Sundry Print Reports
07/01/2024

County or Parish/State: LEA /

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Well Number: 703H

Well Name: DOLLY PURRTON WC Well Location: T23S / R32E / SEC 14 /

FED COM SWSW / 32.2986981 / -103.6499034

Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM084729 Unit or CA Name: Unit or CA Number:

LLC

Notice of Intent

Sundry ID: 2797225

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 06/25/2024 Time Sundry Submitted: 02:49

Date proposed operation will begin: 06/25/2024

Procedure Description: Marathon Oil Permian LLC respectfully request to make the following changes to the above referenced well. BHL Change Approved BHL: 100' FNL 2310' FWL Sec. 2 23S 32E Proposed BHL: 100' FNL 2210' FWL Sec. 2 23S 32E Casign Design Changes Intermediate Setting Depth FROM: 11904' TO: 11918' Production Setting Depth FROM: 27964' TO: 27937' No other changes to the casing design, cement design changes. Please see attached Drill Plan, Directional Plan, and C102s (Proposed and previously approved) for review and approval.

NOI Attachments

Procedure Description

Dolly_Purrton_Federal_703H___Plan_2_06_24_24_20240625144847.pdf

DOLLY_PURRTON_WC_FEDERAL_COM_703H_C102_REV2_CERTIFIED_20240625144849.pdf

C_102_Dolly_Purrton_703H___Previously_Approved_20240625144847.pdf

Dolly_Purrton_WC_Federal_Com_703H_Drill_Plan_20240625144848.pdf

Page 1 of 2

eived by OCD: 7/1/2024 12:58:54 PM Well Name: DOLLY PURRTON WC

FED COM

Well Location: T23S / R32E / SEC 14 /

SWSW / 32.2986981 / -103.6499034

County or Parish/State: LEA/ 2 of

NM

Well Number: 703H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM084729

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002550467

Operator: MARATHON OIL PERMIAN

Conditions of Approval

Additional

DOLLY PURRTON WC FEDERAL COM 703H SUNDRY COA 6302024 20240630110054.pdf

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: ADRIAN COVARRUBIAS Signed on: JUN 25, 2024 02:46 PM

Name: MARATHON OIL PERMIAN LLC

Title: regulatory Compliance Representative

Street Address: 990 TOWN & COUNTRY BLVD

City: HOUSTON State: TX

Phone: (713) 296-3368

Email address: acovarrubias@marathonoil.com

Field

Representative Name:

Street Address:

City: State:

Phone:

Email address:

BLM Point of Contact

Signature: Keith Immatty

BLM POC Name: KEITH P IMMATTY BLM POC Title: ENGINEER

BLM POC Phone: 5759884722 BLM POC Email Address: KIMMATTY@BLM.GOV

Zip:

Disposition: Approved Disposition Date: 06/30/2024

Page 2 of 2

Form 3160-5 (June 2019)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

ON	ORM APPROVED MB No. 1004-0137 res: October 31, 202
Serial No.	

EAU OF LAND MANAGEMENT	5. Lease Seri

SUNDRY NOTICES AND REPORTS ON Do not use this form for proposals to drill or abandoned well. Use Form 3160-3 (APD) for s	to re-enter a		6. If Indian, Allottee or Tribe Name				
SUBMIT IN TRIPLICATE - Other instructions on p	page 2		7. If Unit of CA/Agreement, Name and/or No.				
1. Type of Well			-				
Oil Well Gas Well Other			8. Well Name and No.				
2. Name of Operator			9. API Well No.				
3a. Address 3b. Phone N	No. (include area co	ode)	10. Field and Pool or Ex	plora	atory Area		
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)			11. Country or Parish, S	tate			
12. CHECK THE APPROPRIATE BOX(ES) TO	INDICATE NATU	RE OF NOTI	ICE, REPORT OR OTHE	ER D	ATA		
TYPE OF SUBMISSION	Т	YPE OF AC	TION				
Acidize D	eepen	Prod	luction (Start/Resume)		Water Shut-Off		
Notice of Intent \square	ydraulic Fracturing	=	amation		Well Integrity		
Cooing Roppin	ew Construction	=	omplete	$\overline{\Box}$	Other		
Subsequent Report	ug and Abandon		porarily Abandon				
	ug Back		er Disposal				
3. Describe Proposed or Completed Operation: Clearly state all pertinent detail the proposal is to deepen directionally or recomplete horizontally, give substitute Bond under which the work will be perfonned or provide the Bond No. of completion of the involved operations. If the operation results in a multiple of completed. Final Abandonment Notices must be filed only after all requirem is ready for final inspection.) 4. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)	urface locations and on file with BLM/B completion or recor	I measured ar IA. Required appletion in a	nd true vertical depths of subsequent reports must new interval, a Form 316	all pe be fil 0-4 r	ertinent markers and zones. Attach led within 30 days following nust be filed once testing has been		
	Title						
Signature	Date						
THE SPACE FOR FE	DERAL OR S	STATE OF	ICE USE				
Approved by							
	777.41			.4.			
	Title		Da	ite			
Conditions of approval, if any, are attached. Approval of this notice does not war sertify that the applicant holds legal or equitable title to those rights in the subject which would entitle the applicant to conduct operations thereon.							
Fitle 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime fo any false, fictitious or fraudulent statements or representations as to any matter w			Ifully to make to any dep	artme	ent or agency of the United States		

(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: SWSW / 407 FSL / 1235 FWL / TWSP: 23S / RANGE: 32E / SECTION: 14 / LAT: 32.2986981 / LONG: -103.6499034 (TVD: 0 feet, MD: 0 feet) PPP: SWSW / 100 FSL / 1250 FWL / TWSP: 23S / RANGE: 32E / SECTION: 14 / LAT: 32.2977034 / LONG: -103.6499189 (TVD: 11653 feet, MD: 11682 feet) PPP: SWSW / 0 FSL / 1250 FWL / TWSP: 23S / RANGE: 32E / SECTION: 11 / LAT: 32.3119423 / LONG: -103.6499218 (TVD: 12131 feet, MD: 17135 feet) BHL: NWNW / 100 FNL / 2310 FWL / TWSP: 23S / RANGE: 32E / SECTION: 11 / LAT: 32.3262017 / LONG: -103.6499255 (TVD: 12131 feet, MD: 22322 feet)



PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:
WELL NAME & NO.:
SURFACE HOLE FOOTAGE:
BOTTOM HOLE FOOTAGE
LOCATION:
COUNTY:
MARATHON OIL COMPANY
DOLLY PURRTON WC FEDERAL COM 703H
407'/S & 1235'/W
100'/N & 2210'/W
Section 14, T.23 S., R.32 E.
Lea County, New Mexico

ALL PREVIOUS COAs STILL APPLY

COA

H2S	• Yes	O No	
Potash	None	O Secretary	© R-111-P
Cave/Karst Potential	• Low	O Medium	O High
Cave/Karst Potential	O Critical		
Variance	O None	• Flex Hose	Other
Wellhead	Conventional	Multibowl	O Both
Wellhead Variance	O Diverter		
Other	□4 String	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Cementing	☐ Contingency	☐ EchoMeter	☐ Primary Cement
	Cement Squeeze		Squeeze
Special Requirements	☐ Water Disposal	☑ COM	□ Unit
Special Requirements	☐ Batch Sundry		
Special Requirements	☐ Break Testing	□ Offline	☐ Casing
Variance		Cementing	Clearance

A. CASING

Alternate Casing Design:

- 1. The 13-3/8 inch surface casing shall be set at approximately 1273 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) 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.
- 2. The **9-5/8** inch intermediate casing shall be set at approximately **11,918** feet. Review cement volumes for possible salt washout. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

Option 1 (Single Stage):

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

Option 2 (DV Tool):

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally and the **DV tool is placed below the salt interval.** The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.
- 3. The **5-1/2** inch production casing shall be set at approximately **27,917** feet. 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.

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)

- If well located in Eddy County
 EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
 BLM_NM_CFO_DrillingNotifications@BLM.GOV (575) 361-2822
- If well located in 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. In the event the operator has proposed 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. When the operator proposes 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 **43 CFR part 3170 Subpart 3172** 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 integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
- B. PRESSURE CONTROL
- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3.

- 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 43 CFR part 3170 Subpart 3172 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 cement), 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 cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** 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 43 CFR part 3170 Subpart 3172.

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.

KPI 6/30/2024

Azimuths to Grid North Project: Lea County, NM (NAD27 NME) True North: -0.37° Site: Dolly Purrton Federal Magnetic North: 5.83° PHOENIX Marathon Oil Well: Dolly Purrton Federal 703H **Magnetic Field** Strength: 47429.5nT Wellbore: OH TECHNOLOGY SERVICES Dip Angle: 59.82° Corporation... RKB @ 3740.60usft (Cactus 171) Date: 5/07/2024 Design: Plan 2 06-24-24 **Model: MVHD** Ground Level: 3717.00 Rig: Cactus 171 WELL DETAILS Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS) 500 15600⁻ Ellipsoid: Clarke 1866 3717.00 Zone Name: New Mexico East 3001 Easting Longitude 472957.32 32° 17' 54.326096 N 103° 38' 58.149368 W Well Dolly Purrton Federal 703H, Grid North 711301.77 1000 15000· Latitude: 32° 17' 54.326096 N DESIGN TARGET DETAILS Longitude: 103° 38' 58.149368 W Rustler Dolly Purton Federal 7021 Grid East: 711301.77 Longitude 14400-Grid North: 472957.32 KOP/FTP/PPP1v2 - DP Fed 703H TD at 27936.97 32° 17' 51.328017 N 103° 38' 46.812964 W Scale Factor: 1.000 Salado LTP/BHLv2 - DP Fed 703H MA MALL 26 35 FEDERAL LTP/BHLv2 - DP Fed 703H Geomagnetic Model: MVHD
Sample Date: 07-May-24
Magnetic Declination: 6.200°
Dip Angle from Horizontal: 59.825°
Magnetic Field Strength: 47429.46566572nT PI2 Exit- DP Fed 703H 2000 13800-PPP2v2 - DP Fed 703H 4881.12 32° 18' 42.567962 N 103° 38' 46.833694 W Dolly Purrton Federal 703H Llama Mall 26-35 Fed Com 22 PPP3v2 - DP Fed 703H 32° 19' 8.794128 N 103° 38' 46.846188 W 480488.63 Dolly Purrton Federal 501 H 2500· 13200 To convert a Magnetic Direction to a Grid Direction, Add 5.835° To convert a Magnetic Direction to a True Direction, Add 6.200° East To convert a True Direction to a Grid Direction, Subtract 0.365° 26-35 Fed Com 23H SECTION DETAILS EDERAL DOM 321 3000 12600-Annotation Dolly Purrton Federal 502H Dolly Purton Federal 3021 KOP, Begin 2.00°/100' Build KOP, Begin 2.00°/100' Build 12000 Hold 7.91° Inc at 110.18° Azm Castile Begin 2.00°/100' Drop & Turn KOP2, Begin 10.00°/100' Build 12847.97 90.00 359.63 12450.00 11400-LP, Hold 90.00° Inc at 359.63° Azm Hold 7.91° Inc at 110.18° Azm TD at 27936.97 PI2 Exit- DP Fed 703H 10800 Base of Salt (BX) 10200 **epth** 5500-Dolly Purrton Federal 302H 9600 15400 **100' Hardline** Dollý Purrton Federal 502H 9000 15300-Cherry Canyon Dolly Purrton Federal 703H LTP/BHLv2 - DP Fed 703H 6500-**2**8400 15200 TD at 27936.97 PPR3v2 - DP Fed 703H **7800** 15100-Brushy Canyon KOP2, Begin 10.00°/100' Build 7500-Dolly Purrton Federal 701H = 15000 11900 3rd Bone Spring Sand KOP/FTP/PPP1v2 - DP Fed 703H 8000 Dolly Purrton Federal 702H **\$**6600-URRACA FEDERAL #1 (P&A) Dolly Purrton Federal 703H 8500 **ග** 6000 Jrraca 14 AV Federal Com 24H Dolly Purrton Federal 501H Bone Spring Lime 9000 Upper Avalon Shale URRACA 11 SB FEDERAL #004 Dolly Purton Federal 502/ 5400 ψ 12200 Wolfcamp **\$**14700 LP, Hold 90.00° Inc at 359.63° Azm 9500 4800 **%** 14600 **2** 12300 ₩PP2v2 - DP Fed 703H KOP, Begin 2.00°/100' Build 10000 1st Bone Spring Sand 330 4200-14500 Ž 12400 Wolfcamp A 2nd Bone Spring Carbonate Hold 7.91° Inc at 110.18° Azm 3600--150 14400-2nd Bone Spring Sand 12500-3000 Dolly Purrton Federal 703H -1500 -1000 14300 Vertical Section at 359.63° (500 usft/in) Vertical Section at 359.63° (100 usft/in) 2400 1000 1100 1200 1300 900 w Federal 2 West(-)/East(+) (50 usft/in) West(-)/East(+) (100 usft/in) LP, Hold 90.00° Inc at 359.63° Azm CUERVO FEDERAL 23H Begin 2.00°/100' Drop & Turn 3rd Bone Spring Carbonate KOP2, Begin 10.00°/100' Build 600 **45** 11500 TD at 27936.97 12000 3rd Bone Spring Sand LP, Hold 90.00° Inc at 359.63° Azm Cuervo Federal 1H Wolfcamp KOP, Begin 2.00°/100' Build Wolfcamp A Hold 7.91° Inc at 110.18° Azm Begin 2.00°/100' Drop & Turn Wolfcamp B Wolfcamp C PPP2v2 - DP Fed 703H PPP3v2 - DP Fed 703H PI2 Exit- DP Fed 703H KOP2, Begin 10.00°/100' Build LTP/BHLv2 - DP Fed 703H Wolfcamp D KOP/FTP/PPP1v2 - DP Fed 703H -1500 -1000 -500 2000 2500 3500 4000 4500 5000 6500 7000 7500 8000 8500 9000 9500 10000 10500 11000 11500 12000 12500 13000 13500 14000 14500 15000 15500 1500 3000 5500 West(-)/East(+) (600 usft/in) Vertical Section at 359.63° (500 usft/in) Date: 15:01, June 24 2024



Marathon Oil Permian LLC

Lea County, NM (NAD27 NME)
Dolly Purrton Federal
Dolly Purrton Federal 703H

OH

Plan: Plan 2 06-24-24

Standard Planning Report

24 June, 2024







Database: USAEDMDB

Company: Marathon Oil Permian LLC
Project: Lea County, NM (NAD27 NME)

Site: Dolly Purrton Federal
Well: Dolly Purrton Federal 703H

Wellbore: OH

Design: Plan 2 06-24-24

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Dolly Purrton Federal 703H

RKB @ 3740.60usft (Cactus 171) RKB @ 3740.60usft (Cactus 171)

Grid

Minimum Curvature

Project Lea County, NM (NAD27 NME)

Map System: US State Plane 1927 (Exact solution)

Geo Datum: NAD 1927 (NADCON CONUS)

Map Zone: New Mexico East 3001

System Datum: Mean Sea Level

Site Dolly Purrton Federal

 Site Position:
 Northing:
 473,017.32 usft
 Latitude:
 32° 17' 54.919830 N

 From:
 Map
 Easting:
 711,301.77 usft
 Longitude:
 103° 38' 58.144910 W

Position Uncertainty: 0.00 usft Slot Radius: 13-3/16 "

Well Dolly Purrton Federal 703H

 Well Position
 +N/-S
 0.00 usft
 Northing:
 472,957.32 usfl
 Latitude:
 32° 17' 54.326097 N

 +E/-W
 0.00 usft
 Easting:
 711,301.77 usfl
 Longitude:
 103° 38' 58.149369 W

Position Uncertainty 0.00 usft Wellhead Elevation: usft Ground Level: 3,717.00 usft

Grid Convergence: 0.365 °

Wellbore OH

 Magnetics
 Model Name
 Sample Date
 Declination (°)
 Dip Angle (°)
 Field Strength (nT)

 MVHD
 5/07/24
 6.200
 59.825
 47,429.46566572

Design Plan 2 06-24-24

Audit Notes:

Version:Phase:PLANTie On Depth:0.00

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

 0.00
 0.00
 0.00
 359.63

Plan Survey Tool Program Date 6/24/24

Depth From Depth To

(usft) (usft) Survey (Wellbore) Tool Name Remarks

1 0.00 27,936.97 Plan 2 06-24-24 (OH) MWD+IFR1+MS

OWSG Rev. 2 MWD + IFR1

Plan Sections Measured Vertical Build Turn Dogleg Depth Inclination **Azimuth** Depth +N/-S +E/-W Rate Rate Rate **TFO** (°/100usft) (°/100usft) (°/100usft) (usft) (usft) (usft) (usft) (°) (°) (°) Target 0.00 0.00 0.00 0.00 0.000 0.00 0.00 0.00 0.00 0.00 3,970.00 0.00 0.00 3,970.00 0.00 0.00 0.00 0.00 0.00 0.000 110.182 4,365.49 7.91 110.18 4,364.24 -9.40 25.58 2.00 2.00 0.00 11,405.26 7.91 110.18 11,337.02 -343.64 934.88 0.00 0.00 0.00 0.000 12,017.97 7.00 359.63 11,946.87 -320.76 974.36 2.00 -0.15 -18.04 -147.477 90.00 970.69 10.00 10.00 0.00 0.000 12,847.97 359.63 12,450.00 247 91 27,936.97 90.00 359.63 12,450.00 15,336.60 873.25 0.00 0.00 0.00 0.000 LTP/BHLv2 - DP Fe





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Marathon Oil Permian LLC Lea County, NM (NAD27 NME) Dolly Purrton Federal

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Well Dolly Purrton Federal 703H RKB @ 3740.60usft (Cactus 171) RKB @ 3740.60usft (Cactus 171)

Grid

	l.									
Planne	ed 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 1,221.00 Rustler	0.00 0.00	0.00 0.00	0.00 1,221.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
	1,696.00	0.00	0.00	1,696.00	0.00	0.00	0.00	0.00	0.00	0.00
	Salado 3,604.00	0.00	0.00	3,604.00	0.00	0.00	0.00	0.00	0.00	0.00
	3,970.00	0.00 n 2.00°/100' B u	0.00	3,970.00	0.00	0.00	0.00	0.00	0.00	0.00
	4,000.00 4,100.00 4,200.00 4,300.00 4,365.49	0.60 2.60 4.60 6.60 7.91 Inc at 110.18°	110.18 110.18 110.18 110.18	4,000.00 4,099.96 4,199.75 4,299.27 4,364.24	-0.05 -1.02 -3.18 -6.55 -9.40	0.15 2.77 8.66 17.82 25.58	-0.06 -1.04 -3.24 -6.67 -9.57	2.00 2.00 2.00 2.00 2.00	2.00 2.00 2.00 2.00 2.00	0.00 0.00 0.00 0.00 0.00
		inc at 110.18	Azm							
	4,400.00 4,500.00 4,600.00 4,700.00 4,800.00	7.91 7.91 7.91 7.91 7.91	110.18 110.18 110.18 110.18 110.18	4,398.42 4,497.47 4,596.51 4,695.56 4,794.61	-11.04 -15.79 -20.54 -25.29 -30.03	30.04 42.96 55.87 68.79 81.71	-11.24 -16.07 -20.90 -25.73 -30.56	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
	4,900.00 4,948.80 Base of Sa	7.91 7.91 It (BX) - Lama l	110.18 110.18 r	4,893.66 4,942.00	-34.78 -37.10	94.62 100.93	-35.39 -37.75	0.00 0.00	0.00 0.00	0.00 0.00
	5,000.00 5,001.30	7.91 7.91	110.18 110.18	4,992.71 4,994.00	-39.53 -39.59	107.54 107.71	-40.22 -40.29	0.00 0.00	0.00 0.00	0.00 0.00
	Bell Canyo									
	5,100.00	7.91	110.18	5,091.76	-44.28	120.46	-45.05	0.00	0.00	0.00
	5,200.00 5,300.00 5,400.00 5,500.00 5,600.00	7.91 7.91 7.91 7.91 7.91	110.18 110.18 110.18 110.18 110.18	5,190.81 5,289.85 5,388.90 5,487.95 5,587.00	-49.02 -53.77 -58.52 -63.27 -68.02	133.37 146.29 159.21 172.12 185.04	-49.88 -54.72 -59.55 -64.38 -69.21	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
	5,700.00 5,800.00 5,900.00 6,000.00 6,100.00	7.91 7.91 7.91 7.91 7.91	110.18 110.18 110.18 110.18 110.18	5,686.05 5,785.10 5,884.15 5,983.19 6,082.24	-72.76 -77.51 -82.26 -87.01 -91.75	197.96 210.87 223.79 236.71 249.62	-74.04 -78.87 -83.70 -88.53 -93.36	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
	6,135.09	7.91	110.18	6,117.00	-93.42	254.15	-95.06	0.00	0.00	0.00
	Cherry Car 6,200.00 6,300.00 6,400.00 6,500.00	7.91 7.91 7.91 7.91 7.91	110.18 110.18 110.18 110.18	6,181.29 6,280.34 6,379.39 6,478.44	-96.50 -101.25 -106.00 -110.75	262.54 275.46 288.37 301.29	-98.20 -103.03 -107.86 -112.69	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
	6,600.00 6,700.00 6,800.00 6,900.00 7,000.00	7.91 7.91 7.91 7.91 7.91	110.18 110.18 110.18 110.18 110.18	6,577.49 6,676.53 6,775.58 6,874.63 6,973.68	-115.49 -120.24 -124.99 -129.74 -134.48	314.21 327.12 340.04 352.96 365.87	-117.52 -122.35 -127.18 -132.01 -136.84	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
	7,100.00 7,121.48 Brushy Ca	7.91 7.91 nvon	110.18 110.18	7,072.73 7,094.00	-139.23 -140.25	378.79 381.56	-141.68 -142.71	0.00 0.00	0.00 0.00	0.00 0.00
	7,200.00 7,300.00	7.91 7.91	110.18 110.18	7,171.78 7,270.83	-143.98 -148.73	391.70 404.62	-146.51 -151.34	0.00 0.00	0.00 0.00	0.00 0.00





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esig	n:	Plan 2 06-24	-24							
lanr	ed 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)
	7,400.00	7.91	110.18	7,369.87	-153.48	417.54	-156.17	0.00	0.00	0.00
	7,500.00	7.91	110.18	7,468.92	-158.22	430.45	-161.00	0.00	0.00	0.00
	7,600.00	7.91	110.18	7,567.97	-162.97	443.37	-165.83	0.00	0.00	0.00
	7,700.00	7.91	110.18	7,667.02	-167.72	456.29	-170.66	0.00	0.00	0.00
	7,800.00	7.91	110.18	7,766.07	-172.47	469.20	-175.49	0.00	0.00	0.00
	7,900.00	7.91	110.18	7,865.12	-177.21	482.12	-180.32	0.00	0.00	0.00
	8,000.00	7.91	110.18	7,964.17	-181.96	495.04	-185.16	0.00	0.00	0.00
	8,100.00	7.91	110.18	8,063.21	-186.71	507.95	-189.99	0.00	0.00	0.00
	8,200.00	7.91	110.18	8,162.26	-191.46	520.87	-194.82	0.00	0.00	0.00
	8,300.00	7.91	110.18	8,261.31	-196.21	533.79	-199.65	0.00	0.00	0.00
	8,400.00	7.91	110.18	8,360.36	-200.95	546.70	-204.48	0.00	0.00	0.00
	8,500.00	7.91	110.18	8,459.41	-205.70	559.62	-209.31	0.00	0.00	0.00
	8,600.00	7.91	110.18	8,558.46	-210.45	572.54	-214.14	0.00	0.00	0.00
	8,700.00	7.91	110.18	8,657.51	-215.20	585.45	-218.97	0.00	0.00	0.00
	8,800.00	7.91	110.18	8,756.55	-219.95	598.37	-223.80	0.00	0.00	0.00
	8,800.45	7.91	110.18	8,757.00	-219.97	598.43	-223.83	0.00	0.00	0.00
	Bone Sprir	_	440.40		221.22	244.00	000.04			
	8,900.00	7.91	110.18	8,855.60	-224.69	611.29	-228.64	0.00	0.00	0.00
	8,931.70	7.91	110.18	8,887.00	-226.20	615.38	-230.17	0.00	0.00	0.00
	9,000.00 9,100.00 9,200.00	7.91 7.91 7.91 7.91	110.18 110.18 110.18	8,954.65 9,053.70 9,152.75	-229.44 -234.19 -238.94	624.20 637.12 650.04	-233.47 -238.30 -243.13	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
	9,300.00	7.91	110.18	9,251.80	-243.68	662.95	-247.96	0.00	0.00	0.00
	9,400.00	7.91	110.18	9,350.85	-248.43	675.87	-252.79	0.00	0.00	0.00
	9,500.00	7.91	110.18	9,449.89	-253.18	688.79	-257.62	0.00	0.00	0.00
	9,600.00	7.91	110.18	9,548.94	-257.93	701.70	-262.45	0.00	0.00	0.00
	9,700.00	7.91	110.18	9,647.99	-262.68	714.62	-267.28	0.00	0.00	0.00
	9,800.00	7.91	110.18	9,747.04	-267.42	727.54	-272.12	0.00	0.00	0.00
	9,900.00	7.91	110.18	9,846.09	-272.17	740.45	-276.95	0.00	0.00	0.00
	9,994.81	7.91	110.18	9,940.00	-276.67	752.70	-281.53	0.00	0.00	0.00
		pring Sand	110.18	9.945.14	-276.92	753.37	204 70	0.00	0.00	0.00
	10,000.00 10,100.00	7.91 7.91	110.18	10,044.19	-276.92 -281.67	766.29	-281.78 -286.61	0.00	0.00	0.00
	10,200.00	7.91	110.18	10,143.23	-286.41	779.20	-291.44	0.00	0.00	0.00
	10,299.72	7.91	110.18	10,242.00	-291.15	792.08	-296.26	0.00	0.00	0.00
	2nd Bone S	Spring Carbon	ate							
	10,300.00	7.91	110.18	10,242.28	-291.16	792.12	-296.27	0.00	0.00	0.00
	10,400.00	7.91	110.18	10,341.33	-295.91	805.04	-301.10	0.00	0.00	0.00
	10,500.00	7.91	110.18	10,440.38	-300.66	817.95	-305.93	0.00	0.00	0.00
	10,600.00	7.91	110.18	10,539.43	-305.41	830.87	-310.76	0.00	0.00	0.00
	10,668.22	7.91	110.18	10,607.00	-308.64	839.68	-314.06	0.00	0.00	0.00
		Spring Sand	440.40	10 620 40	240.45	040.70	245.00	0.00	0.00	0.00
	10,700.00	7.91	110.18	10,638.48	-310.15	843.79	-315.60	0.00	0.00	0.00
	10,800.00	7.91	110.18	10,737.53	-314.90	856.70	-320.43	0.00	0.00	0.00
	10,900.00	7.91	110.18	10,836.57	-319.65	869.62	-325.26	0.00	0.00	0.00
	11,000.00	7.91	110.18	10,935.62	-324.40	882.54	-330.09	0.00	0.00	0.00
	11,100.00	7.91	110.18	11,034.67	-329.14	895.45	-334.92	0.00	0.00	0.00
	11,181.10	7.91	110.18	11,115.00	-332.99	905.93	-338.84	0.00	0.00	0.00
		Spring Carbon		44 400 70	000.00	000.0=	000 75	2.22	2.22	2.22
	11,200.00	7.91	110.18	11,133.72	-333.89	908.37	-339.75	0.00	0.00	0.00
	11,300.00	7.91	110.18	11,232.77	-338.64	921.29	-344.58	0.00	0.00	0.00
	11,400.00	7.91	110.18	11,331.82	-343.39	934.20	-349.41	0.00	0.00	0.00



Project:

PhoenixPlanning Report



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11,405.26	7.91	110.18	11,337.02	-343.64	934.88	-349.67	0.00	0.00	0.00
	/100' Drop &								
11,500.00 11,600.00 11,700.00	6.39 5.07 4.32	101.00 85.80 62.97	11,431.03 11,530.53 11,630.21	-346.89 -347.63 -345.60	946.18 956.06 963.82	-353.00 -353.80 -351.81	2.00 2.00 2.00	-1.60 -1.32 -0.76	-9.70 -15.20 -22.83
11,800.00 11,900.00 11,960.73	4.41 5.32 6.13	36.48 15.27 6.15	11,729.93 11,829.57 11,890.00	-340.79 -333.23 -327.29	969.46 972.97 974.06	-347.05 -339.50 -333.57	2.00 2.00 2.00	0.10 0.91 1.33	-26.49 -21.22 -15.01
·	pring Sand	0.13	11,030.00	-527.29	374.00	-333.37	2.00	1.55	-13.01
12,000.00	6.72	1.50	11,929.02	-322.91	974.34	-329.19	2.00	1.50	-11.86
12,017.97	7.00	359.63	11,946.87	-320.76	974.36	-327.05	2.00	1.57	-10.38
	in 10.00°/100'								
12,100.00 12,200.00 12,262.49	15.20 25.20 31.45	359.63 359.63 359.63	12,027.29 12,121.02 12,176.00	-304.98 -270.49 -240.85	974.26 974.04 973.85	-311.27 -276.78 -247.14	10.00 10.00 10.00	10.00 10.00 10.00	0.00 0.00 0.00
Wolfcamp			,						
12,300.00 12,400.00	35.20 45.20	359.63 359.63	12,207.34 12,283.62	-220.25 -155.78	973.71 973.30	-226.53 -162.07	10.00 10.00	10.00 10.00	0.00 0.00
12,500.00 12,594.87	55.20 64.69	359.63 359.63	12,347.54 12,395.00	-79.05 2.97	972.80 972.27	-85.33 -3.31	10.00 10.00	10.00 10.00	0.00 0.00
Wolfcamp		250.02	40 007 47	7.00	070.04	4.04	10.00	40.00	0.00
12,600.00 12,700.00 12,800.00	65.20 75.20 85.20	359.63 359.63 359.63	12,397.17 12,431.00 12,447.99	7.62 101.58 200.00	972.24 971.63 971.00	1.34 95.31 193.72	10.00 10.00 10.00	10.00 10.00 10.00	0.00 0.00 0.00
12,847.97	90.00	359.63	12,450.00	247.91	970.69	241.64	10.00	10.00	0.00
LP, Hold 90	.00° Inc at 35	9.63° Azm							
12,900.00 13,000.00 13,100.00 13,200.00	90.00 90.00 90.00 90.00	359.63 359.63 359.63 359.63	12,450.00 12,450.00 12,450.00 12,450.00	299.94 399.94 499.94 599.93	970.35 969.71 969.06 968.42	293.67 393.67 493.67 593.67	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
13,300.00 13,400.00 13,500.00 13,600.00	90.00 90.00 90.00 90.00	359.63 359.63 359.63 359.63	12,450.00 12,450.00 12,450.00 12,450.00	699.93 799.93 899.93 999.93	967.77 967.13 966.48 965.83	693.67 793.67 893.67 993.67	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
13,700.00	90.00	359.63	12,450.00	1,099.92	965.19	1,093.67	0.00	0.00	0.00
13,800.00 13,900.00 14,000.00 14,100.00 14,200.00	90.00 90.00 90.00 90.00 90.00	359.63 359.63 359.63 359.63 359.63	12,450.00 12,450.00 12,450.00 12,450.00 12,450.00	1,199.92 1,299.92 1,399.92 1,499.92 1,599.91	964.54 963.90 963.25 962.60 961.96	1,193.67 1,293.67 1,393.67 1,493.67 1,593.67	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
14,300.00 14,400.00 14,500.00 14,600.00 14,700.00	90.00 90.00 90.00 90.00 90.00	359.63 359.63 359.63 359.63	12,450.00 12,450.00 12,450.00 12,450.00 12,450.00	1,699.91 1,799.91 1,899.91 1,999.90 2,099.90	961.31 960.67 960.02 959.38 958.73	1,693.67 1,793.67 1,893.67 1,993.67 2,093.67	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
14,800.00 14,900.00 15,000.00 15,100.00 15,200.00	90.00 90.00 90.00 90.00 90.00	359.63 359.63 359.63 359.63 359.63	12,450.00 12,450.00 12,450.00 12,450.00 12,450.00	2,199.90 2,299.90 2,399.90 2,499.89 2,599.89	958.08 957.44 956.79 956.15 955.50	2,193.67 2,293.67 2,393.67 2,493.67 2,593.67	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
15,300.00 15,400.00 15,500.00	90.00 90.00 90.00	359.63 359.63 359.63	12,450.00 12,450.00 12,450.00	2,699.89 2,799.89 2,899.89	954.86 954.21 953.56	2,693.67 2,793.67 2,893.67	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00





Database: Company: Project: USAEDMDB

Marathon Oil Permian LLC Lea County, NM (NAD27 NME)

Site: Dolly Purrton Federal
Well: Dolly Purrton Federal 703H

Wellbore: OH

Design: Plan 2 06-24-24

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Dolly Purrton Federal 703H RKB @ 3740.60usft (Cactus 171) RKB @ 3740.60usft (Cactus 171)

Grid

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,600.00	90.00	359.63	12,450.00	2,999.88	952.92	2,993.67	0.00	0.00	0.00
15,700.00	90.00	359.63	12,450.00	3,099.88	952.27	3,093.67	0.00	0.00	0.00
15,800.00	90.00	359.63	12,450.00	3,199.88	951.63	3,193.67	0.00	0.00	0.00
15,900.00	90.00	359.63	12,450.00	3,299.88	950.98	3,293.67	0.00	0.00	0.00
16,000.00	90.00	359.63	12,450.00	3,399.88	950.34	3,393.67	0.00	0.00	0.00
16,100.00	90.00	359.63	12,450.00	3,499.87	949.69	3,493.67	0.00	0.00	0.00
16,200.00	90.00	359.63	12,450.00	3,599.87	949.04	3,593.67	0.00	0.00	0.00
16,300.00	90.00	359.63	12,450.00	3,699.87	948.40	3,693.67	0.00	0.00	0.00
16,400.00	90.00	359.63	12,450.00	3,799.87	947.75	3,793.67	0.00	0.00	0.00
16,500.00	90.00	359.63	12,450.00	3,899.87	947.11	3,893.67	0.00	0.00	0.00
16,600.00	90.00	359.63	12,450.00	3,999.86	946.46	3,993.67	0.00	0.00	0.00
16,700.00	90.00	359.63	12,450.00	4,099.86	945.81	4,093.67	0.00	0.00	0.00
16,800.00	90.00	359.63	12,450.00	4,199.86	945.17	4,193.67	0.00	0.00	0.00
16,900.00	90.00	359.63	12,450.00	4,299.86	944.52	4,293.67	0.00	0.00	0.00
17,000.00	90.00	359.63	12,450.00	4,399.85	943.88	4,393.67	0.00	0.00	0.00
17,100.00	90.00	359.63	12,450.00	4,499.85	943.23	4,493.67	0.00	0.00	0.00
17,200.00	90.00	359.63	12,450.00	4,599.85	942.59	4,593.67	0.00	0.00	0.00
17,300.00	90.00	359.63	12,450.00	4,699.85	941.94	4,693.67	0.00	0.00	0.00
17,400.00	90.00	359.63	12,450.00	4,799.85	941.29	4,793.67	0.00	0.00	0.00
17,500.00	90.00	359.63	12,450.00	4,899.84	940.65	4,893.67	0.00	0.00	0.00
17,600.00	90.00	359.63	12,450.00	4,999.84	940.00	4,993.67	0.00	0.00	0.00
17,700.00	90.00	359.63	12,450.00	5,099.84	939.36	5,093.67	0.00	0.00	0.00
17,800.00	90.00	359.63	12,450.00	5,199.84	938.71	5,193.67	0.00	0.00	0.00
17,900.00	90.00	359.63	12,450.00	5,299.84	938.07	5,293.67	0.00	0.00	0.00
18,000.00	90.00	359.63	12,450.00	5,399.83	937.42	5,393.67	0.00	0.00	0.00
18,100.00	90.00	359.63	12,450.00	5,499.83	936.77	5,493.67	0.00	0.00	0.00
18,200.00	90.00	359.63	12,450.00	5,599.83	936.13	5,593.67	0.00	0.00	0.00
18,300.00	90.00	359.63	12,450.00	5,699.83	935.48	5,693.67	0.00	0.00	0.00
18,400.00	90.00	359.63	12,450.00	5,799.83	934.84	5,793.67	0.00	0.00	0.00
18,500.00	90.00	359.63	12,450.00	5,899.82	934.19	5,893.67	0.00	0.00	0.00
18,600.00	90.00	359.63	12,450.00	5,999.82	933.55	5,993.67	0.00	0.00	0.00
18,700.00	90.00	359.63	12,450.00	6,099.82	932.90	6,093.67	0.00	0.00	0.00
18,800.00	90.00	359.63	12,450.00	6,199.82	932.25	6,193.67	0.00	0.00	0.00
18,900.00	90.00	359.63	12,450.00	6,299.82	931.61	6,293.67	0.00	0.00	0.00
19,000.00	90.00	359.63	12,450.00	6,399.81	930.96	6,393.67	0.00	0.00	0.00
19,100.00	90.00	359.63	12,450.00	6,499.81	930.32	6,493.67	0.00	0.00	0.00
19,200.00	90.00	359.63	12,450.00	6,599.81	929.67	6,593.67	0.00	0.00	0.00
19,300.00 19,400.00 19,500.00 19,600.00 19,700.00	90.00 90.00 90.00 90.00 90.00	359.63 359.63 359.63 359.63	12,450.00 12,450.00 12,450.00 12,450.00 12,450.00	6,699.81 6,799.80 6,899.80 6,999.80 7,099.80	929.02 928.38 927.73 927.09 926.44	6,693.67 6,793.67 6,893.67 6,993.67 7,093.67	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
19,800.00	90.00	359.63	12,450.00	7,199.80	925.80	7,193.67	0.00	0.00	0.00
19,900.00	90.00	359.63	12,450.00	7,299.79	925.15	7,293.67	0.00	0.00	0.00
20,000.00	90.00	359.63	12,450.00	7,399.79	924.50	7,393.67	0.00	0.00	0.00
20,100.00	90.00	359.63	12,450.00	7,499.79	923.86	7,493.67	0.00	0.00	0.00
20,200.00	90.00	359.63	12,450.00	7,599.79	923.21	7,593.67	0.00	0.00	0.00
20,300.00	90.00	359.63	12,450.00	7,699.79	922.57	7,693.67	0.00	0.00	0.00
20,400.00	90.00	359.63	12,450.00	7,799.78	921.92	7,793.67	0.00	0.00	0.00
20,500.00	90.00	359.63	12,450.00	7,899.78	921.28	7,893.67	0.00	0.00	0.00
20,600.00	90.00	359.63	12,450.00	7,999.78	920.63	7,993.67	0.00	0.00	0.00
20,700.00	90.00	359.63	12,450.00	8,099.78	919.98	8,093.67	0.00	0.00	0.00
20,800.00	90.00	359.63	12,450.00	8,199.78	919.34	8,193.67	0.00	0.00	0.00
20,900.00	90.00	359.63	12,450.00	8,299.77	918.69	8,293.67	0.00	0.00	0.00





Database: Company: Project: USAEDMDB

Marathon Oil Permian LLC Lea County, NM (NAD27 NME)

Site: Dolly Purrton Federal
Well: Dolly Purrton Federal 703H

Wellbore: OH

Design: Plan 2 06-24-24

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Dolly Purrton Federal 703H RKB @ 3740.60usft (Cactus 171) RKB @ 3740.60usft (Cactus 171)

Grid

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)
21,000.00	90.00	359.63	12,450.00	8,399.77	918.05	8,393.67	0.00	0.00	0.00
21,100.00	90.00	359.63	12,450.00	8,499.77	917.40	8,493.67	0.00	0.00	0.00
21,200.00	90.00	359.63	12,450.00	8,599.77	916.76	8,593.67	0.00	0.00	0.00
21,300.00 21,400.00 21,500.00 21,600.00 21,700.00	90.00 90.00 90.00 90.00 90.00	359.63 359.63 359.63 359.63	12,450.00 12,450.00 12,450.00 12,450.00 12,450.00	8,699.77 8,799.76 8,899.76 8,999.76 9,099.76	916.11 915.46 914.82 914.17 913.53	8,693.67 8,793.67 8,893.67 8,993.67 9,093.67	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
21,800.00	90.00	359.63	12,450.00	9,199.75	912.88	9,193.67	0.00	0.00	0.00
21,900.00	90.00	359.63	12,450.00	9,299.75	912.23	9,293.67	0.00	0.00	0.00
22,000.00	90.00	359.63	12,450.00	9,399.75	911.59	9,393.67	0.00	0.00	0.00
22,100.00	90.00	359.63	12,450.00	9,499.75	910.94	9,493.67	0.00	0.00	0.00
22,200.00	90.00	359.63	12,450.00	9,599.75	910.30	9,593.67	0.00	0.00	0.00
22,300.00	90.00	359.63	12,450.00	9,699.74	909.65	9,693.67	0.00	0.00	0.00
22,400.00	90.00	359.63	12,450.00	9,799.74	909.01	9,793.67	0.00	0.00	0.00
22,500.00	90.00	359.63	12,450.00	9,899.74	908.36	9,893.67	0.00	0.00	0.00
22,600.00	90.00	359.63	12,450.00	9,999.74	907.71	9,993.67	0.00	0.00	0.00
22,700.00	90.00	359.63	12,450.00	10,099.74	907.07	10,093.67	0.00	0.00	0.00
22,800.00	90.00	359.63	12,450.00	10,199.73	906.42	10,193.67	0.00	0.00	0.00
22,900.00	90.00	359.63	12,450.00	10,299.73	905.78	10,293.67	0.00	0.00	0.00
23,000.00	90.00	359.63	12,450.00	10,399.73	905.13	10,393.67	0.00	0.00	0.00
23,100.00	90.00	359.63	12,450.00	10,499.73	904.49	10,493.67	0.00	0.00	0.00
23,200.00	90.00	359.63	12,450.00	10,599.73	903.84	10,593.67	0.00	0.00	0.00
23,300.00 23,400.00 23,500.00 23,600.00 23,700.00	90.00 90.00 90.00 90.00 90.00	359.63 359.63 359.63 359.63	12,450.00 12,450.00 12,450.00 12,450.00 12,450.00	10,699.72 10,799.72 10,899.72 10,999.72 11,099.72	903.19 902.55 901.90 901.26 900.61	10,693.67 10,793.67 10,893.67 10,993.67 11,093.67	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
23,800.00	90.00	359.63	12,450.00	11,199.71	899.97	11,193.67	0.00	0.00	0.00
23,900.00	90.00	359.63	12,450.00	11,299.71	899.32	11,293.67	0.00	0.00	0.00
24,000.00	90.00	359.63	12,450.00	11,399.71	898.67	11,393.67	0.00	0.00	0.00
24,100.00	90.00	359.63	12,450.00	11,499.71	898.03	11,493.67	0.00	0.00	0.00
24,200.00	90.00	359.63	12,450.00	11,599.70	897.38	11,593.67	0.00	0.00	0.00
24,300.00	90.00	359.63	12,450.00	11,699.70	896.74	11,693.67	0.00	0.00	0.00
24,400.00	90.00	359.63	12,450.00	11,799.70	896.09	11,793.67	0.00	0.00	0.00
24,500.00	90.00	359.63	12,450.00	11,899.70	895.44	11,893.67	0.00	0.00	0.00
24,600.00	90.00	359.63	12,450.00	11,999.70	894.80	11,993.67	0.00	0.00	0.00
24,700.00	90.00	359.63	12,450.00	12,099.69	894.15	12,093.67	0.00	0.00	0.00
24,800.00	90.00	359.63	12,450.00	12,199.69	893.51	12,193.67	0.00	0.00	0.00
24,900.00	90.00	359.63	12,450.00	12,299.69	892.86	12,293.67	0.00	0.00	0.00
25,000.00	90.00	359.63	12,450.00	12,399.69	892.22	12,393.67	0.00	0.00	0.00
25,100.00	90.00	359.63	12,450.00	12,499.69	891.57	12,493.67	0.00	0.00	0.00
25,200.00	90.00	359.63	12,450.00	12,599.68	890.92	12,593.67	0.00	0.00	0.00
25,300.00	90.00	359.63	12,450.00	12,699.68	890.28	12,693.67	0.00	0.00	0.00
25,400.00	90.00	359.63	12,450.00	12,799.68	889.63	12,793.67	0.00	0.00	0.00
25,500.00	90.00	359.63	12,450.00	12,899.68	888.99	12,893.67	0.00	0.00	0.00
25,600.00	90.00	359.63	12,450.00	12,999.68	888.34	12,993.67	0.00	0.00	0.00
25,700.00	90.00	359.63	12,450.00	13,099.67	887.70	13,093.67	0.00	0.00	0.00
25,800.00	90.00	359.63	12,450.00	13,199.67	887.05	13,193.67	0.00	0.00	0.00
25,900.00	90.00	359.63	12,450.00	13,299.67	886.40	13,293.67	0.00	0.00	0.00
26,000.00	90.00	359.63	12,450.00	13,399.67	885.76	13,393.67	0.00	0.00	0.00
26,100.00	90.00	359.63	12,450.00	13,499.67	885.11	13,493.67	0.00	0.00	0.00
26,200.00	90.00	359.63	12,450.00	13,599.66	884.47	13,593.67	0.00	0.00	0.00
26,300.00	90.00	359.63	12,450.00	13,699.66	883.82	13,693.67	0.00	0.00	0.00





Database: Company: Project: USAEDMDB

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Marathon Oil Permian LLC Lea County, NM (NAD27 NME)

Site: Dolly Purrton Federal
Well: Dolly Purrton Federal 703H

Wellbore: OH

Design: Plan 2 06-24-24

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

876.07

875.43

874.78

874.13

873.49

873.25

14,893.67

14,993.67

15,093.67

15,193.67

15,293.67

15,330.64

Well Dolly Purrton Federal 703H RKB @ 3740.60usft (Cactus 171)

RKB @ 3740.60usft (Cactus 171)

Minimum Curvature

0.00

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F	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)
	26,400.00	90.00	359.63	12,450.00	13,799.66	883.18	13,793.67	0.00	0.00	0.00
	26,500.00	90.00	359.63	12,450.00	13,899.66	882.53	13,893.67	0.00	0.00	0.00
	26,600.00	90.00	359.63	12,450.00	13,999.65	881.88	13,993.67	0.00	0.00	0.00
	26,700.00	90.00	359.63	12,450.00	14,099.65	881.24	14,093.67	0.00	0.00	0.00
	26,800.00	90.00	359.63	12,450.00	14,199.65	880.59	14,193.67	0.00	0.00	0.00
	26,900.00	90.00	359.63	12,450.00	14,299.65	879.95	14,293.67	0.00	0.00	0.00
	27,000.00	90.00	359.63	12,450.00	14,399.65	879.30	14,393.67	0.00	0.00	0.00
	27,100.00	90.00	359.63	12,450.00	14,499.64	878.65	14,493.67	0.00	0.00	0.00
	27,200.00	90.00	359.63	12,450.00	14,599.64	878.01	14,593.67	0.00	0.00	0.00
	27,300.00	90.00	359.63	12,450.00	14,699.64	877.36	14,693.67	0.00	0.00	0.00
	27,400.00	90.00	359.63	12,450.00	14.799.64	876.72	14.793.67	0.00	0.00	0.00

14,899.64

14,999.63

15,099.63

15,199.63

15,299.63

15,336.60

TD at 27936.97

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27,600.00

27,700.00

27,800.00

27,900.00

27,936.97

Des	ign	Targ	jets
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 hit/miss target 	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting		
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	Latitude	Longitude

KOP/FTP/PPP1v2 - [0.00 0.00 7,094.00 -296.74 974.97 472,660.58 712,276.74 \(\)2° 17' 51.328017 N 3° 38' 46.812964 W - plan misses target center by 607.91usft at 7205.55usft MD (7177.28 TVD, -144.24 N, 392.42 E)

- Point

PI2 Exit- DP Fed 703 0.00 0.00 12,450.00 10,169.25 903.96 483,126.57 712,205.7332° 19' 34.899039 N 3° 38' 46.858743 W - plan misses target center by 2.66usft at 22769.53usft MD (12450.00 TVD, 10169.27 N, 906.62 E)

- Point

LTP/BHLv2 - DP Fed 0.00 0.00 12,450.00 15,336.60 873.25 488,293.92 712,175.0232° 20' 26.034479 N 3° 38' 46.830430 W

- plan hits target center

- Point

PPP3v2 - DP Fed 70: 0.00 0.00 12,450.00 7,531.31 921.95 480,488.63 712,223.72 32° 19' 8.794128 N 3° 38' 46.846188 W

- plan misses target center by 1.71usft at 20131.53usft MD (12450.00 TVD, 7531.32 N, 923.65 E)

- Point

PPP2v2 - DP Fed 70: 0.00 0.00 12,450.00 4,881.12 940.01 477,838.44 712,241.78;2° 18' 42.567963 N 3° 38' 46.833695 W

- plan misses target center by 0.76usft at 17481.28usft MD (12450.00 TVD, 4881.12 N, 940.77 E)

- Point



Site:

PhoenixPlanning Report



Database: Company: Project:

USAEDMDB

Marathon Oil Permian LLC Lea County, NM (NAD27 NME)

Dolly Purrton Federal
Dolly Purrton Federal 703H

Well: Doll Wellbore: OH

Design: Plan 2 06-24-24

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Dolly Purrton Federal 703H RKB @ 3740.60usft (Cactus 171) RKB @ 3740.60usft (Cactus 171)

Grid

Formations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	1,221.00	1,221.00	Rustler		0.000	359.62
	1,696.00	1,696.00	Salado		0.000	359.62
	3,604.00	3,604.00	Castile		0.000	359.62
	4,948.80	4,942.00	Base of Salt (BX)		0.000	359.62
	4,948.80	4,942.00	Lamar		0.000	359.62
	5,001.30	4,994.00	Bell Canyon		0.000	359.62
	6,135.09	6,117.00	Cherry Canyon		0.000	359.62
	7,121.48	7,094.00	Brushy Canyon		0.000	359.62
	8,800.45	8,757.00	Bone Spring Lime		0.000	359.62
	8,931.70	8,887.00	Upper Avalon Shale		0.000	359.62
	9,994.81	9,940.00	1st Bone Spring Sand		0.000	359.62
	10,299.72	10,242.00	2nd Bone Spring Carbonate		0.000	359.62
	10,668.22	10,607.00	2nd Bone Spring Sand		0.000	359.62
	11,181.10	11,115.00	3rd Bone Spring Carbonate		0.000	359.62
	11,960.73	11,890.00	3rd Bone Spring Sand		0.000	359.62
	12,262.49	12,176.00	Wolfcamp		0.000	359.62
	12,594.87	12,395.00	Wolfcamp A		0.000	359.62

Plan Annotations				
Measured	Vertical	Local Coor	dinates	
Depth	Depth	+N/-S	+E/-W	Comment
(usft)	(usft)	(usft)	(usft)	
3,970.00	3,970.00	0.00	0.00	KOP, Begin 2.00°/100' Build
4,365.49	4,364.24	-9.40	25.58	Hold 7.91° Inc at 110.18° Azm
11,405.26	11,337.02	-343.64	934.88	Begin 2.00°/100' Drop & Turn
12,017.97	11,946.87	-320.76	974.36	KOP2, Begin 10.00°/100' Build
12,847.97	12,450.00	247.91	970.69	LP, Hold 90.00° Inc at 359.63° Azm
27,936.97	12,450.00	15,336.60	873.25	TD at 27936.97

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811 S. First St., Artesia, NM 88210

Phone: (575) 748-1283 Fax: (575) 748-9720 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

<u>District IV</u> 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

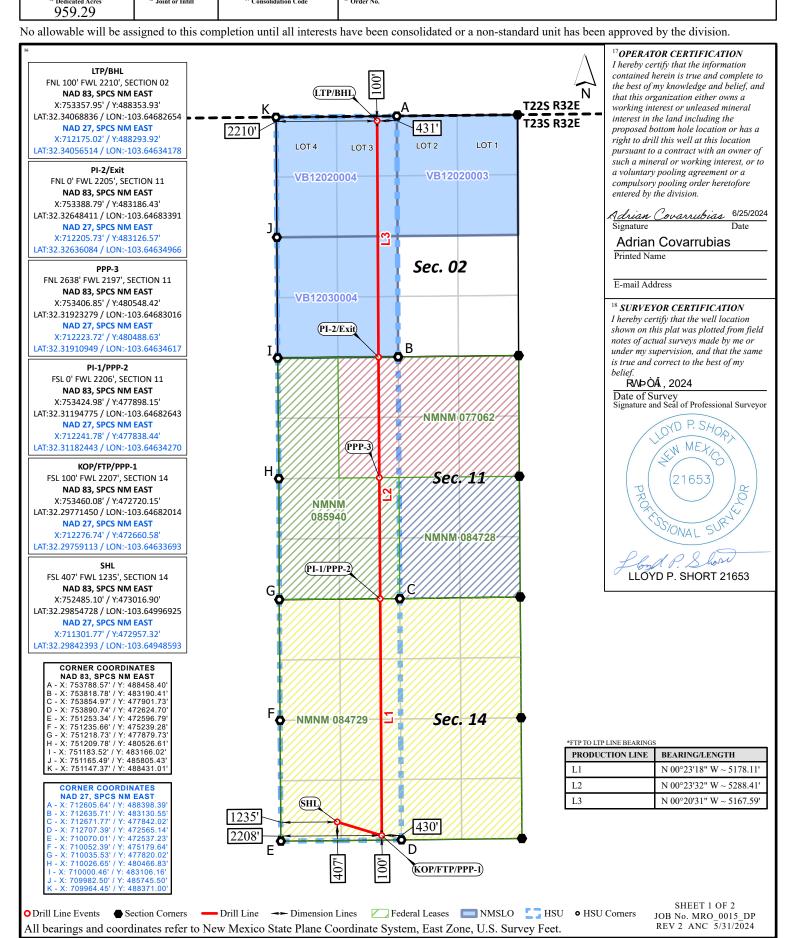
✓ AMENDED REPORT
New Proposed

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-025-5046	67	² Pool Code 17645	LFCAMP	
⁴ Property Code 335710			^{roperty Name} ΓΟΝ WC FEDERAL	⁶ Well Number 703H
⁷ OGRID No. 372098			perator Name OIL PERMIAN LLC	⁹ Elevation 3717'

¹⁰ Surface Location

	UL or lot no. M	Section 14	Township 23S	Range 32E	Lot Idn	Lot Idn Feet from the North/South line 407' SOUTH		Feet from the 1235'	East/West line WEST	County LEA
	¹¹ Bottom Hole Location If Different From Surface									
Г	UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
ı	1.3	2	238	32E		100'	NORTH	2210'	WEST	LEA



VICINITY MAP

	32	³³ T22S	34 R32E	35	T228 R32E	од Ш 33 Т228 Т228	32 R33E
ľ		T23S				T23S	R33E
l	5	4	3	2	1	6	5
ı	DOLLY PUF	RRTON WC FED					
ľ	MAF	RATHON OIL PE	SHL RMIAN LLC		32E	33 E	
	8	9	10 ALLISHA	11	12 R32E	T23S R33E	8
	17	16	15	14	13	18	17
	20	21	22 PAS	CABLEAUS 23	24	19 XL	20
	29	28	27	26	25	30	29
	32	33	34	35 T23S R32E	36		32 R33E
(5 5	4	3	T24S <u>₹</u> 32E	T24S R32E		R33E 5

SEC. 14 TWP. 23S RGE. 32E

SURVEY: N.M.P.M. COUNTY: LEA

OPERATOR: MARATHON OIL PERMIAN LLC

DESCRIPTION: 407' FSL & 1235' FWL

ELEVATION: 3717'

LEASE: DOLLY PURRTON FEDERAL

U.S.G.S. TOPOGRAPHIC MAP: BOOTLEG RIDGE, NM.

FROM THE INTERSECTION OF NM HWY 31 & NM HWY 128, HEAD SOUTH ON NM HWY 128 FOR 19 MILES TO AN EXISTING LEASE ROAD. TURN LEFT ONTO THE EXISTING LEASE ROAD HEADING NORTHEAST FOR 5.6 MILES TO A CALICHE ROAD. TURN LEFT ONTO CALICHE ROAD, HEADING NORTHWEST FOR 0.7 MILES TO THE PROPOSED LEASE ROAD FOR THE DOLLY PURRTON FEDERAL WELL LOCATION PAD. TURN RIGHT ONTO SAID PROPOSED LEASE ROAD, HEADING EAST FOR 0.2 MILES, ENTERING THE



1" = 1 MILE

SHEET 2 OF 2

PREPARED BY:
DELTA FIELD SERVICES, LLC
510 TRENTON STREET, WEST MONROE, LA 71291
318-323-6900 OFFICE
JOB No. MRO_0015_DP

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Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

Previously Approved

WELL LOCATION AND ACREAGE DEDICATION PLAT

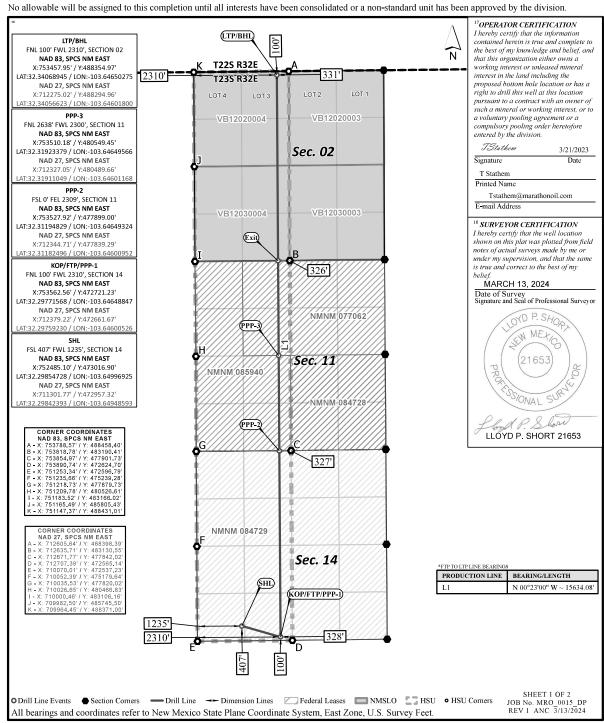
¹ API Number	² Pool Code		
30-25-50467	17645	LFCAMP	
4 Property Code		operty Name	6 Well Number
	DOLLY PURRT	ON WC FEDERAL COM	703H
7 OGRID No.	8 O)	perator Name	⁹ Elevation
372098	MARATHON	OIL PERMIAN LLC	3717'

¹⁰ Surface Location

			11						
M	14	23S	32E		407'	SOUTH	1235'	WEST	LEA
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Townshi	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L 3	1 2	23S	32E		100'	NORTH	2310'	WEST	LEA
¹² Dedicated Acres 959.29		¹³ Joint or Infill	¹⁴ Cor	solidation Code	15 Order No.				



MARATHON OIL PERMIAN, LLC. DRILLING AND OPERATIONS PLAN



WELL NAME & NUMBER:

DOLLY PURRTON WC FEDERAL COM 703H

LOCATION: SECTION 14 TOWNSHIP 23S RANGE 32E

LEA COUNTY, NEW MEXICO

Section 1:

GEOLOGICAL FORMATIONS

Name of Surface Formation: Permian Elevation: 3717 feet

Estimated Tops of Important Geological Markers:

Formation	TVD (ft)	MD (ft)	Elevation (ft SS)	Lithologies	Mineral Resources	Producing Formation?
Rustler	1221	1248	2496	Anhydrite	Brine	No
Salado	1696	1723	2021	Salt/Anhydrite	Brine	No
Castile	3604	3631	113	Salt/Anhydrite	Brine	No
Base of Salt (BX)	4942	4969	-1225	Salt/Anhydrite	Brine	No
Lamar	4942	4969	-1225	Sandstone/Shale	None	No
Bell Canyon	4994	5021	-1277	Sandstone	Oil	No
Cherry Canyon	6117	6144	-2400	Sandstone	Oil	No
Brushy Canyon	7094	7121	-3377	Sandstone	Oil	No
Bone Spring Lime	8757	8784	-5040	Limestone	None	No
Upper Avalon Shale	8887	8914	-5170	Shale	Oil	Yes
1st Bone Spring Sand	9940	9967	-6223	Sandstone	Oil	Yes
2nd Bone Spring Carbonate	10242	10269	-6525	Limestone/Shale	None	No
2nd Bone Spring Sand	10607	10634	-6890	Sandstone	Oil	Yes
3rd Bone Spring Carbonate	11115	11142	-7398	Limestone	Oil	No
3rd Bone Spring Sand	11890	11917	-8173	Sandstone	Oil	Yes
Wolfcamp	12176	12203	-8459	Sandstone/Shale/Carbonates	Natural Gas / Oil	Yes
Wolfcamp A	12395	12422	-8678	Sandstone/Shale/Carbonates	Natural Gas / Oil	Yes
Wolfcamp B	12831	12858	-9114	Sandstone/Shale/Carbonates	Natural Gas / Oil	No
Wolfcamp C	12997	13024	-9280	Sandstone/Shale/Carbonates	Natural Gas / Oil	No
Wolfcamp D	13108	13135	-9391 Sandstone/Shale/Carbonates		Natural Gas / Oil	No

Section 2:

BLOWOUT PREVENTER TESTING PROCEDURE

Pressure Rating (PSI): 10M Rating Depth: 1000

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 Stack 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 and Blind rams will be operationally checked on each trip out of the hole, but not to exceed more than once per day. 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 4

Section 3:							CASIN	IG PROGI	RAM								
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	1273	0	1246	3717	2471	54.5	J55	втс	5.22	1.81	BUOY	4.52	BUOY	4.52
Intermediate	12.25	9.625	0	11918	0	11847	3717	-8130	40	P110HC	BTC	1.20	1.42	BUOY	2.44	BUOY	2.44
Production	8.75	5.5	0	27937	0	12450	3717	-8733	23	P110HC	TLW	2.53	1.26	BUOY	2.22	BUOY	2.22
	All cas	ing strings	will be test	ed in accor	dance with	Onshore (Oil and Gas	Order #2	III.B.1.h	•			Safety	Factors wi	ll Meet or	Exceed	

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

Yes or 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	1123	483	2.12	12.5	1024	25	Class C	Extender,Accelerator,LCM
Surface	Tail	1123	1273	99	1.32	14.8	130	25	Class C	Accelerator
Intermediate	Lead	0	11418	2087	2.18	12.4	4549	25	Class C	Extender,Accelerator,LCM
Intermediate	Tail	11418	11918	147	1.33	14.8	196	25	Class C	Retarder
Production	Tail	11618	27937	3108	1.68	13	5221	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 Plugging Procedure for Pilot Hole: N/A

Pilot Hole Depth: N/A KOP Depth: N/A

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

Marathon Oil Permian LLC.

Drilling & Operations Plan - Page 3 of 4

Section 5: CIRCULATING MEDIUM

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

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

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

Describe the mud monitoring system utilized:

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

Circulating Medium Table:

Top Depth	Bottom Depth	Mud Type	Min. Weight (ppg)	Max Weight (ppg)	
0	1273	Water Based Mud	8.4	8.8	
1273	11918	Brine or Oil Based Mud	9.2	10.2	
11918	27937	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:	ANTICIF	PATED PRESSURE
Anticipated Bottom Hole Pressure:	8093	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.

Marathon Oil Permian LLC. Drilling & Operations Plan - Page 4 of 4

DRILL PLAN CHANGE REGISTER

DOLLY PURRTON WC FEDERAL COM 703H SECTION 14, TOWNSHIP 23S, RANGE 32E

LEA COUNTY, NEW MEXICO

Original Document Date: Prepared By: Submitted By:

Tuesday, June 25, 2024 Anthony Monaco Adrian Covarrubias

Revised Date:	Monday, October 18, 2021	Submittal Date:	Monday, November 1, 2021
Revised By:	Court Nelson (Drilling Engineer)	Submittal Type:	NOI Change to AAPD Sundry Notice
	Matt Baker (Geologist)	Submitted By:	Melissa Szudera
	, ,		
Summary of Revisions:			
Section		Description	
2 - Casing	Removed second intermediate string		
4 - Cement	Removed second intermediate string		
5 - Mud	Removed second intermediate string		
Revised Date:		Submittal Date:	
Revised By:		Submittal Type:	
Nevised by.			
		Submitted By:	
Summary of Revisions:			
Section		Description	
	,		
		6.1	
Revised Date:		Submittal Date:	
Revised By:		Submittal Type:	
		Submitted By:	
Summary of Revisions: Section		Description	
Section		Description	
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Revised Date:		Submittal Date:	
Revised By:		Submittal Type:	
		Submitted By:	
Summary of Revisions:			
Section		Description	
Section		Description	

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State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 360083

CONDITIONS

Operator:	OGRID:
MARATHON OIL PERMIAN LLC	372098
990 Town & Country Blvd.	Action Number:
Houston, TX 77024	360083
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By		Condition Date
pkautz	ALL PREVIOUS COA'S APPLY.	7/2/2024