

Revised March 23, 2017

ID NO. 226845

NSL - 8608

RECEIVED:	REVIEWER:	TYPE:	APP NO: pLEL2316444315
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Geological & Engineering Bureau -  
 1220 South St. Francis Drive, Santa Fe, NM 87505

**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND  
 REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Applicant:** Marathon Oil Permian LLC **OGRID Number:** 372098  
**Well Name:** Ripley BS Fed Com #501H **API:** 30-015-47620  
**Pool:** Willow Lake; Bone Spring **Pool Code:** 64450

**SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION  
 INDICATED BELOW**

**1) TYPE OF APPLICATION:** Check those which apply for [A]

A. Location – Spacing Unit – Simultaneous Dedication

☒ NSL      ☐ NSP (PROJECT AREA)      ☐ NSP (PRORATION UNIT)      ☐ SD

B. Check one only for [ I ] or [ II ]

[ I ] Commingling – Storage – Measurement

☐ DHC    ☐ CTB    ☐ PLC    ☐ PC    ☐ OLS    ☐ OLM

[ II ] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery

☐ WFX    ☐ PMX    ☐ SWD    ☐ IPI    ☐ EOR    ☐ PPR
**2) NOTIFICATION REQUIRED TO:** Check those which apply.

- A. ☒ Offset operators or lease holders  
 B. ☐ Royalty, overriding royalty owners, revenue owners  
 C. ☐ Application requires published notice  
 D. ☐ Notification and/or concurrent approval by SLO  
 E. ☐ Notification and/or concurrent approval by BLM  
 F. ☐ Surface owner  
 G. ☒ For all of the above, proof of notification or publication is attached, and/or,  
 H. ☐ No notice required

**FOR OCD ONLY**

- ☐ Notice Complete  
☐ Application Content Complete

**3) CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

**Note: Statement must be completed by an individual with managerial and/or supervisory capacity.**

Chase Rice

Print or Type Name

6/12/2023

Date

713-296-3055

Phone Number

cfrice@marathonoil.com

e-mail Address

Signature



**Marathon Oil**  
990 Town & Country Blvd  
Houston, Texas 77024  
Telephone: 713-296-3055  
cfrice@marathonoil.com

June 12, 2023

New Mexico Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, New Mexico 87505  
Attn: Mr. Dylan Fuge, Director

Re: Application for Unorthodox Well Location (NSL)  
Ripley 35 26 SB Federal Com #201H  
Section 35, T24S 28E Eddy County, NM

Dear Mr. Fuge:

Marathon Oil Permian LLC respectfully requests administrative approval of an unorthodox oil well location for its Ripley 35-26 SB Federal Com #201H well (API 30-015-47620). Please note that Marathon Oil Permian LLC has submitted a BLM approved sundry to the NMOCD to change the name to Ripley BS Fed Com #501H and the to change the pool to the Bone Spring; Willow Lake.

The spacing unit dedicated to the well is approximately 640 acres, which includes proximity tracts (defining well: Ripley BS Fed Com #301H - 30-015-47621) and is comprised of the E2 of Sec. 35 and 26. The acreage is governed by the Bone Spring; Willow Lake pool rules which provides for a 160 acre spacing unit and 330-foot setbacks. Accordingly, the completed interval is unorthodox because it is closer than 330 feet to the western boundary of the spacing unit. Approval of the unorthodox location will allow Marathon Oil Permian LLC to use its preferred first take point for the horizontal well, which will maximize recovery and prevent waste.

Please see the attached documents:

- As drilled C102:
  - SHL: 320' FSL & 1311' FEL - Sec. 35, T24S, 28E
  - FTP: 390' FSL & 2404' FEL - Sec. 35, T24S, 28E
  - LTP: 127' FNL & 2317' FEL - Sec. 26, T24S, 28E
  - BHL: 100' FNL & 2317' FEL - Sec. 26, 24S, 28EEddy County, NM
- Exhibit A –Sundry to change name, pool, C102 – as submitted to the NMOCD (pages 6-30)
- Exhibit B – Affected Parties Notification & Response (pages 31-34)
- Exhibit C – Map in relation to the adjoining spacing units/tracts (page 35)

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In summary, approval of the application will provide Marathon Oil Permian LLC the opportunity to recover oil and gas reserves from the Bone Spring; Willow Lake pool that may otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.

Should you have any questions regarding the application, please email me at [cfrice@marathonoil.com](mailto:cfrice@marathonoil.com) or please call me at 713-296-3055.

Sincerely,

A handwritten signature in blue ink that reads "Chase Rice". The signature is written in a cursive style with a horizontal line extending from the end of the name.

Chase Rice  
Land Supervisor

Marathon Oil Permian LLC  
Ripley BS Federal Com #501H  
Willow Lake; Bone Spring (64450)

**List of Affected Parties:**

<b>Operator/Affected Party</b>	<b>Location</b>	<b>Date Letter Sent</b>	<b>Tracking Number</b>
Mewbourne Oil Co. P O Box 5270 Hobbs, NM 88241	W2 Sec. 35 T-24S R-28E	3/1/2023	Email Notification, Waiver Request & Agreement



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 Road, Aztec, NM 87410  
 Phone: (505) 334-6178 Fax: (505) 334-6170  
**District IV**  
 1220 S. St. Francis Dr., Santa Fe, NM 87505  
 Phone: (505) 476-3460 Fax: (505) 476-3462

## State of New Mexico

Form C-102

## Energy, Minerals &amp; Natural Resources Department

Revised August 1, 2011

## OIL CONSERVATION DIVISION

Submit one copy to appropriate

District Office

1220 South St. Francis Dr.

Santa Fe, NM 87505

☐ AMENDED REPORT

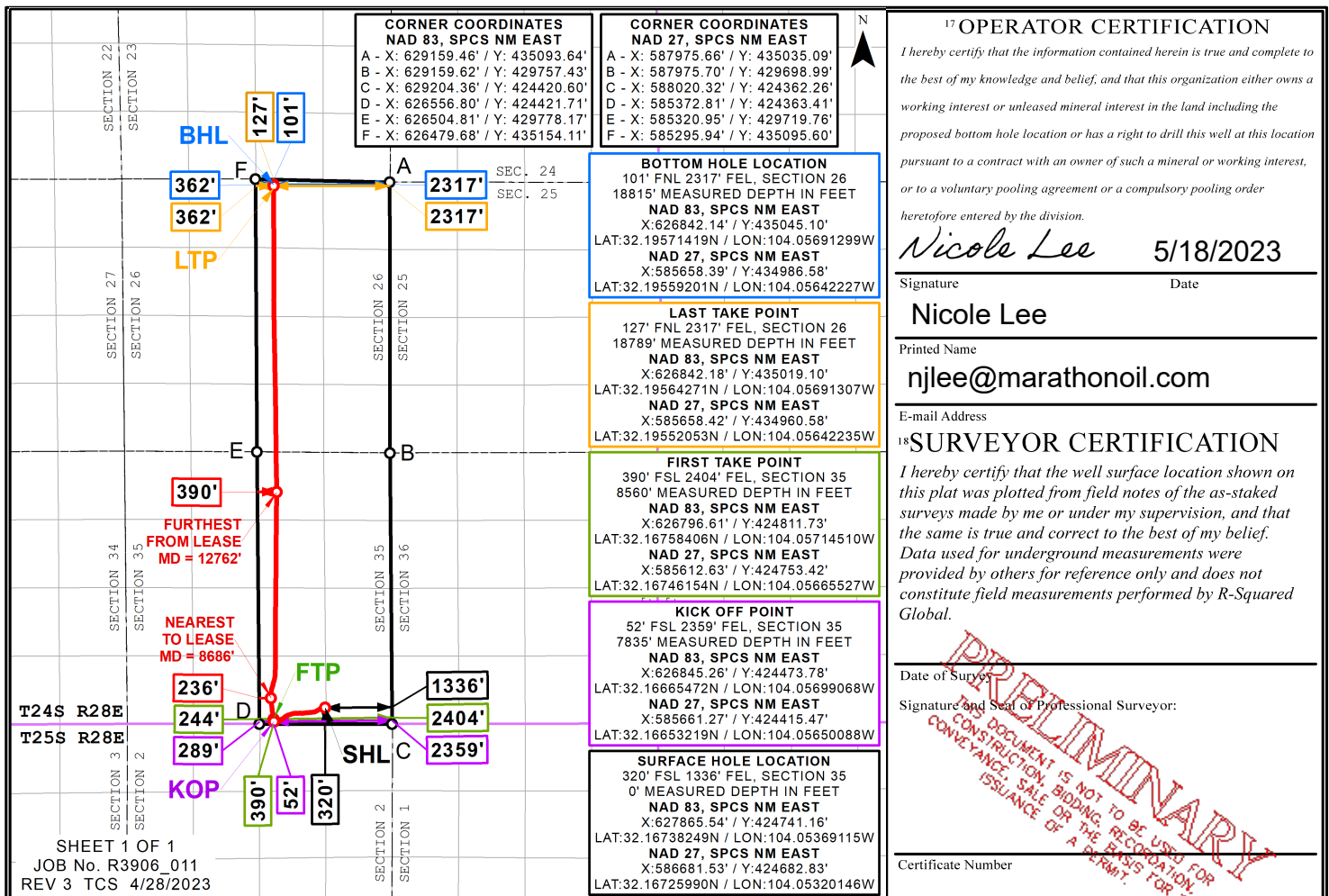
## WELL LOCATION AND ACREAGE DEDICATION AS-DRILLED PLAT

<sup>1</sup> API Number 30-015-47620	<sup>2</sup> Pool Code 96415	<sup>3</sup> Pool Name BONE SPRING; WILLOW LAKE
<sup>4</sup> Property Code 333485	Property Name RIPLEY BS FED COM	<sup>6</sup> Well Number 501H
<sup>7</sup> OGRID No. 372098	<sup>8</sup> Operator Name MARATHON OIL PERMIAN LLC	<sup>9</sup> Elevation 2955'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	35	24S	28E		320	SOUTH	1336	EAST	EDDY
<sup>11</sup> Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	26	24S	28E		101	NORTH	2317	EAST	EDDY
<sup>12</sup> Dedicated Acres 640.0	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



Distances/areas relative to NAD 83 Combined Scale Factor: 0.9997778 Convergence Angle: 0.1412667

☐ Horizontal Spacing Unit

Form 3160-5  
(June 2019)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2021**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No. NMNM25953

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator MARATHON OIL PERMIAN LLC

3a. Address 990 TOWN & COUNTRY BLVD, HOUSTON, TX 3b. Phone No. (include area code)  
(000) 000-00004. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SEC 35/T24S/R28E/NMP

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No. RIPLEY 35 -26 SB FED COM/201H

9. API Well No. 3001547620

10. Field and Pool or Exploratory Area  
WILLOW LAKE /WILLOW LAKE-BONE SPRING11. Country or Parish, State  
EDDY/NM

## 12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Marathon Oil Permian respectfully requests approval to change the SHL and BHL as shown below. Offset operator drilled and completed wells that required Marathon to change our well spacing.

SHL: 320' FSL 1311' FEL Sec. 35 24S 28E Change to: 320' FSL 1336' FEL Sec. 35 24S 28E

BHL: 100' FNL 2155' FEL Sec. 28 24S 28E Change to: 100' FNL 2310' FEL Sec 26 24S 28E

No additional surface disturbance - SHL located on previously approved pad - please see attached pad diagram. Please see attached C102, drill plan, and directional plan.

Please change the well name and number from Ripley 35-26 SB Fed Com 201H TO: Ripley BS Fed Com #501H

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)  
TERRI STATHEM / Ph: (713) 629-6600

Title Regulatory Compliance Manager

Signature

Date

11/07/2022

**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved

Title Petroleum Engineer

Date

11/10/2022

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office CARLSBAD

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

## GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

## SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

*Item 13*: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

## NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

## Additional Information

### Location of Well

0. SHL: SWSE / 320 FSL / 1311 FEL / TWSP: 24S / RANGE: 28E / SECTION: 35 / LAT: 32.1673832 / LONG: -104.0536591 ( TVD: 0 feet, MD: 0 feet )

PPP: NWNE / 1338 FNL / 1656 FEL / TWSP: 24S / RANGE: 28E / SECTION: 35 / LAT: 32.1775324 / LONG: -104.0547955 ( TVD: 9777 feet, MD: 13474 feet )

PPP: SWSE / 330 FSL / 1654 FEL / TWSP: 24S / RANGE: 28E / SECTION: 35 / LAT: 32.1674126 / LONG: -104.0547186 ( TVD: 9663 feet, MD: 9768 feet )

BHL: NWNE / 100 FNL / 2155 FEL / TWSP: 24S / RANGE: 28E / SECTION: 35 / LAT: 32.1803026 / LONG: -104.0548165 ( TVD: 9777 feet, MD: 14482 feet )

CONFIDENTIAL

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	<b>Marathon Oil</b>
<b>LEASE NO.:</b>	<b>NMNM25953</b>
<b>LOCATION:</b>	Section 35, T.24 S., R.28E., NMPM
<b>COUNTY:</b>	Eddy County, New Mexico

<b>WELL NAME &amp; NO.:</b>	Ripley BS Fed Com 501H
<b>SURFACE HOLE FOOTAGE:</b>	320'/S & 1336'/E
<b>BOTTOM HOLE FOOTAGE:</b>	100'/N & 2310'/E

COA

H2S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input type="radio"/> Medium	<input checked="" type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Fluid Filled	<input type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware and Bone Springs** formations. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

### B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **500** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8**



**hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

**Intermediate casing must be kept 1/3<sup>rd</sup> fluid filled to meet BLM minimum collapse requirement.**

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

- Cement to surface. If cement does not circulate see B.1.a, c-d above.

**Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

- ❖ In High Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

## **C. PRESSURE CONTROL**

1. **Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).**
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

**D. SPECIAL REQUIREMENT (S)****Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

**GENERAL REQUIREMENTS**

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
(575) 361-2822

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)  
689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. **Operator is approved to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the**

- wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
- b. **Operator is approve to set surface casing with Spudder Rig**
- **Notify the BLM when moving in and removing the Spudder Rig.**
  - **Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.**
  - **BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.**
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.



4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

#### B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
- a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
  - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
  - d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall

have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

#### C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

#### D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**ZS 051022**

## 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 Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170

## District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

## State of New Mexico

## Energy, Minerals &amp; Natural Resources Department

## OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☒ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-015-47620	<sup>2</sup> Pool Code 64450	<sup>3</sup> Pool Name BONE SPRING; WILLOW LAKE
<sup>4</sup> Property Code	<sup>5</sup> Property Name RIPLEY BS FED COM	<sup>6</sup> Well Number 501H
<sup>7</sup> OGRID No. 372098	<sup>8</sup> Operator Name MARATHON OIL PERMIAN, LLC	<sup>9</sup> Elevation 2955'

<sup>10</sup> Surface Location

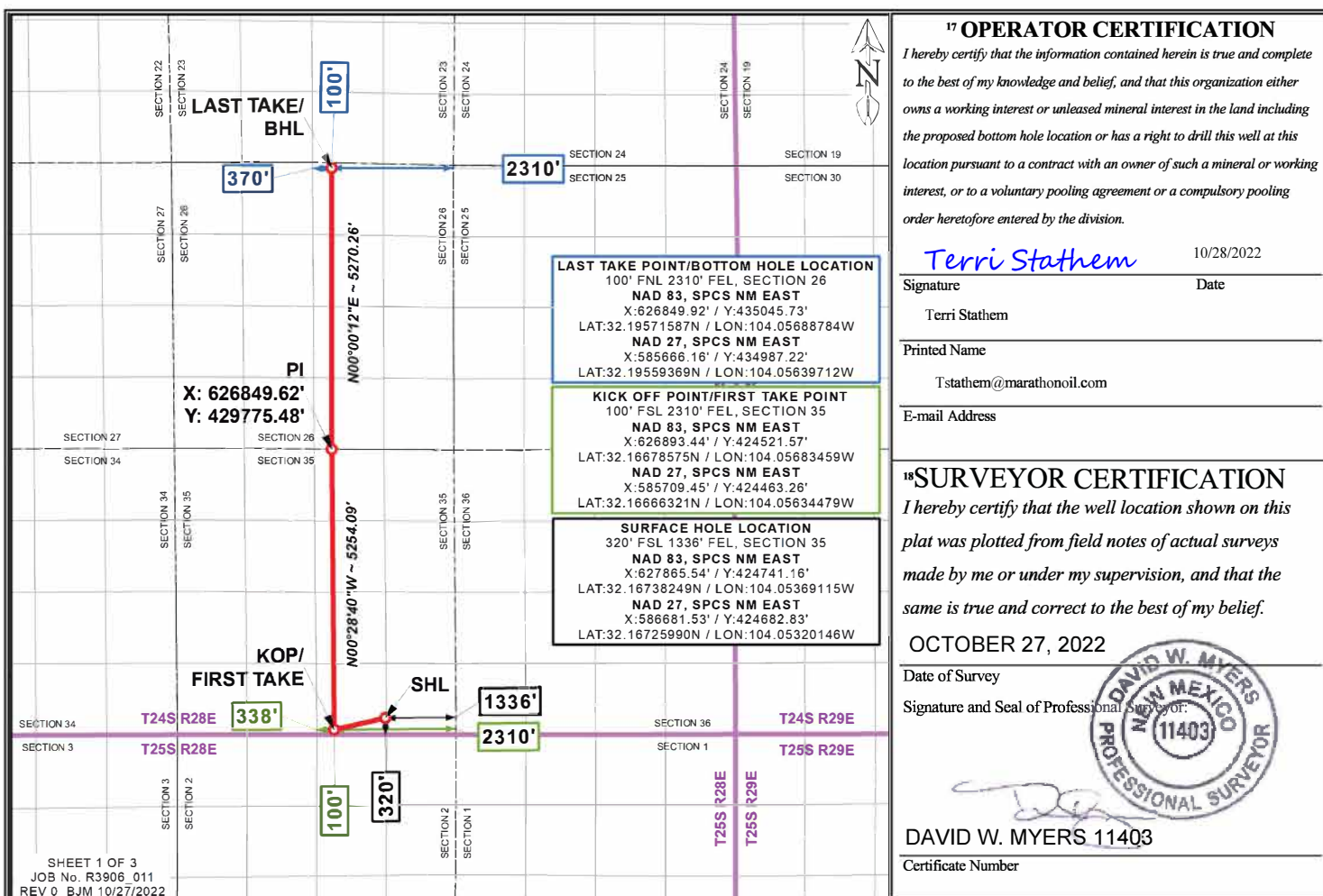
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	35	24S	28E		320	SOUTH	1336	EAST	EDDY

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	26	24S	28E		100	NORTH	2310	EAST	EDDY

<sup>12</sup> Dedicated Acres 640.0	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
----------------------------------------	-------------------------------	----------------------------------	-------------------------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



Distances/areas relative to NAD 83 Combined Scale Factor: 0.9997778 Convergence Angle: 0°08'28.5600"

## WELL PAD PLAT

RIPLEY 35 FED COM

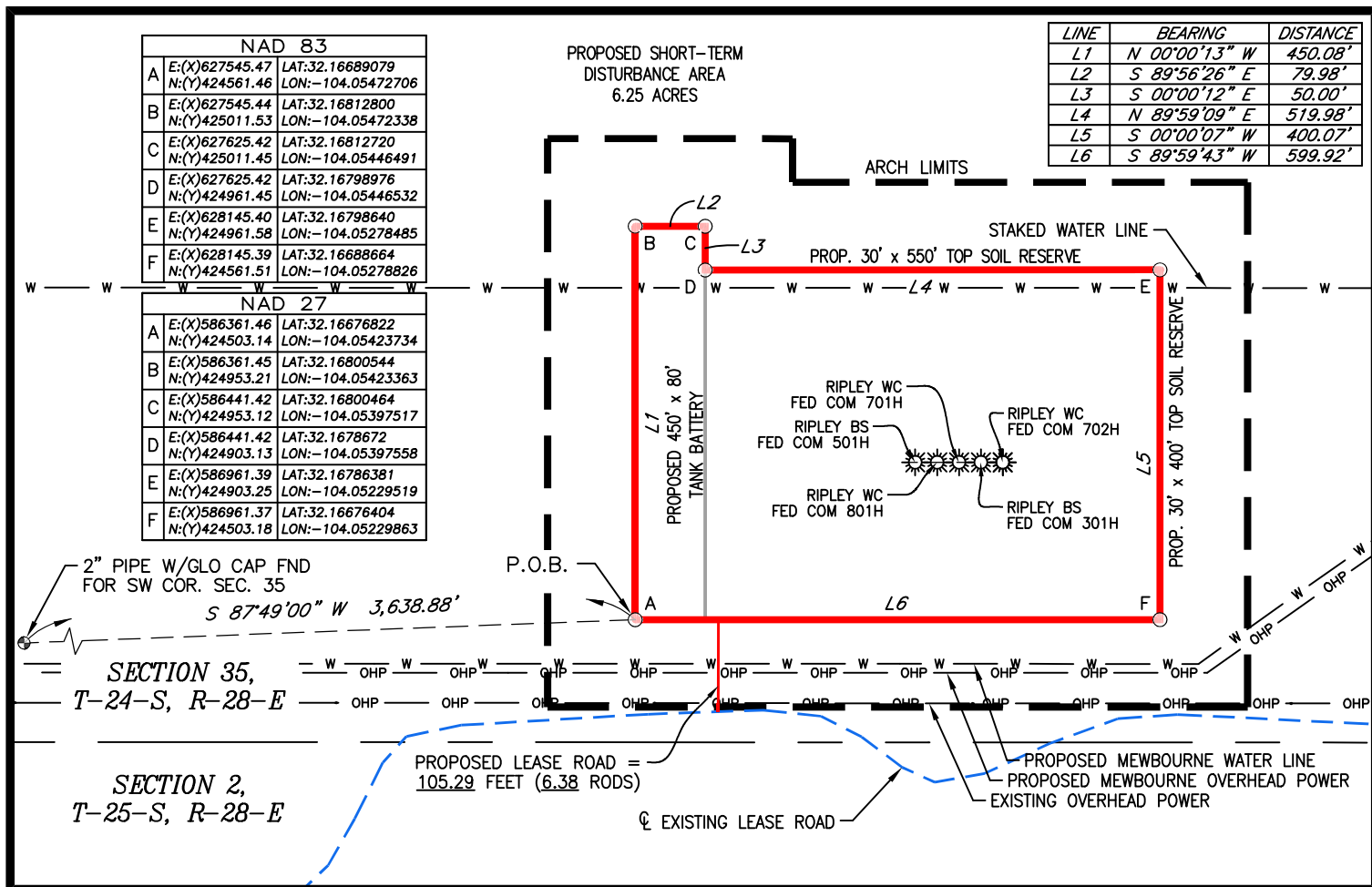
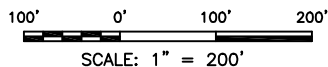
SEC. 35 TWP. 24-S RGE. 28-E

SURVEY: N.M.P.M.

COUNTY: EDDY

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: MALAGA, N.M.



OCTOBER 27, 2022

DAVID W. MYERS 11403



PLAT FOR A SURFACE SITE ON THE PROPERTY OF  
DEVON ENERGY  
PRODUCTION CO. LP.  
EDDY COUNTY, NEW MEXICO

**BASIS OF BEARING**  
ALL BEARINGS AND COORDINATES  
REFER TO NAD 83, NEW MEXICO  
STATE PLANE COORDINATE  
SYSTEM, EAST ZONE, U.S. SURVEY  
FEET. (ALL BEARINGS AND  
DISTANCES ARE GRID  
MEASUREMENTS.)

**LEGEND**

P.O.B. POINT OF BEGINNING

**R3906\_001**

— — — — — EXISTING ROAD  
— — — — — PROPOSED ROAD  
— — — — — SURFACE SITE EDGE  
— — — — — EXIST. PIPELINE  
— — — — — MONUMENT  
— — — — — WELL

— x — x — ARCH LIMITS  
— - - - - FENCE  
— - - - - SECTION LINE  
— W — WATER LINE  
— OHP — OVERHEAD POWER

REV.	DATE	DESCRIPTION	BY	CHKD
10	10/20/2022	RENAME WELLS	ANC	MWS
SHEET 3 of 7				
DRAWN BY: JCS				
DATE: 05/16/2018				
CHECKED BY: MWS				



510 TRENTON ST.  
WEST MONROE, LA 71291  
(318) 323-6900  
FAX (318) 362-0064



# WELL PAD PLAT

RIPLEY 35 FED COM  
SEC. 35 TWP. 24-S RGE. 28-E  
SURVEY: N.M.P.M.  
COUNTY: EDDY  
OPERATOR: MARATHON OIL PERMIAN LLC  
U.S.G.S. TOPOGRAPHIC MAP: MALAGA, N.M.

## FIELD NOTES DESCRIBING

*A tract of land being 5.60 acres. Said tract being located in Section 35, Township 24 South, Range 28 East, New Mexico Principal Meridian, Eddy County, New Mexico.*

Being more particularly described by metes and bounds as follows:

*BEGINNING* at a point from which a 2 inch pipe with GLO cap found for the Southwest corner of said Section 35 bears S 87°49'00" W a distance of 3,638.88 feet.

### THENCE

N 00°00'13" W a distance of 450.08 feet, S 89°56'26" E a distance of 79.98 feet,  
S 00°00'12" E a distance of 50.00 feet, N 89°59'09" E a distance of 519.98 feet,  
S 00°00'07" W a distance of 400.07 feet to the Southeast corner of this tract and  
S 89°59'43" W a distance of 599.92 feet to the *POINT OF BEGINNING*.

The total area of the herein described tract contains 5.60 acres of land.

All bearings and coordinates refer to NAD 83, New Mexico State Plane Coordinate System, East Zone, U.S. Survey Feet. (All bearings, distances, coordinates and areas are based on grid measurements utilizing a combined scale factor of 0.9997778, convergence angle of 0.14126667°.)

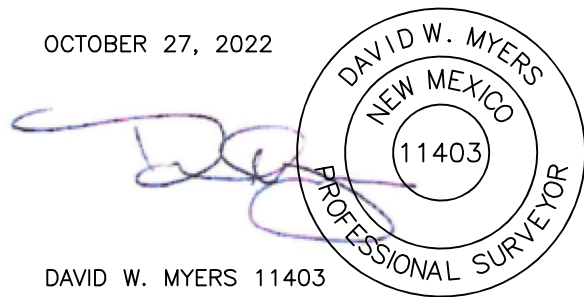
Title information furnished by Marathon Oil Permian LLC.

Reference accompanying Certificate of Survey prepared in conjunction with this legal description for easement.

STATE OF NEW MEXICO  
COUNTY OF EDDY

I, David W. Myers, New Mexico Professional Surveyor No. 11403 do hereby certify that this easement survey plat and the actual survey on the ground upon which it is based were performed by me or under my direct supervision; that I am responsible for this survey; that this survey meets the minimum standards for surveying in New Mexico; and that it is true and correct to the best of my knowledge and belief. I further certify that this survey is not a land division or subdivision as defined in the New Mexico Subdivision Act and that this instrument is an easement survey plat crossing an existing tract or tracts.

OCTOBER 27, 2022



DAVID W. MYERS 11403



PLAT FOR A SURFACE SITE ON THE PROPERTY OF  
DEVON ENERGY  
PRODUCTION CO. LP.  
EDDY COUNTY, NEW MEXICO

**BASIS OF BEARING**  
ALL BEARINGS AND COORDINATES REFER TO NAD 83, NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET. (ALL BEARINGS AND DISTANCES ARE GRID MEASUREMENTS.)

### LEGEND

P.O.B. POINT OF BEGINNING

— x — x — ARCH LIMITS

— — — — — FENCE

— — — — — SECTION LINE

— — — — — WATER LINE

— — — — — OVERHEAD POWER

⊙ MONUMENT

☀ WELL

R3906\_001

REV.	DATE	DESCRIPTION	BY	CHKD
10	10/20/2022	RENAME WELLS	ANC	MWS
SHEET 4 of 7				
DRAWN BY: JCS				
DATE: 05/16/2018				
CHECKED BY: MWS				



510 TRENTON ST.  
WEST MONROE, LA 71291  
(318) 323-6900  
FAX (318) 362-0064

**LEGEND**

PROPOSED WELL PAD	—————
ARCH SURVEY LIMITS	——— ———
PROPOSED LEASE ROAD	—————
EXISTING ROAD	- - - - -
SECTION LINE	——— - - ———
WATER LINE	——— W ———
OVERHEAD POWER	——— OHP ———

**WELL LOCATION PLAT**

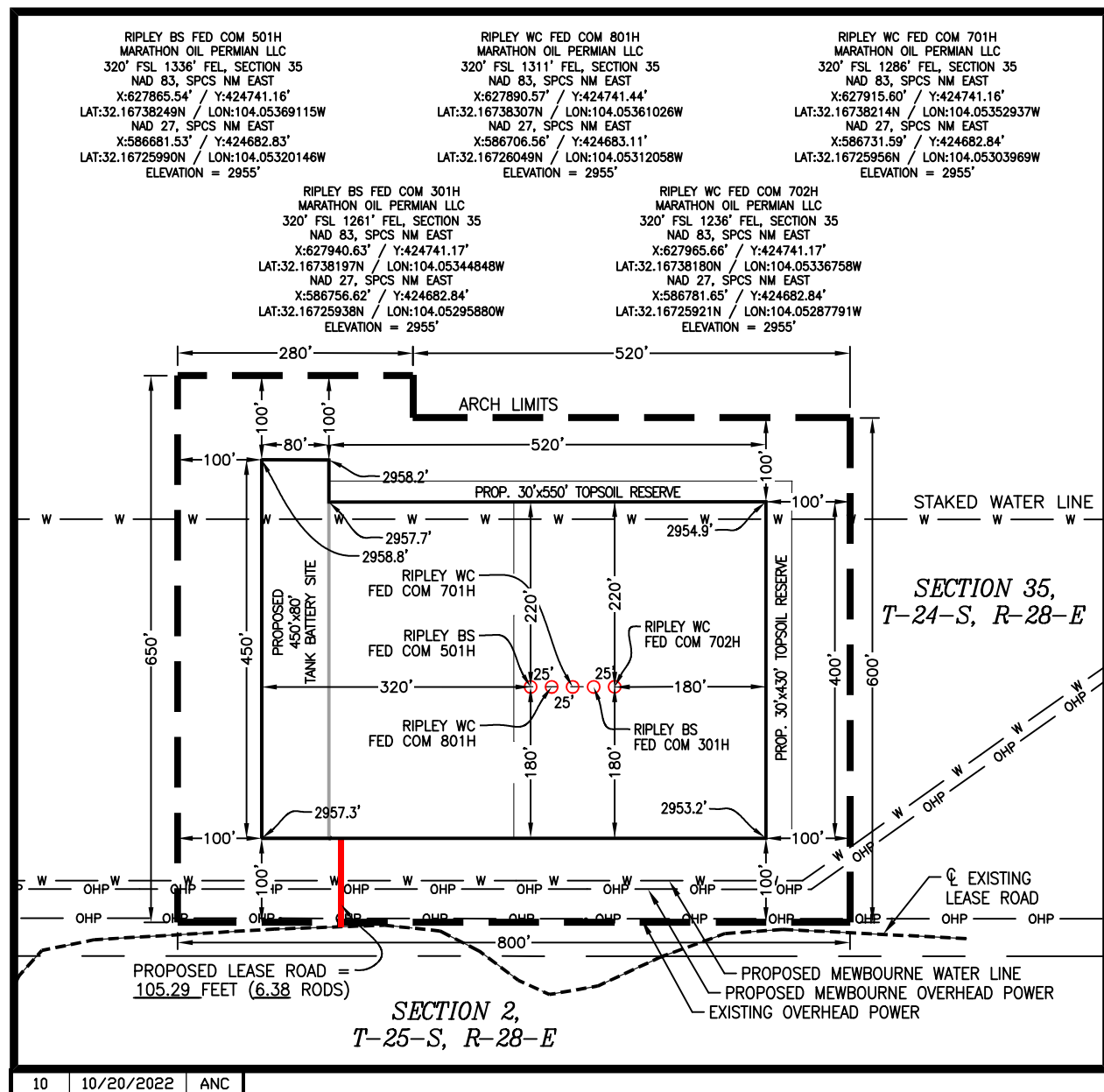
RIPLEY 35 FED COM  
SEC. 35 TWP. 24-S RGE. 28-E

SURVEY: N.M.P.M.

COUNTY: EDDY

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: MALAGA, N.M.



10 10/20/2022 ANC

OCTOBER 27, 2022

**NOTE:**

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA SHOWN IS FROM STATE OF NEW MEXICO OIL CONSERVATION DIVISION FORM C-102 INCLUDED IN THIS SUBMITTAL.

DAVID W. MYERS 11403



SHEET 5 of 7

PREPARED BY:  
R-SQUARED GLOBAL, LLC  
510 TRENTON STREET, WEST MONROE, LA 71291  
318-323-6900 OFFICE  
JOB No. R3906\_001

100' 0' 100' 200'  
SCALE: 1" = 200'

MARATHON OIL PERMIAN, LLC.  
**DRILLING AND OPERATIONS PLAN**



WELL NAME &amp; NUMBER:

**RIPLEY BS FED COM 501H**

LOCATION:

SECTION **35**  
**EDDY**TOWNSHIP **24S**  
COUNTY,RANGE **28E**  
**NEW MEXICO****Section 1:****GEOLOGICAL FORMATIONS**

Name of Surface Formation:

Permian

Elevation:

2955 feet

**Estimated Tops of Important Geological Markers:**

Formation	TVD (ft)	MD (ft)	Elevation (ft SS)	Lithologies	Mineral Resources	Producing Formation?
Rustler	89	89	2171	Anhydrite	Brine	No
Salado	750	750	1720	Salt/Anhydrite	Brine	No
Castile	1009	1009	-354	Salt/Anhydrite	Brine	No
Base of Salt (BX)	2688	2688	-2121	Salt/Anhydrite	Brine	No
Lamar	2688	2688	-2121	Sandstone/Shale	None	No
Bell Canyon	2721	2721	-2146	Sandstone	Oil	No
Cherry Canyon	3600	3600	-3446	Sandstone	Oil	No
Brushy Canyon	4880	4880	-4609	Sandstone	Oil	No
Bone Spring Lime	6434	6434	-6055	Limestone	None	No
Upper Avalon Shale	6480	6480	-6093	Shale	Oil	Yes
1st Bone Spring Sand	7357	7357	-7390	Sandstone	Oil	Yes
2nd Bone Spring Carbonate	7633	7633	-7593	Limestone/Shale	None	No
2nd Bone Spring Sand	7980	7980	-7904	Sandstone	Oil	Yes
3rd Bone Spring Carbonate	8612	8612	-8373	Limestone	Oil	No
3rd Bone Spring Sand	9259	9259	-8964	Sandstone	Oil	Yes
Wolfcamp	9626	9626	-9368	Sandstone/Shale/Carbonates	Natural Gas / Oil	Yes
Wolfcamp A	9773	9773	-9493	Sandstone/Shale/Carbonates	Natural Gas / Oil	Yes
Wolfcamp B	10065	10065	-9822	Sandstone/Shale/Carbonates	Natural Gas / Oil	No
Wolfcamp C	10334	10334	-10140	Sandstone/Shale/Carbonates	Natural Gas / Oil	No
Wolfcamp D	10843	10843	-10531	Sandstone/Shale/Carbonates	Natural Gas / Oil	No

**Section 2:****BLOWOUT PREVENTER TESTING PROCEDURE**

Pressure Rating (PSI):

10M

Rating Depth:

10000

Equipment:

13 5/8 BOP Annular (5,000 psi WP) and BOP Stack (10,000 psi WP) will be installed and tested before drilling all holes.

Requesting Variance?

Yes

Variance Request:

A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.

Testing Procedure:

BOP/BOPE will be tested to 250 psi low and a high of 100% WP for the Annular and 5,000psi for the BOP Stacking before drilling the intermediate hole, 10,000psi for the BOP Stacking before drilling the production hole. Testing will be conducted by an independent service company per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the Equipment Description above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock, full opening safety valve / inside BOP and choke lines and choke manifold. See attached schematics.

Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i. A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. See attached schematic.



Marathon Oil Permian LLC.

Drilling &amp; Operations Plan - Page 2 of 4

**Section 3:****CASING PROGRAM**

String Type	Hole Size	Casing Size	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Weight (lbs/ft)	Grade	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
Surface	17.5	13.375	0	500	0	500	2955	2455	54.5	J55	BTC	1.00	1.15	BUOY	1.30	BUOY	1.30
Intermediate	12.25	9.625	0	7858	0	7727	2955	-4772	40	P110HC	BTC	1.00	1.15	BUOY	1.30	BUOY	1.30
Production	8.75	5.5	0	18859	0	8400	2955	-5445	23	P110HC	TLW	1.00	1.15	BUOY	1.30	BUOY	1.30
All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h												Safety Factors will Meet or Exceed					

**Casing Condition:** New  
**Casing Standard:** API  
**Tapered String?** No

Yes or No

Is casing new? If used, attach certification as required in Onshore Order #1.	Yes
Does casing meet API specifications? If no, attach casing specification sheet.	Yes
Is premium or uncommon casing planned? If yes attach casing specification sheet.	No
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Yes
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Yes
Is well located within Capitan Reef?	No
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is proposed well within the designated four string boundary?	
Is well located in R-111-P and SOPA?	No
If yes, are the first three strings cemented to surface?	
Is the second string set 100' to 600' below the base of salt?	
Is well located in SOPA but not in R-111-P?	No
If yes, are the first 2 strings cemented to surface and third string cement tied back 500' into previous casing?	
Is well located in high Cave/Karst?	No
If yes, are there two strings cemented to surface?	
If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	No
If yes, are there three strings cemented to surface?	

**Section 4:****CEMENT PROGRAM**

String Type	Lead/Tail	Top MD	Bottom MD	Quantity (sks)	Yield (ft³/sks)	Density (ppg)	Slurry Volume (ft³)	Excess (%)	Cement Type	Additives
Surface	Lead	0	200	105	2.12	12.5	222	25	Class C	Extender, Accelerator, LCM
Surface	Tail	200	500	197	1.32	14.8	260	25	Class C	Accelerator
Intermediate	Lead	0	7358	1336	2.18	12.4	2912	25	Class C	Extender, Accelerator, LCM
Intermediate	Tail	7358	7858	147	1.33	14.8	196	25	Class C	Retarder
Production	Tail	7558	18859	2165	1.68	13	3637	25	Class H	Retarder, Extender, Fluid Loss, Suspension Agent

Stage tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. Stage tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

**Pilot Hole?** No  
**Pilot Hole Depth:** N/A  
**KOP Depth:** N/A  
**Plugging Procedure for Pilot Hole:** N/A

Plug Top	Plug Bottom	Excess (%)	Quantity (sx)	Density (ppg)	Yield (ft³/sks)	Water gal/sk	Slurry Description and Cement Type

Marathon Oil Permian LLC.

Drilling &amp; Operations Plan - Page 3 of 4

**Section 5:****CIRCULATING MEDIUM**

**Mud System Type:** Closed  
**Will an air or gas system be used?** No

**Describe what will be on location to control well or mitigate other conditions:**

The necessary mud products for additional weight and fluid loss control will be on location at all times.

**Describe the mud monitoring system utilized:**

Losses or gains in the mud system will be monitored visually/manually as well as with an electronic PVT.

**Circulating Medium Table:**

Top Depth	Bottom Depth	Mud Type	Min. Weight (ppg)	Max Weight (ppg)
0	500	Water Based Mud	8.4	8.8
500	7858	Brine or Oil Based Mud	9.2	10.2
7858	18859	Oil Based Mud	10.5	12.5

**Section 6:****TESTING, LOGGING, CORING****List of production tests including testing procedures, equipment and safety measures:**

GR from TD to surface (horizontal well - vertical portion of hole)

**List of open and cased hole logs run in the well:**

GR while drilling from Intermediate casing shoe to TD.

**Coring operation description for the well:**

Run gamma-ray (GR) and corrected neutron log (CNL) or analogous to surface for future development of the area, one per shared well pad not to exceed 200' radial distance.

**Section 7:****ANTICIPATED PRESSURE**

**Anticipated Bottom Hole Pressure:** 5460 PSI  
**Anticipated Bottom Hole Temperature:** 195 °F  
**Anticipated Abnormal Pressure?** No  
**Anticipated Abnormal Temperature?** No

**Potential Hazards:**

H2S detection equipment will be in operation after drilling out the surface casing shoe until the production casing has been cemented. Breathing equipment will be on location from drilling out the surface shoe until production casing is cemented. If H2S is encountered the operator will comply with Onshore Order #6. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. See attached H2S Contingency Plan.

**Section 8:****OTHER INFORMATION****Auxiliary Well Control and Monitoring Equipment:**

A Kelly cock will be in the drill string at all times. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor unobstructed and readily accessible at all times.

Hydrogen Sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production casing is cemented. Breathing equipment will be on location upon drilling the surface casing shoe until total depth is reached. If Hydrogen Sulfide is encountered, measured amounts and formations will be reported to the BLM.

**Anticipated Starting Date and Duration of Operations:**

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as possible after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 30 days.

Project: Eddy County, NM (NAD27-NME)  
 Site: Ripley BS Fed Com Pad  
 Well: Ripley BS Fed Com 501H  
 Wellbore: OH  
 Design: Plan 1 11-02-22  
 Rig: Cactu 169



Azimuths to Grid North  
 True North: -0.15°  
 Magnetic North: 6.48°  
 Magnetic Field  
 Strength: 475.25 nT  
 Dip Angle: 59.78°  
 Date: 12/31/2022  
 Model: MVHD

Ripley BS Fed Com 501H

BHL - Ripley BS Fed Com 501H  
 TD at 18559.30

#### WELL DETAILS

	+N/S	+E/W	Nothing	East	2955.00
	0.00	42.6820 N	58681.53	32° 10' 2.13520 N	104° 3' 11.52525 W

#### DESIGN TARGET DETAILS

Name	TVD	+N/S	+E/W	Nothing	East	2955.00
FTP - Ripley BS Fed Com 501H	4833.60	-219.57	-972.08	42.6820 N	58681.53	32° 10' 2.13520 N
BHL - Ripley BS Fed Com 501H	8400.00	10304.39	-1015.37	43.98722	58570.45	32° 11' 44.13717 N

#### SECTION DETAILS

Sec	ID	Inc	Azi	TVD	+N/S	+E/W	Diag	Tra	VSe	Target	Annotation
1	1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP Begin 2.00°/100° Build
2	2099.96	16.00	254.48	2099.96	-29.68	-106.32	2.00	254.48	-29.28	2.00	Hold 16.00° Inc at 254.48° Azm
3	4951.23	16.00	254.48	4951.23	-29.68	-106.32	2.00	254.48	-29.28	2.00	Begin 2.00°/100° Drop
4	5751.18	0.00	0.00	5751.18	0.00	0.00	0.00	0.00	0.00	0.00	Begin Vertical Hold
5	7951.19	0.00	0.00	7951.19	0.00	0.00	0.00	0.00	0.00	0.00	KOP2 Begin 10.00°/100° Build
6	8655.19	90.00	359.76	8655.19	90.00	359.76	10.00	359.76	307.44	10.00	LP Hold 90.00° Inc at 359.76° Azm
7	18559.30	50.00	359.76	18559.30	50.00	359.76	10.00	359.76	307.44	10.00	TD at 18559.30



Ground Level: 2955.00

Ripley BS Fed Com 501H

TD at 18559.30

FTP - Ripley BS Fed Com 501H

TD at 18559.30

Begin 2.00°/100° Drop

Begin Vertical Hold

Begin Vertical Hold

Begin Vertical Hold

Begin Vertical Hold

Begin Vertical Hold

Begin Vertical Hold

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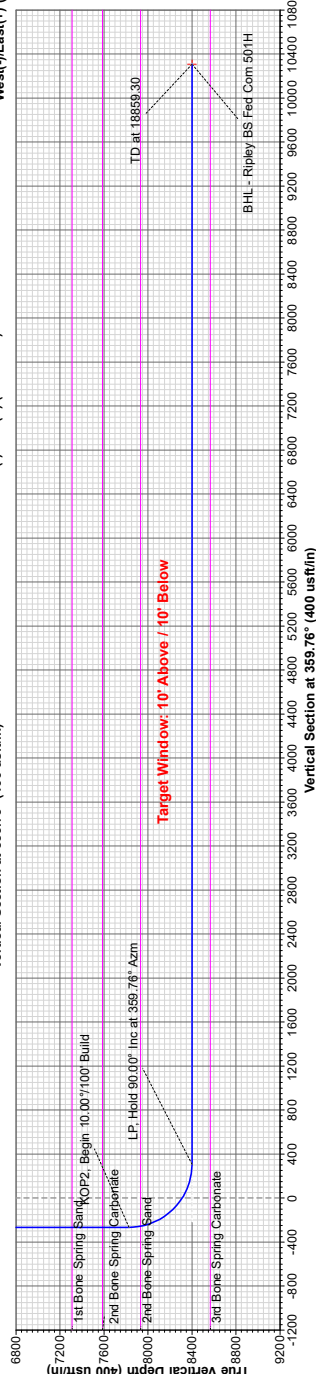
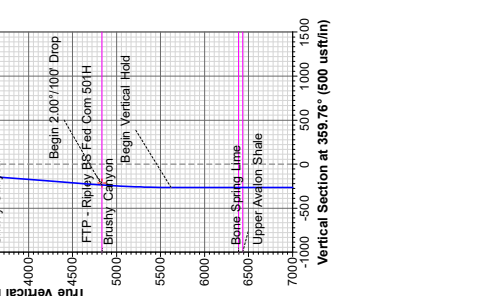
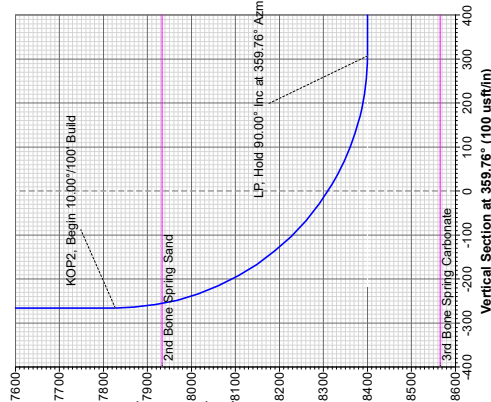
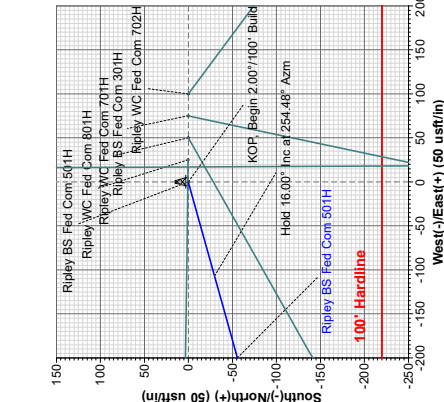
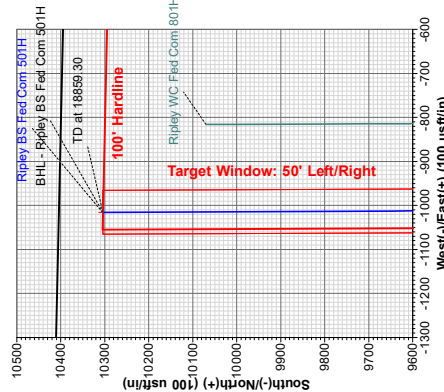
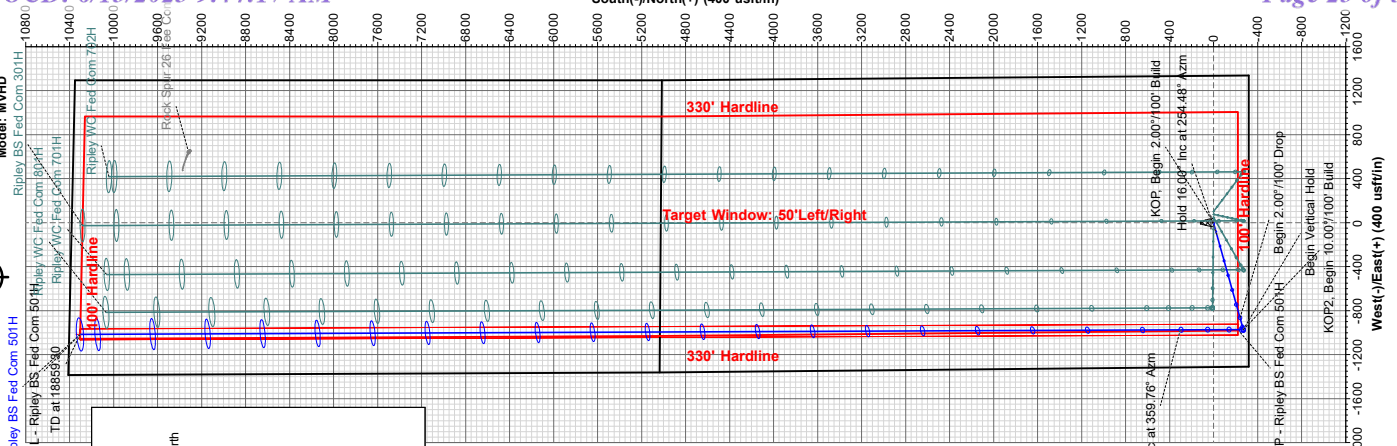
Begin Vertical Hold

Begin Vertical Hold

Begin Vertical Hold

Begin Vertical Hold

Map System: US State Plane 1927 (Exact solution)  
 Datum: NAD 1927 (NADCON CONUS)  
 Ellipsoid: Clarke 1866  
 Zone Name: New Mexico East 3001  
 Local Origin: Well Ripley BS Fed Com 501H, Grid North  
 Latitude: 32° 10' 2.13520 N  
 Longitude: 104° 3' 11.52525 W  
 Grid East: 58681.53  
 Grid North: 424682.83  
 Scale Factor: 1.000  
 Geomagnetic Model: MVHD  
 Sample Date: 31-Dec-22  
 Magnetic Declination: 6.631°  
 Dip Angle from Horizontal: 59.779°  
 Magnetic Field Strength: 475.25560979nT  
 To convert a Magnetic Direction to a Grid Direction, Add 6.48°  
 To convert a True Direction to a Grid Direction, Subtract 0.149°





# **Marathon Oil Permian LLC**

**Eddy County, NM (NAD27-NME)**

**Ripley Fed Com Pad**

**Ripley BS Fed Com 501H**

**OH**

**Plan: Plan 1 11-02-22**

## **Standard Planning Report**

**02 November, 2022**





# Phoenix Planning Report



<b>Database:</b>	USA Compass	<b>Local Co-ordinate Reference:</b>	Well Ripley BS Fed Com 501H
<b>Company:</b>	Marathon Oil Permian LLC	<b>TVD Reference:</b>	RKB @ 2978.60usft (Cactu 169)
<b>Project:</b>	Eddy County, NM (NAD27-NME)	<b>MD Reference:</b>	RKB @ 2978.60usft (Cactu 169)
<b>Site:</b>	Ripley Fed Com Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	Ripley BS Fed Com 501H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1 11-02-22		

<b>Project</b>	Eddy County, NM (NAD27-NME)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	New Mexico East 3001		

Site		Ripley Fed Com Pad			
Site Position:		Northing:	424,682.84 usft	Latitude:	32° 10' 2.133784 N
From:	Map	Easting:	586,756.62 usft	Longitude:	104° 3' 10.651717 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.149 °

Well	Ripley BS Fed Com 501H					
Well Position	+N/-S	-0.01 usft	Northing:	424,682.83 usft	Latitude:	32° 10' 2.135620 N
	+E/-W	-75.09 usft	Easting:	586,681.53 usft	Longitude:	104° 3' 11.525325 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	2,955.00 usft

<b>Wellbore</b>	OH				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	12/31/2022	6.631	59.779	47,525.56360978

<b>Design</b>	Plan 1 11-02-22				
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<b>Audit Notes:</b>					
<b>Version:</b>		<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	359.76	

<b>Plan Survey Tool Program</b>	<b>Date</b>	11/2/2022			
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>	
1	0.00	18,859.30	Plan 1 11-02-22 (OH)	MWD+HRGM	
				OWSG MWD + HRGM	

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.000	
2,099.96	16.00	254.48	2,089.60	-29.68	-106.92	2.00	2.00	0.00	254.485	
4,951.23	16.00	254.48	4,830.43	-239.90	-864.16	0.00	0.00	0.00	0.000	
5,751.18	0.00	0.00	5,620.03	-269.59	-971.08	2.00	-2.00	0.00	180.000	
7,958.19	0.00	0.00	7,827.04	-269.59	-971.08	0.00	0.00	0.00	0.000	
8,858.19	90.00	359.76	8,400.00	303.37	-973.48	10.00	10.00	0.00	359.760	
18,859.30	90.00	359.76	8,400.00	10,304.39	-1,015.37	0.00	0.00	0.00	0.000	BHL - Ripley BS Fe



# Phoenix Planning Report



<b>Database:</b>	USA Compass	<b>Local Co-ordinate Reference:</b>	Well Ripley BS Fed Com 501H
<b>Company:</b>	Marathon Oil Permian LLC	<b>TVD Reference:</b>	RKB @ 2978.60usft (Cactu 169)
<b>Project:</b>	Eddy County, NM (NAD27-NME)	<b>MD Reference:</b>	RKB @ 2978.60usft (Cactu 169)
<b>Site:</b>	Ripley Fed Com Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	Ripley BS Fed Com 501H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1 11-02-22		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42.60	0.00	0.00	42.60	0.00	0.00	0.00	0.00	0.00	0.00
<b>Rustler</b>									
703.60	0.00	0.00	703.60	0.00	0.00	0.00	0.00	0.00	0.00
<b>Salado</b>									
962.60	0.00	0.00	962.60	0.00	0.00	0.00	0.00	0.00	0.00
<b>Castile</b>									
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>KOP, Begin 2.00°/100' Build</b>									
1,400.00	2.00	254.48	1,399.98	-0.47	-1.68	-0.46	2.00	2.00	0.00
1,500.00	4.00	254.48	1,499.84	-1.87	-6.72	-1.84	2.00	2.00	0.00
1,600.00	6.00	254.48	1,599.45	-4.20	-15.12	-4.13	2.00	2.00	0.00
1,700.00	8.00	254.48	1,698.70	-7.46	-26.86	-7.35	2.00	2.00	0.00
1,800.00	10.00	254.48	1,797.47	-11.64	-41.94	-11.47	2.00	2.00	0.00
1,900.00	12.00	254.48	1,895.62	-16.75	-60.32	-16.49	2.00	2.00	0.00
2,000.00	14.00	254.48	1,993.06	-22.76	-82.00	-22.42	2.00	2.00	0.00
2,099.96	16.00	254.48	2,089.60	-29.68	-106.92	-29.23	2.00	2.00	0.00
<b>Hold 16.00° Inc at 254.48° Azm</b>									
2,100.00	16.00	254.48	2,089.64	-29.69	-106.93	-29.24	0.00	0.00	0.00
2,200.00	16.00	254.48	2,185.77	-37.06	-133.49	-36.50	0.00	0.00	0.00
2,300.00	16.00	254.48	2,281.90	-44.43	-160.05	-43.76	0.00	0.00	0.00
2,400.00	16.00	254.48	2,378.02	-51.80	-186.61	-51.02	0.00	0.00	0.00
2,500.00	16.00	254.48	2,474.15	-59.18	-213.16	-58.28	0.00	0.00	0.00
2,600.00	16.00	254.48	2,570.28	-66.55	-239.72	-65.55	0.00	0.00	0.00
2,674.20	16.00	254.48	2,641.60	-72.02	-259.43	-70.93	0.00	0.00	0.00
<b>Base of Salt (BX) - Lamar</b>									
2,700.00	16.00	254.48	2,666.40	-73.92	-266.28	-72.81	0.00	0.00	0.00
2,708.53	16.00	254.48	2,674.60	-74.55	-268.54	-73.43	0.00	0.00	0.00
<b>Bell Canyon</b>									
2,800.00	16.00	254.48	2,762.53	-81.30	-292.84	-80.07	0.00	0.00	0.00
2,900.00	16.00	254.48	2,858.66	-88.67	-319.40	-87.33	0.00	0.00	0.00
3,000.00	16.00	254.48	2,954.78	-96.04	-345.95	-94.59	0.00	0.00	0.00
3,100.00	16.00	254.48	3,050.91	-103.41	-372.51	-101.85	0.00	0.00	0.00
3,200.00	16.00	254.48	3,147.04	-110.79	-399.07	-109.11	0.00	0.00	0.00
3,300.00	16.00	254.48	3,243.16	-118.16	-425.63	-116.38	0.00	0.00	0.00
3,400.00	16.00	254.48	3,339.29	-125.53	-452.18	-123.64	0.00	0.00	0.00
3,500.00	16.00	254.48	3,435.42	-132.91	-478.74	-130.90	0.00	0.00	0.00
3,600.00	16.00	254.48	3,531.54	-140.28	-505.30	-138.16	0.00	0.00	0.00
3,622.95	16.00	254.48	3,553.60	-141.97	-511.39	-139.83	0.00	0.00	0.00
<b>Cherry Canyon</b>									
3,700.00	16.00	254.48	3,627.67	-147.65	-531.86	-145.42	0.00	0.00	0.00
3,800.00	16.00	254.48	3,723.80	-155.02	-558.42	-152.68	0.00	0.00	0.00
3,900.00	16.00	254.48	3,819.92	-162.40	-584.97	-159.95	0.00	0.00	0.00
4,000.00	16.00	254.48	3,916.05	-169.77	-611.53	-167.21	0.00	0.00	0.00
4,100.00	16.00	254.48	4,012.17	-177.14	-638.09	-174.47	0.00	0.00	0.00
4,200.00	16.00	254.48	4,108.30	-184.52	-664.65	-181.73	0.00	0.00	0.00
4,300.00	16.00	254.48	4,204.43	-191.89	-691.20	-188.99	0.00	0.00	0.00
4,400.00	16.00	254.48	4,300.55	-199.26	-717.76	-196.25	0.00	0.00	0.00
4,500.00	16.00	254.48	4,396.68	-206.63	-744.32	-203.51	0.00	0.00	0.00
4,600.00	16.00	254.48	4,492.81	-214.01	-770.88	-210.78	0.00	0.00	0.00
4,700.00	16.00	254.48	4,588.93	-221.38	-797.44	-218.04	0.00	0.00	0.00
4,800.00	16.00	254.48	4,685.06	-228.75	-823.99	-225.30	0.00	0.00	0.00
4,900.00	16.00	254.48	4,781.19	-236.13	-850.55	-232.56	0.00	0.00	0.00



# Phoenix Planning Report



<b>Database:</b>	USA Compass	<b>Local Co-ordinate Reference:</b>	Well Ripley BS Fed Com 501H
<b>Company:</b>	Marathon Oil Permian LLC	<b>TVD Reference:</b>	RKB @ 2978.60usft (Cactu 169)
<b>Project:</b>	Eddy County, NM (NAD27-NME)	<b>MD Reference:</b>	RKB @ 2978.60usft (Cactu 169)
<b>Site:</b>	Ripley Fed Com Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	Ripley BS Fed Com 501H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1 11-02-22		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,951.23	16.00	254.48	4,830.43	-239.90	-864.16	-236.28	0.00	0.00	0.00
<b>Begin 2.00°/100' Drop</b>									
4,954.52	15.93	254.48	4,833.60	-240.14	-865.03	-236.52	2.00	-2.00	0.00
<b>Brushy Canyon</b>									
5,000.00	15.02	254.48	4,877.43	-243.39	-876.72	-239.72	2.00	-2.00	0.00
5,100.00	13.02	254.48	4,974.44	-249.87	-900.07	-246.10	2.00	-2.00	0.00
5,200.00	11.02	254.48	5,072.24	-255.45	-920.14	-251.59	2.00	-2.00	0.00
5,300.00	9.02	254.48	5,170.71	-260.10	-936.91	-256.17	2.00	-2.00	0.00
5,400.00	7.02	254.48	5,269.73	-263.83	-950.36	-259.85	2.00	-2.00	0.00
5,500.00	5.02	254.48	5,369.17	-266.64	-960.47	-262.62	2.00	-2.00	0.00
5,600.00	3.02	254.48	5,468.92	-268.52	-967.23	-264.46	2.00	-2.00	0.00
5,700.00	1.02	254.48	5,568.85	-269.46	-970.64	-265.39	2.00	-2.00	0.00
5,751.18	0.00	0.00	5,620.03	-269.59	-971.08	-265.52	2.00	-2.00	0.00
<b>Begin Vertical Hold</b>									
6,518.75	0.00	0.00	6,387.60	-269.59	-971.08	-265.52	0.00	0.00	0.00
<b>Bone Spring Lime</b>									
6,564.75	0.00	0.00	6,433.60	-269.59	-971.08	-265.52	0.00	0.00	0.00
<b>Upper Avalon Shale</b>									
7,441.75	0.00	0.00	7,310.60	-269.59	-971.08	-265.52	0.00	0.00	0.00
<b>1st Bone Spring Sand</b>									
7,717.75	0.00	0.00	7,586.60	-269.59	-971.08	-265.52	0.00	0.00	0.00
<b>2nd Bone Spring Carbonate</b>									
7,958.19	0.00	0.00	7,827.04	-269.59	-971.08	-265.52	0.00	0.00	0.00
<b>KOP2, Begin 10.00°/100' Build</b>									
8,000.00	4.18	359.76	7,868.81	-268.06	-971.08	-263.99	10.00	10.00	0.00
8,065.38	10.72	359.76	7,933.60	-259.59	-971.12	-255.52	10.00	10.00	0.00
<b>2nd Bone Spring Sand</b>									
8,100.00	14.18	359.76	7,967.40	-252.13	-971.15	-248.06	10.00	10.00	0.00
8,200.00	24.18	359.76	8,061.73	-219.31	-971.29	-215.24	10.00	10.00	0.00
8,300.00	34.18	359.76	8,148.93	-170.62	-971.49	-166.55	10.00	10.00	0.00
8,400.00	44.18	359.76	8,226.35	-107.52	-971.76	-103.45	10.00	10.00	0.00
8,500.00	54.18	359.76	8,291.63	-31.94	-972.07	-27.87	10.00	10.00	0.00
8,600.00	64.18	359.76	8,342.80	53.83	-972.43	57.90	10.00	10.00	0.00
8,700.00	74.18	359.76	8,378.30	147.18	-972.82	151.25	10.00	10.00	0.00
8,800.00	84.18	359.76	8,397.05	245.27	-973.23	249.35	10.00	10.00	0.00
8,858.19	90.00	359.76	8,400.00	303.37	-973.48	307.44	10.00	10.00	0.00
<b>LP, Hold 90.00° Inc at 359.76° Azm</b>									
8,900.00	90.00	359.76	8,400.00	345.17	-973.65	349.25	0.00	0.00	0.00
9,000.00	90.00	359.76	8,400.00	445.17	-974.07	449.25	0.00	0.00	0.00
9,100.00	90.00	359.76	8,400.00	545.17	-974.49	549.25	0.00	0.00	0.00
9,200.00	90.00	359.76	8,400.00	645.17	-974.91	649.25	0.00	0.00	0.00
9,300.00	90.00	359.76	8,400.00	745.17	-975.33	749.25	0.00	0.00	0.00
9,400.00	90.00	359.76	8,400.00	845.17	-975.75	849.25	0.00	0.00	0.00
9,500.00	90.00	359.76	8,400.00	945.17	-976.17	949.25	0.00	0.00	0.00
9,600.00	90.00	359.76	8,400.00	1,045.17	-976.58	1,049.25	0.00	0.00	0.00
9,700.00	90.00	359.76	8,400.00	1,145.17	-977.00	1,149.25	0.00	0.00	0.00
9,800.00	90.00	359.76	8,400.00	1,245.17	-977.42	1,249.25	0.00	0.00	0.00
9,900.00	90.00	359.76	8,400.00	1,345.16	-977.84	1,349.25	0.00	0.00	0.00
10,000.00	90.00	359.76	8,400.00	1,445.16	-978.26	1,449.25	0.00	0.00	0.00
10,100.00	90.00	359.76	8,400.00	1,545.16	-978.68	1,549.25	0.00	0.00	0.00
10,200.00	90.00	359.76	8,400.00	1,645.16	-979.10	1,649.25	0.00	0.00	0.00
10,300.00	90.00	359.76	8,400.00	1,745.16	-979.52	1,749.25	0.00	0.00	0.00
10,400.00	90.00	359.76	8,400.00	1,845.16	-979.94	1,849.25	0.00	0.00	0.00





# Phoenix Planning Report



<b>Database:</b>	USA Compass	<b>Local Co-ordinate Reference:</b>	Well Ripley BS Fed Com 501H
<b>Company:</b>	Marathon Oil Permian LLC	<b>TVD Reference:</b>	RKB @ 2978.60usft (Cactu 169)
<b>Project:</b>	Eddy County, NM (NAD27-NME)	<b>MD Reference:</b>	RKB @ 2978.60usft (Cactu 169)
<b>Site:</b>	Ripley Fed Com Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	Ripley BS Fed Com 501H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1 11-02-22		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,500.00	90.00	359.76	8,400.00	1,945.16	-980.35	1,949.25	0.00	0.00	0.00
10,600.00	90.00	359.76	8,400.00	2,045.16	-980.77	2,049.25	0.00	0.00	0.00
10,700.00	90.00	359.76	8,400.00	2,145.16	-981.19	2,149.25	0.00	0.00	0.00
10,800.00	90.00	359.76	8,400.00	2,245.16	-981.61	2,249.25	0.00	0.00	0.00
10,900.00	90.00	359.76	8,400.00	2,345.16	-982.03	2,349.25	0.00	0.00	0.00
11,000.00	90.00	359.76	8,400.00	2,445.15	-982.45	2,449.25	0.00	0.00	0.00
11,100.00	90.00	359.76	8,400.00	2,545.15	-982.87	2,549.25	0.00	0.00	0.00
11,200.00	90.00	359.76	8,400.00	2,645.15	-983.29	2,649.25	0.00	0.00	0.00
11,300.00	90.00	359.76	8,400.00	2,745.15	-983.71	2,749.25	0.00	0.00	0.00
11,400.00	90.00	359.76	8,400.00	2,845.15	-984.12	2,849.25	0.00	0.00	0.00
11,500.00	90.00	359.76	8,400.00	2,945.15	-984.54	2,949.25	0.00	0.00	0.00
11,600.00	90.00	359.76	8,400.00	3,045.15	-984.96	3,049.25	0.00	0.00	0.00
11,700.00	90.00	359.76	8,400.00	3,145.15	-985.38	3,149.25	0.00	0.00	0.00
11,800.00	90.00	359.76	8,400.00	3,245.15	-985.80	3,249.25	0.00	0.00	0.00
11,900.00	90.00	359.76	8,400.00	3,345.15	-986.22	3,349.25	0.00	0.00	0.00
12,000.00	90.00	359.76	8,400.00	3,445.15	-986.64	3,449.25	0.00	0.00	0.00
12,100.00	90.00	359.76	8,400.00	3,545.15	-987.06	3,549.25	0.00	0.00	0.00
12,200.00	90.00	359.76	8,400.00	3,645.14	-987.48	3,649.25	0.00	0.00	0.00
12,300.00	90.00	359.76	8,400.00	3,745.14	-987.89	3,749.25	0.00	0.00	0.00
12,400.00	90.00	359.76	8,400.00	3,845.14	-988.31	3,849.25	0.00	0.00	0.00
12,500.00	90.00	359.76	8,400.00	3,945.14	-988.73	3,949.25	0.00	0.00	0.00
12,600.00	90.00	359.76	8,400.00	4,045.14	-989.15	4,049.25	0.00	0.00	0.00
12,700.00	90.00	359.76	8,400.00	4,145.14	-989.57	4,149.25	0.00	0.00	0.00
12,800.00	90.00	359.76	8,400.00	4,245.14	-989.99	4,249.25	0.00	0.00	0.00
12,900.00	90.00	359.76	8,400.00	4,345.14	-990.41	4,349.25	0.00	0.00	0.00
13,000.00	90.00	359.76	8,400.00	4,445.14	-990.83	4,449.25	0.00	0.00	0.00
13,100.00	90.00	359.76	8,400.00	4,545.14	-991.25	4,549.25	0.00	0.00	0.00
13,200.00	90.00	359.76	8,400.00	4,645.14	-991.66	4,649.25	0.00	0.00	0.00
13,300.00	90.00	359.76	8,400.00	4,745.13	-992.08	4,749.25	0.00	0.00	0.00
13,400.00	90.00	359.76	8,400.00	4,845.13	-992.50	4,849.25	0.00	0.00	0.00
13,500.00	90.00	359.76	8,400.00	4,945.13	-992.92	4,949.25	0.00	0.00	0.00
13,600.00	90.00	359.76	8,400.00	5,045.13	-993.34	5,049.25	0.00	0.00	0.00
13,700.00	90.00	359.76	8,400.00	5,145.13	-993.76	5,149.25	0.00	0.00	0.00
13,800.00	90.00	359.76	8,400.00	5,245.13	-994.18	5,249.25	0.00	0.00	0.00
13,900.00	90.00	359.76	8,400.00	5,345.13	-994.60	5,349.25	0.00	0.00	0.00
14,000.00	90.00	359.76	8,400.00	5,445.13	-995.02	5,449.25	0.00	0.00	0.00
14,100.00	90.00	359.76	8,400.00	5,545.13	-995.43	5,549.25	0.00	0.00	0.00
14,200.00	90.00	359.76	8,400.00	5,645.13	-995.85	5,649.25	0.00	0.00	0.00
14,300.00	90.00	359.76	8,400.00	5,745.13	-996.27	5,749.25	0.00	0.00	0.00
14,400.00	90.00	359.76	8,400.00	5,845.13	-996.69	5,849.25	0.00	0.00	0.00
14,500.00	90.00	359.76	8,400.00	5,945.12	-997.11	5,949.25	0.00	0.00	0.00
14,600.00	90.00	359.76	8,400.00	6,045.12	-997.53	6,049.25	0.00	0.00	0.00
14,700.00	90.00	359.76	8,400.00	6,145.12	-997.95	6,149.25	0.00	0.00	0.00
14,800.00	90.00	359.76	8,400.00	6,245.12	-998.37	6,249.25	0.00	0.00	0.00
14,900.00	90.00	359.76	8,400.00	6,345.12	-998.79	6,349.25	0.00	0.00	0.00
15,000.00	90.00	359.76	8,400.00	6,445.12	-999.20	6,449.25	0.00	0.00	0.00
15,100.00	90.00	359.76	8,400.00	6,545.12	-999.62	6,549.25	0.00	0.00	0.00
15,200.00	90.00	359.76	8,400.00	6,645.12	-1,000.04	6,649.25	0.00	0.00	0.00
15,300.00	90.00	359.76	8,400.00	6,745.12	-1,000.46	6,749.25	0.00	0.00	0.00
15,400.00	90.00	359.76	8,400.00	6,845.12	-1,000.88	6,849.25	0.00	0.00	0.00
15,500.00	90.00	359.76	8,400.00	6,945.12	-1,001.30	6,949.25	0.00	0.00	0.00
15,600.00	90.00	359.76	8,400.00	7,045.11	-1,001.72	7,049.25	0.00	0.00	0.00
15,700.00	90.00	359.76	8,400.00	7,145.11	-1,002.14	7,149.25	0.00	0.00	0.00
15,800.00	90.00	359.76	8,400.00	7,245.11	-1,002.56	7,249.25	0.00	0.00	0.00





# Phoenix Planning Report



<b>Database:</b>	USA Compass	<b>Local Co-ordinate Reference:</b>	Well Ripley BS Fed Com 501H
<b>Company:</b>	Marathon Oil Permian LLC	<b>TVD Reference:</b>	RKB @ 2978.60usft (Cactu 169)
<b>Project:</b>	Eddy County, NM (NAD27-NME)	<b>MD Reference:</b>	RKB @ 2978.60usft (Cactu 169)
<b>Site:</b>	Ripley Fed Com Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	Ripley BS Fed Com 501H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1 11-02-22		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
15,900.00	90.00	359.76	8,400.00	7,345.11	-1,002.97	7,349.25	0.00	0.00	0.00	
16,000.00	90.00	359.76	8,400.00	7,445.11	-1,003.39	7,449.25	0.00	0.00	0.00	
16,100.00	90.00	359.76	8,400.00	7,545.11	-1,003.81	7,549.25	0.00	0.00	0.00	
16,200.00	90.00	359.76	8,400.00	7,645.11	-1,004.23	7,649.25	0.00	0.00	0.00	
16,300.00	90.00	359.76	8,400.00	7,745.11	-1,004.65	7,749.25	0.00	0.00	0.00	
16,400.00	90.00	359.76	8,400.00	7,845.11	-1,005.07	7,849.25	0.00	0.00	0.00	
16,500.00	90.00	359.76	8,400.00	7,945.11	-1,005.49	7,949.25	0.00	0.00	0.00	
16,600.00	90.00	359.76	8,400.00	8,045.11	-1,005.91	8,049.25	0.00	0.00	0.00	
16,700.00	90.00	359.76	8,400.00	8,145.10	-1,006.33	8,149.25	0.00	0.00	0.00	
16,800.00	90.00	359.76	8,400.00	8,245.10	-1,006.74	8,249.25	0.00	0.00	0.00	
16,900.00	90.00	359.76	8,400.00	8,345.10	-1,007.16	8,349.25	0.00	0.00	0.00	
17,000.00	90.00	359.76	8,400.00	8,445.10	-1,007.58	8,449.25	0.00	0.00	0.00	
17,100.00	90.00	359.76	8,400.00	8,545.10	-1,008.00	8,549.25	0.00	0.00	0.00	
17,200.00	90.00	359.76	8,400.00	8,645.10	-1,008.42	8,649.25	0.00	0.00	0.00	
17,300.00	90.00	359.76	8,400.00	8,745.10	-1,008.84	8,749.25	0.00	0.00	0.00	
17,400.00	90.00	359.76	8,400.00	8,845.10	-1,009.26	8,849.25	0.00	0.00	0.00	
17,500.00	90.00	359.76	8,400.00	8,945.10	-1,009.68	8,949.25	0.00	0.00	0.00	
17,600.00	90.00	359.76	8,400.00	9,045.10	-1,010.10	9,049.25	0.00	0.00	0.00	
17,700.00	90.00	359.76	8,400.00	9,145.10	-1,010.51	9,149.25	0.00	0.00	0.00	
17,800.00	90.00	359.76	8,400.00	9,245.10	-1,010.93	9,249.25	0.00	0.00	0.00	
17,900.00	90.00	359.76	8,400.00	9,345.09	-1,011.35	9,349.25	0.00	0.00	0.00	
18,000.00	90.00	359.76	8,400.00	9,445.09	-1,011.77	9,449.25	0.00	0.00	0.00	
18,100.00	90.00	359.76	8,400.00	9,545.09	-1,012.19	9,549.25	0.00	0.00	0.00	
18,200.00	90.00	359.76	8,400.00	9,645.09	-1,012.61	9,649.25	0.00	0.00	0.00	
18,300.00	90.00	359.76	8,400.00	9,745.09	-1,013.03	9,749.25	0.00	0.00	0.00	
18,400.00	90.00	359.76	8,400.00	9,845.09	-1,013.45	9,849.25	0.00	0.00	0.00	
18,500.00	90.00	359.76	8,400.00	9,945.09	-1,013.86	9,949.25	0.00	0.00	0.00	
18,600.00	90.00	359.76	8,400.00	10,045.09	-1,014.28	10,049.25	0.00	0.00	0.00	
18,700.00	90.00	359.76	8,400.00	10,145.09	-1,014.70	10,149.25	0.00	0.00	0.00	
18,800.00	90.00	359.76	8,400.00	10,245.09	-1,015.12	10,249.25	0.00	0.00	0.00	
18,859.30	90.00	359.76	8,400.00	10,304.39	-1,015.37	10,308.55	0.00	0.00	0.00	
TD at 18859.30										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
FTP - Ripley BS Fed (	0.00	0.00	4,833.60	-219.57	-972.08	424,463.26	585,709.45	32° 9' 59.987578 N	04° 3' 22.841208 W	
- plan misses target center by 105.77usft at 4980.58usft MD (4858.69 TVD, -242.03 N, -871.81 E)										
- Point										
BHL - Ripley BS Fed (	0.00	359.76	8,400.00	10,304.39	-1,015.37	434,987.22	585,666.16	32° 11' 44.137318 N	04° 3' 23.029658 W	
- plan hits target center										
- Rectangle (sides W100.00 H10,524.05 D0.00)										



# Phoenix Planning Report



<b>Database:</b>	USA Compass	<b>Local Co-ordinate Reference:</b>	Well Ripley BS Fed Com 501H
<b>Company:</b>	Marathon Oil Permian LLC	<b>TVD Reference:</b>	RKB @ 2978.60usft (Cactu 169)
<b>Project:</b>	Eddy County, NM (NAD27-NME)	<b>MD Reference:</b>	RKB @ 2978.60usft (Cactu 169)
<b>Site:</b>	Ripley Fed Com Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	Ripley BS Fed Com 501H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1 11-02-22		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
42.60	42.60	Rustler		0.000	359.76	
703.60	703.60	Salado		0.000	359.76	
962.60	962.60	Castile		0.000	359.76	
2,674.20	2,641.60	Base of Salt (BX)		0.000	359.76	
2,674.20	2,641.60	Lamar		0.000	359.76	
2,708.53	2,674.60	Bell Canyon		0.000	359.76	
3,622.95	3,553.60	Cherry Canyon		0.000	359.76	
4,954.52	4,833.60	Brushy Canyon		0.000	359.76	
6,518.75	6,387.60	Bone Spring Lime		0.000	359.76	
6,564.75	6,433.60	Upper Avalon Shale		0.000	359.76	
7,441.75	7,310.60	1st Bone Spring Sand		0.000	359.76	
7,717.75	7,586.60	2nd Bone Spring Carbonate		0.000	359.76	
8,065.38	7,933.60	2nd Bone Spring Sand		0.000	359.76	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,300.00	1,300.00	0.00	0.00	KOP, Begin 2.00°/100' Build	
2,099.96	2,089.60	-29.68	-106.92	Hold 16.00° Inc at 254.48° Azm	
4,951.23	4,830.43	-239.90	-864.16	Begin 2.00°/100' Drop	
5,751.18	5,620.03	-269.59	-971.08	Begin Vertical Hold	
7,958.19	7,827.04	-269.59	-971.08	KOP2, Begin 10.00°/100' Build	
8,858.19	8,400.00	303.37	-973.48	LP, Hold 90.00° Inc at 359.76° Azm	
18,859.30	8,400.00	10,304.39	-1,015.37	TD at 18859.30	

**Exhibit B**

---

**From:** Tyler Jolly <tjolly@mewbourne.com>  
**Sent:** Friday, March 31, 2023 8:52 AM  
**To:** Rice, Chase F. (MRO)  
**Subject:** [External] RE: [EXT] RE: NSL Wavier Request - MOP Ripley BS Fed Com 501H

**Beware of links/attachments.**

Chase,

Let me check with Corey on this. I know it was in his inbox.

Tyler

---

**From:** Rice, Chase F. (MRO) <cfrice@marathonoil.com>  
**Sent:** Wednesday, March 29, 2023 10:44 AM  
**To:** Tyler Jolly <tjolly@mewbourne.com>  
**Subject:** RE: [EXT] RE: NSL Wavier Request - MOP Ripley BS Fed Com 501H

Hey Tyler, just checking to see if you had the NSL wavier executed.

---

**From:** Tyler Jolly <tjolly@mewbourne.com>  
**Sent:** Monday, March 13, 2023 10:14 AM  
**To:** Rice, Chase F. (MRO) <cfrice@marathonoil.com>  
**Subject:** [External] RE: [EXT] RE: NSL Wavier Request - MOP Ripley BS Fed Com 501H

**Beware of links/attachments.**

Chase,

The waiver is in Corey's inbox prepared for him to sign but he is out this week.

Did you guys get any feedback on if a swap or carry to the tanks offer would work for Marathon on the Bushwood area?

Tyler

---

**From:** Rice, Chase F. (MRO) <cfrice@marathonoil.com>  
**Sent:** Monday, March 13, 2023 9:08 AM  
**To:** Tyler Jolly <tjolly@mewbourne.com>  
**Subject:** RE: [EXT] RE: NSL Wavier Request - MOP Ripley BS Fed Com 501H

Tyler, just checking on this. Thanks

---

**From:** Rice, Chase F. (MRO)  
**Sent:** Tuesday, March 7, 2023 9:13 AM  
**To:** Tyler Jolly <tjolly@mewbourne.com>  
**Subject:** RE: [EXT] RE: NSL Wavier Request - MOP Ripley BS Fed Com 501H

Tyler, per our conversation, attached is NSL waiver document for your review and execution. Thanks for working with us. Let me know if you need anything else regarding this.

Chase Rice, CPL  
Staff Land Professional – Permian

Marathon Oil Corp.  
990 Town & Country Blvd  
Houston, Texas 77024  
O: 713-296-3055  
C: 832-530-0051

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Notice: Should the contents of this message concern any potential agreement it is understood that any final agreement is subject to diligence and management approval; there shall be no binding agreement until the parties have executed and exchanged a definitive final agreement.

---

**From:** Rice, Chase F. (MRO)  
**Sent:** Thursday, March 2, 2023 11:21 AM  
**To:** Tyler Jolly <[tjolly@mewbourne.com](mailto:tjolly@mewbourne.com)>  
**Subject:** RE: [EXT] RE: NSL Wavier Request - MOP Ripley BS Fed Com 501H

Tyler, see attached full surveys. Well name changes and corresponding API ##s below. Thanks

- Ripley WC Fed Com 702H (Formerly known as Ripley 35 WXY Fed Com 3H)- 30015476130000
- Ripley WC Fed Com 801H (Formerly known as Ripley 35 WD Fed Com 8H or Ripley 35-26 SB Fed Com 203H)- 30015476220000
- Ripley WC Fed Com 701H (Formerly known as Ripley 35-26 WCY Fed Com 5H)- 30015476140000
- Ripley BS Fed Com 501H (Formerly known as Ripley 35 WA Fed Com 4H or Ripley 35-26 SB Fed Com 201H)- 30015476200000
- Ripley BS Fed Com 301H (Formerly known as Ripley 35 WA Fed Com 9H or Ripley 35-26 SB Fed Com 202H)- 30015476210000

---

**From:** Tyler Jolly <[tjolly@mewbourne.com](mailto:tjolly@mewbourne.com)>  
**Sent:** Thursday, March 2, 2023 9:50 AM  
**To:** Rice, Chase F. (MRO) <[cfrice@marathonoil.com](mailto:cfrice@marathonoil.com)>  
**Subject:** [External] RE: [EXT] RE: NSL Wavier Request - MOP Ripley BS Fed Com 501H

**Beware of links/attachments.**

Can you send us the API and final survey for all their Ripley wells? The survey you sent only goes out a ¼ mile. I'm assuming you guys have filed a name change, but nothing has come across the OCD yet.

<a href="#">30-015-47613</a>	RIPLEY 35 26 WXY FEDERAL COM #003H	MARATHON OIL
<a href="#">30-015-47614</a>	RIPLEY 35 WXY FEDERAL COM #005H	MARATHON OIL
<a href="#">30-015-47620</a>	RIPLEY 35 26 SB FEDERAL COM #201H	MARATHON OIL
<a href="#">30-015-47621</a>	RIPLEY 35 26 SB FEDERAL COM #202H	MARATHON OIL
<a href="#">30-015-47622</a>	RIPLEY 35 26 SB FEDERAL COM #203H	MARATHON OIL

---

**From:** Rice, Chase F. (MRO) <[cfrice@marathonoil.com](mailto:cfrice@marathonoil.com)>  
**Sent:** Thursday, March 2, 2023 9:41 AM  
**To:** Tyler Jolly <[tjolly@mewbourne.com](mailto:tjolly@mewbourne.com)>  
**Subject:** [EXT] RE: NSL Wavier Request - MOP Ripley BS Fed Com 501H

Tyler, sorry to pester about this request. But we are starting to move off our current pad and moving to this Ripley Pad to begin completions. Thanks

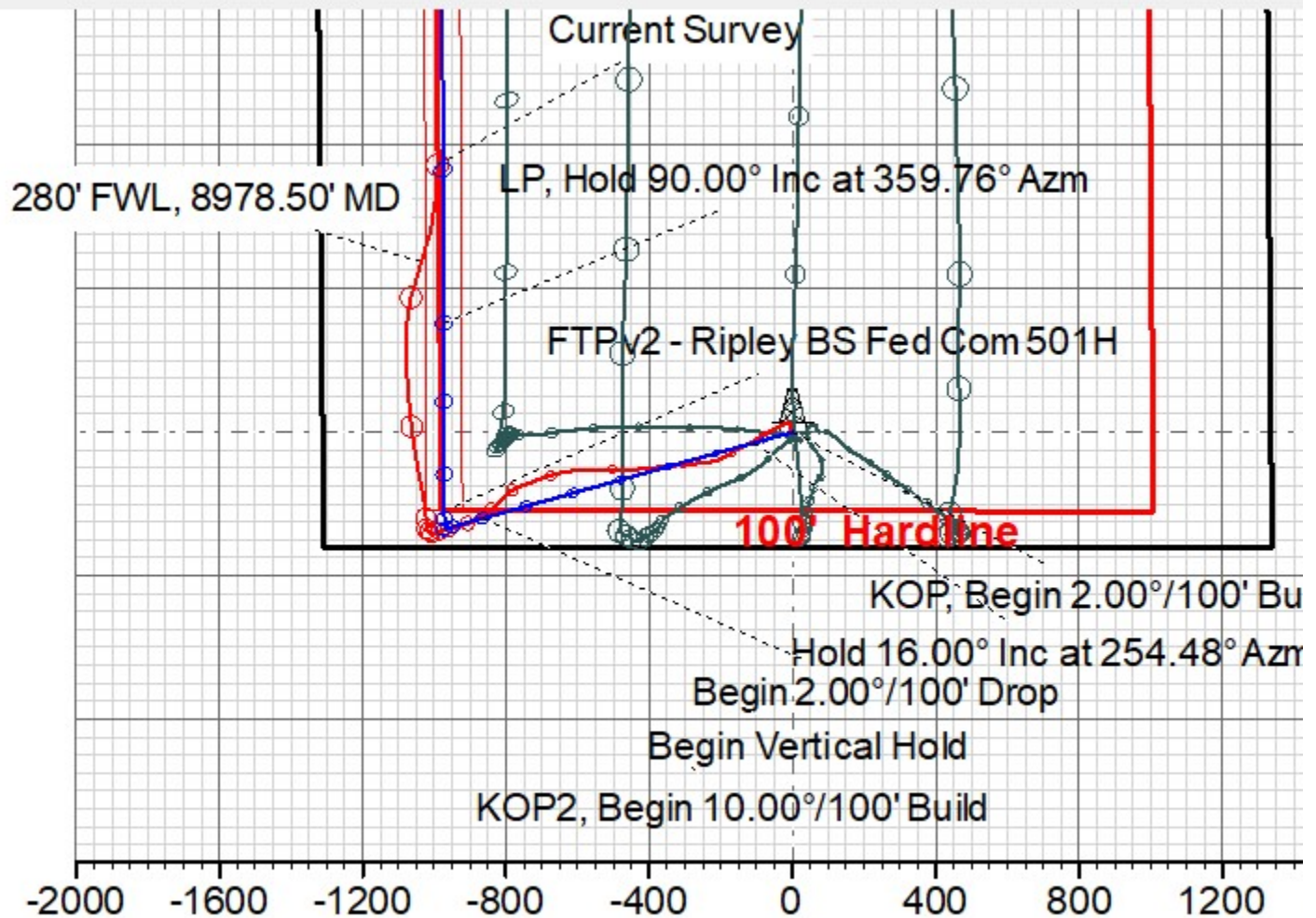
---

**From:** Rice, Chase F. (MRO)  
**Sent:** Wednesday, March 1, 2023 8:57 AM  
**To:** Tyler Jolly <[tjolly@mewbourne.com](mailto:tjolly@mewbourne.com)>  
**Subject:** NSL Wavier Request - MOP Ripley BS Fed Com 501H

Tyler,

~387' of treatable lateral in Marathon's Ripley BS Fed Com 501H (E2 Section 26 & 35 T24S 28E) drifted outside of plan offset to your EL Jefe Unit (W2 Section 35 T24S R28E). Would MEW be willing to grant Marathon a NSL Wavier, so we can complete this portion of the lateral?

We would be willing to grant MEW a reciprocal wavier that is analogous to the request. Attached survey, let me know if you need anything else and thanks for considering.



Chase Rice, CPL  
Staff Land Professional – Permian

Marathon Oil Corp.  
990 Town & Country Blvd  
Houston, Texas 77024  
O: 713-296-3055  
C: 832-530-0051

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Notice: Should the contents of this message concern any potential agreement it is understood that any final agreement is subject to diligence and management approval; there shall be no binding agreement until the parties have executed and exchanged a definitive final agreement.



Ripley 35 26 SB Federal Com #201H  
Section 35, T24S 28E Eddy County, NM



Marathon Oil

**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 226845

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 226845
	Action Type: [UF-NSL] Non-Standard Location (NSL)

CONDITIONS

Created By	Condition	Condition Date
llowe	None	6/13/2023