/21/21 13:40

Matrix: Solid

Date Received: 09/23/21 16:42

Sample Depth: 8 - 9

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<249	U	249	mg/Kg		09/24/21 14:35	09/24/21 02:58	5
Diesel Range Organics (Over C10-C28)	1780		249	mg/Kg		09/24/21 14:35	09/24/21 02:58	5
Oil Range Organics (Over C28-C36)	<249	U	249	mg/Kg		09/24/21 14:35	09/24/21 02:58	5
Total TPH	1780		249	mg/Kg		09/24/21 14:35	09/24/21 02:58	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130	09/24/21 14:35	09/24/21 02:58	5
o-Terphenyl	117		70 - 130	09/24/21 14:35	09/24/21 02:58	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.4		4.99	mg/Kg			09/27/21 21:31	1

Client Sample ID: TT-5

Lab Sample ID: 880-6404-3

Date Collected: 09/21/21 13:50

Matrix: Solid

Date Received: 09/23/21 16:42

Sample Depth: 9 - 10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0895		0.0398	mg/Kg		09/24/21 10:53	09/24/21 21:15	20
Toluene	0.0941		0.0398	mg/Kg		09/24/21 10:53	09/24/21 21:15	20
Ethylbenzene	0.153		0.0398	mg/Kg		09/24/21 10:53	09/24/21 21:15	20
m-Xylene & p-Xylene	0.148		0.0795	mg/Kg		09/24/21 10:53	09/24/21 21:15	20
o-Xylene	0.0814		0.0398	mg/Kg		09/24/21 10:53	09/24/21 21:15	20
Xylenes, Total	0.229		0.0795	mg/Kg		09/24/21 10:53	09/24/21 21:15	20
Total BTEX	0.566		0.0795	mg/Kg		09/24/21 10:53	09/24/21 21:15	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	168	S1+	70 - 130	09/24/21 10:53	09/24/21 21:15	20
1,4-Difluorobenzene (Surr)	83		70 - 130	09/24/21 10:53	09/24/21 21:15	20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	115		49.8	mg/Kg		09/24/21 14:35	09/24/21 03:18	1
Diesel Range Organics (Over C10-C28)	422		49.8	mg/Kg		09/24/21 14:35	09/24/21 03:18	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/24/21 14:35	09/24/21 03:18	1
Total TPH	537		49.8	mg/Kg		09/24/21 14:35	09/24/21 03:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130	09/24/21 14:35	09/24/21 03:18	1
o-Terphenyl	119		70 - 130	09/24/21 14:35	09/24/21 03:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.3		4.95	mg/Kg			09/27/21 21:37	1

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Surrogate Summary

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

Job ID: 880-6404-1
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)
880-6278-A-92-D MS	Matrix Spike	116	84
880-6278-A-92-E MSD	Matrix Spike Duplicate	122	71
880-6404-1	TT-5	104	63 S1-
880-6404-2	TT-5	81	85
880-6404-3	TT-5	168 S1+	83
LCS 880-8359/1-A	Lab Control Sample	114	86
LCSD 880-8359/2-A	Lab Control Sample Dup	115	85
MB 880-8359/5-A	Method Blank	103	79
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)
880-6404-1	TT-5	125	114
880-6404-2	TT-5	125	117
880-6404-3	TT-5	118	119
880-6413-A-41-D MS	Matrix Spike	119	112
880-6413-A-41-E MSD	Matrix Spike Duplicate	123	114
LCS 880-8373/2-A	Lab Control Sample	91	86
LCSD 880-8373/3-A	Lab Control Sample Dup	91	84
MB 880-8373/1-A	Method Blank	108	115
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-6404-1
SDG: Eunice NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8359/5-A

Matrix: Solid

Analysis Batch: 8365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8359

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/24/21 10:53	09/24/21 17:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	09/24/21 10:53	09/24/21 17:49	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/24/21 10:53	09/24/21 17:49	1

Lab Sample ID: LCS 880-8359/1-A

Matrix: Solid

Analysis Batch: 8365

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8359

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09435		mg/Kg		94	70 - 130
Toluene	0.100	0.09455		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.09547		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.1988		mg/Kg		99	70 - 130
o-Xylene	0.100	0.09902		mg/Kg		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

Lab Sample ID: LCSD 880-8359/2-A

Matrix: Solid

Analysis Batch: 8365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8359

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09553		mg/Kg		96	70 - 130	1	35
Toluene	0.100	0.09768		mg/Kg		98	70 - 130	3	35
Ethylbenzene	0.100	0.1002		mg/Kg		100	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2093		mg/Kg		105	70 - 130	5	35
o-Xylene	0.100	0.1051		mg/Kg		105	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

Lab Sample ID: 880-6278-A-92-D MS

Matrix: Solid

Analysis Batch: 8365

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8359

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1	0.0998	0.06933	F1	mg/Kg		69	70 - 130

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-6404-1
SDG: Eunice NM

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

Lab Sample ID: 880-6278-A-92-D MS

Matrix: Solid

Analysis Batch: 8365

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8359

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00200	U F1	0.0998	0.07674		mg/Kg		76	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.07945		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1605		mg/Kg		80	70 - 130
o-Xylene	<0.00200	U	0.0998	0.08074		mg/Kg		80	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	116		70 - 130						
1,4-Difluorobenzene (Surr)	84		70 - 130						

Lab Sample ID: 880-6278-A-92-E MSD

Matrix: Solid

Analysis Batch: 8365

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8359

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0994	0.05515	F1	mg/Kg		55	70 - 130	23	35
Toluene	<0.00200	U F1	0.0994	0.06640	F1	mg/Kg		66	70 - 130	14	35
Ethylbenzene	<0.00200	U	0.0994	0.07154		mg/Kg		72	70 - 130	10	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1491		mg/Kg		75	70 - 130	7	35
o-Xylene	<0.00200	U	0.0994	0.07463		mg/Kg		75	70 - 130	8	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	122		70 - 130								
1,4-Difluorobenzene (Surr)	71		70 - 130								

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

Lab Sample ID: MB 880-8373/1-A

Matrix: Solid

Analysis Batch: 8338

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8373

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		09/24/21 14:35	09/24/21 19:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/24/21 14:35	09/24/21 19:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/24/21 14:35	09/24/21 19:18	1
Total TPH	<50.0	U	50.0	mg/Kg		09/24/21 14:35	09/24/21 19:18	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			09/24/21 14:35	09/24/21 19:18	1
o-Terphenyl	115		70 - 130			09/24/21 14:35	09/24/21 19:18	1

Lab Sample ID: LCS 880-8373/2-A

Matrix: Solid

Analysis Batch: 8338

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8373

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	745.3		mg/Kg		75	70 - 130

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-6404-1
SDG: Eunice NM

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

Lab Sample ID: LCS 880-8373/2-A

Matrix: Solid

Analysis Batch: 8338

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8373

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (Over C10-C28)	1000	869.5		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	86		70 - 130

Lab Sample ID: LCSD 880-8373/3-A

Matrix: Solid

Analysis Batch: 8338

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8373

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	801.3		mg/Kg		80	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	822.0		mg/Kg		82	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	84		70 - 130

Lab Sample ID: 880-6413-A-41-D MS

Matrix: Solid

Analysis Batch: 8338

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8373

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	933.2		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	174		997	886.7		mg/Kg		71	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	119		70 - 130
o-Terphenyl	112		70 - 130

Lab Sample ID: 880-6413-A-41-E MSD

Matrix: Solid

Analysis Batch: 8338

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8373

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	<49.8	U	999	1012		mg/Kg		101	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	174		999	917.3		mg/Kg		74	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	114		70 - 130

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-6404-1
SDG: Eunice NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-8317/1-A

Matrix: Solid

Analysis Batch: 8469

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			09/27/21 20:58	1

Lab Sample ID: LCS 880-8317/2-A

Matrix: Solid

Analysis Batch: 8469

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	240.1		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-8317/3-A

Matrix: Solid

Analysis Batch: 8469

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	240.9		mg/Kg		96	90 - 110	0	20

Lab Sample ID: 880-6404-1 MS

Matrix: Solid

Analysis Batch: 8469

Client Sample ID: TT-5

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	11.8		249	278.2		mg/Kg		107	90 - 110

Lab Sample ID: 880-6404-1 MSD

Matrix: Solid

Analysis Batch: 8469

Client Sample ID: TT-5

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	11.8		249	279.4		mg/Kg		108	90 - 110	0	20

Eurofins Xenco, Midland

QC Association Summary

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

Job ID: 880-6404-1
SDG: Eunice NM

GC VOA

Prep Batch: 8359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6404-1	TT-5	Total/NA	Solid	5035	
880-6404-2	TT-5	Total/NA	Solid	5035	
880-6404-3	TT-5	Total/NA	Solid	5035	
MB 880-8359/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8359/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8359/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-6278-A-92-D MS	Matrix Spike	Total/NA	Solid	5035	
880-6278-A-92-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 8365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6404-1	TT-5	Total/NA	Solid	8021B	8359
880-6404-2	TT-5	Total/NA	Solid	8021B	8359
880-6404-3	TT-5	Total/NA	Solid	8021B	8359
MB 880-8359/5-A	Method Blank	Total/NA	Solid	8021B	8359
LCS 880-8359/1-A	Lab Control Sample	Total/NA	Solid	8021B	8359
LCSD 880-8359/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8359
880-6278-A-92-D MS	Matrix Spike	Total/NA	Solid	8021B	8359
880-6278-A-92-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8359

GC Semi VOA

Analysis Batch: 8292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6404-2	TT-5	Total/NA	Solid	8015B NM	8373
880-6404-3	TT-5	Total/NA	Solid	8015B NM	8373

Analysis Batch: 8338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6404-1	TT-5	Total/NA	Solid	8015B NM	8373
MB 880-8373/1-A	Method Blank	Total/NA	Solid	8015B NM	8373
LCS 880-8373/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8373
LCSD 880-8373/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8373
880-6413-A-41-D MS	Matrix Spike	Total/NA	Solid	8015B NM	8373
880-6413-A-41-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8373

Prep Batch: 8373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6404-1	TT-5	Total/NA	Solid	8015NM Prep	
880-6404-2	TT-5	Total/NA	Solid	8015NM Prep	
880-6404-3	TT-5	Total/NA	Solid	8015NM Prep	
MB 880-8373/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8373/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8373/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6413-A-41-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6413-A-41-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 8317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6404-1	TT-5	Soluble	Solid	DI Leach	

Eurofins Xenco, Midland

QC Association Summary

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

Job ID: 880-6404-1
SDG: Eunice NM

HPLC/IC (Continued)

Leach Batch: 8317 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6404-2	TT-5	Soluble	Solid	DI Leach	
880-6404-3	TT-5	Soluble	Solid	DI Leach	
MB 880-8317/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8317/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8317/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6404-1 MS	TT-5	Soluble	Solid	DI Leach	
880-6404-1 MSD	TT-5	Soluble	Solid	DI Leach	

Analysis Batch: 8469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6404-1	TT-5	Soluble	Solid	300.0	8317
880-6404-2	TT-5	Soluble	Solid	300.0	8317
880-6404-3	TT-5	Soluble	Solid	300.0	8317
MB 880-8317/1-A	Method Blank	Soluble	Solid	300.0	8317
LCS 880-8317/2-A	Lab Control Sample	Soluble	Solid	300.0	8317
LCSD 880-8317/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8317
880-6404-1 MS	TT-5	Soluble	Solid	300.0	8317
880-6404-1 MSD	TT-5	Soluble	Solid	300.0	8317

Eurofins Xenco, Midland

Lab Chronicle

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

Job ID: 880-6404-1
SDG: Eunice NM

Client Sample ID: TT-5

Lab Sample ID: 880-6404-1

Date Collected: 09/21/21 13:30

Matrix: Solid

Date Received: 09/23/21 16:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	8359	09/24/21 10:53	MR	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	8365	09/24/21 20:34	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8373	09/24/21 14:35	DM	XEN MID
Total/NA	Analysis	8015B NM		5			8338	09/25/21 01:28	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	8317	09/26/21 12:21	SC	XEN MID
Soluble	Analysis	300.0		1			8469	09/27/21 21:15	CH	XEN MID

Client Sample ID: TT-5

Lab Sample ID: 880-6404-2

Date Collected: 09/21/21 13:40

Matrix: Solid

Date Received: 09/23/21 16:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	8359	09/24/21 10:53	MR	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	8365	09/24/21 20:54	MR	XEN MID
Total/NA	Analysis	8015B NM		5			8292	09/24/21 02:58	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8373	09/24/21 14:35	DM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	8317	09/26/21 12:21	SC	XEN MID
Soluble	Analysis	300.0		1			8469	09/27/21 21:31	CH	XEN MID

Client Sample ID: TT-5

Lab Sample ID: 880-6404-3

Date Collected: 09/21/21 13:50

Matrix: Solid

Date Received: 09/23/21 16:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	8359	09/24/21 10:53	MR	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	8365	09/24/21 21:15	MR	XEN MID
Total/NA	Analysis	8015B NM		1			8292	09/24/21 03:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8373	09/24/21 14:35	DM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	8317	09/26/21 12:21	SC	XEN MID
Soluble	Analysis	300.0		1			8469	09/27/21 21:37	CH	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 Eunice EMSU Remediation

Job ID: 880-6404-1
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	T104704400-21-22	06-30-22
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 Eunice EMSU Remediation

Job ID: 880-6404-1
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 Eunice EMSU Remediation

Job ID: 880-6404-1
SDG: Eunice NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-6404-1	TT-5	Solid	09/21/21 13:30	09/23/21 16:42	7 - 8
880-6404-2	TT-5	Solid	09/21/21 13:40	09/23/21 16:42	8 - 9
880-6404-3	TT-5	Solid	09/21/21 13:50	09/23/21 16:42	9 - 10



Environment Testing
Xerco

Houston, TX (281) 240-4200, Dallas TX (214) 880-6-
Midland TX (432) 704-5440 San Antonio, TX (2)
EL Paso TX (915) 585-3443, Lubbock, TX (806) 794-1200
Hobbs, NM (575) 392-7560 Carlsbad NM (575) 988-3199

Chain of Custody



Chain of Custody

6404

www.xenco.com Page 1 of 1

Project Manager	Kussell Sebring	Bill to: (if different)	
Company Name	TRC	Company Name	
Address	10 Desra Dr. #130E	Address	
City, State ZIP	Mound TX 79705	City, State ZIP	
Phone	432.250.4465	Email	TS-Sebring@TRCcompanies.com

Work Order Comments

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

State of Project:

Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐



Deliverables EDD ☐ ADapt ☐ Other ☐

Project Name:	<i>HFA Euro-Cash Receipt</i>						Turn Around	
Project Number	<i>454378</i>						<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	
Project Location:	<i>Euro N/A</i>						Due Date	
Sampler's Name:	<i>R. Serrano</i>						TAT starts the day received by the lab if received by 4:30pm	
PO #:								
SAMPLE RECEIPT	Temp Blank:	Yes <input checked="" type="radio"/> No <input type="radio"/>	Thermometer ID:	Wet Ice:	Yes <input checked="" type="radio"/> No <input type="radio"/>			
Samples Received Intact:	Yes <input checked="" type="radio"/> No <input type="radio"/>				<i>1P-8</i>			
Cooler Custody Seals:	Yes <input type="radio"/> No <input checked="" type="radio"/>		Correction Factor:		<i>+0.5</i>			
Sample Custody Seals:	Yes <input type="radio"/> No <input checked="" type="radio"/>		Temperature Reading		<i>2.2</i>			
Total Containers:	<i>3</i>		Corrected Temperature:		<i>2.7</i>			
Parameters								
	pH		TEX		ionide			
ANALYSIS REQUEST								
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							

[illegible]

Total	200.7 / 6610	200.8 / 6020:
Circle Method(s) and Metal(s) to be analyzed	8RCRA TCLP/SPLP 6010	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 Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hq 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
1 		9/22/21 1642	2		
3			4		
5			6		

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6404-1

SDG Number: Eunice NM

Login Number: 6404**List Number: 1****Creator: Phillips, Kerianna****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.	True	
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
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-6652-1

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

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/10/2022 9:36:02 AM

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

LINKS

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results through
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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 Eunice EMSU Remediation

Laboratory Job ID: 880-6652-1
SDG: Eunice NM

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Definitions/Glossary

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

Job ID: 880-6652-1
SDG: Eunice NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
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

Case Narrative

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

Job ID: 880-6652-1
SDG: Eunice NM

Job ID: 880-6652-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-6652-1

REVISION

The report being provided is a revision of the original report sent on 10/5/2021. The report (revision 1) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

Receipt

The samples were received on 9/29/2021 2:02 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 6.0°C

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: CS-7 (880-6652-14). Evidence of matrix interferences is not obvious.

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 Eunice EMSU Remediation

Job ID: 880-6652-1
SDG: Eunice NM

Client Sample ID: CS-1

Lab Sample ID: 880-6652-1

Date Collected: 09/28/21 08:00

Matrix: Solid

Date Received: 09/29/21 14:02

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:33	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	<49.9	U	49.9	mg/Kg		09/29/21 16:43	09/30/21 17:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/29/21 16:43	09/30/21 17:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/29/21 16:43	09/30/21 17:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			09/29/21 16:43	09/30/21 17:27	1
o-Terphenyl	103		70 - 130			09/29/21 16:43	09/30/21 17:27	1

Client Sample ID: CS-2

Lab Sample ID: 880-6652-3

Date Collected: 09/28/21 08:10

Matrix: Solid

Date Received: 09/29/21 14:02

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:33	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	<49.9	U	49.9	mg/Kg		09/29/21 16:43	09/30/21 17:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/29/21 16:43	09/30/21 17:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/29/21 16:43	09/30/21 17:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			09/29/21 16:43	09/30/21 17:48	1
o-Terphenyl	104		70 - 130			09/29/21 16:43	09/30/21 17:48	1

Client Sample ID: CS-3

Lab Sample ID: 880-6652-5

Date Collected: 09/28/21 08:20

Matrix: Solid

Date Received: 09/29/21 14:02

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:33	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	<49.8	U	49.8	mg/Kg		09/29/21 16:43	09/30/21 18:10	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/29/21 16:43	09/30/21 18:10	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/29/21 16:43	09/30/21 18:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			09/29/21 16:43	09/30/21 18:10	1
o-Terphenyl	102		70 - 130			09/29/21 16:43	09/30/21 18:10	1

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Client Sample Results

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

Job ID: 880-6652-1
SDG: Eunice NM

Client Sample ID: CS-4

Lab Sample ID: 880-6652-7

Date Collected: 09/28/21 08:30

Matrix: Solid

Date Received: 09/29/21 14:02

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:33	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	<50.0	U	50.0	mg/Kg		09/29/21 16:43	09/30/21 18:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/29/21 16:43	09/30/21 18:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/29/21 16:43	09/30/21 18:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			09/29/21 16:43	09/30/21 18:31	1
o-Terphenyl	107		70 - 130			09/29/21 16:43	09/30/21 18:31	1

Client Sample ID: CS-5

Lab Sample ID: 880-6652-9

Date Collected: 09/28/21 08:40

Matrix: Solid

Date Received: 09/29/21 14:02

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	60.3		50.0	mg/Kg			10/04/21 10:33	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	<50.0	U	50.0	mg/Kg		09/29/21 16:43	09/30/21 18:53	1
Diesel Range Organics (Over C10-C28)	60.3		50.0	mg/Kg		09/29/21 16:43	09/30/21 18:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/29/21 16:43	09/30/21 18:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			09/29/21 16:43	09/30/21 18:53	1
o-Terphenyl	105		70 - 130			09/29/21 16:43	09/30/21 18:53	1

Client Sample ID: CS-6

Lab Sample ID: 880-6652-11

Date Collected: 09/28/21 08:55

Matrix: Solid

Date Received: 09/29/21 14:02

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:33	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	<49.8	U	49.8	mg/Kg		09/29/21 16:43	09/30/21 19:14	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/29/21 16:43	09/30/21 19:14	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/29/21 16:43	09/30/21 19:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			09/29/21 16:43	09/30/21 19:14	1
o-Terphenyl	109		70 - 130			09/29/21 16:43	09/30/21 19:14	1

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Client Sample Results

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

Job ID: 880-6652-1
SDG: Eunice NM

Client Sample ID: CS-7

Lab Sample ID: 880-6652-13

Date Collected: 09/28/21 09:05

Matrix: Solid

Date Received: 09/29/21 14:02

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	189		50.0	mg/Kg			10/04/21 10:33	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	<50.0	U	50.0	mg/Kg		09/29/21 16:43	09/30/21 19:36	1
Diesel Range Organics (Over C10-C28)	189		50.0	mg/Kg		09/29/21 16:43	09/30/21 19:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/29/21 16:43	09/30/21 19:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			09/29/21 16:43	09/30/21 19:36	1
o-Terphenyl	107		70 - 130			09/29/21 16:43	09/30/21 19:36	1

Client Sample ID: CS-7

Lab Sample ID: 880-6652-14

Date Collected: 09/28/21 09:10

Matrix: Solid

Date Received: 09/29/21 14:02

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	593		50.0	mg/Kg			10/05/21 10:03	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	61.8		49.8	mg/Kg		10/04/21 13:45	10/05/21 03:11	1
Diesel Range Organics (Over C10-C28)	474		49.8	mg/Kg		10/04/21 13:45	10/05/21 03:11	1
Oil Range Organics (Over C28-C36)	57.0		49.8	mg/Kg		10/04/21 13:45	10/05/21 03:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			10/04/21 13:45	10/05/21 03:11	1
o-Terphenyl	132	S1+	70 - 130			10/04/21 13:45	10/05/21 03:11	1

Client Sample ID: CS-8

Lab Sample ID: 880-6652-15

Date Collected: 09/28/21 09:15

Matrix: Solid

Date Received: 09/29/21 14:02

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:33	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	<49.8	U	49.8	mg/Kg		09/29/21 16:43	09/30/21 19:57	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/29/21 16:43	09/30/21 19:57	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/29/21 16:43	09/30/21 19:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			09/29/21 16:43	09/30/21 19:57	1
o-Terphenyl	109		70 - 130			09/29/21 16:43	09/30/21 19:57	1

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Client Sample Results

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

Job ID: 880-6652-1
SDG: Eunice NM

Client Sample ID: CS-9

Lab Sample ID: 880-6652-17

Date Collected: 09/28/21 09:25

Matrix: Solid

Date Received: 09/29/21 14:02

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:33	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	<50.0	U	50.0	mg/Kg		09/29/21 16:43	09/30/21 20:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/29/21 16:43	09/30/21 20:19	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/29/21 16:43	09/30/21 20:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			09/29/21 16:43	09/30/21 20:19	1
o-Terphenyl	106		70 - 130			09/29/21 16:43	09/30/21 20:19	1

Surrogate Summary

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

Job ID: 880-6652-1
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	OTPH1
		(70-130)	(70-130)
880-6652-1	CS-1	102	103
880-6652-3	CS-2	101	104
880-6652-5	CS-3	99	102
880-6652-7	CS-4	103	107
880-6652-9	CS-5	101	105
880-6652-11	CS-6	106	109
880-6652-13	CS-7	105	107
880-6652-14	CS-7	120	132 S1+
880-6652-15	CS-8	104	109
880-6652-17	CS-9	102	106
890-1316-A-11-E MS	Matrix Spike	100	91
890-1316-A-11-F MSD	Matrix Spike Duplicate	101	91
890-1349-A-1-F MS	Matrix Spike	120	110
890-1349-A-1-G MSD	Matrix Spike Duplicate	122	113
LCS 880-8617/2-A	Lab Control Sample	105	96
LCS 880-8829/2-A	Lab Control Sample	113	117
LCSD 880-8617/3-A	Lab Control Sample Dup	106	97
LCSD 880-8829/3-A	Lab Control Sample Dup	108	111
MB 880-8617/1-A	Method Blank	100	103
MB 880-8829/1-A	Method Blank	122	128

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-6652-1
SDG: Eunice NM

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

Lab Sample ID: MB 880-8617/1-A

Matrix: Solid

Analysis Batch: 8626

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8617

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		09/29/21 16:43	09/30/21 11:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/29/21 16:43	09/30/21 11:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/29/21 16:43	09/30/21 11:21	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			09/29/21 16:43	09/30/21 11:21	1
o-Terphenyl	103		70 - 130			09/29/21 16:43	09/30/21 11:21	1

Lab Sample ID: LCS 880-8617/2-A

Matrix: Solid

Analysis Batch: 8626

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8617

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	795.0		mg/Kg		80	70 - 130
Diesel Range Organics (Over C10-C28)	1000	947.4		mg/Kg		95	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
1-Chlorooctane	105		70 - 130				
o-Terphenyl	96		70 - 130				

Lab Sample ID: LCSD 880-8617/3-A

Matrix: Solid

Analysis Batch: 8626

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8617

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	874.5		mg/Kg		87	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	1000	945.0		mg/Kg		94	70 - 130	0	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	106		70 - 130						
o-Terphenyl	97		70 - 130						

Lab Sample ID: 890-1316-A-11-E MS

Matrix: Solid

Analysis Batch: 8626

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8617

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	1000		mg/Kg		100	70 - 130
Diesel Range Organics (Over C10-C28)	63.1		997	890.0		mg/Kg		83	70 - 130

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QC Sample Results

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

Job ID: 880-6652-1
SDG: Eunice NM

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

Lab Sample ID: 890-1316-A-11-E MS

Matrix: Solid

Analysis Batch: 8626

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8617

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: 890-1316-A-11-F MSD

Matrix: Solid

Analysis Batch: 8626

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8617

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	<49.8	U	999	1023		mg/Kg		102	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	63.1		999	901.5		mg/Kg		84	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: MB 880-8829/1-A

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8829

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		10/04/21 13:45	10/04/21 21:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/04/21 13:45	10/04/21 21:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/04/21 13:45	10/04/21 21:30	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane	122		70 - 130	10/04/21 13:45	10/04/21 21:30	1
o-Terphenyl	128		70 - 130	10/04/21 13:45	10/04/21 21:30	1

Lab Sample ID: LCS 880-8829/2-A

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8829

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	968.3		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1131		mg/Kg		113	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	117		70 - 130

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QC Sample Results

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

Job ID: 880-6652-1
SDG: Eunice NM

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

Lab Sample ID: LCSD 880-8829/3-A

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8829

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	910.6		mg/Kg		91	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	1069		mg/Kg		107	70 - 130	6	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	108		70 - 130						
o-Terphenyl	111		70 - 130						

Lab Sample ID: 890-1349-A-1-F MS

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8829

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	299		995	1030		mg/Kg		73	70 - 130		
Diesel Range Organics (Over C10-C28)	287		995	1341		mg/Kg		106	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	120		70 - 130								
o-Terphenyl	110		70 - 130								

Lab Sample ID: 890-1349-A-1-G MSD

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8829

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	299		997	1121		mg/Kg		82	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	287		997	1374		mg/Kg		109	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	122		70 - 130								
o-Terphenyl	113		70 - 130								

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QC Association Summary

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

Job ID: 880-6652-1
SDG: Eunice NM

GC Semi VOA

Prep Batch: 8617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6652-1	CS-1	Total/NA	Solid	8015NM Prep	
880-6652-3	CS-2	Total/NA	Solid	8015NM Prep	
880-6652-5	CS-3	Total/NA	Solid	8015NM Prep	
880-6652-7	CS-4	Total/NA	Solid	8015NM Prep	
880-6652-9	CS-5	Total/NA	Solid	8015NM Prep	
880-6652-11	CS-6	Total/NA	Solid	8015NM Prep	
880-6652-13	CS-7	Total/NA	Solid	8015NM Prep	
880-6652-15	CS-8	Total/NA	Solid	8015NM Prep	
880-6652-17	CS-9	Total/NA	Solid	8015NM Prep	
MB 880-8617/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8617/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8617/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1316-A-11-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1316-A-11-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6652-1	CS-1	Total/NA	Solid	8015B NM	8617
880-6652-3	CS-2	Total/NA	Solid	8015B NM	8617
880-6652-5	CS-3	Total/NA	Solid	8015B NM	8617
880-6652-7	CS-4	Total/NA	Solid	8015B NM	8617
880-6652-9	CS-5	Total/NA	Solid	8015B NM	8617
880-6652-11	CS-6	Total/NA	Solid	8015B NM	8617
880-6652-13	CS-7	Total/NA	Solid	8015B NM	8617
880-6652-15	CS-8	Total/NA	Solid	8015B NM	8617
880-6652-17	CS-9	Total/NA	Solid	8015B NM	8617
MB 880-8617/1-A	Method Blank	Total/NA	Solid	8015B NM	8617
LCS 880-8617/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8617
LCSD 880-8617/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8617
890-1316-A-11-E MS	Matrix Spike	Total/NA	Solid	8015B NM	8617
890-1316-A-11-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8617

Analysis Batch: 8775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6652-14	CS-7	Total/NA	Solid	8015B NM	8829
MB 880-8829/1-A	Method Blank	Total/NA	Solid	8015B NM	8829
LCS 880-8829/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8829
LCSD 880-8829/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8829
890-1349-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	8829
890-1349-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8829

Analysis Batch: 8793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6652-1	CS-1	Total/NA	Solid	8015 NM	
880-6652-3	CS-2	Total/NA	Solid	8015 NM	
880-6652-5	CS-3	Total/NA	Solid	8015 NM	
880-6652-7	CS-4	Total/NA	Solid	8015 NM	
880-6652-9	CS-5	Total/NA	Solid	8015 NM	
880-6652-11	CS-6	Total/NA	Solid	8015 NM	
880-6652-13	CS-7	Total/NA	Solid	8015 NM	
880-6652-15	CS-8	Total/NA	Solid	8015 NM	

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QC Association Summary

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

Job ID: 880-6652-1
SDG: Eunice NM

GC Semi VOA (Continued)

Analysis Batch: 8793 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6652-17	CS-9	Total/NA	Solid	8015 NM	

Prep Batch: 8829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6652-14	CS-7	Total/NA	Solid	8015NM Prep	
MB 880-8829/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8829/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8829/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1349-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1349-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6652-14	CS-7	Total/NA	Solid	8015 NM	

Lab Chronicle

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

Job ID: 880-6652-1
SDG: Eunice NM

Client Sample ID: CS-1

Date Collected: 09/28/21 08:00

Date Received: 09/29/21 14:02

Lab Sample ID: 880-6652-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8617	09/29/21 16:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	09/30/21 17:27	AJ	XEN MID

Client Sample ID: CS-2

Date Collected: 09/28/21 08:10

Date Received: 09/29/21 14:02

Lab Sample ID: 880-6652-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8617	09/29/21 16:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	09/30/21 17:48	AJ	XEN MID

Client Sample ID: CS-3

Date Collected: 09/28/21 08:20

Date Received: 09/29/21 14:02

Lab Sample ID: 880-6652-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8617	09/29/21 16:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	09/30/21 18:10	AJ	XEN MID

Client Sample ID: CS-4

Date Collected: 09/28/21 08:30

Date Received: 09/29/21 14:02

Lab Sample ID: 880-6652-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	8617	09/29/21 16:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	09/30/21 18:31	AJ	XEN MID

Client Sample ID: CS-5

Date Collected: 09/28/21 08:40

Date Received: 09/29/21 14:02

Lab Sample ID: 880-6652-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8617	09/29/21 16:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	09/30/21 18:53	AJ	XEN MID

Client Sample ID: CS-6

Date Collected: 09/28/21 08:55

Date Received: 09/29/21 14:02

Lab Sample ID: 880-6652-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:33	AJ	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-6652-1
SDG: Eunice NM

Client Sample ID: CS-6

Date Collected: 09/28/21 08:55

Date Received: 09/29/21 14:02

Lab Sample ID: 880-6652-11

Matrix: Solid

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			10.05 g	10 mL	8617	09/29/21 16:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	09/30/21 19:14	AJ	XEN MID

Client Sample ID: CS-7

Date Collected: 09/28/21 09:05

Date Received: 09/29/21 14:02

Lab Sample ID: 880-6652-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8617	09/29/21 16:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	09/30/21 19:36	AJ	XEN MID

Client Sample ID: CS-7

Date Collected: 09/28/21 09:10

Date Received: 09/29/21 14:02

Lab Sample ID: 880-6652-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8889	10/05/21 10:03	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	8829	10/04/21 13:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8775	10/05/21 03:11	AJ	XEN MID

Client Sample ID: CS-8

Date Collected: 09/28/21 09:15

Date Received: 09/29/21 14:02

Lab Sample ID: 880-6652-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8617	09/29/21 16:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	09/30/21 19:57	AJ	XEN MID

Client Sample ID: CS-9

Date Collected: 09/28/21 09:25

Date Received: 09/29/21 14:02

Lab Sample ID: 880-6652-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8617	09/29/21 16:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	09/30/21 20:19	AJ	XEN MID

Laboratory References:

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

Eurofins Xenco

Accreditation/Certification Summary

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

Job ID: 880-6652-1
SDG: Eunice NM

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-6652-1
SDG: Eunice NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-6652-1
SDG: Eunice NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-6652-1	CS-1	Solid	09/28/21 08:00	09/29/21 14:02
880-6652-3	CS-2	Solid	09/28/21 08:10	09/29/21 14:02
880-6652-5	CS-3	Solid	09/28/21 08:20	09/29/21 14:02
880-6652-7	CS-4	Solid	09/28/21 08:30	09/29/21 14:02
880-6652-9	CS-5	Solid	09/28/21 08:40	09/29/21 14:02
880-6652-11	CS-6	Solid	09/28/21 08:55	09/29/21 14:02
880-6652-13	CS-7	Solid	09/28/21 09:05	09/29/21 14:02
880-6652-14	CS-7	Solid	09/28/21 09:10	09/29/21 14:02
880-6652-15	CS-8	Solid	09/28/21 09:15	09/29/21 14:02
880-6652-17	CS-9	Solid	09/28/21 09:25	09/29/21 14:02



Environment Testing
Xenoco

Chain of Custody

Houston TX (281) 240-4200 Dallas TX
Midland TX (432) 704-5440 San Antonio
El Paso TX (915) 585-3443 Lubbock, TX
Hobbs NM (575) 392-7550 Carlsbad NM (505) 300-3152



ir No:

66052

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Page

1 of 2

Project Manager	RUSSELL SEBRING	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 DESTA DR #130E	Address	
City, State ZIP	MIDLAND, TX 79705	City, State ZIP	
Phone	432 250 4465	Email	RSEBRING@TRCCOMPANIES.COM

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: _____ 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 Eunice EMSU Remediation	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST		Preservative Codes	
Project Number	454378	Due Date				None, NO	DI Water	H ₂ O	
Project Location	Eunice, NM	TAT starts the day received by the lab if received by 4 30pm				Cool Cool	MeOH	Me	
Sampler's Name	Russell Sebring/Misti Bryant					HCL HC	HNO ₃	HN	
PO #						H ₂ SO ₄ , H ₂	NaOH	Na	
SAMPLE RECEIPT		Temp Blank	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	H ₃ PO ₄ , HP			
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID				NaHSO ₄ , NABIS			
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor				Na ₂ S ₂ O ₃ , NaSO ₃			
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	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	TPH 8015M	Chlorides	Hold	Sample Comments
CS-1 @ 3'	S	9/28/2021	800	3	C	1	X			
CS-1 @ 3.5'	S	9/28/2021	805	3.5	C	1		X		
CS-2 @ 3'	S	9/28/2021	810	3	C	1	X			
CS-2 @ 3.5'	S	9/28/2021	815	3.5	C	1		X		
CS-3 @ 3'	S	9/28/2021	820	3	C	1	X			
CS-3 @ 3.5'	S	9/28/2021	825	3.5	C	1		X		
CS-4 @ 3'	S	9/28/2021	830	3	C	1	X			
CS-4 @ 3.5'	S	9/28/2021	835	3.5	C	1		X		
CS-5 @ 3'	S	9/28/2021	840	3	C	1	X			
CS-5 @ 3.5'	S	9/28/2021	850	3.5	C	1		X		

If results are > 100 please run deeper

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 Ti U	Hg 1631 / 245 1 / 7470 / 7471
--------------------	---------------	----------------------	--	-------------------------------

Circle Method(s) and Metal(s) to be analyzed

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
		9-28-21 13:37			



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: 16652

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Project Manager	RUSSELL SEBRING	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 DESTA DR #130E	Address	
City, State ZIP	MIDLAND, TX 79705	City, State ZIP	
Phone	432 250 4465	Email	RSEBRING@TRCCOMPANIES.COM

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:	
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 Eunice EMSU Remediation	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST																Preservative Codes	
Project Number	454378	Due Date																				None NO	DI Water H ₂ O
Project Location	Eunice, NM	TAT starts the day received by the lab if received by 4 30pm																				Cool Cool	MeOH Me
Sampler's Name	Russell Sebring/Misti Bryant	Temperature ID																				HCL HC	HNO ₃ HN
PO #		Wet Ice																				H ₂ SO ₄ H ₂	NaOH Na
SAMPLE RECEIPT	Temp Blank	Yes No																				H ₃ PO ₄ HP	
	Samples Received Intact	Yes No																				NaHSO ₄ NABIS	
	Cooler Custody Seals	Yes No N/A																				Na ₂ S ₂ O ₃ NaSO ₃	
	Sample Custody Seals	Yes No N/A																				Zn Acetate+NaOH Zn	
Total Containers		Corrected Temperature																				NaOH+Ascorbic Acid SAPC	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grav/Comp	# of Cont	TPH 8015M	chlorides	Hold																					Sample Comments	
CS-6 @ 3'	S	9/28/2021	855	3	C	1	X																								
CS-6 @ 3.5'	S	9/28/2021	900	3.5	C	1			X																						
CS-7 @ 3'	S	9/28/2021	905	3	C	1	X																								
CS-7 @ 3.5'	S	9/28/2021	910	3.5	C	1			X																						
CS-8 @ 3'	S	9/28/2021	915	3	C	1	X																								
CS-8 @ 3.5'	S	9/28/2021	920	3.5	C	1			X																						
CS-9 @ 3'	S	9/28/2021	925	3	C	1	X																								
CS-9 @ 3.5'	S	9/28/2021	930	3.5	C	1			X																						

If results are > 100 please run deeper

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 / 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 \$3 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
1		9-29-21 13:37			
3					
5					

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6652-1

SDG Number: Eunice NM

Login Number: 6652**List Number: 1****Creator: Phillips, Kerianna****List Source: Eurofins Xenco**

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

Laboratory Job ID: 880-6654-1

Laboratory Sample Delivery Group: Eunice NM
Client Project/Site: HEP Eunice EMSU Remediation
Revision: 2

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/10/2022 9:37:30 AM

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

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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 Eunice EMSU Remediation

Laboratory Job ID: 880-6654-1
SDG: Eunice NM

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Definitions/Glossary

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

Job ID: 880-6654-1
SDG: Eunice NM

Qualifiers

GC Semi VOA

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

Case Narrative

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

Job ID: 880-6654-1
SDG: Eunice NM

Job ID: 880-6654-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-6654-1

REVISION

The report being provided is a revision of the original report sent on 10/4/2021. The report (revision 2) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

The report being provided is a revision of the original report sent on 10/4/2021. The report (revision 2) is being revised due to Per client email, removed sample depths from sample name.

Revision 1 - 11/3/2021 - Reason - Per client email, corrected samples 014,015,016 to match COC.

Receipt

The samples were received on 9/29/2021 1:37 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 6.0°C

GC Semi VOA

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 Eunice EMSU Remediation

Job ID: 880-6654-1
SDG: Eunice NM

Client Sample ID: CS-10

Lab Sample ID: 880-6654-1

Date Collected: 09/28/21 09:45

Matrix: Solid

Date Received: 09/29/21 13:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	56.3		50.0	mg/Kg			10/04/21 10:33	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	<49.9	U	49.9	mg/Kg		09/30/21 09:25	10/01/21 00:58	1
Diesel Range Organics (Over C10-C28)	56.3		49.9	mg/Kg		09/30/21 09:25	10/01/21 00:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/30/21 09:25	10/01/21 00:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			09/30/21 09:25	10/01/21 00:58	1
o-Terphenyl	117		70 - 130			09/30/21 09:25	10/01/21 00:58	1

Client Sample ID: CS-11

Lab Sample ID: 880-6654-3

Date Collected: 09/28/21 09:55

Matrix: Solid

Date Received: 09/29/21 13:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:33	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	<49.9	U	49.9	mg/Kg		09/30/21 09:25	10/01/21 01:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/30/21 09:25	10/01/21 01:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/30/21 09:25	10/01/21 01:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			09/30/21 09:25	10/01/21 01:20	1
o-Terphenyl	109		70 - 130			09/30/21 09:25	10/01/21 01:20	1

Client Sample ID: CS-12

Lab Sample ID: 880-6654-5

Date Collected: 09/28/21 10:05

Matrix: Solid

Date Received: 09/29/21 13:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:46	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	<49.8	U	49.8	mg/Kg		09/30/21 09:25	10/01/21 01:41	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/30/21 09:25	10/01/21 01:41	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/30/21 09:25	10/01/21 01:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			09/30/21 09:25	10/01/21 01:41	1
o-Terphenyl	107		70 - 130			09/30/21 09:25	10/01/21 01:41	1

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Client Sample Results

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

Job ID: 880-6654-1
SDG: Eunice NM

Client Sample ID: CS-13

Lab Sample ID: 880-6654-7

Date Collected: 09/28/21 10:15

Matrix: Solid

Date Received: 09/29/21 13:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:46	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	<50.0	U	50.0	mg/Kg		09/30/21 09:25	10/01/21 02:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/30/21 09:25	10/01/21 02:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/30/21 09:25	10/01/21 02:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			09/30/21 09:25	10/01/21 02:03	1
o-Terphenyl	103		70 - 130			09/30/21 09:25	10/01/21 02:03	1

Client Sample ID: CS-14

Lab Sample ID: 880-6654-9

Date Collected: 09/28/21 10:25

Matrix: Solid

Date Received: 09/29/21 13:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:46	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	<49.9	U	49.9	mg/Kg		09/30/21 09:25	10/01/21 02:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/30/21 09:25	10/01/21 02:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/30/21 09:25	10/01/21 02:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			09/30/21 09:25	10/01/21 02:45	1
o-Terphenyl	105		70 - 130			09/30/21 09:25	10/01/21 02:45	1

Client Sample ID: CS-16

Lab Sample ID: 880-6654-11

Date Collected: 09/28/21 10:50

Matrix: Solid

Date Received: 09/29/21 13:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:46	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	<49.9	U	49.9	mg/Kg		09/30/21 09:25	10/01/21 03:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/30/21 09:25	10/01/21 03:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/30/21 09:25	10/01/21 03:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			09/30/21 09:25	10/01/21 03:06	1
o-Terphenyl	105		70 - 130			09/30/21 09:25	10/01/21 03:06	1

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Client Sample Results

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

Job ID: 880-6654-1
SDG: Eunice NM

Client Sample ID: CS-19

Date Collected: 09/28/21 11:20

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:46	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	<49.9	U	49.9	mg/Kg		09/30/21 09:25	10/01/21 03:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/30/21 09:25	10/01/21 03:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/30/21 09:25	10/01/21 03:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			09/30/21 09:25	10/01/21 03:27	1
o-Terphenyl	109		70 - 130			09/30/21 09:25	10/01/21 03:27	1

Client Sample ID: CS-21

Date Collected: 09/28/21 11:40

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-13

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:46	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	<49.8	U	49.8	mg/Kg		09/30/21 09:25	10/01/21 03:48	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/30/21 09:25	10/01/21 03:48	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/30/21 09:25	10/01/21 03:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			09/30/21 09:25	10/01/21 03:48	1
o-Terphenyl	104		70 - 130			09/30/21 09:25	10/01/21 03:48	1

Client Sample ID: SW-1

Date Collected: 09/28/21 09:30

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-14

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:46	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	<50.0	U	50.0	mg/Kg		09/30/21 09:25	10/01/21 04:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/30/21 09:25	10/01/21 04:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/30/21 09:25	10/01/21 04:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130			09/30/21 09:25	10/01/21 04:10	1
o-Terphenyl	115		70 - 130			09/30/21 09:25	10/01/21 04:10	1

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Client Sample Results

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

Job ID: 880-6654-1
SDG: Eunice NM

Client Sample ID: SW-2

Lab Sample ID: 880-6654-15

Date Collected: 09/28/21 09:35

Matrix: Solid

Date Received: 09/29/21 13:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:46	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	<50.0	U	50.0	mg/Kg		09/30/21 09:25	10/01/21 04:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/30/21 09:25	10/01/21 04:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/30/21 09:25	10/01/21 04:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130			09/30/21 09:25	10/01/21 04:31	1
o-Terphenyl	123		70 - 130			09/30/21 09:25	10/01/21 04:31	1

Client Sample ID: SW-3

Lab Sample ID: 880-6654-16

Date Collected: 09/28/21 09:40

Matrix: Solid

Date Received: 09/29/21 13:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	70.9		50.0	mg/Kg			10/04/21 10:46	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	<49.8	U	49.8	mg/Kg		09/30/21 09:25	10/01/21 04:52	1
Diesel Range Organics (Over C10-C28)	70.9		49.8	mg/Kg		09/30/21 09:25	10/01/21 04:52	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/30/21 09:25	10/01/21 04:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			09/30/21 09:25	10/01/21 04:52	1
o-Terphenyl	101		70 - 130			09/30/21 09:25	10/01/21 04:52	1

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Surrogate Summary

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

Job ID: 880-6654-1
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	OTPH1
		(70-130)	(70-130)
880-6650-A-1-B MS	Matrix Spike	103	94
880-6650-A-1-C MSD	Matrix Spike Duplicate	103	93
880-6654-1	CS-10	112	117
880-6654-3	CS-11	104	109
880-6654-5	CS-12	103	107
880-6654-7	CS-13	100	103
880-6654-9	CS-14	103	105
880-6654-11	CS-16	102	105
880-6654-12	CS-19	106	109
880-6654-13	CS-21	101	104
880-6654-14	SW-1	110	115
880-6654-15	SW-2	114	123
880-6654-16	SW-3	100	101
LCS 880-8639/2-A	Lab Control Sample	102	94
LCSD 880-8639/3-A	Lab Control Sample Dup	101	93
MB 880-8639/1-A	Method Blank	100	104
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

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

Job ID: 880-6654-1
SDG: Eunice NM

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

Lab Sample ID: MB 880-8639/1-A

Matrix: Solid

Analysis Batch: 8626

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8639

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		09/30/21 09:25	09/30/21 21:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/30/21 09:25	09/30/21 21:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/30/21 09:25	09/30/21 21:01	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			09/30/21 09:25	09/30/21 21:01	1
o-Terphenyl	104		70 - 130			09/30/21 09:25	09/30/21 21:01	1

Lab Sample ID: LCS 880-8639/2-A

Matrix: Solid

Analysis Batch: 8626

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8639

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	770.3		mg/Kg		77	70 - 130
Diesel Range Organics (Over C10-C28)	1000	914.9		mg/Kg		91	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
1-Chlorooctane	102		70 - 130				
o-Terphenyl	94		70 - 130				

Lab Sample ID: LCSD 880-8639/3-A

Matrix: Solid

Analysis Batch: 8626

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8639

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	777.6		mg/Kg		78	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	921.2		mg/Kg		92	70 - 130	1	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	101		70 - 130						
o-Terphenyl	93		70 - 130						

Lab Sample ID: 880-6650-A-1-B MS

Matrix: Solid

Analysis Batch: 8626

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8639

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	794.2		mg/Kg		80	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	866.5		mg/Kg		82	70 - 130

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QC Sample Results

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

Job ID: 880-6654-1
SDG: Eunice NM

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

Lab Sample ID: 880-6650-A-1-B MS

Matrix: Solid

Analysis Batch: 8626

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8639

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 880-6650-A-1-C MSD

Matrix: Solid

Analysis Batch: 8626

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8639

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	<49.8	U	999	868.4		mg/Kg		87	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	856.9		mg/Kg		81	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	93		70 - 130

QC Association Summary

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

Job ID: 880-6654-1
SDG: Eunice NM

GC Semi VOA

Analysis Batch: 8626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6654-1	CS-10	Total/NA	Solid	8015B NM	8639
880-6654-3	CS-11	Total/NA	Solid	8015B NM	8639
880-6654-5	CS-12	Total/NA	Solid	8015B NM	8639
880-6654-7	CS-13	Total/NA	Solid	8015B NM	8639
880-6654-9	CS-14	Total/NA	Solid	8015B NM	8639
880-6654-11	CS-16	Total/NA	Solid	8015B NM	8639
880-6654-12	CS-19	Total/NA	Solid	8015B NM	8639
880-6654-13	CS-21	Total/NA	Solid	8015B NM	8639
880-6654-14	SW-1	Total/NA	Solid	8015B NM	8639
880-6654-15	SW-2	Total/NA	Solid	8015B NM	8639
880-6654-16	SW-3	Total/NA	Solid	8015B NM	8639
MB 880-8639/1-A	Method Blank	Total/NA	Solid	8015B NM	8639
LCS 880-8639/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8639
LCSD 880-8639/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8639
880-6650-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	8639
880-6650-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8639

Prep Batch: 8639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6654-1	CS-10	Total/NA	Solid	8015NM Prep	
880-6654-3	CS-11	Total/NA	Solid	8015NM Prep	
880-6654-5	CS-12	Total/NA	Solid	8015NM Prep	
880-6654-7	CS-13	Total/NA	Solid	8015NM Prep	
880-6654-9	CS-14	Total/NA	Solid	8015NM Prep	
880-6654-11	CS-16	Total/NA	Solid	8015NM Prep	
880-6654-12	CS-19	Total/NA	Solid	8015NM Prep	
880-6654-13	CS-21	Total/NA	Solid	8015NM Prep	
880-6654-14	SW-1	Total/NA	Solid	8015NM Prep	
880-6654-15	SW-2	Total/NA	Solid	8015NM Prep	
880-6654-16	SW-3	Total/NA	Solid	8015NM Prep	
MB 880-8639/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8639/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8639/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6650-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6650-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6654-1	CS-10	Total/NA	Solid	8015 NM	
880-6654-3	CS-11	Total/NA	Solid	8015 NM	
880-6654-5	CS-12	Total/NA	Solid	8015 NM	
880-6654-7	CS-13	Total/NA	Solid	8015 NM	
880-6654-9	CS-14	Total/NA	Solid	8015 NM	
880-6654-11	CS-16	Total/NA	Solid	8015 NM	
880-6654-12	CS-19	Total/NA	Solid	8015 NM	
880-6654-13	CS-21	Total/NA	Solid	8015 NM	
880-6654-14	SW-1	Total/NA	Solid	8015 NM	
880-6654-15	SW-2	Total/NA	Solid	8015 NM	
880-6654-16	SW-3	Total/NA	Solid	8015 NM	

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Lab Chronicle

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

Job ID: 880-6654-1
SDG: Eunice NM

Client Sample ID: CS-10

Date Collected: 09/28/21 09:45

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8639	09/30/21 09:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	10/01/21 00:58	AJ	XEN MID

Client Sample ID: CS-11

Date Collected: 09/28/21 09:55

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8639	09/30/21 09:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	10/01/21 01:20	AJ	XEN MID

Client Sample ID: CS-12

Date Collected: 09/28/21 10:05

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	8639	09/30/21 09:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	10/01/21 01:41	AJ	XEN MID

Client Sample ID: CS-13

Date Collected: 09/28/21 10:15

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8639	09/30/21 09:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	10/01/21 02:03	AJ	XEN MID

Client Sample ID: CS-14

Date Collected: 09/28/21 10:25

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8639	09/30/21 09:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	10/01/21 02:45	AJ	XEN MID

Client Sample ID: CS-16

Date Collected: 09/28/21 10:50

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:46	AJ	XEN MID

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Lab Chronicle

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

Job ID: 880-6654-1
SDG: Eunice NM

Client Sample ID: CS-16

Date Collected: 09/28/21 10:50

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-11

Matrix: Solid

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			10.03 g	10 mL	8639	09/30/21 09:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	10/01/21 03:06	AJ	XEN MID

Client Sample ID: CS-19

Date Collected: 09/28/21 11:20

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8639	09/30/21 09:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	10/01/21 03:27	AJ	XEN MID

Client Sample ID: CS-21

Date Collected: 09/28/21 11:40

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8639	09/30/21 09:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	10/01/21 03:48	AJ	XEN MID

Client Sample ID: SW-1

Date Collected: 09/28/21 09:30

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	8639	09/30/21 09:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	10/01/21 04:10	AJ	XEN MID

Client Sample ID: SW-2

Date Collected: 09/28/21 09:35

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8639	09/30/21 09:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	10/01/21 04:31	AJ	XEN MID

Client Sample ID: SW-3

Date Collected: 09/28/21 09:40

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:46	AJ	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-6654-1
SDG: Eunice NM

Client Sample ID: SW-3

Date Collected: 09/28/21 09:40

Date Received: 09/29/21 13:37

Lab Sample ID: 880-6654-16

Matrix: Solid

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			10.05 g	10 mL	8639	09/30/21 09:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8626	10/01/21 04:52	AJ	XEN MID

Laboratory References:
XEN MID = Eurofins Xenco, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Accreditation/Certification Summary

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

Job ID: 880-6654-1
SDG: Eunice NM

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-6654-1
SDG: Eunice NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-6654-1
SDG: Eunice NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-6654-1	CS-10	Solid	09/28/21 09:45	09/29/21 13:37
880-6654-3	CS-11	Solid	09/28/21 09:55	09/29/21 13:37
880-6654-5	CS-12	Solid	09/28/21 10:05	09/29/21 13:37
880-6654-7	CS-13	Solid	09/28/21 10:15	09/29/21 13:37
880-6654-9	CS-14	Solid	09/28/21 10:25	09/29/21 13:37
880-6654-11	CS-16	Solid	09/28/21 10:50	09/29/21 13:37
880-6654-12	CS-19	Solid	09/28/21 11:20	09/29/21 13:37
880-6654-13	CS-21	Solid	09/28/21 11:40	09/29/21 13:37
880-6654-14	SW-1	Solid	09/28/21 09:30	09/29/21 13:37
880-6654-15	SW-2	Solid	09/28/21 09:35	09/29/21 13:37
880-6654-16	SW-3	Solid	09/28/21 09:40	09/29/21 13:37



Chain of C

Houston TX (281) 240-4200	Dall	880-6654 Chain of Custody
Midland TX (432) 704-5440	San An	
El Paso TX (915) 585-3443	Lubbock, TX (806) 797-2000	
Hobbs NM (575) 392-7550	Carlsbad NM (575) 988-3199	

Order No:

101054

www.xenco.com

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Work Order Comments	
Program: UST/PST <input type="checkbox"/> RRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
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 EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____	

[illegible][illegible]

Total 200.7 / 6010 200.8 / 6020:

8RCRA 13F

kas 11 Al Sb

Be B Cd Ca

Cu Fe Pb Mg

Ni K Se Ac

a Sr Ti Sn L

100

Circle Method(s) and Metal(s) to be analyzed

TCLP / SPLP 6010

0 8RCRA Sb As Ba



Be Cd Cr Co Cu Pb

o Mn Mo Ni Se Ag T

Hg 1631/2

2451/7470/7471

Notice: Signature of this document by relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 Xeno. A minimum charge of \$35.00 will be applied to each project and a charge of \$3 for each sample submitted to Eurofins Xeno, 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
1 		9-25-21 13:37	2		
3			4		
5			6		



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 2

Project Manager	RUSSELL SEBRING	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 DESTA DR #130E	Address	
City, State ZIP	MIDLAND, TX 79705	City, State ZIP	
Phone	432 250 4465	Email	RSEBRING@TRCCOMPANIES.COM

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:	
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: _____	

[illegible]

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		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					

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6654-1

SDG Number: Eunice NM

Login Number: 6654**List Number: 1****Creator: Phillips, Kerianna****List Source: Eurofins Xenco**

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

Laboratory Job ID: 880-6805-1

Laboratory Sample Delivery Group: 454378

Client Project/Site: HEP: Eunice EMSU Remediation
Revision: 2

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/7/2022 4:32:17 PM

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

LINKS

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results through
TotalAccess

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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: Eunice EMSU Remediation

Laboratory Job ID: 880-6805-1
SDG: 454378

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Definitions/Glossary

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

Job ID: 880-6805-1
SDG: 454378

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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.

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

Case Narrative

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

Job ID: 880-6805-1
SDG: 454378

Job ID: 880-6805-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-6805-1

Comments

No additional comments.

Revision

The report being provided is a revision of the original report sent on 10/8/2021. The report (revision 1) is being revised due to: Added narrative regarding low surrogate recoveries.

Receipt

The samples were received on 10/5/2021 12:43 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 5.3° C.

Receipt Exceptions

Added narrative regarding low surrogate recoveries

GC Semi VOA

Method 8015B NM: The laboratory control sample (LCS) associated with preparation batch 880-8972 and analytical batch 880-8955 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015B NM: Surrogate recovery for the following sample was outside control limits: (MB 880-8972/1-A). Evidence of matrix interferences is not obvious.

Method 8015B NM: Surrogate recovery for the following sample was outside control limits: CS-15@4.5 (880-6805-1). Evidence of matrix interferences is not obvious.

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

Organic 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: Eunice EMSU Remediation

Job ID: 880-6805-1
SDG: 454378

Client Sample ID: CS-15

Date Collected: 09/28/21 10:35

Date Received: 10/05/21 12:43

Sample Depth: 4.5

Lab Sample ID: 880-6805-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	739		49.9	mg/Kg			10/07/21 09:03	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	205		49.9	mg/Kg		10/06/21 10:40	10/06/21 23:25	1
Diesel Range Organics (Over C10-C28)	481	*1	49.9	mg/Kg		10/06/21 10:40	10/06/21 23:25	1
Oil Range Organics (Over C28-C36)	52.6		49.9	mg/Kg		10/06/21 10:40	10/06/21 23:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	21	S1-	70 - 130			10/06/21 10:40	10/06/21 23:25	1
o-Terphenyl	19	S1-	70 - 130			10/06/21 10:40	10/06/21 23:25	1

Client Sample ID: CS-16

Date Collected: 09/28/21 10:45

Date Received: 10/05/21 12:43

Sample Depth: 4.5

Lab Sample ID: 880-6805-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/07/21 09:03	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	<50.0	U	50.0	mg/Kg		10/06/21 10:40	10/06/21 21:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	mg/Kg		10/06/21 10:40	10/06/21 21:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/06/21 10:40	10/06/21 21:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			10/06/21 10:40	10/06/21 21:38	1
o-Terphenyl	102		70 - 130			10/06/21 10:40	10/06/21 21:38	1

Client Sample ID: CS-17

Date Collected: 09/28/21 10:55

Date Received: 10/05/21 12:43

Sample Depth: 4.5

Lab Sample ID: 880-6805-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/07/21 09:03	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	<49.9	U	49.9	mg/Kg		10/06/21 10:40	10/06/21 22:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9	mg/Kg		10/06/21 10:40	10/06/21 22:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/06/21 10:40	10/06/21 22:43	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-6805-1
SDG: 454378

Client Sample ID: CS-17

Date Collected: 09/28/21 10:55

Date Received: 10/05/21 12:43

Sample Depth: 4.5

Lab Sample ID: 880-6805-3

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	10/06/21 10:40	10/06/21 22:43	1
o-Terphenyl	100		70 - 130	10/06/21 10:40	10/06/21 22:43	1

Client Sample ID: CS-18

Date Collected: 09/28/21 11:05

Date Received: 10/05/21 12:43

Sample Depth: 4.5

Lab Sample ID: 880-6805-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	245		49.8	mg/Kg			10/07/21 09:03	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	<49.8	U	49.8	mg/Kg		10/06/21 10:40	10/06/21 23:46	1
Diesel Range Organics (Over C10-C28)	245	*1	49.8	mg/Kg		10/06/21 10:40	10/06/21 23:46	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/06/21 10:40	10/06/21 23:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			10/06/21 10:40	10/06/21 23:46	1
o-Terphenyl	102		70 - 130			10/06/21 10:40	10/06/21 23:46	1

Client Sample ID: CS-19

Date Collected: 09/28/21 11:15

Date Received: 10/05/21 12:43

Sample Depth: 4.5

Lab Sample ID: 880-6805-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/07/21 09:03	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	<50.0	U	50.0	mg/Kg		10/06/21 10:40	10/06/21 23:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	mg/Kg		10/06/21 10:40	10/06/21 23:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/06/21 10:40	10/06/21 23:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130			10/06/21 10:40	10/06/21 23:04	1
o-Terphenyl	117		70 - 130			10/06/21 10:40	10/06/21 23:04	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-6805-1
SDG: 454378

Client Sample ID: CS-20

Date Collected: 09/28/21 11:25

Date Received: 10/05/21 12:43

Sample Depth: 4.5

Lab Sample ID: 880-6805-6

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/07/21 09:03	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	<49.9	U	49.9	mg/Kg		10/05/21 15:00	10/06/21 05:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/05/21 15:00	10/06/21 05:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/05/21 15:00	10/06/21 05:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			10/05/21 15:00	10/06/21 05:06	1
o-Terphenyl	119		70 - 130			10/05/21 15:00	10/06/21 05:06	1

Client Sample ID: CS-21

Date Collected: 09/28/21 11:35

Date Received: 10/05/21 12:43

Sample Depth: 4.5

Lab Sample ID: 880-6805-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/07/21 09:03	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	<50.0	U	50.0	mg/Kg		10/05/21 15:00	10/06/21 05:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/05/21 15:00	10/06/21 05:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/05/21 15:00	10/06/21 05:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130			10/05/21 15:00	10/06/21 05:27	1
o-Terphenyl	122		70 - 130			10/05/21 15:00	10/06/21 05:27	1

Eurofins Xenco

Surrogate Summary

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

Job ID: 880-6805-1
SDG: 454378

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	OTPH1
		(70-130)	(70-130)
880-6805-1	CS-15	21 S1-	19 S1-
880-6805-2	CS-16	97	102
880-6805-2 MS	CS-16	115	113
880-6805-2 MSD	CS-16	117	115
880-6805-3	CS-17	92	100
880-6805-4	CS-18	98	102
880-6805-5	CS-19	109	117
880-6805-6	CS-20	111	119
880-6805-7	CS-21	113	122
880-6816-A-1-F MS	Matrix Spike	126	127
880-6816-A-1-G MSD	Matrix Spike Duplicate	129	125
LCS 880-8934/2-A	Lab Control Sample	111	114
LCS 880-8972/2-A	Lab Control Sample	105	105
LCSD 880-8934/3-A	Lab Control Sample Dup	106	108
LCSD 880-8972/3-A	Lab Control Sample Dup	112	110
MB 880-8934/1-A	Method Blank	115	130
MB 880-8972/1-A	Method Blank	120	132 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

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

Job ID: 880-6805-1
SDG: 454378

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

Lab Sample ID: MB 880-8934/1-A

Matrix: Solid

Analysis Batch: 8873

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8934

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		10/05/21 15:00	10/05/21 20:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/05/21 15:00	10/05/21 20:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/05/21 15:00	10/05/21 20:33	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			10/05/21 15:00	10/05/21 20:33	1
o-Terphenyl	130		70 - 130			10/05/21 15:00	10/05/21 20:33	1

Lab Sample ID: LCS 880-8934/2-A

Matrix: Solid

Analysis Batch: 8873

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8934

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	901.9		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	1000	970.2		mg/Kg		97	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	111		70 - 130				
o-Terphenyl	114		70 - 130				

Lab Sample ID: LCSD 880-8934/3-A

Matrix: Solid

Analysis Batch: 8873

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8934

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	954.9		mg/Kg		95	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	911.1		mg/Kg		91	70 - 130	6	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	106		70 - 130						
o-Terphenyl	108		70 - 130						

Lab Sample ID: 880-6816-A-1-F MS

Matrix: Solid

Analysis Batch: 8873

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8934

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	995	968.9		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	995	1024		mg/Kg		103	70 - 130

Eurofins Xenco

QC Sample Results

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

Job ID: 880-6805-1
SDG: 454378

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

Lab Sample ID: 880-6816-A-1-F MS

Matrix: Solid

Analysis Batch: 8873

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8934

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	126		70 - 130
o-Terphenyl	127		70 - 130

Lab Sample ID: 880-6816-A-1-G MSD

Matrix: Solid

Analysis Batch: 8873

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8934

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	<49.9	U	997	1002		mg/Kg		100	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1020		mg/Kg		102	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	129		70 - 130
o-Terphenyl	125		70 - 130

Lab Sample ID: MB 880-8972/1-A

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8972

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		10/06/21 10:40	10/06/21 20:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/06/21 10:40	10/06/21 20:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/06/21 10:40	10/06/21 20:31	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane	120		70 - 130	10/06/21 10:40	10/06/21 20:31	1
o-Terphenyl	132	S1+	70 - 130	10/06/21 10:40	10/06/21 20:31	1

Lab Sample ID: LCS 880-8972/2-A

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	906.4		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	999.9		mg/Kg		100	70 - 130

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

Eurofins Xenco

QC Sample Results

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

Job ID: 880-6805-1
SDG: 454378

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

Lab Sample ID: LCSD 880-8972/3-A

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8972

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	994.2		mg/Kg		99	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	1260	*1	mg/Kg		126	70 - 130	23	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	112		70 - 130						
o-Terphenyl	110		70 - 130						

Lab Sample ID: 880-6805-2 MS

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: CS-16

Prep Type: Total/NA

Prep Batch: 8972

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	1027		mg/Kg		101	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U *1	997	999.4		mg/Kg		95	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	115		70 - 130								
o-Terphenyl	113		70 - 130								

Lab Sample ID: 880-6805-2 MSD

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: CS-16

Prep Type: Total/NA

Prep Batch: 8972

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	<50.0	U	1000	1147		mg/Kg		113	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	<50.0	U *1	1000	1033		mg/Kg		98	70 - 130	3	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	117		70 - 130								
o-Terphenyl	115		70 - 130								

Eurofins Xenco

QC Association Summary

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

Job ID: 880-6805-1
SDG: 454378

GC Semi VOA

Analysis Batch: 8873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6805-6	CS-20	Total/NA	Solid	8015B NM	8934
880-6805-7	CS-21	Total/NA	Solid	8015B NM	8934
MB 880-8934/1-A	Method Blank	Total/NA	Solid	8015B NM	8934
LCS 880-8934/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8934
LCSD 880-8934/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8934
880-6816-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	8934
880-6816-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8934

Prep Batch: 8934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6805-6	CS-20	Total/NA	Solid	8015NM Prep	
880-6805-7	CS-21	Total/NA	Solid	8015NM Prep	
MB 880-8934/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8934/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8934/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6816-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6816-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6805-1	CS-15	Total/NA	Solid	8015B NM	8972
880-6805-2	CS-16	Total/NA	Solid	8015B NM	8972
880-6805-3	CS-17	Total/NA	Solid	8015B NM	8972
880-6805-4	CS-18	Total/NA	Solid	8015B NM	8972
880-6805-5	CS-19	Total/NA	Solid	8015B NM	8972
MB 880-8972/1-A	Method Blank	Total/NA	Solid	8015B NM	8972
LCS 880-8972/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8972
LCSD 880-8972/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8972
880-6805-2 MS	CS-16	Total/NA	Solid	8015B NM	8972
880-6805-2 MSD	CS-16	Total/NA	Solid	8015B NM	8972

Prep Batch: 8972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6805-1	CS-15	Total/NA	Solid	8015NM Prep	
880-6805-2	CS-16	Total/NA	Solid	8015NM Prep	
880-6805-3	CS-17	Total/NA	Solid	8015NM Prep	
880-6805-4	CS-18	Total/NA	Solid	8015NM Prep	
880-6805-5	CS-19	Total/NA	Solid	8015NM Prep	
MB 880-8972/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8972/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8972/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6805-2 MS	CS-16	Total/NA	Solid	8015NM Prep	
880-6805-2 MSD	CS-16	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6805-1	CS-15	Total/NA	Solid	8015 NM	
880-6805-2	CS-16	Total/NA	Solid	8015 NM	
880-6805-3	CS-17	Total/NA	Solid	8015 NM	
880-6805-4	CS-18	Total/NA	Solid	8015 NM	
880-6805-5	CS-19	Total/NA	Solid	8015 NM	

Eurofins Xenco

QC Association Summary

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

Job ID: 880-6805-1
SDG: 454378

GC Semi VOA (Continued)

Analysis Batch: 9044 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6805-6	CS-20	Total/NA	Solid	8015 NM	
880-6805-7	CS-21	Total/NA	Solid	8015 NM	

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

Lab Chronicle

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

Job ID: 880-6805-1
SDG: 454378

Client Sample ID: CS-15

Date Collected: 09/28/21 10:35

Date Received: 10/05/21 12:43

Lab Sample ID: 880-6805-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:03	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8955	10/06/21 23:25	AJ	XEN MID

Client Sample ID: CS-16

Date Collected: 09/28/21 10:45

Date Received: 10/05/21 12:43

Lab Sample ID: 880-6805-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:03	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8955	10/06/21 21:38	AJ	XEN MID

Client Sample ID: CS-17

Date Collected: 09/28/21 10:55

Date Received: 10/05/21 12:43

Lab Sample ID: 880-6805-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:03	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8955	10/06/21 22:43	AJ	XEN MID

Client Sample ID: CS-18

Date Collected: 09/28/21 11:05

Date Received: 10/05/21 12:43

Lab Sample ID: 880-6805-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:03	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8955	10/06/21 23:46	AJ	XEN MID

Client Sample ID: CS-19

Date Collected: 09/28/21 11:15

Date Received: 10/05/21 12:43

Lab Sample ID: 880-6805-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:03	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8955	10/06/21 23:04	AJ	XEN MID

Client Sample ID: CS-20

Date Collected: 09/28/21 11:25

Date Received: 10/05/21 12:43

Lab Sample ID: 880-6805-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:03	AJ	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-6805-1
SDG: 454378

Client Sample ID: CS-20

Date Collected: 09/28/21 11:25

Date Received: 10/05/21 12:43

Lab Sample ID: 880-6805-6

Matrix: Solid

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			10.03 g	10 mL	8934	10/05/21 15:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8873	10/06/21 05:06	AJ	XEN MID

Client Sample ID: CS-21

Date Collected: 09/28/21 11:35

Date Received: 10/05/21 12:43

Lab Sample ID: 880-6805-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:03	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8934	10/05/21 15:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8873	10/06/21 05:27	AJ	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 880-6805-1
SDG: 454378

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-6805-1
SDG: 454378

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-6805-1
SDG: 454378

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-6805-1	CS-15	Solid	09/28/21 10:35	10/05/21 12:43	4.5
880-6805-2	CS-16	Solid	09/28/21 10:45	10/05/21 12:43	4.5
880-6805-3	CS-17	Solid	09/28/21 10:55	10/05/21 12:43	4.5
880-6805-4	CS-18	Solid	09/28/21 11:05	10/05/21 12:43	4.5
880-6805-5	CS-19	Solid	09/28/21 11:15	10/05/21 12:43	4.5
880-6805-6	CS-20	Solid	09/28/21 11:25	10/05/21 12:43	4.5
880-6805-7	CS-21	Solid	09/28/21 11:35	10/05/21 12:43	4.5



Environment Testing
Xenco

Chain of Custody
Houston TX (281) 240-4200 Dallas
Midland, TX (432) 704-5440 San Antonio
El Paso TX (915) 585-3443 Lubbock
Hobbs NM (575) 392-7550 Carlsbad NM (505) 765-1111



Order No: 6805

Page 1 of 1

Project Manager	RUSSELL SEBRING	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 Desta Drive #130E	Address	
City, State ZIP	Midland TX, 79705	City, State ZIP	
Phone	432 250 4465	Email	rsebring@trccompanies.com

Project Name	HEP Eunice EMSU Remediation	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush	Pres. Code	
Project Number	454378	Due Date	3 DAY		
Project Location	Eunice NM				
Sample's Name	Russell Sebring/Misti Bryant				
PO #					
SAMPLE RECEIPT					
Samples Received Intact	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temp Blank	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Cooler Custody Seals	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID			
Sample Custody Seals	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor			
Total Containers	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature Reading			
		Corrected Temperature			

ANALYSIS REQUEST

Preservative Codes

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH	Chloride	Hold	ANALYSIS REQUEST	Preservative Codes
CS-15@4.5	S	9/28/2021	1035	4.5 Comp	1	X					None NO DI Water H ₂ O
CS-16@4.5	S	9/28/2021	1045	4.5 Comp	1	X					Cool Cool MeOH Me
CS-17@4.5	S	9/28/2021	1055	4.5 Comp	1	X					HCL HC HNO ₃ HN
CS-18@4.5	S	9/28/2021	1105	4.5 Comp	1	X					H ₂ SO ₄ H ₂ NaOH Na
CS-19@4.5	S	9/28/2021	1115	4.5 Comp	1	X					H ₃ PO ₄ HP
CS-20@4.5	S	9/28/2021	1125	4.5 Comp	1	X					NaHSO ₄ NABIS
CS-21@4.5	S	9/28/2021	1135	4.5 Comp	1	X					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 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
		10/5/21 1230 ²			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6805-1

SDG Number: 454378

Login Number: 6805**List Number: 1****List Source: Eurofins Xenco****Creator: Phillips, Kerianna**

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

Laboratory Job ID: 880-6701-1
Laboratory Sample Delivery Group: Eunice, NM
Client Project/Site: HEP EMSU
Revision: 2

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
2/4/2022 12:01:33 PM

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

LINKS

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results through
TotalAccess

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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: 880-6701-1
SDG: Eunice, NM

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Definitions/Glossary

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

Job ID: 880-6701-1
SDG: Eunice, NM

Qualifiers

GC Semi VOA

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

Case Narrative

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

Job ID: 880-6701-1
SDG: Eunice, NM

Job ID: 880-6701-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-6701-1

REVISION

The report being provided is a revision of the original report sent on 10/1/2021. The report (revision 2) is being revised due to Per client email, corrected sample IDs.

Report revision history

The report being provided is a revision of the original report sent on 10/1/2021. The report (revision 2) is being revised due to Per client email, corrected sample IDs.

Revision 1 - 1/10/2022 - Reason - Per client email, removed sample depths from sample name.

Receipt

The samples were received on 9/30/2021 4:53 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 0.8°C

GC Semi VOA

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: 880-6701-1
SDG: Eunice, NM

Client Sample ID: SW-4

Lab Sample ID: 880-6701-1

Date Collected: 09/29/21 13:00

Matrix: Solid

Date Received: 09/30/21 16:53

Sample Depth: 2.25'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/01/21 14:57	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	<49.8	U	49.8	mg/Kg		10/01/21 07:42	10/01/21 11:19	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 07:42	10/01/21 11:19	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 07:42	10/01/21 11:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			10/01/21 07:42	10/01/21 11:19	1
o-Terphenyl	113		70 - 130			10/01/21 07:42	10/01/21 11:19	1

Client Sample ID: SW-5

Lab Sample ID: 880-6701-2

Date Collected: 09/29/21 13:05

Matrix: Solid

Date Received: 09/30/21 16:53

Sample Depth: 2.25'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/01/21 14:57	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	<50.0	U	50.0	mg/Kg		10/01/21 07:42	10/01/21 12:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 07:42	10/01/21 12:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 07:42	10/01/21 12:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			10/01/21 07:42	10/01/21 12:24	1
o-Terphenyl	104		70 - 130			10/01/21 07:42	10/01/21 12:24	1

Client Sample ID: SW-6

Lab Sample ID: 880-6701-3

Date Collected: 09/29/21 13:10

Matrix: Solid

Date Received: 09/30/21 16:53

Sample Depth: 2.25'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/01/21 14:57	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	<49.9	U	49.9	mg/Kg		10/01/21 07:42	10/01/21 12:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 07:42	10/01/21 12:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 07:42	10/01/21 12:46	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-6701-1
SDG: Eunice, NM

Client Sample ID: SW-6

Date Collected: 09/29/21 13:10

Date Received: 09/30/21 16:53

Sample Depth: 2.25'

Lab Sample ID: 880-6701-3

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	10/01/21 07:42	10/01/21 12:46	1
o-Terphenyl	108		70 - 130	10/01/21 07:42	10/01/21 12:46	1

Client Sample ID: SW-7

Date Collected: 09/29/21 13:15

Date Received: 09/30/21 16:53

Sample Depth: 1.5'

Lab Sample ID: 880-6701-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/01/21 14:57	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	<49.9	U	49.9	mg/Kg		10/01/21 07:42	10/01/21 13:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 07:42	10/01/21 13:08	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 07:42	10/01/21 13:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			10/01/21 07:42	10/01/21 13:08	1
o-Terphenyl	109		70 - 130			10/01/21 07:42	10/01/21 13:08	1

Client Sample ID: SW-8

Date Collected: 09/29/21 13:20

Date Received: 09/30/21 16:53

Sample Depth: 1.5'

Lab Sample ID: 880-6701-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/01/21 14:57	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	<49.8	U	49.8	mg/Kg		10/01/21 07:42	10/01/21 13:30	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 07:42	10/01/21 13:30	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 07:42	10/01/21 13:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			10/01/21 07:42	10/01/21 13:30	1
o-Terphenyl	105		70 - 130			10/01/21 07:42	10/01/21 13:30	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-6701-1
SDG: Eunice, NM

Client Sample ID: SW-9

Lab Sample ID: 880-6701-6

Date Collected: 09/29/21 13:25

Matrix: Solid

Date Received: 09/30/21 16:53

Sample Depth: 1.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/01/21 14:57	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	<49.8	U	49.8	mg/Kg		10/01/21 07:51	10/01/21 11:19	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 07:51	10/01/21 11:19	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 07:51	10/01/21 11:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			10/01/21 07:51	10/01/21 11:19	1
o-Terphenyl	95		70 - 130			10/01/21 07:51	10/01/21 11:19	1

Client Sample ID: SW-10

Lab Sample ID: 880-6701-7

Date Collected: 09/29/21 13:30

Matrix: Solid

Date Received: 09/30/21 16:53

Sample Depth: 2.25'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/01/21 14:57	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	<50.0	U	50.0	mg/Kg		10/01/21 07:51	10/01/21 12:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 07:51	10/01/21 12:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 07:51	10/01/21 12:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130			10/01/21 07:51	10/01/21 12:24	1
o-Terphenyl	89		70 - 130			10/01/21 07:51	10/01/21 12:24	1

Client Sample ID: SW-11

Lab Sample ID: 880-6701-8

Date Collected: 09/29/21 13:35

Matrix: Solid

Date Received: 09/30/21 16:53

Sample Depth: 2.25'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/01/21 14:57	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	<49.9	U	49.9	mg/Kg		10/01/21 07:51	10/01/21 12:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 07:51	10/01/21 12:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 07:51	10/01/21 12:46	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-6701-1
SDG: Eunice, NM

Client Sample ID: SW-11

Date Collected: 09/29/21 13:35

Date Received: 09/30/21 16:53

Sample Depth: 2.25'

Lab Sample ID: 880-6701-8

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	10/01/21 07:51	10/01/21 12:46	1
o-Terphenyl	110		70 - 130	10/01/21 07:51	10/01/21 12:46	1

Client Sample ID: CS-30

Date Collected: 09/29/21 08:40

Date Received: 09/30/21 16:53

Sample Depth: 4.5'

Lab Sample ID: 880-6701-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/01/21 14:57	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	<49.9	U	49.9	mg/Kg		10/01/21 07:51	10/01/21 13:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 07:51	10/01/21 13:08	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 07:51	10/01/21 13:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			10/01/21 07:51	10/01/21 13:08	1
o-Terphenyl	116		70 - 130			10/01/21 07:51	10/01/21 13:08	1

Client Sample ID: CS-27

Date Collected: 09/29/21 08:25

Date Received: 09/30/21 16:53

Sample Depth: 4.5'

Lab Sample ID: 880-6701-10

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/01/21 14:57	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	<49.8	U	49.8	mg/Kg		10/01/21 07:51	10/01/21 13:30	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 07:51	10/01/21 13:30	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 07:51	10/01/21 13:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			10/01/21 07:51	10/01/21 13:30	1
o-Terphenyl	105		70 - 130			10/01/21 07:51	10/01/21 13:30	1

Eurofins Midland

Surrogate Summary

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

Job ID: 880-6701-1
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	OTPH1
		(70-130)	(70-130)
880-6701-1	SW-4	104	113
880-6701-1 MS	SW-4	99	100
880-6701-1 MSD	SW-4	99	98
880-6701-2	SW-5	97	104
880-6701-3	SW-6	101	108
880-6701-4	SW-7	98	109
880-6701-5	SW-8	99	105
880-6701-6	SW-9	93	95
880-6701-6 MS	SW-9	107	97
880-6701-6 MSD	SW-9	97	87
880-6701-7	SW-10	88	89
880-6701-8	SW-11	104	110
880-6701-9	CS-30	111	116
880-6701-10	CS-27	100	105
LCS 880-8705/2-A	Lab Control Sample	103	103
LCS 880-8706/2-A	Lab Control Sample	96	89
LCSD 880-8705/3-A	Lab Control Sample Dup	108	107
LCSD 880-8706/3-A	Lab Control Sample Dup	104	102
MB 880-8705/1-A	Method Blank	95	104
MB 880-8706/1-A	Method Blank	107	107

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-6701-1
SDG: Eunice, NM

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

Lab Sample ID: MB 880-8705/1-A

Matrix: Solid

Analysis Batch: 8701

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8705

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		10/01/21 07:42	10/01/21 10:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 07:42	10/01/21 10:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 07:42	10/01/21 10:13	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130			10/01/21 07:42	10/01/21 10:13	1
o-Terphenyl	104		70 - 130			10/01/21 07:42	10/01/21 10:13	1

Lab Sample ID: LCS 880-8705/2-A

Matrix: Solid

Analysis Batch: 8701

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8705

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	940.7		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	1000	987.0		mg/Kg		99	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	103		70 - 130				
o-Terphenyl	103		70 - 130				

Lab Sample ID: LCSD 880-8705/3-A

Matrix: Solid

Analysis Batch: 8701

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8705

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	992.5		mg/Kg		99	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	1002		mg/Kg		100	70 - 130	2	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	108		70 - 130						
o-Terphenyl	107		70 - 130						

Lab Sample ID: 880-6701-1 MS

Matrix: Solid

Analysis Batch: 8701

Client Sample ID: SW-4

Prep Type: Total/NA

Prep Batch: 8705

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	882.2		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	883.7		mg/Kg		89	70 - 130

Eurofins Midland

QC Sample Results

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

Job ID: 880-6701-1
SDG: Eunice, NM

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

Lab Sample ID: 880-6701-1 MS

Matrix: Solid

Analysis Batch: 8701

Client Sample ID: SW-4

Prep Type: Total/NA

Prep Batch: 8705

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: 880-6701-1 MSD

Matrix: Solid

Analysis Batch: 8701

Client Sample ID: SW-4

Prep Type: Total/NA

Prep Batch: 8705

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	<49.8	U	999	930.9		mg/Kg		88	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	879.7		mg/Kg		88	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: MB 880-8706/1-A

Matrix: Solid

Analysis Batch: 8703

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8706

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		10/01/21 07:51	10/01/21 10:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 07:51	10/01/21 10:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 07:51	10/01/21 10:13	1

	MB	MB						
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	107		70 - 130	10/01/21 07:51	10/01/21 10:13	1		
o-Terphenyl	107		70 - 130	10/01/21 07:51	10/01/21 10:13	1		

Lab Sample ID: LCS 880-8706/2-A

Matrix: Solid

Analysis Batch: 8703

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8706

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	857.5		mg/Kg		86	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	901.0		mg/Kg		90	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	89		70 - 130

Eurofins Midland

QC Sample Results

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

Job ID: 880-6701-1
SDG: Eunice, NM

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

Lab Sample ID: LCSD 880-8706/3-A

Matrix: Solid

Analysis Batch: 8703

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8706

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	896.7		mg/Kg		90	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	1006		mg/Kg		101	70 - 130	11	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	104		70 - 130						
o-Terphenyl	102		70 - 130						

Lab Sample ID: 880-6701-6 MS

Matrix: Solid

Analysis Batch: 8703

Client Sample ID: SW-9

Prep Type: Total/NA

Prep Batch: 8706

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	939.0		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	997	1049		mg/Kg		105	70 - 130		
Surrogate	%Recovery	MS Qualifier	Limits								
1-Chlorooctane	107		70 - 130								
o-Terphenyl	97		70 - 130								

Lab Sample ID: 880-6701-6 MSD

Matrix: Solid

Analysis Batch: 8703

Client Sample ID: SW-9

Prep Type: Total/NA

Prep Batch: 8706

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	<49.8	U	999	859.7		mg/Kg		83	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	940.0		mg/Kg		94	70 - 130	11	20
Surrogate	%Recovery	MSD Qualifier	Limits								
1-Chlorooctane	97		70 - 130								
o-Terphenyl	87		70 - 130								

Eurofins Midland

QC Association Summary

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

Job ID: 880-6701-1
SDG: Eunice, NM

GC Semi VOA

Analysis Batch: 8701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6701-1	SW-4	Total/NA	Solid	8015B NM	8705
880-6701-2	SW-5	Total/NA	Solid	8015B NM	8705
880-6701-3	SW-6	Total/NA	Solid	8015B NM	8705
880-6701-4	SW-7	Total/NA	Solid	8015B NM	8705
880-6701-5	SW-8	Total/NA	Solid	8015B NM	8705
MB 880-8705/1-A	Method Blank	Total/NA	Solid	8015B NM	8705
LCS 880-8705/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8705
LCSD 880-8705/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8705
880-6701-1 MS	SW-4	Total/NA	Solid	8015B NM	8705
880-6701-1 MSD	SW-4	Total/NA	Solid	8015B NM	8705

Analysis Batch: 8703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6701-6	SW-9	Total/NA	Solid	8015B NM	8706
880-6701-7	SW-10	Total/NA	Solid	8015B NM	8706
880-6701-8	SW-11	Total/NA	Solid	8015B NM	8706
880-6701-9	CS-30	Total/NA	Solid	8015B NM	8706
880-6701-10	CS-27	Total/NA	Solid	8015B NM	8706
MB 880-8706/1-A	Method Blank	Total/NA	Solid	8015B NM	8706
LCS 880-8706/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8706
LCSD 880-8706/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8706
880-6701-6 MS	SW-9	Total/NA	Solid	8015B NM	8706
880-6701-6 MSD	SW-9	Total/NA	Solid	8015B NM	8706

Prep Batch: 8705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6701-1	SW-4	Total/NA	Solid	8015NM Prep	
880-6701-2	SW-5	Total/NA	Solid	8015NM Prep	
880-6701-3	SW-6	Total/NA	Solid	8015NM Prep	
880-6701-4	SW-7	Total/NA	Solid	8015NM Prep	
880-6701-5	SW-8	Total/NA	Solid	8015NM Prep	
MB 880-8705/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8705/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8705/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6701-1 MS	SW-4	Total/NA	Solid	8015NM Prep	
880-6701-1 MSD	SW-4	Total/NA	Solid	8015NM Prep	

Prep Batch: 8706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6701-6	SW-9	Total/NA	Solid	8015NM Prep	
880-6701-7	SW-10	Total/NA	Solid	8015NM Prep	
880-6701-8	SW-11	Total/NA	Solid	8015NM Prep	
880-6701-9	CS-30	Total/NA	Solid	8015NM Prep	
880-6701-10	CS-27	Total/NA	Solid	8015NM Prep	
MB 880-8706/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8706/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8706/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6701-6 MS	SW-9	Total/NA	Solid	8015NM Prep	
880-6701-6 MSD	SW-9	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

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

Job ID: 880-6701-1
SDG: Eunice, NM

GC Semi VOA

Analysis Batch: 8748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6701-1	SW-4	Total/NA	Solid	8015 NM	
880-6701-2	SW-5	Total/NA	Solid	8015 NM	
880-6701-3	SW-6	Total/NA	Solid	8015 NM	
880-6701-4	SW-7	Total/NA	Solid	8015 NM	
880-6701-5	SW-8	Total/NA	Solid	8015 NM	
880-6701-6	SW-9	Total/NA	Solid	8015 NM	
880-6701-7	SW-10	Total/NA	Solid	8015 NM	
880-6701-8	SW-11	Total/NA	Solid	8015 NM	
880-6701-9	CS-30	Total/NA	Solid	8015 NM	
880-6701-10	CS-27	Total/NA	Solid	8015 NM	

Lab Chronicle

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

Job ID: 880-6701-1
SDG: Eunice, NM

Client Sample ID: SW-4

Date Collected: 09/29/21 13:00

Date Received: 09/30/21 16:53

Lab Sample ID: 880-6701-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8748	10/01/21 14:57	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8705	10/01/21 07:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8701	10/01/21 11:19	AJ	XEN MID

Client Sample ID: SW-5

Date Collected: 09/29/21 13:05

Date Received: 09/30/21 16:53

Lab Sample ID: 880-6701-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8748	10/01/21 14:57	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	8705	10/01/21 07:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8701	10/01/21 12:24	AJ	XEN MID

Client Sample ID: SW-6

Date Collected: 09/29/21 13:10

Date Received: 09/30/21 16:53

Lab Sample ID: 880-6701-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8748	10/01/21 14:57	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8705	10/01/21 07:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8701	10/01/21 12:46	AJ	XEN MID

Client Sample ID: SW-7

Date Collected: 09/29/21 13:15

Date Received: 09/30/21 16:53

Lab Sample ID: 880-6701-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8748	10/01/21 14:57	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8705	10/01/21 07:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8701	10/01/21 13:08	AJ	XEN MID

Client Sample ID: SW-8

Date Collected: 09/29/21 13:20

Date Received: 09/30/21 16:53

Lab Sample ID: 880-6701-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8748	10/01/21 14:57	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8705	10/01/21 07:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8701	10/01/21 13:30	AJ	XEN MID

Client Sample ID: SW-9

Date Collected: 09/29/21 13:25

Date Received: 09/30/21 16:53

Lab Sample ID: 880-6701-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8748	10/01/21 14:57	AJ	XEN MID

Eurofins Midland

Lab Chronicle

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

Job ID: 880-6701-1
SDG: Eunice, NM

Client Sample ID: SW-9

Lab Sample ID: 880-6701-6

Date Collected: 09/29/21 13:25

Matrix: Solid

Date Received: 09/30/21 16:53

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			10.04 g	10 mL	8706	10/01/21 07:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8703	10/01/21 11:19	AJ	XEN MID

Client Sample ID: SW-10

Lab Sample ID: 880-6701-7

Date Collected: 09/29/21 13:30

Matrix: Solid

Date Received: 09/30/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8748	10/01/21 14:57	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	8706	10/01/21 07:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8703	10/01/21 12:24	AJ	XEN MID

Client Sample ID: SW-11

Lab Sample ID: 880-6701-8

Date Collected: 09/29/21 13:35

Matrix: Solid

Date Received: 09/30/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8748	10/01/21 14:57	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8706	10/01/21 07:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8703	10/01/21 12:46	AJ	XEN MID

Client Sample ID: CS-30

Lab Sample ID: 880-6701-9

Date Collected: 09/29/21 08:40

Matrix: Solid

Date Received: 09/30/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8748	10/01/21 14:57	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8706	10/01/21 07:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8703	10/01/21 13:08	AJ	XEN MID

Client Sample ID: CS-27

Lab Sample ID: 880-6701-10

Date Collected: 09/29/21 08:25

Matrix: Solid

Date Received: 09/30/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8748	10/01/21 14:57	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8706	10/01/21 07:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8703	10/01/21 13:30	AJ	XEN MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

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

Job ID: 880-6701-1
SDG: Eunice, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-6701-1
SDG: Eunice, NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-6701-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-6701-1	SW-4	Solid	09/29/21 13:00	09/30/21 16:53	2.25'
880-6701-2	SW-5	Solid	09/29/21 13:05	09/30/21 16:53	2.25'
880-6701-3	SW-6	Solid	09/29/21 13:10	09/30/21 16:53	2.25'
880-6701-4	SW-7	Solid	09/29/21 13:15	09/30/21 16:53	1.5'
880-6701-5	SW-8	Solid	09/29/21 13:20	09/30/21 16:53	1.5'
880-6701-6	SW-9	Solid	09/29/21 13:25	09/30/21 16:53	1.5'
880-6701-7	SW-10	Solid	09/29/21 13:30	09/30/21 16:53	2.25'
880-6701-8	SW-11	Solid	09/29/21 13:35	09/30/21 16:53	2.25'
880-6701-9	CS-30	Solid	09/29/21 08:40	09/30/21 16:53	4.5'
880-6701-10	CS-27	Solid	09/29/21 08:25	09/30/21 16:53	4.5'



Environment Testing Xenco

Chain of Custody
Houston, TX (281) 240-4242
Midland, TX (432) 704-5444
El Paso, TX (915) 585-3434
Hobbs, NM (575) 392-7535



Work Order No: 6701

www.xenco.com Page 1 of 1

Project Manager	Russel Sebring	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 Desha Dr.	Address	
City/State/Zip	Midland, TX 79705	City/State/Zip	
Phone	432-250-4465	Email	Russel.Mitchell@trc.com

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 <input type="checkbox"/>	

Project Name	HEP EMSG	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush	Pres. Code	
Project Number	428993	Due Date			
Project Location	Eurofins NM	TAT starts the day received by the lab, if received by 4:30pm			
Sample's Name	Mitchell 8-year				
PO #					

SAMPLE RECEIPT				Parameters			
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temp Blank	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:					
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor:					
Total Containers	10	Temperature Reading	0.3				
		Corrected Temperature	0.8				
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Cont	# of Cont	
C5-50-4 @ 2.25'	S	9/24/21	1300	2.25'	G	1	X
C5-50-5 @ 2.25'			1305	2.25'			
C5-50-6 @ 2.25'			1310	2.25'			
C5-50-7 @ 1.5'			1315	1.5'			
C5-50-8 @ 1.5'			1320	1.5'			
C5-50-9 @ 1.5'			1325	1.5'			
C5-50-10 @ 2.25'			1330	2.25'			
C5-50-11 @ 2.25'			1335	2.25'			
C5-30 @ 4.5'			0810	4.5'			
C5-27 @ 4.5'			0825	4.5'			

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

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
Mitchell 8-year	ECM	9/30/21 1447			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6701-1

SDG Number: Eunice, NM

Login Number: 6701**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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-6702-1
Laboratory Sample Delivery Group: Eunice, NM
Client Project/Site: HEP EMSU
Revision: 1

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/7/2022 4:41:15 PM

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

LINKS

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results through
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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: 880-6702-1
SDG: Eunice, NM

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Definitions/Glossary

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

Job ID: 880-6702-1
SDG: Eunice, NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
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

Case Narrative

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

Job ID: 880-6702-1
SDG: Eunice, NM

Job ID: 880-6702-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-6702-1

REVISION

The report being provided is a revision of the original report sent on 10/5/2021. The report (revision 1) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

Receipt

The samples were received on 9/30/2021 4:57 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 0.8°C

GC Semi VOA

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: 880-6702-1
SDG: Eunice, NM

Client Sample ID: CS-22

Date Collected: 09/29/21 08:00

Date Received: 09/30/21 16:57

Sample Depth: 4.5'

Lab Sample ID: 880-6702-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/05/21 10:42	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	<50.0	U *	50.0	mg/Kg		10/01/21 09:56	10/01/21 22:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 09:56	10/01/21 22:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 09:56	10/01/21 22:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			10/01/21 09:56	10/01/21 22:36	1
o-Terphenyl	102		70 - 130			10/01/21 09:56	10/01/21 22:36	1

Client Sample ID: CS-23

Date Collected: 09/29/21 08:05

Date Received: 09/30/21 16:57

Sample Depth: 4.5'

Lab Sample ID: 880-6702-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/05/21 10:42	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	<49.8	U *	49.8	mg/Kg		10/01/21 09:56	10/01/21 22:57	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 09:56	10/01/21 22:57	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 09:56	10/01/21 22:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130			10/01/21 09:56	10/01/21 22:57	1
o-Terphenyl	102		70 - 130			10/01/21 09:56	10/01/21 22:57	1

Client Sample ID: CS-26

Date Collected: 09/29/21 08:20

Date Received: 09/30/21 16:57

Sample Depth: 4.5'

Lab Sample ID: 880-6702-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/05/21 10:42	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	<50.0	U *	50.0	mg/Kg		10/01/21 09:56	10/01/21 23:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 09:56	10/01/21 23:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 09:56	10/01/21 23:17	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-6702-1
SDG: Eunice, NM

Client Sample ID: CS-26

Date Collected: 09/29/21 08:20

Date Received: 09/30/21 16:57

Sample Depth: 4.5'

Lab Sample ID: 880-6702-3

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	10/01/21 09:56	10/01/21 23:17	1
o-Terphenyl	102		70 - 130	10/01/21 09:56	10/01/21 23:17	1

Client Sample ID: CS-28

Date Collected: 09/29/21 08:30

Date Received: 09/30/21 16:57

Sample Depth: 4.5'

Lab Sample ID: 880-6702-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/05/21 10:42	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	<49.8	U *	49.8	mg/Kg		10/01/21 09:56	10/01/21 23:37	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 09:56	10/01/21 23:37	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 09:56	10/01/21 23:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			10/01/21 09:56	10/01/21 23:37	1
o-Terphenyl	103		70 - 130			10/01/21 09:56	10/01/21 23:37	1

Client Sample ID: CS-29

Date Collected: 09/29/21 08:35

Date Received: 09/30/21 16:57

Sample Depth: 4.5'

Lab Sample ID: 880-6702-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/05/21 10:42	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	<50.0	U *	50.0	mg/Kg		10/01/21 09:56	10/01/21 23:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 09:56	10/01/21 23:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 09:56	10/01/21 23:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130			10/01/21 09:56	10/01/21 23:58	1
o-Terphenyl	105		70 - 130			10/01/21 09:56	10/01/21 23:58	1

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Client Sample Results

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

Job ID: 880-6702-1
SDG: Eunice, NM

Client Sample ID: CS-31

Lab Sample ID: 880-6702-6

Date Collected: 09/29/21 08:45

Matrix: Solid

Date Received: 09/30/21 16:57

Sample Depth: 4.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/05/21 10:42	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	<50.0	U	50.0	mg/Kg		10/01/21 13:00	10/01/21 17:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 13:00	10/01/21 17:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 13:00	10/01/21 17:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			10/01/21 13:00	10/01/21 17:30	1
o-Terphenyl	113		70 - 130			10/01/21 13:00	10/01/21 17:30	1

Client Sample ID: CS-32

Lab Sample ID: 880-6702-7

Date Collected: 09/29/21 08:50

Matrix: Solid

Date Received: 09/30/21 16:57

Sample Depth: 4.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/05/21 10:42	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	<50.0	U	50.0	mg/Kg		10/01/21 13:00	10/01/21 17:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 13:00	10/01/21 17:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 13:00	10/01/21 17:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			10/01/21 13:00	10/01/21 17:51	1
o-Terphenyl	113		70 - 130			10/01/21 13:00	10/01/21 17:51	1

Client Sample ID: CS-33

Lab Sample ID: 880-6702-8

Date Collected: 09/29/21 08:55

Matrix: Solid

Date Received: 09/30/21 16:57

Sample Depth: 4.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	222		50.0	mg/Kg			10/05/21 10:42	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	<49.8	U	49.8	mg/Kg		10/01/21 13:00	10/01/21 18:13	1
Diesel Range Organics (Over C10-C28)	222		49.8	mg/Kg		10/01/21 13:00	10/01/21 18:13	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 13:00	10/01/21 18:13	1

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Client Sample Results

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

Job ID: 880-6702-1
SDG: Eunice, NM

Client Sample ID: CS-33
Date Collected: 09/29/21 08:55
Date Received: 09/30/21 16:57
Sample Depth: 4.5'

Lab Sample ID: 880-6702-8
Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	10/01/21 13:00	10/01/21 18:13	1
o-Terphenyl	117		70 - 130	10/01/21 13:00	10/01/21 18:13	1

Surrogate Summary

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

Job ID: 880-6702-1
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	OTPH1
		(70-130)	(70-130)
880-6699-A-1-B MS	Matrix Spike	110	110
880-6699-A-1-C MSD	Matrix Spike Duplicate	106	104
880-6701-A-1-B MS	Matrix Spike	99	100
880-6701-A-1-C MSD	Matrix Spike Duplicate	99	98
880-6702-1	CS-22	93	102
880-6702-2	CS-23	94	102
880-6702-3	CS-26	93	102
880-6702-4	CS-28	93	103
880-6702-5	CS-29	95	105
880-6702-6	CS-31	102	113
880-6702-7	CS-32	105	113
880-6702-8	CS-33	111	117
LCS 880-8705/2-A	Lab Control Sample	103	103
LCS 880-8715/2-A	Lab Control Sample	96	97
LCSD 880-8705/3-A	Lab Control Sample Dup	108	107
LCSD 880-8715/3-A	Lab Control Sample Dup	93	95
MB 880-8705/1-A	Method Blank	95	104
MB 880-8715/1-A	Method Blank	95	105

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-6702-1
SDG: Eunice, NM

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

Lab Sample ID: MB 880-8705/1-A

Matrix: Solid

Analysis Batch: 8701

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8705

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		10/01/21 07:42	10/01/21 10:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 07:42	10/01/21 10:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 07:42	10/01/21 10:13	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130			10/01/21 07:42	10/01/21 10:13	1
o-Terphenyl	104		70 - 130			10/01/21 07:42	10/01/21 10:13	1

Lab Sample ID: LCS 880-8705/2-A

Matrix: Solid

Analysis Batch: 8701

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8705

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	940.7		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	1000	987.0		mg/Kg		99	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	103		70 - 130				
o-Terphenyl	103		70 - 130				

Lab Sample ID: LCSD 880-8705/3-A

Matrix: Solid

Analysis Batch: 8701

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8705

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	992.5		mg/Kg		99	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	1002		mg/Kg		100	70 - 130	2	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	108		70 - 130						
o-Terphenyl	107		70 - 130						

Lab Sample ID: 880-6701-A-1-B MS

Matrix: Solid

Analysis Batch: 8701

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8705

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	882.2		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	883.7		mg/Kg		89	70 - 130

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QC Sample Results

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

Job ID: 880-6702-1
SDG: Eunice, NM

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

Lab Sample ID: 880-6701-A-1-B MS

Matrix: Solid

Analysis Batch: 8701

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8705

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: 880-6701-A-1-C MSD

Matrix: Solid

Analysis Batch: 8701

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8705

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	<49.8	U	999	930.9		mg/Kg		88	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	879.7		mg/Kg		88	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: MB 880-8715/1-A

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8715

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		10/01/21 09:56	10/01/21 15:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 09:56	10/01/21 15:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 09:56	10/01/21 15:18	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane	95		70 - 130	10/01/21 09:56	10/01/21 15:18	1
o-Terphenyl	105		70 - 130	10/01/21 09:56	10/01/21 15:18	1

Lab Sample ID: LCS 880-8715/2-A

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8715

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	745.9		mg/Kg		75	70 - 130
Diesel Range Organics (Over C10-C28)	1000	945.6		mg/Kg		95	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	97		70 - 130

Eurofins Xenco

QC Sample Results

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

Job ID: 880-6702-1
SDG: Eunice, NM

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

Lab Sample ID: LCSD 880-8715/3-A

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8715

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	674.3	*-	mg/Kg		67	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	1000	879.9		mg/Kg		88	70 - 130	7	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	93		70 - 130						
o-Terphenyl	95		70 - 130						

Lab Sample ID: 880-6699-A-1-B MS

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8715

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *-	997	1058		mg/Kg		106	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	997	957.5		mg/Kg		93	70 - 130		
Surrogate	%Recovery	MS Qualifier	Limits								
1-Chlorooctane	110		70 - 130								
o-Terphenyl	110		70 - 130								

Lab Sample ID: 880-6699-A-1-C MSD

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8715

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	<49.8	U *-	999	1017		mg/Kg		102	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	903.3		mg/Kg		87	70 - 130	6	20
Surrogate	%Recovery	MSD Qualifier	Limits								
1-Chlorooctane	106		70 - 130								
o-Terphenyl	104		70 - 130								

Eurofins Xenco

QC Association Summary

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

Job ID: 880-6702-1
SDG: Eunice, NM

GC Semi VOA

Analysis Batch: 8697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6702-1	CS-22	Total/NA	Solid	8015B NM	8715
880-6702-2	CS-23	Total/NA	Solid	8015B NM	8715
880-6702-3	CS-26	Total/NA	Solid	8015B NM	8715
880-6702-4	CS-28	Total/NA	Solid	8015B NM	8715
880-6702-5	CS-29	Total/NA	Solid	8015B NM	8715
MB 880-8715/1-A	Method Blank	Total/NA	Solid	8015B NM	8715
LCS 880-8715/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8715
LCSD 880-8715/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8715
880-6699-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	8715
880-6699-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8715

Analysis Batch: 8701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6702-6	CS-31	Total/NA	Solid	8015B NM	8705
880-6702-7	CS-32	Total/NA	Solid	8015B NM	8705
880-6702-8	CS-33	Total/NA	Solid	8015B NM	8705
MB 880-8705/1-A	Method Blank	Total/NA	Solid	8015B NM	8705
LCS 880-8705/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8705
LCSD 880-8705/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8705
880-6701-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	8705
880-6701-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8705

Prep Batch: 8705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6702-6	CS-31	Total/NA	Solid	8015NM Prep	
880-6702-7	CS-32	Total/NA	Solid	8015NM Prep	
880-6702-8	CS-33	Total/NA	Solid	8015NM Prep	
MB 880-8705/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8705/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8705/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6701-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6701-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 8715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6702-1	CS-22	Total/NA	Solid	8015NM Prep	
880-6702-2	CS-23	Total/NA	Solid	8015NM Prep	
880-6702-3	CS-26	Total/NA	Solid	8015NM Prep	
880-6702-4	CS-28	Total/NA	Solid	8015NM Prep	
880-6702-5	CS-29	Total/NA	Solid	8015NM Prep	
MB 880-8715/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8715/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8715/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6699-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6699-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6702-1	CS-22	Total/NA	Solid	8015 NM	
880-6702-2	CS-23	Total/NA	Solid	8015 NM	
880-6702-3	CS-26	Total/NA	Solid	8015 NM	

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QC Association Summary

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

Job ID: 880-6702-1
SDG: Eunice, NM

GC Semi VOA (Continued)

Analysis Batch: 8890 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6702-4	CS-28	Total/NA	Solid	8015 NM	
880-6702-5	CS-29	Total/NA	Solid	8015 NM	
880-6702-6	CS-31	Total/NA	Solid	8015 NM	
880-6702-7	CS-32	Total/NA	Solid	8015 NM	
880-6702-8	CS-33	Total/NA	Solid	8015 NM	

Lab Chronicle

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

Job ID: 880-6702-1
SDG: Eunice, NM

Client Sample ID: CS-22

Date Collected: 09/29/21 08:00

Date Received: 09/30/21 16:57

Lab Sample ID: 880-6702-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8890	10/05/21 10:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8715	10/01/21 09:56	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/01/21 22:36	AJ	XEN MID

Client Sample ID: CS-23

Date Collected: 09/29/21 08:05

Date Received: 09/30/21 16:57

Lab Sample ID: 880-6702-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8890	10/05/21 10:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	8715	10/01/21 09:56	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/01/21 22:57	AJ	XEN MID

Client Sample ID: CS-26

Date Collected: 09/29/21 08:20

Date Received: 09/30/21 16:57

Lab Sample ID: 880-6702-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8890	10/05/21 10:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8715	10/01/21 09:56	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/01/21 23:17	AJ	XEN MID

Client Sample ID: CS-28

Date Collected: 09/29/21 08:30

Date Received: 09/30/21 16:57

Lab Sample ID: 880-6702-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8890	10/05/21 10:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8715	10/01/21 09:56	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/01/21 23:37	AJ	XEN MID

Client Sample ID: CS-29

Date Collected: 09/29/21 08:35

Date Received: 09/30/21 16:57

Lab Sample ID: 880-6702-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8890	10/05/21 10:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8715	10/01/21 09:56	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/01/21 23:58	AJ	XEN MID

Client Sample ID: CS-31

Date Collected: 09/29/21 08:45

Date Received: 09/30/21 16:57

Lab Sample ID: 880-6702-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8890	10/05/21 10:42	AJ	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-6702-1
SDG: Eunice, NM

Client Sample ID: CS-31**Lab Sample ID: 880-6702-6****Date Collected: 09/29/21 08:45****Matrix: Solid****Date Received: 09/30/21 16:57**

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	8705	10/01/21 13:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8701	10/01/21 17:30	AJ	XEN MID

Client Sample ID: CS-32**Lab Sample ID: 880-6702-7****Date Collected: 09/29/21 08:50****Matrix: Solid****Date Received: 09/30/21 16:57**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8890	10/05/21 10:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8705	10/01/21 13:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8701	10/01/21 17:51	AJ	XEN MID

Client Sample ID: CS-33**Lab Sample ID: 880-6702-8****Date Collected: 09/29/21 08:55****Matrix: Solid****Date Received: 09/30/21 16:57**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8890	10/05/21 10:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	8705	10/01/21 13:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8701	10/01/21 18:13	AJ	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 880-6702-1
SDG: Eunice, NM

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-6702-1
SDG: Eunice, NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-6702-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-6702-1	CS-22	Solid	09/29/21 08:00	09/30/21 16:57	4.5'
880-6702-2	CS-23	Solid	09/29/21 08:05	09/30/21 16:57	4.5'
880-6702-3	CS-26	Solid	09/29/21 08:20	09/30/21 16:57	4.5'
880-6702-4	CS-28	Solid	09/29/21 08:30	09/30/21 16:57	4.5'
880-6702-5	CS-29	Solid	09/29/21 08:35	09/30/21 16:57	4.5'
880-6702-6	CS-31	Solid	09/29/21 08:45	09/30/21 16:57	4.5'
880-6702-7	CS-32	Solid	09/29/21 08:50	09/30/21 16:57	4.5'
880-6702-8	CS-33	Solid	09/29/21 08:55	09/30/21 16:57	4.5'



Environment Testing

Houston, TX (281)
Midland, TX (432) 7
EL Paso, TX (915)
Hobbs NM (575) 7



Work Order No:

6702

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Project Manager	Russel Sebring		Bill to: (if different)	
Company Name	T.E.C.		Company Name	
Address	100 West 40 th		Address	
City State ZIP	Midland TX 79705		City State ZIP	
Phone	432-280-4465	Email	Russel, Misti	

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 Information						ANALYSIS REQUEST								Preservative Codes						
Project Name:	HEP EMSU															None NO	Dl Water H ₂ O			
Project Number:	428993					<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush										Cool Cool	MeOH Me			
Project Location:	Enic NM					Due Date:										HCL HC	HNO ₃ HN			
Sampler's Name:	mish Blyed					TAT starts the day received by the lab, if received by 4:30pm										H ₂ SO ₄ H ₂	NaOH Na			
P.O.#						Parameters														
SAMPLE RECEIPT						Temp Blank:	(Yes) No	Wet Ice:	(Yes) No								H ₃ PO ₄ HP			
Samples Received Intact:						(Yes) No	Thermometer ID:	RB								NaHSO ₄ NABIS				
Cooler Custody Seals:						Yes No	Correction Factor:	+0.5								Na ₂ S ₂ O ₃ NASO ₃				
Sample Custody Seals:						Yes No	N/A	Temperature Reading:	0.3								Zn Acetate+NaOH Zn			
Total Containers:						B	Corrected Temperature:	0.8								NaOH+Ascorbic Acid SAPC				
Sample Identification						Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont.							Sample Comments		
CS-22 @4.5'						S	9/21/21	0600	4.5	G1	1	X								
CS-23 @4.5'								0605												
CS-26 @4.5'								0620												
CS-28 @4.5'								0630												
CS-29 @4.5'								0635												
CS-31 @4.5'								0645												
CS-32 @4.5'								0650												
CS-33 @4.5'						V		0855	V	V	V									

Value: signature of the document and relinquishment or transfer constitutes a valid purchase order from client company to Eurofins Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, but not analyzed. These terms will be enforced unless previously rejected by Eurofins Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, but not analyzed. These terms will be enforced unless previously rejected by Eurofins Xeno.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 <i>Mat Rupp</i>	<i>PCN</i>	9/30/21 1147 2			
3		1047 4 <i>PP</i>			
5		6			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6702-1

SDG Number: Eunice, NM

Login Number: 6702**List Number: 1****Creator: Teel, Brianna****List Source: Eurofins Xenco**

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: 880-6728-1

Laboratory Sample Delivery Group: Eunice, NM
Client Project/Site: HEP Eunice EMSU Remediation

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
10/4/2021 12:24:07 PM

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

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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 Eunice EMSU Remediation

Laboratory Job ID: 880-6728-1
SDG: Eunice, NM

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Definitions/Glossary

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

Job ID: 880-6728-1
SDG: Eunice, NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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 Eunice EMSU Remediation

Job ID: 880-6728-1
SDG: Eunice, NM

Job ID: 880-6728-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-6728-1

Receipt

The samples were received on 10/1/2021 2:45 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 1.8°C

GC Semi VOA

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 Eunice EMSU Remediation

Job ID: 880-6728-1
SDG: Eunice, NM

Client Sample ID: SW-12

Lab Sample ID: 880-6728-1

Date Collected: 09/30/21 13:30

Matrix: Solid

Date Received: 10/01/21 14:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.8	U *1	49.8	mg/Kg		10/01/21 15:30	10/02/21 00:39	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 00:39	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 00:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			10/01/21 15:30	10/02/21 00:39	1
o-Terphenyl	121		70 - 130			10/01/21 15:30	10/02/21 00:39	1

Client Sample ID: SW-13

Lab Sample ID: 880-6728-2

Date Collected: 09/30/21 13:40

Matrix: Solid

Date Received: 10/01/21 14:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<50.0	U *1	50.0	mg/Kg		10/01/21 15:30	10/02/21 00:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 00:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 00:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			10/01/21 15:30	10/02/21 00:59	1
o-Terphenyl	111		70 - 130			10/01/21 15:30	10/02/21 00:59	1

Client Sample ID: SW-14

Lab Sample ID: 880-6728-3

Date Collected: 09/30/21 13:50

Matrix: Solid

Date Received: 10/01/21 14:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.9	U *1	49.9	mg/Kg		10/01/21 15:30	10/02/21 01:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 01:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 01:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			10/01/21 15:30	10/02/21 01:19	1
o-Terphenyl	108		70 - 130			10/01/21 15:30	10/02/21 01:19	1

Eurofins Xenco, Midland

Client Sample Results

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

Job ID: 880-6728-1
SDG: Eunice, NM

Client Sample ID: SW-15

Lab Sample ID: 880-6728-4

Date Collected: 09/30/21 14:00

Matrix: Solid

Date Received: 10/01/21 14:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.9	U *1	49.9	mg/Kg		10/01/21 15:30	10/02/21 01:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 01:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 01:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			10/01/21 15:30	10/02/21 01:40	1
o-Terphenyl	108		70 - 130			10/01/21 15:30	10/02/21 01:40	1

Client Sample ID: SW-16

Lab Sample ID: 880-6728-5

Date Collected: 09/30/21 14:10

Matrix: Solid

Date Received: 10/01/21 14:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.9	U *1	49.9	mg/Kg		10/01/21 15:30	10/02/21 02:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 02:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 02:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			10/01/21 15:30	10/02/21 02:01	1
o-Terphenyl	107		70 - 130			10/01/21 15:30	10/02/21 02:01	1

Eurofins Xenco, Midland

Surrogate Summary

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

Job ID: 880-6728-1
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)
880-6728-1	SW-12	111	121
880-6728-2	SW-13	102	111
880-6728-3	SW-14	100	108
880-6728-4	SW-15	100	108
880-6728-5	SW-16	101	107
890-1329-A-4-E MS	Matrix Spike	100	99
890-1329-A-4-F MSD	Matrix Spike Duplicate	98	98
LCS 880-8707/2-A	Lab Control Sample	111	107
LCSD 880-8707/3-A	Lab Control Sample Dup	99	96
MB 880-8707/1-A	Method Blank	93	100

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-6728-1
SDG: Eunice, NM

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

Lab Sample ID: MB 880-8707/1-A

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8707

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		10/01/21 08:12	10/01/21 10:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 08:12	10/01/21 10:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 08:12	10/01/21 10:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			10/01/21 08:12	10/01/21 10:16	1
o-Terphenyl	100		70 - 130			10/01/21 08:12	10/01/21 10:16	1

Lab Sample ID: LCS 880-8707/2-A

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8707

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1266		mg/Kg		127	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1026		mg/Kg		103	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	111		70 - 130				
o-Terphenyl	107		70 - 130				

Lab Sample ID: LCSD 880-8707/3-A

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8707

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	783.3	*1	mg/Kg		78	70 - 130	47	20
Diesel Range Organics (Over C10-C28)	1000	909.8		mg/Kg		91	70 - 130	12	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	99		70 - 130						
o-Terphenyl	96		70 - 130						

Lab Sample ID: 890-1329-A-4-E MS

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8707

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	997	1022		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	895.1		mg/Kg		88	70 - 130

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-6728-1
SDG: Eunice, NM

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

Lab Sample ID: 890-1329-A-4-E MS

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8707

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 890-1329-A-4-F MSD

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8707

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	<49.8	U *1	999	951.1		mg/Kg		95	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	888.0		mg/Kg		87	70 - 130	1	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	98		70 - 130								
o-Terphenyl	98		70 - 130								

QC Association Summary

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

Job ID: 880-6728-1
SDG: Eunice, NM

GC Semi VOA

Analysis Batch: 8697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6728-1	SW-12	Total/NA	Solid	8015B NM	8707
880-6728-2	SW-13	Total/NA	Solid	8015B NM	8707
880-6728-3	SW-14	Total/NA	Solid	8015B NM	8707
880-6728-4	SW-15	Total/NA	Solid	8015B NM	8707
880-6728-5	SW-16	Total/NA	Solid	8015B NM	8707
MB 880-8707/1-A	Method Blank	Total/NA	Solid	8015B NM	8707
LCS 880-8707/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8707
LCSD 880-8707/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8707
890-1329-A-4-E MS	Matrix Spike	Total/NA	Solid	8015B NM	8707
890-1329-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8707

Prep Batch: 8707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6728-1	SW-12	Total/NA	Solid	8015NM Prep	
880-6728-2	SW-13	Total/NA	Solid	8015NM Prep	
880-6728-3	SW-14	Total/NA	Solid	8015NM Prep	
880-6728-4	SW-15	Total/NA	Solid	8015NM Prep	
880-6728-5	SW-16	Total/NA	Solid	8015NM Prep	
MB 880-8707/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8707/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8707/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1329-A-4-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1329-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6728-1	SW-12	Total/NA	Solid	8015 NM	
880-6728-2	SW-13	Total/NA	Solid	8015 NM	
880-6728-3	SW-14	Total/NA	Solid	8015 NM	
880-6728-4	SW-15	Total/NA	Solid	8015 NM	
880-6728-5	SW-16	Total/NA	Solid	8015 NM	

Lab Chronicle

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

Job ID: 880-6728-1
SDG: Eunice, NM

Client Sample ID: SW-12

Date Collected: 09/30/21 13:30

Date Received: 10/01/21 14:45

Lab Sample ID: 880-6728-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	8707	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/02/21 00:39	AJ	XEN MID

Client Sample ID: SW-13

Date Collected: 09/30/21 13:40

Date Received: 10/01/21 14:45

Lab Sample ID: 880-6728-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8707	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/02/21 00:59	AJ	XEN MID

Client Sample ID: SW-14

Date Collected: 09/30/21 13:50

Date Received: 10/01/21 14:45

Lab Sample ID: 880-6728-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8707	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/02/21 01:19	AJ	XEN MID

Client Sample ID: SW-15

Date Collected: 09/30/21 14:00

Date Received: 10/01/21 14:45

Lab Sample ID: 880-6728-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8707	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/02/21 01:40	AJ	XEN MID

Client Sample ID: SW-16

Date Collected: 09/30/21 14:10

Date Received: 10/01/21 14:45

Lab Sample ID: 880-6728-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8707	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/02/21 02:01	AJ	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 Eunice EMSU Remediation

Job ID: 880-6728-1
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	T104704400-21-22	06-30-22

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
8015 NM		Solid	Total TPH

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

Method Summary

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

Job ID: 880-6728-1
SDG: Eunice, NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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 Eunice EMSU Remediation

Job ID: 880-6728-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-6728-1	SW-12	Solid	09/30/21 13:30	10/01/21 14:45
880-6728-2	SW-13	Solid	09/30/21 13:40	10/01/21 14:45
880-6728-3	SW-14	Solid	09/30/21 13:50	10/01/21 14:45
880-6728-4	SW-15	Solid	09/30/21 14:00	10/01/21 14:45
880-6728-5	SW-16	Solid	09/30/21 14:10	10/01/21 14:45

1

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14



Environment Test as Xerco

Houston TX (281) 240-4200 Dallas TX (214) 902-0300
Midland TX (432) 704-5440 San Antonio, TX (210) 509-333-
EL Paso TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

Chain of Custody

WO



660-b / 28 Chain of Custody

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Project Manager	RUSSELL SEBRING	Bill to (if different)	
Company Name	TRC	Company Name	
Address.	10 Desta Drive, #130E	Address.	
City, State ZIP	Midland TX, 79705	City, State ZIP	
Phone	432 250 4465	Email	rsebring@trccompanies.com

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.	
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 Eunice EMSU Remediation		Turn Around	
Project Number	454378		<input type="checkbox"/> Routine	<input checked="" type="checkbox"/> Rush 24hrs
Project Location	Eunice NM		Due Date	
Sampler's Name	Russell Sebring/Misti Bryant		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	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Samples Received intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID	128	
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	1.3	
Total Containers.		Corrected Temperature.	1.3	

Parameters	ANALYSIS REQUEST								Preservative Codes	
	Test Code									
									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	

[illegible]

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
TC1P / SPLP 6010			8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
Circle Method(s) and Metal(s) to be analyzed			Hg 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document is required for relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 Xeno. A minimum charge of \$35.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, 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
1 <i>[Signature]</i>	<i>[Signature]</i>	10/1/21 1428		<i>[Signature]</i>	10 01 2
3			4		1443
5			6		

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6728-1

SDG Number: Eunice, NM

Login Number: 6728

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

Laboratory Job ID: 880-6730-1

Laboratory Sample Delivery Group: Eunice, NM
Client Project/Site: HEP Eunice EMSU
Revision: 2

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/7/2022 4:42:31 PM

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

LINKS

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results through
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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 Eunice EMSU

Laboratory Job ID: 880-6730-1
SDG: Eunice, NM

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Definitions/Glossary

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

Job ID: 880-6730-1
SDG: Eunice, NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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

Case Narrative

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

Job ID: 880-6730-1
SDG: Eunice, NM

Job ID: 880-6730-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-6730-1

REVISION

The report being provided is a revision of the original report sent on 10/6/2021. The report (revision 2) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

The report being provided is a revision of the original report sent on 10/6/2021. The report (revision 2) is being revised due to Per client email, removed sample depths from sample name.

Revision 1 - 11/10/2021 - Reason - MS/MSD missing on final report.

Receipt

The samples were received on 10/1/2021 2:48 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 1.8°C

GC Semi VOA

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 Eunice EMSU

Job ID: 880-6730-1
SDG: Eunice, NM

Client Sample ID: CS-34

Lab Sample ID: 880-6730-1

Date Collected: 09/30/21 09:30

Matrix: Solid

Date Received: 10/01/21 14:48

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<49.8	U *1	49.8	mg/Kg		10/01/21 15:30	10/02/21 02:21	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 02:21	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 02:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			10/01/21 15:30	10/02/21 02:21	1
o-Terphenyl	114		70 - 130			10/01/21 15:30	10/02/21 02:21	1

Client Sample ID: CS-35

Lab Sample ID: 880-6730-2

Date Collected: 09/30/21 09:35

Matrix: Solid

Date Received: 10/01/21 14:48

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<50.0	U *1	50.0	mg/Kg		10/01/21 15:30	10/02/21 02:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 02:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 02:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			10/01/21 15:30	10/02/21 02:41	1
o-Terphenyl	110		70 - 130			10/01/21 15:30	10/02/21 02:41	1

Client Sample ID: CS-36

Lab Sample ID: 880-6730-3

Date Collected: 09/30/21 09:40

Matrix: Solid

Date Received: 10/01/21 14:48

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<50.0	U *1	50.0	mg/Kg		10/01/21 15:30	10/02/21 03:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 03:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 03:02	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-6730-1
SDG: Eunice, NM

Client Sample ID: CS-36

Date Collected: 09/30/21 09:40

Date Received: 10/01/21 14:48

Sample Depth: 3

Lab Sample ID: 880-6730-3

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	10/01/21 15:30	10/02/21 03:02	1
o-Terphenyl	113		70 - 130	10/01/21 15:30	10/02/21 03:02	1

Client Sample ID: CS-37

Date Collected: 09/30/21 09:45

Date Received: 10/01/21 14:48

Sample Depth: 3

Lab Sample ID: 880-6730-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<49.8	U *1	49.8	mg/Kg		10/01/21 15:30	10/02/21 03:22	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 03:22	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 03:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			10/01/21 15:30	10/02/21 03:22	1
o-Terphenyl	110		70 - 130			10/01/21 15:30	10/02/21 03:22	1

Client Sample ID: CS-38

Date Collected: 09/30/21 09:50

Date Received: 10/01/21 14:48

Sample Depth: 3

Lab Sample ID: 880-6730-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<50.0	U *1	50.0	mg/Kg		10/01/21 15:30	10/02/21 03:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 03:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 03:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			10/01/21 15:30	10/02/21 03:42	1
o-Terphenyl	115		70 - 130			10/01/21 15:30	10/02/21 03:42	1

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Client Sample Results

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

Job ID: 880-6730-1
SDG: Eunice, NM

Client Sample ID: CS-39

Lab Sample ID: 880-6730-6

Date Collected: 09/30/21 09:55

Matrix: Solid

Date Received: 10/01/21 14:48

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	5280		50.0	mg/Kg			10/06/21 10:56	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	1410	*1	249	mg/Kg		10/01/21 15:30	10/02/21 04:03	5
Diesel Range Organics (Over C10-C28)	3580		249	mg/Kg		10/01/21 15:30	10/02/21 04:03	5
Oil Range Organics (Over C28-C36)	287		249	mg/Kg		10/01/21 15:30	10/02/21 04:03	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130			10/01/21 15:30	10/02/21 04:03	5
o-Terphenyl	108		70 - 130			10/01/21 15:30	10/02/21 04:03	5

Client Sample ID: CS-40

Lab Sample ID: 880-6730-7

Date Collected: 09/30/21 10:00

Matrix: Solid

Date Received: 10/01/21 14:48

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<50.0	U *1	50.0	mg/Kg		10/01/21 15:30	10/02/21 04:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 04:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 04:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			10/01/21 15:30	10/02/21 04:23	1
o-Terphenyl	116		70 - 130			10/01/21 15:30	10/02/21 04:23	1

Client Sample ID: CS-41

Lab Sample ID: 880-6730-8

Date Collected: 09/30/21 10:05

Matrix: Solid

Date Received: 10/01/21 14:48

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 00:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 00:39	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 00:39	1

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Client Sample Results

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

Job ID: 880-6730-1
SDG: Eunice, NM

Client Sample ID: CS-41

Date Collected: 09/30/21 10:05

Date Received: 10/01/21 14:48

Sample Depth: 3

Lab Sample ID: 880-6730-8

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	10/01/21 15:30	10/02/21 00:39	1
o-Terphenyl	107		70 - 130	10/01/21 15:30	10/02/21 00:39	1

Client Sample ID: CS-42

Date Collected: 09/30/21 10:10

Date Received: 10/01/21 14:48

Sample Depth: 3

Lab Sample ID: 880-6730-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 00:59	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 00:59	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 00:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			10/01/21 15:30	10/02/21 00:59	1
o-Terphenyl	108		70 - 130			10/01/21 15:30	10/02/21 00:59	1

Client Sample ID: CS-43

Date Collected: 09/30/21 10:15

Date Received: 10/01/21 14:48

Sample Depth: 3

Lab Sample ID: 880-6730-10

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 01:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 01:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 01:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130			10/01/21 15:30	10/02/21 01:19	1
o-Terphenyl	127		70 - 130			10/01/21 15:30	10/02/21 01:19	1

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Client Sample Results

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

Job ID: 880-6730-1
SDG: Eunice, NM

Client Sample ID: CS-44

Lab Sample ID: 880-6730-11

Date Collected: 09/30/21 10:20

Matrix: Solid

Date Received: 10/01/21 14:48

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 01:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 01:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 01:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			10/01/21 15:30	10/02/21 01:40	1
o-Terphenyl	99		70 - 130			10/01/21 15:30	10/02/21 01:40	1

Client Sample ID: CS-45

Lab Sample ID: 880-6730-12

Date Collected: 09/30/21 10:25

Matrix: Solid

Date Received: 10/01/21 14:48

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 02:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 02:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 02:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			10/01/21 15:30	10/02/21 02:01	1
o-Terphenyl	123		70 - 130			10/01/21 15:30	10/02/21 02:01	1

Client Sample ID: CS-46

Lab Sample ID: 880-6730-13

Date Collected: 09/30/21 10:30

Matrix: Solid

Date Received: 10/01/21 14:48

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 02:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 02:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 15:30	10/02/21 02:21	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-6730-1
SDG: Eunice, NM

Client Sample ID: CS-46

Date Collected: 09/30/21 10:30

Date Received: 10/01/21 14:48

Sample Depth: 3

Lab Sample ID: 880-6730-13

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	10/01/21 15:30	10/02/21 02:21	1
o-Terphenyl	102		70 - 130	10/01/21 15:30	10/02/21 02:21	1

Client Sample ID: CS-47

Date Collected: 09/30/21 10:35

Date Received: 10/01/21 14:48

Sample Depth: 3

Lab Sample ID: 880-6730-14

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 02:41	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 02:41	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 02:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			10/01/21 15:30	10/02/21 02:41	1
o-Terphenyl	109		70 - 130			10/01/21 15:30	10/02/21 02:41	1

Client Sample ID: CS-48

Date Collected: 09/30/21 10:40

Date Received: 10/01/21 14:48

Sample Depth: 3

Lab Sample ID: 880-6730-15

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 03:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 03:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 03:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			10/01/21 15:30	10/02/21 03:02	1
o-Terphenyl	102		70 - 130			10/01/21 15:30	10/02/21 03:02	1

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Client Sample Results

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

Job ID: 880-6730-1
SDG: Eunice, NM

Client Sample ID: CS-49

Date Collected: 09/30/21 10:45

Date Received: 10/01/21 14:48

Sample Depth: 3

Lab Sample ID: 880-6730-16

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 03:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 03:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 03:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130			10/01/21 15:30	10/02/21 03:22	1
o-Terphenyl	125		70 - 130			10/01/21 15:30	10/02/21 03:22	1

Client Sample ID: CS-50

Date Collected: 09/30/21 10:50

Date Received: 10/01/21 14:48

Sample Depth: 3

Lab Sample ID: 880-6730-17

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 03:42	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 03:42	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 15:30	10/02/21 03:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			10/01/21 15:30	10/02/21 03:42	1
o-Terphenyl	111		70 - 130			10/01/21 15:30	10/02/21 03:42	1

Client Sample ID: CS-51

Date Collected: 09/30/21 10:55

Date Received: 10/01/21 14:48

Sample Depth: 3

Lab Sample ID: 880-6730-18

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/06/21 10:56	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	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 04:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 04:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 15:30	10/02/21 04:03	1

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Client Sample Results

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

Job ID: 880-6730-1
SDG: Eunice, NM

Client Sample ID: CS-51
Date Collected: 09/30/21 10:55
Date Received: 10/01/21 14:48
Sample Depth: 3

Lab Sample ID: 880-6730-18
Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	10/01/21 15:30	10/02/21 04:03	1
o-Terphenyl	119		70 - 130	10/01/21 15:30	10/02/21 04:03	1

Surrogate Summary

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

Job ID: 880-6730-1
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	OTPH1
		(70-130)	(70-130)
880-6730-1	CS-34	104	114
880-6730-2	CS-35	99	110
880-6730-3	CS-36	103	113
880-6730-4	CS-37	97	110
880-6730-5	CS-38	104	115
880-6730-6	CS-39	122	108
880-6730-7	CS-40	107	116
880-6730-8	CS-41	104	107
880-6730-9	CS-42	102	108
880-6730-10	CS-43	122	127
880-6730-11	CS-44	96	99
880-6730-12	CS-45	115	123
880-6730-13	CS-46	98	102
880-6730-14	CS-47	96	109
880-6730-15	CS-48	98	102
880-6730-16	CS-49	121	125
880-6730-17	CS-50	111	111
880-6730-18	CS-51	115	119
890-1329-A-4-E MS	Matrix Spike	100	99
890-1329-A-4-F MSD	Matrix Spike Duplicate	98	98
890-1329-A-6-E MS	Matrix Spike	97	93
890-1329-A-6-F MSD	Matrix Spike Duplicate	91	84
LCS 880-8707/2-A	Lab Control Sample	111	107
LCS 880-8709/2-A	Lab Control Sample	98	91
LCSD 880-8707/3-A	Lab Control Sample Dup	99	96
LCSD 880-8709/3-A	Lab Control Sample Dup	97	90
MB 880-8707/1-A	Method Blank	93	100
MB 880-8709/1-A	Method Blank	97	105

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-6730-1
SDG: Eunice, NM

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

Lab Sample ID: MB 880-8707/1-A

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8707

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		10/01/21 08:12	10/01/21 10:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 08:12	10/01/21 10:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 08:12	10/01/21 10:16	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			10/01/21 08:12	10/01/21 10:16	1
o-Terphenyl	100		70 - 130			10/01/21 08:12	10/01/21 10:16	1

Lab Sample ID: LCS 880-8707/2-A

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8707

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1266		mg/Kg		127	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1026		mg/Kg		103	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
1-Chlorooctane	111		70 - 130				
o-Terphenyl	107		70 - 130				

Lab Sample ID: LCSD 880-8707/3-A

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8707

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	783.3	*1	mg/Kg		78	70 - 130	47	20
Diesel Range Organics (Over C10-C28)	1000	909.8		mg/Kg		91	70 - 130	12	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	99		70 - 130						
o-Terphenyl	96		70 - 130						

Lab Sample ID: 890-1329-A-4-E MS

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8707

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	997	1022		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	895.1		mg/Kg		88	70 - 130

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QC Sample Results

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

Job ID: 880-6730-1
SDG: Eunice, NM

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

Lab Sample ID: 890-1329-A-4-E MS

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8707

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 890-1329-A-4-F MSD

Matrix: Solid

Analysis Batch: 8697

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8707

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	<49.8	U *1	999	951.1		mg/Kg		95	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	888.0		mg/Kg		87	70 - 130	1	20

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

Lab Sample ID: MB 880-8709/1-A

Matrix: Solid

Analysis Batch: 8699

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8709

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		10/01/21 08:14	10/01/21 10:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 08:14	10/01/21 10:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 08:14	10/01/21 10:16	1

	MB	MB						
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	97		70 - 130	10/01/21 08:14	10/01/21 10:16	1		
o-Terphenyl	105		70 - 130	10/01/21 08:14	10/01/21 10:16	1		

Lab Sample ID: LCS 880-8709/2-A

Matrix: Solid

Analysis Batch: 8699

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8709

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	771.1		mg/Kg		77	70 - 130
Diesel Range Organics (Over C10-C28)	1000	908.2		mg/Kg		91	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	91		70 - 130

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QC Sample Results

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

Job ID: 880-6730-1
SDG: Eunice, NM

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

Lab Sample ID: LCSD 880-8709/3-A

Matrix: Solid

Analysis Batch: 8699

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8709

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	829.0		mg/Kg		83	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	878.4		mg/Kg		88	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	97		70 - 130						
o-Terphenyl	90		70 - 130						

Lab Sample ID: 890-1329-A-6-E MS

Matrix: Solid

Analysis Batch: 8699

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8709

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	952.8		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	997	861.1		mg/Kg		86	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	97		70 - 130								
o-Terphenyl	93		70 - 130								

Lab Sample ID: 890-1329-A-6-F MSD

Matrix: Solid

Analysis Batch: 8699

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8709

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	<49.8	U	999	920.7		mg/Kg		92	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	784.1		mg/Kg		78	70 - 130	9	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	91		70 - 130								
o-Terphenyl	84		70 - 130								

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QC Association Summary

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

Job ID: 880-6730-1
SDG: Eunice, NM

GC Semi VOA

Analysis Batch: 8697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6730-1	CS-34	Total/NA	Solid	8015B NM	8707
880-6730-2	CS-35	Total/NA	Solid	8015B NM	8707
880-6730-3	CS-36	Total/NA	Solid	8015B NM	8707
880-6730-4	CS-37	Total/NA	Solid	8015B NM	8707
880-6730-5	CS-38	Total/NA	Solid	8015B NM	8707
880-6730-6	CS-39	Total/NA	Solid	8015B NM	8707
880-6730-7	CS-40	Total/NA	Solid	8015B NM	8707
MB 880-8707/1-A	Method Blank	Total/NA	Solid	8015B NM	8707
LCS 880-8707/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8707
LCSD 880-8707/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8707
890-1329-A-4-E MS	Matrix Spike	Total/NA	Solid	8015B NM	8707
890-1329-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8707

Analysis Batch: 8699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6730-8	CS-41	Total/NA	Solid	8015B NM	8709
880-6730-9	CS-42	Total/NA	Solid	8015B NM	8709
880-6730-10	CS-43	Total/NA	Solid	8015B NM	8709
880-6730-11	CS-44	Total/NA	Solid	8015B NM	8709
880-6730-12	CS-45	Total/NA	Solid	8015B NM	8709
880-6730-13	CS-46	Total/NA	Solid	8015B NM	8709
880-6730-14	CS-47	Total/NA	Solid	8015B NM	8709
880-6730-15	CS-48	Total/NA	Solid	8015B NM	8709
880-6730-16	CS-49	Total/NA	Solid	8015B NM	8709
880-6730-17	CS-50	Total/NA	Solid	8015B NM	8709
880-6730-18	CS-51	Total/NA	Solid	8015B NM	8709
MB 880-8709/1-A	Method Blank	Total/NA	Solid	8015B NM	8709
LCS 880-8709/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8709
LCSD 880-8709/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8709
890-1329-A-6-E MS	Matrix Spike	Total/NA	Solid	8015B NM	8709
890-1329-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8709

Prep Batch: 8707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6730-1	CS-34	Total/NA	Solid	8015NM Prep	
880-6730-2	CS-35	Total/NA	Solid	8015NM Prep	
880-6730-3	CS-36	Total/NA	Solid	8015NM Prep	
880-6730-4	CS-37	Total/NA	Solid	8015NM Prep	
880-6730-5	CS-38	Total/NA	Solid	8015NM Prep	
880-6730-6	CS-39	Total/NA	Solid	8015NM Prep	
880-6730-7	CS-40	Total/NA	Solid	8015NM Prep	
MB 880-8707/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8707/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8707/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1329-A-4-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1329-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 8709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6730-8	CS-41	Total/NA	Solid	8015NM Prep	
880-6730-9	CS-42	Total/NA	Solid	8015NM Prep	

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QC Association Summary

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

Job ID: 880-6730-1
SDG: Eunice, NM

GC Semi VOA (Continued)

Prep Batch: 8709 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6730-10	CS-43	Total/NA	Solid	8015NM Prep	
880-6730-11	CS-44	Total/NA	Solid	8015NM Prep	
880-6730-12	CS-45	Total/NA	Solid	8015NM Prep	
880-6730-13	CS-46	Total/NA	Solid	8015NM Prep	
880-6730-14	CS-47	Total/NA	Solid	8015NM Prep	
880-6730-15	CS-48	Total/NA	Solid	8015NM Prep	
880-6730-16	CS-49	Total/NA	Solid	8015NM Prep	
880-6730-17	CS-50	Total/NA	Solid	8015NM Prep	
880-6730-18	CS-51	Total/NA	Solid	8015NM Prep	
MB 880-8709/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8709/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8709/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1329-A-6-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1329-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6730-1	CS-34	Total/NA	Solid	8015 NM	
880-6730-2	CS-35	Total/NA	Solid	8015 NM	
880-6730-3	CS-36	Total/NA	Solid	8015 NM	
880-6730-4	CS-37	Total/NA	Solid	8015 NM	
880-6730-5	CS-38	Total/NA	Solid	8015 NM	
880-6730-6	CS-39	Total/NA	Solid	8015 NM	
880-6730-7	CS-40	Total/NA	Solid	8015 NM	
880-6730-8	CS-41	Total/NA	Solid	8015 NM	
880-6730-9	CS-42	Total/NA	Solid	8015 NM	
880-6730-10	CS-43	Total/NA	Solid	8015 NM	
880-6730-11	CS-44	Total/NA	Solid	8015 NM	
880-6730-12	CS-45	Total/NA	Solid	8015 NM	
880-6730-13	CS-46	Total/NA	Solid	8015 NM	
880-6730-14	CS-47	Total/NA	Solid	8015 NM	
880-6730-15	CS-48	Total/NA	Solid	8015 NM	
880-6730-16	CS-49	Total/NA	Solid	8015 NM	
880-6730-17	CS-50	Total/NA	Solid	8015 NM	
880-6730-18	CS-51	Total/NA	Solid	8015 NM	

Lab Chronicle

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

Job ID: 880-6730-1
SDG: Eunice, NM

Client Sample ID: CS-34

Date Collected: 09/30/21 09:30

Date Received: 10/01/21 14:48

Lab Sample ID: 880-6730-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8707	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/02/21 02:21	AJ	XEN MID

Client Sample ID: CS-35

Date Collected: 09/30/21 09:35

Date Received: 10/01/21 14:48

Lab Sample ID: 880-6730-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	8707	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/02/21 02:41	AJ	XEN MID

Client Sample ID: CS-36

Date Collected: 09/30/21 09:40

Date Received: 10/01/21 14:48

Lab Sample ID: 880-6730-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8707	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/02/21 03:02	AJ	XEN MID

Client Sample ID: CS-37

Date Collected: 09/30/21 09:45

Date Received: 10/01/21 14:48

Lab Sample ID: 880-6730-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	8707	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/02/21 03:22	AJ	XEN MID

Client Sample ID: CS-38

Date Collected: 09/30/21 09:50

Date Received: 10/01/21 14:48

Lab Sample ID: 880-6730-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8707	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/02/21 03:42	AJ	XEN MID

Client Sample ID: CS-39

Date Collected: 09/30/21 09:55

Date Received: 10/01/21 14:48

Lab Sample ID: 880-6730-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-6730-1
SDG: Eunice, NM

Client Sample ID: CS-39

Lab Sample ID: 880-6730-6

Date Collected: 09/30/21 09:55

Matrix: Solid

Date Received: 10/01/21 14:48

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			10.04 g	10 mL	8707	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		5			8697	10/02/21 04:03	AJ	XEN MID

Client Sample ID: CS-40

Lab Sample ID: 880-6730-7

Date Collected: 09/30/21 10:00

Matrix: Solid

Date Received: 10/01/21 14:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8707	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8697	10/02/21 04:23	AJ	XEN MID

Client Sample ID: CS-41

Lab Sample ID: 880-6730-8

Date Collected: 09/30/21 10:05

Matrix: Solid

Date Received: 10/01/21 14:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8709	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8699	10/02/21 00:39	AJ	XEN MID

Client Sample ID: CS-42

Lab Sample ID: 880-6730-9

Date Collected: 09/30/21 10:10

Matrix: Solid

Date Received: 10/01/21 14:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	8709	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8699	10/02/21 00:59	AJ	XEN MID

Client Sample ID: CS-43

Lab Sample ID: 880-6730-10

Date Collected: 09/30/21 10:15

Matrix: Solid

Date Received: 10/01/21 14:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8709	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8699	10/02/21 01:19	AJ	XEN MID

Client Sample ID: CS-44

Lab Sample ID: 880-6730-11

Date Collected: 09/30/21 10:20

Matrix: Solid

Date Received: 10/01/21 14:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-6730-1
SDG: Eunice, NM

Client Sample ID: CS-44

Lab Sample ID: 880-6730-11

Date Collected: 09/30/21 10:20

Matrix: Solid

Date Received: 10/01/21 14:48

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			10.03 g	10 mL	8709	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8699	10/02/21 01:40	AJ	XEN MID

Client Sample ID: CS-45

Lab Sample ID: 880-6730-12

Date Collected: 09/30/21 10:25

Matrix: Solid

Date Received: 10/01/21 14:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8709	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8699	10/02/21 02:01	AJ	XEN MID

Client Sample ID: CS-46

Lab Sample ID: 880-6730-13

Date Collected: 09/30/21 10:30

Matrix: Solid

Date Received: 10/01/21 14:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8709	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8699	10/02/21 02:21	AJ	XEN MID

Client Sample ID: CS-47

Lab Sample ID: 880-6730-14

Date Collected: 09/30/21 10:35

Matrix: Solid

Date Received: 10/01/21 14:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8709	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8699	10/02/21 02:41	AJ	XEN MID

Client Sample ID: CS-48

Lab Sample ID: 880-6730-15

Date Collected: 09/30/21 10:40

Matrix: Solid

Date Received: 10/01/21 14:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	8709	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8699	10/02/21 03:02	AJ	XEN MID

Client Sample ID: CS-49

Lab Sample ID: 880-6730-16

Date Collected: 09/30/21 10:45

Matrix: Solid

Date Received: 10/01/21 14:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-6730-1
SDG: Eunice, NM

Client Sample ID: CS-49

Lab Sample ID: 880-6730-16

Date Collected: 09/30/21 10:45

Matrix: Solid

Date Received: 10/01/21 14:48

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			10.01 g	10 mL	8709	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8699	10/02/21 03:22	AJ	XEN MID

Client Sample ID: CS-50

Lab Sample ID: 880-6730-17

Date Collected: 09/30/21 10:50

Matrix: Solid

Date Received: 10/01/21 14:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	8709	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8699	10/02/21 03:42	AJ	XEN MID

Client Sample ID: CS-51

Lab Sample ID: 880-6730-18

Date Collected: 09/30/21 10:55

Matrix: Solid

Date Received: 10/01/21 14:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8973	10/06/21 10:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8709	10/01/21 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8699	10/02/21 04:03	AJ	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 880-6730-1
SDG: Eunice, NM

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-6730-1
SDG: Eunice, NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-6730-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-6730-1	CS-34	Solid	09/30/21 09:30	10/01/21 14:48	3
880-6730-2	CS-35	Solid	09/30/21 09:35	10/01/21 14:48	3
880-6730-3	CS-36	Solid	09/30/21 09:40	10/01/21 14:48	3
880-6730-4	CS-37	Solid	09/30/21 09:45	10/01/21 14:48	3
880-6730-5	CS-38	Solid	09/30/21 09:50	10/01/21 14:48	3
880-6730-6	CS-39	Solid	09/30/21 09:55	10/01/21 14:48	3
880-6730-7	CS-40	Solid	09/30/21 10:00	10/01/21 14:48	3
880-6730-8	CS-41	Solid	09/30/21 10:05	10/01/21 14:48	3
880-6730-9	CS-42	Solid	09/30/21 10:10	10/01/21 14:48	3
880-6730-10	CS-43	Solid	09/30/21 10:15	10/01/21 14:48	3
880-6730-11	CS-44	Solid	09/30/21 10:20	10/01/21 14:48	3
880-6730-12	CS-45	Solid	09/30/21 10:25	10/01/21 14:48	3
880-6730-13	CS-46	Solid	09/30/21 10:30	10/01/21 14:48	3
880-6730-14	CS-47	Solid	09/30/21 10:35	10/01/21 14:48	3
880-6730-15	CS-48	Solid	09/30/21 10:40	10/01/21 14:48	3
880-6730-16	CS-49	Solid	09/30/21 10:45	10/01/21 14:48	3
880-6730-17	CS-50	Solid	09/30/21 10:50	10/01/21 14:48	3
880-6730-18	CS-51	Solid	09/30/21 10:55	10/01/21 14:48	3



Environment Test Inc.
Xenoco

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



Wol 880-6730 Chain of Custody

www.xenco.com Page 1 of 2

Project Manager	RUSSELL SEBRING	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 Destia Drive, #130E	Address	
City, State ZIP	Midland TX, 79705	City, State ZIP	
Phone	432 250 4465	Email	rsebring@trccompanies.com

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.				
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	

[illegible][illegible]

Circle Method(s) and Metal(s) to be analyzed	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		
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 (acknowledgment 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
TS [Signature]	[Signature]	10/1/21 1420		[Signature]	10.01.21
					1441



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 N

Loc: 880
6730

www.xenco.com Page 2 of 2

Project Manager	RUSSELL SEBRING	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 Desta Drive, #130E	Address	
City, State ZIP	Midland TX, 79705	City, State ZIP	
Phone	432 250 4465	Email	rsebring@trccompanies.com

Work Order Comments	
Program: 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
Deliverables: EDD	<input type="checkbox"/> ADAPT <input type="checkbox"/> Other

Project Name	HEP Eunice EMSU Remediation	Turn Around	<input type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code	ANALYSIS REQUEST																Preservative Codes																				
Project Number	454378	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	Eunice NM	TAT starts the day received by the lab if received by 4:30pm																																							
Sampler's Name	Russell Sebring/Mist Bryant																																								
PO #																																									
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	TPH	Chloride	Hold																	Sample Comments															
CS-44 @ 3	S	9/30/2021	1020	3	C	1	X																																		
CS-45 @ 4.5	S	9/30/2021	1025	3	C	1	X																																		
CS-46 @ 4.5	S	9/30/2021	1030	3	C	1	X																																		
CS-47 @ 4.5	S	9/30/2021	1035	3	C	1	X																																		
CS-48 @ 4.5	S	9/30/2021	1040	3	C	1	X																																		
CS-49 @ 4.5	S	9/30/2021	1045	3	C	1	X																																		
CS-50 @ 4.5	S	9/30/2021	1050	3	C	1	X																																		
CS-51 @ 4.5	S	9/30/2021	1055	3	C	1	X																																		

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 / 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
Russell Sebring					

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6730-1

SDG Number: Eunice, NM

Login Number: 6730**List Number: 1****Creator: Teel, Brianna****List Source: Eurofins Xenco**

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

Laboratory Job ID: 880-6745-1

Laboratory Sample Delivery Group: Eunice, NM

Client Project/Site: HEP EMSU

Revision: 2

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
2/4/2022 12:08:21 PM

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

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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: 880-6745-1
SDG: Eunice, NM

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Definitions/Glossary

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

Job ID: 880-6745-1
SDG: Eunice, NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
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

Case Narrative

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

Job ID: 880-6745-1
SDG: Eunice, NM

Job ID: 880-6745-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-6745-1

REVISION

The report being provided is a revision of the original report sent on 10/4/2021. The report (revision 2) is being revised due to Per client email, corrected sample IDs.

Report revision history

The report being provided is a revision of the original report sent on 10/4/2021. The report (revision 2) is being revised due to Per client email, corrected sample IDs.

Revision 1 - 1/7/2022 - Reason - Per client email, removed sample depths from sample name.

Receipt

The samples were received on 10/1/2021 4:04 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 0.8°C

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SW-24 (880-6745-8). Evidence of matrix interferences is not obvious.

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: 880-6745-1
SDG: Eunice, NM

Client Sample ID: SW-17

Lab Sample ID: 880-6745-1

Date Collected: 10/01/21 08:00

Matrix: Solid

Date Received: 10/01/21 16:04

Sample Depth: 2.25'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 11:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 11:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 11:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130			10/01/21 17:11	10/02/21 11:14	1
o-Terphenyl	105		70 - 130			10/01/21 17:11	10/02/21 11:14	1

Client Sample ID: SW-18

Lab Sample ID: 880-6745-2

Date Collected: 10/01/21 08:05

Matrix: Solid

Date Received: 10/01/21 16:04

Sample Depth: 2.25'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<50.0	U	50.0	mg/Kg		10/01/21 17:11	10/02/21 12:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 17:11	10/02/21 12:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 17:11	10/02/21 12:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130			10/01/21 17:11	10/02/21 12:18	1
o-Terphenyl	103		70 - 130			10/01/21 17:11	10/02/21 12:18	1

Client Sample ID: SW-19

Lab Sample ID: 880-6745-3

Date Collected: 10/01/21 08:10

Matrix: Solid

Date Received: 10/01/21 16:04

Sample Depth: 2.25'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 12:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 12:39	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 12:39	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-6745-1
SDG: Eunice, NM

Client Sample ID: SW-19

Date Collected: 10/01/21 08:10

Date Received: 10/01/21 16:04

Sample Depth: 2.25'

Lab Sample ID: 880-6745-3

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	10/01/21 17:11	10/02/21 12:39	1
o-Terphenyl	104		70 - 130	10/01/21 17:11	10/02/21 12:39	1

Client Sample ID: SW-20

Date Collected: 10/01/21 08:15

Date Received: 10/01/21 16:04

Sample Depth: 1.5'

Lab Sample ID: 880-6745-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 13:00	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 13:00	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 13:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130			10/01/21 17:11	10/02/21 13:00	1
o-Terphenyl	101		70 - 130			10/01/21 17:11	10/02/21 13:00	1

Client Sample ID: SW-21

Date Collected: 10/01/21 08:20

Date Received: 10/01/21 16:04

Sample Depth: 1.5'

Lab Sample ID: 880-6745-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<50.0	U	50.0	mg/Kg		10/01/21 17:11	10/02/21 13:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 17:11	10/02/21 13:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 17:11	10/02/21 13:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130			10/01/21 17:11	10/02/21 13:22	1
o-Terphenyl	100		70 - 130			10/01/21 17:11	10/02/21 13:22	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-6745-1
SDG: Eunice, NM

Client Sample ID: SW-22

Lab Sample ID: 880-6745-6

Date Collected: 10/01/21 08:25

Matrix: Solid

Date Received: 10/01/21 16:04

Sample Depth: 2.25'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 13:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 13:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 13:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			10/01/21 17:11	10/02/21 13:43	1
o-Terphenyl	104		70 - 130			10/01/21 17:11	10/02/21 13:43	1

Client Sample ID: SW-23

Lab Sample ID: 880-6745-7

Date Collected: 10/01/21 08:30

Matrix: Solid

Date Received: 10/01/21 16:04

Sample Depth: 2.25'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 14:04	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 14:04	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 14:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			10/01/21 17:11	10/02/21 14:04	1
o-Terphenyl	105		70 - 130			10/01/21 17:11	10/02/21 14:04	1

Client Sample ID: SW-24

Lab Sample ID: 880-6745-8

Date Collected: 10/01/21 08:35

Matrix: Solid

Date Received: 10/01/21 16:04

Sample Depth: 2.25'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 14:25	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 14:25	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 14:25	1

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Client Sample Results

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

Job ID: 880-6745-1
SDG: Eunice, NM

Client Sample ID: SW-24

Date Collected: 10/01/21 08:35

Date Received: 10/01/21 16:04

Sample Depth: 2.25'

Lab Sample ID: 880-6745-8

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	10/01/21 17:11	10/02/21 14:25	1
o-Terphenyl	52	S1-	70 - 130	10/01/21 17:11	10/02/21 14:25	1

Client Sample ID: SW-25

Date Collected: 10/01/21 08:40

Date Received: 10/01/21 16:04

Sample Depth: 2.25'

Lab Sample ID: 880-6745-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 14:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 14:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 14:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130			10/01/21 17:11	10/02/21 14:46	1
o-Terphenyl	101		70 - 130			10/01/21 17:11	10/02/21 14:46	1

Client Sample ID: SW-26

Date Collected: 10/01/21 08:45

Date Received: 10/01/21 16:04

Sample Depth: 2.25'

Lab Sample ID: 880-6745-10

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 15:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 15:08	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 15:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130			10/01/21 17:11	10/02/21 15:08	1
o-Terphenyl	102		70 - 130			10/01/21 17:11	10/02/21 15:08	1

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Client Sample Results

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

Job ID: 880-6745-1
SDG: Eunice, NM

Client Sample ID: SW-27

Lab Sample ID: 880-6745-11

Date Collected: 10/01/21 08:50

Matrix: Solid

Date Received: 10/01/21 16:04

Sample Depth: 2.25'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 15:51	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 15:51	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 15:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130			10/01/21 17:11	10/02/21 15:51	1
o-Terphenyl	104		70 - 130			10/01/21 17:11	10/02/21 15:51	1

Client Sample ID: SW-28

Lab Sample ID: 880-6745-12

Date Collected: 10/01/21 10:00

Matrix: Solid

Date Received: 10/01/21 16:04

Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<50.0	U	50.0	mg/Kg		10/01/21 17:11	10/02/21 16:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 17:11	10/02/21 16:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 17:11	10/02/21 16:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			10/01/21 17:11	10/02/21 16:13	1
o-Terphenyl	99		70 - 130			10/01/21 17:11	10/02/21 16:13	1

Client Sample ID: SW-28

Lab Sample ID: 880-6745-13

Date Collected: 10/01/21 10:05

Matrix: Solid

Date Received: 10/01/21 16:04

Sample Depth: 5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 16:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 16:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 16:34	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-6745-1
SDG: Eunice, NM

Client Sample ID: SW-28

Date Collected: 10/01/21 10:05

Date Received: 10/01/21 16:04

Sample Depth: 5'

Lab Sample ID: 880-6745-13

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	10/01/21 17:11	10/02/21 16:34	1
o-Terphenyl	102		70 - 130	10/01/21 17:11	10/02/21 16:34	1

Client Sample ID: SW-29

Date Collected: 10/01/21 10:10

Date Received: 10/01/21 16:04

Sample Depth: 2'

Lab Sample ID: 880-6745-14

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 16:56	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 16:56	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 16:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			10/01/21 17:11	10/02/21 16:56	1
o-Terphenyl	94		70 - 130			10/01/21 17:11	10/02/21 16:56	1

Client Sample ID: SW-29

Date Collected: 10/01/21 10:15

Date Received: 10/01/21 16:04

Sample Depth: 5'

Lab Sample ID: 880-6745-15

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<50.0	U	50.0	mg/Kg		10/01/21 17:11	10/02/21 17:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 17:11	10/02/21 17:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 17:11	10/02/21 17:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130			10/01/21 17:11	10/02/21 17:17	1
o-Terphenyl	102		70 - 130			10/01/21 17:11	10/02/21 17:17	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-6745-1
SDG: Eunice, NM

Client Sample ID: SW-30

Lab Sample ID: 880-6745-16

Date Collected: 10/01/21 10:20

Matrix: Solid

Date Received: 10/01/21 16:04

Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 17:38	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 17:38	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 17:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130			10/01/21 17:11	10/02/21 17:38	1
o-Terphenyl	95		70 - 130			10/01/21 17:11	10/02/21 17:38	1

Client Sample ID: SW-30

Lab Sample ID: 880-6745-17

Date Collected: 10/01/21 10:25

Matrix: Solid

Date Received: 10/01/21 16:04

Sample Depth: 5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 17:59	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 17:59	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/01/21 17:11	10/02/21 17:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			10/01/21 17:11	10/02/21 17:59	1
o-Terphenyl	105		70 - 130			10/01/21 17:11	10/02/21 17:59	1

Client Sample ID: SW-31

Lab Sample ID: 880-6745-18

Date Collected: 10/01/21 10:30

Matrix: Solid

Date Received: 10/01/21 16:04

Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 18:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 18:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 18:20	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-6745-1
SDG: Eunice, NM

Client Sample ID: SW-31

Lab Sample ID: 880-6745-18

Date Collected: 10/01/21 10:30

Matrix: Solid

Date Received: 10/01/21 16:04

Sample Depth: 2'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	10/01/21 17:11	10/02/21 18:20	1
o-Terphenyl	101		70 - 130	10/01/21 17:11	10/02/21 18:20	1

Client Sample ID: SW-31

Lab Sample ID: 880-6745-19

Date Collected: 10/01/21 10:35

Matrix: Solid

Date Received: 10/01/21 16:04

Sample Depth: 5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/04/21 10:23	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	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 18:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 18:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/01/21 17:11	10/02/21 18:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			10/01/21 17:11	10/02/21 18:41	1
o-Terphenyl	99		70 - 130			10/01/21 17:11	10/02/21 18:41	1

Surrogate Summary

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

Job ID: 880-6745-1
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)
880-6745-1	SW-17	95	105
880-6745-1 MS	SW-17	107	110
880-6745-1 MSD	SW-17	110	108
880-6745-2	SW-18	94	103
880-6745-3	SW-19	96	104
880-6745-4	SW-20	94	101
880-6745-5	SW-21	94	100
880-6745-6	SW-22	96	104
880-6745-7	SW-23	96	105
880-6745-8	SW-24	96	52 S1-
880-6745-9	SW-25	95	101
880-6745-10	SW-26	95	102
880-6745-11	SW-27	95	104
880-6745-12	SW-28	92	99
880-6745-13	SW-28	94	102
880-6745-14	SW-29	90	94
880-6745-15	SW-29	94	102
880-6745-16	SW-30	91	95
880-6745-17	SW-30	96	105
880-6745-18	SW-31	93	101
880-6745-19	SW-31	92	99
LCS 880-8754/2-A	Lab Control Sample	100	102
LCSD 880-8754/3-A	Lab Control Sample Dup	103	107
MB 880-8754/1-A	Method Blank	94	106

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-6745-1
SDG: Eunice, NM

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

Lab Sample ID: MB 880-8754/1-A

Matrix: Solid

Analysis Batch: 8764

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8754

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		10/01/21 17:11	10/02/21 10:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/01/21 17:11	10/02/21 10:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/01/21 17:11	10/02/21 10:10	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130			10/01/21 17:11	10/02/21 10:10	1
o-Terphenyl	106		70 - 130			10/01/21 17:11	10/02/21 10:10	1

Lab Sample ID: LCS 880-8754/2-A

Matrix: Solid

Analysis Batch: 8764

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8754

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	888.1		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)	1000	947.7		mg/Kg		95	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	100		70 - 130				
o-Terphenyl	102		70 - 130				

Lab Sample ID: LCSD 880-8754/3-A

Matrix: Solid

Analysis Batch: 8764

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8754

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	905.1		mg/Kg		91	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	959.0		mg/Kg		96	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	103		70 - 130						
o-Terphenyl	107		70 - 130						

Lab Sample ID: 880-6745-1 MS

Matrix: Solid

Analysis Batch: 8764

Client Sample ID: SW-17

Prep Type: Total/NA

Prep Batch: 8754

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	995	859.8		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	995	914.1		mg/Kg		92	70 - 130

Eurofins Midland

QC Sample Results

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

Job ID: 880-6745-1
SDG: Eunice, NM

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

Lab Sample ID: 880-6745-1 MS

Matrix: Solid

Analysis Batch: 8764

Client Sample ID: SW-17

Prep Type: Total/NA

Prep Batch: 8754

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: 880-6745-1 MSD

Matrix: Solid

Analysis Batch: 8764

Client Sample ID: SW-17

Prep Type: Total/NA

Prep Batch: 8754

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	<49.9	U	997	953.8		mg/Kg		94	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	<49.9	U	997	908.7		mg/Kg		91	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	108		70 - 130

QC Association Summary

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

Job ID: 880-6745-1
SDG: Eunice, NM

GC Semi VOA

Prep Batch: 8754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6745-1	SW-17	Total/NA	Solid	8015NM Prep	
880-6745-2	SW-18	Total/NA	Solid	8015NM Prep	
880-6745-3	SW-19	Total/NA	Solid	8015NM Prep	
880-6745-4	SW-20	Total/NA	Solid	8015NM Prep	
880-6745-5	SW-21	Total/NA	Solid	8015NM Prep	
880-6745-6	SW-22	Total/NA	Solid	8015NM Prep	
880-6745-7	SW-23	Total/NA	Solid	8015NM Prep	
880-6745-8	SW-24	Total/NA	Solid	8015NM Prep	
880-6745-9	SW-25	Total/NA	Solid	8015NM Prep	
880-6745-10	SW-26	Total/NA	Solid	8015NM Prep	
880-6745-11	SW-27	Total/NA	Solid	8015NM Prep	
880-6745-12	SW-28	Total/NA	Solid	8015NM Prep	
880-6745-13	SW-28	Total/NA	Solid	8015NM Prep	
880-6745-14	SW-29	Total/NA	Solid	8015NM Prep	
880-6745-15	SW-29	Total/NA	Solid	8015NM Prep	
880-6745-16	SW-30	Total/NA	Solid	8015NM Prep	
880-6745-17	SW-30	Total/NA	Solid	8015NM Prep	
880-6745-18	SW-31	Total/NA	Solid	8015NM Prep	
880-6745-19	SW-31	Total/NA	Solid	8015NM Prep	
MB 880-8754/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8754/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8754/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6745-1 MS	SW-17	Total/NA	Solid	8015NM Prep	
880-6745-1 MSD	SW-17	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6745-1	SW-17	Total/NA	Solid	8015B NM	8754
880-6745-2	SW-18	Total/NA	Solid	8015B NM	8754
880-6745-3	SW-19	Total/NA	Solid	8015B NM	8754
880-6745-4	SW-20	Total/NA	Solid	8015B NM	8754
880-6745-5	SW-21	Total/NA	Solid	8015B NM	8754
880-6745-6	SW-22	Total/NA	Solid	8015B NM	8754
880-6745-7	SW-23	Total/NA	Solid	8015B NM	8754
880-6745-8	SW-24	Total/NA	Solid	8015B NM	8754
880-6745-9	SW-25	Total/NA	Solid	8015B NM	8754
880-6745-10	SW-26	Total/NA	Solid	8015B NM	8754
880-6745-11	SW-27	Total/NA	Solid	8015B NM	8754
880-6745-12	SW-28	Total/NA	Solid	8015B NM	8754
880-6745-13	SW-28	Total/NA	Solid	8015B NM	8754
880-6745-14	SW-29	Total/NA	Solid	8015B NM	8754
880-6745-15	SW-29	Total/NA	Solid	8015B NM	8754
880-6745-16	SW-30	Total/NA	Solid	8015B NM	8754
880-6745-17	SW-30	Total/NA	Solid	8015B NM	8754
880-6745-18	SW-31	Total/NA	Solid	8015B NM	8754
880-6745-19	SW-31	Total/NA	Solid	8015B NM	8754
MB 880-8754/1-A	Method Blank	Total/NA	Solid	8015B NM	8754
LCS 880-8754/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8754
LCSD 880-8754/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8754
880-6745-1 MS	SW-17	Total/NA	Solid	8015B NM	8754
880-6745-1 MSD	SW-17	Total/NA	Solid	8015B NM	8754

Eurofins Midland

QC Association Summary

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

Job ID: 880-6745-1
SDG: Eunice, NM

GC Semi VOA

Analysis Batch: 8793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6745-1	SW-17	Total/NA	Solid	8015 NM	
880-6745-2	SW-18	Total/NA	Solid	8015 NM	
880-6745-3	SW-19	Total/NA	Solid	8015 NM	
880-6745-4	SW-20	Total/NA	Solid	8015 NM	
880-6745-5	SW-21	Total/NA	Solid	8015 NM	
880-6745-6	SW-22	Total/NA	Solid	8015 NM	
880-6745-7	SW-23	Total/NA	Solid	8015 NM	
880-6745-8	SW-24	Total/NA	Solid	8015 NM	
880-6745-9	SW-25	Total/NA	Solid	8015 NM	
880-6745-10	SW-26	Total/NA	Solid	8015 NM	
880-6745-11	SW-27	Total/NA	Solid	8015 NM	
880-6745-12	SW-28	Total/NA	Solid	8015 NM	
880-6745-13	SW-28	Total/NA	Solid	8015 NM	
880-6745-14	SW-29	Total/NA	Solid	8015 NM	
880-6745-15	SW-29	Total/NA	Solid	8015 NM	
880-6745-16	SW-30	Total/NA	Solid	8015 NM	
880-6745-17	SW-30	Total/NA	Solid	8015 NM	
880-6745-18	SW-31	Total/NA	Solid	8015 NM	
880-6745-19	SW-31	Total/NA	Solid	8015 NM	

Lab Chronicle

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

Job ID: 880-6745-1
SDG: Eunice, NM

Client Sample ID: SW-17

Date Collected: 10/01/21 08:00

Date Received: 10/01/21 16:04

Lab Sample ID: 880-6745-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 11:14	AJ	XEN MID

Client Sample ID: SW-18

Date Collected: 10/01/21 08:05

Date Received: 10/01/21 16:04

Lab Sample ID: 880-6745-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 12:18	AJ	XEN MID

Client Sample ID: SW-19

Date Collected: 10/01/21 08:10

Date Received: 10/01/21 16:04

Lab Sample ID: 880-6745-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 12:39	AJ	XEN MID

Client Sample ID: SW-20

Date Collected: 10/01/21 08:15

Date Received: 10/01/21 16:04

Lab Sample ID: 880-6745-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 13:00	AJ	XEN MID

Client Sample ID: SW-21

Date Collected: 10/01/21 08:20

Date Received: 10/01/21 16:04

Lab Sample ID: 880-6745-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 13:22	AJ	XEN MID

Client Sample ID: SW-22

Date Collected: 10/01/21 08:25

Date Received: 10/01/21 16:04

Lab Sample ID: 880-6745-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID

Eurofins Midland

Lab Chronicle

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

Job ID: 880-6745-1
SDG: Eunice, NM

Client Sample ID: SW-22

Date Collected: 10/01/21 08:25

Date Received: 10/01/21 16:04

Lab Sample ID: 880-6745-6

Matrix: Solid

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			10.02 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 13:43	AJ	XEN MID

Client Sample ID: SW-23

Date Collected: 10/01/21 08:30

Date Received: 10/01/21 16:04

Lab Sample ID: 880-6745-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 14:04	AJ	XEN MID

Client Sample ID: SW-24

Date Collected: 10/01/21 08:35

Date Received: 10/01/21 16:04

Lab Sample ID: 880-6745-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 14:25	AJ	XEN MID

Client Sample ID: SW-25

Date Collected: 10/01/21 08:40

Date Received: 10/01/21 16:04

Lab Sample ID: 880-6745-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 14:46	AJ	XEN MID

Client Sample ID: SW-26

Date Collected: 10/01/21 08:45

Date Received: 10/01/21 16:04

Lab Sample ID: 880-6745-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 15:08	AJ	XEN MID

Client Sample ID: SW-27

Date Collected: 10/01/21 08:50

Date Received: 10/01/21 16:04

Lab Sample ID: 880-6745-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID

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Lab Chronicle

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

Job ID: 880-6745-1
SDG: Eunice, NM

Client Sample ID: SW-27

Lab Sample ID: 880-6745-11

Date Collected: 10/01/21 08:50

Matrix: Solid

Date Received: 10/01/21 16:04

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			10.05 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 15:51	AJ	XEN MID

Client Sample ID: SW-28

Lab Sample ID: 880-6745-12

Date Collected: 10/01/21 10:00

Matrix: Solid

Date Received: 10/01/21 16:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 16:13	AJ	XEN MID

Client Sample ID: SW-28

Lab Sample ID: 880-6745-13

Date Collected: 10/01/21 10:05

Matrix: Solid

Date Received: 10/01/21 16:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 16:34	AJ	XEN MID

Client Sample ID: SW-29

Lab Sample ID: 880-6745-14

Date Collected: 10/01/21 10:10

Matrix: Solid

Date Received: 10/01/21 16:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 16:56	AJ	XEN MID

Client Sample ID: SW-29

Lab Sample ID: 880-6745-15

Date Collected: 10/01/21 10:15

Matrix: Solid

Date Received: 10/01/21 16:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 17:17	AJ	XEN MID

Client Sample ID: SW-30

Lab Sample ID: 880-6745-16

Date Collected: 10/01/21 10:20

Matrix: Solid

Date Received: 10/01/21 16:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID

Eurofins Midland

Lab Chronicle

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

Job ID: 880-6745-1
SDG: Eunice, NM

Client Sample ID: SW-30

Lab Sample ID: 880-6745-16

Date Collected: 10/01/21 10:20

Matrix: Solid

Date Received: 10/01/21 16:04

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			10.04 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 17:38	AJ	XEN MID

Client Sample ID: SW-30

Lab Sample ID: 880-6745-17

Date Collected: 10/01/21 10:25

Matrix: Solid

Date Received: 10/01/21 16:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 17:59	AJ	XEN MID

Client Sample ID: SW-31

Lab Sample ID: 880-6745-18

Date Collected: 10/01/21 10:30

Matrix: Solid

Date Received: 10/01/21 16:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 18:20	AJ	XEN MID

Client Sample ID: SW-31

Lab Sample ID: 880-6745-19

Date Collected: 10/01/21 10:35

Matrix: Solid

Date Received: 10/01/21 16:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			8793	10/04/21 10:23	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8754	10/01/21 17:11	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8764	10/02/21 18:41	AJ	XEN MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

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

Job ID: 880-6745-1
SDG: Eunice, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-6745-1
SDG: Eunice, NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

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

Laboratory References:
XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440



Sample Summary

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

Job ID: 880-6745-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-6745-1	SW-17	Solid	10/01/21 08:00	10/01/21 16:04	2.25'
880-6745-2	SW-18	Solid	10/01/21 08:05	10/01/21 16:04	2.25'
880-6745-3	SW-19	Solid	10/01/21 08:10	10/01/21 16:04	2.25'
880-6745-4	SW-20	Solid	10/01/21 08:15	10/01/21 16:04	1.5'
880-6745-5	SW-21	Solid	10/01/21 08:20	10/01/21 16:04	1.5'
880-6745-6	SW-22	Solid	10/01/21 08:25	10/01/21 16:04	2.25'
880-6745-7	SW-23	Solid	10/01/21 08:30	10/01/21 16:04	2.25'
880-6745-8	SW-24	Solid	10/01/21 08:35	10/01/21 16:04	2.25'
880-6745-9	SW-25	Solid	10/01/21 08:40	10/01/21 16:04	2.25'
880-6745-10	SW-26	Solid	10/01/21 08:45	10/01/21 16:04	2.25'
880-6745-11	SW-27	Solid	10/01/21 08:50	10/01/21 16:04	2.25'
880-6745-12	SW-28	Solid	10/01/21 10:00	10/01/21 16:04	2'
880-6745-13	SW-28	Solid	10/01/21 10:05	10/01/21 16:04	5'
880-6745-14	SW-29	Solid	10/01/21 10:10	10/01/21 16:04	2'
880-6745-15	SW-29	Solid	10/01/21 10:15	10/01/21 16:04	5'
880-6745-16	SW-30	Solid	10/01/21 10:20	10/01/21 16:04	2'
880-6745-17	SW-30	Solid	10/01/21 10:25	10/01/21 16:04	5'
880-6745-18	SW-31	Solid	10/01/21 10:30	10/01/21 16:04	2'
880-6745-19	SW-31	Solid	10/01/21 10:35	10/01/21 16:04	5'



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

N



880-6745 Chain of Custody

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Project Manager	Russel Selving	Bill to (if different)	
Company Name	TRE	Company Name	
Address	10 Deth Dr	Address	
City, State ZIP	Midland, TX 79705	City, State ZIP	
Phone	432-250-4465	Email	Russel.Mstf

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: 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	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush	Pres. Code	
Project Number	428493	Due Date			
Project Location	Evince, NM	TAT starts the day received by the lab, if received by 4:30pm			
Sample Name	Misha Bryant	Temperature Reading			
PO #		Corrected Temperature			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Sample Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
CS-SW-17 @ 2.25'	S	10/1/21	0800	2.25	G	1	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								</

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 / 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
Mt Bryant	J. H. H. H.	10-01-21			



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

Loc: 880
6745

Work

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Project Manager:	Russel Strong	Bill to: (if different)	
Company Name:	TEC	Company Name:	
Address:	10 DASH Dr	Address:	
City State ZIP:	Midland TX 79705	City State ZIP:	
Phone:	432-250-4465	Email:	Russel.mish

Program: <input type="checkbox"/> UST/PSR <input type="checkbox"/> RRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project: MM	
Reporting 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:	

Project Name:	HEP EMSU	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush 24h	Pres. Code	
Project Number:	428993	Due Date			
Project Location:	Evacite NM	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Mish Bryant				
P.O. #					

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Samples Received Intact:	Yes	No	Thermometer ID:			
Cooler Custody Seals:	Yes	No	Correction Factor:			
Sample Custody Seals:	Yes	No	Temperature Reading:			
Total Containers:			Corrected Temperature:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Total 200.7 / 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

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
1. <i>Mish Bryant</i>	<i>[Signature]</i>	2			
3.		4			
5.		6			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6745-1

SDG Number: Eunice, NM

Login Number: 6745**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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-6803-1

Laboratory Sample Delivery Group: 454378

Client Project/Site: HEP: Eunice EMSU Remediation
Revision: 1

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/7/2022 4:46:41 PM

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

LINKS

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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: Eunice EMSU Remediation

Laboratory Job ID: 880-6803-1
SDG: 454378

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Definitions/Glossary

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

Job ID: 880-6803-1
SDG: 454378

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
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

Case Narrative

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

Job ID: 880-6803-1
SDG: 454378

Job ID: 880-6803-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-6803-1

REVISION

The report being provided is a revision of the original report sent on 10/7/2021. The report (revision 1) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

Receipt

The samples were received on 10/5/2021 12:30 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 5.3°C

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-8972 and analytical batch 880-8955 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-8972/1-A). Evidence of matrix interferences is not obvious.

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: Eunice EMSU Remediation

Job ID: 880-6803-1
SDG: 454378

Client Sample ID: CS-54

Date Collected: 10/04/21 09:40

Date Received: 10/05/21 12:30

Sample Depth: 9

Lab Sample ID: 880-6803-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4750		250	mg/Kg			10/07/21 09:20	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	588		250	mg/Kg		10/06/21 10:40	10/07/21 02:36	5
Diesel Range Organics (Over C10-C28)	3690	*1	250	mg/Kg		10/06/21 10:40	10/07/21 02:36	5
Oil Range Organics (Over C28-C36)	472		250	mg/Kg		10/06/21 10:40	10/07/21 02:36	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130			10/06/21 10:40	10/07/21 02:36	5
o-Terphenyl	104		70 - 130			10/06/21 10:40	10/07/21 02:36	5

Client Sample ID: CS-55

Date Collected: 10/04/21 09:40

Date Received: 10/05/21 12:30

Sample Depth: 9

Lab Sample ID: 880-6803-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	5480		249	mg/Kg			10/07/21 09:20	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	1190		249	mg/Kg		10/06/21 10:40	10/07/21 02:57	5
Diesel Range Organics (Over C10-C28)	3770	*1	249	mg/Kg		10/06/21 10:40	10/07/21 02:57	5
Oil Range Organics (Over C28-C36)	520		249	mg/Kg		10/06/21 10:40	10/07/21 02:57	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130			10/06/21 10:40	10/07/21 02:57	5
o-Terphenyl	105		70 - 130			10/06/21 10:40	10/07/21 02:57	5

Client Sample ID: CS-58

Date Collected: 10/04/21 10:00

Date Received: 10/05/21 12:30

Sample Depth: 9

Lab Sample ID: 880-6803-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	692		49.9	mg/Kg			10/07/21 09:20	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	64.8		49.9	mg/Kg		10/06/21 10:40	10/07/21 03:18	1
Diesel Range Organics (Over C10-C28)	562	*1	49.9	mg/Kg		10/06/21 10:40	10/07/21 03:18	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-6803-1
SDG: 454378

Client Sample ID: CS-58

Date Collected: 10/04/21 10:00

Date Received: 10/05/21 12:30

Sample Depth: 9

Lab Sample ID: 880-6803-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	65.0		49.9	mg/Kg		10/06/21 10:40	10/07/21 03:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			10/06/21 10:40	10/07/21 03:18	1
o-Terphenyl	105		70 - 130			10/06/21 10:40	10/07/21 03:18	1

Client Sample ID: CS-59

Date Collected: 10/04/21 10:05

Date Received: 10/05/21 12:30

Sample Depth: 9

Lab Sample ID: 880-6803-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1980		249	mg/Kg			10/07/21 09:20	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	505		249	mg/Kg		10/06/21 10:40	10/07/21 03:39	5
Diesel Range Organics (Over C10-C28)	1470	*1	249	mg/Kg		10/06/21 10:40	10/07/21 03:39	5
Oil Range Organics (Over C28-C36)	<249	U	249	mg/Kg		10/06/21 10:40	10/07/21 03:39	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			10/06/21 10:40	10/07/21 03:39	5
o-Terphenyl	104		70 - 130			10/06/21 10:40	10/07/21 03:39	5

Eurofins Xenco

Surrogate Summary

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

Job ID: 880-6803-1
SDG: 454378

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)
880-6803-1	CS-54	114	104
880-6803-2	CS-55	118	105
880-6803-3	CS-58	99	105
880-6803-4	CS-59	106	104
880-6805-A-2-B MS	Matrix Spike	115	113
880-6805-A-2-C MSD	Matrix Spike Duplicate	117	115
LCS 880-8972/2-A	Lab Control Sample	105	105
LCSD 880-8972/3-A	Lab Control Sample Dup	112	110
MB 880-8972/1-A	Method Blank	120	132 S1+

Surrogate Legend
1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-6803-1
SDG: 454378

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

Lab Sample ID: MB 880-8972/1-A

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8972

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		10/06/21 10:40	10/06/21 20:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/06/21 10:40	10/06/21 20:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/06/21 10:40	10/06/21 20:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			10/06/21 10:40	10/06/21 20:31	1
o-Terphenyl	132	S1+	70 - 130			10/06/21 10:40	10/06/21 20:31	1

Lab Sample ID: LCS 880-8972/2-A

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	906.4		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	999.9		mg/Kg		100	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	105		70 - 130				
o-Terphenyl	105		70 - 130				

Lab Sample ID: LCSD 880-8972/3-A

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8972

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	994.2		mg/Kg		99	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	1260	*1	mg/Kg		126	70 - 130	23	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	112		70 - 130						
o-Terphenyl	110		70 - 130						

Lab Sample ID: 880-6805-A-2-B MS

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8972

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	1027		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U *1	997	999.4		mg/Kg		95	70 - 130

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QC Sample Results

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

Job ID: 880-6803-1
SDG: 454378

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

Lab Sample ID: 880-6805-A-2-B MS

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8972

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: 880-6805-A-2-C MSD

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8972

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	<50.0	U	1000	1147		mg/Kg		113	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	<50.0	U *1	1000	1033		mg/Kg		98	70 - 130	3	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	115		70 - 130

QC Association Summary

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

Job ID: 880-6803-1
SDG: 454378

GC Semi VOA

Analysis Batch: 8955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6803-1	CS-54	Total/NA	Solid	8015B NM	8972
880-6803-2	CS-55	Total/NA	Solid	8015B NM	8972
880-6803-3	CS-58	Total/NA	Solid	8015B NM	8972
880-6803-4	CS-59	Total/NA	Solid	8015B NM	8972
MB 880-8972/1-A	Method Blank	Total/NA	Solid	8015B NM	8972
LCS 880-8972/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8972
LCSD 880-8972/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8972
880-6805-A-2-B MS	Matrix Spike	Total/NA	Solid	8015B NM	8972
880-6805-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8972

Prep Batch: 8972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6803-1	CS-54	Total/NA	Solid	8015NM Prep	
880-6803-2	CS-55	Total/NA	Solid	8015NM Prep	
880-6803-3	CS-58	Total/NA	Solid	8015NM Prep	
880-6803-4	CS-59	Total/NA	Solid	8015NM Prep	
MB 880-8972/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8972/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8972/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6805-A-2-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6805-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6803-1	CS-54	Total/NA	Solid	8015 NM	
880-6803-2	CS-55	Total/NA	Solid	8015 NM	
880-6803-3	CS-58	Total/NA	Solid	8015 NM	
880-6803-4	CS-59	Total/NA	Solid	8015 NM	

Lab Chronicle

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

Job ID: 880-6803-1
SDG: 454378

Client Sample ID: CS-54

Date Collected: 10/04/21 09:40

Date Received: 10/05/21 12:30

Lab Sample ID: 880-6803-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		5			8955	10/07/21 02:36	AJ	XEN MID

Client Sample ID: CS-55

Date Collected: 10/04/21 09:40

Date Received: 10/05/21 12:30

Lab Sample ID: 880-6803-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		5			8955	10/07/21 02:57	AJ	XEN MID

Client Sample ID: CS-58

Date Collected: 10/04/21 10:00

Date Received: 10/05/21 12:30

Lab Sample ID: 880-6803-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8955	10/07/21 03:18	AJ	XEN MID

Client Sample ID: CS-59

Date Collected: 10/04/21 10:05

Date Received: 10/05/21 12:30

Lab Sample ID: 880-6803-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		5			8955	10/07/21 03:39	AJ	XEN MID

Laboratory References:

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

Eurofins Xenco

Accreditation/Certification Summary

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

Job ID: 880-6803-1
SDG: 454378

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-6803-1
SDG: 454378

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-6803-1
SDG: 454378

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-6803-1	CS-54	Solid	10/04/21 09:40	10/05/21 12:30	9
880-6803-2	CS-55	Solid	10/04/21 09:40	10/05/21 12:30	9
880-6803-3	CS-58	Solid	10/04/21 10:00	10/05/21 12:30	9
880-6803-4	CS-59	Solid	10/04/21 10:05	10/05/21 12:30	9



Xenopus

Houston
Midland Tx
El Paso
880-6803 Chain of Custody
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

Work Order No: 000-6803

www.xenco.com Page 1 of 1

Project Manager	RUSSELL SEBRING		Bill to (if different)	
Company Name	TRC		Company Name	
Address	10 Desta Drive, #130E		Address	
City, State ZIP	Midland TX, 79705		City, State ZIP	
Phone	432 250 4465	Email	rsebring@trccompanies.com	



Work Order Comments	
Program: UST/PST <input type="checkbox"/> RRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
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 EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

Project Name	HEP Eunice EMSU Remediation						Turn Around										
Project Number	454378						<input type="checkbox"/> Routine	<input checked="" type="checkbox"/> Rush									
Project Location	Eunice NM						Due Date	3 DAY									
Sampler's Name	Russell Sebring/Misti Bryant						TAT starts the day received by the lab if received by 4:30pm										
PO #:																	
SAMPLE RECEIPT																	
	Temp Blank.			Yes (<input checked="" type="radio"/>) No (<input type="radio"/>)			Wet Ice			(<input checked="" type="radio"/>) Yes No (<input type="radio"/>)							
Samples Received Intact	(Yes) No			Thermometer ID						IP-8							
Cooler Custody Seals.	Yes No (<input checked="" type="radio"/>)			Correction Factor						+0.5							
Sample Custody Seals.	Yes No (<input checked="" type="radio"/>)			Temperature Reading						4.3							
Total Containers.				Corrected Temperature						5.3							
Parameters																	
ANALYSIS REQUEST																	
Perservative 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																	

[illegible]

Circle Method(s) and Metal(s) to be analyzed	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 Zr	
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 is relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 Xeno. A minimum charge of \$35.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, 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
		10/5/21 1230			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6803-1

SDG Number: 454378

Login Number: 6803**List Number: 1****Creator: Phillips, Kerianna****List Source: Eurofins Xenco**

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

Laboratory Job ID: 880-6804-1

Laboratory Sample Delivery Group: 454378

Client Project/Site: HEP: Eunice EMSU Remediation
Revision: 2

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/7/2022 4:31:07 PM

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

LINKS

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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: Eunice EMSU Remediation

Laboratory Job ID: 880-6804-1
SDG: 454378

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Definitions/Glossary

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

Job ID: 880-6804-1
SDG: 454378

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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.

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

Case Narrative

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

Job ID: 880-6804-1
SDG: 454378

Job ID: 880-6804-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-6804-1

Comments

No additional comments.

Revision

The report being provided is a revision of the original report sent on 10/7/2021. The report (revision 1) is being revised due to: Added narrative regarding low surrogate recoveries.

Receipt

The samples were received on 10/5/2021 12:39 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 5.3° C.

Receipt Exceptions

Added narrative regarding low surrogate recoveries

GC Semi VOA

Method 8015B NM: The laboratory control sample (LCS) associated with preparation batch 880-8972 and analytical batch 880-8955 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015B NM: Surrogate recovery for the following sample was outside control limits: (MB 880-8972/1-A). Evidence of matrix interferences is not obvious.

Method 8015B NM: Surrogate recovery for the following sample was outside control limits: CS-60@4.5 (880-6804-1). Evidence of matrix interferences is not obvious.

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

Organic 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: Eunice EMSU Remediation

Job ID: 880-6804-1
SDG: 454378

Client Sample ID: CS-60

Date Collected: 10/04/21 15:30

Date Received: 10/05/21 12:39

Sample Depth: 4.5

Lab Sample ID: 880-6804-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1440		49.9	mg/Kg			10/07/21 09:03	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	317		49.9	mg/Kg		10/06/21 10:40	10/07/21 02:15	1
Diesel Range Organics (Over C10-C28)	1000	*1	49.9	mg/Kg		10/06/21 10:40	10/07/21 02:15	1
Oil Range Organics (Over C28-C36)	124		49.9	mg/Kg		10/06/21 10:40	10/07/21 02:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	26	S1-	70 - 130			10/06/21 10:40	10/07/21 02:15	1
o-Terphenyl	20	S1-	70 - 130			10/06/21 10:40	10/07/21 02:15	1

Client Sample ID: CS-61

Date Collected: 10/04/21 15:35

Date Received: 10/05/21 12:39

Sample Depth: 4.5

Lab Sample ID: 880-6804-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	690		50.0	mg/Kg			10/07/21 09:03	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	<50.0	U	50.0	mg/Kg		10/06/21 10:40	10/07/21 00:29	1
Diesel Range Organics (Over C10-C28)	618	*1	50.0	mg/Kg		10/06/21 10:40	10/07/21 00:29	1
Oil Range Organics (Over C28-C36)	72.0		50.0	mg/Kg		10/06/21 10:40	10/07/21 00:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			10/06/21 10:40	10/07/21 00:29	1
o-Terphenyl	104		70 - 130			10/06/21 10:40	10/07/21 00:29	1

Client Sample ID: CS-62

Date Collected: 10/04/21 15:40

Date Received: 10/05/21 12:39

Sample Depth: 4.5

Lab Sample ID: 880-6804-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	817		50.0	mg/Kg			10/07/21 09:03	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	56.5		50.0	mg/Kg		10/06/21 10:40	10/07/21 00:07	1
Diesel Range Organics (Over C10-C28)	679	*1	50.0	mg/Kg		10/06/21 10:40	10/07/21 00:07	1

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Client Sample Results

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

Job ID: 880-6804-1
SDG: 454378

Client Sample ID: CS-62

Date Collected: 10/04/21 15:40

Date Received: 10/05/21 12:39

Sample Depth: 4.5

Lab Sample ID: 880-6804-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	81.1		50.0	mg/Kg		10/06/21 10:40	10/07/21 00:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	21	S1-	70 - 130			10/06/21 10:40	10/07/21 00:07	1
o-Terphenyl	21	S1-	70 - 130			10/06/21 10:40	10/07/21 00:07	1

Client Sample ID: CS-63

Date Collected: 10/04/21 15:45

Date Received: 10/05/21 12:39

Sample Depth: 4.5

Lab Sample ID: 880-6804-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	136		49.8	mg/Kg			10/07/21 09:03	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	<49.8	U	49.8	mg/Kg		10/06/21 10:40	10/07/21 00:50	1
Diesel Range Organics (Over C10-C28)	136	*1	49.8	mg/Kg		10/06/21 10:40	10/07/21 00:50	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/06/21 10:40	10/07/21 00:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			10/06/21 10:40	10/07/21 00:50	1
o-Terphenyl	104		70 - 130			10/06/21 10:40	10/07/21 00:50	1

Client Sample ID: CS-64

Date Collected: 10/04/21 15:50

Date Received: 10/05/21 12:39

Sample Depth: 4.5

Lab Sample ID: 880-6804-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	145		49.9	mg/Kg			10/07/21 09:20	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	<49.9	U	49.9	mg/Kg		10/06/21 10:40	10/07/21 01:11	1
Diesel Range Organics (Over C10-C28)	145	*1	49.9	mg/Kg		10/06/21 10:40	10/07/21 01:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/06/21 10:40	10/07/21 01:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			10/06/21 10:40	10/07/21 01:11	1
o-Terphenyl	103		70 - 130			10/06/21 10:40	10/07/21 01:11	1

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Client Sample Results

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

Job ID: 880-6804-1
SDG: 454378

Client Sample ID: CS-65

Lab Sample ID: 880-6804-6

Date Collected: 10/04/21 15:55

Matrix: Solid

Date Received: 10/05/21 12:39

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	188		49.8	mg/Kg			10/07/21 09:20	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	<49.8	U	49.8	mg/Kg		10/06/21 10:40	10/07/21 01:32	1
Diesel Range Organics (Over C10-C28)	188	*1	49.8	mg/Kg		10/06/21 10:40	10/07/21 01:32	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/06/21 10:40	10/07/21 01:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	10/06/21 10:40	10/07/21 01:32	1
o-Terphenyl	102		70 - 130	10/06/21 10:40	10/07/21 01:32	1

Surrogate Summary

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

Job ID: 880-6804-1
SDG: 454378

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)
880-6804-1	CS-60	26 S1-	20 S1-
880-6804-2	CS-61	100	104
880-6804-3	CS-62	21 S1-	21 S1-
880-6804-4	CS-63	98	104
880-6804-5	CS-64	97	103
880-6804-6	CS-65	96	102
880-6805-A-2-B MS	Matrix Spike	115	113
880-6805-A-2-C MSD	Matrix Spike Duplicate	117	115
LCS 880-8972/2-A	Lab Control Sample	105	105
LCSD 880-8972/3-A	Lab Control Sample Dup	112	110
MB 880-8972/1-A	Method Blank	120	132 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

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

Job ID: 880-6804-1
SDG: 454378

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

Lab Sample ID: MB 880-8972/1-A

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8972

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		10/06/21 10:40	10/06/21 20:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/06/21 10:40	10/06/21 20:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/06/21 10:40	10/06/21 20:31	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			10/06/21 10:40	10/06/21 20:31	1
o-Terphenyl	132	S1+	70 - 130			10/06/21 10:40	10/06/21 20:31	1

Lab Sample ID: LCS 880-8972/2-A

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	906.4		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	999.9		mg/Kg		100	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
1-Chlorooctane	105		70 - 130				
o-Terphenyl	105		70 - 130				

Lab Sample ID: LCSD 880-8972/3-A

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8972

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	994.2		mg/Kg		99	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	1260	*1	mg/Kg		126	70 - 130	23	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	112		70 - 130						
o-Terphenyl	110		70 - 130						

Lab Sample ID: 880-6805-A-2-B MS

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8972

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	1027		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U *1	997	999.4		mg/Kg		95	70 - 130

Eurofins Xenco

QC Sample Results

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

Job ID: 880-6804-1
SDG: 454378

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

Lab Sample ID: 880-6805-A-2-B MS

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8972

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: 880-6805-A-2-C MSD

Matrix: Solid

Analysis Batch: 8955

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8972

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	<50.0	U	1000	1147		mg/Kg		113	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	<50.0	U *1	1000	1033		mg/Kg		98	70 - 130	3	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	115		70 - 130

QC Association Summary

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

Job ID: 880-6804-1
SDG: 454378

GC Semi VOA

Analysis Batch: 8955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6804-1	CS-60	Total/NA	Solid	8015B NM	8972
880-6804-2	CS-61	Total/NA	Solid	8015B NM	8972
880-6804-3	CS-62	Total/NA	Solid	8015B NM	8972
880-6804-4	CS-63	Total/NA	Solid	8015B NM	8972
880-6804-5	CS-64	Total/NA	Solid	8015B NM	8972
880-6804-6	CS-65	Total/NA	Solid	8015B NM	8972
MB 880-8972/1-A	Method Blank	Total/NA	Solid	8015B NM	8972
LCS 880-8972/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8972
LCSD 880-8972/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8972
880-6805-A-2-B MS	Matrix Spike	Total/NA	Solid	8015B NM	8972
880-6805-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8972

Prep Batch: 8972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6804-1	CS-60	Total/NA	Solid	8015NM Prep	
880-6804-2	CS-61	Total/NA	Solid	8015NM Prep	
880-6804-3	CS-62	Total/NA	Solid	8015NM Prep	
880-6804-4	CS-63	Total/NA	Solid	8015NM Prep	
880-6804-5	CS-64	Total/NA	Solid	8015NM Prep	
880-6804-6	CS-65	Total/NA	Solid	8015NM Prep	
MB 880-8972/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8972/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8972/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6805-A-2-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6805-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6804-1	CS-60	Total/NA	Solid	8015 NM	
880-6804-2	CS-61	Total/NA	Solid	8015 NM	
880-6804-3	CS-62	Total/NA	Solid	8015 NM	
880-6804-4	CS-63	Total/NA	Solid	8015 NM	
880-6804-5	CS-64	Total/NA	Solid	8015 NM	
880-6804-6	CS-65	Total/NA	Solid	8015 NM	

Lab Chronicle

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

Job ID: 880-6804-1
SDG: 454378

Client Sample ID: CS-60

Date Collected: 10/04/21 15:30

Date Received: 10/05/21 12:39

Lab Sample ID: 880-6804-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:03	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8955	10/07/21 02:15	AJ	XEN MID

Client Sample ID: CS-61

Date Collected: 10/04/21 15:35

Date Received: 10/05/21 12:39

Lab Sample ID: 880-6804-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:03	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8955	10/07/21 00:29	AJ	XEN MID

Client Sample ID: CS-62

Date Collected: 10/04/21 15:40

Date Received: 10/05/21 12:39

Lab Sample ID: 880-6804-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:03	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8955	10/07/21 00:07	AJ	XEN MID

Client Sample ID: CS-63

Date Collected: 10/04/21 15:45

Date Received: 10/05/21 12:39

Lab Sample ID: 880-6804-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:03	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8955	10/07/21 00:50	AJ	XEN MID

Client Sample ID: CS-64

Date Collected: 10/04/21 15:50

Date Received: 10/05/21 12:39

Lab Sample ID: 880-6804-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8955	10/07/21 01:11	AJ	XEN MID

Client Sample ID: CS-65

Date Collected: 10/04/21 15:55

Date Received: 10/05/21 12:39

Lab Sample ID: 880-6804-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-6804-1
SDG: 454378

Client Sample ID: CS-65 Lab Sample ID: 880-6804-6
Date Collected: 10/04/21 15:55 Matrix: Solid
Date Received: 10/05/21 12:39

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			10.05 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8955	10/07/21 01:32	AJ	XEN MID

Laboratory References:
XEN MID = Eurofins Xenco, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Accreditation/Certification Summary

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

Job ID: 880-6804-1
SDG: 454378

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-6804-1
SDG: 454378

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-6804-1
SDG: 454378

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-6804-1	CS-60	Solid	10/04/21 15:30	10/05/21 12:39	4.5
880-6804-2	CS-61	Solid	10/04/21 15:35	10/05/21 12:39	4.5
880-6804-3	CS-62	Solid	10/04/21 15:40	10/05/21 12:39	4.5
880-6804-4	CS-63	Solid	10/04/21 15:45	10/05/21 12:39	4.5
880-6804-5	CS-64	Solid	10/04/21 15:50	10/05/21 12:39	4.5
880-6804-6	CS-65	Solid	10/04/21 15:55	10/05/21 12:39	4.5



880-6804 Chain of Custody

Chain of Custody

Houston, TX (281) 240-4200 Dallas TX (214) 902-0300
 Itildand 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 Carspad NM (575) 988-3199

Work Order No.:

1007

www.xenco.com Page 1 of 1

Project Manager	RUSSELL SEBRING		Bill to, (if different)	
Company Name	TRC		Company Name	
Address.	10 Destia Drive, #130E		Address	
City, State ZIP	Midland TX, 79705		City, State ZIP	
Phone	432.250.4465	Email	rsebring@trccompanies.com	

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:	
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: _____	

[illegible]

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6804-1

SDG Number: 454378

Login Number: 6804**List Number: 1****Creator: Phillips, Kerianna****List Source: Eurofins Xenco**

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

Laboratory Job ID: 880-6806-1

Laboratory Sample Delivery Group: 454378

Client Project/Site: HEP: Eunice EMSU Remediation
Revision: 1

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/7/2022 4:33:21 PM

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

LINKS

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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: Eunice EMSU Remediation

Laboratory Job ID: 880-6806-1
SDG: 454378

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Definitions/Glossary

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

Job ID: 880-6806-1
SDG: 454378

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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

Case Narrative

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

Job ID: 880-6806-1
SDG: 454378

Job ID: 880-6806-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-6806-1

REVISION

The report being provided is a revision of the original report sent on 10/14/2021. The report (revision 1) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

Receipt

The samples were received on 10/5/2021 12:30 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 5.3°C

GC Semi VOA

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-9438 and analytical batch 880-9428 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10

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: Eunice EMSU Remediation

Job ID: 880-6806-1
SDG: 454378

Client Sample ID: CS-52

Date Collected: 10/04/21 09:00

Date Received: 10/05/21 12:30

Sample Depth: 8'

Lab Sample ID: 880-6806-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/13/21 15:17	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	<49.9	U *1	49.9	mg/Kg		10/14/21 09:34	10/14/21 13:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/14/21 09:34	10/14/21 13:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/14/21 09:34	10/14/21 13:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			10/14/21 09:34	10/14/21 13:58	1
o-Terphenyl	105		70 - 130			10/14/21 09:34	10/14/21 13:58	1

Client Sample ID: CS-53

Date Collected: 10/04/21 09:05

Date Received: 10/05/21 12:30

Sample Depth: 8'

Lab Sample ID: 880-6806-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/13/21 15:17	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	<49.8	U *1	49.8	mg/Kg		10/14/21 09:34	10/14/21 15:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/14/21 09:34	10/14/21 15:02	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/14/21 09:34	10/14/21 15:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130			10/14/21 09:34	10/14/21 15:02	1
o-Terphenyl	95		70 - 130			10/14/21 09:34	10/14/21 15:02	1

Client Sample ID: CS-56

Date Collected: 10/04/21 09:15

Date Received: 10/05/21 12:30

Sample Depth: 8'

Lab Sample ID: 880-6806-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/13/21 15:17	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	<49.9	U *1	49.9	mg/Kg		10/14/21 09:34	10/14/21 15:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/14/21 09:34	10/14/21 15:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/14/21 09:34	10/14/21 15:23	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-6806-1
SDG: 454378

Client Sample ID: CS-56

Date Collected: 10/04/21 09:15

Date Received: 10/05/21 12:30

Sample Depth: 8'

Lab Sample ID: 880-6806-3

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	10/14/21 09:34	10/14/21 15:23	1
o-Terphenyl	101		70 - 130	10/14/21 09:34	10/14/21 15:23	1

Client Sample ID: CS-57

Date Collected: 10/04/21 09:20

Date Received: 10/05/21 12:30

Sample Depth: 8'

Lab Sample ID: 880-6806-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/13/21 15:17	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	<49.8	U *1	49.8	mg/Kg		10/14/21 09:34	10/14/21 15:45	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/14/21 09:34	10/14/21 15:45	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/14/21 09:34	10/14/21 15:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			10/14/21 09:34	10/14/21 15:45	1
o-Terphenyl	101		70 - 130			10/14/21 09:34	10/14/21 15:45	1

Surrogate Summary

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

Job ID: 880-6806-1
SDG: 454378

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	OTPH1
		(70-130)	(70-130)
880-6806-1	CS-52	96	105
880-6806-1 MS	CS-52	93	88
880-6806-1 MSD	CS-52	93	89
880-6806-2	CS-53	89	95
880-6806-3	CS-56	93	101
880-6806-4	CS-57	93	101
LCS 880-9438/2-A	Lab Control Sample	97	94
LCSD 880-9438/3-A	Lab Control Sample Dup	85	83
MB 880-9438/1-A	Method Blank	85	90

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-6806-1
SDG: 454378

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

Lab Sample ID: MB 880-9438/1-A

Matrix: Solid

Analysis Batch: 9428

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9438

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		10/14/21 09:34	10/14/21 12:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/14/21 09:34	10/14/21 12:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/14/21 09:34	10/14/21 12:54	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130			10/14/21 09:34	10/14/21 12:54	1
o-Terphenyl	90		70 - 130			10/14/21 09:34	10/14/21 12:54	1

Lab Sample ID: LCS 880-9438/2-A

Matrix: Solid

Analysis Batch: 9428

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9438

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	980.1		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1069		mg/Kg		107	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	97		70 - 130				
o-Terphenyl	94		70 - 130				

Lab Sample ID: LCSD 880-9438/3-A

Matrix: Solid

Analysis Batch: 9428

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9438

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	774.1	*1	mg/Kg		77	70 - 130	23	20
Diesel Range Organics (Over C10-C28)	1000	874.0		mg/Kg		87	70 - 130	20	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	85		70 - 130						
o-Terphenyl	83		70 - 130						

Lab Sample ID: 880-6806-1 MS

Matrix: Solid

Analysis Batch: 9428

Client Sample ID: CS-52

Prep Type: Total/NA

Prep Batch: 9438

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 *1	997	886.2		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	914.4		mg/Kg		90	70 - 130

Eurofins Xenco

QC Sample Results

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

Job ID: 880-6806-1
SDG: 454378

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

Lab Sample ID: 880-6806-1 MS

Matrix: Solid

Analysis Batch: 9428

Client Sample ID: CS-52

Prep Type: Total/NA

Prep Batch: 9438

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: 880-6806-1 MSD

Matrix: Solid

Analysis Batch: 9428

Client Sample ID: CS-52

Prep Type: Total/NA

Prep Batch: 9438

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	<49.9	U *1	1000	932.1		mg/Kg		89	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	935.1		mg/Kg		92	70 - 130	2	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	89		70 - 130

QC Association Summary

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

Job ID: 880-6806-1
SDG: 454378

GC Semi VOA

Analysis Batch: 9387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6806-1	CS-52	Total/NA	Solid	8015 NM	
880-6806-2	CS-53	Total/NA	Solid	8015 NM	
880-6806-3	CS-56	Total/NA	Solid	8015 NM	
880-6806-4	CS-57	Total/NA	Solid	8015 NM	

Analysis Batch: 9428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6806-1	CS-52	Total/NA	Solid	8015B NM	9438
880-6806-2	CS-53	Total/NA	Solid	8015B NM	9438
880-6806-3	CS-56	Total/NA	Solid	8015B NM	9438
880-6806-4	CS-57	Total/NA	Solid	8015B NM	9438
MB 880-9438/1-A	Method Blank	Total/NA	Solid	8015B NM	9438
LCS 880-9438/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9438
LCSD 880-9438/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9438
880-6806-1 MS	CS-52	Total/NA	Solid	8015B NM	9438
880-6806-1 MSD	CS-52	Total/NA	Solid	8015B NM	9438

Prep Batch: 9438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6806-1	CS-52	Total/NA	Solid	8015NM Prep	
880-6806-2	CS-53	Total/NA	Solid	8015NM Prep	
880-6806-3	CS-56	Total/NA	Solid	8015NM Prep	
880-6806-4	CS-57	Total/NA	Solid	8015NM Prep	
MB 880-9438/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9438/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9438/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6806-1 MS	CS-52	Total/NA	Solid	8015NM Prep	
880-6806-1 MSD	CS-52	Total/NA	Solid	8015NM Prep	

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Lab Chronicle

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

Job ID: 880-6806-1
SDG: 454378

Client Sample ID: CS-52

Date Collected: 10/04/21 09:00

Date Received: 10/05/21 12:30

Lab Sample ID: 880-6806-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9438	10/14/21 09:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9428	10/14/21 13:58	AJ	XEN MID

Client Sample ID: CS-53

Date Collected: 10/04/21 09:05

Date Received: 10/05/21 12:30

Lab Sample ID: 880-6806-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9438	10/14/21 09:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9428	10/14/21 15:02	AJ	XEN MID

Client Sample ID: CS-56

Date Collected: 10/04/21 09:15

Date Received: 10/05/21 12:30

Lab Sample ID: 880-6806-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9438	10/14/21 09:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9428	10/14/21 15:23	AJ	XEN MID

Client Sample ID: CS-57

Date Collected: 10/04/21 09:20

Date Received: 10/05/21 12:30

Lab Sample ID: 880-6806-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	9438	10/14/21 09:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9428	10/14/21 15:45	AJ	XEN MID

Laboratory References:

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

Eurofins Xenco

Accreditation/Certification Summary

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

Job ID: 880-6806-1
SDG: 454378

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-6806-1
SDG: 454378

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-6806-1
SDG: 454378

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-6806-1	CS-52	Solid	10/04/21 09:00	10/05/21 12:30	8'
880-6806-2	CS-53	Solid	10/04/21 09:05	10/05/21 12:30	8'
880-6806-3	CS-56	Solid	10/04/21 09:15	10/05/21 12:30	8'
880-6806-4	CS-57	Solid	10/04/21 09:20	10/05/21 12:30	8'

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Environment Testing
Xenco

Houston TX (281) 240-4200 Dallas
Midland, TX (432) 704-5440 San Antonio
El Paso, TX (915) 585-3443 Lubbock
Hobbs NM (575) 392-7550, Carlsbad NM (505) 755-7550

Chain of Cus



der No: 080-16806

www.xenco.com Page 1 of 1

Project Manager	RUSSELL SEBRING	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 Desia Drive, #130E	Address	
City, State ZIP	Midland TX, 79705	City, State ZIP	
Phone	432 250 4465	Email	rsebring@trccompanies.com

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:	
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"/>	

Project Name	HEP Eunice EMSU Remediation	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST																Preservative Codes				
Project Number	454378	Due Date																				None NO	DI Water H ₂ O			
Project Location	Eunice NM	TAT starts the day received by the lab if received by 4:30pm																				Cool Cool	MeOH Me			
Sampler's Name	Russell Sebring																					HCL HC	HNO ₃ HN			
PO #																						H ₂ SO ₄ H ₂	NaOH Na			
SAMPLE RECEIPT		Temp Blank: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID	Wet Ice	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																	H ₃ PO ₄ HP				
Samples Received Intact:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor																			NaHSO ₄ NABIS				
Cooler Custody Seals:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature Reading																			Na ₂ S ₂ O ₃ NaSO ₃				
Sample Custody Seals:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Corrected Temperature																			Zn Acetate+NaOH Zn				
Total Containers:																						NaOH+Ascorbic Acid SAPC				
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH	HOLD																	Sample Comments	
CS-52@8	S	10/4/2021	900	8'	Comp	1		X																		
CS-53@8	S	10/4/2021	905	8'	Comp	1		X																		
CS-56@8	S	10/4/2021	915	8'	Comp	1		X																		
CS-57@8	S	10/4/2021	920	8'	Comp	1		X																		

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

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 \$3 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

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6806-1

SDG Number: 454378

Login Number: 6806**List Number: 1****Creator: Phillips, Kerianna****List Source: Eurofins Xenco**

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

Laboratory Job ID: 880-6937-1

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

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/7/2022 4:34:37 PM

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

LINKS

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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: Eunice EMSU Remediation

Laboratory Job ID: 880-6937-1
SDG: Eunice NM

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Definitions/Glossary

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

Job ID: 880-6937-1
SDG: Eunice NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
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

Case Narrative

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

Job ID: 880-6937-1
SDG: Eunice NM

Job ID: 880-6937-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-6937-1

REVISION

The report being provided is a revision of the original report sent on 10/8/2021. The report (revision 1) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

Receipt

The samples were received on 10/7/2021 8:09 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 time was 5.7°C

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9049 and analytical batch 880-9027 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 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: CS-75 (880-6937-1), CS-76 (880-6937-2), CS-77 (880-6937-3), CS-78 (880-6937-4), CS-79 (880-6937-5), CS-80 (880-6937-6), CS-82 (880-6937-8), (MB 880-9049/1-A), (880-6937-A-1-B MS) and (880-6937-A-1-C MSD). Evidence of matrix interferences is not obvious.

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: Eunice EMSU Remediation

Job ID: 880-6937-1
SDG: Eunice NM

Client Sample ID: CS-75

Lab Sample ID: 880-6937-1

Date Collected: 10/06/21 13:00

Matrix: Solid

Date Received: 10/07/21 08:09

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	53.8		49.9	mg/Kg			10/08/21 18:05	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	<49.9	U	49.9	mg/Kg		10/07/21 09:44	10/07/21 20:49	1
Diesel Range Organics (Over C10-C28)	53.8	F1	49.9	mg/Kg		10/07/21 09:44	10/07/21 20:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/07/21 09:44	10/07/21 20:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130			10/07/21 09:44	10/07/21 20:49	1
o-Terphenyl	160	S1+	70 - 130			10/07/21 09:44	10/07/21 20:49	1

Client Sample ID: CS-76

Lab Sample ID: 880-6937-2

Date Collected: 10/06/21 13:05

Matrix: Solid

Date Received: 10/07/21 08:09

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	326		49.8	mg/Kg			10/08/21 18:05	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	<49.8	U	49.8	mg/Kg		10/07/21 09:44	10/07/21 21:55	1
Diesel Range Organics (Over C10-C28)	326		49.8	mg/Kg		10/07/21 09:44	10/07/21 21:55	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/07/21 09:44	10/07/21 21:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			10/07/21 09:44	10/07/21 21:55	1
o-Terphenyl	132	S1+	70 - 130			10/07/21 09:44	10/07/21 21:55	1

Client Sample ID: CS-77

Lab Sample ID: 880-6937-3

Date Collected: 10/06/21 13:10

Matrix: Solid

Date Received: 10/07/21 08:09

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4530		250	mg/Kg			10/08/21 18:05	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	764		250	mg/Kg		10/07/21 09:44	10/07/21 22:17	5
Diesel Range Organics (Over C10-C28)	3350		250	mg/Kg		10/07/21 09:44	10/07/21 22:17	5
Oil Range Organics (Over C28-C36)	417		250	mg/Kg		10/07/21 09:44	10/07/21 22:17	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130			10/07/21 09:44	10/07/21 22:17	5
o-Terphenyl	135	S1+	70 - 130			10/07/21 09:44	10/07/21 22:17	5

Eurofins Xenco

Client Sample Results

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

Job ID: 880-6937-1
SDG: Eunice NM

Client Sample ID: CS-78

Lab Sample ID: 880-6937-4

Date Collected: 10/06/21 13:15

Matrix: Solid

Date Received: 10/07/21 08:09

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2780		249	mg/Kg			10/08/21 18:05	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	289		249	mg/Kg		10/07/21 09:44	10/07/21 22:39	5
Diesel Range Organics (Over C10-C28)	2220		249	mg/Kg		10/07/21 09:44	10/07/21 22:39	5
Oil Range Organics (Over C28-C36)	271		249	mg/Kg		10/07/21 09:44	10/07/21 22:39	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130			10/07/21 09:44	10/07/21 22:39	5
o-Terphenyl	143	S1+	70 - 130			10/07/21 09:44	10/07/21 22:39	5

Client Sample ID: CS-79

Lab Sample ID: 880-6937-5

Date Collected: 10/06/21 13:20

Matrix: Solid

Date Received: 10/07/21 08:09

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1260		49.9	mg/Kg			10/08/21 18:05	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	<49.9	U	49.9	mg/Kg		10/07/21 09:44	10/07/21 23:01	1
Diesel Range Organics (Over C10-C28)	1140		49.9	mg/Kg		10/07/21 09:44	10/07/21 23:01	1
Oil Range Organics (Over C28-C36)	123		49.9	mg/Kg		10/07/21 09:44	10/07/21 23:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130			10/07/21 09:44	10/07/21 23:01	1
o-Terphenyl	147	S1+	70 - 130			10/07/21 09:44	10/07/21 23:01	1

Client Sample ID: CS-80

Lab Sample ID: 880-6937-6

Date Collected: 10/06/21 13:25

Matrix: Solid

Date Received: 10/07/21 08:09

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	210		50.0	mg/Kg			10/08/21 18:05	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	<50.0	U	50.0	mg/Kg		10/07/21 09:44	10/07/21 23:23	1
Diesel Range Organics (Over C10-C28)	210		50.0	mg/Kg		10/07/21 09:44	10/07/21 23:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/07/21 09:44	10/07/21 23:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			10/07/21 09:44	10/07/21 23:23	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-6937-1
SDG: Eunice NM

Client Sample ID: CS-80

Date Collected: 10/06/21 13:25

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6937-6

Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	133	S1+	70 - 130	10/07/21 09:44	10/07/21 23:23	1

Client Sample ID: CS-81

Date Collected: 10/06/21 13:30

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6937-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	575		50.0	mg/Kg			10/08/21 18:05	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	<50.0	U	50.0	mg/Kg		10/07/21 09:44	10/07/21 23:45	1
Diesel Range Organics (Over C10-C28)	511		50.0	mg/Kg		10/07/21 09:44	10/07/21 23:45	1
Oil Range Organics (Over C28-C36)	64.3		50.0	mg/Kg		10/07/21 09:44	10/07/21 23:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			10/07/21 09:44	10/07/21 23:45	1
o-Terphenyl	120		70 - 130			10/07/21 09:44	10/07/21 23:45	1

Client Sample ID: CS-82

Date Collected: 10/06/21 13:35

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6937-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	55.5		49.8	mg/Kg			10/08/21 18:05	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	<49.8	U	49.8	mg/Kg		10/07/21 09:44	10/08/21 00:07	1
Diesel Range Organics (Over C10-C28)	55.5		49.8	mg/Kg		10/07/21 09:44	10/08/21 00:07	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/07/21 09:44	10/08/21 00:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130			10/07/21 09:44	10/08/21 00:07	1
o-Terphenyl	160	S1+	70 - 130			10/07/21 09:44	10/08/21 00:07	1

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Surrogate Summary

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

Job ID: 880-6937-1
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)
880-6937-1	CS-75	129	160 S1+
880-6937-1 MS	CS-75	128	139 S1+
880-6937-1 MSD	CS-75	126	136 S1+
880-6937-2	CS-76	107	132 S1+
880-6937-3	CS-77	119	135 S1+
880-6937-4	CS-78	122	143 S1+
880-6937-5	CS-79	126	147 S1+
880-6937-6	CS-80	112	133 S1+
880-6937-7	CS-81	99	120
880-6937-8	CS-82	131 S1+	160 S1+
LCS 880-9049/2-A	Lab Control Sample	109	126
LCSD 880-9049/3-A	Lab Control Sample Dup	102	115
MB 880-9049/1-A	Method Blank	125	162 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-6937-1
SDG: Eunice NM

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

Lab Sample ID: MB 880-9049/1-A

Matrix: Solid

Analysis Batch: 9027

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9049

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		10/07/21 09:44	10/07/21 19:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/07/21 09:44	10/07/21 19:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/07/21 09:44	10/07/21 19:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130			10/07/21 09:44	10/07/21 19:43	1
o-Terphenyl	162	S1+	70 - 130			10/07/21 09:44	10/07/21 19:43	1

Lab Sample ID: LCS 880-9049/2-A

Matrix: Solid

Analysis Batch: 9027

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9049

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	931.1		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1197		mg/Kg		120	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	109		70 - 130				
o-Terphenyl	126		70 - 130				

Lab Sample ID: LCSD 880-9049/3-A

Matrix: Solid

Analysis Batch: 9027

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9049

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	850.3		mg/Kg		85	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	1106		mg/Kg		111	70 - 130	8	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	102		70 - 130						
o-Terphenyl	115		70 - 130						

Lab Sample ID: 880-6937-1 MS

Matrix: Solid

Analysis Batch: 9027

Client Sample ID: CS-75

Prep Type: Total/NA

Prep Batch: 9049

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	997	1190		mg/Kg		117	70 - 130
Diesel Range Organics (Over C10-C28)	53.8	F1	997	1382	F1	mg/Kg		133	70 - 130

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QC Sample Results

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

Job ID: 880-6937-1
SDG: Eunice NM

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

Lab Sample ID: 880-6937-1 MS

Matrix: Solid

Analysis Batch: 9027

Client Sample ID: CS-75

Prep Type: Total/NA

Prep Batch: 9049

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	128		70 - 130
o-Terphenyl	139	S1+	70 - 130

Lab Sample ID: 880-6937-1 MSD

Matrix: Solid

Analysis Batch: 9027

Client Sample ID: CS-75

Prep Type: Total/NA

Prep Batch: 9049

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	<49.9	U	1000	1041		mg/Kg		102	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	53.8	F1	1000	1360	F1	mg/Kg		131	70 - 130	2	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	126		70 - 130
o-Terphenyl	136	S1+	70 - 130

QC Association Summary

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

Job ID: 880-6937-1
SDG: Eunice NM

GC Semi VOA

Analysis Batch: 9027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6937-1	CS-75	Total/NA	Solid	8015B NM	9049
880-6937-2	CS-76	Total/NA	Solid	8015B NM	9049
880-6937-3	CS-77	Total/NA	Solid	8015B NM	9049
880-6937-4	CS-78	Total/NA	Solid	8015B NM	9049
880-6937-5	CS-79	Total/NA	Solid	8015B NM	9049
880-6937-6	CS-80	Total/NA	Solid	8015B NM	9049
880-6937-7	CS-81	Total/NA	Solid	8015B NM	9049
880-6937-8	CS-82	Total/NA	Solid	8015B NM	9049
MB 880-9049/1-A	Method Blank	Total/NA	Solid	8015B NM	9049
LCS 880-9049/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9049
LCSD 880-9049/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9049
880-6937-1 MS	CS-75	Total/NA	Solid	8015B NM	9049
880-6937-1 MSD	CS-75	Total/NA	Solid	8015B NM	9049

Prep Batch: 9049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6937-1	CS-75	Total/NA	Solid	8015NM Prep	
880-6937-2	CS-76	Total/NA	Solid	8015NM Prep	
880-6937-3	CS-77	Total/NA	Solid	8015NM Prep	
880-6937-4	CS-78	Total/NA	Solid	8015NM Prep	
880-6937-5	CS-79	Total/NA	Solid	8015NM Prep	
880-6937-6	CS-80	Total/NA	Solid	8015NM Prep	
880-6937-7	CS-81	Total/NA	Solid	8015NM Prep	
880-6937-8	CS-82	Total/NA	Solid	8015NM Prep	
MB 880-9049/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9049/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9049/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6937-1 MS	CS-75	Total/NA	Solid	8015NM Prep	
880-6937-1 MSD	CS-75	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6937-1	CS-75	Total/NA	Solid	8015 NM	
880-6937-2	CS-76	Total/NA	Solid	8015 NM	
880-6937-3	CS-77	Total/NA	Solid	8015 NM	
880-6937-4	CS-78	Total/NA	Solid	8015 NM	
880-6937-5	CS-79	Total/NA	Solid	8015 NM	
880-6937-6	CS-80	Total/NA	Solid	8015 NM	
880-6937-7	CS-81	Total/NA	Solid	8015 NM	
880-6937-8	CS-82	Total/NA	Solid	8015 NM	

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Lab Chronicle

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

Job ID: 880-6937-1
SDG: Eunice NM

Client Sample ID: CS-75

Date Collected: 10/06/21 13:00

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6937-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/07/21 20:49	AJ	XEN MID

Client Sample ID: CS-76

Date Collected: 10/06/21 13:05

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6937-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/07/21 21:55	AJ	XEN MID

Client Sample ID: CS-77

Date Collected: 10/06/21 13:10

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6937-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		5			9027	10/07/21 22:17	AJ	XEN MID

Client Sample ID: CS-78

Date Collected: 10/06/21 13:15

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6937-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		5			9027	10/07/21 22:39	AJ	XEN MID

Client Sample ID: CS-79

Date Collected: 10/06/21 13:20

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6937-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/07/21 23:01	AJ	XEN MID

Client Sample ID: CS-80

Date Collected: 10/06/21 13:25

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6937-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-6937-1
SDG: Eunice NM

Client Sample ID: CS-80

Date Collected: 10/06/21 13:25

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6937-6

Matrix: Solid

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			10.01 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/07/21 23:23	AJ	XEN MID

Client Sample ID: CS-81

Date Collected: 10/06/21 13:30

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6937-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/07/21 23:45	AJ	XEN MID

Client Sample ID: CS-82

Date Collected: 10/06/21 13:35

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6937-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/08/21 00:07	AJ	XEN MID

Laboratory References:

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

Eurofins Xenco

Accreditation/Certification Summary

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

Job ID: 880-6937-1
SDG: Eunice NM

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

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

Method Summary

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

Job ID: 880-6937-1
SDG: Eunice NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

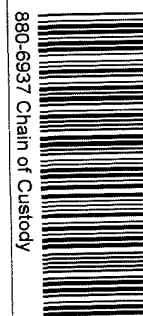
Job ID: 880-6937-1
SDG: Eunice NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-6937-1	CS-75	Solid	10/06/21 13:00	10/07/21 08:09
880-6937-2	CS-76	Solid	10/06/21 13:05	10/07/21 08:09
880-6937-3	CS-77	Solid	10/06/21 13:10	10/07/21 08:09
880-6937-4	CS-78	Solid	10/06/21 13:15	10/07/21 08:09
880-6937-5	CS-79	Solid	10/06/21 13:20	10/07/21 08:09
880-6937-6	CS-80	Solid	10/06/21 13:25	10/07/21 08:09
880-6937-7	CS-81	Solid	10/06/21 13:30	10/07/21 08:09
880-6937-8	CS-82	Solid	10/06/21 13:35	10/07/21 08:09



Environment Testing
Xenco

Houston TX (281) 240-4200 Dallas
Midland TX (432) 704-5440 San Antonio
El Paso, TX (915) 585-3443 Lubbock,
Hobbs, NM (575) 392-7550 Carlsbad, NM



ler No: 6937

www.xenco.com Page _____ of _____

Project Manager	RUSSELL SEBRING	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 Desta Drive, #130E	Address	
City, State ZIP	Midland TX, 79705	City, State ZIP	
Phone	432 250 4465	Email	rsebring@trccompanies.com

Work Order Comments

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

State of Project:

Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐



Deliverables EDD ☐ ADAPT ☐ Other: _____

Project Name:		HEP Eunice EMSU Remediation		Turn Around																					
Project Number		454378		<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush																					
Project Location		Eunice NM		Due Date		2/14/02																			
Sampler's Name:		Russell Sebring/Msiti Bryant		TAT starts the day received by the lab. If received by 4:30pm																					
PO #:																									
SAMPLE RECEIPT		Temp Blank		Yes (No)		Wet Ice		(Yes) No																	
Samples Received Intact:		(Yes) No		Thermometer ID:				12.8																	
Cooler Custody Seals:		Yes No		(N/A)		Correction Factor:		+0.5																	
Sample Custody Seals:		Yes No		N/A		Temperature Reading		5.2																	
Total Containers:				Corrected Temperature		5.7																			
Parameters												Pres. Code													
ANALYSIS REQUEST													Preservative Codes												
													None NO Cool Cool HCL HC H ₂ SO ₄ H ₂ H ₃ PO ₄ HP NaHSO ₄ NABIS Na ₂ S ₂ O ₃ NaSO ₃ Zn Acetate+NaOH Zn NaOH+Ascorbic Acid SAPC												

[illegible]

	Total	200.7 / 6010	200.8 / 6020:	
Circle Method(s) and Metal(s) to be analyzed	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
	TCCLP / SPLIP 6010	8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg 1631 / 245 1 / 7420 / 7471

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
		10/7/21 0809			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6937-1

SDG Number: Eunice NM

Login Number: 6937**List Number: 1****Creator: Phillips, Kerianna****List Source: Eurofins Xenco**

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

Laboratory Job ID: 880-6938-1

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

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/7/2022 4:28:13 PM

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

LINKS

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results through
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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: Eunice EMSU Remediation

Laboratory Job ID: 880-6938-1
SDG: Eunice NM

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Definitions/Glossary

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

Job ID: 880-6938-1
SDG: Eunice NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
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

Case Narrative

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

Job ID: 880-6938-1
SDG: Eunice NM

Job ID: 880-6938-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-6938-1

REVISION

The report being provided is a revision of the original report sent on 10/8/2021. The report (revision 1) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

Receipt

The samples were received on 10/7/2021 8:09 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 time was 5.7°C

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9049 and analytical batch 880-9027 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 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: CS-66 (880-6938-1), CS-67 (880-6938-2), CS-68 (880-6938-3), CS-70 (880-6938-5), CS-71 (880-6938-6), CS-73 (880-6938-8), CS-74 (880-6938-9), (MB 880-9049/1-A), (880-6937-A-1-A), (880-6937-A-1-B MS) and (880-6937-A-1-C MSD). Evidence of matrix interferences is not obvious.

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: Eunice EMSU Remediation

Job ID: 880-6938-1
SDG: Eunice NM

Client Sample ID: CS-66

Date Collected: 10/06/21 10:00

Date Received: 10/07/21 08:09

Sample Depth: 4.5

Lab Sample ID: 880-6938-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	58.9		49.9	mg/Kg			10/08/21 18:05	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	<49.9	U	49.9	mg/Kg		10/07/21 09:44	10/08/21 00:29	1
Diesel Range Organics (Over C10-C28)	58.9		49.9	mg/Kg		10/07/21 09:44	10/08/21 00:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/07/21 09:44	10/08/21 00:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130			10/07/21 09:44	10/08/21 00:29	1
o-Terphenyl	155	S1+	70 - 130			10/07/21 09:44	10/08/21 00:29	1

Client Sample ID: CS-67

Date Collected: 10/06/21 10:05

Date Received: 10/07/21 08:09

Sample Depth: 4.5

Lab Sample ID: 880-6938-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	54.3		49.8	mg/Kg			10/08/21 18:05	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	<49.8	U	49.8	mg/Kg		10/07/21 09:44	10/08/21 00:51	1
Diesel Range Organics (Over C10-C28)	54.3		49.8	mg/Kg		10/07/21 09:44	10/08/21 00:51	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/07/21 09:44	10/08/21 00:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130			10/07/21 09:44	10/08/21 00:51	1
o-Terphenyl	139	S1+	70 - 130			10/07/21 09:44	10/08/21 00:51	1

Client Sample ID: CS-68

Date Collected: 10/06/21 10:10

Date Received: 10/07/21 08:09

Sample Depth: 4.5

Lab Sample ID: 880-6938-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	112		49.9	mg/Kg			10/08/21 18:05	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	<49.9	U	49.9	mg/Kg		10/07/21 09:44	10/08/21 01:34	1
Diesel Range Organics (Over C10-C28)	112		49.9	mg/Kg		10/07/21 09:44	10/08/21 01:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/07/21 09:44	10/08/21 01:34	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-6938-1
SDG: Eunice NM

Client Sample ID: CS-68

Date Collected: 10/06/21 10:10

Date Received: 10/07/21 08:09

Sample Depth: 4.5

Lab Sample ID: 880-6938-3

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	10/07/21 09:44	10/08/21 01:34	1
o-Terphenyl	132	S1+	70 - 130	10/07/21 09:44	10/08/21 01:34	1

Client Sample ID: CS-69

Date Collected: 10/06/21 10:15

Date Received: 10/07/21 08:09

Sample Depth: 4.5

Lab Sample ID: 880-6938-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/08/21 18:05	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	<50.0	U	50.0	mg/Kg		10/07/21 09:44	10/08/21 01:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/07/21 09:44	10/08/21 01:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/07/21 09:44	10/08/21 01:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			10/07/21 09:44	10/08/21 01:56	1
o-Terphenyl	126		70 - 130			10/07/21 09:44	10/08/21 01:56	1

Client Sample ID: CS-70

Date Collected: 10/06/21 10:20

Date Received: 10/07/21 08:09

Sample Depth: 4.5

Lab Sample ID: 880-6938-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/08/21 18:05	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	<49.9	U	49.9	mg/Kg		10/07/21 09:44	10/08/21 02:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/07/21 09:44	10/08/21 02:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/07/21 09:44	10/08/21 02:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			10/07/21 09:44	10/08/21 02:18	1
o-Terphenyl	132	S1+	70 - 130			10/07/21 09:44	10/08/21 02:18	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-6938-1
SDG: Eunice NM

Client Sample ID: CS-71

Date Collected: 10/06/21 10:25

Date Received: 10/07/21 08:09

Sample Depth: 4.5

Lab Sample ID: 880-6938-6

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	230		49.8	mg/Kg			10/08/21 18:05	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	<49.8	U	49.8	mg/Kg		10/07/21 09:44	10/08/21 02:40	1
Diesel Range Organics (Over C10-C28)	230		49.8	mg/Kg		10/07/21 09:44	10/08/21 02:40	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/07/21 09:44	10/08/21 02:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			10/07/21 09:44	10/08/21 02:40	1
o-Terphenyl	137	S1+	70 - 130			10/07/21 09:44	10/08/21 02:40	1

Client Sample ID: CS-72

Date Collected: 10/06/21 10:30

Date Received: 10/07/21 08:09

Sample Depth: 4.5

Lab Sample ID: 880-6938-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	503		50.0	mg/Kg			10/08/21 18:05	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	<50.0	U	50.0	mg/Kg		10/07/21 09:44	10/08/21 03:02	1
Diesel Range Organics (Over C10-C28)	451		50.0	mg/Kg		10/07/21 09:44	10/08/21 03:02	1
Oil Range Organics (Over C28-C36)	51.5		50.0	mg/Kg		10/07/21 09:44	10/08/21 03:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130			10/07/21 09:44	10/08/21 03:02	1
o-Terphenyl	102		70 - 130			10/07/21 09:44	10/08/21 03:02	1

Client Sample ID: CS-73

Date Collected: 10/06/21 10:35

Date Received: 10/07/21 08:09

Sample Depth: 4.5

Lab Sample ID: 880-6938-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	57.1		49.9	mg/Kg			10/08/21 18:05	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	<49.9	U	49.9	mg/Kg		10/07/21 09:44	10/08/21 03:24	1
Diesel Range Organics (Over C10-C28)	57.1		49.9	mg/Kg		10/07/21 09:44	10/08/21 03:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/07/21 09:44	10/08/21 03:24	1

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Client Sample Results

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

Job ID: 880-6938-1
SDG: Eunice NM

Client Sample ID: CS-73

Date Collected: 10/06/21 10:35

Date Received: 10/07/21 08:09

Sample Depth: 4.5

Lab Sample ID: 880-6938-8

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130	10/07/21 09:44	10/08/21 03:24	1
o-Terphenyl	157	S1+	70 - 130	10/07/21 09:44	10/08/21 03:24	1

Client Sample ID: CS-74

Date Collected: 10/06/21 10:40

Date Received: 10/07/21 08:09

Sample Depth: 4.5

Lab Sample ID: 880-6938-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	142		49.8	mg/Kg			10/08/21 18:05	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	<49.8	U	49.8	mg/Kg		10/07/21 09:44	10/08/21 03:46	1
Diesel Range Organics (Over C10-C28)	142		49.8	mg/Kg		10/07/21 09:44	10/08/21 03:46	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/07/21 09:44	10/08/21 03:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			10/07/21 09:44	10/08/21 03:46	1
o-Terphenyl	135	S1+	70 - 130			10/07/21 09:44	10/08/21 03:46	1

Surrogate Summary

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

Job ID: 880-6938-1
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)
880-6937-A-1-B MS	Matrix Spike	128	139 S1+
880-6937-A-1-C MSD	Matrix Spike Duplicate	126	136 S1+
880-6938-1	CS-66	128	155 S1+
880-6938-2	CS-67	118	139 S1+
880-6938-3	CS-68	112	132 S1+
880-6938-4	CS-69	104	126
880-6938-5	CS-70	107	132 S1+
880-6938-6	CS-71	120	137 S1+
880-6938-7	CS-72	86	102
880-6938-8	CS-73	127	157 S1+
880-6938-9	CS-74	108	135 S1+
LCS 880-9049/2-A	Lab Control Sample	109	126
LCSD 880-9049/3-A	Lab Control Sample Dup	102	115
MB 880-9049/1-A	Method Blank	125	162 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

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

Job ID: 880-6938-1
SDG: Eunice NM

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

Lab Sample ID: MB 880-9049/1-A

Matrix: Solid

Analysis Batch: 9027

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9049

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		10/07/21 09:44	10/07/21 19:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/07/21 09:44	10/07/21 19:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/07/21 09:44	10/07/21 19:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130			10/07/21 09:44	10/07/21 19:43	1
o-Terphenyl	162	S1+	70 - 130			10/07/21 09:44	10/07/21 19:43	1

Lab Sample ID: LCS 880-9049/2-A

Matrix: Solid

Analysis Batch: 9027

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9049

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	931.1		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1197		mg/Kg		120	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	109		70 - 130				
o-Terphenyl	126		70 - 130				

Lab Sample ID: LCSD 880-9049/3-A

Matrix: Solid

Analysis Batch: 9027

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9049

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	850.3		mg/Kg		85	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	1106		mg/Kg		111	70 - 130	8	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	102		70 - 130						
o-Terphenyl	115		70 - 130						

Lab Sample ID: 880-6937-A-1-B MS

Matrix: Solid

Analysis Batch: 9027

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9049

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	997	1190		mg/Kg		117	70 - 130
Diesel Range Organics (Over C10-C28)	53.8	F1	997	1382	F1	mg/Kg		133	70 - 130

Eurofins Xenco

QC Sample Results

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

Job ID: 880-6938-1
SDG: Eunice NM

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

Lab Sample ID: 880-6937-A-1-B MS

Matrix: Solid

Analysis Batch: 9027

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9049

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	128		70 - 130
o-Terphenyl	139	S1+	70 - 130

Lab Sample ID: 880-6937-A-1-C MSD

Matrix: Solid

Analysis Batch: 9027

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9049

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	<49.9	U	1000	1041		mg/Kg		102	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	53.8	F1	1000	1360	F1	mg/Kg		131	70 - 130	2	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	126		70 - 130								
o-Terphenyl	136	S1+	70 - 130								

QC Association Summary

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

Job ID: 880-6938-1
SDG: Eunice NM

GC Semi VOA

Analysis Batch: 9027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6938-1	CS-66	Total/NA	Solid	8015B NM	9049
880-6938-2	CS-67	Total/NA	Solid	8015B NM	9049
880-6938-3	CS-68	Total/NA	Solid	8015B NM	9049
880-6938-4	CS-69	Total/NA	Solid	8015B NM	9049
880-6938-5	CS-70	Total/NA	Solid	8015B NM	9049
880-6938-6	CS-71	Total/NA	Solid	8015B NM	9049
880-6938-7	CS-72	Total/NA	Solid	8015B NM	9049
880-6938-8	CS-73	Total/NA	Solid	8015B NM	9049
880-6938-9	CS-74	Total/NA	Solid	8015B NM	9049
MB 880-9049/1-A	Method Blank	Total/NA	Solid	8015B NM	9049
LCS 880-9049/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9049
LCSD 880-9049/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9049
880-6937-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	9049
880-6937-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9049

Prep Batch: 9049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6938-1	CS-66	Total/NA	Solid	8015NM Prep	
880-6938-2	CS-67	Total/NA	Solid	8015NM Prep	
880-6938-3	CS-68	Total/NA	Solid	8015NM Prep	
880-6938-4	CS-69	Total/NA	Solid	8015NM Prep	
880-6938-5	CS-70	Total/NA	Solid	8015NM Prep	
880-6938-6	CS-71	Total/NA	Solid	8015NM Prep	
880-6938-7	CS-72	Total/NA	Solid	8015NM Prep	
880-6938-8	CS-73	Total/NA	Solid	8015NM Prep	
880-6938-9	CS-74	Total/NA	Solid	8015NM Prep	
MB 880-9049/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9049/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9049/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6937-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6937-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6938-1	CS-66	Total/NA	Solid	8015 NM	
880-6938-2	CS-67	Total/NA	Solid	8015 NM	
880-6938-3	CS-68	Total/NA	Solid	8015 NM	
880-6938-4	CS-69	Total/NA	Solid	8015 NM	
880-6938-5	CS-70	Total/NA	Solid	8015 NM	
880-6938-6	CS-71	Total/NA	Solid	8015 NM	
880-6938-7	CS-72	Total/NA	Solid	8015 NM	
880-6938-8	CS-73	Total/NA	Solid	8015 NM	
880-6938-9	CS-74	Total/NA	Solid	8015 NM	

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-6938-1
SDG: Eunice NM

Client Sample ID: CS-66

Date Collected: 10/06/21 10:00

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6938-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/08/21 00:29	AJ	XEN MID

Client Sample ID: CS-67

Date Collected: 10/06/21 10:05

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6938-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/08/21 00:51	AJ	XEN MID

Client Sample ID: CS-68

Date Collected: 10/06/21 10:10

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6938-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/08/21 01:34	AJ	XEN MID

Client Sample ID: CS-69

Date Collected: 10/06/21 10:15

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6938-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/08/21 01:56	AJ	XEN MID

Client Sample ID: CS-70

Date Collected: 10/06/21 10:20

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6938-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/08/21 02:18	AJ	XEN MID

Client Sample ID: CS-71

Date Collected: 10/06/21 10:25

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6938-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID

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Lab Chronicle

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

Job ID: 880-6938-1
SDG: Eunice NM

Client Sample ID: CS-71

Date Collected: 10/06/21 10:25

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6938-6

Matrix: Solid

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			10.04 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/08/21 02:40	AJ	XEN MID

Client Sample ID: CS-72

Date Collected: 10/06/21 10:30

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6938-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/08/21 03:02	AJ	XEN MID

Client Sample ID: CS-73

Date Collected: 10/06/21 10:35

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6938-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/08/21 03:24	AJ	XEN MID

Client Sample ID: CS-74

Date Collected: 10/06/21 10:40

Date Received: 10/07/21 08:09

Lab Sample ID: 880-6938-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	9049	10/07/21 09:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9027	10/08/21 03:46	AJ	XEN MID

Laboratory References:

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

Eurofins Xenco

Accreditation/Certification Summary

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

Job ID: 880-6938-1
SDG: Eunice NM

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-6938-1
SDG: Eunice NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-6938-1
SDG: Eunice NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-6938-1	CS-66	Solid	10/06/21 10:00	10/07/21 08:09	4.5
880-6938-2	CS-67	Solid	10/06/21 10:05	10/07/21 08:09	4.5
880-6938-3	CS-68	Solid	10/06/21 10:10	10/07/21 08:09	4.5
880-6938-4	CS-69	Solid	10/06/21 10:15	10/07/21 08:09	4.5
880-6938-5	CS-70	Solid	10/06/21 10:20	10/07/21 08:09	4.5
880-6938-6	CS-71	Solid	10/06/21 10:25	10/07/21 08:09	4.5
880-6938-7	CS-72	Solid	10/06/21 10:30	10/07/21 08:09	4.5
880-6938-8	CS-73	Solid	10/06/21 10:35	10/07/21 08:09	4.5
880-6938-9	CS-74	Solid	10/06/21 10:40	10/07/21 08:09	4.5



Environment Testing
Xenco

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Midland TX (432) 704-5440 S
El Paso TX (915) 585-3443
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199



ork Order No:

16938

www.xenco.com Page of

Project Manager	RUSSELL SEBRING	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 Desta Drive, #130E	Address	
City, State ZIP	Midland TX, 79705	City, State ZIP	
Phone	432 250 4465	Email	rsebring@trccompanies.com

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: 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 Eunice EMSU Remediation	Tum Around	Pres. Code	ANALYSIS REQUEST										Preservative Codes			
Project Number	454378	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush												None NO DI Water H ₂ O			
Project Location	Eunice NM	Due Date	24 Apr											Cool Cool MeOH Me			
Sampler's Name	Russell Sebring/Misti Bryant	TAT starts the day received by the lab if received by 4 30pm												HCL HC HNO ₃ HN			
PO #														H ₂ SO ₄ H ₂ NaOH Na			
SAMPLE RECEIPT		Temp Blank	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>											H ₃ PO ₄ HP	
Samples Received Intact	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID	1065											NaHSO ₄ NABIS			
Cooler Custody Seals	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor	1035											Na ₂ S ₂ O ₃ NaSO ₃			
Sample Custody Seals	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature Reading	5.2											Zn Acetate+NaOH Zn			
Total Containers		Corrected Temperature	5.7											NaOH+Ascorbic Acid SAPC			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Cont	# of TPH	Chloride	Hold											Sample Comments
CS-66@4 5	S	10/6/2021	1000	4.5 Comp	1	X													
CS-67@4 5	S	10/6/2021	1005	4.5 Comp	1	X													
CS-68@4 5	S	10/6/2021	1010	4.5 Comp	1	X													
CS-69@4 5	S	10/6/2021	1015	4.5 Comp	1	X													
CS-70@4 5	S	10/6/2021	1020	4.5 Comp	1	X													
CS-71@4 5	S	10/6/2021	1025	4.5 Comp	1	X													
CS-72@4 5	S	10/6/2021	1030	4.5 Comp	1	X													
CS-73@4 5	S	10/6/2021	1035	4.5 Comp	1	X													
CS-74@4 5	S	10/6/2021	1040	4.5 Comp	1	X													

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 / 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
		10/7/21 09:01			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6938-1

SDG Number: Eunice NM

Login Number: 6938**List Number: 1****Creator: Phillips, Kerianna****List Source: Eurofins Xenco**

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

Laboratory Job ID: 880-7055-1

Laboratory Sample Delivery Group: Eunice, NM
Client Project/Site: HEP:Eunice EMSU Remediation
Revision: 2

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/7/2022 4:25:40 PM

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

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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:Eunice EMSU Remediation

Laboratory Job ID: 880-7055-1
SDG: Eunice, NM

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Definitions/Glossary

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

Job ID: 880-7055-1
SDG: Eunice, NM

Qualifiers

GC Semi VOA

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

Case Narrative

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

Job ID: 880-7055-1
SDG: Eunice, NM

Job ID: 880-7055-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-7055-1

REVISION

The report being provided is a revision of the original report sent on 10/12/2021. The report (revision 2) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

The report being provided is a revision of the original report sent on 10/12/2021. The report (revision 2) is being revised due to Per client email, removed sample depths from sample name.

Revision 1 - 11/3/2021 - Reason - MS/MSD missing on final report.

Receipt

The samples were received on 10/11/2021 12:18 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 4.5°C

GC Semi VOA

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:Eunice EMSU Remediation

Job ID: 880-7055-1
SDG: Eunice, NM

Client Sample ID: CS-24

Date Collected: 10/06/21 08:55

Date Received: 10/11/21 12:18

Sample Depth: 4.5'

Lab Sample ID: 880-7055-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/11/21 10:08	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	<50.0	U	50.0	mg/Kg		10/11/21 15:52	10/12/21 06:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/11/21 15:52	10/12/21 06:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/11/21 15:52	10/12/21 06:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130			10/11/21 15:52	10/12/21 06:30	1
o-Terphenyl	128		70 - 130			10/11/21 15:52	10/12/21 06:30	1

Client Sample ID: CS-25

Date Collected: 10/06/21 08:50

Date Received: 10/11/21 12:18

Sample Depth: 4.5'

Lab Sample ID: 880-7055-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/11/21 10:08	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	<49.8	U	49.8	mg/Kg		10/11/21 15:52	10/12/21 06:51	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/11/21 15:52	10/12/21 06:51	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/11/21 15:52	10/12/21 06:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			10/11/21 15:52	10/12/21 06:51	1
o-Terphenyl	128		70 - 130			10/11/21 15:52	10/12/21 06:51	1

Eurofins Xenco

Surrogate Summary

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

Job ID: 880-7055-1
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	OTPH1
		(70-130)	(70-130)
880-7055-1	CS-24	113	128
880-7055-2	CS-25	112	128
890-1384-A-61-E MS	Matrix Spike	95	92
890-1384-A-61-F MSD	Matrix Spike Duplicate	110	112
LCS 880-9249/2-A	Lab Control Sample	88	85
LCSD 880-9249/3-A	Lab Control Sample Dup	93	92
MB 880-9249/1-A	Method Blank	104	121

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-7055-1
SDG: Eunice, NM

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

Lab Sample ID: MB 880-9249/1-A

Matrix: Solid

Analysis Batch: 9176

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9249

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		10/11/21 15:52	10/12/21 05:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/11/21 15:52	10/12/21 05:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/11/21 15:52	10/12/21 05:28	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			10/11/21 15:52	10/12/21 05:28	1
o-Terphenyl	121		70 - 130			10/11/21 15:52	10/12/21 05:28	1

Lab Sample ID: LCS 880-9249/2-A

Matrix: Solid

Analysis Batch: 9176

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	996.0		mg/Kg		100	70 - 130
Diesel Range Organics (Over C10-C28)	1000	907.1		mg/Kg		91	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	88		70 - 130				
o-Terphenyl	85		70 - 130				

Lab Sample ID: LCSD 880-9249/3-A

Matrix: Solid

Analysis Batch: 9176

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9249

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	938.8		mg/Kg		94	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	891.4		mg/Kg		89	70 - 130	2	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	93		70 - 130						
o-Terphenyl	92		70 - 130						

Lab Sample ID: 890-1384-A-61-E MS

Matrix: Solid

Analysis Batch: 9176

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9249

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	997	1107		mg/Kg		109	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	913.7		mg/Kg		90	70 - 130

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QC Sample Results

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

Job ID: 880-7055-1
SDG: Eunice, NM

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

Lab Sample ID: 890-1384-A-61-E MS

Matrix: Solid

Analysis Batch: 9176

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9249

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 890-1384-A-61-F MSD

Matrix: Solid

Analysis Batch: 9176

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9249

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	<49.9	U	1000	1158		mg/Kg		114	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1075		mg/Kg		106	70 - 130	16	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	112		70 - 130

QC Association Summary

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

Job ID: 880-7055-1
SDG: Eunice, NM

GC Semi VOA

Analysis Batch: 9176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-9249/1-A	Method Blank	Total/NA	Solid	8015B NM	9249
LCS 880-9249/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9249
LCSD 880-9249/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9249
890-1384-A-61-E MS	Matrix Spike	Total/NA	Solid	8015B NM	9249
890-1384-A-61-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9249

Analysis Batch: 9178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7055-1	CS-24	Total/NA	Solid	8015B NM	9249
880-7055-2	CS-25	Total/NA	Solid	8015B NM	9249

Analysis Batch: 9187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7055-1	CS-24	Total/NA	Solid	8015 NM	
880-7055-2	CS-25	Total/NA	Solid	8015 NM	

Prep Batch: 9249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7055-1	CS-24	Total/NA	Solid	8015NM Prep	
880-7055-2	CS-25	Total/NA	Solid	8015NM Prep	
MB 880-9249/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9249/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9249/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1384-A-61-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1384-A-61-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Lab Chronicle

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

Job ID: 880-7055-1
SDG: Eunice, NM

Client Sample ID: CS-24

Date Collected: 10/06/21 08:55

Date Received: 10/11/21 12:18

Lab Sample ID: 880-7055-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9187	10/11/21 10:08	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	9249	10/11/21 15:52	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9178	10/12/21 06:30	AJ	XEN MID

Client Sample ID: CS-25

Date Collected: 10/06/21 08:50

Date Received: 10/11/21 12:18

Lab Sample ID: 880-7055-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9187	10/11/21 10:08	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9249	10/11/21 15:52	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9178	10/12/21 06:51	AJ	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 880-7055-1
SDG: Eunice, NM

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-7055-1
SDG: Eunice, NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-7055-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-7055-1	CS-24	Solid	10/06/21 08:55	10/11/21 12:18	4.5'
880-7055-2	CS-25	Solid	10/06/21 08:50	10/11/21 12:18	4.5'

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880-7055 Chain of Custody

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Project Manager	RUSSELL SEBRING		Bill to: (if different)	
Company Name	TRC		Company Name	
Address	10 Destia Drive, #130E		Address	
City, State ZIP	Midland TX, 79705	City, State ZIP		
Phone	432 250 4465	Email	rsebring@trccompanies.com	

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:				
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"/>				

[illegible]

Revised Date: 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-7055-1

SDG Number: Eunice, NM

Login Number: 7055**List Number: 1****Creator: Teel, Brianna****List Source: Eurofins Xenco**

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

Laboratory Job ID: 880-6967-1

Laboratory Sample Delivery Group: Eunice, NM
Client Project/Site: HEP:Eunice EMSU Draw
Revision: 3

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
2/4/2022 12:13:05 PM

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

LINKS

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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:Eunice EMSU Draw

Laboratory Job ID: 880-6967-1
SDG: Eunice, NM

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Definitions/Glossary

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

Job ID: 880-6967-1
SDG: Eunice, NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
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.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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

Case Narrative

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

Job ID: 880-6967-1
SDG: Eunice, NM

Job ID: 880-6967-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-6967-1

REVISION

The report being provided is a revision of the original report sent on 10/11/2021. The report (revision 3) is being revised due to Per client email, corrected sample IDs.

Report revision history

The report being provided is a revision of the original report sent on 10/11/2021. The report (revision 3) is being revised due to Per client email, corrected sample IDs.

Revision 2 - 1/7/2022 - Reason - Per client email, removed sample depths from sample name.

Revision 2 - 1/7/2022 - Reason - Per client email, removed sample depths from sample name.

Revision 1 - 11/3/2021 - Reason - Per client email, correct sample IDs to match COC.

Receipt

The samples were received on 10/7/2021 3:24 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 2.4°C

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-9091 and analytical batch 880-9084 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-9091/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-9093/1-A). Evidence of matrix interferences is not obvious.

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:Eunice EMSU Draw

Job ID: 880-6967-1
SDG: Eunice, NM

Client Sample ID: SW-32

Lab Sample ID: 880-6967-1

Date Collected: 10/07/21 11:30

Matrix: Solid

Date Received: 10/07/21 15:24

Sample Depth: 2.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/08/21 18:05	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	<49.9	U	49.9	mg/Kg		10/08/21 08:27	10/08/21 13:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U *	49.9	mg/Kg		10/08/21 08:27	10/08/21 13:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/08/21 08:27	10/08/21 13:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130			10/08/21 08:27	10/08/21 13:21	1
o-Terphenyl	84		70 - 130			10/08/21 08:27	10/08/21 13:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1700		25.0	mg/Kg			10/08/21 10:38	5

Client Sample ID: SW-33

Lab Sample ID: 880-6967-2

Date Collected: 10/07/21 11:35

Matrix: Solid

Date Received: 10/07/21 15:24

Sample Depth: 2.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/08/21 18:05	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	<49.8	U	49.8	mg/Kg		10/08/21 08:27	10/08/21 14:27	1
Diesel Range Organics (Over C10-C28)	<49.8	U *	49.8	mg/Kg		10/08/21 08:27	10/08/21 14:27	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/08/21 08:27	10/08/21 14:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			10/08/21 08:27	10/08/21 14:27	1
o-Terphenyl	98		70 - 130			10/08/21 08:27	10/08/21 14:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	193		5.00	mg/Kg			10/08/21 10:45	1

Client Sample ID: SW-34

Lab Sample ID: 880-6967-3

Date Collected: 10/07/21 11:40

Matrix: Solid

Date Received: 10/07/21 15:24

Sample Depth: 2.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	238		49.9	mg/Kg			10/08/21 18:05	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-6967-1
SDG: Eunice, NM

Client Sample ID: SW-34

Lab Sample ID: 880-6967-3

Date Collected: 10/07/21 11:40

Matrix: Solid

Date Received: 10/07/21 15:24

Sample Depth: 2.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	171		49.9	mg/Kg		10/08/21 08:27	10/08/21 14:58	1
Diesel Range Organics (Over C10-C28)	66.8	*-	49.9	mg/Kg		10/08/21 08:27	10/08/21 14:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/08/21 08:27	10/08/21 14:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130			10/08/21 08:27	10/08/21 14:58	1
o-Terphenyl	96		70 - 130			10/08/21 08:27	10/08/21 14:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1180		4.98	mg/Kg			10/08/21 10:52	1

Client Sample ID: SW-35

Lab Sample ID: 880-6967-4

Date Collected: 10/07/21 11:45

Matrix: Solid

Date Received: 10/07/21 15:24

Sample Depth: 2.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	194		49.8	mg/Kg			10/08/21 18:05	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	117		49.8	mg/Kg		10/08/21 08:27	10/08/21 15:20	1
Diesel Range Organics (Over C10-C28)	76.9	*-	49.8	mg/Kg		10/08/21 08:27	10/08/21 15:20	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/08/21 08:27	10/08/21 15:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130			10/08/21 08:27	10/08/21 15:20	1
o-Terphenyl	97		70 - 130			10/08/21 08:27	10/08/21 15:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	126		4.95	mg/Kg			10/08/21 10:59	1

Client Sample ID: SW-36

Lab Sample ID: 880-6967-5

Date Collected: 10/07/21 11:50

Matrix: Solid

Date Received: 10/07/21 15:24

Sample Depth: 2.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/08/21 18:05	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	<49.9	U	49.9	mg/Kg		10/08/21 08:27	10/08/21 15:42	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-6967-1
SDG: Eunice, NM

Client Sample ID: SW-36

Lab Sample ID: 880-6967-5

Date Collected: 10/07/21 11:50

Matrix: Solid

Date Received: 10/07/21 15:24

Sample Depth: 2.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U *	49.9	mg/Kg		10/08/21 08:27	10/08/21 15:42	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/08/21 08:27	10/08/21 15:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130			10/08/21 08:27	10/08/21 15:42	1
o-Terphenyl	92		70 - 130			10/08/21 08:27	10/08/21 15:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1100		5.04	mg/Kg			10/08/21 11:06	1

Client Sample ID: SW-37

Lab Sample ID: 880-6967-6

Date Collected: 10/07/21 11:55

Matrix: Solid

Date Received: 10/07/21 15:24

Sample Depth: 2.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/08/21 18:05	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	<49.9	U	49.9	mg/Kg		10/08/21 08:35	10/08/21 13:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/08/21 08:35	10/08/21 13:19	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/08/21 08:35	10/08/21 13:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			10/08/21 08:35	10/08/21 13:19	1
o-Terphenyl	112		70 - 130			10/08/21 08:35	10/08/21 13:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.6		5.00	mg/Kg			10/08/21 11:28	1

Eurofins Midland

Surrogate Summary

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

Job ID: 880-6967-1
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	OTPH1
		(70-130)	(70-130)
880-6967-1	SW-32	82	84
880-6967-1 MS	SW-32	95	90
880-6967-1 MSD	SW-32	98	93
880-6967-2	SW-33	90	98
880-6967-3	SW-34	89	96
880-6967-4	SW-35	89	97
880-6967-5	SW-36	87	92
880-6967-6	SW-37	102	112
880-6967-6 MS	SW-37	102	100
880-6967-6 MSD	SW-37	102	105
LCS 880-9091/2-A	Lab Control Sample	69 S1-	71
LCS 880-9093/2-A	Lab Control Sample	90	95
LCSD 880-9091/3-A	Lab Control Sample Dup	81	85
LCSD 880-9093/3-A	Lab Control Sample Dup	100	107
MB 880-9091/1-A	Method Blank	92	103
MB 880-9093/1-A	Method Blank	114	131 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

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

Job ID: 880-6967-1
SDG: Eunice, NM

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

Lab Sample ID: MB 880-9091/1-A

Matrix: Solid

Analysis Batch: 9084

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9091

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		10/08/21 08:27	10/08/21 12:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/08/21 08:27	10/08/21 12:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/08/21 08:27	10/08/21 12:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	10/08/21 08:27	10/08/21 12:16	1
o-Terphenyl	103		70 - 130	10/08/21 08:27	10/08/21 12:16	1

Lab Sample ID: LCS 880-9091/2-A

Matrix: Solid

Analysis Batch: 9084

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9091

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	751.0		mg/Kg		75	70 - 130
Diesel Range Organics (Over C10-C28)	1000	694.0	*-	mg/Kg		69	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	69	S1-	70 - 130
o-Terphenyl	71		70 - 130

Lab Sample ID: LCSD 880-9091/3-A

Matrix: Solid

Analysis Batch: 9084

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9091

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	807.7		mg/Kg		81	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	775.5		mg/Kg		78	70 - 130	11	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	85		70 - 130

Lab Sample ID: 880-6967-1 MS

Matrix: Solid

Analysis Batch: 9084

Client Sample ID: SW-32

Prep Type: Total/NA

Prep Batch: 9091

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	997	852.1		mg/Kg		83	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U *-	997	782.7		mg/Kg		76	70 - 130

Eurofins Midland

QC Sample Results

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

Job ID: 880-6967-1
SDG: Eunice, NM

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

Lab Sample ID: 880-6967-1 MS

Matrix: Solid

Analysis Batch: 9084

Client Sample ID: SW-32

Prep Type: Total/NA

Prep Batch: 9091

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 880-6967-1 MSD

Matrix: Solid

Analysis Batch: 9084

Client Sample ID: SW-32

Prep Type: Total/NA

Prep Batch: 9091

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	<49.9	U	1000	881.7		mg/Kg		86	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U *	1000	827.1		mg/Kg		80	70 - 130	6	20

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

Lab Sample ID: MB 880-9093/1-A

Matrix: Solid

Analysis Batch: 9088

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9093

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		10/08/21 08:35	10/08/21 12:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/08/21 08:35	10/08/21 12:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/08/21 08:35	10/08/21 12:13	1

	MB	MB						
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	114		70 - 130	10/08/21 08:35	10/08/21 12:13	1		
o-Terphenyl	131	S1+	70 - 130	10/08/21 08:35	10/08/21 12:13	1		

Lab Sample ID: LCS 880-9093/2-A

Matrix: Solid

Analysis Batch: 9088

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9093

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	776.9		mg/Kg		78	70 - 130
Diesel Range Organics (Over C10-C28)	1000	900.9		mg/Kg		90	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	95		70 - 130

Eurofins Midland

QC Sample Results

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

Job ID: 880-6967-1
SDG: Eunice, NM

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

Lab Sample ID: LCSD 880-9093/3-A

Matrix: Solid

Analysis Batch: 9088

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9093

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	835.1		mg/Kg		84	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	1036		mg/Kg		104	70 - 130	14	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	100		70 - 130						
o-Terphenyl	107		70 - 130						

Lab Sample ID: 880-6967-6 MS

Matrix: Solid

Analysis Batch: 9088

Client Sample ID: SW-37

Prep Type: Total/NA

Prep Batch: 9093

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	890.3		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1025		mg/Kg		103	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	102		70 - 130								
o-Terphenyl	100		70 - 130								

Lab Sample ID: 880-6967-6 MSD

Matrix: Solid

Analysis Batch: 9088

Client Sample ID: SW-37

Prep Type: Total/NA

Prep Batch: 9093

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	<49.9	U	1000	981.0		mg/Kg		94	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1078		mg/Kg		108	70 - 130	5	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	102		70 - 130								
o-Terphenyl	105		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9075/1-A

Matrix: Solid

Analysis Batch: 9100

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			10/08/21 09:05	1

Eurofins Midland

QC Sample Results

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

Job ID: 880-6967-1
SDG: Eunice, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-9075/2-A

Matrix: Solid

Analysis Batch: 9100

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	253.0		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-9075/3-A

Matrix: Solid

Analysis Batch: 9100

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	253.3		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-6967-5 MS

Matrix: Solid

Analysis Batch: 9100

Client Sample ID: SW-36

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1100		252	1323	4	mg/Kg		87	90 - 110

Lab Sample ID: 880-6967-5 MSD

Matrix: Solid

Analysis Batch: 9100

Client Sample ID: SW-36

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1100		252	1321	4	mg/Kg		86	90 - 110	0	20

QC Association Summary

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

Job ID: 880-6967-1
SDG: Eunice, NM

GC Semi VOA

Analysis Batch: 9084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6967-1	SW-32	Total/NA	Solid	8015B NM	9091
880-6967-2	SW-33	Total/NA	Solid	8015B NM	9091
880-6967-3	SW-34	Total/NA	Solid	8015B NM	9091
880-6967-4	SW-35	Total/NA	Solid	8015B NM	9091
880-6967-5	SW-36	Total/NA	Solid	8015B NM	9091
MB 880-9091/1-A	Method Blank	Total/NA	Solid	8015B NM	9091
LCS 880-9091/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9091
LCSD 880-9091/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9091
880-6967-1 MS	SW-32	Total/NA	Solid	8015B NM	9091
880-6967-1 MSD	SW-32	Total/NA	Solid	8015B NM	9091

Analysis Batch: 9088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6967-6	SW-37	Total/NA	Solid	8015B NM	9093
MB 880-9093/1-A	Method Blank	Total/NA	Solid	8015B NM	9093
LCS 880-9093/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9093
LCSD 880-9093/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9093
880-6967-6 MS	SW-37	Total/NA	Solid	8015B NM	9093
880-6967-6 MSD	SW-37	Total/NA	Solid	8015B NM	9093

Prep Batch: 9091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6967-1	SW-32	Total/NA	Solid	8015NM Prep	
880-6967-2	SW-33	Total/NA	Solid	8015NM Prep	
880-6967-3	SW-34	Total/NA	Solid	8015NM Prep	
880-6967-4	SW-35	Total/NA	Solid	8015NM Prep	
880-6967-5	SW-36	Total/NA	Solid	8015NM Prep	
MB 880-9091/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9091/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9091/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6967-1 MS	SW-32	Total/NA	Solid	8015NM Prep	
880-6967-1 MSD	SW-32	Total/NA	Solid	8015NM Prep	

Prep Batch: 9093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6967-6	SW-37	Total/NA	Solid	8015NM Prep	
MB 880-9093/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9093/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9093/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6967-6 MS	SW-37	Total/NA	Solid	8015NM Prep	
880-6967-6 MSD	SW-37	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6967-1	SW-32	Total/NA	Solid	8015 NM	
880-6967-2	SW-33	Total/NA	Solid	8015 NM	
880-6967-3	SW-34	Total/NA	Solid	8015 NM	
880-6967-4	SW-35	Total/NA	Solid	8015 NM	
880-6967-5	SW-36	Total/NA	Solid	8015 NM	
880-6967-6	SW-37	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

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

Job ID: 880-6967-1
SDG: Eunice, NM

HPLC/IC

Leach Batch: 9075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6967-1	SW-32	Soluble	Solid	DI Leach	
880-6967-2	SW-33	Soluble	Solid	DI Leach	
880-6967-3	SW-34	Soluble	Solid	DI Leach	
880-6967-4	SW-35	Soluble	Solid	DI Leach	
880-6967-5	SW-36	Soluble	Solid	DI Leach	
880-6967-6	SW-37	Soluble	Solid	DI Leach	
MB 880-9075/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9075/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9075/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6967-5 MS	SW-36	Soluble	Solid	DI Leach	
880-6967-5 MSD	SW-36	Soluble	Solid	DI Leach	

Analysis Batch: 9100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6967-1	SW-32	Soluble	Solid	300.0	9075
880-6967-2	SW-33	Soluble	Solid	300.0	9075
880-6967-3	SW-34	Soluble	Solid	300.0	9075
880-6967-4	SW-35	Soluble	Solid	300.0	9075
880-6967-5	SW-36	Soluble	Solid	300.0	9075
880-6967-6	SW-37	Soluble	Solid	300.0	9075
MB 880-9075/1-A	Method Blank	Soluble	Solid	300.0	9075
LCS 880-9075/2-A	Lab Control Sample	Soluble	Solid	300.0	9075
LCSD 880-9075/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9075
880-6967-5 MS	SW-36	Soluble	Solid	300.0	9075
880-6967-5 MSD	SW-36	Soluble	Solid	300.0	9075

Lab Chronicle

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

Job ID: 880-6967-1
SDG: Eunice, NM

Client Sample ID: SW-32

Date Collected: 10/07/21 11:30

Date Received: 10/07/21 15:24

Lab Sample ID: 880-6967-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 13:21	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	9075	10/08/21 08:00	CH	XEN MID
Soluble	Analysis	300.0		5			9100	10/08/21 10:38	CH	XEN MID

Client Sample ID: SW-33

Date Collected: 10/07/21 11:35

Date Received: 10/07/21 15:24

Lab Sample ID: 880-6967-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 14:27	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	9075	10/08/21 08:00	CH	XEN MID
Soluble	Analysis	300.0		1			9100	10/08/21 10:45	CH	XEN MID

Client Sample ID: SW-34

Date Collected: 10/07/21 11:40

Date Received: 10/07/21 15:24

Lab Sample ID: 880-6967-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 14:58	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	9075	10/08/21 08:00	CH	XEN MID
Soluble	Analysis	300.0		1			9100	10/08/21 10:52	CH	XEN MID

Client Sample ID: SW-35

Date Collected: 10/07/21 11:45

Date Received: 10/07/21 15:24

Lab Sample ID: 880-6967-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 15:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9075	10/08/21 08:00	CH	XEN MID
Soluble	Analysis	300.0		1			9100	10/08/21 10:59	CH	XEN MID

Client Sample ID: SW-36

Date Collected: 10/07/21 11:50

Date Received: 10/07/21 15:24

Lab Sample ID: 880-6967-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID

Eurofins Midland

Lab Chronicle

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

Job ID: 880-6967-1
SDG: Eunice, NM

Client Sample ID: SW-36

Date Collected: 10/07/21 11:50

Date Received: 10/07/21 15:24

Lab Sample ID: 880-6967-5

Matrix: Solid

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			10.03 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 15:42	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	9075	10/08/21 08:00	CH	XEN MID
Soluble	Analysis	300.0		1			9100	10/08/21 11:06	CH	XEN MID

Client Sample ID: SW-37

Date Collected: 10/07/21 11:55

Date Received: 10/07/21 15:24

Lab Sample ID: 880-6967-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9088	10/08/21 13:19	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	9075	10/08/21 08:00	CH	XEN MID
Soluble	Analysis	300.0		1			9100	10/08/21 11:28	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 880-6967-1
SDG: Eunice, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-6967-1
SDG: Eunice, NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	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 Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Midland

Sample Summary

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

Job ID: 880-6967-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-6967-1	SW-32	Solid	10/07/21 11:30	10/07/21 15:24	2.25
880-6967-2	SW-33	Solid	10/07/21 11:35	10/07/21 15:24	2.25
880-6967-3	SW-34	Solid	10/07/21 11:40	10/07/21 15:24	2.25
880-6967-4	SW-35	Solid	10/07/21 11:45	10/07/21 15:24	2.25
880-6967-5	SW-36	Solid	10/07/21 11:50	10/07/21 15:24	2.25
880-6967-6	SW-37	Solid	10/07/21 11:55	10/07/21 15:24	2.25



Environment Testing
Xenco

880-6967



880-6967 Chain of Custody

www.xenco.com Page 1 of 1

Project Manager	Russell Seabury	Bill to: (if different)	
Company Name	TIC	Company Name	
Address	10 DOSTA DR #136E	Address	
City, State ZIP	MILWAUKEE WI 53205	City State ZIP	
Phone	432.250 4465	Email	RSE seabury@ticon.com

Project Name		Turn Around	
Project Number	454378	<input type="checkbox"/> Routine	<input checked="" type="checkbox"/> Rush
Project Location	Euclid Ave	Due Date	2/24/22
Sampler's Name	Russell Seabury	TAT starts the day received by the lab, if received by 4:30pm	
P.O. #			

SAMPLE RECEIPT		Parameters	
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temp Blank	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID	10.8
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor	+0.5
Total Containers	2.4	Temperature Reading	1.9
		Corrected Temperature:	2.4

ANALYSIS REQUEST		Preservative Codes	
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	None NO	
State of Project:		Cool Cool	
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"/>		HCL HC	
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	H ₂ SO ₄ H ₂	
		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 Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	ANALYSIS REQUEST	Preservative Codes	Sample Comments
SW-23 @ 2.25	S	7/20/21	11:30	2.25	Comp	1	✓		None NO	DI Water H ₂ O
SW-24 @ 2.25	S	7/20/21	11:35	1	✓	1	✓		Cool Cool	MeOH Me
SW-25 @ 2.25	S	7/20/21	11:45	1	✓	1	✓		HCL HC	HNO ₃ HN
SW-26 @ 2.25	S	7/20/21	11:45	1	✓	1	✓		H ₂ SO ₄ H ₂	NaOH Na
SW-27 @ 2.25	S	7/20/21	11:50	1	✓	1	✓			
SW-28 @ 2.25	S	7/20/21	11:55	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

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
[Signature]	[Signature]	10/7/21 1918			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6967-1

SDG Number: Eunice, NM

Login Number: 6967**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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-6968-1

Laboratory Sample Delivery Group: Eunice, NM
Client Project/Site: HEP:Eunice EMSU Draw
Revision: 2

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/7/2022 4:26:45 PM

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

LINKS

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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:Eunice EMSU Draw

Laboratory Job ID: 880-6968-1
SDG: Eunice, NM

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Definitions/Glossary

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

Job ID: 880-6968-1
SDG: Eunice, NM

Qualifiers

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
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:Eunice EMSU Draw

Job ID: 880-6968-1
SDG: Eunice, NM

Job ID: 880-6968-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-6968-1

REVISION

The report being provided is a revision of the original report sent on 10/11/2021. The report (revision 2) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

The report being provided is a revision of the original report sent on 10/11/2021. The report (revision 2) is being revised due to Per client email, removed sample depths from sample name.

Revision 1 - 10/18/2021 - Reason - Per client email, corrected sample ID.

Receipt

The samples were received on 10/7/2021 3:25 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 2.4°C

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-9093/1-A). Evidence of matrix interferences is not obvious.

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:Eunice EMSU Draw

Job ID: 880-6968-1
SDG: Eunice, NM

Client Sample ID: CS-83

Date Collected: 10/07/21 10:00

Date Received: 10/07/21 15:25

Sample Depth: 4.5

Lab Sample ID: 880-6968-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	100		49.9	mg/Kg			10/08/21 18:05	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	<49.9	U	49.9	mg/Kg		10/08/21 08:25	10/08/21 13:21	1
Diesel Range Organics (Over C10-C28)	100		49.9	mg/Kg		10/08/21 08:25	10/08/21 13:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/08/21 08:25	10/08/21 13:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			10/08/21 08:25	10/08/21 13:21	1
o-Terphenyl	107		70 - 130			10/08/21 08:25	10/08/21 13:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.4		5.00	mg/Kg			10/08/21 13:46	1

Client Sample ID: CS-84

Date Collected: 10/07/21 10:05

Date Received: 10/07/21 15:25

Sample Depth: 4.5

Lab Sample ID: 880-6968-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/08/21 18:05	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	<49.8	U	49.8	mg/Kg		10/08/21 08:25	10/08/21 14:27	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/08/21 08:25	10/08/21 14:27	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/08/21 08:25	10/08/21 14:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			10/08/21 08:25	10/08/21 14:27	1
o-Terphenyl	106		70 - 130			10/08/21 08:25	10/08/21 14:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	221		4.99	mg/Kg			10/08/21 14:04	1

Client Sample ID: CS-85

Date Collected: 10/07/21 10:10

Date Received: 10/07/21 15:25

Sample Depth: 4.5

Lab Sample ID: 880-6968-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	369		49.9	mg/Kg			10/08/21 18:05	1

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Client Sample Results

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

Job ID: 880-6968-1
SDG: Eunice, NM

Client Sample ID: CS-85

Lab Sample ID: 880-6968-3

Date Collected: 10/07/21 10:10

Matrix: Solid

Date Received: 10/07/21 15:25

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/08/21 08:25	10/08/21 14:58	1
Diesel Range Organics (Over C10-C28)	317		49.9	mg/Kg		10/08/21 08:25	10/08/21 14:58	1
Oil Range Organics (Over C28-C36)	51.5		49.9	mg/Kg		10/08/21 08:25	10/08/21 14:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			10/08/21 08:25	10/08/21 14:58	1
o-Terphenyl	105		70 - 130			10/08/21 08:25	10/08/21 14:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	132		4.98	mg/Kg			10/08/21 14:11	1

Client Sample ID: CS-86

Lab Sample ID: 880-6968-4

Date Collected: 10/07/21 10:15

Matrix: Solid

Date Received: 10/07/21 15:25

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	113		49.8	mg/Kg			10/08/21 18:05	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	<49.8	U	49.8	mg/Kg		10/08/21 08:25	10/08/21 15:20	1
Diesel Range Organics (Over C10-C28)	113		49.8	mg/Kg		10/08/21 08:25	10/08/21 15:20	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/08/21 08:25	10/08/21 15:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130			10/08/21 08:25	10/08/21 15:20	1
o-Terphenyl	103		70 - 130			10/08/21 08:25	10/08/21 15:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	380		4.97	mg/Kg			10/08/21 14:17	1

Client Sample ID: CS-87

Lab Sample ID: 880-6968-5

Date Collected: 10/07/21 10:20

Matrix: Solid

Date Received: 10/07/21 15:25

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3860		249	mg/Kg			10/08/21 18:05	1

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Client Sample Results

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

Job ID: 880-6968-1
SDG: Eunice, NM

Client Sample ID: CS-87

Lab Sample ID: 880-6968-5

Date Collected: 10/07/21 10:20

Matrix: Solid

Date Received: 10/07/21 15:25

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	643		249	mg/Kg		10/08/21 08:25	10/08/21 15:42	5
Diesel Range Organics (Over C10-C28)	2880		249	mg/Kg		10/08/21 08:25	10/08/21 15:42	5
Oil Range Organics (Over C28-C36)	334		249	mg/Kg		10/08/21 08:25	10/08/21 15:42	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			10/08/21 08:25	10/08/21 15:42	5
o-Terphenyl	98		70 - 130			10/08/21 08:25	10/08/21 15:42	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	865		4.95	mg/Kg			10/08/21 14:23	1

Client Sample ID: CS-88

Lab Sample ID: 880-6968-6

Date Collected: 10/07/21 10:25

Matrix: Solid

Date Received: 10/07/21 15:25

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	113		49.8	mg/Kg			10/08/21 18:05	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	<49.8	U	49.8	mg/Kg		10/08/21 08:34	10/08/21 14:25	1
Diesel Range Organics (Over C10-C28)	113		49.8	mg/Kg		10/08/21 08:34	10/08/21 14:25	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/08/21 08:34	10/08/21 14:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130			10/08/21 08:34	10/08/21 14:25	1
o-Terphenyl	95		70 - 130			10/08/21 08:34	10/08/21 14:25	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1050		4.98	mg/Kg			10/08/21 14:42	1

Client Sample ID: CS-89

Lab Sample ID: 880-6968-7

Date Collected: 10/07/21 10:30

Matrix: Solid

Date Received: 10/07/21 15:25

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/08/21 18:05	1

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Client Sample Results

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

Job ID: 880-6968-1
SDG: Eunice, NM

Client Sample ID: CS-89

Lab Sample ID: 880-6968-7

Date Collected: 10/07/21 10:30

Matrix: Solid

Date Received: 10/07/21 15:25

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/08/21 08:34	10/08/21 13:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/08/21 08:34	10/08/21 13:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/08/21 08:34	10/08/21 13:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130			10/08/21 08:34	10/08/21 13:19	1
o-Terphenyl	93		70 - 130			10/08/21 08:34	10/08/21 13:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	893		5.05	mg/Kg			10/08/21 14:48	1

Client Sample ID: CS-90

Lab Sample ID: 880-6968-8

Date Collected: 10/07/21 10:35

Matrix: Solid

Date Received: 10/07/21 15:25

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	134		49.9	mg/Kg			10/08/21 18:05	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	<49.9	U	49.9	mg/Kg		10/08/21 08:34	10/08/21 14:51	1
Diesel Range Organics (Over C10-C28)	134		49.9	mg/Kg		10/08/21 08:34	10/08/21 14:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/08/21 08:34	10/08/21 14:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130			10/08/21 08:34	10/08/21 14:51	1
o-Terphenyl	95		70 - 130			10/08/21 08:34	10/08/21 14:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	357		4.99	mg/Kg			10/08/21 14:54	1

Client Sample ID: CS-91

Lab Sample ID: 880-6968-9

Date Collected: 10/07/21 10:40

Matrix: Solid

Date Received: 10/07/21 15:25

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	152		49.8	mg/Kg			10/08/21 18:05	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	<49.8	U	49.8	mg/Kg		10/08/21 08:34	10/08/21 15:13	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-6968-1
SDG: Eunice, NM

Client Sample ID: CS-91

Lab Sample ID: 880-6968-9

Date Collected: 10/07/21 10:40

Matrix: Solid

Date Received: 10/07/21 15:25

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	152		49.8	mg/Kg		10/08/21 08:34	10/08/21 15:13	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/08/21 08:34	10/08/21 15:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			10/08/21 08:34	10/08/21 15:13	1
o-Terphenyl	100		70 - 130			10/08/21 08:34	10/08/21 15:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42.9		5.04	mg/Kg			10/08/21 15:01	1

Client Sample ID: CS-92

Lab Sample ID: 880-6968-10

Date Collected: 10/07/21 10:45

Matrix: Solid

Date Received: 10/07/21 15:25

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	388		49.9	mg/Kg			10/08/21 18:05	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	50.0		49.9	mg/Kg		10/08/21 08:34	10/08/21 15:35	1
Diesel Range Organics (Over C10-C28)	338		49.9	mg/Kg		10/08/21 08:34	10/08/21 15:35	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/08/21 08:34	10/08/21 15:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130			10/08/21 08:34	10/08/21 15:35	1
o-Terphenyl	98		70 - 130			10/08/21 08:34	10/08/21 15:35	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	305		4.98	mg/Kg			10/08/21 15:07	1

Client Sample ID: CS-93

Lab Sample ID: 880-6968-11

Date Collected: 10/07/21 10:50

Matrix: Solid

Date Received: 10/07/21 15:25

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/08/21 18:05	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	<49.8	U	49.8	mg/Kg		10/08/21 08:35	10/08/21 14:25	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/08/21 08:35	10/08/21 14:25	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-6968-1
SDG: Eunice, NM

Client Sample ID: CS-93

Date Collected: 10/07/21 10:50

Date Received: 10/07/21 15:25

Sample Depth: 4.5

Lab Sample ID: 880-6968-11

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/08/21 08:35	10/08/21 14:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			10/08/21 08:35	10/08/21 14:25	1
o-Terphenyl	115		70 - 130			10/08/21 08:35	10/08/21 14:25	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	488		4.95	mg/Kg			10/08/21 15:13	1

Client Sample ID: CS-94

Date Collected: 10/07/21 10:55

Date Received: 10/07/21 15:25

Sample Depth: 4.5

Lab Sample ID: 880-6968-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/08/21 18:05	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	<49.9	U	49.9	mg/Kg		10/08/21 08:35	10/08/21 14:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/08/21 08:35	10/08/21 14:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/08/21 08:35	10/08/21 14:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			10/08/21 08:35	10/08/21 14:51	1
o-Terphenyl	120		70 - 130			10/08/21 08:35	10/08/21 14:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1870		25.2	mg/Kg			10/08/21 15:32	5

Client Sample ID: CS-95

Date Collected: 10/07/21 11:00

Date Received: 10/07/21 15:25

Sample Depth: 4.5

Lab Sample ID: 880-6968-13

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/08/21 18:05	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	<49.8	U	49.8	mg/Kg		10/08/21 08:35	10/08/21 15:13	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/08/21 08:35	10/08/21 15:13	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/08/21 08:35	10/08/21 15:13	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-6968-1
SDG: Eunice, NM

Client Sample ID: CS-95

Date Collected: 10/07/21 11:00

Date Received: 10/07/21 15:25

Sample Depth: 4.5

Lab Sample ID: 880-6968-13

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	10/08/21 08:35	10/08/21 15:13	1
o-Terphenyl	120		70 - 130	10/08/21 08:35	10/08/21 15:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3470		24.9	mg/Kg			10/08/21 15:38	5

Client Sample ID: CS-96

Date Collected: 10/07/21 11:05

Date Received: 10/07/21 15:25

Sample Depth: 4.5

Lab Sample ID: 880-6968-14

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4230		249	mg/Kg			10/08/21 18:05	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	<249	U	249	mg/Kg		10/08/21 08:35	10/08/21 15:35	5
Diesel Range Organics (Over C10-C28)	3690		249	mg/Kg		10/08/21 08:35	10/08/21 15:35	5
Oil Range Organics (Over C28-C36)	536		249	mg/Kg		10/08/21 08:35	10/08/21 15:35	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	10/08/21 08:35	10/08/21 15:35	5
o-Terphenyl	119		70 - 130	10/08/21 08:35	10/08/21 15:35	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	203		4.98	mg/Kg			10/08/21 15:57	1

Eurofins Xenco

Surrogate Summary

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

Job ID: 880-6968-1
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	OTPH1
		(70-130)	(70-130)
880-6967-A-6-C MS	Matrix Spike	102	100
880-6967-A-6-D MSD	Matrix Spike Duplicate	102	105
880-6968-1	CS-83	98	107
880-6968-1 MS	CS-83	114	112
880-6968-1 MSD	CS-83	111	111
880-6968-2	CS-84	96	106
880-6968-3	CS-85	99	105
880-6968-4	CS-86	95	103
880-6968-5	CS-87	107	98
880-6968-6	CS-88	87	95
880-6968-7	CS-89	88	93
880-6968-7 MS	CS-89	89	90
880-6968-7 MSD	CS-89	83	85
880-6968-8	CS-90	87	95
880-6968-9	CS-91	92	100
880-6968-10	CS-92	91	98
880-6968-11	CS-93	102	115
880-6968-12	CS-94	105	120
880-6968-13	CS-95	106	120
880-6968-14	CS-96	111	119
LCS 880-9090/2-A	Lab Control Sample	96	95
LCS 880-9092/2-A	Lab Control Sample	109	116
LCS 880-9093/2-A	Lab Control Sample	90	95
LCSD 880-9090/3-A	Lab Control Sample Dup	97	93
LCSD 880-9092/3-A	Lab Control Sample Dup	94	97
LCSD 880-9093/3-A	Lab Control Sample Dup	100	107
MB 880-9090/1-A	Method Blank	110	122
MB 880-9092/1-A	Method Blank	94	102
MB 880-9093/1-A	Method Blank	114	131 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-6968-1
SDG: Eunice, NM

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

Lab Sample ID: MB 880-9090/1-A

Matrix: Solid

Analysis Batch: 9082

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9090

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		10/08/21 08:25	10/08/21 12:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/08/21 08:25	10/08/21 12:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/08/21 08:25	10/08/21 12:16	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130			10/08/21 08:25	10/08/21 12:16	1
o-Terphenyl	122		70 - 130			10/08/21 08:25	10/08/21 12:16	1

Lab Sample ID: LCS 880-9090/2-A

Matrix: Solid

Analysis Batch: 9082

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9090

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	854.4		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1000	923.8		mg/Kg		92	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
1-Chlorooctane	96		70 - 130				
o-Terphenyl	95		70 - 130				

Lab Sample ID: LCSD 880-9090/3-A

Matrix: Solid

Analysis Batch: 9082

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9090

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1016		mg/Kg		102	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	1000	1002		mg/Kg		100	70 - 130	8	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	97		70 - 130						
o-Terphenyl	93		70 - 130						

Lab Sample ID: 880-6968-1 MS

Matrix: Solid

Analysis Batch: 9082

Client Sample ID: CS-83

Prep Type: Total/NA

Prep Batch: 9090

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	997	959.3		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	100		997	1024		mg/Kg		93	70 - 130

Eurofins Xenco

QC Sample Results

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

Job ID: 880-6968-1
SDG: Eunice, NM

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

Lab Sample ID: 880-6968-1 MS

Matrix: Solid

Analysis Batch: 9082

Client Sample ID: CS-83

Prep Type: Total/NA

Prep Batch: 9090

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	112		70 - 130

Lab Sample ID: 880-6968-1 MSD

Matrix: Solid

Analysis Batch: 9082

Client Sample ID: CS-83

Prep Type: Total/NA

Prep Batch: 9090

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	<49.9	U	1000	938.3		mg/Kg		91	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	100		1000	1022		mg/Kg		92	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	111		70 - 130

Lab Sample ID: MB 880-9092/1-A

Matrix: Solid

Analysis Batch: 9086

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9092

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		10/08/21 08:34	10/08/21 12:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/08/21 08:34	10/08/21 12:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/08/21 08:34	10/08/21 12:13	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane	94		70 - 130	10/08/21 08:34	10/08/21 12:13	1
o-Terphenyl	102		70 - 130	10/08/21 08:34	10/08/21 12:13	1

Lab Sample ID: LCS 880-9092/2-A

Matrix: Solid

Analysis Batch: 9086

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9092

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	965.8		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	950.5		mg/Kg		95	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	116		70 - 130

Eurofins Xenco

QC Sample Results

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

Job ID: 880-6968-1
SDG: Eunice, NM

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

Lab Sample ID: LCSD 880-9092/3-A

Matrix: Solid

Analysis Batch: 9086

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9092

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	810.0		mg/Kg		81	70 - 130	18	20
Diesel Range Organics (Over C10-C28)	1000	822.3		mg/Kg		82	70 - 130	14	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	94		70 - 130						
o-Terphenyl	97		70 - 130						

Lab Sample ID: 880-6968-7 MS

Matrix: Solid

Analysis Batch: 9086

Client Sample ID: CS-89

Prep Type: Total/NA

Prep Batch: 9092

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	795.3		mg/Kg		80	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	997	762.7		mg/Kg		74	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	89		70 - 130								
o-Terphenyl	90		70 - 130								

Lab Sample ID: 880-6968-7 MSD

Matrix: Solid

Analysis Batch: 9086

Client Sample ID: CS-89

Prep Type: Total/NA

Prep Batch: 9092

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	<49.9	U	1000	792.3		mg/Kg		79	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	732.4		mg/Kg		71	70 - 130	4	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	83		70 - 130								
o-Terphenyl	85		70 - 130								

Lab Sample ID: MB 880-9093/1-A

Matrix: Solid

Analysis Batch: 9088

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9093

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		10/08/21 08:35	10/08/21 12:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/08/21 08:35	10/08/21 12:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/08/21 08:35	10/08/21 12:13	1

Eurofins Xenco

QC Sample Results

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

Job ID: 880-6968-1
SDG: Eunice, NM

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

Lab Sample ID: MB 880-9093/1-A

Matrix: Solid

Analysis Batch: 9088

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9093

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130	10/08/21 08:35	10/08/21 12:13	1
o-Terphenyl	131	S1+	70 - 130	10/08/21 08:35	10/08/21 12:13	1

Lab Sample ID: LCS 880-9093/2-A

Matrix: Solid

Analysis Batch: 9088

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9093

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	776.9		mg/Kg		78	70 - 130
Diesel Range Organics (Over C10-C28)	1000	900.9		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: LCSD 880-9093/3-A

Matrix: Solid

Analysis Batch: 9088

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9093

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	835.1		mg/Kg		84	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	1036		mg/Kg		104	70 - 130	14	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 880-6967-A-6-C MS

Matrix: Solid

Analysis Batch: 9088

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9093

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	997	890.3		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1025		mg/Kg		103	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	100		70 - 130

Eurofins Xenco

QC Sample Results

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

Job ID: 880-6968-1
SDG: Eunice, NM

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

Lab Sample ID: 880-6967-A-6-D MSD

Matrix: Solid

Analysis Batch: 9088

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9093

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	<49.9	U	1000	981.0		mg/Kg		94	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1078		mg/Kg		108	70 - 130	5	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	102		70 - 130								
o-Terphenyl	105		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9081/1-A

Matrix: Solid

Analysis Batch: 9116

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			10/08/21 13:27	1

Lab Sample ID: LCS 880-9081/2-A

Matrix: Solid

Analysis Batch: 9116

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	259.8		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-9081/3-A

Matrix: Solid

Analysis Batch: 9116

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	259.9		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 880-6968-1 MS

Matrix: Solid

Analysis Batch: 9116

Client Sample ID: CS-83

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	16.4		250	285.7		mg/Kg		108	90 - 110

Lab Sample ID: 880-6968-1 MSD

Matrix: Solid

Analysis Batch: 9116

Client Sample ID: CS-83

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	16.4		250	283.2		mg/Kg		107	90 - 110	1	20

Eurofins Xenco

QC Sample Results

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

Job ID: 880-6968-1
SDG: Eunice, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-6968-11 MS

Matrix: Solid

Analysis Batch: 9116

Client Sample ID: CS-93

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	488		248	739.7		mg/Kg		102	90 - 110		

Lab Sample ID: 880-6968-11 MSD

Matrix: Solid

Analysis Batch: 9116

Client Sample ID: CS-93

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	488		248	736.5		mg/Kg		101	90 - 110	0	20

QC Association Summary

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

Job ID: 880-6968-1
SDG: Eunice, NM

GC Semi VOA

Analysis Batch: 9082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6968-1	CS-83	Total/NA	Solid	8015B NM	9090
880-6968-2	CS-84	Total/NA	Solid	8015B NM	9090
880-6968-3	CS-85	Total/NA	Solid	8015B NM	9090
880-6968-4	CS-86	Total/NA	Solid	8015B NM	9090
880-6968-5	CS-87	Total/NA	Solid	8015B NM	9090
MB 880-9090/1-A	Method Blank	Total/NA	Solid	8015B NM	9090
LCS 880-9090/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9090
LCSD 880-9090/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9090
880-6968-1 MS	CS-83	Total/NA	Solid	8015B NM	9090
880-6968-1 MSD	CS-83	Total/NA	Solid	8015B NM	9090

Analysis Batch: 9086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6968-6	CS-88	Total/NA	Solid	8015B NM	9092
880-6968-7	CS-89	Total/NA	Solid	8015B NM	9092
880-6968-8	CS-90	Total/NA	Solid	8015B NM	9092
880-6968-9	CS-91	Total/NA	Solid	8015B NM	9092
880-6968-10	CS-92	Total/NA	Solid	8015B NM	9092
MB 880-9092/1-A	Method Blank	Total/NA	Solid	8015B NM	9092
LCS 880-9092/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9092
LCSD 880-9092/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9092
880-6968-7 MS	CS-89	Total/NA	Solid	8015B NM	9092
880-6968-7 MSD	CS-89	Total/NA	Solid	8015B NM	9092

Analysis Batch: 9088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6968-11	CS-93	Total/NA	Solid	8015B NM	9093
880-6968-12	CS-94	Total/NA	Solid	8015B NM	9093
880-6968-13	CS-95	Total/NA	Solid	8015B NM	9093
880-6968-14	CS-96	Total/NA	Solid	8015B NM	9093
MB 880-9093/1-A	Method Blank	Total/NA	Solid	8015B NM	9093
LCS 880-9093/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9093
LCSD 880-9093/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9093
880-6967-A-6-C MS	Matrix Spike	Total/NA	Solid	8015B NM	9093
880-6967-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9093

Prep Batch: 9090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6968-1	CS-83	Total/NA	Solid	8015NM Prep	
880-6968-2	CS-84	Total/NA	Solid	8015NM Prep	
880-6968-3	CS-85	Total/NA	Solid	8015NM Prep	
880-6968-4	CS-86	Total/NA	Solid	8015NM Prep	
880-6968-5	CS-87	Total/NA	Solid	8015NM Prep	
MB 880-9090/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9090/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9090/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6968-1 MS	CS-83	Total/NA	Solid	8015NM Prep	
880-6968-1 MSD	CS-83	Total/NA	Solid	8015NM Prep	

Eurofins Xenco

QC Association Summary

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

Job ID: 880-6968-1
SDG: Eunice, NM

GC Semi VOA

Prep Batch: 9092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6968-6	CS-88	Total/NA	Solid	8015NM Prep	
880-6968-7	CS-89	Total/NA	Solid	8015NM Prep	
880-6968-8	CS-90	Total/NA	Solid	8015NM Prep	
880-6968-9	CS-91	Total/NA	Solid	8015NM Prep	
880-6968-10	CS-92	Total/NA	Solid	8015NM Prep	
MB 880-9092/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9092/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9092/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6968-7 MS	CS-89	Total/NA	Solid	8015NM Prep	
880-6968-7 MSD	CS-89	Total/NA	Solid	8015NM Prep	

Prep Batch: 9093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6968-11	CS-93	Total/NA	Solid	8015NM Prep	
880-6968-12	CS-94	Total/NA	Solid	8015NM Prep	
880-6968-13	CS-95	Total/NA	Solid	8015NM Prep	
880-6968-14	CS-96	Total/NA	Solid	8015NM Prep	
MB 880-9093/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9093/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9093/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6967-A-6-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6967-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6968-1	CS-83	Total/NA	Solid	8015 NM	
880-6968-2	CS-84	Total/NA	Solid	8015 NM	
880-6968-3	CS-85	Total/NA	Solid	8015 NM	
880-6968-4	CS-86	Total/NA	Solid	8015 NM	
880-6968-5	CS-87	Total/NA	Solid	8015 NM	
880-6968-6	CS-88	Total/NA	Solid	8015 NM	
880-6968-7	CS-89	Total/NA	Solid	8015 NM	
880-6968-8	CS-90	Total/NA	Solid	8015 NM	
880-6968-9	CS-91	Total/NA	Solid	8015 NM	
880-6968-10	CS-92	Total/NA	Solid	8015 NM	
880-6968-11	CS-93	Total/NA	Solid	8015 NM	
880-6968-12	CS-94	Total/NA	Solid	8015 NM	
880-6968-13	CS-95	Total/NA	Solid	8015 NM	
880-6968-14	CS-96	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 9081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6968-1	CS-83	Soluble	Solid	DI Leach	
880-6968-2	CS-84	Soluble	Solid	DI Leach	
880-6968-3	CS-85	Soluble	Solid	DI Leach	
880-6968-4	CS-86	Soluble	Solid	DI Leach	
880-6968-5	CS-87	Soluble	Solid	DI Leach	
880-6968-6	CS-88	Soluble	Solid	DI Leach	
880-6968-7	CS-89	Soluble	Solid	DI Leach	

Eurofins Xenco

QC Association Summary

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

Job ID: 880-6968-1
SDG: Eunice, NM

HPLC/IC (Continued)

Leach Batch: 9081 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6968-8	CS-90	Soluble	Solid	DI Leach	
880-6968-9	CS-91	Soluble	Solid	DI Leach	
880-6968-10	CS-92	Soluble	Solid	DI Leach	
880-6968-11	CS-93	Soluble	Solid	DI Leach	
880-6968-12	CS-94	Soluble	Solid	DI Leach	
880-6968-13	CS-95	Soluble	Solid	DI Leach	
880-6968-14	CS-96	Soluble	Solid	DI Leach	
MB 880-9081/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9081/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9081/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6968-1 MS	CS-83	Soluble	Solid	DI Leach	
880-6968-1 MSD	CS-83	Soluble	Solid	DI Leach	
880-6968-11 MS	CS-93	Soluble	Solid	DI Leach	
880-6968-11 MSD	CS-93	Soluble	Solid	DI Leach	

Analysis Batch: 9116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6968-1	CS-83	Soluble	Solid	300.0	9081
880-6968-2	CS-84	Soluble	Solid	300.0	9081
880-6968-3	CS-85	Soluble	Solid	300.0	9081
880-6968-4	CS-86	Soluble	Solid	300.0	9081
880-6968-5	CS-87	Soluble	Solid	300.0	9081
880-6968-6	CS-88	Soluble	Solid	300.0	9081
880-6968-7	CS-89	Soluble	Solid	300.0	9081
880-6968-8	CS-90	Soluble	Solid	300.0	9081
880-6968-9	CS-91	Soluble	Solid	300.0	9081
880-6968-10	CS-92	Soluble	Solid	300.0	9081
880-6968-11	CS-93	Soluble	Solid	300.0	9081
880-6968-12	CS-94	Soluble	Solid	300.0	9081
880-6968-13	CS-95	Soluble	Solid	300.0	9081
880-6968-14	CS-96	Soluble	Solid	300.0	9081
MB 880-9081/1-A	Method Blank	Soluble	Solid	300.0	9081
LCS 880-9081/2-A	Lab Control Sample	Soluble	Solid	300.0	9081
LCSD 880-9081/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9081
880-6968-1 MS	CS-83	Soluble	Solid	300.0	9081
880-6968-1 MSD	CS-83	Soluble	Solid	300.0	9081
880-6968-11 MS	CS-93	Soluble	Solid	300.0	9081
880-6968-11 MSD	CS-93	Soluble	Solid	300.0	9081

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-6968-1
SDG: Eunice, NM

Client Sample ID: CS-83

Date Collected: 10/07/21 10:00

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9090	10/08/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9082	10/08/21 13:21	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	9081	10/07/21 16:15	CH	XEN MID
Soluble	Analysis	300.0		1			9116	10/08/21 13:46	CH	XEN MID

Client Sample ID: CS-84

Date Collected: 10/07/21 10:05

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9090	10/08/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9082	10/08/21 14:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	9081	10/07/21 16:15	CH	XEN MID
Soluble	Analysis	300.0		1			9116	10/08/21 14:04	CH	XEN MID

Client Sample ID: CS-85

Date Collected: 10/07/21 10:10

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9090	10/08/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9082	10/08/21 14:58	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	9081	10/07/21 16:15	CH	XEN MID
Soluble	Analysis	300.0		1			9116	10/08/21 14:11	CH	XEN MID

Client Sample ID: CS-86

Date Collected: 10/07/21 10:15

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	9090	10/08/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9082	10/08/21 15:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	9081	10/07/21 16:15	CH	XEN MID
Soluble	Analysis	300.0		1			9116	10/08/21 14:17	CH	XEN MID

Client Sample ID: CS-87

Date Collected: 10/07/21 10:20

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-6968-1
SDG: Eunice, NM

Client Sample ID: CS-87

Date Collected: 10/07/21 10:20

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-5

Matrix: Solid

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			10.03 g	10 mL	9090	10/08/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		5			9082	10/08/21 15:42	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9081	10/07/21 16:15	CH	XEN MID
Soluble	Analysis	300.0		1			9116	10/08/21 14:23	CH	XEN MID

Client Sample ID: CS-88

Date Collected: 10/07/21 10:25

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 14:25	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	9081	10/07/21 16:15	CH	XEN MID
Soluble	Analysis	300.0		1			9116	10/08/21 14:42	CH	XEN MID

Client Sample ID: CS-89

Date Collected: 10/07/21 10:30

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 13:19	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	9081	10/07/21 16:15	CH	XEN MID
Soluble	Analysis	300.0		1			9116	10/08/21 14:48	CH	XEN MID

Client Sample ID: CS-90

Date Collected: 10/07/21 10:35

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 14:51	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	9081	10/07/21 16:15	CH	XEN MID
Soluble	Analysis	300.0		1			9116	10/08/21 14:54	CH	XEN MID

Client Sample ID: CS-91

Date Collected: 10/07/21 10:40

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-6968-1
SDG: Eunice, NM

Client Sample ID: CS-91

Date Collected: 10/07/21 10:40

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-9

Matrix: Solid

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			10.04 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 15:13	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	9081	10/07/21 16:15	CH	XEN MID
Soluble	Analysis	300.0		1			9116	10/08/21 15:01	CH	XEN MID

Client Sample ID: CS-92

Date Collected: 10/07/21 10:45

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 15:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	9081	10/07/21 16:15	CH	XEN MID
Soluble	Analysis	300.0		1			9116	10/08/21 15:07	CH	XEN MID

Client Sample ID: CS-93

Date Collected: 10/07/21 10:50

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9088	10/08/21 14:25	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9081	10/07/21 16:15	CH	XEN MID
Soluble	Analysis	300.0		1			9116	10/08/21 15:13	CH	XEN MID

Client Sample ID: CS-94

Date Collected: 10/07/21 10:55

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9088	10/08/21 14:51	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	9081	10/07/21 16:15	CH	XEN MID
Soluble	Analysis	300.0		5			9116	10/08/21 15:32	CH	XEN MID

Client Sample ID: CS-95

Date Collected: 10/07/21 11:00

Date Received: 10/07/21 15:25

Lab Sample ID: 880-6968-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-6968-1
SDG: Eunice, NM

Client Sample ID: CS-95

Lab Sample ID: 880-6968-13

Date Collected: 10/07/21 11:00

Matrix: Solid

Date Received: 10/07/21 15:25

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			10.04 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9088	10/08/21 15:13	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	9081	10/07/21 16:15	CH	XEN MID
Soluble	Analysis	300.0		5			9116	10/08/21 15:38	CH	XEN MID

Client Sample ID: CS-96

Lab Sample ID: 880-6968-14

Date Collected: 10/07/21 11:05

Matrix: Solid

Date Received: 10/07/21 15:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			9142	10/08/21 18:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		5			9088	10/08/21 15:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	9081	10/07/21 16:15	CH	XEN MID
Soluble	Analysis	300.0		1			9116	10/08/21 15:57	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 880-6968-1
SDG: Eunice, NM

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-6968-1
SDG: Eunice, NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	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, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

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

Job ID: 880-6968-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-6968-1	CS-83	Solid	10/07/21 10:00	10/07/21 15:25	4.5
880-6968-2	CS-84	Solid	10/07/21 10:05	10/07/21 15:25	4.5
880-6968-3	CS-85	Solid	10/07/21 10:10	10/07/21 15:25	4.5
880-6968-4	CS-86	Solid	10/07/21 10:15	10/07/21 15:25	4.5
880-6968-5	CS-87	Solid	10/07/21 10:20	10/07/21 15:25	4.5
880-6968-6	CS-88	Solid	10/07/21 10:25	10/07/21 15:25	4.5
880-6968-7	CS-89	Solid	10/07/21 10:30	10/07/21 15:25	4.5
880-6968-8	CS-90	Solid	10/07/21 10:35	10/07/21 15:25	4.5
880-6968-9	CS-91	Solid	10/07/21 10:40	10/07/21 15:25	4.5
880-6968-10	CS-92	Solid	10/07/21 10:45	10/07/21 15:25	4.5
880-6968-11	CS-93	Solid	10/07/21 10:50	10/07/21 15:25	4.5
880-6968-12	CS-94	Solid	10/07/21 10:55	10/07/21 15:25	4.5
880-6968-13	CS-95	Solid	10/07/21 11:00	10/07/21 15:25	4.5
880-6968-14	CS-96	Solid	10/07/21 11:05	10/07/21 15:25	4.5



Environment Testing
Xenco



880-6968 Chain of Custody

880-6968

No: _____

o.com Page 1 of 2

Project Manager	Russell S. S. S. S.	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 Bona Dr. #130 E	Address	
City State ZIP	Murumb TX 74705	City State ZIP	
Phone	432.250 4465	Email	RSB@trc.com

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:	
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"/>

Project Name:		HEC-CLINIC EMS-4 125m		Turn Around				ANALYSIS REQUEST										Preservative Codes	
P Project Number:		454378		<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush												None NO DI Water H ₂ O			
Project Location		Europe N/A		Due Date		24 hr										Cool cool MeOH Me			
Sample's Name:		Russian Security		TAT starts the day received by the lab, if received by 4:30pm												HCL HC HNO ₃ HN			
P O #				Wet Ice:		(Yes) No										H ₂ SO ₄ H ₂ NaOH Na			
SAMPLE RECEIPT		Temp Blank.		(Yes) No		Thermometer ID		128								H ₃ PO ₄ HP			
Samples Received Intact:		(Yes) No		Correction Factor		+0.5										NaHSO ₄ NABIS			
Cooler Custody Seals:		Yes No		Temperature Reading		1.9										Na ₂ S ₂ O ₃ NaSO ₃			
Sample Custody Seals:		Yes No		Corrected Temperature:		2.4										Zn Acetate+NaOH Zn			
Total Containers																NaOH+Ascorbic Acid SAPC			
Sample Identification		Matrix		Date Sampled		Time Sampled		Depth		Grab/Comp		# of Cont		Parameters		Sample Comments			
CS-83045		S		7/20/21		1000		45		6.5		1				TPH			
CS-84045												1				CHLORIDES			
CS-85045												1							
CS-86045												1							
CS-87045												1							
CS-88045												1							
CS-89045												1							
CS-90045												1							
CS-91045												1							
CS-92045												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 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
<i>[Signature]</i>	<i>[Signature]</i>	10/12/21 1518			



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

Loc: 810
6969

1. **Answer:** **100%**

Page 2 of 2



Project Manager	KUSSELL SEARIN	Bill to: (if different)	
Company Name	TIC	Company Name	
Address	10 DASH DR. #130E	Address	
City/State/ZIP	MIDLAND TX 79705	City/State/ZIP	
Phone	432.250.4465	Email	TSE@arroyo.com

Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PHP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
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: _____

[illegible][illegible]

Total 2007.7 / 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		TCLP / SPLP 6010	8RCRA	5b 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 Xenico, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenico 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 Xenico. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenico, 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
		10/12/18			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-6968-1

SDG Number: Eunice, NM

Login Number: 6968**List Number: 1****Creator: Teel, Brianna****List Source: Eurofins Xenco**

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

Laboratory Job ID: 880-7394-1

Laboratory Sample Delivery Group: Eunice NM
Client Project/Site: HEP: Eunice EMSU
Revision: 2

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/7/2022 4:17:22 PM

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

LINKS

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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: Eunice EMSU

Laboratory Job ID: 880-7394-1
SDG: Eunice NM

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Definitions/Glossary

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

Job ID: 880-7394-1
SDG: Eunice NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
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

Case Narrative

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

Job ID: 880-7394-1
SDG: Eunice NM

Job ID: 880-7394-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-7394-1

REVISION

The report being provided is a revision of the original report sent on 10/22/2021. The report (revision 2) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

The report being provided is a revision of the original report sent on 10/22/2021. The report (revision 2) is being revised due to Per client email, removed sample depths from sample name.

Revision 1 - 10/27/2021 - Reason - Deepers on final report 10/27/2021.

Receipt

The samples were received on 10/20/2021 9:01 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 time was 0.5°C

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-7394-A-1-B MS). Evidence of matrix interferences is not obvious.

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: Eunice EMSU

Job ID: 880-7394-1
SDG: Eunice NM

Client Sample ID: CS-78

Date Collected: 10/19/21 16:15

Date Received: 10/20/21 09:01

Sample Depth: 4.5

Lab Sample ID: 880-7394-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	480		49.8	mg/Kg			10/22/21 20:36	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	<49.8	U	49.8	mg/Kg		10/21/21 08:52	10/22/21 14:44	1
Diesel Range Organics (Over C10-C28)	409		49.8	mg/Kg		10/21/21 08:52	10/22/21 14:44	1
Oil Range Organics (Over C28-C36)	71.4		49.8	mg/Kg		10/21/21 08:52	10/22/21 14:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			10/21/21 08:52	10/22/21 14:44	1
o-Terphenyl	107		70 - 130			10/21/21 08:52	10/22/21 14:44	1

Client Sample ID: CS-79

Date Collected: 10/19/21 16:25

Date Received: 10/20/21 09:01

Sample Depth: 4.5

Lab Sample ID: 880-7394-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4970		250	mg/Kg			10/22/21 20:36	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	1070		250	mg/Kg		10/21/21 08:52	10/22/21 16:18	5
Diesel Range Organics (Over C10-C28)	3480		250	mg/Kg		10/21/21 08:52	10/22/21 16:18	5
Oil Range Organics (Over C28-C36)	418		250	mg/Kg		10/21/21 08:52	10/22/21 16:18	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130			10/21/21 08:52	10/22/21 16:18	5
o-Terphenyl	96		70 - 130			10/21/21 08:52	10/22/21 16:18	5

Client Sample ID: CS-79

Date Collected: 10/19/21 16:30

Date Received: 10/20/21 09:01

Sample Depth: 5.5

Lab Sample ID: 880-7394-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	399		49.9	mg/Kg			10/27/21 12:19	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	<49.9	U	49.9	mg/Kg		10/26/21 16:36	10/27/21 18:07	1
Diesel Range Organics (Over C10-C28)	336		49.9	mg/Kg		10/26/21 16:36	10/27/21 18:07	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-7394-1
SDG: Eunice NM

Client Sample ID: CS-79

Date Collected: 10/19/21 16:30

Date Received: 10/20/21 09:01

Sample Depth: 5.5

Lab Sample ID: 880-7394-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	62.5		49.9	mg/Kg		10/26/21 16:36	10/27/21 18:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			10/26/21 16:36	10/27/21 18:07	1
o-Terphenyl	123		70 - 130			10/26/21 16:36	10/27/21 18:07	1

Client Sample ID: CS-76

Date Collected: 10/19/21 15:55

Date Received: 10/20/21 09:01

Sample Depth: 4.5

Lab Sample ID: 880-7394-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	408		49.9	mg/Kg			10/22/21 20:36	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	<49.9	U	49.9	mg/Kg		10/21/21 08:52	10/22/21 16:39	1
Diesel Range Organics (Over C10-C28)	349		49.9	mg/Kg		10/21/21 08:52	10/22/21 16:39	1
Oil Range Organics (Over C28-C36)	59.1		49.9	mg/Kg		10/21/21 08:52	10/22/21 16:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			10/21/21 08:52	10/22/21 16:39	1
o-Terphenyl	110		70 - 130			10/21/21 08:52	10/22/21 16:39	1

Client Sample ID: CS-77

Date Collected: 10/19/21 16:05

Date Received: 10/20/21 09:01

Sample Depth: 4.5

Lab Sample ID: 880-7394-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/22/21 20:36	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	<50.0	U	50.0	mg/Kg		10/21/21 08:52	10/22/21 16:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/21/21 08:52	10/22/21 16:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 08:52	10/22/21 16:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			10/21/21 08:52	10/22/21 16:59	1
o-Terphenyl	112		70 - 130			10/21/21 08:52	10/22/21 16:59	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-7394-1
SDG: Eunice NM

Client Sample ID: CS-80

Lab Sample ID: 880-7394-9

Date Collected: 10/19/21 16:35

Matrix: Solid

Date Received: 10/20/21 09:01

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/22/21 20:36	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	<49.8	U	49.8	mg/Kg		10/21/21 08:52	10/22/21 17:20	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/21/21 08:52	10/22/21 17:20	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/21/21 08:52	10/22/21 17:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	10/21/21 08:52	10/22/21 17:20	1
o-Terphenyl	111		70 - 130	10/21/21 08:52	10/22/21 17:20	1

Client Sample ID: CS-81

Lab Sample ID: 880-7394-11

Date Collected: 10/19/21 16:45

Matrix: Solid

Date Received: 10/20/21 09:01

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/22/21 20:36	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	<49.8	U	49.8	mg/Kg		10/21/21 08:52	10/22/21 17:40	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/21/21 08:52	10/22/21 17:40	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/21/21 08:52	10/22/21 17:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	10/21/21 08:52	10/22/21 17:40	1
o-Terphenyl	122		70 - 130	10/21/21 08:52	10/22/21 17:40	1

Eurofins Xenco

Surrogate Summary

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

Job ID: 880-7394-1
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	OTPH1
		(70-130)	(70-130)
880-7394-1	CS-78	100	107
880-7394-1 MS	CS-78	105	9 S1-
880-7394-1 MSD	CS-78	106	100
880-7394-3	CS-79	116	96
880-7394-4	CS-79	111	123
880-7394-5	CS-76	101	110
880-7394-7	CS-77	101	112
880-7394-9	CS-80	102	111
880-7394-11	CS-81	110	122
890-1448-A-4-F MS	Matrix Spike	104	102
890-1448-A-4-G MSD	Matrix Spike Duplicate	101	99
LCS 880-10059/2-A	Lab Control Sample	98	100
LCS 880-10652/2-A	Lab Control Sample	88	95
LCSD 880-10059/3-A	Lab Control Sample Dup	108	112
LCSD 880-10652/3-A	Lab Control Sample Dup	77	83
MB 880-10059/1-A	Method Blank	110	115
MB 880-10652/1-A	Method Blank	109	128
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

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

Job ID: 880-7394-1
SDG: Eunice NM

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

Lab Sample ID: MB 880-10059/1-A

Matrix: Solid

Analysis Batch: 10159

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10059

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		10/21/21 08:52	10/22/21 13:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/21/21 08:52	10/22/21 13:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 08:52	10/22/21 13:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	10/21/21 08:52	10/22/21 13:37	1
o-Terphenyl	115		70 - 130	10/21/21 08:52	10/22/21 13:37	1

Lab Sample ID: LCS 880-10059/2-A

Matrix: Solid

Analysis Batch: 10159

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10059

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	929.6		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	1000	800.8		mg/Kg		80	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: LCSD 880-10059/3-A

Matrix: Solid

Analysis Batch: 10159

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 10059

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1075		mg/Kg		108	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	1000	882.9		mg/Kg		88	70 - 130	10	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	112		70 - 130

Lab Sample ID: 880-7394-1 MS

Matrix: Solid

Analysis Batch: 10159

Client Sample ID: CS-78

Prep Type: Total/NA

Prep Batch: 10059

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	996	1129		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	409		996	1302		mg/Kg		90	70 - 130

Eurofins Xenco

QC Sample Results

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

Job ID: 880-7394-1
SDG: Eunice NM

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

Lab Sample ID: 880-7394-1 MS

Matrix: Solid

Analysis Batch: 10159

Client Sample ID: CS-78

Prep Type: Total/NA

Prep Batch: 10059

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	9	S1-	70 - 130

Lab Sample ID: 880-7394-1 MSD

Matrix: Solid

Analysis Batch: 10159

Client Sample ID: CS-78

Prep Type: Total/NA

Prep Batch: 10059

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	<49.8	U	994	1158		mg/Kg		117	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	409		994	1268		mg/Kg		86	70 - 130	3	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: MB 880-10652/1-A

Matrix: Solid

Analysis Batch: 10661

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10652

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		10/26/21 16:36	10/27/21 10:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/26/21 16:36	10/27/21 10:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/26/21 16:36	10/27/21 10:17	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane	109		70 - 130	10/26/21 16:36	10/27/21 10:17	1
o-Terphenyl	128		70 - 130	10/26/21 16:36	10/27/21 10:17	1

Lab Sample ID: LCS 880-10652/2-A

Matrix: Solid

Analysis Batch: 10661

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10652

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1296		mg/Kg		130	70 - 130
Diesel Range Organics (Over C10-C28)	1000	781.6		mg/Kg		78	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	95		70 - 130

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QC Sample Results

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

Job ID: 880-7394-1
SDG: Eunice NM

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

Lab Sample ID: LCSD 880-10652/3-A

Matrix: Solid

Analysis Batch: 10661

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 10652

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1146		mg/Kg		115	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	757.1		mg/Kg		76	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	77		70 - 130						
o-Terphenyl	83		70 - 130						

Lab Sample ID: 890-1448-A-4-F MS

Matrix: Solid

Analysis Batch: 10661

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 10652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1197		mg/Kg		120	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	997	922.5		mg/Kg		90	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	104		70 - 130								
o-Terphenyl	102		70 - 130								

Lab Sample ID: 890-1448-A-4-G MSD

Matrix: Solid

Analysis Batch: 10661

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 10652

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	<49.9	U	1000	1125		mg/Kg		112	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	914.6		mg/Kg		88	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	101		70 - 130								
o-Terphenyl	99		70 - 130								

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QC Association Summary

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

Job ID: 880-7394-1
SDG: Eunice NM

GC Semi VOA

Prep Batch: 10059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7394-1	CS-78	Total/NA	Solid	8015NM Prep	
880-7394-3	CS-79	Total/NA	Solid	8015NM Prep	
880-7394-5	CS-76	Total/NA	Solid	8015NM Prep	
880-7394-7	CS-77	Total/NA	Solid	8015NM Prep	
880-7394-9	CS-80	Total/NA	Solid	8015NM Prep	
880-7394-11	CS-81	Total/NA	Solid	8015NM Prep	
MB 880-10059/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-10059/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-10059/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-7394-1 MS	CS-78	Total/NA	Solid	8015NM Prep	
880-7394-1 MSD	CS-78	Total/NA	Solid	8015NM Prep	

Analysis Batch: 10159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7394-1	CS-78	Total/NA	Solid	8015B NM	10059
880-7394-3	CS-79	Total/NA	Solid	8015B NM	10059
880-7394-5	CS-76	Total/NA	Solid	8015B NM	10059
880-7394-7	CS-77	Total/NA	Solid	8015B NM	10059
880-7394-9	CS-80	Total/NA	Solid	8015B NM	10059
880-7394-11	CS-81	Total/NA	Solid	8015B NM	10059
MB 880-10059/1-A	Method Blank	Total/NA	Solid	8015B NM	10059
LCS 880-10059/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	10059
LCSD 880-10059/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	10059
880-7394-1 MS	CS-78	Total/NA	Solid	8015B NM	10059
880-7394-1 MSD	CS-78	Total/NA	Solid	8015B NM	10059

Analysis Batch: 10307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7394-1	CS-78	Total/NA	Solid	8015 NM	
880-7394-3	CS-79	Total/NA	Solid	8015 NM	
880-7394-5	CS-76	Total/NA	Solid	8015 NM	
880-7394-7	CS-77	Total/NA	Solid	8015 NM	
880-7394-9	CS-80	Total/NA	Solid	8015 NM	
880-7394-11	CS-81	Total/NA	Solid	8015 NM	

Prep Batch: 10652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7394-4	CS-79	Total/NA	Solid	8015NM Prep	
MB 880-10652/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-10652/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-10652/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1448-A-4-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1448-A-4-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 10661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7394-4	CS-79	Total/NA	Solid	8015B NM	10652
MB 880-10652/1-A	Method Blank	Total/NA	Solid	8015B NM	10652
LCS 880-10652/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	10652
LCSD 880-10652/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	10652
890-1448-A-4-F MS	Matrix Spike	Total/NA	Solid	8015B NM	10652

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QC Association Summary

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

Job ID: 880-7394-1
SDG: Eunice NM

GC Semi VOA (Continued)

Analysis Batch: 10661 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1448-A-4-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	10652

Analysis Batch: 10676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7394-4	CS-79	Total/NA	Solid	8015 NM	

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

Lab Chronicle

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

Job ID: 880-7394-1
SDG: Eunice NM

Client Sample ID: CS-78

Date Collected: 10/19/21 16:15

Date Received: 10/20/21 09:01

Lab Sample ID: 880-7394-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10307	10/22/21 20:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	10059	10/21/21 08:52	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10159	10/22/21 14:44	AJ	XEN MID

Client Sample ID: CS-79

Date Collected: 10/19/21 16:25

Date Received: 10/20/21 09:01

Lab Sample ID: 880-7394-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10307	10/22/21 20:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	10059	10/21/21 08:52	AJ	XEN MID
Total/NA	Analysis	8015B NM		5			10159	10/22/21 16:18	AJ	XEN MID

Client Sample ID: CS-79

Date Collected: 10/19/21 16:30

Date Received: 10/20/21 09:01

Lab Sample ID: 880-7394-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10676	10/27/21 12:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	10652	10/26/21 16:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			10661	10/27/21 18:07	AJ	XEN MID

Client Sample ID: CS-76

Date Collected: 10/19/21 15:55

Date Received: 10/20/21 09:01

Lab Sample ID: 880-7394-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10307	10/22/21 20:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	10059	10/21/21 08:52	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10159	10/22/21 16:39	AJ	XEN MID

Client Sample ID: CS-77

Date Collected: 10/19/21 16:05

Date Received: 10/20/21 09:01

Lab Sample ID: 880-7394-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10307	10/22/21 20:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	10059	10/21/21 08:52	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10159	10/22/21 16:59	AJ	XEN MID

Client Sample ID: CS-80

Date Collected: 10/19/21 16:35

Date Received: 10/20/21 09:01

Lab Sample ID: 880-7394-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10307	10/22/21 20:36	AJ	XEN MID

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Lab Chronicle

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

Job ID: 880-7394-1
SDG: Eunice NM

Client Sample ID: CS-80

Lab Sample ID: 880-7394-9

Date Collected: 10/19/21 16:35

Matrix: Solid

Date Received: 10/20/21 09:01

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			10.05 g	10 mL	10059	10/21/21 08:52	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10159	10/22/21 17:20	AJ	XEN MID

Client Sample ID: CS-81

Lab Sample ID: 880-7394-11

Date Collected: 10/19/21 16:45

Matrix: Solid

Date Received: 10/20/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10307	10/22/21 20:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	10059	10/21/21 08:52	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10159	10/22/21 17:40	AJ	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 880-7394-1
SDG: Eunice NM

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-7394-1
SDG: Eunice NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-7394-1
SDG: Eunice NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-7394-1	CS-78	Solid	10/19/21 16:15	10/20/21 09:01	4.5
880-7394-3	CS-79	Solid	10/19/21 16:25	10/20/21 09:01	4.5
880-7394-4	CS-79	Solid	10/19/21 16:30	10/20/21 09:01	5.5
880-7394-5	CS-76	Solid	10/19/21 15:55	10/20/21 09:01	4.5
880-7394-7	CS-77	Solid	10/19/21 16:05	10/20/21 09:01	4.5
880-7394-9	CS-80	Solid	10/19/21 16:35	10/20/21 09:01	4.5
880-7394-11	CS-81	Solid	10/19/21 16:45	10/20/21 09:01	4.5



Environment Testing

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
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El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550 Carlsbad, NM (575) 988-3199



880-7394 Chain of Custody

www.xenco.com Page 1 of 2

Project Manager	Travis S. Smith	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10000 N. 10th St. #130E	Address	
City/State/Zip	Midland TX 79701	City/State/Zip	
Phone	432.700.4465	Email	Travis.Smith@TRC.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 EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

Project Name	Midland Encl. Rev	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush 48 Hrs	Pres Code	
Project Number	454378	Due Date			
Project Location	Encl. Rev	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name	D. Seibert				
PO #					
SAMPLE RECEIPT		Temp Blank	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Samples Received Intact	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID	728		
Cooler Custody Seals	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor	0.4		
Sample Custody Seals	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Temperature Reading	0.4		
Total Containers		Corrected Temperature	0.5		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	ANALYSIS REQUEST	Preservative Codes	Sample Comments
CS-78e4.5'	S	1/16/20	1620	4.5'	1	1		None NO	DI Water H ₂ O
CS-78e4.5'		1/16/20	1625	4.5'	1	1		Cool Cool	MeOH Me
CS-78e4.5'		1/16/20	1630	5.5'	1	1		HCL HC	HNO ₃ HN
CS-78e4.5'		1/16/20	1635	4.5'	1	1		H ₂ SO ₄ H ₂	NaOH Na
CS-78e4.5'		1/16/20	1640	5.5'	1	1		H ₃ PO ₄ HP	
CS-78e4.5'		1/16/20	1645	4.5'	1	1		NaHSO ₄ NABIS	
CS-78e4.5'		1/16/20	1650	4.5'	1	1		Na ₂ S ₂ O ₃ NaSO ₃	
CS-78e4.5'		1/16/20	1655	4.5'	1	1		Zn Acetate+NaOH Zn	
CS-78e4.5'		1/16/20	1700	5.5'	1	1		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 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 sample 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
TRC	THANER	10-20-21			
		901			



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: 7394

www.xenco.com Page 2 of 2

Project Manager	Russell Seaman	Bill to (if different)	
Company Name	TRE	Company Name	
Address		Address	
City, State ZIP		City, State ZIP	
Phone		Email	TE Seaman@TRECORP.COM

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:	
Reporting 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

Project Name	MetElevior EASU Perm	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush/PAH	Pres. Code		ANALYSIS REQUEST										Preservative Codes		
Project Number		Due Date														None NO	DI Water H ₂ O	
Project Location		TAT starts the day received by the lab, if received by 4:30pm														Cool Cool	MeOH Me	
Sample's Name																HCL, HC	HNO ₃ HN	
PO #		Temp Blank	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>											H ₂ SO ₄ H ₂	NaOH Na	
SAMPLE RECEIPT		Samples Received Intact:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID											H ₃ PO ₄ HP		
		Cooler Custody Seals	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor												NaHSO ₄ NABIS		
		Sample Custody Seals	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature Reading												Na ₂ S ₂ O ₃ NaSO ₃		
		Total Containers	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Corrected Temperature												Zn Acetate+NaOH Zn		
																NaOH+Ascorbic Acid SAPC		
Sample Identification	Matrix	Date Sampled	Time	Depth	Grab/Comp	# of Cont											Sample Comments	
CS-80 @ 4.5	S	March 21	16:35	4.5'	Comp	1												
CS-80 @ 5.5			16:46	5.5'		1												
CS-81 @ 4.5			16:45	4.5'		1												
CS-81 @ 5.5			16:50	5.5'		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 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
1 <i>[Signature]</i>	2 <i>[Signature]</i>	10:30:31			
3		901			
5					

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-7394-1

SDG Number: Eunice NM

Login Number: 7394**List Number: 1****Creator: Kramer, Jessica****List Source: Eurofins Xenco**

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

Laboratory Job ID: 880-7396-1

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

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/7/2022 4:18:40 PM

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

LINKS

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results through
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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: Eunice EMSU

Laboratory Job ID: 880-7396-1
SDG: Eunice, NM

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Definitions/Glossary

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

Job ID: 880-7396-1
SDG: Eunice, NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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

Case Narrative

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

Job ID: 880-7396-1
SDG: Eunice, NM

Job ID: 880-7396-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-7396-1

REVISION

The report being provided is a revision of the original report sent on 10/22/2021. The report (revision 1) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

Receipt

The samples were received on 10/20/2021 9:19 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 time was 0.5°C

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-10061 and analytical batch 880-10051 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.

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: Eunice EMSU

Job ID: 880-7396-1
SDG: Eunice, NM

Client Sample ID: CS-59

Lab Sample ID: 880-7396-1

Date Collected: 10/19/21 11:30

Matrix: Solid

Date Received: 10/20/21 09:19

Sample Depth: 10'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	69.3		50.0	mg/Kg			10/21/21 16:18	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	<50.0	U F1	50.0	mg/Kg		10/21/21 09:42	10/21/21 12:43	1
Diesel Range Organics (Over C10-C28)	69.3		50.0	mg/Kg		10/21/21 09:42	10/21/21 12:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 09:42	10/21/21 12:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			10/21/21 09:42	10/21/21 12:43	1
o-Terphenyl	116		70 - 130			10/21/21 09:42	10/21/21 12:43	1

Client Sample ID: CS-54

Lab Sample ID: 880-7396-3

Date Collected: 10/19/21 11:40

Matrix: Solid

Date Received: 10/20/21 09:19

Sample Depth: 10'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	59.1		50.0	mg/Kg			10/21/21 16:18	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	<50.0	U	50.0	mg/Kg		10/21/21 09:42	10/21/21 13:42	1
Diesel Range Organics (Over C10-C28)	59.1		50.0	mg/Kg		10/21/21 09:42	10/21/21 13:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 09:42	10/21/21 13:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			10/21/21 09:42	10/21/21 13:42	1
o-Terphenyl	115		70 - 130			10/21/21 09:42	10/21/21 13:42	1

Client Sample ID: CS-55

Lab Sample ID: 880-7396-5

Date Collected: 10/19/21 11:50

Matrix: Solid

Date Received: 10/20/21 09:19

Sample Depth: 10'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	52.8		49.9	mg/Kg			10/21/21 16:18	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	<49.9	U	49.9	mg/Kg		10/21/21 09:42	10/21/21 14:02	1
Diesel Range Organics (Over C10-C28)	52.8		49.9	mg/Kg		10/21/21 09:42	10/21/21 14:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/21 09:42	10/21/21 14:02	1

Eurofins Xenco

Client Sample Results

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

Job ID: 880-7396-1
SDG: Eunice, NM

Client Sample ID: CS-55

Date Collected: 10/19/21 11:50

Date Received: 10/20/21 09:19

Sample Depth: 10'

Lab Sample ID: 880-7396-5

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	10/21/21 09:42	10/21/21 14:02	1
o-Terphenyl	114		70 - 130	10/21/21 09:42	10/21/21 14:02	1

Client Sample ID: CS-60

Date Collected: 10/19/21 14:00

Date Received: 10/20/21 09:19

Sample Depth: 5.5'

Lab Sample ID: 880-7396-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	521		49.8	mg/Kg			10/21/21 16:18	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	<49.8	U	49.8	mg/Kg		10/21/21 09:42	10/21/21 14:22	1
Diesel Range Organics (Over C10-C28)	467		49.8	mg/Kg		10/21/21 09:42	10/21/21 14:22	1
Oil Range Organics (Over C28-C36)	54.1		49.8	mg/Kg		10/21/21 09:42	10/21/21 14:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			10/21/21 09:42	10/21/21 14:22	1
o-Terphenyl	110		70 - 130			10/21/21 09:42	10/21/21 14:22	1

Client Sample ID: CS-101

Date Collected: 10/19/21 14:15

Date Received: 10/20/21 09:19

Sample Depth: 5.5'

Lab Sample ID: 880-7396-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	389		49.9	mg/Kg			10/21/21 16:18	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	<49.9	U	49.9	mg/Kg		10/21/21 09:42	10/21/21 14:42	1
Diesel Range Organics (Over C10-C28)	389		49.9	mg/Kg		10/21/21 09:42	10/21/21 14:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/21 09:42	10/21/21 14:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			10/21/21 09:42	10/21/21 14:42	1
o-Terphenyl	111		70 - 130			10/21/21 09:42	10/21/21 14:42	1

Eurofins Xenco

Surrogate Summary

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

Job ID: 880-7396-1
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	OTPH1
		(70-130)	(70-130)
880-7396-1	CS-59	107	116
880-7396-1 MS	CS-59	111	106
880-7396-1 MSD	CS-59	117	115
880-7396-3	CS-54	107	115
880-7396-5	CS-55	105	114
880-7396-7	CS-60	105	110
880-7396-9	CS-101	106	111
LCS 880-10061/2-A	Lab Control Sample	104	103
LCSD 880-10061/3-A	Lab Control Sample Dup	101	102
MB 880-10061/1-A	Method Blank	106	116

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-7396-1
SDG: Eunice, NM

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

Lab Sample ID: MB 880-10061/1-A

Matrix: Solid

Analysis Batch: 10051

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10061

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		10/21/21 09:42	10/21/21 11:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/21/21 09:42	10/21/21 11:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 09:42	10/21/21 11:42	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			10/21/21 09:42	10/21/21 11:42	1
o-Terphenyl	116		70 - 130			10/21/21 09:42	10/21/21 11:42	1

Lab Sample ID: LCS 880-10061/2-A

Matrix: Solid

Analysis Batch: 10051

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10061

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	974.4		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	874.6		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	104		70 - 130				
o-Terphenyl	103		70 - 130				

Lab Sample ID: LCSD 880-10061/3-A

Matrix: Solid

Analysis Batch: 10051

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 10061

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	886.7		mg/Kg		89	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	851.4		mg/Kg		85	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	101		70 - 130						
o-Terphenyl	102		70 - 130						

Lab Sample ID: 880-7396-1 MS

Matrix: Solid

Analysis Batch: 10051

Client Sample ID: CS-59

Prep Type: Total/NA

Prep Batch: 10061

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	1000	1264		mg/Kg		126	70 - 130
Diesel Range Organics (Over C10-C28)	69.3		1000	1021		mg/Kg		95	70 - 130

Eurofins Xenco

QC Sample Results

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

Job ID: 880-7396-1
SDG: Eunice, NM

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

Lab Sample ID: 880-7396-1 MS

Matrix: Solid

Analysis Batch: 10051

Client Sample ID: CS-59

Prep Type: Total/NA

Prep Batch: 10061

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: 880-7396-1 MSD

Matrix: Solid

Analysis Batch: 10051

Client Sample ID: CS-59

Prep Type: Total/NA

Prep Batch: 10061

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	<50.0	U F1	997	1312	F1	mg/Kg		132	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	69.3		997	1071		mg/Kg		101	70 - 130	5	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	115		70 - 130

QC Association Summary

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

Job ID: 880-7396-1
SDG: Eunice, NM

GC Semi VOA

Analysis Batch: 10051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7396-1	CS-59	Total/NA	Solid	8015B NM	10061
880-7396-3	CS-54	Total/NA	Solid	8015B NM	10061
880-7396-5	CS-55	Total/NA	Solid	8015B NM	10061
880-7396-7	CS-60	Total/NA	Solid	8015B NM	10061
880-7396-9	CS-101	Total/NA	Solid	8015B NM	10061
MB 880-10061/1-A	Method Blank	Total/NA	Solid	8015B NM	10061
LCS 880-10061/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	10061
LCSD 880-10061/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	10061
880-7396-1 MS	CS-59	Total/NA	Solid	8015B NM	10061
880-7396-1 MSD	CS-59	Total/NA	Solid	8015B NM	10061

Prep Batch: 10061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7396-1	CS-59	Total/NA	Solid	8015NM Prep	
880-7396-3	CS-54	Total/NA	Solid	8015NM Prep	
880-7396-5	CS-55	Total/NA	Solid	8015NM Prep	
880-7396-7	CS-60	Total/NA	Solid	8015NM Prep	
880-7396-9	CS-101	Total/NA	Solid	8015NM Prep	
MB 880-10061/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-10061/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-10061/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-7396-1 MS	CS-59	Total/NA	Solid	8015NM Prep	
880-7396-1 MSD	CS-59	Total/NA	Solid	8015NM Prep	

Analysis Batch: 10145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7396-1	CS-59	Total/NA	Solid	8015 NM	
880-7396-3	CS-54	Total/NA	Solid	8015 NM	
880-7396-5	CS-55	Total/NA	Solid	8015 NM	
880-7396-7	CS-60	Total/NA	Solid	8015 NM	
880-7396-9	CS-101	Total/NA	Solid	8015 NM	

Lab Chronicle

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

Job ID: 880-7396-1
SDG: Eunice, NM

Client Sample ID: CS-59

Date Collected: 10/19/21 11:30

Date Received: 10/20/21 09:19

Lab Sample ID: 880-7396-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10145	10/21/21 16:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	10061	10/21/21 09:42	AM	XEN MID
Total/NA	Analysis	8015B NM		1			10051	10/21/21 12:43	AJ	XEN MID

Client Sample ID: CS-54

Date Collected: 10/19/21 11:40

Date Received: 10/20/21 09:19

Lab Sample ID: 880-7396-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10145	10/21/21 16:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	10061	10/21/21 09:42	AM	XEN MID
Total/NA	Analysis	8015B NM		1			10051	10/21/21 13:42	AJ	XEN MID

Client Sample ID: CS-55

Date Collected: 10/19/21 11:50

Date Received: 10/20/21 09:19

Lab Sample ID: 880-7396-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10145	10/21/21 16:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	10061	10/21/21 09:42	AM	XEN MID
Total/NA	Analysis	8015B NM		1			10051	10/21/21 14:02	AJ	XEN MID

Client Sample ID: CS-60

Date Collected: 10/19/21 14:00

Date Received: 10/20/21 09:19

Lab Sample ID: 880-7396-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10145	10/21/21 16:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	10061	10/21/21 09:42	AM	XEN MID
Total/NA	Analysis	8015B NM		1			10051	10/21/21 14:22	AJ	XEN MID

Client Sample ID: CS-101

Date Collected: 10/19/21 14:15

Date Received: 10/20/21 09:19

Lab Sample ID: 880-7396-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10145	10/21/21 16:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	10061	10/21/21 09:42	AM	XEN MID
Total/NA	Analysis	8015B NM		1			10051	10/21/21 14:42	AJ	XEN MID

Laboratory References:

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

Eurofins Xenco

Accreditation/Certification Summary

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

Job ID: 880-7396-1
SDG: Eunice, NM

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

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

Method Summary

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

Job ID: 880-7396-1
SDG: Eunice, NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-7396-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-7396-1	CS-59	Solid	10/19/21 11:30	10/20/21 09:19	10'
880-7396-3	CS-54	Solid	10/19/21 11:40	10/20/21 09:19	10'
880-7396-5	CS-55	Solid	10/19/21 11:50	10/20/21 09:19	10'
880-7396-7	CS-60	Solid	10/19/21 14:00	10/20/21 09:19	5.5'
880-7396-9	CS-101	Solid	10/19/21 14:15	10/20/21 09:19	5.5'



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



V
880-7396 Chain of Custody

www.xenco.com Page 1 of 1

Project Manager	Russell Seibert	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 Desha Dr #130E	Address	
City, State ZIP	Midland TX 79705	City State ZIP	
Phone	432.210.1165	Email	RSeibert@TRC.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 <input type="checkbox"/>	
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: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

Project Name:	HEP Enuff Enuff 12	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush 18 hrs	Pres. Code	
Project Number:	454378	Due Date			
Project Location	Enuff Enuff	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	R. Seibert				
P.O. #					
SAMPLE RECEIPT		Temp Blank	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID	1288		
Cooler Custody Seals	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor	0.7		
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Temperature Reading	0.4		
Total Containers:		Corrected Temperature	0.5		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH	Flow																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-7396-1

SDG Number: Eunice, NM

Login Number: 7396**List Number: 1****Creator: Teel, Brianna****List Source: Eurofins Xenco**

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

Laboratory Job ID: 880-7398-1

Laboratory Sample Delivery Group: Eunice, NM
Client Project/Site: HEP: Eunice EMSU
Revision: 2

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
2/4/2022 12:15:53 PM

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

LINKS

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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: Eunice EMSU

Laboratory Job ID: 880-7398-1
SDG: Eunice, NM

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Definitions/Glossary

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

Job ID: 880-7398-1
SDG: Eunice, NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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

Case Narrative

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

Job ID: 880-7398-1
SDG: Eunice, NM

Job ID: 880-7398-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-7398-1

REVISION

The report being provided is a revision of the original report sent on 10/22/2021. The report (revision 2) is being revised due to Per client email, requesting to change sample ID from CS-07 to CS-7.

Report revision history

The report being provided is a revision of the original report sent on 10/22/2021. The report (revision 2) is being revised due to Per client email, requesting to change sample ID from CS-07 to CS-7.

Revision 1 - 1/7/2022 - Reason - Per client email, removed sample depths from sample name.

Receipt

The samples were received on 10/20/2021 9:23 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 time was 0.5°C

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-10061 and analytical batch 880-10051 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.

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: Eunice EMSU

Job ID: 880-7398-1
SDG: Eunice, NM

Client Sample ID: CS-7

Date Collected: 10/19/21 10:00

Date Received: 10/20/21 09:23

Sample Depth: 4.5'

Lab Sample ID: 880-7398-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	140		50.0	mg/Kg			10/21/21 16:18	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	<50.0	U	50.0	mg/Kg		10/21/21 09:42	10/21/21 15:01	1
Diesel Range Organics (Over C10-C28)	140		50.0	mg/Kg		10/21/21 09:42	10/21/21 15:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 09:42	10/21/21 15:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			10/21/21 09:42	10/21/21 15:01	1
o-Terphenyl	112		70 - 130			10/21/21 09:42	10/21/21 15:01	1

Client Sample ID: CS-97

Date Collected: 10/19/21 10:10

Date Received: 10/20/21 09:23

Sample Depth: 4.5'

Lab Sample ID: 880-7398-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	154		49.9	mg/Kg			10/21/21 16:18	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	<49.9	U	49.9	mg/Kg		10/21/21 09:42	10/21/21 15:21	1
Diesel Range Organics (Over C10-C28)	154		49.9	mg/Kg		10/21/21 09:42	10/21/21 15:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/21 09:42	10/21/21 15:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			10/21/21 09:42	10/21/21 15:21	1
o-Terphenyl	111		70 - 130			10/21/21 09:42	10/21/21 15:21	1

Client Sample ID: CS-98

Date Collected: 10/19/21 10:20

Date Received: 10/20/21 09:23

Sample Depth: 4.5'

Lab Sample ID: 880-7398-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	128		50.0	mg/Kg			10/21/21 16:18	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	<50.0	U	50.0	mg/Kg		10/21/21 09:42	10/21/21 15:41	1
Diesel Range Organics (Over C10-C28)	128		50.0	mg/Kg		10/21/21 09:42	10/21/21 15:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 09:42	10/21/21 15:41	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-7398-1
SDG: Eunice, NM

Client Sample ID: CS-98

Date Collected: 10/19/21 10:20

Date Received: 10/20/21 09:23

Sample Depth: 4.5'

Lab Sample ID: 880-7398-5

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	10/21/21 09:42	10/21/21 15:41	1
o-Terphenyl	109		70 - 130	10/21/21 09:42	10/21/21 15:41	1

Client Sample ID: CS-99

Date Collected: 10/19/21 10:30

Date Received: 10/20/21 09:23

Sample Depth: 4.5'

Lab Sample ID: 880-7398-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	91.0		50.0	mg/Kg			10/21/21 16:18	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	<50.0	U	50.0	mg/Kg		10/21/21 09:42	10/21/21 16:00	1
Diesel Range Organics (Over C10-C28)	91.0		50.0	mg/Kg		10/21/21 09:42	10/21/21 16:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 09:42	10/21/21 16:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			10/21/21 09:42	10/21/21 16:00	1
o-Terphenyl	107		70 - 130			10/21/21 09:42	10/21/21 16:00	1

Client Sample ID: CS-100

Date Collected: 10/19/21 10:40

Date Received: 10/20/21 09:23

Sample Depth: 4.5'

Lab Sample ID: 880-7398-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	142		49.8	mg/Kg			10/21/21 16:18	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	<49.8	U	49.8	mg/Kg		10/21/21 09:42	10/21/21 16:20	1
Diesel Range Organics (Over C10-C28)	142		49.8	mg/Kg		10/21/21 09:42	10/21/21 16:20	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/21/21 09:42	10/21/21 16:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			10/21/21 09:42	10/21/21 16:20	1
o-Terphenyl	108		70 - 130			10/21/21 09:42	10/21/21 16:20	1

Eurofins Midland

Surrogate Summary

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

Job ID: 880-7398-1
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	OTPH1
		(70-130)	(70-130)
880-7396-A-1-B MS	Matrix Spike	111	106
880-7396-A-1-C MSD	Matrix Spike Duplicate	117	115
880-7398-1	CS-7	106	112
880-7398-3	CS-97	106	111
880-7398-5	CS-98	103	109
880-7398-7	CS-99	102	107
880-7398-9	CS-100	101	108
LCS 880-10061/2-A	Lab Control Sample	104	103
LCSD 880-10061/3-A	Lab Control Sample Dup	101	102
MB 880-10061/1-A	Method Blank	106	116

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-7398-1
SDG: Eunice, NM

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

Lab Sample ID: MB 880-10061/1-A

Matrix: Solid

Analysis Batch: 10051

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10061

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		10/21/21 09:42	10/21/21 11:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/21/21 09:42	10/21/21 11:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 09:42	10/21/21 11:42	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			10/21/21 09:42	10/21/21 11:42	1
o-Terphenyl	116		70 - 130			10/21/21 09:42	10/21/21 11:42	1

Lab Sample ID: LCS 880-10061/2-A

Matrix: Solid

Analysis Batch: 10051

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10061

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	974.4		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	874.6		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	104		70 - 130				
o-Terphenyl	103		70 - 130				

Lab Sample ID: LCSD 880-10061/3-A

Matrix: Solid

Analysis Batch: 10051

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 10061

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	886.7		mg/Kg		89	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	851.4		mg/Kg		85	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	101		70 - 130						
o-Terphenyl	102		70 - 130						

Lab Sample ID: 880-7396-A-1-B MS

Matrix: Solid

Analysis Batch: 10051

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 10061

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	1000	1264		mg/Kg		126	70 - 130
Diesel Range Organics (Over C10-C28)	69.3		1000	1021		mg/Kg		95	70 - 130

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QC Sample Results

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

Job ID: 880-7398-1
SDG: Eunice, NM

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

Lab Sample ID: 880-7396-A-1-B MS

Matrix: Solid

Analysis Batch: 10051

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 10061

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: 880-7396-A-1-C MSD

Matrix: Solid

Analysis Batch: 10051

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 10061

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	<50.0	U F1	997	1312	F1	mg/Kg		132	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	69.3		997	1071		mg/Kg		101	70 - 130	5	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	115		70 - 130

QC Association Summary

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

Job ID: 880-7398-1
SDG: Eunice, NM

GC Semi VOA

Analysis Batch: 10051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7398-1	CS-7	Total/NA	Solid	8015B NM	10061
880-7398-3	CS-97	Total/NA	Solid	8015B NM	10061
880-7398-5	CS-98	Total/NA	Solid	8015B NM	10061
880-7398-7	CS-99	Total/NA	Solid	8015B NM	10061
880-7398-9	CS-100	Total/NA	Solid	8015B NM	10061
MB 880-10061/1-A	Method Blank	Total/NA	Solid	8015B NM	10061
LCS 880-10061/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	10061
LCSD 880-10061/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	10061
880-7396-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	10061
880-7396-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	10061

Prep Batch: 10061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7398-1	CS-7	Total/NA	Solid	8015NM Prep	
880-7398-3	CS-97	Total/NA	Solid	8015NM Prep	
880-7398-5	CS-98	Total/NA	Solid	8015NM Prep	
880-7398-7	CS-99	Total/NA	Solid	8015NM Prep	
880-7398-9	CS-100	Total/NA	Solid	8015NM Prep	
MB 880-10061/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-10061/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-10061/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-7396-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-7396-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 10145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7398-1	CS-7	Total/NA	Solid	8015 NM	
880-7398-3	CS-97	Total/NA	Solid	8015 NM	
880-7398-5	CS-98	Total/NA	Solid	8015 NM	
880-7398-7	CS-99	Total/NA	Solid	8015 NM	
880-7398-9	CS-100	Total/NA	Solid	8015 NM	

Lab Chronicle

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

Job ID: 880-7398-1
SDG: Eunice, NM

Client Sample ID: CS-7

Date Collected: 10/19/21 10:00

Date Received: 10/20/21 09:23

Lab Sample ID: 880-7398-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10145	10/21/21 16:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	10061	10/21/21 09:42	AM	XEN MID
Total/NA	Analysis	8015B NM		1			10051	10/21/21 15:01	AJ	XEN MID

Client Sample ID: CS-97

Date Collected: 10/19/21 10:10

Date Received: 10/20/21 09:23

Lab Sample ID: 880-7398-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10145	10/21/21 16:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	10061	10/21/21 09:42	AM	XEN MID
Total/NA	Analysis	8015B NM		1			10051	10/21/21 15:21	AJ	XEN MID

Client Sample ID: CS-98

Date Collected: 10/19/21 10:20

Date Received: 10/20/21 09:23

Lab Sample ID: 880-7398-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10145	10/21/21 16:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	10061	10/21/21 09:42	AM	XEN MID
Total/NA	Analysis	8015B NM		1			10051	10/21/21 15:41	AJ	XEN MID

Client Sample ID: CS-99

Date Collected: 10/19/21 10:30

Date Received: 10/20/21 09:23

Lab Sample ID: 880-7398-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10145	10/21/21 16:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	10061	10/21/21 09:42	AM	XEN MID
Total/NA	Analysis	8015B NM		1			10051	10/21/21 16:00	AJ	XEN MID

Client Sample ID: CS-100

Date Collected: 10/19/21 10:40

Date Received: 10/20/21 09:23

Lab Sample ID: 880-7398-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10145	10/21/21 16:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	10061	10/21/21 09:42	AM	XEN MID
Total/NA	Analysis	8015B NM		1			10051	10/21/21 16:20	AJ	XEN MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

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

Job ID: 880-7398-1
SDG: Eunice, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-7398-1
SDG: Eunice, NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-7398-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-7398-1	CS-7	Solid	10/19/21 10:00	10/20/21 09:23	4.5'
880-7398-3	CS-97	Solid	10/19/21 10:10	10/20/21 09:23	4.5'
880-7398-5	CS-98	Solid	10/19/21 10:20	10/20/21 09:23	4.5'
880-7398-7	CS-99	Solid	10/19/21 10:30	10/20/21 09:23	4.5'
880-7398-9	CS-100	Solid	10/19/21 10:40	10/20/21 09:23	4.5'

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IS 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) 794-1266
Hobbs, NM (575) 392-7550 Carlsbad, NM (575) 988-3199

Chain of Custody



880-7398 Chain of Custody

www.xenco.com Page 1 of 1

Project Name	HEPI Emission Emission Review	Bill to (if different)	
Project Number	454 348	Company Name	
Project Location	Emission Review	Address	
Sampler's Name	R. S. Garcia	City State ZIP	
P.O. #		Email	RSGARCIA@TRC.COM

Work Order Comments	
Program: <input type="checkbox"/> UST/PSR <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 EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	ANALYSIS REQUEST										Preservative Codes	
							Parameters											
CS-07 @ 4.5	S	19047-21	1000	4.5	C	1	TPH										None NO	DI Water H ₂ O
CS-07 @ 5.5			1005	5.5		1											Cool Cool	MeOH Me
CS-07 @ 4.5			1010	4.5		1											HCL HC	HNO ₃ HN
CS-07 @ 5.5			1015	5.5		1											H ₂ SO ₄ H ₂	NaOH Na
CS-08 @ 4.5			1020	4.5		1											H ₃ PO ₄ HP	
CS-08 @ 5.5			1025	5.5		1											NaHSO ₄ 4 NABIS	
CS-09 @ 4.5			1030	4.5		1											Na ₂ S ₂ O ₃ NaSO ₃	
CS-09 @ 5.5			1035	5.5		1											Zn Acetate+NaOH Zn	
CS-100 @ 4.5			1040	4.5		1											NaOH+Ascorbic Acid SAPC	
CS-100 @ 5.5			1045	5.5		1												

Sample Comments

* If > 1500 GPC + DRO

Flow Deplete

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 / SPLD 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
<i>[Signature]</i>	<i>[Signature]</i>	10-30-21			
		901			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-7398-1

SDG Number: Eunice, NM

Login Number: 7398**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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-7399-1

Laboratory Sample Delivery Group: Eunice. NM
Client Project/Site: HEP: Euince EMSU
Revision: 2

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
2/4/2022 12:04:18 PM

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

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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: Eunice EMSU

Laboratory Job ID: 880-7399-1
SDG: Eunice. NM

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Definitions/Glossary

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

Job ID: 880-7399-1
SDG: Eunice. NM

Qualifiers

GC Semi 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.

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

Case Narrative

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

Job ID: 880-7399-1
SDG: Eunice. NM

Job ID: 880-7399-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-7399-1

REVISION

The report being provided is a revision of the original report sent on 10/22/2021. The report (revision 2) is being revised due to Per client email, corrected sample ID from SW-37 to SW-46.

Report revision history

The report being provided is a revision of the original report sent on 10/22/2021. The report (revision 2) is being revised due to Per client email, corrected sample ID from SW-37 to SW-46.

Revision 1 - 1/7/2022 - Reason - Per client email, removed sample depths from sample name.

Receipt

The samples were received on 10/20/2021 9:26 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 time was 0.5°C

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SW-38 (880-7399-2) and (880-7394-A-1-B MS). Evidence of matrix interferences is not obvious.

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: Eunice EMSU

Job ID: 880-7399-1
SDG: Eunice. NM

Client Sample ID: SW-46

Lab Sample ID: 880-7399-1

Date Collected: 10/19/21 11:00

Matrix: Solid

Date Received: 10/20/21 09:26

Sample Depth: 9'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/22/21 20:36	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	<50.0	U	50.0	mg/Kg		10/21/21 08:52	10/22/21 18:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/21/21 08:52	10/22/21 18:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 08:52	10/22/21 18:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			10/21/21 08:52	10/22/21 18:01	1
o-Terphenyl	123		70 - 130			10/21/21 08:52	10/22/21 18:01	1

Client Sample ID: SW-38

Lab Sample ID: 880-7399-2

Date Collected: 10/19/21 11:05

Matrix: Solid

Date Received: 10/20/21 09:26

Sample Depth: 9'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	469		50.0	mg/Kg			10/22/21 20:36	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	<50.0	U	50.0	mg/Kg		10/21/21 08:52	10/22/21 18:21	1
Diesel Range Organics (Over C10-C28)	414		50.0	mg/Kg		10/21/21 08:52	10/22/21 18:21	1
Oil Range Organics (Over C28-C36)	54.9		50.0	mg/Kg		10/21/21 08:52	10/22/21 18:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130			10/21/21 08:52	10/22/21 18:21	1
o-Terphenyl	131	S1+	70 - 130			10/21/21 08:52	10/22/21 18:21	1

Client Sample ID: SW-39

Lab Sample ID: 880-7399-3

Date Collected: 10/19/21 11:10

Matrix: Solid

Date Received: 10/20/21 09:26

Sample Depth: 9'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/22/21 20:36	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	<49.8	U	49.8	mg/Kg		10/21/21 08:52	10/22/21 18:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/21/21 08:52	10/22/21 18:44	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/21/21 08:52	10/22/21 18:44	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-7399-1
SDG: Eunice. NM

Client Sample ID: SW-39

Date Collected: 10/19/21 11:10

Date Received: 10/20/21 09:26

Sample Depth: 9'

Lab Sample ID: 880-7399-3

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	10/21/21 08:52	10/22/21 18:44	1
o-Terphenyl	122		70 - 130	10/21/21 08:52	10/22/21 18:44	1

Client Sample ID: SW-40

Date Collected: 10/19/21 11:15

Date Received: 10/20/21 09:26

Sample Depth: 9'

Lab Sample ID: 880-7399-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/22/21 20:36	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	<49.8	U	49.8	mg/Kg		10/21/21 08:52	10/22/21 19:04	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/21/21 08:52	10/22/21 19:04	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/21/21 08:52	10/22/21 19:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			10/21/21 08:52	10/22/21 19:04	1
o-Terphenyl	118		70 - 130			10/21/21 08:52	10/22/21 19:04	1

Client Sample ID: SW-41

Date Collected: 10/19/21 11:20

Date Received: 10/20/21 09:26

Sample Depth: 9'

Lab Sample ID: 880-7399-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/22/21 20:36	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	<50.0	U	50.0	mg/Kg		10/21/21 08:52	10/22/21 19:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/21/21 08:52	10/22/21 19:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 08:52	10/22/21 19:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130			10/21/21 08:52	10/22/21 19:45	1
o-Terphenyl	122		70 - 130			10/21/21 08:52	10/22/21 19:45	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-7399-1
SDG: Eunice. NM

Client Sample ID: SW-42

Lab Sample ID: 880-7399-6

Date Collected: 10/19/21 11:25

Matrix: Solid

Date Received: 10/20/21 09:26

Sample Depth: 6'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/22/21 20:36	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	<49.9	U	49.9	mg/Kg		10/21/21 08:52	10/22/21 20:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/21/21 08:52	10/22/21 20:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/21 08:52	10/22/21 20:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	10/21/21 08:52	10/22/21 20:05	1
o-Terphenyl	121		70 - 130	10/21/21 08:52	10/22/21 20:05	1

Surrogate Summary

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

Job ID: 880-7399-1
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	OTPH1
		(70-130)	(70-130)
880-7394-A-1-B MS	Matrix Spike	105	9 S1-
880-7394-A-1-C MSD	Matrix Spike Duplicate	106	100
880-7399-1	SW-46	111	123
880-7399-2	SW-38	119	131 S1+
880-7399-3	SW-39	109	122
880-7399-4	SW-40	104	118
880-7399-5	SW-41	113	122
880-7399-6	SW-42	108	121
LCS 880-10059/2-A	Lab Control Sample	98	100
LCSD 880-10059/3-A	Lab Control Sample Dup	108	112
MB 880-10059/1-A	Method Blank	110	115

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-7399-1
SDG: Eunice. NM

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

Lab Sample ID: MB 880-10059/1-A

Matrix: Solid

Analysis Batch: 10159

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10059

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		10/21/21 08:52	10/22/21 13:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/21/21 08:52	10/22/21 13:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 08:52	10/22/21 13:37	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130			10/21/21 08:52	10/22/21 13:37	1
o-Terphenyl	115		70 - 130			10/21/21 08:52	10/22/21 13:37	1

Lab Sample ID: LCS 880-10059/2-A

Matrix: Solid

Analysis Batch: 10159

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10059

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	929.6		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	1000	800.8		mg/Kg		80	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	98		70 - 130				
o-Terphenyl	100		70 - 130				

Lab Sample ID: LCSD 880-10059/3-A

Matrix: Solid

Analysis Batch: 10159

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 10059

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1075		mg/Kg		108	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	1000	882.9		mg/Kg		88	70 - 130	10	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	108		70 - 130						
o-Terphenyl	112		70 - 130						

Lab Sample ID: 880-7394-A-1-B MS

Matrix: Solid

Analysis Batch: 10159

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 10059

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	996	1129		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	409		996	1302		mg/Kg		90	70 - 130

Eurofins Midland

QC Sample Results

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

Job ID: 880-7399-1
SDG: Eunice. NM

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

Lab Sample ID: 880-7394-A-1-B MS

Matrix: Solid

Analysis Batch: 10159

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 10059

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	9	S1-	70 - 130

Lab Sample ID: 880-7394-A-1-C MSD

Matrix: Solid

Analysis Batch: 10159

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 10059

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	<49.8	U	994	1158		mg/Kg		117	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	409		994	1268		mg/Kg		86	70 - 130	3	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	100		70 - 130

QC Association Summary

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

Job ID: 880-7399-1
SDG: Eunice. NM

GC Semi VOA

Prep Batch: 10059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7399-1	SW-46	Total/NA	Solid	8015NM Prep	
880-7399-2	SW-38	Total/NA	Solid	8015NM Prep	
880-7399-3	SW-39	Total/NA	Solid	8015NM Prep	
880-7399-4	SW-40	Total/NA	Solid	8015NM Prep	
880-7399-5	SW-41	Total/NA	Solid	8015NM Prep	
880-7399-6	SW-42	Total/NA	Solid	8015NM Prep	
MB 880-10059/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-10059/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-10059/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-7394-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-7394-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 10159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7399-1	SW-46	Total/NA	Solid	8015B NM	10059
880-7399-2	SW-38	Total/NA	Solid	8015B NM	10059
880-7399-3	SW-39	Total/NA	Solid	8015B NM	10059
880-7399-4	SW-40	Total/NA	Solid	8015B NM	10059
880-7399-5	SW-41	Total/NA	Solid	8015B NM	10059
880-7399-6	SW-42	Total/NA	Solid	8015B NM	10059
MB 880-10059/1-A	Method Blank	Total/NA	Solid	8015B NM	10059
LCS 880-10059/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	10059
LCSD 880-10059/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	10059
880-7394-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	10059
880-7394-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	10059

Analysis Batch: 10308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7399-1	SW-46	Total/NA	Solid	8015 NM	
880-7399-2	SW-38	Total/NA	Solid	8015 NM	
880-7399-3	SW-39	Total/NA	Solid	8015 NM	
880-7399-4	SW-40	Total/NA	Solid	8015 NM	
880-7399-5	SW-41	Total/NA	Solid	8015 NM	
880-7399-6	SW-42	Total/NA	Solid	8015 NM	

Lab Chronicle

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

Job ID: 880-7399-1
SDG: Eunice. NM

Client Sample ID: SW-46

Date Collected: 10/19/21 11:00

Date Received: 10/20/21 09:26

Lab Sample ID: 880-7399-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10308	10/22/21 20:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	10059	10/21/21 08:52	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10159	10/22/21 18:01	AJ	XEN MID

Client Sample ID: SW-38

Date Collected: 10/19/21 11:05

Date Received: 10/20/21 09:26

Lab Sample ID: 880-7399-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10308	10/22/21 20:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	10059	10/21/21 08:52	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10159	10/22/21 18:21	AJ	XEN MID

Client Sample ID: SW-39

Date Collected: 10/19/21 11:10

Date Received: 10/20/21 09:26

Lab Sample ID: 880-7399-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10308	10/22/21 20:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	10059	10/21/21 08:52	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10159	10/22/21 18:44	AJ	XEN MID

Client Sample ID: SW-40

Date Collected: 10/19/21 11:15

Date Received: 10/20/21 09:26

Lab Sample ID: 880-7399-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10308	10/22/21 20:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	10059	10/21/21 08:52	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10159	10/22/21 19:04	AJ	XEN MID

Client Sample ID: SW-41

Date Collected: 10/19/21 11:20

Date Received: 10/20/21 09:26

Lab Sample ID: 880-7399-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10308	10/22/21 20:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	10059	10/21/21 08:52	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10159	10/22/21 19:45	AJ	XEN MID

Client Sample ID: SW-42

Date Collected: 10/19/21 11:25

Date Received: 10/20/21 09:26

Lab Sample ID: 880-7399-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10308	10/22/21 20:36	AJ	XEN MID

Eurofins Midland

Lab Chronicle

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

Job ID: 880-7399-1
SDG: Eunice. NM

Client Sample ID: SW-42
Date Collected: 10/19/21 11:25
Date Received: 10/20/21 09:26

Lab Sample ID: 880-7399-6
Matrix: Solid

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			10.02 g	10 mL	10059	10/21/21 08:52	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10159	10/22/21 20:05	AJ	XEN MID

Laboratory References:
XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Accreditation/Certification Summary

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

Job ID: 880-7399-1
SDG: Eunice. NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-7399-1
SDG: Eunice. NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

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

Laboratory References:
XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Sample Summary

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

Job ID: 880-7399-1
SDG: Eunice. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-7399-1	SW-46	Solid	10/19/21 11:00	10/20/21 09:26	9'
880-7399-2	SW-38	Solid	10/19/21 11:05	10/20/21 09:26	9'
880-7399-3	SW-39	Solid	10/19/21 11:10	10/20/21 09:26	9'
880-7399-4	SW-40	Solid	10/19/21 11:15	10/20/21 09:26	9'
880-7399-5	SW-41	Solid	10/19/21 11:20	10/20/21 09:26	9'
880-7399-6	SW-42	Solid	10/19/21 11:25	10/20/21 09:26	6'



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



880-7399 Chain of Custody

www.xenco.com Page 1 of 1

Project Manager	Russell Seberry	Bill to (if different)	
Company Name	TIC	Company Name	
Address	10 DISTR DR #130E	Address	
City State Zip	MIDLAND TX 79705	City State Zip	
Phone	432-250-4465	Email	RSeberry@TICcorp.com

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:	
Reporting 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	

Project Name	HAZARDOUS EMERG PRV	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush 48 Hrs	Pres. Code	
Project Number	454378	Due Date			
Project Location	ELMIST PR	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	R Seberry				
P.O. #					
SAMPLE RECEIPT	Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Parameters		
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Thermometer ID	728		
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Correction Factor	0.4		
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Temperature Reading	0.4		
Total Containers:		Corrected Temperature:	0.5		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont														
SW-37 EQ	S	10/20/21	1100	9'	Comp	1														
SW-38 EQ			1105	9'		1														
SW-35 EQ			1114	9'		1														
SW-40 EQ			1115	9'		1														
SW-41 EQ			1120	9'		1														
SW-42 EQ			1125	6'		1														

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	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												

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

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-7399-1

SDG Number: Eunice. NM

Login Number: 7399**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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-7487-1

Laboratory Sample Delivery Group: Eunice, NM
Client Project/Site: HEP:Eunice EMSU Remediation
Revision: 2

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
2/4/2022 11:52:37 AM

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

LINKS

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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:Eunice EMSU Remediation

Laboratory Job ID: 880-7487-1
SDG: Eunice,NM

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Definitions/Glossary

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

Job ID: 880-7487-1
SDG: Eunice,NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
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.

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

Case Narrative

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

Job ID: 880-7487-1
SDG: Eunice,NM

Job ID: 880-7487-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-7487-1

REVISION

The report being provided is a revision of the original report sent on 11/2/2021. The report (revision 2) is being revised due to Per client email, corrected sample date to 10/22/21 for sample 3,4, and 5.

Report revision history

The report being provided is a revision of the original report sent on 11/2/2021. The report (revision 2) is being revised due to Per client email, corrected sample date to 10/22/21 for sample 3,4, and 5.

Revision 1 - 1/10/2022 - Reason - Per client email, removed sample depths from sample name.

Receipt

The samples were received on 10/22/2021 3:45 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 1.0°C

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-1450-A-1-D). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-10846 and analytical batch 880-10885 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-10272 and analytical batch 880-10330 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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:Eunice EMSU Remediation

Job ID: 880-7487-1
SDG: Eunice,NM

Client Sample ID: CS-87

Lab Sample ID: 880-7487-1

Date Collected: 10/21/21 16:15

Matrix: Solid

Date Received: 10/22/21 15:45

Sample Depth: 6.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	6820		250	mg/Kg			10/27/21 12:13	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	1530		250	mg/Kg		10/22/21 16:46	10/24/21 03:07	5
Diesel Range Organics (Over C10-C28)	4790		250	mg/Kg		10/22/21 16:46	10/24/21 03:07	5
Oil Range Organics (Over C28-C36)	496		250	mg/Kg		10/22/21 16:46	10/24/21 03:07	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130			10/22/21 16:46	10/24/21 03:07	5
o-Terphenyl	107		70 - 130			10/22/21 16:46	10/24/21 03:07	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	542		5.05	mg/Kg			10/24/21 00:38	1

Client Sample ID: CS-87

Lab Sample ID: 880-7487-2

Date Collected: 10/21/21 16:20

Matrix: Solid

Date Received: 10/22/21 15:45

Sample Depth: 7.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1680		49.8	mg/Kg			10/27/21 13:36	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	349		49.8	mg/Kg		10/27/21 13:40	10/28/21 03:50	1
Diesel Range Organics (Over C10-C28)	1220		49.8	mg/Kg		10/27/21 13:40	10/28/21 03:50	1
Oil Range Organics (Over C28-C36)	109		49.8	mg/Kg		10/27/21 13:40	10/28/21 03:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			10/27/21 13:40	10/28/21 03:50	1
o-Terphenyl	105		70 - 130			10/27/21 13:40	10/28/21 03:50	1

Client Sample ID: CS-87

Lab Sample ID: 880-7487-3

Date Collected: 10/22/21 10:00

Matrix: Solid

Date Received: 10/22/21 15:45

Sample Depth: 8

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4980		249	mg/Kg			10/29/21 13:47	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-7487-1
SDG: Eunice,NM

Client Sample ID: CS-87

Lab Sample ID: 880-7487-3

Date Collected: 10/22/21 10:00

Matrix: Solid

Date Received: 10/22/21 15:45

Sample Depth: 8

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1330		249	mg/Kg		10/28/21 14:47	10/29/21 12:53	5
Diesel Range Organics (Over C10-C28)	3650		249	mg/Kg		10/28/21 14:47	10/29/21 12:53	5
Oil Range Organics (Over C28-C36)	<249	U	249	mg/Kg		10/28/21 14:47	10/29/21 12:53	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	151	S1+	70 - 130			10/28/21 14:47	10/29/21 12:53	5
o-Terphenyl	96		70 - 130			10/28/21 14:47	10/29/21 12:53	5

Client Sample ID: CS-87

Lab Sample ID: 880-7487-4

Date Collected: 10/22/21 10:05

Matrix: Solid

Date Received: 10/22/21 15:45

Sample Depth: 9

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2080		249	mg/Kg			11/01/21 12:32	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	658		249	mg/Kg		10/29/21 16:10	10/30/21 19:38	5
Diesel Range Organics (Over C10-C28)	1420		249	mg/Kg		10/29/21 16:10	10/30/21 19:38	5
Oil Range Organics (Over C28-C36)	<249	U	249	mg/Kg		10/29/21 16:10	10/30/21 19:38	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			10/29/21 16:10	10/30/21 19:38	5
o-Terphenyl	111		70 - 130			10/29/21 16:10	10/30/21 19:38	5

Client Sample ID: CS-87

Lab Sample ID: 880-7487-5

Date Collected: 10/22/21 10:10

Matrix: Solid

Date Received: 10/22/21 15:45

Sample Depth: 10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	442		49.9	mg/Kg			11/01/21 19:25	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	49.9	*1	49.9	mg/Kg		11/01/21 14:28	11/02/21 03:04	1
Diesel Range Organics (Over C10-C28)	392		49.9	mg/Kg		11/01/21 14:28	11/02/21 03:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/01/21 14:28	11/02/21 03:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			11/01/21 14:28	11/02/21 03:04	1
o-Terphenyl	109		70 - 130			11/01/21 14:28	11/02/21 03:04	1

Eurofins Midland

Surrogate Summary

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

Job ID: 880-7487-1
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	OTPH1
		(70-130)	(70-130)
880-7487-1	CS-87	121	107
880-7487-2	CS-87	104	105
880-7487-3	CS-87	151 S1+	96
880-7487-4	CS-87	105	111
880-7487-5	CS-87	96	109
880-7562-A-17-I MS	Matrix Spike	87	88
880-7562-A-17-J MSD	Matrix Spike Duplicate	87	89
880-7623-A-1-H MS	Matrix Spike	95	91
880-7623-A-1-I MSD	Matrix Spike Duplicate	92	92
890-1445-A-42-D MSD	Matrix Spike Duplicate	94	98
890-1445-A-42-E MS	Matrix Spike	89	92
890-1450-A-1-E MS	Matrix Spike	111	113
890-1450-A-1-F MSD	Matrix Spike Duplicate	127	129
890-1488-A-21-C MS	Matrix Spike	101	98
890-1488-A-21-D MSD	Matrix Spike Duplicate	86	83
LCS 880-10277/2-A	Lab Control Sample	101	100
LCS 880-10752/2-A	Lab Control Sample	87	94
LCS 880-10846/2-A	Lab Control Sample	104	105
LCS 880-10989/2-A	Lab Control Sample	89	97
LCS 880-11155/2-A	Lab Control Sample	81	92
LCSD 880-10277/3-A	Lab Control Sample Dup	105	106
LCSD 880-10752/3-A	Lab Control Sample Dup	87	92
LCSD 880-10846/3-A	Lab Control Sample Dup	98	103
LCSD 880-10989/3-A	Lab Control Sample Dup	95	105
LCSD 880-11155/3-A	Lab Control Sample Dup	76	86
MB 880-10277/1-A	Method Blank	111	126
MB 880-10752/1-A	Method Blank	124	143 S1+
MB 880-10846/1-A	Method Blank	96	111
MB 880-10989/1-A	Method Blank	102	115
MB 880-11155/1-A	Method Blank	92	105

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-7487-1
SDG: Eunice,NM

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

Lab Sample ID: MB 880-10277/1-A

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10277

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		10/22/21 16:46	10/23/21 21:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/22/21 16:46	10/23/21 21:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/22/21 16:46	10/23/21 21:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			10/22/21 16:46	10/23/21 21:07	1
o-Terphenyl	126		70 - 130			10/22/21 16:46	10/23/21 21:07	1

Lab Sample ID: LCS 880-10277/2-A

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	924.8		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	921.0		mg/Kg		92	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	101		70 - 130				
o-Terphenyl	100		70 - 130				

Lab Sample ID: LCSD 880-10277/3-A

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 10277

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	862.2		mg/Kg		86	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	873.0		mg/Kg		87	70 - 130	5	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	105		70 - 130						
o-Terphenyl	106		70 - 130						

Lab Sample ID: 890-1445-A-42-D MSD

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 10277

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	<49.9	U F1	997	<49.9	U F1	mg/Kg		0	70 - 130	NC	20
Diesel Range Organics (Over C10-C28)	79.2	F1	997	84.08	F1	mg/Kg		0.5	70 - 130	5	20

Eurofins Midland

QC Sample Results

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

Job ID: 880-7487-1
SDG: Eunice,NM

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

Lab Sample ID: 890-1445-A-42-D MSD

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 10277

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-1445-A-42-E MS

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 10277

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 F1	1000	<50.0	U F1	mg/Kg		0	70 - 130
Diesel Range Organics (Over C10-C28)	79.2	F1	1000	79.66	F1	mg/Kg		0.04	70 - 130
Surrogate	MS	MS							
	%Recovery	Qualifier	Limits						
1-Chlorooctane	89		70 - 130						
o-Terphenyl	92		70 - 130						

Lab Sample ID: MB 880-10752/1-A

Matrix: Solid

Analysis Batch: 10661

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10752

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		10/27/21 13:40	10/27/21 19:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/27/21 13:40	10/27/21 19:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/27/21 13:40	10/27/21 19:28	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
1-Chlorooctane	124		70 - 130			10/27/21 13:40	10/27/21 19:28	1
o-Terphenyl	143	S1+	70 - 130			10/27/21 13:40	10/27/21 19:28	1

Lab Sample ID: LCS 880-10752/2-A

Matrix: Solid

Analysis Batch: 10661

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10752

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	927.4		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	1000	920.2		mg/Kg		92	70 - 130
Surrogate	LCS	LCS	Limits				
	%Recovery	Qualifier					
1-Chlorooctane	87		70 - 130				
o-Terphenyl	94		70 - 130				

Eurofins Midland

QC Sample Results

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

Job ID: 880-7487-1
SDG: Eunice,NM

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

Lab Sample ID: LCSD 880-10752/3-A

Matrix: Solid

Analysis Batch: 10661

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 10752

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1115		mg/Kg		111	70 - 130	18	20
Diesel Range Organics (Over C10-C28)	1000	770.0		mg/Kg		77	70 - 130	18	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	87		70 - 130						
o-Terphenyl	92		70 - 130						

Lab Sample ID: 890-1450-A-1-E MS

Matrix: Solid

Analysis Batch: 10661

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 10752

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1192		mg/Kg		120	70 - 130		
Diesel Range Organics (Over C10-C28)	65.1		997	1095		mg/Kg		103	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	111		70 - 130								
o-Terphenyl	113		70 - 130								

Lab Sample ID: 890-1450-A-1-F MSD

Matrix: Solid

Analysis Batch: 10661

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 10752

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	<49.9	U	1000	1221		mg/Kg		122	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	65.1		1000	1233		mg/Kg		117	70 - 130	12	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	127		70 - 130								
o-Terphenyl	129		70 - 130								

Lab Sample ID: MB 880-10846/1-A

Matrix: Solid

Analysis Batch: 10885

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10846

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		10/28/21 14:47	10/29/21 10:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/28/21 14:47	10/29/21 10:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/28/21 14:47	10/29/21 10:52	1

Eurofins Midland

QC Sample Results

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

Job ID: 880-7487-1
SDG: Eunice,NM

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

Lab Sample ID: MB 880-10846/1-A

Matrix: Solid

Analysis Batch: 10885

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10846

	MB	MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
1-Chlorooctane	96		70 - 130	10/28/21 14:47	10/29/21 10:52	1				
o-Terphenyl	111		70 - 130	10/28/21 14:47	10/29/21 10:52	1				

Lab Sample ID: LCS 880-10846/2-A

Matrix: Solid

Analysis Batch: 10885

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10846

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1093		mg/Kg		109	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	922.2		mg/Kg		92	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: LCSD 880-10846/3-A

Matrix: Solid

Analysis Batch: 10885

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 10846

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	998.3		mg/Kg		100	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	915.7		mg/Kg		92	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: 890-1488-A-21-C MS

Matrix: Solid

Analysis Batch: 10885

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 10846

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 F2	997	1253		mg/Kg		121	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	997	927.0		mg/Kg		91	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	98		70 - 130

Eurofins Midland

QC Sample Results

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

Job ID: 880-7487-1
SDG: Eunice,NM

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

Lab Sample ID: 890-1488-A-21-D MSD

Matrix: Solid

Analysis Batch: 10885

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 10846

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	<49.9	U F2	1000	1006	F2	mg/Kg		96	70 - 130	22	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	779.6		mg/Kg		76	70 - 130	17	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	86		70 - 130								
o-Terphenyl	83		70 - 130								

Lab Sample ID: MB 880-10989/1-A

Matrix: Solid

Analysis Batch: 10996

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10989

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		10/29/21 16:10	10/30/21 10:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/29/21 16:10	10/30/21 10:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/29/21 16:10	10/30/21 10:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			10/29/21 16:10	10/30/21 10:43	1
o-Terphenyl	115		70 - 130			10/29/21 16:10	10/30/21 10:43	1

Lab Sample ID: LCS 880-10989/2-A

Matrix: Solid

Analysis Batch: 10996

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10989

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	791.7		mg/Kg		79	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	947.9		mg/Kg		95	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	89		70 - 130						
o-Terphenyl	97		70 - 130						

Lab Sample ID: LCSD 880-10989/3-A

Matrix: Solid

Analysis Batch: 10996

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 10989

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	829.2		mg/Kg		83	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	914.5		mg/Kg		91	70 - 130	4	20

Eurofins Midland

QC Sample Results

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

Job ID: 880-7487-1
SDG: Eunice,NM

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

Lab Sample ID: LCSD 880-10989/3-A

Matrix: Solid

Analysis Batch: 10996

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 10989

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: 880-7623-A-1-H MS

Matrix: Solid

Analysis Batch: 10996

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 10989

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	997	893.1		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	857.8		mg/Kg		86	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	95		70 - 130						
o-Terphenyl	91		70 - 130						

Lab Sample ID: 880-7623-A-1-I MSD

Matrix: Solid

Analysis Batch: 10996

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 10989

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	<49.9	U	1000	899.9		mg/Kg		88	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	883.4		mg/Kg		88	70 - 130	3	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	92		70 - 130								
o-Terphenyl	92		70 - 130								

Lab Sample ID: MB 880-11155/1-A

Matrix: Solid

Analysis Batch: 11030

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11155

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		11/01/21 14:28	11/01/21 21:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/01/21 14:28	11/01/21 21:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/21 14:28	11/01/21 21:24	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			11/01/21 14:28	11/01/21 21:24	1
o-Terphenyl	105		70 - 130			11/01/21 14:28	11/01/21 21:24	1

Eurofins Midland

QC Sample Results

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

Job ID: 880-7487-1
SDG: Eunice,NM

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

Lab Sample ID: LCS 880-11155/2-A

Matrix: Solid

Analysis Batch: 11030

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11155

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec.		
			Added	Result	Qualifier			Limits			
Gasoline Range Organics (GRO)-C6-C10			1000	786.0		mg/Kg		79	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	812.9		mg/Kg		81	70 - 130		
Surrogate	LCS	LCS	Limits								
	%Recovery	Qualifier									
1-Chlorooctane	81		70 - 130								
o-Terphenyl	92		70 - 130								

Lab Sample ID: LCSD 880-11155/3-A

Matrix: Solid

Analysis Batch: 11030

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11155

Top Bottom 1999											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1123	*1	mg/Kg		112	70 - 130	35	20
Diesel Range Organics (Over C10-C28)			1000	856.1		mg/Kg		86	70 - 130	5	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
1-Chlorooctane	76		70 - 130								
o-Terphenyl	86		70 - 130								

Lab Sample ID: 880-7562-A-17-I MS

Matrix: Solid

Analysis Batch: 11030

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 11155

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.		
	Result	Qualifier	Added	Result	Qualifier				Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	997	980.3		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	997	784.9		mg/Kg		77	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	87		70 - 130								
o-Terphenyl	88		70 - 130								

Lab Sample ID: 880-7562-A-17-J MSD

Matrix: Solid

Analysis Batch: 11030

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 11155

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	1000	983.7		mg/Kg		96	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	808.4		mg/Kg		79	70 - 130	3	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	87		70 - 130								

Eurofins Midland

QC Sample Results

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

Job ID: 880-7487-1
SDG: Eunice,NM

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

Lab Sample ID: 880-7562-A-17-J MSD

Matrix: Solid

Analysis Batch: 11030

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 11155

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	89		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-10272/1-A

Matrix: Solid

Analysis Batch: 10330

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Chloride	<5.00	U	5.00	mg/Kg			10/23/21 21:32	1

Lab Sample ID: LCS 880-10272/2-A

Matrix: Solid

Analysis Batch: 10330

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
Chloride	250	250.2		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-10272/3-A

Matrix: Solid

Analysis Batch: 10330

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD
	Added	Result	Qualifier				Limits	Limit
Chloride	250	251.5		mg/Kg		101	90 - 110	0 20

Lab Sample ID: 880-7448-A-11-C MS

Matrix: Solid

Analysis Batch: 10330

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Chloride	11400	F1	5010	16360		mg/Kg		98	90 - 110

Lab Sample ID: 880-7448-A-11-D MSD

Matrix: Solid

Analysis Batch: 10330

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	Limit
Chloride	11400	F1	5010	15710	F1	mg/Kg		85	90 - 110	4 20

QC Association Summary

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

Job ID: 880-7487-1
SDG: Eunice,NM

GC Semi VOA

Prep Batch: 10277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7487-1	CS-87	Total/NA	Solid	8015NM Prep	
MB 880-10277/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-10277/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-10277/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1445-A-42-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	
890-1445-A-42-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	

Analysis Batch: 10309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7487-1	CS-87	Total/NA	Solid	8015B NM	10277
MB 880-10277/1-A	Method Blank	Total/NA	Solid	8015B NM	10277
LCS 880-10277/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	10277
LCSD 880-10277/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	10277
890-1445-A-42-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	10277
890-1445-A-42-E MS	Matrix Spike	Total/NA	Solid	8015B NM	10277

Analysis Batch: 10661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7487-2	CS-87	Total/NA	Solid	8015B NM	10752
MB 880-10752/1-A	Method Blank	Total/NA	Solid	8015B NM	10752
LCS 880-10752/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	10752
LCSD 880-10752/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	10752
890-1450-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	10752
890-1450-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	10752

Analysis Batch: 10676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7487-1	CS-87	Total/NA	Solid	8015 NM	
880-7487-2	CS-87	Total/NA	Solid	8015 NM	
880-7487-3	CS-87	Total/NA	Solid	8015 NM	

Prep Batch: 10752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7487-2	CS-87	Total/NA	Solid	8015NM Prep	
MB 880-10752/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-10752/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-10752/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1450-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1450-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 10846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7487-3	CS-87	Total/NA	Solid	8015NM Prep	
MB 880-10846/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-10846/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-10846/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1488-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1488-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

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

Job ID: 880-7487-1
SDG: Eunice,NM

GC Semi VOA

Analysis Batch: 10885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7487-3	CS-87	Total/NA	Solid	8015B NM	10846
MB 880-10846/1-A	Method Blank	Total/NA	Solid	8015B NM	10846
LCS 880-10846/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	10846
LCSD 880-10846/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	10846
890-1488-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	10846
890-1488-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	10846

Prep Batch: 10989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7487-4	CS-87	Total/NA	Solid	8015NM Prep	
MB 880-10989/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-10989/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-10989/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-7623-A-1-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-7623-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 10996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7487-4	CS-87	Total/NA	Solid	8015B NM	10989
MB 880-10989/1-A	Method Blank	Total/NA	Solid	8015B NM	10989
LCS 880-10989/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	10989
LCSD 880-10989/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	10989
880-7623-A-1-H MS	Matrix Spike	Total/NA	Solid	8015B NM	10989
880-7623-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	10989

Analysis Batch: 11030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7487-5	CS-87	Total/NA	Solid	8015B NM	11155
MB 880-11155/1-A	Method Blank	Total/NA	Solid	8015B NM	11155
LCS 880-11155/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11155
LCSD 880-11155/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11155
880-7562-A-17-I MS	Matrix Spike	Total/NA	Solid	8015B NM	11155
880-7562-A-17-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	11155

Analysis Batch: 11118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7487-4	CS-87	Total/NA	Solid	8015 NM	
880-7487-5	CS-87	Total/NA	Solid	8015 NM	

Prep Batch: 11155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7487-5	CS-87	Total/NA	Solid	8015NM Prep	
MB 880-11155/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11155/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11155/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-7562-A-17-I MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-7562-A-17-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

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

Job ID: 880-7487-1
SDG: Eunice,NM

HPLC/IC

Leach Batch: 10272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7487-1	CS-87	Soluble	Solid	DI Leach	
MB 880-10272/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-10272/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-10272/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-7448-A-11-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7448-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 10330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7487-1	CS-87	Soluble	Solid	300.0	10272
MB 880-10272/1-A	Method Blank	Soluble	Solid	300.0	10272
LCS 880-10272/2-A	Lab Control Sample	Soluble	Solid	300.0	10272
LCSD 880-10272/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	10272
880-7448-A-11-C MS	Matrix Spike	Soluble	Solid	300.0	10272
880-7448-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	10272

Lab Chronicle

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

Job ID: 880-7487-1
SDG: Eunice,NM

Client Sample ID: CS-87

Lab Sample ID: 880-7487-1

Date Collected: 10/21/21 16:15

Matrix: Solid

Date Received: 10/22/21 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10676	10/27/21 12:13	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	10277	10/22/21 16:46	AJ	XEN MID
Total/NA	Analysis	8015B NM		5			10309	10/24/21 03:07	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	10272	10/22/21 16:34	SC	XEN MID
Soluble	Analysis	300.0		1			10330	10/24/21 00:38	CH	XEN MID

Client Sample ID: CS-87

Lab Sample ID: 880-7487-2

Date Collected: 10/21/21 16:20

Matrix: Solid

Date Received: 10/22/21 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10676	10/27/21 13:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	10752	10/27/21 13:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			10661	10/28/21 03:50	AJ	XEN MID

Client Sample ID: CS-87

Lab Sample ID: 880-7487-3

Date Collected: 10/22/21 10:00

Matrix: Solid

Date Received: 10/22/21 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10676	10/29/21 13:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	10846	10/28/21 14:47	DM	XEN MID
Total/NA	Analysis	8015B NM		5			10885	10/29/21 12:53	AJ	XEN MID

Client Sample ID: CS-87

Lab Sample ID: 880-7487-4

Date Collected: 10/22/21 10:05

Matrix: Solid

Date Received: 10/22/21 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11118	11/01/21 12:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	10989	10/29/21 16:10	DM	XEN MID
Total/NA	Analysis	8015B NM		5			10996	10/30/21 19:38	AJ	XEN MID

Client Sample ID: CS-87

Lab Sample ID: 880-7487-5

Date Collected: 10/22/21 10:10

Matrix: Solid

Date Received: 10/22/21 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11118	11/01/21 19:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11155	11/01/21 14:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11030	11/02/21 03:04	AJ	XEN MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

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

Job ID: 880-7487-1
SDG: Eunice,NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-7487-1
SDG: Eunice,NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	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 Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Midland

Sample Summary

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

Job ID: 880-7487-1
SDG: Eunice,NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-7487-1	CS-87	Solid	10/21/21 16:15	10/22/21 15:45	6.5
880-7487-2	CS-87	Solid	10/21/21 16:20	10/22/21 15:45	7.5
880-7487-3	CS-87	Solid	10/22/21 10:00	10/22/21 15:45	8
880-7487-4	CS-87	Solid	10/22/21 10:05	10/22/21 15:45	9
880-7487-5	CS-87	Solid	10/22/21 10:10	10/22/21 15:45	10

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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 880-7487 Chain of Custody



www.xenco.com Page 1 of 1

Project Manager	RUSSELL SEBRING	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 Desta Drive, #130E	Address	
City, State ZIP	Midland TX, 79705	City, State ZIP	
Phone	432 250 4465	Email	rsebring@trccompanies.com

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:	
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 Eunice EMSU Remediation	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush 24	Pres. Code		ANALYSIS REQUEST										Preservative Codes			
Project Number	454378	Due Date														None NO	DI Water- H ₂ O		
Project Location	Eunice NM	TAT starts the day received by the lab if received by 4:30pm														Cool Cool	MeOH Me		
Sampler's Name	Russell Sebring/Mist Bryant															HCL HC	HNO ₃ HN		
PO #																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	Correction Factor														Na ₂ S ₂ O ₃ NaSO ₃			
Sample Custody Seals:	Yes No	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 TPH	Chloride	Hold											Sample Comments
CS-87@6.5	S	10 21 21	1615	6.5 Comp	1	X	X												If GRO+DRO > 1500 Run Deeper
CS-87@7.5	S	10 21 21	1620	7.5 Comp	1			X											
CS-87@8	S	10 22 21	1000	8 Comp	1			X											
CS-87@9	S	10 22 21	1005	9 Comp	1			X											
CS-87@10	S	10 22 21	1010	10 Comp	1			X											
CS-87@11	S	10 22 21	1015	11 Comp	1			X											

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 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
		10-22-21			
		1592			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-7487-1

SDG Number: Eunice,NM

Login Number: 7487**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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-7488-1

Laboratory Sample Delivery Group: Eunice, NM
Client Project/Site: HEP:Eunice EMSU Remediation

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
10/27/2021 12:28:38 PM

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

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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:Eunice EMSU Remediation

Laboratory Job ID: 880-7488-1
SDG: Eunice, NM

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Definitions/Glossary

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

Job ID: 880-7488-1
SDG: Eunice, NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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.

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

Case Narrative

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

Job ID: 880-7488-1
SDG: Eunice, NM

Job ID: 880-7488-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-7488-1

Receipt

The samples were received on 10/22/2021 3:48 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 1.0°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

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-10272 and analytical batch 880-10330 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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:Eunice EMSU Remediation

Job ID: 880-7488-1
SDG: Eunice, NM

Client Sample ID: CS-102 @6

Lab Sample ID: 880-7488-1

Date Collected: 10/21/21 16:25

Matrix: Solid

Date Received: 10/22/21 15:48

Sample Depth: 6

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	612		49.9	mg/Kg			10/27/21 12:13	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	<49.9	U	49.9	mg/Kg		10/22/21 16:46	10/24/21 03:27	1
Diesel Range Organics (Over C10-C28)	537		49.9	mg/Kg		10/22/21 16:46	10/24/21 03:27	1
Oil Range Organics (Over C28-C36)	75.2		49.9	mg/Kg		10/22/21 16:46	10/24/21 03:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			10/22/21 16:46	10/24/21 03:27	1
o-Terphenyl	106		70 - 130			10/22/21 16:46	10/24/21 03:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1060		5.04	mg/Kg			10/24/21 00:45	1

Client Sample ID: CS-103 @6

Lab Sample ID: 880-7488-3

Date Collected: 10/21/21 16:35

Matrix: Solid

Date Received: 10/22/21 15:48

Sample Depth: 6

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1070		50.0	mg/Kg			10/27/21 12:13	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	<50.0	U	50.0	mg/Kg		10/22/21 16:46	10/24/21 03:47	1
Diesel Range Organics (Over C10-C28)	946		50.0	mg/Kg		10/22/21 16:46	10/24/21 03:47	1
Oil Range Organics (Over C28-C36)	125		50.0	mg/Kg		10/22/21 16:46	10/24/21 03:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			10/22/21 16:46	10/24/21 03:47	1
o-Terphenyl	110		70 - 130			10/22/21 16:46	10/24/21 03:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	792		5.03	mg/Kg			10/24/21 00:52	1

Eurofins Xenco, Midland

Client Sample Results

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

Job ID: 880-7488-1
SDG: Eunice, NM

Client Sample ID: CS-104@4.5

Lab Sample ID: 880-7488-5

Date Collected: 10/21/21 16:25

Matrix: Solid

Date Received: 10/22/21 15:48

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	74.0		49.8	mg/Kg			10/27/21 12:13	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	<49.8	U	49.8	mg/Kg		10/22/21 16:46	10/24/21 04:07	1
Diesel Range Organics (Over C10-C28)	74.0		49.8	mg/Kg		10/22/21 16:46	10/24/21 04:07	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/22/21 16:46	10/24/21 04:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			10/22/21 16:46	10/24/21 04:07	1
o-Terphenyl	110		70 - 130			10/22/21 16:46	10/24/21 04:07	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.6		4.97	mg/Kg			10/24/21 01:00	1

Client Sample ID: CS-105 @4.5

Lab Sample ID: 880-7488-6

Date Collected: 10/21/21 16:25

Matrix: Solid

Date Received: 10/22/21 15:48

Sample Depth: 4.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/27/21 12:13	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	<49.9	U	49.9	mg/Kg		10/22/21 16:46	10/24/21 04:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/22/21 16:46	10/24/21 04:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/22/21 16:46	10/24/21 04:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			10/22/21 16:46	10/24/21 04:27	1
o-Terphenyl	108		70 - 130			10/22/21 16:46	10/24/21 04:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.0		4.99	mg/Kg			10/24/21 01:07	1

Eurofins Xenco, Midland

Surrogate Summary

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

Job ID: 880-7488-1
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	OTPH1
		(70-130)	(70-130)
880-7488-1	CS-102 @6	101	106
880-7488-3	CS-103 @6	106	110
880-7488-5	CS-104@4.5	104	110
880-7488-6	CS-105 @4.5	103	108
890-1445-A-42-D MSD	Matrix Spike Duplicate	94	98
890-1445-A-42-E MS	Matrix Spike	89	92
LCS 880-10277/2-A	Lab Control Sample	101	100
LCSD 880-10277/3-A	Lab Control Sample Dup	105	106
MB 880-10277/1-A	Method Blank	111	126

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-7488-1
SDG: Eunice, NM

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

Lab Sample ID: MB 880-10277/1-A

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10277

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		10/22/21 16:46	10/23/21 21:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/22/21 16:46	10/23/21 21:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/22/21 16:46	10/23/21 21:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			10/22/21 16:46	10/23/21 21:07	1
o-Terphenyl	126		70 - 130			10/22/21 16:46	10/23/21 21:07	1

Lab Sample ID: LCS 880-10277/2-A

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	924.8		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	921.0		mg/Kg		92	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	101		70 - 130				
o-Terphenyl	100		70 - 130				

Lab Sample ID: LCSD 880-10277/3-A

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 10277

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	862.2		mg/Kg		86	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	873.0		mg/Kg		87	70 - 130	5	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	105		70 - 130						
o-Terphenyl	106		70 - 130						

Lab Sample ID: 890-1445-A-42-D MSD

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 10277

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	<49.9	U F1	997	<49.9	U F1	mg/Kg		0	70 - 130	NC	20
Diesel Range Organics (Over C10-C28)	79.2	F1	997	84.08	F1	mg/Kg		0.5	70 - 130	5	20

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-7488-1
SDG: Eunice, NM

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

Lab Sample ID: 890-1445-A-42-D MSD

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 10277

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-1445-A-42-E MS

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 10277

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 F1	1000	<50.0	U F1	mg/Kg		0	70 - 130
Diesel Range Organics (Over C10-C28)	79.2	F1	1000	79.66	F1	mg/Kg		0.04	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	92		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-10272/1-A

Matrix: Solid

Analysis Batch: 10330

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			10/23/21 21:32	1

Lab Sample ID: LCS 880-10272/2-A

Matrix: Solid

Analysis Batch: 10330

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	250.2		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-10272/3-A

Matrix: Solid

Analysis Batch: 10330

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	251.5		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-7448-A-11-C MS

Matrix: Solid

Analysis Batch: 10330

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	11400	F1	5010	16360		mg/Kg		98	90 - 110

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-7488-1
SDG: Eunice, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-7448-A-11-D MSD

Matrix: Solid

Analysis Batch: 10330

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	11400	F1	5010	15710	F1	mg/Kg		85	90 - 110	4	20

QC Association Summary

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

Job ID: 880-7488-1
SDG: Eunice, NM

GC Semi VOA

Prep Batch: 10277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7488-1	CS-102 @6	Total/NA	Solid	8015NM Prep	
880-7488-3	CS-103 @6	Total/NA	Solid	8015NM Prep	
880-7488-5	CS-104@4.5	Total/NA	Solid	8015NM Prep	
880-7488-6	CS-105 @4.5	Total/NA	Solid	8015NM Prep	
MB 880-10277/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-10277/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-10277/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1445-A-42-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	
890-1445-A-42-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	

Analysis Batch: 10309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7488-1	CS-102 @6	Total/NA	Solid	8015B NM	10277
880-7488-3	CS-103 @6	Total/NA	Solid	8015B NM	10277
880-7488-5	CS-104@4.5	Total/NA	Solid	8015B NM	10277
880-7488-6	CS-105 @4.5	Total/NA	Solid	8015B NM	10277
MB 880-10277/1-A	Method Blank	Total/NA	Solid	8015B NM	10277
LCS 880-10277/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	10277
LCSD 880-10277/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	10277
890-1445-A-42-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	10277
890-1445-A-42-E MS	Matrix Spike	Total/NA	Solid	8015B NM	10277

Analysis Batch: 10676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7488-1	CS-102 @6	Total/NA	Solid	8015 NM	
880-7488-3	CS-103 @6	Total/NA	Solid	8015 NM	
880-7488-5	CS-104@4.5	Total/NA	Solid	8015 NM	
880-7488-6	CS-105 @4.5	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 10272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7488-1	CS-102 @6	Soluble	Solid	DI Leach	
880-7488-3	CS-103 @6	Soluble	Solid	DI Leach	
880-7488-5	CS-104@4.5	Soluble	Solid	DI Leach	
880-7488-6	CS-105 @4.5	Soluble	Solid	DI Leach	
MB 880-10272/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-10272/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-10272/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-7448-A-11-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7448-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 10330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7488-1	CS-102 @6	Soluble	Solid	300.0	10272
880-7488-3	CS-103 @6	Soluble	Solid	300.0	10272
880-7488-5	CS-104@4.5	Soluble	Solid	300.0	10272
880-7488-6	CS-105 @4.5	Soluble	Solid	300.0	10272
MB 880-10272/1-A	Method Blank	Soluble	Solid	300.0	10272
LCS 880-10272/2-A	Lab Control Sample	Soluble	Solid	300.0	10272

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QC Association Summary

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

Job ID: 880-7488-1
SDG: Eunice, NM

HPLC/IC (Continued)

Analysis Batch: 10330 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-10272/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	10272
880-7448-A-11-C MS	Matrix Spike	Soluble	Solid	300.0	10272
880-7448-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	10272

Lab Chronicle

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

Job ID: 880-7488-1
SDG: Eunice, NM

Client Sample ID: CS-102 @6

Lab Sample ID: 880-7488-1

Date Collected: 10/21/21 16:25

Matrix: Solid

Date Received: 10/22/21 15:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10676	10/27/21 12:13	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	10277	10/22/21 16:46	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10309	10/24/21 03:27	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	10272	10/22/21 16:34	SC	XEN MID
Soluble	Analysis	300.0		1			10330	10/24/21 00:45	CH	XEN MID

Client Sample ID: CS-103 @6

Lab Sample ID: 880-7488-3

Date Collected: 10/21/21 16:35

Matrix: Solid

Date Received: 10/22/21 15:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10676	10/27/21 12:13	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	10277	10/22/21 16:46	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10309	10/24/21 03:47	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	10272	10/22/21 16:34	SC	XEN MID
Soluble	Analysis	300.0		1			10330	10/24/21 00:52	CH	XEN MID

Client Sample ID: CS-104@4.5

Lab Sample ID: 880-7488-5

Date Collected: 10/21/21 16:25

Matrix: Solid

Date Received: 10/22/21 15:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10676	10/27/21 12:13	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	10277	10/22/21 16:46	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10309	10/24/21 04:07	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	10272	10/22/21 16:34	SC	XEN MID
Soluble	Analysis	300.0		1			10330	10/24/21 01:00	CH	XEN MID

Client Sample ID: CS-105 @4.5

Lab Sample ID: 880-7488-6

Date Collected: 10/21/21 16:25

Matrix: Solid

Date Received: 10/22/21 15:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10676	10/27/21 12:13	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	10277	10/22/21 16:46	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10309	10/24/21 04:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	10272	10/22/21 16:34	SC	XEN MID
Soluble	Analysis	300.0		1			10330	10/24/21 01:07	CH	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:Eunice EMSU Remediation

Job ID: 880-7488-1
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	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

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

Job ID: 880-7488-1
SDG: Eunice, NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	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:Eunice EMSU Remediation

Job ID: 880-7488-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-7488-1	CS-102 @6	Solid	10/21/21 16:25	10/22/21 15:48	6
880-7488-3	CS-103 @6	Solid	10/21/21 16:35	10/22/21 15:48	6
880-7488-5	CS-104@4.5	Solid	10/21/21 16:25	10/22/21 15:48	4.5
880-7488-6	CS-105 @4.5	Solid	10/21/21 16:25	10/22/21 15:48	4.5



Environment Testings
Xenco

Houston TX (281) 240-4200, Dallas TX (214) 902-0380
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



World
800-7400 Child of Custody

www.xenco.com Page 1 of 1




Project Manager	RUSSELL SEBRING	Bill to, (if different)	
Company Name	TRC	Company Name	
Address	10 Desta Drive, #130E	Address	
City, State ZIP	Midland TX, 79705	City, State ZIP	
Phone	432 250 4465	Email	rsebring@trccompanies.com

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:	
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"/>	

[illegible][illegible]

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		TCLP / SPLP	6010	8RCRA	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U				Hg	1631 / 245	1 / 7470	7 / 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 \$45.00 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
1 		10/22/21	2		
3 		1542	4		
5			6		

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-7488-1

SDG Number: Eunice, NM

Login Number: 7488**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
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-7489-1

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

For:

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

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/10/2022 9:04:35 AM

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

LINKS

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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:Eunice EMSU Remediation

Laboratory Job ID: 880-7489-1
SDG: Eunice, NM

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Definitions/Glossary

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

Job ID: 880-7489-1
SDG: Eunice, NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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:Eunice EMSU Remediation

Job ID: 880-7489-1
SDG: Eunice, NM

Job ID: 880-7489-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-7489-1

REVISION

The report being provided is a revision of the original report sent on 11/2/2021. The report (revision 1) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

Receipt

The samples were received on 10/22/2021 3:50 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 1.0°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:Eunice EMSU Remediation

Job ID: 880-7489-1
SDG: Eunice, NM

Client Sample ID: SW-35A

Date Collected: 10/21/21 11:45

Date Received: 10/22/21 15:50

Sample Depth: 2.25

Lab Sample ID: 880-7489-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/27/21 12:19	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	<49.9	U	49.9	mg/Kg		10/22/21 16:46	10/24/21 04:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/22/21 16:46	10/24/21 04:47	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/22/21 16:46	10/24/21 04:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	10/22/21 16:46	10/24/21 04:47	1
o-Terphenyl	109		70 - 130	10/22/21 16:46	10/24/21 04:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1650		25.2	mg/Kg			10/24/21 04:56	5

Client Sample ID: SW-35B

Date Collected: 10/21/21 11:50

Date Received: 10/22/21 15:50

Sample Depth: 2.25

Lab Sample ID: 880-7489-2

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	365		5.00	mg/Kg			10/30/21 14:38	1

Client Sample ID: SW-36A

Date Collected: 10/21/21 11:30

Date Received: 10/22/21 15:50

Sample Depth: 2.25

Lab Sample ID: 880-7489-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/27/21 12:19	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	<49.9	U	49.9	mg/Kg		10/22/21 16:46	10/24/21 05:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/22/21 16:46	10/24/21 05:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/22/21 16:46	10/24/21 05:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	10/22/21 16:46	10/24/21 05:07	1
o-Terphenyl	107		70 - 130	10/22/21 16:46	10/24/21 05:07	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1180		25.2	mg/Kg			10/24/21 05:03	5

Eurofins Xenco

Client Sample Results

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

Job ID: 880-7489-1
SDG: Eunice, NM

Client Sample ID: SW-36B

Lab Sample ID: 880-7489-5

Date Collected: 10/21/21 11:35

Matrix: Solid

Date Received: 10/22/21 15:50

Sample Depth: 2.25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	787		5.00	mg/Kg			10/30/21 14:46	1

Client Sample ID: SW-36C

Lab Sample ID: 880-7489-6

Date Collected: 10/21/21 11:40

Matrix: Solid

Date Received: 10/22/21 15:50

Sample Depth: 2.25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		5.00	mg/Kg			11/01/21 19:59	1

Client Sample ID: SW-32A

Lab Sample ID: 880-7489-7

Date Collected: 10/21/21 11:00

Matrix: Solid

Date Received: 10/22/21 15:50

Sample Depth: 2.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/27/21 12:19	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	<49.8	U	49.8	mg/Kg		10/22/21 16:46	10/24/21 05:27	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/22/21 16:46	10/24/21 05:27	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/22/21 16:46	10/24/21 05:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			10/22/21 16:46	10/24/21 05:27	1
o-Terphenyl	110		70 - 130			10/22/21 16:46	10/24/21 05:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3170		24.9	mg/Kg			10/24/21 05:10	5

Client Sample ID: SW-32B

Lab Sample ID: 880-7489-8

Date Collected: 10/21/21 11:05

Matrix: Solid

Date Received: 10/22/21 15:50

Sample Depth: 2.25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2270		24.8	mg/Kg			10/30/21 15:07	5

Eurofins Xenco

Client Sample Results

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

Job ID: 880-7489-1
SDG: Eunice, NM

Client Sample ID: SW-32C

Date Collected: 10/21/21 11:10

Date Received: 10/22/21 15:50

Sample Depth: 2.25

Lab Sample ID: 880-7489-9

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	275		5.00	mg/Kg			11/01/21 20:17	1

Client Sample ID: SW-34A

Date Collected: 10/21/21 11:15

Date Received: 10/22/21 15:50

Sample Depth: 2.25

Lab Sample ID: 880-7489-10

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/28/21 17:05	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	<50.0	U	50.0	mg/Kg		10/22/21 16:46	10/27/21 18:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/22/21 16:46	10/27/21 18:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/22/21 16:46	10/27/21 18:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			10/22/21 16:46	10/27/21 18:27	1
o-Terphenyl	117		70 - 130			10/22/21 16:46	10/27/21 18:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1070		4.99	mg/Kg			10/24/21 05:17	1

Client Sample ID: SW-34B

Date Collected: 10/21/21 11:20

Date Received: 10/22/21 15:50

Sample Depth: 2.25

Lab Sample ID: 880-7489-11

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1070		5.04	mg/Kg			10/30/21 15:14	1

Client Sample ID: SW-34C

Date Collected: 10/21/21 11:25

Date Received: 10/22/21 15:50

Sample Depth: 2.25

Lab Sample ID: 880-7489-12

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36.8		4.98	mg/Kg			11/01/21 20:23	1

Eurofins Xenco

Surrogate Summary

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

Job ID: 880-7489-1
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	OTPH1
		(70-130)	(70-130)
880-7489-1	SW-35A	102	109
880-7489-4	SW-36A	103	107
880-7489-7	SW-32A	103	110
880-7489-10	SW-34A	103	117
890-1445-A-42-D MSD	Matrix Spike Duplicate	94	98
890-1445-A-42-E MS	Matrix Spike	89	92
LCS 880-10277/2-A	Lab Control Sample	101	100
LCSD 880-10277/3-A	Lab Control Sample Dup	105	106
MB 880-10277/1-A	Method Blank	111	126

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 880-7489-1
SDG: Eunice, NM

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

Lab Sample ID: MB 880-10277/1-A

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10277

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		10/22/21 16:46	10/23/21 21:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/22/21 16:46	10/23/21 21:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/22/21 16:46	10/23/21 21:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			10/22/21 16:46	10/23/21 21:07	1
o-Terphenyl	126		70 - 130			10/22/21 16:46	10/23/21 21:07	1

Lab Sample ID: LCS 880-10277/2-A

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	924.8		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	921.0		mg/Kg		92	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	101		70 - 130				
o-Terphenyl	100		70 - 130				

Lab Sample ID: LCSD 880-10277/3-A

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 10277

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	862.2		mg/Kg		86	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	873.0		mg/Kg		87	70 - 130	5	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	105		70 - 130						
o-Terphenyl	106		70 - 130						

Lab Sample ID: 890-1445-A-42-D MSD

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 10277

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	<49.9	U F1	997	<49.9	U F1	mg/Kg		0	70 - 130	NC	20
Diesel Range Organics (Over C10-C28)	79.2	F1	997	84.08	F1	mg/Kg		0.5	70 - 130	5	20

Eurofins Xenco

QC Sample Results

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

Job ID: 880-7489-1
SDG: Eunice, NM

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

Lab Sample ID: 890-1445-A-42-D MSD

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 10277

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-1445-A-42-E MS

Matrix: Solid

Analysis Batch: 10309

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 10277

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 F1	1000	<50.0	U F1	mg/Kg		0	70 - 130
Diesel Range Organics (Over C10-C28)	79.2	F1	1000	79.66	F1	mg/Kg		0.04	70 - 130
Surrogate	MS	MS							
	%Recovery	Qualifier	Limits						
1-Chlorooctane	89		70 - 130						
o-Terphenyl	92		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-10275/1-A

Matrix: Solid

Analysis Batch: 10331

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			10/24/21 01:43	1

Lab Sample ID: LCS 880-10275/2-A

Matrix: Solid

Analysis Batch: 10331

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	252.6		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-10275/3-A

Matrix: Solid

Analysis Batch: 10331

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	256.0		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 880-7474-A-11-B MS

Matrix: Solid

Analysis Batch: 10331

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	44.0		251	298.2		mg/Kg		101	90 - 110

Eurofins Xenco

QC Sample Results

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

Job ID: 880-7489-1
SDG: Eunice, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-7474-A-11-C MSD

Matrix: Solid

Analysis Batch: 10331

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	44.0		251	297.0		mg/Kg		101	90 - 110	0	20

Lab Sample ID: MB 880-10750/1-A

Matrix: Solid

Analysis Batch: 10952

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			10/30/21 13:34	1

Lab Sample ID: LCS 880-10750/2-A

Matrix: Solid

Analysis Batch: 10952

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	241.7		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-10750/3-A

Matrix: Solid

Analysis Batch: 10952

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	241.8		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-7517-A-1-E MS

Matrix: Solid

Analysis Batch: 10952

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	21.7		248	254.8		mg/Kg		94	90 - 110

Lab Sample ID: 880-7517-A-1-F MSD

Matrix: Solid

Analysis Batch: 10952

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	21.7		248	254.9		mg/Kg		94	90 - 110	0	20

Lab Sample ID: MB 880-10751/1-A

Matrix: Solid

Analysis Batch: 11105

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			11/01/21 17:56	1

Lab Sample ID: LCS 880-10751/2-A

Matrix: Solid

Analysis Batch: 11105

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	244.7		mg/Kg		98	90 - 110

Eurofins Xenco

QC Sample Results

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

Job ID: 880-7489-1
SDG: Eunice, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-10751/3-A

Matrix: Solid

Analysis Batch: 11105

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	245.5		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 880-7624-A-6-D MS

Matrix: Solid

Analysis Batch: 11105

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	<4.99	U	250	259.9		mg/Kg		103	90 - 110		

Lab Sample ID: 880-7624-A-6-E MSD

Matrix: Solid

Analysis Batch: 11105

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<4.99	U	250	259.8		mg/Kg		103	90 - 110	0	20

QC Association Summary

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

Job ID: 880-7489-1
SDG: Eunice, NM

GC Semi VOA

Prep Batch: 10277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7489-1	SW-35A	Total/NA	Solid	8015NM Prep	
880-7489-4	SW-36A	Total/NA	Solid	8015NM Prep	
880-7489-7	SW-32A	Total/NA	Solid	8015NM Prep	
880-7489-10	SW-34A	Total/NA	Solid	8015NM Prep	
MB 880-10277/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-10277/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-10277/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1445-A-42-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	
890-1445-A-42-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	

Analysis Batch: 10309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7489-1	SW-35A	Total/NA	Solid	8015B NM	10277
880-7489-4	SW-36A	Total/NA	Solid	8015B NM	10277
880-7489-7	SW-32A	Total/NA	Solid	8015B NM	10277
MB 880-10277/1-A	Method Blank	Total/NA	Solid	8015B NM	10277
LCS 880-10277/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	10277
LCSD 880-10277/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	10277
890-1445-A-42-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	10277
890-1445-A-42-E MS	Matrix Spike	Total/NA	Solid	8015B NM	10277

Analysis Batch: 10661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7489-10	SW-34A	Total/NA	Solid	8015B NM	10277

Analysis Batch: 10676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7489-1	SW-35A	Total/NA	Solid	8015 NM	
880-7489-4	SW-36A	Total/NA	Solid	8015 NM	
880-7489-7	SW-32A	Total/NA	Solid	8015 NM	

Analysis Batch: 10877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7489-10	SW-34A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 10275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7489-1	SW-35A	Soluble	Solid	DI Leach	
880-7489-4	SW-36A	Soluble	Solid	DI Leach	
880-7489-7	SW-32A	Soluble	Solid	DI Leach	
880-7489-10	SW-34A	Soluble	Solid	DI Leach	
MB 880-10275/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-10275/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-10275/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-7474-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7474-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Eurofins Xenco

QC Association Summary

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

Job ID: 880-7489-1
SDG: Eunice, NM

HPLC/IC

Analysis Batch: 10331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7489-1	SW-35A	Soluble	Solid	300.0	10275
880-7489-4	SW-36A	Soluble	Solid	300.0	10275
880-7489-7	SW-32A	Soluble	Solid	300.0	10275
880-7489-10	SW-34A	Soluble	Solid	300.0	10275
MB 880-10275/1-A	Method Blank	Soluble	Solid	300.0	10275
LCS 880-10275/2-A	Lab Control Sample	Soluble	Solid	300.0	10275
LCSD 880-10275/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	10275
880-7474-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	10275
880-7474-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	10275

Leach Batch: 10750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7489-2	SW-35B	Soluble	Solid	DI Leach	
880-7489-5	SW-36B	Soluble	Solid	DI Leach	
880-7489-8	SW-32B	Soluble	Solid	DI Leach	
880-7489-11	SW-34B	Soluble	Solid	DI Leach	
MB 880-10750/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-10750/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-10750/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-7517-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7517-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 10751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7489-6	SW-36C	Soluble	Solid	DI Leach	
880-7489-9	SW-32C	Soluble	Solid	DI Leach	
880-7489-12	SW-34C	Soluble	Solid	DI Leach	
MB 880-10751/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-10751/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-10751/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-7624-A-6-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7624-A-6-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 10952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7489-2	SW-35B	Soluble	Solid	300.0	10750
880-7489-5	SW-36B	Soluble	Solid	300.0	10750
880-7489-8	SW-32B	Soluble	Solid	300.0	10750
880-7489-11	SW-34B	Soluble	Solid	300.0	10750
MB 880-10750/1-A	Method Blank	Soluble	Solid	300.0	10750
LCS 880-10750/2-A	Lab Control Sample	Soluble	Solid	300.0	10750
LCSD 880-10750/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	10750
880-7517-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	10750
880-7517-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	10750

Analysis Batch: 11105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7489-6	SW-36C	Soluble	Solid	300.0	10751
880-7489-9	SW-32C	Soluble	Solid	300.0	10751
880-7489-12	SW-34C	Soluble	Solid	300.0	10751
MB 880-10751/1-A	Method Blank	Soluble	Solid	300.0	10751

Eurofins Xenco

QC Association Summary

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

Job ID: 880-7489-1
SDG: Eunice, NM

HPLC/IC (Continued)

Analysis Batch: 11105 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-10751/2-A	Lab Control Sample	Soluble	Solid	300.0	10751
LCSD 880-10751/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	10751
880-7624-A-6-D MS	Matrix Spike	Soluble	Solid	300.0	10751
880-7624-A-6-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	10751

Lab Chronicle

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

Job ID: 880-7489-1
SDG: Eunice, NM

Client Sample ID: SW-35A

Date Collected: 10/21/21 11:45

Date Received: 10/22/21 15:50

Lab Sample ID: 880-7489-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10676	10/27/21 12:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	10277	10/22/21 16:46	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10309	10/24/21 04:47	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	10275	10/22/21 16:40	SC	XEN MID
Soluble	Analysis	300.0		5			10331	10/24/21 04:56	CH	XEN MID

Client Sample ID: SW-35B

Date Collected: 10/21/21 11:50

Date Received: 10/22/21 15:50

Lab Sample ID: 880-7489-2

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 g	50 mL	10750	10/29/21 14:36	SC	XEN MID
Soluble	Analysis	300.0		1			10952	10/30/21 14:38	CH	XEN MID

Client Sample ID: SW-36A

Date Collected: 10/21/21 11:30

Date Received: 10/22/21 15:50

Lab Sample ID: 880-7489-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10676	10/27/21 12:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	10277	10/22/21 16:46	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10309	10/24/21 05:07	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	10275	10/22/21 16:40	SC	XEN MID
Soluble	Analysis	300.0		5			10331	10/24/21 05:03	CH	XEN MID

Client Sample ID: SW-36B

Date Collected: 10/21/21 11:35

Date Received: 10/22/21 15:50

Lab Sample ID: 880-7489-5

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			5 g	50 mL	10750	10/29/21 14:36	SC	XEN MID
Soluble	Analysis	300.0		1			10952	10/30/21 14:46	CH	XEN MID

Client Sample ID: SW-36C

Date Collected: 10/21/21 11:40

Date Received: 10/22/21 15:50

Lab Sample ID: 880-7489-6

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 g	50 mL	10751	11/01/21 13:34	SC	XEN MID
Soluble	Analysis	300.0		1			11105	11/01/21 19:59	CH	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-7489-1
SDG: Eunice, NM

Client Sample ID: SW-32A

Date Collected: 10/21/21 11:00

Date Received: 10/22/21 15:50

Lab Sample ID: 880-7489-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10676	10/27/21 12:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	10277	10/22/21 16:46	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10309	10/24/21 05:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	10275	10/22/21 16:40	SC	XEN MID
Soluble	Analysis	300.0		5			10331	10/24/21 05:10	CH	XEN MID

Client Sample ID: SW-32B

Date Collected: 10/21/21 11:05

Date Received: 10/22/21 15:50

Lab Sample ID: 880-7489-8

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	10750	10/29/21 14:36	SC	XEN MID
Soluble	Analysis	300.0		5			10952	10/30/21 15:07	CH	XEN MID

Client Sample ID: SW-32C

Date Collected: 10/21/21 11:10

Date Received: 10/22/21 15:50

Lab Sample ID: 880-7489-9

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 g	50 mL	10751	11/01/21 13:34	SC	XEN MID
Soluble	Analysis	300.0		1			11105	11/01/21 20:17	CH	XEN MID

Client Sample ID: SW-34A

Date Collected: 10/21/21 11:15

Date Received: 10/22/21 15:50

Lab Sample ID: 880-7489-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			10877	10/28/21 17:05	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	10277	10/22/21 16:46	AJ	XEN MID
Total/NA	Analysis	8015B NM		1			10661	10/27/21 18:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	10275	10/22/21 16:40	SC	XEN MID
Soluble	Analysis	300.0		1			10331	10/24/21 05:17	CH	XEN MID

Client Sample ID: SW-34B

Date Collected: 10/21/21 11:20

Date Received: 10/22/21 15:50

Lab Sample ID: 880-7489-11

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			4.96 g	50 mL	10750	10/29/21 14:36	SC	XEN MID
Soluble	Analysis	300.0		1			10952	10/30/21 15:14	CH	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 880-7489-1
SDG: Eunice, NM

Client Sample ID: SW-34C Lab Sample ID: 880-7489-12
Date Collected: 10/21/21 11:25 Matrix: Solid
Date Received: 10/22/21 15:50

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	10751	11/01/21 13:34	SC	XEN MID
Soluble	Analysis	300.0		1			11105	11/01/21 20:23	CH	XEN MID

Laboratory References:
XEN MID = Eurofins Xenco, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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

Accreditation/Certification Summary

Client: TRC Solutions, Inc.
Project/Site: HEP:Eunice EMSU Remediation

Job ID: 880-7489-1
SDG: Eunice, NM

Laboratory: Eurofins Xenco

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: TRC Solutions, Inc.
Project/Site: HEP:Eunice EMSU Remediation

Job ID: 880-7489-1
SDG: Eunice, NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	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, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: TRC Solutions, Inc.
Project/Site: HEP:Eunice EMSU Remediation

Job ID: 880-7489-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-7489-1	SW-35A	Solid	10/21/21 11:45	10/22/21 15:50	2.25
880-7489-2	SW-35B	Solid	10/21/21 11:50	10/22/21 15:50	2.25
880-7489-4	SW-36A	Solid	10/21/21 11:30	10/22/21 15:50	2.25
880-7489-5	SW-36B	Solid	10/21/21 11:35	10/22/21 15:50	2.25
880-7489-6	SW-36C	Solid	10/21/21 11:40	10/22/21 15:50	2.25
880-7489-7	SW-32A	Solid	10/21/21 11:00	10/22/21 15:50	2.25
880-7489-8	SW-32B	Solid	10/21/21 11:05	10/22/21 15:50	2.25
880-7489-9	SW-32C	Solid	10/21/21 11:10	10/22/21 15:50	2.25
880-7489-10	SW-34A	Solid	10/21/21 11:15	10/22/21 15:50	2.25
880-7489-11	SW-34B	Solid	10/21/21 11:20	10/22/21 15:50	2.25
880-7489-12	SW-34C	Solid	10/21/21 11:25	10/22/21 15:50	2.25



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

Worl 880-7489 Chain of Custody



www.xenco.com Page 1 of 2

Project Manager	RUSSELL SEBRING	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 Desta Drive #130E	Address	
City, State ZIP	Midland TX 79705	City, State ZIP	
Phone	432 250 4465	Email	rsebring@trccompanies.com

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	
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 Eunice EMSU Remediation	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush	Pres. Code		
Project Number	454378	Due Date				
Project Location	Eunice NM	TAT starts the day received by the lab if received by 4:30pm				
Sampler's Name	Russell Sebring/Misti Bryant					
PO #						
SAMPLE RECEIPT	Temp Blank	Yes	No	Wet Ice	Yes	No
Samples Received Intact:	Yes	No	Thermometer ID	128		
Cooler Custody Seals	Yes	No	Correction Factor	0.9		
Sample Custody Seals	Yes	No	Temperature Reading	0.9		
Total Containers		Corrected Temperature	1.0			

Sample Identification							Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH	Chloride	Hold																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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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 / 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
		10-20-21			
		1542			



**Environment Testing
Xero**

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:

7489

www.xenco.com Page 1 of 1

Project Manager	RUSSELL SEEBRING	Bill to (if different)	
Company Name	TRC	Company Name	
Address	10 Destia Drive, #130E	Address	
City, State ZIP	Midland TX, 79705	City, State ZIP	
Phone	432 250 4465	Email	rseebri@trccompanies.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project:

Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables EDD ☐ ADAPT ☐ Other: _____



Project Name	HEP Eunice EMSU Remediation		Turn Around	
Project Number-	454378		<input type="checkbox"/> Routine	<input checked="" type="checkbox"/> Rush <i>48</i>
Project Location	Eunice NM		Due Date	
Sampler's Name	Russell Sebring/Misti Bryant		TAT starts the day received by the lab if received by 4:30pm	
PO #:				
SAMPLE RECEIPT			Temp Blank.	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	

ANALYSIS REQUEST										Preservative Codes			
Pres. Code													
										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	

[illegible]

Total 200.7 / 6010	200.8 / 6020:	
8RCRA	13PPM	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		
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 is the relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 Xeno. A minimum charge of \$35.00 will be applied to each project and a charge of \$3 for each sample submitted to Eurofins Xeno, 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
		2			
		4			
		6			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-7489-1

SDG Number: Eunice, NM

Login Number: 7489**List Number: 1****Creator: Teel, Brianna****List Source: Eurofins Xenco**

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
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-7547-1

Laboratory Sample Delivery Group: Eunice, NM
Client Project/Site: HEP: Eunice EMSU Draw
Revision: 2

For:

TRC Solutions, Inc.
2057 Commerce Drive
Midland, Texas 79703

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/10/2022 9:07:14 AM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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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: Eunice EMSU Draw

Laboratory Job ID: 880-7547-1
SDG: Eunice, NM

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Definitions/Glossary

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Draw

Job ID: 880-7547-1
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: Eunice EMSU Draw

Job ID: 880-7547-1
SDG: Eunice, NM

Job ID: 880-7547-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-7547-1

REVISION

The report being provided is a revision of the original report sent on 10/28/2021. The report (revision 2) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

The report being provided is a revision of the original report sent on 10/28/2021. The report (revision 2) is being revised due to Per client email, removed sample depths from sample name.

Revision 1 - 11/3/2021 - Reason - Changed collection date to 10/22/2021.

Receipt

The sample was received on 10/25/2021 4:40 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.7°C

GC Semi VOA

Method 8015MOD_NM: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 860-28361.

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: Eunice EMSU Draw

Job ID: 880-7547-1
SDG: Eunice, NM

Client Sample ID: CS-96

Lab Sample ID: 880-7547-1

Date Collected: 10/22/21 12:05

Matrix: Solid

Date Received: 10/25/21 16:40

Sample Depth: 5'

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/28/21 10:30	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	<50.0	U	50.0	mg/Kg		10/27/21 14:00	10/27/21 18:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/27/21 14:00	10/27/21 18:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/27/21 14:00	10/27/21 18:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		65 - 130	10/27/21 14:00	10/27/21 18:37	1
o-Terphenyl	108		65 - 130	10/27/21 14:00	10/27/21 18:37	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0	mg/Kg		10/28/21 11:34	10/28/21 13:27	1

Surrogate Summary

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Draw

Job ID: 880-7547-1
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	OTPH1
		(65-130)	(65-130)
880-7547-1	CS-96	94	108
LCS 860-28361/2-A	Lab Control Sample	117	100
LCSD 860-28361/3-A	Lab Control Sample Dup	123	106
MB 860-28361/1-A	Method Blank	96	108

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Draw

Job ID: 880-7547-1
SDG: Eunice, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 860-28361/1-A

Matrix: Solid

Analysis Batch: 28260

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28361

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		10/27/21 14:00	10/27/21 17:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/27/21 14:00	10/27/21 17:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/27/21 14:00	10/27/21 17:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		65 - 130			10/27/21 14:00	10/27/21 17:43	1
o-Terphenyl	108		65 - 130			10/27/21 14:00	10/27/21 17:43	1

Lab Sample ID: LCS 860-28361/2-A

Matrix: Solid

Analysis Batch: 28260

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28361

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	868.0		mg/Kg		87	70 - 135
Diesel Range Organics (Over C10-C28)	997	1066		mg/Kg		107	70 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	117		65 - 130				
o-Terphenyl	100		65 - 130				

Lab Sample ID: LCSD 860-28361/3-A

Matrix: Solid

Analysis Batch: 28260

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 28361

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	945.1		mg/Kg		94	70 - 135	8	35
Diesel Range Organics (Over C10-C28)	997	1127		mg/Kg		113	70 - 135	6	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	123		65 - 130						
o-Terphenyl	106		65 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-28471/1-A

Matrix: Solid

Analysis Batch: 28485

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28471

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0	mg/Kg		10/28/21 11:34	10/28/21 08:58	1

Eurofins Xenco

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Draw

Job ID: 880-7547-1
SDG: Eunice, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-28471/2-A

Matrix: Solid

Analysis Batch: 28485

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	96.50		mg/Kg		96	80 - 120

Lab Sample ID: LCSD 860-28471/3-A

Matrix: Solid

Analysis Batch: 28485

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 28471

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	96.80		mg/Kg		97	80 - 120	0	20

Lab Sample ID: 880-7547-1 MS

Matrix: Solid

Analysis Batch: 28485

Client Sample ID: CS-96

Prep Type: Total/NA

Prep Batch: 28471

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<10.0	U	99.8	124.1		mg/Kg		116	80 - 120

Lab Sample ID: 880-7547-1 MSD

Matrix: Solid

Analysis Batch: 28485

Client Sample ID: CS-96

Prep Type: Total/NA

Prep Batch: 28471

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<10.0	U	99.8	127.2		mg/Kg		119	80 - 120	2	20

QC Association Summary

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Draw

Job ID: 880-7547-1
SDG: Eunice, NM

GC Semi VOA

Analysis Batch: 26106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7547-1	CS-96	Total/NA	Solid	8015 NM	

Analysis Batch: 28260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7547-1	CS-96	Total/NA	Solid	8015B NM	28361
MB 860-28361/1-A	Method Blank	Total/NA	Solid	8015B NM	28361
LCS 860-28361/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	28361
LCSD 860-28361/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	28361

Prep Batch: 28361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7547-1	CS-96	Total/NA	Solid	8015NM Prep	
MB 860-28361/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 860-28361/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 860-28361/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Prep Batch: 28471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7547-1	CS-96	Total/NA	Solid	300_Prep	
MB 860-28471/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-28471/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-28471/3-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
880-7547-1 MS	CS-96	Total/NA	Solid	300_Prep	
880-7547-1 MSD	CS-96	Total/NA	Solid	300_Prep	

Analysis Batch: 28485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7547-1	CS-96	Total/NA	Solid	300.0	28471
MB 860-28471/1-A	Method Blank	Total/NA	Solid	300.0	28471
LCS 860-28471/2-A	Lab Control Sample	Total/NA	Solid	300.0	28471
LCSD 860-28471/3-A	Lab Control Sample Dup	Total/NA	Solid	300.0	28471
880-7547-1 MS	CS-96	Total/NA	Solid	300.0	28471
880-7547-1 MSD	CS-96	Total/NA	Solid	300.0	28471

Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Draw

Job ID: 880-7547-1
SDG: Eunice, NM

Client Sample ID: CS-96**Lab Sample ID: 880-7547-1****Date Collected: 10/22/21 12:05****Matrix: Solid****Date Received: 10/25/21 16:40**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			26106	10/28/21 10:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			10 g	10 mL	28361	10/27/21 14:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			28260	10/27/21 18:37	T1S	XEN STF
Total/NA	Prep	300_Prep			5.00 g	50 mL	28471	10/28/21 11:34	DTN	XEN STF
Total/NA	Analysis	300.0		1			28485	10/28/21 13:27	DTN	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Draw

Job ID: 880-7547-1
SDG: Eunice, NM

Laboratory: Eurofins Xenco

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

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
8015 NM		Solid	Total TPH
8015B NM	8015NM Prep	Solid	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Prep	Solid	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Prep	Solid	Oil Range Organics (Over C28-C36)

Method Summary

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Draw

Job ID: 880-7547-1
SDG: Eunice, NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN STF
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN STF
300.0	Anions, Ion Chromatography	MCAWW	XEN STF
300_Prep	Anions, Ion Chromatography, 10% Wt/Vol	MCAWW	XEN STF
8015NM Prep	Microextraction	SW846	XEN STF

Protocol References:

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 STF = Eurofins Xenco, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Draw

Job ID: 880-7547-1
SDG: Eunice, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-7547-1	CS-96	Solid	10/22/21 12:05	10/25/21 16:40	5'

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-7547-1

SDG Number: Eunice, NM

Login Number: 7547**List Number: 1****Creator: Teel, Brianna****List Source: Eurofins Xenco**

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	

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-7547-1

SDG Number: Eunice, NM

Login Number: 7547**List Number: 2****Creator: Palmar, Pedro****List Source: Eurofins Xenco****List Creation: 10/27/21 02:38 PM**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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?	N/A	
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.	True	
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").	True	



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-8013-1

Laboratory Sample Delivery Group: Eunice NM
Client Project/Site: HEP: Eunice EMSU Remediation
Revision: 1

For:

TRC Solutions, Inc.
2057 Commerce Drive
Midland, Texas 79703

Attn: Russell Sebring

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
1/10/2022 9:09:39 AM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

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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: Eunice EMSU Remediation

Laboratory Job ID: 880-8013-1
SDG: Eunice NM

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Definitions/Glossary

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Remediation

Job ID: 880-8013-1
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
F1	MS and/or MSD recovery exceeds control limits.
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: Eunice EMSU Remediation

Job ID: 880-8013-1
SDG: Eunice NM

Job ID: 880-8013-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative 880-8013-1

REVISION

The report being provided is a revision of the original report sent on 11/9/2021. The report (revision 1) is being revised due to Per client email, removed sample depths from sample name.

Report revision history

Receipt

The samples were received on 11/5/2021 2:52 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 3.7°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

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-11446 and analytical batch 880-11458 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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: Eunice EMSU Remediation

Job ID: 880-8013-1
SDG: Eunice NM

Client Sample ID: SW-43

Lab Sample ID: 880-8013-1

Date Collected: 11/04/21 14:00

Matrix: Solid

Date Received: 11/05/21 14:52

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/08/21 15:54	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	<49.9	U	49.9	mg/Kg		11/05/21 15:11	11/06/21 20:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/05/21 15:11	11/06/21 20:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/05/21 15:11	11/06/21 20:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			11/05/21 15:11	11/06/21 20:19	1
o-Terphenyl	109		70 - 130			11/05/21 15:11	11/06/21 20:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	360		4.98	mg/Kg			11/07/21 18:32	1

Client Sample ID: SW-44

Lab Sample ID: 880-8013-2

Date Collected: 11/04/21 14:05

Matrix: Solid

Date Received: 11/05/21 14:52

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	50.2		49.9	mg/Kg			11/08/21 16:33	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	<49.9	U	49.9	mg/Kg		11/05/21 15:11	11/06/21 20:40	1
Diesel Range Organics (Over C10-C28)	50.2		49.9	mg/Kg		11/05/21 15:11	11/06/21 20:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/05/21 15:11	11/06/21 20:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			11/05/21 15:11	11/06/21 20:40	1
o-Terphenyl	119		70 - 130			11/05/21 15:11	11/06/21 20:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	390		4.96	mg/Kg			11/07/21 18:43	1

Client Sample ID: SW-45

Lab Sample ID: 880-8013-3

Date Collected: 11/04/21 14:10

Matrix: Solid

Date Received: 11/05/21 14:52

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			11/08/21 16:33	1

Eurofins Xenco

Client Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Remediation

Job ID: 880-8013-1
SDG: Eunice NM

Client Sample ID: SW-45

Date Collected: 11/04/21 14:10

Date Received: 11/05/21 14:52

Lab Sample ID: 880-8013-3

Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		11/05/21 15:11	11/06/21 21:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		11/05/21 15:11	11/06/21 21:01	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/05/21 15:11	11/06/21 21:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	11/05/21 15:11	11/06/21 21:01	1
o-Terphenyl	91		70 - 130	11/05/21 15:11	11/06/21 21:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	163		4.95	mg/Kg			11/07/21 18:53	1

Surrogate Summary

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Remediation

Job ID: 880-8013-1
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	OTPH1
		(70-130)	(70-130)
880-8013-1	SW-43	102	109
880-8013-2	SW-44	101	119
880-8013-3	SW-45	87	91
890-1530-A-1-F MS	Matrix Spike	110	99
890-1530-A-1-G MSD	Matrix Spike Duplicate	101	91
LCS 880-11611/2-A	Lab Control Sample	98	91
LCSD 880-11611/3-A	Lab Control Sample Dup	111	98
MB 880-11611/1-A	Method Blank	107	121

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Remediation

Job ID: 880-8013-1
SDG: Eunice NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-11611/1-A

Matrix: Solid

Analysis Batch: 11626

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11611

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		11/05/21 15:11	11/06/21 12:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/05/21 15:11	11/06/21 12:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/05/21 15:11	11/06/21 12:08	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			11/05/21 15:11	11/06/21 12:08	1
o-Terphenyl	121		70 - 130			11/05/21 15:11	11/06/21 12:08	1

Lab Sample ID: LCS 880-11611/2-A

Matrix: Solid

Analysis Batch: 11626

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11611

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	908.8		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	890.7		mg/Kg		89	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	98		70 - 130				
o-Terphenyl	91		70 - 130				

Lab Sample ID: LCSD 880-11611/3-A

Matrix: Solid

Analysis Batch: 11626

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11611

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	768.0		mg/Kg		77	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	1000	966.3		mg/Kg		97	70 - 130	8	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	111		70 - 130						
o-Terphenyl	98		70 - 130						

Lab Sample ID: 890-1530-A-1-F MS

Matrix: Solid

Analysis Batch: 11626

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 11611

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	997	1153		mg/Kg		116	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1066		mg/Kg		105	70 - 130

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QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Remediation

Job ID: 880-8013-1
SDG: Eunice NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-1530-A-1-F MS

Matrix: Solid

Analysis Batch: 11626

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 11611

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 890-1530-A-1-G MSD

Matrix: Solid

Analysis Batch: 11626

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 11611

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	<49.9	U	1000	1224		mg/Kg		122	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	958.9		mg/Kg		94	70 - 130	11	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	91		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-11446/1-A

Matrix: Solid

Analysis Batch: 11458

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			11/07/21 14:01	1

Lab Sample ID: LCS 880-11446/2-A

Matrix: Solid

Analysis Batch: 11458

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	245.1		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-11446/3-A

Matrix: Solid

Analysis Batch: 11458

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	245.1		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 880-7991-A-2-B MS

Matrix: Solid

Analysis Batch: 11458

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	266	F1	252	470.1	F1	mg/Kg		81	90 - 110

Eurofins Xenco

QC Sample Results

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Remediation

Job ID: 880-8013-1
SDG: Eunice NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-7991-A-2-C MSD

Matrix: Solid

Analysis Batch: 11458

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	266	F1	252	472.0	F1	mg/Kg		82	90 - 110	0	20

QC Association Summary

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Remediation

Job ID: 880-8013-1
SDG: Eunice NM

GC Semi VOA

Analysis Batch: 11598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8013-1	SW-43	Total/NA	Solid	8015 NM	
880-8013-2	SW-44	Total/NA	Solid	8015 NM	
880-8013-3	SW-45	Total/NA	Solid	8015 NM	

Prep Batch: 11611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8013-1	SW-43	Total/NA	Solid	8015NM Prep	
880-8013-2	SW-44	Total/NA	Solid	8015NM Prep	
880-8013-3	SW-45	Total/NA	Solid	8015NM Prep	
MB 880-11611/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11611/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11611/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1530-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1530-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 11626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8013-1	SW-43	Total/NA	Solid	8015B NM	11611
880-8013-2	SW-44	Total/NA	Solid	8015B NM	11611
880-8013-3	SW-45	Total/NA	Solid	8015B NM	11611
MB 880-11611/1-A	Method Blank	Total/NA	Solid	8015B NM	11611
LCS 880-11611/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11611
LCSD 880-11611/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11611
890-1530-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	11611
890-1530-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	11611

HPLC/IC

Leach Batch: 11446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8013-1	SW-43	Soluble	Solid	DI Leach	
880-8013-2	SW-44	Soluble	Solid	DI Leach	
880-8013-3	SW-45	Soluble	Solid	DI Leach	
MB 880-11446/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11446/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11446/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-7991-A-2-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7991-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 11458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8013-1	SW-43	Soluble	Solid	300.0	11446
880-8013-2	SW-44	Soluble	Solid	300.0	11446
880-8013-3	SW-45	Soluble	Solid	300.0	11446
MB 880-11446/1-A	Method Blank	Soluble	Solid	300.0	11446
LCS 880-11446/2-A	Lab Control Sample	Soluble	Solid	300.0	11446
LCSD 880-11446/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11446
880-7991-A-2-B MS	Matrix Spike	Soluble	Solid	300.0	11446
880-7991-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	11446

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Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Remediation

Job ID: 880-8013-1
SDG: Eunice NM

Client Sample ID: SW-43

Lab Sample ID: 880-8013-1

Date Collected: 11/04/21 14:00

Matrix: Solid

Date Received: 11/05/21 14:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11611	11/05/21 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11626	11/06/21 20:19	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11446	11/06/21 16:00	SC	XEN MID
Soluble	Analysis	300.0		1			11458	11/07/21 18:32	CH	XEN MID

Client Sample ID: SW-44

Lab Sample ID: 880-8013-2

Date Collected: 11/04/21 14:05

Matrix: Solid

Date Received: 11/05/21 14:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/08/21 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11611	11/05/21 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11626	11/06/21 20:40	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	11446	11/06/21 16:00	SC	XEN MID
Soluble	Analysis	300.0		1			11458	11/07/21 18:43	CH	XEN MID

Client Sample ID: SW-45

Lab Sample ID: 880-8013-3

Date Collected: 11/04/21 14:10

Matrix: Solid

Date Received: 11/05/21 14:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/08/21 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11611	11/05/21 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11626	11/06/21 21:01	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11446	11/06/21 16:00	SC	XEN MID
Soluble	Analysis	300.0		1			11458	11/07/21 18:53	CH	XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco

Accreditation/Certification Summary

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Remediation

Job ID: 880-8013-1
SDG: Eunice NM

Laboratory: Eurofins Xenco

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
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
8015 NM		Solid	Total TPH

Method Summary

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Remediation

Job ID: 880-8013-1
SDG: Eunice NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	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, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco

Sample Summary

Client: TRC Solutions, Inc.
Project/Site: HEP: Eunice EMSU Remediation

Job ID: 880-8013-1
SDG: Eunice NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-8013-1	SW-43	Solid	11/04/21 14:00	11/05/21 14:52
880-8013-2	SW-44	Solid	11/04/21 14:05	11/05/21 14:52
880-8013-3	SW-45	Solid	11/04/21 14:10	11/05/21 14:52

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



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



880-8013 Chain of Custody

www.xenco.com Page _____ of _____

Project Manager	RUSSELL SEBRING	Bill to: (if different)	
Company Name	TRC	Company Name	
Address	10 Desta Drive, #130E	Address	
City, State ZIP	Midland TX, 79705	City, State ZIP	
Phone	432 250 4465	Email	rsebring@trccompanies.com

Work Order Comments	
Program: <input type="checkbox"/> US-REF <input type="checkbox"/> PRT <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
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 EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

Project Name:	HEP Eunice EMSU Remediation	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush	Pres. Code	
Project Number	454378	Due Date			
Project Location	Eunice NM	TAT starts the day received by the lab. If received by 4:30pm			
Sample's Name	Russell Sebring/Misti Bryant				
PO #:					
SAMPLE RECEIPT					
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temp Blank	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Ice	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID	128		
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor	0.1		
Total Containers:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature Reading:	3.7		
		Corrected Temperature:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH	Chloride	Hold	Sample Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
SW-43 @ 8	S	11/4/2021	1400	8 Comp	1		X	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															</

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 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
		11-5-21			
		1453			

Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 880-8013-1

SDG Number: Eunice NM

Login Number: 8013**List Number: 1****Creator: Kramer, Jessica****List Source: Eurofins Xenco**

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.	True	
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	



Appendix E: Photographic Documentation

Appendix E - Photographic Documentation**Photograph No. 1****Date:**

1/6/2021

Direction:

Aerial

Description:

Aerial view of initial release

**Photograph No. 2****Date:**

3/18/2021

Direction:

Northwest

Description:View of delineation
activities: TT-1/Area 1

Appendix E - Photographic Documentation**Photograph No. 3****Date:****3/18/2021****Direction:****Southwest****Description:****View of delineation
activities: TT-1/Area 1****Photograph No. 4****Date:****3/18/2021****Direction:****Southeast****Description:****View of delineation
activities: TT-4/Area 4**

Appendix E - Photographic Documentation**Photograph No. 5****Date:****3/18/2021****Direction:****Southwest****Description:****View of delineation
activities: TT-5/Area 5****Photograph No. 6****Date:****3/18/2021****Direction:****Southeast****Description:****View of delineation
activities: TT-6/Area 6**

Appendix E - Photographic Documentation**Photograph No. 7****Date:****3/18/2021****Direction:****Southeast.****Description:****View of delineation
activities: TT- 7/Area 7****Photograph No. 8****Date:****3/18/2021****Direction:****Southwest****Description:****View of delineation
activities: TT-11/Area 11**

Appendix E - Photographic Documentation**Photograph No. 9****Date:****9/28/2021****Direction:****Northeast****Description:****View of remediation
activities in Area 1****Photograph No. 10****Date:****9/28/2021****Direction:****Southwest****Description:****View of remediation
activities in Areas 1 and 2**

Appendix E - Photographic Documentation**Photograph No. 11****Date:****9/28/2021****Direction:****Southwest****Description:****View of additional
remediation activities in
Areas 1 and 2****Photograph No. 12****Date:****9/28/2021****Direction:****North****Description:****View of remediation
activities in Areas 3 and 6**

Appendix E - Photographic Documentation**Photograph No. 13****Date:****9/28/2021****Direction:****Southeast****Description:****View of additional
remediation activities in
Area 4****Photograph No. 14****Date:****9/28/2021****Direction:****Southeast****Description:****View of additional
remediation activities in
Area 5**

Appendix E - Photographic Documentation**Photograph No. 15****Date:****9/28/2021****Direction:****Southeast****Description:****View of additional
remediation activities in
Areas 6 and 7****Photograph No. 16****Date:****9/28/2021****Direction:****East****Description:****View of remediation
activities in Area 8**

Appendix E - Photographic Documentation**Photograph No. 17****Date:**

9/28/2021

Direction:

Northwest

Description:**View of remediation activities in Areas 10 and 11****Photograph No. 18****Date:**

9/28/2021

Direction:

Northwest

Description:**View of remediation activities in Area 9**

Appendix E - Photographic Documentation**Photograph No. 19****Date:**

9/28/2021

Direction:

North

Description:

View of remediation activities in Areas 8 to 11

**Photograph No. 20****Date:**

9/28/2021

Direction:

Southwest

Description:

Overview of remediation activities in Area 1-3.



Appendix E - Photographic Documentation**Photograph No. 21****Date:****9/28/2021****Direction:****South****Description:****Backfill activities in Area 1****Photograph No. 22****Date:****10/7/2021****Direction:****North****Description:****Backfill activities in Area 2 and 3**

Appendix E - Photographic Documentation**Photograph No. 23****Date:**

10/7/2021

Direction:

Southeast

Description:

Backfill activities in Areas 4 and 5

**Photograph No. 24****Date:**

10/7/2021

Direction:

Southwest

Description:

Backfill activities in Areas 3 to 5



Appendix E - Photographic Documentation**Photograph No. 25****Date:****10/7/2021****Direction:****Southeast****Description:****Backfill activities in Area 6****Photograph No. 26****Date:****10/7/2021****Direction:****Southeast****Description:****Backfill activities in Areas 7 and 8**

Appendix E - Photographic Documentation**Photograph No. 23****Date:****10/7/2021****Direction:****Southeast****Description:****Backfill activities in Areas 8 and 9****Photograph No. 24****Date:****10/7/2021****Direction:****Northwest****Description:****Backfill activities in Area 9 to 11**



Appendix B: Disposal Tickets and Transporter Manifests

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

1111

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie NolanDate: 4/25/2021NAME OF TRANSPORTER (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Trucking
LOL
M Mata

Name: Carlos GSignature: Carlos GDate: 5/3/21DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]Date: 5-3-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 5.3.21
Generator: Holly Energy Partners
Job #: J&L # 2419
Trucking Co: JA Transports # 4307
Site Location: Enrico EMSH
Total Yards/Day: 2000 Hrs
Landfarm Representative: David Jett SDYde

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NIMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Salo

Signature: Salo

Date: 5-03-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: _____

Date: _____

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 -- David Jett

575-390-7446 -- Michelle Kuhn

Permit# NM-01-0023

Date: 5.3.21
Generator: Holly Energy Partners
Job #: J&L # 24
Trucking Co: MATA # 151
Site Location: Ennice EN151
Total Yards/Day: 2000 1111 80yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NIMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: _____

Date: _____

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Truck # 03

Name: Juan Arroyo

Signature: Juan Arroyo

Date: 5-3-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: Carol

Date: 5-3-21

Direct Bill: Holly Energy Partners PO # 308022
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Track #3

Date: 5.3.21
Generator: Holly Energy Partners
Job #: J&L # 2419
Trucking Co: Arroyos Trucking
Site Location: Emmie EM 54
Total Yards/Day: 20ea 1111 80yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

1-load - 1 load
2-load out 2 load in
3-load out 3 load in
4-load out 4 load in
VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: _____

Date: _____

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Alvaro Ramos
Signature: Alvaro Ramos
Date: 5/3/21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: David J. J.Date: 5-3-21

Direct Bill: Holly Energy Partners PO # 308022
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 5-3-21
Generator: Holly Energy Partners
Job #: J&L # 2419
Trucking Co: MATA # 51
Site Location: Enrre EMSA
Total Yards/Day: 2000 Hll David Jett 80 yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

4 loads of contaminated soil
4 loads of top soil

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: _____

Date: _____

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Gunter MO Lopez

Signature: [Signature]

Date: 05-03-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: _____

Date: _____

Direct Bill: Holly Energy Partners PO # 308022
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 5-3-21
Generator: Holly Energy Partners
Job #: J&L # 7419
Trucking Co: MTA #42
Site Location: Enree EM514
Total Yards/Day: 2000 yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Harold A. Mata

Signature: Harold

Date: 5-4-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: David J. J

Date: 5-4-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 5-4-21
Generator: Holly Energy Partners
Job #: J&L # 2419
Trucking Co: Marta # 151
Site Location: Enrvice EMSU
Total Yards/Day: 20ea 111 60 yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Juan Arroyo

Signature: Juan Arroyo

Date: 5-4-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]

Date: 5-4-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 5.4.21
Generator: Holly Energy Partners
Job #: J+L # 2419
Trucking Co: Arroyo Trucking #03
Site Location: Enuse EM54
Total Yards/Day: 2000 1111 30 yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Mata Trucking

Signature: Mata Trucking

Date: 5/4/21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: _____

Date: _____

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

load #1 in
load #2 out
load #3
load #4

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 5-4-21
Generator: Holly Energy Partners
Job #: J&L # 2419
Trucking Co: Marta # 51
Site Location: Emice EM50
Total Yards/Day: 2000 yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

4 loads of contaminated soil
4 loads of top soil
VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie NolanDate: 4/25/2021NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: GuillermoSignature: Guillermo LopezDate: 05-04-21DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]Date: 5-4-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 5-4-21
Generator: Holly Energy Partners
Job #: J&L # 2419
Trucking Co: Marta # 42
Site Location: Quilice EMSU
Total Yards/Day: 2000 1111 3045
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

1111

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

101

M Mata

Name: Carlos Gracia

Signature: Carlos G

Date: 5/4/21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]

Date: 5.4.21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

101

Date: 5.4.21
Generator: Holly Energy Partners
Job #: J&L # 2419
Trucking Co: JA Transport # 4307
Site Location: Emise EMSU
Total Yards/Day: 20 ea. 1111 80 yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Truck #03

Name: Juan Arroyo

Signature: Juan Arroyo

Date: 5-5-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: David Gott

Date: 5-5-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 5-5-21
Generator: Holly Energy Partners
Job #: J&L #2419
Trucking Co: Arroyo Trucking DB
Site Location: Enmore EMSW
Total Yards/Day: 30 ea 114
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMIPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

4 loads top soil
4 loads of contaminated soil

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Gulherme
Signature: Gulherme Lopes
Date: 05-05-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: Carol
Date: 5-5-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 5-5-21
Generator: Holly Energy Partners
Job #: J&L # 2419
Trucking Co: MATA #151
Site Location: Enclave EMSU
Total Yards/Day: 20 per 11/1 80 yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

*4 loads top soil
4 loads copo container material*

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: *Melanie Nolan*

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: *Mata Trucking*

Signature: *[Signature]*

Date: 5/5/21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: *[Signature]*

Date: 5-5-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 5-3-21
Generator: Holly Greenway Partners
Job #: JL # 2419
Trucking Co: MATN #42
Site Location: Emcee EMSU
Total Yards/Day: 2000.1112 80 yds
Landfarm Representative: [Signature]

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NIMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Alvaro Ramos

Signature: Alvaro Ramos

Date: 5/5/21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: Carol Pitt

Date: 5-5-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

#1 load out
#2 load out
#3 load out
#4 load out
#1 load
#2 load
#3 load
#4 load

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 5-5-21
Generator: Holly Energy Partners
Job #: JEL # 2419
Trucking Co: MATA # 51
Site Location: Enise EMSU
Total Yards/Day: 2000 1117 80 yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NIMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Carlos G

Signature: Carlos G

Date: 5-5/21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: Carlos G

Date: 5-5-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 5-5-21
Generator: Billy Energy Partners
Job #: J&L 2419
Trucking Co: J A Trucking #4307
Site Location: Engrice EMSA
Total Yards/Day: 2000 1111 80 yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFESTSHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: ALUGINO BARRAS

Signature: Alugino Barras

Date: 5/6/21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: David Jett

Date: 5-6-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 5-6-21
Generator: Holly Energy
Job #: PH # 2419
Trucking Co: Mota # 51
Site Location: Exise EMSA
Total Yards/Day: 40 yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFESTSHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Guillermo
Signature Guillermo Lopez
Date: 05-06-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: David J. J.
Date: 5-6-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 5-6-21
Generator: Holly Energy
Job #: J&L # 2419
Trucking Co: Adair # 151
Site Location: Enrico # 154
Total Yards/Day: 40 yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFESTSHIPPER FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NIMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Juan Carlos

Signature: [Signature]

Date: 4/21/21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NIM-01-0023

Signature: [Signature]

Date: 4-25-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 — David Jett

575-390-7446 — Michelle Kuhn

Permit# NM-01-0023

Date: 5-6-21
Generator: Holly Enverga
Job #: JFL # 2419
Trucking Co: Mata # 42
Site Location: Envice En154
Total Yards/Day: 60 yds
Landfarm Representative: David Jett

1360 yds TOTAL

TRANSPORTER'S MANIFESTSHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NIMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

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E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubicyards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Carlos G

Signature: Carlos G

Date: 5/6/21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]

Date: 5-6-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permitt# NM-01-0023

Date: 5-6-21
Generator: Holly Gregory
Job #: J&L # 2419
Trucking Co: JA Transport #4307
Site Location: Enise EM54
Total Yards/Day: David Jett 270 yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Rafael J. Jager

Signature: 

Date: 11/01/2021

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

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Signature: 

Date: 11/01/2021

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: _____

Signature: _____

Date: 11-1-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]

Date: 11-1-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241 Truck # 101

Name: Jess Reno

Signature: JR

Date: 4-1-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

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Signature: [Signature]

Date: 4/21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 11-1-21
Generator: Holley Energy
Job #: J&L # 2506
Trucking Co: (Mata) JATransport
Site Location: Enrico Eosu Remediation
Total Yards/Day: (2000) 111 50 yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPER FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NM/PA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: _____

Signature: _____

Date: 11-2-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

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Signature: _____

Date: 11-2-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Rafael Jaquez

Signature: 

Date: 11/02/2021

DISPOSAL SITE:

J&L Landfairm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: 

Date: 11-2-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Truck # 51

Name: Melanie Mata

Signature: Melanie Mata

Date: 4-25-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

80

Signature: [Signature]

Date: 4-25-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Jessie Rono

Signature: JR

Date: 4-2-21

DISPOSAL SITE:

J&L Landfairm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: David Jett

Date: 4-2-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 11-2-21
Generator: Holly Energy
Job #: Job # 2503
Trucking Co: Marta # 101
Site Location: Enrico EMS 11 Remediation
Total Yards/Day: (2000) 1
Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 -- David Jett

575-390-7446 -- Michelle Kuhn

Permit# NM-01-0023

Date: 11-2-21

Generator: Holly Energy

Job #: J+L # 2502

Trucking Co: Burke (Mata) J.A. PAVS

Site Location: Enrico / ENSU Remediation

Total Yards/Day: 2000

Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 11-2-21
Generator: Holly Energy
Job #: J&L # 75
Trucking Co: MATA #1702
Site Location: Enrico / ENSU Remediation
Total Yards/Day: (2000) 1 50 yds
Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 11-2-21
Generator: Holly Energy
Job #: J&L # 2502
Trucking Co: Mata #51
Site Location: Enrico EMSR Remediation
Total Yards/Day: (70ea) 1
Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 11-2-21
Generator: Holly Energy
Job #: J&L # 2502
Trucking Co: (Mata) El Travieso
Site Location: Enrico EMSU Remediation
Total Yards/Day: (20ea) 1 ~~200~~ 80
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMIPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241 TRUCK # 12

Name: _____

Signature: _____

Date: 4-3-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NIM-01-0023

Signature: [Signature]

Date: 4-3-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NM/PA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Rafael Laguer

Signature: [Signature]

Date: 11/03/2021

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

[Signature]

Signature: [Signature]

Date: 11-03

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPER FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMMPA: N/A

TRANSPORTER NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

1111

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Carlos G

Signature: _____

Date: 11-3-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]

Date: 11-3-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMIPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

VOLUME: approx. 1,500 cubicyards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241
Truck # 101

Name: Jesse Rono

Signature: J.R.

Date: 11-3-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]

Date: 11-3-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32,492667, -103,256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Truck # 51

Name: Mata

Signature: Mata

Date: 11-3-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]

Date: 11-3-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 2-15-21
Generator: Holly Energy
Job #: J&L # 2502
Trucking Co: Marta Brown & Nelson
Site Location: Exxon Energy Corporation
Total Yards/Day: 50 yds
Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 -- David Jett

575-390-7446 -- Michelle Kuhn

Permit# NM-01-0023

Date: 11-15-21
Generator: Holly Energy
Job #: TRUP 250267
Trucking Co: MATTA #43
Site Location: Garice EM501A Remediation
Total Yards/Day: 50 yds
Landfarm Representative: David Jett

1920 Total

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 -- David Jett

575-390-7446 -- Michelle Kuhn

Permit# NM-01-0023

Date: 11-5-71
Generator: Folly Energy
Job #: J&L # 2502
Trucking Co: Matt #312
Site Location: Quince Canyon Remediation
Total Yards/Day: 50 yds
Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 11-5-21
Generator: Holly Energy
Job #: J&L # 2507
Trucking Co: MMA #5
Site Location: Burice Energy Remediation
Total Yards/Day: 30 yds
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMIPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

1661

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Truck # 107

Name: Carlos G

Signature: _____

Date: 11-8-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: Quintanilla

Date: 11-8-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Rafael Jagoz

Signature: [Signature]

Date: 11/08/2021

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]

Date: 11-8-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Sawyer

Signature: [Signature]

Date: 4-08-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

80

Signature: [Signature]

Date: 4-08-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: M Mata

Signature: [Signature]

Date: 4/25/21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]

Date: 4/25/21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 11-8-21
Generator: Wally Energy
Job #: J&L # 2502
Trucking Co: Nata # 107
Site Location: Enrico Early Remediation
Total Yards/Day: (20 yds ea) 111 yds 80 yds
Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 11-8-21
Generator: Holly Ensey
Job #: JFL # 2502
Trucking Co: Marta 151
Site Location: Enrico Eads Remediation
Total Yards/Day: (2000) 111
Landfarm Representative: David Jett 80443

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 11-8-21
Generator: Holly Energy
Job #: J&L # 2502
Trucking Co: Alta 47
Site Location: Enrico Enx Remediation
Total Yards/Day: (2000) 1111
Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 11-8-21
Generator: Holly Energy
Job #: J&L # 2502
Trucking Co: Marta #B 05
Site Location: Enrico EMSA Remediation
Total Yards/Day: (2800) 1116
Landfarm Representative: David Jett

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMIPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St, Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

#151
M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: D. Baldoo

Signature: D. Baldoo

Date: 4-25-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: D. Baldoo

Date: 4-25-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMIPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Samuel

Signature: Samuel

Date: _____

80

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: Samuel

Date: 4/25/21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMIPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Robert Hooper

Signature: [Signature]

Date: 11/09/2021

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]

Date: 11-9-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Carlos Grocio

Signature: _____

Date: 4-9-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]

Date: 4-9-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPER FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTER NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Truck 101

Name: Mata

Signature: [Signature]

Date: 11-9-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]

Date: 11-9-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 11-9-21
Generator: Molly Evers
Job #: J&L # 2502
Trucking Co: Marta # 101 Mawak
Site Location: Enrica Ensen Remediation
Total Yards/Day: (28 yds cu) 1/11 80 yds
Landfarm Representative: [Signature]

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 11-9-21
Generator: Holly energy
Job #: JLE # 2502
Trucking Co: MATA # 102
Site Location: Runvic Ensen Remediation
Total Yards/Day: (20 yds ea) 111' 80 yds
Landfarm Representative: David Jett **11720**

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 11-9-21
Generator: Welly Energy
Job #: Job # 2502
Trucking Co: Marta # 151
Site Location: EMMIE EM5U Remediation
Total Yards/Day: (28 yds ea) 111 SD yd
Landfarm Representative: [Signature]

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 -- David Jett

575-390-7446 -- Michelle Kuhn

Permit# NM-01-0023

Date: 11-9-21
Generator: Holly Energy
Job #: J&L # 2502
Trucking Co: MATA #12
Site Location: Enrico EM54 Remediation
Total Yards/Day: (20 yds ea) 1111 80 yds
Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 1-19-21
Generator: Holly Energy
Job #: J&L #1 2502
Trucking Co: NATA #5
Site Location: Enclave Enson Remediation
Total Yards/Day: (20 yds) 11.1 80 yds
Landfarm Representative: [Signature]

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Rosaldo

Signature: Rosaldo Flores

Date: 11-10-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]

Date: 11-10-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NIMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie NolanDate: 4/25/2021NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: S. Mata

Signature: _____

Date: _____

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]Date: 4-25-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NIMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Rafael Jaquez

Signature: [Signature]

Date: 11/10/2021

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

[Signature]

Signature: [Signature]

Date: 11/10/21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NIMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Carlos G

Signature: _____

Date: 11-11-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPER FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NIVPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

1111 loads

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: Carlos Garcia

Signature: Carlos

Date: 11-11-21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

30 yds

Signature: [Signature]

Date: 11-11-21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPER'S FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTER'S NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON-EXEMPT SOIL

VOLUME: approx. 1,500 cubicyards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie NolanDate: 4/25/2021NAME OF TRANSPORTER (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name: _____

Signature: _____

Date: _____

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]Date: 4/25/2021

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

TRANSPORTER'S MANIFEST

SHIPPERS FACILITY NAME AND ADDRESS:

Holly Energy Partners
1602 W. Main Street
Artesia, NM 88210

LOCATION OF MATERIAL:

Site: Eunice EMSU
Location: 32.492667, -103.256611
Lea County, New Mexico
NMPA: N/A

TRANSPORTERS NAME AND ADDRESS: M

Mata Trucking,
PO BOX 1263,
Hobbs, NM, 88241

DESCRIPTION OF WASTE:

E&P NON- EXEMPT SOIL

VOLUME: approx. 1,500 cubic yards

FACILITY CONTACT:

Melanie Nolan
Holly Energy Partners
1602 W. Main St., Artesia, NM 88210

Signature: Melanie Nolan

Date: 4/25/2021

NAME OF TRANSPORTER: (DRIVER)

M Mata Trucking, PO
BOX 1263, Hobbs, NM,
88241

Name Osvaldo

Signature: Osvaldo

Date: 11.11.21

DISPOSAL SITE:

J&L Landfarm
P.O. Box 356
Hobbs, NM 88241
Permit # NM-01-0023

Signature: [Signature]

Date: 11.11.21

Direct Bill: Holly Energy Partners
Care Of: Melanie Nolan

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 84282

CONDITIONS

Operator: HOLLY ENERGY PARTNERS - OPERATING, LP 1602 W. Main St. Artesia, NM 88210	OGRID: 282505
	Action Number: 84282
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	Closure report approved.	3/24/2022