

Submit 1 Copy To Appropriate District Office  
 District I - (575) 393-6161  
 1525 N. French Dr., Hobbs, NM 88240  
 District II - (575) 748-1283  
 811 S. First St., Artesia, NM 88210  
 District III - (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV - (505) 476-3460  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 Revised July 18, 2013

OIL CONSERVATION DIVISION  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

WELL API NO. 30-015-44375
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Cypress Fee 23 27 9
8. Well Number 3H
9. OGRID Number 372098
10. Pool name or Wildcat Forehand Ranch; Bone Spring
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3159'

**SUNDRY NOTICES AND REPORTS ON WELLS**  
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well  Gas Well  Other

2. Name of Operator  
Marathon Oil Permian LLC.

3. Address of Operator  
5555 San Felipe St, Houston, TX 77056

4. Well Location  
 Unit Letter L : 1697 feet from the South line and 598 feet from the West line  
 Section 9 Township 23S Range 27E NMPM County Eddy

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input checked="" type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>			
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

MIRU 10/9/2017, spud well on 10/11/2017. Ran casing from 120' to 475'. Ran 11 total joints of 13 3/8" casing to 475', float collar at 433.40'. Centralizers placed at first 3 and every 3rd to surface. Marker joint from 31.9' to 41.3'. P/E cement head and circulate 1.5x casing capacity (111 lbs) at 8 bpm and 150 pressure. 0 losses. Pump fresh water spacer at 8.3 ppg. Pump 117 bbls of tail cement at 14.8 ppg (1.33 yield), 5:26 hours to 500 psi. Pump displacement (68 lbs) fresh water at 8.3 ppg. Full returns observed. Plugged bumped at 180 psi with 500 psi increase after bump. Floats holding, 12 bbl bled back, estimated TOC 25'. 50 bbls and 211 sacks cement to surface. Surface casing not pressure tested. Decision was made to not continue drill well, P&A sundry and procedure submitted. Surface casing will be pressure tested prior to P&A.

See attached casing and cement details and directional.

**NM OIL CONSERVATION**  
 ARTESIA DISTRICT

JAN 16 2018

RECEIVED

Spud Date:

10/09/2017

Rig Release Date:

[Empty box for Rig Release Date]

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Mj TITLE Regulatory Compliance Representative DATE 01/18/2018  
 Type or print name Melissa Szudera E-mail address: mszudera@marathonoil.com PHONE: 713-296-3179  
**For State Use Only**

APPROVED BY: [Signature] TITLE Staff Mj DATE 1-18-18  
 Conditions of Approval (if any):

**Cypress Fee 23 27 9 3H - Casing and Cement Operations+A1:E25**

Casing detail	Surface	Intermediate 1	Intermediate 2	Liner
Date	10/12/2017	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Hole size	17.5	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Casing size	13.375	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Weight	54.5	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Type	J55	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Thread	BTC	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Depth (MD)	471	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Amount jnts	11	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Cement detail	Surface	Intermediate 1	Intermediate 2	Liner
Date	10/12/2017	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Top depth KB	26.5	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Bottom depth KB	485	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Lead sks	0	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Tail sks	493	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Gel spacer	20	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Class	C	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Circulate to surface (bbls)	50	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
WOC to 500 psi		XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Top meas. method	Circulated	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
TOC	25'	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Pressure testing	Surface	Intermediate 1	Intermediate 2	Liner
Date	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
PSI	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Time (min)	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Bled off	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
Good test	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX

**USA**

**NEW MEXICO**

**CYPRESS FEE 23-27-9 (2H, 3H, 4H)**

**CYPRESS FEE 23-27-9 3H**

**CYPRESS FEE 23-27-9 3H**

**Design: CYPRESS FEE 23-27-9 3H**

# **Standard Survey Report**

**18 January, 2018**

# Marathon Oil

## Survey Report

Company: USA	Local Co-ordinate Reference: Well CYPRESS FEE 23-27-9 3H	
Project: NEW MEXICO	TVD Reference: RKB @ 3185.5usft	
Site: CYPRESS FEE 23-27-9 (2H, 3H, 4H)	MD Reference: RKB @ 3185.5usft	
Well: CYPRESS FEE 23-27-9 3H	North Reference: Grid	
Wellbore: CYPRESS FEE 23-27-9 3H	Survey Calculation Method: Minimum Curvature	
Design: CYPRESS FEE 23-27-9 3H	Database: EDMPROD	

<b>Project</b> NEW MEXICO		
<b>Map System:</b> US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b> NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b> New Mexico East 3001		

<b>Site</b> CYPRESS FEE 23-27-9 (2H, 3H, 4H)					
<b>Site Position:</b>	<b>Northing:</b>	478,939.79 usft	<b>Latitude:</b>	32° 18' 59.950 N	
<b>From:</b> Map	<b>Easting:</b>	540,778.74 usft	<b>Longitude:</b>	104° 12' 4.792 W	
<b>Position Uncertainty:</b>	3.3 usft	<b>Slot Radius:</b>	17-1/2 "	<b>Grid Convergence:</b>	0.07 °

<b>Well</b> CYPRESS FEE 23-27-9 3H, WELL 2 OF 3					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	478,974.84 usft	<b>Latitude:</b> 32° 19' 0.296 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	540,827.50 usft	<b>Longitude:</b> 104° 12' 4.223 W
<b>Position Uncertainty</b>		1.1 usft	<b>Wellhead Elevation:</b>	0.0 usft	<b>Ground Level:</b> 3,159.0 usft

<b>Wellbore</b> CYPRESS FEE 23-27-9 3H					
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
	IGRF2015	7/10/2017	(°)	(°)	(nT)
			7.24	60.05	47,921

<b>Design</b> CYPRESS FEE 23-27-9 3H					
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	88.42	

<b>Survey Program</b> Date: 10/18/2017					
<b>From</b>	<b>To</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
(usft)	(usft)				
165.0	485.0	SURVEY (CYPRESS FEE 23-27-9 3H)	MWD+IFR1	OWSG MWD + IFR1	

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
165.0	0.30	29.80	165.0	0.4	0.2	0.2	0.18	0.18	0.00
226.0	0.30	56.90	226.0	0.6	0.4	0.4	0.23	0.00	44.43
317.0	0.80	73.40	317.0	0.9	1.2	1.3	0.57	0.55	18.13
409.0	0.90	60.90	409.0	1.4	2.5	2.5	0.23	0.11	-13.59
417.0	1.00	62.70	417.0	1.5	2.6	2.6	1.30	1.25	22.50
485.0	1.00	62.70	485.0	2.1	3.7	3.7	0.00	0.00	0.00

# Marathon Oil

## Survey Report

**Company:** USA  
**Project:** NEW MEXICO  
**Site:** CYPRESS FEE 23-27-9 (2H, 3H, 4H)  
**Well:** CYPRESS FEE 23-27-9 3H  
**Wellbore:** CYPRESS FEE 23-27-9 3H  
**Design:** CYPRESS FEE 23-27-9 3H

**Local Co-ordinate Reference:** Well CYPRESS FEE 23-27-9 3H  
**TVD Reference:** RKB @ 3185.5usft  
**MD Reference:** RKB @ 3185.5usft  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDMPROD

Checked By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_