ENSOLUM

May 21, 2025

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

Re: Remediation Work Plan
State D A CTB
Hilcorp Energy Company
NMOCD Incident No: napp2505326850

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Remediation Work Plan* (Work Plan) for a release at the State D A Central Tank Battery (CTB) (Site). The Site is located on New Mexico State Trust Land (STL), managed by the New Mexico State Land Office (NMSLO), in Unit L, Section 16, Township 21 South, Range 37 East, Lea County, New Mexico, (Figure 1). This Work Plan includes a summary of delineation activities performed at the Site and the proposed remediation of impacted soil originating from the release.

SITE BACKGROUND

On February 21, 2025, Hilcorp personnel discovered a release of 165 barrels (bbls) of oil at the Site. Specifically, while conducting a routine Site inspection, Hilcorp personnel observed a visibly impacted area measuring approximately 50 feet by 64 feet inside the secondary containment berm of the tank battery. The release volume was based on the operator's tank-gauging data. Of the released fluids, approximately 160 barrels were recovered via vacuum truck. Additionally, the spilled fluids did not migrate horizontally outside of secondary containment. Hilcorp submitted the *Notification of Release* to the New Mexico Oil Conservation Division (NMOCD) on February 22, 2025, and the Site was assigned the NMOCD Incident Number napp2505326850.

SITE CHARACTERIZATION

As part of the Site investigation, local geology/hydrogeology and nearby sensitive receptors were assessed in accordance with Title 19, Chapter 15, Part 29, Sections 11 and 12 (19.15.29.11 and 12) of the New Mexico Administrative Code (NMAC). This information is further discussed below.

POTENTIAL SENSITIVE RECEPTORS

Potential nearby receptors were assessed through desktop reviews of United States Geological Survey (USGS) topographic maps, Federal Emergency Management Administration (FEMA) Geographic Information System (GIS) maps, New Mexico Office of the State Engineer (NMOSE) database, aerial photographs, and Site-specific observations.

The nearest significant watercourse to the Site is a dry wash located approximately 3,345 feet north of the well pad. The nearest fresh water well is USGS permitted well 322814103102601 located approximately 2,215 feet northeast of the Site with a recorded depth to water of 73.07 feet below ground surface (bgs). The closest NMOSE permitted well, CP-00554, is located approximately 4,349 feet southwest of the Site with a recorded depth to water of 70 feet bgs. Lastly, NMOCD remediation site 1R-426-12, located approximately 2,800 feet southwest of the Site, advanced several borings in 2006 to depths up to 60 feet bgs without encountering groundwater. In accordance with 19.15.29.11.A(2) NMAC, the "responsible party must provide a reasonable determination of probable ground water depth using data generated by numeric models, cathodic well lithology, water well data, published information or other tools". Based on the information provided above, the three closest data points to the Site, including one collected within 25 years, are between 2,215 and 4,349 feet from the Site and indicate that groundwater is at least greater than 60 feet below ground surface. Based on these multiple lines of evidence, depth-to-groundwater is reasonably determined to be greater than 50 feet bgs. Documentation supporting this determination are attached as Appendix A.

The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and within 300 feet from any wetland (Figure 1). No wellhead protection areas, springs, or domestic/stock wells are located within a ½-mile from the Site (Figure 1). The Site is not within a 100-year floodplain, overlying a subsurface mine, or located within an area underlain by unstable geology. Additionally, the area is designated as low potential karst by the Bureau of Land Management (BLM). Schools, hospitals, institutions, churches, and/or other occupied permanent residence or structures are not located within 300 feet of the Site. A Site receptor map is shown on Figure 1.

SITE CLOSURE CRITERIA

Based on the information presented above and in accordance with the *Table I, Closure Criteria for Soils Impacted by a Release* (19.15.29.12 NMAC), the following Closure Criteria for constituents of concern (COCs) should be applied to the Site:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH) as a combination of gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO):

  2,500 mg/kg
- TPH as a combination of GRO and DRO: 1,000 mg/kg
- Chloride: 10,000 mg/kg

DELINEATION AND SOIL SAMPLING ACTIVITIES

Upon discovery of the release, Hilcorp retained Ensolum to conduct initial soil sampling activities on March 5, 2025. In total, two surface soil samples were collected from 0.5 feet bgs at locations SS01 and SS02 shown on Figure 2. Additionally, a hand auger was used to advance SS02 to a depth of 9 feet bgs. During delineation activities, Ensolum personnel logged soil lithology and field screened for the presence of volatile organic compounds (VOCs) using a calibrated photoionization detector (PID). Soil descriptions and field screening results were noted in the field book. Soil samples were collected directly into laboratory-provided jars and immediately placed on ice. Samples were submitted to Eurofins Environment Testing (Eurofins) for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B, TPH following Method 8015, and chloride following EPA Method 300.0. Sample results indicated impacted soil above NMOCD Table I Closure Criteria was present within the release area near the ground

surface. Soil from sample SS02A, collected at a depth of 9 feet bgs, was compliant with the Table I Closure Criteria.

Based on the initial sampling results, Ensolum conducted additional delineation activities on May 7, 2025. A notification of sampling activities was provided to the NMOCD prior to the delineation work and is attached as Appendix B. Due to a high-pressure gas line containing elevated concentrations of hydrogen sulfide and at the request of the gas utility operator, Ensolum could not advance hand auger borings within 25 feet of the pipeline without hydro-excavating to spot the line. As such, three borings, BH01 through BH03, were collected south, east, and west of the stained surface soil to laterally delineate the release (Figure 2). Samples were field screened and logged in the same manner described above. Two soil samples were collected from each pothole in order to delineate the vertical impacts at the Site and submitted to Eurofins to BTEX, TPH, and chloride. Based on the laboratory analytical results, all COCs were either not detected above laboratory reporting limits or were not detected above the applicable Closure Criteria in any other analyzed samples.

A summary of analytical results is summarized in Table 1 and Figure 2, with complete laboratory reports attached in Appendix C. Photographs taken during delineation activities are also provided in Appendix D. PID field screening results are included in Table 1.

REMEDIATION WORK PLAN

Based on the soil sampling results described above, it is estimated impacted soil is present at the Site between the ground surface to a depth of approximately 7 feet bgs. Analytical results also indicate impacted soil is likely limited to areas within the secondary containment berm with an approximate areal extent of 4,900 square feet or less. Based on these estimates, approximately 1,270 cubic yards of impacted soil are present at the Site. Of note, although a delineation boring could not be advanced on the northern edge of the release, it is assumed that the release stayed within the secondary containment on this portion of the Site based on other delineation data.

Hilcorp proposes to excavate impacted soil at the Site to achieve NMOCD Closure Criteria. Soil will be excavated and transported off-Site for treatment/disposal at an NMOCD approved commercial landfarm. Once field screening indicates impacted soil has been removed, 5-point composite soil samples will be collected at least every 200 square feet from the floor and sidewalls of the excavation. The 5-point composite samples will be collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Based on previous analytical results and no prior Closure Criteria exceedances of chloride, Hilcorp is requesting soil samples only be analyzed for TPH and BTEX during confirmation sampling. Once confirmed impacted soil has been removed, the excavation will be backfilled with clean imported soil and recontoured to match pre-existing conditions at the Site.

CULTURAL RESOURCE SURVEY

Since the release remained on pad, an assessment of cultural properties had already been completed prior to the construction of the well pad and as such, the Cultural Properties Protection Rule (CPP) has been followed. No additional cultural resource surveys were completed in connection with this release.

RECLAMATION PLAN

The release remained on the well pad that is currently in operation for oil and gas production purposes. As such, the release area is not expected to be reclaimed until the oil and gas well is plugged and abandoned (P&A'd) and the well pad is reclaimed. The Reclamation Plan for this release will default to the NMSLO-approved Reclamation Plan for the well pad per 19.2.100.67 NMAC.

SCHEDULE

Hilcorp will complete the excavation and soil sampling activities within 90 days of the date of approval of this Work Plan by the NMSLO AND NMOCD. A *Closure Request* will be submitted within 60 days of receipt of final laboratory analytical results.

We appreciate the opportunity to provide this work plan to the NMSLO and NMOCD. If you should have any questions or comments regarding this document, please contact the undersigned.

Sincerely,
Ensolum, LLC

Stuart Hyde, PG (licensed in WA & TX)
Senior Managing Geologist
(970) 903-1607
shyde@ensolum.com

Daniel R. Moir, PG (licensed in WY & TX)
Senior Managing Geologist
(303) 887-2946
dmoir@ensolum.com

Cc: NMSLO

Attachments:

Figure 1:	Site Receptor Map
Figure 2:	Soil Sample Location Map
Table 1:	Soil Sample Analytical Results
Appendix A:	Depth to Water Determination
Appendix B:	Agency Correspondence
Appendix C:	Laboratory Analytical Reports
Appendix D:	Photographic Log

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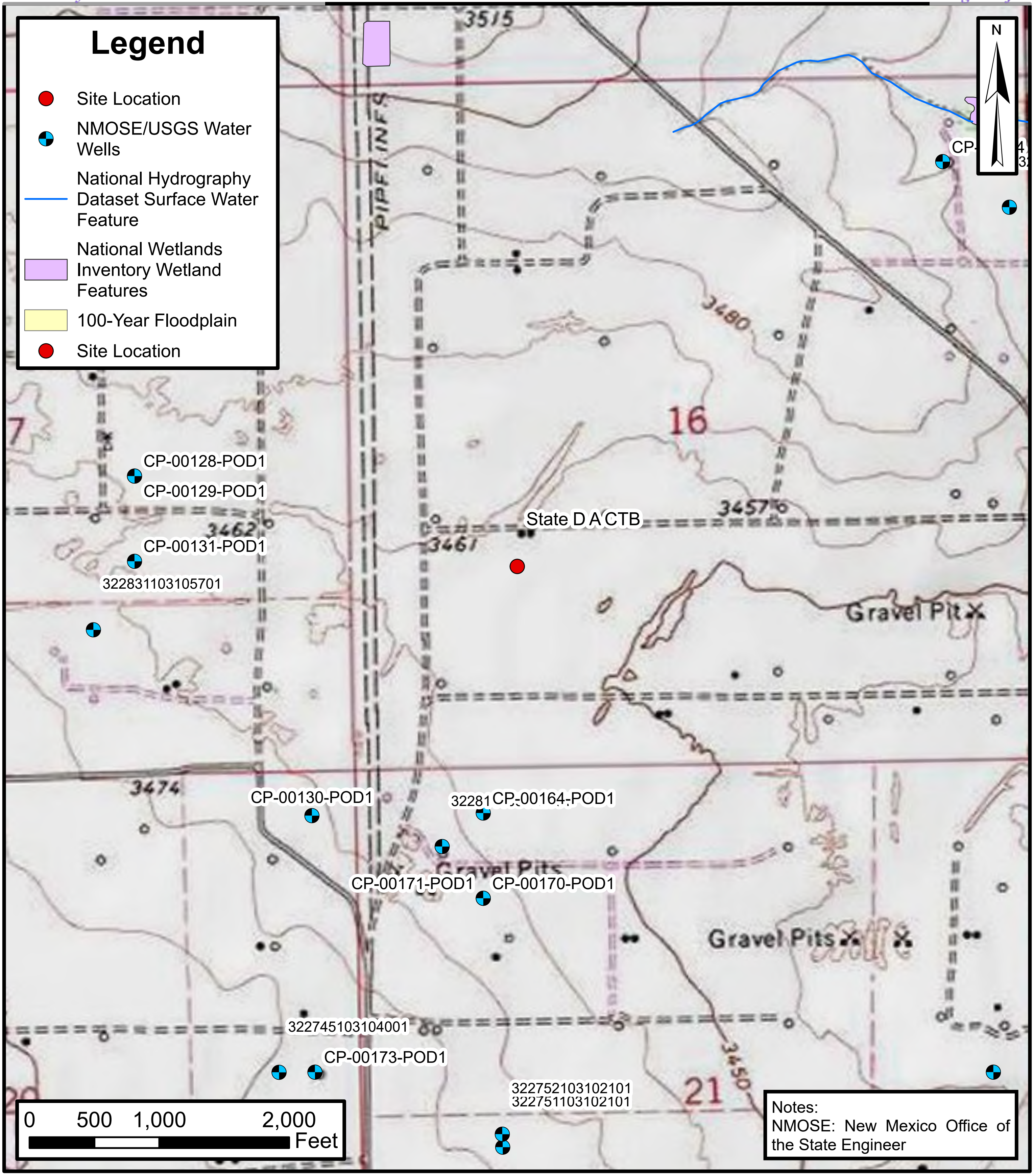
FIGURES



Default Folder: C:\Users\Greg Palese\OneDrive - ENSOLUM, LLC\Desktop\Ensolum GIS\Ensolum GIS1 - Durango\Hilcorp\State D A CTB

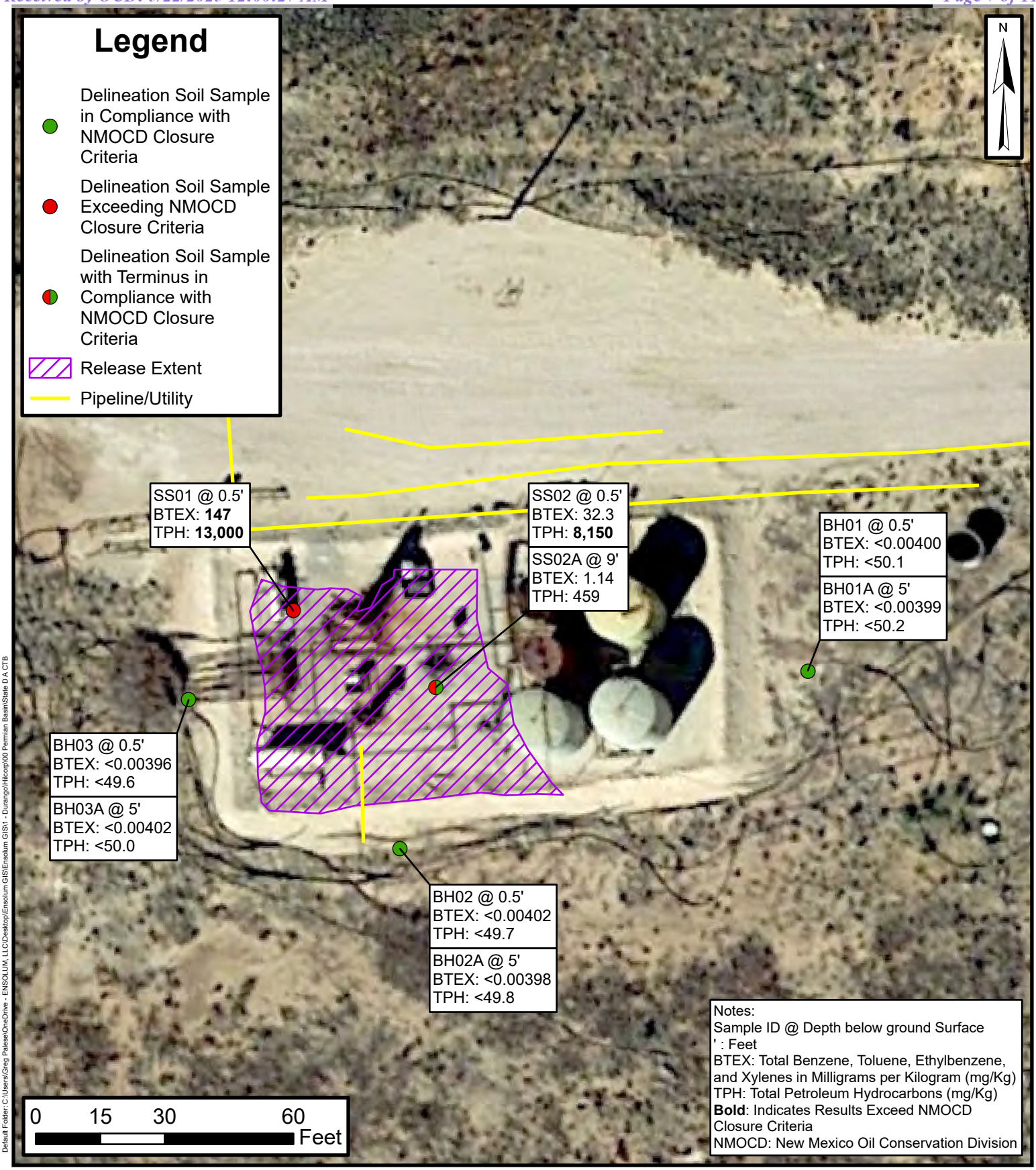
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

State D A CTB
Hilcorp Energy Company
32.4765720, -103.1723811
Lea County, New Mexico

FIGURE
1

Sources: Environmental Systems Research Institute (ESRI), United States Geologic Survey (USGS), United States Fish and Wildlife Service (USFWS), National Geographic Society, i-cubed



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ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Soil Sample Location Map

State D A CTB
Hilcorp Energy Company
32.4765720, -103.1723811
Lea County, New Mexico

FIGURE
2

Sources: Google Earth (2023)

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
State D A CTB
Hilcorp Energy Company
Lea County, New Mexico

Sample Identification	Date	Depth (feet bgs)	PID (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release			NE	**10**	NE	NE	NE	**50**	NE	NE	NE	**1,000**	**2,500**	**10,000**
SS01	3/5/2025	0.5	>5,000	2.16	31.8	37.8	75.3	**147**	4,820	8,140	<999	**13,000**	**13,000**	12.1
SS02	3/5/2025	0.5	>5,000	<0.497	7.45	8.90	16.0	32.3	1,780	6,370	<996	**8,150**	**8,150**	10.4
SS02A	3/5/2025	9.0	326	<0.0992	0.106	0.187	0.846	1.14	<50.5	459	<50.5	459	459	21.2
BH01	5/7/2025	0.5	0.7	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<50.1	<50.1	<50.1	<50.1	<50.1	99.0
BH01A	5/7/2025	5.0	0.2	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<50.2	<50.2	<50.2	<50.2	<50.2	174
BH02	5/7/2025	0.5	1.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<49.7	<49.7	<49.7	<49.7	<49.7	83.4
BH02A	5/7/2025	5.0	3.1	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	101
BH03	5/7/2025	0.5	2.3	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	<49.6	<49.6	<49.6	<49.6	<49.6	98.6
BH03A	5/7/2025	6.0	4.4	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	104

Notes:

bgs: Below ground surface
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
mg/kg: Milligrams per kilogram
NE: Not Established
NMOCD: New Mexico Oil Conservation Division
PID: Photoionization detector
ppm: Parts per million
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
MRO: Motor Oil/Lube Oil Range Organics
TPH: Total Petroleum Hydrocarbon
': Feet
< : Indicates result less than the stated laboratory reporting limit (RL)
*Concentrations in **bold** and shaded exceed the New Mexico Oil Conservation Division Table I Closure Criteria for Soils Impacted by a Release*

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APPENDIX A

Depth to Water Determination

Revised June 1972

474068

SANTA FE

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

'78 MAR 15 AM 11 59

(A) Owner of well Millard Deck Owner's Well No. _____

Street or Post Office Address P. O. Box 409

City and State Eunice, New Mex. 88231

STATE ENGINEER OFFICE
SANTA FE, N.M. 87501

Well was drilled under Permit No. CP-554 and is located in the:

a. NE ¼ NE ¼ ¼ ¼ of Section 16 Township 21-S Range 37-E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in Lea County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor W. L. Van Noy License No. WD-208

Address P. O. Box 7 Oil Center, N. M. 88266

Drilling Began June 1, 1976 Completed June, 5, 1976 Type tools spudder Size of hole 8" in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 80 ft.

Completed well is ☐ shallow ☐ artesian. Depth to water upon completion of well 70 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
75	80	5	fine water sand.	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
5"	welded		0	80	80	none	64	80

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by:

_____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received 4/5/77

Quad _____ FWL _____ FSL _____

File No. CP-554 Use STK Location No. 21.37.16.222321

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	5	5	top soil
5	25	20	caliche
25	65	40	dry sand
65	75	10	firm rock
75	80	5	water sand
80			red clay.

Section 7. REMARKS AND ADDITIONAL INFORMATION

'77 APR 5 AM 8 15

STATE ENGINEER OFFICE
ROSWELL, N. M.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

W. L. Van Tay
Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

National Water Information System: Web Interface

USGS Water Resources

Data Category: Site Information | Geographic Area: United States | GO

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.

USGS 322814103102601 21S.37E.21.11121

Available data for this site SUMMARY OF ALL AVAILABLE DATA | GO

Well Site

DESCRIPTION:

Latitude 32°28'14", Longitude 103°10'26" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: not determined.
Land surface altitude: 3,462 feet above NAVD88.
Well completed in "Pecos River Basin alluvial aquifer" (N100PCSRVR) national aquifer.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1954-01-10	1954-01-10	1
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to New Mexico Water Science Center Water-Data Inquiries

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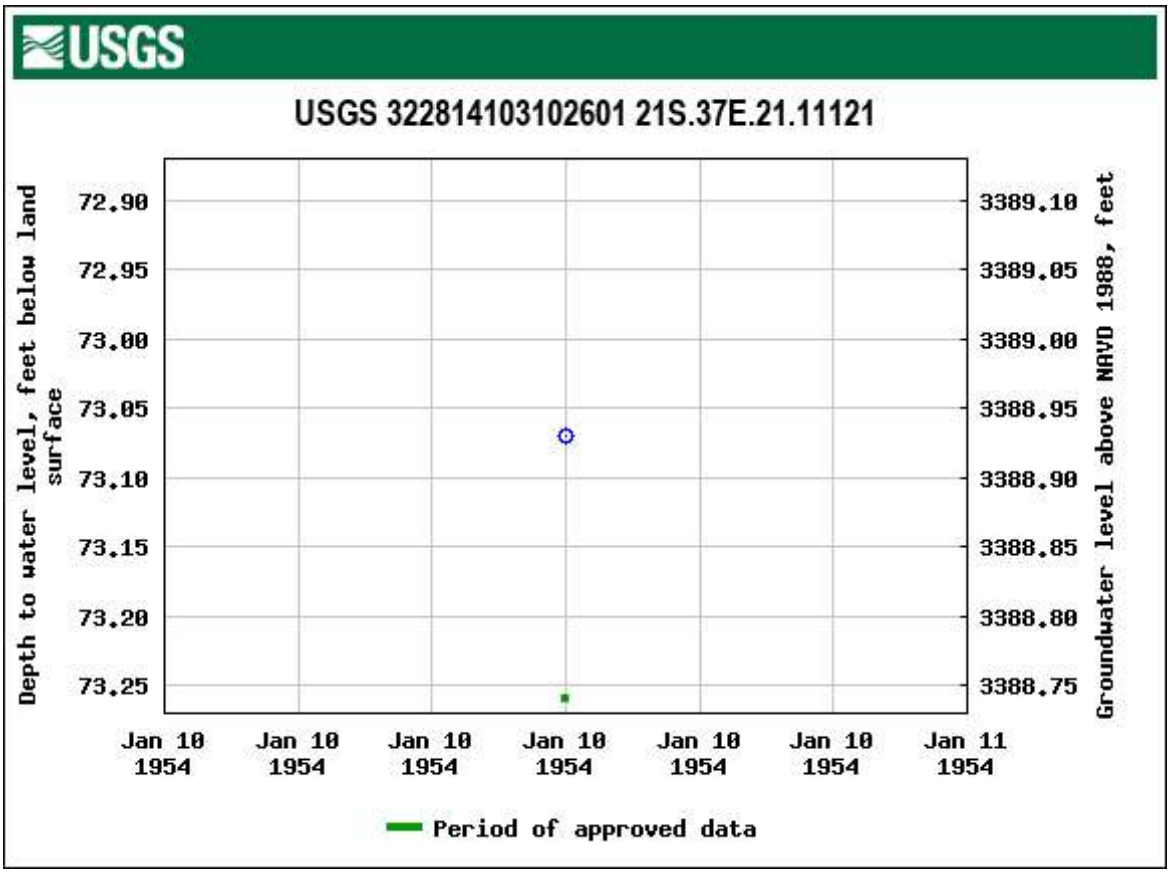
Questions or Comments
Help
Data Tips
Explanation of terms
Subscribe for system changes

Title: NWIS Site Information for USA: Site Inventory
URL: https://waterdata.usgs.gov/nwis/inventory?site_no=322814103102601&agency_cd=USGS

Page Contact Information: New Mexico Water Data Support Team
Page Last Modified: 2025-02-25 14:01:58 EST
0.9 0.9 sdww02


USGS
USGS 322814103102601 21S.37E.21.11121
Depth to water level, feet below land surface
72.90
72.95
73.00
73.05
73.10
73.15
73.20
73.25
Groundwater level above NAVD 1988, feet
3389.10
3389.05
3389.00
3388.95
3388.90
3388.85
3388.80
3388.75
Jan 10 1954
Jan 10 1954
Jan 10 1954
Jan 10 1954
Jan 10 1954
Jan 10 1954
Jan 11 1954
Period of approved data

1R – 426-12

WORK PLANS

DATE:
5-9-07

IR426-12
Work Plan

Highlander Environmental Corp.

Midland, Texas

2007 MAY 14 AM 10 21

5-9-07

CERTIFIED MAIL
RETURN RECIEPT NO. 7004 2510 0001 1869 0927

May 9, 2007

Mr. Wayne Price
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87504

RE: **CORRECTIVE ACTION PLAN (CAP)**
O-17-1 VENT, BD SWD SYSTEM
UNIT "O", SEC. 17, T21S, R37E
Lea County, New Mexico

Mr. Johnson:

RICE Operating Company (ROC) has retained Highlander Environmental Corp. (Highlander) to address potential environmental concerns at the above-referenced site. ROC is the service provider (agent) for the 0-17-1 Vent, BD SWD System (System) and has no ownership of any portion of the pipeline, well, or facility. The System is owned by a consortium of oil producers, System Partners, who provide all operating capital on a percentage ownership/usage basis. Environmental projects of this magnitude require System Partner AFE approval and work begins as funds are received. In general, project funding is not forthcoming until NMOCD approves the work plan. Therefore, your timely review of this submission is requested.

For all environmental projects, ROC will choose a path forward that:

- protects public health,
- provides the greatest net environmental benefit,
- complies with NMOCD Rules, and
- is supported by good science.

Each site shall have three submissions or a combination of:

1. An **Investigation and Characterization Plan** (ICP) is a proposal for data gathering and site characterization and assessment.

2. Upon evaluating the data and results from the ICP, a recommended remedy is submitted in this **Corrective Action Plan** (CAP).

3. Finally, after implementing the remedy, a **Closure Report** with final documentation will be submitted.

1.0 BACKGROUND & PREVIOUS WORK

As part of the ROC Junction Box Upgrade Workplan, starting on March 7, 2003, the junction box was removed and the Site was investigated vertically and horizontally with a backhoe. See site location as shown on Figure 1. The Site was excavated to the approximate dimensions of 27' x 18' x 12'. TPH impact was noted to a depth of at least 12' below ground surface (bgs). Chloride impact was consistent vertically and horizontally, with a bottom hole chloride concentration of 1,740 mg/kg at 12' below ground surface. Regional groundwater information indicates that the depth to groundwater is approximately 70' bgs.

The junction box once contained a vent, but the junction was eliminated and the site was plumbed straight through with new poly pipeline. ROC completed the replacement of the line on August 29, 2003. On September 16, 2003, ROC submitted a Junction Box Disclosure Report to the NMOCD. A copy of the Junction Box Disclosure Report is included in Appendix A.

On August 10, 2006, ROC submitted the ICP to Mr. Wayne Price of the NMOCD-Santa Fe office for review. Mr. Price granted approval of the ICP in a letter dated September 21, 2006.

On October 9 and 10, 2006, Highlander personnel were onsite to oversee the installation of five soil borings (SB-1, SB-2, SB-3, SB-4, and SB-5) within and adjacent to the former junction box location. Soil samples were collected every 5' beginning at a depth of 13 feet bgs within the excavated area and 3 feet bgs outside the excavated area. Samples were collected utilizing a split spoon sampler, and placed into laboratory supplied containers and delivered to the laboratory under chain-of-custody control for chloride analysis by EPA method 300.0 and specific samples for TPH analysis by EPA method 8015 modified. The collected samples were field screened for TPH utilizing a photoionization detector (PID) and for chlorides with a field sampling kit. The split spoons were decontaminated between samples utilizing an alconox and deionization water wash followed by a deionization water rinse. Copies of laboratory analyses and chain-of-custody documentation are included in Appendix B. The soil boring locations are shown on Figure 2. The soil boring logs are included in Appendix C. The results of the sampling are summarized in Table 1.

Referring to Table 1, the TPH concentrations were below the NMOCD guidelines in all samples collected and submitted for analysis. The chloride concentrations showed a marked decrease with depth in each of the five soil borings.

2.0 COLLECTED REGIONAL HYDROGEOLOGIC DATA

Since groundwater was not encountered during drilling of the site, it was not deemed necessary to perform a water well inventory within a ½ mile radius of the site.

3.0 EVALUATION

When evaluating any proposed remedy or investigative work, ROC will confirm that there is a reasonable relationship between the benefits created by the proposed remedy or assessment and the economic and social costs. In evaluating the documented levels of chlorides within the soil, it was determined that an unconsolidated clay barrier be placed within the impacted zone in order to prevent further vertical migration of the chlorides into the surrounding soils.

4.0 PROPOSED REMEDY

Groundwater is 70' bgs and the chlorides and TPH decrease with depth and do not extend beyond 35' bgs. As such, ROC proposes preparation and revegetation of the surface soils in order to provide an infiltration barrier. This may include removal of existing gravel, importation of clean topsoil and reseeding utilizing native vegetation. In addition, the site will be monitored for growth. Based on the visual inspection and subsurface drilling, the area of the former junction box to be revegetated is approximately 37' by 38'.

If you require any additional information or have any questions or comments, please call.

Highlander Environmental Corp.

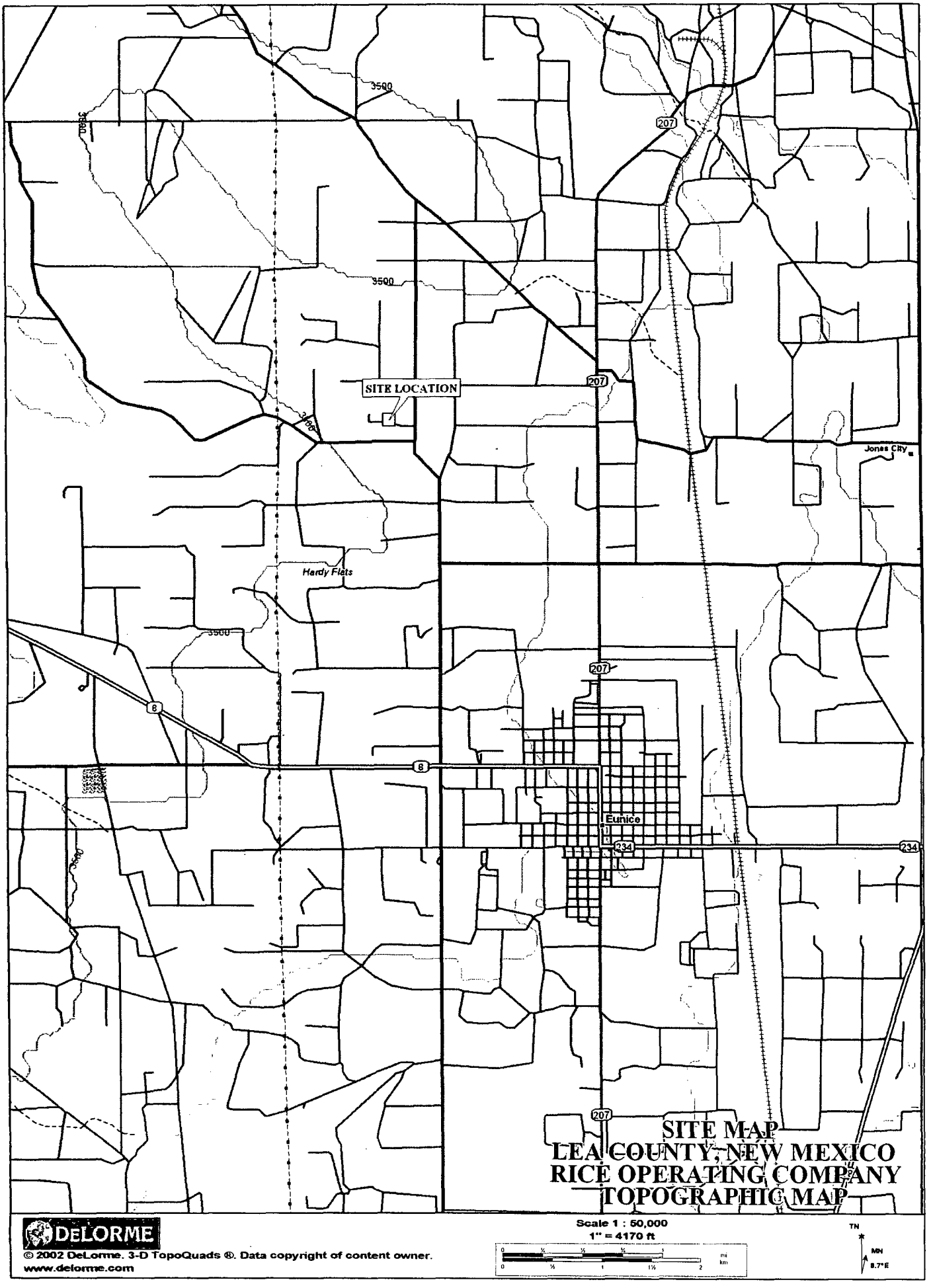
Jeffrey Kindley

Jeffrey Kindley, P.G
Senior Environmental Geologist

cc: ROC
Edward Hansen-NMOCD

enclosures: site maps, data tables, lab results, figures

Figures



SITE MAP
LEA COUNTY, NEW MEXICO
RICE OPERATING COMPANY
TOPOGRAPHIC MAP

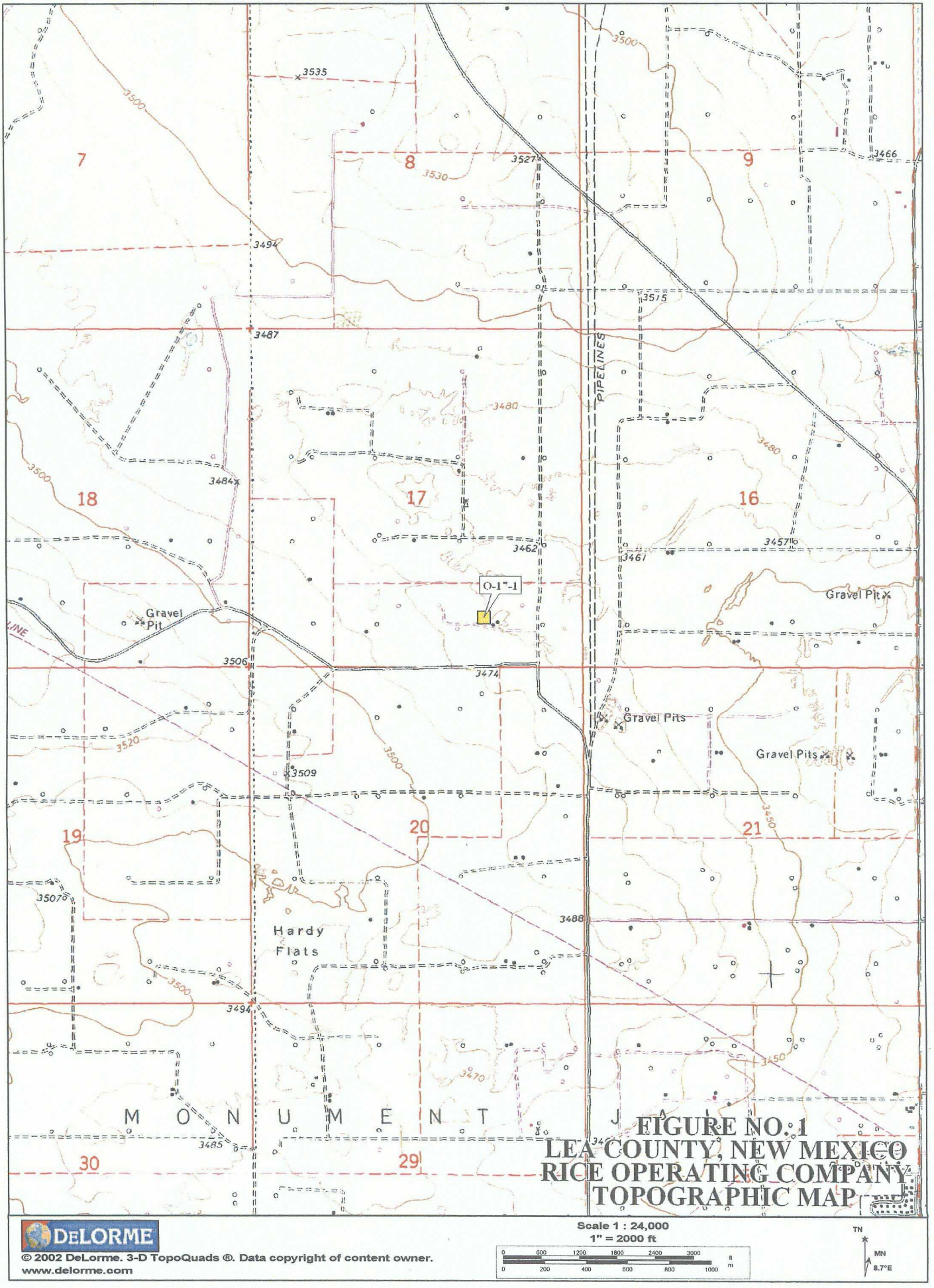
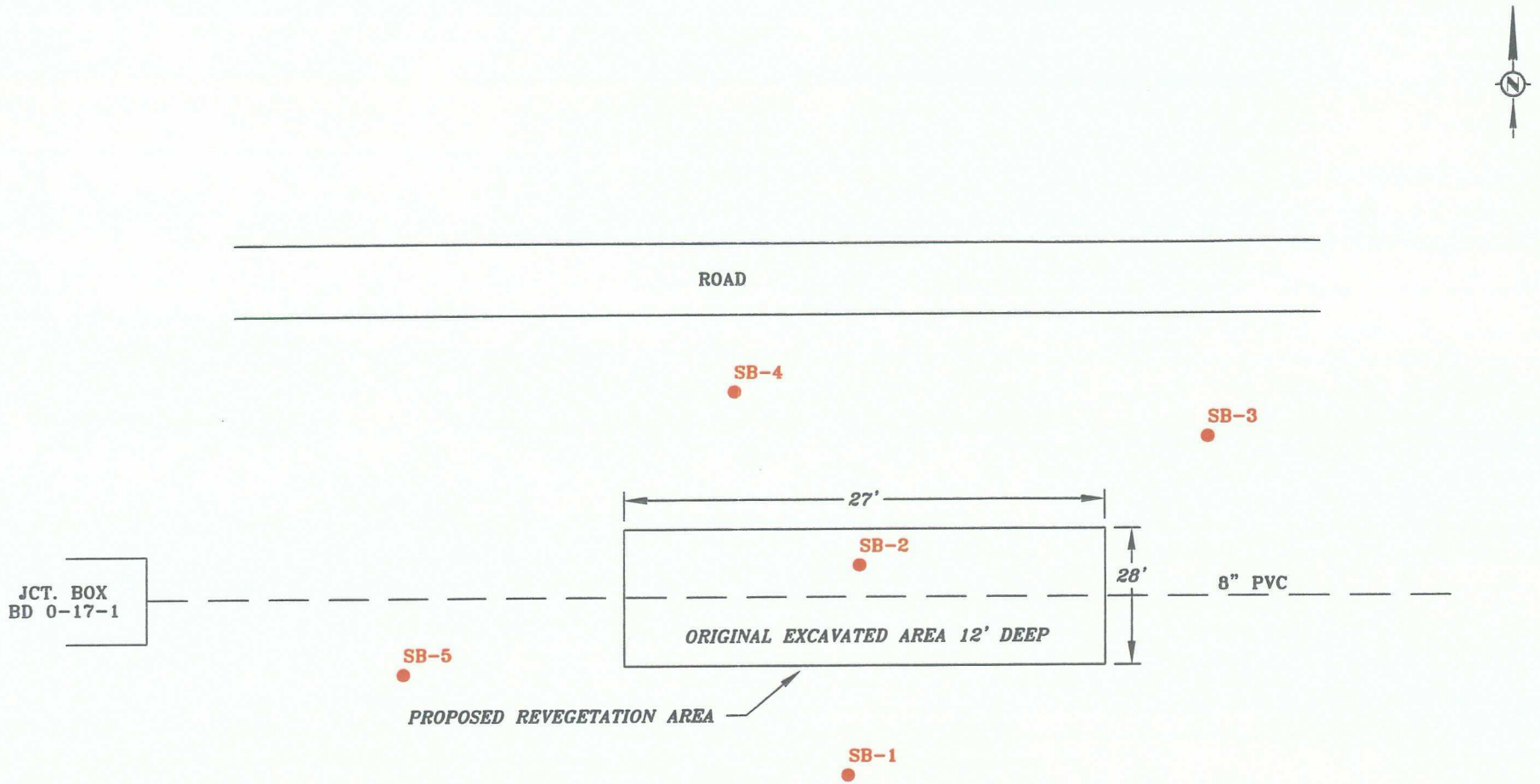


FIGURE NO. 1
LEA COUNTY, NEW MEXICO
RICE OPERATING COMPANY
TOPOGRAPHIC MAP

Scale 1 : 24,000
1" = 2000 ft

0 600 1200 1800 2400 3000 ft
0 200 400 600 800 1000 m

TN
MN
8.7°E



● SOIL BORING LOCATIONS

NOT TO SCALE

FIGURE NO. 2

LEA COUNTY, NEW MEXICO

RICE OPERATING COMPANY
BD 0-17-1
SOIL BORING LOCATIONS

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

DATE: 8/14/06
DWN. BY: JJ
FILE: C:\RICE\3644 SITE MAP

Tables

Table 1

Rice Operating

BD O-17-1

Lea County, New Mexico

Sample ID	Date Sampled	Sample Depth (ft)	Chlorides Field (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg)			
					C6-C12	C12-C28	C-28-C35	Total
SB-1	10/09/06	13-15'	895	**978**	<10.0	314	56.7	371
SB-1	10/09/06	18-20'	571	213	NA	NA	NA	NA
SB-1	10/09/06	23-25'	212	**255**	NA	NA	NA	NA
SB-1	10/09/06	28-30'	169	NA	NA	NA	NA	NA
SB-1	10/09/06	33-35'	226	**298**	NA	NA	NA	NA
SB-2	10/09/06	13-15'	1,293	**638**	30.4	553	94.4	678
SB-2	10/09/06	18-20'	995	**1,360**	<10.0	80	<10.0	80
SB-2	10/09/06	23-25'	210	**681**	NA	NA	NA	NA
SB-2	10/09/06	28-30'	930	**638**	NA	NA	NA	NA
SB-2	10/09/06	33-35'	411	**362**	NA	NA	NA	NA
SB-2	10/09/06	38-40'	621	181	NA	NA	NA	NA
SB-2	10/09/06	43-45'	374	128	NA	NA	NA	NA
SB-2	10/09/06	48-50'	270	95.7	NA	NA	NA	NA
SB-2	10/09/06	53-55'	266	21.3	NA	NA	NA	NA
SB-2	10/09/06	58-60'	239	31.9	NA	NA	NA	NA
SB-3	10/09/06	3-5'	274	106	<10.0	13.2	<10.0	13.2
SB-3	10/09/06	8-10'	470	**425**	NA	NA	NA	NA
SB-3	10/09/06	13-15'	615	**596**	NA	NA	NA	NA
SB-3	10/09/06	18-20'	488	**638**	NA	NA	NA	NA
SB-3	10/09/06	23-25'	682	**596**	NA	NA	NA	NA
SB-3	10/09/06	28-30'	441	**383**	NA	NA	NA	NA
SB-3	10/09/06	33-35'	276	53.2	NA	NA	NA	NA
SB-3	10/09/06	38-40'	234	42.5	NA	NA	NA	NA
SB-4	10/09/06	3-5'	348	128	<10.0	<10.0	<10.0	<10.0
SB-4	10/09/06	8-10'	556	**596**	NA	NA	NA	NA
SB-4	10/09/06	13-15'	255	213	NA	NA	NA	NA
SB-4	10/09/06	18-20'	235	42.5	NA	NA	NA	NA
SB-4	10/09/06	23-25'	149	63.8	NA	NA	NA	NA
SB-5	10/09/06	13-15'	834	**1,110**	<10.0	<10.0	<10.0	<10.0
SB-5	10/09/06	18-20'	406	**468**	NA	NA	NA	NA
SB-5	10/09/06	23-25'	300	234	NA	NA	NA	NA
SB-5	10/09/06	28-30'	236	128	NA	NA	NA	NA
SB-5	10/09/06	33-35'	160	31.9	NA	NA	NA	NA

Appendix A

RICE OPERATING COMPANY
JUNCTION BOX DISCLOSURE* REPORT

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
Blinebry-Drinkard	O-17-1 vent	O	17	21S	37E	Lea	No Box		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Millard Deck Estate OTHER _____

Depth to Groundwater 70 feet NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started 3/7/2003 Date Completed 8/29/2003 OCD Witness No

Soil Excavated 240 cubic yards Excavation Length 30 Width 18 Depth 12 feet

Soil Disposed 0 cubic yards Offsite Facility n/a Location n/a

FINAL ANALYTICAL RESULTS: **Sample Date** 3/17/2003 **Sample Depth** 12 ft bgs

Procure 5-point composite sample of bottom and 4-point composite sample of sidewalls. TPH, BTEX and Chloride laboratory test results completed by using an approved lab and testing procedures pursuant to NMOCD guidelines.

Sample Location	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg	GRO mg/kg	DRO mg/kg	Chloride mg/kg
SIDEWALLS	<0.025	<0.025	0.051	0.281	126	1290	1810
BOTTOM	<0.100	0.972	4.44	19.42	1420	5280	1740

General Description of Remedial Action: This junction box once contained a vent but the junction has been eliminated and the site re-plumbed straight through with new poly pipeline. The 30 x 18 x 12 ft deep excavation yielded TPH impact to at least 12 ft deep. Vertically, the 8 ft and 12 ft samples were field-tested for chlorides, yielding 1000 and 400 ppm respectively. However, there was not a lateral decline in chloride concentrations on the excavation walls. The color change in the titration of the chloride test was difficult to detect due to the TPH concentration and the color of the soil sample, which may account for the discrepancy with the lab results. The excavation has been backfilled and the location identified for further consideration at a later date.

ADDITIONAL EVALUATION IS *HIGH* PRIORITY.

cc: lab results, photos

LOCATION	DEPTH (ft)	ppm

CHLORIDE FIELD TESTS

Vertical	8	1000
Vertical	12	400

TPH FIELD TESTS

Vertical	4	28220
Vertical	8	49220
Vertical	12	35070

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE 9/16/2003 PRINTED NAME Kristin Farris

SIGNATURE Kristin Farris TITLE Project Scientist

**** This site is a "DISCLOSURE." It will be placed on a prioritized list of similar sites for further consideration.***

Appendix B

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Tim Reed

Highlander Environmental Corp.

1910 N. Big Spring St.

Midland, TX 79705

Project: Rice/ 0-17-1

Project Number: 2644

Location: None Given

Lab Order Number: 6J13017

Report Date: 10/23/06

Highlander Environmental Corp.
1910 N. Big Spring St.
Midland TX, 79705

Project: Rice/ 0-17-1
Project Number: 2644
Project Manager: Tim Reed

Fax: (432) 682-3946

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-1 13-15'	6J13017-01	Soil	10/09/06 00:00	10-13-2006 16:20
SB-1 18-20'	6J13017-02	Soil	10/09/06 00:00	10-13-2006 16:20
SB-1 23-25'	6J13017-03	Soil	10/09/06 00:00	10-13-2006 16:20
SB-1 33-35'	6J13017-04	Soil	10/09/06 00:00	10-13-2006 16:20
SB-2 13-15'	6J13017-05	Soil	10/09/06 00:00	10-13-2006 16:20
SB-2 18-20'	6J13017-06	Soil	10/09/06 00:00	10-13-2006 16:20
SB-2 23-25'	6J13017-07	Soil	10/09/06 00:00	10-13-2006 16:20
SB-2 28-30'	6J13017-08	Soil	10/09/06 00:00	10-13-2006 16:20
SB-2 33-35'	6J13017-09	Soil	10/09/06 00:00	10-13-2006 16:20
SB-2 38-40'	6J13017-10	Soil	10/09/06 00:00	10-13-2006 16:20
SB-2 43-45'	6J13017-11	Soil	10/09/06 00:00	10-13-2006 16:20
SB-2 48-50'	6J13017-12	Soil	10/09/06 00:00	10-13-2006 16:20
SB-2 53-55'	6J13017-13	Soil	10/09/06 00:00	10-13-2006 16:20
SB-2 58-60'	6J13017-14	Soil	10/09/06 00:00	10-13-2006 16:20
SB-3 3-5'	6J13017-15	Soil	10/09/06 00:00	10-13-2006 16:20
SB-3 8-10'	6J13017-16	Soil	10/09/06 00:00	10-13-2006 16:20
SB-3 13-15'	6J13017-17	Soil	10/09/06 00:00	10-13-2006 16:20
SB-3 18-20'	6J13017-18	Soil	10/09/06 00:00	10-13-2006 16:20
SB-3 23-25'	6J13017-19	Soil	10/09/06 00:00	10-13-2006 16:20
SB-3 28-30'	6J13017-20	Soil	10/09/06 00:00	10-13-2006 16:20
SB-3 33-35'	6J13017-21	Soil	10/09/06 00:00	10-13-2006 16:20
SB-3 38-40'	6J13017-22	Soil	10/09/06 00:00	10-13-2006 16:20
SB-4 3-5'	6J13017-23	Soil	10/09/06 00:00	10-13-2006 16:20
SB-4 8-10'	6J13017-24	Soil	10/09/06 00:00	10-13-2006 16:20
SB-4 13-15'	6J13017-25	Soil	10/09/06 00:00	10-13-2006 16:20
SB-4 18-20'	6J13017-26	Soil	10/09/06 00:00	10-13-2006 16:20
SB-4 23-25'	6J13017-27	Soil	10/09/06 00:00	10-13-2006 16:20
SB-5 13-15'	6J13017-28	Soil	10/09/06 00:00	10-13-2006 16:20
SB-5 18-20'	6J13017-29	Soil	10/09/06 00:00	10-13-2006 16:20
SB-5 23-25'	6J13017-30	Soil	10/09/06 00:00	10-13-2006 16:20
SB-5 28-30'	6J13017-31	Soil	10/09/06 00:00	10-13-2006 16:20
SB-5 32-35'	6J13017-32	Soil	10/09/06 00:00	10-13-2006 16:20

Highlander Environmental Corp.	Project: Rice/ 0-17-1	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2644	
Midland TX, 79705	Project Manager: Tim Reed	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-1 13-15' (6J13017-01) Soil									
Carbon Ranges C6-C12	**J [7.69]**	10.0	mg/kg dry	1	EJ61502	10/15/06	10/15/06	EPA 8015M	J
Carbon Ranges C12-C28	**314**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**56.7**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**371**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*89.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*79.4 %*	*70-130*		"	"	"	"	
SB-2 13-15' (6J13017-05) Soil									
Carbon Ranges C6-C12	**30.4**	10.0	mg/kg dry	1	EJ61502	10/15/06	10/15/06	EPA 8015M	
Carbon Ranges C12-C28	**553**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**94.4**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**678**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*90.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*80.2 %*	*70-130*		"	"	"	"	
SB-2 18-20' (6J13017-06) Soil									
Carbon Ranges C6-C12	**J [9.93]**	10.0	mg/kg dry	1	EJ61502	10/15/06	10/16/06	EPA 8015M	J
Carbon Ranges C12-C28	**80.0**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**J [9.44]**	10.0	"	"	"	"	"	"	J
Total Hydrocarbons	**80.0**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*91.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*80.2 %*	*70-130*		"	"	"	"	
SB-3 3-5' (6J13017-15) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EJ61502	10/15/06	10/16/06	EPA 8015M	
Carbon Ranges C12-C28	**13.2**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**13.2**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*87.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*80.6 %*	*70-130*		"	"	"	"	

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Highlander Environmental Corp.	Project: Rice/ 0-17-1	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2644	
Midland TX, 79705	Project Manager: Tim Reed	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-4 3-5' (6J13017-23) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EJ61609	10/16/06	10/17/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*87.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*79.8 %*	*70-130*		"	"	"	"	
SB-5 13-15' (6J13017-28) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EJ61502	10/15/06	10/16/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*89.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*78.8 %*	*70-130*		"	"	"	"	

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Highlander Environmental Corp.	Project: Rice/ 0-17-1	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2644	
Midland TX, 79705	Project Manager: Tim Reed	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-1 13-15' (6J13017-01) Soil									
Chloride	**978**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
% Moisture	**7.2**	0.1	%	1	EJ61601	10/13/06	10/16/06	% calculation	
SB-1 18-20' (6J13017-02) Soil									
Chloride	**213**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
SB-1 23-25' (6J13017-03) Soil									
Chloride	**255**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
SB-1 33-35' (6J13017-04) Soil									
Chloride	**298**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
SB-2 13-15' (6J13017-05) Soil									
Chloride	**638**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
% Moisture	**10.9**	0.1	%	1	EJ61601	10/13/06	10/16/06	% calculation	
SB-2 18-20' (6J13017-06) Soil									
Chloride	**1360**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
% Moisture	**10.1**	0.1	%	1	EJ61601	10/13/06	10/16/06	% calculation	
SB-2 23-25' (6J13017-07) Soil									
Chloride	**681**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
SB-2 28-30' (6J13017-08) Soil									
Chloride	**638**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
SB-2 33-35' (6J13017-09) Soil									
Chloride	**362**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
SB-2 38-40' (6J13017-10) Soil									
Chloride	**181**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	

Highlander Environmental Corp.
1910 N. Big Spring St.
Midland TX, 79705

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Project Manager: Tim Reed

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General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-2 43-45' (6J13017-11) Soil									
Chloride	**128**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
SB-2 48-50' (6J13017-12) Soil									
Chloride	**95.7**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
SB-2 53-55' (6J13017-13) Soil									
Chloride	**21.3**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
SB-2 58-60' (6J13017-14) Soil									
Chloride	**31.9**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
SB-3 3-5' (6J13017-15) Soil									
Chloride	**106**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
% Moisture	**3.8**	0.1	%	1	EJ61601	10/13/06	10/16/06	% calculation	
SB-3 8-10' (6J13017-16) Soil									
Chloride	**425**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
SB-3 13-15' (6J13017-17) Soil									
Chloride	**596**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
SB-3 18-20' (6J13017-18) Soil									
Chloride	**638**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
SB-3 23-25' (6J13017-19) Soil									
Chloride	**596**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	
SB-3 28-30' (6J13017-20) Soil									
Chloride	**383**	20.0	mg/kg Wet	2	EJ62014	10/20/06	10/22/06	SW 846 9253	

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1910 N. Big Spring St.	Project Number: 2644	
Midland TX, 79705	Project Manager: Tim Reed	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-3 33-35' (6J13017-21) Soil									
Chloride	**53.2**	20.0	mg/kg Wet	2	EJ62015	10/20/06	10/22/06	SW 846 9253	
SB-3 38-40' (6J13017-22) Soil									
Chloride	**42.5**	20.0	mg/kg Wet	2	EJ62015	10/20/06	10/22/06	SW 846 9253	
SB-4 3-5' (6J13017-23) Soil									
Chloride	**128**	20.0	mg/kg Wet	2	EJ62015	10/20/06	10/22/06	SW 846 9253	
% Moisture	**12.0**	0.1	%	1	EJ61601	10/13/06	10/16/06	% calculation	
SB-4 8-10' (6J13017-24) Soil									
Chloride	**596**	20.0	mg/kg Wet	2	EJ62015	10/20/06	10/22/06	SW 846 9253	
SB-4 13-15' (6J13017-25) Soil									
Chloride	**213**	20.0	mg/kg Wet	2	EJ62015	10/20/06	10/22/06	SW 846 9253	
SB-4 18-20' (6J13017-26) Soil									
Chloride	**42.5**	20.0	mg/kg Wet	2	EJ62015	10/20/06	10/22/06	SW 846 9253	
SB-4 23-25' (6J13017-27) Soil									
Chloride	**63.8**	20.0	mg/kg Wet	2	EJ62015	10/20/06	10/22/06	SW 846 9253	
SB-5 13-15' (6J13017-28) Soil									
Chloride	**1110**	20.0	mg/kg Wet	2	EJ62015	10/20/06	10/22/06	SW 846 9253	
% Moisture	**12.1**	0.1	%	1	EJ61601	10/13/06	10/16/06	% calculation	
SB-5 18-20' (6J13017-29) Soil									
Chloride	**468**	20.0	mg/kg Wet	2	EJ62015	10/20/06	10/22/06	SW 846 9253	
SB-5 23-25' (6J13017-30) Soil									
Chloride	**234**	20.0	mg/kg Wet	2	EJ62015	10/20/06	10/22/06	SW 846 9253	

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Highlander Environmental Corp.	Project: Rice/ 0-17-1	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2644	
Midland TX, 79705	Project Manager: Tim Reed	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SB-5 28-30' (6J13017-31) Soil									
Chloride	**128**	20.0	mg/kg Wet	2	EJ62015	10/20/06	10/22/06	SW 846 9253	
SB-5 32-35' (6J13017-32) Soil									
Chloride	**31.9**	20.0	mg/kg Wet	2	EJ62015	10/20/06	10/22/06	SW 846 9253	

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Project Number: 2644
Project Manager: Tim Reed

Fax: (432) 682-3946

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ61502 - Solvent Extraction (GC)										
Blank (EJ61502-BLK1)				Prepared & Analyzed: 10/15/06						
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	*45.3*		*mg/kg*	*50.0*		*90.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.1*		"	*50.0*		*82.2*	*70-130*			
LCS (EJ61502-BS1)				Prepared & Analyzed: 10/15/06						
Carbon Ranges C6-C12	486	10.0	mg/kg wet	500		97.2	75-125			
Carbon Ranges C12-C28	474	10.0	"	500		94.8	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	960	10.0	"	1000		96.0	75-125			
Surrogate: 1-Chlorooctane	*58.0*		*mg/kg*	*50.0*		*116*	*70-130*			
Surrogate: 1-Chlorooctadecane	*43.7*		"	*50.0*		*87.4*	*70-130*			
Calibration Check (EJ61502-CCV1)				Prepared: 10/15/06 Analyzed: 10/16/06						
Carbon Ranges C6-C12	203		mg/kg	250		81.2	80-120			
Carbon Ranges C12-C28	237		"	250		94.8	80-120			
Total Hydrocarbons	440		"	500		88.0	80-120			
Surrogate: 1-Chlorooctane	*47.8*		"	*50.0*		*95.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*38.4*		"	*50.0*		*76.8*	*70-130*			
Matrix Spike (EJ61502-MS1)	**Source: 6J13015-01**			Prepared: 10/15/06 Analyzed: 10/16/06						
Carbon Ranges C6-C12	527	10.0	mg/kg dry	567	ND	92.9	75-125			
Carbon Ranges C12-C28	507	10.0	"	567	ND	89.4	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbons	1030	10.0	"	1130	ND	91.2	75-125			
Surrogate: 1-Chlorooctane	*56.9*		*mg/kg*	*50.0*		*114*	*70-130*			
Surrogate: 1-Chlorooctadecane	*43.3*		"	*50.0*		*86.6*	*70-130*			

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Highlander Environmental Corp.	Project: Rice/ 0-17-1	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2644	
Midland TX, 79705	Project Manager: Tim Reed	

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ61502 - Solvent Extraction (GC)										
Matrix Spike Dup (EJ61502-MSD1)	**Source: 6J13015-01**			Prepared: 10/15/06 Analyzed: 10/16/06						
Carbon Ranges C6-C12	525	10.0	mg/kg dry	567	ND	92.6	75-125	0.380	20	
Carbon Ranges C12-C28	513	10.0	"	567	ND	90.5	75-125	1.18	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbons	1040	10.0	"	1130	ND	92.0	75-125	0.966	20	
Surrogate: 1-Chlorooctane	*57.1*		*mg/kg*	*50.0*		*114*	*70-130*			
Surrogate: 1-Chlorooctadecane	*42.8*		*"*	*50.0*		*85.6*	*70-130*			
Batch EJ61609 - Solvent Extraction (GC)										
Blank (EJ61609-BLK1)				Prepared: 10/16/06 Analyzed: 10/17/06						
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	*48.3*		*mg/kg*	*50.0*		*96.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*45.0*		*"*	*50.0*		*90.0*	*70-130*			
LCS (EJ61609-BS1)				Prepared: 10/16/06 Analyzed: 10/17/06						
Carbon Ranges C6-C12	469	10.0	mg/kg wet	500		93.8	75-125			
Carbon Ranges C12-C28	452	10.0	"	500		90.4	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	921	10.0	"	1000		92.1	75-125			
Surrogate: 1-Chlorooctane	*60.5*		*mg/kg*	*50.0*		*121*	*70-130*			
Surrogate: 1-Chlorooctadecane	*46.4*		*"*	*50.0*		*92.8*	*70-130*			
Calibration Check (EJ61609-CCV1)				Prepared: 10/16/06 Analyzed: 10/18/06						
Carbon Ranges C6-C12	216		mg/kg	250		86.4	80-120			
Carbon Ranges C12-C28	248		"	250		99.2	80-120			
Total Hydrocarbons	464		"	500		92.8	80-120			
Surrogate: 1-Chlorooctane	*64.5*		*"*	*50.0*		*129*	*70-130*			
Surrogate: 1-Chlorooctadecane	*62.7*		*"*	*50.0*		*125*	*70-130*			

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Highlander Environmental Corp.
1910 N. Big Spring St.
Midland TX, 79705

Project: Rice/ 0-17-1
Project Number: 2644
Project Manager: Tim Reed

Fax: (432) 682-3946

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ61609 - Solvent Extraction (GC)										
Matrix Spike (EJ61609-MS1)	**Source: 6J16003-03**			Prepared: 10/16/06 Analyzed: 10/17/06						
Carbon Ranges C6-C12	511	10.0	mg/kg dry	572	ND	89.3	75-125			
Carbon Ranges C12-C28	504	10.0	"	572	ND	88.1	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbons	1020	10.0	"	1140	ND	89.5	75-125			
Surrogate: 1-Chlorooctane	*56.5*		*mg/kg*	*50.0*		*113*	*70-130*			
Surrogate: 1-Chlorooctadecane	*43.8*		"	*50.0*		*87.6*	*70-130*			
Matrix Spike Dup (EJ61609-MSD1)	**Source: 6J16003-03**			Prepared: 10/16/06 Analyzed: 10/17/06						
Carbon Ranges C6-C12	511	10.0	mg/kg dry	572	ND	89.3	75-125	0.00	20	
Carbon Ranges C12-C28	500	10.0	"	572	ND	87.4	75-125	0.797	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbons	1010	10.0	"	1140	ND	88.6	75-125	0.985	20	
Surrogate: 1-Chlorooctane	*55.2*		*mg/kg*	*50.0*		*110*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.0*		"	*50.0*		*82.0*	*70-130*			

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Highlander Environmental Corp.	Project: Rice/ 0-17-1	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2644	
Midland TX, 79705	Project Manager: Tim Reed	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ61601 - General Preparation (Prep)										
Blank (EJ61601-BLK1)				Prepared: 10/13/06 Analyzed: 10/16/06						
% Solids	100		%							
Duplicate (EJ61601-DUP1)		Source: 6J13004-01		Prepared: 10/13/06 Analyzed: 10/16/06						
% Solids	74.4		%		74.5			0.134	20	
Duplicate (EJ61601-DUP2)		Source: 6J13017-06		Prepared: 10/13/06 Analyzed: 10/16/06						
% Solids	90.4		%		89.9			0.555	20	
Duplicate (EJ61601-DUP3)		Source: 6J13021-05		Prepared: 10/13/06 Analyzed: 10/16/06						
% Solids	89.8		%		90.8			1.11	20	
Duplicate (EJ61601-DUP4)		Source: 6J14001-02		Prepared: 10/13/06 Analyzed: 10/16/06						
% Solids	85.1		%		85.1			0.00	20	
Batch EJ62014 - Water Extraction										
Blank (EJ62014-BLK1)				Prepared: 10/20/06 Analyzed: 10/22/06						
Chloride	ND	20.0	mg/kg Wet							
LCS (EJ62014-BS1)				Prepared: 10/20/06 Analyzed: 10/22/06						
Chloride	92.5	5.00	mg/kg Wet	100		92.5	80-120			
Matrix Spike (EJ62014-MS1)		Source: 6J13017-13		Prepared: 10/20/06 Analyzed: 10/22/06						
Chloride	521	20.0	mg/kg Wet	500	21.3	99.9	80-120			
Matrix Spike Dup (EJ62014-MSD1)		Source: 6J13017-13		Prepared: 10/20/06 Analyzed: 10/22/06						
Chloride	532	20.0	mg/kg Wet	500	21.3	102	80-120	2.09	20	

Highlander Environmental Corp.	Project: Rice/ 0-17-1	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2644	
Midland TX, 79705	Project Manager: Tim Reed	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ62014 - Water Extraction										
Reference (EJ62014-SRM1)				Prepared: 10/20/06 Analyzed: 10/22/06						
Chloride	51.0		mg/kg	50.0		102	80-120			
Batch EJ62015 - Water Extraction										
Blank (EJ62015-BLK1)				Prepared: 10/20/06 Analyzed: 10/22/06						
Chloride	ND	20.0	mg/kg Wet							
LCS (EJ62015-BS1)				Prepared: 10/20/06 Analyzed: 10/22/06						
Chloride	91.5	5.00	mg/kg Wet	100		91.5	80-120			
Matrix Spike (EJ62015-MS1)		**Source: 6J13017-23**		Prepared: 10/20/06 Analyzed: 10/22/06						
Chloride	638	20.0	mg/kg Wet	500	128	102	80-120			
Matrix Spike Dup (EJ62015-MSD1)		**Source: 6J13017-23**		Prepared: 10/20/06 Analyzed: 10/22/06						
Chloride	649	20.0	mg/kg Wet	500	128	104	80-120	1.71	20	
Reference (EJ62015-SRM1)				Prepared: 10/20/06 Analyzed: 10/22/06						
Chloride	52.1		mg/kg	50.0		104	80-120			

Highlander Environmental Corp.	Project: Rice/ 0-17-1	Fax: (432) 682-3946
1910 N. Big Spring St.	Project Number: 2644	
Midland TX, 79705	Project Manager: Tim Reed	

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 10/23/2006

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
LaTasha Cornish, Chemist
Sandra Sanchez, Lab Tech.

32 Total

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

PAGE: 1 OF: 4

CLIENT NAME: Rice Engineering

SITE MANAGER: Tim Reed

PROJECT NO.: 2644

PROJECT NAME: O-17-1

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 8015 MOD. TX1005 / 418.1	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 608/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
01	10/9/06		S			SB-1 (13-15')	1				✓	✓			✓											✓			
02	10/9/06		S			SB-1 (18-20')	1				✓	✓														✓			
03	10/9/06		S			SB-1 (23-25')	1				✓	✓														✓			
—	10/9/06		S			SB-1 (28-30') No sample	1				✓	✓														✓			
04	10/9/06		S			SB-1 (33-35')	1				✓	✓														✓			
05	10/9/06		S			SB-2 (13-15')	1				✓	✓			✓											✓			
06	10/9/06		S			SB-2 (18-20')	1				✓	✓			✓											✓			
07	10/9/06		S			SB-2 (23-25')	1				✓	✓														✓			
08	10/9/06		S			SB-2 (28-30')	1				✓	✓														✓			
09	10/9/06		S			SB-2 (33-35')	1				✓	✓														✓			

RELINQUISHED BY: (Signature) Date: 10/13/06 Time: 4:20

RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: Environmental Lab of TX

ADDRESS:

CITY: Odessa STATE: TX ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature)

DATE: 10/13/06 TIME: 4:20

SAMPLED BY: (Print & Sign) Jeffrey Kindle Date: 10/09/06 Time: 1800

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #
HAND DELIVERED UPS OTHER:

HIGHLANDER CONTACT PERSON: Tim Reed

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: Ice Bags 3.0 w/ labels

MATRIX: W-Water S-Soil A-Air SL-Sludge SD-Solid O-Other

REMARKS:

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Environmental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

CLIENT NAME: Rice Engineering

SITE MANAGER: Tim Reed

PROJECT NO.: 2644

PROJECT NAME: D-17-1

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 8015 MOD. TX1005 / 418.1	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 608/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
(05)13617																													
10	10/09/06		S			SB-2 (38-40)	1				✓	✓														✓			
11	10/09/06		S			SB-2 (43-45)	1				✓	✓														✓			
12	10/09/06		S			SB-2 (48-50)	1				✓	✓														✓			
13	10/09/06		S			SB-2 (53-55)	1				✓	✓														✓			
14	10/09/06		S			SB-2 (58-60)	1				✓	✓														✓			
15	10/09/06		S			SB-3 (3-5)	1				✓	✓			✓											✓			
16	10/09/06		S			SB-3 (8-10)	1				✓	✓														✓			
17	10/09/06		S			SB-3 (13-15)	1				✓	✓														✓			
18	10/09/06		S			SB-3 (18-20)	1				✓	✓														✓			
19	10/09/06		S			SB-3 (23-25)	1				✓	✓														✓			

RELINQUISHED BY: (Signature) Date: 10/13/06 Time: 1020

RECEIVED BY: (Signature) Date: Time:

SAMPLED BY: (Print & Sign) Jeffrey Kindle Date: 10/09/06 Time: 1800

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

SAMPLE SHIPPED BY: (Circle) FEDEX HAND DELIVERED BUS UPS AIRBILL #: OTHER:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: Environmental Lab of Tx

ADDRESS:

CITY: Odessa STATE: TX ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature) Date: 10/13/06 Time: 1120

HIGHLANDER CONTACT PERSON: Tim Reed

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED:

MATRIX: W-Water S-Soil A-Air SL-Sludge SD-Solid O-Other

REMARKS:

Please Fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Environmental Corp. - Project Manager retains pink copy - Accounting receives Gold copy.

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

CLIENT NAME: Rio Engineering
SITE MANAGER: Tim Reed
PROJECT NO.: 2644
PROJECT NAME: O-17-1

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 8015 MOD. TX1005 / 418.1	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	BOD, TSS, pH, TDS / Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
(1)120117																													
-10	10/10/06		S			SB-3 (28-30)	1				✓	✓														✓			
-11	10/10/06		S			SB-3 (33-35)	1				✓	✓														✓			
-12	10/10/06		S			SB-3 (38-40)	1				✓	✓														✓			
-13	10/10/06		S			SB-4 (3-5)	1				✓	✓			✓											✓			
-14	10/10/06		S			SB-4 (8-10)	1				✓	✓														✓			
-15	10/10/06		S			SB-4 (13-15)	1				✓	✓														✓			
-16	10/10/06		S			SB-4 (18-20)	1				✓	✓														✓			
-17	10/10/06		S			SB-4 (23-25)	1				✓	✓														✓			
-18	10/10/06		S			SB-5 (13-15)	1				✓	✓			✓											✓			
-19	10/10/06		S			SB-5 (18-20)	1				✓	✓														✓			

RELINQUISHED BY: (Signature) Date: 10/13/06 Time: 4:20
RECEIVED BY: (Signature) Date: Time:
SAMPLED BY: (Print & Sign) Jeffrey Kindle Date: 10/10/06 Time: 1800

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
SAMPLE SHIPPED BY: (circle) FEDEX HAND DELIVERED BUS UPS AIRBILL #: OTHER:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: Environmental Lab of Tx
ADDRESS:
CITY: Odessa STATE: TX ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature) Cerri Kelly
DATE: 10/13/06 TIME: 4:20

HIGHLANDER CONTACT PERSON: Tim Reed

Results by:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED:

MATRIX: W-Water S-Soil A-Air SL-Sludge SD-Solid O-Other

REMARKS:

Please Fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Enviromental Corp. - Project Manager retains pink copy - Accounting receives Gold copy.

Analysis Request and Chain of Custody Record

PAGE: 4 OF: 4

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 Fax (432) 682-3946

CLIENT NAME: Rico Engineering
SITE MANAGER: Tim Reed
PROJECT NO.: 2644
PROJECT NAME: O-17-1

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 8015 MOD. TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	BOD, TSS, pH, TDS, (Chloride)	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
13017																													
-30	10/10/06		S			SB-5 (23-25)	1				✓	✓														✓			
-31	10/10/06		S			SB-5 (28-30)	1				✓	✓														✓			
-32	10/10/06		S			SB-5 (33-35)	1				✓	✓														✓			

RELINQUISHED BY: (Signature) [illegible] Date: 10/13/06 Time: 4:20
RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: Environmental Lab of TX
ADDRESS:
CITY: [illegible] STATE: TX ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature) Carrie Wolf
DATE: 10/13/06 TIME: 4:20

SAMPLED BY: (Print & Sign) Jeffrey Knobloch Date: 10/10/06 Time: 1200
SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #
(HAND DELIVERED) UPS OTHER:
HIGHLANDER CONTACT PERSON: Tim Reed
Results by:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED:
MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other
REMARKS:

Please Fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Environmental Corp. - Project Manager retains pink copy - Accounting receives Gold copy.

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Highlander

Date/ Time: 10/15/24 4:20

Lab ID #: 605130

Initials: CK

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	3.0 °C	
#2	Shipping container in good condition?	~~Yes~~	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	~~Not Present~~	
#5	Chain of Custody present?	~~Yes~~	No		
#6	Sample instructions complete of Chain of Custody?	~~Yes~~	No		
#7	Chain of Custody signed when relinquished/ received?	~~Yes~~	No		
#8	Chain of Custody agrees with sample label(s)?	~~Yes~~	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	~~Yes~~	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	~~Yes~~	No		
#11	Containers supplied by ELOT?	~~Yes~~	No		
#12	Samples in proper container/ bottle?	~~Yes~~	No	See Below	
#13	Samples properly preserved?	~~Yes~~	No	See Below	
#14	Sample bottles intact?	~~Yes~~	No		
#15	Preservations documented on Chain of Custody?	~~Yes~~	No		
#16	Containers documented on Chain of Custody?	~~Yes~~	No		
#17	Sufficient sample amount for indicated test(s)?	~~Yes~~	No	See Below	
#18	All samples received within sufficient hold time?	~~Yes~~	No	See Below	
#19	VOC samples have zero headspace?	~~Yes~~	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Appendix C

SAMPLE LOG

Boring/Well: SB-1
Project Number: 2644
Client: Rice Engineering
Site Location: BD 0-17-1
Location: Lea County, New Mexico
Total Depth 35
Date Installed: 10/09/06

DEPTH (in feet)	OVM	CHLORIDES (in mg/Kg)	SAMPLE DESCRIPTION
13-15	25	895	Tan calcareous sand with slight hydrocarbon odor
18-20	0	571	Tan calcareous fine grain sand
23-25	0	212	Tan calcareous fine grain sand
28-30	0	169	Tan calcareous fine grain sand
33-35	0	226	Tan calcareous fine grain sand

Boring completed at 35 feet bgs

SAMPLE LOG

Boring/Well: SB-2
Project Number: 2644
Client: Rice Engineering
Site Location: BD 0-17-1
Location: Lea County, New Mexico
Total Depth 60
Date Installed: 10/09/06

DEPTH (in feet)	OVM	CHLORIDES (in mg/Kg)	SAMPLE DESCRIPTION
13-15	28	1293	Tan calcareous sand with slight hydrocarbon odor
18-20	25	995	Tan calcareous fine grain sand
23-25	10	210	Tan calcareous fine grain sand
28-30	2	930	Tan calcareous fine grain sand
33-35	0	411	Tan calcareous fine grain sand
38-40	0	621	Tan calcareous fine grain sand
43-45	0	374	Tan calcareous fine grain sand
48-50	0	270	Tan calcareous fine grain sand
53-55	0	266	Tan calcareous fine grain sand
58-60	0	239	Tan calcareous fine grain sand

Boring completed at 60 feet bgs

SAMPLE LOG

Boring/Well: SB-3
Project Number: 2644
Client: Rice Engineering
Site Location: BD 0-17-1
Location: Lea County, New Mexico
Total Depth 40
Date Installed: 10/09/06

DEPTH (in feet)	OVM	CHLORIDES (in mg/Kg)	SAMPLE DESCRIPTION
3-5	2	274	Brown fine grain sand
8-10	0	470	Dark brown clayey sand
13-15	0	615	Dark brown clayey sand
18-20	0	488	Dark brown clayey sand
23-25	0	682	Tan calcareous fine grain sand
28-30	0	441	Tan calcareous fine grain sand
33-35	0	276	Tan calcareous fine grain sand
38-40	0	234	Tan calcareous fine grain sand

Boring completed at 40 feet bgs

SAMPLE LOG

Boring/Well: SB-4
Project Number: 2644
Client: Rice Engineering
Site Location: BD 0-17-1
Location: Lea County, New Mexico
Total Depth 25
Date Installed: 10/10/06

DEPTH (in feet)	OVM	CHLORIDES (in mg/Kg)	SAMPLE DESCRIPTION
3-5	2	348	Tan clayey fine grain sand with no odor or staining
8-10	2	556	Tan calcareous fine grain sand with no odor or staining
13-15	2	255	Tan calcareous fine grain sand with no odor or staining
18-20	2	235	Tan calcareous fine grain sand with no odor or staining
23-25	0	149	Tan calcareous fine grain sand with no odor or staining

Boring completed at 25 feet bgs

SAMPLE LOG

Boring/Well: SB-5
Project Number: 2644
Client: Rice Engineering
Site Location: BD 0-17-1
Location: Lea County, New Mexico
Total Depth 35
Date Installed: 10/10/06

DEPTH (in feet)	OVM	CHLORIDES (in mg/Kg)	SAMPLE DESCRIPTION
13-15	2	834	Tan/brown calcareous fine grain sand with no odor or staining
18-20	2	406	Tan calcareous fine grain sand with no odor or staining
23-25	0	300	Tan calcareous fine grain sand with no odor or staining
28-30	0	236	Tan calcareous fine grain sand with no odor or staining
33-35	0	149	Tan calcareous fine grain sand with no odor or staining

Boring completed at 35 feet bgs

ENSOLUM

APPENDIX B

Agency Correspondence

From: SLO Spills
To: Stuart Hyde; SLO Spills
Cc: Billy Ginn; Devin Hencmann; Fatima Smith
Subject: RE: (Notice of Spill) Hilcorp Energy Company - Facility ID fAPP2224169341 - 2/21/2025
Date: Wednesday, February 26, 2025 9:11:48 AM
Attachments: image006.png
image010.png
image011.png
image012.png
image002.png

> You don't often get email from spills@nmslo.gov. Learn why this is important

[**EXTERNAL EMAIL**]

Thank you for notifying the NMSLO Environmental Compliance Office (ECO) of the incident or release noted in the subject line above and the potential impact to State Trust Land. Once the release is stopped and contained, your cooperation in completing the subsequent remediation tasks is appreciated:

1. Identify compliance requirements for the Cultural Properties Protection (CPP) Rule.
2. Identify avoidance, minimization, or mitigation measures for impact to any biologically sensitive areas.
3. Apply for a Right of Entry (ROE) for Remediation if any part of the remediation occurs off of the active lease of the responsible party. A site delineation plan and reclamation plan are required for the ROE application. (https://www.nmstatelands.org/resources/forms-and-applications/)
4. If the remediation closure report is not submitted within 90 days of discovery of the release, a site delineation plan must be submitted to eco@nmslo.gov for review and approval. (If delineation and remediation happen concurrently, a remediation plan must be submitted to eco@nmslo.gov in place of a site delineation plan.)
5. Subsequent reports that must be submitted to ECO include:
    - **remediation plan;**
    - **reclamation plan, if applicable; or**
    - **remediation with reclamation plan;**
    - **remediation closure report; or**
    - **remediation closure report with reclamation activities report;**
    - **reclamation activities report;**
    - **final reclamation report, if applicable.**

SAMPLING NOTIFICATIONS
Written notification of the confirmation sampling event must be submitted to ECO a minimum of two (2) business days before the sampling event, or as directed by ECO. Please submit notifications to eco@nmslo.gov with the subject line as follows: ***(Sampling Notification) Company-Location Name (API/Incident #)-Date of Incident.***

NMSLO RESOURCES

- RIGHT OF ENTRY FORMS: Rights of Way Forms - https://www.nmstatelands.org/resources/forms-and-applications/

- ECO GUIDANCE DOCUMENTS: Environmental Compliance Office - https://www.nmstatelands.org/resources/forms-and-applications/ (PENDING)
- LEASE STATUS MAP: https://mapservice.nmstatelands.org/LandStatus/
- NMSLO OIL & GAS MANUAL: https://www.nmstatelands.org/wp-content/uploads/2023/07/Oil-and-Gas-Manual-2023-_WEB.pdf
- NMSLO LEASE SEARCH: https://secure.slo.state.nm.us/Applications/SLOConnect/

CULTURAL PROPERTIES PROTECTION RULE (19.2.24 NMAC) FOR REMEDIATION AND RECLAMATION ACTIVITIES

A. As soon as possible, when a new release or damage occurs on STL, contact a Cultural Resource Consultant who will:

1. Conduct an Archaeological Records Management System (ARMS) review to determine if any known cultural properties have been previously identified within the remediation area and if the area has been surveyed for cultural resources.
2. Advise as to whether an archaeological monitor should be present during initial containment activities and subsequent remediation efforts.
3. Advise as to whether a full cultural properties survey will be required after containment and before full remediation.

B. A list of cultural resource consultants permitted to conduct work on state lands is maintained here: https://www.nhistoricpreservation.org/programs/permits.html.

C. To learn more about NMSLO's Cultural Properties Protection Rule visit: https://www.nmstatelands.org/divisions/cultural-resources-office/culturalproperties/. CRO can be contacted via email at croinfo@nmslo.gov or call 505-827-5781.

BIOLOGICAL COMPLIANCE & REPORTING

ECO recommends utilizing the resources below to determine if the site activities are occurring in a sensitive or restricted area. Also, when additional assistance is needed, ECO recommends consulting with a qualified third-party biologist for evaluation of potential impacts to threatened, endangered, and sensitive wildlife and plant species, environmentally sensitive areas, surface waters, cave and karst features, and sensitive soils before conducting remediation and reclamation activities.

BIOLOGICAL COMPLIANCE RESOURCES

- New Mexico State Land Office Land Status Map https://mapservice.nmstatelands.org/LandStatus
- U.S. Fish and Wildlife Services Information for Planning and Consultation: https://ipac.ecosphere.fws.gov/
- BISON-M database: https://bison-m.org/
- New Mexico Department of Game and Fish Environmental Review Tool (ERT): https://nmert.org/content/map
- Open Enviro Map Wetlands: https://gis.web.env.nm.gov/oem/?map=wetlands

Thank you for working with ECO, and your efforts to protect State Trust Land.

Environmental Compliance Office
Surface Resources Division

eco@nmslo.gov
nmstatelands.org
.....

From: Stuart Hyde <shyde@ensolum.com>
Sent: Saturday, February 22, 2025 7:38 AM
To: SLO Spills <spills@nmslo.gov>
Cc: Billy Ginn <William.Ginn@hilcorp.com>; Devin Hencmann <dhencmann@ensolum.com>; Fatima Smith <fsmith@ensolum.com>
Subject: [EXTERNAL] (Notice of Spill) Hilcorp Energy Company - Facility ID fAPP2224169341 - 2/21/2025

On behalf of Hilcorp Energy Company, we are reporting the release of 165 barrels of crude oil, of which 160 barrels were recovered, at the State D A CTB site, facility ID fAPP2224169341, Lea County, NM. Attached is the Notification of Release submitted to the NMOCD.

Stuart Hyde, PG
(Licensed in WA/TX)
Senior Managing Geologist
970-903-1607
Ensolum, LLC

"If you want to go fast, go alone. If you want to go far, go together." – African Proverb

---

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Saturday, February 22, 2025 7:28 AM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 434359

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Stuart Hyde for HILCORP ENERGY COMPANY),

The OCD has accepted the submitted *Notification of a release* (NOR), for incident ID (n#) nAPP2505326850,
with the following conditions:

When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.

Please reference nAPP2505326850, on all subsequent C-141 submissions and communications regarding the remediation of this release.
NOTE: As of December 2019, NMOCD has discontinued the use of the "RP" number.
If you have any questions regarding this application, or don't know why you have received this email, please contact us.

ocd.enviro@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: OCDOnline@state.nm.us
To: Fatima Smith
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 458475
Date: Monday, May 5, 2025 10:44:06 AM

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Fatima Smith for HILCORP ENERGY COMPANY),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2505326850.

The sampling event is expected to take place:

When: 05/07/2025 @ 09:00
Where: K-16-21S-37E 0 FNL 0 FEL (32.476833,-103.172027)

Additional Information: Contact PM Fatima Smith, 575-725-1196

Additional Instructions: State D A CTB, coordinates 32.476589, -103.172363

This notification is to alert OCD of sampling that will occur on Wednesday 5/7/2025 through Thursday 5/8/2025.

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

ENSOLUM

APPENDIX C

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Devin Hencmann
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 3/10/2025 2:03:46 PM

JOB DESCRIPTION

State D A CTB
07A1988176

JOB NUMBER

890-7774-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

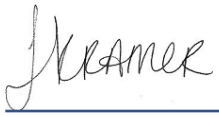
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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3/10/2025 2:03:46 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: State D A CTB

Laboratory Job ID: 890-7774-1
SDG: 07A1988176

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-7774-1
Project/Site: State D A CTB SDG: 07A1988176

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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.
☼	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: Ensolum
Project: State D A CTB

Job ID: 890-7774-1

Job ID: 890-7774-1 Eurofins Carlsbad

Job Narrative
890-7774-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/5/2025 4:41 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 5.8°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-7774-1), SS02 (890-7774-2) and SS02A (890-7774-3).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: SS01 (890-7774-1). 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.

Diesel Range Organics
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS01 (890-7774-1) and SS02 (890-7774-2). 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.

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-104808 and analytical batch 880-104836 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is 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: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

Client Sample ID: SS01

Lab Sample ID: 890-7774-1
Matrix: Solid
Date Collected: 03/05/25 10:53
Date Received: 03/05/25 16:41

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.16**		0.495		mg/Kg		03/07/25 12:21	03/09/25 10:56	250
Toluene	**31.8**		0.495		mg/Kg		03/07/25 12:21	03/09/25 10:56	250
Ethylbenzene	**37.8**		0.495		mg/Kg		03/07/25 12:21	03/09/25 10:56	250
m-Xylene & p-Xylene	**52.7**		0.990		mg/Kg		03/07/25 12:21	03/09/25 10:56	250
o-Xylene	**22.6**		0.495		mg/Kg		03/07/25 12:21	03/09/25 10:56	250
Xylenes, Total	**75.3**		0.990		mg/Kg		03/07/25 12:21	03/09/25 10:56	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*147*	*S1+*	*70 - 130*	*03/07/25 12:21*	*03/09/25 10:56*	*250*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*03/07/25 12:21*	*03/09/25 10:56*	*250*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**147**		0.990		mg/Kg			03/09/25 10:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**13000**		999		mg/Kg			03/07/25 02:37	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**4820**		999		mg/Kg		03/06/25 19:57	03/07/25 02:37	20
Diesel Range Organics (Over C10-C28)	**8140**		999		mg/Kg		03/06/25 19:57	03/07/25 02:37	20
Oil Range Organics (Over C28-C36)	<999	U	999		mg/Kg		03/06/25 19:57	03/07/25 02:37	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*237*	*S1+*	*70 - 130*	*03/06/25 19:57*	*03/07/25 02:37*	*20*
o-Terphenyl	*265*	*S1+*	*70 - 130*	*03/06/25 19:57*	*03/07/25 02:37*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.1**		9.92		mg/Kg			03/10/25 11:46	1

Client Sample ID: SS02

Lab Sample ID: 890-7774-2
Matrix: Solid
Date Collected: 03/05/25 10:55
Date Received: 03/05/25 16:41

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.497	U	0.497		mg/Kg		03/07/25 12:21	03/09/25 11:17	250
Toluene	**7.45**		0.497		mg/Kg		03/07/25 12:21	03/09/25 11:17	250
Ethylbenzene	**8.90**		0.497		mg/Kg		03/07/25 12:21	03/09/25 11:17	250
m-Xylene & p-Xylene	**12.2**		0.994		mg/Kg		03/07/25 12:21	03/09/25 11:17	250
o-Xylene	**3.77**		0.497		mg/Kg		03/07/25 12:21	03/09/25 11:17	250
Xylenes, Total	**16.0**		0.994		mg/Kg		03/07/25 12:21	03/09/25 11:17	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*03/07/25 12:21*	*03/09/25 11:17*	*250*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*03/07/25 12:21*	*03/09/25 11:17*	*250*

Client Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

Client Sample ID: SS02

Date Collected: 03/05/25 10:55
Date Received: 03/05/25 16:41

Lab Sample ID: 890-7774-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**32.3**		0.994		mg/Kg			03/09/25 11:17	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**8150**		996		mg/Kg			03/07/25 02:52	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**1780**		996		mg/Kg		03/06/25 19:57	03/07/25 02:52	20
Diesel Range Organics (Over C10-C28)	**6370**		996		mg/Kg		03/06/25 19:57	03/07/25 02:52	20
Oil Range Organics (Over C28-C36)	<996	U	996		mg/Kg		03/06/25 19:57	03/07/25 02:52	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*155*	*S1+*	*70 - 130*	*03/06/25 19:57*	*03/07/25 02:52*	*20*
o-Terphenyl	*224*	*S1+*	*70 - 130*	*03/06/25 19:57*	*03/07/25 02:52*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.4**		10.0		mg/Kg			03/10/25 11:53	1

Client Sample ID: SS02A

Date Collected: 03/05/25 11:55
Date Received: 03/05/25 16:41

Lab Sample ID: 890-7774-3
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0992	U	0.0992		mg/Kg		03/07/25 12:21	03/09/25 11:37	50
Toluene	**0.106**		0.0992		mg/Kg		03/07/25 12:21	03/09/25 11:37	50
Ethylbenzene	**0.187**		0.0992		mg/Kg		03/07/25 12:21	03/09/25 11:37	50
m-Xylene & p-Xylene	**0.461**		0.198		mg/Kg		03/07/25 12:21	03/09/25 11:37	50
o-Xylene	**0.385**		0.0992		mg/Kg		03/07/25 12:21	03/09/25 11:37	50
Xylenes, Total	**0.846**		0.198		mg/Kg		03/07/25 12:21	03/09/25 11:37	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/07/25 12:21*	*03/09/25 11:37*	*50*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*03/07/25 12:21*	*03/09/25 11:37*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**1.14**		0.198		mg/Kg			03/09/25 11:37	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**459**		50.5		mg/Kg			03/07/25 12:00	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/07/25 11:57	03/07/25 12:00	1
Diesel Range Organics (Over C10-C28)	**459**		50.5		mg/Kg		03/07/25 11:57	03/07/25 12:00	1

Client Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

Client Sample ID: SS02A

Date Collected: 03/05/25 11:55
Date Received: 03/05/25 16:41

Lab Sample ID: 890-7774-3

Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/07/25 11:57	03/07/25 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*03/07/25 11:57*	*03/07/25 12:00*	*1*
o-Terphenyl	*114*		*70 - 130*	*03/07/25 11:57*	*03/07/25 12:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.2**		10.1		mg/Kg			03/10/25 11:59	1

Surrogate Summary

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

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)
880-55325-A-1-B MS	Matrix Spike	93	106
880-55325-A-1-C MSD	Matrix Spike Duplicate	104	102
890-7774-1	SS01	147 S1+	89
890-7774-2	SS02	88	88
890-7774-3	SS02A	103	79
LCS 880-104764/1-A	Lab Control Sample	97	103
LCSD 880-104764/2-A	Lab Control Sample Dup	105	103
MB 880-104764/5-A	Method Blank	91	89
MB 880-104801/5-A	Method Blank	91	90

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)
880-55308-A-1-F MS	Matrix Spike	92	85
880-55308-A-1-G MSD	Matrix Spike Duplicate	95	89
890-7774-1	SS01	237 S1+	265 S1+
890-7774-2	SS02	155 S1+	224 S1+
890-7774-3	SS02A	117	114
890-7778-A-26-B MS	Matrix Spike	103	100
890-7778-A-26-C MSD	Matrix Spike Duplicate	114	100
LCS 880-104677/2-A	Lab Control Sample	122	109
LCS 880-104680/2-A	Lab Control Sample	79	82
LCSD 880-104677/3-A	Lab Control Sample Dup	125	111
LCSD 880-104680/3-A	Lab Control Sample Dup	77	79
MB 880-104677/1-A	Method Blank	91	83
MB 880-104680/1-A	Method Blank	107	98

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-104764/5-A
Matrix: Solid
Analysis Batch: 104646

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 104764

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/07/25 12:21	03/09/25 08:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/25 12:21	03/09/25 08:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/25 12:21	03/09/25 08:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/07/25 12:21	03/09/25 08:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/25 12:21	03/09/25 08:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/07/25 12:21	03/09/25 08:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*03/07/25 12:21*	*03/09/25 08:11*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*03/07/25 12:21*	*03/09/25 08:11*	*1*

Lab Sample ID: LCS 880-104764/1-A
Matrix: Solid
Analysis Batch: 104646

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 104764

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1110		mg/Kg		111	70 - 130		
Toluene			0.100	0.1133		mg/Kg		113	70 - 130		
Ethylbenzene			0.100	0.1090		mg/Kg		109	70 - 130		
m-Xylene & p-Xylene			0.200	0.1964		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.1059		mg/Kg		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 880-104764/2-A
Matrix: Solid
Analysis Batch: 104646

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 104764

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1113		mg/Kg		111	70 - 130	0	35
Toluene			0.100	0.1193		mg/Kg		119	70 - 130	5	35
Ethylbenzene			0.100	0.1134		mg/Kg		113	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.2012		mg/Kg		101	70 - 130	2	35
o-Xylene			0.100	0.1090		mg/Kg		109	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 880-55325-A-1-B MS
Matrix: Solid
Analysis Batch: 104646

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 104764

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.100	0.1119		mg/Kg		112	70 - 130		
Toluene	<0.00200	U	0.100	0.1041		mg/Kg		104	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

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

Lab Sample ID: 880-55325-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 104646 — **Prep Batch: 104764**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.09236		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1610		mg/Kg		81	70 - 130
o-Xylene	<0.00200	U	0.100	0.08366		mg/Kg		84	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: 880-55325-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 104646 — **Prep Batch: 104764**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.1048		mg/Kg		105	70 - 130	6	35
Toluene	<0.00200	U	0.100	0.1092		mg/Kg		109	70 - 130	5	35
Ethylbenzene	<0.00200	U	0.100	0.1003		mg/Kg		100	70 - 130	8	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1798		mg/Kg		90	70 - 130	11	35
o-Xylene	<0.00200	U	0.100	0.09123		mg/Kg		91	70 - 130	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: MB 880-104801/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 104646 — **Prep Batch: 104801**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/08/25 10:49	03/08/25 20:11	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/08/25 10:49	03/08/25 20:11	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/08/25 10:49	03/08/25 20:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/08/25 10:49	03/08/25 20:11	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/08/25 10:49	03/08/25 20:11	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/08/25 10:49	03/08/25 20:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*03/08/25 10:49*	*03/08/25 20:11*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/08/25 10:49*	*03/08/25 20:11*	*1*

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

Lab Sample ID: MB 880-104677/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 104594 — **Prep Batch: 104677**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/06/25 19:56	03/07/25 00:03	1

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QC Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

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

Lab Sample ID: MB 880-104677/1-A
Matrix: Solid
Analysis Batch: 104594

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 104677

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/06/25 19:56	03/07/25 00:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/06/25 19:56	03/07/25 00:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*03/06/25 19:56*	*03/07/25 00:03*	*1*
o-Terphenyl	*83*		*70 - 130*	*03/06/25 19:56*	*03/07/25 00:03*	*1*

Lab Sample ID: LCS 880-104677/2-A
Matrix: Solid
Analysis Batch: 104594

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 104677

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1121		mg/Kg		112	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1159		mg/Kg		116	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*122*		*70 - 130*
o-Terphenyl	*109*		*70 - 130*

Lab Sample ID: LCSD 880-104677/3-A
Matrix: Solid
Analysis Batch: 104594

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 104677

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1223		mg/Kg		122	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	1189		mg/Kg		119	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*125*		*70 - 130*
o-Terphenyl	*111*		*70 - 130*

Lab Sample ID: 880-55308-A-1-F MS
Matrix: Solid
Analysis Batch: 104594

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 104677

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	994	795.9		mg/Kg		80	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	994	773.8		mg/Kg		78	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

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

Lab Sample ID: 880-55308-A-1-G MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 104594 — **Prep Batch: 104677**

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	994	814.1		mg/Kg		82	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.0	U	994	806.7		mg/Kg		81	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*89*		*70 - 130*

Lab Sample ID: MB 880-104680/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 104612 — **Prep Batch: 104680**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/06/25 19:57	03/07/25 01:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/06/25 19:57	03/07/25 01:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/06/25 19:57	03/07/25 01:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*03/06/25 19:57*	*03/07/25 01:15*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/06/25 19:57*	*03/07/25 01:15*	*1*

Lab Sample ID: LCS 880-104680/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 104612 — **Prep Batch: 104680**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1076		mg/Kg		108	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1072		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*79*		*70 - 130*
o-Terphenyl	*82*		*70 - 130*

Lab Sample ID: LCSD 880-104680/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 104612 — **Prep Batch: 104680**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	1001		mg/Kg		100	70 - 130	7	20

QC Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

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

Lab Sample ID: LCSD 880-104680/3-A
Matrix: Solid
Analysis Batch: 104612

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 104680

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	77		70 - 130
o-Terphenyl	79		70 - 130

Lab Sample ID: 890-7778-A-26-B MS
Matrix: Solid
Analysis Batch: 104612

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 104680

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	759.5		mg/Kg		76	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	995	719.4		mg/Kg		72	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: 890-7778-A-26-C MSD
Matrix: Solid
Analysis Batch: 104612

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 104680

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	995	733.2		mg/Kg		74	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U	995	692.4		mg/Kg		70	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	100		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-104808/1-A
Matrix: Solid
Analysis Batch: 104836

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0	mg/Kg			03/10/25 08:55	1

Lab Sample ID: LCS 880-104808/2-A
Matrix: Solid
Analysis Batch: 104836

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	255.0		mg/Kg		102	90 - 110

QC Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-104808/3-A
Matrix: Solid
Analysis Batch: 104836

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	248.3		mg/Kg		99	90 - 110	3	20

Lab Sample ID: 880-55382-A-5-B MS
Matrix: Solid
Analysis Batch: 104836

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	2590	F1	2500	5649	F1	mg/Kg		122	90 - 110		

Lab Sample ID: 880-55382-A-5-C MSD
Matrix: Solid
Analysis Batch: 104836

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	2590	F1	2500	5671	F1	mg/Kg		123	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

GC VOA

Analysis Batch: 104646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7774-1	SS01	Total/NA	Solid	8021B	104764
890-7774-2	SS02	Total/NA	Solid	8021B	104764
890-7774-3	SS02A	Total/NA	Solid	8021B	104764
MB 880-104764/5-A	Method Blank	Total/NA	Solid	8021B	104764
MB 880-104801/5-A	Method Blank	Total/NA	Solid	8021B	104801
LCS 880-104764/1-A	Lab Control Sample	Total/NA	Solid	8021B	104764
LCSD 880-104764/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	104764
880-55325-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	104764
880-55325-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	104764

Prep Batch: 104764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7774-1	SS01	Total/NA	Solid	5035	
890-7774-2	SS02	Total/NA	Solid	5035	
890-7774-3	SS02A	Total/NA	Solid	5035	
MB 880-104764/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-104764/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-104764/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-55325-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-55325-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 104801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-104801/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 104899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7774-1	SS01	Total/NA	Solid	Total BTEX	
890-7774-2	SS02	Total/NA	Solid	Total BTEX	
890-7774-3	SS02A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 104594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7774-1	SS01	Total/NA	Solid	8015B NM	104677
890-7774-2	SS02	Total/NA	Solid	8015B NM	104677
MB 880-104677/1-A	Method Blank	Total/NA	Solid	8015B NM	104677
LCS 880-104677/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	104677
LCSD 880-104677/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	104677
880-55308-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	104677
880-55308-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	104677

Analysis Batch: 104612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7774-3	SS02A	Total/NA	Solid	8015B NM	104680
MB 880-104680/1-A	Method Blank	Total/NA	Solid	8015B NM	104680
LCS 880-104680/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	104680
LCSD 880-104680/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	104680
890-7778-A-26-B MS	Matrix Spike	Total/NA	Solid	8015B NM	104680
890-7778-A-26-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	104680

QC Association Summary

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

GC Semi VOA

Prep Batch: 104677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7774-1	SS01	Total/NA	Solid	8015NM Prep	
890-7774-2	SS02	Total/NA	Solid	8015NM Prep	
MB 880-104677/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-104677/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-104677/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-55308-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-55308-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 104680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7774-3	SS02A	Total/NA	Solid	8015NM Prep	
MB 880-104680/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-104680/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-104680/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7778-A-26-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-7778-A-26-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 104723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7774-1	SS01	Total/NA	Solid	8015 NM	
890-7774-2	SS02	Total/NA	Solid	8015 NM	
890-7774-3	SS02A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 104808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7774-1	SS01	Soluble	Solid	DI Leach	
890-7774-2	SS02	Soluble	Solid	DI Leach	
890-7774-3	SS02A	Soluble	Solid	DI Leach	
MB 880-104808/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-104808/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-104808/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-55382-A-5-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-55382-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 104836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7774-1	SS01	Soluble	Solid	300.0	104808
890-7774-2	SS02	Soluble	Solid	300.0	104808
890-7774-3	SS02A	Soluble	Solid	300.0	104808
MB 880-104808/1-A	Method Blank	Soluble	Solid	300.0	104808
LCS 880-104808/2-A	Lab Control Sample	Soluble	Solid	300.0	104808
LCSD 880-104808/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	104808
880-55382-A-5-B MS	Matrix Spike	Soluble	Solid	300.0	104808
880-55382-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	104808

Lab Chronicle

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

Client Sample ID: SS01
Date Collected: 03/05/25 10:53
Date Received: 03/05/25 16:41

Lab Sample ID: 890-7774-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	104764	03/07/25 12:21	MNR	EET MID
Total/NA	Analysis	8021B		250	5 mL	5 mL	104646	03/09/25 10:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			104899	03/09/25 10:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			104723	03/07/25 02:37	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	104677	03/06/25 19:57	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	104594	03/07/25 02:37	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	104808	03/09/25 09:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	104836	03/10/25 11:46	CH	EET MID

Client Sample ID: SS02
Date Collected: 03/05/25 10:55
Date Received: 03/05/25 16:41

Lab Sample ID: 890-7774-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	104764	03/07/25 12:21	MNR	EET MID
Total/NA	Analysis	8021B		250	5 mL	5 mL	104646	03/09/25 11:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			104899	03/09/25 11:17	AJ	EET MID
Total/NA	Analysis	8015 NM		1			104723	03/07/25 02:52	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	104677	03/06/25 19:57	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	104594	03/07/25 02:52	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	104808	03/09/25 09:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	104836	03/10/25 11:53	CH	EET MID

Client Sample ID: SS02A
Date Collected: 03/05/25 11:55
Date Received: 03/05/25 16:41

Lab Sample ID: 890-7774-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	104764	03/07/25 12:21	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	104646	03/09/25 11:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			104899	03/09/25 11:37	AJ	EET MID
Total/NA	Analysis	8015 NM		1			104723	03/07/25 12:00	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	104680	03/07/25 11:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	104612	03/07/25 12:00	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	104808	03/09/25 09:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	104836	03/10/25 11:59	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

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	06-30-25

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-7774-1
SDG: 07A1988176

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-7774-1	SS01	Solid	03/05/25 10:53	03/05/25 16:41
890-7774-2	SS02	Solid	03/05/25 10:55	03/05/25 16:41
890-7774-3	SS02A	Solid	03/05/25 11:55	03/05/25 16:41

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	~~Tacoma Morrissey~~ JDS Fatima Smith	Bill to: (if different)	Billy Ginn
Company Name:	Ensolum LLC	Company Name:	Hilcorp
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	~~337 257 8307~~ JDS 575 725 1196	Email:	tsmith@ensolum.com, kthomason@ensolum.com dhencmann JDS

Program: UST
State of Projec
Reporting: Lev
Deliverables: E

890-7774 Chain of Custody

Project Name:	State DACTB	Turn Around	
Project Number:	07A1988176	☑ Routine ☒ Rush	
Project Location:	32.4765720, -103.1723561	Due Date:	~~24hr~~ JPS
~~Sampler's Name:~~	Joshua Bexley	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:	TM#007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	6.0
~~Total Containers:~~		Corrected Temperature:	5.8

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: Chloride EPA 300.0	TPH 8015	BTEX 8021
SS01	Soil	3.5.25	1053	0.5'	G	1	Cool-Cool	X	X	X
SS02	Soil	3.5.25	1055	0.5'	G	1		X	X	X
SS02A	Soil	3.5.25	1155	9'	G	1		X	X	X

JDS

Preservative Codes

None: NO	DI Water: H_2O
Cool: Cool	MeOH: Me
HCL: HC	HNO_3: HN
H_2SO_4: H_2	NaOH: Na
H_3PO_4: HP	
$NaHSO_4$: NABIS	
~~$Na_2S_2O_3$: $NaSO_3$~~	
Zn Acetate+NaOH: Zn	
NaOH+Ascorbic Acid: SAPC	

Sample Comments

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 Tl 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 Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		16:41 3/5	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Kramer, Jessica	Carrier Tracking No(s): N/A	COC No: 890-4694.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Jessica.Kramer@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-7774-1
Address: 1211 W. Florida Ave,	Due Date Requested: 3/11/2025			Preservation Codes: -
City: Midland	TAT Requested (days): N/A			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: state D A CTB	Project #: 89000102			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
SS01 (890-7774-1)	3/5/25	10:53 Mountain	G	Solid			X	X	X	X	X	1	
SS02 (890-7774-2)	3/5/25	10:55 Mountain	G	Solid			X	X	X	X	X	1	
SS02A (890-7774-3)	3/5/25	11:55 Mountain	G	Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/6 1630				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/7/25 0800	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-7774-1
SDG Number: 07A1988176

Login Number: 7774
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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?	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.	N/A	Refer to Job Narrative for details.
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: Ensolum

Job Number: 890-7774-1
SDG Number: 07A1988176

Login Number: 7774
List Number: 2
Creator: Laing, Edmundo

List Source: Eurofins Midland
List Creation: 03/06/25 08:45 PM

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	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Fatima Smith
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 5/9/2025 1:44:16 PM

JOB DESCRIPTION

State D A CTB
07A1988176

JOB NUMBER

890-8134-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

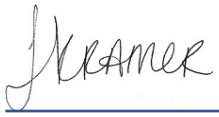
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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5/9/2025 1:44:16 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: State D A CTB

Laboratory Job ID: 890-8134-1
SDG: 07A1988176

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-8134-1
Project/Site: State D A CTB SDG: 07A1988176

Qualifiers

GC VOA

Qualifier	Qualifier Description
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.
☼	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: Ensolum
Project: State D A CTB

Job ID: 890-8134-1

Job ID: 890-8134-1 Eurofins Carlsbad

Job Narrative
890-8134-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 5/7/2025 3:11 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 4.8°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BH01 (890-8134-1), BH01A (890-8134-2), BH02 (890-8134-3), BH02A (890-8134-4), BH03 (890-8134-5) and BH03A (890-8134-6).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: (CCV 880-109696/20). 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.

Diesel Range Organics
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-109662 and analytical batch 880-109714 was outside the upper control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-109662 and analytical batch 880-109714 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

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: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

Client Sample ID: BH01

Lab Sample ID: 890-8134-1
Matrix: Solid
Date Collected: 05/07/25 09:58
Date Received: 05/07/25 15:11
Sample Depth: 0.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/07/25 15:35	05/08/25 18:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/07/25 15:35	05/08/25 18:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/07/25 15:35	05/08/25 18:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/07/25 15:35	05/08/25 18:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/07/25 15:35	05/08/25 18:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/07/25 15:35	05/08/25 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*05/07/25 15:35*	*05/08/25 18:03*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*05/07/25 15:35*	*05/08/25 18:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			05/08/25 18:03	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			05/08/25 23:11	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		05/07/25 14:33	05/08/25 23:11	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		05/07/25 14:33	05/08/25 23:11	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		05/07/25 14:33	05/08/25 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*05/07/25 14:33*	*05/08/25 23:11*	*1*
o-Terphenyl	*87*		*70 - 130*	*05/07/25 14:33*	*05/08/25 23:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**99.0**		9.96		mg/Kg			05/08/25 13:01	1

Client Sample ID: BH01A

Lab Sample ID: 890-8134-2
Matrix: Solid
Date Collected: 05/07/25 10:52
Date Received: 05/07/25 15:11
Sample Depth: 5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/07/25 15:35	05/08/25 18:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/07/25 15:35	05/08/25 18:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/07/25 15:35	05/08/25 18:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/07/25 15:35	05/08/25 18:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/07/25 15:35	05/08/25 18:23	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/07/25 15:35	05/08/25 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*05/07/25 15:35*	*05/08/25 18:23*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

Client Sample ID: BH01A

Date Collected: 05/07/25 10:52
Date Received: 05/07/25 15:11
Sample Depth: 5

Lab Sample ID: 890-8134-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*05/07/25 15:35*	*05/08/25 18:23*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			05/08/25 18:23	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2	mg/Kg			05/08/25 23:26	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2	mg/Kg		05/07/25 14:33	05/08/25 23:26	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2	mg/Kg		05/07/25 14:33	05/08/25 23:26	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		05/07/25 14:33	05/08/25 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*05/07/25 14:33*	*05/08/25 23:26*	*1*
o-Terphenyl	*81*		*70 - 130*	*05/07/25 14:33*	*05/08/25 23:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**174**		9.92	mg/Kg			05/08/25 13:08	1

Client Sample ID: BH02

Date Collected: 05/07/25 10:08
Date Received: 05/07/25 15:11
Sample Depth: 0.5

Lab Sample ID: 890-8134-3
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/07/25 15:35	05/08/25 18:44	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/07/25 15:35	05/08/25 18:44	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/07/25 15:35	05/08/25 18:44	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/07/25 15:35	05/08/25 18:44	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/07/25 15:35	05/08/25 18:44	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/07/25 15:35	05/08/25 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*05/07/25 15:35*	*05/08/25 18:44*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*05/07/25 15:35*	*05/08/25 18:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			05/08/25 18:44	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			05/08/25 23:42	1

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Client Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

Client Sample ID: BH02

Lab Sample ID: 890-8134-3
Matrix: Solid
Date Collected: 05/07/25 10:08
Date Received: 05/07/25 15:11
Sample Depth: 0.5

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		05/07/25 14:33	05/08/25 23:42	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		05/07/25 14:33	05/08/25 23:42	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		05/07/25 14:33	05/08/25 23:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*05/07/25 14:33*	*05/08/25 23:42*	*1*
o-Terphenyl	*73*		*70 - 130*	*05/07/25 14:33*	*05/08/25 23:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**83.4**		9.94		mg/Kg			05/08/25 13:15	1

Client Sample ID: BH02A

Lab Sample ID: 890-8134-4
Matrix: Solid
Date Collected: 05/07/25 11:01
Date Received: 05/07/25 15:11
Sample Depth: 5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/07/25 15:35	05/08/25 19:04	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/07/25 15:35	05/08/25 19:04	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/07/25 15:35	05/08/25 19:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/07/25 15:35	05/08/25 19:04	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/07/25 15:35	05/08/25 19:04	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/07/25 15:35	05/08/25 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*05/07/25 15:35*	*05/08/25 19:04*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*05/07/25 15:35*	*05/08/25 19:04*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			05/08/25 19:04	1

Method: SW846 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			05/08/25 23:56	1

Method: SW846 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		05/07/25 14:33	05/08/25 23:56	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/07/25 14:33	05/08/25 23:56	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/07/25 14:33	05/08/25 23:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*05/07/25 14:33*	*05/08/25 23:56*	*1*
o-Terphenyl	*78*		*70 - 130*	*05/07/25 14:33*	*05/08/25 23:56*	*1*

Client Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

Client Sample ID: BH02A
Lab Sample ID: 890-8134-4

Date Collected: 05/07/25 11:01
Matrix: Solid
Date Received: 05/07/25 15:11
Sample Depth: 5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	101		9.90		mg/Kg			05/08/25 13:23	1

Client Sample ID: BH03
Lab Sample ID: 890-8134-5

Date Collected: 05/07/25 10:21
Matrix: Solid
Date Received: 05/07/25 15:11
Sample Depth: 0.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/07/25 15:35	05/08/25 19:25	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/07/25 15:35	05/08/25 19:25	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/07/25 15:35	05/08/25 19:25	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/07/25 15:35	05/08/25 19:25	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/07/25 15:35	05/08/25 19:25	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/07/25 15:35	05/08/25 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*05/07/25 15:35*	*05/08/25 19:25*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*05/07/25 15:35*	*05/08/25 19:25*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			05/08/25 19:25	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			05/09/25 00:27	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		05/07/25 14:33	05/09/25 00:27	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		05/07/25 14:33	05/09/25 00:27	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		05/07/25 14:33	05/09/25 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*05/07/25 14:33*	*05/09/25 00:27*	*1*
o-Terphenyl	*75*		*70 - 130*	*05/07/25 14:33*	*05/09/25 00:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98.6		10.1		mg/Kg			05/08/25 13:30	1

Client Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

Client Sample ID: BH03A

Date Collected: 05/07/25 11:14
Date Received: 05/07/25 15:11
Sample Depth: 6

Lab Sample ID: 890-8134-6

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/07/25 15:35	05/08/25 19:45	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/07/25 15:35	05/08/25 19:45	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/07/25 15:35	05/08/25 19:45	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/07/25 15:35	05/08/25 19:45	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/07/25 15:35	05/08/25 19:45	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/07/25 15:35	05/08/25 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*05/07/25 15:35*	*05/08/25 19:45*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*05/07/25 15:35*	*05/08/25 19:45*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/08/25 19:45	1

Method: SW846 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			05/09/25 00:43	1

Method: SW846 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		05/07/25 14:33	05/09/25 00:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/07/25 14:33	05/09/25 00:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/07/25 14:33	05/09/25 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*05/07/25 14:33*	*05/09/25 00:43*	*1*
o-Terphenyl	*79*		*70 - 130*	*05/07/25 14:33*	*05/09/25 00:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**104**		9.90		mg/Kg			05/08/25 13:38	1

Surrogate Summary

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-57839-A-1-B MS	Matrix Spike	122	85										
880-57839-A-1-C MSD	Matrix Spike Duplicate	117	89										
890-8134-1	BH01	118	84										
890-8134-2	BH01A	118	84										
890-8134-3	BH02	109	86										
890-8134-4	BH02A	119	83										
890-8134-5	BH03	115	83										
890-8134-6	BH03A	115	84										
LCS 880-109665/1-A	Lab Control Sample	110	87										
LCSD 880-109665/2-A	Lab Control Sample Dup	115	86										
MB 880-109665/5-A	Method Blank	117	81										

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)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-57839-A-8-B MS	Matrix Spike	99	87										
880-57839-A-8-C MSD	Matrix Spike Duplicate	97	84										
890-8134-1	BH01	96	87										
890-8134-2	BH01A	91	81										
890-8134-3	BH02	77	73										
890-8134-4	BH02A	87	78										
890-8134-5	BH03	84	75										
890-8134-6	BH03A	88	79										
LCS 880-109662/2-A	Lab Control Sample	96	82										
LCSD 880-109662/3-A	Lab Control Sample Dup	100	84										
MB 880-109662/1-A	Method Blank	139 S1+	126										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-109665/5-A
Matrix: Solid
Analysis Batch: 109696

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 109665

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/07/25 15:35	05/08/25 11:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/07/25 15:35	05/08/25 11:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/07/25 15:35	05/08/25 11:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/07/25 15:35	05/08/25 11:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/07/25 15:35	05/08/25 11:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/07/25 15:35	05/08/25 11:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*05/07/25 15:35*	*05/08/25 11:28*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*05/07/25 15:35*	*05/08/25 11:28*	*1*

Lab Sample ID: LCS 880-109665/1-A
Matrix: Solid
Analysis Batch: 109696

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 109665

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07001		mg/Kg		70	70 - 130		
Toluene			0.100	0.07894		mg/Kg		79	70 - 130		
Ethylbenzene			0.100	0.08151		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene			0.200	0.1683		mg/Kg		84	70 - 130		
o-Xylene			0.100	0.08077		mg/Kg		81	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: LCSD 880-109665/2-A
Matrix: Solid
Analysis Batch: 109696

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 109665

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.07664		mg/Kg		77	70 - 130	9	35
Toluene			0.100	0.07897		mg/Kg		79	70 - 130	0	35
Ethylbenzene			0.100	0.08169		mg/Kg		82	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.1703		mg/Kg		85	70 - 130	1	35
o-Xylene			0.100	0.08185		mg/Kg		82	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: 880-57839-A-1-B MS
Matrix: Solid
Analysis Batch: 109696

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 109665

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.100	0.08902		mg/Kg		89	70 - 130		
Toluene	<0.00200	U	0.100	0.1008		mg/Kg		101	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

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

Lab Sample ID: 880-57839-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 109696 — **Prep Batch: 109665**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.1066		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2140		mg/Kg		107	70 - 130
o-Xylene	<0.00200	U	0.100	0.1001		mg/Kg		100	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*

Lab Sample ID: 880-57839-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 109696 — **Prep Batch: 109665**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.09384		mg/Kg		94	70 - 130	5	35
Toluene	<0.00200	U	0.100	0.1044		mg/Kg		104	70 - 130	4	35
Ethylbenzene	<0.00200	U	0.100	0.1077		mg/Kg		108	70 - 130	1	35
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2233		mg/Kg		112	70 - 130	4	35
o-Xylene	<0.00200	U	0.100	0.1051		mg/Kg		105	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*

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

Lab Sample ID: MB 880-109662/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 109714 — **Prep Batch: 109662**

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		05/07/25 14:33	05/08/25 20:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/07/25 14:33	05/08/25 20:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/07/25 14:33	05/08/25 20:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*139*	*S1+*	*70 - 130*	*05/07/25 14:33*	*05/08/25 20:25*	*1*
o-Terphenyl	*126*		*70 - 130*	*05/07/25 14:33*	*05/08/25 20:25*	*1*

Lab Sample ID: LCS 880-109662/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 109714 — **Prep Batch: 109662**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	883.8		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	1000	891.7		mg/Kg		89	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

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

Lab Sample ID: LCS 880-109662/2-A
Matrix: Solid
Analysis Batch: 109714

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 109662

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	82		70 - 130

Lab Sample ID: LCSD 880-109662/3-A
Matrix: Solid
Analysis Batch: 109714

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 109662

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	929.6		mg/Kg		93	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	919.2		mg/Kg		92	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	84		70 - 130

Lab Sample ID: 880-57839-A-8-B MS
Matrix: Solid
Analysis Batch: 109714

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 109662

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	998	1197		mg/Kg		120	70 - 130
Diesel Range Organics (Over C10-C28)	<50.1	U	998	1102		mg/Kg		108	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	87		70 - 130

Lab Sample ID: 880-57839-A-8-C MSD
Matrix: Solid
Analysis Batch: 109714

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 109662

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	<50.1	U	998	1154		mg/Kg		116	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<50.1	U	998	1103		mg/Kg		108	70 - 130	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	84		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-109694/1-A
Matrix: Solid
Analysis Batch: 109704

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			05/08/25 10:04	1

Lab Sample ID: LCS 880-109694/2-A
Matrix: Solid
Analysis Batch: 109704

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	264.0		mg/Kg		106	90 - 110		

Lab Sample ID: LCSD 880-109694/3-A
Matrix: Solid
Analysis Batch: 109704

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	259.7		mg/Kg		104	90 - 110	2	20

Lab Sample ID: 880-57839-A-11-D MS
Matrix: Solid
Analysis Batch: 109704

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	100		252	339.1		mg/Kg		95	90 - 110		

Lab Sample ID: 880-57839-A-11-E MSD
Matrix: Solid
Analysis Batch: 109704

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	100		252	342.6		mg/Kg		96	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

GC VOA

Prep Batch: 109665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8134-1	BH01	Total/NA	Solid	5035	
890-8134-2	BH01A	Total/NA	Solid	5035	
890-8134-3	BH02	Total/NA	Solid	5035	
890-8134-4	BH02A	Total/NA	Solid	5035	
890-8134-5	BH03	Total/NA	Solid	5035	
890-8134-6	BH03A	Total/NA	Solid	5035	
MB 880-109665/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-109665/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-109665/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-57839-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-57839-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 109696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8134-1	BH01	Total/NA	Solid	8021B	109665
890-8134-2	BH01A	Total/NA	Solid	8021B	109665
890-8134-3	BH02	Total/NA	Solid	8021B	109665
890-8134-4	BH02A	Total/NA	Solid	8021B	109665
890-8134-5	BH03	Total/NA	Solid	8021B	109665
890-8134-6	BH03A	Total/NA	Solid	8021B	109665
MB 880-109665/5-A	Method Blank	Total/NA	Solid	8021B	109665
LCS 880-109665/1-A	Lab Control Sample	Total/NA	Solid	8021B	109665
LCSD 880-109665/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	109665
880-57839-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	109665
880-57839-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	109665

Analysis Batch: 109851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8134-1	BH01	Total/NA	Solid	Total BTEX	
890-8134-2	BH01A	Total/NA	Solid	Total BTEX	
890-8134-3	BH02	Total/NA	Solid	Total BTEX	
890-8134-4	BH02A	Total/NA	Solid	Total BTEX	
890-8134-5	BH03	Total/NA	Solid	Total BTEX	
890-8134-6	BH03A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 109662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8134-1	BH01	Total/NA	Solid	8015NM Prep	
890-8134-2	BH01A	Total/NA	Solid	8015NM Prep	
890-8134-3	BH02	Total/NA	Solid	8015NM Prep	
890-8134-4	BH02A	Total/NA	Solid	8015NM Prep	
890-8134-5	BH03	Total/NA	Solid	8015NM Prep	
890-8134-6	BH03A	Total/NA	Solid	8015NM Prep	
MB 880-109662/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-109662/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-109662/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-57839-A-8-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-57839-A-8-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

GC Semi VOA

Analysis Batch: 109714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8134-1	BH01	Total/NA	Solid	8015B NM	109662
890-8134-2	BH01A	Total/NA	Solid	8015B NM	109662
890-8134-3	BH02	Total/NA	Solid	8015B NM	109662
890-8134-4	BH02A	Total/NA	Solid	8015B NM	109662
890-8134-5	BH03	Total/NA	Solid	8015B NM	109662
890-8134-6	BH03A	Total/NA	Solid	8015B NM	109662
MB 880-109662/1-A	Method Blank	Total/NA	Solid	8015B NM	109662
LCS 880-109662/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	109662
LCSD 880-109662/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	109662
880-57839-A-8-B MS	Matrix Spike	Total/NA	Solid	8015B NM	109662
880-57839-A-8-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	109662

Analysis Batch: 109813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8134-1	BH01	Total/NA	Solid	8015 NM	
890-8134-2	BH01A	Total/NA	Solid	8015 NM	
890-8134-3	BH02	Total/NA	Solid	8015 NM	
890-8134-4	BH02A	Total/NA	Solid	8015 NM	
890-8134-5	BH03	Total/NA	Solid	8015 NM	
890-8134-6	BH03A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 109694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8134-1	BH01	Soluble	Solid	DI Leach	
890-8134-2	BH01A	Soluble	Solid	DI Leach	
890-8134-3	BH02	Soluble	Solid	DI Leach	
890-8134-4	BH02A	Soluble	Solid	DI Leach	
890-8134-5	BH03	Soluble	Solid	DI Leach	
890-8134-6	BH03A	Soluble	Solid	DI Leach	
MB 880-109694/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-109694/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-109694/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-57839-A-11-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-57839-A-11-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 109704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8134-1	BH01	Soluble	Solid	300.0	109694
890-8134-2	BH01A	Soluble	Solid	300.0	109694
890-8134-3	BH02	Soluble	Solid	300.0	109694
890-8134-4	BH02A	Soluble	Solid	300.0	109694
890-8134-5	BH03	Soluble	Solid	300.0	109694
890-8134-6	BH03A	Soluble	Solid	300.0	109694
MB 880-109694/1-A	Method Blank	Soluble	Solid	300.0	109694
LCS 880-109694/2-A	Lab Control Sample	Soluble	Solid	300.0	109694
LCSD 880-109694/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	109694
880-57839-A-11-D MS	Matrix Spike	Soluble	Solid	300.0	109694
880-57839-A-11-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	109694

Lab Chronicle

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

Client Sample ID: BH01
Date Collected: 05/07/25 09:58
Date Received: 05/07/25 15:11

Lab Sample ID: 890-8134-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	109665	05/07/25 15:35	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	109696	05/08/25 18:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			109851	05/08/25 18:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			109813	05/08/25 23:11	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	109662	05/07/25 14:33	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	109714	05/08/25 23:11	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	109694	05/08/25 07:51	SA	EET MID
Soluble	Analysis	300.0		1			109704	05/08/25 13:01	CH	EET MID

Client Sample ID: BH01A
Date Collected: 05/07/25 10:52
Date Received: 05/07/25 15:11

Lab Sample ID: 890-8134-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	109665	05/07/25 15:35	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	109696	05/08/25 18:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			109851	05/08/25 18:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			109813	05/08/25 23:26	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	109662	05/07/25 14:33	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	109714	05/08/25 23:26	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	109694	05/08/25 07:51	SA	EET MID
Soluble	Analysis	300.0		1			109704	05/08/25 13:08	CH	EET MID

Client Sample ID: BH02
Date Collected: 05/07/25 10:08
Date Received: 05/07/25 15:11

Lab Sample ID: 890-8134-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	109665	05/07/25 15:35	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	109696	05/08/25 18:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			109851	05/08/25 18:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			109813	05/08/25 23:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	109662	05/07/25 14:33	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	109714	05/08/25 23:42	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	109694	05/08/25 07:51	SA	EET MID
Soluble	Analysis	300.0		1			109704	05/08/25 13:15	CH	EET MID

Client Sample ID: BH02A
Date Collected: 05/07/25 11:01
Date Received: 05/07/25 15:11

Lab Sample ID: 890-8134-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	109665	05/07/25 15:35	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	109696	05/08/25 19:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			109851	05/08/25 19:04	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

Client Sample ID: BH02A

Date Collected: 05/07/25 11:01
Date Received: 05/07/25 15:11

Lab Sample ID: 890-8134-4
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			109813	05/08/25 23:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	109662	05/07/25 14:33	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	109714	05/08/25 23:56	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	109694	05/08/25 07:51	SA	EET MID
Soluble	Analysis	300.0		1			109704	05/08/25 13:23	CH	EET MID

Client Sample ID: BH03

Date Collected: 05/07/25 10:21
Date Received: 05/07/25 15:11

Lab Sample ID: 890-8134-5
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	5035			5.05 g	5 mL	109665	05/07/25 15:35	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	109696	05/08/25 19:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			109851	05/08/25 19:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			109813	05/09/25 00:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	109662	05/07/25 14:33	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	109714	05/09/25 00:27	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	109694	05/08/25 07:51	SA	EET MID
Soluble	Analysis	300.0		1			109704	05/08/25 13:30	CH	EET MID

Client Sample ID: BH03A

Date Collected: 05/07/25 11:14
Date Received: 05/07/25 15:11

Lab Sample ID: 890-8134-6
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	5035			4.98 g	5 mL	109665	05/07/25 15:35	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	109696	05/08/25 19:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			109851	05/08/25 19:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			109813	05/09/25 00:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	109662	05/07/25 14:33	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	109714	05/09/25 00:43	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	109694	05/08/25 07:51	SA	EET MID
Soluble	Analysis	300.0		1			109704	05/08/25 13:38	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

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	06-30-25

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: State D A CTB

Job ID: 890-8134-1
SDG: 07A1988176

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8134-1	BH01	Solid	05/07/25 09:58	05/07/25 15:11	0.5
890-8134-2	BH01A	Solid	05/07/25 10:52	05/07/25 15:11	5
890-8134-3	BH02	Solid	05/07/25 10:08	05/07/25 15:11	0.5
890-8134-4	BH02A	Solid	05/07/25 11:01	05/07/25 15:11	5
890-8134-5	BH03	Solid	05/07/25 10:21	05/07/25 15:11	0.5
890-8134-6	BH03A	Solid	05/07/25 11:14	05/07/25 15:11	6

eurofins | Environment Testing Xenco

Chain of Custody

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

890-8134 Chain of Custody

5/9/2025

Project Manager:	Fatima SMith	Bill to: (if different)	
Company Name:	EnSolum, LLC	Company Name:	Hilcorp / Attn: Billy Ginn
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	575-725-1196	Email:	FSmith@ensolum.com/msarkis@ensolum.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:	State D A CTB	Turn Around	☑ Routine ☐ Rush
Project Number:	07A1988176	Due Date:	5/14/25
Project Location:	32.4765720, -103.1723811	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Mario Sarkis		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TRN007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.0
Total Containers:		Corrected Temperature:	4.8

Preservative Codes

None: NO — DI Water: H_2O
Cool: Cool — MeOH: Me
HCL: HC — HNO_3: HN
H_2SO_4: H_2 — NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX	TPH	Chlorides	Sample Comments
								cool	cool	cool	
BH01	S	5/7/25	0958	0.5'	G	1		✓	✓	✓	
BH01A	S		1052	5'	G	1		✓	✓	✓	
BH02	S		1008	0.5'	G	1		✓	✓	✓	
BH02A	S		1101	5'	G	1		✓	✓	✓	
BH03	S		1021	0.5'	G	1		✓	✓	✓	
BH03A	S		1114	6'	G	1		✓	✓	✓	

MPS

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 Tl 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 Tl U Hg: 1631 / 245.1 / 7470 / 7471

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			3:11 5/8	2		
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-8134-1
SDG Number: 07A1988176

Login Number: 8134
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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?	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.	N/A	Refer to Job Narrative for details.
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: Ensolum

Job Number: 890-8134-1
SDG Number: 07A1988176

Login Number: 8134
List Number: 2
Creator: Laing, Edmundo

List Source: Eurofins Midland
List Creation: 05/08/25 07:26 AM

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	

ENSOLUM

APPENDIX D

Photographic Log

ENSOLUM

Photographic Log
Hilcorp Energy Company
State D A CTB
Lea County, New Mexico

Photograph: 1 Date: 3/5/2025
Description: Soil staining from release
View: Southwest

Photograph: 2 Date: 3/5/2025
Description: Soil staining from release
View: Northwest

Photograph: 3 Date: 3/5/2025
Description: Sample location SS02
View: Southeast

Photograph: 4 Date: 5/7/2025
Description: Sample location BH01
View: South

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

QUESTIONS

Action 465997

QUESTIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 465997
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2505326850**
Incident Name	**NAPP2505326850 STATE D A CTB @ 0**
Incident Type	**Oil Release**
Incident Status	**Remediation Plan Received**
Incident Facility	**[fAPP2224169341] State D A**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	State D A CTB
Date Release Discovered	02/21/2025
Surface Owner	State

Incident Details	
Please answer all the questions in this group.	
Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Corrosion | Other (Specify) | Crude Oil | Released: 165 BBL | Recovered: 160 BBL | Lost: 5 BBL.
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Release from circulating line from the above ground tank.

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 465997
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

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	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	NA

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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.

I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 05/21/2025

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 465997
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	Attached Document
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between ½ and 1 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between ½ and 1 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between ½ and 1 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	174
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	13000
GRO+DRO (EPA SW-846 Method 8015M)	13000
BTEX (EPA SW-846 Method 8021B or 8260B)	147
Benzene (EPA SW-846 Method 8021B or 8260B)	2.2
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	07/01/2025
On what date will (or did) the final sampling or liner inspection occur	07/15/2025
On what date will (or was) the remediation complete(d)	07/15/2025
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	4900
What is the estimated volume (in cubic yards) that will be remediated	1270
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 465997
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	SUNDANCE PARABO [fEEM0112334085]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
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.	
I hereby agree and sign off to the above statement	Name: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 05/21/2025
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 465997
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 465997
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**458475**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**05/07/2025**
What was the (estimated) number of samples that were to be gathered	**25**
What was the sampling surface area in square feet	**2960**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 465997
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
nvelez	The remediation plan is approved as written. Hilcorp has 90-days (September 2, 2025) to submit to OCD its appropriate or final remediation closure report.	6/4/2025