

C-104 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
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REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT**Section 1 - Operator and Well Information**

Submittal Type: ☒ Test Allowable (C-104RT) ☐ New Well (C-104NW) ☐ Recomplete (C-104RC) ☐ Pay Add (C-104RC) ☐ Amended	
Operator Name: Marathon Oil Permian LLC	OGRID: 372098
Property Name and Well Number: Hefeweizen State Com 301H	Property Code: 335052
Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal	API Number: 30-025-52328
Pool Name: WC-25 G-08 S203506D; Bone Spring	Pool Code: 97983

Section 2 – Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	30	19S	35E		247N	1303E	32.63805835	-103.49227425	Lea

Section 3 – Completion Information

Producing Method Flowing	Ready Date 6/15/2024	Perforations MD 10,360'-20,779'	Perforations TVD 9,729-9,770
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Section 4 – Action IDs for Submissions and Order Numbers

List Action IDs for Drilling Sundries	Was an Order required / needed (Y/N), if yes list Order number:
C-104 RT Action ID (if C-104NW):	Communitization Agreement ☐ Yes ☒ No, Order No.
Surface Casing Action ID: 366675	Unit: ☐ Yes ☒ No, Order No.
Intermediate 1 Casing Action ID: 366675	Compulsory Pooling: ☒ Yes ☐ No, Order No. R-22897
Intermediate 2 Casing Action ID:	Down Hole Commingling: ☐ Yes ☒ No, Order No.
Production Casing Action ID: 366675	Surface Commingling: ☒ Yes ☐ No, Order No. Action ID: 335124
All casing was pressure tested in accordance with NMAC ☒ Yes ☐ No	Non-standard Location: ☒ Yes ☐ No ☐ Common ownership Order No. NSL 8750
Liner 1 Action ID:	Non-standard Proration: ☐ Yes ☒ No, Order No.
Casing was installed prior to OCD's Action ID system (Y/N): N	Simultaneous Dedication: ☐ Yes ☒ No, Order No.

Section 5 - Operator Signature and Certification

☒ I hereby certify that the required Water Use Report has been, or will be, submitted for this well's completion.	
☒ I hereby certify that the required Fracfocus disclosure has been, or will be, submitted for this well's completion.	
☒ 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.	
Name Krystal Bartholomew	
Title Adv. Regulatory Compliance Representative	Date 08/19/2024

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	☐ Initial Submittal
			☐ Amended Report
		☒ As Drilled	

WELL LOCATION INFORMATION

API Number 30-025-52328	Pool Code 97983	Pool Name WC-25 G-08 S203506D; Bone Spring
Property Code 335052	Property Name Hefeweizen State Com	Well Number 301H
OGRID No. 372098	Operator Name Marathon Oil	Ground Level Elevation 3786'
Surface Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal		Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	30	19S	35E		247N	1303 E	32.63805835	-103.49227425	Lea

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	31	19S	35E		103S	1634 E	32.60986046	-103.49337854	Lea

Dedicated Acres 320	Infill or Defining Well Defining	Defining Well API	Overlapping Spacing Unit (Y/N) N	Consolidation Code C
Order Numbers.			Well setbacks are under Common Ownership: ☒ Yes ☐ No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	19	19S	35E		725S	1578E	32.64073017	-103.49316769	Lea

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	30	19S	35E		100N	1535E	32.63846225	-103.49302513	Lea

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	31	19S	35E		103S	1634E	32.60986046	-103.49337854	Lea

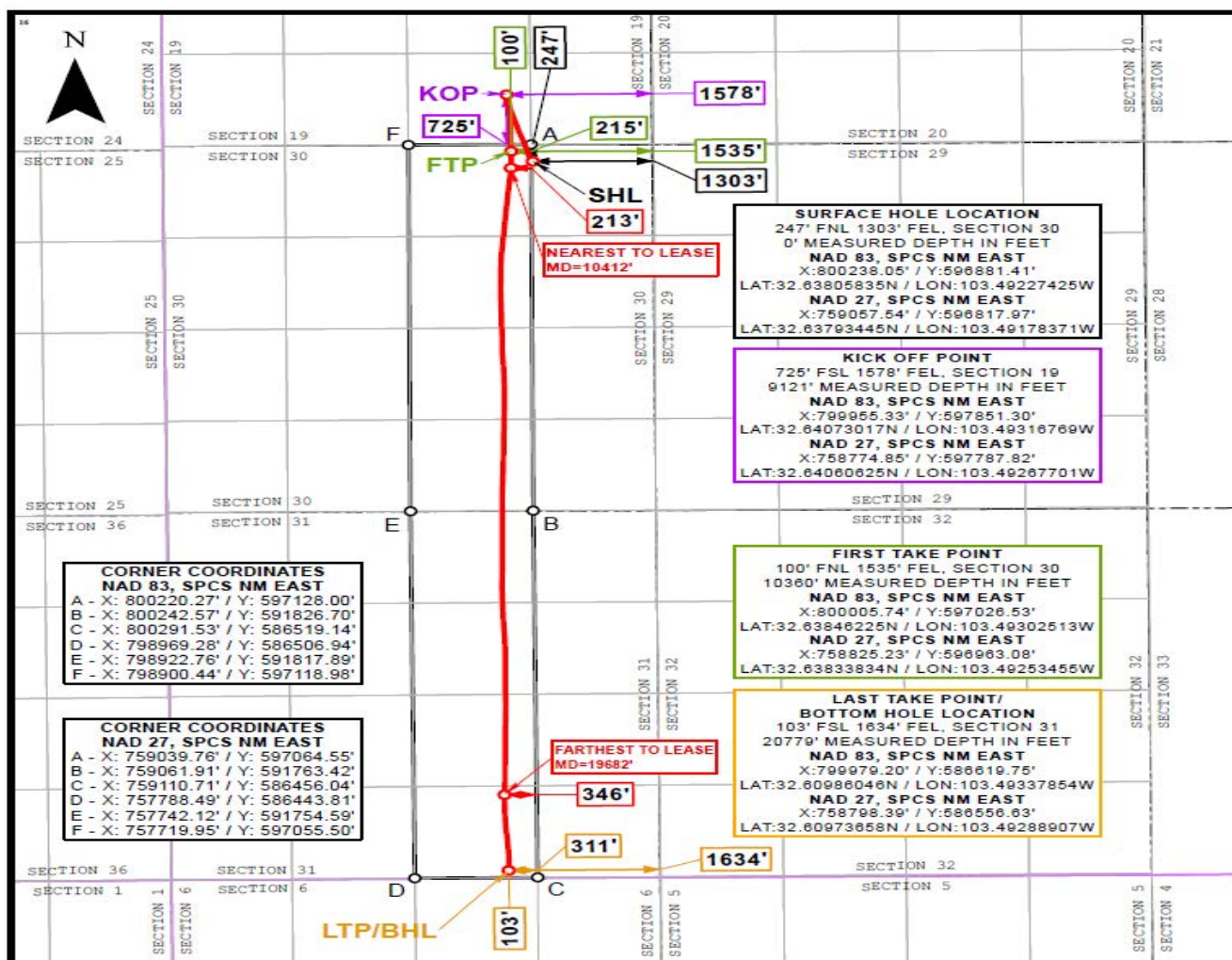
Unitized Area or Area of Uniform Interest Yes, Comm Agreement	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation: 3809'KB
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OPERATOR CERTIFICATIONS <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> <i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i> <i>Krystal Bartholomew</i> 08/19/2024 Signature Date Krystal Bartholomew Printed Name kbartholomew@marathonoil.com Email Address		SURVEYOR CERTIFICATIONS <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> Signature and Seal of Professional Surveyor Certificate Number Date of Survey	
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Note: 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.

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.





Marathon Oil Permian LLC

**Lea County, NM (NAD27 NME)
Gong Worthy - Hefeweizen Pad
Hefeweizen State Com 301H**

OH / 73852

Design: Surveys (Cactus 171)

Standard Survey Report

19 March, 2024





Phoenix
Survey Report



Company:	Marathon Oil Permian LLC	Local Co-ordinate Reference:	Well Hefeweizen State Com 301H
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	RKB @ 3809.60usft (Cactus 171)
Site:	Gong Worthy - Hefeweizen Pad	MD Reference:	RKB @ 3809.60usft (Cactus 171)
Well:	Hefeweizen State Com 301H	North Reference:	Grid
Wellbore:	OH / 73852	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Cactus 171)	Database:	USAEDMDB

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

Site	Gong Worthy - Hefeweizen Pad		
Site Position:		Northing:	596,817.97 usft
From:	Map	Easting:	759,057.54 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.6379345
		Longitude:	-103.4917837

Well	Hefeweizen State Com 301H		
Well Position	+N/-S	0.00 usft	Northing: 596,817.97 usft
	+E/-W	0.00 usft	Easting: 759,057.54 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
Grid Convergence:	0.454 °	Ground Level:	3,786.00 usft

Wellbore	OH / 73852				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IFR	2024-02-29	6.311	60.440	47,507.00000000

Design	Surveys (Cactus 171)				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	179.60	

Survey Program	Date	2024-03-19			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
150.00	20,779.00	Phoenix MWD Surveys (OH / 73852)	MWD+IFR1+MS	OWSG Rev. 2 MWD + IFR1 + Multi-Station Corre	

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)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
150.00	0.52	177.06	150.00	-0.68	0.03	0.68	0.35	0.35	0.00	
First Phoenix MWD Survey										
240.00	0.29	135.05	240.00	-1.25	0.22	1.25	0.40	-0.26	-46.68	
328.00	0.48	166.94	327.99	-1.77	0.46	1.77	0.32	0.22	36.24	
423.00	0.29	139.25	422.99	-2.34	0.70	2.34	0.27	-0.20	-29.15	
515.00	0.41	147.69	514.99	-2.79	1.03	2.80	0.14	0.13	9.17	
608.00	0.58	173.25	607.99	-3.54	1.27	3.55	0.30	0.18	27.48	
698.00	0.60	177.86	697.98	-4.46	1.34	4.47	0.06	0.02	5.12	
790.00	0.64	188.85	789.98	-5.45	1.28	5.46	0.14	0.04	11.95	



Phoenix Survey Report



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Site:	Gong Worthy - Hefeweizen Pad	MD Reference:	RKB @ 3809.60usft (Cactus 171)
Well:	Hefeweizen State Com 301H	North Reference:	Grid
Wellbore:	OH / 73852	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Cactus 171)	Database:	USAEDMDB

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)
882.00	0.46	201.01	881.97	-6.30	1.06	6.31	0.23	-0.20	13.22
974.00	0.28	184.07	973.97	-6.87	0.92	6.88	0.23	-0.20	-18.41
1,065.00	0.30	187.46	1,064.97	-7.33	0.87	7.34	0.03	0.02	3.73
1,157.00	0.30	165.67	1,156.97	-7.80	0.90	7.81	0.12	0.00	-23.68
1,248.00	0.65	167.52	1,247.96	-8.54	1.07	8.54	0.38	0.38	2.03
1,340.00	0.54	147.46	1,339.96	-9.41	1.41	9.42	0.25	-0.12	-21.80
1,435.00	0.57	149.80	1,434.96	-10.20	1.89	10.21	0.04	0.03	2.46
1,531.00	0.78	179.35	1,530.95	-11.26	2.14	11.28	0.42	0.22	30.78
1,625.00	0.79	187.48	1,624.94	-12.55	2.06	12.56	0.12	0.01	8.65
1,721.00	0.71	162.30	1,720.93	-13.77	2.16	13.78	0.35	-0.08	-26.23
1,816.00	0.83	177.19	1,815.92	-15.02	2.37	15.03	0.24	0.13	15.67
1,890.00	0.63	200.97	1,889.92	-15.93	2.25	15.95	0.48	-0.27	32.14
2,014.00	1.01	153.20	2,013.91	-17.54	2.50	17.56	0.60	0.31	-38.52
2,109.00	1.64	314.80	2,108.90	-17.33	1.91	17.35	2.76	0.66	170.11
2,203.00	4.47	325.85	2,202.75	-13.35	-1.10	13.35	3.06	3.01	11.76
2,297.00	6.84	330.30	2,296.29	-5.46	-5.93	5.42	2.56	2.52	4.73
2,392.00	8.55	331.93	2,390.43	5.69	-12.06	-5.77	1.81	1.80	1.72
2,488.00	10.15	332.02	2,485.15	19.45	-19.38	-19.59	1.67	1.67	0.09
2,582.00	11.42	338.98	2,577.49	35.46	-26.61	-35.64	1.93	1.35	7.40
2,677.00	11.73	342.13	2,670.56	53.43	-32.94	-53.66	0.74	0.33	3.32
2,771.00	11.74	342.86	2,762.60	71.66	-38.69	-71.93	0.16	0.01	0.78
2,866.00	11.64	343.66	2,855.63	90.09	-44.24	-90.40	0.20	-0.11	0.84
2,961.00	11.81	344.93	2,948.65	108.68	-49.46	-109.02	0.33	0.18	1.34
3,055.00	11.87	344.56	3,040.65	127.28	-54.54	-127.66	0.10	0.06	-0.39
3,150.00	12.14	346.05	3,133.57	146.40	-59.55	-146.81	0.43	0.28	1.57
3,244.00	11.52	346.56	3,225.57	165.12	-64.11	-165.56	0.67	-0.66	0.54
3,339.00	11.10	347.33	3,318.73	183.27	-68.32	-183.74	0.47	-0.44	0.81
3,434.00	10.61	344.02	3,412.03	200.60	-72.74	-201.10	0.83	-0.52	-3.48
3,528.00	10.25	344.26	3,504.47	216.97	-77.39	-217.50	0.39	-0.38	0.26
3,622.00	9.70	344.05	3,597.05	232.63	-81.83	-233.20	0.59	-0.59	-0.22
3,717.00	9.13	342.96	3,690.77	247.53	-86.24	-248.13	0.63	-0.60	-1.15
3,811.00	9.06	342.48	3,783.59	261.72	-90.65	-262.35	0.11	-0.07	-0.51
3,906.00	10.48	341.84	3,877.21	277.06	-95.60	-277.72	1.50	1.49	-0.67
4,001.00	10.84	341.19	3,970.57	293.73	-101.17	-294.43	0.40	0.38	-0.68
4,095.00	10.91	340.27	4,062.88	310.47	-107.02	-311.21	0.20	0.07	-0.98
4,190.00	10.80	340.70	4,156.18	327.33	-113.00	-328.11	0.14	-0.12	0.45
4,285.00	11.07	340.32	4,249.46	344.32	-119.01	-345.14	0.29	0.28	-0.40
4,381.00	10.88	339.54	4,343.70	361.49	-125.29	-362.35	0.25	-0.20	-0.81
4,475.00	10.78	339.32	4,436.03	378.02	-131.49	-378.93	0.12	-0.11	-0.23
4,569.00	10.84	339.96	4,528.36	394.55	-137.62	-395.50	0.14	0.06	0.68
4,663.00	11.60	346.34	4,620.57	412.04	-142.89	-413.03	1.55	0.81	6.79
4,758.00	11.74	345.08	4,713.60	430.66	-147.63	-431.68	0.31	0.15	-1.33
4,852.00	11.61	344.65	4,805.66	449.02	-152.60	-450.08	0.17	-0.14	-0.46



Phoenix Survey Report



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Well:	Hefeweizen State Com 301H	North Reference:	Grid
Wellbore:	OH / 73852	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Cactus 171)	Database:	USAEDMDB

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)
4,947.00	11.73	344.84	4,898.69	467.56	-157.65	-468.65	0.13	0.13	0.20
5,041.00	11.80	344.34	4,990.72	486.04	-162.74	-487.16	0.13	0.07	-0.53
5,136.00	12.02	343.66	5,083.67	504.88	-168.15	-506.04	0.27	0.23	-0.72
5,229.00	12.22	342.66	5,174.60	523.57	-173.81	-524.77	0.31	0.22	-1.08
5,324.00	11.78	342.77	5,267.53	542.43	-179.68	-543.67	0.46	-0.46	0.12
5,418.00	11.29	343.52	5,359.63	560.42	-185.13	-561.70	0.55	-0.52	0.80
5,512.00	10.65	343.90	5,451.91	577.59	-190.15	-578.90	0.69	-0.68	0.40
5,606.00	10.59	345.43	5,544.30	594.29	-194.73	-595.64	0.31	-0.06	1.63
5,702.00	10.61	344.13	5,638.66	611.33	-199.37	-612.71	0.25	0.02	-1.35
5,796.00	10.48	343.77	5,731.07	627.86	-204.12	-629.27	0.16	-0.14	-0.38
5,891.00	10.41	343.12	5,824.50	644.37	-209.03	-645.82	0.14	-0.07	-0.68
5,986.00	10.41	343.49	5,917.93	660.81	-213.96	-662.29	0.07	0.00	0.39
6,081.00	10.12	342.33	6,011.41	677.00	-218.93	-678.51	0.37	-0.31	-1.22
6,176.00	10.56	342.38	6,104.87	693.24	-224.10	-694.79	0.46	0.46	0.05
6,269.00	10.59	342.77	6,196.29	709.53	-229.21	-711.11	0.08	0.03	0.42
6,363.00	10.26	342.69	6,288.74	725.77	-234.26	-727.39	0.35	-0.35	-0.09
6,459.00	9.92	341.54	6,383.26	741.78	-239.42	-743.43	0.41	-0.35	-1.20
6,553.00	10.31	341.18	6,475.79	757.42	-244.70	-759.11	0.42	0.41	-0.38
6,648.00	9.84	341.13	6,569.33	773.15	-250.07	-774.88	0.49	-0.49	-0.05
6,742.00	9.60	340.99	6,661.98	788.16	-255.22	-789.92	0.26	-0.26	-0.15
6,837.00	9.31	340.80	6,755.69	802.91	-260.33	-804.70	0.31	-0.31	-0.20
6,932.00	9.03	340.05	6,849.47	817.17	-265.40	-819.00	0.32	-0.29	-0.79
7,026.00	7.58	340.22	6,942.49	829.94	-270.01	-831.80	1.54	-1.54	0.18
7,121.00	7.06	342.13	7,036.71	841.39	-273.92	-843.28	0.60	-0.55	2.01
7,215.00	6.59	344.31	7,130.05	852.08	-277.16	-854.00	0.57	-0.50	2.32
7,311.00	5.77	347.42	7,225.49	862.10	-279.70	-864.03	0.92	-0.85	3.24
7,405.00	5.16	349.76	7,319.06	870.87	-281.48	-872.81	0.69	-0.65	2.49
7,500.00	4.53	348.82	7,413.72	878.75	-282.96	-880.71	0.67	-0.66	-0.99
7,594.00	4.07	356.00	7,507.46	885.72	-283.92	-887.68	0.75	-0.49	7.64
7,689.00	3.40	358.76	7,602.25	891.90	-284.21	-893.86	0.73	-0.71	2.91
7,783.00	2.96	359.85	7,696.11	897.12	-284.28	-899.08	0.47	-0.47	1.16
7,878.00	2.99	0.77	7,790.98	902.05	-284.25	-904.01	0.06	0.03	0.97
7,972.00	3.09	358.53	7,884.85	907.03	-284.28	-908.99	0.17	0.11	-2.38
8,066.00	3.20	0.98	7,978.71	912.19	-284.30	-914.15	0.18	0.12	2.61
8,161.00	3.00	356.88	8,073.57	917.32	-284.39	-919.28	0.31	-0.21	-4.32
8,255.00	2.99	1.16	8,167.44	922.23	-284.48	-924.19	0.24	-0.01	4.55
8,350.00	3.01	359.16	8,262.31	927.20	-284.47	-929.16	0.11	0.02	-2.11
8,444.00	3.15	1.70	8,356.17	932.25	-284.42	-934.21	0.21	0.15	2.70
8,539.00	3.64	357.70	8,451.01	937.87	-284.47	-939.83	0.57	0.52	-4.21
8,634.00	3.37	0.13	8,545.83	943.67	-284.58	-945.64	0.32	-0.28	2.56
8,728.00	3.56	0.07	8,639.66	949.36	-284.57	-951.32	0.20	0.20	-0.06
8,801.00	3.36	2.95	8,712.52	953.76	-284.46	-955.72	0.36	-0.27	3.95
8,932.00	2.92	4.64	8,843.33	960.92	-283.99	-962.88	0.34	-0.34	1.29



Phoenix Survey Report



Company:	Marathon Oil Permian LLC	Local Co-ordinate Reference:	Well Hefeweizen State Com 301H
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	RKB @ 3809.60usft (Cactus 171)
Site:	Gong Worthy - Hefeweizen Pad	MD Reference:	RKB @ 3809.60usft (Cactus 171)
Well:	Hefeweizen State Com 301H	North Reference:	Grid
Wellbore:	OH / 73852	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Cactus 171)	Database:	USAEDMDB

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)
9,026.00	2.81	359.72	8,937.21	965.61	-283.81	-967.57	0.29	-0.12	-5.23
9,121.00	2.37	2.87	9,032.11	969.90	-283.72	-971.86	0.49	-0.46	3.32
KOP: 9121' MD, 9076.10' TVD - Latt:32.6406064, Long:-103.4926804									
9,214.00	6.39	157.69	9,124.96	967.03	-281.66	-968.97	9.24	4.32	166.47
9,309.00	21.28	161.65	9,216.94	945.65	-274.18	-947.54	15.70	15.67	4.17
9,404.00	23.99	165.36	9,304.62	910.60	-263.87	-912.42	3.22	2.85	3.91
9,500.00	29.26	172.62	9,390.44	868.41	-255.92	-870.17	6.44	5.49	7.56
9,594.00	35.29	176.60	9,469.88	818.47	-251.35	-820.20	6.80	6.41	4.23
9,689.00	41.71	177.92	9,544.19	759.43	-248.57	-761.14	6.81	6.76	1.39
9,783.00	49.77	178.93	9,609.75	692.19	-246.77	-693.89	8.61	8.57	1.07
9,878.00	59.17	177.39	9,664.89	615.01	-244.23	-616.70	9.98	9.89	-1.62
9,972.00	70.36	178.68	9,704.91	530.17	-241.36	-531.84	11.97	11.90	1.37
10,068.00	83.23	179.56	9,726.79	436.91	-239.95	-438.58	13.44	13.41	0.92
10,162.00	90.36	179.13	9,732.04	343.13	-238.87	-344.78	7.60	7.59	-0.46
10,257.00	90.90	178.08	9,731.00	248.16	-236.56	-249.81	1.24	0.57	-1.11
10,318.00	91.09	177.40	9,729.94	187.22	-234.15	-188.85	1.16	0.31	-1.11
10,360.13	90.85	177.58	9,729.22	145.13	-232.31	-146.75	0.71	-0.56	0.44
FTP: 10360.13', 9729.22' TVD - Latt:32.6383384, Long:-103.4925346									
10,412.00	90.56	177.81	9,728.58	93.31	-230.23	-94.92	0.71	-0.56	0.44
10,506.00	91.04	182.75	9,727.27	-0.65	-230.69	-0.96	5.28	0.51	5.26
10,601.00	91.53	183.11	9,725.14	-95.50	-235.54	93.85	0.64	0.52	0.38
10,695.00	90.41	184.65	9,723.55	-189.27	-241.90	187.57	2.03	-1.19	1.64
10,790.00	90.33	186.03	9,722.94	-283.85	-250.74	282.09	1.46	-0.08	1.45
10,884.00	90.64	184.82	9,722.14	-377.43	-259.63	375.60	1.33	0.33	-1.29
10,979.00	92.03	184.76	9,719.93	-472.07	-267.56	470.19	1.46	1.46	-0.06
11,074.00	90.84	184.70	9,717.55	-566.71	-275.39	564.77	1.25	-1.25	-0.06
11,168.00	89.98	185.00	9,716.88	-660.37	-283.34	658.38	0.97	-0.91	0.32
11,263.00	90.47	184.79	9,716.50	-755.02	-291.44	752.97	0.56	0.52	-0.22
11,358.00	89.79	182.43	9,716.29	-849.83	-297.42	847.73	2.59	-0.72	-2.48
11,453.00	90.07	185.13	9,716.40	-944.61	-303.69	942.47	2.86	0.29	2.84
11,547.00	90.56	184.69	9,715.89	-1,038.26	-311.73	1,036.06	0.70	0.52	-0.47
11,642.00	88.91	184.22	9,716.33	-1,132.97	-319.11	1,130.72	1.81	-1.74	-0.49
11,737.00	90.01	185.63	9,717.22	-1,227.61	-327.27	1,225.30	1.88	1.16	1.48
11,832.00	91.27	185.03	9,716.16	-1,322.20	-336.09	1,319.82	1.47	1.33	-0.63
11,927.00	90.56	181.22	9,714.64	-1,417.02	-341.27	1,414.61	4.08	-0.75	-4.01
12,021.00	90.70	180.06	9,713.61	-1,511.01	-342.32	1,508.58	1.24	0.15	-1.23
12,116.00	90.61	181.17	9,712.52	-1,606.00	-343.34	1,603.56	1.17	-0.09	1.17
12,211.00	90.52	180.80	9,711.59	-1,700.98	-344.97	1,698.53	0.40	-0.09	-0.39
12,305.00	89.50	180.72	9,711.57	-1,794.97	-346.22	1,792.51	1.09	-1.09	-0.09
12,400.00	89.25	179.73	9,712.61	-1,889.96	-346.59	1,887.50	1.07	-0.26	-1.04
12,494.00	90.67	178.37	9,712.67	-1,983.94	-345.03	1,981.49	2.09	1.51	-1.45
12,588.00	89.84	177.88	9,712.25	-2,077.89	-341.96	2,075.45	1.03	-0.88	-0.52
12,682.00	89.25	178.66	9,713.00	-2,171.84	-339.12	2,169.42	1.04	-0.63	0.83
12,777.00	89.21	178.18	9,714.28	-2,266.80	-336.50	2,264.40	0.51	-0.04	-0.51



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Site:	Gong Worthy - Hefeweizen Pad	MD Reference:	RKB @ 3809.60usft (Cactus 171)
Well:	Hefeweizen State Com 301H	North Reference:	Grid
Wellbore:	OH / 73852	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Cactus 171)	Database:	USAEDMDB

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)
12,873.00	88.74	179.16	9,715.99	-2,362.76	-334.27	2,360.37	1.13	-0.49	1.02
12,967.00	88.65	178.68	9,718.13	-2,456.72	-332.50	2,454.33	0.52	-0.10	-0.51
13,061.00	89.84	178.99	9,719.37	-2,550.69	-330.59	2,548.32	1.31	1.27	0.33
13,156.00	90.76	179.57	9,718.88	-2,645.68	-329.39	2,643.31	1.14	0.97	0.61
13,250.00	90.29	178.33	9,718.01	-2,739.65	-327.67	2,737.30	1.41	-0.50	-1.32
13,344.00	88.76	176.03	9,718.79	-2,833.53	-323.05	2,831.20	2.94	-1.63	-2.45
13,439.00	88.58	178.48	9,721.00	-2,928.39	-318.50	2,926.09	2.59	-0.19	2.58
13,533.00	88.64	177.66	9,723.28	-3,022.30	-315.34	3,020.03	0.87	0.06	-0.87
13,628.00	88.79	177.92	9,725.41	-3,117.21	-311.67	3,114.96	0.32	0.16	0.27
13,723.00	88.74	178.15	9,727.46	-3,212.13	-308.42	3,209.90	0.25	-0.05	0.24
13,818.00	88.91	178.64	9,729.40	-3,307.07	-305.76	3,304.86	0.55	0.18	0.52
13,913.00	88.90	179.34	9,731.22	-3,402.04	-304.08	3,399.84	0.74	-0.01	0.74
14,008.00	91.29	180.38	9,731.06	-3,497.03	-303.85	3,494.83	2.74	2.52	1.09
14,102.00	92.37	181.68	9,728.06	-3,590.97	-305.54	3,588.75	1.80	1.15	1.38
14,197.00	90.98	180.56	9,725.28	-3,685.90	-307.39	3,683.67	1.88	-1.46	-1.18
14,292.00	91.61	180.90	9,723.14	-3,780.87	-308.60	3,778.62	0.75	0.66	0.36
14,386.00	92.72	181.42	9,719.59	-3,874.78	-310.51	3,872.52	1.30	1.18	0.55
14,481.00	92.38	181.17	9,715.36	-3,969.66	-312.65	3,967.39	0.44	-0.36	-0.26
14,575.00	92.01	179.79	9,711.76	-4,063.59	-313.44	4,061.30	1.52	-0.39	-1.47
14,670.00	92.43	181.15	9,708.08	-4,158.51	-314.22	4,156.22	1.50	0.44	1.43
14,764.00	91.30	180.78	9,705.02	-4,252.45	-315.80	4,250.14	1.26	-1.20	-0.39
14,859.00	91.86	181.11	9,702.40	-4,347.40	-317.36	4,345.08	0.68	0.59	0.35
14,953.00	89.28	180.81	9,701.47	-4,441.37	-318.94	4,439.04	2.76	-2.74	-0.32
15,048.00	90.96	181.19	9,701.27	-4,536.35	-320.60	4,534.01	1.81	1.77	0.40
15,143.00	90.72	181.53	9,699.87	-4,631.32	-322.85	4,628.95	0.44	-0.25	0.36
15,237.00	91.32	181.61	9,698.20	-4,725.27	-325.43	4,722.88	0.64	0.64	0.09
15,332.00	90.53	181.56	9,696.67	-4,820.22	-328.05	4,817.81	0.83	-0.83	-0.05
15,426.00	93.48	180.19	9,693.38	-4,914.14	-329.49	4,911.72	3.46	3.14	-1.46
15,520.00	90.98	179.16	9,689.72	-5,008.05	-328.96	5,005.64	2.88	-2.66	-1.10
15,615.00	90.50	178.77	9,688.49	-5,103.03	-327.24	5,100.62	0.65	-0.51	-0.41
15,710.00	91.06	179.40	9,687.20	-5,198.01	-325.72	5,195.61	0.89	0.59	0.66
15,805.00	91.75	179.75	9,684.87	-5,292.98	-325.02	5,290.58	0.81	0.73	0.37
15,899.00	90.27	180.90	9,683.21	-5,386.96	-325.55	5,384.55	1.99	-1.57	1.22
15,993.00	91.29	180.70	9,681.93	-5,480.94	-326.86	5,478.52	1.11	1.09	-0.21
16,088.00	90.49	179.61	9,680.46	-5,575.92	-327.12	5,573.50	1.42	-0.84	-1.15
16,183.00	92.40	179.92	9,678.06	-5,670.89	-326.73	5,668.47	2.04	2.01	0.33
16,278.00	91.79	180.10	9,674.59	-5,765.82	-326.75	5,763.40	0.67	-0.64	0.19
16,372.00	90.35	180.82	9,672.84	-5,859.80	-327.50	5,857.37	1.71	-1.53	0.77
16,467.00	91.24	180.83	9,671.52	-5,954.78	-328.87	5,952.34	0.94	0.94	0.01
16,561.00	89.25	180.13	9,671.12	-6,048.77	-329.66	6,046.32	2.24	-2.12	-0.74
16,655.00	91.92	181.38	9,670.16	-6,142.75	-330.90	6,140.29	3.14	2.84	1.33
16,752.00	90.47	178.25	9,668.13	-6,239.71	-330.58	6,237.25	3.56	-1.49	-3.23
16,846.00	91.27	177.98	9,666.70	-6,333.65	-327.49	6,331.21	0.90	0.85	-0.29



Phoenix Survey Report



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Site:	Gong Worthy - Hefeweizen Pad	MD Reference:	RKB @ 3809.60usft (Cactus 171)
Well:	Hefeweizen State Com 301H	North Reference:	Grid
Wellbore:	OH / 73852	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Cactus 171)	Database:	USAEDMDB

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)
16,941.00	91.01	176.80	9,664.81	-6,428.53	-323.16	6,426.12	1.27	-0.27	-1.24
17,034.00	88.53	178.20	9,665.19	-6,521.43	-319.11	6,519.05	3.06	-2.67	1.51
17,129.00	89.62	178.57	9,666.72	-6,616.38	-316.43	6,614.01	1.21	1.15	0.39
17,223.00	90.41	177.74	9,666.70	-6,710.33	-313.41	6,707.98	1.22	0.84	-0.88
17,317.00	87.30	176.02	9,668.58	-6,804.16	-308.29	6,801.84	3.78	-3.31	-1.83
17,411.00	88.47	177.16	9,672.04	-6,897.92	-302.70	6,895.64	1.74	1.24	1.21
17,507.00	88.58	178.16	9,674.52	-6,993.81	-298.79	6,991.55	1.05	0.11	1.04
17,601.00	88.64	178.94	9,676.80	-7,087.75	-296.41	7,085.51	0.83	0.06	0.83
17,695.00	88.56	179.89	9,679.09	-7,181.72	-295.45	7,179.48	1.01	-0.09	1.01
17,790.00	88.05	179.86	9,681.90	-7,276.68	-295.24	7,274.44	0.54	-0.54	-0.03
17,884.00	87.50	180.34	9,685.55	-7,370.60	-295.41	7,368.36	0.78	-0.59	0.51
17,979.00	87.87	180.68	9,689.39	-7,465.52	-296.25	7,463.27	0.53	0.39	0.36
18,073.00	88.81	179.82	9,692.11	-7,559.48	-296.66	7,557.22	1.36	1.00	-0.91
18,168.00	90.58	179.36	9,692.62	-7,654.47	-295.98	7,652.22	1.93	1.86	-0.48
18,263.00	87.88	176.65	9,693.89	-7,749.39	-292.68	7,747.16	4.03	-2.84	-2.85
18,357.00	86.82	179.65	9,698.24	-7,843.23	-289.64	7,841.01	3.38	-1.13	3.19
18,451.00	87.80	180.65	9,702.65	-7,937.12	-289.89	7,934.90	1.49	1.04	1.06
18,546.00	87.51	181.21	9,706.54	-8,032.03	-291.43	8,029.80	0.66	-0.31	0.59
18,641.00	88.24	181.01	9,710.06	-8,126.94	-293.27	8,124.70	0.80	0.77	-0.21
18,735.00	90.42	180.69	9,711.16	-8,220.92	-294.66	8,218.66	2.34	2.32	-0.34
18,830.00	89.16	179.93	9,711.51	-8,315.92	-295.18	8,313.65	1.55	-1.33	-0.80
18,924.00	88.82	179.85	9,713.17	-8,409.90	-295.00	8,407.64	0.37	-0.36	-0.09
19,019.00	88.79	180.44	9,715.15	-8,504.88	-295.24	8,502.61	0.62	-0.03	0.62
19,113.00	88.16	180.53	9,717.65	-8,598.84	-296.03	8,596.57	0.68	-0.67	0.10
19,208.00	89.48	181.62	9,719.61	-8,693.80	-297.81	8,691.51	1.80	1.39	1.15
19,303.00	88.78	180.56	9,721.05	-8,788.77	-299.62	8,786.47	1.34	-0.74	-1.12
19,398.00	88.67	179.78	9,723.16	-8,883.75	-299.90	8,881.44	0.83	-0.12	-0.82
19,493.00	87.91	180.79	9,726.00	-8,978.70	-300.38	8,976.39	1.33	-0.80	1.06
19,587.00	89.28	181.73	9,728.30	-9,072.65	-302.44	9,070.32	1.77	1.46	1.00
19,682.00	89.73	179.92	9,729.12	-9,167.63	-303.81	9,165.29	1.96	0.47	-1.91
19,776.00	86.03	178.38	9,732.60	-9,261.54	-302.42	9,259.20	4.26	-3.94	-1.64
19,870.00	90.72	180.36	9,735.27	-9,355.46	-301.39	9,353.13	5.42	4.99	2.11
19,965.00	89.71	178.04	9,734.91	-9,450.45	-300.06	9,448.12	2.66	-1.06	-2.44
20,059.00	89.59	177.22	9,735.48	-9,544.36	-296.17	9,542.06	0.88	-0.13	-0.87
20,154.00	90.59	176.06	9,735.33	-9,639.20	-290.61	9,636.93	1.61	1.05	-1.22
20,248.00	87.70	173.31	9,736.74	-9,732.76	-281.90	9,730.56	4.24	-3.07	-2.93
20,343.00	87.43	174.66	9,740.77	-9,827.15	-271.96	9,825.01	1.45	-0.28	1.42
20,437.00	87.88	176.90	9,744.62	-9,920.81	-265.05	9,918.72	2.43	0.48	2.38
20,532.00	86.88	177.79	9,748.96	-10,015.61	-260.65	10,013.55	1.41	-1.05	0.94
20,626.00	84.50	178.65	9,756.03	-10,109.29	-257.74	10,107.25	2.69	-2.53	0.91
20,721.00	84.96	180.86	9,764.75	-10,203.88	-257.33	10,201.84	2.37	0.48	2.33
20,754.00	85.12	181.76	9,767.61	-10,236.75	-258.09	10,234.70	2.76	0.48	2.73
Final Phoenix MWD Survey									
20,779.00	85.12	181.76	9,769.73	-10,261.65	-258.85	10,259.59	0.00	0.00	0.00



Phoenix
Survey Report



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Survey									
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Projection to TD - Latt:32.6097357, Long:-103.4928881									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
150.00	150.00	-0.68	0.03	First Phoenix MWD Survey
9,121.00	9,032.11	969.90	-283.72	KOP: 9121' MD, 9076.10' TVD
9,121.00	9,032.11	969.90	-283.72	Latt:32.6406064, Long:-103.4926804
10,360.13	9,729.22	145.13	-232.31	FTP: 10360.13', 9729.22' TVD
10,360.13	9,729.22	145.13	-232.31	Latt:32.6383384, Long:-103.4925346
20,754.00	9,767.61	-10,236.75	-258.09	Final Phoenix MWD Survey
20,779.00	9,769.73	-10,261.65	-258.85	Projection to TD
20,779.00	9,769.73	-10,261.65	-258.85	Latt:32.6097357, Long:-103.4928881

Checked By: _____

Approved By: _____

Date: _____

District I
1625 N. French Dr., Hobbs, NM 88240
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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 376472

ACKNOWLEDGMENTS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 376472
	Action Type: [C-104] Completion Packet - Test Allowable (C-104RT)

ACKNOWLEDGMENTS

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

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
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Energy, Minerals and Natural Resources
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Santa Fe, NM 87505

CONDITIONS

Action 376472

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 376472
	Action Type: [C-104] Completion Packet - Test Allowable (C-104RT)

CONDITIONS

Created By	Condition	Condition Date
plmartinez	RT EXPIRES 9/15/2024.	9/4/2024