CARMONA RESOURCES

SITE INFORMATION

Closure Report
Sterling 1H 2H CTB
Incident ID: NAPP2330544013
Unit O Sec 17 T23S R27E
32.2981054°, -104.2084016°
Eddy County, New Mexico

Crude Oil Release
Point of Release: Failure on Separator Sight Glass Valve
Release Date: 10.29.23
Volume Released: 11.1 Barrels of Crude Oil
Volume Recovered: 11.1 Barrels of Crude Oil

Prepared for:
Marathon Oil Corporation
990 Town and Country Blvd,
Houston, Texas 77024

Prepared by:
Carmona Resources, LLC
310 West Wall Street
Suite 500
Midland, Texas 79701

310 West Wall Street, Suite 500
Midland TX, 79701
432.813.1992

CARMONA RESOURCES

TABLE OF CONTENTS

310 West Wall Street, Suite 500
Midland TX, 79701
432.813.1992

CARMONA RESOURCES

November 13, 2023

Mike Bratcher
District Supervisor
Oil Conservation Division, District 2
811 S. First Street
Artesia, New Mexico 88210

Re: Closure Report
Sterling 1H 2H CTB
Marathon Oil Corporation
Incident ID: NAPP2330544013
Site Location: Unit O, S17, T23S, R27E
(Lat 32.2981054º, Long -104.2084016°)
Eddy County, New Mexico

Mr. Bratcher:

On behalf of Marathon Oil Corporation, Carmona Resources, LLC has prepared this letter to document the Sterling 1H 2H CTB site activities. The site is located at 32.2981054°, -104.2084016° within Unit O, S17, T23S, R27E, in Eddy County, New Mexico (Figures 1 and 2).

1.0 Site Information and Background

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the incident was discovered on October 29, 2023, due to a failure on the valve to a sight glass off a separator. The incident released approximately eleven point one (11.1) barrels of crude oil, with eleven point one (11.1) barrels of crude oil recovered. All fluids were contained within the lined facility. See Figure 3. The initial C-141 form is attached in Appendix B.

2.0 Site Characterization and Groundwater

The site is located within a high karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, no known water source is within a 0.50-mile radius of the location. The nearest well is located approximately 0.63 miles southeast of the site in S21, T23S, R27E and was drilled in 1983. The well has a reported groundwater depth of 163.27 feet below the ground surface (ft bgs). A copy of the associated point of diversion is attached in Appendix C.

3.0 NMAC Regulatory Criteria

Per the NMOCD regulatory criteria established in 19.15.29.12 NMAC, the following criteria were utilized in assessing the site.

- Benzene: 10 milligrams per kilogram (mg/kg).
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg.
- TPH: 100 mg/kg (GRO + DRO + MRO).
- Chloride: 600 mg/kg.

4.0 Liner Inspection Activities

On November 7, 2023, Carmona Resources, LLC conducted liner inspection activities to assess the liner's integrity within the facility. Prior to the liner inspection, the NMOCD division office was notified via email on November 2, 2023, per Subsection D of 19.15.29.12 NMAC. See Appendix B. Carmona Resources, LLC personnel inspected the liner visually and found it to be intact with no integrity issues. Refer to the Photolog.

310 West Wall Street, Suite 500
Midland TX, 79701
432.813.1992

CARMONA RESOURCES

5.0 Conclusions

Based on the liner inspection throughout the facility, no further actions are required at the site. The final C-141 is attached, and Marathon formally requests the closure of the spill. If you have any questions regarding this report or need additional information, please contact us at 432-813-1992.

Sincerely,
Carmona Resources, LLC

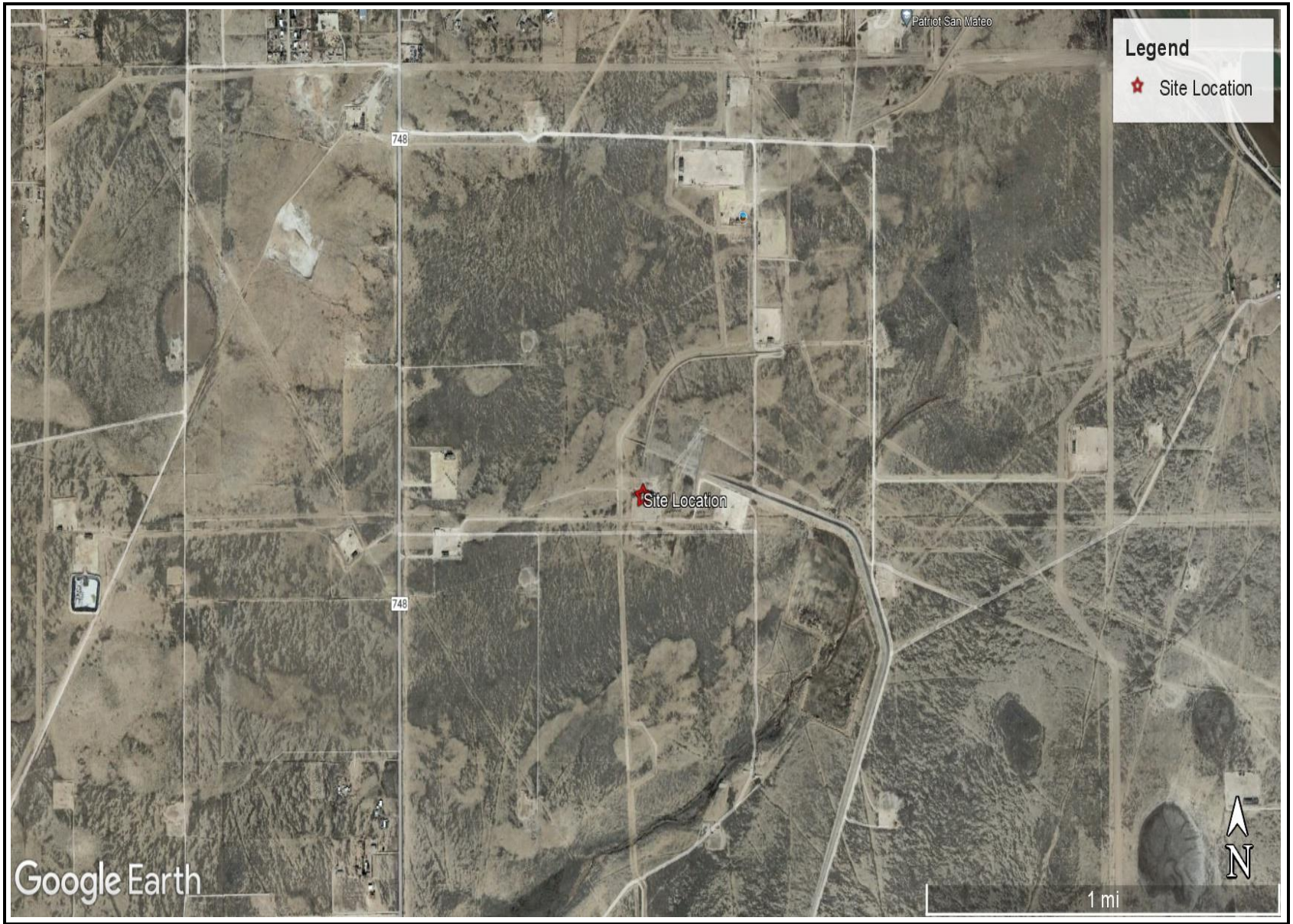
Mike Carmona
Environmental Manager

Clinton Merritt
Sr. Project Manager

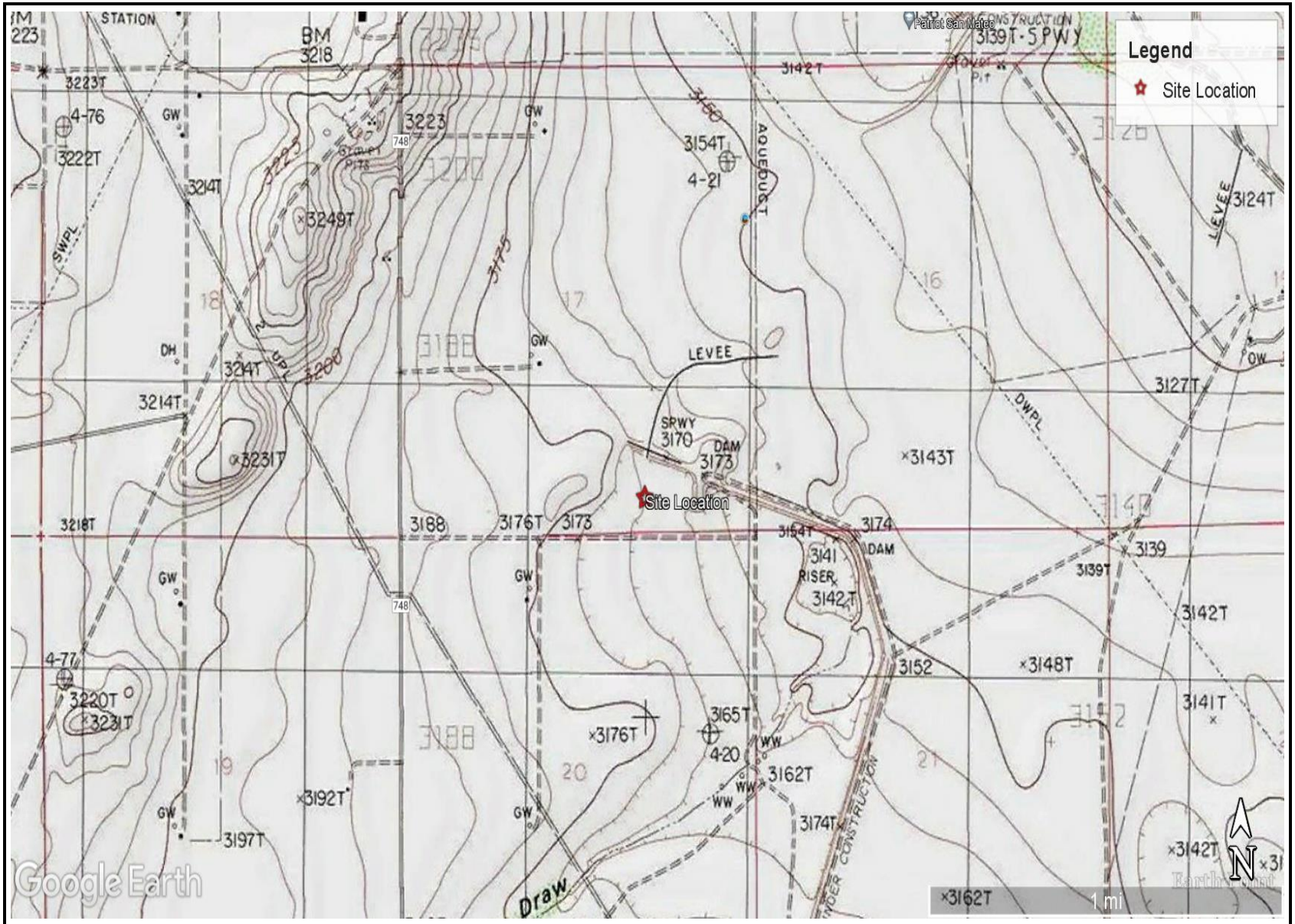
310 West Wall Street, Suite 500
Midland TX, 79701
432.813.1992

FIGURES

CARMONA RESOURCES



OVERVIEW MAP MARATHON OIL CORPORATION STERLING 1H 2H CTB EDDY COUNTY, NEW MEXICO 32.2981054°, -104.2084016°	CARMONA RESOURCES	FIGURE 1



TOPOGRAPHIC MAP MARATHON OIL CORPORATION STERLING 1H 2H CTB EDDY COUNTY, NEW MEXICO 32.2981054°, -104.2084016°	CARMONA RESOURCES	FIGURE 2

SECONDARY CONTAINMENT MAP MARATHON OIL CORPORATION STERLING 1H 2H CTB EDDY COUNTY, NEW MEXICO 32.2981054°, -104.2084016°	CARMONA RESOURCES	FIGURE 3

APPENDIX A

CARMONA RESOURCES

PHOTOGRAPHIC LOG

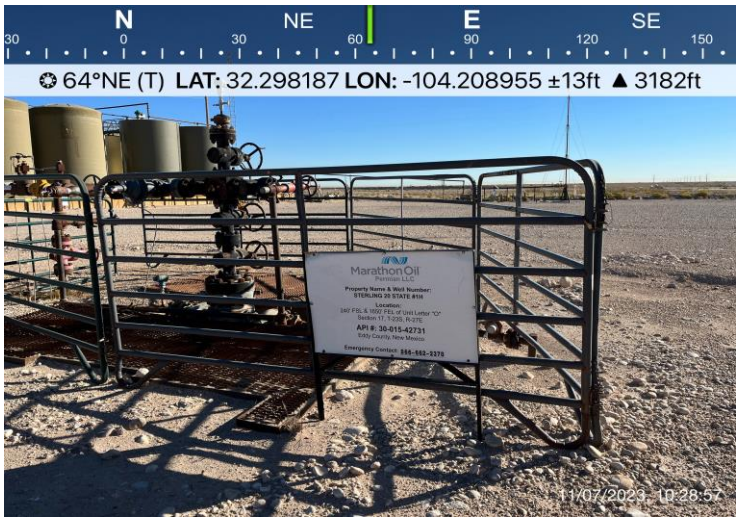
Marathon Oil Corporation

Photograph No. 1

Facility: Sterling 1H 2H CTB

County: Eddy County, New Mexico

Description:
View Northeast, facility signage.



Photograph No. 2

Facility: Sterling 1H 2H CTB

County: Eddy County, New Mexico

Description:
View East, area of lined facility.

Photograph No. 3

Facility: Sterling 1H 2H CTB

County: Eddy County, New Mexico

Description:
View West, area of lined facility.

PHOTOGRAPHIC LOG

Marathon Oil Corporation

Photograph No. 4

Facility: Sterling 1H 2H CTB

County: Eddy County, New Mexico

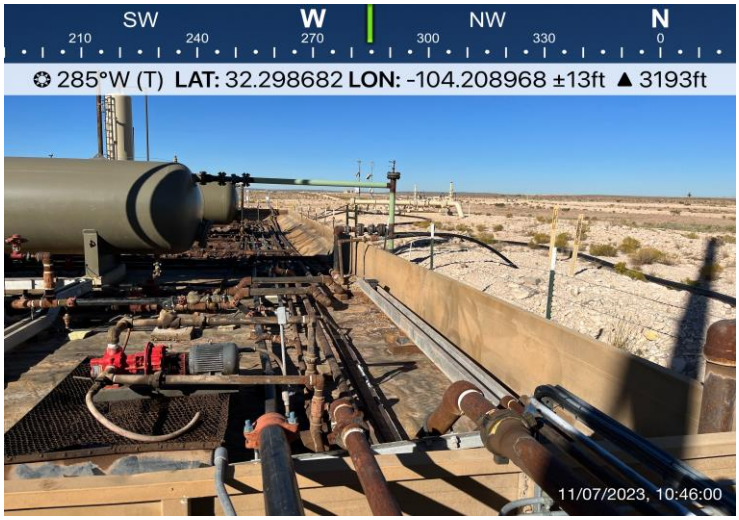
Description:
View North, area of lined facility.

Photograph No. 5

Facility: Sterling 1H 2H CTB

County: Eddy County, New Mexico

Description:
View West, area of lined facility.

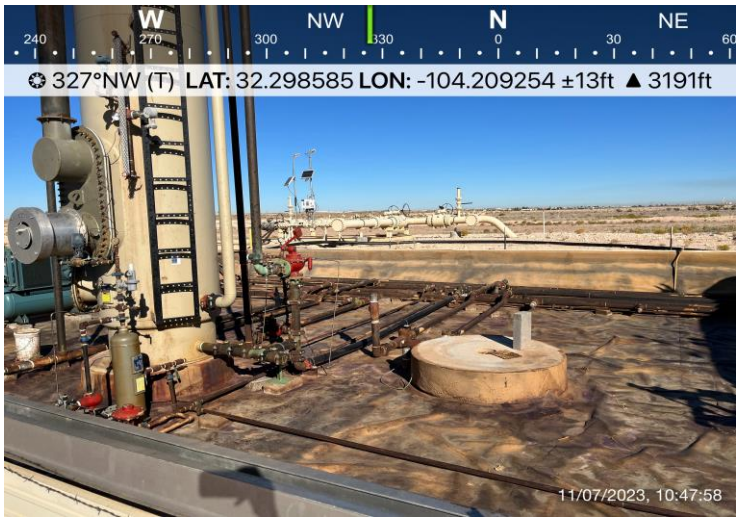


Photograph No. 6

Facility: Sterling 1H 2H CTB

County: Eddy County, New Mexico

Description:
View Northwest, area of lined facility.



APPENDIX B

CARMONA RESOURCES

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	nAPP2330544013
District RP	
Facility ID	fAPP2126332399
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 msanjari@marathonoil.com	Incident # *(assigned by OCD)* nAPP2330544013
Contact mailing address 4111 S. Tidwell Rd., Carlsbad, NM 8220	

Location of Release Source

Latitude 32.2981054 Longitude -104.2084016
(NAD 83 in decimal degrees to 5 decimal places)

Site Name **Sterling 1H 2H CTB**	Site Type **Oil & Gas TB**
Date Release Discovered: **10/29/23**	Facility# **fAPP2126332399**

Unit Letter	Section	Township	Range	County
O	**17**	**23S**	**27E**	**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)

☒ Crude Oil	Volume Released (bbls)11.1	Volume Recovered (bbls)11.1
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
Operator arrived on location to an active release from a failure on the valve to the sight glass off the separator that resulted in the release of approx. 11.1 bbl. of oil within the lined, secondary containment. Standing fluid was too shallow to recover and was addressed during pressure washing. A notice will be sent out prior to a liner integrity inspection.

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2330544013
District RP	
Facility ID	fAPP2126332399
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

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

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

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

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

Printed Name: Melodie Sanjari Title: Environmental Professional

Signature: Melodie Sanjari Date: **11/1/23**

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

OCD Only

Received by: Shelly Wells Date: 11/1/2023

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ 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)?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ 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?	☐ Yes ☐ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☐ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☐ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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: _____ Title: _____

Signature:_____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Shelly Wells Date: 11/13/2023

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Shelly Wells Date: 11/13/2023

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: _____ Date: _____

Printed Name: _____ Title: _____

MRO Spill Calculation Tool

Standing Liquid Inputs:

	Length (ft.)	Width (ft.) (Area for Displacement)	Avg. Liquid Depth (in.)	% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Rectangle Area #1	30	50	0.5		11.13	11.13	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
Vessel Displacement					0.00	0.00	0.00
Vessel Displacement					0.00	0.00	0.00
				Liquid Volume:	**11.13**	**11.13**	**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					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
Rectangle Area #7					0.00	0.00	0.00
Rectangle Area #8					0.00	0.00	0.00
				Saturated Volume	**0.00**	**0.00**	**0.00**

	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Total Spill Volume (bbls):	11.13	11.13	0.00
Total Spill Volume (gals):	467.53	467.53	0.00

Comments:

Color Key:	Required Input Cells	Supplemental Input Cells	No Input (Calculations)	No Input

Ground/Vegetation Overspray

Cover Type	Microns	Approximate Depth (in)
Ground		
Dull Color	10	0.00003281
Dark Color	50	0.00016404

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

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 281817
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	11/1/2023

From: Wells, Shelly, EMNRD
Sent: Thursday, November 2, 2023 4:44 PM
To: Clint Merritt
Cc: Melodie Sanjari; Castro, Isaac (MRO); Mike Carmona; Conner Moehring; Devin Dominguez; Hamlet, Robert, EMNRD; Bratcher, Michael, EMNRD
Subject: RE: [EXTERNAL] Marathon - Sterling 1H 2H CTB - Liner Inspection Notification

Hi Clinton,

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Environmental Bureau
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Clint Merritt <MerrittC@carmonaresources.com>
Sent: Thursday, November 2, 2023 3:37 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Melodie Sanjari <msanjari@marathonoil.com>; Castro, Isaac (MRO) <icastro@marathonoil.com>; Mike Carmona <Mcarmona@carmonaresources.com>; Conner Moehring <Cmoehring@carmonaresources.com>; Devin Dominguez <Ddominguez@carmonaresources.com>
Subject: [EXTERNAL] Marathon - Sterling 1H 2H CTB - Liner Inspection Notification

Good Afternoon,

This email is a notification for a liner inspection for the Marathon – Sterling 1H 2H CTB. The inspection is scheduled to begin on Tuesday, November 7th, around 10:00 a.m. Mountain Time. Carmona Resources personnel will be on-site to document and inspect the liner inside of the facility.

nAPP2330544013

Please call if you have any questions.

Clinton Merritt
310 West Wall Street, Suite 500
Midland TX, 79701
M: 432-813-9044
MerrittC@carmonaresources.com

CARMONA RESOURCES

APPENDIX C

CARMONA RESOURCES

Nearest Water Well

Marathon Oil Permian LLC

Legend

- 0.50 Mile Radius
- 0.63 Miles
- 0.92 Miles
- 1.02 Miles
- 1.30 Miles
- NMSEO Water Well
- Sterling 1H 2H CTB (10.29.2023)
- USGS Water Well

Sterling 1H 2H CTB (10.29.2023)

100' - Drilled 1964

133.22' - Drilled 2018

163.27' - Drilled 1983

170' - Drilled 1998

N

4000 ft

Google Earth

High Karst

Marathon Oil Permian LLC

Legend

High

Sterling 1H 2H CTB (10.29.2023)

Sterling 1H 2H CTB (10.29.2023)

N

4000 ft

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number		POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 01261		CUB	ED				21	23S	27E	575780	3572889*	1521	250		
C 01195		C	ED			2	19	23S	27E	572958	3573260*	1646	180	100	80
C 01781		C	ED		2	4	19	23S	27E	573161	3572659*	1752			
C 01781 POD2		C	ED		2	4	19	23S	27E	573161	3572659*	1752	210		
C 01781 POD3		C	ED		2	4	19	23S	27E	573161	3572659*	1752	210		
C 01618		C	ED	4	4	4	07	23S	27E	573252	3575384*	2070	250		
C 02377		C	ED			2	29	23S	27E	574575	3571666*	2088	232	170	62
C 03005		C	ED	3	4	4	07	23S	27E	573052	3575384*	2199	140	100	40
C 04044 POD1		CUB	ED	3	2	3	09	23S	27E	575504	3575907	2363	290	150	140
C 02453		C	ED	4	4	2	29	23S	27E	574876	3571372*	2407	210	175	35
C 03301		C	ED	3	3	4	07	23S	27E	572597	3575268	2454	375		
C 01632		C	ED	3	2	4	07	23S	27E	573050	3575789*	2515	162	100	62
C 01632 CLW197648	O	C	ED	3	2	4	07	23S	27E	573050	3575789*	2515	162	100	62
C 01632 POD2		C	ED	3	2	4	07	23S	27E	573050	3575789*	2515	173	100	73
C 02112		C	ED	1	3	4	13	21S	24E	573831	3571337	2515	182	119	63
C 04429 POD1		C	ED	4	4	1	08	23S	27E	574102	3576270	2552	400	350	50
C 00195		CUB	ED	4	1	4	09	23S	27E	576069	3575827*	2582	128	83	45
C 01071		C	ED			1	08	23S	27E	573751	3576499*	2852	279	95	184
C 02191		C	ED			1	08	23S	27E	573751	3576499*	2852	252	75	177
C 04581 POD1		C	ED	3	1	1	09	23S	27E	575167	3576589	2906	165	109	56
C 00187		C	ED	1	1	4	15	23S	27E	577380	3574509	2949	210	125	85
C 00623		C	ED		2	1	15	23S	27E	577189	3575142*	3000	200		
C 03736 POD1		C	ED	2	2	4	13	23S	26E	571677	3574793	3035			
C 02300		CUB	ED			3	07	23S	27E	572160	3575676*	3050	402		
C 03892 POD1		C	ED	1	2	1	08	23S	27E	573846	3576764	3086	148	54	94
C 02510		C	ED	1	2	1	08	23S	27E	573848	3576806*	3126	350	350	0

***UTM location was derived from PLSS - see Help**

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 00508 CLW225089	O	CUB	ED	4	1	3	10	23S	27E	576877	3575839*	3140	234	28	206
C 02326		C	ED			2	07	23S	27E	572948	3576491*	3160	140	99	41
C 00420	C	CUB	ED		4	2	09	23S	27E	576370	3576337*	3171	2151		
C 00508 S		CUB	ED	2	1	3	10	23S	27E	576877	3576039*	3276	234	28	206
C 00068 CLW193190	O	CUB	ED	3	3	1	10	23S	27E	576673	3576241*	3283	175		
C 02835		CUB	ED	3	4	1	30	23S	27E	572258	3571338*	3315	228		
C 01847		C	ED		1	3	07	23S	27E	571956	3575878*	3336	300		
C 01847 POD2		C	ED		1	3	07	23S	27E	571956	3575878*	3336	243		
C 00323		C	ED		4	4	05	23S	27E	574750	3577122*	3374	200		
C 02711		C	ED		4	4	05	23S	27E	574750	3577122*	3374	170	75	95
C 03020		C	ED		4	4	05	23S	27E	574750	3577122*	3374	176	135	41
C 00068		CUB	ED	1	3	1	10	23S	27E	576673	3576441*	3437	175		
C 03799 POD1		C	ED	1	3	3	04	23S	27E	574981	3577170	3445	200	51	149
C 04453 POD1		C	ED	3	2	1	07	23S	27E	572475	3576566	3482	250	70	180
C 01825		C	ED		3	2	13	23S	26E	571151	3574670*	3499	243	221	22
C 00109 CLW203096	O	CUB	ED	1	3	3	04	23S	27E	575051	3577226*	3510	260		
C 02710		C	ED			4	05	23S	27E	574550	3577318*	3563	200	72	128
C 03653 POD1		C	ED	2	4	4	05	23S	27E	574757	3577331	3584	220	180	40
C 01083		C	ED		4	2	15	23S	27E	578003	3574751	3614	325	45	280
C 00508		CUB	ED	3	1	4	10	23S	27E	577487	3575855*	3628	190		
C 03010		C	ED	2	2	4	12	23S	26E	571649	3575978*	3638	140	130	10
C 01857		C	ED				13	23S	26E	570949	3574465*	3649	255	197	58
C 02232		C	ED				13	23S	26E	570949	3574465*	3649	240	200	40
C 02448		C	ED		2	4	12	23S	26E	571550	3575879*	3658	140	127	13
C 04331 POD1		C	ED	2	2	4	12	23S	26E	571632	3575997	3663	170	133	37
C 00259 S		CUB	ED	1	1	3	30	23S	27E	571874	3571131*	3732	204		
C 02834		CUB	ED	1	1	3	30	23S	27E	571874	3571131*	3732	310	176	134
C 04591 POD1		C	ED	3	2	1	07	23S	27E	572168	3576690	3767	300		
C 00296		C	ED		1	4	05	23S	27E	574345	3577519*	3769	225		

***UTM location was derived from PLSS - see Help**

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(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number		POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 01672		C	ED		4	3	13	23S	26E	570750	3573861*	3780	280	80	200
C 03961 POD1		C	ED	1	2	4	12	23S	26E	571522	3576070	3795	280		
C 00518 POD2		CUB	ED	2	4	4	22	23S	27E	578105	3572431*	3813	220	98	122
C 01905		C	ED		2	3	13	23S	26E	570749	3574267*	3814	300		
C 03071		C	ED		2	3	13	23S	26E	570749	3574267*	3814	250	204	46
C 01678		C	ED	3	3	4	12	23S	26E	571048	3575379*	3841		350	
C 00518		CUB	ED	1	1	3	23	23S	27E	578310	3572840*	3890	178		
C 02484 EXPL		CUB	ED		4	1	13	23S	26E	570747	3574672*	3891	280	175	105
C 03348		C	ED	1	3	3	13	23S	26E	570606	3573938	3927	240	200	40
C 03766 POD1		C	ED	3	3	1	14	23S	27E	578373	3574609	3938	260	25	235
C 01642		C	ED	2	2	1	13	23S	26E	570845	3575177*	3948	303		
C 03060		C	ED	4	4	4	10	23S	27E	578098	3575460	3955	139	87	52
C 03488 POD1		C	ED	4	3	1	23	23S	27E	578430	3573023	3969	217	122	95
C 02151		C	ED		4	3	06	23S	27E	572341	3577095*	3993	196	130	66
C 00231 AS		CUB	ED	4	1	1	23	23S	27E	578512	3573447*	3995	230	100	130
C 00498		CUB	ED	4	1	1	23	23S	27E	578512	3573447*	3995	210	120	90
C 00498 CLW194833	O	CUB	ED	4	1	1	23	23S	27E	578512	3573447*	3995	165	80	85

Average Depth to Water: **129 feet**

Minimum Depth: **25 feet**

Maximum Depth: **350 feet**

Record Count: 72

UTMNAD83 Radius Search (in meters):

Easting (X): 574528.8 **Northing (Y):** 3573754.31 **Radius:** 4000

***UTM location was derived from PLSS - see Help**

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: New Mexico | GO

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Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 321726104120801

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 321726104120801 23S.27E.20.42220

Eddy County, New Mexico
Latitude 32°17'26", Longitude 104°12'08" NAD27
Land-surface elevation 3,162 feet above NAVD88
The depth of the well is 192 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measure
1981-05-14		D	62610		2997.28	NGVD29	1	Z		
1981-05-14		D	62611		2998.92	NAVD88	1	Z		
1981-05-14		D	72019	163.08			1	Z		
1983-02-02		D	62610		2997.09	NGVD29	1	Z		
1983-02-02		D	62611		2998.73	NAVD88	1	Z		
1983-02-02		D	72019	163.27			1	Z		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface

Section	Code	Description
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for New Mexico: Water Levels
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2023-11-02 15:58:12 EDT
0.43 0.4 nadww01

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? S

Groundwater | New Mexico | GO

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Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 321727104131801

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 321727104131801 23S.27E.19.421232

Eddy County, New Mexico
Latitude 32°17'27", Longitude 104°13'18" NAD27
Land-surface elevation 3,190 feet above NAVD88
The depth of the well is 180 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1966-01-05		D	62610		3033.25	NGVD29	1	Z		
1966-01-05		D	62611		3034.89	NAVD88	1	Z		
1966-01-05		D	72019	155.11			1	Z		
1967-01-19		D	62610		3033.08	NGVD29	1	Z		
1967-01-19		D	62611		3034.72	NAVD88	1	Z		
1967-01-19		D	72019	155.28			1	Z		
1968-01-26		D	62610		3033.20	NGVD29	1	Z		
1968-01-26		D	62611		3034.84	NAVD88	1	Z		
1968-01-26		D	72019	155.16			1	Z		
1969-01-28		D	62610		3033.70	NGVD29	1	Z		
1969-01-28		D	62611		3035.34	NAVD88	1	Z		
1969-01-28		D	72019	154.66			1	Z		
1970-01-20		D	62610		3032.54	NGVD29	1	Z		
1970-01-20		D	62611		3034.18	NAVD88	1	Z		

Date	Time	? Water-level date-time accuracy	? Parameter code		Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? S	
1970-01-20		D	72019	155.82		1	Z		
1974-01-22		D	62610	3031.74	NGVD29	1	Z		
1974-01-22		D	62611	3033.38	NAVD88	1	Z		
1974-01-22		D	72019	156.62		1	Z		
1975-01-29		D	62610	3032.27	NGVD29	1	Z		
1975-01-29		D	62611	3033.91	NAVD88	1	Z		
1975-01-29		D	72019	156.09		1	Z		
1976-01-13		D	62610	3033.22	NGVD29	1	Z		
1976-01-13		D	62611	3034.86	NAVD88	1	Z		
1976-01-13		D	72019	155.14		1	Z		
1977-02-01		D	62610	3032.96	NGVD29	1	Z		
1977-02-01		D	62611	3034.60	NAVD88	1	Z		
1977-02-01		D	72019	155.40		1	Z		
1978-01-23		D	62610	3032.96	NGVD29	1	Z		
1978-01-23		D	62611	3034.60	NAVD88	1	Z		
1978-01-23		D	72019	155.40		1	Z		
1983-01-25		D	62610	3032.71	NGVD29	1	Z		
1983-01-25		D	62611	3034.35	NAVD88	1	Z		
1983-01-25		D	72019	155.65		1	Z		
1988-03-16		D	62610	3034.46	NGVD29	1	Z		
1988-03-16		D	62611	3036.10	NAVD88	1	Z		
1988-03-16		D	72019	153.90		1	Z		
1993-05-04		D	62610	3031.61	NGVD29	1	S		
1993-05-04		D	62611	3033.25	NAVD88	1	S		
1993-05-04		D	72019	156.75		1	S		
1995-07-18		D	62610	3032.28	NGVD29	1	S		
1995-07-18		D	62611	3033.92	NAVD88	1	S		
1995-07-18		D	72019	156.08		1	S		
1996-01-23		D	62610	3032.81	NGVD29	1	S		
1996-01-23		D	62611	3034.45	NAVD88	1	S		
1996-01-23		D	72019	155.55		1	S		
1998-01-14		D	62610	3032.68	NGVD29	1	S		
1998-01-14		D	62611	3034.32	NAVD88	1	S		
1998-01-14		D	72019	155.68		1	S		
2003-01-24		D	62610	3027.63	NGVD29	1	S	USGS	
2003-01-24		D	62611	3029.27	NAVD88	1	S	USGS	
2003-01-24		D	72019	160.73		1	S	USGS	
2018-02-01	00:14 UTC	m	62610	3055.14	NGVD29	1	V	USGS	
2018-02-01	00:14 UTC	m	62611	3056.78	NAVD88	1	V	USGS	
2018-02-01	00:14 UTC	m	72019	133.22		1	V	USGS	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? S

Method of measurement	V	Calibrated electric-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for New Mexico: Water Levels
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2023-11-02 15:56:59 EDT
0.32 0.29 nadww02

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	C 01195			2	19	23S	27E	572958	3573260*

Driller License:	108	**Driller Company:**	SMITH, SAM S.		
Driller Name:	SMITH, SAM S.				
Drill Start Date:	07/01/1964	**Drill Finish Date:**	07/15/1964	**Plug Date:**	
Log File Date:	08/14/1964	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	6.00	**Depth Well:**	180 feet	**Depth Water:**	100 feet

Water Bearing Stratifications:	Top	Bottom	Description
	168	173	Limestone/Dolomite/Chalk

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer
Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02377			2	29	23S	27E	574575	3571666*

Driller License: 1348 **Driller Company:** TAYLOR WATER WELL SERVICE

Driller Name:

Drill Start Date: 05/24/1998 **Drill Finish Date:** 05/30/1998 **Plug Date:**

Log File Date: 08/24/1998 **PCW Rcv Date:** **Source:** Shallow

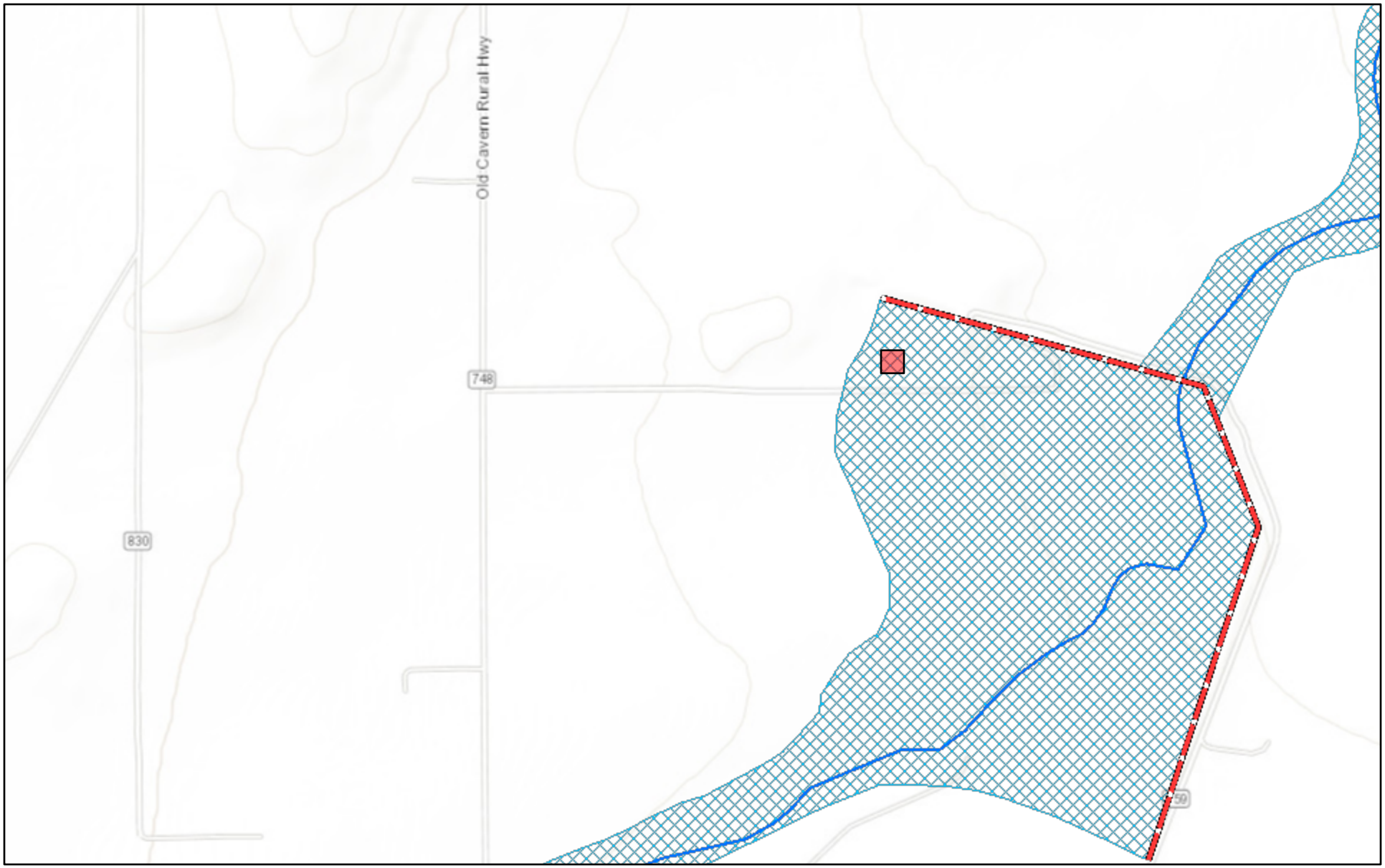
Pump Type: **Pipe Discharge Size:** **Estimated Yield:**

Casing Size: **Depth Well:** 232 feet **Depth Water:** 170 feet

Water Bearing Stratifications:	Top	Bottom	Description
	173	174	Limestone/Dolomite/Chalk
	175	176	Other/Unknown
	179	180	Other/Unknown

***UTM location was derived from PLSS - see Help**

New Mexico NFHL Data



November 2, 2023

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

FEMA, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

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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 284923

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 284923
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2330544013 STERLING 20 STATE TB, thank you. This Remediation Closure Report is approved.	3/15/2024