Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM 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.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No. NMNM25953

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☑ Gas Well ☐ Other

8. Well Name and No. RIPLEY 35-26 WXY FED COM/5H

2. Name of Operator MARATHON OIL PERMIAN LLC

9. API Well No. 3001547614

3a. Address 990 TOWN & COUNTRY BLVD, HOUSTON, TX

3b. Phone No. *(include area code)* (000) 000-0000

10. Field and Pool or Exploratory Area PURPLE SAGE/Wolfcamp

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* SEC 35/T24S/R28E/NMP

11. 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			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ 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 recomplete 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 perfonned 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 recompletion 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 detennined 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 1336' FEL Sec. 35 24S 28E Change to: 320' FSL 1286' FEL Sec 35 24S 28E
BHL: 330' FNL 2320' FEL Sec. 26 24S 28E Change to: 330' FNL 1765' 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 WXY Fed Com 5H TO: Ripley WC Fed Com #701H

Dean R McClure

09/12/2023

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 OFICE 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 ofthis form to U.S. Department ofthe Interior, Bureau ofLand 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 / 1336 FEL / TWSP: 24S / RANGE: 28E / SECTION: 35 / LAT: 32.1673835 / LONG: -104.053756 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 1339 FNL / 2323 FEL / TWSP: 24S / RANGE: 28E / SECTION: 35 / LAT: 32.1775478 / LONG: -104.0569494 (TVD: 9665 feet, MD: 13418 feet)

PPP: SWSE / 330 FSL / 2318 FEL / TWSP: 24S / RANGE: 28E / SECTION: 35 / LAT: 32.1674181 / LONG: -104.0568644 (TVD: 9551 feet, MD: 9708 feet)

BHL: NWNE / 330 FNL / 2320 FEL / TWSP: 24S / RANGE: 28E / SECTION: 35 / LAT: 32.1803168 / LONG: -104.0569727 (TVD: 9665 feet, MD: 14427 feet)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

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

WELL NAME & NO.:	Ripley WC Fed Com 701H
SURFACE HOLE FOOTAGE:	320'/S & 1286'/E
BOTTOM HOLE FOOTAGE	330'/N & 1765'/E

COA

H2S	◉ Yes	○ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	○ Low	○ Medium	◉ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☑ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☑ COM	☐ 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 1/3rd 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 2nd 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 intergrity 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 intergrity 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.

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 & 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

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-47614	98220	PURPLE SAGE; Wolfcamp (gas)

[4] Property Code	[5] Property Name	[6] Well Number
334694	RIPLEY WC FED COM	701H

[7] OGRID No.	[8] Operator Name	[9] Elevation
372098	MARATHON OIL PERMIAN, LLC	2955'

[10] Surface Location

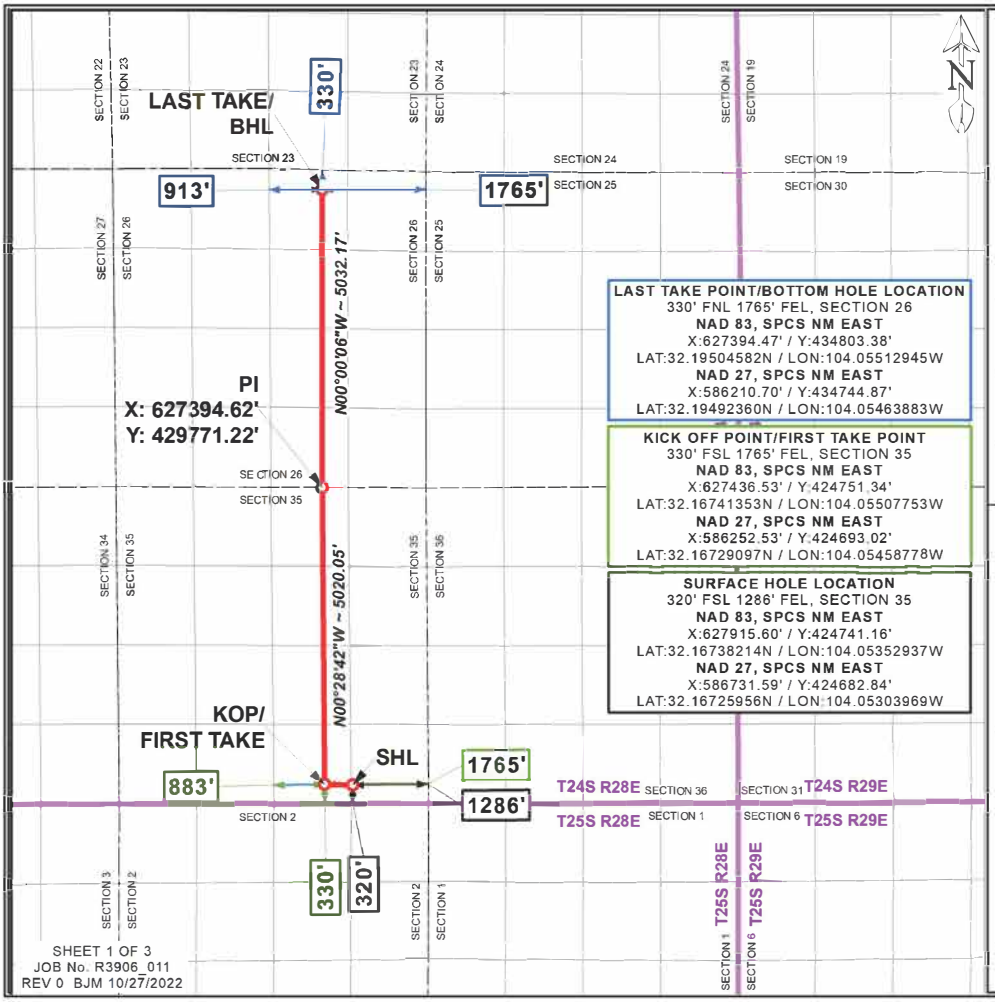
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	35	24S	28E		320	SOUTH	1286	EAST	EDDY

[11] 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		330	NORTH	1765	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640.0			

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.



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Terri Stathem — 10/28/2022
Signature — Date

Terri Stathem
Printed Name

Tstathem@marathonoil.com
E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

OCTOBER 27, 2022
Date of Survey

Signature and Seal of Professional Surveyor:

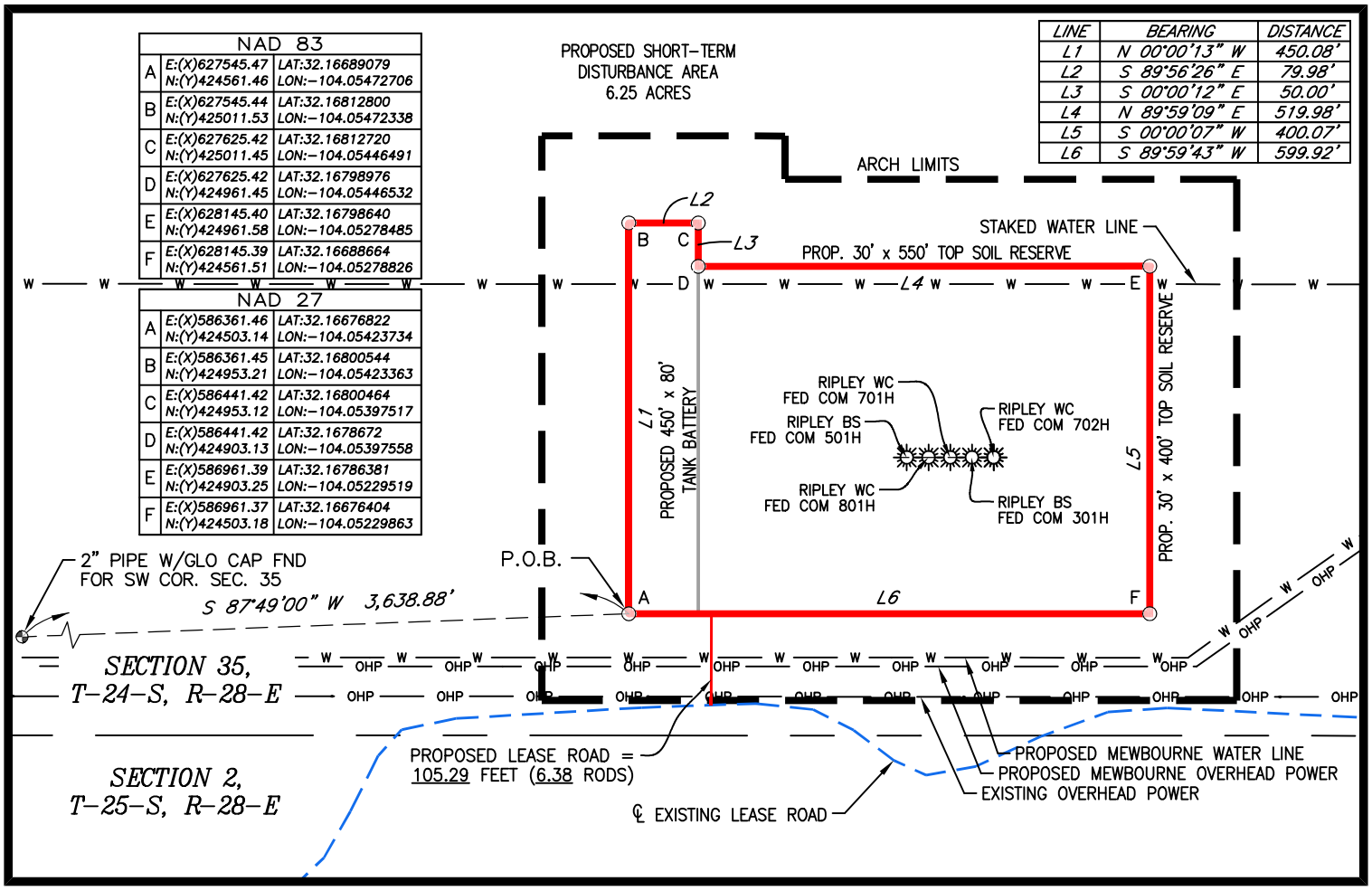
DAVID W. MYERS 11403
Certificate Number

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.

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



OCTOBER 27, 2022

DAVID W. MYERS NEW MEXICO 11403 PROFESSIONAL SURVEYOR

DAVID W. MYERS 11403

Marathon Oil Permian LLC

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

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

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
EXISTING ROAD
PROPOSED ROAD
SURFACE SITE EDGE
EXIST. PIPELINE
MONUMENT
WELL
ARCH LIMITS
FENCE
SECTION LINE
WATER LINE
OVERHEAD POWER

R3906_001

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°.)

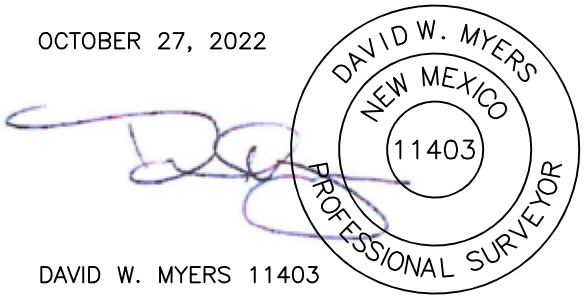
Title information furnished by Marathon Oil Permian LLC.

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

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

EXISTING ROAD
PROPOSED ROAD
SURFACE SITE EDGE
EXIST. PIPELINE
MONUMENT
WELL
ARCH LIMITS
FENCE
SECTION LINE
WATER LINE
OHP OVERHEAD POWER

R3906_001

Marathon Oil Permian LLC

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

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

S. BOURNE & SON GLOBAL, LLC
510 TRENTON ST.
WEST MONROE, LA 71291
(318) 323-6900
FAX (318) 362-0064

MARATHON OIL PERMIAN, LLC.

DRILLING AND OPERATIONS PLAN

WELL NAME & NUMBER: **RIPLEY WC FED COM 701H**

LOCATION: SECTION **35** TOWNSHIP **24S** RANGE **28E**

EDDY COUNTY, **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.

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	9023	0	8977	2955	-6022	40	P110HC	BTC	1.00	1.15	BUOY	1.30	BUOY	1.30
Production	8.75	5.5	0	19782	0	9650	2955	-6695	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	8523	1545	2.18	12.4	3368	25	Class C	Extender,Accelerator,LCM
Intermediate	Tail	8523	9023	147	1.33	14.8	196	25	Class C	Retarder
Production	Tail	8723	19782	2119	1.68	13	3560	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

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	9023	Brine or Oil Based Mud	9.2	10.2
9023	19782	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: **6273** 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.

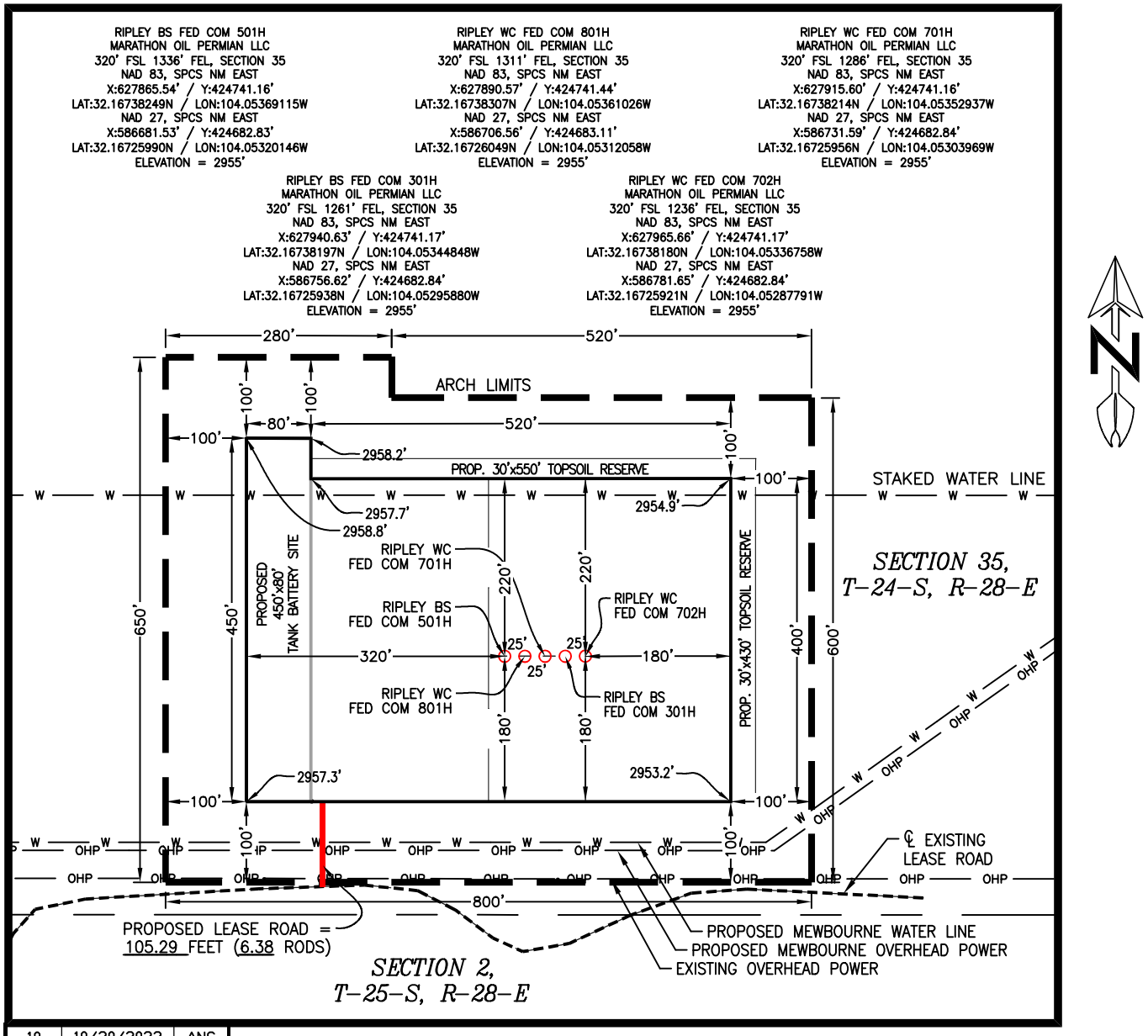
Anticipated Starting Date and Duration of Operations:
Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as possible after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 30 days.

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.

LEGEND

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



10	10/20/2022	ANC

OCTOBER 27, 2022

DAVID W. MYERS 11403

DAVID W. MYERS NEW MEXICO 11403 PROFESSIONAL SURVEYOR

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.

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

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

Marathon Oil Corporation

Project: Eddy County, NM (NAD27-NME)
Site: Ripley Fed Com Pad
Well: Ripley WC Fed Com 701H
Wellbore: OH
Design: Plan 1 11-02-22
Rig: Cactus 169

PHOENIX TECHNOLOGY SERVICES

Azimuths to Grid North
True North: -0.15°
Magnetic North: 6.48°

Magnetic Field
Strength: 47525.6nT
Dip Angle: 59.78°
Date: 12/31/2022
Model: MVHD

RKB @ 2978.60usft (Cactus 169)
Ground Level: 2955.00

WELL DETAILS

2955.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	424682.84	586731.59	32° 10' 2.134429 N	104° 3' 10.942920 W

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP - Ripley WC Fed Com 701H	4833.60	10.18	-479.06	424693.02	586252.53	32° 10' 2.247488 N	104° 3' 16.516060 W
BHL - Ripley WC Fed Com 701H	9650.00	10062.03	-520.89	434744.87	586210.70	32° 11' 41.725024 N	104° 3' 16.699754 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00		
2	1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.000	0.00		KOP, Begin 2.00°/100' Build
3	1815.26	10.31	240.54	1812.49	-22.73	-40.24	2.00	240.537	-22.56		Hold 10.31° Inc at 240.54° Azm
4	4365.02	10.31	240.54	4321.11	-247.09	-437.38	0.00	0.000	-245.25		Begin 2.00°/100' Drop
5	4880.28	0.00	0.00	4833.60	-269.82	-477.61	2.00	180.000	-267.81		Begin Vertical Hold
6	9123.72	0.00	0.00	9077.04	-269.82	-477.61	0.00	0.000	-267.81		KOP2, Begin 10.00°/100' Build
7	10023.72	90.00	359.76	9650.00	303.14	-480.01	10.00	359.760	305.14		LP, Hold 90.00° Inc at 359.76° Azm
8	19782.70	90.00	359.76	9650.00	10062.03	-520.89	0.00	0.000	10064.12	BHL - Ripley WC Fed Com 701H	TD at 19782.70

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001

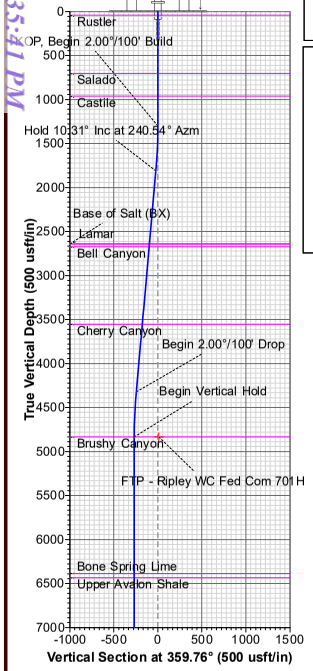
Local Origin: Well Ripley WC Fed Com 701H, Grid North

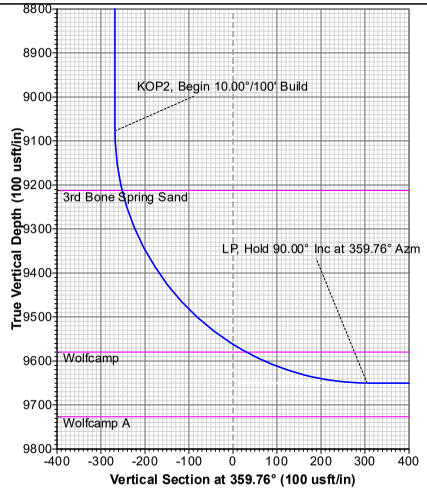
Latitude: 32° 10' 2.134429 N
Longitude: 104° 3' 10.942920 W

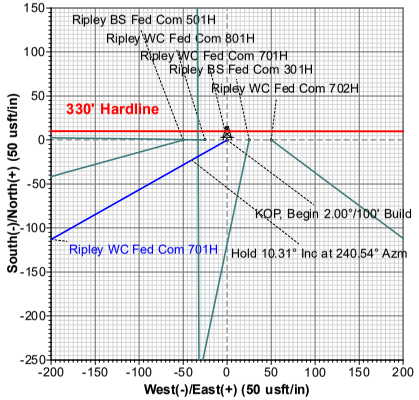
Grid East: 586731.59
Grid North: 424682.84
Scale Factor: 1.000

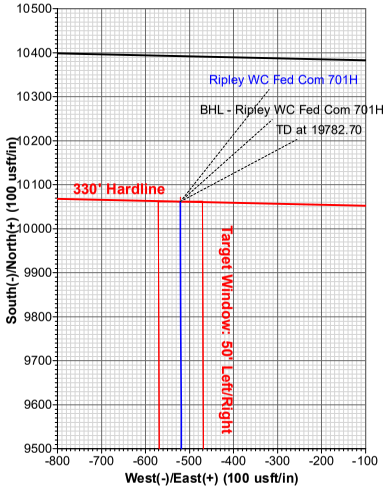
Geomagnetic Model: MVHD
Sample Date: 31-Dec-22
Magnetic Declination: 6.631°
Dip Angle from Horizontal: 59.779°
Magnetic Field Strength: 47525.56827715nT

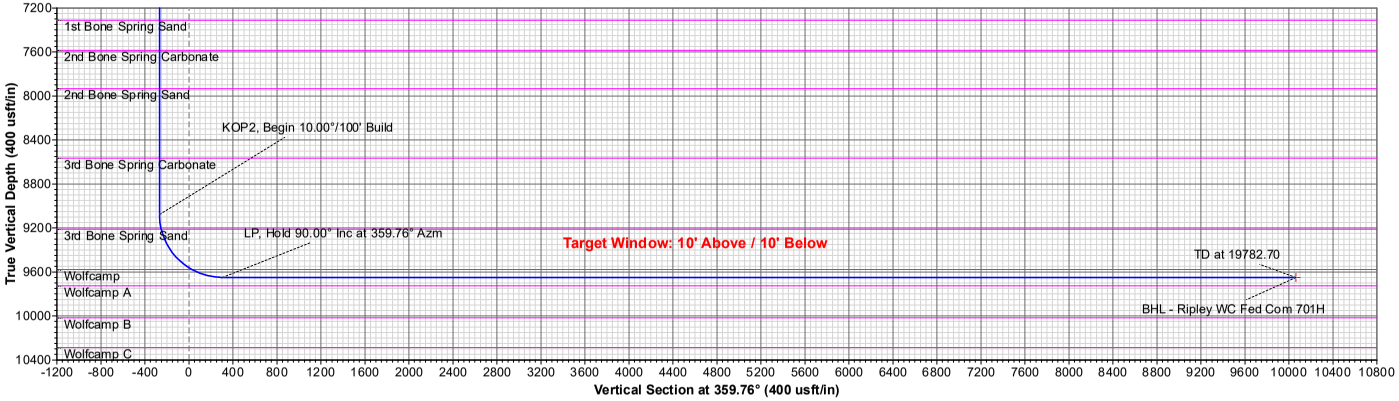
To convert a Magnetic Direction to a Grid Direction, Add 6.482°
To convert a Magnetic Direction to a True Direction, Add 6.631° East
To convert a True Direction to a Grid Direction, Subtract 0.149°

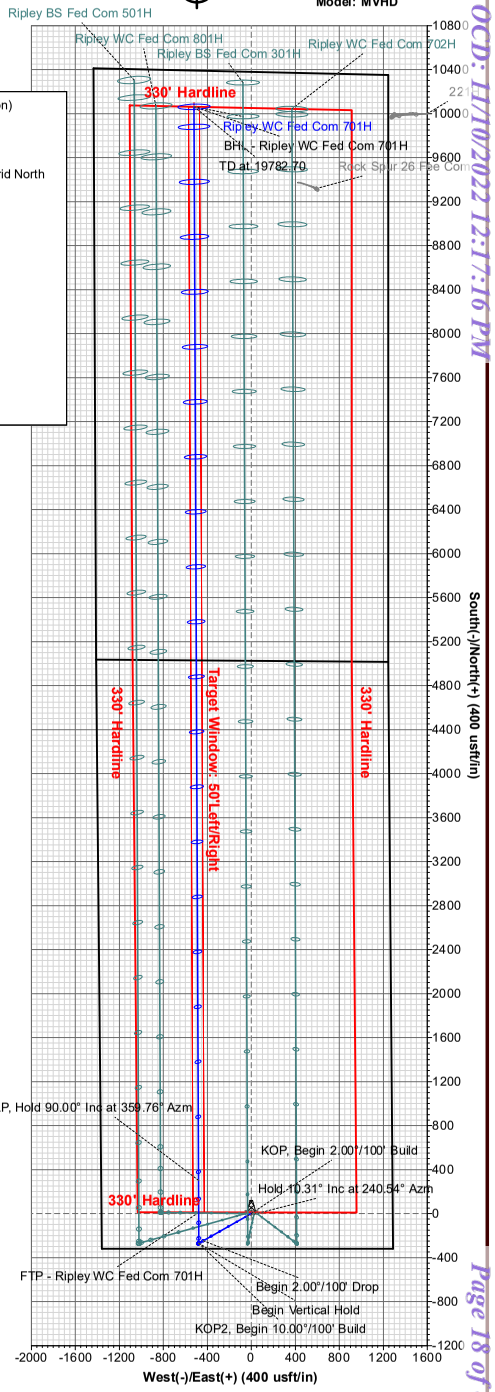












Date: 10:30, November 02 2022

PHOENIX
TECHNOLOGY SERVICES

Marathon Oil Permian LLC

Eddy County, NM (NAD27-NME)
Ripley Fed Com Pad
Ripley WC Fed Com 701H

OH

Plan: Plan 1 11-02-22

Standard Planning Report

02 November, 2022

Marathon Oil Corporation

PHOENIX TECHNOLOGY SERVICES

Phoenix
Planning Report

Marathon Oil Corporation

Database:	USA Compass	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Company:	Marathon Oil Permian LLC	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Project:	Eddy County, NM (NAD27-NME)	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site:	Ripley Fed Com Pad	**North Reference:**	Grid
Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 11-02-22		

Project Eddy County, NM (NAD27-NME)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	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 WC Fed Com 701H

Well Position	**+N/-S**	0.00 usft	**Northing:**	424,682.84 usft	**Latitude:**	32° 10' 2.134429 N
	+E/-W	-25.03 usft	**Easting:**	586,731.59 usft	**Longitude:**	104° 3' 10.942920 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	2,955.00 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	12/31/2022	6.631	59.779	47,525.56827715

Design Plan 1 11-02-22

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.76

Plan Survey Tool Program **Date** 11/2/2022

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	19,782.70	Plan 1 11-02-22 (OH)	MWD+HRGM	
				OWSG MWD + HRGM	

Plan Sections

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	
1,815.26	10.31	240.54	1,812.49	-22.73	-40.24	2.00	2.00	0.00	240.537	
4,365.02	10.31	240.54	4,321.11	-247.09	-437.38	0.00	0.00	0.00	0.000	
4,880.28	0.00	0.00	4,833.60	-269.82	-477.61	2.00	-2.00	0.00	180.000	
9,123.72	0.00	0.00	9,077.04	-269.82	-477.61	0.00	0.00	0.00	0.000	
10,023.72	90.00	359.76	9,650.00	303.14	-480.01	10.00	10.00	0.00	359.760	
19,782.70	90.00	359.76	9,650.00	10,062.03	-520.89	0.00	0.00	0.00	0.000	BHL - Ripley WC Fe

PHOENIX TECHNOLOGY SERVICES

Phoenix

Planning Report

Marathon Oil Corporation

Database:	USA Compass	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Company:	Marathon Oil Permian LLC	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Project:	Eddy County, NM (NAD27-NME)	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site:	Ripley Fed Com Pad	**North Reference:**	Grid
Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	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
Rustler									
703.60	0.00	0.00	703.60	0.00	0.00	0.00	0.00	0.00	0.00
Salado									
962.60	0.00	0.00	962.60	0.00	0.00	0.00	0.00	0.00	0.00
Castile									
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP, Begin 2.00°/100' Build									
1,400.00	2.00	240.54	1,399.98	-0.86	-1.52	-0.85	2.00	2.00	0.00
1,500.00	4.00	240.54	1,499.84	-3.43	-6.08	-3.41	2.00	2.00	0.00
1,600.00	6.00	240.54	1,599.45	-7.72	-13.66	-7.66	2.00	2.00	0.00
1,700.00	8.00	240.54	1,698.70	-13.71	-24.27	-13.61	2.00	2.00	0.00
1,800.00	10.00	240.54	1,797.47	-21.41	-37.89	-21.25	2.00	2.00	0.00
1,815.26	10.31	240.54	1,812.49	-22.73	-40.24	-22.56	2.00	2.00	0.00
Hold 10.31° Inc at 240.54° Azm									
1,900.00	10.31	240.54	1,895.86	-30.19	-53.43	-29.96	0.00	0.00	0.00
2,000.00	10.31	240.54	1,994.25	-38.99	-69.01	-38.70	0.00	0.00	0.00
2,100.00	10.31	240.54	2,092.63	-47.79	-84.59	-47.43	0.00	0.00	0.00
2,200.00	10.31	240.54	2,191.02	-56.58	-100.16	-56.16	0.00	0.00	0.00
2,300.00	10.31	240.54	2,289.41	-65.38	-115.74	-64.90	0.00	0.00	0.00
2,400.00	10.31	240.54	2,387.79	-74.18	-131.31	-73.63	0.00	0.00	0.00
2,500.00	10.31	240.54	2,486.18	-82.98	-146.89	-82.37	0.00	0.00	0.00
2,600.00	10.31	240.54	2,584.57	-91.78	-162.46	-91.10	0.00	0.00	0.00
2,657.97	10.31	240.54	2,641.60	-96.88	-171.49	-96.16	0.00	0.00	0.00
Base of Salt (BX) - Lamar									
2,691.51	10.31	240.54	2,674.60	-99.83	-176.72	-99.09	0.00	0.00	0.00
Bell Canyon									
2,700.00	10.31	240.54	2,682.95	-100.58	-178.04	-99.83	0.00	0.00	0.00
2,800.00	10.31	240.54	2,781.34	-109.38	-193.62	-108.57	0.00	0.00	0.00
2,900.00	10.31	240.54	2,879.73	-118.18	-209.19	-117.30	0.00	0.00	0.00
3,000.00	10.31	240.54	2,978.12	-126.98	-224.77	-126.03	0.00	0.00	0.00
3,100.00	10.31	240.54	3,076.50	-135.78	-240.34	-134.77	0.00	0.00	0.00
3,200.00	10.31	240.54	3,174.89	-144.58	-255.92	-143.50	0.00	0.00	0.00
3,300.00	10.31	240.54	3,273.28	-153.37	-271.49	-152.24	0.00	0.00	0.00
3,400.00	10.31	240.54	3,371.66	-162.17	-287.07	-160.97	0.00	0.00	0.00
3,500.00	10.31	240.54	3,470.05	-170.97	-302.64	-169.70	0.00	0.00	0.00
3,584.92	10.31	240.54	3,553.60	-178.45	-315.87	-177.12	0.00	0.00	0.00
Cherry Canyon									
3,600.00	10.31	240.54	3,568.44	-179.77	-318.22	-178.44	0.00	0.00	0.00
3,700.00	10.31	240.54	3,666.82	-188.57	-333.80	-187.17	0.00	0.00	0.00
3,800.00	10.31	240.54	3,765.21	-197.37	-349.37	-195.90	0.00	0.00	0.00
3,900.00	10.31	240.54	3,863.60	-206.17	-364.95	-204.64	0.00	0.00	0.00
4,000.00	10.31	240.54	3,961.98	-214.97	-380.52	-213.37	0.00	0.00	0.00
4,100.00	10.31	240.54	4,060.37	-223.77	-396.10	-222.11	0.00	0.00	0.00
4,200.00	10.31	240.54	4,158.76	-232.57	-411.67	-230.84	0.00	0.00	0.00
4,300.00	10.31	240.54	4,257.14	-241.37	-427.25	-239.57	0.00	0.00	0.00
4,365.02	10.31	240.54	4,321.11	-247.09	-437.38	-245.25	0.00	0.00	0.00
Begin 2.00°/100' Drop									
4,400.00	9.61	240.54	4,355.57	-250.06	-442.64	-248.21	2.00	-2.00	0.00
4,500.00	7.61	240.54	4,454.44	-257.42	-455.67	-255.51	2.00	-2.00	0.00
4,600.00	5.61	240.54	4,553.77	-263.08	-465.68	-261.13	2.00	-2.00	0.00
4,700.00	3.61	240.54	4,653.44	-267.03	-472.67	-265.05	2.00	-2.00	0.00

PHOENIX TECHNOLOGY SERVICES

Phoenix

Planning Report

Marathon Oil Corporation

Database:	USA Compass	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Company:	Marathon Oil Permian LLC	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Project:	Eddy County, NM (NAD27-NME)	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site:	Ripley Fed Com Pad	**North Reference:**	Grid
Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	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)
4,800.00	1.61	240.54	4,753.33	-269.26	-476.63	-267.27	2.00	-2.00	0.00
4,880.28	0.00	0.00	4,833.60	-269.82	-477.61	-267.81	2.00	-2.00	0.00
Begin Vertical Hold - Brushy Canyon									
6,434.28	0.00	0.00	6,387.60	-269.82	-477.61	-267.81	0.00	0.00	0.00
Bone Spring Lime									
6,480.28	0.00	0.00	6,433.60	-269.82	-477.61	-267.81	0.00	0.00	0.00
Upper Avalon Shale									
7,357.28	0.00	0.00	7,310.60	-269.82	-477.61	-267.81	0.00	0.00	0.00
1st Bone Spring Sand									
7,633.28	0.00	0.00	7,586.60	-269.82	-477.61	-267.81	0.00	0.00	0.00
2nd Bone Spring Carbonate									
7,980.28	0.00	0.00	7,933.60	-269.82	-477.61	-267.81	0.00	0.00	0.00
2nd Bone Spring Sand									
8,612.28	0.00	0.00	8,565.60	-269.82	-477.61	-267.81	0.00	0.00	0.00
3rd Bone Spring Carbonate									
9,123.72	0.00	0.00	9,077.04	-269.82	-477.61	-267.81	0.00	0.00	0.00
KOP2, Begin 10.00°/100' Build									
9,200.00	7.63	359.76	9,153.10	-264.75	-477.63	-262.74	10.00	10.00	0.00
9,260.58	13.69	359.76	9,212.60	-253.55	-477.68	-251.55	10.00	10.00	0.00
3rd Bone Spring Sand									
9,300.00	17.63	359.76	9,250.55	-242.91	-477.72	-240.91	10.00	10.00	0.00
9,400.00	27.63	359.76	9,342.74	-204.49	-477.89	-202.48	10.00	10.00	0.00
9,500.00	37.63	359.76	9,426.85	-150.64	-478.11	-148.63	10.00	10.00	0.00
9,600.00	47.63	359.76	9,500.33	-83.00	-478.39	-81.00	10.00	10.00	0.00
9,700.00	57.63	359.76	9,560.96	-3.63	-478.73	-1.63	10.00	10.00	0.00
9,736.70	61.30	359.76	9,579.60	27.97	-478.86	29.98	10.00	10.00	0.00
Wolfcamp									
9,800.00	67.63	359.76	9,606.87	85.06	-479.10	87.06	10.00	10.00	0.00
9,900.00	77.63	359.76	9,636.69	180.38	-479.50	182.38	10.00	10.00	0.00
10,000.00	87.63	359.76	9,649.51	279.42	-479.91	281.43	10.00	10.00	0.00
10,023.72	90.00	359.76	9,650.00	303.14	-480.01	305.14	10.00	10.00	0.00
LP, Hold 90.00° Inc at 359.76° Azm									
10,100.00	90.00	359.76	9,650.00	379.41	-480.33	381.42	0.00	0.00	0.00
10,200.00	90.00	359.76	9,650.00	479.41	-480.75	481.42	0.00	0.00	0.00
10,300.00	90.00	359.76	9,650.00	579.41	-481.17	581.42	0.00	0.00	0.00
10,400.00	90.00	359.76	9,650.00	679.41	-481.59	681.42	0.00	0.00	0.00
10,500.00	90.00	359.76	9,650.00	779.41	-482.01	781.42	0.00	0.00	0.00
10,600.00	90.00	359.76	9,650.00	879.41	-482.43	881.42	0.00	0.00	0.00
10,700.00	90.00	359.76	9,650.00	979.41	-482.84	981.42	0.00	0.00	0.00
10,800.00	90.00	359.76	9,650.00	1,079.41	-483.26	1,081.42	0.00	0.00	0.00
10,900.00	90.00	359.76	9,650.00	1,179.41	-483.68	1,181.42	0.00	0.00	0.00
11,000.00	90.00	359.76	9,650.00	1,279.41	-484.10	1,281.42	0.00	0.00	0.00
11,100.00	90.00	359.76	9,650.00	1,379.41	-484.52	1,381.42	0.00	0.00	0.00
11,200.00	90.00	359.76	9,650.00	1,479.40	-484.94	1,481.42	0.00	0.00	0.00
11,300.00	90.00	359.76	9,650.00	1,579.40	-485.36	1,581.42	0.00	0.00	0.00
11,400.00	90.00	359.76	9,650.00	1,679.40	-485.78	1,681.42	0.00	0.00	0.00
11,500.00	90.00	359.76	9,650.00	1,779.40	-486.20	1,781.42	0.00	0.00	0.00
11,600.00	90.00	359.76	9,650.00	1,879.40	-486.61	1,881.42	0.00	0.00	0.00
11,700.00	90.00	359.76	9,650.00	1,979.40	-487.03	1,981.42	0.00	0.00	0.00
11,800.00	90.00	359.76	9,650.00	2,079.40	-487.45	2,081.42	0.00	0.00	0.00
11,900.00	90.00	359.76	9,650.00	2,179.40	-487.87	2,181.42	0.00	0.00	0.00
12,000.00	90.00	359.76	9,650.00	2,279.40	-488.29	2,281.42	0.00	0.00	0.00

PHOENIX TECHNOLOGY SERVICES

Phoenix

Planning Report

Marathon Oil Corporation

Database:	USA Compass	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Company:	Marathon Oil Permian LLC	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Project:	Eddy County, NM (NAD27-NME)	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site:	Ripley Fed Com Pad	**North Reference:**	Grid
Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	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)
12,100.00	90.00	359.76	9,650.00	2,379.40	-488.71	2,381.42	0.00	0.00	0.00
12,200.00	90.00	359.76	9,650.00	2,479.40	-489.13	2,481.42	0.00	0.00	0.00
12,300.00	90.00	359.76	9,650.00	2,579.40	-489.55	2,581.42	0.00	0.00	0.00
12,400.00	90.00	359.76	9,650.00	2,679.39	-489.97	2,681.42	0.00	0.00	0.00
12,500.00	90.00	359.76	9,650.00	2,779.39	-490.38	2,781.42	0.00	0.00	0.00
12,600.00	90.00	359.76	9,650.00	2,879.39	-490.80	2,881.42	0.00	0.00	0.00
12,700.00	90.00	359.76	9,650.00	2,979.39	-491.22	2,981.42	0.00	0.00	0.00
12,800.00	90.00	359.76	9,650.00	3,079.39	-491.64	3,081.42	0.00	0.00	0.00
12,900.00	90.00	359.76	9,650.00	3,179.39	-492.06	3,181.42	0.00	0.00	0.00
13,000.00	90.00	359.76	9,650.00	3,279.39	-492.48	3,281.42	0.00	0.00	0.00
13,100.00	90.00	359.76	9,650.00	3,379.39	-492.90	3,381.42	0.00	0.00	0.00
13,200.00	90.00	359.76	9,650.00	3,479.39	-493.32	3,481.42	0.00	0.00	0.00
13,300.00	90.00	359.76	9,650.00	3,579.39	-493.74	3,581.42	0.00	0.00	0.00
13,400.00	90.00	359.76	9,650.00	3,679.39	-494.15	3,681.42	0.00	0.00	0.00
13,500.00	90.00	359.76	9,650.00	3,779.38	-494.57	3,781.42	0.00	0.00	0.00
13,600.00	90.00	359.76	9,650.00	3,879.38	-494.99	3,881.42	0.00	0.00	0.00
13,700.00	90.00	359.76	9,650.00	3,979.38	-495.41	3,981.42	0.00	0.00	0.00
13,800.00	90.00	359.76	9,650.00	4,079.38	-495.83	4,081.42	0.00	0.00	0.00
13,900.00	90.00	359.76	9,650.00	4,179.38	-496.25	4,181.42	0.00	0.00	0.00
14,000.00	90.00	359.76	9,650.00	4,279.38	-496.67	4,281.42	0.00	0.00	0.00
14,100.00	90.00	359.76	9,650.00	4,379.38	-497.09	4,381.42	0.00	0.00	0.00
14,200.00	90.00	359.76	9,650.00	4,479.38	-497.51	4,481.42	0.00	0.00	0.00
14,300.00	90.00	359.76	9,650.00	4,579.38	-497.92	4,581.42	0.00	0.00	0.00
14,400.00	90.00	359.76	9,650.00	4,679.38	-498.34	4,681.42	0.00	0.00	0.00
14,500.00	90.00	359.76	9,650.00	4,779.38	-498.76	4,781.42	0.00	0.00	0.00
14,600.00	90.00	359.76	9,650.00	4,879.38	-499.18	4,881.42	0.00	0.00	0.00
14,700.00	90.00	359.76	9,650.00	4,979.37	-499.60	4,981.42	0.00	0.00	0.00
14,800.00	90.00	359.76	9,650.00	5,079.37	-500.02	5,081.42	0.00	0.00	0.00
14,900.00	90.00	359.76	9,650.00	5,179.37	-500.44	5,181.42	0.00	0.00	0.00
15,000.00	90.00	359.76	9,650.00	5,279.37	-500.86	5,281.42	0.00	0.00	0.00
15,100.00	90.00	359.76	9,650.00	5,379.37	-501.28	5,381.42	0.00	0.00	0.00
15,200.00	90.00	359.76	9,650.00	5,479.37	-501.69	5,481.42	0.00	0.00	0.00
15,300.00	90.00	359.76	9,650.00	5,579.37	-502.11	5,581.42	0.00	0.00	0.00
15,400.00	90.00	359.76	9,650.00	5,679.37	-502.53	5,681.42	0.00	0.00	0.00
15,500.00	90.00	359.76	9,650.00	5,779.37	-502.95	5,781.42	0.00	0.00	0.00
15,600.00	90.00	359.76	9,650.00	5,879.37	-503.37	5,881.42	0.00	0.00	0.00
15,700.00	90.00	359.76	9,650.00	5,979.37	-503.79	5,981.42	0.00	0.00	0.00
15,800.00	90.00	359.76	9,650.00	6,079.36	-504.21	6,081.42	0.00	0.00	0.00
15,900.00	90.00	359.76	9,650.00	6,179.36	-504.63	6,181.42	0.00	0.00	0.00
16,000.00	90.00	359.76	9,650.00	6,279.36	-505.05	6,281.42	0.00	0.00	0.00
16,100.00	90.00	359.76	9,650.00	6,379.36	-505.46	6,381.42	0.00	0.00	0.00
16,200.00	90.00	359.76	9,650.00	6,479.36	-505.88	6,481.42	0.00	0.00	0.00
16,300.00	90.00	359.76	9,650.00	6,579.36	-506.30	6,581.42	0.00	0.00	0.00
16,400.00	90.00	359.76	9,650.00	6,679.36	-506.72	6,681.42	0.00	0.00	0.00
16,500.00	90.00	359.76	9,650.00	6,779.36	-507.14	6,781.42	0.00	0.00	0.00
16,600.00	90.00	359.76	9,650.00	6,879.36	-507.56	6,881.42	0.00	0.00	0.00
16,700.00	90.00	359.76	9,650.00	6,979.36	-507.98	6,981.42	0.00	0.00	0.00
16,800.00	90.00	359.76	9,650.00	7,079.36	-508.40	7,081.42	0.00	0.00	0.00
16,900.00	90.00	359.76	9,650.00	7,179.36	-508.82	7,181.42	0.00	0.00	0.00
17,000.00	90.00	359.76	9,650.00	7,279.35	-509.23	7,281.42	0.00	0.00	0.00
17,100.00	90.00	359.76	9,650.00	7,379.35	-509.65	7,381.42	0.00	0.00	0.00
17,200.00	90.00	359.76	9,650.00	7,479.35	-510.07	7,481.42	0.00	0.00	0.00
17,300.00	90.00	359.76	9,650.00	7,579.35	-510.49	7,581.42	0.00	0.00	0.00
17,400.00	90.00	359.76	9,650.00	7,679.35	-510.91	7,681.42	0.00	0.00	0.00

PHOENIX TECHNOLOGY SERVICES

Phoenix
Planning Report

Marathon Oil Corporation

Database:	USA Compass	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Company:	Marathon Oil Permian LLC	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Project:	Eddy County, NM (NAD27-NME)	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site:	Ripley Fed Com Pad	**North Reference:**	Grid
Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	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)
17,500.00	90.00	359.76	9,650.00	7,779.35	-511.33	7,781.42	0.00	0.00	0.00
17,600.00	90.00	359.76	9,650.00	7,879.35	-511.75	7,881.42	0.00	0.00	0.00
17,700.00	90.00	359.76	9,650.00	7,979.35	-512.17	7,981.42	0.00	0.00	0.00
17,800.00	90.00	359.76	9,650.00	8,079.35	-512.58	8,081.42	0.00	0.00	0.00
17,900.00	90.00	359.76	9,650.00	8,179.35	-513.00	8,181.42	0.00	0.00	0.00
18,000.00	90.00	359.76	9,650.00	8,279.35	-513.42	8,281.42	0.00	0.00	0.00
18,100.00	90.00	359.76	9,650.00	8,379.34	-513.84	8,381.42	0.00	0.00	0.00
18,200.00	90.00	359.76	9,650.00	8,479.34	-514.26	8,481.42	0.00	0.00	0.00
18,300.00	90.00	359.76	9,650.00	8,579.34	-514.68	8,581.42	0.00	0.00	0.00
18,400.00	90.00	359.76	9,650.00	8,679.34	-515.10	8,681.42	0.00	0.00	0.00
18,500.00	90.00	359.76	9,650.00	8,779.34	-515.52	8,781.42	0.00	0.00	0.00
18,600.00	90.00	359.76	9,650.00	8,879.34	-515.94	8,881.42	0.00	0.00	0.00
18,700.00	90.00	359.76	9,650.00	8,979.34	-516.35	8,981.42	0.00	0.00	0.00
18,800.00	90.00	359.76	9,650.00	9,079.34	-516.77	9,081.42	0.00	0.00	0.00
18,900.00	90.00	359.76	9,650.00	9,179.34	-517.19	9,181.42	0.00	0.00	0.00
19,000.00	90.00	359.76	9,650.00	9,279.34	-517.61	9,281.42	0.00	0.00	0.00
19,100.00	90.00	359.76	9,650.00	9,379.34	-518.03	9,381.42	0.00	0.00	0.00
19,200.00	90.00	359.76	9,650.00	9,479.33	-518.45	9,481.42	0.00	0.00	0.00
19,300.00	90.00	359.76	9,650.00	9,579.33	-518.87	9,581.42	0.00	0.00	0.00
19,400.00	90.00	359.76	9,650.00	9,679.33	-519.29	9,681.42	0.00	0.00	0.00
19,500.00	90.00	359.76	9,650.00	9,779.33	-519.71	9,781.42	0.00	0.00	0.00
19,600.00	90.00	359.76	9,650.00	9,879.33	-520.12	9,881.42	0.00	0.00	0.00
19,700.00	90.00	359.76	9,650.00	9,979.33	-520.54	9,981.42	0.00	0.00	0.00
19,782.70	90.00	359.76	9,650.00	10,062.03	-520.89	10,064.12	0.00	0.00	0.00
TD at 19782.70									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP - Ripley WC Fed - plan misses target center by 280.01usft at 4878.37usft MD (4831.69 TVD, -269.82 N, -477.61 E) - Point	0.00	0.00	4,833.60	10.18	-479.06	424,693.02	586,252.53	32° 10' 2.247488 N	04° 3' 16.516060 W
BHL - Ripley WC Fed - plan hits target center - Rectangle (sides W100.00 H10,051.94 D0.00)	0.00	359.76	9,650.00	10,062.03	-520.89	434,744.87	586,210.70	32° 11' 41.725024 N	04° 3' 16.699754 W

PHOENIX TECHNOLOGY SERVICES

Phoenix
Planning Report

Marathon Oil Corporation

Database:	USA Compass	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Company:	Marathon Oil Permian LLC	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Project:	Eddy County, NM (NAD27-NME)	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site:	Ripley Fed Com Pad	**North Reference:**	Grid
Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	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
2,657.97	2,641.60	Base of Salt (BX)		0.000	359.76
2,657.97	2,641.60	Lamar		0.000	359.76
2,691.51	2,674.60	Bell Canyon		0.000	359.76
3,584.92	3,553.60	Cherry Canyon		0.000	359.76
4,880.28	4,833.60	Brushy Canyon		0.000	359.76
6,434.28	6,387.60	Bone Spring Lime		0.000	359.76
6,480.28	6,433.60	Upper Avalon Shale		0.000	359.76
7,357.28	7,310.60	1st Bone Spring Sand		0.000	359.76
7,633.28	7,586.60	2nd Bone Spring Carbonate		0.000	359.76
7,980.28	7,933.60	2nd Bone Spring Sand		0.000	359.76
8,612.28	8,565.60	3rd Bone Spring Carbonate		0.000	359.76
9,260.58	9,212.60	3rd Bone Spring Sand		0.000	359.76
9,736.70	9,579.60	Wolfcamp		0.000	359.76

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,300.00	1,300.00	0.00	0.00	KOP, Begin 2.00°/100' Build
1,815.26	1,812.49	-22.73	-40.24	Hold 10.31° Inc at 240.54° Azm
4,365.02	4,321.11	-247.09	-437.38	Begin 2.00°/100' Drop
4,880.28	4,833.60	-269.82	-477.61	Begin Vertical Hold
9,123.72	9,077.04	-269.82	-477.61	KOP2, Begin 10.00°/100' Build
10,023.72	9,650.00	303.14	-480.01	LP, Hold 90.00° Inc at 359.76° Azm
19,782.70	9,650.00	10,062.03	-520.89	TD at 19782.70

PHOENIX
TECHNOLOGY SERVICES

Marathon Oil Permian LLC

Eddy County, NM (NAD27-NME)
Ripley Fed Com Pad
Ripley WC Fed Com 701H

OH
Plan 1 11-02-22

Anticollision Report

02 November, 2022

Marathon Oil Corporation

PHOENIX TECHNOLOGY SERVICES

Phoenix

Anticollision Report

Marathon Oil Corporation

Company:	Marathon Oil Permian LLC	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Reference Site:	Ripley Fed Com Pad	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA Compass
Reference Design:	Plan 1 11-02-22	**Offset TVD Reference:**	Reference Datum

Reference	Plan 1 11-02-22		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.00usft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Max. Cent. Dist. of 1,000.00usft or Max. SF of 4	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 11/2/2022

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	19,782.70	Plan 1 11-02-22 (OH)	MWD+HRGM	OWSG MWD + HRGM

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Paul 25-24S-28E RB						
221H - OH / Job 1610177 - Surveys (Patterson 297)						Out of range
Ripley Fed Com Pad						
Ripley BS Fed Com 301H - OH - Plan 1 11-02-22	1,300.01	1,300.04	25.03	16.36	2.886	CC, ES
Ripley BS Fed Com 301H - OH - Plan 1 11-02-22	1,400.00	1,400.19	26.20	17.11	2.882	SF
Ripley BS Fed Com 501H - OH - Plan 1 11-02-22	1,300.00	1,300.00	50.06	41.39	5.773	CC
Ripley BS Fed Com 501H - OH - Plan 1 11-02-22	1,500.00	1,496.68	50.62	40.94	5.229	ES
Ripley BS Fed Com 501H - OH - Plan 1 11-02-22	1,800.00	1,791.54	54.31	43.17	4.875	SF
Ripley WC Fed Com 702H - OH - Plan 1 11-02-22	1,300.00	1,300.00	50.06	41.39	5.773	CC, ES
Ripley WC Fed Com 702H - OH - Plan 1 11-02-22	19,782.70	19,748.32	890.21	596.91	3.035	SF
Ripley WC Fed Com 801H - OH - Plan 1 11-02-22	1,300.00	1,300.00	25.03	16.36	2.887	CC
Ripley WC Fed Com 801H - OH - Plan 1 11-02-22	1,400.00	1,399.13	25.27	16.06	2.746	ES
Ripley WC Fed Com 801H - OH - Plan 1 11-02-22	1,500.00	1,498.20	26.15	16.46	2.700	SF
Ripley Fed Com Pad - Offsets						
Rock Spur 26 Fee Com - OH - OH						Out of range

Offset Design: Ripley Fed Com Pad - Ripley BS Fed Com 301H - OH - Plan 1 11-02-22

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+HRGM

Offset Well Error: 0.00 usft

Rule Assigned:

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.03	0.00	0.00	0.00	90.000	0.00	25.03	25.03				
100.00	100.00	100.03	100.00	0.53	0.53	90.000	0.00	25.03	25.03	23.96	1.07	23.480	
200.00	200.00	200.03	200.00	1.32	1.32	90.000	0.00	25.03	25.03	22.38	2.65	9.450	
300.00	300.00	300.03	300.00	1.80	1.80	90.000	0.00	25.03	25.03	21.43	3.60	6.956	
400.00	400.00	400.03	400.00	2.18	2.18	90.000	0.00	25.03	25.03	20.68	4.35	5.752	
500.00	500.00	500.03	500.00	2.50	2.50	90.000	0.00	25.03	25.03	20.03	5.00	5.009	
600.00	600.00	600.03	600.00	2.79	2.79	90.000	0.00	25.03	25.03	19.46	5.57	4.491	
700.00	700.00	700.03	700.00	3.05	3.05	90.000	0.00	25.03	25.03	18.93	6.10	4.103	
800.00	800.00	800.03	800.00	3.29	3.29	90.000	0.00	25.03	25.03	18.44	6.59	3.799	
900.00	900.00	900.03	900.00	3.52	3.52	90.000	0.00	25.03	25.03	17.98	7.05	3.552	
1,000.00	1,000.00	1,000.03	1,000.00	3.74	3.74	90.000	0.00	25.03	25.03	17.55	7.48	3.346	
1,100.00	1,100.00	1,100.03	1,100.00	3.95	3.95	90.000	0.00	25.03	25.03	17.14	7.89	3.171	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

PHOENIX TECHNOLOGY SERVICES

Phoenix

Anticollision Report

Marathon Oil Corporation

Company:	Marathon Oil Permian LLC	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Reference Site:	Ripley Fed Com Pad	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA Compass
Reference Design:	Plan 1 11-02-22	**Offset TVD Reference:**	Reference Datum

Offset Design: Ripley Fed Com Pad - Ripley BS Fed Com 301H - OH - Plan 1 11-02-22

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+HRGM

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,200.00	1,200.00	1,200.03	1,200.00	4.15	4.15	90.000	0.00	25.03	25.03	16.74	8.29	3.019	
1,300.00	1,300.00	1,300.03	1,300.00	4.34	4.34	90.000	0.00	25.03	25.03	16.36	8.67	2.886	
1,300.01	1,300.01	1,300.04	1,300.01	4.34	4.34	90.000	0.00	25.03	25.03	16.36	8.67	2.886	CC, ES
1,400.00	1,399.98	1,400.19	1,400.14	4.62	4.61	-148.656	-1.71	24.67	26.20	17.11	9.09	2.882	SF
1,500.00	1,499.84	1,500.23	1,500.03	4.89	4.88	-143.925	-6.84	23.59	29.86	20.40	9.46	3.158	
1,600.00	1,599.45	1,600.01	1,599.48	5.18	4.98	-138.911	-14.93	21.88	36.27	26.55	9.72	3.733	
1,700.00	1,698.70	1,699.59	1,698.67	5.49	5.19	-137.905	-23.43	20.09	45.41	35.32	10.10	4.498	
1,800.00	1,797.47	1,798.88	1,797.58	5.81	5.41	-139.546	-31.90	18.30	57.17	46.65	10.52	5.434	
1,815.26	1,812.49	1,814.00	1,812.65	5.84	5.45	-139.924	-33.19	18.03	59.20	48.63	10.56	5.603	
1,900.00	1,895.86	1,897.92	1,896.25	6.04	5.66	-141.859	-40.34	16.52	70.69	59.80	10.89	6.493	
2,000.00	1,994.25	1,996.97	1,994.92	6.33	5.91	-143.462	-48.79	14.74	84.32	73.01	11.31	7.457	
2,100.00	2,092.63	2,096.01	2,093.59	6.63	6.18	-144.619	-57.24	12.96	98.00	86.26	11.75	8.344	
2,200.00	2,191.02	2,195.05	2,192.25	6.95	6.47	-145.492	-65.69	11.17	111.71	99.52	12.20	9.158	
2,300.00	2,289.41	2,294.10	2,290.92	7.29	6.76	-146.174	-74.14	9.39	125.44	112.78	12.66	9.906	
2,400.00	2,387.79	2,393.14	2,389.58	7.64	7.06	-146.722	-82.59	7.61	139.19	126.05	13.14	10.592	
2,500.00	2,486.18	2,492.18	2,488.25	8.00	7.37	-147.171	-91.03	5.83	152.94	139.31	13.63	11.221	
2,600.00	2,584.57	2,591.23	2,586.92	8.37	7.68	-147.546	-99.48	4.05	166.70	152.58	14.13	11.799	
2,700.00	2,682.95	2,690.27	2,685.58	8.75	8.00	-147.864	-107.93	2.26	180.47	165.84	14.63	12.332	
2,800.00	2,781.34	2,789.31	2,784.25	9.13	8.33	-148.137	-116.38	0.48	194.25	179.10	15.15	12.822	
2,900.00	2,879.73	2,888.36	2,882.91	9.53	8.66	-148.373	-124.83	-1.30	208.02	192.35	15.67	13.275	
3,000.00	2,978.12	2,987.40	2,981.58	9.92	9.00	-148.580	-133.27	-3.08	221.80	205.60	16.20	13.693	
3,100.00	3,076.50	3,086.44	3,080.25	10.33	9.34	-148.763	-141.72	-4.86	235.58	218.85	16.73	14.081	
3,200.00	3,174.89	3,185.49	3,178.91	10.74	9.68	-148.926	-150.17	-6.65	249.37	232.10	17.27	14.441	
3,300.00	3,273.28	3,284.53	3,277.58	11.15	10.02	-149.072	-158.62	-8.43	263.15	245.34	17.81	14.775	
3,400.00	3,371.66	3,383.57	3,376.24	11.56	10.37	-149.203	-167.07	-10.21	276.94	258.58	18.36	15.087	
3,500.00	3,470.05	3,482.61	3,474.91	11.98	10.72	-149.322	-175.52	-11.99	290.73	271.82	18.91	15.377	
3,600.00	3,568.44	3,581.66	3,573.58	12.40	11.08	-149.430	-183.96	-13.77	304.52	285.06	19.46	15.649	
3,700.00	3,666.82	3,680.70	3,672.24	12.83	11.43	-149.528	-192.41	-15.55	318.31	298.29	20.02	15.903	
3,800.00	3,765.21	3,779.74	3,770.91	13.25	11.79	-149.619	-200.86	-17.34	332.10	311.53	20.57	16.142	
3,900.00	3,863.60	3,878.79	3,869.57	13.68	12.15	-149.702	-209.31	-19.12	345.89	324.76	21.14	16.366	
4,000.00	3,961.98	3,977.83	3,968.24	14.11	12.51	-149.779	-217.76	-20.90	359.69	337.99	21.70	16.576	
4,100.00	4,060.37	4,076.87	4,066.91	14.55	12.87	-149.850	-226.20	-22.68	373.48	351.22	22.26	16.775	
4,200.00	4,158.76	4,175.92	4,165.57	14.98	13.23	-149.916	-234.65	-24.46	387.27	364.44	22.83	16.962	
4,300.00	4,257.14	4,274.96	4,264.24	15.42	13.60	-149.978	-243.10	-26.25	401.07	377.67	23.40	17.139	
4,365.02	4,321.11	4,339.35	4,328.39	15.69	13.83	-150.016	-248.59	-27.41	410.04	386.28	23.76	17.258	
4,400.00	4,355.57	4,374.03	4,362.93	15.83	13.96	-150.067	-251.55	-28.03	414.68	390.74	23.94	17.319	
4,500.00	4,454.44	4,473.15	4,461.67	16.28	14.31	-150.036	-260.00	-29.81	425.93	401.46	24.47	17.405	
4,600.00	4,553.77	4,569.86	4,558.16	16.71	14.66	-150.009	-266.39	-31.16	434.56	409.60	24.96	17.411	
4,700.00	4,653.44	4,666.70	4,654.94	17.11	14.97	-150.159	-269.60	-31.84	440.85	415.41	25.43	17.333	
4,800.00	4,753.33	4,765.10	4,753.33	17.46	15.10	-150.431	-270.01	-31.92	444.71	418.88	25.83	17.217	
4,880.28	4,833.60	4,845.36	4,833.60	17.59	15.13	90.024	-270.01	-31.92	445.69	419.70	25.99	17.146	
4,900.00	4,853.32	4,865.09	4,853.32	17.59	15.13	90.024	-270.01	-31.92	445.69	419.68	26.01	17.138	
5,000.00	4,953.32	4,965.09	4,953.32	17.63	15.17	90.024	-270.01	-31.92	445.69	419.58	26.11	17.071	
5,100.00	5,053.32	5,065.09	5,053.32	17.67	15.21	90.024	-270.01	-31.92	445.69	419.48	26.21	17.004	
5,200.00	5,153.32	5,165.09	5,153.32	17.71	15.26	90.024	-270.01	-31.92	445.69	419.38	26.31	16.937	
5,300.00	5,253.32	5,265.09	5,253.32	17.75	15.30	90.024	-270.01	-31.92	445.69	419.27	26.42	16.870	
5,400.00	5,353.32	5,365.09	5,353.32	17.79	15.34	90.024	-270.01	-31.92	445.69	419.17	26.52	16.804	
5,500.00	5,453.32	5,465.09	5,453.32	17.83	15.38	90.024	-270.01	-31.92	445.69	419.06	26.63	16.737	
5,600.00	5,553.32	5,565.09	5,553.32	17.88	15.42	90.024	-270.01	-31.92	445.69	418.96	26.73	16.671	
5,700.00	5,653.32	5,665.09	5,653.32	17.92	15.47	90.024	-270.01	-31.92	445.69	418.85	26.84	16.605	
5,800.00	5,753.32	5,765.09	5,753.32	17.96	15.51	90.024	-270.01	-31.92	445.69	418.74	26.95	16.539	
5,900.00	5,853.32	5,865.09	5,853.32	18.00	15.55	90.024	-270.01	-31.92	445.69	418.64	27.06	16.473	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

PHOENIX TECHNOLOGY SERVICES

Phoenix
Anticollision Report

Marathon Oil Corporation

Company:	Marathon Oil Permian LLC	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Reference Site:	Ripley Fed Com Pad	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA Compass
Reference Design:	Plan 1 11-02-22	**Offset TVD Reference:**	Reference Datum

Offset Design: Ripley Fed Com Pad - Ripley BS Fed Com 301H - OH - Plan 1 11-02-22

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+HRGM

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Rule Assigned: Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,000.00	5,953.32	5,965.09	5,953.32	18.05	15.60	90.024	-270.01	-31.92	445.69	418.53	27.16	16.408	
6,100.00	6,053.32	6,065.09	6,053.32	18.09	15.64	90.024	-270.01	-31.92	445.69	418.42	27.27	16.343	
6,200.00	6,153.32	6,165.09	6,153.32	18.13	15.68	90.024	-270.01	-31.92	445.69	418.31	27.38	16.277	
6,300.00	6,253.32	6,265.09	6,253.32	18.18	15.73	90.024	-270.01	-31.92	445.69	418.20	27.49	16.213	
6,400.00	6,353.32	6,365.09	6,353.32	18.22	15.77	90.024	-270.01	-31.92	445.69	418.09	27.60	16.148	
6,500.00	6,453.32	6,465.09	6,453.32	18.27	15.82	90.024	-270.01	-31.92	445.69	417.98	27.71	16.083	
6,600.00	6,553.32	6,565.09	6,553.32	18.31	15.86	90.024	-270.01	-31.92	445.69	417.87	27.82	16.019	
6,700.00	6,653.32	6,665.09	6,653.32	18.36	15.91	90.024	-270.01	-31.92	445.69	417.76	27.93	15.955	
6,800.00	6,753.32	6,765.09	6,753.32	18.40	15.95	90.024	-270.01	-31.92	445.69	417.64	28.05	15.891	
6,900.00	6,853.32	6,865.09	6,853.32	18.45	16.00	90.024	-270.01	-31.92	445.69	417.53	28.16	15.828	
7,000.00	6,953.32	6,965.09	6,953.32	18.49	16.05	90.024	-270.01	-31.92	445.69	417.42	28.27	15.765	
7,100.00	7,053.32	7,065.17	7,053.38	18.54	16.03	89.876	-268.85	-31.93	445.69	417.32	28.37	15.712	
7,112.07	7,065.39	7,077.21	7,065.39	18.54	16.01	89.761	-267.96	-31.93	445.69	417.30	28.38	15.702	
7,200.00	7,153.32	7,163.06	7,150.07	18.58	15.87	88.011	-254.34	-31.99	445.91	417.30	28.60	15.591	
7,300.00	7,253.32	7,253.63	7,236.14	18.63	15.67	84.440	-226.45	-32.10	447.94	419.00	28.94	15.476	
7,400.00	7,353.32	7,333.79	7,307.82	18.68	15.48	79.929	-190.72	-32.25	454.61	425.34	29.27	15.532	
7,500.00	7,453.32	7,400.00	7,362.80	18.72	15.33	75.406	-153.90	-32.41	468.87	439.47	29.40	15.947	
7,600.00	7,553.32	7,460.88	7,409.30	18.77	15.20	70.778	-114.65	-32.57	492.83	463.45	29.38	16.776	
7,700.00	7,653.32	7,509.78	7,443.48	18.82	15.10	66.860	-79.68	-32.71	527.37	498.27	29.10	18.123	
7,800.00	7,753.32	7,550.00	7,469.26	18.87	15.02	63.579	-48.83	-32.84	572.14	543.45	28.69	19.943	
7,900.00	7,853.32	7,585.58	7,490.22	18.91	14.96	60.680	-20.09	-32.96	626.03	597.75	28.29	22.132	
8,000.00	7,953.32	7,615.05	7,506.20	18.96	14.92	58.307	4.67	-33.07	687.66	659.73	27.93	24.623	
8,100.00	8,053.32	7,650.00	7,523.48	19.01	14.87	55.551	35.04	-33.19	755.77	728.03	27.73	27.252	
8,200.00	8,153.32	7,650.00	7,523.48	19.06	14.87	55.551	35.04	-33.19	828.95	801.52	27.42	30.229	
8,300.00	8,253.32	7,680.91	7,537.19	19.11	14.83	53.185	62.74	-33.31	906.01	878.58	27.43	33.028	
8,400.00	8,353.32	7,700.00	7,544.90	19.16	14.81	51.764	80.20	-33.38	986.61	959.16	27.46	35.934	

PHOENIX TECHNOLOGY SERVICES

Phoenix

Anticollision Report

Marathon Oil Corporation

Company:	Marathon Oil Permian LLC	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Reference Site:	Ripley Fed Com Pad	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA Compass
Reference Design:	Plan 1 11-02-22	**Offset TVD Reference:**	Reference Datum

Offset Design: Ripley Fed Com Pad - Ripley BS Fed Com 501H - OH - Plan 1 11-02-22

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+HRGM

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.011	-0.01	-50.06	50.06				
100.00	100.00	100.00	100.00	0.53	0.53	-90.011	-0.01	-50.06	50.06	48.99	1.07	46.956	
200.00	200.00	200.00	200.00	1.32	1.32	-90.011	-0.01	-50.06	50.06	47.41	2.65	18.900	
300.00	300.00	300.00	300.00	1.80	1.80	-90.011	-0.01	-50.06	50.06	46.46	3.60	13.912	
400.00	400.00	400.00	400.00	2.18	2.18	-90.011	-0.01	-50.06	50.06	45.71	4.35	11.505	
500.00	500.00	500.00	500.00	2.50	2.50	-90.011	-0.01	-50.06	50.06	45.06	5.00	10.017	
600.00	600.00	600.00	600.00	2.79	2.79	-90.011	-0.01	-50.06	50.06	44.49	5.57	8.982	
700.00	700.00	700.00	700.00	3.05	3.05	-90.011	-0.01	-50.06	50.06	43.96	6.10	8.207	
800.00	800.00	800.00	800.00	3.29	3.29	-90.011	-0.01	-50.06	50.06	43.47	6.59	7.598	
900.00	900.00	900.00	900.00	3.52	3.52	-90.011	-0.01	-50.06	50.06	43.01	7.05	7.104	
1,000.00	1,000.00	1,000.00	1,000.00	3.74	3.74	-90.011	-0.01	-50.06	50.06	42.58	7.48	6.692	
1,100.00	1,100.00	1,100.00	1,100.00	3.95	3.95	-90.011	-0.01	-50.06	50.06	42.17	7.89	6.341	
1,200.00	1,200.00	1,200.00	1,200.00	4.15	4.15	-90.011	-0.01	-50.06	50.06	41.77	8.29	6.038	
1,300.00	1,300.00	1,300.00	1,300.00	4.34	4.34	-90.011	-0.01	-50.06	50.06	41.39	8.67	5.773 CC	
1,400.00	1,399.98	1,398.34	1,398.32	4.62	4.61	29.899	-0.46	-51.69	50.20	41.00	9.19	5.460	
1,500.00	1,499.84	1,496.68	1,496.52	4.89	4.89	31.224	-1.82	-56.56	50.62	40.94	9.68	5.229 ES	
1,600.00	1,599.45	1,594.99	1,594.47	5.18	5.17	33.379	-4.07	-64.68	51.39	41.22	10.17	5.052	
1,700.00	1,698.70	1,693.29	1,692.05	5.49	5.48	36.278	-7.22	-76.03	52.58	41.92	10.66	4.933	
1,800.00	1,797.47	1,791.54	1,789.14	5.81	5.80	39.796	-11.26	-90.59	54.31	43.17	11.14	4.875 SF	
1,815.26	1,812.49	1,806.54	1,803.90	5.84	5.85	40.377	-11.96	-93.10	54.63	43.44	11.19	4.883	
1,900.00	1,895.86	1,889.75	1,885.59	6.04	6.14	42.952	-16.19	-108.34	57.59	46.05	11.54	4.990	
2,000.00	1,994.25	1,987.74	1,981.16	6.33	6.50	44.188	-21.99	-129.22	63.92	51.88	12.04	5.307	
2,100.00	2,092.63	2,085.30	2,075.50	6.63	6.87	43.828	-28.62	-153.12	73.20	60.58	12.62	5.801	
2,200.00	2,191.02	2,184.34	2,170.72	6.95	7.21	42.809	-35.91	-179.39	84.36	71.11	13.25	6.367	
2,300.00	2,289.41	2,283.70	2,266.23	7.29	7.55	42.015	-43.24	-205.78	95.58	81.66	13.91	6.869	
2,400.00	2,387.79	2,383.06	2,361.74	7.64	7.91	41.387	-50.57	-232.17	106.81	92.21	14.60	7.313	
2,500.00	2,486.18	2,482.42	2,457.25	8.00	8.29	40.880	-57.89	-258.56	118.05	102.73	15.32	7.707	
2,600.00	2,584.57	2,581.78	2,552.77	8.37	8.67	40.460	-65.22	-284.94	129.30	113.25	16.05	8.056	
2,700.00	2,682.95	2,681.15	2,648.28	8.75	9.07	40.108	-72.54	-311.33	140.55	123.75	16.80	8.366	
2,800.00	2,781.34	2,780.51	2,743.79	9.13	9.48	39.808	-79.87	-337.72	151.81	134.25	17.57	8.642	
2,900.00	2,879.73	2,879.87	2,839.30	9.53	9.90	39.549	-87.19	-364.11	163.08	144.73	18.35	8.888	
3,000.00	2,978.12	2,979.23	2,934.82	9.92	10.32	39.324	-94.52	-390.50	174.34	155.20	19.14	9.109	
3,100.00	3,076.50	3,078.59	3,030.33	10.33	10.75	39.126	-101.85	-416.89	185.61	165.67	19.94	9.308	
3,200.00	3,174.89	3,177.95	3,125.84	10.74	11.19	38.951	-109.17	-443.27	196.88	176.13	20.75	9.487	
3,300.00	3,273.28	3,277.31	3,221.35	11.15	11.63	38.794	-116.50	-469.66	208.15	186.58	21.57	9.648	
3,400.00	3,371.66	3,376.67	3,316.87	11.56	12.08	38.654	-123.82	-496.05	219.42	197.02	22.40	9.795	
3,500.00	3,470.05	3,476.04	3,412.38	11.98	12.53	38.528	-131.15	-522.44	230.70	207.46	23.24	9.929	
3,600.00	3,568.44	3,575.40	3,507.89	12.40	12.98	38.413	-138.47	-548.83	241.97	217.90	24.08	10.050	
3,700.00	3,666.82	3,674.76	3,603.40	12.83	13.44	38.308	-145.80	-575.21	253.25	228.33	24.92	10.162	
3,800.00	3,765.21	3,774.12	3,698.92	13.25	13.90	38.213	-153.13	-601.60	264.52	238.75	25.77	10.264	
3,900.00	3,863.60	3,873.48	3,794.43	13.68	14.37	38.125	-160.45	-627.99	275.80	249.17	26.63	10.358	
4,000.00	3,961.98	3,972.84	3,889.94	14.11	14.83	38.044	-167.78	-654.38	287.08	259.59	27.49	10.444	
4,100.00	4,060.37	4,072.20	3,985.45	14.55	15.30	37.969	-175.10	-680.77	298.36	270.01	28.35	10.524	
4,200.00	4,158.76	4,171.56	4,080.97	14.98	15.77	37.900	-182.43	-707.16	309.64	280.42	29.22	10.598	
4,300.00	4,257.14	4,270.93	4,176.48	15.42	16.24	37.836	-189.75	-733.54	320.92	290.83	30.09	10.667	
4,365.02	4,321.11	4,335.53	4,238.58	15.69	16.55	37.796	-194.52	-750.70	328.25	297.61	30.64	10.714	
4,400.00	4,355.57	4,370.27	4,271.97	15.83	16.72	37.804	-197.08	-759.93	332.36	301.43	30.93	10.745	
4,500.00	4,454.44	4,469.31	4,367.18	16.28	17.19	37.613	-204.38	-786.23	345.97	314.13	31.84	10.866	
4,600.00	4,553.77	4,567.87	4,461.92	16.71	17.66	37.146	-211.65	-812.41	362.35	329.59	32.76	11.060	
4,700.00	4,653.44	4,665.83	4,556.09	17.11	18.13	36.453	-218.87	-838.42	381.53	347.85	33.68	11.327	
4,800.00	4,753.33	4,763.07	4,649.56	17.46	18.60	35.588	-226.04	-864.25	403.59	369.00	34.59	11.669	
4,880.28	4,833.60	4,840.53	4,724.02	17.59	18.98	-84.659	-231.75	-884.82	423.41	388.21	35.20	12.028	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

PHOENIX TECHNOLOGY SERVICES

Phoenix

Anticollision Report

Marathon Oil Corporation

Company:	Marathon Oil Permian LLC	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Reference Site:	Ripley Fed Com Pad	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA Compass
Reference Design:	Plan 1 11-02-22	**Offset TVD Reference:**	Reference Datum

Offset Design: Ripley Fed Com Pad - Ripley BS Fed Com 501H - OH - Plan 1 11-02-22

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+HRGM

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Rule Assigned: Minimum Separation (usft)	Separation Factor	Warning
4,900.00	4,853.32	4,859.48	4,742.24	17.59	19.07	-84.917	-233.15	-889.85	428.52	393.19	35.33	12.129	
5,000.00	4,953.32	4,956.39	4,835.39	17.63	19.53	-86.143	-240.29	-915.58	454.53	418.54	35.99	12.630	
5,100.00	5,053.32	5,070.80	4,946.03	17.67	20.08	-87.330	-248.08	-943.65	478.73	441.96	36.77	13.019	
5,200.00	5,153.32	5,187.47	5,059.95	17.71	20.65	-88.246	-254.81	-967.87	499.30	461.81	37.48	13.321	
5,300.00	5,253.32	5,306.07	5,176.70	17.75	21.21	-88.939	-260.36	-987.88	516.08	477.98	38.10	13.546	
5,400.00	5,353.32	5,426.22	5,295.76	17.79	21.74	-89.439	-264.67	-1,003.40	528.95	490.35	38.61	13.702	
5,500.00	5,453.32	5,547.53	5,416.55	17.83	22.23	-89.770	-267.66	-1,014.17	537.82	498.82	39.00	13.790	
5,600.00	5,553.32	5,669.57	5,538.43	17.88	22.66	-89.944	-269.28	-1,020.02	542.61	503.35	39.26	13.821	
5,700.00	5,653.32	5,784.47	5,653.32	17.92	22.83	-89.977	-269.60	-1,021.14	543.53	504.23	39.30	13.831	
5,800.00	5,753.32	5,884.47	5,753.32	17.96	22.86	-89.977	-269.60	-1,021.14	543.53	504.16	39.37	13.805	
5,900.00	5,853.32	5,984.47	5,853.32	18.00	22.89	-89.977	-269.60	-1,021.14	543.53	504.08	39.45	13.778	
6,000.00	5,953.32	6,084.47	5,953.32	18.05	22.93	-89.977	-269.60	-1,021.14	543.53	504.00	39.53	13.751	
6,100.00	6,053.32	6,184.47	6,053.32	18.09	22.96	-89.977	-269.60	-1,021.14	543.53	503.92	39.60	13.724	
6,200.00	6,153.32	6,284.47	6,153.32	18.13	22.99	-89.977	-269.60	-1,021.14	543.53	503.84	39.68	13.696	
6,300.00	6,253.32	6,384.47	6,253.32	18.18	23.03	-89.977	-269.60	-1,021.14	543.53	503.76	39.76	13.669	
6,400.00	6,353.32	6,484.47	6,353.32	18.22	23.06	-89.977	-269.60	-1,021.14	543.53	503.68	39.84	13.641	
6,500.00	6,453.32	6,584.47	6,453.32	18.27	23.09	-89.977	-269.60	-1,021.14	543.53	503.60	39.92	13.614	
6,600.00	6,553.32	6,684.47	6,553.32	18.31	23.13	-89.977	-269.60	-1,021.14	543.53	503.52	40.01	13.586	
6,700.00	6,653.32	6,784.47	6,653.32	18.36	23.16	-89.977	-269.60	-1,021.14	543.53	503.44	40.09	13.559	
6,800.00	6,753.32	6,884.47	6,753.32	18.40	23.20	-89.977	-269.60	-1,021.14	543.53	503.36	40.17	13.531	
6,900.00	6,853.32	6,984.47	6,853.32	18.45	23.23	-89.977	-269.60	-1,021.14	543.53	503.27	40.25	13.503	
7,000.00	6,953.32	7,084.47	6,953.32	18.49	23.27	-89.977	-269.60	-1,021.14	543.53	503.19	40.33	13.475	
7,100.00	7,053.32	7,184.47	7,053.32	18.54	23.31	-89.977	-269.60	-1,021.14	543.53	503.11	40.42	13.448	
7,200.00	7,153.32	7,284.47	7,153.32	18.58	23.34	-89.977	-269.60	-1,021.14	543.53	503.02	40.50	13.420	
7,300.00	7,253.32	7,384.47	7,253.32	18.63	23.38	-89.977	-269.60	-1,021.14	543.53	502.94	40.59	13.392	
7,400.00	7,353.32	7,484.47	7,353.32	18.68	23.41	-89.977	-269.60	-1,021.14	543.53	502.85	40.67	13.364	
7,500.00	7,453.32	7,584.47	7,453.32	18.72	23.45	-89.977	-269.60	-1,021.14	543.53	502.77	40.76	13.336	
7,600.00	7,553.32	7,684.47	7,553.32	18.77	23.49	-89.977	-269.60	-1,021.14	543.53	502.68	40.84	13.308	
7,700.00	7,653.32	7,784.47	7,653.32	18.82	23.53	-89.977	-269.60	-1,021.14	543.53	502.60	40.93	13.280	
7,800.00	7,753.32	7,884.47	7,753.32	18.87	23.56	-89.977	-269.60	-1,021.14	543.53	502.51	41.02	13.251	
7,806.29	7,759.61	7,890.76	7,759.61	18.87	23.57	-89.977	-269.60	-1,021.14	543.53	502.50	41.02	13.250	
7,900.00	7,853.32	7,984.34	7,853.18	18.91	23.58	-89.914	-269.00	-1,021.14	543.53	502.45	41.08	13.230	
8,000.00	7,953.32	8,081.96	7,949.85	18.96	23.52	-88.573	-256.28	-1,021.19	543.76	502.74	41.02	13.255	
8,100.00	8,053.32	8,172.85	8,036.71	19.01	23.45	-85.796	-229.85	-1,021.30	545.41	504.53	40.89	13.340	
8,200.00	8,153.32	8,253.72	8,109.64	19.06	23.39	-82.172	-195.05	-1,021.45	550.69	509.95	40.73	13.519	
8,300.00	8,253.32	8,323.49	8,168.09	19.11	23.34	-78.287	-157.04	-1,021.61	562.06	521.50	40.57	13.856	
8,400.00	8,353.32	8,382.64	8,213.72	19.16	23.32	-74.552	-119.44	-1,021.77	581.56	541.20	40.35	14.412	
8,500.00	8,453.32	8,432.41	8,248.94	19.21	23.31	-71.179	-84.30	-1,021.91	610.29	570.22	40.07	15.229	
8,600.00	8,553.32	8,474.28	8,276.12	19.26	23.31	-68.236	-52.46	-1,022.05	648.46	608.71	39.74	16.316	
8,700.00	8,653.32	8,500.00	8,291.63	19.31	23.32	-66.403	-31.95	-1,022.13	695.63	656.19	39.44	17.636	
8,800.00	8,753.32	8,550.00	8,319.09	19.36	23.35	-62.825	9.81	-1,022.31	750.63	711.62	39.01	19.243	
8,900.00	8,853.32	8,565.39	8,326.80	19.41	23.37	-61.730	23.14	-1,022.36	812.28	773.53	38.76	20.959	
9,000.00	8,953.32	8,600.00	8,342.80	19.46	23.41	-59.292	53.82	-1,022.49	879.98	841.49	38.49	22.864	
9,100.00	9,053.32	8,600.00	8,342.80	19.51	23.41	-59.292	53.82	-1,022.49	952.09	913.76	38.33	24.838	
9,123.72	9,077.04	8,600.00	8,342.80	19.51	23.41	-59.292	53.82	-1,022.49	969.92	931.62	38.29	25.329	
9,150.00	9,103.31	8,615.72	8,349.45	19.50	23.44	-55.485	68.06	-1,022.55	989.45	951.19	38.26	25.863	

PHOENIX TECHNOLOGY SERVICES

Phoenix

Anticollision Report

Marathon Oil Corporation

Company:	Marathon Oil Permian LLC	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Reference Site:	Ripley Fed Com Pad	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA Compass
Reference Design:	Plan 1 11-02-22	**Offset TVD Reference:**	Reference Datum

Offset Design: Ripley Fed Com Pad - Ripley WC Fed Com 702H - OH - Plan 1 11-02-22 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+HRGM — **Rule Assigned:** — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	90.000	0.00	50.06	50.06				
100.00	100.00	100.00	100.00	0.53	0.53	90.000	0.00	50.06	50.06	48.99	1.07	46.956	
200.00	200.00	200.00	200.00	1.32	1.32	90.000	0.00	50.06	50.06	47.41	2.65	18.900	
300.00	300.00	300.00	300.00	1.80	1.80	90.000	0.00	50.06	50.06	46.46	3.60	13.912	
400.00	400.00	400.00	400.00	2.18	2.18	90.000	0.00	50.06	50.06	45.71	4.35	11.505	
500.00	500.00	500.00	500.00	2.50	2.50	90.000	0.00	50.06	50.06	45.06	5.00	10.017	
600.00	600.00	600.00	600.00	2.79	2.79	90.000	0.00	50.06	50.06	44.49	5.57	8.982	
700.00	700.00	700.00	700.00	3.05	3.05	90.000	0.00	50.06	50.06	43.96	6.10	8.207	
800.00	800.00	800.00	800.00	3.29	3.29	90.000	0.00	50.06	50.06	43.47	6.59	7.598	
900.00	900.00	900.00	900.00	3.52	3.52	90.000	0.00	50.06	50.06	43.01	7.05	7.104	
1,000.00	1,000.00	1,000.00	1,000.00	3.74	3.74	90.000	0.00	50.06	50.06	42.58	7.48	6.692	
1,100.00	1,100.00	1,100.00	1,100.00	3.95	3.95	90.000	0.00	50.06	50.06	42.17	7.89	6.341	
1,200.00	1,200.00	1,200.00	1,200.00	4.15	4.15	90.000	0.00	50.06	50.06	41.77	8.29	6.038	
1,300.00	1,300.00	1,300.00	1,300.00	4.34	4.34	90.000	0.00	50.06	50.06	41.39	8.67	5.773 CC, ES	
1,400.00	1,399.98	1,398.54	1,398.52	4.62	4.61	-150.327	-1.01	51.42	52.96	43.80	9.16	5.780	
1,500.00	1,499.84	1,496.58	1,496.42	4.89	4.88	-149.807	-4.03	55.46	61.64	52.01	9.62	6.405	
1,600.00	1,599.45	1,593.64	1,593.13	5.18	5.16	-149.181	-8.99	62.11	76.05	65.95	10.10	7.531	
1,700.00	1,698.70	1,689.26	1,688.07	5.49	5.45	-148.579	-15.79	71.23	96.11	85.52	10.59	9.076	
1,800.00	1,797.47	1,785.04	1,782.82	5.81	5.63	-148.213	-24.12	82.39	121.21	110.19	11.02	11.001	
1,815.26	1,812.49	1,799.73	1,797.36	5.84	5.66	-148.224	-25.42	84.13	125.32	114.25	11.07	11.324	
1,900.00	1,895.86	1,881.28	1,878.01	6.04	5.88	-148.524	-32.62	93.79	148.32	136.89	11.44	12.970	
2,000.00	1,994.25	1,977.52	1,973.20	6.33	6.14	-148.777	-41.12	105.19	175.48	163.55	11.93	14.713	
2,100.00	2,092.63	2,073.76	2,068.38	6.63	6.43	-148.962	-49.63	116.59	202.64	190.19	12.45	16.280	
2,200.00	2,191.02	2,170.00	2,163.56	6.95	6.72	-149.104	-58.13	127.98	229.80	216.80	12.99	17.685	
2,300.00	2,289.41	2,266.24	2,258.75	7.29	7.04	-149.215	-66.63	139.38	256.96	243.39	13.56	18.944	
2,400.00	2,387.79	2,362.48	2,353.93	7.64	7.36	-149.305	-75.13	150.78	284.12	269.97	14.15	20.074	
2,500.00	2,486.18	2,458.72	2,449.11	8.00	7.69	-149.380	-83.64	162.18	311.28	296.52	14.76	21.087	
2,600.00	2,584.57	2,554.96	2,544.30	8.37	8.03	-149.442	-92.14	173.58	338.44	323.06	15.39	21.998	
2,700.00	2,682.95	2,651.20	2,639.48	8.75	8.38	-149.495	-100.64	184.97	365.61	349.58	16.02	22.818	
2,800.00	2,781.34	2,747.44	2,734.66	9.13	8.73	-149.541	-109.14	196.37	392.77	376.10	16.67	23.557	
2,900.00	2,879.73	2,843.68	2,829.85	9.53	9.09	-149.581	-117.64	207.77	419.93	402.60	17.33	24.226	
3,000.00	2,978.12	2,939.92	2,925.03	9.92	9.46	-149.616	-126.15	219.17	447.10	429.09	18.00	24.833	
3,100.00	3,076.50	3,036.16	3,020.21	10.33	9.83	-149.647	-134.65	230.56	474.26	455.58	18.68	25.384	
3,200.00	3,174.89	3,132.40	3,115.40	10.74	10.20	-149.675	-143.15	241.96	501.42	482.05	19.37	25.886	
3,300.00	3,273.28	3,228.64	3,210.58	11.15	10.58	-149.700	-151.65	253.36	528.59	508.52	20.06	26.344	
3,400.00	3,371.66	3,324.88	3,305.76	11.56	10.96	-149.722	-160.16	264.76	555.75	534.98	20.77	26.764	
3,500.00	3,470.05	3,421.12	3,400.95	11.98	11.35	-149.743	-168.66	276.15	582.91	561.44	21.47	27.149	
3,600.00	3,568.44	3,517.36	3,496.13	12.40	11.73	-149.761	-177.16	287.55	610.08	587.90	22.18	27.503	
3,700.00	3,666.82	3,613.60	3,591.32	12.83	12.12	-149.778	-185.66	298.95	637.24	614.34	22.90	27.829	
3,800.00	3,765.21	3,709.84	3,686.50	13.25	12.51	-149.794	-194.17	310.35	664.41	640.79	23.62	28.131	
3,900.00	3,863.60	3,806.08	3,781.68	13.68	12.91	-149.808	-202.67	321.75	691.57	667.23	24.34	28.410	
4,000.00	3,961.98	3,902.32	3,876.87	14.11	13.30	-149.821	-211.17	333.14	718.73	693.66	25.07	28.669	
4,100.00	4,060.37	3,998.56	3,972.05	14.55	13.70	-149.834	-219.67	344.54	745.90	720.10	25.80	28.910	
4,200.00	4,158.76	4,094.80	4,067.23	14.98	14.10	-149.845	-228.17	355.94	773.06	746.53	26.53	29.134	
4,300.00	4,257.14	4,191.04	4,162.42	15.42	14.50	-149.856	-236.68	367.34	800.23	772.95	27.27	29.343	
4,365.02	4,321.11	4,253.61	4,224.30	15.69	14.76	-149.862	-242.20	374.75	817.89	790.15	27.74	29.486	
4,400.00	4,355.57	4,287.33	4,257.65	15.83	14.90	-149.955	-245.18	378.74	827.21	799.23	27.98	29.559	
4,500.00	4,454.44	4,392.50	4,361.70	16.28	15.31	-150.111	-254.35	391.03	851.77	823.00	28.77	29.607	
4,600.00	4,553.77	4,521.89	4,490.24	16.71	15.86	-150.212	-263.12	402.78	870.79	841.08	29.71	29.313	
4,700.00	4,653.44	4,653.45	4,621.48	17.11	16.36	-150.330	-268.47	409.95	883.21	852.66	30.54	28.918	
4,800.00	4,753.33	4,786.25	4,754.24	17.46	16.67	-150.467	-270.21	412.28	888.92	857.78	31.14	28.549	
4,880.28	4,833.60	4,865.61	4,833.60	17.59	16.69	90.025	-270.21	412.29	889.90	858.63	31.27	28.457	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

PHOENIX TECHNOLOGY SERVICES

Phoenix

Anticollision Report

Marathon Oil Corporation

Company:	Marathon Oil Permian LLC	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Reference Site:	Ripley Fed Com Pad	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA Compass
Reference Design:	Plan 1 11-02-22	**Offset TVD Reference:**	Reference Datum

Offset Design: Ripley Fed Com Pad - Ripley WC Fed Com 702H - OH - Plan 1 11-02-22

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+HRGM

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Rule Assigned: Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.00	4,853.32	4,885.33	4,853.32	17.59	16.70	90.025	-270.21	412.29	889.90	858.62	31.28	28.448	
5,000.00	4,953.32	4,985.33	4,953.32	17.63	16.74	90.025	-270.21	412.29	889.90	858.53	31.37	28.368	
5,100.00	5,053.32	5,085.33	5,053.32	17.67	16.78	90.025	-270.21	412.29	889.90	858.44	31.46	28.289	
5,200.00	5,153.32	5,185.33	5,153.32	17.71	16.82	90.025	-270.21	412.29	889.90	858.35	31.55	28.209	
5,300.00	5,253.32	5,285.33	5,253.32	17.75	16.87	90.025	-270.21	412.29	889.90	858.26	31.64	28.129	
5,400.00	5,353.32	5,385.33	5,353.32	17.79	16.91	90.025	-270.21	412.29	889.90	858.17	31.73	28.050	
5,500.00	5,453.32	5,485.33	5,453.32	17.83	16.95	90.025	-270.21	412.29	889.90	858.08	31.82	27.970	
5,600.00	5,553.32	5,585.33	5,553.32	17.88	17.00	90.025	-270.21	412.29	889.90	857.99	31.91	27.890	
5,700.00	5,653.32	5,685.33	5,653.32	17.92	17.04	90.025	-270.21	412.29	889.90	857.90	32.00	27.810	
5,800.00	5,753.32	5,785.33	5,753.32	17.96	17.08	90.025	-270.21	412.29	889.90	857.81	32.09	27.730	
5,900.00	5,853.32	5,885.33	5,853.32	18.00	17.13	90.025	-270.21	412.29	889.90	857.71	32.18	27.650	
6,000.00	5,953.32	5,985.33	5,953.32	18.05	17.17	90.025	-270.21	412.29	889.90	857.62	32.28	27.570	
6,100.00	6,053.32	6,085.33	6,053.32	18.09	17.22	90.025	-270.21	412.29	889.90	857.53	32.37	27.490	
6,200.00	6,153.32	6,185.33	6,153.32	18.13	17.26	90.025	-270.21	412.29	889.90	857.43	32.47	27.410	
6,300.00	6,253.32	6,285.33	6,253.32	18.18	17.31	90.025	-270.21	412.29	889.90	857.34	32.56	27.330	
6,400.00	6,353.32	6,385.33	6,353.32	18.22	17.35	90.025	-270.21	412.29	889.90	857.24	32.66	27.250	
6,500.00	6,453.32	6,485.33	6,453.32	18.27	17.40	90.025	-270.21	412.29	889.90	857.14	32.75	27.170	
6,600.00	6,553.32	6,585.33	6,553.32	18.31	17.44	90.025	-270.21	412.29	889.90	857.05	32.85	27.090	
6,700.00	6,653.32	6,685.33	6,653.32	18.36	17.49	90.025	-270.21	412.29	889.90	856.95	32.95	27.010	
6,800.00	6,753.32	6,785.33	6,753.32	18.40	17.54	90.025	-270.21	412.29	889.90	856.85	33.04	26.930	
6,900.00	6,853.32	6,885.33	6,853.32	18.45	17.58	90.025	-270.21	412.29	889.90	856.75	33.14	26.850	
7,000.00	6,953.32	6,985.33	6,953.32	18.49	17.63	90.025	-270.21	412.29	889.90	856.66	33.24	26.771	
7,100.00	7,053.32	7,085.33	7,053.32	18.54	17.68	90.025	-270.21	412.29	889.90	856.56	33.34	26.691	
7,200.00	7,153.32	7,185.33	7,153.32	18.58	17.73	90.025	-270.21	412.29	889.90	856.46	33.44	26.611	
7,300.00	7,253.32	7,285.33	7,253.32	18.63	17.77	90.025	-270.21	412.29	889.90	856.36	33.54	26.532	
7,400.00	7,353.32	7,385.33	7,353.32	18.68	17.82	90.025	-270.21	412.29	889.90	856.26	33.64	26.452	
7,500.00	7,453.32	7,485.33	7,453.32	18.72	17.87	90.025	-270.21	412.29	889.90	856.15	33.74	26.373	
7,600.00	7,553.32	7,585.33	7,553.32	18.77	17.92	90.025	-270.21	412.29	889.90	856.05	33.84	26.294	
7,700.00	7,653.32	7,685.33	7,653.32	18.82	17.97	90.025	-270.21	412.29	889.90	855.95	33.95	26.215	
7,800.00	7,753.32	7,785.33	7,753.32	18.87	18.02	90.025	-270.21	412.29	889.90	855.85	34.05	26.136	
7,900.00	7,853.32	7,885.33	7,853.32	18.91	18.06	90.025	-270.21	412.29	889.90	855.75	34.15	26.057	
8,000.00	7,953.32	7,985.33	7,953.32	18.96	18.11	90.025	-270.21	412.29	889.90	855.64	34.26	25.978	
8,100.00	8,053.32	8,085.33	8,053.32	19.01	18.16	90.025	-270.21	412.29	889.90	855.54	34.36	25.899	
8,200.00	8,153.32	8,185.33	8,153.32	19.06	18.21	90.025	-270.21	412.29	889.90	855.43	34.46	25.821	
8,300.00	8,253.32	8,285.33	8,253.32	19.11	18.26	90.025	-270.21	412.29	889.90	855.33	34.57	25.742	
8,400.00	8,353.32	8,385.33	8,353.32	19.16	18.31	90.025	-270.21	412.29	889.90	855.22	34.67	25.664	
8,500.00	8,453.32	8,485.33	8,453.32	19.21	18.37	90.025	-270.21	412.29	889.90	855.12	34.78	25.586	
8,600.00	8,553.32	8,585.33	8,553.32	19.26	18.42	90.025	-270.21	412.29	889.90	855.01	34.89	25.508	
8,700.00	8,653.32	8,685.33	8,653.32	19.31	18.47	90.025	-270.21	412.29	889.90	854.90	34.99	25.430	
8,800.00	8,753.32	8,785.33	8,753.32	19.36	18.52	90.025	-270.21	412.29	889.90	854.80	35.10	25.353	
8,900.00	8,853.32	8,885.33	8,853.32	19.41	18.57	90.025	-270.21	412.29	889.90	854.69	35.21	25.275	
9,000.00	8,953.32	8,985.33	8,953.32	19.46	18.62	90.025	-270.21	412.29	889.90	854.58	35.32	25.198	
9,100.00	9,053.32	9,085.33	9,053.32	19.51	18.68	90.025	-270.21	412.29	889.90	854.47	35.43	25.117	
9,123.72	9,077.04	9,109.05	9,077.04	19.51	18.69	90.025	-270.21	412.29	889.90	854.45	35.45	25.103	
9,150.00	9,103.31	9,135.52	9,103.50	19.50	18.68	90.265	-269.60	412.28	889.90	854.44	35.46	25.097	
9,200.00	9,153.10	9,185.88	9,153.64	19.46	18.64	90.263	-265.06	412.26	889.90	854.43	35.47	25.090	
9,250.00	9,202.30	9,236.24	9,203.19	19.40	18.57	90.259	-256.15	412.23	889.90	854.44	35.46	25.097	
9,300.00	9,250.55	9,286.59	9,251.75	19.33	18.49	90.253	-242.92	412.17	889.90	854.47	35.43	25.116	
9,350.00	9,297.49	9,336.93	9,298.96	19.27	18.41	90.245	-225.49	412.10	889.90	854.50	35.39	25.144	
9,400.00	9,342.74	9,387.25	9,344.44	19.20	18.33	90.235	-203.98	412.01	889.90	854.55	35.34	25.178	
9,450.00	9,385.97	9,437.56	9,387.85	19.14	18.26	90.223	-178.58	411.90	889.89	854.60	35.29	25.214	
9,500.00	9,426.85	9,487.86	9,428.85	19.08	18.19	90.210	-149.48	411.78	889.89	854.65	35.25	25.246	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

PHOENIX TECHNOLOGY SERVICES

Phoenix

Anticollision Report

Marathon Oil Corporation

Company:	Marathon Oil Permian LLC	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Reference Site:	Ripley Fed Com Pad	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA Compass
Reference Design:	Plan 1 11-02-22	**Offset TVD Reference:**	Reference Datum

Offset Design: Ripley Fed Com Pad - Ripley WC Fed Com 702H - OH - Plan 1 11-02-22

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+HRGM

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Rule Assigned: Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,550.00	9,465.07	9,538.13	9,467.13	19.04	18.13	90.195	-116.91	411.64	889.89	854.68	35.22	25.270	
9,600.00	9,500.33	9,588.39	9,502.39	19.01	18.09	90.178	-81.13	411.49	889.89	854.69	35.20	25.281	
9,650.00	9,532.38	9,638.62	9,534.37	19.00	18.07	90.160	-42.41	411.33	889.89	854.68	35.21	25.271	
9,700.00	9,560.96	9,688.82	9,562.82	19.01	18.07	90.141	-1.07	411.16	889.89	854.63	35.26	25.237	
9,750.00	9,585.85	9,739.00	9,587.53	19.05	18.09	90.121	42.58	410.98	889.89	854.54	35.35	25.174	
9,800.00	9,606.87	9,789.15	9,608.32	19.11	18.15	90.100	88.20	410.78	889.89	854.40	35.49	25.077	
9,850.00	9,623.87	9,839.27	9,625.03	19.21	18.23	90.078	135.44	410.59	889.89	854.21	35.67	24.945	
9,900.00	9,636.69	9,889.36	9,637.54	19.33	18.35	90.056	183.92	410.38	889.89	853.97	35.92	24.776	
9,950.00	9,645.26	9,939.42	9,645.77	19.49	18.49	90.033	233.28	410.18	889.89	853.67	36.22	24.571	
10,000.00	9,649.51	9,989.45	9,649.66	19.68	18.67	90.010	283.14	409.97	889.89	853.32	36.57	24.333	
10,023.72	9,650.00	10,013.17	9,650.00	19.77	18.77	90.000	306.86	409.87	889.89	853.13	36.76	24.210	
10,100.00	9,650.00	10,089.45	9,650.00	20.13	19.11	90.000	383.14	409.55	889.89	852.44	37.45	23.761	
10,200.00	9,650.00	10,189.45	9,650.00	20.66	19.64	90.000	483.14	409.13	889.89	851.35	38.54	23.091	
10,300.00	9,650.00	10,289.45	9,650.00	21.27	20.24	90.000	583.14	408.71	889.89	850.08	39.81	22.356	
10,400.00	9,650.00	10,389.45	9,650.00	21.95	20.92	90.000	683.14	408.29	889.89	848.65	41.23	21.581	
10,500.00	9,650.00	10,489.45	9,650.00	22.69	21.68	90.000	783.14	407.87	889.89	847.08	42.81	20.788	
10,600.00	9,650.00	10,589.45	9,650.00	23.49	22.49	90.000	883.14	407.45	889.89	845.37	44.51	19.991	
10,700.00	9,650.00	10,689.45	9,650.00	24.34	23.37	90.000	983.14	407.04	889.89	843.55	46.34	19.205	
10,800.00	9,650.00	10,789.45	9,650.00	25.25	24.31	90.000	1,083.14	406.62	889.89	841.63	48.26	18.439	
10,900.00	9,650.00	10,889.45	9,650.00	26.20	25.29	90.000	1,183.14	406.20	889.89	839.61	50.28	17.700	
11,000.00	9,650.00	10,989.45	9,650.00	27.20	26.32	90.000	1,283.13	405.78	889.89	837.51	52.37	16.991	
11,100.00	9,650.00	11,089.45	9,650.00	28.23	27.38	90.000	1,383.13	405.36	889.89	835.35	54.54	16.316	
11,200.00	9,650.00	11,189.45	9,650.00	29.30	28.48	90.000	1,483.13	404.94	889.89	833.12	56.77	15.675	
11,300.00	9,650.00	11,289.45	9,650.00	30.40	29.61	90.000	1,583.13	404.52	889.89	830.83	59.06	15.068	
11,400.00	9,650.00	11,389.45	9,650.00	31.52	30.77	90.000	1,683.13	404.10	889.89	828.49	61.40	14.494	
11,500.00	9,650.00	11,489.45	9,650.00	32.67	31.95	90.000	1,783.13	403.68	889.89	826.11	63.78	13.953	
11,600.00	9,650.00	11,589.45	9,650.00	33.84	33.16	90.000	1,883.13	403.27	889.89	823.69	66.20	13.443	
11,700.00	9,650.00	11,689.45	9,650.00	35.04	34.38	90.000	1,983.13	402.85	889.89	821.23	68.65	12.962	
11,800.00	9,650.00	11,789.45	9,650.00	36.25	35.62	90.000	2,083.13	402.43	889.89	818.75	71.14	12.508	
11,900.00	9,650.00	11,889.45	9,650.00	37.48	36.87	90.000	2,183.13	402.01	889.89	816.23	73.66	12.081	
12,000.00	9,650.00	11,989.45	9,650.00	38.72	38.14	90.000	2,283.13	401.59	889.89	813.69	76.20	11.678	
12,100.00	9,650.00	12,089.45	9,650.00	39.97	39.42	90.000	2,383.12	401.17	889.89	811.12	78.77	11.298	
12,200.00	9,650.00	12,189.45	9,650.00	41.24	40.71	90.000	2,483.12	400.75	889.89	808.54	81.35	10.939	
12,300.00	9,650.00	12,289.45	9,650.00	42.52	42.01	90.000	2,583.12	400.33	889.89	805.93	83.96	10.599	
12,400.00	9,650.00	12,389.45	9,650.00	43.81	43.32	90.000	2,683.12	399.91	889.89	803.31	86.58	10.278	
12,500.00	9,650.00	12,489.45	9,650.00	45.11	44.64	90.000	2,783.12	399.50	889.89	800.67	89.22	9.974	
12,600.00	9,650.00	12,589.45	9,650.00	46.41	45.96	90.000	2,883.12	399.08	889.89	798.02	91.87	9.686	
12,700.00	9,650.00	12,689.45	9,650.00	47.73	47.29	90.000	2,983.12	398.66	889.89	795.35	94.54	9.413	
12,800.00	9,650.00	12,789.45	9,650.00	49.05	48.63	90.000	3,083.12	398.24	889.89	792.67	97.22	9.154	
12,900.00	9,650.00	12,889.45	9,650.00	50.38	49.98	90.000	3,183.12	397.82	889.89	789.98	99.91	8.907	
13,000.00	9,650.00	12,989.45	9,650.00	51.71	51.33	90.000	3,283.12	397.40	889.89	787.28	102.60	8.673	
13,100.00	9,650.00	13,089.45	9,650.00	53.05	52.68	90.000	3,383.12	396.98	889.89	784.57	105.31	8.450	
13,200.00	9,650.00	13,189.45	9,650.00	54.40	54.04	90.000	3,483.12	396.56	889.89	781.86	108.03	8.237	
13,300.00	9,650.00	13,289.45	9,650.00	55.75	55.40	90.000	3,583.11	396.14	889.89	779.13	110.76	8.035	
13,400.00	9,650.00	13,389.45	9,650.00	57.10	56.77	90.000	3,683.11	395.73	889.89	776.40	113.49	7.841	
13,500.00	9,650.00	13,489.45	9,650.00	58.46	58.14	90.000	3,783.11	395.31	889.89	773.66	116.23	7.656	
13,600.00	9,650.00	13,589.45	9,650.00	59.82	59.51	90.000	3,883.11	394.89	889.89	770.91	118.98	7.479	
13,700.00	9,650.00	13,689.45	9,650.00	61.19	60.89	90.000	3,983.11	394.47	889.89	768.16	121.73	7.310	
13,800.00	9,650.00	13,789.45	9,650.00	62.56	62.27	90.000	4,083.11	394.05	889.89	765.40	124.49	7.148	
13,900.00	9,650.00	13,889.45	9,650.00	63.93	63.65	90.000	4,183.11	393.63	889.89	762.63	127.26	6.993	
14,000.00	9,650.00	13,989.45	9,650.00	65.30	65.04	90.000	4,283.11	393.21	889.89	759.86	130.03	6.844	
14,100.00	9,650.00	14,089.45	9,650.00	66.68	66.43	90.000	4,383.11	392.79	889.89	757.09	132.80	6.701	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

PHOENIX TECHNOLOGY SERVICES

Phoenix

Anticollision Report

Marathon Oil Corporation

Company:	Marathon Oil Permian LLC	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Reference Site:	Ripley Fed Com Pad	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA Compass
Reference Design:	Plan 1 11-02-22	**Offset TVD Reference:**	Reference Datum

Offset Design: Ripley Fed Com Pad - Ripley WC Fed Com 702H - OH - Plan 1 11-02-22

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+HRGM

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Rule Assigned: Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,200.00	9,650.00	14,189.45	9,650.00	68.06	67.82	90.000	4,483.11	392.37	889.89	754.31	135.58	6.564	
14,300.00	9,650.00	14,289.45	9,650.00	69.44	69.21	90.000	4,583.11	391.96	889.89	751.53	138.36	6.432	
14,400.00	9,650.00	14,389.45	9,650.00	70.83	70.60	90.000	4,683.10	391.54	889.89	748.74	141.15	6.305	
14,500.00	9,650.00	14,489.45	9,650.00	72.22	72.00	90.000	4,783.10	391.12	889.89	745.95	143.94	6.183	
14,600.00	9,650.00	14,589.45	9,650.00	73.61	73.39	90.000	4,883.10	390.70	889.89	743.16	146.73	6.065	
14,700.00	9,650.00	14,689.45	9,650.00	75.00	74.79	90.000	4,983.10	390.28	889.89	740.36	149.53	5.951	
14,800.00	9,650.00	14,789.45	9,650.00	76.39	76.19	90.000	5,083.10	389.86	889.89	737.56	152.33	5.842	
14,900.00	9,650.00	14,889.45	9,650.00	77.79	77.60	90.000	5,183.10	389.44	889.89	734.76	155.13	5.736	
15,000.00	9,650.00	14,989.45	9,650.00	79.18	79.00	90.000	5,283.10	389.02	889.89	731.95	157.93	5.635	
15,100.00	9,650.00	15,089.45	9,650.00	80.58	80.40	90.000	5,383.10	388.60	889.89	729.15	160.74	5.536	
15,200.00	9,650.00	15,189.45	9,650.00	81.98	81.81	90.000	5,483.10	388.19	889.89	726.34	163.55	5.441	
15,300.00	9,650.00	15,289.45	9,650.00	83.38	83.22	90.000	5,583.10	387.77	889.89	723.52	166.36	5.349	
15,400.00	9,650.00	15,389.45	9,650.00	84.78	84.62	90.000	5,683.10	387.35	889.89	720.71	169.18	5.260	
15,500.00	9,650.00	15,489.45	9,650.00	86.19	86.03	90.000	5,783.09	386.93	889.89	717.89	172.00	5.174	
15,600.00	9,650.00	15,589.45	9,650.00	87.59	87.44	90.000	5,883.09	386.51	889.89	715.07	174.82	5.090	
15,700.00	9,650.00	15,689.45	9,650.00	89.00	88.85	90.000	5,983.09	386.09	889.89	712.25	177.64	5.010	
15,800.00	9,650.00	15,789.45	9,650.00	90.40	90.27	90.000	6,083.09	385.67	889.89	709.43	180.46	4.931	
15,900.00	9,650.00	15,889.45	9,650.00	91.81	91.68	90.000	6,183.09	385.25	889.89	706.60	183.28	4.855	
16,000.00	9,650.00	15,989.45	9,650.00	93.22	93.09	90.000	6,283.09	384.84	889.89	703.78	186.11	4.781	
16,100.00	9,650.00	16,089.45	9,650.00	94.63	94.51	90.000	6,383.09	384.42	889.89	700.95	188.94	4.710	
16,200.00	9,650.00	16,189.45	9,650.00	96.04	95.92	90.000	6,483.09	384.00	889.89	698.12	191.77	4.640	
16,300.00	9,650.00	16,289.45	9,650.00	97.45	97.34	90.000	6,583.09	383.58	889.89	695.29	194.60	4.573	
16,400.00	9,650.00	16,389.45	9,650.00	98.86	98.76	90.000	6,683.09	383.16	889.89	692.46	197.43	4.507	
16,500.00	9,650.00	16,489.45	9,650.00	100.28	100.17	90.000	6,783.09	382.74	889.89	689.62	200.26	4.444	
16,600.00	9,650.00	16,589.45	9,650.00	101.69	101.59	90.000	6,883.09	382.32	889.89	686.79	203.10	4.382	
16,700.00	9,650.00	16,689.45	9,650.00	103.11	103.01	90.000	6,983.08	381.90	889.89	683.95	205.94	4.321	
16,800.00	9,650.00	16,789.45	9,650.00	104.52	104.43	90.000	7,083.08	381.48	889.89	681.12	208.77	4.262	
16,900.00	9,650.00	16,889.45	9,650.00	105.94	105.85	90.000	7,183.08	381.07	889.89	678.28	211.61	4.205	
17,000.00	9,650.00	16,989.45	9,650.00	107.35	107.27	90.000	7,283.08	380.65	889.89	675.44	214.45	4.150	
17,100.00	9,650.00	17,089.45	9,650.00	108.77	108.69	90.000	7,383.08	380.23	889.89	672.60	217.29	4.095	
17,200.00	9,650.00	17,189.45	9,650.00	110.19	110.11	90.000	7,483.08	379.81	889.89	669.76	220.13	4.043	
17,300.00	9,650.00	17,289.45	9,650.00	111.61	111.53	90.000	7,583.08	379.39	889.89	666.91	222.98	3.991	
17,400.00	9,650.00	17,389.45	9,650.00	113.03	112.95	90.000	7,683.08	378.97	889.89	664.07	225.82	3.941	
17,500.00	9,650.00	17,489.45	9,650.00	114.44	114.38	90.000	7,783.08	378.55	889.89	661.23	228.66	3.892	
17,600.00	9,650.00	17,589.45	9,650.00	115.86	115.80	90.000	7,883.08	378.13	889.89	658.38	231.51	3.844	
17,700.00	9,650.00	17,689.45	9,650.00	117.28	117.22	90.000	7,983.08	377.71	889.89	655.53	234.35	3.797	
17,800.00	9,650.00	17,789.45	9,650.00	118.71	118.65	90.000	8,083.07	377.30	889.89	652.69	237.20	3.752	
17,900.00	9,650.00	17,889.45	9,650.00	120.13	120.07	90.000	8,183.07	376.88	889.89	649.84	240.05	3.707	
18,000.00	9,650.00	17,989.45	9,650.00	121.55	121.50	90.000	8,283.07	376.46	889.89	646.99	242.90	3.664	
18,100.00	9,650.00	18,089.45	9,650.00	122.97	122.92	90.000	8,383.07	376.04	889.89	644.14	245.75	3.621	
18,200.00	9,650.00	18,189.45	9,650.00	124.39	124.35	90.000	8,483.07	375.62	889.89	641.29	248.60	3.580	
18,300.00	9,650.00	18,289.45	9,650.00	125.82	125.77	90.000	8,583.07	375.20	889.89	638.44	251.45	3.539	
18,400.00	9,650.00	18,389.45	9,650.00	127.24	127.20	90.000	8,683.07	374.78	889.89	635.59	254.30	3.499	
18,500.00	9,650.00	18,489.45	9,650.00	128.66	128.62	90.000	8,783.07	374.36	889.89	632.74	257.15	3.461	
18,600.00	9,650.00	18,589.45	9,650.00	130.09	130.05	90.000	8,883.07	373.94	889.89	629.89	260.00	3.423	
18,700.00	9,650.00	18,689.45	9,650.00	131.51	131.48	90.000	8,983.07	373.53	889.89	627.03	262.85	3.385	
18,800.00	9,650.00	18,789.45	9,650.00	132.94	132.90	90.000	9,083.07	373.11	889.89	624.18	265.71	3.349	
18,900.00	9,650.00	18,889.45	9,650.00	134.36	134.33	90.000	9,183.07	372.69	889.89	621.33	268.56	3.314	
19,000.00	9,650.00	18,989.45	9,650.00	135.79	135.76	90.000	9,283.06	372.27	889.89	618.47	271.41	3.279	
19,100.00	9,650.00	19,089.45	9,650.00	137.21	137.19	90.000	9,383.06	371.85	889.89	615.62	274.27	3.245	
19,200.00	9,650.00	19,189.45	9,650.00	138.64	138.61	90.000	9,483.06	371.43	889.89	612.76	277.13	3.211	
19,300.00	9,650.00	19,289.45	9,650.00	140.06	140.04	90.000	9,583.06	371.01	889.89	609.91	279.98	3.178	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

PHOENIX TECHNOLOGY SERVICES

Phoenix

Anticollision Report

Marathon Oil Corporation

Company:	Marathon Oil Permian LLC	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Reference Site:	Ripley Fed Com Pad	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA Compass
Reference Design:	Plan 1 11-02-22	**Offset TVD Reference:**	Reference Datum

Offset Design: Ripley Fed Com Pad - Ripley WC Fed Com 702H - OH - Plan 1 11-02-22

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+HRGM

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,400.00	9,650.00	19,389.45	9,650.00	141.49	141.47	90.000	9,683.06	370.59	889.89	607.05	282.84	3.146	
19,500.00	9,650.00	19,489.45	9,650.00	142.92	142.90	90.000	9,783.06	370.17	889.89	604.19	285.69	3.115	
19,600.00	9,650.00	19,589.45	9,650.00	144.34	144.33	90.000	9,883.06	369.76	889.89	601.34	288.55	3.084	
19,700.00	9,650.00	19,689.45	9,650.00	145.77	145.76	90.000	9,983.06	369.34	889.89	598.48	291.41	3.054	
19,702.63	9,650.00	19,692.07	9,650.00	145.81	145.80	90.000	9,985.68	369.33	889.89	598.40	291.48	3.053	
19,782.70	9,650.00	19,748.32	9,650.00	146.95	146.60	90.000	10,041.93	369.09	890.21	596.91	293.30	3.035 SF	

PHOENIX TECHNOLOGY SERVICES

Phoenix

Anticollision Report

Marathon Oil Corporation

Company:	Marathon Oil Permian LLC	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Reference Site:	Ripley Fed Com Pad	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA Compass
Reference Design:	Plan 1 11-02-22	**Offset TVD Reference:**	Reference Datum

Offset Design: Ripley Fed Com Pad - Ripley WC Fed Com 801H - OH - Plan 1 11-02-22

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+HRGM

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-89.382	0.27	-25.03	25.03				
100.00	100.00	100.00	100.00	0.53	0.53	-89.382	0.27	-25.03	25.03	23.97	1.07	23.480	
200.00	200.00	200.00	200.00	1.32	1.32	-89.382	0.27	-25.03	25.03	22.38	2.65	9.450	
300.00	300.00	300.00	300.00	1.80	1.80	-89.382	0.27	-25.03	25.03	21.43	3.60	6.956	
400.00	400.00	400.00	400.00	2.18	2.18	-89.382	0.27	-25.03	25.03	20.68	4.35	5.753	
500.00	500.00	500.00	500.00	2.50	2.50	-89.382	0.27	-25.03	25.03	20.03	5.00	5.009	
600.00	600.00	600.00	600.00	2.79	2.79	-89.382	0.27	-25.03	25.03	19.46	5.57	4.491	
700.00	700.00	700.00	700.00	3.05	3.05	-89.382	0.27	-25.03	25.03	18.93	6.10	4.103	
800.00	800.00	800.00	800.00	3.29	3.29	-89.382	0.27	-25.03	25.03	18.44	6.59	3.799	
900.00	900.00	900.00	900.00	3.52	3.52	-89.382	0.27	-25.03	25.03	17.98	7.05	3.552	
1,000.00	1,000.00	1,000.00	1,000.00	3.74	3.74	-89.382	0.27	-25.03	25.03	17.55	7.48	3.346	
1,100.00	1,100.00	1,100.00	1,100.00	3.95	3.95	-89.382	0.27	-25.03	25.03	17.14	7.89	3.171	
1,200.00	1,200.00	1,200.00	1,200.00	4.15	4.15	-89.382	0.27	-25.03	25.03	16.74	8.29	3.019	
1,300.00	1,300.00	1,300.00	1,300.00	4.34	4.34	-89.382	0.27	-25.03	25.03	16.36	8.67	2.887 CC	
1,400.00	1,399.98	1,399.13	1,399.11	4.62	4.62	32.053	0.29	-26.74	25.27	16.06	9.20	2.746 ES	
1,500.00	1,499.84	1,498.20	1,498.05	4.89	4.90	37.715	0.36	-31.88	26.15	16.46	9.68	2.700 SF	
1,600.00	1,599.45	1,597.19	1,596.65	5.18	5.19	46.187	0.46	-40.43	28.13	18.01	10.12	2.780	
1,700.00	1,698.70	1,696.03	1,694.77	5.49	5.50	55.924	0.61	-52.36	31.77	21.28	10.49	3.029	
1,800.00	1,797.47	1,794.69	1,792.23	5.81	5.83	65.267	0.81	-67.63	37.49	26.68	10.80	3.470	
1,815.26	1,812.49	1,809.72	1,807.04	5.84	5.88	66.582	0.84	-70.25	38.55	27.73	10.83	3.561	
1,900.00	1,895.86	1,893.12	1,888.89	6.04	6.17	71.838	1.04	-86.21	45.80	34.72	11.08	4.132	
2,000.00	1,994.25	1,991.21	1,984.53	6.33	6.53	73.922	1.31	-108.01	56.92	45.41	11.51	4.947	
2,100.00	2,092.63	2,088.73	2,078.81	6.63	6.91	73.362	1.63	-132.91	70.49	58.48	12.01	5.870	
2,200.00	2,191.02	2,186.86	2,172.97	6.95	7.21	71.756	1.98	-160.52	86.01	73.49	12.52	6.868	
2,300.00	2,289.41	2,285.60	2,267.67	7.29	7.55	70.557	2.33	-188.49	101.74	88.62	13.11	7.758	
2,400.00	2,387.79	2,384.34	2,362.36	7.64	7.92	69.679	2.68	-216.46	117.49	103.77	13.73	8.559	
2,500.00	2,486.18	2,483.07	2,457.05	8.00	8.29	69.008	3.03	-244.43	133.27	118.91	14.36	9.281	
2,600.00	2,584.57	2,581.81	2,551.74	8.37	8.68	68.480	3.38	-272.40	149.06	134.06	15.01	9.932	
2,700.00	2,682.95	2,680.55	2,646.43	8.75	9.08	68.053	3.74	-300.37	164.87	149.19	15.67	10.519	
2,800.00	2,781.34	2,779.28	2,741.12	9.13	9.49	67.700	4.09	-328.34	180.68	164.33	16.35	11.050	
2,900.00	2,879.73	2,878.02	2,835.81	9.53	9.91	67.405	4.44	-356.31	196.49	179.45	17.04	11.532	
3,000.00	2,978.12	2,976.76	2,930.50	9.92	10.34	67.153	4.79	-384.28	212.31	194.57	17.74	11.969	
3,100.00	3,076.50	3,075.50	3,025.20	10.33	10.77	66.936	5.15	-412.26	228.13	209.69	18.45	12.367	
3,200.00	3,174.89	3,174.23	3,119.89	10.74	11.20	66.747	5.50	-440.23	243.96	224.80	19.16	12.730	
3,300.00	3,273.28	3,272.97	3,214.58	11.15	11.65	66.582	5.85	-468.20	259.79	239.90	19.89	13.063	
3,400.00	3,371.66	3,371.71	3,309.27	11.56	12.09	66.435	6.20	-496.17	275.62	255.00	20.62	13.367	
3,500.00	3,470.05	3,470.44	3,403.96	11.98	12.55	66.304	6.55	-524.14	291.45	270.09	21.36	13.647	
3,600.00	3,568.44	3,569.18	3,498.65	12.40	13.00	66.187	6.91	-552.11	307.28	285.18	22.10	13.905	
3,700.00	3,666.82	3,667.92	3,593.34	12.83	13.46	66.082	7.26	-580.08	323.12	300.27	22.85	14.144	
3,800.00	3,765.21	3,766.65	3,688.04	13.25	13.92	65.986	7.61	-608.05	338.95	315.36	23.60	14.364	
3,900.00	3,863.60	3,865.39	3,782.73	13.68	14.38	65.898	7.96	-636.02	354.79	330.44	24.35	14.569	
4,000.00	3,961.98	3,964.13	3,877.42	14.11	14.85	65.818	8.31	-663.99	370.62	345.51	25.11	14.759	
4,100.00	4,060.37	4,062.86	3,972.11	14.55	15.32	65.745	8.67	-691.96	386.46	360.59	25.87	14.936	
4,200.00	4,158.76	4,167.57	4,072.66	14.98	15.81	65.715	9.03	-721.16	401.95	375.27	26.68	15.065	
4,300.00	4,257.14	4,279.59	4,181.21	15.42	16.36	65.992	9.38	-748.79	414.77	387.26	27.50	15.081	
4,365.02	4,321.11	4,352.79	4,252.70	15.69	16.71	66.356	9.58	-764.55	421.43	393.46	27.97	15.066	
4,400.00	4,355.57	4,392.27	4,291.41	15.83	16.90	66.637	9.68	-772.29	424.56	396.35	28.21	15.052	
4,500.00	4,454.44	4,505.37	4,402.86	16.28	17.43	67.319	9.92	-791.49	432.33	403.47	28.86	14.979	
4,600.00	4,553.77	4,618.80	4,515.30	16.71	17.92	67.830	10.11	-806.32	438.34	408.92	29.43	14.897	
4,700.00	4,653.44	4,732.48	4,628.50	17.11	18.38	68.180	10.24	-816.71	442.56	412.66	29.90	14.803	
4,800.00	4,753.33	4,846.31	4,742.17	17.46	18.79	68.375	10.31	-822.60	444.95	414.69	30.26	14.705	
4,880.28	4,833.60	4,937.75	4,833.60	17.59	19.00	-51.040	10.33	-824.06	445.54	415.15	30.39	14.660	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

PHOENIX TECHNOLOGY SERVICES

Phoenix

Anticollision Report

Marathon Oil Corporation

Company:	Marathon Oil Permian LLC	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Reference Site:	Ripley Fed Com Pad	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA Compass
Reference Design:	Plan 1 11-02-22	**Offset TVD Reference:**	Reference Datum

Offset Design: Ripley Fed Com Pad - Ripley WC Fed Com 801H - OH - Plan 1 11-02-22

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+HRGM

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Rule Assigned: Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,881.72	4,835.05	4,939.40	4,835.25	17.59	19.01	-51.040	10.33	-824.06	445.54	415.15	30.39	14.661	
4,900.00	4,853.32	4,957.47	4,853.32	17.59	19.01	-51.040	10.33	-824.06	445.54	415.15	30.40	14.657	
5,000.00	4,953.32	5,057.47	4,953.32	17.63	19.05	-51.040	10.33	-824.06	445.54	415.05	30.49	14.611	
5,100.00	5,053.32	5,157.47	5,053.32	17.67	19.09	-51.040	10.33	-824.06	445.54	414.95	30.60	14.561	
5,200.00	5,153.32	5,257.47	5,153.32	17.71	19.13	-51.040	10.33	-824.06	445.54	414.84	30.70	14.512	
5,300.00	5,253.32	5,357.47	5,253.32	17.75	19.18	-51.040	10.33	-824.06	445.54	414.74	30.81	14.462	
5,400.00	5,353.32	5,457.47	5,353.32	17.79	19.22	-51.040	10.33	-824.06	445.54	414.63	30.91	14.413	
5,500.00	5,453.32	5,557.47	5,453.32	17.83	19.27	-51.040	10.33	-824.06	445.54	414.52	31.02	14.363	
5,600.00	5,553.32	5,657.47	5,553.32	17.88	19.31	-51.040	10.33	-824.06	445.54	414.42	31.13	14.314	
5,700.00	5,653.32	5,757.47	5,653.32	17.92	19.35	-51.040	10.33	-824.06	445.54	414.31	31.23	14.265	
5,800.00	5,753.32	5,857.47	5,753.32	17.96	19.40	-51.040	10.33	-824.06	445.54	414.20	31.34	14.216	
5,900.00	5,853.32	5,957.47	5,853.32	18.00	19.45	-51.040	10.33	-824.06	445.54	414.09	31.45	14.167	
6,000.00	5,953.32	6,057.47	5,953.32	18.05	19.49	-51.040	10.33	-824.06	445.54	413.98	31.56	14.118	
6,100.00	6,053.32	6,157.47	6,053.32	18.09	19.54	-51.040	10.33	-824.06	445.54	413.88	31.67	14.069	
6,200.00	6,153.32	6,257.47	6,153.32	18.13	19.58	-51.040	10.33	-824.06	445.54	413.77	31.78	14.021	
6,300.00	6,253.32	6,357.47	6,253.32	18.18	19.63	-51.040	10.33	-824.06	445.54	413.66	31.89	13.972	
6,400.00	6,353.32	6,457.47	6,353.32	18.22	19.68	-51.040	10.33	-824.06	445.54	413.54	32.00	13.924	
6,500.00	6,453.32	6,557.47	6,453.32	18.27	19.72	-51.040	10.33	-824.06	445.54	413.43	32.11	13.876	
6,600.00	6,553.32	6,657.47	6,553.32	18.31	19.77	-51.040	10.33	-824.06	445.54	413.32	32.22	13.828	
6,700.00	6,653.32	6,757.47	6,653.32	18.36	19.82	-51.040	10.33	-824.06	445.54	413.21	32.33	13.780	
6,800.00	6,753.32	6,857.47	6,753.32	18.40	19.87	-51.040	10.33	-824.06	445.54	413.10	32.45	13.732	
6,900.00	6,853.32	6,957.47	6,853.32	18.45	19.91	-51.040	10.33	-824.06	445.54	412.99	32.56	13.685	
7,000.00	6,953.32	7,057.47	6,953.32	18.49	19.96	-51.040	10.33	-824.06	445.54	412.87	32.67	13.637	
7,100.00	7,053.32	7,157.47	7,053.32	18.54	20.01	-51.040	10.33	-824.06	445.54	412.76	32.78	13.590	
7,200.00	7,153.32	7,257.47	7,153.32	18.58	20.06	-51.040	10.33	-824.06	445.54	412.64	32.90	13.543	
7,300.00	7,253.32	7,357.47	7,253.32	18.63	20.11	-51.040	10.33	-824.06	445.54	412.53	33.01	13.496	
7,400.00	7,353.32	7,457.47	7,353.32	18.68	20.15	-51.040	10.33	-824.06	445.54	412.42	33.13	13.449	
7,500.00	7,453.32	7,557.47	7,453.32	18.72	20.20	-51.040	10.33	-824.06	445.54	412.30	33.24	13.402	
7,600.00	7,553.32	7,657.47	7,553.32	18.77	20.25	-51.040	10.33	-824.06	445.54	412.18	33.36	13.356	
7,700.00	7,653.32	7,757.47	7,653.32	18.82	20.30	-51.040	10.33	-824.06	445.54	412.07	33.48	13.310	
7,800.00	7,753.32	7,857.47	7,753.32	18.87	20.35	-51.040	10.33	-824.06	445.54	411.95	33.59	13.264	
7,900.00	7,853.32	7,957.47	7,853.32	18.91	20.40	-51.040	10.33	-824.06	445.54	411.83	33.71	13.218	
8,000.00	7,953.32	8,057.47	7,953.32	18.96	20.45	-51.040	10.33	-824.06	445.54	411.72	33.83	13.172	
8,100.00	8,053.32	8,157.47	8,053.32	19.01	20.50	-51.040	10.33	-824.06	445.54	411.60	33.94	13.126	
8,200.00	8,153.32	8,257.47	8,153.32	19.06	20.55	-51.040	10.33	-824.06	445.54	411.48	34.06	13.081	
8,300.00	8,253.32	8,357.47	8,253.32	19.11	20.60	-51.040	10.33	-824.06	445.54	411.36	34.18	13.035	
8,400.00	8,353.32	8,457.47	8,353.32	19.16	20.65	-51.040	10.33	-824.06	445.54	411.25	34.30	12.990	
8,500.00	8,453.32	8,557.47	8,453.32	19.21	20.71	-51.040	10.33	-824.06	445.54	411.13	34.42	12.945	
8,600.00	8,553.32	8,657.47	8,553.32	19.26	20.76	-51.040	10.33	-824.06	445.54	411.01	34.54	12.901	
8,700.00	8,653.32	8,757.47	8,653.32	19.31	20.81	-51.040	10.33	-824.06	445.54	410.89	34.66	12.856	
8,800.00	8,753.32	8,857.47	8,753.32	19.36	20.86	-51.040	10.33	-824.06	445.54	410.77	34.78	12.812	
8,900.00	8,853.32	8,957.47	8,853.32	19.41	20.91	-51.040	10.33	-824.06	445.54	410.65	34.90	12.767	
9,000.00	8,953.32	9,057.47	8,953.32	19.46	20.96	-51.040	10.33	-824.06	445.54	410.53	35.02	12.723	
9,100.00	9,053.32	9,157.47	9,053.32	19.51	21.02	-51.040	10.33	-824.06	445.54	410.40	35.14	12.679	
9,123.72	9,077.04	9,181.20	9,077.04	19.51	21.03	-51.040	10.33	-824.06	445.54	410.38	35.16	12.672	
9,150.00	9,103.31	9,207.47	9,103.31	19.50	21.04	-50.890	10.33	-824.06	445.16	409.97	35.20	12.648	
9,200.00	9,153.10	9,257.25	9,153.10	19.46	21.07	-51.557	10.33	-824.06	442.36	407.00	35.35	12.513	
9,250.00	9,202.30	9,306.45	9,202.30	19.40	21.09	-52.886	10.33	-824.06	436.92	401.36	35.55	12.289	
9,300.00	9,250.55	9,354.71	9,250.55	19.33	21.12	-54.892	10.33	-824.06	429.05	393.24	35.80	11.984	
9,350.00	9,297.49	9,401.64	9,297.49	19.27	21.14	-57.589	10.33	-824.06	419.06	382.96	36.10	11.608	
9,400.00	9,342.74	9,446.89	9,342.74	19.20	21.17	-60.972	10.33	-824.06	407.41	370.96	36.45	11.176	
9,450.00	9,385.97	9,490.12	9,385.97	19.14	21.19	-64.999	10.33	-824.06	394.67	357.80	36.87	10.706	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

PHOENIX TECHNOLOGY SERVICES

Phoenix

Anticollision Report

Marathon Oil Corporation

Company:	Marathon Oil Permian LLC	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
Reference Site:	Ripley Fed Com Pad	**MD Reference:**	RKB @ 2978.60usft (Cactus 169)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA Compass
Reference Design:	Plan 1 11-02-22	**Offset TVD Reference:**	Reference Datum

Offset Design: Ripley Fed Com Pad - Ripley WC Fed Com 801H - OH - Plan 1 11-02-22

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+HRGM

Rule Assigned:

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,500.00	9,426.85	9,531.00	9,426.85	19.08	21.21	-69.567	10.33	-824.06	381.56	344.23	37.34	10.220	
9,550.00	9,465.07	9,569.22	9,465.07	19.04	21.23	-74.493	10.33	-824.06	369.01	331.15	37.86	9.747	
9,600.00	9,500.33	9,604.49	9,500.33	19.01	21.25	-79.519	10.33	-824.06	358.04	319.63	38.41	9.322	
9,650.00	9,532.38	9,636.53	9,532.38	19.00	21.27	-84.336	10.33	-824.06	349.85	310.89	38.96	8.980	
9,700.00	9,560.96	9,665.11	9,560.96	19.01	21.28	-88.631	10.33	-824.06	345.62	306.17	39.45	8.761	
9,718.06	9,570.38	9,674.53	9,570.38	19.02	21.29	-89.999	10.33	-824.06	345.27	305.67	39.60	8.718	
9,750.00	9,585.85	9,690.00	9,585.85	19.05	21.30	-92.130	10.33	-824.06	346.40	306.58	39.82	8.699	
9,800.00	9,606.87	9,711.03	9,606.87	19.11	21.31	-94.619	10.33	-824.06	352.96	312.93	40.03	8.816	
9,850.00	9,623.87	9,728.02	9,623.87	19.21	21.32	-95.939	10.33	-824.06	365.63	325.55	40.07	9.124	
9,900.00	9,636.69	9,740.85	9,636.69	19.33	21.32	-95.973	10.33	-824.06	384.24	344.28	39.96	9.615	
9,950.00	9,645.26	9,749.42	9,645.26	19.49	21.33	-94.628	10.33	-824.06	408.25	368.51	39.74	10.272	
10,000.00	9,649.51	9,753.66	9,649.51	19.68	21.33	-91.838	10.33	-824.06	436.86	397.39	39.47	11.067	
10,023.72	9,650.00	9,754.15	9,650.00	19.77	21.33	-90.000	10.33	-824.06	451.78	412.44	39.34	11.484	
10,100.00	9,650.00	9,754.15	9,650.00	20.13	21.33	-90.000	10.33	-824.06	504.35	465.44	38.91	12.961	
10,200.00	9,650.00	9,754.15	9,650.00	20.66	21.33	-90.000	10.33	-824.06	581.29	542.87	38.42	15.131	
10,300.00	9,650.00	9,754.15	9,650.00	21.27	21.33	-90.000	10.33	-824.06	664.40	626.38	38.02	17.476	
10,400.00	9,650.00	9,754.15	9,650.00	21.95	21.33	-90.000	10.33	-824.06	751.64	713.93	37.70	19.935	
10,500.00	9,650.00	9,754.15	9,650.00	22.69	21.33	-90.000	10.33	-824.06	841.72	804.25	37.46	22.468	
10,600.00	9,650.00	9,754.15	9,650.00	23.49	21.33	-90.000	10.33	-824.06	933.82	896.54	37.28	25.052	

PHOENIX TECHNOLOGY SERVICES

Phoenix
Anticollision Report

Marathon Oil Corporation

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Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
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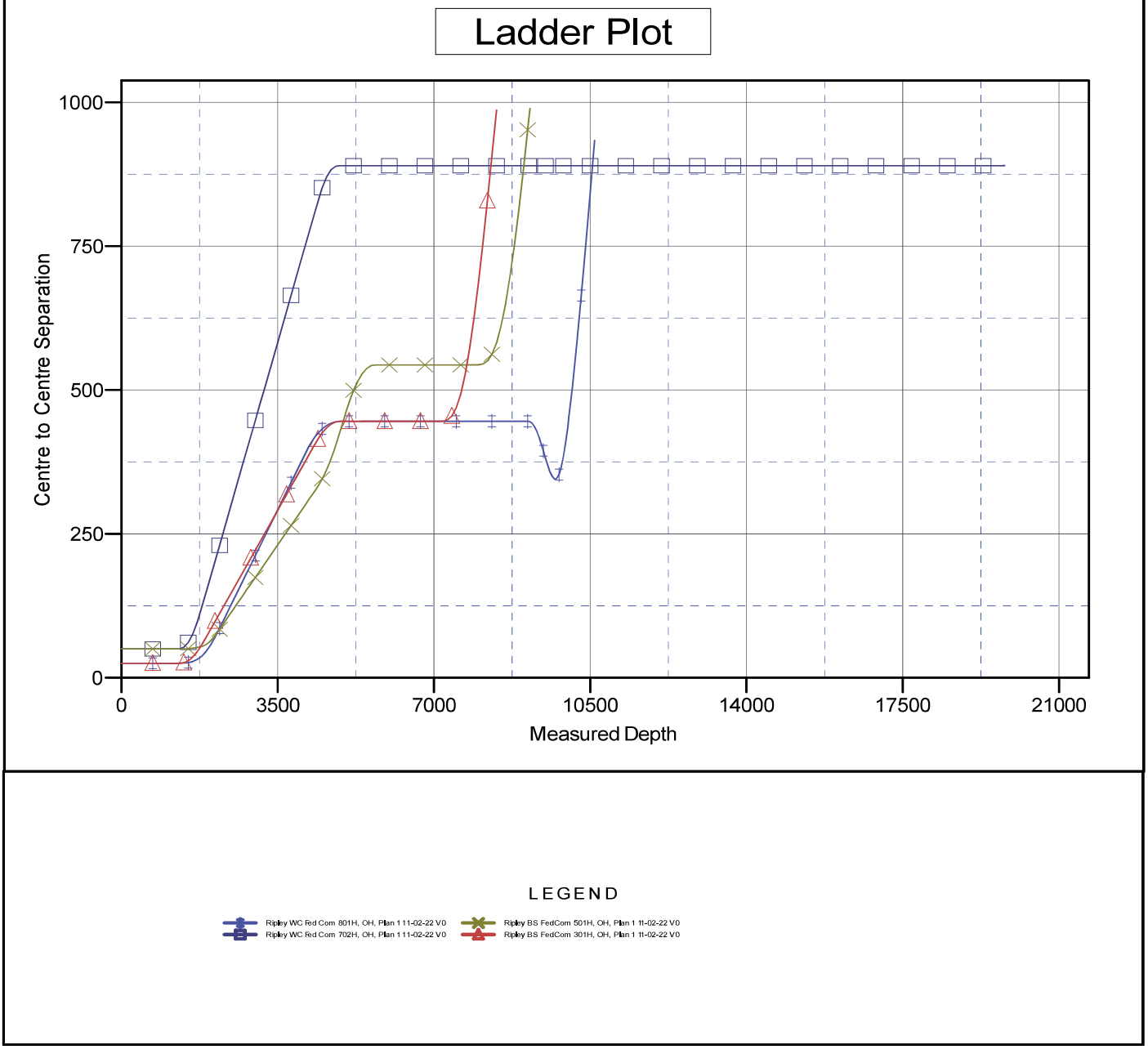
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA Compass
Reference Design:	Plan 1 11-02-22	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to RKB @ 2978.60usft (Cactus 169)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 19' 60.000000 W

Coordinates are relative to: Ripley WC Fed Com 701H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 300
Grid Convergence at Surface is: 0.149°



CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

PHOENIX TECHNOLOGY SERVICES

Phoenix
Anticollision Report

Marathon Oil Corporation

Company:	Marathon Oil Permian LLC	**Local Co-ordinate Reference:**	Well Ripley WC Fed Com 701H
Project:	Eddy County, NM (NAD27-NME)	**TVD Reference:**	RKB @ 2978.60usft (Cactus 169)
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Reference Well:	Ripley WC Fed Com 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
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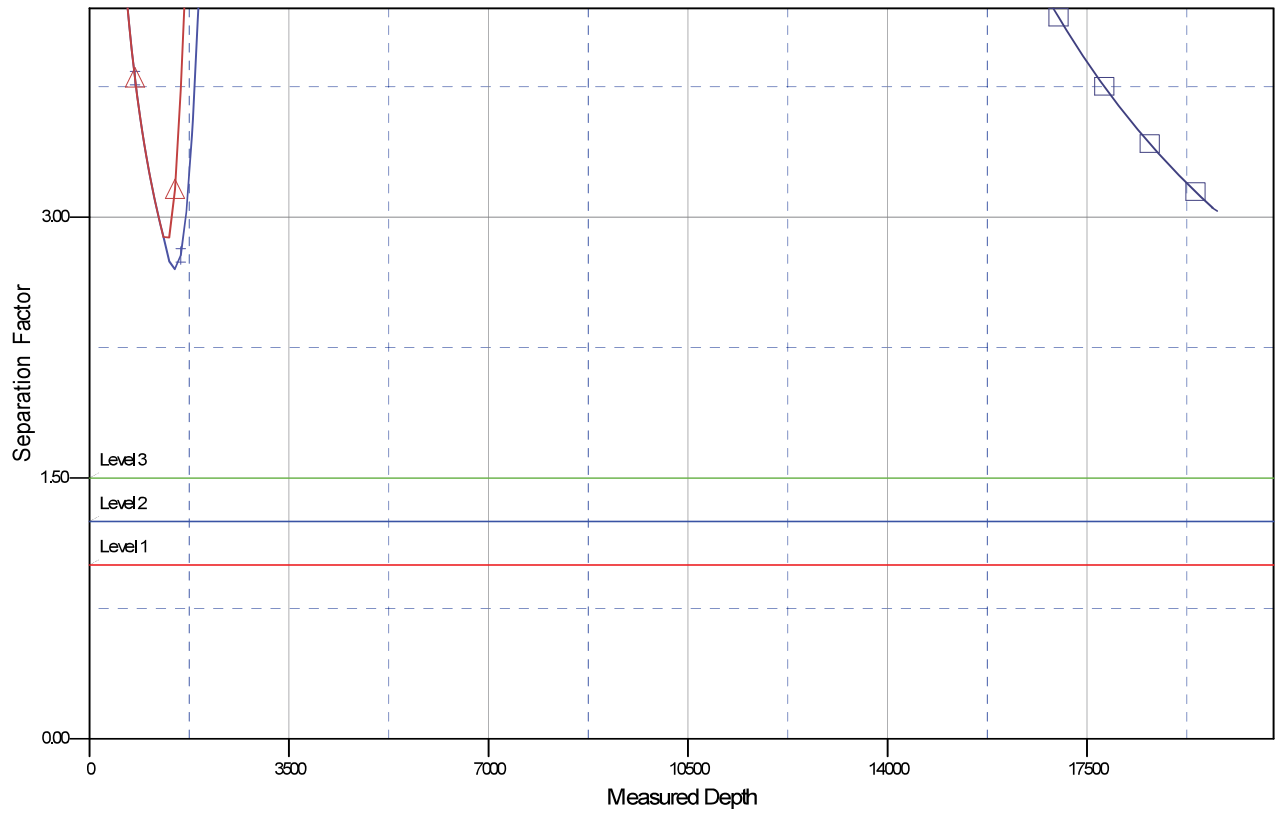
Offset Depths are relative to Offset Datum
Central Meridian is 104° 19' 60.000000 W

Coordinates are relative to: Ripley WC Fed Com 701H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 300
Grid Convergence at Surface is: 0.149°

Separation Factor Plot



LEGEND

Ripley WC Fed Com 801H, OH, Plan 1 11-02-22 V0
Ripley WC Fed Com 702H, OH, Plan 1 11-02-22 V0
Ripley BS FedCom 501H, OH, Plan 1 11-02-22 V0
Ripley BS FedCom 301H, OH, Plan 1 11-02-22 V0

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 157718

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 157718
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	None	9/12/2023