

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

Form C-103
Revised July 18, 2013

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.)		WELL API NO. 30-015-44374
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☐ FEE ☒
2. Name of Operator Marathon Oil Permian LLC		6. State Oil & Gas Lease No.
3. Address of Operator 5555 San Felipe Rd Houston, TX 77057		7. Lease Name or Unit Agreement Name Cypress Fee 23 27 9
4. Well Location Unit Letter <u>L</u> : <u>549</u> feet from the <u>south</u> line and <u>549</u> feet from the <u>west</u> line Section <u>9</u> Township <u>23S</u> Range <u>27E</u> NMPM <u>EDDY</u> County		8. Well Number <u>002H</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3159 GR		9. OGRID Number 372098
		10. Pool name or Wildcat Carlsbad; Bone Spring; South

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 well-bore diagram of proposed completion or recompletion.

Marathon respectfully requests a change to original plans to drill into the Bone Springs to the Wolfcamp D. (Gas well)
Changes to drilling casing and cementing is listed below. Please see attached C-102 and directional plan for the change requested.

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC	Drilling Fluid
Prod	8.75	7	29	9200	595	0	Cut Brine
Liner	6.125	4.5	13.5	14400	410	9100	OBM

NM OIL CONSERVATION
ARTESIA DISTRICT

NOV 03 2017

RECEIVED

Spud Date:

10/13/2017

Rig Release Date:

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

SIGNATURE Jennifer Van Curen TITLE Sr. Regulatory Compliance DATE 10/19/2017

Type or print name Jennifer Van Curen E-mail address: jvancuren@marathonoil.com PHONE: 713-296-2500

For State Use Only

APPROVED BY: Raymond W. Duda TITLE Geologist DATE 11-6-17
Conditions of Approval (if any):

NOV 03 2017

District I

1625 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720

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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) 476-3462State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-013-44374	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP
⁴ Property Code 319281	⁵ Property Name CYPRESS FEE 23-27-9	⁶ Well Number 2H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 3159

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	9	T23S	R27E		1664'	SOUTH	549'	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	9	T23S	R27E		755'	SOUTH	330'	EAST	EDDY

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

¹⁶ CORNER COORDINATES NAD 83, SPCS NM EAST A - Y: 479969.05' / X: 581406.92' B - Y: 480105.89' / X: 586659.17' C - Y: 477486.36' / X: 586707.24' D - Y: 477316.50' / X: 581420.97'		CORNER COORDINATES NAD 27, SPCS NM EAST A - Y: 479910.10' / X: 540224.91' B - Y: 480146.87' / X: 545477.09' C - Y: 477427.41' / X: 545525.10' D - Y: 477257.62' / X: 540238.91'		¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or released 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. <i>Jennifer Van Curen</i> 10/19/2017 Signature Date Jennifer Van Curen Printed Name jvancuren@marathonoil.com E-mail Address	
SECTION 5	SECTION 4			SECTION 3	
SECTION 8	SECTION 9	LAST TAKE POINT/ BOTTOM HOLE LOCATION 755' FSL 330' FEL NAD 83, SPCS NM EAST X:586363.52' / Y:478231.17' LAT:32.31464603N / LON:104.18758266W NAD 27, SPCS NM EAST X:545181.41' / Y:478172.20' LAT:32.31452692N / LON:104.18709301W		SECTION 10	
FIRST TAKE POINT 762' FSL 330' FVL NAD 83, SPCS NM EAST X:581746.88' / Y:478089.77' LAT:32.31427372N / LON:104.20252738W NAD 27, SPCS NM EAST X:540564.83' / Y:478030.86' LAT:32.31415483N / LON:104.20202718W					
SECTION 8	SECTION 9			SECTION 10	
SECTION 17	SECTION 16			SECTION 15	
¹⁸ SURVEYOR CERTIFICATION 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. OCTOBER 19, 2017 Date of Survey Signature and Seal of Professional Surveyor LLOYD P. SHORT Certificate Number LLOYD P. SHORT 21653					



Pro Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 2H
Project:	Eddy County, NM	TVD Reference:	Well @ 3185.50usft (GL: 3159' + KB: 26.5' (H&P480))
Site:	Cypress Fee 23-27-9 (2-3-4)	MD Reference:	Well @ 3185.50usft (GL: 3159' + KB: 26.5' (H&P480))
Well:	No. 2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #4	Database:	WellPlanner1

Project:	Eddy County, NM		
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:	Cypress Fee 23-27-9 (2-3-4)
Site Position:	Northing: 478,939.79 usft Latitude: 32.3166527
From: Map	Easting: 540,778.74 usft Longitude: -104.2013311
Position Uncertainty: 0.00 usft	Slot Radius: 13-3/16 " Grid Convergence: 0.07 °

Well:	No. 2H
Well Position	+N/-S 0.00 usft Northing: 478,939.79 usft Latitude: 32.3166527
	+E/-W 0.00 usft Easting: 540,778.74 usft Longitude: -104.2013311
Position Uncertainty	0.00 usft Wellhead Elevation: usft Ground Level: 3,159.00 usft

Wellbore:	OH
Magnetics	Model Name Sample Date Declination (°) Dip Angle (°) Field Strength (nT)
	User Defined 10/9/2017 7.57 60.07 48,038.30

Design:	Plan #4
Audit Notes:	
Version:	Phase: PLAN Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft) +N/-S (usft) +E/-W (usft) Direction (°)
	0.00 0.00 0.00 88.25

Survey Tool Program	Date 10/18/2017
From (usft) To (usft) Survey (Wellbore) Tool Name Description	
0.00 5,000.00 Plan #4 (OH)	MWD+IFR1 OWSG MWD + IFR1
5,000.00 10,000.00 Plan #4 (OH)	MWD+IFR1 OWSG MWD + IFR1
10,000.00 14,330.83 Plan #4 (OH)	MWD+IFR1 OWSG MWD + IFR1

Planned 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
[CypressFee#2H]FTP - [CypressFee#2H]LTP/BHL - [CypressFee#2H]KOP									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00



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Well:	No. 2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #4	Database:	WellPlanner1

Planned 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)
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,198.86	0.00	0.00	4,198.86	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.01	205.91	4,200.00	0.00	0.00	0.00	1.00	1.00	0.00
4,300.00	1.01	205.91	4,299.99	-0.80	-0.39	-0.41	1.00	1.00	0.00
4,400.00	2.01	205.91	4,399.96	-3.18	-1.54	-1.64	1.00	1.00	0.00
4,500.00	3.01	205.91	4,499.86	-7.12	-3.46	-3.67	1.00	1.00	0.00
4,600.00	4.01	205.91	4,599.67	-12.63	-6.13	-6.52	1.00	1.00	0.00



Pro Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 2H
Project:	Eddy County, NM	TVD Reference:	Well @ 3185.50usft (GL: 3159' + KB: 26.5' (H&P480))
Site:	Cypress Fee 23-27-9 (2-3-4)	MD Reference:	Well @ 3185.50usft (GL: 3159' + KB: 26.5' (H&P480))
Well:	No. 2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #4	Database:	WellPlanner1

Planned 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)
4,700.00	5.01	205.91	4,699.36	-19.70	-9.57	-10.17	1.00	1.00	0.00
4,800.00	6.01	205.91	4,798.90	-28.34	-13.77	-14.63	1.00	1.00	0.00
4,900.00	7.01	205.91	4,898.25	-38.54	-18.72	-19.89	1.00	1.00	0.00
5,000.00	8.01	205.91	4,997.39	-50.30	-24.43	-25.96	1.00	1.00	0.00
5,100.00	9.01	205.91	5,096.29	-63.61	-30.90	-32.83	1.00	1.00	0.00
5,200.00	10.01	205.91	5,194.91	-78.47	-38.12	-40.50	1.00	1.00	0.00
5,300.00	11.01	205.91	5,293.23	-94.88	-46.09	-48.97	1.00	1.00	0.00
5,400.00	12.01	205.91	5,391.22	-112.83	-54.81	-58.23	1.00	1.00	0.00
5,500.00	13.01	205.91	5,488.85	-132.32	-64.28	-68.29	1.00	1.00	0.00
5,600.00	14.01	205.91	5,586.08	-153.33	-74.49	-79.14	1.00	1.00	0.00
5,700.00	15.01	205.91	5,682.89	-175.87	-85.44	-90.77	1.00	1.00	0.00
5,798.86	16.00	205.91	5,778.15	-199.64	-96.99	-103.04	1.00	1.00	0.00
5,800.00	16.00	205.91	5,779.24	-199.92	-97.12	-103.18	0.00	0.00	0.00
5,900.00	16.00	205.91	5,875.37	-224.72	-109.17	-115.98	0.00	0.00	0.00
6,000.00	16.00	205.91	5,971.49	-249.51	-121.21	-128.78	0.00	0.00	0.00
6,100.00	16.00	205.91	6,067.62	-274.30	-133.26	-141.57	0.00	0.00	0.00
6,200.00	16.00	205.91	6,163.75	-299.10	-145.30	-154.37	0.00	0.00	0.00
6,300.00	16.00	205.91	6,259.87	-323.89	-157.35	-167.17	0.00	0.00	0.00
6,400.00	16.00	205.91	6,356.00	-348.68	-169.39	-179.96	0.00	0.00	0.00
6,500.00	16.00	205.91	6,452.12	-373.47	-181.44	-192.76	0.00	0.00	0.00
6,600.00	16.00	205.91	6,548.25	-398.27	-193.48	-205.55	0.00	0.00	0.00
6,700.00	16.00	205.91	6,644.38	-423.06	-205.53	-218.35	0.00	0.00	0.00
6,800.00	16.00	205.91	6,740.50	-447.85	-217.57	-231.15	0.00	0.00	0.00
6,900.00	16.00	205.91	6,836.63	-472.65	-229.62	-243.94	0.00	0.00	0.00
7,000.00	16.00	205.91	6,932.76	-497.44	-241.66	-256.74	0.00	0.00	0.00
7,100.00	16.00	205.91	7,028.88	-522.23	-253.70	-269.53	0.00	0.00	0.00
7,200.00	16.00	205.91	7,125.01	-547.02	-265.75	-282.33	0.00	0.00	0.00
7,300.00	16.00	205.91	7,221.13	-571.82	-277.79	-295.13	0.00	0.00	0.00
7,400.00	16.00	205.91	7,317.26	-596.61	-289.84	-307.92	0.00	0.00	0.00
7,500.00	16.00	205.91	7,413.39	-621.40	-301.88	-320.72	0.00	0.00	0.00
7,600.00	16.00	205.91	7,509.51	-646.20	-313.93	-333.51	0.00	0.00	0.00
7,700.00	16.00	205.91	7,605.64	-670.99	-325.97	-346.31	0.00	0.00	0.00
7,800.00	16.00	205.91	7,701.77	-695.78	-338.02	-359.11	0.00	0.00	0.00
7,900.00	16.00	205.91	7,797.89	-720.57	-350.06	-371.90	0.00	0.00	0.00
8,000.00	16.00	205.91	7,894.02	-745.37	-362.11	-384.70	0.00	0.00	0.00
8,100.00	16.00	205.91	7,990.14	-770.16	-374.15	-397.50	0.00	0.00	0.00
8,200.00	16.00	205.91	8,086.27	-794.95	-386.19	-410.29	0.00	0.00	0.00
8,300.00	16.00	205.91	8,182.40	-819.75	-398.24	-423.09	0.00	0.00	0.00
8,400.00	16.00	205.91	8,278.52	-844.54	-410.28	-435.88	0.00	0.00	0.00
8,419.82	16.00	205.91	8,297.57	-849.45	-412.67	-438.42	0.00	0.00	0.00
8,500.00	13.59	205.91	8,375.09	-867.87	-421.62	-447.93	3.00	-3.00	0.00
8,600.00	10.59	205.91	8,472.86	-886.72	-430.77	-457.65	3.00	-3.00	0.00



Pro Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 2H
Project:	Eddy County, NM	TVD Reference:	Well @ 3185.50usft (GL: 3159' + KB: 26.5' (H&P480))
Site:	Cypress Fee 23-27-9 (2-3-4)	MD Reference:	Well @ 3185.50usft (GL: 3159' + KB: 26.5' (H&P480))
Well:	No. 2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #4	Database:	WellPlanner1

Planned 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)
8,700.00	7.59	205.91	8,571.59	-900.93	-437.68	-464.99	3.00	-3.00	0.00
8,800.00	4.59	205.91	8,671.01	-910.48	-442.32	-469.92	3.00	-3.00	0.00
8,900.00	1.59	205.91	8,770.86	-915.33	-444.68	-472.42	3.00	-3.00	0.00
8,953.15	0.00	0.00	8,824.00	-916.00	-445.00	-472.77	3.00	-3.00	0.00
9,000.00	0.00	0.00	8,870.85	-916.00	-445.00	-472.77	0.00	0.00	0.00
9,100.00	0.00	0.00	8,970.85	-916.00	-445.00	-472.77	0.00	0.00	0.00
9,153.15	0.00	0.00	9,024.00	-916.00	-445.00	-472.77	0.00	0.00	0.00
[CypressFee#2H]NewKOP									
9,200.00	4.68	88.25	9,070.80	-915.94	-443.09	-470.85	10.00	10.00	0.00
9,250.00	9.68	88.25	9,120.39	-915.75	-436.84	-464.60	10.00	10.00	0.00
9,300.00	14.68	88.25	9,169.25	-915.43	-426.29	-454.05	10.00	10.00	0.00
9,350.00	19.68	88.25	9,217.00	-914.98	-411.53	-439.28	10.00	10.00	0.00
9,400.00	24.68	88.25	9,263.28	-914.40	-392.67	-420.41	10.00	10.00	0.00
9,450.00	29.68	88.25	9,307.75	-913.70	-369.84	-397.57	10.00	10.00	0.00
9,500.00	34.68	88.25	9,350.05	-912.88	-343.23	-370.95	10.00	10.00	0.00
9,550.00	39.68	88.25	9,389.87	-911.96	-313.03	-340.74	10.00	10.00	0.00
9,600.00	44.68	88.25	9,426.91	-910.93	-279.48	-307.17	10.00	10.00	0.00
9,650.00	49.68	88.25	9,460.88	-909.81	-242.83	-270.51	10.00	10.00	0.00
9,700.00	54.68	88.25	9,491.53	-908.60	-203.37	-231.02	10.00	10.00	0.00
9,740.68	58.75	88.25	9,513.85	-907.56	-169.38	-197.02	10.00	10.00	0.00
[CypressFee#2H]NewFTP									
9,750.00	59.68	88.25	9,518.61	-907.32	-161.38	-189.01	10.00	10.00	0.00
9,800.00	64.68	88.25	9,541.94	-905.96	-117.19	-144.80	10.00	10.00	0.00
9,850.00	69.68	88.25	9,561.32	-904.55	-71.14	-98.73	10.00	10.00	0.00
9,900.00	74.68	88.25	9,576.61	-903.10	-23.57	-51.14	10.00	10.00	0.00
9,950.00	79.68	88.25	9,587.70	-901.61	25.14	-2.40	10.00	10.00	0.00
10,000.00	84.68	88.25	9,594.49	-900.09	74.64	47.12	10.00	10.00	0.00
10,036.18	88.30	88.25	9,596.71	-898.98	110.73	83.23	10.00	10.00	0.00
10,100.00	88.30	88.25	9,598.60	-897.03	174.49	147.02	0.00	0.00	0.00
10,200.00	88.30	88.25	9,601.56	-893.97	274.40	246.97	0.00	0.00	0.00
10,300.00	88.30	88.25	9,604.52	-890.91	374.31	346.93	0.00	0.00	0.00
10,400.00	88.30	88.25	9,607.48	-887.86	474.22	446.88	0.00	0.00	0.00
10,500.00	88.30	88.25	9,610.44	-884.80	574.13	546.84	0.00	0.00	0.00
10,600.00	88.30	88.25	9,613.40	-881.74	674.04	646.80	0.00	0.00	0.00
10,700.00	88.30	88.25	9,616.36	-878.68	773.95	746.75	0.00	0.00	0.00
10,800.00	88.30	88.25	9,619.32	-875.62	873.86	846.71	0.00	0.00	0.00
10,900.00	88.30	88.25	9,622.29	-872.56	973.77	946.67	0.00	0.00	0.00
11,000.00	88.30	88.25	9,625.25	-869.50	1,073.68	1,046.62	0.00	0.00	0.00
11,100.00	88.30	88.25	9,628.21	-866.44	1,173.58	1,146.58	0.00	0.00	0.00
11,200.00	88.30	88.25	9,631.17	-863.38	1,273.49	1,246.53	0.00	0.00	0.00
11,300.00	88.30	88.25	9,634.13	-860.32	1,373.40	1,346.49	0.00	0.00	0.00
11,400.00	88.30	88.25	9,637.09	-857.27	1,473.31	1,446.45	0.00	0.00	0.00



Pro Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 2H
Project:	Eddy County, NM	TVD Reference:	Well @ 3185.50usft (GL: 3159' + KB: 26.5' (H&P480))
Site:	Cypress Fee 23-27-9 (2-3-4)	MD Reference:	Well @ 3185.50usft (GL: 3159' + KB: 26.5' (H&P480))
Well:	No. 2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #4	Database:	WellPlanner1

Planned 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)
11,500.00	88.30	88.25	9,640.05	-854.21	1,573.22	1,546.40	0.00	0.00	0.00
11,600.00	88.30	88.25	9,643.01	-851.15	1,673.13	1,646.36	0.00	0.00	0.00
11,700.00	88.30	88.25	9,645.98	-848.09	1,773.04	1,746.31	0.00	0.00	0.00
11,800.00	88.30	88.25	9,648.94	-845.03	1,872.95	1,846.27	0.00	0.00	0.00
11,900.00	88.30	88.25	9,651.90	-841.97	1,972.86	1,946.23	0.00	0.00	0.00
12,000.00	88.30	88.25	9,654.86	-838.91	2,072.77	2,046.18	0.00	0.00	0.00
12,100.00	88.30	88.25	9,657.82	-835.85	2,172.68	2,146.14	0.00	0.00	0.00
12,200.00	88.30	88.25	9,660.78	-832.79	2,272.59	2,246.10	0.00	0.00	0.00
12,300.00	88.30	88.25	9,663.74	-829.73	2,372.50	2,346.05	0.00	0.00	0.00
12,400.00	88.30	88.25	9,666.70	-826.67	2,472.41	2,446.01	0.00	0.00	0.00
12,500.00	88.30	88.25	9,669.67	-823.62	2,572.32	2,545.96	0.00	0.00	0.00
12,600.00	88.30	88.25	9,672.63	-820.56	2,672.22	2,645.92	0.00	0.00	0.00
12,700.00	88.30	88.25	9,675.59	-817.50	2,772.13	2,745.88	0.00	0.00	0.00
12,800.00	88.30	88.25	9,678.55	-814.44	2,872.04	2,845.83	0.00	0.00	0.00
12,900.00	88.30	88.25	9,681.51	-811.38	2,971.95	2,945.79	0.00	0.00	0.00
13,000.00	88.30	88.25	9,684.47	-808.32	3,071.86	3,045.74	0.00	0.00	0.00
13,100.00	88.30	88.25	9,687.43	-805.26	3,171.77	3,145.70	0.00	0.00	0.00
13,200.00	88.30	88.25	9,690.39	-802.20	3,271.68	3,245.66	0.00	0.00	0.00
13,300.00	88.30	88.25	9,693.36	-799.14	3,371.59	3,345.61	0.00	0.00	0.00
13,400.00	88.30	88.25	9,696.32	-796.08	3,471.50	3,445.57	0.00	0.00	0.00
13,500.00	88.30	88.25	9,699.28	-793.03	3,571.41	3,545.53	0.00	0.00	0.00
13,600.00	88.30	88.25	9,702.24	-789.97	3,671.32	3,645.48	0.00	0.00	0.00
13,700.00	88.30	88.25	9,705.20	-786.91	3,771.23	3,745.44	0.00	0.00	0.00
13,800.00	88.30	88.25	9,708.16	-783.85	3,871.14	3,845.39	0.00	0.00	0.00
13,900.00	88.30	88.25	9,711.12	-780.79	3,971.05	3,945.35	0.00	0.00	0.00
14,000.00	88.30	88.25	9,714.08	-777.73	4,070.96	4,045.31	0.00	0.00	0.00
14,100.00	88.30	88.25	9,717.04	-774.67	4,170.86	4,145.26	0.00	0.00	0.00
14,200.00	88.30	88.25	9,720.01	-771.61	4,270.77	4,245.22	0.00	0.00	0.00
14,300.00	88.30	88.25	9,722.97	-768.55	4,370.68	4,345.17	0.00	0.00	0.00
14,330.83	88.30	88.25	9,723.88	-767.61	4,401.49	4,376.00	0.00	0.00	0.00
[CypressFee#2H]NewLTP/BHL									



Pro Directional Survey Report

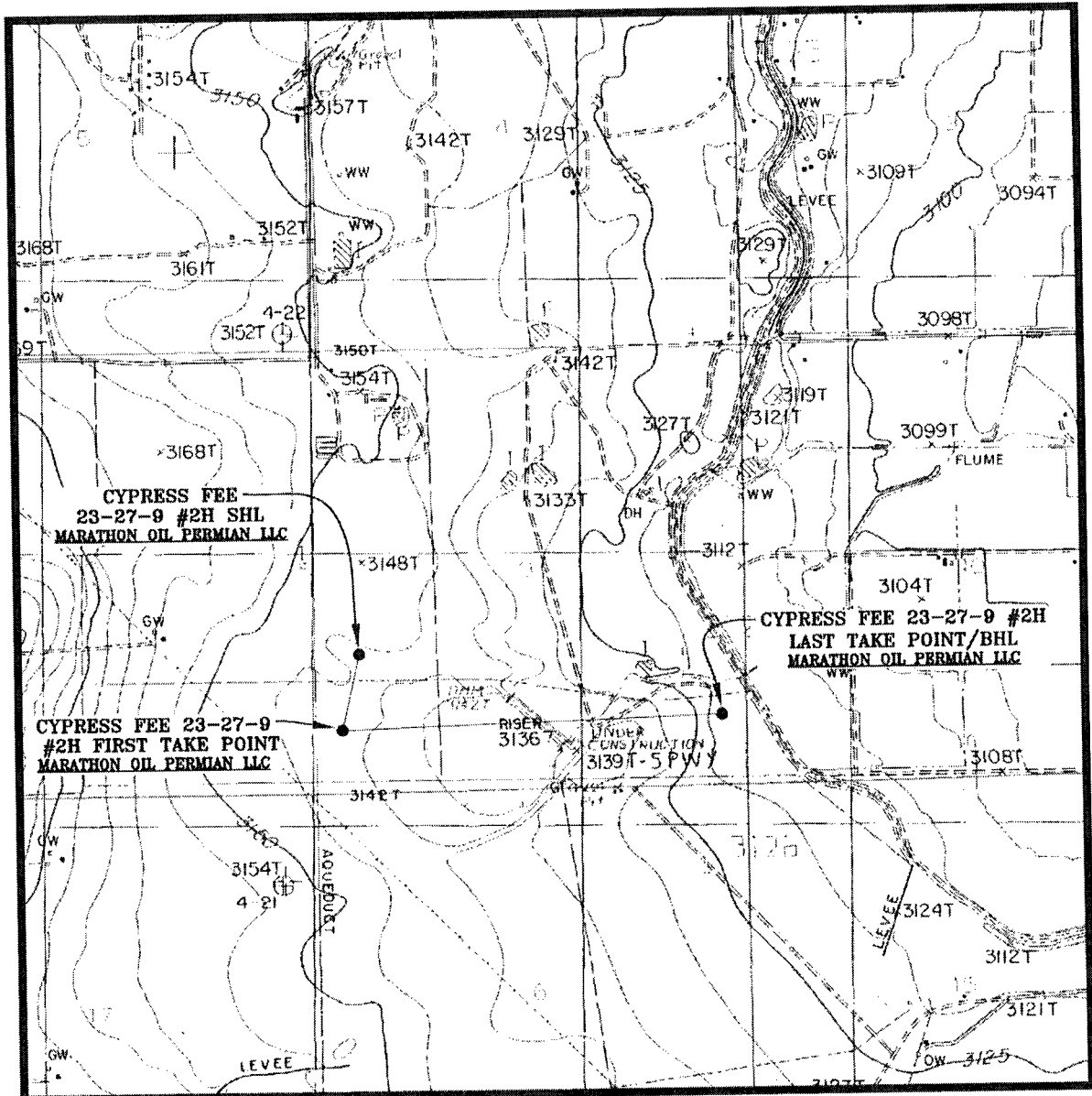


Company:	Marathon Oil	Local Co-ordinate Reference:	Well No. 2H
Project:	Eddy County, NM	TVD Reference:	Well @ 3185.50usft (GL: 3159' + KB: 26.5' (H&P480))
Site:	Cypress Fee 23-27-9 (2-3-4)	MD Reference:	Well @ 3185.50usft (GL: 3159' + KB: 26.5' (H&P480))
Well:	No. 2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #4	Database:	WellPlanner1

Design Targets										
Target Name	hit/miss target	Dip Angle	Dip Dir.	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude
Shape		(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
[CypressFee#2H]FTP		0.00	0.00	0.00	-1,008.94	-213.38	477,930.85	540,565.36	32.3138799	-104.2020259
- plan misses target center by 1031.26usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)										
- Point										
[CypressFee#2H]LTP/Bt		0.00	0.00	0.00	-867.61	4,404.49	478,072.18	545,183.23	32.3142520	-104.1870775
- plan misses target center by 4489.13usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)										
- Point										
[CypressFee#2H]KOP		0.00	0.01	0.00	-1,016.00	-442.00	477,923.79	540,336.74	32.3138613	-104.2027659
- plan misses target center by 1107.98usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)										
- Point										
[CypressFee#2H]NewKC		0.00	0.00	9,024.00	-916.00	-445.00	478,023.79	540,333.74	32.3141362	-104.2027752
- plan hits target center										
- Point										
[CypressFee#2H]NewF1		0.00	0.00	9,586.76	-908.94	-216.38	478,030.85	540,562.36	32.3141548	-104.2020352
- plan misses target center by 86.76usft at 9740.68usft MD (9513.85 TVD, -907.56 N, -169.38 E)										
- Point										
[CypressFee#2H]NewLT		0.00	0.00	9,723.88	-767.61	4,401.49	478,172.18	545,180.23	32.3145269	-104.1870868
- plan hits target center										
- Point										

Checked By: _____	Approved By: _____	Date: _____
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LOCATION VERIFICATION MAP

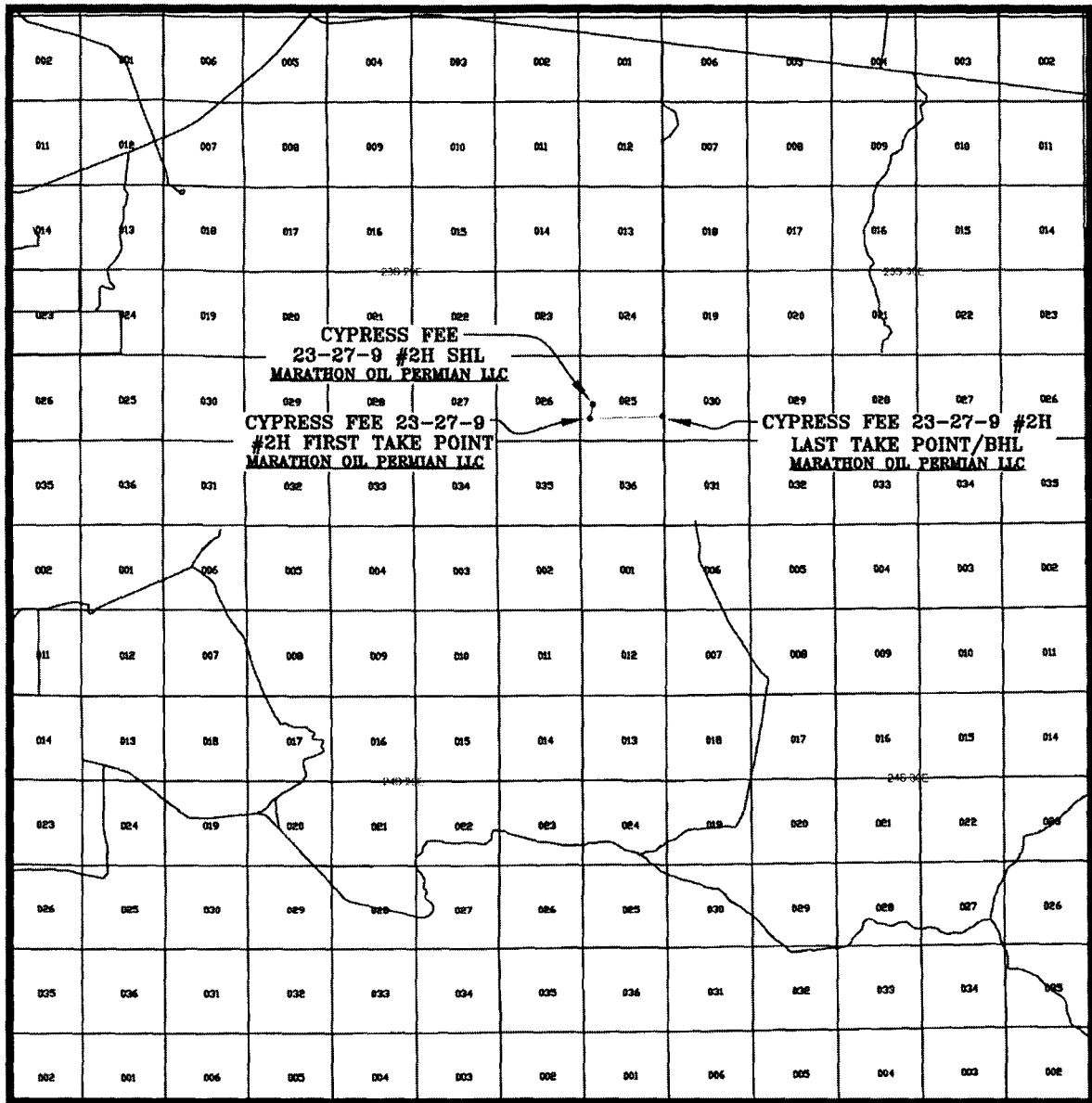


SEC. 9 TWP. 23-S RGE. 27-E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 DESCRIPTION: 1664' FSL & 549' FWL
 ELEVATION: 3159'
 OPERATOR: MARATHON OIL PERMIAN LLC
 LEASE: CYPRESS FEE 23-27-9
 U.S.G.S. TOPOGRAPHIC MAP: OTIS, N.M.

SCALE: 1" = 2000'
 CONTOUR INTERVAL = 5'

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-6900 OFFICE
 JOB No. R3772_002

VICINITY MAP



SEC. 9 TWP. 23-S RGE. 27-E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 DESCRIPTION: 1664' FSL & 549' FWL
 ELEVATION: 3159'
 OPERATOR: MARATHON OIL PERMIAN LLC
 LEASE: CYPRESS FEE 23-27-9
 U.S.G.S. TOPOGRAPHIC MAP: OTIS, N.M.

SCALE: 1" = 2 MILES

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-8900 OFFICE
 JOB No. R3772_002

WELL PAD SURFACE

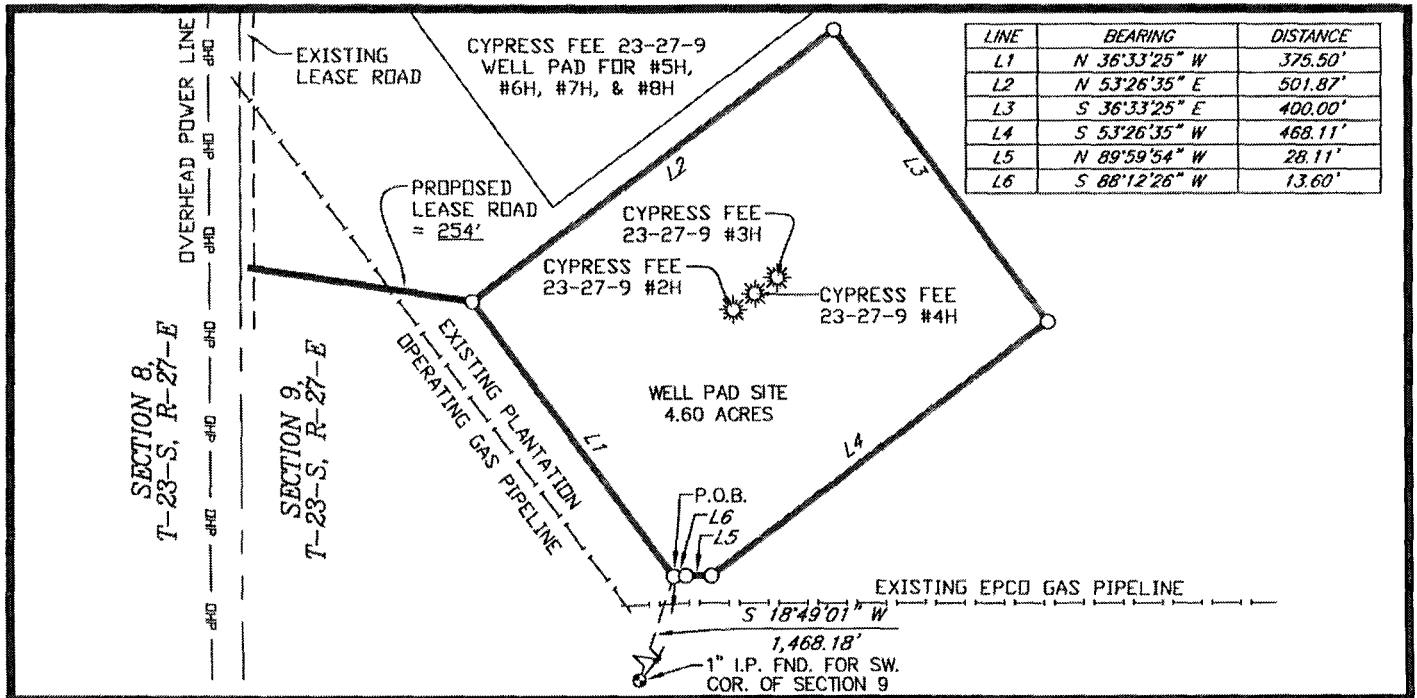
100' 0' 100' 200'
SCALE: 1" = 200'

SEC. 9 TWP. 23-S RGE. 27-E

SURVEY: N.M.P.M.

COUNTY: EDDY

U.S.G.S. TOPOGRAPHIC MAP: OTIS, N.M.



FIELD NOTES DESCRIBING

A tract of land being 4.60 acres. Said tract being located in Section 9, Township 23 South, Range 27 East, New Mexico Principal Meridian, Eddy County, New Mexico.

Being more particularly described by metes and bounds as follows:

BEGINNING at a point from which a 1 inch iron pipe found for the Southwest corner of said Section 9 bears, S 18°49'01" W a distance of 1,468.18 feet

THENCE

N 36°33'25" W a distance of 375.50 feet to the West corner of this tract, and
N 53°26'35" E a distance of 501.87 feet to the North corner of this tract, and
S 36°33'25" E a distance of 400.00 feet to the East corner of this tract, and
S 53°26'35" W a distance of 468.11 feet, N 89°59'54" W a distance of 28.11 feet, and
S 88°12'26" W a distance of 13.60 feet to the **POINT OF BEGINNING**.

The total area of the herein described tract contains 4.60 acres of land

All bearings and coordinates refer to NAD 83 New Mexico State Plane Coordinate System, East Zone, U.S. Survey Feet. (All bearings and distances are grid measurements.)

Title information furnished by Marathon Oil Permian LLC.

Reference accompanying Certificate of Survey prepared in conjunction with this legal description for easement.

STATE OF NEW MEXICO
COUNTY OF EDDY

I, Lloyd P. Short, New Mexico Professional Surveyor No. 21653, do hereby certify that this easement survey plat and the actual survey on the ground upon which it is based were performed by me or under my direct supervision; that I am responsible for this survey; that this survey meets the minimum standards for surveying in New Mexico; and that it is true and correct to the best of my knowledge and belief. I further certify that this survey is not a land division or subdivision as defined in the New Mexico Subdivision Act and that this instrument is an easement survey plat crossing an existing tract or tracts.



LLOYD P. SHORT, PS No. 21653 DATE: OCTOBER 19, 2017

Lloyd P. Short

Marathon Oil
Permian LLC

PLAT FOR A SURFACE SITE ON THE PROPERTY OF
THE EARL AND ANN JACOBI
FAMILY TRUST
EDDY COUNTY, NEW MEXICO

BASIS OF BEARING
ALL BEARINGS AND COORDINATES REFER TO NAD 83, NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET. (ALL BEARINGS AND DISTANCES ARE GRID MEASUREMENTS.)

LEGEND	P.O.B. POINT OF BEGINNING	R3772_002
— — — — —	PROP. LEASE RD.	— — — — —
— — — — —	EDGE OF ROAD	— x — x —
— — — — —	SURFACE SITE EDGE	— — — — —
— — — — —	EXIST. PIPELINE	— — — — —
●	MONUMENT	●
○	POWER POLE	○
— — — — —	ARC LIMITS	— — — — —
— — — — —	FENCE	— — — — —
— — — — —	SECTION LINE	— — — — —
— — — — —	OVERHEAD POWER	— — — — —
●	QUARTER SPLIT	●

REV.	DATE	DESCRIPTION	BY	CHKD
SHEET 4 OF 7				
DRAWN BY: DEF				
DATE: 07/08/2017				
CHECKED BY: LPS				



1309 LOUISVILLE AVE.
MONROE, LA 71201
(318) 323-6900
FAX (318) 362-0064

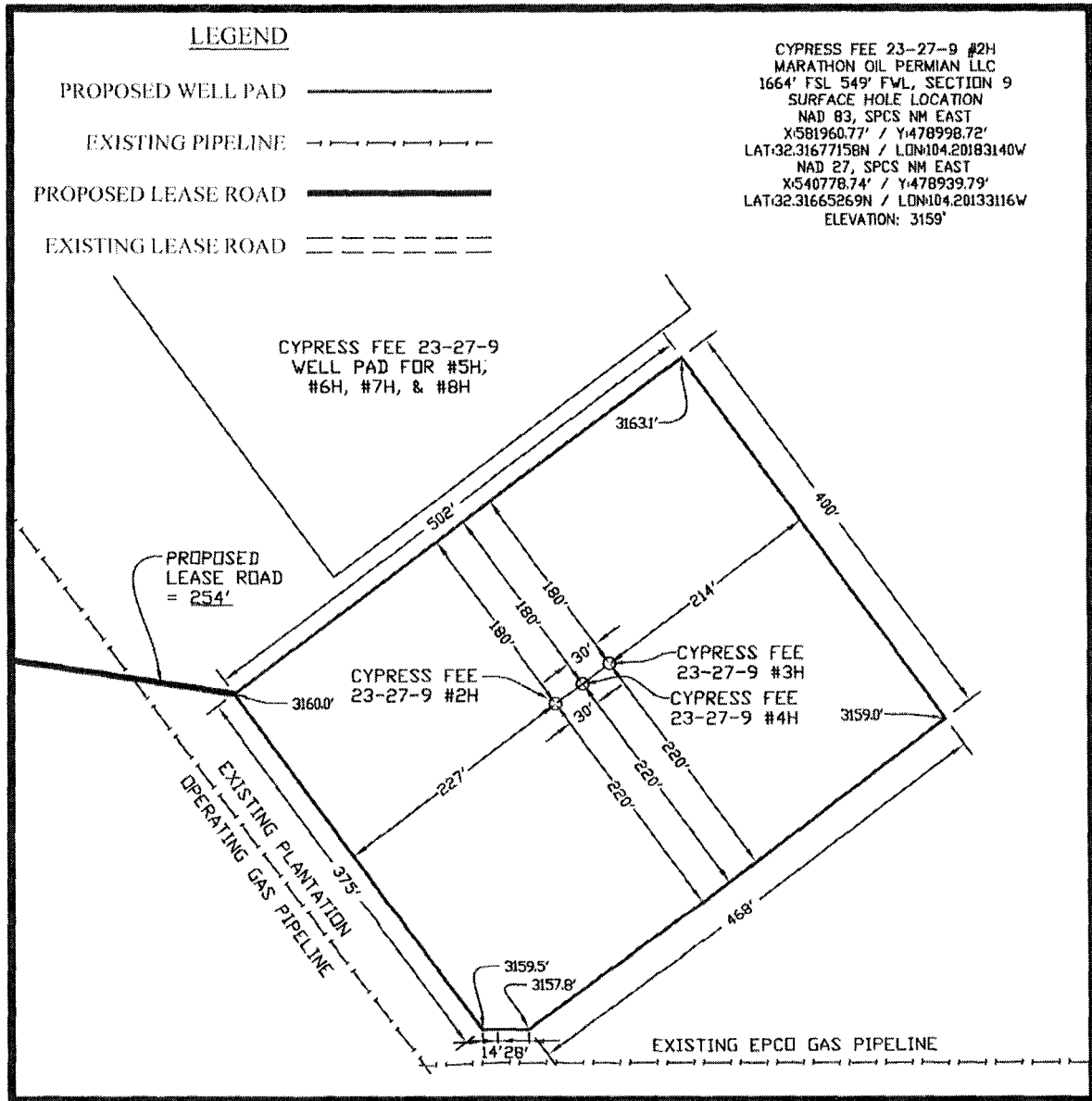
WELL PAD TOPO

SEC. 9 TWP. 23-S RGE. 27-E

SURVEY: N.M.P.M.

COUNTY: EDDY

U.S.G.S. TOPOGRAPHIC MAP: OTIS, N.M.



DIRECTIONS TO LOCATION:

FROM THE INTERSECTION OF U.S. HIGHWAY 62/WEST GREENE STREET AND U.S. 180 W./U.S. 62 W./S. CANAL STREET IN CARLSBAD, NEW MEXICO, TRAVEL SOUTH ON U.S. 62 W./S. CANAL STREET FOR 2.0 MILES TO SLIGHT LEFT ONTO U.S.-285 SOUTH. TRAVEL SOUTH ON U.S.-285 SOUTH FOR 1.3 MILES TO S. THOMASON ROAD ON THE RIGHT. TRAVEL SOUTH ON S. THOMASON ROAD FOR 3.6 MILES TO A LEASE ROAD ON THE LEFT (SECOND RD. RIGHT AFTER SHARP CURVE TO THE LEFT). TRAVEL SOUTH ON LEASE ROAD FOR 0.7 MILES TO PROPOSED WELLS 541 FEET ON THE LEFT.

NOTE:

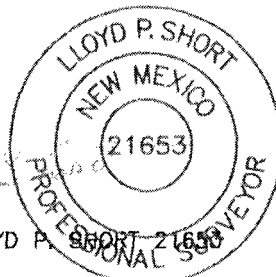
THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA SHOWN IS FROM STATE OF NEW MEXICO OIL CONSERVATION DIVISION FORM C-102 INCLUDED IN THIS SUBMITTAL.

75' 0' 75' 150'

SCALE: 1" = 150'

OCTOBER 19, 2017

LLOYD P. SHORT 21653



PREPARED BY:
R-SQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE, MONROE, LA 71201
318-323-6900 OFFICE
JOB No. R3772_002

SCALE: 1" = 2000'
CONTOUR INTERVAL = 20'

PREPARED BY:
R-SQUARED GLOBAL, LLC
1909 LOUISVILLE AVENUE, MONROE, LA 71201
318-323-6900 OFFICE
JOB No. R3772_002

EXISTING ACCESS ROAD VICINITY MAP

CYPRESS FEE 23-27-9 #2H

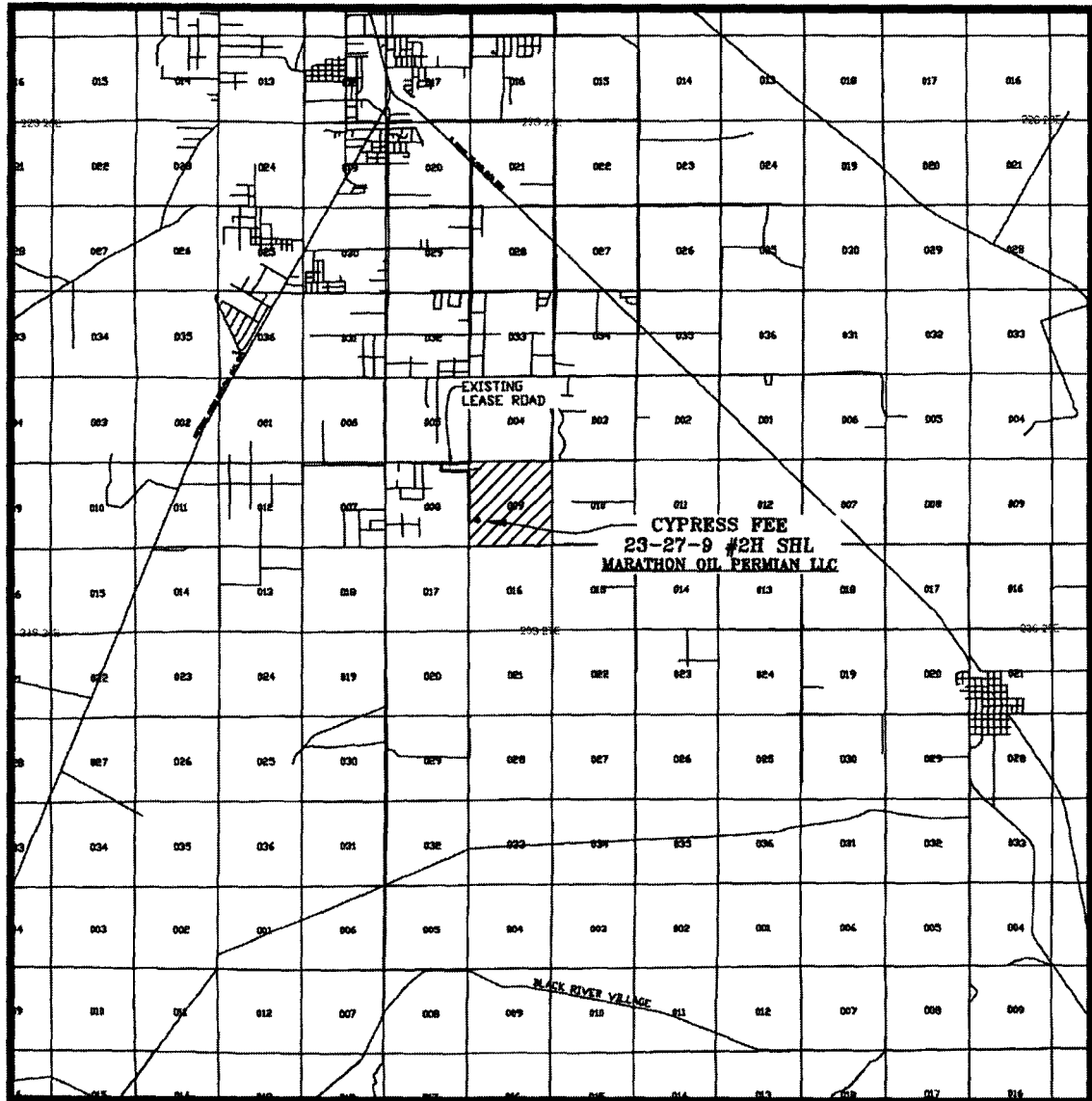
1664' FSL & 549' FWL

SEC. 9 TWP. 23-S RGE. 27-E

SURVEY: N.M.P.M.

COUNTY: EDDY

U.S.G.S. TOPOGRAPHIC MAP: OTIS, N.M.



SCALE: 1" = 2 MILES

PREPARED BY:
R-SQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE, MONROE, LA 71201
318-328-6900 OFFICE
JOB No. R3772_002