

Well Name: MAXIMUS 5 WXY FED COM	Well Location: T23S / R28E / SEC 6 / LOT 5 / 32.337352 / -104.1334132	County or Parish/State: EDDY / NM
Well Number: 2H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM32636	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001553405	Operator: MARATHON OIL PERMIAN LLC	

Subsequent Report

Sundry ID: 2819676

Type of Submission: Subsequent Report

Type of Action: Drilling Operations

Date Sundry Submitted: 10/29/2024

Time Sundry Submitted: 02:56

Date Operation Actually Began: 04/05/2023

Actual Procedure: While drilling the Maximus 5 WXY Fed Com 2H well learned our offsets had encountered losses while drilling intermediate casing string. Requested approval from the BLM to set intermediate casing @ 8888' to avoid potential issues. Please see attached drill plan for change to intermediate casing and cement design.

SR Attachments

PActual Procedure

Maximus_2H_Drill_Plan_Chg_Int_csg_20241029145644.pdf

Well Number: 2H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMNM32636

Unit or CA Name:

Unit or CA Number:

US Well Number: 3001553405

Operator: MARATHON OIL PERMIAN LLC

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: TERRI STATHEM

Signed on: OCT 29, 2024 02:55 PM

Name: MARATHON OIL PERMIAN LLC

Title: Regulatory Compliance Manager

Street Address: 990 TOWN & COUNTRY BLVD

City: HOUSTON

State: TX

Phone: (713) 296-2113

Email address: TSTATHEM@MARATHONOIL.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: KEITH P IMMATTY

BLM POC Title: ENGINEER

BLM POC Phone: 5759884722

BLM POC Email Address: KIMMATTY@BLM.GOV

Disposition: Accepted

Disposition Date: 10/29/2024

Signature: Keith Immatty

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 <i>Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.</i>		5. Lease Serial No. NMNM32636
		6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2		7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. MAXIMUS 5 WXY FED COM/2H
2. Name of Operator MARATHON OIL PERMIAN LLC		9. API Well No. 3001553405
3a. Address 990 TOWN & COUNTRY BLVD, HOUSTON, TX	3b. Phone No. (include area code) (713) 296-2113	10. Field and Pool or Exploratory Area BOBCAT DRAW/BONE SPRING, SOUTH
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 6/T23S/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			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate 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 recompleation 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.)

While drilling the Maximus 5 WXY Fed Com 2H well learned our offsets had encountered losses while drilling intermediate casing string. Requested approval from the BLM to set intermediate casing @ 8888' to avoid potential issues.

Please see attached drill plan for change to intermediate casing and cement design.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) TERRI STATHEM / Ph: (713) 296-2113	Title Regulatory Compliance Manager
Signature (Electronic Submission)	Date 10/29/2024

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by KEITH P IMMATTY / Ph: (575) 988-4722 / Accepted	Title ENGINEER	Date 10/29/2024
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office CARLSBAD	

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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

Additional Information

Location of Well

0. SHL: LOT 5 / 1605 FNL / 442 FWL / TWSP: 23S / RANGE: 28E / SECTION: 6 / LAT: 32.337352 / LONG: -104.1334132 (TVD: 0 feet, MD: 0 feet)

PPP: LOT 4 / 660 FNL / 330 FWL / TWSP: 23S / RANGE: 28E / SECTION: 6 / LAT: 32.3399497 / LONG: -104.13374 (TVD: 9315 feet, MD: 9477 feet)

PPP: LOT 1 / 661 FNL / 1341 FEL / TWSP: 23S / RANGE: 28E / SECTION: 5 / LAT: 32.3400712 / LONG: -104.1048931 (TVD: 9465 feet, MD: 18079 feet)

BHL: LOT 1 / 660 FNL / 330 FEL / TWSP: 23S / RANGE: 28E / SECTION: 5 / LAT: 32.340104 / LONG: -104.1016149 (TVD: 9489 feet, MD: 19400 feet)

CONFIDENTIAL

MARATHON OIL PERMIAN, LLC.

DRILLING AND OPERATIONS PLAN



WELL NAME & NUMBER:MAXIMUS 5 WXY FED COM 2H

LOCATION:SECTION 6TOWNSHIP 23SRANGE 28E

EDDYCOUNTY,NEW MEXICO

Section 1:

GEOLOGICAL FORMATIONS

Name of Surface Formation:Permian

Elevation:3045 feet

Estimated Tops of Important Geological Markers:

Formation	TVD (ft)	MD (ft)	Elevation (ft SS)	Lithologies	Mineral Resources	Producing Formation?
Rustler	N/A	N/A	N/A	Anhydrite	Brine	No
Salado	326	356	2724	Salt/Anhydrite	Brine	No
Castile	850	880	2200	Salt/Anhydrite	Brine	No
Base of Salt (BX)	2128	2158	922	Anhydrite	Brine	No
Lamar	2373	2403	677	Sandstone/Shale	None	No
Bell Canyon	2458	2488	592	Sandstone	Oil	No
Cherry Canyon	3172	3202	-122	Sandstone	Oil	No
Brushy Canyon	4314	4344	-1264	Sandstone	Oil	No
Bone Spring Lime	5814	5844	-2764	Limestone	None	No
Upper Avalon Shale	5854	5884	-2804	Shale	Oil	Yes
1st Bone Spring Sand	6825	6855	-3775	Sandstone	Oil	Yes
2nd Bone Spring Carbonate	7125	7155	-4075	Limestone/Shale	None	No
2nd Bone Spring Sand	7570	7600	-4520	Sandstone	Oil	Yes
3rd Bone Spring Carbonate	7781	7811	-4731	Limestone	Oil	No
3rd Bone Spring Sand	8899	8929	-5849	Sandstone	Oil	Yes
Wolfcamp	9196	9226	-6146	Sandstone/Shale/Carbonates	Natural Gas / Oil	Yes
Wolfcamp X Sand	9225	9255	-6175	Sandstone/Shale/Carbonates	Natural Gas / Oil	Yes
Wolfcamp Y Sand	9290	9320	-6240	Sandstone/Shale/Carbonates	Natural Gas / Oil	Yes
Wolfcamp A	9340	9370	-6290	Sandstone/Shale/Carbonates	Natural Gas / Oil	Yes
Wolfcamp B	9551	9581	-6501	Sandstone/Shale/Carbonates	Natural Gas / Oil	Possible
Wolfcamp C	9794	9824	-6744	Sandstone/Shale/Carbonates	Natural Gas / Oil	Yes
Wolfcamp D	10067	10097	-7017	Sandstone/Shale/Carbonates	Natural Gas / Oil	Yes

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 12.25" intermediate hole, 10,000psi for the BOP Stacking before drilling the 8.75" production hole. Testing will be conducted by an independent service company per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the Equipment Description above. If the system is upgraded all the components installed will be functional and tested.

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

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

Marathon Oil Permian LLC.

Drilling & Operations Plan - Page 2 of 3

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	480	0	450	3045	2595	54.5	J55	BTC	1.00	1.15	BUOY	1.30	BUOY	1.30
Intermediate	12.25	9.625	0	8888	0	2388	3045	657	40	P110HC	BTC	1.00	1.15	BUOY	1.30	BUOY	1.30
Production	8.75	5.5	0	19400	0	9489	3045	-6444	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	180	97	2.12	12.5	205	25	Class C	Extender, Accelerator, LCM
Surface	Tail	180	480	197	1.32	14.8	260	25	Class C	Accelerator
Intermediate	Lead	0	8388	1520	2.18	12.4	3314	25	Class C	Extender, Accelerator, LCM
Intermediate	Tail	8388	8888	147	1.33	14.8	196	25	Class C	Retarder
Production	Tail	8588	19400	2073	1.68	13	3482	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	450	Water Based Mud	8.4	8.8
450	2418	Brine or Oil Based Mud	9.2	10.2
2418	19400	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: 6168 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.

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 397410

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 397410
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply.	11/3/2024