



CDH Consulting, LLC  
Thornton, Colorado  
720.431.7468  
[www.CDHConsult.com](http://www.CDHConsult.com)

**Site Characterization & Remediation Plan**

Westall Line Release  
Incident #nAPP2322554757  
Eddy County, New Mexico  
Unit A, Section 10, Township 17 South, Range 30 East  
GPS Coordinates: 32.85551, -103.95222

**Prepared For**

MR NM Operating, LLC  
Dallas, Texas

**Prepared By**

CDH Consulting, LLC  
Thornton, Colorado



October 4, 2024

Shelly Wells  
Environmental Specialist  
Advanced Environmental Bureau  
EMNRD – Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, New Mexico 87505

**RE: Site Characterization & Remediation Plan**

Westall Line Release  
Incident #nAPP2322554757  
Eddy County, New Mexico  
Unit A, Section 10, Township 17 South, Range 30 East  
GPS Coordinates: 32.85551, -103.95222

Shelly Wells,

CDH Consulting, LLC (CDH) on behalf of MR NM Operating, LLC (MR NM) presents this Site Characterization & Remediation Plan for the above referenced location to the New Mexico Oil Conservation Division (OCD).

**SITE INFORMATION**

The Westall Line Release (Site) occurred approximately 26 miles east of Artesia, New Mexico and 11 miles west of Maljamar, New Mexico (Figure 1). The legal location description is Unit Letter A, Section 10, Township 17 South, Range 30 East in Eddy County, New Mexico.

On July 31, 2023, the release was discovered exiting a poly water disposal line by Cypress Natural Resources (CNR, parent company of MR NM) personnel at approximately 3:30 pm. The line was shut-in by 4:00 pm and repaired that evening. During repairs, a drag mark on the poly line was determined to be the source of the release, likely damaged during line installation. Approximately 20 feet of poly line was removed and replaced with new poly line. On July 31, 2023, a vacuum truck removed approximately 25 barrels of produced water from the ground surface. MR NM used the time calculated between the notification of the release and when the line was last driven and the estimated rate through the flowline from CNR facilities to estimate the volume released (approximately 150 barrels). Recovered volumes were reported by the quantity removed by the vacuum truck (Attachment A). On August 15, 2023, a Form C-141 was submitted to the OCD detailing the initial response to the release. The initial C-141 is included as Attachment B.

During emergency response activities, produced water reached an open excavation adjacent to the pumpjack for the Federal R #002 (API #30-015-04170) operated by LLJ Ventures, LLC DBA Marker Oil & Gas in the downgradient direction relative to the release. Produced water was recovered from the open excavation via hydrovac.



## GROUNDWATER & SITE RANKING

There are no significant watercourses or other sensitive areas within specified distances of the release as defined by 19.15.29.12.C.(4) or within a ½-mile of the site. The New Mexico Office of the State Engineer (OSE) lists point of diversion (POD) RA-13319-POD1 located approximately 812 feet northeast of the release (Figure 1). The soil boring log for RA-13319-POD1 indicates the soil boring was advanced to 101 feet below ground surface (bgs) and was documented to be a “dry hole”. The soil boring log for RA-13319-POD1 is included as Attachment C.

As depth-to-groundwater near the release has been documented to be greater than 100 feet bgs, the closure criteria for soil deeper than 4 feet bgs is summarized below per 19.15.29.12 NMAC:

- Chloride - 20,000 milligrams per kilogram (mg/kg)
- Total petroleum hydrocarbons (TPH) including gasoline range organics (GRO), diesel range organics (DRO), and motor oil/lube organics (MRO) - 2,500 mg/kg
- GRO and DRO - 1,000 mg/kg
- Benzene, toluene, ethylbenzene, total xylenes (BTEX) - 50 mg/kg
- Benzene - 10 mg/kg

The top 4 feet of soil will be horizontally delineated to the reclamation standard summarized below per 19.15.29.12 NMAC and the top 4 feet of soil will be reclaimed to the criteria listed below per NMAC 19.15.29.13.D.(1).

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

## SITE CHARACTERIZATION

On October 10, 2023, CDH personnel were onsite to visually inspect the impacted area and collect a soil sample from the release point. Soil was observed to be a red, gravelly, fine sandy loam. CDH personnel collected SS04@0.5 from the release point to determine if the soil was impacted (Figure 2) and analyzed for chloride per United States Environmental Protection Agency (EPA) Method 300.0, TPH (GRO+DRO+MRO) per EPA Method 8015, and BTEX per EPA Method 8021B. Photos of the site during the initial site visit are included as Attachment D.

Laboratory analytical results were compared to the above-mentioned OCD criteria for the top 4 feet of soil. Analytical results indicate that TPH, benzene, and BTEX were below laboratory reporting limits in SS04@0.5. Chloride exceeded the OCD reclamation standard for the top 4 feet of soil (600 mg/kg) in SS04 with a concentration of 12,200 mg/kg per NMAC 19.15.29.13.D.(1). The release location and soil sample location for SS04 are presented on Figure 2. The laboratory analytical report is included in Attachment E and summarized in Table 1.



On April 18, 2024, CDH personnel were onsite to horizontally and vertically delineate chloride impacts. Soil samples were collected by stepping out approximately 20 feet in each cardinal direction relative to the release point (SS04). The soil samples were collected at 0.5 feet bgs to be field screened for chloride utilizing Hach Chloride QuanTab® Test Strips. If field screening indicated chloride concentrations were in-compliance with the OCD reclamation standard for the top 4 feet of soil (600 mg/kg), soil samples were collected at that location from depths of 0.5 feet, 2 feet, and 4 feet bgs to be submitted for laboratory analysis of chloride.

Field screening at soil sample locations SS01 (46 mg/kg), SS02 (50 mg/kg), and SS03 (504 mg/kg) indicated chloride concentrations were potentially in-compliance with the OCD reclamation standard for the top 4 feet of soil (600 mg/kg); therefore, soil samples were collected at depths of 0.5 feet, 2 feet, and 4 feet at these locations. Field screening indicated elevated chloride concentrations 20 feet west (1,560 mg/kg), 40 feet west (1,680 mg/kg), and 60 feet west (1,560 mg/kg) of the release point (SS04). Field screening 80 feet west of the release point (SS04) indicated chloride was potentially in-compliance with the OCD reclamation standard for the top 4 feet of soil (600 mg/kg) with an estimated chloride concentration of 211 mg/kg. Soil samples were collected at soil sample location SS05 from depths of 0.5 feet, 2 feet, and 4 feet bgs. To vertically delineate elevated chloride identified in SS04@0.5, soil samples were collected at SS04@2.0 and SS04@4.0. Background soil samples were collected from BG01 from depths of 0.5 feet, 2 feet, and 4 feet bgs (Figure 3). Soil samples were placed in laboratory-supplied 4-ounce glass jars, labeled, stored in a cooler, placed on ice, and hand-delivered via standard chain-of-custody protocol to Envirotech of Farmington, New Mexico, for analysis of chloride per EPA Method 300.0. The laboratory analytical report is included in Attachment E and summarized in Table 1.

Laboratory analytical results indicated:

- SS01@0.5 (489 mg/kg) and SS02@0.5 (<20.0 mg/kg) were below the OCD reclamation standard for the top 4 feet of soil (600 mg/kg), successfully delineating horizontal chloride impacts to the north and east (Figure 2);
- Soil sample SS04@4.0 in-compliance with the OCD Table I Closure Criteria (20,000 mg/kg) with a concentration of 13,900 mg/kg, successfully delineating vertical chloride impacts (Figure 2);
- Soil at sample location SS03, slightly exceeded the OCD reclamation standard for the top 4 feet of soil (600 mg/kg) at 0.5 feet (1,480 mg/kg), 2 feet (873 mg/kg), and 4 feet (719 mg/kg);
- Soil at sample location SS05, slightly exceeded the OCD reclamation standard for the top 4 feet of soil (600 mg/kg) at 0.5 feet (660 mg/kg), 2 feet (835 mg/kg), and 4 feet (856 mg/kg); and
- Background soil samples at BG01 were below the laboratory reporting limits at all depths.

On September 5, 2024, CDH personnel were onsite to collect soil samples from the area located between the MR NM produced water flowline release and the open excavation adjacent to the Federal R #002 (API #30-015-04170) operated by LLJ Ventures, LLC DBA Marker Oil & Gas. Soil samples were collected from SS06, SS07, and SS08 to gather information to differentiate impacted soil associated with the MR NM flowline release and the Federal R #002 open excavation.





Laboratory analytical results at SS06 indicated chloride (695 mg/kg) exceeded the reclamation standard (600 mg/kg) at 6 inches bgs but was in-compliance with the remediation standard at 4 feet bgs (147 mg/kg). TPH, GRO, DRO, oil range organics (ORO), BTEX, and benzene were all below the laboratory reporting limits at SS06. At SS07, located 17 feet closer to the Federal R #002 open excavation, chloride (3,050 mg/kg) and TPH (2,070 mg/kg) at 6 inches bgs increased significantly. SS07 was in-compliance with the reclamation standard at 4 feet bgs for chloride (176 mg/kg) and TPH, GRO, DRO, ORO, BTEX, and benzene were all below the laboratory reporting limits. At SS08 chloride was in-compliance with the reclamation standard at 1-foot bgs (75.5 mg/kg) and 4 feet bgs (543 mg/kg) but exceeded the reclamation standard for TPH (100 mg/kg) due to elevated DRO (531 mg/kg). TPH (at 4 feet bgs), GRO, DRO, ORO, BTEX, and benzene were all below the laboratory reporting limits at SS08.

## REMEDATION PLAN

On October 2, 2024, CDH and the OCD developed a clear and reasonable path forward regarding the LLJ Ventures, LLC DBA Marker Oil & Gas Federal R #002 wellhead release open excavation via Microsoft Teams. It was agreed that MR NM will remove 6 inches (approximately 2 cubic yards) in the vicinity of SS07 (Figure 4). The dimensions of soil removed will be noted and photographically documented, but no confirmation soil samples will be collected from this area. MR NM will collect confirmation soil samples for all OCD Table 1 Soil Standard constituents within the primary excavation area; however, if TPH or BTEX is encountered MR NM will cease excavation in the applicable direction as this would indicate Federal R #002 wellhead release impacts have been encountered. MR NM will import approximately 17 cubic yards of topsoil as backfill material for the off-pad and off-road area (Figure 4). MR NM will import non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg in accordance with 19.15.29.13.D.(1) NMAC as backfill material for on-pad and on-road areas (approximately 683 cubic yards).

Chloride impacted soil will be excavated to 4 feet bgs within the planned excavation area (Figure 4) to remove chloride impacted soil exceeding the OCD reclamation standard for the top 4 feet of soil (600 mg/kg). However, extending the excavation southwest may encroach the open excavation associated with the Federal R #002 (API #30-015-04170) where there is a record of violation as well as an open excavation; therefore, MR NM will cautiously extend the excavation to the southwest documenting field screening results to ensure MR NM is excavating the release that originated from MR NM's flowline and not impacted soil associated with the Federal R #002 production well or tank battery (Figure 4). CDH anticipates the removal of approximately 700 cubic yards of chloride impacted soil. Impacted soil will be transported to an OCD-approved offsite disposal facility.

To confirm chloride impacted soil has successfully been removed from the excavation and to complete horizontal delineation, one 5-point composite confirmation sample will be collected for every 200 square feet of sidewall (approximately 6 sidewall samples). One 5-point composite confirmation sample will be collected from the base of the excavation for every 400 square feet to be submitted for laboratory analysis of chloride. By collecting a 5-point composite confirmation soil sample from the base of the excavation for every 400 square feet instead of every 200 square feet, the minimum number of confirmation samples will be reduced from 25 samples to 12 samples, which will more than sufficiently confirm that chloride



impacted soil has been successfully removed from the base of the excavation.

Please do not hesitate to contact Michael A. Wicker at (616) 970-8459 or [mwicker@cdhconsult.com](mailto:mwicker@cdhconsult.com) if you have any questions or require additional information.

Kind Regards,

**CDH CONSULTING, LLC**

A handwritten signature in black ink, appearing to read "Michael A. Wicker".

Michael A. Wicker, P.G.  
Senior Geologist

A handwritten signature in black ink, appearing to read "Chris Del Hierro".

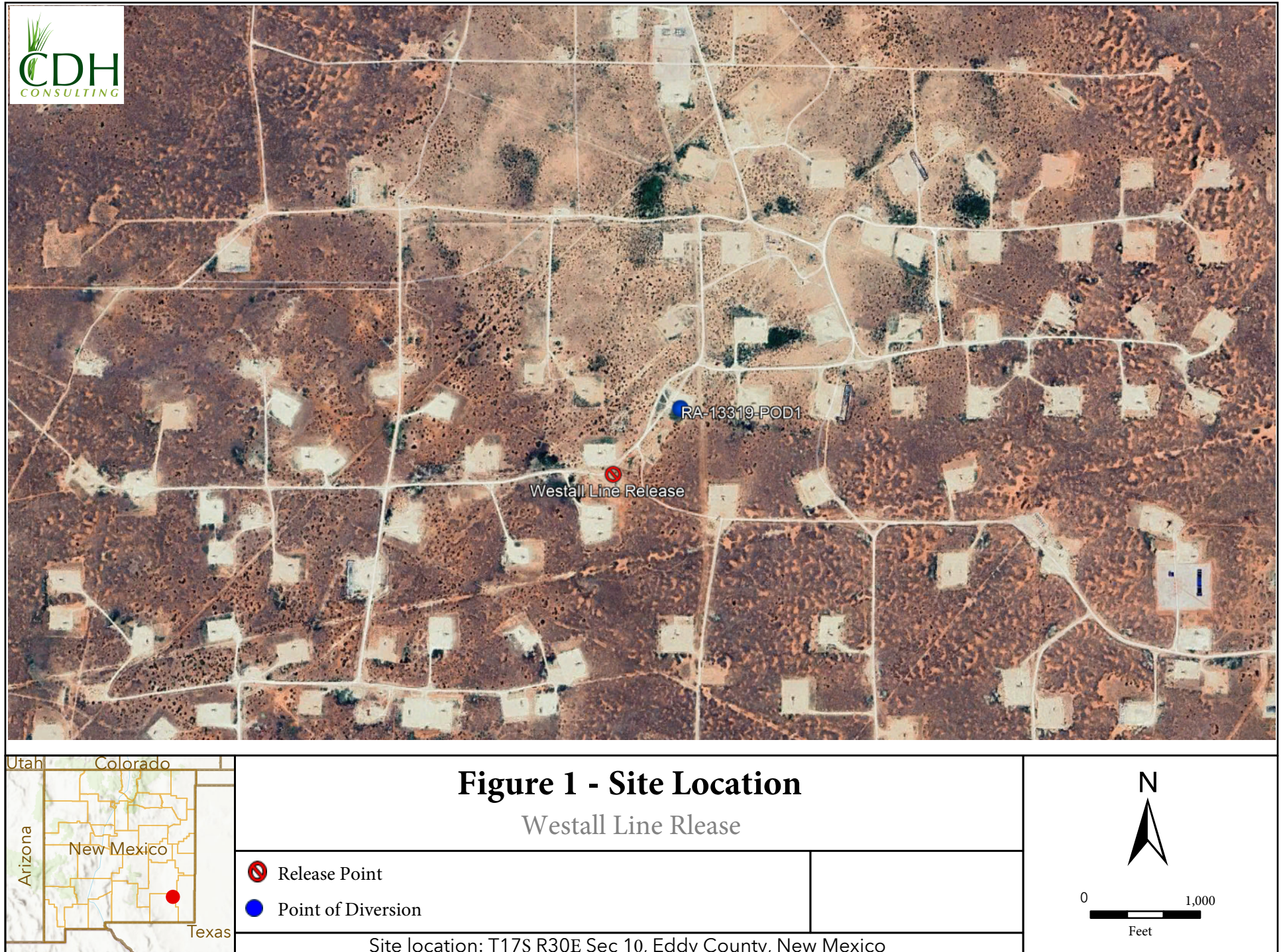
Chris Del Hierro  
Principal & Partner

**Attachments**

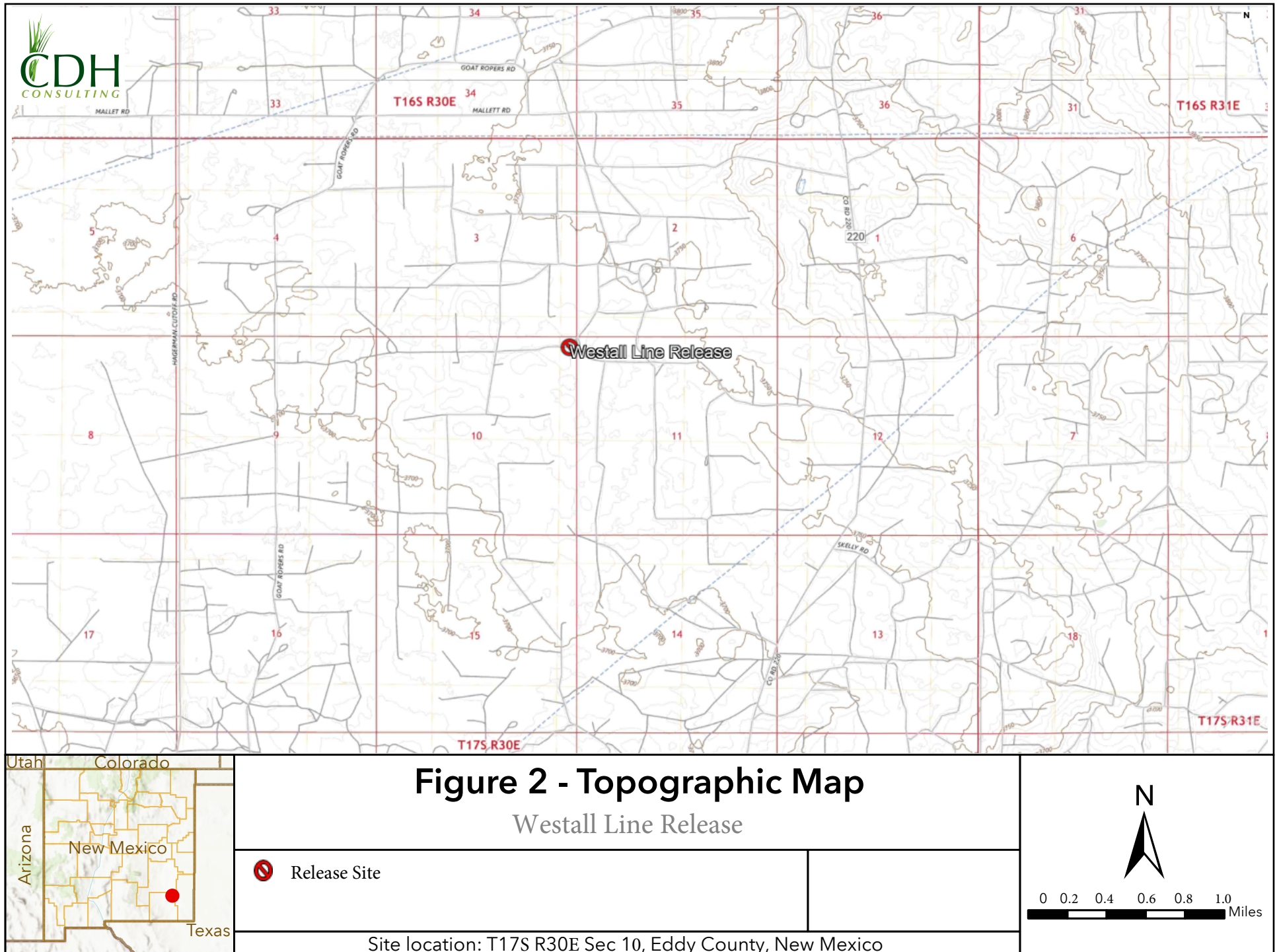
Figures  
Table  
Attachment A – Disposal Manifest  
Attachment B – Initial C-141  
Attachment C – Soil Boring Log  
Attachment D – Photographic Log  
Attachment E – Laboratory Analytical Reports

## FIGURES











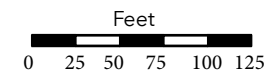


**Figure 3 - Site Map**  
Westall Line Release

- Estimated Excavation Extent
- Soil Sample Location

- Release Point

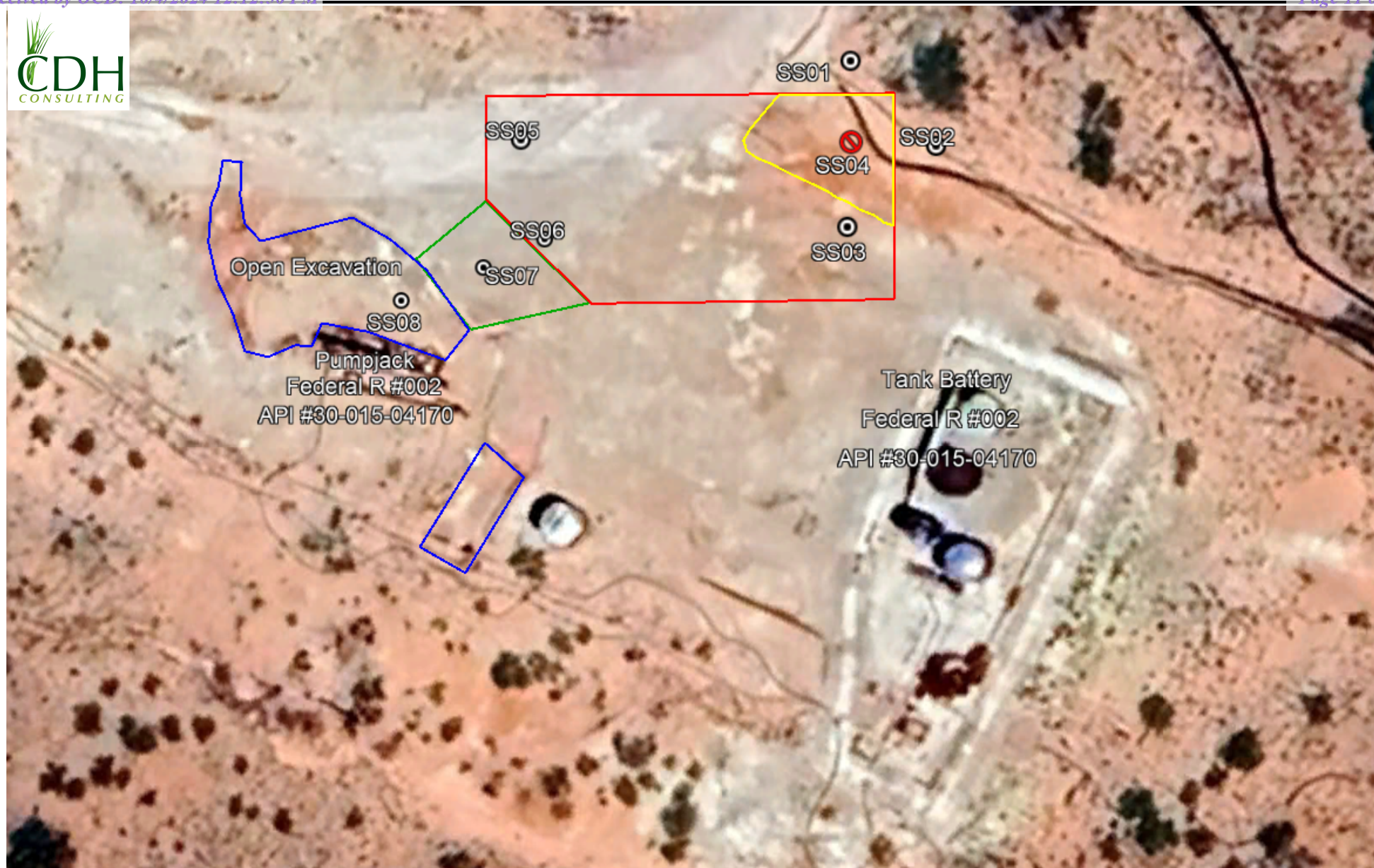
Scale:  
1:72



Site location: T17S R30E Sec 10, Eddy County, New Mexico

Map Created: 6/12/2024





## Figure 4 - Soil Sample Location

Westall Line Release

  Planned Excavation

  Open Excavation

  Backfill with Topsoil

  Scrape Top 6 inches

⊗ Release Point

⊙ Soil Sample Location



Feet

0  40

Site location: T17S R30E Sec 10, Eddy County, New Mexico

Map Created: 6/12/2024

TABLE



**TABLE 1**  
**SOIL ANALYTICAL RESULTS**  
**WESTALL LINE RELEASE**  
**INCIDENT #nAPP2322554757**  
**EDDY COUNTY, NEW MEXICO**  
**MR NM OPERATING, LLC**

Sample ID	Date Sampled	Depth (ft bgs)	Chlorides (mg/kg)	TPH <sup>(2)</sup> (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	BTEX (mg/kg)	Benzene (mg/kg)
NMOCDC Table I Soil Standard (mg/kg) <sup>(1)</sup>		0-4	600	100	NA	NA	NA	50	10
NMOCDC Table I Soil Standard (mg/kg) <sup>(2)</sup>		>4	20,000	2,500	NA	NA	1,000	50	10
BG01@0.5	4/18/2024	0.5	<20.0	--	--	--	--	--	--
BG01@2.0	4/18/2024	2.0	<20.0	--	--	--	--	--	--
BG01@4.0	4/18/2024	4.0	<20.0	--	--	--	--	--	--
SS01@0.5	4/18/2024	0.5	489	--	--	--	--	--	--
SS02@0.5	4/18/2024	0.5	<20.0	--	--	--	--	--	--
SS03@0.5	4/18/2024	0.5	<b>1,480</b>	--	--	--	--	--	--
SS03@2.0	4/18/2024	2.0	<b>873</b>	--	--	--	--	--	--
SS03@4.0	4/18/2024	4.0	<b>719</b>	--	--	--	--	--	--
SS04@0.5	10/10/2023	0.5	<b>12,200</b>	<49.9	<49.9	<49.9	<49.9	<0.00396	<0.00198
SS04@2.0	4/18/2024	2.0	<b>10,900</b>	--	--	--	--	--	--
SS04@4.0	4/18/2024	4.0	<b>13,900</b>	--	--	--	--	--	--
SS05@0.5	4/18/2024	0.5	<b>660</b>	--	--	--	--	--	--
SS05@2.0	4/18/2024	2.0	<b>835</b>	--	--	--	--	--	--
SS05@4.0	4/18/2024	4.0	<b>856</b>	--	--	--	--	--	--
SS06@0.5	9/5/2024	0.5	<b>695</b>	<95.0	<20.0	<25.0	<50.0	<0.1000	<0.0250
SS06@4.0	9/5/2024	4.0	147	<95.0	<20.0	<25.0	<50.0	<0.1000	<0.0250
SS07@0.5	9/5/2024	0.5	<b>3,050</b>	<b>2,070</b>	<20.0	1,020	1,050	<0.1000	<0.0250
SS07@4.0	9/5/2024	4.0	176	<95.0	<20.0	<25.0	<50.0	<0.1000	<0.0250
SS08@1.0	9/5/2024	1.0	75.5	<b>531</b>	<20.0	531	<50.0	<0.1000	<0.0250
SS08@4.0	9/5/2024	4.0	543	<95.0	<20.0	<25.0	<50.0	<0.1000	<0.0250

**Notes:**

Soil sample location SS04 represents soil from the source of the release

1. Standards for soil are taken from 19.15.29.12(C)(4) NMAC, Table I, Depth to ground water 0-50 ft

2. TPH - Total volatile and extractable hydrocarbons. Value calculated by adding GRO, DRO and ORO concentrations.

**Bold** = Result above closure criteria

NMOCDC = New Mexico Oil Conservation Division

(<) = Analytical result is less than the indicated laboratory reporting limit

GRO = Gasoline range organics

DRO = Diesel range organics

ORO = Oil range organics

BTEX = Total benzene, toluene, ethylbenzene, and total xylenes

mg/kg = Milligrams per kilogram


ft = Feet


bgs = Below ground surface

NA = not applicable

# **ATTACHMENT A**

## **Disposal Manifest**



 **TRUCKING, LLC** **RT Trucking, LLC** **TICKET No 128403**

PO Box 133  
Loco Hills, NM  
(575) 703-5189

DATE 7-31-23

DRIVER Fernando Segura TRUCK NO. 27 CAPACITY 130 BBLS. 25

SHIPPED FROM ground AT Trek line

SHIPPED TO Cedar lake #1249 LEASE Trek line

DESCRIPTION	HRS OR BBLS.	RATE	AMOUNT	TOTALS
recover fluid from pit	25			
				SUB TOTAL
				TAX
				TOTAL

TIME STARTED \_\_\_\_\_ TIME FINISHED \_\_\_\_\_ TOTAL HOURS \_\_\_\_\_

COMPANY NAME mr nm operating COMPANY REP Chance Scarborough

Ref. No: G. 203024257

## **ATTACHMENT B**

Initial C-141

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS  
  
Action 251403

QUESTIONS

Operator: MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID: 330506
	Action Number: 251403
	Action Type: [NOTIFY] Notification Of Release (NOR)

QUESTIONS

<b>Location of Release Source</b> <i>Please answer all the questions in this group.</i>	
Site Name	Water Disposal Flowline Release
Date Release Discovered	07/31/2023
Surface Owner	Federal

<b>Incident Details</b> <i>Please answer all the questions in this group.</i>	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	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

<b>Nature and Volume of Release</b> <i>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.</i>	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Human Error   Flow Line - Production   Produced Water   Released: 150 BBL   Recovered: 25 BBL   Lost: 125 BBL.
Is the concentration of dissolved chloride in the produced water >10,000 mg/l	Yes
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)	Not answered.

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QUESTIONS, Page 2

Action 251403

QUESTIONS (continued)

Operator: MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID: 330506
	Action Number: 251403
	Action Type: [NOTIFY] Notification Of Release (NOR)

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 19.15.29.7(A) NMAC	Yes, major release.
Reasons why this would be considered a submission for a notification of a major release	<ul style="list-style-type: none"><li>Unauthorized release of a volume, excluding gases, of 25 barrels or more</li></ul>
If YES, was immediate notice given to the OCD, by whom	Katherine Kahn, CDH Consulting, LLC
If YES, was immediate notice given to the OCD, to whom	Mike Bratcher, OCD
If YES, was immediate notice given to the OCD, when	08/01/2023
If YES, was immediate notice given to the OCD, by what means (phone, email, etc.)	phone
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	Not answered.
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please 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 19.15.29.11(A)(5)(a) NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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**Santa Fe, NM 87505**

ACKNOWLEDGMENTS  
  
Action 251403

ACKNOWLEDGMENTS

Operator: MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID: 330506
	Action Number: 251403
	Action Type: [NOTIFY] Notification Of Release (NOR)

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	I acknowledge that I am authorized to submit notification of a releases on behalf of my operator.
<input checked="" type="checkbox"/>	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to my operator) to track the notification(s) and corrective action(s) for a release, pursuant to NMAC 19.15.29.
<input checked="" type="checkbox"/>	I acknowledge that creating a new incident file will require my operator to file subsequent submission(s) of form "C-141, Application for administrative approval of a release notification and corrective action", pursuant to NMAC 19.15.29.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	I acknowledge the fact that 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.
<input checked="" type="checkbox"/>	I acknowledge the fact that, 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.

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CONDITIONS

Action 251403

CONDITIONS

Operator: MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID: 330506
	Action Number: 251403
	Action Type: [NOTIFY] Notification Of Release (NOR)

CONDITIONS

Created By	Condition	Condition Date
gfast_cdh	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.	8/13/2023



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

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

Incident ID	NAPP2322554757
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	MR NM Operating LLC	OGRID
Contact Name	Klint Farrar	Contact Telephone (469) 906-2004
Contact email	klint@cypressnr.com	Incident # (assigned by OCD)
Contact mailing address	5950 Berkshire Lane Suite 1000 Dallas, TX 75225	

Location of Release Source

Latitude 32.85551 Longitude -103.95222  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Westall Line Release	Site Type	Flowline
Date Release Discovered	7/31/23	API# (if applicable)	

Unit Letter	Section	Township	Range	County
A	10	17S	30E	Eddy

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

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 150 bbls	Volume Recovered (bbls) 25 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

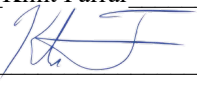
The release was noticed by Cypress personnel around 3:30 pm on 7/31/23 from a poly water disposal line. The line was shut-in by 4 pm and repaired that evening. During repairs, a drag mark on the poly line was determined to be the source of the release, likely damaged during the installation. Twenty feet of poly line was removed and replaced with new poly. A vac truck removed approximately 25 bbls of produced water from the surface on 7/31/23. MR NM calculated the time between notification of the leak and when the line was last driven and calculated the estimated rate through the flowline from CNR facilities. Recovered volumes were reported by the quantity removed by the vac truck.

Incident ID	NAPP2322554757
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?  This incident is an unauthorized release of a volume, excluding gases, of 25 barrels or more.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Mike Bratcher at the OCD (575-626-0857) was notified via phone on 8.1.23 by Katherine Kahn (CDH Consulting, LLC). Additionally, this form was emailed to the OCD.Enviro@emnrd.nm.gov. Jose Martinez at the BLM (575-234-5972) was also notified of the spill by phone and email on 8.1.23 by Katherine Kahn since it occurred on federal land.	

## Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:  	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Klint Farrar</u>	Title: <u>President</u>
Signature: <u></u>	Date: <u>8/1/23</u>
email: <u>klint@cypressnr.com</u>	Telephone: <u>469-906-2004</u>
<b><u>OCD Only</u></b>	
Received by: <u>Shelly Wells</u>	Date: <u>8/15/2023</u>

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 251425

CONDITIONS

Operator: MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID: 330506
	Action Number: 251425
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	8/15/2023

## **ATTACHMENT C**

### **Soil Boring Log**



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1 (TW-1)		WELL TAG ID NO. N/A		OSE FILE NO(S). RA-13319			
	WELL OWNER NAME(S) Spur Energy Partners LLC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 9655 Katy Freeway, Suite 500				CITY Houston	STATE TX	ZIP 77024	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32		MINUTES 51	SECONDS 25.10	N		
		LONGITUDE 103		56	59.71	W		
* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84								
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SW SW SW Sec. 02 T17S R30E, NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 8/15/2023		DRILLING ENDED 8/15/2023		DEPTH OF COMPLETED WELL (FT) Temporary Well Material	BORE HOLE DEPTH (FT) ±101	DEPTH WATER FIRST ENCOUNTERED (FT) N/A	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	DATE STATIC MEASURED 8/23/2023	
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger						CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>	
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	101	±6.25	Soil Boring	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				N/A				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. RA-13319	POD NO. 1	TRN NO. 746098
LOCATION 17S-30E-02-333	WELL TAG ID NO.	PAGE 1 OF 2



WR-20 WELL RECORD &amp; LOG (Version 01/28/2022)

FILE NO. RA-13319		POD NO. 1	TRN NO. 746098
LOCATION 17S.30E.02.333		WELL TAG ID NO.	PAGE 2 OF 2

## **ATTACHMENT D**

### Photographic Log



Latitude: 32.855423  
Longitude: -103.952105  
View: looking east/southeast  
Date: 10/10/23





Latitude: 32.855440  
Longitude: -103.952234  
View: looking southwest  
Date: 10/10/23





Latitude: 32.855295  
Longitude: -103.952398  
View: looking east  
Date: 10/10/23





Latitude: 32.855333  
Longitude: -103.952105  
View: looking south  
Date: 10/10/23






Latitude: 32.855333  
Longitude: -103.952105  
View: looking west  
Date: 10/10/23





Latitude: 32.855364  
Longitude: -103.952222  
View: looking south  
Date: 10/10/23

575



**Santiago Garcia**  
M | 916.396.4066 • [Santiago.Garcia@npacificoil.com](mailto:Santiago.Garcia@npacificoil.com)  
For Emergency Contact Joseph Urban  
M | 575.366.0084 • [Joseph.Urban@npacificoil.com](mailto:Joseph.Urban@npacificoil.com)  
[jarrym\\_gdc@hotmail.com](mailto:jarrym_gdc@hotmail.com)

**FEDERAL R**  
**LEASE #LC-029020-H**  
**330' FWL & 330' FEL**  
**UNIT A, SEC. 10, T17S, R30E**  
**EDDY COUNTY, NEW MEXICO**  
**API #30-015-04170**



Latitude: 32.855594  
Longitude: -103.951957  
View: looking west  
Date: 10/10/23





Latitude: 32.855604  
Longitude: -103.951972  
View: looking south  
Date: 10/10/23





Latitude: 32.855580  
Longitude: -103.951933  
View: looking southeast  
Date: 10/10/23





## **ATTACHMENT E**

### Laboratory Analytical Reports



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Chris Del Hierro  
CDH Consulting  
9446 Clermont St,  
Thornton, Colorado 80229  
Generated 10/17/2023 12:06:46 PM

## JOB DESCRIPTION

Westall Line  
SDG NUMBER Loco Hills NM

## JOB NUMBER

880-34290-1

Eurofins Midland  
1211 W. Florida Ave  
Midland TX 79701

# Eurofins Midland

## 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



Generated  
10/17/2023 12:06:46 PM

Authorized for release by  
Irene Vann, Project Manager  
[Irene.Vann@et.eurofinsus.com](mailto:Irene.Vann@et.eurofinsus.com)  
(210)509-3334

Client: CDH Consulting  
Project/Site: Westall Line

Laboratory Job ID: 880-34290-1  
SDG: Loco Hills NM

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Definitions/Glossary

Client: CDH Consulting  
Project/Site: Westall Line

Job ID: 880-34290-1  
SDG: Loco Hills NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

## Case Narrative

Client: CDH Consulting  
Project/Site: Westall Line

Job ID: 880-34290-1  
SDG: Loco Hills NM

**Job ID: 880-34290-1**

**Laboratory: Eurofins Midland**

### Narrative

#### Job Narrative 880-34290-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample 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 10/11/2023 10:25 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.9°C  
Client called on 10/11/23 at 11:49 placed samples 1-3 on HOLD. only wanting to run sample 004

### Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (880-34290-1), SS02 (880-34290-2), SS03 (880-34290-3) and SS04 (880-34290-4).

### GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64494 and analytical batch 880-64432 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-34290-A-4-B MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

### GC Semi VOA

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

### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-64570 and 880-64570 and analytical batch 880-64697 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

## Client Sample Results

Client: CDH Consulting  
Project/Site: Westall Line

Job ID: 880-34290-1  
SDG: Loco Hills NM

Client Sample ID: SS04

Lab Sample ID: 880-34290-4

Date Collected: 10/10/23 15:36

Matrix: Solid

Date Received: 10/11/23 10:25

Sample Depth: .5 ft

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	U	0.00198		mg/Kg		10/11/23 13:47	10/12/23 00:39	1
Ethylbenzene	ND	U F1	0.00198		mg/Kg		10/11/23 13:47	10/12/23 00:39	1
Toluene	ND	U F1	0.00198		mg/Kg		10/11/23 13:47	10/12/23 00:39	1
Xylenes, Total	ND	U	0.00396		mg/Kg		10/11/23 13:47	10/12/23 00:39	1
m-Xylene & p-Xylene	ND	U	0.00396		mg/Kg		10/11/23 13:47	10/12/23 00:39	1
o-Xylene	ND	U	0.00198		mg/Kg		10/11/23 13:47	10/12/23 00:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	10/11/23 13:47	10/12/23 00:39	1
1,4-Difluorobenzene (Surr)	96		70 - 130	10/11/23 13:47	10/12/23 00:39	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	ND	U	0.00396		mg/Kg			10/12/23 00:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	ND	U	49.9		mg/Kg			10/12/23 10:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND	U	49.9		mg/Kg		10/11/23 15:46	10/12/23 10:56	1
Diesel Range Organics (Over C10-C28)	ND	U	49.9		mg/Kg		10/11/23 15:46	10/12/23 10:56	1
Oil Range Organics (Over C28-C36)	ND	U	49.9		mg/Kg		10/11/23 15:46	10/12/23 10:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	10/11/23 15:46	10/12/23 10:56	1
o-Terphenyl	113		70 - 130	10/11/23 15:46	10/12/23 10:56	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12200	F1	100		mg/Kg			10/13/23 15:56	20

Eurofins Midland

## Surrogate Summary

Client: CDH Consulting  
Project/Site: Westall Line

Job ID: 880-34290-1  
SDG: Loco Hills NM

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
880-34290-4	SS04	88	96
880-34290-4 MS	SS04	111	98
880-34290-4 MSD	SS04	122	142 S1+
LCS 880-64494/1-A	Lab Control Sample	108	94
LCSD 880-64494/2-A	Lab Control Sample Dup	104	100
MB 880-64332/5-A	Method Blank	108	122
MB 880-64494/5-A	Method Blank	118	129

## 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	OTPH1
		(70-130)	(70-130)
880-34290-4	SS04	104	113
880-34290-4 MS	SS04	97	92
880-34290-4 MSD	SS04	97	91
LCS 880-64505/2-A	Lab Control Sample	97	103
LCSD 880-64505/3-A	Lab Control Sample Dup	84	90
MB 880-64505/1-A	Method Blank	96	109

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl



## QC Sample Results

Client: CDH Consulting  
Project/Site: Westall Line

Job ID: 880-34290-1  
SDG: Loco Hills NM

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

Lab Sample ID: MB 880-64332/5-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64332

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Ethylbenzene	ND	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Toluene	ND	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
Xylenes, Total	ND	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
m-Xylene & p-Xylene	ND	U	0.00400		mg/Kg		10/10/23 10:38	10/11/23 12:35	1
o-Xylene	ND	U	0.00200		mg/Kg		10/10/23 10:38	10/11/23 12:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10/10/23 10:38	10/11/23 12:35	1
1,4-Difluorobenzene (Surr)	122		70 - 130	10/10/23 10:38	10/11/23 12:35	1

Lab Sample ID: MB 880-64494/5-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64494

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	U	0.00200		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
Ethylbenzene	ND	U	0.00200		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
Toluene	ND	U	0.00200		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
Xylenes, Total	ND	U	0.00400		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
m-Xylene & p-Xylene	ND	U	0.00400		mg/Kg		10/11/23 13:47	10/12/23 00:11	1
o-Xylene	ND	U	0.00200		mg/Kg		10/11/23 13:47	10/12/23 00:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	10/11/23 13:47	10/12/23 00:11	1
1,4-Difluorobenzene (Surr)	129		70 - 130	10/11/23 13:47	10/12/23 00:11	1

Lab Sample ID: LCS 880-64494/1-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09030		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.08307		mg/Kg		83	70 - 130
Toluene	0.100	0.08593		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	0.200	0.1713		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08396		mg/Kg		84	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-64494/2-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09034		mg/Kg		90	70 - 130	0	35

Eurofins Midland

## QC Sample Results

Client: CDH Consulting  
Project/Site: Westall Line

Job ID: 880-34290-1  
SDG: Loco Hills NM

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

Lab Sample ID: LCSD 880-64494/2-A

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethylbenzene	0.100	0.08819		mg/Kg		88	70 - 130	6	35
Toluene	0.100	0.08974		mg/Kg		90	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1943		mg/Kg		97	70 - 130	13	35
o-Xylene	0.100	0.09133		mg/Kg		91	70 - 130	8	35

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

Lab Sample ID: 880-34290-4 MS

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: SS04

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND	U	0.0998	0.08825		mg/Kg		88	70 - 130
Ethylbenzene	ND	U F1	0.0998	0.08069		mg/Kg		81	70 - 130
Toluene	ND	U F1	0.0998	0.07919		mg/Kg		79	70 - 130
m-Xylene & p-Xylene	ND	U	0.200	0.1791		mg/Kg		90	70 - 130
o-Xylene	ND	U	0.0998	0.08455		mg/Kg		85	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-34290-4 MSD

Matrix: Solid

Analysis Batch: 64432

Client Sample ID: SS04

Prep Type: Total/NA

Prep Batch: 64494

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND	U	0.100	0.1203		mg/Kg		120	70 - 130	31	35
Ethylbenzene	ND	U F1	0.100	0.06805	F1	mg/Kg		68	70 - 130	17	35
Toluene	ND	U F1	0.100	0.05846	F1	mg/Kg		58	70 - 130	30	35
m-Xylene & p-Xylene	ND	U	0.201	0.2010		mg/Kg		100	70 - 130	12	35
o-Xylene	ND	U	0.100	0.09822		mg/Kg		98	70 - 130	15	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	142	S1+	70 - 130

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

Lab Sample ID: MB 880-64505/1-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64505

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1

Eurofins Midland

## QC Sample Results

Client: CDH Consulting  
Project/Site: Westall Line

Job ID: 880-34290-1  
SDG: Loco Hills NM

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

Lab Sample ID: MB 880-64505/1-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64505

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	ND	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1
Oil Range Organics (Over C28-C36)	ND	U	50.0		mg/Kg		10/11/23 15:46	10/12/23 08:09	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				10/11/23 15:46	10/12/23 08:09	1
o-Terphenyl	109		70 - 130				10/11/23 15:46	10/12/23 08:09	1

Lab Sample ID: LCS 880-64505/2-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	952.4		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	912.6		mg/Kg		91	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	97		70 - 130						
o-Terphenyl	103		70 - 130						

Lab Sample ID: LCSD 880-64505/3-A

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	856.3		mg/Kg		86	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	786.7		mg/Kg		79	70 - 130	15	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	84		70 - 130						
o-Terphenyl	90		70 - 130						

Lab Sample ID: 880-34290-4 MS

Matrix: Solid

Analysis Batch: 64518

Client Sample ID: SS04

Prep Type: Total/NA

Prep Batch: 64505

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	ND	U	994	1158		mg/Kg		113	70 - 130		
Diesel Range Organics (Over C10-C28)	ND	U	994	889.8		mg/Kg		87	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	97		70 - 130								
o-Terphenyl	92		70 - 130								

Eurofins Midland

## QC Sample Results

Client: CDH Consulting  
Project/Site: Westall Line

Job ID: 880-34290-1  
SDG: Loco Hills NM

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

**Lab Sample ID: 880-34290-4 MSD**

**Matrix: Solid**

**Analysis Batch: 64518**

**Client Sample ID: SS04**

Prep Type: Total/NA

**Prep Batch: 64505**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits
Gasoline Range Organics (GRO)-C6-C10	ND	U	994	1187		mg/Kg		116	70 - 130	2	20 - 140
Diesel Range Organics (Over C10-C28)	ND	U	994	893.7		mg/Kg		87	70 - 130	0	20 - 140
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	97		70 - 130								
o-Terphenyl	91		70 - 130								

### Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-64570/1-A**

**Matrix: Solid**

**Analysis Batch: 64697**

**Client Sample ID: Method Blank**

**Prep Type: Soluble**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND	U	5.00		mg/Kg			10/13/23 14:30	1

**Lab Sample ID: LCS 880-64570/2-A**

**Matrix: Solid**

**Analysis Batch: 64697**

**Client Sample ID: Lab Control Sample**

**Prep Type: Soluble**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	231.1		mg/Kg	-	92	90 - 110

**Lab Sample ID: LCSD 880-64570/3-A**

**Matrix: Solid**

**Analysis Batch: 64697**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Soluble**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits
Chloride	250	240.6		mg/Kg		96	90 - 110	4	20

**Lab Sample ID: 880-34290-4 MS**

**Matrix: Solid**

**Analysis Batch: 64697**

**Client Sample ID: SS04**

**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	12200	F1	4990	16620	F1	mg/Kg	-	88	90 - 110		

**Lab Sample ID: 880-34290-4 MSD**

**Matrix: Solid**

**Analysis Batch: 64697**

**Client Sample ID: SS04**

**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits
Chloride	12200	F1	4970	16500	F1	mg/Kg	-	86	90 - 110	1	20

Eurofins Midland



## QC Association Summary

Client: CDH Consulting  
Project/Site: Westall Line

Job ID: 880-34290-1  
SDG: Loco Hills NM

## GC VOA

## Prep Batch: 64332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-64332/5-A	Method Blank	Total/NA	Solid	5035	

## Analysis Batch: 64432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34290-4	SS04	Total/NA	Solid	8021B	64494
MB 880-64332/5-A	Method Blank	Total/NA	Solid	8021B	64332
MB 880-64494/5-A	Method Blank	Total/NA	Solid	8021B	64494
LCS 880-64494/1-A	Lab Control Sample	Total/NA	Solid	8021B	64494
LCSD 880-64494/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64494
880-34290-4 MS	SS04	Total/NA	Solid	8021B	64494
880-34290-4 MSD	SS04	Total/NA	Solid	8021B	64494

## Prep Batch: 64494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34290-4	SS04	Total/NA	Solid	5035	
MB 880-64494/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64494/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64494/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34290-4 MS	SS04	Total/NA	Solid	5035	
880-34290-4 MSD	SS04	Total/NA	Solid	5035	

## Analysis Batch: 64598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34290-4	SS04	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 64505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34290-4	SS04	Total/NA	Solid	8015NM Prep	
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34290-4 MS	SS04	Total/NA	Solid	8015NM Prep	
880-34290-4 MSD	SS04	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 64518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34290-4	SS04	Total/NA	Solid	8015B NM	64505
MB 880-64505/1-A	Method Blank	Total/NA	Solid	8015B NM	64505
LCS 880-64505/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64505
LCSD 880-64505/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64505
880-34290-4 MS	SS04	Total/NA	Solid	8015B NM	64505
880-34290-4 MSD	SS04	Total/NA	Solid	8015B NM	64505

## Analysis Batch: 64711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34290-4	SS04	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: CDH Consulting  
Project/Site: Westall Line

Job ID: 880-34290-1  
SDG: Loco Hills NM

HPLC/IC

Leach Batch: 64570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34290-4	SS04	Soluble	Solid	DI Leach	
MB 880-64570/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64570/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64570/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-34290-4 MS	SS04	Soluble	Solid	DI Leach	
880-34290-4 MSD	SS04	Soluble	Solid	DI Leach	

Analysis Batch: 64697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34290-4	SS04	Soluble	Solid	300.0	64570
MB 880-64570/1-A	Method Blank	Soluble	Solid	300.0	64570
LCS 880-64570/2-A	Lab Control Sample	Soluble	Solid	300.0	64570
LCSD 880-64570/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64570
880-34290-4 MS	SS04	Soluble	Solid	300.0	64570
880-34290-4 MSD	SS04	Soluble	Solid	300.0	64570

Lab Chronicle

Client: CDH Consulting  
Project/Site: Westall Line

Job ID: 880-34290-1  
SDG: Loco Hills NM

Client Sample ID: SS04  
Date Collected: 10/10/23 15:36  
Date Received: 10/11/23 10:25

Lab Sample ID: 880-34290-4  
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			5.05 g	5 mL	64494	10/11/23 13:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64432	10/12/23 00:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64598	10/12/23 00:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			64711	10/12/23 10:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	64505	10/11/23 15:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64518	10/12/23 10:56	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	64570	10/12/23 14:16	AG	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	64697	10/13/23 15:56	CH	EET MID

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

Accreditation/Certification Summary

Client: CDH Consulting  
Project/Site: Westall Line

Job ID: 880-34290-1  
SDG: Loco Hills NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
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: CDH Consulting  
Project/Site: Westall Line

Job ID: 880-34290-1  
SDG: Loco Hills NM

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: CDH Consulting  
Project/Site: Westall Line

Job ID: 880-34290-1  
SDG: Loco Hills NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-34290-4	SS04	Solid	10/10/23 15:36	10/11/23 10:25	.5 ft

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



## 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

Environment Testing  
Xenco



WM

880-34290 Chain of Custody

Page \_\_\_\_ of \_\_\_\_  
www.xenco.com

Project Manager <b>Katherine Kahen</b>		Bill to: (if different)		Work Order Comments	
Company Name <b>CDH Consulting</b>		Company Name		Program, UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
Address <b>9446 Clamnet St</b>		Address		State of Project:	
City, State ZIP <b>Thornton, CO 80226</b>		City, State ZIP		Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Phone <b>303 319 9604</b>		Email <b>KKahen @ CDHConsulting.com</b>		Deliverables EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

Project Name <b>Westall Lane</b>		Turn Around		ANALYSIS REQUEST		Preservative Codes	
Project Number		<input type="checkbox"/> Routine <input type="checkbox"/> Rush		Pres. Code		None NO DI Water H <sub>2</sub> O	
Project Location <b>Loco Hills NM</b>		Due Date				Cool Cool MeOH Me	
Sampler's Name <b>Bronson Thacker</b>		TAT starts the day received by the lab, if received by 4:30pm				HCL HC HNO <sub>3</sub> HN	
PO #						H <sub>2</sub> SO <sub>4</sub> H <sub>2</sub>	

SAMPLE RECEIPT		Temp Blank		Yes No		Wet Ice		Yes No		Parameters		# of	
Samples Received Intact:		(Yes) No		Thermometer ID		No		No				Cont	
Cooler Custody Seals.		Yes No		Correction Factor		+20							
Sample Custody Seals.		Yes No		Temperature Reading		5.7							
Total Containers:				Corrected Temperature:		5.9							

Sample Identification		Matrix		Date Sampled		Time Sampled		Depth		Grab/Comp		# of	
5501		Soil		10/14/03		15:18		5 ft		Grab		1	
5502						15:23							
5503						15:31							
5504						15:36							

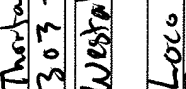
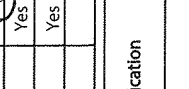
  

Total 200.7 / 6010		200.8 / 6020:		8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO <sub>2</sub> Na Sr Ti Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010		8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 2451 / 7470 / 7471	

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco. Its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)		Received by (Signature)		Date/Time	
				10/14/03	

Revised Date: 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: CDH Consulting

Job Number: 880-34290-1  
SDG Number: Loco Hills NM

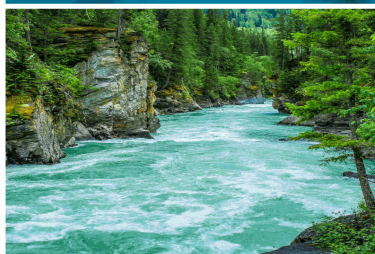
Login Number: 34290  
List Number: 1  
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

Report to:

Michael A. Wicker



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

CDH Consulting

Project Name: Westall Line Release

Work Order: E404218

Job Number: 24034-0001

Received: 4/22/2024

Revision: 3

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/2/24

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
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Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 5/2/24

Michael A. Wicker  
9446 Clermont Street  
Thornton, CO 80229



Project Name: Westall Line Release  
Workorder: E404218  
Date Received: 4/22/2024 11:00:00AM

Michael A. Wicker,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/22/2024 11:00:00AM, under the Project Name: Westall Line Release.

The analytical test results summarized in this report with the Project Name: Westall Line Release apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

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Sample Custody Officer  
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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)



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Sample Summary

CDH Consulting 9446 Clermont Street Thornton CO, 80229	Project Name: Westall Line Release Project Number: 24034-0001 Project Manager: Michael A. Wicker	Reported: 05/02/24 10:58
--	--	-----------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01@0.5	E404218-01A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
SS01@2.0	E404218-02A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
SS01@4.0	E404218-03A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
SS02@0.5	E404218-04A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
SS02@2.0	E404218-05A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
SS02@4.0	E404218-06A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
SS03@0.5	E404218-07A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
SS03@2.0	E404218-08A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
SS03@4.0	E404218-09A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
SS04@2.0	E404218-10A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
SS04@4.0	E404218-11A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
SS05@0.5	E404218-12A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
SS05@2.0	E404218-13A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
SS05@4.0	E404218-14A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
BG01@0.5	E404218-15A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
BG01@2.0	E404218-16A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.
BG01@4.0	E404218-17A	Soil	04/18/24	04/22/24	Glass Jar, 2 oz.

Sample Data

CDH Consulting	Project Name:	Westall Line Release	
9446 Clermont Street	Project Number:	24034-0001	Reported:
Thornton CO, 80229	Project Manager:	Michael A. Wicker	5/2/2024 10:58:08AM

SS01@0.5

E404218-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: JM		Batch: 2417023
Chloride	489	20.0	1	04/22/24	04/23/24	



Sample Data

CDH Consulting	Project Name:	Westall Line Release	
9446 Clermont Street	Project Number:	24034-0001	Reported:
Thornton CO, 80229	Project Manager:	Michael A. Wicker	5/2/2024 10:58:08AM

SS02@0.5

E404218-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2417023
Chloride	ND	20.0	1	04/22/24	04/23/24	



Sample Data

CDH Consulting	Project Name:	Westall Line Release	
9446 Clermont Street	Project Number:	24034-0001	Reported:
Thornton CO, 80229	Project Manager:	Michael A. Wicker	5/2/2024 10:58:08AM

SS03@0.5

E404218-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2417023
Chloride	1480	20.0	1	04/22/24	04/23/24	





Sample Data

CDH Consulting	Project Name:	Westall Line Release	
9446 Clermont Street	Project Number:	24034-0001	Reported:
Thornton CO, 80229	Project Manager:	Michael A. Wicker	5/2/2024 10:58:08AM

SS03@2.0

E404218-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2417023
Chloride	873	20.0	1	04/22/24	04/23/24	



Sample Data

CDH Consulting	Project Name:	Westall Line Release	
9446 Clermont Street	Project Number:	24034-0001	Reported:
Thornton CO, 80229	Project Manager:	Michael A. Wicker	5/2/2024 10:58:08AM

SS04@2.0

E404218-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2417023
Chloride	10900	200	10	04/22/24	04/23/24	

Sample Data

CDH Consulting	Project Name:	Westall Line Release	
9446 Clermont Street	Project Number:	24034-0001	Reported:
Thornton CO, 80229	Project Manager:	Michael A. Wicker	5/2/2024 10:58:08AM

SS05@0.5

E404218-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2417023
Chloride	660	20.0	1	04/22/24	04/23/24	



Sample Data

CDH Consulting	Project Name:	Westall Line Release	
9446 Clermont Street	Project Number:	24034-0001	Reported:
Thornton CO, 80229	Project Manager:	Michael A. Wicker	5/2/2024 10:58:08AM

SS05@2.0

E404218-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2417023
Chloride	835	20.0	1	04/22/24	04/23/24	



Sample Data

CDH Consulting	Project Name:	Westall Line Release	
9446 Clermont Street	Project Number:	24034-0001	Reported:
Thornton CO, 80229	Project Manager:	Michael A. Wicker	5/2/2024 10:58:08AM

BG01@0.5

E404218-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2417023
Chloride	ND	20.0	1	04/22/24	04/23/24	



Sample Data

CDH Consulting	Project Name:	Westall Line Release	
9446 Clermont Street	Project Number:	24034-0001	Reported:
Thornton CO, 80229	Project Manager:	Michael A. Wicker	5/2/2024 10:58:08AM

BG01@2.0  
E404218-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2417023
Chloride	ND	20.0	1	04/22/24	04/23/24	





QC Summary Data

CDH Consulting	Project Name:	Westall Line Release	Reported:
9446 Clermont Street	Project Number:	24034-0001	
Thornton CO, 80229	Project Manager:	Michael A. Wicker	5/2/2024 10:58:08AM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2417023-BLK1)					Prepared: 04/22/24 Analyzed: 04/22/24				
Chloride	ND	20.0							
LCS (2417023-BS1)					Prepared: 04/22/24 Analyzed: 04/22/24				
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2417023-MS1)					Source: E404218-04		Prepared: 04/22/24 Analyzed: 04/23/24		
Chloride	265	20.0	250	ND	106	80-120			
Matrix Spike Dup (2417023-MSD1)					Source: E404218-04		Prepared: 04/22/24 Analyzed: 04/23/24		
Chloride	266	20.0	250	ND	107	80-120	0.378	20	

QC Summary Report Comment:  
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.  
Therefore, hand calculated values may differ slightly.

Definitions and Notes

CDH Consulting	Project Name:	Westall Line Release	
9446 Clermont Street	Project Number:	24034-0001	Reported:
Thornton CO, 80229	Project Manager:	Michael A. Wicker	05/02/24 10:58

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



## Chain of Custody

Page 1 of 2

Client Information				Invoice Information		Lab Use Only		TAT				State											
Client: CDH Consulting				Company: CDH Consulting		Lab WO# E404218		Job Number				<table border="1"> <tr> <td>1D</td> <td>2D</td> <td>3D</td> <td>Std</td> </tr> <tr> <td></td> <td></td> <td></td> <td>X</td> </tr> </table>				1D	2D	3D	Std				X
1D	2D	3D	Std																				
			X																				
Project Name: Westall Line Release				Address:								<table border="1"> <tr> <td>NM</td> <td>CO</td> <td>UT</td> <td>TX</td> </tr> <tr> <td>X</td> <td></td> <td></td> <td></td> </tr> </table>				NM	CO	UT	TX	X			
NM	CO	UT	TX																				
X																							
Project Manager: Michael A. Wicker				City, State, Zip:																			
Address:				Phone:																			
City, State, Zip:				Email: dslavens@cdhconsult.com																			
Phone: (616) 970-8459				Miscellaneous:																			
Email: mwicker@CDHconsult.com																							
Sample Information										Analysis and Method				EPA Program									
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCED 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA						
1115	4/18/2024	Soil	1	SS01@0.5		1					X												
1125	4/18/2024	Soil	1	SS01@2.0		2											Hold						
1138	4/18/2024	Soil	1	SS01@4.0		3											Hold						
1030	4/18/2024	Soil	1	SS02@0.5		4				X													
1045	4/18/2024	Soil	1	SS02@2.0		5											Hold						
1055	4/18/2024	Soil	1	SS02@4.0		6											Hold						
1405	4/18/2024	Soil	1	SS03@0.5		7				X													
1415	4/18/2024	Soil	1	SS03@2.0		8											Hold						
1425	4/18/2024	Soil	1	SS03@4.0		9											Hold						
1440	4/18/2024	Soil	1	SS04@2.0		10				X													
Additional Instructions: please cc' mwicker@cdhconsult.com																							
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																							
Sampled by: Travis Short																							
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 oC on subsequent days.  Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N  T1 _____ T2 _____ T3 _____  AVG Temp oC 4															
		4/19	0700	Michelle Gonzales		4/19/24	0700																
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time																
Michelle Gonzales		4/19/24	1700	C. M.		4/19/24	1800																
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time																
C. M.		4/19/24	2400			4/22/24	1100																
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time																
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other																							
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																							
Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																							

## Chain of Custody

Client Information				Invoice Information		Lab Use Only		TAT				State									
Client: CDH Consulting				Company: CDH Consulting		Lab WO#		1D 2D 3D Std				NM CO UT TX									
Project Name: Westall Line Release				Address:		E404218						X									
Project Manager: Michael A. Wicker				City, State, Zip:																	
Address:				Phone:																	
City, State, Zip:				Email: dslavens@cdhconsult.com																	
Phone: (616) 970-8459				Miscellaneous:																	
Email: mwicker@CDHconsult.com																					
Sample Information										Analysis and Method								EPA Program			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCED 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA				
1450	4/18/2024	Soil	1	SS04@4.0		11															
1370	4/18/2024	Soil	1	SS05@0.5 X 80		12					X										
1340	4/18/2024	Soil	1	SS05@2.0 X 80		13															
1350	4/18/2024	Soil	1	SS05@4.0 X 80		14															
0945	4/18/2024	Soil	1	BG01@0.5		15					X										
1002	4/18/2024	Soil	1	BG01@2.0		16															
1018	4/18/2024	Soil	1	BG01@4.0		17															
Additional Instructions: Please cc' mwicker@cdhconsult.com																					
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																					
Sampled by: Travis Short																					
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 oC on subsequent days.  Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N  T1 _____ T2 _____ T3 _____  AVG Temp oC 4													
Relinquished by: (Signature)		Date	Time	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														
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA _____																					
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## Chain of Custody

Page 1 of 2

Client Information				Invoice Information		Lab Use Only		TAT				State					
Client: CDH Consulting				Company: CDH Consulting		Lab WO# E404218		Job Number 24024-0001		1D	2D	3D	Std	NM	CO	UT	TX
Project Name: Westall Line Release				Address:										X			
Project Manager: Michael A. Wicker				City, State, Zip:													
Address:				Phone:													
City, State, Zip:				Email: dslavens@cdhconsult.com													
Phone: (616) 970-8459				Miscellaneous:													
Email: mwicker@CDHconsult.com																	
Sample Information										Analysis and Method				EPA Program			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Filter	Lab Number	DRO/DRO by 8015	GRD/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA
1115	4/18/2024	Soil	1	SS01@0.5		1					X						
1125	4/18/2024	Soil	1	SS01@2.0		2											Hold
1138	4/18/2024	Soil	1	SS01@4.0		3											Hold
1030	4/18/2024	Soil	1	SS02@0.5		4					X						
1045	4/18/2024	Soil	1	SS02@2.0		5											Hold
1055	4/18/2024	Soil	1	SS02@4.0		6											Hold
1405	4/18/2024	Soil	1	SS03@0.5		7					X						
1415	4/18/2024	Soil	1	SS03@2.0		8					X						Remove from hold per M. Wicker 5/1/24 RJ
1425	4/18/2024	Soil	1	SS03@4.0		9											Hold
1440	4/18/2024	Soil	1	SS04@2.0		10					X						
Additional Instructions: Please cc' mwicker@cdhconsult.com																	
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																	
Sampled by: Travis Short																	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 oC on subsequent days. Received on ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N T1 _____ T2 _____ T3 _____ AVG Temp oC 4									
Relinquished by: (Signature)		Date	Time	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										
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other																	
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## Chain of Custody

Page 2 of 2

Client Information				Invoice Information		Lab Use Only		TAT				State					
Client: CDH Consulting				Company: CDH Consulting		Lab WO# <b>E404218</b>		Job Number <b>24034-0001</b>				1D	2D	3D	Std		
Project Name: Westall Line Release				Address:													
Project Manager: Michael A. Wicker				City, State, Zip:													
Address:				Phone:													
City, State, Zip:				Email: <a href="mailto:dslavens@cdhconsult.com">dslavens@cdhconsult.com</a>													
Phone: (616) 970-8459				Miscellaneous:													
Email: <a href="mailto:mwicker@CDHconsult.com">mwicker@CDHconsult.com</a>																	
Sample Information						Analysis and Method								EPA Program			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Filter	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA
1450	4/18/2024	Soil	1	SS04@4.0		11											
1370	4/18/2024	Soil	1	SS05@0.5 X 80		12					X						
1340	4/18/2024	Soil	1	SS05@2.0 X 80		13					X						
1350	4/18/2024	Soil	1	SS05@4.0 X 80		14											
0945	4/18/2024	Soil	1	BG01@0.5		15					X						
1002	4/18/2024	Soil	1	BG01@2.0		16					X						
1018	4/18/2024	Soil	1	BG01@4.0		17											
<b>Additional Instructions:</b> Please cc' <a href="mailto:mwicker@cdhconsult.com">mwicker@cdhconsult.com</a>																	
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																	
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Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 oC on subsequent days.									
<i>[Signature]</i>		4/19	0700	<i>Michelle Gonzales</i>		4.19.24	0700										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time										
<i>Michelle Gonzales</i>		4.19.24	1700	<i>[Signature]</i>		4.19.24	1800										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp oC <b>4</b>									
<i>[Signature]</i>		4.19.24	2400	<i>[Signature]</i>		4.22.24	1100										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time										
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other																	
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																	
Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																	



## Envirotech Analytical Laboratory

Printed: 4/22/2024 11:11:41AM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	CDH Consulting	Date Received:	04/22/24 11:00	Work Order ID:	E404218
Phone:	(616) 970-8459	Date Logged In:	04/19/24 16:33	Logged In By:	Alexa Michaels
Email:	mwicker@CDHconsult.com	Due Date:	04/26/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/Resolution

See COC Remarks for samples on hold per client.

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
  - Sample ID? Yes
  - Date/Time Collected? Yes
  - Collectors name? Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Envirotech Analytical Laboratory  
Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.  
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	CDH Consulting	Date Received:	04/22/24 11:00	Work Order ID:	E404218
Phone:	(616) 970-8459	Date Logged In:	04/19/24 16:33	Logged In By:	Alexa Michaels
Email:	mwickerr@CDHconsult.com	Due Date:	04/26/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?
2. Does the number of samples per sampling site location match the COC?
3. Were samples dropped off by client or carrier?
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?
5. Were all samples received within holding time?

Note: Analyses, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?

Sample Cooler

7. Was a sample cooler received?
8. If yes, was cooler received in good condition?
9. Was the sample(s) received intact, i.e., not broken?
10. Were custody/security seals present?
11. If yes, were custody/security seals intact?

12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C

Note: Thermal preservation is not required, if samples are received w/in 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present?
15. Are VOC samples collected in VOA Vials?
16. Is the head space less than 6-8 mm (pea sized or less)?
17. Was a trip blank (TB) included for VOC analyses?
18. Are non-VOC samples collected in the correct containers?
19. Is the appropriate volume/weight or number of sample containers collected?

Field Label

20. Were field sample labels filled out with the minimum information:  
Sample ID?  
Date/Time Collected?  
Collectors name?

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?
22. Are sample(s) correctly preserved?
24. Is lab filtration required and/or requested for dissolved metals?

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?
27. If yes, does the COC specify which phase(s) is to be analyzed?

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?
29. Was a subcontract laboratory specified by the client and if so who?

Client Instruction

Please disregard "x80" in sample ID for SS05@0.5, SS05@2.0, and SS05@4.0

Signature of client authorizing changes to the COC or sample disposition.

*Handwritten signature*

4/23/2024

Date

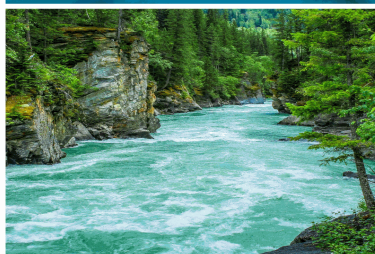


envirotech Inc.



Report to:

Michael A. Wicker



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

CDH Consulting

Project Name: Westall Flowline Release

Work Order: E409033

Job Number: 24034-0001

Received: 9/6/2024

Revision: 2

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
9/12/24

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.  
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 9/12/24

Michael A. Wicker  
9446 Clermont Street  
Thornton, CO 80229



Project Name: Westall Flowline Release  
Workorder: E409033  
Date Received: 9/6/2024 8:00:00AM

Michael A. Wicker,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/6/2024 8:00:00AM, under the Project Name: Westall Flowline Release.

The analytical test results summarized in this report with the Project Name: Westall Flowline Release apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

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Laboratory Administrator  
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[mgonzaless@envirotech-inc.com](mailto:mgonzaless@envirotech-inc.com)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)



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Sample Summary

CDH Consulting 9446 Clermont Street Thornton CO, 80229	Project Name: Westall Flowline Release Project Number: 24034-0001 Project Manager: Michael A. Wicker	Reported: 09/12/24 11:04
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS06 @ 0.5	E409033-01A	Soil	09/05/24	09/06/24	Glass Jar, 2 oz.
SS06 @ 4.0	E409033-02A	Soil	09/05/24	09/06/24	Glass Jar, 2 oz.
SS07 @ 0.5	E409033-03A	Soil	09/05/24	09/06/24	Glass Jar, 2 oz.
SS07 @ 4.0	E409033-04A	Soil	09/05/24	09/06/24	Glass Jar, 2 oz.
SS08 @ 1.0	E409033-05A	Soil	09/05/24	09/06/24	Glass Jar, 2 oz.
SS08 @ 4.0	E409033-06A	Soil	09/05/24	09/06/24	Glass Jar, 2 oz.



Sample Data

CDH Consulting 9446 Clermont Street Thornton CO, 80229	Project Name: Westall Flowline Release Project Number: 24034-0001 Project Manager: Michael A. Wicker	Reported: 9/12/2024 11:04:00AM
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SS06 @ 0.5  
E409033-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436071	
Benzene	ND	0.0250	1	09/06/24	09/10/24	
Ethylbenzene	ND	0.0250	1	09/06/24	09/10/24	
Toluene	ND	0.0250	1	09/06/24	09/10/24	
o-Xylene	ND	0.0250	1	09/06/24	09/10/24	
p,m-Xylene	ND	0.0500	1	09/06/24	09/10/24	
Total Xylenes	ND	0.0250	1	09/06/24	09/10/24	
Surrogate: 4-Bromochlorobenzene-PID	99.2 %	70-130		09/06/24	09/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436071	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/06/24	09/10/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	95.3 %	70-130		09/06/24	09/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: AF		Batch: 2436073	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/06/24	09/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/06/24	09/07/24	
Surrogate: n-Nonane	84.8 %	50-200		09/06/24	09/07/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2436063	
Chloride	695	20.0	1	09/06/24	09/07/24	



Sample Data

CDH Consulting 9446 Clermont Street Thornton CO, 80229	Project Name: Westall Flowline Release Project Number: 24034-0001 Project Manager: Michael A. Wicker	Reported: 9/12/2024 11:04:00AM
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SS06 @ 4.0  
E409033-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436071	
Benzene	ND	0.0250	1	09/06/24	09/10/24	
Ethylbenzene	ND	0.0250	1	09/06/24	09/10/24	
Toluene	ND	0.0250	1	09/06/24	09/10/24	
o-Xylene	ND	0.0250	1	09/06/24	09/10/24	
p,m-Xylene	ND	0.0500	1	09/06/24	09/10/24	
Total Xylenes	ND	0.0250	1	09/06/24	09/10/24	
Surrogate: 4-Bromochlorobenzene-PID	101 %	70-130		09/06/24	09/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436071	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/06/24	09/10/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	95.5 %	70-130		09/06/24	09/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: AF		Batch: 2436073	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/06/24	09/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/06/24	09/07/24	
Surrogate: n-Nonane	76.9 %	50-200		09/06/24	09/07/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2436063	
Chloride	147	20.0	1	09/06/24	09/07/24	





Sample Data

CDH Consulting 9446 Clermont Street Thornton CO, 80229	Project Name: Westall Flowline Release Project Number: 24034-0001 Project Manager: Michael A. Wicker	Reported: 9/12/2024 11:04:00AM
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SS07 @ 0.5  
E409033-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436071	
Benzene	ND	0.0250	1	09/06/24	09/10/24	
Ethylbenzene	ND	0.0250	1	09/06/24	09/10/24	
Toluene	ND	0.0250	1	09/06/24	09/10/24	
o-Xylene	ND	0.0250	1	09/06/24	09/10/24	
p,m-Xylene	ND	0.0500	1	09/06/24	09/10/24	
Total Xylenes	ND	0.0250	1	09/06/24	09/10/24	
Surrogate: 4-Bromochlorobenzene-PID	95.5 %	70-130		09/06/24	09/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436071	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/06/24	09/10/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.0 %	70-130		09/06/24	09/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: AF		Batch: 2436073	
Diesel Range Organics (C10-C28)	1020	500	20	09/06/24	09/07/24	
Oil Range Organics (C28-C36)	1050	1000	20	09/06/24	09/07/24	
Surrogate: n-Nonane	93.7 %	50-200		09/06/24	09/07/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2436063	
Chloride	3050	40.0	2	09/06/24	09/07/24	



Sample Data

CDH Consulting 9446 Clermont Street Thornton CO, 80229	Project Name: Westall Flowline Release Project Number: 24034-0001 Project Manager: Michael A. Wicker	Reported: 9/12/2024 11:04:00AM
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SS07 @ 4.0  
E409033-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436071	
Benzene	ND	0.0250	1	09/06/24	09/10/24	
Ethylbenzene	ND	0.0250	1	09/06/24	09/10/24	
Toluene	ND	0.0250	1	09/06/24	09/10/24	
o-Xylene	ND	0.0250	1	09/06/24	09/10/24	
p,m-Xylene	ND	0.0500	1	09/06/24	09/10/24	
Total Xylenes	ND	0.0250	1	09/06/24	09/10/24	
Surrogate: 4-Bromochlorobenzene-PID	98.9 %	70-130		09/06/24	09/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436071	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/06/24	09/10/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.8 %	70-130		09/06/24	09/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: AF		Batch: 2436073	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/06/24	09/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/06/24	09/07/24	
Surrogate: n-Nonane	77.6 %	50-200		09/06/24	09/07/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2436063	
Chloride	176	20.0	1	09/06/24	09/07/24	



Sample Data

CDH Consulting 9446 Clermont Street Thornton CO, 80229	Project Name: Westall Flowline Release Project Number: 24034-0001 Project Manager: Michael A. Wicker	Reported: 9/12/2024 11:04:00AM
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SS08 @ 1.0  
E409033-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436071	
Benzene	ND	0.0250	1	09/06/24	09/10/24	
Ethylbenzene	ND	0.0250	1	09/06/24	09/10/24	
Toluene	ND	0.0250	1	09/06/24	09/10/24	
o-Xylene	ND	0.0250	1	09/06/24	09/10/24	
p,m-Xylene	ND	0.0500	1	09/06/24	09/10/24	
Total Xylenes	ND	0.0250	1	09/06/24	09/10/24	
Surrogate: 4-Bromochlorobenzene-PID	98.4 %	70-130		09/06/24	09/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436071	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/06/24	09/10/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.1 %	70-130		09/06/24	09/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: AF		Batch: 2436073	
Diesel Range Organics (C10-C28)	531	250	10	09/06/24	09/07/24	
Oil Range Organics (C28-C36)	ND	500	10	09/06/24	09/07/24	
Surrogate: n-Nonane	81.3 %	50-200		09/06/24	09/07/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2436063	
Chloride	75.5	20.0	1	09/06/24	09/07/24	



Sample Data

CDH Consulting 9446 Clermont Street Thornton CO, 80229	Project Name: Westall Flowline Release Project Number: 24034-0001 Project Manager: Michael A. Wicker	Reported: 9/12/2024 11:04:00AM
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SS08 @ 4.0  
E409033-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436071	
Benzene	ND	0.0250	1	09/06/24	09/10/24	
Ethylbenzene	ND	0.0250	1	09/06/24	09/10/24	
Toluene	ND	0.0250	1	09/06/24	09/10/24	
o-Xylene	ND	0.0250	1	09/06/24	09/10/24	
p,m-Xylene	ND	0.0500	1	09/06/24	09/10/24	
Total Xylenes	ND	0.0250	1	09/06/24	09/10/24	
Surrogate: 4-Bromochlorobenzene-PID	97.9 %	70-130		09/06/24	09/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2436071	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/06/24	09/10/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	95.1 %	70-130		09/06/24	09/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: AF		Batch: 2436073	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/06/24	09/07/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/06/24	09/07/24	
Surrogate: n-Nonane	74.3 %	50-200		09/06/24	09/07/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2436063	
Chloride	543	20.0	1	09/06/24	09/07/24	





QC Summary Data

CDH Consulting 9446 Clermont Street Thornton CO, 80229	Project Name: Westall Flowline Release Project Number: 24034-0001 Project Manager: Michael A. Wicker	Reported:  9/12/2024 11:04:00AM
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Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2436071-BLK1) Prepared: 09/06/24 Analyzed: 09/10/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.79		8.00		97.3	70-130			

LCS (2436071-BS1) Prepared: 09/06/24 Analyzed: 09/10/24

Benzene	4.30	0.0250	5.00		86.0	70-130			
Ethylbenzene	4.63	0.0250	5.00		92.6	70-130			
Toluene	4.57	0.0250	5.00		91.4	70-130			
o-Xylene	4.67	0.0250	5.00		93.4	70-130			
p,m-Xylene	9.44	0.0500	10.0		94.4	70-130			
Total Xylenes	14.1	0.0250	15.0		94.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.84		8.00		98.0	70-130			

Matrix Spike (2436071-MS1) Source: E409033-05 Prepared: 09/06/24 Analyzed: 09/10/24

Benzene	4.65	0.0250	5.00	ND	93.0	54-133			
Ethylbenzene	4.96	0.0250	5.00	ND	99.2	61-133			
Toluene	4.93	0.0250	5.00	ND	98.5	61-130			
o-Xylene	4.98	0.0250	5.00	ND	99.5	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	100	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.89		8.00		98.6	70-130			

Matrix Spike Dup (2436071-MSD1) Source: E409033-05 Prepared: 09/06/24 Analyzed: 09/10/24

Benzene	4.70	0.0250	5.00	ND	94.0	54-133	1.05	20	
Ethylbenzene	5.04	0.0250	5.00	ND	101	61-133	1.54	20	
Toluene	4.98	0.0250	5.00	ND	99.6	61-130	1.08	20	
o-Xylene	5.06	0.0250	5.00	ND	101	63-131	1.55	20	
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131	1.27	20	
Total Xylenes	15.3	0.0250	15.0	ND	102	63-131	1.36	20	
Surrogate: 4-Bromochlorobenzene-PID	7.95		8.00		99.4	70-130			



QC Summary Data

CDH Consulting	Project Name:	Westall Flowline Release	Reported:
9446 Clermont Street	Project Number:	24034-0001	
Thornton CO, 80229	Project Manager:	Michael A. Wicker	9/12/2024 11:04:00AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2436071-BLK1) Prepared: 09/06/24 Analyzed: 09/10/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.62		8.00		95.3	70-130			

LCS (2436071-BS2) Prepared: 09/06/24 Analyzed: 09/10/24

Gasoline Range Organics (C6-C10)	47.8	20.0	50.0		95.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.83		8.00		97.9	70-130			

Matrix Spike (2436071-MS2) Source: E409033-05 Prepared: 09/06/24 Analyzed: 09/10/24

Gasoline Range Organics (C6-C10)	45.7	20.0	50.0	ND	91.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.68		8.00		96.0	70-130			

Matrix Spike Dup (2436071-MSD2) Source: E409033-05 Prepared: 09/06/24 Analyzed: 09/10/24

Gasoline Range Organics (C6-C10)	44.0	20.0	50.0	ND	88.1	70-130	3.79	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.55		8.00		94.3	70-130			



QC Summary Data

CDH Consulting 9446 Clermont Street Thornton CO, 80229	Project Name: Westall Flowline Release Project Number: 24034-0001 Project Manager: Michael A. Wicker	Reported:  9/12/2024 11:04:00AM
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Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: AF

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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<b>Blank (2436073-BLK1)</b>					Prepared: 09/06/24 Analyzed: 09/07/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	41.1		50.0		82.2	50-200			

<b>LCS (2436073-BS1)</b>					Prepared: 09/06/24 Analyzed: 09/07/24				
Diesel Range Organics (C10-C28)	212	25.0	250		84.6	38-132			
Surrogate: n-Nonane	43.7		50.0		87.3	50-200			

<b>Matrix Spike (2436073-MS1)</b>					<b>Source: E409032-01</b>		Prepared: 09/06/24 Analyzed: 09/07/24		
Diesel Range Organics (C10-C28)	192	25.0	250	ND	76.7	38-132			
Surrogate: n-Nonane	41.2		50.0		82.4	50-200			

<b>Matrix Spike Dup (2436073-MSD1)</b>					<b>Source: E409032-01</b>		Prepared: 09/06/24 Analyzed: 09/07/24		
Diesel Range Organics (C10-C28)	201	25.0	250	ND	80.5	38-132	4.86	20	
Surrogate: n-Nonane	41.2		50.0		82.4	50-200			



QC Summary Data

CDH Consulting	Project Name:	Westall Flowline Release	Reported:
9446 Clermont Street	Project Number:	24034-0001	
Thornton CO, 80229	Project Manager:	Michael A. Wicker	9/12/2024 11:04:00AM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2436063-BLK1)					Prepared: 09/06/24 Analyzed: 09/06/24				
Chloride	ND	20.0							
LCS (2436063-BS1)					Prepared: 09/06/24 Analyzed: 09/06/24				
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2436063-MS1)					Source: E409035-05		Prepared: 09/06/24 Analyzed: 09/06/24		
Chloride	253	20.0	250	ND	101	80-120			
Matrix Spike Dup (2436063-MSD1)					Source: E409035-05		Prepared: 09/06/24 Analyzed: 09/06/24		
Chloride	253	20.0	250	ND	101	80-120	0.0451	20	

QC Summary Report Comment:  
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.  
Therefore, hand calculated values may differ slightly.





Definitions and Notes

CDH Consulting	Project Name:	Westall Flowline Release	
9446 Clermont Street	Project Number:	24034-0001	Reported:
Thornton CO, 80229	Project Manager:	Michael A. Wicker	09/12/24 11:04

- ND      Analyte NOT DETECTED at or above the reporting limit
- NR      Not Reported
- RPD      Relative Percent Difference
- DNI      Did Not Ignite
- DNR      Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



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<b>Client:</b> <u>Cypress</u>					<b>Bill To</b>					<b>Lab Use Only</b>					<b>TAT</b>				<b>EPA Program</b>					
<b>Project:</b> <u>Westfall Flowline Release</u>					<b>Attention:</b> <u>Michael Wicker</u>					<b>Lab WO#</b> <u>E409033</u>					<b>Job Number</b> <u>24034-000</u>				<b>1D</b>	<b>2D</b>	<b>3D</b>	<b>Standard</b>	<b>CWA</b>	<b>SDWA</b>
<b>Project Manager:</b> <u>Michael Wicker</u>					<b>Address:</b>					<b>Address:</b>					<b>Analysis and Method</b>									
<b>Address:</b>					<b>City, State, Zip</b>					<b>City, State, Zip</b>													<b>RCRA</b>	
<b>Phone:</b>					<b>Phone:</b>																			
<b>Email:</b>					<b>Email:</b> <u>wickerm@mail.gvsu.edu</u>																			
<b>Report due by:</b> <u>CDH Consulting</u>																								
<b>Time Sampled</b>	<b>Date Sampled</b>	<b>Matrix</b>	<b>No. of Containers</b>	<b>Sample ID</b>	<b>Lab Number</b>	<b>DRO/ORO by 8015</b>	<b>GRO/DRO by 8015</b>	<b>BTEX by 8021</b>	<b>VOC by 8260</b>	<b>Metals 6010</b>	<b>Chloride 300.0</b>	<b>BGDOC - NM</b>	<b>TCEQ 1005-TX</b>											
	9/5	S	1	SS06@0.5	1							/												
	9/5	S	1	SS06@4.0	2							/												
	9/5	S	1	SS07@0.5	3							/												
	9/5	S	1	SS07@4.0	4							/												
	9/5	S	1	SS08@1.0	5							/												
	9/5	S	1	SS08@4.0	6							/												
<b>Additional Instructions:</b>																								
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.													Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.											
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Lab Use Only												
<u>Dakotah Cueto</u>		9/5/24		1400		<u>[Signature]</u>		9-5-24		1400		Received on ice: <u>Y/N</u>												
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		T1 T2 T3												
<u>A.H.</u>		9-5-24		2400		<u>[Signature]</u>		9-6-24		0800		AVG Temp °C <u>4</u>												
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time														
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other													Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA											
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																								



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## Envirotech Analytical Laboratory

Printed: 9/6/2024 10:37:50AM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	CDH Consulting	Date Received:	09/06/24 08:00	Work Order ID:	E409033
Phone:	(616) 970-8459	Date Logged In:	09/05/24 17:13	Logged In By:	Noe Soto
Email:	mwicker@CDHconsult.com	Due Date:	09/12/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/Resolution

Time sampled is missing on COC by client.

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
  - Sample ID? Yes
  - Date/Time Collected? Yes
  - Collectors name? No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



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Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS  
  
Action 389865

QUESTIONS

Operator: MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID:
	330506
	Action Number:
	389865
Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2322554757
Incident Name	NAPP2322554757 WATER DISPOSAL FLOWLINE RELEASE @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received

Location of Release Source	
Please answer all the questions in this group.	
Site Name	WATER DISPOSAL FLOWLINE RELEASE
Date Release Discovered	07/31/2023
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water 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	Not answered.
Produced Water Released (bbls) Details	Cause: Human Error   Flow Line - Production   Produced Water   Released: 150 BBL   Recovered: 25 BBL   Lost: 125 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
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)	Not answered.



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QUESTIONS, Page 2

Action 389865

**QUESTIONS (continued)**

Operator: MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID:	330506
	Action Number:	389865
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
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	Not answered.

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: Ginger Fast Title: Consultant Email: gfast@CDHConsult.com Date: 10/04/2024
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**Santa Fe, NM 87505**

QUESTIONS, Page 3

Action 389865

**QUESTIONS (continued)**

Operator: MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID: 330506
	Action Number: 389865
	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 100 and 500 (ft.)
What method was used to determine the depth to ground water	Attached Document
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1 and 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	Yes

**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)	13900
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	0
GRO+DRO	(EPA SW-846 Method 8015M)	0
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0

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	12/15/2024
On what date will (or did) the final sampling or liner inspection occur	09/05/2024
On what date will (or was) the remediation complete(d)	12/31/2024
What is the estimated surface area (in square feet) that will be reclaimed	4600
What is the estimated volume (in cubic yards) that will be reclaimed	700
What is the estimated surface area (in square feet) that will be remediated	4600
What is the estimated volume (in cubic yards) that will be remediated	700

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, Page 4

Action 389865

**QUESTIONS (continued)**

Operator: MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID:	330506
	Action Number:	389865
	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 <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	R360 ARTESIA LLC LANDFARM [FEEM0112340644]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> 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: Ginger Fast Title: Consultant Email: gfast@CDHConsult.com Date: 10/04/2024
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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.



**District I**  
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**District II**  
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Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 5  
  
Action 389865

QUESTIONS (continued)

Operator:  MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID:	330506
	Action Number:	389865
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

<b>Deferral Requests Only</b>	
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, Page 6  
  
Action 389865

QUESTIONS (continued)

Operator: MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID: 330506
	Action Number: 389865
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	{Unavailable.}

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



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CONDITIONS  
  
Action 389865

CONDITIONS

Operator:  MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID:
	330506
	Action Number:
	389865
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

CONDITIONS

Created By	Condition	Condition Date
scwells	Remediation plan approved with conditions: 1) Areas affected by the MR NM Operating release that are located on the other operator's wellpad may be backfilled with compacted caliche.	10/11/2024
scwells	2) The top 4' of the release area needs to be reclaimed to the most stringent criteria in Table 1.	10/11/2024
scwells	3) All confirmation samples must be tested for all constituents in Table 1.	10/11/2024
scwells	4) If MR NM Operating chooses to cease excavation due to encountering TPH or BTEX, all activities must cease and the OCD is to be consulted immediately.	10/11/2024
scwells	Submit remediation closure report to the OCD by 1/9/2025.	10/11/2024