State of New Mexico Energy, Minerals & Natural Resources

Form C-104 Revised August 1, 2011

1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 Oil Conservation Division

Submi	t one copy	to appr	opriate	District	Office

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tec, NM 87410	1220 South St. Francis Dr.
Santa Fe, NM 87505	Santa Fe, NM 87505

<u>District IV</u> 1220 S. St. Franc				:05		20 South St. Santa Fe, NI		ſ.					AMENDED REPORT		
220 S. St. Franc	is Dr., Sa <b>I.</b>					OWABLE		ГНО	RIZAT	TION T	го т	TRANS	SPORT		
1 Operator n			ess						<sup>2</sup> OGR 372098	ID Num	ber				
Marathon Oil 5555 San Fe			on, TX	77056				,			ling C	ode/ Effe	ective Date		
<sup>4</sup> API Number 30 - 025-46		,		Name 25 G-09 S	S263504I	N; WOLFCAMI	D .				<sup>6</sup> Po	ool Code 17			
<sup>7</sup> Property C			<sup>8</sup> Prop	erty Nan	ne							ell Num	ber		
326320 II. <sup>10</sup> Su	rface L			LIE MUR	CPHY 6 V	VA FEDERAL (	JOIN				18H				
Ul or lot no. A	Section 6	Town	nship 6S	Range 35E	Lot Idn	Feet from the 272	North/South NORTH		Feet fro			West line	County LEA		
UL or lot no.	ttom H Section			n Range	Lot Idn	Feet from the	North/South	h lina	Feet fro	m the	East/	West line	County		
E <sub>A</sub>	7		isiip 6S	35E	Lot Iuii	101	SOUTH		39			AST	LEA		
12 Lse Code F	<sup>13</sup> Prod	ucing Me Code F	ethod	<sup>14</sup> Gas Co Da		<sup>15</sup> C-129 Perr	nit Number	16 (	C-129 Efi	fective D	ate	<sup>17</sup> C-	129 Expiration Date		
III. Oil a		s Trai	nspor	ters		40									
<sup>18</sup> Transpor OGRID	ter					<sup>19</sup> Transpor and Ad							<sup>20</sup> O/G/W		
16587	С	RYX E	ENERO	GY CO									0		
24650	1	ΓARGA	MIDS	STREAM	SERVIC	ES LLC							G		
IV. Well															
<sup>21</sup> Spud Da 12/20/201			Ready 1 /13/20			<sup>23</sup> <b>TD</b> !979' MD	<sup>24</sup> <b>PBTI</b> 22914' M			' <mark>erforati</mark> '46' - 22,			<sup>26</sup> DHC, MC		
	ole Size			<sup>28</sup> Casing	g & Tubir	ng Size		epth So				<sup>30</sup> Sa	cks Cement		
17	-1/2"			13-3/8", 5	54.5#, J5	5, STC	1	170'					1175		
9-	7/8"			7-5/8", 29	9.7#, P11	0, BTC	11	1875'					675		
6-	3/4"			5-1/2", 2	3#, P110	), TWL	22	2967'					1590		
V. Well															
<sup>31</sup> Date New 9/21/202			<b>Delive</b> /21/20	ry Date 21		Test Date 22/2021		hrs	h	35 Tbg	o Pres	sure	<sup>36</sup> Csg. Pressure 3339		
<sup>37</sup> Choke Si 18/64	ize		<sup>38</sup> Oil 230		39	Water 2731		Gas 06					<sup>41</sup> Test Method Flowing		
<sup>42</sup> I hereby cert been complied complete to the Signature:	with and	d that th	ne infor	mation gi	ven above	e is true and	Approved by:	P.	OIL CO			N DIVISI	ON		
Printed name:	Adrian (	Covarri	ubias				Title: NMC	OCD							
<sup>Title:</sup> Regulat	ory Prof	fession	ıal				Approval Date	e: <u>1</u> /	/31/202	2					
E-mail Addres	acova	ırrubias		rathonoil			<del></del>					_			
Date:			Pho	ne: 713 0	200										

1625 N. French Dr., Hobbs. NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 <u>District II</u>

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

Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

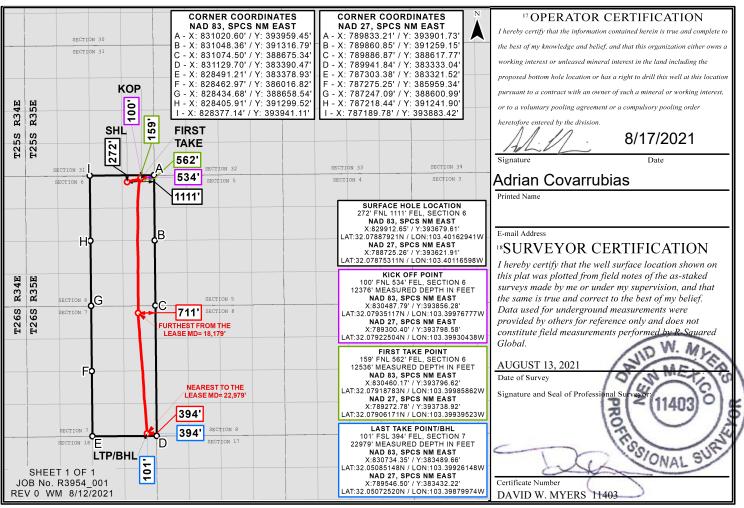
#### WELL LOCATION AND ACREAGE DEDICATION AS-DRILLED PLAT

<sup>1</sup> API Number 30-025-464	<sup>2</sup> Pool Code 98117	<sup>3</sup> Pool Name WC-025 G-09 S263504N; W	OLFCAMP		
<sup>4</sup> Property Code 326320		roperty Name Y 6 WA FEDERAL COM	<sup>6</sup> Well Number 18H		
<sup>7</sup> OGRID No. 372098	1	oerator Name OIL PERMIAN LLC	<sup>9</sup> Elevation 3270'		

<sup>10</sup> Surface Location

					" Surface I				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line Feet from		East/West line	County
A	6	26S	35E		272	NORTH	1111	EAST	LEA
11			11 В	ottom Hol	e Location If	Different From S	Surface		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A ₱	7	26S	35E		101	SOUTH	394	EAST	LEA
12 Dedicated Acres	13 Joint or	Infill 14 C	onsolidation (	Code 15 Or	der No.	-			
640.0									

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.



Distances/areas relative to NAD 83 Combined Scale Factor: 0.99985058 Convergence Angle: 00°29'34.804752"

Horizontal Spacing Unit



13 3/8"

500-

1000-

1500-

2000

2500-

3000-

3500-

4000-

4500-

5000-

6000

6500

8000

8500

9000-

9500-

10000-

10500

11000

11500

12000

12500

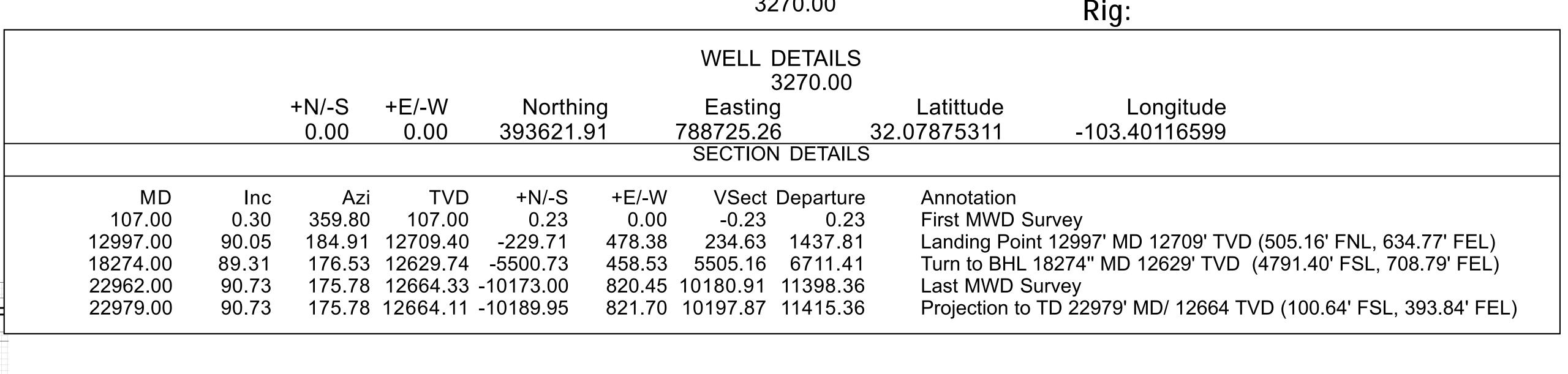
# **Marathon Oil Permian LLC**

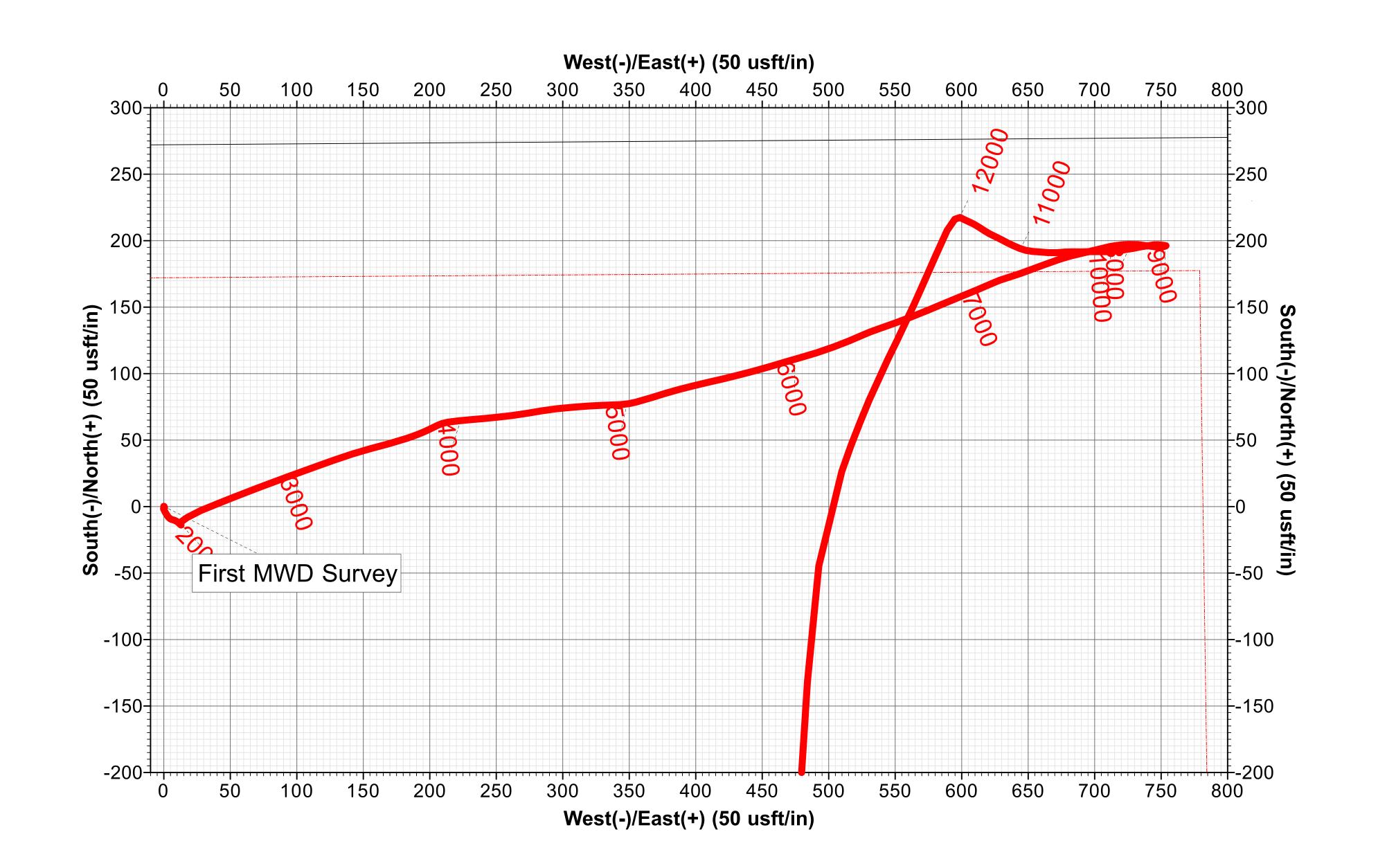
Project: Lea County, New Mexico (NAD27) Site: Charlie Murphy 6 Pad (Grid)

Well: Charlie Murphy 6 WXY Fed Com 18H

RKB (Precision 601) 25' + GL(3270') @ 3295.00usftWellbore: Wellbore #1 Design: Actual Drilled

3270.00





Vertical Section at 179.41° (500 usft/in)

Landing Point 12997' MD 12709' TVD (505.16' FNL, 634.77' FEL) Turn to BHL 18274" MD 12629' TVD (4791.40' FSL, 708.79' FEL)

HALLIBURTON

Sperry Drilling

Projection to TD 22979' MD/ 12664 TVD (100.64' FSL, 393.84' FEL)

Charlie Murphy 6 WXY Fed Com 18H/Wellbore #1

1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 6500 7000 7500 8000 9500 100001050011000115001200012500130001350014000145001500016000

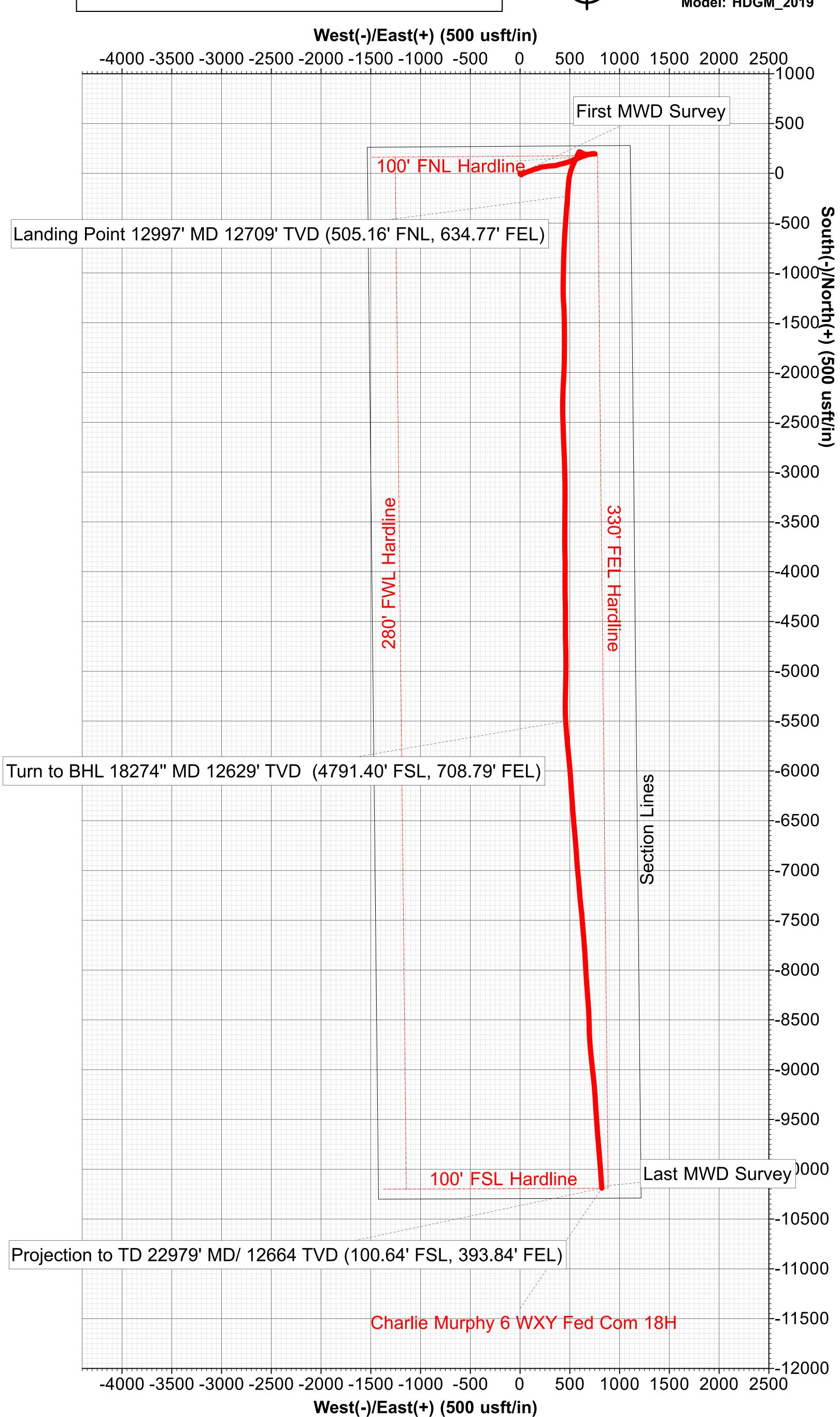
Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)

Ellipsoid: Clarke 1866

Zone Name: New Mexico East 3001

**Azimuths to Grid North** True North: -0.50° Magnetic North: 6.04°

> **Magnetic Field** Strength: 47671.0nT Dip Angle: 59.67° Date: 12/1/2019 Model: HDGM\_2019



# **Marathon Oil Permian LLC**

Lea County, New Mexico (NAD27) Charlie Murphy 6 Pad (Grid) API#

Charlie Murphy 6 WXY Fed Com 18H

SHL: (272' FNL, 1111' FEL)

Wellbore #1

**Design: Actual Drilled** 

# Sperry Drilling Services Combo Report

24 February, 2020

Well Coordinates:

32.07875312 -103.40116599 NAD 1927 (NADCON CONUS) New Mexico East 3001 393,621.91 N 788,725.26 E

Ground Level: 3,270.00 usft

Local Coordinate Origin:

Viewing Datum:

TVDs to System:

North Reference:

Unit System:

Centered on Well Charlie Murphy 6 WXY Fed Com 18H RKB (Precision 601) 25' + GL(3270') @ 3295.00usft

1

Grid

Midcon (2 decimal)

Version: 5000.15 Build: 91E

Report Version: Midcon Combo v1.15

**HALLIBURTON** 

# Page 5 of 31 Marathon Oil Permian LLC

Lea County, New Mexico (NAD27)

# **HALLIBURTON**

Measured		Grid	Vertical	Local Coordinates		Map Coord	dinates	Dogleg	Vertical	Toolface	
Depth	Inclination	Azimuth	Depth	Northing	Easting	Northing	Easting	Rate	Section	Angle	Comments
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(usft)	(°)	
0.00	0.00	0.00	0.00	0.00 N	0.00 E	393,621.91	788,725.26	0.00	0.00	0.00	LP WP6 - 18H KOP/FTP (100' FNL - 380' FEL) - 18H LTP/BHL (100' FSL - 380' FEL)
20.00	0.00	0.00	20.00	0.00 N	0.00 E	393,621.91	788,725.26	0.00	0.00	0.00	211 /2112 (100 1 02 000 1 22)
107.00	0.30	359.80	107.00	0.23 N	0.00 W	393,622.14	788,725.26	0.34	-0.23	359.80	First MWD Survey
191.00	0.40	148.60	191.00	0.20 N	0.15 E	393,622.11	788,725.41	0.80	-0.20	162.12	
292.00	0.80	161.00	291.99	0.77 S	0.56 E	393,621.14	788,725.82	0.41	0.78	24.25	
379.00	1.00	302.00	378.99	0.94 S	0.12 E	393,620.97	788,725.38	1.95	0.94	158.24	
466.00	1.30	161.90	465.98	1.48 S	0.22 W	393,620.43	788,725.04	2.49	1.48	-157.34	
511.00	1.50	154.30	510.97	2.49 S	0.20 E	393,619.42	788,725.46	0.61	2.50	-46.72	
552.00	1.50	151.38	551.95	3.45 S	0.68 E	393,618.46	788,725.94	0.19	3.46	-91.46	
597.00	1.63	149.71	596.94	4.52 S	1.29 E	393,617.39	788,726.55	0.31	4.53	-20.17	
641.00	1.67	149.19	640.92	5.61 S	1.93 E	393,616.30	788,727.19	0.10	5.63	-20.78	
686.00	1.80	146.50	685.90	6.76 S	2.66 E	393,615.15	788,727.92	0.34	6.79	-33.42	
732.00	1.60	145.40	731.88	7.89 S	3.42 E	393,614.02	788,728.68	0.44	7.93	-171.28	
822.00	1.10	113.10	821.85	9.27 S	4.93 E	393,612.64	788,730.19	0.99	9.32	-138.75	
866.00	1.10	108.80	865.85	9.57 S	5.72 E	393,612.34	788,730.98	0.19	9.63	-92.15	
956.00	1.60	107.61	955.82	10.23 S	7.73 E	393,611.68	788,732.99	0.56	10.31	-3.80	
1,001.00	1.10	111.48	1,000.81	10.57 S	8.74 E	393,611.34	788,734.00	1.13	10.66	171.60	
1,046.00	1.10	122.20	1,045.80	10.96 S	9.50 E	393,610.95	788,734.76	0.46	11.06	95.36	
1,080.00	1.00	134.86	1,079.79	11.35 S	9.99 E	393,610.56	788,735.25	0.74	11.45	119.56	
1,200.00	1.19	130.37	1,199.77	12.89 S	11.68 E	393,609.02	788,736.94	0.18	13.01	-26.32	13 3/8"
1,223.00	1.23	129.67	1,222.77	13.21 S	12.06 E	393,608.70	788,737.32	0.18	13.33	-21.83	
1,313.00	0.10	74.68	1,312.76	13.80 S	12.87 E	393,608.11	788,738.13	1.31	13.93	-176.00	
1,403.00	0.03	263.30	1,402.76	13.78 S	12.93 E	393,608.13	788,738.19	0.14	13.92	-178.01	
1,492.00	0.06	88.01	1,491.76	13.79 S	12.95 E	393,608.12	788,738.21	0.10	13.92	-176.86	
1,581.00	0.06	308.00	1,580.76	13.75 S	12.96 E	393,608.16	788,738.22	0.13	13.89	-160.00	
1,671.00	0.28	312.40	1,670.76	13.58 S	12.76 E	393,608.33	788,738.02	0.24	13.71	5.60	
1,760.00	0.35	322.91	1,759.76	13.21 S	12.44 E	393,608.70	788,737.70	0.10	13.34	44.87	
1,850.00	0.28	309.55	1,849.76	12.85 S	12.10 E	393,609.06	788,737.36	0.11	12.98	-140.17	
1,939.00	0.21	308.07	1,938.76	12.62 S	11.80 E	393,609.29	788,737.06	0.08	12.74	-175.57	
2,029.00	1.10	50.32	2,028.75	11.96 S	12.34 E	393,609.95	788,737.60	1.29	12.09	112.41	
2,118.00	2.26	55.24	2,117.71	10.42 S	14.44 E	393,611.49	788,739.70	1.31	10.56	9.55	
2,208.00	2.79	54.80	2,207.62	8.14 S	17.69 E	393,613.77	788,742.95	0.59	8.32	-2.31	
2,387.00	4.47	67.70	2,386.26	2.98 S	27.70 E	393,618.93	788,752.96	1.04	3.27	32.46	
2,477.00	4.72	68.14	2,475.97	0.27 S	34.38 E	393,621.64	788,759.64	0.28	0.63	8.24	
2,566.00	5.72	68.42	2,564.60	2.72 N	41.91 E	393,624.63	788,767.17	1.12	-2.29	1.60	

# Lea County, New Mexico (NAD27)

Measured		Grid	Vertical	Local Coo	rdinates	Map Coord	linates	Dogleg	Vertical	Toolface	
Depth	Inclination	Azimuth	Depth	Northing	Easting	Northing	Easting	Rate	Section	Angle	Comme
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(usft)	(°)	
2,656.00	7.78	67.94	2,653.97	6.66 N	51.72 E	393,628.57	788,776.98	2.29	-6.13	-1.81	
2,746.00	8.09	68.73	2,743.11	11.24 N	63.27 E	393,633.15	788,788.53	0.37	-10.59	19.77	
2,835.00	8.52	69.67	2,831.18	15.81 N	75.29 E	393,637.72	788,800.55	0.51	-15.03	17.99	
2,925.00	8.78	69.52	2,920.15	20.53 N	87.97 E	393,642.44	788,813.23	0.29	-19.62	-5.03	
3,014.00	8.89	70.34	3,008.10	25.22 N	100.81 E	393,647.13	788,826.07	0.19	-24.18	49.27	
3,104.00	9.21	70.26	3,096.98	29.99 N	114.14 E	393,651.90	788,839.40	0.36	-28.81	-2.29	
3,194.00	9.60	70.23	3,185.77	34.96 N	127.98 E	393,656.87	788,853.24	0.43	-33.64	-0.73	
3,283.00	9.13	72.86	3,273.58	39.55 N	141.71 E	393,661.46	788,866.97	0.71	-38.09	138.97	
3,373.00	8.90	74.21	3,362.47	43.55 N	155.24 E	393,665.46	788,880.50	0.35	-41.95	138.06	
3,462.00	9.42	75.58	3,450.33	47.24 N	168.92 E	393,669.15	788,894.18	0.63	-45.49	23.43	
3,552.00	8.96	71.20	3,539.18	51.33 N	182.68 E	393,673.24	788,907.94	0.93	-49.45	-125.48	
3,641.00	5.37	67.42	3,627.47	55.16 N	193.09 E	393,677.07	788,918.35	4.07	-53.17	-174.39	
3,731.00	4.39	64.31	3,717.14	58.27 N	200.09 E	393,680.18	788,925.35	1.13	-56.21	-166.44	
3,820.00	4.43	63.77	3,805.88	61.27 N	206.24 E	393,683.18	788,931.50	0.06	-59.14	-46.34	
3,910.00		80.68	3,895.56	63.47 N	213.42 E	393,685.38	788,938.68	1.82	-61.27	68.72	
3,999.00	5.49	84.38	3,984.17	64.55 N	221.68 E	393,686.46	788,946.94	0.47	-62.26	57.13	
4,089.00	5.11	84.89	4,073.79	65.33 N	229.95 E	393,687.24	788,955.21	0.43	-62.96	173.19	
4,178.00		85.12	4,162.28	66.14 N	239.34 E	393,688.05	788,964.60	2.17	-63.68	0.84	
4,268.00		84.21	4,251.55	67.21 N	250.73 E	393,689.12	788,975.99	0.60	-64.63	-12.77	
4,357.00	7.44	82.39	4,339.79	68.57 N	262.27 E	393,690.48	788,987.53	0.30	-65.86	-119.57	
4,447.00		80.92	4,429.07	70.21 N	273.52 E	393,692.12	788,998.78	0.46	-67.39	-154.08	
4,536.00		79.89	4,517.41	72.01 N	284.15 E	393,693.92	789,009.41	0.28	-69.08	-150.94	
4,626.00		83.56	4,606.73	73.59 N	295.13 E	393,695.50	789,020.39	0.72	-70.55	45.75	
4,716.00		85.95	4,695.95	74.67 N	306.91 E	393,696.58	789,032.17	0.62	-71.50	35.51	
4,805.00		84.72	4,784.16	75.62 N	318.65 E	393,697.53	789,043.91	0.42	-72.34	-155.01	
4,894.00		89.55	4,872.36	76.20 N	330.56 E	393,698.11	789,055.82	0.94	-72.79	53.11	
4,984.00		86.26	4,961.49	76.66 N	343.00 E	393,698.57	789,068.26	0.51	-73.12	-95.40	
5,073.00		75.34	5,049.64	78.63 N	355.15 E	393,700.54	789,080.41	1.70	-74.97	-92.02	
5,163.00		72.75	5,138.82	81.95 N	366.81 E	393,703.86	789,092.07	0.75	-78.17	-150.26	
5,252.00		72.71	5,227.13	85.22 N	377.33 E	393,707.13	789,102.59	0.76	-81.33	-179.60	
5,342.00		75.38	5,316.55	88.03 N	387.10 E	393,709.94	789,112.36	0.71	-84.04	153.00	
5,431.00		75.73	5,404.95	90.60 N	397.08 E	393,712.51	789,122.34	0.71	-86.50	2.81	
5,521.00		77.30	5,494.21	93.29 N	408.33 E	393,715.20	789,133.59	0.99	-89.08	19.66	
5,610.00		76.96	5,582.37	95.29 N 96.00 N	420.20 E	393,717.91	789,145.46	0.09	-91.67	-7.53	
5,700.00		75.45	5,671.50	98.97 N	420.20 E 432.32 E	393,720.88	789,143.46	0.41	-91.67 -94.52	-7.53 -122.57	
5,789.00		75.18	5,759.67	102.04 N	444.03 E	393,723.95	789,169.29	0.22	-97.46	-169.20	
5,879.00	7.36	73.51	5,848.90	105.22 N	455.40 E	393,727.13	789,180.66	0.47	-100.53	-149.50	

# Lea County, New Mexico (NAD27)

Measured		Grid	Vertical	Local Coo	rdinates	Map Coor	dinates	Dogleg	Vertical	Toolface	
Depth	Inclination	Azimuth	Depth	Northing	Easting	Northing	Easting	Rate	Section	Angle	Comments
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(usft)	(°)	
5,968.00	7.30	73.33	5,937.17	108.46 N	466.28 E	393,730.37	789,191.54	0.07	-103.66	-159.14	
6,058.00	8.66	74.47	6,026.29	111.92 N	478.29 E	393,733.83	789,203.55	1.52	-106.99	7.20	
6,147.00	8.67	72.22	6,114.28	115.76 N	491.13 E	393,737.67	789,216.39	0.38	-110.70	-89.42	
6,237.00	8.29	69.80	6,203.30	120.07 N	503.68 E	393,741.98	789,228.94	0.58	-114.88	-137.99	
6,326.00	7.78	67.64	6,291.42	124.58 N	515.27 E	393,746.49	789,240.53	0.67	-119.27	-150.44	
6,416.00	7.17	65.65	6,380.66	129.21 N	526.03 E	393,751.12	789,251.29	0.74	-123.79	-157.99	
6,505.00	8.56	71.11	6,468.82	133.65 N	537.35 E	393,755.56	789,262.61	1.77	-128.11	30.98	
6,595.00	8.71	70.09	6,557.80	138.14 N	550.10 E	393,760.05	789,275.36	0.24	-132.47	-46.10	
6,684.00	8.45	68.58	6,645.80	142.82 N	562.52 E	393,764.73	789,287.78	0.39	-137.02	-139.84	
6,774.00	8.52	67.45	6,734.82	147.79 N	574.83 E	393,769.70	789,300.09	0.20	-141.87	-67.79	
6,863.00	8.48	66.97	6,822.84	152.89 N	586.96 E	393,774.80	789,312.22	0.09	-146.84	-119.65	
6,953.00	8.62	68.35	6,911.84	157.97 N	599.34 E	393,779.88	789,324.60	0.28	-151.79	56.38	
7,042.00	8.43	67.05	6,999.86	162.98 N	611.54 E	393,784.89	789,336.80	0.30	-156.67	-135.24	
7,132.00	7.81	65.98	7,088.95	168.04 N	623.20 E	393,789.95	789,348.46	0.71	-161.61	-166.83	
7,221.00	7.10	73.66	7,177.20	172.05 N	634.01 E	393,793.96	789,359.27	1.37	-165.51	129.24	
7,311.00	6.60	69.91	7,266.56	175.39 N	644.20 E	393,797.30	789,369.46	0.75	-168.75	-140.04	
7,401.00	6.32	70.01	7,355.99	178.86 N	653.71 E	393,800.77	789,378.97	0.31	-172.12	177.75	
7,490.00	6.20	70.15	7,444.46	182.17 N	662.84 E	393,804.08	789,388.10	0.14	-175.33	172.82	
7,580.00	6.26	70.18	7,533.93	185.48 N	672.03 E	393,807.39	789,397.29	0.07	-178.55	3.12	
7,669.00	7.83	75.77	7,622.25	188.61 N	682.47 E	393,810.52	789,407.73	1.92	-181.58	26.38	
7,758.00	7.90	77.06	7,710.42	191.47 N	694.31 E	393,813.38	789,419.57	0.21	-184.32	69.01	
7,848.00	7.56	75.47	7,799.60	194.35 N	706.06 E	393,816.26	789,431.32	0.45	-187.06	-148.62	
7,938.00	6.23	82.88	7,888.95	196.44 N	716.64 E	393,818.35	789,441.90	1.77	-189.05	149.86	
8,027.00	5.15	88.24	7,977.51	197.16 N	725.43 E	393,819.07	789,450.69	1.35	-189.68	156.45	
8,117.00	3.75	94.26	8,067.23	197.06 N	732.40 E	393,818.97	789,457.66	1.64	-189.51	164.53	
8,206.00	2.86	100.32	8,156.09	196.45 N	737.49 E	393,818.36	789,462.75	1.07	-188.84	161.57	
8,296.00	2.76	94.81	8,245.98	195.86 N	741.85 E	393,817.77	789,467.11	0.32	-188.22	-113.05	
8,385.00	1.37	101.27	8,334.92	195.48 N	745.03 E	393,817.39	789,470.29	1.58	-187.79	173.71	
8,475.00	0.80	98.29	8,424.90	195.18 N	746.71 E	393,817.09	789,471.97	0.64	-187.48	-175.83	
8,565.00	0.86	96.91	8,514.89	195.00 N	748.00 E	393,816.91	789,473.26	0.07	-187.29	-19.12	
8,654.00	0.64	90.36	8,603.88	194.92 N	749.16 E	393,816.83	789,474.42	0.26	-187.20	-161.96	
8,744.00	0.62	77.31	8,693.88	195.02 N	750.14 E	393,816.93	789,475.40	0.16	-187.29	-104.43	
8,833.00	0.62	71.64	8,782.87	195.28 N	751.07 E	393,817.19	789,476.33	0.07	-187.54	-92.83	
8,923.00	0.52	72.18	8,872.87	195.56 N	751.92 E	393,817.47	789,477.18	0.11	-187.81	177.19	
9,012.00	0.44	78.00	8,961.87	195.76 N	752.64 E	393,817.67	789,477.90	0.11	-187.99	151.53	
9,102.00	0.38	68.05	9,051.86	195.94 N	753.25 E	393,817.85	789,478.51	0.10	-188.17	-135.02	
9,191.00	0.29	44.90	9,140.86	196.21 N	753.68 E	393,818.12	789,478.94	0.18	-188.44	-134.83	

# Lea County, New Mexico (NAD27)

Measured Depth (usft)	Inclination	Grid Azimuth (°)	Vertical Depth (usft)	Local Coo Northing (usft)	Easting (usft)	Map Coord Northing (usft)	Easting (usft)	Dogleg Rate (°/100usft)	Vertical Section (usft)	Toolface Angle (°)	Comments
9,281.00	1.39	272.72	9,230.85	196.42 N	752.75 E	393,818.33	789,478.01	1.78	-188.66	-139.90	
9,370.00	1.60	280.11	9,319.82	196.69 N	750.45 E	393,818.60	789,475.71	0.32	-188.95	46.29	
9,460.00	1.85	270.17	9,409.78	196.92 N	747.76 E	393,818.83	789,473.02	0.43	-189.21	-55.16	
9,549.00	2.24	268.68	9,498.73	196.88 N	744.59 E	393,818.79	789,469.85	0.44	-189.20	-8.51	
9,728.00	4.02	257.45	9,677.45	195.44 N	734.97 E	393,817.35	789,460.23	1.05	-187.86	-24.67	
9,818.00	4.10	259.48	9,767.23	194.16 N	728.72 E	393,816.07	789,453.98	0.18	-186.65	61.91	
9,907.00	3.84	262.93	9,856.02	193.22 N	722.64 E	393,815.13	789,447.90	0.40	-185.76	139.14	
9,997.00	3.87	260.33	9,945.81	192.33 N	716.65 E	393,814.24	789,441.91	0.20	-184.94	-81.56	
10,086.00	3.80	268.02	10,034.61	191.73 N	710.74 E	393,813.64	789,436.00	0.58	-184.40	101.58	
10,176.00	4.57	272.69	10,124.37	191.79 N	704.18 E	393,813.70	789,429.44	0.93	-184.53	26.21	
10,265.00	4.98	267.18	10,213.06	191.77 N	696.78 E	393,813.68	789,422.04	0.69	-184.58	-50.97	
10,355.00	4.31	270.12	10,302.77	191.58 N	689.50 E	393,813.49	789,414.76	0.79	-184.47	161.90	
10,444.00	3.74	270.68	10,391.55	191.63 N	683.25 E	393,813.54	789,408.51	0.64	-184.58	176.33	
10,534.00	3.79	266.15	10,481.35	191.46 N	677.35 E	393,813.37	789,402.61	0.34	-184.48	-82.72	
10,623.00	3.88	264.93	10,570.15	191.00 N	671.41 E	393,812.91	789,396.67	0.14	-184.07	-42.81	
10,713.00	4.08	275.39	10,659.94	191.03 N	665.19 E	393,812.94	789,390.45	0.84	-184.17	79.86	
10,802.00	3.88	273.36	10,748.72	191.50 N	659.04 E	393,813.41	789,384.30	0.27	-184.71	-145.85	
10,892.00	3.47	275.06	10,838.54	191.92 N	653.28 E	393,813.83	789,378.54	0.47	-185.18	165.96	
10,982.00	3.19	284.13	10,928.39	192.77 N	648.14 E	393,814.68	789,373.40	0.66	-186.09	122.47	
11,071.00	3.20	292.14	11,017.25	194.31 N	643.44 E	393,816.22	789,368.70	0.50	-187.68	92.72	
11,161.00	3.25	294.11	11,107.11	196.30 N	638.78 E	393,818.21	789,364.04	0.14	-189.71	66.70	
11,250.00	3.03	297.39	11,195.97	198.42 N	634.39 E	393,820.33	789,359.65	0.32	-191.87	142.39	
11,340.00	3.12	298.53	11,285.84	200.68 N	630.13 E	393,822.59	789,355.39	0.12	-194.18	34.77	
11,429.00	3.40	294.08	11,374.70	202.91 N	625.59 E	393,824.82	789,350.85	0.42	-196.46	-44.34	
11,519.00	2.99	298.34	11,464.56	205.12 N	621.09 E	393,827.03	789,346.35	0.53	-198.71	152.04	
11,608.00	2.73	302.99	11,553.45	207.37 N	617.27 E	393,829.28	789,342.53	0.39	-201.00	140.56	
11,698.00	3.17	304.26	11,643.33	209.94 N	613.41 E	393,831.85	789,338.67	0.49	-203.61	9.08	
11,787.00	3.18	297.58	11,732.19	212.47 N	609.19 E	393,834.38	789,334.45	0.42	-206.18	-91.79	
11,838.00	2.92	293.90	11,783.12	213.65 N	606.75 E	393,835.56	789,332.01	0.64	-207.39	-144.84	
11,953.00	2.39	296.02	11,898.00	215.89 N	601.92 E	393,837.80	789,327.18	0.47	-209.68	170.56	
12,048.00	1.89	298.09	11,992.93	217.49 N	598.76 E	393,839.40	789,324.02	0.53	-211.32	172.25	
12,141.00	4.03	230.99	12,085.82	216.16 N	594.86 E	393,838.07	789,320.12	4.01	-210.02	-94.91	
12,235.00	8.68	206.93	12,179.23	207.75 N	589.08 E	393,829.66	789,314.34	5.60	-201.67	-42.14	
12,330.00	15.45	202.92	12,272.08	189.68 N	580.89 E	393,811.59	789,306.15	7.18	-183.69	-9.03	
12,424.00	20.58	204.58	12,361.45	163.11 N	569.14 E	393,785.02	789,294.40	5.48	-157.24	6.51	
12,456.00	25.15	204.12	12,390.92	151.78 N	564.02 E	393,773.69	789,289.28	14.29	-145.97	-2.45	

Lea County, New Mexico (NAD27)

Measured		Grid	Vertical	Local Cod	ordinates	Map Coordinates		Dogleg	Vertical	Toolface	
Depth	Inclination	Azimuth	Depth	Northing	Easting	Northing	Easting	Rate	Section	Angle	Comments
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(usft)	(°)	
12,519.00	31.00	206.07	12,446.49	124.97 N	551.41 E	393,746.88	789,276.67	9.40	-119.28	9.78	
12,550.00	31.75	206.07	12,472.95	110.47 N	544.31 E	393,732.38	789,269.57	2.42	-104.86	0.00	
12,612.00	32.62	203.16	12,525.43	80.45 N	530.57 E	393,702.36	789,255.83	2.87	-74.98	-61.93	
12,643.00	36.37	201.51	12,550.98	64.21 N	523.91 E	393,686.12	789,249.17	12.47	-58.81	-14.68	
12,675.00	39.31	201.05	12,576.24	45.92 N	516.79 E	393,667.83	789,242.05	9.23	-40.60	-5.66	
12,707.00	41.41	198.23	12,600.63	26.40 N	509.84 E	393,648.31	789,235.10	8.70	-21.15	-42.09	
12,803.00	58.71	190.08	12,662.08	44.75 S	492.58 E	393,577.16	789,217.84	19.13	49.82	-22.61	
12,898.00	76.72	181.67	12,698.02	131.77 S	484.04 E	393,490.14	789,209.30	20.63	136.75	-25.11	
12,997.00	90.05	184.91	12,709.40	229.71 S	478.38 E	393,392.20	789,203.64	13.85	234.63	13.79	Landing Point 12997' MD 12709' TVD (505.16' FNL, 634.77'
											FEL)
13,021.00	93.28	185.68	12,708.70	253.60 S	476.16 E	393,368.31	789,201.42	13.85	258.49	13.41	
13,115.00	94.57	184.34	12,702.27	347.02 S	467.97 E	393,274.89	789,193.23	1.98	351.82	-45.98	
13,210.00	95.57	183.71	12,693.87	441.41 S	461.33 E	393,180.50	789,186.59	1.24	446.14	-32.08	
13,231.00	95.85	183.93	12,691.79	462.26 S	459.94 E	393,159.65	789,185.20	1.69	466.97	38.01	
13,308.00	97.56	184.37	12,682.80	538.53 S	454.40 E	393,083.38	789,179.66	2.29	543.18	14.31	
13,402.00	95.79	183.38	12,671.87	631.67 S	448.10 E	392,990.24	789,173.36	2.15	636.25	-150.89	
13,497.00	95.03	182.69	12,662.91	726.12 S	443.09 E	392,895.79	789,168.35	1.08	730.64	-137.86	
13,591.00		181.49	12,655.83	819.78 S	439.67 E	392,802.13	789,164.93	1.98	824.27	-139.83	
13,685.00	93.04	181.34	12,650.38	913.60 S	437.36 E	392,708.31	789,162.62	0.63	918.05	-165.28	
13,780.00	92.88	181.25	12,645.47	1,008.44 S	435.21 E	392,613.47	789,160.47	0.19	1,012.87	-150.67	
13,873.00	91.64	180.71	12,641.81	1,101.36 S	433.62 E	392,520.55	789,158.88	1.45	1,105.76	-156.47	
13,967.00	90.22	179.69	12,640.28	1,195.34 S	433.29 E	392,426.57	789,158.55	1.86	1,199.74	-144.30	
14,059.00		175.94	12,640.14	,	436.80 E	392,334.65	789,162.06	4.09	1,291.69	-93.96	
14,152.00		177.80	12,640.74	1,380.11 S	441.88 E	392,241.80	789,167.14	2.13	1,384.59	109.81	
14,246.00		179.41	12,641.00	,	444.17 E	392,147.83	789,169.43	2.08	1,478.57	55.42	
14,339.00		178.57	12,640.51		445.81 E	392,054.85	789,171.07	0.93	1,571.57	-103.39	
14,433.00	90.80	180.90	12,639.69	1,661.05 S	446.24 E	391,960.86	789,171.50	2.56	1,665.56	75.55	
14,526.00		179.99	12,639.69		445.52 E	391,867.87	789,170.78	1.98	1,758.54	-150.37	
14,620.00		180.51	,	1,848.03 S	445.11 E	391,773.88	789,170.70	0.57	1,852.52	104.04	
14,713.00		181.78	12,641.31		443.25 E	391,680.90	789,168.51	2.20	1,945.47	38.27	
14,807.00		183.05	12,640.09		439.29 E	391,587.00	789,164.55	1.36	2,039.33	84.15	
		182.79	12,638.96		434.45 E	391,492.13			2,134.14		
14,902.00 14,997.00		182.79	12,638.96	,	434.45 E 430.74 E	391,492.13	789,159.71 789,156.00	0.38 1.17	2,134.14	-133.88 -97.25	
15,091.00		180.72	12,636.14		430.74 E 428.76 E	391,397.20	789,156.00	1.17	2,322.97	-97.25 -82.36	
15,185.00		178.61	12,637.35	*	420.76 E 429.31 E	391,303.23	789,154.02 789,154.57	2.33	2,322.97	-82.36 -105.87	
15,279.00		178.38	12,636.91		429.31 E 431.78 E	391,209.24	789,157.04	0.28	2,510.95	-60.52	
15,372.00	90.14	178.08	12,636.73	2,599.60 S	434.65 E	391,022.31	789,159.91	0.33	2,603.93	-78.69	

Lea County, New Mexico (NAD27)

# **HALLIBURTON**

Measured		Grid	Vertical	Local Coo	rdinates	Map Coord	inates	Dogleg	Vertical	Toolface	
Depth	Inclination	Azimuth	Depth	Northing	Easting	Northing	Easting	Rate	Section	Angle	Comments
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(usft)	(°)	
15,467.00	90.16	177.86	12,636.49	2,694.54 S	438.02 E	390,927.37	789,163.28	0.23	2,698.90	-84.81	
15,561.00	90.23	177.51	12,636.17	2,788.46 S	441.81 E	390,833.45	789,167.07	0.38	2,792.86	-78.69	
15,655.00	90.02	177.98	12,635.96	2,882.38 S	445.51 E	390,739.53	789,170.77	0.55	2,886.82	114.07	
15,749.00	90.05	178.46	12,635.90	2,976.34 S	448.43 E	390,645.57	789,173.69	0.51	2,980.80	86.42	
15,843.00	90.09	179.00	12,635.79	3,070.32 S	450.52 E	390,551.59	789,175.78	0.58	3,074.79	85.76	
15,938.00	90.05	179.72	12,635.67	3,165.31 S	451.58 E	390,456.60	789,176.84	0.76	3,169.79	93.18	
16,032.00	90.26	180.22	12,635.42	3,259.31 S	451.63 E	390,362.60	789,176.89	0.58	3,263.79	67.22	
16,126.00	90.36	180.24	12,634.91	3,353.31 S	451.25 E	390,268.60	789,176.51	0.11	3,357.77	11.31	
16,217.00	90.42	180.40	12,634.29	3,444.30 S	450.74 E	390,177.61	789,176.00	0.19	3,448.76	69.44	
16,310.00	90.73	180.83	12,633.36	3,537.29 S	449.74 E	390,084.62	789,175.00	0.57	3,541.74	54.21	
16,405.00	89.24	179.73	12,633.38	3,632.29 S	449.28 E	389,989.62	789,174.54	1.95	3,636.72	-143.56	
16,499.00	89.24	180.02	12,634.63	3,726.28 S	449.48 E	389,895.63	789,174.74	0.31	3,730.71	90.00	
16,593.00	88.75	178.06	12,636.28	3,820.25 S	451.06 E	389,801.66	789,176.32	2.15	3,824.69	-104.05	
16,687.00	90.33	179.19	12,637.03	3,914.21 S	453.31 E	389,707.70	789,178.57	2.07	3,918.67	35.58	
16,781.00	92.37	181.21	12,634.82	4,008.17 S	452.99 E	389,613.74	789,178.25	3.05	4,012.63	44.69	
16,874.00	91.61	180.22	12,631.59	4,101.11 S	451.83 E	389,520.80	789,177.09	1.34	4,105.54	-127.51	
16,967.00	90.32	179.29	12,630.02	4,194.09 S	452.22 E	389,427.82	789,177.48	1.71	4,198.53	-144.21	
17,060.00	89.47	178.65	12,630.19	4,287.08 S	453.90 E	389,334.83	789,179.16	1.14	4,291.52	-143.02	
17,151.00	89.54	179.30	12,630.98	4,378.06 S	455.52 E	389,243.85	789,180.78	0.72	4,382.52	83.86	
17,245.00	89.68	179.80	12,631.62	4,472.05 S	456.26 E	389,149.86	789,181.52	0.55	4,476.51	74.36	
17,337.00	90.09	180.80	12,631.80	4,564.05 S	455.78 E	389,057.86	789,181.04	1.17	4,568.50	67.71	
17,431.00	88.86	178.75	12,632.66	4,658.04 S	456.15 E	388,963.87	789,181.41	2.54	4,662.49	-120.97	
17,524.00	89.42	178.27	12,634.06	4,751.00 S	458.57 E	388,870.91	789,183.83	0.79	4,755.47	-40.60	
17,616.00	90.76	179.10	12,633.92	4,842.97 S	460.68 E	388,778.94	789,185.94	1.71	4,847.46	31.77	
17,709.00	91.50	180.30	12,632.08	4,935.95 S	461.17 E	388,685.96	789,186.43	1.52	4,940.43	58.32	
17,802.00	90.63	180.53	12,630.35	5,028.93 S	460.49 E	388,592.98	789,185.75	0.97	5,033.40	165.19	
17,896.00	90.86	181.33	12,629.13	5,122.91 S	458.97 E	388,499.00	789,184.23	0.89	5,127.36	73.95	
17,991.00	90.59	181.67	12,627.93	5,217.87 S	456.48 E	388,404.04	789,181.74	0.46	5,222.29	128.45	
18,085.00	89.84	180.99	12,627.58	5,311.84 S	454.30 E	388,310.07	789,179.56	1.08	5,316.23	-137.80	
18,179.00	89.12	178.69	12,628.43	5,405.83 S	454.56 E	388,216.08	789,179.82	2.56	5,410.22	-107.39	
18,273.00	89.30	176.54	12,629.73	5,499.73 S	458.47 E	388,122.18	789,183.73	2.30	5,504.16	-85.23	
18,274.00	89.31	176.53	12,629.74	5,500.73 S	458.53 E	388,121.18	789,183.79	1.54	5,505.16	-51.10	Turn to BHL 18274" MD 12629' TVD (4791.40' FSL,
											708.79' FEL)
18,368.00	90.22	175.40		5,594.49 S	465.15 E	388,027.42	789,190.41	1.54	5,598.99	-51.10	
18,462.00	89.69	174.75	12,630.20	5,688.14 S	473.22 E	387,933.77	789,198.48	0.89	5,692.72	-129.19	
18,557.00	89.98	174.59	12,630.47	5,782.73 S	482.04 E	387,839.18	789,207.30	0.35	5,787.39	-28.89	
18,651.00	88.86	174.83	12,631.42	5,876.33 S	490.71 E	387,745.58	789,215.97	1.22	5,881.07	167.91	

Lea County, New Mexico (NAD27)

Measured		Grid	Vertical	Local Coo	rdinates	Map Coor	dinates	Dogleg	Vertical	Toolface	
Depth	Inclination	Azimuth	Depth	Northing	Easting	Northing	Easting	Rate	Section	Angle	Comments
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(usft)	(°)	
18,745.00	87.08	174.41	12,634.75	5,969.85 S	499.52 E	387,652.06	789,224.78	1.95	5,974.68	-166.74	
18,839.00	88.25	176.19	12,638.58	6,063.45 S	507.21 E	387,558.46	789,232.47	2.26	6,068.35	56.70	
18,933.00	88.77	176.59	12,641.03	6,157.23 S	513.13 E	387,464.68	789,238.39	0.70	6,162.19	37.56	
19,027.00	87.98	176.05	12,643.69	6,251.00 S	519.16 E	387,370.91	789,244.42	1.02	6,256.01	-145.66	
19,122.00	87.62	175.29	12,647.34	6,345.66 S	526.33 E	387,276.25	789,251.59	0.88	6,350.74	-115.38	
19,215.00	87.96	175.78	12,650.92	6,438.31 S	533.56 E	387,183.60	789,258.82	0.64	6,443.46	55.23	
19,310.00	88.11	174.98	12,654.18	6,532.94 S	541.21 E	387,088.97	789,266.47	0.86	6,538.17	-79.39	
19,403.00	88.45	174.66	12,656.97	6,625.52 S	549.60 E	386,996.39	789,274.86	0.50	6,630.83	-43.26	
19,497.00	89.95	175.60	12,658.29	6,719.17 S	557.58 E	386,902.74	789,282.84	1.88	6,724.55	32.08	
19,592.00	89.95	175.95	12,658.37	6,813.91 S	564.58 E	386,808.00	789,289.84	0.37	6,819.36	90.00	
19,686.00	89.48	175.92	12,658.84	6,907.67 S	571.24 E	386,714.24	789,296.50	0.50	6,913.19	-176.35	
19,781.00	89.02	174.63	12,660.08	7,002.34 S	579.07 E	386,619.57	789,304.33	1.44	7,007.93	-109.63	
19,875.00	89.02	174.37	12,661.69	7,095.89 S	588.07 E	386,526.02	789,313.33	0.28	7,101.57	-90.00	
19,969.00	89.83	176.18	12,662.63	7,189.56 S	595.82 E	386,432.35	789,321.08	2.11	7,195.32	65.90	
20,064.00	88.49	174.65	12,664.02	7,284.24 S	603.41 E	386,337.67	789,328.67	2.14	7,290.07	-131.22	
20,158.00	87.64	173.40	12,667.20	7,377.68 S	613.19 E	386,244.23	789,338.45	1.61	7,383.60	-124.25	
20,251.00	88.97	175.52	12,669.95	7,470.19 S	622.16 E	386,151.72	789,347.42	2.69	7,476.20	57.92	
20,345.00	88.74	174.48	12,671.83	7,563.82 S	630.35 E	386,058.09	789,355.61	1.13	7,569.91	-102.48	
20,440.00	90.97	175.46	12,672.07	7,658.44 S	638.68 E	385,963.47	789,363.94	2.56	7,664.61	23.73	
20,534.00	90.97	175.91	12,670.48	7,752.16 S	645.75 E	385,869.75	789,371.01	0.48	7,758.40	90.00	
20,629.00	90.70	176.46	12,669.09	7,846.94 S	652.07 E	385,774.97	789,377.33	0.64	7,853.24	116.15	
20,724.00	90.90	176.58	12,667.77	7,941.76 S	657.84 E	385,680.15	789,383.10	0.25	7,948.11	30.96	
20,819.00	91.45	177.16	12,665.82	8,036.59 S	663.02 E	385,585.32	789,388.28	0.84	8,043.00	46.51	
20,913.00	90.24	175.38	12,664.43	8,130.38 S	669.14 E	385,491.53	789,394.40	2.29	8,136.84	-124.19	
21,006.00	89.20	175.71	12,664.89	8,223.10 S	676.36 E	385,398.81	789,401.62	1.17	8,229.63	162.40	
21,099.00	88.80	175.92	12,666.51	8,315.83 S	683.15 E	385,306.08	789,408.41	0.49	8,322.43	152.31	
21,193.00	89.20	176.79	12,668.15	8,409.63 S	689.12 E	385,212.28	789,414.38	1.02	8,416.28	65.31	
21,288.00	88.90	178.03	12,669.72	8,504.52 S	693.41 E	385,117.39	789,418.67	1.34	8,511.21	103.61	
21,382.00	89.65	179.11	12,670.91	8,598.48 S	695.76 E	385,023.43	789,421.02	1.40	8,605.19	55.23	
21,476.00	90.58	176.40	12,670.73	8,692.40 S	699.44 E	384,929.51	789,424.70	3.05	8,699.14	-71.06	
21,571.00	91.30	174.86	12,669.17	8,787.10 S	706.68 E	384,834.81	789,431.94	1.79	8,793.91	-64.93	
21,664.00	90.36	174.33	12,667.82	8,879.68 S	715.44 E	384,742.23	789,440.70	1.16	8,886.57	-150.58	
21,758.00	87.54	173.35	12,669.54	8,973.11 S	725.52 E	384,648.80	789,450.78	3.18	8,980.10	-160.85	
21,853.00	87.82	173.89	12,673.39	9,067.44 S	736.07 E	384,554.47	789,461.33	0.64	9,074.54	62.58	
21,948.00	88.52	174.66	12,676.42	9,161.92 S	745.54 E	384,459.99	789,470.80	1.10	9,169.11	47.72	
22,042.00	90.05	176.03	12,677.59	9,255.60 S	753.17 E	384,366.31	789,478.43	2.18	9,262.86	41.85	
22,135.00	90.82	176.72	12,676.89	9,348.41 S	759.05 E	384,273.50	789,484.31	1.11	9,355.73	41.86	

Lea County, New Mexico (NAD27)

# **HALLIBURTON**

# Design Report for Charlie Murphy 6 WXY Fed Com 18H - Actual Drilled

Measured		Grid	Vertical	Local Coo	rdinates	Map Coord	linates	Dogleg	Vertical	Toolface	
Depth	Inclination	Azimuth	Depth	Northing	Easting	Northing	Easting	Rate	Section	Angle	Comments
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(usft)	(°)	
22,226.00	91.07	176.47	12,675.39	9,439.23 S	764.45 E	384,182.68	789,489.71	0.39	9,446.61	-44.99	
22,321.00	91.48	175.83	12,673.27	9,534.00 S	770.83 E	384,087.91	789,496.09	0.80	9,541.43	-57.34	
22,415.00	90.40	175.34	12,671.73	9,627.70 S	778.07 E	383,994.21	789,503.33	1.26	9,635.20	-155.59	
22,508.00	90.43	175.33	12,671.06	9,720.39 S	785.63 E	383,901.52	789,510.89	0.03	9,727.97	-18.43	
22,601.00	90.94	175.14	12,669.95	9,813.06 S	793.35 E	383,808.85	789,518.61	0.59	9,820.71	-20.43	
22,695.00	91.04	175.71	12,668.32	9,906.75 S	800.85 E	383,715.16	789,526.11	0.62	9,914.47	80.04	
22,789.00	90.78	175.55	12,666.83	10,000.46 S	808.01 E	383,621.45	789,533.27	0.32	10,008.25	-148.39	
22,883.00	90.90	176.10	12,665.45	10,094.20 S	814.85 E	383,527.71	789,540.11	0.60	10,102.06	77.69	
22,962.00	90.73	175.78	12,664.33	10,173.00 S	820.45 E	383,448.91	789,545.71	0.46	10,180.91	-117.98	Last MWD Survey
22,979.00	90.73	175.78	12,664.11	10,189.95 S	821.70 E	383,431.96	789,546.96	0.00	10,197.87	0.00	Projection to TD 22979' MD/ 12664 TVD (100.64' FSL,
											393.84' FEL)

#### **Design Annotations**

Measured	Vertical	Local Coord	dinates	
Depth	Depth	+N/-S	+E/-W	Comment
(usft)	(usft)	(usft)	(usft)	
107.00	107.00	0.23	0.00	First MWD Survey
12,997.00	12,709.40	-229.71	478.38	Landing Point 12997' MD 12709' TVD (505.16' FNL, 634.77' FEL)
18,274.00	12,629.74	-5,500.73	458.53	Turn to BHL 18274" MD 12629' TVD (4791.40' FSL, 708.79' FEL)
22,962.00	12,664.33	-10,173.00	820.45	Last MWD Survey
22,979.00	12,664.11	-10,189.95	821.70	Projection to TD 22979' MD/ 12664 TVD (100.64' FSL, 393.84' FEL)

#### **Vertical Section Information**

Angle			Origin	Orig	jin	Start
Type	Target	Azimuth	Type	+N/_S	+E/-W	TVD
		(°)		(usft)	(usft)	(usft)
User	No Target (Freehand)	179 41	Slot	0.00	0.00	0.00

#### Survey tool program

From	То		Survey/Plan	Survey Tool
(usft)	(usft)			
20.00	22,962.00	MWD		3_MWD+HRGM+AX
22,979.00	22,979.00	Projection to TD		3_Blind

# Page 13 of 31

#### Marathon Oil Permian LLC

Lea County, New Mexico (NAD27)

# **HALLIBURTON**

# Design Report for Charlie Murphy 6 WXY Fed Com 18H - Actual Drilled

**Casing Details** 

Measured Vertical Casing Hole Depth Depth Name Diameter Diameter (usft) (usft) (") (") 1,200.00 1,199.77 13 3/8" 13-3/8 17-1/2

Design Targets

**Target Name** Dip Dip +N/-S +E/-W Northing - hit/miss Dir. TVD Easting Angle () () () () target () () Latitude Longitude ()

**Directional Difficulty Index** 

Average Dogleg over Survey: 1.31 °/100usft Maximum Dogleg over Survey: 20.63 °/100usft at

12,898.00 usft

Net Tortousity applicable to Plans: 0.06 °/100usft Directional Difficulty Index: 6.793

**Audit Info** 

#### **Marathon Oil Permian LLC**

Lea County, New Mexico (NAD27)

### **HALLIBURTON**

# North Reference Sheet for Charlie Murphy 6 Pad (Grid) - Charlie Murphy 6 WXY Fed Com 18H - Wellbore #1

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to RKB (Precision 601) 25' + GL(3270') @ 3295.00usft. Northing and Easting are relative to Charlie Murphy 6 WXY Fed Com 18H

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 3001 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866

Projection method is Transverse Mercator (Gauss-Kruger)

Central Meridian is -104.33333333°, Longitude Origin:0.00000000°, Latitude Origin:0.00000000°

False Easting: 500,000.00usft, False Northing: 0.00usft, Scale Reduction: 1.00000457

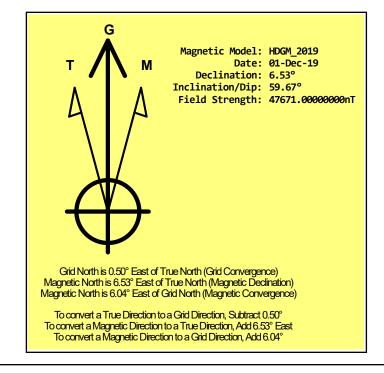
Grid Coordinates of Well: 393,621.91 usft N, 788,725.26 usft E Geographical Coordinates of Well: 32.07875312, -103.40116599

Grid Convergence at Surface is: 0.50°

Based upon Minimum Curvature type calculations, at a Measured Depth of 22,979.00 $\,$ usft

the Bottom Hole Displacement is 10,223.03usft in the Direction of 175.39° (Grid).

Magnetic Convergence at surface is: -6.04° ( 1 December 2019, , HDGM\_2019)



Ceived by OCD: A	0/23/2021-11:11:0		State of N						Form	Page 15 of 3
<u>District I</u> – (575) 393 1625 N. French Dr.,		Energy,	Minerals a	ınd Natur	al Resc	ources	WELL AF		Revised July	18, 2013
<u>District II</u> – (575) 74 811 S. First St., Arte	18-1283	OIL C	ONSERV.	ATION :	DIVIS	ION	30-025-464	186		
<u>District III</u> – (505) 3	34-6178	12	220 South	St. Franc	eis Dr.			e Type of Leas ATE   \[ \begin{aligned} \]	se FEE 🗍	
1000 Rio Brazos Rd District IV – (505) 4			Santa Fe,	, NM 87:	505			oil & Gas Leas		
1220 S. St. Francis I 87505										
	SUNDRY NOT						7. Lease l	Name or Unit	Agreement l	Name
\	S FORM FOR PROPO RVOIR. USE "APPLI					TO A	Charlie Mu	rphy 6 WA Fe	deral Com	
1. Type of Well		Gas Well	Other					umber 18H		
2. Name of Ope Marathon Oil Per							9. OGRII 372098	) Number		
3. Address of O	perator St., Houston, TX 7	7056						name or Wildc -09 S263504N		
4. Well Location	n							-03 020000+14	•	
Unit Le	Α	fee	t from the _	NORTH	l lir	ne and	1111	feet from the _	EAST	line
Section	6		1	26S Rar		35E	NMPM	Cour	nty LE	ĒΑ
		11. Elevation	n (Show whe	ether DR, . 3270' (		T, GR, etc.)				
PERFORM REM TEMPORARILY PULL OR ALTER DOWNHOLE CO CLOSED-LOOP OTHER: 13. Describe of startin proposed 8/12/2020 - Pe 8/13/2021 - MI 8/18/2021 - Sta 8/29/2021 - fra 4914 gal of 15' 9/13/2021 - We	R CASING DMMINGLE SYSTEM Droposed or compage any proposed with completion or reconform Production Cases Case	PLUG AND CHANGE PLUG AND CHANGE PLUG MULTIPLE (on the control of t	ABANDON  ANS COMPL  as. (Clearly  LE 19.15.7.1  st to 13,000ps  or a total of 10	4 NMAC. si for 30 mir	OTHEF ertinent For M	DIAL WORKENCE DRIIGONCE DR	Col give pertinnpletions: A	S. P ANI Descriptions Tent dates, included the control of the cont	RING CASII D A uding estim e diagram o	ated date
Spud Date:	12/20/20			elease Dat			2/24/2020			
I hereby certify th	at the information	above is true a	nd complete	to the bes	st of my	knowledge	e and belief.			
SIGNATURE	Mill	· 	TITL	Regulato	ory Prof	essional		DATE	23/2021	
Type or print nam	Adrian Covarrul	oias		il address:	acova		arathonoil.c	om PHONE:	713-296-33	368
Type or print nam  For State Use Or			E-mai	n address:				FHONE:		
V DDD OAED DA			יייי דיייי	2				DATE		
APPROVED BY:			TITLE	2				DATE		

Submit To Appropr	iate Distri	ct Office		02 AM		State of Ne	xx M	/evi	20							Fc		
Two Copies District I				En		Minerals and				ecources					R		April 3, 2017	
1625 N. French Dr. District II				Lili	cigy, i	viiiiciais air	u iva	ıuraı	IXC	Sources		1. WELL				e v isea	110111 3, 2017	
811 S. First St., Arte District III	esia, NM	88210			Oi	l Conserva	tion	Divi	isic	on		30-025-46487  2. Type of Lease						
1000 Rio Brazos Ro	1000 Rio Brazos Rd., Aztec, NM 87410  District IV  1220 South St. Francis Dr.									STATE ☐ FEE ☑ FED/INDIAN								
1220 S. St. Francis	Dr., Santa	Fe, NM 8	7505			Santa Fe, N	NM 8	8750	)5			3. State Oil & Gas Lease No.						
WELL C	COMP	LETIC	N OR	RECC	MPL	ETION RE	POF	RT A	NE	LOG								
4. Reason for fili	ng:											5. Lease Nan					_	
<b>☑</b> COMPLETI	ON REI	PORT (F	ill in boxe	s #1 throu	ıgh #31	for State and Fe	e wells	s only)				Charlie 6. Well Num		пу 6 vv	A Fede	rai Con	<u>n</u>	
C-144 CLOS	nd the pla										l/or	18H						
7. Type of Comp		□ WOR	KOVER [	□ DEEPI	ENING	□PLUGBACI	к П	DIFFF	REI	NT RESERV	/OIF	R  OTHER						
8. Name of Opera	itor Mai	rathon (	Dil Perm	ian LLC								9 OGRID	<del></del> 3720	98				
10. Address of Op												11. Pool name						
		5555 Sa	n Felipe	St., Ho	uston,	TX 77056						WC-025	G-0	9 S263	504N; V	VOLF	CAMP	
12.Location	Unit Ltr	Se	ction	Towns	ship	Range	Lot			Feet from t	the	N/S Line	Fee	t from the	e E/W I	Line	County	
Surface:	Α		6	26	6S	35E				272		N		1111		E	LEA	
BH:	Р		7		6S	35E				101		S		394		E	LEA	
13. Date Spudded 12/20/2019		ate T.D. 2/4/2				Released 2/24/2020					9/	l (Ready to Pro 13/2021		]	RT, GR, e	etc.)	and RKB, 3270' GL	
18. Total Measure	ed Depth 2297			19. I	Plug Bac	ck Measured Dep 22914'	pth		20.	Was Direct		ıl Survey Made <b>es</b>	?	21. Ty	pe Electri	ic and O	ther Logs Run	
22. Producing Into 12,546' - 2				Top, Bo	ttom, Na	nme												
23.						ING REC	ORI	D (R			ring							
CASING SIZ	ZE		IGHT LB			DEPTH SET				LE SIZE		CEMENTIN		CORD	AN	MOUNT	PULLED	
13 3/8" 7 5/8"			5#; J55 #, P110,			1170' 11875'				7 1/2" 9 7/8"		+	175 75					
5 1/2"			, P110,			22967'				6 3/4"			73 590					
0 1/2		2011	, 1 110,			22001				3 07 1		1	,,,,					
24.	Ton		l n		LIN	ER RECORD		Laca	FF	¥	25.			NG REC		D L CIT	ED CET	
SIZE	TOP		BO	OTTOM		SACKS CEM	ENT	SCR	EEN	N	SIZ	ZE	D	EPTH SE	5T	PACK	ER SET	
26. Perforation	record (i	nterval, s	ize, and n	ımber)				27.	AC	ID, SHOT,	FR	ACTURE, CI	EME	NT, SQU	JEEZE,	ETC.		
12,546' - 22,7	778'; 0.	36", 10	20 shots							INTERVAL		AMOUNT AND KIND MATERIAL USED						
										- 22,778'		26,621,391 lbs propant; 100 Mesh 4914 gal - 15% HCl Acid						
								_		- 22,778' - 22,778'		4914 gai - 503,739 b						
20							DD(			<u>- 22,776</u> TION		303,739 D	DIS -	DIACKIS	II VValei			
28.  Date First Produc	tion		Produ	ction Met	hod <i>(Fla</i>	owing, gas lift, p					)	Well Statu	s (Pro	d or Shu	ıt-in)			
	1/2021				(	Flowir	_	0 ~1-					- (		Prod.			
Date of Test	Hour	s Tested	С	noke Size		Prod'n For		Oil -			Ga	s - MCF	W	ater - Bb	1.	Gas - 0	Oil Ratio	
9/22/2021		24		18/6	4	Test Period			2	:30		206		273	31			
Flow Tubing Press. 0	House Data							Water - Bbl.		Oil G	avity - Al	PI - <i>(Coi</i>	rr.)					
29. Disposition of Gas (Sold, used for fuel, vented, etc.)									30.	Test Witr	nessed By							
sold 31. List Attachme	ents																	
32. If a temporary	pit was	used at the	ne well, at	ach a plat	with th	e location of the	tempo	orary p	it.				33. F	Rig Relea	se Date:			
34. If an on-site b	_			_			_						1					
						Latitude					_	Longitude				NA	AD83	
I hereby certify Signature		he info		shown o	]	<i>n sides of this</i> Printed Name Adria				•		<i>to the best o</i> Regulatory P			edge and		f 9/23/2021	
E-mail Addres	W - 0			thonoil :		TAITIC				111	.10	- ,				Date		
L-man Addres	s accv	arrubid	swillald	u ioi ioii.	CUIII													

# **INSTRUCTIONS**

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

### INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southea	stern New Mexico	Northw	estern New Mexico
T. Anhy	T. Canyon 5436'	T. Ojo Alamo	T. Penn A"
T. Salt	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt 5143'	T. Atoka	T. Fruitland	T. Penn. "C"
T. Yates	T. Miss	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers	T. Devonian	T. Cliff House	T. Leadville
T. Queen	T. Silurian	T. Menefee	T. Madison
T. Grayburg	T. Montoya	T. Point Lookout	T. Elbert
T. San Andres	T. Simpson	T. Mancos	T. McCracken
T. Glorieta	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock	T. Ellenburger	Base Greenhorn	T.Granite
T. Blinebry	T. Gr. Wash	T. Dakota	
T.Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard	T. Bone Springs 9347'	T.Todilto	
T. Abo	T. Castile 3586'	T. Entrada	
T. Wolfcamp 12536'	T. Lamar 5408'	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

			SANDS OI	R GAS R ZONE
No. 1, from	to	No. 3, from	to	
No. 2, from	to	No. 4, from	to	
	IMPORTANT \	WATER SANDS		
Include data on rate of w	vater inflow and elevation to which water	r rose in hole.		
No. 1, from	to	feet		
No. 2, from	to	feet		
No. 3, from	to	feet		
	LITHOLOGY RECORD	Attach additional sheet if r	necessary)	

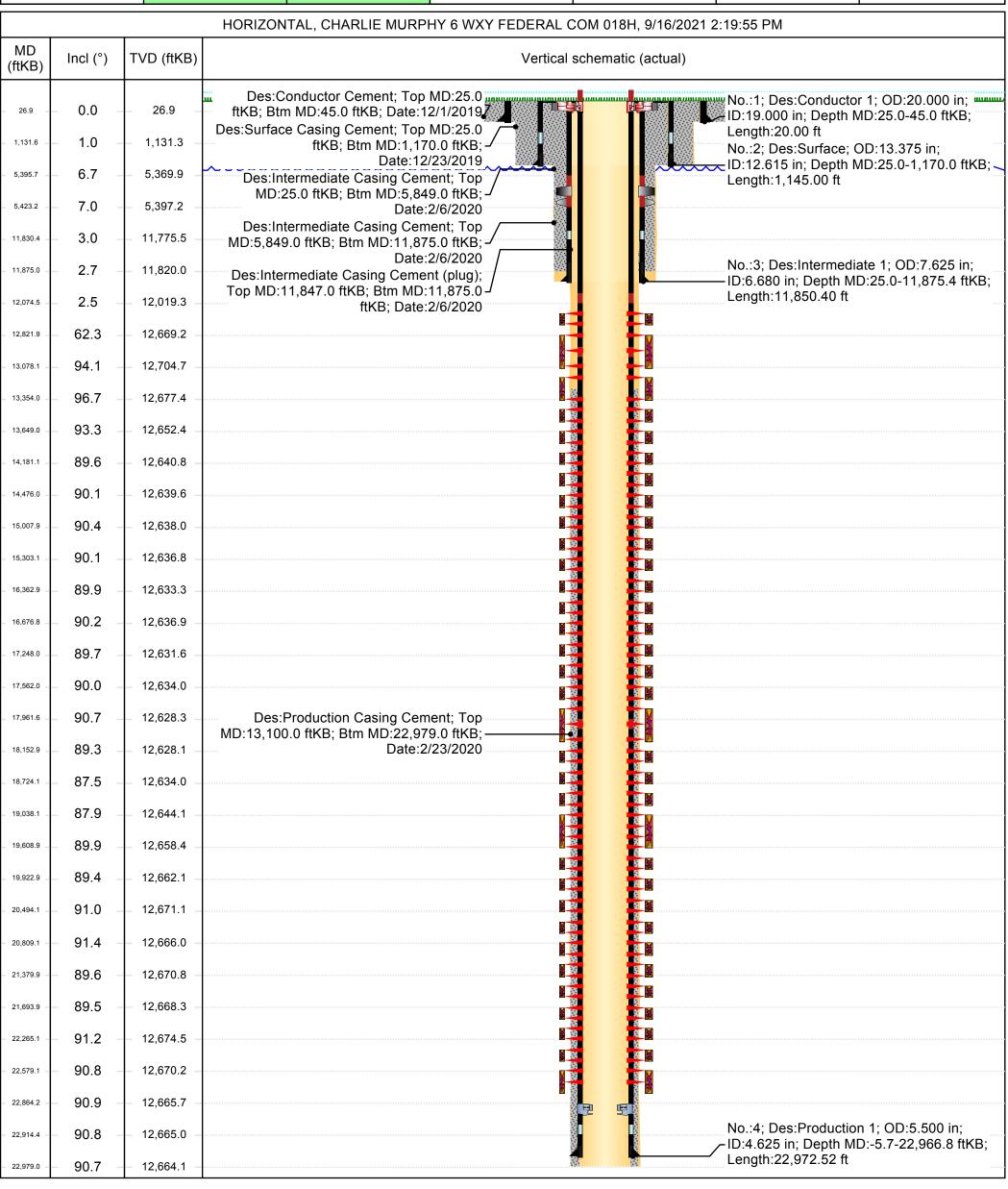
From	То	Thickness In Feet	Lithology	From	То	Thickness In Feet	Lithology

Report Printed: 9/16/2021



# Wellbore Schematic Well Name: CHARLIE MURPHY 6 WXY FEDERAL COM 018H

State/Province NEW MEXICO	Country UNITED STATES	Field Name DOGIE DRAW	Latitude (°) 32.07874880	Longitude (°) -103.40116390		North/South Reference FNL
API/ IPO UWI 3002546487	KB-Ground Distance (ft) 25.00	KB-Mud Line Distance (ft)	Ground Elevation (ft) 3,270.00	0 0 1	Well Original Completion Date 9/15/2021	Well First Production Date



Page 1/1

www.marathonoil.com

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018

Do not use thi	NOTICES AND REPO is form for proposals to II. Use form 3160-3 (API	drill or to re-	enter an		6. If Indian, Allottee o	r Tribe	Name		
SUBMIT IN	TRIPLICATE - Other inst	ructions on	page 2		7. If Unit or CA/Agree	ement,	Name and/or No.		
Type of Well     Oil Well		8. Well Name and No. CHARLIE MURPHY 6 WXY FC 18H							
2. Name of Operator MARATHON OIL PERMIAN L		9. API Well No. 30-025-46487-0	0-X1						
3a. Address 5555 SAN FELIPE STREET HOUSTON, TX 77056	)	10. Field and Pool or I WC025G09S26							
4. Location of Well (Footage, Sec., T	., R., M., or Survey Description,	)			11. County or Parish,	State			
Sec 6 T26S R35E NENE 272F 32.078880 N Lat, 103.401627					LEA COUNTY,	NM			
12. CHECK THE AF	PPROPRIATE BOX(ES)	TO INDICA	ΓE NATURE C	F NOTICE,	REPORT, OR OTH	IER D	OATA		
TYPE OF SUBMISSION			ТҮРЕ О	F ACTION					
☐ Notice of Intent	☐ Acidize	☐ Deej	pen	☐ Product	ion (Start/Resume)		Vater Shut-Off		
	☐ Alter Casing	☐ Hyd	raulic Fracturing	□ Reclam	ation		Vell Integrity		
Subsequent Report	□ Casing Repair	☐ New	Construction	☐ Recomp	olete		Other		
☐ Final Abandonment Notice	☐ Change Plans	☐ Plug	and Abandon	□ Tempor	arily Abandon	Dril	lling Operations		
	☐ Convert to Injection	☐ Plug	Back	☐ Water I	Water Disposal				
Attach the Bond under which the worfollowing completion of the involved testing has been completed. Final Abdetermined that the site is ready for final MIRU. 12/18/2019? Notify BL 12/23? Run 13-3/8? csg, 54.5 sks of lead cement, and 345 s Notify BLM of intent to test BC for 30 min, held, good test. Dr 1/27? Drill 9-7/8? vertical to 9 vertical assembly to BHA. Chavertical to 10077?. Flow check vertical assembly. Drill 9-7/8? 7-5/8? csg, 29.7#, P110, Buttr bbls of spacer, 460 sks of lead Perform 2nd stage of cementing	operations. If the operation respondonment Notices must be file inal inspection.  M of intent to spud. 12/20 5#, J55, STC to 1170?. Cells of tail cement with 576 DPE. Perform BOPE test. ill float equipment, shoe to 1589?. 1/31? Flow check ange to new vertical BHA, and circulate bottoms up vertical to 11885?. 2/4? Gess to 11875?. 2/6? Cem d cement, and 215 sks, of ng 7-5/8? csg by pumping	or Spud well. Sement casing sks of cemer 1/26 ? Pressurack, and 10? well and circutest and TIH. Circulate hole nent 1st stage tail cement well and temer tement skyling.	Drill 17-1/2? he by pumping 50 ht to surface. 1/2 are test 13-3/8? of new formatic late bottoms up. 2/1 ? Continue A. Change BHA and flow check of 7-5/8? csg by with no cement to requirements.	ompletion in a siding reclamation of the to 1170?. bbls of space 25/2020? csg to 1600 on to 1180?. TOH with a drilling 9-7/6. TIH with new complete the complete the total of	new interval, a Form 316 n, have been completed a er, 830 psi 3? ew	0-4 mu	st be filed once		
14. I hereby certify that the foregoing is true and correct.  Electronic Submission #504522 verified by the BLM Well Information System  For MARATHON OIL PERMIAN LLC, sent to the Hobbs  Committed to AFMSS for processing by PRISCILLA PEREZ on 02/26/2020 (20PP1424SE)									
Name (Printed/Typed) ADRIAN (	_ATORY PR	OFESSIONAL							
Signature (Electronic S	Submission)		Date 02/26/2	2020					
	OFFICE U	SE							
Approved By ACCEPT	ON SHEPAR LUM ENGIN			Date 02/27/2020					
Conditions of approval, if any, are attache certify that the applicant holds legal or equivalent would entitle the applicant to conductive the	iitable title to those rights in the		Office Hobbs				,		
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent	U.S.C. Section 1212, make it a statements or representations as	crime for any pe to any matter wi	rson knowingly and thin its jurisdiction	d willfully to m	ake to any department or	agency	of the United		

#### Additional data for EC transaction #504522 that would not fit on the form

#### 32. Additional remarks, continued

120 sks of tail cement, with 78 sks of cement to surface. 2/7 ? Pressure test 7-5/8? csg to 6000 psi for 30 min, held, good test. 2/8 ? Drill flow equipment, shoe track, and 10? of new formation to 11895?. Drill 6-3/4? vertical section to 12096?. Drill 6-3/4? curve section to 12610?. 2/9 ? Flow check well and circulate bottoms up. TOOH to BHA and change curve assembly. TIH with new curve assembly. Re-log gamma from 12498? to 12610?. Continue to drill 6-3/4? curve to 12748?. 2/10 ? Flow check. TOH with curve assembly to BHA. Change curve assembly. TIH. Re-log gamma from 12650 to 12748?. 2/11 ? Drill 6-3/4? curve to 12979?. TOH to BHA and pick up lateral assembly. TIH. Re-log gamma from 12820? to 12979?. 12/13 ? Drill 6-3/4? lateral to 13280?. Flow check and circulate. TOH to BHA. Change lateral assembly and TIH. Re-log gamma from 13120? to 13280?. 2/14 ? Continue drilling 6-3/4? lateral to 22979?. 2/20 ? Flow check and circulate. TOH to BHA. 2/22 ? Run 5-1/2? csg, 23#, P110, TLW to 22967?. 2/23 ? Cement casing by pumping 30 bbls of spacer, 575 sks of lead cement, and 1015 sks of tail cement, with no cement to surface. Pressure test of 5-1/2? csg will be performed during completions. RDMO 2/24/2020.

#### Revisions to Operator-Submitted EC Data for Sundry Notice #504522

**Operator Submitted BLM Revised (AFMSS)** 

DRG SR DRG Sundry Type: SR

Lease: NMNM013647 NMNM13647

Agreement:

MARATHON OIL PERMIAN LLC 5555 SAN FELIPE STREET HOUSTON, TX 77056 Operator: MARATHON OIL PERMIAN LLC

5555 SAN FELIPE ST HOUSTON, TX 77056 Ph: 713-296-3368

Admin Contact:

ADRIAN COVARRUBIAS REGULATORY PROFESSIONAL ADRIAN COVARRUBIAS REGULATORY PROFESSIONAL E-Mail: acovarrubias@marathonoil.com E-Mail: acovarrubias@marathonoil.com

Ph: 713-296-3368 Ph: 713.296.3368

ADRIAN COVARRUBIAS REGULATORY PROFESSIONAL Tech Contact: ADRIAN COVARRUBIAS

REGULATORY PROFESSIONAL E-Mail: acovarrubias@marathonoil.com E-Mail: acovarrubias@marathonoil.com

Ph: 713-296-3368 Ph: 713.296.3368

Location:

State: County: NM NM LEA LEA

WC025 G09 S263504N; WOLFC Field/Pool: WC025G09S263504N-WOLFCAMP

Well/Facility:

CHARLIE MURPHY 6 WXY FC 18H Sec 6 T26S R35E Mer NMP NENE 272FNL 1111FEL CHARLIE MURPHY 6 WXY FC 18H Sec 6 T26S R35E NENE 272FNL 1201FEL

32.078880 N Lat, 103.401627 W Lon

# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION TO CONSIDER:

**CASE NO. 16424 ORDER NO. R-20306** 

APPLICATION OF MARATHON OIL PERMIAN LLC FOR APPROVAL OF A NON-STANDARD SPACING AND PRORATION UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

# **ORDER OF THE DIVISION**

### **BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on September 20, 2018, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 31<sup>st</sup> day of December, 2018, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

# **FINDS THAT**

- (1) Due public notice has been given and the Division has jurisdiction of this case and the subject matter.
- (2) Cases No. 16424 and 16425 were consolidated at the hearing for testimony; however, a separate order will be issued for each case.
- (3) The Applicant, Marathon Oil Permian LLC, seeks to compulsory pool all uncommitted oil and gas interests within a spacing unit ("the Unit") described as follows:

A Horizontal Spacing Unit comprising 640 acres (more or less) within the Wildcat Wolfcamp Oil Pool (Pool code 98117) and all other pools hereafter defined within the Wolfcamp formation in the E/2 of Section 6 and E/2 of Section 7, Township 26 South, Range 35 East, NMPM, Lea County, New Mexico.

- (4) Applicant also seeks approval of the above described lands as a non-standard Horizontal Spacing Unit.
  - (5) The Unit will be dedicated to the following well(s):

Case No. 16424 Order No. R-20306 Page 2 of 8

# Charlie Murphy 6 WXY FC Well No. 12H, API No. 30-025-Pending

SHL: 271 feet from the North line and 1201 feet from the East line, (Unit A) of Section 6, Township 26 South, Range 35 East, NMPM.

BHL: 100 feet from the South line and 1979 feet from the East line, (Unit O) of Section 7, Township 26 South, Range 35 East, NMPM.

# Charlie Murphy 6 WA FC Well No. 15H, API No. 30-025-Pending

SHL: 272 feet from the North line and 1141 feet from the East line, (Unit A) of Section 6, Township 26 South, Range 35 East, NMPM.

BHL: 100 feet from the South line and 989 feet from the East line, (Unit P) of Section 7, Township 26 South, Range 35 East, NMPM.

# Charlie Murphy 6 WXY FC Well No. 18H, API No. 30-025-Pending

SHL: 272 feet from the North line and 1111 feet from the East line, (Unit A) of Section 6, Township 26 South, Range 35 East, NMPM.

BHL: 100 feet from the South line and 330 feet from the East line, (Unit P) of Section 7, Township 26 South, Range 35 East, NMPM.

- (6) The Wildcat Wolfcamp Oil Pool is governed by Division Rule 19.15.15.9(A) NMAC, which specifies 40-acre spacing and proration units [vertical wells], each comprising a governmental quarter-quarter section.
- (7) The allowed setback footage distance for the proposed horizontal Oil well(s) is specified in Paragraph (1) of Subsection C of 19.15.16.15 NMAC effective June 26, 2018. Said rules allow the first or last take points to be no closer than 100 feet to the nearest unit boundary, and the setbacks measured perpendicular to the well path to be a minimum of 330 feet from the outer boundary of the horizontal spacing unit
- (8) Devon Energy Production Company, L.P. appeared at the hearing. No other party entered an appearance in this case or otherwise opposed this application.
- (9) Applicant appeared at the hearing through counsel and presented evidence to the effect that:
  - (a) The Wolfcamp formation in this area is suitable for development by horizontal drilling.
  - (b) The orientation of the horizontal well(s) is appropriate for the Unit.
  - (c) The target drilling depth will be within the Wolfcamp Y and A members of the Wolfcamp formation.
  - (d) The Well No. 15H is located within the E/2 E/2 of both Sections but is closer than 330 feet to the W/2 E/2 of each Section, therefore this is the well which defines the E/2 spacing unit.

Case No. 16424 Order No. R-20306 Page 3 of 8

- (e) Notice by certified mail was provided to all uncommitted interest owners in the proposed Unit whose interests were evidenced by a conveyance instrument, either of record or known to Applicant when the Application was filed, and to heirs known to Applicant of deceased persons who appear as owners in such instruments.
- (f) All affected parties were successfully contacted and provided with notice.
- (g) Notice to affected parties was posted in a newspaper of general circulation in the county as provided in Rule 19.15.4.12.B NMAC.

# The Division finds and concludes that

- (10) The application in this case was filed, and the Well(s) were permitted, on or after the June 26, 2018 date on which amendments to 19.15.16.7 and 19.15.16.15 NMAC (prescribing new spacing rules for horizontal wells) became effective (see Order No. R-14689). Hence the Well(s) must be spaced, permitted and drilled pursuant 19.15.16.15 NMAC, as amended effective June 26, 2018.
- (11) Provided that the Unit constitutes a <u>standard horizontal spacing unit</u> for each of the Well(s) under now effective rules, no non-standard spacing unit approval is needed. If, however, the Unit is not a standard horizontal spacing unit for any of the Well(s), the operator must obtain <u>approval of a non-standard horizontal spacing unit</u> pursuant to 19.15.16.15.B(5) prior to producing such well.
- (12) The portion of the case asking for a non-standard spacing and proration unit is no longer needed and should be dismissed.
- (13) If the location of any of the Well(s) is unorthodox when the well is completed under the spacing rules then in effect and applicable to the well, the operator must obtain a non-standard location approval prior to producing the well.
- (14) Marathon Oil Permian LLC (OGRID 372098) should be designated the operator of the Well(s) and of the Unit.
- (15) Two or more separately owned tracts are embraced within the Unit, and/or there are royalty interests and/or undivided interests in oil and gas minerals in one or more tracts included in the Unit that are separately owned.
- (16) Applicant is owner of an oil and gas working interest within the Unit. Applicant has the right to drill and proposes to drill the Well(s) to a common source of supply within the Unit at the described depths and location(s). Applicant should be allowed a one year period to complete at least one of the Well(s) after commencing drilling of the Well(s).
- (17) There are interest owners in the Unit that have not agreed to pool their interests.

Case No. 16424 Order No. R-20306 Page 4 of 8

- (18) To avoid the drilling of unnecessary wells, protect correlative rights, prevent waste and afford to the owner of each interest in the Unit the opportunity to recover or receive without unnecessary expense a just and fair share of hydrocarbons, this application should be approved by pooling all uncommitted interests, whatever they may be, in the oil and gas in the Wolfcamp formation within the Unit.
- (19) To ensure protection of correlative rights, any pooled working interest owner whose address is known, and who has elected to participate under the terms of this order should be notified before the Division grants any extension of the time provided herein for commencing drilling. Any such owner may file an application, with notice to the operator, requesting that the extension be denied.
- (20) Infill wells within the Unit should be subject to Division Rules 19.15.13.9 NMAC through 19.15.13.10 NMAC, and to the terms and conditions of this order.
- (21) Any pooled working interest owner who does not pay its share of estimated well costs of any well should have withheld from production from such well its share of reasonable well costs plus an additional 200% thereof as a reasonable charge for the risk involved in drilling the Well(s).
- (22) Reasonable charges for supervision (combined fixed rates) should be fixed at \$7000 per month, per well, while drilling and \$700 per month, per well, while producing, provided that these rates should be adjusted annually pursuant to the COPAS form titled "Accounting Procedure-Joint Operations."

# IT IS THEREFORE ORDERED THAT

(1) All uncommitted interests, whatever they may be, in the oil and gas within the following described spacing unit ("the Unit") are hereby pooled:

A Horizontal Spacing Unit comprising 640 acres (more or less) within the Wildcat Wolfcamp Oil Pool (Pool code 98117) and all other pools hereafter defined within the Wolfcamp formation in the E/2 of Section 6 and E/2 of Section 7, Township 26 South, Range 35 East, NMPM, Lea County, New Mexico.

- (2) The portion of the application in this case asking for approval of a non-standard spacing and proration unit is dismissed.
  - (3) The Unit shall be dedicated to the following "Well(s)":

# Charlie Murphy 6 WXY FC Well No. 12H, API No. 30-025-Pending

SHL: 271 feet from the North line and 1201 feet from the East line, (Unit A) of Section 6, Township 26 South, Range 35 East, NMPM.

BHL: 100 feet from the South line and 1979 feet from the East line, (Unit O) of Section 7, Township 26 South, Range 35 East, NMPM.

Charlie Murphy 6 WA FC Well No. 15H, API No. 30-025-Pending

Case No. 16424 Order No. R-20306 Page 5 of 8

SHL: 272 feet from the North line and 1141 feet from the East line, (Unit A) of Section 6, Township 26 South, Range 35 East, NMPM.

BHL: 100 feet from the South line and 989 feet from the East line, (Unit P) of Section 7, Township 26 South, Range 35 East, NMPM.

# Charlie Murphy 6 WXY FC Well No. 18H, API No. 30-025-Pending

SHL: 272 feet from the North line and 1111 feet from the East line, (Unit A) of Section 6, Township 26 South, Range 35 East, NMPM.

BHL: 100 feet from the South line and 330 feet from the East line, (Unit P) of Section 7, Township 26 South, Range 35 East, NMPM.

- (4) The Well(s) will be drilled horizontally and will target the Wolfcamp Y and A members of the Wolfcamp formation.
- (5) Marathon Oil Permian LLC (OGRID 372098) is hereby designated the operator of the Well(s) and of the Unit.
- (6) If any of the Well(s) is completed at an unorthodox location under applicable rules in effect at the time such well is completed, the operator shall provide notice and apply administratively for a location exception prior to producing the well.
- (7) The operator of the Unit shall commence drilling the Well(s) on or before December 31, 2019 and shall thereafter continue drilling the Well(s) with due diligence to test the Wolfcamp formation at or about the proposed true vertical and measured depths.
- (8) In the event the operator does not commence drilling the Well(s) on or before the date provided in the foregoing paragraph, the compulsory pooling provision of this order shall be of no effect, unless the operator obtains a written time extension from the Division Director pursuant to a written request stating its reasons for such extension and attaching satisfactory evidence.
- (9) In the event the operator does not commence completion operations within one year after commencement of drilling operations pursuant to this order, then the compulsory pooling provisions of this order shall be of no effect unless operator obtains a written time extension from the Division Director pursuant to a written request stating its reasons for such extension and attaching satisfactory evidence.
- (10) The operator shall provide a copy of any request for extension of time to drill or complete any well filed with the Director pursuant to this order to each pooled working interest owner who has elected to participate in the drilling of any well that is the subject of the request. Such copy shall be sent at the same time the request is sent to the Director.
- (11) Upon final plugging and abandonment of the Well(s) and any other well drilled on the Unit pursuant to Division Rule 19.15.13.9 NMAC, the pooled unit created

Case No. 16424 Order No. R-20306 Page 6 of 8

by this order shall terminate unless this order has been amended to authorize further operations.

- (12) Infill wells within the Unit shall be subject to Division Rule 19.15.13.9 NMAC and to the terms and conditions of this order.
- (13) After pooling, uncommitted working interest owners are referred to as pooled working interest owners. ("Pooled working interest owners" are owners of working interests in the Unit, including unleased mineral interests, who are not parties to an operating agreement governing the Unit.) After the effective date of this order, the operator shall furnish the Division and each known pooled working interest owner in the Unit separate itemized schedules of estimated costs of drilling, completing and equipping each of the Well(s) ("well costs").
- (14) Within 30 days from the date the schedule of estimated well costs for any well is furnished, any pooled working interest owner shall have the right to elect to pay its share of estimated well costs to the operator in lieu of paying its share of reasonable well costs out of production as hereinafter provided. Payment shall be rendered within 90 days after expiration of the 30-day election period and any such owner who pays its share of estimated well costs as provided above for any well shall remain liable for operating costs but shall not be liable for risk charges to the extent computed based on costs of such well. Pooled working interest owners who do not elect to pay their share of estimated well costs, or who do not render timely payment to the operator, as provided in this paragraph shall thereafter be referred to as "non-consenting working interest owners."
- (15) The operator shall furnish the Division and each known pooled working interest owner (including non-consenting working interest owners) an itemized schedule of actual well costs of each well within 180 days following completion of the proposed well. If no objection to the actual well costs for any well is received by the Division, and the Division has not objected, within 45 days following receipt of the schedule for such well, the actual well costs shall be deemed to be the reasonable well costs. If there is an objection to actual well costs within the 45-day period, the Division will determine reasonable well costs for such well after public notice and hearing.
- (16) Within 60 days following determination of reasonable well costs for any well, any pooled working interest owner who has paid its share of estimated costs of such well in advance as provided above shall pay to the operator its share of the amount that reasonable well costs exceed estimated well costs and shall receive from the operator the amount, if any, that the estimated well costs it has paid for such well exceed its share of reasonable well costs.
- (17) The operator is hereby authorized to withhold the following costs and charges from each non-consenting working interest owner's share of production from each well:

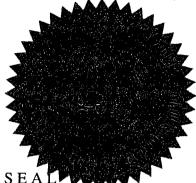
Case No. 16424 Order No. R-20306 Page 7 of 8

- (a) the proportionate share of reasonable well costs attributable to the non-consenting working interest owner; and
- (b) as a charge for the risk involved in drilling the well, 200% of the above costs.
- (18) During the cost recovery period, the operator shall furnish to the Division and to each known non-consenting pooled working interest owner, annually, and within 90 days after payout occurs, a schedule of all revenues attributable to each proposed well, and all charges for supervision and operating costs charged against such revenues. Operating costs shall include all reasonable costs actually incurred for the maintenance and operation of the well, except for "well costs" reported pursuant to prior ordering paragraphs, that are properly chargeable to the joint account pursuant to COPAS procedures. If no objection to the operating costs is received by the Division, and the Division has not objected, within 45 days following receipt of any schedule, the costs shall be deemed to be the reasonable operating costs. If there is an objection to the accuracy or reasonable operating costs reported within the 45-day period, the Division will determine reasonable operating costs after public notice and hearing.
- (19) The operator shall distribute the costs and charges withheld from production, proportionately, to the parties who advanced the well costs for such well.
- (20) Reasonable charges for supervision (combined fixed rates) are hereby fixed at \$7000 per month, per well, while drilling and \$700 per month, per well, while producing, provided that these rates shall be adjusted annually pursuant to the COPAS form titled "Accounting Procedure-Joint Operations." The operator is authorized to withhold from production from each well the proportionate share of both the supervision charges and the actual expenditures required for operating of such well, not more than what are reasonable, attributable to pooled working interest owners.
- (21) Except as provided in the foregoing paragraphs, all proceeds from production from the Well(s) that are not disbursed for any reason shall be held for the account of the person or persons entitled thereto pursuant to the Oil and Gas Proceeds Payment Act (NMSA 1978 Sections 70-10-1 through 70-10-6, as amended). If not sooner disbursed, such proceeds shall be turned over to the appropriate authority as and when required by the Uniform Unclaimed Property Act (NMSA 1978 Sections 7-8A-1 through 70-8A-31, as amended).
- (22) Any unleased mineral interest shall be considered a seven-eighths (7/8) working interest and a one-eighth (1/8) royalty interest for allocating costs and charges under this order. Any costs that are to be paid out of production shall be withheld only from the working interests' share of production, and no costs or charges shall be withheld from production attributable to royalty interests.
- (23) Should all the parties to this compulsory pooling order reach voluntary agreement after entry of this order, this order shall thereafter be of no further effect.

Case No. 16424 Order No. R-20306 Page 8 of 8

- (24) The operator of the wells and Unit shall notify the Division in writing of the subsequent voluntary agreement of any party subject to the compulsory pooling provisions of this order.
- (25) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO OIL CONSERVATION DIVISION

Director

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

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** 

ACKNOWLEDGMENTS

Action 51454

#### **ACKNOWLEDGMENTS**

Operator:	OGRID:		
MARATHON OIL PERMIAN LLC	372098		
990 Town & Country Blvd.	Action Number:		
Houston, TX 77024	51454		
	Action Type:		
	[C-104] Completion Packet (C-104C)		

#### **ACKNOWLEDGMENTS**

✓	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
V	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.

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

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 51454

#### **CONDITIONS**

Operator:	OGRID:
MARATHON OIL PERMIAN LLC	372098
990 Town & Country Blvd.	Action Number:
Houston, TX 77024	51454
	Action Type:
	[C-104] Completion Packet (C-104C)

#### CONDITIONS

Г	Created By	Condition	Condition Date
	plmartinez	File 3160-4 Completion Report and 3160-5 Completion Sundry within 10 days to NMOCD after BLM approval.	1/31/2022