

Office
 District I – (575) 393-6161
 1625 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. 30-025-45965
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name FLOWMASTER 15 FB FEE
8. Well Number 15H
9. OGRID Number 372098
10. Pool name or Wildcat RED HILLS; BONE SPRING, NORTH

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 <u>N</u> : <u>591</u> feet from the <u>SOUTH</u> line and <u>1858</u> feet from the <u>WEST</u> line Section <u>15</u> Township <u>24S</u> Range <u>34E</u> NMPM County <u>LEA</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3519' GL	

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: ☐		OTHER: Record Cleanup ☒	

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.

Marathon Oil Permian LLC is submitting a copy of the directional survey as the Division's request. Please see attached.

Spud Date:

5/22/2019

Rig Release Date:

6/25/2019

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

SIGNATURE Adrian Covarrubias TITLE Adv. Regulatory Compliance Rep. DATE 3/31/2023

Type or print name Adrian Covarrubias E-mail address: acovarrubias@marathonoil.com PHONE: 713-296-3368

For State Use Only

APPROVED BY: Dean R. McClure TITLE Petroleum Engineer DATE 03/31/2023

Conditions of Approval (if any):



Marathon Oil

Lea County, NM

Flowmaster 15 (2-14-15)

FB FEE #15H

OH

Design: Gyro/MWD 1247'-15234' PTB 15290'

Survey Report

23 June, 2019





Professional Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well FB FEE #15H
Project:	Lea County, NM	TVD Reference:	Well @ 3546.00usft (GL: 3519' + KB: 27' (PD582))
Site:	Flowmaster 15 (2-14-15)	MD Reference:	Well @ 3546.00usft (GL: 3519' + KB: 27' (PD582))
Well:	FB FEE #15H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD 1247'-15234' PTB 15290'	Database:	WellPlanner1

Project		Lea County, NM	
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site		Flowmaster 15 (2-14-15)			
Site Position:		Northing:		441,863.15 usft	
From:	Map	Easting:		770,170.21 usft	
Position Uncertainty:		Slot Radius:		13-3/16 "	
				Latitude:	
				Longitude:	
				Grid Convergence:	
				32.211781	
				-103.459803	
				0.47 °	

Well		FB FEE #15H, LNM1452519				
Well Position	+N/-S	0.00 usft	Northing:	441,863.34 usft	Latitude:	32.211782
	+E/-W	0.00 usft	Easting:	770,140.19 usft	Longitude:	-103.459900
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,519.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/31/2019	6.63	59.87	47,897.60

Design		Gyro/MWD 1247'-15234' PTB 15290'			
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:		Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
		0.00	0.00	0.00	359.55



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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD 1247'-15234' PTB 15290'	Database:	WellPlanner1

Survey Program		Date 6/23/2019			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
188.00	1,089.00	Survey #1 (OH)	GYRO-NS-CT	OWSG XYZ Accel with XY Static and Continuous Gyro	
1,247.00	15,290.00	Survey #2 (OH)	MWD+HDGM	OWSG MWD + HRGM	

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	441,863.34	770,140.19	
[FlowmasterFB#15H]PlatLTP/BHL											
188.00	0.60	128.00	188.00	-0.61	-0.61	0.78	0.98	128.00	441,862.73	770,140.97	
300.00	0.40	300.00	299.99	-0.78	-0.77	0.90	1.18	130.63	441,862.57	770,141.09	
394.00	0.30	42.00	393.99	-0.43	-0.42	0.78	0.89	118.57	441,862.92	770,140.97	
520.00	0.40	272.00	519.99	-0.17	-0.16	0.56	0.58	106.31	441,863.18	770,140.75	
615.00	0.70	51.00	614.99	0.21	0.21	0.68	0.71	72.65	441,863.55	770,140.87	
710.00	0.80	319.00	709.99	1.07	1.08	0.70	1.28	32.85	441,864.42	770,140.89	
804.00	0.60	48.00	803.98	1.90	1.90	0.63	2.01	18.36	441,865.24	770,140.82	
900.00	0.50	9.00	899.98	2.64	2.65	1.07	2.86	21.98	441,865.99	770,141.26	
1,024.00	0.80	168.00	1,023.97	2.33	2.34	1.34	2.69	29.70	441,865.68	770,141.53	
1,059.00	1.00	193.00	1,058.97	1.79	1.80	1.32	2.23	36.14	441,865.14	770,141.51	
1,089.00	0.60	117.00	1,088.97	1.47	1.48	1.40	2.03	43.42	441,864.82	770,141.59	
1,247.00	0.20	83.20	1,246.96	1.12	1.13	2.41	2.66	64.78	441,864.47	770,142.60	
1,337.00	0.30	106.60	1,336.96	1.06	1.09	2.79	3.00	68.74	441,864.43	770,142.98	
1,427.00	0.40	331.20	1,426.96	1.27	1.29	2.87	3.14	65.70	441,864.63	770,143.06	
1,516.00	0.80	264.80	1,515.96	1.49	1.51	2.10	2.58	54.25	441,864.85	770,142.29	
1,606.00	3.30	255.40	1,605.89	0.81	0.80	-1.04	1.31	307.68	441,864.14	770,139.15	
1,695.00	4.60	253.40	1,694.68	-0.81	-0.87	-6.94	6.99	262.89	441,862.47	770,133.25	
1,785.00	5.40	252.90	1,784.34	-3.03	-3.14	-14.44	14.78	257.73	441,860.20	770,125.75	
1,875.00	7.50	252.80	1,873.76	-5.93	-6.12	-24.10	24.87	255.74	441,857.22	770,116.09	



Professional Directional Survey Report



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Site:	Flowmaster 15 (2-14-15)	MD Reference:	Well @ 3546.00usft (GL: 3519' + KB: 27' (PD582))
Well:	FB FEE #15H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD 1247'-15234' PTB 15290'	Database:	WellPlanner1

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
1,964.00	8.70	254.50	1,961.87	-9.36	-9.64	-36.14	37.40	255.06	441,853.70	770,104.05
2,054.00	10.20	254.70	2,050.65	-13.17	-13.56	-50.38	52.18	254.93	441,849.78	770,089.81
2,144.00	10.80	256.80	2,139.14	-17.07	-17.59	-66.28	68.57	255.14	441,845.75	770,073.91
2,233.00	11.60	257.50	2,226.45	-20.78	-21.43	-83.13	85.85	255.54	441,841.91	770,057.06
2,323.00	12.00	253.40	2,314.54	-25.27	-26.06	-100.93	104.24	255.52	441,837.28	770,039.26
2,413.00	12.80	253.70	2,402.44	-30.60	-31.53	-119.47	123.56	255.21	441,831.81	770,020.72
2,502.00	12.00	246.70	2,489.37	-36.88	-37.96	-137.43	142.58	254.56	441,825.38	770,002.76
2,592.00	11.30	243.70	2,577.52	-44.36	-45.57	-153.93	160.53	253.51	441,817.77	769,986.26
2,682.00	11.70	244.30	2,665.71	-52.10	-53.43	-170.06	178.25	252.56	441,809.91	769,970.13
2,772.00	10.20	246.80	2,754.07	-59.07	-60.53	-185.60	195.23	251.94	441,802.81	769,954.59
2,861.00	9.50	249.10	2,841.76	-64.68	-66.26	-199.71	210.41	251.65	441,797.08	769,940.48
2,951.00	10.00	250.90	2,930.46	-69.78	-71.46	-214.03	225.65	251.54	441,791.88	769,926.16
3,041.00	10.40	252.90	3,019.04	-74.60	-76.41	-229.18	241.58	251.56	441,786.93	769,911.01
3,131.00	10.80	253.30	3,107.50	-79.29	-81.22	-245.02	258.13	251.66	441,782.12	769,895.17
3,220.00	10.20	244.60	3,195.02	-84.95	-87.00	-260.13	274.29	251.51	441,776.34	769,880.06
3,310.00	10.60	240.80	3,283.54	-92.29	-94.45	-274.55	290.34	251.02	441,768.89	769,865.64
3,399.00	11.20	241.30	3,370.93	-100.32	-102.60	-289.28	306.93	250.47	441,760.74	769,850.91
3,489.00	11.50	241.70	3,459.17	-108.65	-111.05	-304.85	324.44	249.98	441,752.29	769,835.34
3,578.00	9.50	237.60	3,546.68	-116.68	-119.19	-318.86	340.41	249.50	441,744.15	769,821.33
3,668.00	8.40	236.40	3,635.58	-124.21	-126.81	-330.61	354.09	249.02	441,736.53	769,809.58
3,758.00	8.70	237.80	3,724.58	-131.38	-134.07	-341.84	367.19	248.58	441,729.27	769,798.35
3,848.00	8.80	240.70	3,813.53	-138.29	-141.07	-353.61	380.71	248.25	441,722.27	769,786.58
3,937.00	8.90	240.50	3,901.47	-144.92	-147.79	-365.53	394.28	247.99	441,715.55	769,774.66
4,027.00	8.40	242.50	3,990.45	-151.29	-154.25	-377.42	407.73	247.77	441,709.09	769,762.77
4,117.00	8.30	242.80	4,079.50	-157.20	-160.26	-389.03	420.75	247.61	441,703.08	769,751.16
4,206.00	8.70	239.80	4,167.52	-163.43	-166.58	-400.56	433.82	247.42	441,696.76	769,739.63
4,295.00	9.00	240.60	4,255.46	-170.14	-173.38	-412.45	447.41	247.20	441,689.96	769,727.74



Professional Directional Survey Report



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Site:	Flowmaster 15 (2-14-15)	MD Reference:	Well @ 3546.00usft (GL: 3519' + KB: 27' (PD582))
Well:	FB FEE #15H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD 1247'-15234' PTB 15290'	Database:	WellPlanner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
4,385.00	9.20	240.40	4,344.33	-177.05	-180.39	-424.84	461.55	246.99	441,682.95	769,715.35	
4,475.00	9.00	241.70	4,433.19	-183.84	-187.29	-437.29	475.71	246.82	441,676.05	769,702.90	
4,565.00	8.00	241.40	4,522.20	-190.09	-193.62	-448.99	488.96	246.67	441,669.72	769,691.20	
4,654.00	7.00	233.50	4,610.44	-196.20	-199.81	-458.78	500.41	246.47	441,663.53	769,681.41	
4,744.00	7.90	231.60	4,699.68	-203.23	-206.92	-468.04	511.74	246.15	441,656.42	769,672.15	
4,834.00	9.90	242.20	4,788.60	-210.59	-214.37	-479.73	525.45	245.92	441,648.97	769,660.46	
4,924.00	11.20	247.00	4,877.08	-217.50	-221.39	-494.62	541.91	245.89	441,641.95	769,645.57	
5,013.00	10.50	243.90	4,964.49	-224.32	-228.34	-509.86	558.66	245.88	441,635.00	769,630.33	
5,103.00	9.80	240.10	5,053.08	-231.64	-235.76	-523.87	574.47	245.77	441,627.58	769,616.32	
5,192.00	9.10	234.70	5,140.87	-239.39	-243.60	-536.18	588.92	245.57	441,619.74	769,604.01	
5,282.00	8.30	235.20	5,229.84	-247.12	-251.43	-547.32	602.31	245.33	441,611.91	769,592.87	
5,359.00	8.00	240.10	5,306.06	-252.89	-257.27	-556.53	613.12	245.19	441,606.07	769,583.66	
5,546.00	6.70	244.40	5,491.52	-263.92	-268.47	-577.65	636.99	245.07	441,594.87	769,562.54	
5,636.00	6.90	250.30	5,580.89	-267.94	-272.56	-587.47	647.62	245.11	441,590.78	769,552.72	
5,726.00	9.10	257.30	5,670.01	-271.23	-275.95	-599.51	659.97	245.28	441,587.39	769,540.68	
5,815.00	10.30	259.70	5,757.74	-274.08	-278.92	-614.20	674.57	245.58	441,584.42	769,525.99	
5,905.00	10.50	261.00	5,846.26	-276.68	-281.64	-630.22	690.29	245.92	441,581.70	769,509.97	
5,994.00	10.00	261.00	5,933.84	-279.04	-284.12	-645.86	705.59	246.26	441,579.22	769,494.33	
6,084.00	9.90	260.10	6,022.48	-281.47	-286.67	-661.20	720.67	246.56	441,576.67	769,478.99	
6,174.00	10.10	260.10	6,111.12	-284.03	-289.36	-676.60	735.87	246.85	441,573.98	769,463.59	
6,263.00	10.10	260.90	6,198.74	-286.49	-291.93	-691.99	751.05	247.13	441,571.41	769,448.20	
6,353.00	9.80	259.90	6,287.38	-288.96	-294.52	-707.32	766.19	247.39	441,568.82	769,432.87	
6,442.00	9.40	254.20	6,375.14	-292.15	-297.83	-721.77	780.81	247.58	441,565.51	769,418.42	
6,532.00	9.90	247.20	6,463.87	-297.04	-302.83	-735.98	795.85	247.63	441,560.51	769,404.21	
6,622.00	9.80	248.90	6,552.54	-302.68	-308.59	-750.26	811.24	247.64	441,554.75	769,389.93	
6,711.00	9.20	248.40	6,640.32	-307.92	-313.93	-763.94	825.93	247.66	441,549.41	769,376.25	
6,801.00	9.90	250.70	6,729.07	-313.02	-319.14	-777.93	840.85	247.69	441,544.20	769,362.26	



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6,891.00	10.80	249.40	6,817.61	-318.42	-324.66	-793.12	857.00	247.74	441,538.68	769,347.07	
6,980.00	10.60	251.00	6,905.06	-323.90	-330.26	-808.67	873.51	247.78	441,533.08	769,331.52	
7,070.00	10.30	252.60	6,993.57	-328.88	-335.36	-824.17	889.79	247.86	441,527.98	769,316.02	
7,159.00	9.90	252.10	7,081.19	-333.49	-340.09	-839.05	905.35	247.94	441,523.25	769,301.14	
7,249.00	9.80	253.90	7,169.86	-337.88	-344.59	-853.77	920.69	248.02	441,518.75	769,286.42	
7,338.00	10.80	252.10	7,257.43	-342.42	-349.26	-868.98	936.54	248.10	441,514.08	769,271.21	
7,428.00	12.50	248.70	7,345.57	-348.42	-355.39	-886.08	954.69	248.15	441,507.95	769,254.11	
7,517.00	15.30	242.40	7,431.96	-357.21	-364.33	-905.47	976.01	248.08	441,499.01	769,234.72	
7,608.00	15.40	241.50	7,519.72	-368.37	-375.66	-926.72	999.97	247.93	441,487.68	769,213.47	
7,697.00	14.90	242.70	7,605.62	-379.09	-386.54	-947.28	1,023.11	247.80	441,476.80	769,192.91	
7,787.00	14.60	242.70	7,692.66	-389.44	-397.05	-967.64	1,045.93	247.69	441,466.29	769,172.55	
7,876.00	14.30	242.90	7,778.84	-399.44	-407.21	-987.39	1,068.06	247.59	441,456.13	769,152.80	
7,966.00	13.20	241.50	7,866.26	-409.26	-417.17	-1,006.32	1,089.36	247.48	441,446.17	769,133.87	
8,055.00	12.60	241.50	7,953.01	-418.60	-426.65	-1,023.78	1,109.12	247.38	441,436.69	769,116.41	
8,144.00	11.70	242.00	8,040.02	-427.34	-435.52	-1,040.28	1,127.77	247.28	441,427.82	769,099.91	
8,234.00	10.80	240.40	8,128.29	-435.67	-443.97	-1,055.67	1,145.23	247.19	441,419.37	769,084.52	
8,323.00	10.40	240.40	8,215.77	-443.64	-452.06	-1,069.90	1,161.49	247.09	441,411.28	769,070.29	
8,413.00	9.40	240.40	8,304.43	-451.18	-459.70	-1,083.36	1,176.86	247.01	441,403.64	769,056.83	
8,503.00	9.00	241.80	8,393.27	-458.04	-466.66	-1,095.95	1,191.17	246.94	441,396.68	769,044.24	
8,592.00	8.20	242.20	8,481.27	-464.19	-472.91	-1,107.70	1,204.43	246.88	441,390.43	769,032.49	
8,682.00	7.60	242.20	8,570.42	-469.88	-478.68	-1,118.64	1,216.76	246.83	441,384.66	769,021.55	
8,771.00	6.90	242.60	8,658.70	-475.00	-483.88	-1,128.60	1,227.95	246.79	441,379.46	769,011.59	
8,861.00	6.90	243.10	8,748.05	-479.86	-488.82	-1,138.22	1,238.74	246.76	441,374.52	769,001.97	
8,950.00	6.70	244.10	8,836.43	-484.47	-493.50	-1,147.66	1,249.26	246.73	441,369.84	768,992.53	
9,040.00	6.60	245.40	8,925.82	-488.85	-497.95	-1,157.08	1,259.68	246.72	441,365.39	768,983.11	
9,130.00	5.20	245.20	9,015.34	-492.64	-501.81	-1,165.49	1,268.93	246.71	441,361.53	768,974.70	
9,220.00	3.50	234.80	9,105.08	-495.89	-505.11	-1,171.43	1,275.69	246.67	441,358.23	768,968.76	



Professional Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well FB FEE #15H
Project:	Lea County, NM	TVD Reference:	Well @ 3546.00usft (GL: 3519' + KB: 27' (PD582))
Site:	Flowmaster 15 (2-14-15)	MD Reference:	Well @ 3546.00usft (GL: 3519' + KB: 27' (PD582))
Well:	FB FEE #15H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD 1247'-15234' PTB 15290'	Database:	WellPlanner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
9,309.00	3.30	241.50	9,193.92	-498.64	-507.90	-1,175.91	1,280.90	246.64	441,355.44	768,964.28	
9,399.00	3.00	235.50	9,283.79	-501.18	-510.47	-1,180.12	1,285.79	246.61	441,352.87	768,960.07	
9,488.00	2.60	248.60	9,372.68	-503.21	-512.52	-1,183.92	1,290.10	246.59	441,350.82	768,956.27	
9,578.00	2.40	253.60	9,462.60	-504.45	-513.80	-1,187.63	1,294.01	246.61	441,349.54	768,952.56	
9,668.00	2.10	251.80	9,552.53	-505.47	-514.84	-1,191.00	1,297.52	246.62	441,348.50	768,949.19	
9,757.00	1.60	251.60	9,641.48	-506.35	-515.75	-1,193.73	1,300.38	246.63	441,347.59	768,946.46	
9,802.00	1.20	252.30	9,686.47	-506.69	-516.09	-1,194.78	1,301.48	246.64	441,347.25	768,945.41	
9,855.00	0.80	237.00	9,739.46	-507.05	-516.46	-1,195.62	1,302.39	246.64	441,346.88	768,944.57	
9,944.00	0.90	273.80	9,828.45	-507.33	-516.75	-1,196.83	1,303.63	246.65	441,346.59	768,943.36	
9,963.56	1.76	332.63	9,848.00	-507.06	-516.47	-1,197.13	1,303.78	246.66	441,346.87	768,943.06	
[FlowmasterFB#15H]FTP											
10,033.00	6.90	356.00	9,917.23	-501.94	-511.36	-1,197.91	1,302.49	246.88	441,351.98	768,942.28	
10,123.00	20.00	352.60	10,004.57	-481.18	-490.62	-1,200.28	1,296.68	247.77	441,372.72	768,939.91	
10,213.00	29.20	353.30	10,086.31	-443.99	-453.47	-1,204.83	1,287.34	249.37	441,409.87	768,935.36	
10,303.00	36.10	357.70	10,162.06	-395.61	-405.11	-1,208.46	1,274.55	251.47	441,458.23	768,931.73	
10,392.00	44.40	2.00	10,229.94	-338.18	-347.68	-1,208.43	1,257.45	253.95	441,515.66	768,931.76	
10,482.00	50.70	358.10	10,290.66	-271.83	-281.33	-1,208.48	1,240.80	256.89	441,582.01	768,931.71	
10,571.00	60.60	359.20	10,340.82	-198.46	-207.97	-1,210.17	1,227.91	260.25	441,655.37	768,930.02	
10,660.00	70.50	358.60	10,377.61	-117.54	-127.07	-1,211.74	1,218.38	264.01	441,736.27	768,928.45	
10,750.00	77.00	358.50	10,402.78	-31.20	-40.74	-1,213.93	1,214.61	268.08	441,822.60	768,926.26	
10,840.00	83.30	359.60	10,418.17	57.42	47.88	-1,215.39	1,216.33	272.26	441,911.22	768,924.80	
10,894.00	88.60	359.90	10,421.99	111.27	101.73	-1,215.62	1,219.87	274.78	441,965.07	768,924.57	
10,930.00	89.60	359.90	10,422.55	147.26	137.72	-1,215.68	1,223.46	276.46	442,001.06	768,924.51	
11,019.00	91.00	359.70	10,422.08	236.26	226.72	-1,215.99	1,236.95	280.56	442,090.06	768,924.20	
11,109.00	92.10	359.10	10,419.65	326.22	316.68	-1,216.94	1,257.46	284.59	442,180.02	768,923.25	
11,198.00	91.60	0.30	10,416.78	415.18	405.63	-1,217.40	1,283.20	288.43	442,268.97	768,922.79	
11,288.00	90.60	0.20	10,415.05	505.15	495.61	-1,217.01	1,314.05	292.16	442,358.95	768,923.18	



Professional Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well FB FEE #15H
Project:	Lea County, NM	TVD Reference:	Well @ 3546.00usft (GL: 3519' + KB: 27' (PD582))
Site:	Flowmaster 15 (2-14-15)	MD Reference:	Well @ 3546.00usft (GL: 3519' + KB: 27' (PD582))
Well:	FB FEE #15H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD 1247'-15234' PTB 15290'	Database:	WellPlanner1

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
11,377.00	90.90	359.80	10,413.88	594.14	584.60	-1,217.01	1,350.14	295.66	442,447.94	768,923.18
11,467.00	90.70	0.20	10,412.63	684.13	674.59	-1,217.01	1,391.47	299.00	442,537.93	768,923.18
11,497.00	90.70	0.10	10,412.26	714.13	704.59	-1,216.93	1,406.19	300.07	442,567.93	768,923.26
11,587.00	90.30	0.60	10,411.48	804.11	794.58	-1,216.38	1,452.91	303.15	442,657.92	768,923.81
11,676.00	91.60	0.50	10,410.00	893.08	883.57	-1,215.53	1,502.73	306.01	442,746.91	768,924.66
11,766.00	91.40	0.10	10,407.64	983.05	973.53	-1,215.06	1,556.96	308.70	442,836.87	768,925.13
11,855.00	89.00	0.50	10,407.33	1,072.03	1,062.52	-1,214.59	1,613.75	311.18	442,925.86	768,925.60
11,945.00	88.30	0.90	10,409.45	1,161.99	1,152.49	-1,213.49	1,673.56	313.52	443,015.83	768,926.70
12,035.00	89.40	0.50	10,411.26	1,251.95	1,242.47	-1,212.39	1,735.98	315.70	443,105.81	768,927.80
12,124.00	89.50	1.80	10,412.11	1,340.91	1,331.44	-1,210.61	1,799.53	317.72	443,194.78	768,929.58
12,214.00	88.00	0.80	10,414.08	1,430.84	1,421.39	-1,208.56	1,865.74	319.63	443,284.73	768,931.63
12,303.00	88.80	0.50	10,416.56	1,519.79	1,510.35	-1,207.55	1,933.74	321.36	443,373.69	768,932.64
12,392.00	89.80	359.80	10,417.65	1,608.78	1,599.34	-1,207.32	2,003.88	322.95	443,462.68	768,932.87
12,482.00	91.30	359.20	10,416.79	1,698.77	1,689.33	-1,208.11	2,076.87	324.43	443,552.67	768,932.08
12,572.00	90.40	0.10	10,415.45	1,788.76	1,779.32	-1,208.66	2,151.01	325.81	443,642.66	768,931.53
12,661.00	90.60	359.90	10,414.67	1,877.75	1,868.32	-1,208.66	2,225.19	327.10	443,731.66	768,931.53
12,752.00	88.90	0.20	10,415.07	1,968.74	1,959.31	-1,208.58	2,302.08	328.33	443,822.65	768,931.61
12,841.00	86.70	359.80	10,418.49	2,057.67	2,048.24	-1,208.58	2,378.22	329.46	443,911.58	768,931.61
12,931.00	87.70	0.20	10,422.88	2,147.56	2,138.13	-1,208.58	2,456.07	330.52	444,001.47	768,931.61
13,021.00	89.40	359.80	10,425.16	2,237.52	2,228.10	-1,208.58	2,534.78	331.52	444,091.44	768,931.61
13,110.00	89.10	0.00	10,426.33	2,326.51	2,317.09	-1,208.73	2,613.42	332.45	444,180.43	768,931.46
13,200.00	90.40	359.90	10,426.72	2,416.51	2,407.09	-1,208.81	2,693.57	333.33	444,270.43	768,931.38
13,290.00	92.30	359.20	10,424.60	2,506.48	2,497.06	-1,209.52	2,774.57	334.16	444,360.40	768,930.67
13,379.00	90.60	359.00	10,422.35	2,595.44	2,586.01	-1,210.91	2,855.48	334.91	444,449.35	768,929.28
13,469.00	88.30	359.80	10,423.21	2,685.43	2,676.00	-1,211.86	2,937.61	335.64	444,539.34	768,928.33
13,558.00	89.30	359.60	10,425.07	2,774.41	2,764.98	-1,212.32	3,019.08	336.32	444,628.32	768,927.87
13,648.00	90.90	359.50	10,424.92	2,864.41	2,854.97	-1,213.03	3,101.98	336.98	444,718.31	768,927.16



Professional Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well FB FEE #15H
Project:	Lea County, NM	TVD Reference:	Well @ 3546.00usft (GL: 3519' + KB: 27' (PD582))
Site:	Flowmaster 15 (2-14-15)	MD Reference:	Well @ 3546.00usft (GL: 3519' + KB: 27' (PD582))
Well:	FB FEE #15H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD 1247'-15234' PTB 15290'	Database:	WellPlanner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
13,737.00	90.50	359.70	10,423.83	2,953.40	2,943.96	-1,213.65	3,184.31	337.60	444,807.30	768,926.54	
13,827.00	90.80	359.40	10,422.81	3,043.40	3,033.95	-1,214.36	3,267.96	338.19	444,897.29	768,925.83	
13,917.00	88.50	358.60	10,423.36	3,133.38	3,123.93	-1,215.93	3,352.23	338.73	444,987.27	768,924.26	
14,006.00	88.90	358.30	10,425.38	3,222.34	3,212.87	-1,218.34	3,436.12	339.23	445,076.21	768,921.85	
14,096.00	91.00	357.80	10,425.46	3,312.31	3,302.82	-1,221.40	3,521.42	339.71	445,166.16	768,918.79	
14,186.00	90.60	359.50	10,424.20	3,402.28	3,392.78	-1,223.52	3,606.65	340.17	445,256.12	768,916.67	
14,275.00	91.20	359.90	10,422.80	3,491.27	3,481.77	-1,223.98	3,690.64	340.63	445,345.11	768,916.21	
14,365.00	90.10	0.70	10,421.78	3,581.26	3,571.76	-1,223.51	3,775.50	341.09	445,435.10	768,916.68	
14,455.00	89.50	1.60	10,422.10	3,671.22	3,661.74	-1,221.71	3,860.17	341.55	445,525.08	768,918.48	
14,544.00	89.40	1.40	10,422.95	3,760.16	3,750.70	-1,219.38	3,943.94	341.99	445,614.04	768,920.81	
14,634.00	90.30	1.10	10,423.19	3,850.12	3,840.68	-1,217.41	4,029.01	342.41	445,704.02	768,922.78	
14,724.00	89.00	1.30	10,423.74	3,940.08	3,930.66	-1,215.53	4,114.31	342.82	445,794.00	768,924.66	
14,813.00	89.90	1.40	10,424.59	4,029.03	4,019.63	-1,213.43	4,198.79	343.20	445,882.97	768,926.76	
14,903.00	91.50	1.20	10,423.49	4,118.98	4,109.59	-1,211.39	4,284.42	343.58	445,972.93	768,928.80	
14,992.00	89.80	1.00	10,422.48	4,207.94	4,198.57	-1,209.68	4,369.36	343.93	446,061.91	768,930.51	
15,082.00	89.90	0.40	10,422.72	4,297.92	4,288.56	-1,208.58	4,455.61	344.26	446,151.90	768,931.61	
15,172.00	90.90	359.80	10,422.09	4,387.91	4,378.56	-1,208.42	4,542.25	344.57	446,241.90	768,931.77	
15,234.00	92.10	359.80	10,420.46	4,449.89	4,440.53	-1,208.64	4,602.08	344.77	446,303.87	768,931.55	
Last Survey: 15234'MD, 10420.46'TVD											
15,279.20	92.10	359.80	10,418.81	4,495.06	4,485.70	-1,208.80	4,645.72	344.92	446,349.04	768,931.39	
[FlowmasterFB#15H]NewLTP/BHL											
15,290.00	92.10	359.80	10,418.41	4,505.85	4,496.50	-1,208.84	4,656.15	344.95	446,359.84	768,931.35	
PTB: 15290'MD, 10418.41'TVD											



Professional Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well FB FEE #15H
Project:	Lea County, NM	TVD Reference:	Well @ 3546.00usft (GL: 3519' + KB: 27' (PD582))
Site:	Flowmaster 15 (2-14-15)	MD Reference:	Well @ 3546.00usft (GL: 3519' + KB: 27' (PD582))
Well:	FB FEE #15H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD 1247'-15234' PTB 15290'	Database:	WellPlanner1

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
15,234.00	10,420.46	4,440.53	-1,208.64	Last Survey: 15234'MD, 10420.46'TVD
15,290.00	10,418.41	4,496.50	-1,208.84	PTB: 15290'MD, 10418.41'TVD

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 202862

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 202862
	Action Type: [C-103] NOI General Sundry (C-103X)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	None	3/31/2023