

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

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

AMENDED REPORT

**I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT**

<sup>1</sup> Operator name and Address Marathon Oil Permian LLC 990 Town & Country Blvd. Houston, TX 77024		<sup>2</sup> OGRID Number 372098
		<sup>3</sup> Reason for Filing Code/ Effective Date NW / Effective 9/2/2022
<sup>4</sup> API Number 30 - 025-46128	<sup>5</sup> Pool Name Hardin Tank; Bone Spring	<sup>6</sup> Pool Code 96661
<sup>7</sup> Property Code 325751	<sup>8</sup> Property Name Mammoth 1 TB Federal Com	<sup>9</sup> Well Number 10H

**II. <sup>10</sup> Surface Location**

Ul or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
N	1	26S	34E		448	SOUTH	1569	WEST	LEA

**<sup>11</sup> 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
C	36	25S	34E		102	NORTH	2303	WEST	LEA

<sup>12</sup> Lse Code	<sup>13</sup> Producing Method Code	<sup>14</sup> Gas Connection Date	<sup>15</sup> C-129 Permit Number	<sup>16</sup> C-129 Effective Date	<sup>17</sup> C-129 Expiration Date
F	F				

**III. Oil and Gas Transporters**


<sup>18</sup> Transporter OGRID	<sup>19</sup> Transporter Name and Address	<sup>20</sup> O/G/W
371960	Lucid Energy Delaware, LLC 201 S Fourth Street P.O. Box 158, Artesia, NM 88210	G
307204	Oryx Midstream Services, LLC 4000 N Big Spring St. Suite 300, Midland, TX 79705	O
371643	Solaris Water Midstream, LLC 97 Tradewinds Blvd, Suite B, Midland, TX 79706	W

**IV. Well Completion Data**

<sup>21</sup> Spud Date	<sup>22</sup> Ready Date	<sup>23</sup> TD	<sup>24</sup> PBD	<sup>25</sup> Perforations	<sup>26</sup> DHC, MC
10/12/2019	8/29/2022	22712'	22690'	12498' - 22671'	
<sup>27</sup> Hole Size	<sup>28</sup> Casing & Tubing Size	<sup>29</sup> Depth Set	<sup>30</sup> Sacks Cement		
17-1/2"	13-3/8", 54.5#, J55, STC	1192'	1155		
9-7/8"	7-5/8", 29.7#, P110, BTC	11821'	1780		
6-3/4"	5-1/2", 23#, P110, TLW	22695'	2490		

**V. Well Test Data**

<sup>31</sup> Date New Oil	<sup>32</sup> Gas Delivery Date	<sup>33</sup> Test Date	<sup>34</sup> Test Length	<sup>35</sup> Tbg. Pressure	<sup>36</sup> Csg. Pressure
9/3/2022	9/2/2022	9/9/2022	24 hrs		4086
<sup>37</sup> Choke Size	<sup>38</sup> Oil	<sup>39</sup> Water	<sup>40</sup> Gas	<sup>41</sup> Test Method	
28/64	2578	5327	6740	Flowing	

<sup>42</sup> 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: 	OIL CONSERVATION DIVISION
	Approved by: <b>PATRICIA MARTINEZ</b>
	Title: <b>PETROLEUM SPECIALIST</b>
	Approval Date: <b>2/28/2023</b>
Printed name: Adrian Covarrubias	
Title: Regulatory Compliance Representative	
E-mail Address: acovarrubias@marathonoil.com	
Date: 9/20/2022	Phone: 713-296-3368

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

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

AMENDED REPORT  
**As-Drilled**

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

<sup>1</sup> API Number <b>30-025-46128</b>		<sup>2</sup> Pool Code <b>96661</b>		<sup>3</sup> Pool Name <b>HARDIN TANK;BONE SPRING</b>	
<sup>4</sup> Property Code <b>325751</b>		Property Name <b>MAMMOTH 1 TB FED COM</b>			<sup>6</sup> Well Number <b>10H</b>
<sup>7</sup> OGRID No. <b>372098</b>		<sup>8</sup> Operator Name <b>MARATHON OIL PERMIAN LLC.</b>			<sup>9</sup> Elevation <b>3281'</b>

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>N</b>	<b>1</b>	<b>26S</b>	<b>34E</b>		<b>448</b>	<b>SOUTH</b>	<b>1569</b>	<b>WEST</b>	<b>LEA</b>

<sup>11</sup> 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
<b>C</b>	<b>36</b>	<b>25S</b>	<b>34E</b>		<b>102</b>	<b>NORTH</b>	<b>2303</b>	<b>WEST</b>	<b>LEA</b>

<sup>12</sup> Dedicated Acres <b>320.0</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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.

**CORNER COORDINATES NAD 83, SPCS NM EAST**  
 A - X: 823039.79' / Y: 399183.78'  
 B - X: 823088.17' / Y: 393904.53'  
 C - X: 823132.38' / Y: 388627.40'  
 D - X: 821812.29' / Y: 388620.42'  
 E - X: 821762.65' / Y: 393895.29'  
 F - X: 821719.38' / Y: 399176.25'

**CORNER COORDINATES NAD 27, SPCS NM EAST**  
 A - X: 781852.75' / Y: 399126.00'  
 B - X: 781900.88' / Y: 393846.90'  
 C - X: 781944.85' / Y: 388569.90'  
 D - X: 780624.78' / Y: 388562.93'  
 E - X: 780575.38' / Y: 393837.67'  
 F - X: 780532.33' / Y: 399116.48'

**BOTTOM HOLE LOCATION**  
 102' FNL 2303' FWL SECTION 36  
 22,712' MEASURED DEPTH IN FEET  
**NAD 83, SPCS NM EAST**  
 X: 822702.92' / Y: 399079.85'  
 LAT: 32.09389146N / LON: 103.42475759W  
**NAD 27, SPCS NM EAST**  
 X: 781515.88' / Y: 393902.08'  
 LAT: 32.09376571N / LON: 103.42429245W

**LAST TAKE POINT**  
 143' FNL 2305' FWL, SECTION 36  
 22,671' MEASURED DEPTH IN FEET  
**NAD 83, SPCS NM EAST**  
 X: 822705.35' / Y: 399039.03'  
 LAT: 32.09377918N / LON: 103.42475086W  
**NAD 27, SPCS NM EAST**  
 X: 781518.00' / Y: 398981.25'  
 LAT: 32.09365343N / LON: 103.42428573W

**FIRST TAKE POINT**  
 342' FSL 1771' FWL, SECTION 1  
 12,498' MEASURED DEPTH IN FEET  
**NAD 83, SPCS NM EAST**  
 X: 822259.72' / Y: 388965.25'  
 LAT: 32.06610047N / LON: 103.42646317W  
**NAD 27, SPCS NM EAST**  
 X: 781072.21' / Y: 388790.75'  
 LAT: 32.06597459N / LON: 103.42599962W

**KICK OFF POINT**  
 104' FSL 1808' FWL, SECTION 1  
 10,722' MEASURED DEPTH IN FEET  
**NAD 83, SPCS NM EAST**  
 X: 822298.78' / Y: 388726.47'  
 LAT: 32.06544325N / LON: 103.42634355W  
**NAD 27, SPCS NM EAST**  
 X: 781111.26' / Y: 388668.98'  
 LAT: 32.06531738N / LON: 103.42588005W

**SURFACE HOLE LOCATION**  
 448' FSL 1569' FWL, SECTION 1  
**NAD 83, SPCS NM EAST**  
 X: 822056.74' / Y: 389069.75'  
 LAT: 32.06639240N / LON: 103.42711551W  
**NAD 27, SPCS NM EAST**  
 X: 780869.24' / Y: 389012.25'  
 LAT: 32.06626653N / LON: 103.42665192W

**<sup>17</sup> 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]* **9/19/2022**  
 Signature Date

**Adrian Covarrubias**  
 Printed Name

E-mail Address

**<sup>18</sup> 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.

SEPTEMBER 12, 2022  
 Date of Survey

*[Signature]*  
 Signature and Seal of Professional Surveyor

**LLOYD P. SHORT 21653**  
 Certificate Number

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99985482 Convergence Angle: 00°29'26.29720"



# Marathon Oil Permian LLC

Lea County, NM (NAD27 NME)

Mammoth 1 TB Fed Com

Mammoth 1 TB Fed Com 10H

OH / 69335

Design: Surveys (Cactus 169)

## Standard Survey Report

05 April, 2022





**Phoenix**  
Survey Report



<b>Company:</b>	Marathon Oil Permian LLC	<b>Local Co-ordinate Reference:</b>	Well Mammoth 1 TB Fed Com 10H
<b>Project:</b>	Lea County, NM (NAD27 NME)	<b>TVD Reference:</b>	RKB @ 3304.60usft (Cactus 169)
<b>Site:</b>	Mammoth 1 TB Fed Com	<b>MD Reference:</b>	RKB @ 3304.60usft (Cactus 169)
<b>Well:</b>	Mammoth 1 TB Fed Com 10H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH / 69335	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys (Cactus 169)	<b>Database:</b>	USA Compass

<b>Project</b>	Lea County, NM (NAD27 NME)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	New Mexico East 3001		

<b>Site</b>	Mammoth 1 TB Fed Com				
<b>Site Position:</b>		<b>Northing:</b>	389,012.25 usft	<b>Latitude:</b>	32° 3' 58.559508 N
<b>From:</b>	Map	<b>Easting:</b>	780,869.24 usft	<b>Longitude:</b>	103° 25' 35.946912 W
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	0.481 °

<b>Well</b>	Mammoth 1 TB Fed Com 10H					
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	389,012.25 usft	<b>Latitude:</b>	32° 3' 58.559508 N
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	780,869.24 usft	<b>Longitude:</b>	103° 25' 35.946912 W
<b>Position Uncertainty</b>		1.00 usft	<b>Wellhead Elevation:</b>	usft	<b>Ground Level:</b>	3,281.00 usft

<b>Wellbore</b>	OH / 69335				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IFR	3/12/2022	6.328	59.630	47,460.00000000

<b>Design</b>	Surveys (Cactus 169)				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	359.50	

<b>Survey Program</b>	<b>Date</b>	4/5/2022			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
42.70	1,157.60	Surface Surveys (OH / 69335)	MWD+HRGM	OWSG MWD + HRGM	
1,246.60	11,766.60	Pro MWD Surveys (OH / 69335)	MWD+HRGM	OWSG MWD + HRGM	
11,800.00	22,712.00	Phoenix MWD Surveys (OH / 69335)	MWD+HRGM	OWSG MWD + HRGM	

<b>Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42.70	0.17	204.76	42.70	-0.06	-0.03	-0.06	0.40	0.40	0.00	
137.40	0.08	173.12	137.40	-0.25	-0.08	-0.25	0.12	-0.10	-33.41	
221.40	0.15	144.27	221.40	-0.40	-0.01	-0.40	0.11	0.08	-34.35	
312.00	0.25	119.35	312.00	-0.59	0.24	-0.59	0.14	0.11	-27.51	
406.50	0.28	100.22	406.50	-0.73	0.64	-0.74	0.10	0.03	-20.24	
501.30	0.17	109.93	501.30	-0.82	1.00	-0.83	0.12	-0.12	10.24	
595.40	0.09	145.36	595.40	-0.93	1.18	-0.94	0.12	-0.09	37.65	
689.60	0.19	155.22	689.60	-1.13	1.28	-1.14	0.11	0.11	10.47	



**Phoenix**  
Survey Report



<b>Company:</b>	Marathon Oil Permian LLC	<b>Local Co-ordinate Reference:</b>	Well Mammoth 1 TB Fed Com 10H
<b>Project:</b>	Lea County, NM (NAD27 NME)	<b>TVD Reference:</b>	RKB @ 3304.60usft (Cactus 169)
<b>Site:</b>	Mammoth 1 TB Fed Com	<b>MD Reference:</b>	RKB @ 3304.60usft (Cactus 169)
<b>Well:</b>	Mammoth 1 TB Fed Com 10H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH / 69335	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys (Cactus 169)	<b>Database:</b>	USA Compass

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
783.80	0.14	124.38	783.80	-1.34	1.44	-1.35	0.11	-0.05	-32.74	
877.90	0.23	129.91	877.90	-1.53	1.68	-1.54	0.10	0.10	5.88	
972.20	0.36	137.29	972.19	-1.87	2.03	-1.88	0.14	0.14	7.83	
1,066.40	0.56	118.47	1,066.39	-2.30	2.63	-2.33	0.26	0.21	-19.98	
1,157.60	0.37	151.10	1,157.59	-2.77	3.17	-2.80	0.35	-0.21	35.78	
1,246.60	0.48	138.15	1,246.59	-3.30	3.56	-3.33	0.16	0.12	-14.55	
1,335.60	0.48	132.17	1,335.58	-3.83	4.08	-3.87	0.06	0.00	-6.72	
1,425.60	0.26	107.74	1,425.58	-4.15	4.56	-4.18	0.30	-0.24	-27.14	
1,515.60	0.31	80.84	1,515.58	-4.17	4.99	-4.21	0.16	0.06	-29.89	
1,604.60	0.31	61.77	1,604.58	-4.02	5.44	-4.06	0.12	0.00	-21.43	
1,694.60	0.31	18.18	1,694.58	-3.67	5.73	-3.72	0.26	0.00	-48.43	
1,784.60	0.48	26.26	1,784.58	-3.10	5.97	-3.15	0.20	0.19	8.98	
1,874.60	0.48	16.33	1,874.57	-2.40	6.25	-2.46	0.09	0.00	-11.03	
1,963.60	0.48	35.67	1,963.57	-1.74	6.57	-1.80	0.18	0.00	21.73	
2,142.60	1.41	117.41	2,142.55	-2.14	8.96	-2.22	0.79	0.52	45.66	
2,231.60	1.85	120.13	2,231.51	-3.37	11.18	-3.47	0.50	0.49	3.06	
2,320.60	2.64	124.70	2,320.44	-5.26	14.10	-5.38	0.91	0.89	5.13	
2,410.60	2.95	130.50	2,410.34	-7.94	17.57	-8.10	0.47	0.34	6.44	
2,499.60	3.56	137.80	2,499.19	-11.48	21.17	-11.66	0.83	0.69	8.20	
2,589.60	4.18	145.27	2,588.99	-16.24	24.91	-16.46	0.89	0.69	8.30	
2,677.60	4.75	147.64	2,676.72	-21.96	28.69	-22.21	0.68	0.65	2.69	
2,767.60	4.70	145.18	2,766.41	-28.13	32.79	-28.42	0.23	-0.06	-2.73	
2,857.60	4.84	144.39	2,856.10	-34.24	37.10	-34.57	0.17	0.16	-0.88	
2,946.60	4.75	142.19	2,944.79	-40.21	41.55	-40.57	0.23	-0.10	-2.47	
3,035.60	4.62	142.54	3,033.49	-45.96	45.99	-46.36	0.15	-0.15	0.39	
3,124.60	4.48	140.79	3,122.21	-51.50	50.37	-51.94	0.22	-0.16	-1.97	
3,213.60	4.62	148.70	3,210.93	-57.26	54.43	-57.73	0.72	0.16	8.89	
3,303.60	4.62	149.14	3,300.64	-63.47	58.17	-63.97	0.04	0.00	0.49	
3,392.60	4.66	140.43	3,389.35	-69.33	62.31	-69.87	0.79	0.04	-9.79	
3,481.60	4.18	144.83	3,478.09	-74.77	66.48	-75.35	0.66	-0.54	4.94	
3,570.60	4.00	147.03	3,566.86	-80.03	70.04	-80.63	0.27	-0.20	2.47	
3,660.60	3.91	142.98	3,656.65	-85.11	73.59	-85.75	0.33	-0.10	-4.50	
3,749.60	3.69	142.98	3,745.45	-89.82	77.15	-90.49	0.25	-0.25	0.00	
3,838.60	3.60	143.25	3,834.27	-94.34	80.54	-95.04	0.10	-0.10	0.30	
3,928.60	3.38	144.21	3,924.10	-98.76	83.78	-99.49	0.25	-0.24	1.07	
4,017.60	2.95	131.38	4,012.97	-102.40	87.04	-103.16	0.93	-0.48	-14.42	
4,107.60	3.16	129.62	4,102.84	-105.51	90.69	-106.30	0.26	0.23	-1.96	
4,196.60	3.78	150.28	4,191.68	-109.63	94.03	-110.44	1.56	0.70	23.21	
4,285.60	3.82	156.96	4,280.48	-114.90	96.64	-115.74	0.50	0.04	7.51	
4,375.60	3.60	153.53	4,370.30	-120.19	99.08	-121.05	0.35	-0.24	-3.81	
4,464.60	3.12	150.28	4,459.14	-124.80	101.52	-125.68	0.58	-0.54	-3.65	
4,553.60	3.43	136.30	4,548.00	-128.82	104.56	-129.73	0.96	0.35	-15.71	
4,642.60	4.53	122.68	4,636.78	-132.65	109.36	-133.60	1.62	1.24	-15.30	



**Phoenix**  
Survey Report



<b>Company:</b>	Marathon Oil Permian LLC	<b>Local Co-ordinate Reference:</b>	Well Mammoth 1 TB Fed Com 10H
<b>Project:</b>	Lea County, NM (NAD27 NME)	<b>TVD Reference:</b>	RKB @ 3304.60usft (Cactus 169)
<b>Site:</b>	Mammoth 1 TB Fed Com	<b>MD Reference:</b>	RKB @ 3304.60usft (Cactus 169)
<b>Well:</b>	Mammoth 1 TB Fed Com 10H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH / 69335	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys (Cactus 169)	<b>Database:</b>	USA Compass

**Survey**

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,732.60	5.23	127.51	4,726.46	-137.06	115.61	-138.07	0.90	0.78	5.37
4,821.60	5.58	143.16	4,815.07	-143.00	121.42	-144.05	1.70	0.39	17.58
4,910.60	6.51	141.93	4,903.57	-150.43	127.13	-151.54	1.05	1.04	-1.38
5,000.60	6.59	139.56	4,992.98	-158.38	133.62	-159.54	0.31	0.09	-2.63
5,089.60	5.93	144.74	5,081.45	-166.02	139.59	-167.23	0.98	-0.74	5.82
5,179.60	4.79	155.55	5,171.06	-173.24	143.83	-174.49	1.69	-1.27	12.01
5,268.60	4.40	159.68	5,259.77	-179.82	146.55	-181.09	0.57	-0.44	4.64
5,357.60	3.96	161.62	5,348.54	-185.94	148.71	-187.23	0.52	-0.49	2.18
5,446.60	3.74	161.09	5,437.34	-191.60	150.62	-192.91	0.25	-0.25	-0.60
5,536.60	3.74	160.56	5,527.15	-197.15	152.54	-198.47	0.04	0.00	-0.59
5,625.60	3.60	159.42	5,615.96	-202.50	154.49	-203.84	0.18	-0.16	-1.28
5,715.60	3.52	157.31	5,705.79	-207.69	156.55	-209.05	0.17	-0.09	-2.34
5,804.60	3.69	147.64	5,794.61	-212.63	159.14	-214.02	0.71	0.19	-10.87
5,893.60	4.62	138.33	5,883.38	-217.73	163.05	-219.15	1.29	1.04	-10.46
5,983.60	4.40	138.41	5,973.10	-223.02	167.76	-224.48	0.24	-0.24	0.09
6,072.60	4.40	138.24	6,061.84	-228.12	172.30	-229.62	0.01	0.00	-0.19
6,161.60	4.26	136.22	6,150.59	-233.05	176.86	-234.59	0.23	-0.16	-2.27
6,251.60	3.96	135.25	6,240.35	-237.67	181.36	-239.25	0.34	-0.33	-1.08
6,340.60	3.91	137.97	6,329.14	-242.11	185.55	-243.72	0.22	-0.06	3.06
6,429.60	3.91	138.06	6,417.94	-246.62	189.61	-248.27	0.01	0.00	0.10
6,519.60	3.74	137.80	6,507.74	-251.08	193.63	-252.76	0.19	-0.19	-0.29
6,608.60	4.04	146.85	6,596.53	-255.85	197.30	-257.57	0.77	0.34	10.17
6,697.60	4.22	151.77	6,685.30	-261.36	200.56	-263.10	0.45	0.20	5.53
6,786.60	4.22	150.98	6,774.06	-267.11	203.70	-268.88	0.07	0.00	-0.89
6,876.60	4.22	151.68	6,863.82	-272.92	206.88	-274.72	0.06	0.00	0.78
6,965.60	4.18	152.48	6,952.58	-278.68	209.93	-280.50	0.08	-0.04	0.90
7,055.60	4.09	152.48	7,042.34	-284.44	212.93	-286.29	0.10	-0.10	0.00
7,144.60	3.87	152.04	7,131.13	-289.91	215.80	-291.78	0.25	-0.25	-0.49
7,233.60	3.82	153.00	7,219.93	-295.20	218.56	-297.10	0.09	-0.06	1.08
7,322.60	3.65	152.83	7,308.74	-300.36	221.20	-302.28	0.19	-0.19	-0.19
7,412.60	3.52	155.20	7,398.56	-305.42	223.66	-307.36	0.22	-0.14	2.63
7,501.60	3.38	154.41	7,487.40	-310.27	225.94	-312.23	0.17	-0.16	-0.89
7,591.60	3.03	159.95	7,577.26	-314.89	227.90	-316.87	0.52	-0.39	6.16
7,680.60	2.86	169.35	7,666.14	-319.28	229.12	-321.27	0.57	-0.19	10.56
7,769.60	1.80	174.10	7,755.07	-322.86	229.67	-324.85	1.21	-1.19	5.34
7,858.60	1.05	175.06	7,844.04	-325.06	229.89	-327.05	0.84	-0.84	1.08
7,948.60	1.05	174.71	7,934.03	-326.70	230.04	-328.70	0.01	0.00	-0.39
8,037.60	0.97	186.58	8,023.01	-328.26	230.02	-330.26	0.25	-0.09	13.34
8,126.60	0.92	187.02	8,112.00	-329.72	229.85	-331.71	0.06	-0.06	0.49
8,216.60	0.92	180.25	8,201.99	-331.16	229.76	-333.15	0.12	0.00	-7.52
8,305.60	0.92	179.37	8,290.98	-332.59	229.76	-334.58	0.02	0.00	-0.99
8,394.60	0.84	184.38	8,379.97	-333.95	229.72	-335.95	0.12	-0.09	5.63
8,483.60	0.79	178.84	8,468.96	-335.22	229.68	-337.21	0.10	-0.06	-6.22





**Phoenix**  
Survey Report



<b>Company:</b>	Marathon Oil Permian LLC	<b>Local Co-ordinate Reference:</b>	Well Mammoth 1 TB Fed Com 10H
<b>Project:</b>	Lea County, NM (NAD27 NME)	<b>TVD Reference:</b>	RKB @ 3304.60usft (Cactus 169)
<b>Site:</b>	Mammoth 1 TB Fed Com	<b>MD Reference:</b>	RKB @ 3304.60usft (Cactus 169)
<b>Well:</b>	Mammoth 1 TB Fed Com 10H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH / 69335	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys (Cactus 169)	<b>Database:</b>	USA Compass

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,572.60	0.75	168.91	8,557.95	-336.40	229.81	-338.40	0.16	-0.04	-11.16	
8,662.60	0.66	155.29	8,647.94	-337.45	230.14	-339.45	0.21	-0.10	-15.13	
8,751.60	0.66	141.40	8,736.94	-338.32	230.67	-340.32	0.18	0.00	-15.61	
8,840.60	0.53	137.80	8,825.93	-339.02	231.27	-341.03	0.15	-0.15	-4.04	
8,930.60	0.53	123.03	8,915.93	-339.56	231.90	-341.57	0.15	0.00	-16.41	
9,019.60	0.66	115.21	9,004.92	-340.00	232.71	-342.02	0.17	0.15	-8.79	
9,108.60	0.62	116.26	9,093.92	-340.43	233.60	-342.46	0.05	-0.04	1.18	
9,197.60	0.66	113.89	9,182.91	-340.85	234.50	-342.89	0.05	0.04	-2.66	
9,287.60	0.62	116.18	9,272.91	-341.28	235.41	-343.32	0.05	-0.04	2.54	
9,376.60	0.57	108.27	9,361.90	-341.63	236.27	-343.68	0.11	-0.06	-8.89	
9,466.60	0.62	90.69	9,451.90	-341.78	237.18	-343.83	0.21	0.06	-19.53	
9,556.60	0.57	88.23	9,541.89	-341.77	238.11	-343.83	0.06	-0.06	-2.73	
9,645.60	0.44	82.69	9,630.89	-341.71	238.89	-343.78	0.16	-0.15	-6.22	
9,734.60	0.57	80.76	9,719.88	-341.60	239.67	-343.67	0.15	0.15	-2.17	
9,823.60	0.57	89.37	9,808.88	-341.52	240.55	-343.61	0.10	0.00	9.67	
9,912.60	0.57	98.25	9,897.88	-341.58	241.43	-343.67	0.10	0.00	9.98	
10,002.60	0.44	89.11	9,987.87	-341.64	242.22	-343.74	0.17	-0.14	-10.16	
10,091.60	0.26	82.87	10,076.87	-341.61	242.76	-343.71	0.21	-0.20	-7.01	
10,181.60	0.13	98.07	10,166.87	-341.60	243.06	-343.70	0.15	-0.14	16.89	
10,275.60	0.09	175.50	10,260.87	-341.69	243.18	-343.79	0.15	-0.04	82.37	
10,364.60	0.18	228.94	10,349.87	-341.85	243.08	-343.95	0.16	0.10	60.04	
10,453.60	0.31	215.23	10,438.87	-342.14	242.83	-344.24	0.16	0.15	-15.40	
10,542.60	0.48	211.19	10,527.87	-342.65	242.50	-344.75	0.19	0.19	-4.54	
10,632.60	0.26	220.15	10,617.86	-343.13	242.17	-345.23	0.25	-0.24	9.96	
10,721.60	0.00	126.28	10,706.86	-343.28	242.04	-345.38	0.29	-0.29	0.00	
10,810.60	0.29	296.53	10,795.86	-343.18	241.84	-345.28	0.33	0.33	0.00	
10,900.60	0.35	292.31	10,885.86	-342.98	241.38	-345.07	0.07	0.07	-4.69	
10,989.60	0.62	288.88	10,974.86	-342.72	240.68	-344.81	0.30	0.30	-3.85	
11,078.60	0.66	297.93	11,063.85	-342.32	239.77	-344.40	0.12	0.04	10.17	
11,168.60	0.57	306.02	11,153.85	-341.82	238.95	-343.89	0.14	-0.10	8.99	
11,257.60	0.70	317.45	11,242.84	-341.16	238.22	-343.22	0.20	0.15	12.84	
11,347.60	1.01	314.81	11,332.83	-340.19	237.29	-342.25	0.35	0.34	-2.93	
11,436.60	1.19	301.71	11,421.82	-339.15	235.94	-341.20	0.35	0.20	-14.72	
11,525.60	1.19	307.08	11,510.80	-338.11	234.42	-340.14	0.13	0.00	6.03	
11,615.60	1.01	295.21	11,600.78	-337.21	232.96	-339.23	0.32	-0.20	-13.19	
11,704.60	0.97	284.31	11,689.77	-336.69	231.52	-338.70	0.22	-0.04	-12.25	
11,766.60	0.88	296.00	11,751.76	-336.35	230.58	-338.35	0.34	-0.15	18.85	
<b>Tie In</b>										
11,846.00	0.76	329.33	11,831.15	-335.63	229.76	-337.62	0.61	-0.15	41.98	
<b>First Phoenix MWD Survey</b>										
11,914.00	2.64	330.49	11,899.12	-333.88	228.76	-335.86	2.77	2.76	1.71	
12,009.00	9.09	345.13	11,993.58	-324.71	225.76	-326.67	6.92	6.79	15.41	
12,104.00	10.36	347.85	12,087.21	-309.11	222.03	-311.03	1.42	1.34	2.86	
12,199.00	18.34	349.42	12,179.17	-286.03	217.48	-287.91	8.41	8.40	1.65	



**Phoenix**  
Survey Report



<b>Company:</b>	Marathon Oil Permian LLC	<b>Local Co-ordinate Reference:</b>	Well Mammoth 1 TB Fed Com 10H
<b>Project:</b>	Lea County, NM (NAD27 NME)	<b>TVD Reference:</b>	RKB @ 3304.60usft (Cactus 169)
<b>Site:</b>	Mammoth 1 TB Fed Com	<b>MD Reference:</b>	RKB @ 3304.60usft (Cactus 169)
<b>Well:</b>	Mammoth 1 TB Fed Com 10H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH / 69335	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys (Cactus 169)	<b>Database:</b>	USA Compass

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
12,293.00	30.76	350.11	12,264.51	-247.66	210.61	-249.49	13.22	13.21	0.73	
12,387.00	42.20	356.56	12,339.99	-192.26	204.57	-194.04	12.82	12.17	6.86	
12,481.00	59.13	0.27	12,399.37	-119.86	202.85	-121.63	18.26	18.01	3.95	
12,576.00	69.45	0.42	12,440.53	-34.38	203.37	-36.16	10.86	10.86	0.16	
12,670.00	75.59	357.81	12,468.75	55.21	201.95	53.45	7.05	6.53	-2.78	
12,764.00	88.48	354.40	12,481.75	147.88	195.60	146.16	14.17	13.71	-3.63	
12,846.00	94.23	356.84	12,479.81	229.57	189.34	227.91	7.62	7.01	2.98	
12,941.00	94.42	359.07	12,472.65	324.24	185.96	322.60	2.35	0.20	2.35	
13,035.00	92.35	2.31	12,467.10	418.05	187.09	416.40	4.08	-2.20	3.45	
13,130.00	90.96	5.43	12,464.35	512.78	193.50	511.07	3.59	-1.46	3.28	
13,224.00	90.96	8.36	12,462.78	606.08	204.78	604.27	3.12	0.00	3.12	
13,319.00	89.31	11.08	12,462.55	699.70	220.82	697.75	3.35	-1.74	2.86	
13,413.00	89.13	12.05	12,463.83	791.78	239.66	789.66	1.05	-0.19	1.03	
13,507.00	88.81	13.24	12,465.52	883.49	260.24	881.18	1.31	-0.34	1.27	
13,601.00	89.65	13.51	12,466.79	974.93	281.98	972.43	0.94	0.89	0.29	
13,696.00	90.12	17.28	12,466.98	1,066.50	307.19	1,063.78	4.00	0.49	3.97	
13,790.00	89.30	19.38	12,467.45	1,155.72	336.75	1,152.74	2.40	-0.87	2.23	
13,884.00	88.88	19.38	12,468.95	1,244.39	367.94	1,241.13	0.45	-0.45	0.00	
13,978.00	88.34	19.55	12,471.23	1,332.99	399.26	1,329.45	0.60	-0.57	0.18	
14,071.00	87.34	18.78	12,474.73	1,420.77	429.76	1,416.96	1.36	-1.08	-0.83	
14,165.00	87.31	17.22	12,479.12	1,510.07	458.78	1,506.01	1.66	-0.03	-1.66	
14,260.00	87.56	15.54	12,483.37	1,601.12	485.54	1,596.82	1.79	0.26	-1.77	
14,354.00	87.71	15.27	12,487.25	1,691.66	510.49	1,687.14	0.33	0.16	-0.29	
14,448.00	88.56	15.85	12,490.31	1,782.17	535.69	1,777.43	1.09	0.90	0.62	
14,543.00	89.44	15.99	12,491.97	1,873.51	561.75	1,868.54	0.94	0.93	0.15	
14,636.00	90.56	16.19	12,491.97	1,962.87	587.52	1,957.66	1.22	1.20	0.22	
14,731.00	90.27	16.41	12,491.28	2,054.04	614.18	2,048.61	0.38	-0.31	0.23	
14,825.00	89.45	16.21	12,491.51	2,144.26	640.58	2,138.59	0.90	-0.87	-0.21	
14,920.00	88.33	14.94	12,493.35	2,235.75	666.08	2,229.85	1.78	-1.18	-1.34	
15,017.00	89.39	13.53	12,495.28	2,329.75	689.93	2,323.64	1.82	1.09	-1.45	
15,111.00	89.36	12.11	12,496.30	2,421.40	710.79	2,415.11	1.51	-0.03	-1.51	
15,204.00	89.88	10.84	12,496.92	2,512.54	729.29	2,506.08	1.48	0.56	-1.37	
15,299.00	89.16	9.12	12,497.72	2,606.09	745.75	2,599.49	1.96	-0.76	-1.81	
15,393.00	86.25	3.79	12,501.48	2,699.38	756.31	2,692.67	6.46	-3.10	-5.67	
15,488.00	88.16	1.75	12,506.12	2,794.14	760.89	2,787.40	2.94	2.01	-2.15	
15,582.00	88.81	0.26	12,508.60	2,888.09	762.54	2,881.33	1.73	0.69	-1.59	
15,677.00	87.79	358.40	12,511.42	2,983.04	761.43	2,976.28	2.23	-1.07	-1.96	
15,771.00	88.94	356.37	12,514.10	3,076.90	757.14	3,070.17	2.48	1.22	-2.16	
15,865.00	91.13	355.82	12,514.05	3,170.67	750.74	3,164.00	2.40	2.33	-0.59	
15,960.00	92.50	357.17	12,511.04	3,265.44	744.94	3,258.82	2.02	1.44	1.42	
16,055.00	91.26	356.40	12,507.92	3,360.24	739.61	3,353.66	1.54	-1.31	-0.81	
16,149.00	89.71	355.25	12,507.12	3,453.98	732.77	3,447.46	2.05	-1.65	-1.22	
16,243.00	92.78	356.62	12,505.08	3,547.71	726.11	3,541.24	3.58	3.27	1.46	





**Phoenix**  
Survey Report



<b>Company:</b>	Marathon Oil Permian LLC	<b>Local Co-ordinate Reference:</b>	Well Mammoth 1 TB Fed Com 10H
<b>Project:</b>	Lea County, NM (NAD27 NME)	<b>TVD Reference:</b>	RKB @ 3304.60usft (Cactus 169)
<b>Site:</b>	Mammoth 1 TB Fed Com	<b>MD Reference:</b>	RKB @ 3304.60usft (Cactus 169)
<b>Well:</b>	Mammoth 1 TB Fed Com 10H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH / 69335	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys (Cactus 169)	<b>Database:</b>	USA Compass

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
16,339.00	93.17	356.19	12,500.10	3,643.39	720.09	3,636.97	0.60	0.41	-0.45	
16,433.00	91.04	358.57	12,496.65	3,737.22	715.80	3,730.83	3.40	-2.27	2.53	
16,527.00	90.32	358.65	12,495.53	3,831.18	713.52	3,824.81	0.77	-0.77	0.09	
16,622.00	90.72	358.69	12,494.67	3,926.15	711.32	3,919.80	0.42	0.42	0.04	
16,716.00	91.79	358.27	12,492.61	4,020.10	708.82	4,013.76	1.22	1.14	-0.45	
16,809.00	90.72	358.09	12,490.57	4,113.03	705.87	4,106.71	1.17	-1.15	-0.19	
16,904.00	91.07	358.07	12,489.09	4,207.96	702.69	4,201.67	0.37	0.37	-0.02	
16,998.00	91.87	358.40	12,486.68	4,301.88	699.79	4,295.61	0.92	0.85	0.35	
17,093.00	89.67	359.91	12,485.40	4,396.86	698.39	4,390.60	2.81	-2.32	1.59	
17,187.00	90.44	0.12	12,485.31	4,490.86	698.42	4,484.59	0.85	0.82	0.22	
17,300.00	91.99	0.25	12,482.91	4,603.83	698.78	4,597.55	1.38	1.37	0.12	
17,373.00	93.38	0.71	12,479.50	4,676.74	699.39	4,670.46	2.01	1.90	0.63	
17,468.00	92.27	0.78	12,474.81	4,771.62	700.63	4,765.32	1.17	-1.17	0.07	
17,562.00	90.08	1.13	12,472.89	4,865.58	702.19	4,859.27	2.36	-2.33	0.37	
17,656.00	91.64	1.42	12,471.48	4,959.54	704.29	4,953.21	1.69	1.66	0.31	
17,750.00	91.76	1.67	12,468.69	5,053.47	706.82	5,047.11	0.29	0.13	0.27	
17,845.00	92.43	1.28	12,465.21	5,148.37	709.26	5,141.98	0.82	0.71	-0.41	
17,940.00	92.92	1.46	12,460.78	5,243.24	711.53	5,236.83	0.55	0.52	0.19	
18,034.00	90.87	0.87	12,457.67	5,337.16	713.44	5,330.73	2.27	-2.18	-0.63	
18,128.00	88.14	358.62	12,458.48	5,431.14	713.02	5,424.71	3.76	-2.90	-2.39	
18,224.00	88.62	358.33	12,461.20	5,527.07	710.47	5,520.66	0.58	0.50	-0.30	
18,319.00	90.99	358.74	12,461.52	5,622.03	708.04	5,615.64	2.53	2.49	0.43	
18,413.00	92.53	358.68	12,458.63	5,715.96	705.93	5,709.58	1.64	1.64	-0.06	
18,508.00	93.12	359.46	12,453.95	5,810.83	704.39	5,804.46	1.03	0.62	0.82	
18,602.00	94.83	0.03	12,447.44	5,904.60	703.97	5,898.23	1.92	1.82	0.61	
18,696.00	94.11	0.13	12,440.11	5,998.31	704.10	5,991.94	0.77	-0.77	0.11	
18,791.00	90.98	359.52	12,435.89	6,093.21	703.81	6,086.83	3.36	-3.29	-0.64	
18,886.00	91.52	359.29	12,433.82	6,188.18	702.82	6,181.81	0.62	0.57	-0.24	
18,980.00	90.29	358.66	12,432.33	6,282.15	701.14	6,275.79	1.47	-1.31	-0.67	
19,075.00	90.59	358.60	12,431.61	6,377.12	698.87	6,370.78	0.32	0.32	-0.06	
19,170.00	92.29	359.21	12,429.22	6,472.07	697.05	6,465.74	1.90	1.79	0.64	
19,264.00	93.88	359.65	12,424.16	6,565.93	696.12	6,559.60	1.75	1.69	0.47	
19,359.00	92.90	359.96	12,418.54	6,660.76	695.80	6,654.43	1.08	-1.03	0.33	
19,453.00	92.58	0.85	12,414.05	6,754.65	696.46	6,748.31	1.01	-0.34	0.95	
19,547.00	91.83	0.37	12,410.43	6,848.57	697.46	6,842.22	0.95	-0.80	-0.51	
19,642.00	89.92	359.29	12,408.98	6,943.55	697.18	6,937.21	2.31	-2.01	-1.14	
19,737.00	88.93	358.98	12,409.93	7,038.54	695.75	7,032.20	1.09	-1.04	-0.33	
19,831.00	86.68	357.81	12,413.53	7,132.42	693.12	7,126.10	2.70	-2.39	-1.24	
19,926.00	87.30	357.34	12,418.52	7,227.21	689.10	7,220.92	0.82	0.65	-0.49	
20,020.00	88.34	356.87	12,422.10	7,321.02	684.36	7,314.77	1.21	1.11	-0.50	
20,115.00	89.62	357.46	12,423.79	7,415.88	679.66	7,409.67	1.48	1.35	0.62	
20,209.00	90.15	357.21	12,423.98	7,509.78	675.29	7,503.60	0.62	0.56	-0.27	
20,304.00	90.61	357.01	12,423.35	7,604.66	670.50	7,598.52	0.53	0.48	-0.21	
20,398.00	92.16	357.77	12,421.08	7,698.53	666.22	7,692.42	1.84	1.65	0.81	



## Phoenix Survey Report



<b>Company:</b>	Marathon Oil Permian LLC	<b>Local Co-ordinate Reference:</b>	Well Mammoth 1 TB Fed Com 10H
<b>Project:</b>	Lea County, NM (NAD27 NME)	<b>TVD Reference:</b>	RKB @ 3304.60usft (Cactus 169)
<b>Site:</b>	Mammoth 1 TB Fed Com	<b>MD Reference:</b>	RKB @ 3304.60usft (Cactus 169)
<b>Well:</b>	Mammoth 1 TB Fed Com 10H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH / 69335	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys (Cactus 169)	<b>Database:</b>	USA Compass

### Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
20,492.00	92.80	358.62	12,417.01	7,792.39	663.26	7,786.31	1.13	0.68	0.90	
20,586.00	92.95	358.86	12,412.29	7,886.25	661.20	7,880.18	0.30	0.16	0.26	
20,681.00	91.83	0.25	12,408.33	7,981.16	660.46	7,975.10	1.88	-1.18	1.46	
20,776.00	91.44	1.52	12,405.62	8,076.11	661.93	8,070.03	1.40	-0.41	1.34	
20,871.00	90.58	3.93	12,403.95	8,170.98	666.44	8,164.85	2.69	-0.91	2.54	
20,965.00	90.76	3.83	12,402.85	8,264.76	672.80	8,258.57	0.22	0.19	-0.11	
21,054.00	91.39	3.45	12,401.18	8,353.56	678.45	8,347.32	0.83	0.71	-0.43	
21,149.00	90.84	0.60	12,399.33	8,448.48	681.81	8,442.20	3.05	-0.58	-3.00	
21,243.00	90.58	358.72	12,398.16	8,542.46	681.25	8,536.19	2.02	-0.28	-2.00	
21,338.00	90.99	359.50	12,396.86	8,637.44	679.78	8,631.18	0.93	0.43	0.82	
21,433.00	91.55	359.72	12,394.76	8,732.42	679.13	8,726.16	0.63	0.59	0.23	
21,527.00	92.67	0.62	12,391.30	8,826.35	679.41	8,820.08	1.53	1.19	0.96	
21,622.00	90.84	1.19	12,388.39	8,921.29	680.91	8,915.01	2.02	-1.93	0.60	
21,715.00	88.82	358.52	12,388.66	9,014.27	680.67	9,007.99	3.60	-2.17	-2.87	
21,811.00	90.07	358.55	12,389.59	9,110.24	678.22	9,103.97	1.30	1.30	0.03	
21,906.00	91.15	359.30	12,388.58	9,205.21	676.44	9,198.96	1.38	1.14	0.79	
22,002.00	91.44	359.41	12,386.41	9,301.18	675.36	9,294.93	0.32	0.30	0.11	
22,096.00	92.33	0.17	12,383.32	9,395.13	675.01	9,388.88	1.24	0.95	0.81	
22,191.00	90.10	358.26	12,381.30	9,490.09	673.71	9,483.85	3.09	-2.35	-2.01	
22,285.00	90.41	357.36	12,380.89	9,584.02	670.12	9,577.80	1.01	0.33	-0.96	
22,379.00	90.73	356.83	12,379.95	9,677.89	665.35	9,671.72	0.66	0.34	-0.56	
22,475.00	91.66	356.63	12,377.95	9,773.71	659.88	9,767.58	0.99	0.97	-0.21	
22,569.00	92.47	356.77	12,374.56	9,867.49	654.47	9,861.41	0.87	0.86	0.15	
22,640.00	92.70	356.64	12,371.36	9,938.31	650.39	9,932.25	0.37	0.32	-0.18	
<b>Final Phoenix MWD Survey</b>										
22,712.00	92.70	356.64	12,367.97	10,010.10	646.18	10,004.08	0.00	0.00	0.00	
<b>Projection to TD</b>										

### Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,766.60	11,751.76	-336.35	230.58	Tie In
11,846.00	11,831.15	-335.63	229.76	First Phoenix MWD Survey
22,640.00	12,371.36	9,938.31	650.39	Final Phoenix MWD Survey
22,712.00	12,367.97	10,010.10	646.18	Projection to TD

Office
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District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

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

WELL API NO. 30-025-46128
5. Indicate Type of Lease STATE [ ] FEE [ ]
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Mammoth 1 TB Fed Com
8. Well Number 10H
9. OGRID Number 372098
10. Pool name or Wildcat Hardin Tank; Bone Spring
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3281' GR

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)
1. Type of Well: Oil Well [x] Gas Well [ ] Other [ ]
2. Name of Operator Marathon Oil Permian LLC
3. Address of Operator 990 Town & Country Blvd. Houston, TX 77024
4. Well Location Unit Letter N : 448 feet from the South line and 1569 feet from the West line
Section 1 Township 26S Range 34E NMPM County Lea

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

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

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

- 7/5/2022 - Started frac prep operations
7/8/2022 - MIRU flowback equipment
7/10/2022 - Pressure test production casing to 13000 psi for 30 min, held, test good.
7/26/2022 - Start frac stages 1 thru 41 with 2 shots per foot for a total of 984 shots, 0.41" in size using 25,429,397 lbs of proppant, 410 gallons of 15% HCl Acid, and 617,925 bbls of brackish water. Total interval from 12,498' to 22,671'.
8/9/2022 - Finished frac last stage. RD of frac and support equipment
8/28/2022 - Well ready to produce. Turn well over to production team.
9/2/2022 - Opened well and begin flowback operations.

Marathon Oil Permian LLC request tubing exception for this well.

Spud Date: 10/12/2019

Rig Release Date: 4/4/2022

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

SIGNATURE [Signature] TITLE Regulatory Compliance Representative DATE 9/20/2022

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

For State Use Only

APPROVED BY: TITLE DATE

Conditions of Approval (if any):

Submit To Appropriate District Office Two Copies 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 and Natural Resources  Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	Form C-105 Revised April 3, 2017  1. WELL API NO. 30-025-46128  2. Type of Lease <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/> FED/INDIAN  3. State Oil & Gas Lease No.
--	--	--

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

4. Reason for filing: <input checked="" type="checkbox"/> <b>COMPLETION REPORT</b> (Fill in boxes #1 through #31 for State and Fee wells only)  <input type="checkbox"/> <b>C-144 CLOSURE ATTACHMENT</b> (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)	5. Lease Name or Unit Agreement Name Mammoth 1 TB Federal Com  6. Well Number:  10H
---	--

7. Type of Completion:  
 NEW WELL  WORKOVER  DEEPENING  PLUGBACK  DIFFERENT RESERVOIR  OTHER

8. Name of Operator Marathon Oil Permian LLC	9. OGRID 372098
---	--------------------

10. Address of Operator 990 Town & Country Blvd. Houston, TX 77024	11. Pool name or Wildcat Hardin Tank; Bone Spring
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12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
<b>Surface:</b>	N	1	26S	34E		448	S	1569	W	LEA
<b>BH:</b>	C	36	25S	34E		102	N	2303	W	LEA

13. Date Spudded 10/12/2019	14. Date T.D. Reached 3/31/2022	15. Date Rig Released 4/4/2022	16. Date Completed (Ready to Produce) 8/29/2022	17. Elevations (DF and RKB, RT, GR, etc.) 3281 GR
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18. Total Measured Depth of Well 22712'	19. Plug Back Measured Depth 22690'	20. Was Directional Survey Made? Yes	21. Type Electric and Other Logs Run GR
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22. Producing Interval(s), of this completion - Top, Bottom, Name  
 12,498' - 22671'; Bone Spring

**23. CASING RECORD (Report all strings set in well)**

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.5#, J55, STC	1192'	17-1/2"	1155	
7-5/8"	29.7#, P110, BTC	11821'	9-7/8"	1780	
5-1/2"	23#, P110, TLW	22695'	6-3/4"	2490	

24. LINER RECORD				25. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET

26. Perforation record (interval, size, and number) 12,498' - 22671'; 0.41"; 984 shots	27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>DEPTH INTERVAL</th> <th>AMOUNT AND KIND MATERIAL USED</th> </tr> <tr> <td>12,498' - 22671'</td> <td>25,429,397 lbs proppant</td> </tr> <tr> <td>12,498' - 22671'</td> <td>410 gal 15% HCl Acid</td> </tr> <tr> <td>12,498' - 22671'</td> <td>25,952,850 gal brackish water</td> </tr> </table>	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED	12,498' - 22671'	25,429,397 lbs proppant	12,498' - 22671'	410 gal 15% HCl Acid	12,498' - 22671'	25,952,850 gal brackish water
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED								
12,498' - 22671'	25,429,397 lbs proppant								
12,498' - 22671'	410 gal 15% HCl Acid								
12,498' - 22671'	25,952,850 gal brackish water								

**28. PRODUCTION**

Date First Production 9/2/2022	Production Method ( <i>Flowing, gas lift, pumping - Size and type pump</i> ) Flowing	Well Status ( <i>Prod. or Shut-in</i> ) Producing
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Date of Test 9/9/2022	Hours Tested 24	Choke Size 28/64	Prod'n For Test Period	Oil - Bbl 2578	Gas - MCF 6740	Water - Bbl. 5327	Gas - Oil Ratio
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Flow Tubing Press.	Casing Pressure 4086	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - ( <i>Corr.</i> )
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29. Disposition of Gas ( <i>Sold, used for fuel, vented, etc.</i> ) Sold	30. Test Witnessed By
---	-----------------------

31. List Attachments

32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.	33. Rig Release Date:
--	-----------------------

34. If an on-site burial was used at the well, report the exact location of the on-site burial:

Latitude Longitude NAD83

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature	Printed Name Adrian Covarrubias	Title Regulatory Compliance Rep	Date 9/20/2022
-----------	------------------------------------	------------------------------------	-------------------

E-mail Address acovarrubias@marathonoil.com

# 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

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon 5379'	T. Ojo Alamo	T. Penn A"
T. Salt	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt 5358'	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 9304'	T. Todilto	
T. Abo	T. Rustler 1444'	T. Entrada	
T. Wolfcamp	T. Salado 1574'	T. Wingate	
T. Penn	T. Castille 3753'	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

### OIL OR GAS SANDS OR ZONES

No. 1, from.....to..... No. 3, from.....to.....  
 No. 2, from.....to..... No. 4, from.....to.....

### IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....  
 No. 2, from.....to.....feet.....  
 No. 3, from.....to.....feet.....

### LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology	From	To	Thickness In Feet	Lithology

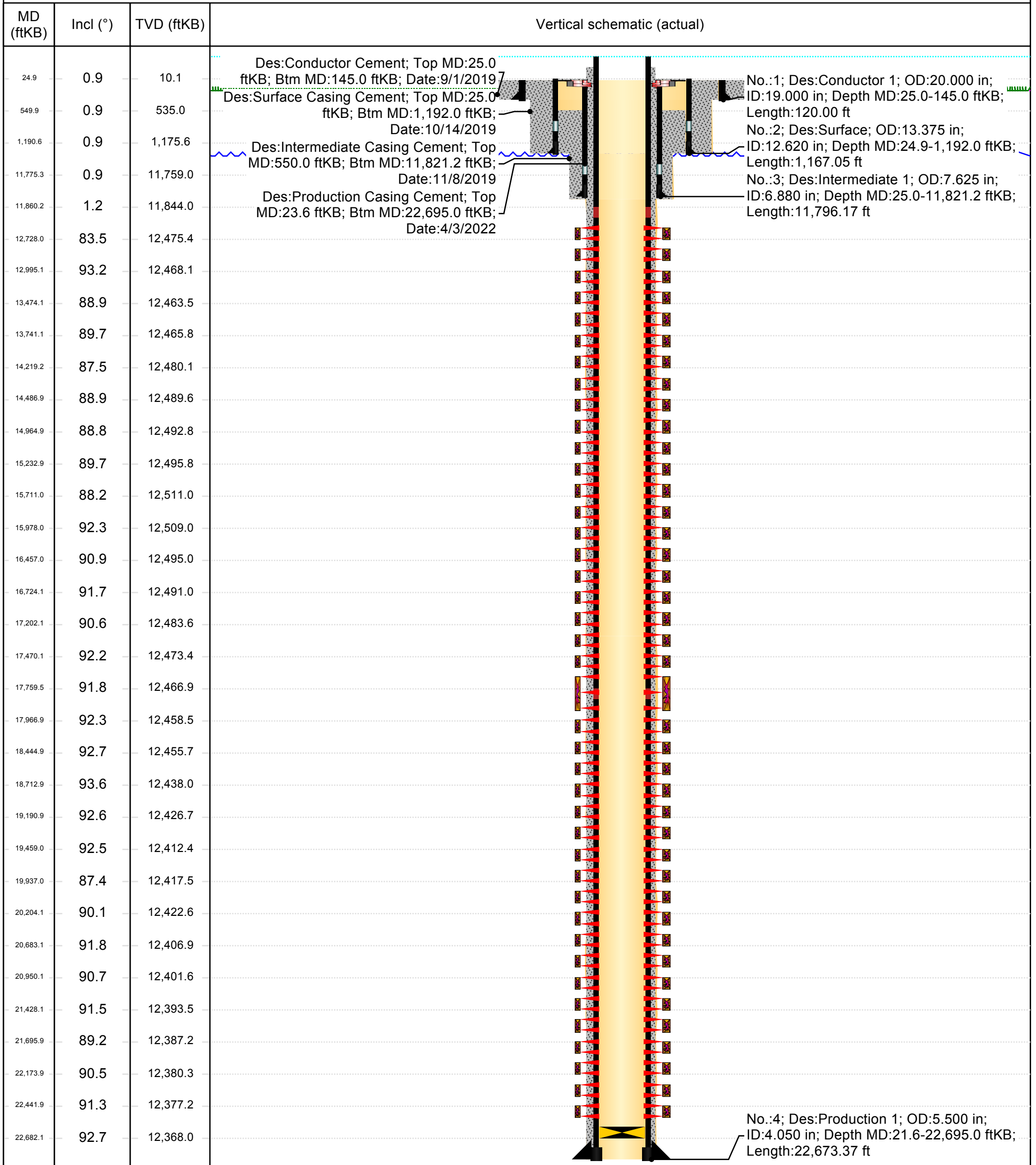


## Wellbore Schematic

### Well Name: MAMMOTH FEDERAL 26 34 1 TB 10H

State/Province NEW MEXICO	Country UNITED STATES	Field Name JABALINA SOUTHWEST	Latitude (°) 32.06622670	Longitude (°) -103.42664480	North/South Distance (ft) 448.0	North/South Reference FSL
API/ IPO UWI	KB-Ground Distance (ft)	KB-Mud Line Distance (ft)	Ground Elevation (ft)	Drilling Rig Spud Date	Well Original Completion Date	Well First Production Date

HORIZONTAL, MAMMOTH FEDERAL 26 34 1 TB 10H, 9/19/2022 11:11:28 AM





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

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

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

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

ACKNOWLEDGMENTS

Action 144887

**ACKNOWLEDGMENTS**

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 144887
	Action Type: [C-104] Completion Packet (C-104C)

**ACKNOWLEDGMENTS**

<input checked="" type="checkbox"/>	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
<input checked="" type="checkbox"/>	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.

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

CONDITIONS

Action 144887

**CONDITIONS**

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 144887
	Action Type: [C-104] Completion Packet (C-104C)

**CONDITIONS**

Created By	Condition	Condition Date
plmartinez	File 3160-4 Completion Report within 10 days to NMOCD after BLM approval.	2/28/2023