

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED

FEB 10 2020

EMNRD-OCD ARTESIA

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

WELL LOCATION AND ACREAGE DEDICATION AS-DRILLED PLAT

¹ API Number 30-015-44690	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code 324948	Property Name CATAPULT 1 WXY FEE	
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁶ Well Number 10H ⁹ Elevation 3217'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	36	T22S	R26E		337	SOUTH	1357	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	1	T23S	R26E		286	SOUTH	341	EAST	EDDY

¹² Dedicated Acres 320.36	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

¹⁶ SECTION 35 SECTION 36 T-22-S SECTION 2 SECTION 1 T-23-S SURFACE HOLE LOCATION 337' FSL 1357' FEL SECTION 36 HAD 83' SPCS IN EAST X: 569525.11' / Y: 488179.22' LAT: 32.34204299N / LON: 104.24206160W HAD 87' SPCS IN EAST X: 528343.43' / Y: 488120.19' LAT: 32.34192481N / LON: 104.24155917W KICK OFF POINT 8,398' MEASURED DEPTH IN FEET HAD 83' SPCS IN EAST X: 570416.27' / Y: 488083.02' LAT: 32.34177643N / LON: 104.23917954W HAD 87' SPCS IN EAST X: 529233.58' / Y: 488023.99' LAT: 32.34165821N / LON: 104.23867720W FIRST TAKE POINT 9,260' MEASURED DEPTH IN DEPTH HAD 83' SPCS IN EAST X: 570529.21' / Y: 487531.13' LAT: 32.34020961N / LON: 104.23881223W HAD 87' SPCS IN EAST X: 529347.51' / Y: 487454.11' LAT: 32.34009137N / LON: 104.23830995W LAST TAKE POINT 13,900' MEASURED DEPTH IN DEPTH HAD 83' SPCS IN EAST X: 570539.90' / Y: 482879.31' LAT: 32.32747187N / LON: 104.23879088W HAD 87' SPCS IN EAST X: 529358.10' / Y: 482820.41' LAT: 32.32735356N / LON: 104.23828895W BOTTOM HOLE LOCATION 13,944' MEASURED DEPTH IN FEET HAD 83' SPCS IN EAST X: 570542.37' / Y: 482835.10' LAT: 32.32735035N / LON: 104.23878300W HAD 87' SPCS IN EAST X: 529360.57' / Y: 482776.21' LAT: 32.32723205N / LON: 104.23828108W SECTION 2 SECTION 1 CORNER COORDINATES HAD 83' SPCS IN EAST A - X: 568227.81' / Y: 487840.96' B - X: 570881.56' / Y: 487843.47' C - X: 570883.00' / Y: 482551.56' D - X: 568203.23' / Y: 482533.94' SECTION 12 CORNER COORDINATES HAD 87' SPCS IN EAST A - X: 527046.14' / Y: 487781.95' B - X: 529699.85' / Y: 487784.43' C - X: 529701.19' / Y: 482492.66' D - X: 527021.46' / Y: 482475.08'		SECTION 31 SECTION 6 SECTION 7	
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¹⁷ OPERATOR CERTIFICATION

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

Signature: *Adrian Covarrubias* Date: 2/7/2020

Printed Name: Adrian Covarrubias

E-mail Address:

¹⁸ SURVEYOR CERTIFICATION

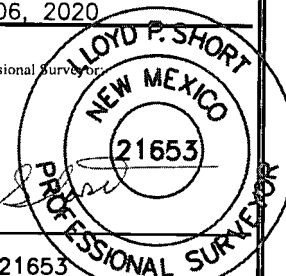
I hereby certify that the well surface location shown on this plat was plotted from field notes of the as-staked surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Data used for underground measurements were provided by others for reference only and does not constitute field measurements performed by R-Squared Global. FEBRUARY 06, 2020

Date of Survey

Signature and Seal of Professional Surveyor

Certificate Number

LOYD P. SHORT 21653



DISTANCES/AREAS RELATIVE TO MA83
COMBINED SCALE FACTOR: 0.99978038 CONVERGENCE: 0.050958007
NOTE: ALL DIMENSIONS IN U.S. FEET

1	02/05/2020	DEF
REV.	DATE	BY

SHEET 1 OF 1
R3798_001

RWP 4-10-20



PRODIRECTIONAL

RECEIVED

FEB 10 2020



EMNRD-OCD ARTESIA

Marathon Oil Corporation

**Catapult Fee 23-26-1 WXY No. 10H
Eddy County, NM**

February 11, 2019

**Job# LNM1418118
API# 30-015-44690**

Survey Completion Report



PRODIRECTIONAL

Survey Certification Letter

February 11, 2019



Marathon Oil
Corporation

Operator Name: Marathon Oil
Well Name: Catapult Fee 23-26-1 WXY No. 10H
County/Parish: Eddy County,
State: NM
Rig Name: Precision 594
Job Number: LNM1418118

This is to certify the surveys performed on the referenced well by Professional Directional Ent., Inc. are true and correct MWD Surveys, data provided as follows:

<u>Surveyor</u>	<u>Surveyed Depths</u>	<u>Projection to Bit</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
ProDirectional	505' MD – 13,889' MD	13,944' MD	12/04/18 – 01/13/19	MWD

Sincerely,

Mike Coats
Regulatory Specialist
Professional Directional

850 Conroe Park West Drive | Conroe, TX 77303 | Phone: 936.441.7266

prodirectional.com

The Standard of Excellence in Directional Supervision



Marathon Oil

Marathon Oil

Eddy County, NM

Catapult Fee 23-26-1 WXY

No. 10H

OH

Survey: ProDirectional

Survey Report

11 February, 2019



Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 10H
Project:	Eddy County, NM(NAD 83)	TVD Reference:	Well @ 3242.00usft
Site:	Catapult Fee 23-26-1 WXY	MD Reference:	Well @ 3242.00usft
Well:	No. 10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD148'-13889', Proj. 13944'	Database:	WellPlanner1

Project	Eddy County, NM(NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Catapult Fee 23-26-1 WXY		
Site Position:		Northing:	488,179.22 usft
From:	Map	Easting:	569,435.11 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.342043
		Longitude:	-104.242353
		Grid Convergence:	0.05 °

Well	No. 10H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft		Wellhead Elevation:
			usft
			Latitude:
			32.342043
			Longitude:
			-104.242062
			Ground Level:
			3,217.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	HDGM	12/1/2018	(°)
			7.30
			Dip Angle
			(°)
			60.03
			Field Strength
			(nT)
			47,944.90

Design	Gyro-MWD148'-13889', Proj. 13944'		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			179.99

Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 10H
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Site:	Catapult Fee 23-26-1 WXY	MD Reference:	Well @ 3242.00usft
Well:	No. 10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD148'-13889', Proj. 13944'	Database:	WellPlanner1

Survey Program		Date	2/11/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
148.00	460.00	Survey #1 (OH)	GYRO-NS-CT	OWSG XYZ Accel with XY Static and Continuous Gyro	
505.00	13,944.00	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	488,179.22	569,525.11	
148.00	0.70	71.10	148.00	-0.29	0.29	0.86	0.90	71.10	488,179.51	569,525.97	
237.00	0.40	30.10	236.99	-0.74	0.74	1.53	1.69	64.19	488,179.96	569,526.64	
328.00	0.20	314.10	327.99	-1.12	1.12	1.57	1.93	54.44	488,180.34	569,526.68	
460.00	0.40	316.10	459.99	-1.62	1.62	1.09	1.95	33.91	488,180.84	569,526.20	
505.00	0.50	317.60	504.99	-1.87	1.87	0.84	2.06	24.26	488,181.09	569,525.95	
Pro MWD First Survey: 505' MD											
596.00	0.60	316.00	595.98	-2.51	2.51	0.25	2.52	5.59	488,181.73	569,525.36	
687.00	0.50	292.80	686.98	-3.01	3.01	-0.45	3.04	351.46	488,182.23	569,524.66	
778.00	0.50	281.60	777.98	-3.24	3.24	-1.21	3.46	339.58	488,182.46	569,523.90	
869.00	0.50	224.50	868.97	-3.04	3.04	-1.87	3.57	328.33	488,182.26	569,523.24	
961.00	1.50	156.60	960.96	-1.65	1.64	-1.68	2.35	314.45	488,180.86	569,523.43	
1,052.00	3.00	143.20	1,051.89	1.36	-1.36	0.22	1.37	170.66	488,177.86	569,525.33	
1,141.00	2.70	113.40	1,140.78	4.05	-4.05	3.54	5.38	138.85	488,175.17	569,528.65	
1,230.00	1.50	102.90	1,229.72	5.15	-5.15	6.60	8.37	127.93	488,174.07	569,531.71	
1,319.00	1.20	126.00	1,318.70	5.95	-5.95	8.49	10.37	125.03	488,173.27	569,533.60	
1,409.00	1.20	158.00	1,408.68	7.38	-7.38	9.61	12.11	127.54	488,171.84	569,534.72	
1,498.00	0.70	151.30	1,497.67	8.72	-8.72	10.22	13.43	130.49	488,170.50	569,535.33	
1,587.00	0.60	77.80	1,586.66	9.10	-9.10	10.93	14.22	129.77	488,170.12	569,536.04	
1,677.00	0.60	73.30	1,676.66	8.87	-8.87	11.85	14.80	126.81	488,170.35	569,536.96	
1,766.00	0.50	77.50	1,765.65	8.65	-8.65	12.67	15.34	124.31	488,170.57	569,537.78	

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Well:	No. 10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD148'-13889', Proj. 13944'	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)	
1,855.00	0.40	77.20	1,854.65	8.50	-8.49	13.35	15.83	122.46	488,170.73	569,538.46	
1,900.00	0.30	72.50	1,899.65	8.43	-8.42	13.62	16.01	121.74	488,170.80	569,538.73	
2,037.00	0.30	137.40	2,036.65	8.58	-8.58	14.20	16.59	121.14	488,170.64	569,539.31	
2,126.00	2.60	85.70	2,125.61	8.60	-8.60	16.37	18.50	117.71	488,170.62	569,541.48	
2,215.00	5.70	82.00	2,214.37	7.84	-7.83	22.77	24.08	108.99	488,171.39	569,547.88	
2,305.00	7.60	83.30	2,303.76	6.52	-6.52	33.10	33.74	101.14	488,172.70	569,558.21	
2,394.00	9.40	88.20	2,391.78	5.61	-5.60	46.21	46.55	96.91	488,173.62	569,571.32	
2,484.00	10.90	94.20	2,480.37	6.01	-5.99	62.05	62.34	95.52	488,173.23	569,587.16	
2,573.00	11.10	95.80	2,567.74	7.49	-7.48	78.96	79.32	95.41	488,171.74	569,604.07	
2,662.00	11.90	94.20	2,654.95	9.03	-9.01	96.64	97.06	95.33	488,170.21	569,621.75	
2,752.00	13.50	92.70	2,742.75	10.21	-10.19	116.39	116.83	95.00	488,169.03	569,641.50	
2,842.00	13.70	92.60	2,830.22	11.19	-11.17	137.53	137.98	94.64	488,168.05	569,662.64	
2,931.00	13.50	92.20	2,916.73	12.07	-12.04	158.44	158.89	94.35	488,167.18	569,683.55	
3,020.00	13.20	90.80	3,003.32	12.62	-12.58	178.98	179.42	94.02	488,166.64	569,704.09	
3,109.00	12.30	89.50	3,090.13	12.68	-12.64	198.62	199.02	93.64	488,166.58	569,723.73	
3,199.00	12.70	94.30	3,178.00	13.34	-13.30	218.07	218.48	93.49	488,165.92	569,743.18	
3,288.00	13.50	97.90	3,264.68	15.51	-15.46	238.12	238.62	93.72	488,163.76	569,763.23	
3,378.00	13.50	98.20	3,352.19	18.45	-18.41	258.92	259.57	94.07	488,160.81	569,784.03	
3,467.00	13.20	97.80	3,438.79	21.32	-21.27	279.27	280.08	94.35	488,157.95	569,804.38	
3,556.00	13.00	98.50	3,525.47	24.18	-24.13	299.24	300.21	94.61	488,155.09	569,824.35	
3,646.00	12.80	98.80	3,613.20	27.20	-27.15	319.10	320.25	94.86	488,152.07	569,844.21	
3,735.00	12.40	99.20	3,700.06	30.24	-30.18	338.28	339.62	95.10	488,149.04	569,863.39	
3,824.00	11.50	97.60	3,787.13	32.95	-32.88	356.50	358.02	95.27	488,146.34	569,881.61	
3,914.00	11.10	97.50	3,875.38	35.27	-35.20	373.99	375.64	95.38	488,144.02	569,899.10	
4,003.00	10.60	96.10	3,962.79	37.26	-37.19	390.62	392.39	95.44	488,142.03	569,915.73	
4,092.00	9.90	95.40	4,050.37	38.85	-38.78	406.38	408.22	95.45	488,140.44	569,931.49	
4,182.00	9.40	95.00	4,139.10	40.22	-40.15	421.40	423.31	95.44	488,139.07	569,946.51	



ProDirectional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 10H
Project:	Eddy County, NM(NAD 83)	TVD Reference:	Well @ 3242.00usft
Site:	Catapult Fee 23-26-1 WXY	MD Reference:	Well @ 3242.00usft
Well:	No. 10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD148'-13889', Proj. 13944'	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)	
4,271.00	10.00	92.80	4,226.82	41.24	-41.16	436.36	438.30	95.39	488,138.06	569,961.47	
4,360.00	10.30	93.20	4,314.43	42.06	-41.98	452.02	453.97	95.31	488,137.24	569,977.13	
4,450.00	9.80	92.10	4,403.05	42.79	-42.71	467.71	469.66	95.22	488,136.51	569,992.82	
4,540.00	10.10	96.70	4,491.70	44.00	-43.91	483.20	485.19	95.19	488,135.31	570,008.31	
4,629.00	11.30	101.00	4,579.15	46.57	-46.49	499.51	501.67	95.32	488,132.73	570,024.62	
4,718.00	11.00	100.20	4,666.47	49.74	-49.65	516.43	518.81	95.49	488,129.57	570,041.54	
4,808.00	10.40	99.50	4,754.91	52.61	-52.51	532.89	535.47	95.63	488,126.71	570,058.00	
4,897.00	10.20	99.30	4,842.47	55.21	-55.11	548.59	551.35	95.74	488,124.11	570,073.70	
4,987.00	9.80	98.00	4,931.10	57.57	-57.47	564.04	566.96	95.82	488,121.75	570,089.15	
5,076.00	9.80	98.80	5,018.81	59.78	-59.68	579.03	582.09	95.88	488,119.54	570,104.14	
5,165.00	9.30	101.20	5,106.57	62.34	-62.24	593.57	596.82	95.99	488,116.98	570,118.68	
5,254.00	9.20	101.20	5,194.41	65.12	-65.02	607.60	611.07	96.11	488,114.20	570,132.71	
5,343.00	8.80	102.10	5,282.32	67.93	-67.82	621.24	624.93	96.23	488,111.40	570,146.35	
5,433.00	8.20	103.80	5,371.33	70.91	-70.80	634.20	638.14	96.37	488,108.42	570,159.31	
5,522.00	7.30	93.80	5,459.52	72.80	-72.69	646.01	650.08	96.42	488,106.53	570,171.12	
5,611.00	6.70	87.20	5,547.86	72.92	-72.81	656.83	660.86	96.33	488,106.41	570,181.94	
5,700.00	6.20	87.80	5,636.29	72.49	-72.37	666.82	670.74	96.19	488,106.85	570,191.93	
5,790.00	5.40	93.80	5,725.83	72.58	-72.46	675.90	679.78	96.12	488,106.76	570,201.01	
5,879.00	5.80	90.90	5,814.41	72.93	-72.81	684.58	688.44	96.07	488,106.41	570,209.69	
5,969.00	6.90	91.10	5,903.85	73.11	-72.99	694.53	698.36	96.00	488,106.23	570,219.64	
6,058.00	6.40	94.30	5,992.26	73.59	-73.46	704.82	708.64	95.95	488,105.76	570,229.93	
6,148.00	7.40	91.10	6,081.60	74.07	-73.95	715.62	719.43	95.90	488,105.27	570,240.73	
6,237.00	8.70	89.30	6,169.72	74.10	-73.98	728.08	731.83	95.80	488,105.24	570,253.19	
6,326.00	8.20	92.80	6,257.76	74.33	-74.21	741.15	744.86	95.72	488,105.01	570,266.26	
6,415.00	8.10	94.00	6,345.86	75.08	-74.95	753.75	757.46	95.68	488,104.27	570,278.86	
6,504.00	7.30	94.90	6,434.06	76.01	-75.87	765.64	769.39	95.66	488,103.35	570,290.75	
6,594.00	5.80	98.90	6,523.47	77.20	-77.07	775.83	779.64	95.67	488,102.15	570,300.94	

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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
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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)	
6,683.00	6.70	88.00	6,611.94	77.72	-77.58	785.46	789.28	95.64	488,101.64	570,310.57	
6,773.00	6.60	89.20	6,701.34	77.46	-77.32	795.88	799.62	95.55	488,101.90	570,320.99	
6,861.00	6.70	94.40	6,788.74	77.79	-77.65	806.05	809.78	95.50	488,101.57	570,331.16	
6,951.00	7.20	96.20	6,878.08	78.80	-78.66	816.89	820.67	95.50	488,100.56	570,342.00	
7,040.00	6.70	97.50	6,966.43	80.08	-79.94	827.59	831.44	95.52	488,099.28	570,352.70	
7,129.00	5.40	98.80	7,054.93	81.40	-81.26	836.87	840.81	95.55	488,097.96	570,361.98	
7,218.00	4.60	100.00	7,143.59	82.67	-82.52	844.53	848.55	95.58	488,096.70	570,369.64	
7,308.00	4.10	100.10	7,233.33	83.86	-83.71	851.25	855.35	95.62	488,095.51	570,376.36	
7,397.00	3.30	99.50	7,322.15	84.84	-84.69	856.91	861.08	95.64	488,094.53	570,382.02	
7,486.00	2.20	107.80	7,411.04	85.79	-85.63	861.06	865.31	95.68	488,093.59	570,386.17	
7,576.00	1.70	104.60	7,500.99	86.65	-86.50	864.00	868.32	95.72	488,092.72	570,389.11	
7,665.00	1.90	85.00	7,589.95	86.85	-86.70	866.74	871.07	95.71	488,092.52	570,391.85	
7,755.00	1.70	92.00	7,679.90	86.77	-86.62	869.56	873.87	95.69	488,092.60	570,394.67	
7,844.00	1.90	95.30	7,768.86	86.95	-86.80	872.35	876.66	95.68	488,092.42	570,397.46	
7,934.00	2.50	95.80	7,858.79	87.29	-87.14	875.79	880.12	95.68	488,092.08	570,400.90	
8,023.00	2.70	112.20	7,947.70	88.28	-88.13	879.66	884.07	95.72	488,091.09	570,404.77	
8,113.00	3.00	117.60	8,037.59	90.17	-90.02	883.71	888.29	95.82	488,089.20	570,408.82	
8,202.00	1.10	139.10	8,126.53	91.90	-91.74	886.34	891.07	95.91	488,087.48	570,411.45	
8,291.00	1.10	136.20	8,215.51	93.16	-93.01	887.49	892.35	95.98	488,086.21	570,412.60	
8,378.00	1.90	136.70	8,302.48	94.81	-94.66	889.05	894.08	96.08	488,084.56	570,414.16	
8,468.00	9.00	145.20	8,392.02	101.69	-101.53	894.10	899.85	96.48	488,077.69	570,419.21	
8,557.00	19.00	161.50	8,478.30	121.20	-121.05	902.70	910.78	97.64	488,058.17	570,427.81	
8,646.00	28.60	165.70	8,559.64	155.67	-155.51	912.58	925.73	99.67	488,023.71	570,437.69	
8,735.00	41.40	165.20	8,632.39	204.97	-204.81	925.41	947.80	102.48	487,974.41	570,450.52	
8,825.00	51.50	168.40	8,694.33	268.42	-268.25	940.13	977.66	105.93	487,910.97	570,465.24	
8,914.00	59.10	167.70	8,744.96	339.95	-339.78	955.29	1,013.92	109.58	487,839.44	570,480.40	
9,003.00	67.10	167.30	8,785.19	417.37	-417.20	972.47	1,058.18	113.22	487,762.02	570,497.58	

Company: Marathon Oil
Project: Eddy County, NM(NAD 83)
Site: Catapult Fee 23-26-1 WXY
Well: No. 10H
Wellbore: OH
Design: Gyro-MWD148'-13889', Proj. 13944'

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well No. 10H
 Well @ 3242.00usft
 Well @ 3242.00usft
 Grid
 Minimum Curvature
 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)	
9,092.00	76.60	171.70	8,812.90	500.43	-500.25	987.77	1,107.22	116.86	487,678.97	570,512.88	
9,168.00	84.10	174.70	8,825.63	574.77	-574.59	996.61	1,150.39	119.97	487,604.63	570,521.72	
9,259.00	89.30	175.90	8,830.87	665.28	-665.10	1,004.05	1,204.36	123.52	487,514.12	570,529.16	
9,355.00	92.70	176.60	8,829.19	761.05	-760.87	1,010.33	1,264.79	126.98	487,418.35	570,535.44	
9,448.00	93.10	177.20	8,824.49	853.79	-853.61	1,015.35	1,326.50	130.05	487,325.61	570,540.46	
9,543.00	92.70	177.10	8,819.68	948.55	-948.37	1,020.07	1,392.82	132.91	487,230.85	570,545.18	
9,637.00	92.60	176.90	8,815.33	1,042.32	-1,042.14	1,024.98	1,461.73	135.48	487,137.08	570,550.09	
9,731.00	93.10	177.10	8,810.66	1,136.08	-1,135.90	1,029.90	1,533.28	137.80	487,043.32	570,555.01	
9,827.00	90.60	177.10	8,807.56	1,231.90	-1,231.72	1,034.75	1,608.68	139.97	486,947.50	570,559.86	
9,921.00	90.50	176.20	8,806.66	1,325.73	-1,325.55	1,040.24	1,684.99	141.88	486,853.67	570,565.35	
10,016.00	91.80	180.20	8,804.75	1,420.65	-1,420.47	1,043.23	1,762.40	143.71	486,758.75	570,568.34	
10,110.00	91.80	179.30	8,801.80	1,514.60	-1,514.42	1,043.64	1,839.20	145.43	486,664.80	570,568.75	
10,204.00	91.50	183.60	8,799.09	1,608.51	-1,608.33	1,041.26	1,915.97	147.08	486,570.89	570,566.37	
10,299.00	91.10	182.90	8,796.94	1,703.33	-1,703.15	1,035.88	1,993.43	148.69	486,476.07	570,560.99	
10,393.00	90.00	182.20	8,796.03	1,797.23	-1,797.05	1,031.69	2,072.14	150.14	486,382.17	570,556.80	
10,487.00	87.60	182.90	8,798.00	1,891.11	-1,890.93	1,027.51	2,152.07	151.48	486,288.29	570,552.62	
10,581.00	90.40	182.70	8,799.64	1,984.97	-1,984.79	1,022.92	2,232.88	152.73	486,194.43	570,548.03	
10,676.00	88.70	181.20	8,800.39	2,079.91	-2,079.73	1,019.69	2,316.25	153.88	486,099.49	570,544.80	
10,770.00	91.90	179.90	8,799.90	2,173.89	-2,173.71	1,018.79	2,400.61	154.89	486,005.51	570,543.90	
10,864.00	90.90	178.40	8,797.60	2,267.84	-2,267.67	1,020.18	2,486.58	155.78	485,911.55	570,545.29	
10,959.00	90.00	177.70	8,796.85	2,362.78	-2,362.61	1,023.41	2,574.74	156.58	485,816.61	570,548.52	
11,054.00	89.50	177.20	8,797.27	2,457.69	-2,457.51	1,027.64	2,663.72	157.31	485,721.71	570,552.75	
11,148.00	91.30	181.20	8,796.61	2,551.66	-2,551.48	1,028.95	2,751.14	158.04	485,627.74	570,554.06	
11,242.00	85.90	180.30	8,798.91	2,645.58	-2,645.40	1,027.72	2,838.02	158.77	485,533.82	570,552.83	
11,337.00	84.80	179.30	8,806.61	2,740.27	-2,740.09	1,028.05	2,926.60	159.43	485,439.13	570,553.16	
11,431.00	88.40	180.00	8,812.18	2,834.08	-2,833.90	1,028.62	3,014.81	160.05	485,345.32	570,553.73	
11,526.00	86.90	179.10	8,816.08	2,929.00	-2,928.82	1,029.37	3,104.45	160.64	485,250.40	570,554.48	

Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 10H
Project:	Eddy County, NM(NAD 83)	TVD Reference:	Well @ 3242.00usft
Site:	Catapult Fee 23-26-1 WXY	MD Reference:	Well @ 3242.00usft
Well:	No. 10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD148'-13889', Proj. 13944'	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)	
11,621.00	86.70	178.20	8,821.38	3,023.82	-3,023.64	1,031.60	3,194.78	161.16	485,155.58	570,556.71	
11,715.00	85.40	177.10	8,827.86	3,117.52	-3,117.34	1,035.45	3,284.81	161.63	485,061.88	570,560.56	
11,810.00	91.40	178.60	8,830.51	3,212.37	-3,212.19	1,039.01	3,376.05	162.08	484,967.03	570,564.12	
11,904.00	90.60	180.50	8,828.87	3,306.35	-3,306.17	1,039.75	3,465.80	162.54	484,873.05	570,564.86	
11,998.00	91.20	181.50	8,827.39	3,400.32	-3,400.14	1,038.11	3,555.08	163.02	484,779.08	570,563.22	
12,092.00	87.90	181.20	8,828.13	3,494.28	-3,494.10	1,035.89	3,644.42	163.49	484,685.12	570,561.00	
12,186.00	88.90	183.30	8,830.75	3,588.16	-3,587.98	1,032.20	3,733.50	163.95	484,591.24	570,557.31	
12,281.00	91.50	182.30	8,830.42	3,683.04	-3,682.86	1,027.56	3,823.52	164.41	484,496.36	570,552.67	
12,375.00	94.00	182.60	8,825.91	3,776.83	-3,776.65	1,023.55	3,912.90	164.84	484,402.57	570,548.66	
12,470.00	91.60	181.90	8,821.27	3,871.64	-3,871.46	1,019.82	4,003.53	165.24	484,307.76	570,544.93	
12,564.00	90.30	181.40	8,819.71	3,965.58	-3,965.41	1,017.12	4,093.77	165.61	484,213.81	570,542.23	
12,658.00	88.20	181.40	8,820.94	4,059.54	-4,059.37	1,014.82	4,184.29	165.96	484,119.85	570,539.93	
12,752.00	88.30	181.80	8,823.81	4,153.46	-4,153.28	1,012.20	4,274.85	166.30	484,025.94	570,537.31	
12,846.00	87.80	182.00	8,827.01	4,247.35	-4,247.18	1,009.08	4,365.41	166.63	483,932.04	570,534.19	
12,940.00	87.20	181.90	8,831.11	4,341.21	-4,341.03	1,005.89	4,456.05	166.95	483,838.19	570,531.00	
13,034.00	87.60	180.90	8,835.38	4,435.08	-4,434.91	1,003.59	4,547.04	167.25	483,744.31	570,528.70	
13,128.00	90.70	183.30	8,836.77	4,528.99	-4,528.82	1,000.15	4,637.94	167.55	483,650.40	570,525.26	
13,222.00	90.50	181.60	8,835.79	4,622.90	-4,622.72	996.13	4,728.83	167.84	483,556.50	570,521.24	
13,317.00	89.10	178.70	8,836.12	4,717.88	-4,717.71	995.88	4,821.68	168.08	483,461.51	570,520.99	
13,411.00	91.00	180.10	8,836.04	4,811.87	-4,811.70	996.87	4,913.87	168.30	483,367.52	570,521.98	
13,507.00	90.90	179.20	8,834.45	4,907.85	-4,907.68	997.45	5,008.02	168.51	483,271.54	570,522.56	
13,601.00	91.20	178.20	8,832.72	5,001.81	-5,001.64	999.59	5,100.55	168.70	483,177.58	570,524.70	
13,695.00	90.90	177.40	8,831.00	5,095.73	-5,095.55	1,003.19	5,193.37	168.86	483,083.67	570,528.30	
13,790.00	88.90	176.40	8,831.17	5,190.58	-5,190.41	1,008.33	5,287.44	169.01	482,988.81	570,533.44	
13,889.00	88.70	176.80	8,833.24	5,289.39	-5,289.21	1,014.20	5,385.57	169.15	482,890.01	570,539.31	
Last Survey: 13889' MD											

Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 10H
Project:	Eddy County, NM(NAD 83)	TVD Reference:	Well @ 3242.00usft
Site:	Catapult Fee 23-26-1 WXY	MD Reference:	Well @ 3242.00usft
Well:	No. 10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD148'-13889', Proj. 13944'	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)
13,944.00	88.70	176.80	8,834.49	5,344.29	-5,344.11	1,017.27	5,440.07	169.22	482,835.11	570,542.38
PTB: 13944' MD										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
505.00	504.99	1.87	0.84	Pro MWD First Survey: 505' MD
13,889.00	8,833.24	-5,289.21	1,014.20	Last Survey: 13889' MD
13,944.00	8,834.49	-5,344.11	1,017.27	PTB: 13944' MD

RECEIVED

District I
1625 N. French Dr., Hobbs, NM 88240

District II
811 S. First St., Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

FEB 10 2020

Form C-104
Revised August 1, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate District Office

EMNRD-OCDARTESIA

☐ AMENDED REPORT**I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT**

¹ Operator name and Address Marathon Oil Permian LLC 5555 San Felipe St., Houston, TX 77056		² OGRID Number 372098
		³ Reason for Filing Code/ Effective Date RT
⁴ API Number 30 - 015-44690	⁵ Pool Name PURPLE SAGE; WOLFCAMP (GAS)	⁶ Pool Code 98220
⁷ Property Code 324948	⁸ Property Name CATAPULT 1 WXY FEE	⁹ Well Number 10H

II. ¹⁰ Surface Location

UI or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
O	36	22S	26E		337	SOUTH	1357	EAST	EDDY

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	1	23S	26E		286	SOUTH	341	EAST	EDDY
¹² Lse Code P	¹³ Producing Method Code P	¹⁴ Gas Connection Date	¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date		

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
16587	ORYX ENERGY CO	O
327139	SENDERO MIDSTREAM	G

IV. Well Completion Data

²¹ Spud Date 11/26/2018	²² Ready Date 1/23/2020	²³ TD 13944' / 8834'	²⁴ PBDT 13889' / 8833'	²⁵ Perforations 9303' - 13826'	²⁶ DHC, MC
²⁷ Hole Size		²⁸ Casing & Tubing Size		²⁹ Depth Set	³⁰ Sacks Cement
17 1/2"		13 3/8", 54.5#, J55, STC		446'	475
12 1/4"		9 5/8", 36#, J55, LTC		1939'	710
8 3/4"		7", 29#, P110, Roughneck		9207'	800
6 1/8"		4 1/2", 13.5#, P110, Roughneck Tubing: 2-7/8"		8322' - 13934' Tubing: 8252'	555

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas		⁴¹ Test Method

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name: Adrian Covarrubias

Title: Regulatory Professional

E-mail Address: acovarrubias@marathonoil.com

Date: 2/5/2020

Phone: 713-296-3368

OIL CONSERVATION DIVISION

Approved by:

Title:

Geo Eng. ST.

Approval Date:

4-9-2020

"RT" Exp. 4/23/2020

4/14/2020