

**Sanjari, Melodie (MRO)**

---

**From:** Sanjari, Melodie (MRO)  
**Sent:** Friday, March 11, 2022 12:43 PM  
**To:** 'OCDOnline@state.nm.us'; 'Hensley, Chad, EMNRD'  
**Subject:** RE: [External] The Oil Conservation Division (OCD) has rejected the application, Application ID: 68692

Good Afternoon Mr. Hensley,

Just wanted to drop a note that I will be re-submitting this closure report this afternoon with updated groundwater data after drilling a temporary monitoring well this past month.

Please let me know if you have any questions.

**Melodie Sanjari**

Environmental Professional  
Permian & Oklahoma  
575-988-8753



---

**From:** OCDOnline@state.nm.us <OCDOnline@state.nm.us>  
**Sent:** Tuesday, January 18, 2022 12:25 PM  
**To:** Sanjari, Melodie (MRO) <msanjari@marathonoil.com>  
**Subject:** [External] The Oil Conservation Division (OCD) has rejected the application, Application ID: 68692

**Beware of links/attachments.**

To whom it may concern (c/o Melodie Sanjari for MARATHON OIL PERMIAN LLC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2131330323, for the following reasons:

- **The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 68692.

Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,  
Chad Hensley  
Environmental Science & Specialist  
575-703-1723  
[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)

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



**CLOSURE REQUEST**

**MARATHON OIL COMPANY**

Created for submission to New Mexico Oil Conservation Division on 03/11/2022

**ASHLEY GIOVENGO**

*Environmental Manager - Permian*

**ENERGIZING AMERICA**

March 11, 2022

**Bradford Billings, Chad Hensley, Jennifer Nobui, Nelson Velez, and/or Robert Hamlet**

State of New Mexico

Energy, Minerals, and Natural Resources

New Mexico Oil Conservation Division

811 South First Street

Artesia, New Mexico 88210

## RE: CLOSURE REQUEST

<b>COMPANY</b>	Marathon Oil Company
<b>LOCATION</b>	Chili Parlor 17 Federal #002H
<b>API</b>	30-025-43137
<b>PLSS</b>	Unit P Sec 08 T22S R33E
<b>GPS</b>	32.399717, -103.588194
<b>INCIDENT ID</b>	nAPP2131330323

## BACKGROUND

Wescom, Inc., hereafter referred to as Wescom, has prepared this closure request on behalf of Marathon Oil Company, hereafter referred to as Marathon, regarding the release at the Chili Parlor 17 Federal #002H (Site) located in Unit P, Section 08, Township 22 South and Range 33 East in Lea County, New Mexico. The GPS coordinates are as follows: North 32.399717 and West -103.588194. Surface owner of the site is State Land. The Site falls within New Mexico Oil Conservation Division (NMOCD), District 2 Artesia.

According to the C-141, Attachment A, a high level on the heater treater carried over to the high-pressure flare, which caused approximately 0.21 barrels (bbl) of hydrocarbons to exit the flare, ignite and then self-extinguish. Approximately 100 square feet (sq. ft) of the pasture, to the Southwest of the engineered pad, and the material beneath the flare was scorched. A bucket truck was used to pressure wash the high-pressure flare stack and a skidsteer was utilized to remove stained soils on the caliche pad.

## SURFACE & GROUND WATER

The New Mexico Office of the State Engineer (OSE) records indicates nearest ground water measurement greater than 101 feet below ground surface (bgs) and is 0.15 miles South of the Site, shown in Attachment C. Additional wells in the area support the data in the nearest water measurement. No playas or lakes are located within a within a one-mile radius of this site (see Attachment C).



## KARST POTENTIAL

According to data from the Bureau of Land Management, this Site is located within low karst potential as shown in Attachment D. There are no indicators of karst around the Site surface.

## TARGET REMEDIAL LEVELS

Well log files submitted to OSE and USGS indicate that depth to water (DTW) exceeds 110 feet bgs in the area surrounding the Site and which verifies the use of the highest Remediation Action Levels (RRAL). The target cleanup levels are determined using the NMOCD Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC, inserted below) including karst guidelines from the Bureau of Land Management. The applicable (RRAL) are 10 parts per million (ppm) Benzene, 50 ppm combined benzene, toluene, ethyl benzene, and total xylenes (BTEX) and, 2500 ppm Total Petroleum Hydrocarbons (TPH), characterization of vertical and horizontal extent of chloride concentration to a level of 20000 mg/kg (ppm) is also required.

Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC)						
Chili Parlor 17 Federal 2H — 32.399717, -103.588194						
Depth to Groundwater		Closure Criteria (unites in mg/kg)				
		Chloride * numerical limit or background, whichever is greater	TPH	GRO+DRO	BTEX	Benzene
Based on high karst potential		600	100		50	10
less than 50 ft bgs		600	100		50	10
51 ft to 100 ft bgs		10000	2500	1000	50	10
greater than 100 ft bgs	>101	20000	2500	1000	50	10
Surface Water	Yes or No	If yes, then				
< 300 feet from continuously flowing watercourse or other significant watercourse?	No					
< 200 feet from lakebed, sinkhole or playa lake	No					
Water Well or Water Source						
< 500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	No					
< 1000 feet from fresh water well or spring?	No					
Human and Other Areas						
< 300 feet from an occupied permanent residence, school, hospital, institution or church?	No					
Within incorporated municipal boundaries or within a defined municipal fresh water well field?	No					
< 100 feet from wetland?	No					
Within area overlying a subsurface mine?	No					
Within an unstable area?	No					
Within a 100-year floodplan?	No					

Table: Closure Criteria Statistics



## REMEDIATION ACTIVITIES

Beginning November 15, 2021, Marathon contracted Wescom to conduct remediation activities onsite and to remove any contamination from the vegetation offsite. A skidsteer was used to remove contaminated soil from the surface of the caliche pad. Impacted material from the surface scrape was transported to an approved disposal facility. The high-pressure flare stack was pressure washed and returned to working condition.



*Photo: North Side of Spill Area*

## CONFIRMATION SAMPLING

A 48-hour sampling notification was given on November 30, 2021, to Victoria Venegas, Robert Hamlet, Chad Hensley, and Mike Bratcher with the NMOCD in Santa Fe, New Mexico. Emails are shown in Attachment F.

Confirmation composite samples were obtained from the excavation on December 02, 2021. All soil samples were properly packaged, preserved, and transported to Hall Environmental by chain of custody, and analyzed for Total Petroleum Hydrocarbons, or TPH, —Method 8015M/D, BTEX—Method 8021B, and Chlorides—Method 300.0. Confirmation samples collected at zero feet and half a foot bgs were all below the applicable RRAL for the Site as shown in Table 1. A background sample BG01 was collected 55 feet Northwest of the caliche pad.

## REQUEST FOR CLOSURE

Based on the attached confirmation sample laboratory data, depth to ground water being greater than 101 feet bgs and the fact that impacted material from this release has been removed and properly disposed of; Marathon hereby requests closure for nAPP2131330323. Marathon also requests that no further action be taken at this time.



Sincerely,

Wescom, Inc.

**Ashley Giovengo**

Environmental Manager-Permian

cc: Melodie Sanjari, Marathon Oil Company

Bradford Billings, NMOCD

Chad Hensley, NMOCD

Jennifer Nobui, NMOCD

Nelson Velez, NMOCD

Robert Hamlet, NMOCD

# REFERENCE MATERIALS

## FIGURES

**FIGURE 1.** Confirmation Sampling

## TABLES

**TABLE 1.** Laboratory Analysis Results: Confirmation Samples

## ATTACHMENTS

**ATTACHMENT A.** Signed C-141

**ATTACHMENT B.** Site Photos

**ATTACHMENT C.** Closure Criteria Supporting Documents

**ATTACHMENT D.** Karst Map

**ATTACHMENT E.** Hall Laboratory Analysis Reports

**ATTACHMENT F.** 48-Hour Confirmation Sample Notification Emails



**Energizing America**

**wescominc.com** | info@wescominc.com | 218-724-1322

Chili Parlor 17 Federal #002H Incident ID: nAPP2131330323

Page 5 of 5

# FIGURE 1

## Confirmation Samples

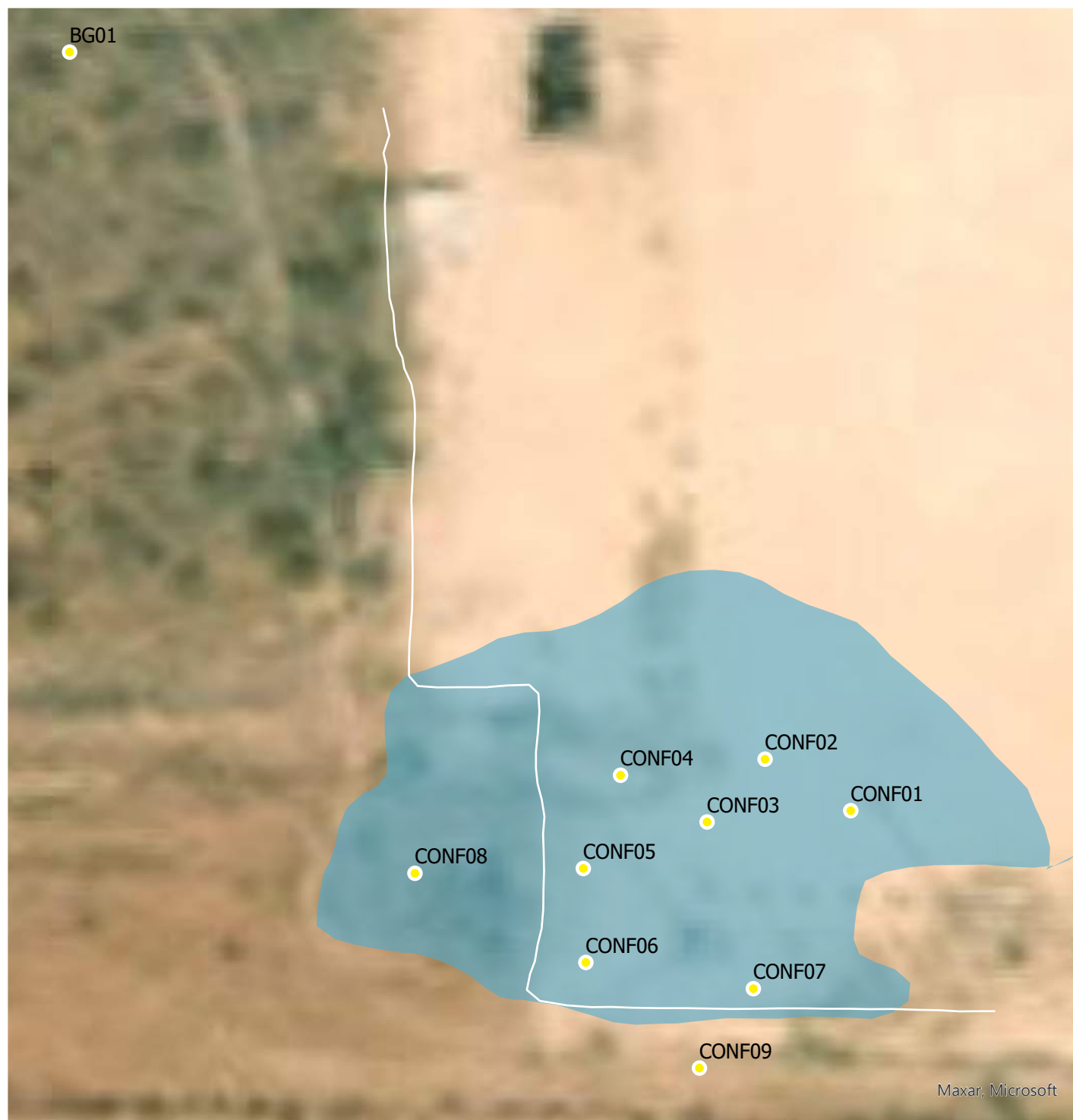


**Energizing America**

**wescominc.com** | info@wescominc.com | 218-724-1322

**Chili Parlor 17 Federal #002H** Incident ID: nAPP2131330323





**FIGURE 1.**  
**CONFIRMATION SAMPLES**



Chili Parlor 17 Federal 2H  
Incident ID: nAPP2131330323  
API: 30-025-43137  
GPS Coordinates: 32.399717, -103.588194  
Lea County, New Mexico  
Marathon Oil Company

**LEGEND**

- Edge of Pad
- Sample Points
- Initial Spill Area



# TABLE 1

## Laboratory Analysis Results: Confirmation Samples



**Energizing America**

**wescominc.com** | info@wescominc.com | 218-724-1322

**Chili Parlor 17 Federal #002H** Incident ID: nAPP2131330323

Chili Parlor 17 Fed 2H   nAPP2131330323							
Marathon Oil Company   12.17.2021							
Table 1. Confirmation Laboratory Analysis Results							
Sample Description			Petroleum Hydrocarbons				Inorganic
Sample ID	Depth (ft.)	Date	Volatile		Extractable		Chloride (mk/kg)
			Benzene (mk/kg)	BTEX (total) (mk/kg)	TPH (mk/kg)	GRO+DRO (mk/kg)	
Closure Criteria			10	50	2500	1000	20000
CONF01	0	12/2/2021	ND	ND	420	240	63
CONF01	0.5	12/2/2021	ND	ND	150	87	ND
CONF02	0	12/2/2021	ND	ND	250	140	ND
CONF02	0.5	12/2/2021	ND	ND	240	130	ND
CONF03	0	12/2/2021	ND	ND	930	530	ND
CONF03	0.5	12/2/2021	ND	ND	230	130	ND
CONF04	0	12/2/2021	ND	ND	990	510	ND
CONF04	0.5	12/2/2021	ND	ND	1100	540	ND
CONF05	0	12/2/2021	ND	ND	860	440	ND
CONF05	0.5	12/2/2021	ND	ND	970	570	ND
CONF06	0	12/2/2021	ND	ND	710	400	ND
CONF06	0.5	12/2/2021	ND	ND	680	440	ND
CONF07	0	12/2/2021	ND	ND	138	72	ND
CONF07	0.5	12/2/2021	ND	ND	42	42	ND
CONF08	0	12/2/2021	ND	ND	ND	ND	ND
CONF08	0.5	12/2/2021	ND	ND	9.7	9.7	ND
CONF09	0	12/2/2021	ND	ND	ND	ND	ND
CONF09	0.5	12/2/2021	ND	ND	ND	ND	ND
BG01	1	12/2/2021	-	-	-	-	ND
BG01	0	12/2/2021	-	-	-	-	ND
ABBREVIATIONS							
BTEX — Benzene, Toluene, Ethylene, Xylene				GRO — Gasoline Range Organics			
DRO — Diesel Range Organics				ND — Non-detect			
ft. — Feet				mg/kg — Milligrams per Kilogram			
TPH — Total Petroleum Hydrocarbons							
Notes							
Bold Red - Results are above closure criteria							
Gray Highlight - Background Samples							



Energizing America

wescominc.com | info@wescominc.com | 218-724-1322

Chili Parlor 17 Federal #002H Incident ID: nAPP2131330323

# ATTACHMENT A

Signed C-141



**Energizing America**

**wescominc.com** | info@wescominc.com | 218-724-1322

**Chili Parlor 17 Federal #002H** Incident ID: nAPP2131330323

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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

Incident ID	nAPP2131330323
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party Marathon Oil Permian LLC	OGRID 372098
Contact Name Melodie Sanjari	Contact Telephone 575-988-8753
Contact email <a href="mailto:msanjari@marathonoil.com">msanjari@marathonoil.com</a>	Incident # (assigned by OCD)
Contact mailing address 4111 S. Tidwell Rd., Carlsbad, NM 8220	

### Location of Release Source

Latitude 32.39971673 Longitude -103.58819381  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name CHILI PARLOR 17 FEDERAL #002H	Site Type Oil & Gas Facility
Date Release Discovered: 11/8/2021	API# (if applicable) 30-025-43137

Unit Letter	Section	Township	Range	County
P	08	22S	33E	Lea

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 checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 0.21	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

#### Cause of Release

A high level on the heater treater carried over to the HP flare, which caused approx. 0.21 bbl. of hydrocarbons to exit the flare, ignite, and then self-extinguish. The material beneath the flare is scorched as well as approx. ~100 sq. ft. of the pasture to the south west of the engineered pad. Characterization/Confirmation samples will be collected after a 48 hour notification is provided to both NM OCD and SLO.

Incident ID	nAPP2131330323
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? Fire
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? SLO and OCD were notified within 24 hours via email and the OCD online portal.	

## 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>Melodie Sanjari</u>	Title: <u>Environmental Professional</u>
Signature: <u>Melodie Sanjari</u>	Date: 11/10/2021
email: <u>msanjari@marathonoil.com</u>	Telephone: <u>575-988-8753</u>
<b><u>OCD Only</u></b>	
Received by: _____	Date: _____

## Spill Calculation Tool

Standing Liquid Inputs:

	Length (ft.)	Width (ft.)	Avg. Liquid Depth (in.)	% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Rectangle Area #1					0.00	0.00	0.00
Rectangle Area #2					0.00	0.00	0.00
Rectangle Area #3					0.00	0.00	0.00
Rectangle Area #4					0.00	0.00	0.00
Rectangle Area #5					0.00	0.00	0.00
Rectangle Area #6					0.00	0.00	0.00
Tank Displacement					0.00	0.00	0.00
Tank Displacement					0.00	0.00	0.00
Liquid Volume:					0.00	0.00	0.00

Saturated Soil Inputs:Soil Type: **Gravel Loam**

	Length (ft.)	Width (ft.)	Avg. Saturated Depth (in.)	% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Rectangle Area #1	20	40	0.125	100%	0.21	0.00	0.21
Rectangle Area #2				0%	0.00	0.00	0.00
Rectangle Area #3				0%	0.00	0.00	0.00
Rectangle Area #4				0%	0.00	0.00	0.00
Rectangle Area #5				0%	0.00	0.00	0.00
Rectangle Area #6				0%	0.00	0.00	0.00
Rectangle Area #7					0.00	0.00	0.00
Rectangle Area #8					0.00	0.00	0.00
Saturated Volume					0.21	0.00	0.21

Volume Recovered and not included in Standing Liquid Inputs :

% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)

	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Total Spill Volume (bbls):	0.21	0.00	0.21

Incident ID	naPP2131330323
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>&gt;110</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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



Incident ID	naPP2131330323
District RP	
Facility ID	
Application ID	

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

Printed Name: Melodie Sanjari Title: Environmental Professional

Signature: Melodie Sanjari Date: 3/11/2022

email: msanjari@marathonoil.com Telephone: 575-988-8753

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	naPP2131330323
District RP	
Facility ID	
Application ID	

## Closure

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

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

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

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

Printed Name: Melodie Sanjari

Title: Environmental Professional

Signature: Melodie Sanjari Date: 3/11/2022

email: msanjari@marathonoil.com

Telephone: 575-988-8753

### OCD Only

Received by: Chad Hensley

Date: 04/05/2022

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

Closure Approved by: Chad Hensley Date: 04/05/2022

Printed Name: Chad Hensley

Title: Environmental Specialist Advanced

# ATTACHMENT B

## Site Photos



**Energizing America**

**wescominc.com** | info@wescominc.com | 218-724-1322

**Chili Parlor 17 Federal #002H** Incident ID: nAPP2131330323

Chili Parlor 17 Federal #002H  
Incident ID: nAPP2131330323



**Initial Spill Area (On-Pad)**



**Initial Spill Area - Cleanup (On-Pad)**

Chili Parlor 17 Federal #002H  
Incident ID: nAPP2131330323



Completed Scrape of Spill Area (On-Pad)



Completed Scrape of Spill Area (On-Pad)



Chili Parlor 17 Federal #002H  
Incident ID: nAPP2131330323



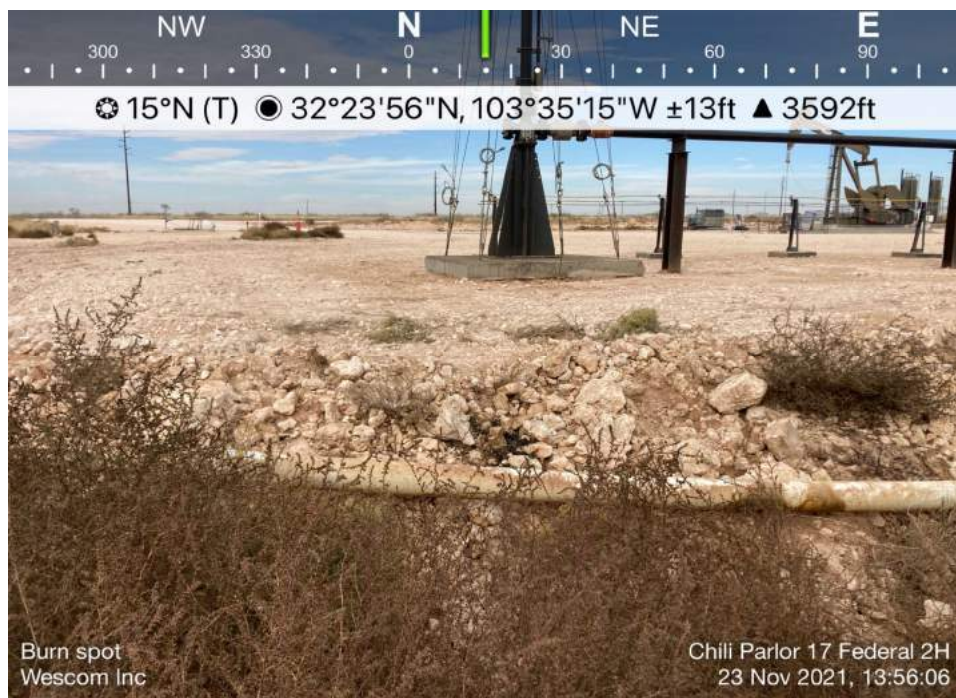
West Side of Caliche Pad



Southeast Side of Flare Line (On-Pad)



Chili Parlor 17 Federal #002H  
Incident ID: nAPP2131330323



Edge of Caliche Pad (Burned Weeds)



South Side of Flare Line (On-Pad)

# ATTACHMENT C

## Closure Criteria Supporting Documents



**Energizing America**

**wescominc.com** | info@wescominc.com | 218-724-1322




**Chili Parlor 17 Federal #002H** Incident ID: nAPP2131330323

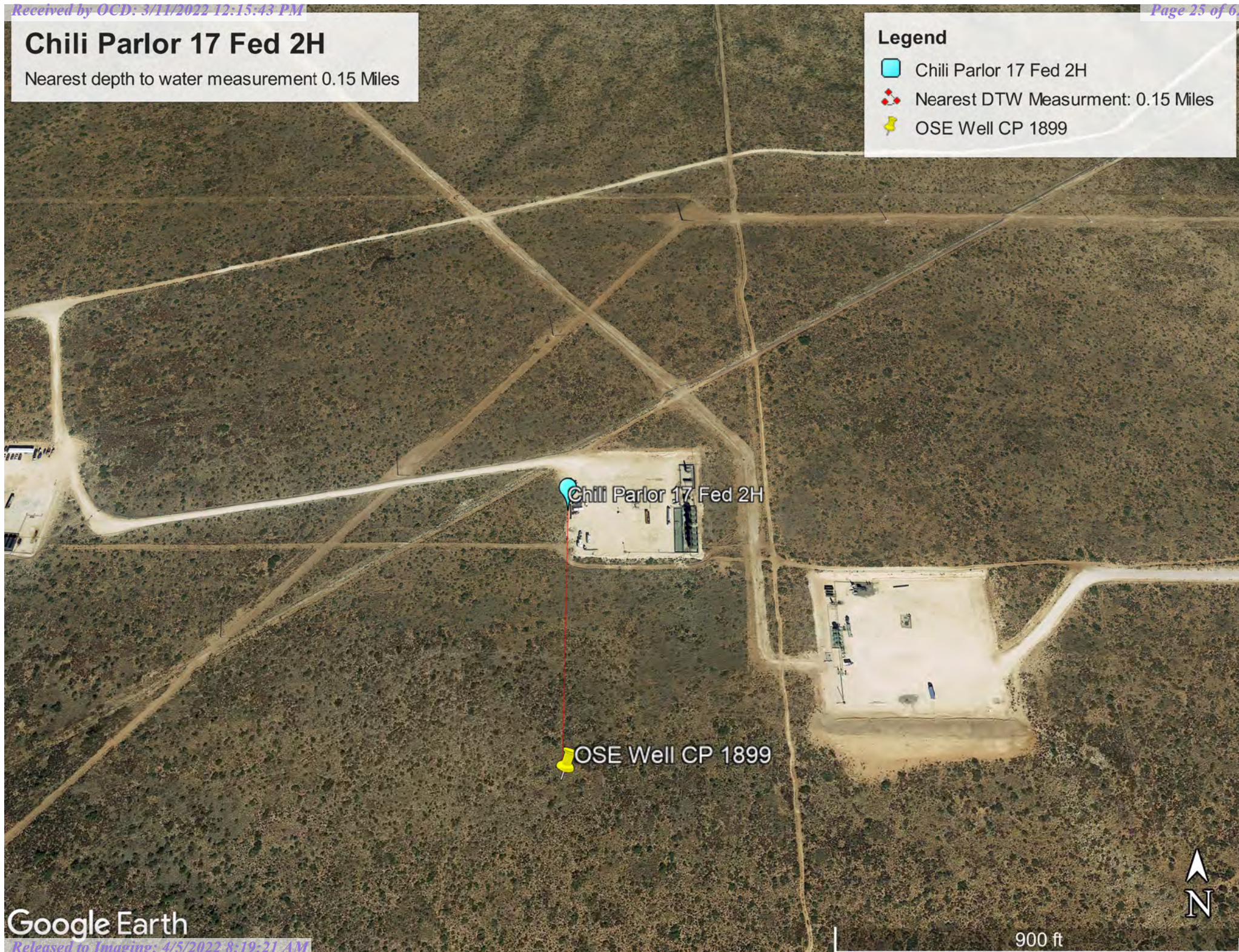


## Chili Parlor 17 Fed 2H

Nearest depth to water measurement 0.15 Miles

### Legend

-  Chili Parlor 17 Fed 2H
-  Nearest DTW Measurment: 0.15 Miles
-  OSE Well CP 1899



Google Earth



900 ft





2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
www.atkinseng.com

03/11/2022

DII-NMOSE  
1900 W 2<sup>nd</sup> Street  
Roswell, NM 88201

*Hand Delivered to the DII Office of the State Engineer*

Re: Well Record CP-1899 Pod1

To whom it may concern:

Attached please find a well log & record and a plugging record, in duplicate, for a one (1) soil borings, CP-1899 Pod1.

If you have any questions, please contact me at 575.499.9244 or [lucas@atkinseng.com](mailto:lucas@atkinseng.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Lucas Middleton".

Lucas Middleton

Enclosures: as noted above

05:07 MAR 11 2022 AM 3:45



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

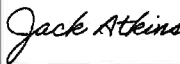
[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (TW-1)		WELL TAG ID NO.		OSE FILE NO(S). CP-1899			
	WELL OWNER NAME(S) Marathon Oil				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 4111 S Tidwell Rd.				CITY Carlsbad	STATE NM	ZIP 88220	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 23	SECONDS 59.07 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	35	16.17 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE SE SE Sec. 09 T22S R33E, 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 2/9/2022	DRILLING ENDED 2/24/2022	DEPTH OF COMPLETED WELL (FT) temporary casing		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 2/24/22, 3/8/2022		
	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) FROM TO		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)
	0	101	±8.5	Boring	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL		AMOUNT (cubic feet)	METHOD OF PLACEMENT	

FOR OSE INTERNAL USE

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

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	9	9	Sand, Fine-grained, poorly graded with caliche, Brown	Y ✓ N	
	9	19	10	Sand, Fine-grained, poorly graded with caliche, Tan	Y ✓ N	
	19	34	15	Sand, Fine-grained, poorly graded with sub-angular gravel, Tan	Y ✓ N	
	34	44	10	Sand, Fine-grained, poorly graded, Tan	Y ✓ N	
	44	49	5	Sand, Fine-grained, poorly graded with sub-angular gravel, Brown	Y ✓ N	
	49	101	52	Clay, with sand ,Dry, Brown	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:						
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: Temporary well materials removed and he soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips ten feet below ground surface to surface.					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:					
	 SIGNATURE OF DRILLER / PRINT SIGNEE NAME			Jackie D. Atkins DATE		

OGE DT MAR 11 2022 08:45

FOR OSE INTERNAL USE

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

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2



# PLUGGING RECORD



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

## I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: CP-1899 POD1

Well owner: Marathon Oil

Phone No.: 575-988-8753

Mailing address: 4111 S Tidwell Rd.

City: Carlsbad

State: New Mexico

Zip code: 88220

## II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: Jackie D. Atkins ( Atkins Engineering Associates Inc.)
- 2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/23
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s):  
Shane Eldridge
- 4) Date well plugging began: 3/8/2022 Date well plugging concluded: 3/8/2022
- 5) GPS Well Location: Latitude: 32 deg, 23 min, 59.07 sec  
Longitude: 103 deg, 35 min, 16.17 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 101.5 ft below ground level (bgl),  
by the following manner: weighted tape
- 7) Static water level measured at initiation of plugging: n/a ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 1/24/2022
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe  
differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

OSE DTI MAR 11 2022 08:45

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

For each interval plugged, describe within the following columns:

<u>Depth</u> (ft bgl)	<u>Plugging Material Used</u> (include any additives used)	<u>Volume of Material Placed</u> (gallons)	<u>Theoretical Volume of Borehole/ Casing</u> (gallons)	<u>Placement Method</u> (tremie pipe, other)	<u>Comments</u> ("casing perforated first", "open annular space also plugged", etc.)
0-10'	Hydrated Bentonite	Approx. 31.3 gallons	29.4 gallons	Augers	
10'-101'	Drill Cuttings	Approx. 268 gallons	268 gallons	Boring	

OSE DT MAR 11 2022 08:45

MULTIPLY	BY	AND OBTAIN
cubic feet x 7.4805	=	gallons
cubic yards x 201.97	=	gallons

### III. SIGNATURE:

I, Jackie D. Atkins, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

*Jack Atkins*

Signature of Well Driller

3/10/2022

Date

# 2022-3-10-CP-1899-POD1\_WR-20 Well Record and Log-forsign

Final Audit Report

2022-03-10

Created:	2022-03-10
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAWqysZ4sd6h3USDVPdzjCIO_yr4VNXdX

## "2022-3-10-CP-1899-POD1\_WR-20 Well Record and Log-forsign" History

 Document created by Lucas Middleton (lucas@atkinseng.com)

2022-03-10 - 11:18:50 PM GMT- IP address: 69.21.254.158

 Document emailed to Jack Atkins (jack@atkinseng.com) for signature

2022-03-10 - 11:20:32 PM GMT

 Email viewed by Jack Atkins (jack@atkinseng.com)

2022-03-10 - 11:22:01 PM GMT- IP address: 64.90.153.232

 Document e-signed by Jack Atkins (jack@atkinseng.com)

Signature Date: 2022-03-10 - 11:24:39 PM GMT - Time Source: server- IP address: 64.90.153.232

 Agreement completed.

2022-03-10 - 11:24:39 PM GMT

05E011 MAR 11 2022 PM 8:46










## Chili Parlor 17 Fed 2H - Riverine 6,331ft



December 3, 2021

**Wetlands**

-  Estuarine and Marine Deepwater
-  Estuarine and Marine Wetland

-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond

-  Lake
-  Other
-  Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.





## Chili Parlor 17 Fed 2H - Pond 8,340ft



December 1, 2021

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine


This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

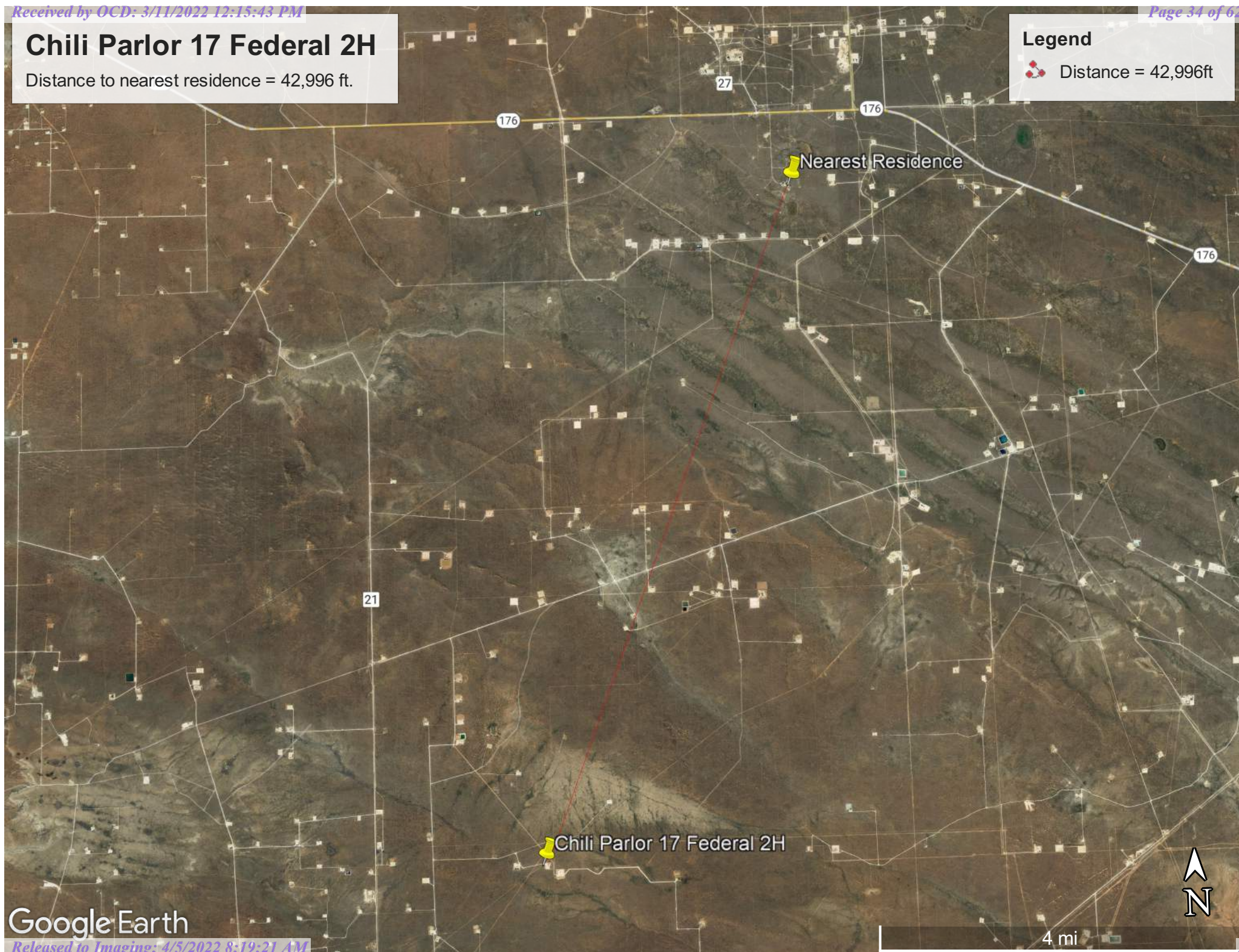


# Chili Parlor 17 Federal 2H

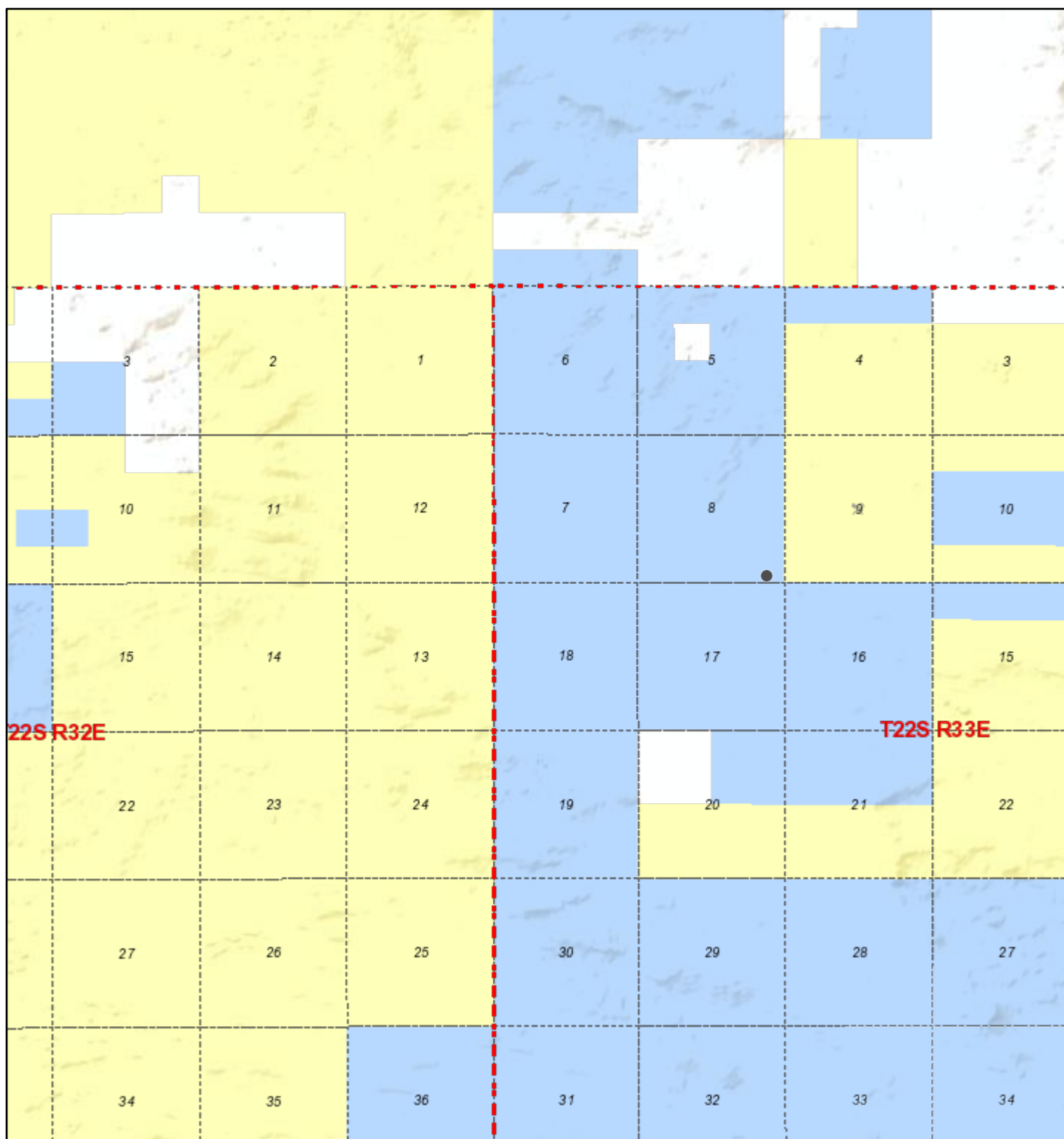
Distance to nearest residence = 42,996 ft.

## Legend

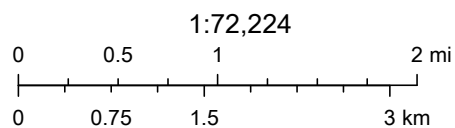
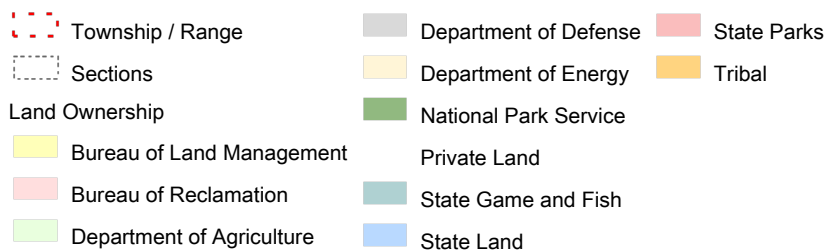
 Distance = 42,996ft



## Active Mines Near Chili Parlor 17 Fed 2H



11/24/2021, 7:51:36 AM



U.S. Bureau of Land Management - New Mexico State Office, Sources:  
Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS



## National Flood Hazard Layer FIRMette



103°35'36"W 32°24'14"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation
		Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **11/24/2021 at 9:47 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Released to Imaging: 4/5/2022 8:19:21 AM

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

# ATTACHMENT D

## Karst Map



**Energizing America**

**wescominc.com** | info@wescominc.com | 218-724-1322





**Chili Parlor 17 Federal #002H** Incident ID: nAPP2131330323




# Chili Parlor 17 Federal 2H

Karst Potential = Low

## Legend

-  Chili Parlor 17 Federal 2H
-  High
-  Low
-  Medium

 Chili Parlor 17 Federal 2H



# ATTACHMENT E

## Hall Laboratory Analysis Reports



**Energizing America**

**wescominc.com** | info@wescominc.com | 218-724-1322

**Chili Parlor 17 Federal #002H** Incident ID: nAPP2131330323

## Analytical Report

Lab Order 2112369

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: BG01-0'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 9:40:00 AM

Lab ID: 2112369-001

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LRN
Chloride	ND	60		mg/Kg	20	12/10/2021 3:45:05 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 1 of 0



## Analytical Report

Lab Order 2112369

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: BG01-1'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 9:42:00 AM

Lab ID: 2112369-002

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LRN
Chloride	ND	60		mg/Kg	20	12/10/2021 3:57:26 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 2 of 0

## Analytical Report

Lab Order 2112369

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF01-0'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 9:49:00 AM

Lab ID: 2112369-003

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	240	19		mg/Kg	2	12/10/2021 10:04:32 PM
Motor Oil Range Organics (MRO)	180	95		mg/Kg	2	12/10/2021 10:04:32 PM
Surr: DNOP	61.4	70-130	S	%Rec	2	12/10/2021 10:04:32 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/8/2021 11:34:00 AM
Surr: BFB	87.6	70-130		%Rec	1	12/8/2021 11:34:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/8/2021 11:34:00 AM
Toluene	ND	0.049		mg/Kg	1	12/8/2021 11:34:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/8/2021 11:34:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/8/2021 11:34:00 AM
Surr: 4-Bromofluorobenzene	77.5	70-130		%Rec	1	12/8/2021 11:34:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>LRN</b>
Chloride	63	60		mg/Kg	20	12/9/2021 8:35:55 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 3 of 0

## Analytical Report

Lab Order 2112369

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF02-0'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 9:51:00 AM

Lab ID: 2112369-004

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	140	9.4		mg/Kg	1	12/9/2021 8:41:53 AM
Motor Oil Range Organics (MRO)	110	47		mg/Kg	1	12/9/2021 8:41:53 AM
Surr: DNOP	84.7	70-130		%Rec	1	12/9/2021 8:41:53 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/8/2021 11:54:00 AM
Surr: BFB	88.2	70-130		%Rec	1	12/8/2021 11:54:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/8/2021 11:54:00 AM
Toluene	ND	0.048		mg/Kg	1	12/8/2021 11:54:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	12/8/2021 11:54:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	12/8/2021 11:54:00 AM
Surr: 4-Bromofluorobenzene	81.8	70-130		%Rec	1	12/8/2021 11:54:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>LRN</b>
Chloride	ND	60		mg/Kg	20	12/9/2021 8:48:18 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 4 of 0

## Analytical Report

Lab Order 2112369

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF03-0'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 9:53:00 AM

Lab ID: 2112369-005

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	530	49		mg/Kg	5	12/10/2021 10:46:46 PM
Motor Oil Range Organics (MRO)	400	250		mg/Kg	5	12/10/2021 10:46:46 PM
Surr: DNOP	62.8	70-130	S	%Rec	5	12/10/2021 10:46:46 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/8/2021 12:13:00 PM
Surr: BFB	86.9	70-130		%Rec	1	12/8/2021 12:13:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/8/2021 12:13:00 PM
Toluene	ND	0.048		mg/Kg	1	12/8/2021 12:13:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/8/2021 12:13:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	12/8/2021 12:13:00 PM
Surr: 4-Bromofluorobenzene	79.2	70-130		%Rec	1	12/8/2021 12:13:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>LRN</b>
Chloride	ND	60		mg/Kg	20	12/9/2021 9:00:38 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 5 of 0

## Analytical Report

Lab Order 2112369

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF04-0'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 9:59:00 AM

Lab ID: 2112369-006

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	510	44		mg/Kg	5	12/10/2021 10:57:21 PM
Motor Oil Range Organics (MRO)	480	220		mg/Kg	5	12/10/2021 10:57:21 PM
Surr: DNOP	71.1	70-130		%Rec	5	12/10/2021 10:57:21 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/8/2021 12:33:00 PM
Surr: BFB	85.5	70-130		%Rec	1	12/8/2021 12:33:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/8/2021 12:33:00 PM
Toluene	ND	0.047		mg/Kg	1	12/8/2021 12:33:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	12/8/2021 12:33:00 PM
Xylenes, Total	ND	0.094		mg/Kg	1	12/8/2021 12:33:00 PM
Surr: 4-Bromofluorobenzene	76.8	70-130		%Rec	1	12/8/2021 12:33:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>LRN</b>
Chloride	ND	59		mg/Kg	20	12/9/2021 9:12:58 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 6 of 0

## Analytical Report

Lab Order 2112369

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF05-0'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 10:02:00 AM

Lab ID: 2112369-007

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	440	50		mg/Kg	5	12/10/2021 11:07:58 PM
Motor Oil Range Organics (MRO)	420	250		mg/Kg	5	12/10/2021 11:07:58 PM
Surr: DNOP	58.6	70-130	S	%Rec	5	12/10/2021 11:07:58 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/8/2021 12:53:00 PM
Surr: BFB	87.8	70-130		%Rec	1	12/8/2021 12:53:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	12/8/2021 12:53:00 PM
Toluene	ND	0.047		mg/Kg	1	12/8/2021 12:53:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	12/8/2021 12:53:00 PM
Xylenes, Total	ND	0.093		mg/Kg	1	12/8/2021 12:53:00 PM
Surr: 4-Bromofluorobenzene	77.5	70-130		%Rec	1	12/8/2021 12:53:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>LRN</b>
Chloride	ND	60		mg/Kg	20	12/10/2021 9:30:51 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 7 of 0



## Analytical Report

Lab Order 2112369

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF06-0'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 10:04:00 AM

Lab ID: 2112369-008

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: SB
Diesel Range Organics (DRO)	400	44		mg/Kg	5	12/10/2021 11:18:38 PM
Motor Oil Range Organics (MRO)	310	220		mg/Kg	5	12/10/2021 11:18:38 PM
Surr: DNOP	62.6	70-130	S	%Rec	5	12/10/2021 11:18:38 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/8/2021 1:12:00 PM
Surr: BFB	90.3	70-130		%Rec	1	12/8/2021 1:12:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	12/8/2021 1:12:00 PM
Toluene	ND	0.046		mg/Kg	1	12/8/2021 1:12:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	12/8/2021 1:12:00 PM
Xylenes, Total	ND	0.091		mg/Kg	1	12/8/2021 1:12:00 PM
Surr: 4-Bromofluorobenzene	81.4	70-130		%Rec	1	12/8/2021 1:12:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: LRN
Chloride	ND	59		mg/Kg	20	12/10/2021 9:43:11 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 8 of 0

## Analytical Report

Lab Order 2112369

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF07-0'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 10:07:00 AM

Lab ID: 2112369-009

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: SB
Diesel Range Organics (DRO)	72	9.9		mg/Kg	1	12/9/2021 9:45:23 AM
Motor Oil Range Organics (MRO)	66	50		mg/Kg	1	12/9/2021 9:45:23 AM
Surr: DNOP	77.3	70-130		%Rec	1	12/9/2021 9:45:23 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/8/2021 2:11:00 PM
Surr: BFB	101	70-130		%Rec	1	12/8/2021 2:11:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	12/8/2021 2:11:00 PM
Toluene	ND	0.046		mg/Kg	1	12/8/2021 2:11:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	12/8/2021 2:11:00 PM
Xylenes, Total	ND	0.092		mg/Kg	1	12/8/2021 2:11:00 PM
Surr: 4-Bromofluorobenzene	81.0	70-130		%Rec	1	12/8/2021 2:11:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: LRN
Chloride	ND	60		mg/Kg	20	12/10/2021 10:20:13 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 9 of 0

## Analytical Report

Lab Order 2112369

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF08-0'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 10:15:00 AM

Lab ID: 2112369-010

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/9/2021 12:35:35 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/9/2021 12:35:35 PM
Surr: DNOP	75.5	70-130		%Rec	1	12/9/2021 12:35:35 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/8/2021 2:31:00 PM
Surr: BFB	82.9	70-130		%Rec	1	12/8/2021 2:31:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	12/8/2021 2:31:00 PM
Toluene	ND	0.046		mg/Kg	1	12/8/2021 2:31:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	12/8/2021 2:31:00 PM
Xylenes, Total	ND	0.092		mg/Kg	1	12/8/2021 2:31:00 PM
Surr: 4-Bromofluorobenzene	74.6	70-130		%Rec	1	12/8/2021 2:31:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>LRN</b>
Chloride	ND	60		mg/Kg	20	12/10/2021 10:32:34 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 10 of 0

## Analytical Report

Lab Order 2112369

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF09-0'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 11:00:00 AM

Lab ID: 2112369-011

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/9/2021 12:46:12 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/9/2021 12:46:12 PM
Surr: DNOP	81.5	70-130		%Rec	1	12/9/2021 12:46:12 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/8/2021 2:51:00 PM
Surr: BFB	88.5	70-130		%Rec	1	12/8/2021 2:51:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	12/8/2021 2:51:00 PM
Toluene	ND	0.046		mg/Kg	1	12/8/2021 2:51:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	12/8/2021 2:51:00 PM
Xylenes, Total	ND	0.093		mg/Kg	1	12/8/2021 2:51:00 PM
Surr: 4-Bromofluorobenzene	80.7	70-130		%Rec	1	12/8/2021 2:51:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>LRN</b>
Chloride	ND	60		mg/Kg	20	12/10/2021 10:44:54 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 11 of 0

## Analytical Report

Lab Order 2112371

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF01-0.5'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 12:18:00 PM

Lab ID: 2112371-001

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	87	9.2		mg/Kg	1	12/9/2021 1:07:30 PM
Motor Oil Range Organics (MRO)	63	46		mg/Kg	1	12/9/2021 1:07:30 PM
Surr: DNOP	76.3	70-130		%Rec	1	12/9/2021 1:07:30 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/8/2021 3:10:00 PM
Surr: BFB	92.6	70-130		%Rec	1	12/8/2021 3:10:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/8/2021 3:10:00 PM
Toluene	ND	0.048		mg/Kg	1	12/8/2021 3:10:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/8/2021 3:10:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	12/8/2021 3:10:00 PM
Surr: 4-Bromofluorobenzene	82.4	70-130		%Rec	1	12/8/2021 3:10:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>LRN</b>
Chloride	ND	60		mg/Kg	20	12/10/2021 10:57:15 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 1 of 0

## Analytical Report

Lab Order 2112371

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF02-0.5'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 12:24:00 PM

Lab ID: 2112371-002

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	130	9.7		mg/Kg	1	12/9/2021 1:18:12 PM
Motor Oil Range Organics (MRO)	110	48		mg/Kg	1	12/9/2021 1:18:12 PM
Surr: DNOP	80.8	70-130		%Rec	1	12/9/2021 1:18:12 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/8/2021 3:30:00 PM
Surr: BFB	93.2	70-130		%Rec	1	12/8/2021 3:30:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/8/2021 3:30:00 PM
Toluene	ND	0.048		mg/Kg	1	12/8/2021 3:30:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/8/2021 3:30:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	12/8/2021 3:30:00 PM
Surr: 4-Bromofluorobenzene	79.6	70-130		%Rec	1	12/8/2021 3:30:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>LRN</b>
Chloride	ND	61		mg/Kg	20	12/10/2021 11:09:35 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		



## Analytical Report

Lab Order 2112371

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF03-0.5'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 12:31:00 PM

Lab ID: 2112371-003

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	130	9.8		mg/Kg	1	12/9/2021 1:28:57 PM
Motor Oil Range Organics (MRO)	100	49		mg/Kg	1	12/9/2021 1:28:57 PM
Surr: DNOP	85.5	70-130		%Rec	1	12/9/2021 1:28:57 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/8/2021 3:50:00 PM
Surr: BFB	86.2	70-130		%Rec	1	12/8/2021 3:50:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/8/2021 3:50:00 PM
Toluene	ND	0.049		mg/Kg	1	12/8/2021 3:50:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/8/2021 3:50:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/8/2021 3:50:00 PM
Surr: 4-Bromofluorobenzene	78.2	70-130		%Rec	1	12/8/2021 3:50:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>LRN</b>
Chloride	ND	60		mg/Kg	20	12/10/2021 11:21:57 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 3 of 0

## Analytical Report

Lab Order 2112371

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF04-0.5'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 12:41:00 PM

Lab ID: 2112371-004

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	540	98		mg/Kg	10	12/9/2021 1:39:43 PM
Motor Oil Range Organics (MRO)	560	490		mg/Kg	10	12/9/2021 1:39:43 PM
Surr: DNOP	0	70-130	S	%Rec	10	12/9/2021 1:39:43 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/8/2021 4:09:00 PM
Surr: BFB	91.4	70-130		%Rec	1	12/8/2021 4:09:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	12/8/2021 4:09:00 PM
Toluene	ND	0.046		mg/Kg	1	12/8/2021 4:09:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	12/8/2021 4:09:00 PM
Xylenes, Total	ND	0.092		mg/Kg	1	12/8/2021 4:09:00 PM
Surr: 4-Bromofluorobenzene	80.9	70-130		%Rec	1	12/8/2021 4:09:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>LRN</b>
Chloride	ND	60		mg/Kg	20	12/10/2021 11:34:18 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 4 of 0

## Analytical Report

Lab Order 2112371

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF05-0.5'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 12:48:00 PM

Lab ID: 2112371-005

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: TOM
Diesel Range Organics (DRO)	570	50		mg/Kg	5	12/14/2021 2:53:43 PM
Motor Oil Range Organics (MRO)	400	250		mg/Kg	5	12/14/2021 2:53:43 PM
Surr: DNOP	119	70-130		%Rec	5	12/14/2021 2:53:43 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/8/2021 4:29:00 PM
Surr: BFB	87.0	70-130		%Rec	1	12/8/2021 4:29:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	12/8/2021 4:29:00 PM
Toluene	ND	0.046		mg/Kg	1	12/8/2021 4:29:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	12/8/2021 4:29:00 PM
Xylenes, Total	ND	0.092		mg/Kg	1	12/8/2021 4:29:00 PM
Surr: 4-Bromofluorobenzene	76.9	70-130		%Rec	1	12/8/2021 4:29:00 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: LRN
Chloride	ND	60		mg/Kg	20	12/10/2021 11:46:39 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 5 of 0

## Analytical Report

Lab Order 2112371

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF06-0.5'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 12:53:00 PM

Lab ID: 2112371-006

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	440	49		mg/Kg	5	12/14/2021 3:17:31 PM
Motor Oil Range Organics (MRO)	240	240		mg/Kg	5	12/14/2021 3:17:31 PM
Surr: DNOP	118	70-130		%Rec	5	12/14/2021 3:17:31 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/9/2021 2:19:00 AM
Surr: BFB	97.1	70-130		%Rec	1	12/9/2021 2:19:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/9/2021 2:19:00 AM
Toluene	ND	0.050		mg/Kg	1	12/9/2021 2:19:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/9/2021 2:19:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/9/2021 2:19:00 AM
Surr: 4-Bromofluorobenzene	87.8	70-130		%Rec	1	12/9/2021 2:19:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>LRN</b>
Chloride	ND	60		mg/Kg	20	12/10/2021 11:58:59 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 6 of 0

## Analytical Report

Lab Order 2112371

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF07-0.5'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 12:56:00 PM

Lab ID: 2112371-007

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	42	9.9		mg/Kg	1	12/9/2021 2:12:08 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/9/2021 2:12:08 PM
Surr: DNOP	80.9	70-130		%Rec	1	12/9/2021 2:12:08 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/9/2021 2:39:00 AM
Surr: BFB	96.1	70-130		%Rec	1	12/9/2021 2:39:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	12/9/2021 2:39:00 AM
Toluene	ND	0.049		mg/Kg	1	12/9/2021 2:39:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/9/2021 2:39:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/9/2021 2:39:00 AM
Surr: 4-Bromofluorobenzene	84.8	70-130		%Rec	1	12/9/2021 2:39:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>LRN</b>
Chloride	ND	60		mg/Kg	20	12/11/2021 12:11:20 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 7 of 0



## Analytical Report

Lab Order 2112371

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF08-0.5'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 1:00:00 PM

Lab ID: 2112371-008

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	9.7	9.3		mg/Kg	1	12/9/2021 2:22:58 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/9/2021 2:22:58 PM
Surr: DNOP	88.9	70-130		%Rec	1	12/9/2021 2:22:58 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/9/2021 2:59:00 AM
Surr: BFB	93.8	70-130		%Rec	1	12/9/2021 2:59:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/9/2021 2:59:00 AM
Toluene	ND	0.050		mg/Kg	1	12/9/2021 2:59:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/9/2021 2:59:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	12/9/2021 2:59:00 AM
Surr: 4-Bromofluorobenzene	82.7	70-130		%Rec	1	12/9/2021 2:59:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	59		mg/Kg	20	12/13/2021 10:32:39 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 8 of 0

## Analytical Report

Lab Order 2112371

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Marathon Oil Company

Client Sample ID: CONF09-0.5'

Project: Chili Parlor 17 Fed 2H 11 08 21 Spill

Collection Date: 12/2/2021 1:05:00 PM

Lab ID: 2112371-009

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/9/2021 2:33:50 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/9/2021 2:33:50 PM
Surr: DNOP	84.9	70-130		%Rec	1	12/9/2021 2:33:50 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/9/2021 3:19:00 AM
Surr: BFB	87.7	70-130		%Rec	1	12/9/2021 3:19:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	12/9/2021 3:19:00 AM
Toluene	ND	0.050		mg/Kg	1	12/9/2021 3:19:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/9/2021 3:19:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/9/2021 3:19:00 AM
Surr: 4-Bromofluorobenzene	81.0	70-130		%Rec	1	12/9/2021 3:19:00 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	61		mg/Kg	20	12/13/2021 11:09:41 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 9 of 0

# ATTACHMENT F

## 48-Hour Confirmation Sample Notification Email



**Energizing America**

**wescominc.com** | [info@wescominc.com](mailto:info@wescominc.com) | 218-724-1322

**Chili Parlor 17 Federal #002H** Incident ID: nAPP2131330323



Shar Harvester &lt;shar.harvester@wescominc.com&gt;

---

**48-Hour Confirmation Sample Notice - nAPP2131330323**

1 message

**Ashley Giovengo** <ashley.giovengo@wescominc.com>

Tue, Nov 30, 2021 at 8:51 AM

To: "Venegas, Victoria, EMNRD" <Victoria.venegas@state.nm.us>, "Hensley, Chad, EMNRD" <Chad.Hensley@state.nm.us>, "Bratcher, Mike, EMNRD" <mike.bratcher@state.nm.us>, "Hamlet, Robert, EMNRD" <Robert.hamlet@state.nm.us>, rmann@slo.state.nm.us

Cc: Shar Harvester <shar.harvester@wescominc.com>, Cole Burton <cole.burton@wescominc.com>, "Sanjari, Melodie (MRO)" <msanjari@marathonoil.com>

Hello All,

We intend to take confirmation samples at the Chili Parlor 17 Federal #002H - nAPP2131330323 starting on (12/02).

Please let us know if you plan to be onsite to oversee this sampling event.

Thanks,

**Ashley Giovengo**, Environmental Manager - Permian**O** (218) 724-1322 | **C** (505) 382-1211**WescomInc.com** | ashley.giovengo@WescomInc.com*"I am in charge of my own safety."***Minnesota** | **North Dakota** | **New Mexico** | **Wisconsin**

**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 89604

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 89604
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	Closure approved.	4/5/2022