

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

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

WELL API NO. 30-015-44501
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Hermes Fee 23 28 30 WA
8. Well Number 1H
9. OGRID Number 372098
10. Pool name or Wildcat Purple Sage; Wolfcamp
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3117

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other
2. Name of Operator Marathon Oil Permian LLC.
3. Address of Operator 5555 San Felipe Street, Houston, TX 77056
4. Well Location Unit Letter <u>D</u> : <u>370</u> feet from the <u>South</u> line and <u>1634</u> feet from the <u>East</u> line Section <u>30</u> Township <u>23S</u> Range <u>28E</u> NMPM County <u>Eddy</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3117

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

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

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

Marathon Oil Permian LLC respectfully requests to change to BHL of this well located in B-30-T23S-R28E from 330' FNL & 2320' FEL to 330' FNL & 1990' FEL. See attachments for updated planned directional and C-102.

NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 07 2017 27.20-17

RECEIVED

Spud Date:		Rig Release Date:	
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I hereby certify that the information above is true and complete to the best of my knowledge and belief.

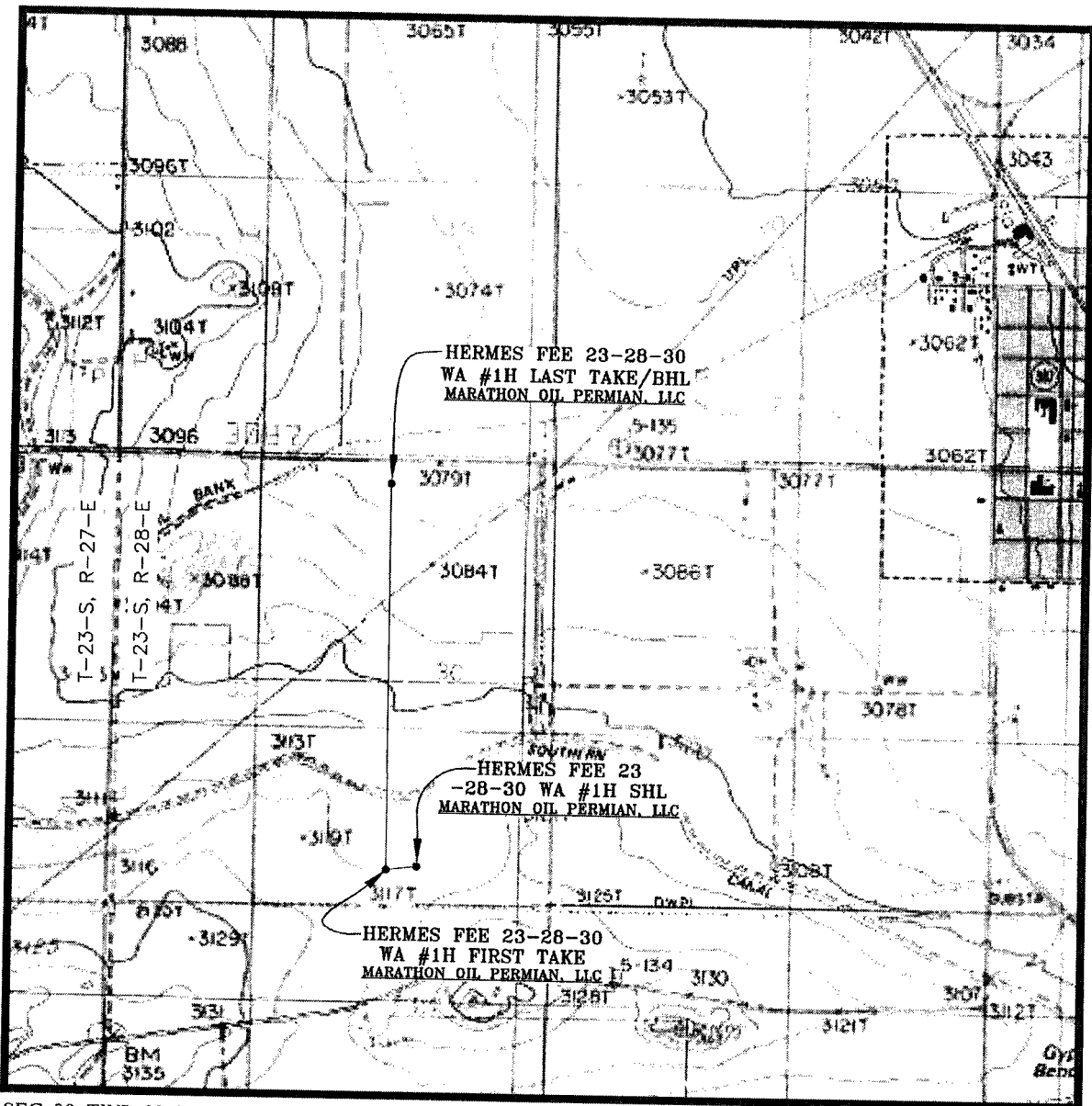
SIGNATURE Melissa Szudera TITLE Regulatory Compliance Representative DATE 12/7/2017

Type or print name Melissa Szudera E-mail address: mszudera@marathonoil.com PHONE: 713-296-3179

For State Use Only
APPROVED BY: Raymond M. Budany TITLE Geologist DATE 12-08-17
Conditions of Approval (if any):

LLOYD P. SHORT 21653

LOCATION VERIFICATION MAP

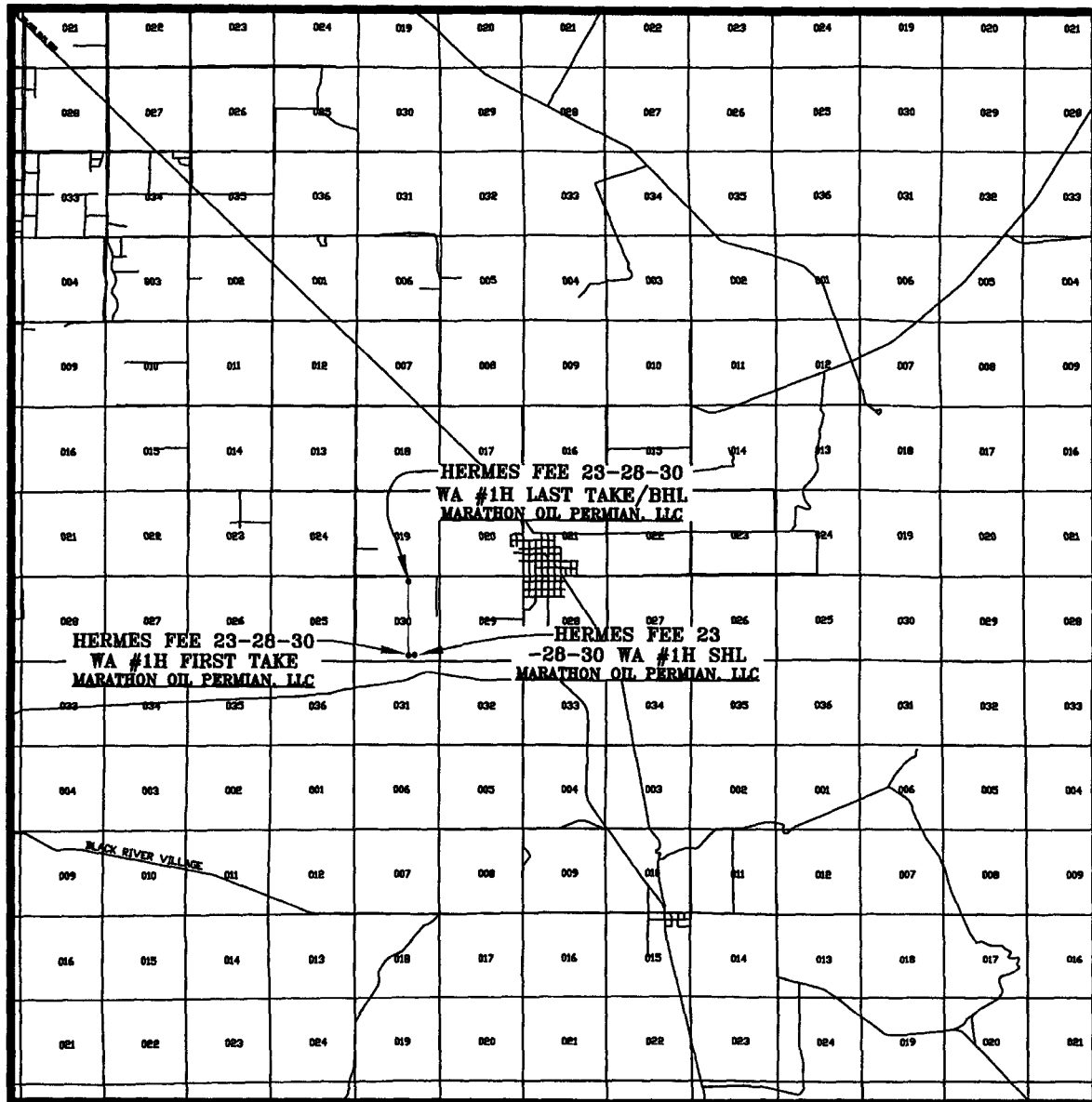


SEC. 30 TWP. 23-S RGE. 28-E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 DESCRIPTION: 370' FSL & 1634' FEL
 ELEVATION: 3117'
 OPERATOR: MARATHON OIL PERMIAN, LLC
 LEASE: HERMES FEE 23-28-30
 U.S.G.S. TOPOGRAPHIC MAP: LOVING, N.M.

SCALE: 1" = 2000'
 CONTOUR INTERVAL = 10'

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-8900 OFFICE
 JOB No. R3791_001

VICINITY MAP



SEC. 30 TWP. 23-S RGE. 28-E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 DESCRIPTION: 370' FSL & 1634' FEL
 ELEVATION: 3117'
 OPERATOR: MARATHON OIL PERMIAN, LLC
 LEASE: HERMES FEE 23-28-30
 U.S.G.S. TOPOGRAPHIC MAP: LOVING, N.M.

SCALE: 1" = 2 MILES

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-6900 OFFICE
 JOB No. R3791_001

NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 07 2017

RECEIVED

USA

NEW MEXICO

HERMES FEE 23-28-30 (WA 1H, TB 3H, WXY 5H)

HERMES FEE 23-28-30 WA 1H

HERMES FEE 23-28-30 WA 1H

30-015 - 44501

Plan: PRELIM B

Survey Report - Geographic

05 December, 2017

Marathon Oil
Survey Report - Geographic

Country:	USA	Well:	HERMES FEE 23-28-30 WA 1H
Province:	NEW MEXICO	RKB @:	3142.5usft
Site:	HERMES FEE 23-28-30 (WA 1H, TB 3H, WXY 5H)	RKB @:	3142.5usft
Well:	HERMES FEE 23-28-30 WA 1H	Grid:	
Wellbore:	HERMES FEE 23-28-30 WA 1H	Minimum Curvature:	
Design:	PRELIM B	EDMPROD:	

Project:	NEW MEXICO		
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:	HERMES FEE 23-28-30 (WA 1H, TB 3H, WXY 5H)				
Site Position:		Northing:	461,896.41 usft	Latitude:	32° 16' 10.902 N
From:	Map	Easting:	565,001.98 usft	Longitude:	104° 7' 22.902 W
Position Uncertainty:	3.3 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.11 °

WELL:		HERMES FEE 23-28-30 WA 1H, WELL 2 OF 3				
Well Position	+N-S	0.0 usft	Northing:	461,896.34 usft	Latitude:	32° 16' 10.900 N
	+E-W	0.0 usft	Easting:	565,052.01 usft	Longitude:	104° 7' 22.319 W
Position Uncertainty		1.1 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,116.0 usft

Wellbore:	HERMES FEE 23-28-30 WA 1H				
Magnetic	IGRF2015	Sample Date	10/9/2017	Declination	7.18
				Dip Angle	60.01
				Field Strength	47,876

Design:	PRELIM B				
Audit Notes:					
Version:		Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:		Depth From (TVB)	N/A	ELW	Direction
		(usft)	(usft)	(usft)	(°)
		0.0	0.0	0.0	359.95

Survey Station:	DMS - 12/5/2017				
Station	0.0	TD	14,072.2 PRELIM B (HERMES FEE 23-28-30 WA 1	Measurement	MWD
		(ft)			
		Survey (Wellbore)		Description	OWSG MWD - Standard

Planned Survey:										
Station	Depth	Interval	Interval	Interval	Interval	Interval	Interval	Interval	Interval	Interval
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)
0.0	0.00	0.00	0.00	0.00	0.00	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W	
100.0	0.00	0.00	100.0	0.00	0.00	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W	
200.0	0.00	0.00	200.0	0.00	0.00	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W	
300.0	0.00	0.00	300.0	0.00	0.00	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W	
400.0	0.00	0.00	400.0	0.00	0.00	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W	
500.0	0.00	0.00	500.0	0.00	0.00	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W	
600.0	0.00	0.00	600.0	0.00	0.00	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W	
700.0	0.00	0.00	700.0	0.00	0.00	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W	
800.0	0.00	0.00	800.0	0.00	0.00	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W	
900.0	0.00	0.00	900.0	0.00	0.00	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W	
1,000.0	0.00	0.00	1,000.0	0.00	0.00	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W	

Marathon Oil

Survey Report - Geographic

Country	USA	Well	HERMES FEE 23-28-30 WA 1H
Province	NEW MEXICO	RKB @	3142.5usft
City	HERMES FEE 23-28-30 (WA 1H, TB 3H, WXY 5H)	RKB @	3142.5usft
Well	HERMES FEE 23-28-30 WA 1H	Grid	
Well	HERMES FEE 23-28-30 WA 1H	Minimum Curvature	
Design	PRELIM B	EDMPROD	

Station	Latitude	Longitude	Station	Latitude	Longitude	Station	Latitude	Longitude	Station	Latitude	Longitude
1,100.0	0.00	0.00	1,100.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
1,200.0	0.00	0.00	1,200.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
1,300.0	0.00	0.00	1,300.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
1,400.0	0.00	0.00	1,400.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
1,500.0	0.00	0.00	1,500.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
1,600.0	0.00	0.00	1,600.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
1,700.0	0.00	0.00	1,700.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
1,800.0	0.00	0.00	1,800.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
1,900.0	0.00	0.00	1,900.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
2,000.0	0.00	0.00	2,000.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
2,100.0	0.00	0.00	2,100.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
2,200.0	0.00	0.00	2,200.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
2,300.0	0.00	0.00	2,300.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
2,400.0	0.00	0.00	2,400.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
2,500.0	0.00	0.00	2,500.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
2,600.0	0.00	0.00	2,600.0	0.0	0.0	461,896.34	565,052.01	32° 16' 10.900 N	104° 7' 22.319 W		
2,700.0	2.00	227.01	2,700.0	-1.2	-1.3	461,895.15	565,050.74	32° 16' 10.889 N	104° 7' 22.334 W		
2,800.0	4.00	227.01	2,799.8	-4.8	-5.1	461,891.58	565,046.91	32° 16' 10.853 N	104° 7' 22.598 W		
2,850.0	5.00	227.01	2,849.7	-7.4	-8.0	461,888.91	565,044.04	32° 16' 10.827 N	104° 7' 22.412 W		
2,900.0	5.00	227.01	2,899.5	-10.4	-11.2	461,885.93	565,040.85	32° 16' 10.798 N	104° 7' 22.449 W		
3,000.0	5.00	227.01	2,999.1	-16.3	-17.5	461,879.99	565,034.48	32° 16' 10.739 N	104° 7' 22.524 W		
3,100.0	5.00	227.01	3,098.7	-22.3	-23.9	461,874.05	565,028.10	32° 16' 10.680 N	104° 7' 22.598 W		
3,200.0	5.00	227.01	3,198.4	-28.2	-30.3	461,868.11	565,021.73	32° 16' 10.621 N	104° 7' 22.672 W		
3,300.0	5.00	227.01	3,298.0	-34.2	-36.7	461,862.16	565,015.35	32° 16' 10.563 N	104° 7' 22.747 W		
3,400.0	5.00	227.01	3,397.6	-40.1	-43.0	461,856.22	565,008.98	32° 16' 10.504 N	104° 7' 22.821 W		
3,500.0	5.00	227.01	3,497.2	-46.1	-49.4	461,850.28	565,002.60	32° 16' 10.445 N	104° 7' 22.896 W		
3,600.0	5.00	227.01	3,596.8	-52.0	-55.8	461,844.33	564,996.23	32° 16' 10.387 N	104° 7' 22.970 W		
3,700.0	5.00	227.01	3,696.4	-58.0	-62.2	461,838.39	564,989.85	32° 16' 10.328 N	104° 7' 23.044 W		
3,800.0	5.00	227.01	3,796.1	-63.9	-68.5	461,832.45	564,983.48	32° 16' 10.269 N	104° 7' 23.119 W		
3,900.0	5.00	227.01	3,895.7	-69.8	-74.9	461,826.50	564,977.10	32° 16' 10.211 N	104° 7' 23.193 W		
4,000.0	5.00	227.01	3,995.3	-75.8	-81.3	461,820.56	564,970.73	32° 16' 10.152 N	104° 7' 23.267 W		
4,100.0	5.00	227.01	4,094.9	-81.7	-87.7	461,814.62	564,964.35	32° 16' 10.093 N	104° 7' 23.342 W		
4,200.0	5.00	227.01	4,194.5	-87.7	-94.0	461,808.67	564,957.98	32° 16' 10.035 N	104° 7' 23.416 W		
4,300.0	5.00	227.01	4,294.2	-93.6	-100.4	461,802.73	564,951.60	32° 16' 9.976 N	104° 7' 23.491 W		
4,400.0	5.00	227.01	4,393.8	-99.6	-106.8	461,796.79	564,945.23	32° 16' 9.917 N	104° 7' 23.565 W		
4,500.0	5.00	227.01	4,493.4	-105.5	-113.2	461,790.84	564,938.85	32° 16' 9.858 N	104° 7' 23.639 W		
4,600.0	5.00	227.01	4,593.0	-111.4	-119.5	461,784.90	564,932.48	32° 16' 9.800 N	104° 7' 23.714 W		
4,700.0	5.00	227.01	4,692.6	-117.4	-125.9	461,778.96	564,926.10	32° 16' 9.741 N	104° 7' 23.788 W		
4,800.0	5.00	227.01	4,792.3	-123.3	-132.3	461,773.01	564,919.73	32° 16' 9.682 N	104° 7' 23.863 W		
4,900.0	5.00	227.01	4,891.9	-129.3	-138.7	461,767.07	564,913.35	32° 16' 9.624 N	104° 7' 23.937 W		
5,000.0	5.00	227.01	4,991.5	-135.2	-145.0	461,761.13	564,906.98	32° 16' 9.565 N	104° 7' 24.011 W		
5,100.0	5.00	227.01	5,091.1	-141.2	-151.4	461,755.18	564,900.60	32° 16' 9.506 N	104° 7' 24.086 W		
5,200.0	5.00	227.01	5,190.7	-147.1	-157.8	461,749.24	564,894.23	32° 16' 9.448 N	104° 7' 24.160 W		
5,300.0	5.00	227.01	5,290.4	-153.0	-164.2	461,743.30	564,887.85	32° 16' 9.389 N	104° 7' 24.234 W		
5,400.0	5.00	227.01	5,390.0	-159.0	-170.5	461,737.35	564,881.48	32° 16' 9.330 N	104° 7' 24.309 W		
5,500.0	5.00	227.01	5,489.6	-164.9	-176.9	461,731.41	564,875.11	32° 16' 9.272 N	104° 7' 24.383 W		
5,600.0	5.00	227.01	5,589.2	-170.9	-183.3	461,725.47	564,868.73	32° 16' 9.213 N	104° 7' 24.458 W		
5,700.0	5.00	227.01	5,688.8	-176.8	-189.7	461,719.52	564,862.36	32° 16' 9.154 N	104° 7' 24.532 W		
5,800.0	5.00	227.01	5,788.5	-182.8	-196.0	461,713.58	564,855.98	32° 16' 9.095 N	104° 7' 24.606 W		
5,900.0	5.00	227.01	5,888.1	-188.7	-202.4	461,707.64	564,849.61	32° 16' 9.037 N	104° 7' 24.681 W		
6,000.0	5.00	227.01	5,987.7	-194.6	-208.8	461,701.69	564,843.23	32° 16' 8.978 N	104° 7' 24.755 W		
6,100.0	5.00	227.01	6,087.3	-200.6	-215.2	461,695.75	564,836.86	32° 16' 8.919 N	104° 7' 24.830 W		
6,200.0	5.00	227.01	6,186.9	-206.5	-221.5	461,689.81	564,830.48	32° 16' 8.861 N	104° 7' 24.904 W		
6,300.0	5.00	227.01	6,286.6	-212.5	-227.9	461,683.86	564,824.11	32° 16' 8.802 N	104° 7' 24.978 W		

Marathon Oil

Survey Report - Geographic

Country	USA	Well Coordinates Reference	Well HERMES FEE 23-28-30 WA 1H
Project	NEW MEXICO	RKB @ 3142.5usft	
Area	HERMES FEE 23-28-30 (WA 1H, TB 3H, WXY 5H)	RKB @ 3142.5usft	
Well	HERMES FEE 23-28-30 WA 1H	Grid	
Wellbore	HERMES FEE 23-28-30 WA 1H	Minimum Curvature	
Design	PRELIM B	EDMPROD	

Original Depth (m)	Interval (m)	Interval (ft)	Depth (m)	Depth (ft)	Interval (m)	Interval (ft)	Depth (m)	Depth (ft)	Latitude	Longitude
6,400.0	5.00	227.01	6,386.2	-218.4	-234.3	461,677.92	564,817.73	32° 16' 8.743 N	104° 7' 25.053 W	
6,500.0	5.00	227.01	6,485.8	-224.4	-240.7	461,671.98	564,811.36	32° 16' 8.685 N	104° 7' 25.127 W	
6,600.0	5.00	227.01	6,585.4	-230.3	-247.0	461,666.03	564,804.98	32° 16' 8.626 N	104° 7' 25.201 W	
6,700.0	5.00	227.01	6,685.0	-236.2	-253.4	461,660.09	564,798.61	32° 16' 8.567 N	104° 7' 25.276 W	
6,800.0	5.00	227.01	6,784.7	-242.2	-259.8	461,654.15	564,792.23	32° 16' 8.509 N	104° 7' 25.350 W	
6,900.0	5.00	227.01	6,884.3	-248.1	-266.2	461,648.20	564,785.86	32° 16' 8.450 N	104° 7' 25.425 W	
7,000.0	5.00	227.01	6,983.9	-254.1	-272.5	461,642.26	564,779.48	32° 16' 8.391 N	104° 7' 25.499 W	
7,100.0	5.00	227.01	7,083.5	-260.0	-278.9	461,636.32	564,773.11	32° 16' 8.332 N	104° 7' 25.573 W	
7,200.0	5.00	227.01	7,183.1	-266.0	-285.3	461,630.37	564,766.73	32° 16' 8.274 N	104° 7' 25.648 W	
7,300.0	5.00	227.01	7,282.7	-271.9	-291.7	461,624.43	564,760.36	32° 16' 8.215 N	104° 7' 25.722 W	
7,400.0	5.00	227.01	7,382.4	-277.9	-298.0	461,618.49	564,753.98	32° 16' 8.156 N	104° 7' 25.797 W	
7,500.0	5.00	227.01	7,482.0	-283.8	-304.4	461,612.54	564,747.61	32° 16' 8.098 N	104° 7' 25.871 W	
7,600.0	5.00	227.01	7,581.6	-289.7	-310.8	461,606.60	564,741.23	32° 16' 8.039 N	104° 7' 25.945 W	
7,618.2	5.00	227.01	7,599.8	-290.8	-311.9	461,605.52	564,740.07	32° 16' 8.028 N	104° 7' 25.959 W	
7,700.0	1.73	227.01	7,681.4	-294.1	-315.5	461,602.25	564,736.56	32° 16' 7.996 N	104° 7' 26.000 W	
7,743.2	0.00	0.00	7,724.6	-294.5	-315.9	461,601.80	564,736.08	32° 16' 7.992 N	104° 7' 26.005 W	
7,800.0	0.00	0.00	7,781.4	-294.5	-315.9	461,601.80	564,736.08	32° 16' 7.992 N	104° 7' 26.005 W	
7,900.0	0.00	0.00	7,881.4	-294.5	-315.9	461,601.80	564,736.08	32° 16' 7.992 N	104° 7' 26.005 W	
8,000.0	0.00	0.00	7,981.4	-294.5	-315.9	461,601.80	564,736.08	32° 16' 7.992 N	104° 7' 26.005 W	
8,100.0	0.00	0.00	8,081.4	-294.5	-315.9	461,601.80	564,736.08	32° 16' 7.992 N	104° 7' 26.005 W	
8,200.0	0.00	0.00	8,181.4	-294.5	-315.9	461,601.80	564,736.08	32° 16' 7.992 N	104° 7' 26.005 W	
8,300.0	0.00	0.00	8,281.4	-294.5	-315.9	461,601.80	564,736.08	32° 16' 7.992 N	104° 7' 26.005 W	
8,400.0	0.00	0.00	8,381.4	-294.5	-315.9	461,601.80	564,736.08	32° 16' 7.992 N	104° 7' 26.005 W	
8,500.0	0.00	0.00	8,481.4	-294.5	-315.9	461,601.80	564,736.08	32° 16' 7.992 N	104° 7' 26.005 W	
8,600.0	0.00	0.00	8,581.4	-294.5	-315.9	461,601.80	564,736.08	32° 16' 7.992 N	104° 7' 26.005 W	
8,700.0	0.00	0.00	8,681.4	-294.5	-315.9	461,601.80	564,736.08	32° 16' 7.992 N	104° 7' 26.005 W	
8,800.0	0.00	0.00	8,781.4	-294.5	-315.9	461,601.80	564,736.08	32° 16' 7.992 N	104° 7' 26.005 W	
8,875.6	0.00	0.00	8,857.0	-294.5	-315.9	461,601.80	564,736.08	32° 16' 7.992 N	104° 7' 26.005 W	
8,900.0	2.44	359.95	8,881.4	-294.0	-315.9	461,602.32	564,736.08	32° 16' 7.997 N	104° 7' 26.005 W	
9,000.0	12.44	359.95	8,980.4	-281.1	-315.9	461,615.25	564,736.07	32° 16' 8.125 N	104° 7' 26.005 W	
9,100.0	22.44	359.95	9,075.7	-251.2	-316.0	461,645.18	564,736.05	32° 16' 8.421 N	104° 7' 26.005 W	
9,200.0	32.44	359.95	9,164.3	-205.1	-316.0	461,691.20	564,736.01	32° 16' 8.876 N	104° 7' 26.004 W	
9,300.0	42.44	359.95	9,243.6	-144.4	-316.1	461,751.91	564,735.95	32° 16' 9.477 N	104° 7' 26.003 W	
9,400.0	52.44	359.95	9,311.2	-70.9	-316.1	461,825.47	564,735.89	32° 16' 10.205 N	104° 7' 26.003 W	
9,500.0	62.44	359.95	9,364.9	13.3	-316.2	461,909.65	564,735.81	32° 16' 11.038 N	104° 7' 26.002 W	
9,600.0	72.44	359.95	9,403.3	105.5	-316.3	462,001.87	564,735.73	32° 16' 11.951 N	104° 7' 26.000 W	
9,700.0	82.44	359.95	9,425.0	203.0	-316.4	462,099.36	564,735.65	32° 16' 12.916 N	104° 7' 25.999 W	
9,775.6	90.00	359.95	9,430.0	278.4	-316.4	462,174.76	564,735.58	32° 16' 13.662 N	104° 7' 25.998 W	
9,800.0	90.00	359.95	9,430.0	302.8	-316.5	462,199.14	564,735.56	32° 16' 13.903 N	104° 7' 25.998 W	
9,900.0	90.00	359.95	9,430.0	402.8	-316.5	462,299.14	564,735.48	32° 16' 14.893 N	104° 7' 25.997 W	
10,000.0	90.00	359.95	9,430.0	502.8	-316.6	462,399.14	564,735.39	32° 16' 15.882 N	104° 7' 25.995 W	
10,100.0	90.00	359.95	9,430.0	602.8	-316.7	462,499.14	564,735.30	32° 16' 16.872 N	104° 7' 25.994 W	
10,200.0	90.00	359.95	9,430.0	702.8	-316.8	462,599.14	564,735.21	32° 16' 17.861 N	104° 7' 25.993 W	
10,300.0	90.00	359.95	9,430.0	802.8	-316.9	462,699.14	564,735.13	32° 16' 18.851 N	104° 7' 25.992 W	
10,400.0	90.00	359.95	9,430.0	902.8	-317.0	462,799.14	564,735.04	32° 16' 19.841 N	104° 7' 25.990 W	
10,500.0	90.00	359.95	9,430.0	1,002.8	-317.1	462,899.14	564,734.95	32° 16' 20.830 N	104° 7' 25.989 W	
10,600.0	90.00	359.95	9,430.0	1,102.8	-317.1	462,999.14	564,734.86	32° 16' 21.820 N	104° 7' 25.988 W	
10,700.0	90.00	359.95	9,430.0	1,202.8	-317.2	463,099.14	564,734.78	32° 16' 22.810 N	104° 7' 25.987 W	
10,800.0	90.00	359.95	9,430.0	1,302.8	-317.3	463,199.14	564,734.69	32° 16' 23.799 N	104° 7' 25.985 W	
10,900.0	90.00	359.95	9,430.0	1,402.8	-317.4	463,299.14	564,734.60	32° 16' 24.789 N	104° 7' 25.984 W	
11,000.0	90.00	359.95	9,430.0	1,502.8	-317.5	463,399.14	564,734.52	32° 16' 25.778 N	104° 7' 25.983 W	
11,100.0	90.00	359.95	9,430.0	1,602.8	-317.6	463,499.14	564,734.43	32° 16' 26.768 N	104° 7' 25.982 W	
11,200.0	90.00	359.95	9,430.0	1,702.8	-317.7	463,599.14	564,734.34	32° 16' 27.758 N	104° 7' 25.980 W	
11,300.0	90.00	359.95	9,430.0	1,802.8	-317.8	463,699.14	564,734.25	32° 16' 28.747 N	104° 7' 25.979 W	

Marathon Oil

Survey Report - Geographic

Country	USA	Well	HERMES FEE 23-28-30 WA 1H
Project	NEW MEXICO	RKB @ 3142.5usft	
Site	HERMES FEE 23-28-30 (WA 1H, TB 3H, WXY 5H)	RKB @ 3142.5usft	
Well	HERMES FEE 23-28-30 WA 1H	Grid	
Wellbore	HERMES FEE 23-28-30 WA 1H	Minimum Curvature	
Depth	PRELIM B	EDMPROD	

Station	Depth (ft)	Interval (ft)	True Depth (ft)	True Interval (ft)	True Azimuth (deg)	True Azimuth (deg)	True Azimuth (deg)	Latitude	Longitude
11,400.0	90.00	359.95	9,430.0	1,902.8	-317.8	463,799.14	564,734.17	32° 16' 29.737 N	104° 7' 25.978 W
11,500.0	90.00	359.95	9,430.0	2,002.8	-317.9	463,899.14	564,734.08	32° 16' 30.727 N	104° 7' 25.977 W
11,600.0	90.00	359.95	9,430.0	2,102.8	-318.0	463,999.14	564,733.99	32° 16' 31.716 N	104° 7' 25.975 W
11,700.0	90.00	359.95	9,430.0	2,202.8	-318.1	464,099.14	564,733.90	32° 16' 32.706 N	104° 7' 25.974 W
11,800.0	90.00	359.95	9,430.0	2,302.8	-318.2	464,199.14	564,733.82	32° 16' 33.695 N	104° 7' 25.973 W
11,900.0	90.00	359.95	9,430.0	2,402.8	-318.3	464,299.14	564,733.73	32° 16' 34.685 N	104° 7' 25.971 W
12,000.0	90.00	359.95	9,430.0	2,502.8	-318.4	464,399.14	564,733.64	32° 16' 35.675 N	104° 7' 25.970 W
12,100.0	90.00	359.95	9,430.0	2,602.8	-318.5	464,499.14	564,733.56	32° 16' 36.664 N	104° 7' 25.969 W
12,200.0	90.00	359.95	9,430.0	2,702.8	-318.5	464,599.14	564,733.47	32° 16' 37.654 N	104° 7' 25.968 W
12,300.0	90.00	359.95	9,430.0	2,802.8	-318.6	464,699.14	564,733.38	32° 16' 38.644 N	104° 7' 25.966 W
12,400.0	90.00	359.95	9,430.0	2,902.8	-318.7	464,799.14	564,733.29	32° 16' 39.633 N	104° 7' 25.965 W
12,500.0	90.00	359.95	9,430.0	3,002.8	-318.8	464,899.14	564,733.21	32° 16' 40.623 N	104° 7' 25.964 W
12,600.0	90.00	359.95	9,430.0	3,102.8	-318.9	464,999.14	564,733.12	32° 16' 41.612 N	104° 7' 25.963 W
12,700.0	90.00	359.95	9,430.0	3,202.8	-319.0	465,099.14	564,733.03	32° 16' 42.602 N	104° 7' 25.961 W
12,800.0	90.00	359.95	9,430.0	3,302.8	-319.1	465,199.14	564,732.94	32° 16' 43.592 N	104° 7' 25.960 W
12,900.0	90.00	359.95	9,430.0	3,402.8	-319.2	465,299.14	564,732.86	32° 16' 44.581 N	104° 7' 25.959 W
13,000.0	90.00	359.95	9,430.0	3,502.8	-319.2	465,399.14	564,732.77	32° 16' 45.571 N	104° 7' 25.958 W
13,100.0	90.00	359.95	9,430.0	3,602.8	-319.3	465,499.14	564,732.68	32° 16' 46.561 N	104° 7' 25.956 W
13,200.0	90.00	359.95	9,430.0	3,702.8	-319.4	465,599.14	564,732.60	32° 16' 47.550 N	104° 7' 25.955 W
13,300.0	90.00	359.95	9,430.0	3,802.8	-319.5	465,699.14	564,732.51	32° 16' 48.540 N	104° 7' 25.954 W
13,400.0	90.00	359.95	9,430.0	3,902.8	-319.6	465,799.14	564,732.42	32° 16' 49.529 N	104° 7' 25.953 W
13,500.0	90.00	359.95	9,430.0	4,002.8	-319.7	465,899.14	564,732.33	32° 16' 50.519 N	104° 7' 25.951 W
13,600.0	90.00	359.95	9,430.0	4,102.8	-319.8	465,999.14	564,732.25	32° 16' 51.509 N	104° 7' 25.950 W
13,700.0	90.00	359.95	9,430.0	4,202.8	-319.9	466,099.14	564,732.16	32° 16' 52.498 N	104° 7' 25.949 W
13,800.0	90.00	359.95	9,430.0	4,302.8	-319.9	466,199.14	564,732.07	32° 16' 53.488 N	104° 7' 25.948 W
13,900.0	90.00	359.95	9,430.0	4,402.8	-320.0	466,299.14	564,731.98	32° 16' 54.478 N	104° 7' 25.946 W
14,000.0	90.00	359.95	9,430.0	4,502.8	-320.1	466,399.14	564,731.90	32° 16' 55.467 N	104° 7' 25.945 W
14,072.2	90.00	359.95	9,430.0	4,575.0	-320.2	466,471.32	564,731.83	32° 16' 56.182 N	104° 7' 25.944 W

Checked By: _____ Approved By: _____ Date: _____