

RECEIVED

JUN 28 2019

Form C-102

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 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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-46145	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code	⁵ Property Name ARES 7 WXY FEE	⁶ Well Number 5H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 3060'

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
D	18	23S	28E		452	NORTH	970	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
D	7	23S	28E		330	NORTH	330	WEST	EDDY

¹² Dedicated Acres 316.58	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.

SHEET 1 OF 3 JOB No. R3980_001_C REV 3 JCS 6/12/2019	CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 602604.61' / Y: 482813.81' B - X: 605206.57' / Y: 482843.69' C - X: 605148.50' / Y: 477508.83' D - X: 602586.62' / Y: 477508.93'	CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 561422.36' / Y: 482754.52' B - X: 564024.29' / Y: 482784.37' C - X: 563966.09' / Y: 477449.65' D - X: 561404.25' / Y: 477449.78'	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 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. <i>[Signature]</i> 6/27/2019 Signature Date Adrian Covarrubias Printed Name E-mail Address
	LAST TAKE POINT/BOTTOM HOLE LOCATION 330' FNL 330' FWL, SECTION 7 NAD 83, SPCS NM EAST X: 602933.50' / Y: 482487.56' LAT: 32.32627287N / LON: 104.13391968W NAD 27, SPCS NM EAST X: 561751.25' / Y: 482428.28' LAT: 32.32615306N / LON: 104.13342166W		
	FIRST TAKE POINT 330' FSL 330' FWL, SECTION 7 NAD 83, SPCS NM EAST X: 602917.74' / Y: 477838.92' LAT: 32.31349453N / LON: 104.13399870W NAD 27, SPCS NM EAST X: 561735.38' / Y: 477779.75' LAT: 32.31337464N / LON: 104.13350109W		
	KICK OFF POINT 100' FSL 330' FWL, SECTION 7 NAD 83, SPCS NM EAST X: 602916.96' / Y: 477608.92' LAT: 32.31286229N / LON: 104.13400261W NAD 27, SPCS NM EAST X: 561734.59' / Y: 477549.76' LAT: 32.31274240N / LON: 104.13350502W		
SURFACE HOLE LOCATION 452' FNL 970' FWL, SECTION 18 NAD 83, SPCS NM EAST X: 603554.99' / Y: 477057.38' LAT: 32.31134291N / LON: 104.13194070W NAD 27, SPCS NM EAST X: 562372.60' / Y: 476998.22' LAT: 32.31122298N / LON: 104.13144324W			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. JUNE 19, 2019 Date of Survey Signature and Seal of Professional Surveyor: <i>[Signature]</i> Certificate Number LLOYD P. SHORT 21653

Distances/areas relative to NAD 83 Combined Scale Factor: 0.999913526 Convergence: 00°06'27.60027"

Company:	Marathon Oil	Local Co-ordinate Reference:	Well WXY No. 5H
Project:	Eddy County, NM	TVD Reference:	Well @ 3085.00usft (GL: 3060' + KB: 25' (PD101))
Site:	Ares 7	MD Reference:	Well @ 3085.00usft (GL: 3060' + KB: 25' (PD101))
Well:	WXY No. 5H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan A	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		Ares 7			
Site Position:		Northing:	476,998.27 usft	Latitude:	32.311223
From:	Map	Easting:	562,432.60 usft	Longitude:	-104.131249
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.11 °

Well:	WXY No. 5H					
Well Position	+N/-S	0.00 usft	Northing:	476,998.22 usft	Latitude:	32.311223
	+E/-W	0.00 usft	Easting:	562,372.60 usft	Longitude:	-104.131443
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,060.00 usft

Wellbore:	OH
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	6/21/2019	7.17	60.03	47,892.40

Design:	Prelim Plan A
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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		0.20

Survey Tool Program		Date	6/21/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	14,129.83	Prelim Plan A (OH)	MWD+IFR1	OWSG MWD + IFR1	

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
[Ares7WXY#5H]FTP									
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
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

Company:	Marathon Oil	Local Co-ordinate Reference:	Well WXY No. 5H
Project:	Eddy County, NM	TVD Reference:	Well @ 3085.00usft (GL: 3060' + KB: 25' (PD101))
Site:	Ares 7	MD Reference:	Well @ 3085.00usft (GL: 3060' + KB: 25' (PD101))
Well:	WXY No. 5H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan A	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)
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	2.00	310.84	1,299.98	1.14	-1.32	1.14	2.00	2.00	0.00
1,400.00	4.00	310.84	1,399.84	4.56	-5.28	4.55	2.00	2.00	0.00
1,500.00	6.00	310.84	1,499.45	10.26	-11.87	10.22	2.00	2.00	0.00
1,600.00	8.00	310.84	1,598.70	18.23	-21.09	18.16	2.00	2.00	0.00
1,700.00	10.00	310.84	1,697.47	28.46	-32.93	28.35	2.00	2.00	0.00
1,800.00	10.00	310.84	1,795.95	39.82	-46.06	39.66	0.00	0.00	0.00
1,900.00	10.00	310.84	1,894.43	51.18	-59.20	50.97	0.00	0.00	0.00
2,000.00	10.00	310.84	1,992.91	62.53	-72.34	62.28	0.00	0.00	0.00
2,100.00	10.00	310.84	2,091.39	73.89	-85.47	73.59	0.00	0.00	0.00
2,200.00	10.00	310.84	2,189.87	85.24	-98.61	84.90	0.00	0.00	0.00
2,300.00	10.00	310.84	2,288.35	96.60	-111.75	96.21	0.00	0.00	0.00
2,400.00	10.00	310.84	2,386.83	107.96	-124.88	107.52	0.00	0.00	0.00
2,500.00	10.00	310.84	2,485.31	119.31	-138.02	118.83	0.00	0.00	0.00
2,600.00	10.00	310.84	2,583.79	130.67	-151.16	130.14	0.00	0.00	0.00
2,700.00	10.00	310.84	2,682.27	142.03	-164.29	141.45	0.00	0.00	0.00
2,800.00	10.00	310.84	2,780.75	153.38	-177.43	152.76	0.00	0.00	0.00
2,900.00	10.00	310.84	2,879.23	164.74	-190.57	164.07	0.00	0.00	0.00
3,000.00	10.00	310.84	2,977.72	176.09	-203.70	175.38	0.00	0.00	0.00
3,100.00	10.00	310.84	3,076.20	187.45	-216.84	186.69	0.00	0.00	0.00
3,200.00	10.00	310.84	3,174.68	198.81	-229.98	198.00	0.00	0.00	0.00
3,300.00	10.00	310.84	3,273.16	210.16	-243.11	209.31	0.00	0.00	0.00
3,400.00	10.00	310.84	3,371.64	221.52	-256.25	220.62	0.00	0.00	0.00
3,500.00	10.00	310.84	3,470.12	232.88	-269.39	231.93	0.00	0.00	0.00
3,600.00	10.00	310.84	3,568.60	244.23	-282.52	243.24	0.00	0.00	0.00
3,700.00	10.00	310.84	3,667.08	255.59	-295.66	254.55	0.00	0.00	0.00
3,800.00	10.00	310.84	3,765.56	266.94	-308.80	265.86	0.00	0.00	0.00
3,900.00	10.00	310.84	3,864.04	278.30	-321.93	277.18	0.00	0.00	0.00
4,000.00	10.00	310.84	3,962.52	289.66	-335.07	288.49	0.00	0.00	0.00
4,100.00	10.00	310.84	4,061.00	301.01	-348.21	299.80	0.00	0.00	0.00
4,200.00	10.00	310.84	4,159.48	312.37	-361.34	311.11	0.00	0.00	0.00
4,300.00	10.00	310.84	4,257.97	323.73	-374.48	322.42	0.00	0.00	0.00
4,400.00	10.00	310.84	4,356.45	335.08	-387.62	333.73	0.00	0.00	0.00
4,500.00	10.00	310.84	4,454.93	346.44	-400.75	345.04	0.00	0.00	0.00
4,600.00	10.00	310.84	4,553.41	357.79	-413.89	356.35	0.00	0.00	0.00
4,700.00	10.00	310.84	4,651.89	369.15	-427.03	367.66	0.00	0.00	0.00
4,800.00	10.00	310.84	4,750.37	380.51	-440.16	378.97	0.00	0.00	0.00
4,900.00	10.00	310.84	4,848.85	391.86	-453.30	390.28	0.00	0.00	0.00

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Well:	WXY No. 5H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan A	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)	
5,000.00	10.00	310.84	4,947.33	403.22	-466.44	401.59	0.00	0.00	0.00	
5,100.00	10.00	310.84	5,045.81	414.58	-479.57	412.90	0.00	0.00	0.00	
5,200.00	10.00	310.84	5,144.29	425.93	-492.71	424.21	0.00	0.00	0.00	
5,300.00	10.00	310.84	5,242.77	437.29	-505.85	435.52	0.00	0.00	0.00	
5,400.00	10.00	310.84	5,341.25	448.64	-518.98	446.83	0.00	0.00	0.00	
5,500.00	10.00	310.84	5,439.73	460.00	-532.12	458.14	0.00	0.00	0.00	
5,600.00	10.00	310.84	5,538.22	471.36	-545.26	469.45	0.00	0.00	0.00	
5,700.00	10.00	310.84	5,636.70	482.71	-558.39	480.76	0.00	0.00	0.00	
5,800.00	10.00	310.84	5,735.18	494.07	-571.53	492.07	0.00	0.00	0.00	
5,900.00	10.00	310.84	5,833.66	505.43	-584.67	503.38	0.00	0.00	0.00	
6,000.00	10.00	310.84	5,932.14	516.78	-597.80	514.69	0.00	0.00	0.00	
6,055.43	10.00	310.84	5,986.73	523.08	-605.08	520.96	0.00	0.00	0.00	
6,100.00	9.11	310.84	6,030.68	527.91	-610.68	525.78	2.00	-2.00	0.00	
6,200.00	7.11	310.84	6,129.67	537.14	-621.35	534.97	2.00	-2.00	0.00	
6,300.00	5.11	310.84	6,229.10	544.10	-629.40	541.90	2.00	-2.00	0.00	
6,400.00	3.11	310.84	6,328.84	548.78	-634.82	546.56	2.00	-2.00	0.00	
6,500.00	1.11	310.84	6,428.77	551.19	-637.60	548.96	2.00	-2.00	0.00	
6,555.43	0.00	0.00	6,484.20	551.54	-638.01	549.31	2.00	-2.00	0.00	
6,600.00	0.00	0.00	6,528.76	551.54	-638.01	549.31	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,628.76	551.54	-638.01	549.31	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,728.76	551.54	-638.01	549.31	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,828.76	551.54	-638.01	549.31	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,928.76	551.54	-638.01	549.31	0.00	0.00	0.00	
7,100.00	0.00	0.00	7,028.76	551.54	-638.01	549.31	0.00	0.00	0.00	
7,200.00	0.00	0.00	7,128.76	551.54	-638.01	549.31	0.00	0.00	0.00	
7,300.00	0.00	0.00	7,228.76	551.54	-638.01	549.31	0.00	0.00	0.00	
7,400.00	0.00	0.00	7,328.76	551.54	-638.01	549.31	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,428.76	551.54	-638.01	549.31	0.00	0.00	0.00	
7,600.00	0.00	0.00	7,528.76	551.54	-638.01	549.31	0.00	0.00	0.00	
7,700.00	0.00	0.00	7,628.76	551.54	-638.01	549.31	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,728.76	551.54	-638.01	549.31	0.00	0.00	0.00	
7,900.00	0.00	0.00	7,828.76	551.54	-638.01	549.31	0.00	0.00	0.00	
8,000.00	0.00	0.00	7,928.76	551.54	-638.01	549.31	0.00	0.00	0.00	
8,100.00	0.00	0.00	8,028.76	551.54	-638.01	549.31	0.00	0.00	0.00	
8,200.00	0.00	0.00	8,128.76	551.54	-638.01	549.31	0.00	0.00	0.00	
8,300.00	0.00	0.00	8,228.76	551.54	-638.01	549.31	0.00	0.00	0.00	
8,400.00	0.00	0.00	8,328.76	551.54	-638.01	549.31	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,428.76	551.54	-638.01	549.31	0.00	0.00	0.00	
8,600.00	0.00	0.00	8,528.76	551.54	-638.01	549.31	0.00	0.00	0.00	
8,700.00	0.00	0.00	8,628.76	551.54	-638.01	549.31	0.00	0.00	0.00	
8,800.00	0.00	0.00	8,728.76	551.54	-638.01	549.31	0.00	0.00	0.00	
8,879.24	0.00	0.00	8,808.00	551.54	-638.01	549.31	0.00	0.00	0.00	

Company:	Marathon Oil	Local Co-ordinate Reference:	Well WXY No. 5H
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Site:	Ares 7	MD Reference:	Well @ 3085.00usft (GL: 3060' + KB: 25' (PD101))
Well:	WXY No. 5H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan A	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)
[Ares7WXY#5H]KOP									
8,900.00	2.08	0.20	8,828.76	551.92	-638.01	549.69	10.00	10.00	0.00
8,950.00	7.08	0.20	8,878.58	555.90	-638.00	553.67	10.00	10.00	0.00
9,000.00	12.08	0.20	8,927.87	564.22	-637.97	561.99	10.00	10.00	0.00
9,050.00	17.08	0.20	8,976.25	576.80	-637.92	574.57	10.00	10.00	0.00
9,100.00	22.08	0.20	9,023.34	593.55	-637.87	591.32	10.00	10.00	0.00
9,150.00	27.08	0.20	9,068.80	614.33	-637.80	612.10	10.00	10.00	0.00
9,200.00	32.08	0.20	9,112.27	639.01	-637.71	636.78	10.00	10.00	0.00
9,250.00	37.08	0.20	9,153.42	667.37	-637.61	665.14	10.00	10.00	0.00
9,300.00	42.08	0.20	9,191.95	699.22	-637.51	696.99	10.00	10.00	0.00
9,350.00	47.08	0.20	9,227.55	734.30	-637.39	732.07	10.00	10.00	0.00
9,400.00	52.08	0.20	9,259.97	772.35	-637.26	770.12	10.00	10.00	0.00
9,450.00	57.08	0.20	9,288.94	813.08	-637.12	810.85	10.00	10.00	0.00
9,500.00	62.08	0.20	9,314.25	856.18	-636.97	853.95	10.00	10.00	0.00
9,550.00	67.08	0.20	9,335.71	901.32	-636.82	899.10	10.00	10.00	0.00
9,600.00	72.08	0.20	9,353.15	948.17	-636.66	945.94	10.00	10.00	0.00
9,650.00	77.08	0.20	9,366.44	996.35	-636.49	994.12	10.00	10.00	0.00
9,700.00	82.08	0.20	9,375.49	1,045.51	-636.32	1,043.28	10.00	10.00	0.00
9,750.00	87.08	0.20	9,380.21	1,095.27	-636.15	1,093.04	10.00	10.00	0.00
9,779.23	90.00	0.20	9,380.96	1,124.49	-636.05	1,122.26	10.00	10.00	0.00
9,800.00	90.00	0.20	9,380.96	1,145.26	-635.98	1,143.03	0.00	0.00	0.00
9,900.00	90.00	0.20	9,380.96	1,245.26	-635.64	1,243.03	0.00	0.00	0.00
10,000.00	90.00	0.20	9,380.96	1,345.26	-635.30	1,343.03	0.00	0.00	0.00
10,100.00	90.00	0.20	9,380.96	1,445.25	-634.96	1,443.03	0.00	0.00	0.00
10,200.00	90.00	0.20	9,380.96	1,545.25	-634.62	1,543.03	0.00	0.00	0.00
10,300.00	90.00	0.20	9,380.96	1,645.25	-634.28	1,643.03	0.00	0.00	0.00
10,400.00	90.00	0.20	9,380.96	1,745.25	-633.93	1,743.03	0.00	0.00	0.00
10,500.00	90.00	0.20	9,380.97	1,845.25	-633.59	1,843.03	0.00	0.00	0.00
10,600.00	90.00	0.20	9,380.97	1,945.25	-633.25	1,943.03	0.00	0.00	0.00
10,700.00	90.00	0.20	9,380.97	2,045.25	-632.91	2,043.03	0.00	0.00	0.00
10,800.00	90.00	0.20	9,380.97	2,145.25	-632.57	2,143.03	0.00	0.00	0.00
10,900.00	90.00	0.20	9,380.97	2,245.25	-632.23	2,243.03	0.00	0.00	0.00
11,000.00	90.00	0.20	9,380.97	2,345.25	-631.88	2,343.03	0.00	0.00	0.00
11,100.00	90.00	0.20	9,380.97	2,445.25	-631.54	2,443.03	0.00	0.00	0.00
11,200.00	90.00	0.20	9,380.97	2,545.25	-631.20	2,543.03	0.00	0.00	0.00
11,300.00	90.00	0.20	9,380.97	2,645.25	-630.86	2,643.03	0.00	0.00	0.00
11,400.00	90.00	0.20	9,380.97	2,745.25	-630.52	2,743.03	0.00	0.00	0.00
11,500.00	90.00	0.20	9,380.97	2,845.25	-630.18	2,843.03	0.00	0.00	0.00
11,600.00	90.00	0.20	9,380.98	2,945.25	-629.84	2,943.03	0.00	0.00	0.00
11,700.00	90.00	0.20	9,380.98	3,045.25	-629.49	3,043.03	0.00	0.00	0.00
11,800.00	90.00	0.20	9,380.98	3,145.24	-629.15	3,143.03	0.00	0.00	0.00
11,900.00	90.00	0.20	9,380.98	3,245.24	-628.81	3,243.03	0.00	0.00	0.00

Company:	Marathon Oil	Local Co-ordinate Reference:	Well WXY No. 5H
Project:	Eddy County, NM	TVD Reference:	Well @ 3085.00usft (GL: 3060' + KB: 25' (PD101))
Site:	Ares 7	MD Reference:	Well @ 3085.00usft (GL: 3060' + KB: 25' (PD101))
Well:	WXY No. 5H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan A	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)	
12,000.00	90.00	0.20	9,380.98	3,345.24	-628.47	3,343.03	0.00	0.00	0.00	
12,100.00	90.00	0.20	9,380.98	3,445.24	-628.13	3,443.03	0.00	0.00	0.00	
12,200.00	90.00	0.20	9,380.98	3,545.24	-627.79	3,543.03	0.00	0.00	0.00	
12,300.00	90.00	0.20	9,380.98	3,645.24	-627.45	3,643.03	0.00	0.00	0.00	
12,400.00	90.00	0.20	9,380.98	3,745.24	-627.10	3,743.03	0.00	0.00	0.00	
12,500.00	90.00	0.20	9,380.98	3,845.24	-626.76	3,843.03	0.00	0.00	0.00	
12,600.00	90.00	0.20	9,380.99	3,945.24	-626.42	3,943.03	0.00	0.00	0.00	
12,700.00	90.00	0.20	9,380.99	4,045.24	-626.08	4,043.03	0.00	0.00	0.00	
12,800.00	90.00	0.20	9,380.99	4,145.24	-625.74	4,143.03	0.00	0.00	0.00	
12,900.00	90.00	0.20	9,380.99	4,245.24	-625.40	4,243.03	0.00	0.00	0.00	
13,000.00	90.00	0.20	9,380.99	4,345.24	-625.05	4,343.03	0.00	0.00	0.00	
13,100.00	90.00	0.20	9,380.99	4,445.24	-624.71	4,443.03	0.00	0.00	0.00	
13,200.00	90.00	0.20	9,380.99	4,545.24	-624.37	4,543.03	0.00	0.00	0.00	
13,300.00	90.00	0.20	9,380.99	4,645.24	-624.03	4,643.03	0.00	0.00	0.00	
13,400.00	90.00	0.20	9,380.99	4,745.24	-623.69	4,743.03	0.00	0.00	0.00	
13,500.00	90.00	0.20	9,380.99	4,845.23	-623.35	4,843.03	0.00	0.00	0.00	
13,600.00	90.00	0.20	9,381.00	4,945.23	-623.01	4,943.03	0.00	0.00	0.00	
13,700.00	90.00	0.20	9,381.00	5,045.23	-622.66	5,043.03	0.00	0.00	0.00	
13,800.00	90.00	0.20	9,381.00	5,145.23	-622.32	5,143.03	0.00	0.00	0.00	
13,900.00	90.00	0.20	9,381.00	5,245.23	-621.98	5,243.03	0.00	0.00	0.00	
14,000.00	90.00	0.20	9,381.00	5,345.23	-621.64	5,343.03	0.00	0.00	0.00	
14,084.83	90.00	0.20	9,381.00	5,430.06	-621.35	5,427.86	0.00	0.00	0.00	
[Ares7WXY#5H]LTP/BHL										
14,100.00	90.00	0.20	9,381.00	5,445.23	-621.30	5,443.03	0.00	0.00	0.00	
14,129.83	90.00	0.20	9,381.00	5,475.06	-621.20	5,472.86	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
[Ares7WXY#5H]FTP	0.00	0.00	0.00	781.53	-637.22	477,779.75	561,735.38	32.313375	-104.133501	
- plan misses target center by 1008.38usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)										
- Point										
[Ares7WXY#5H]KOP	0.00	0.00	8,808.00	551.54	-638.01	477,549.76	561,734.59	32.312742	-104.133505	
- plan hits target center										
- Point										
[Ares7WXY#5H]LTP/BH	0.00	0.00	9,381.00	5,430.06	-621.35	482,428.28	561,751.25	32.326153	-104.133422	
- plan hits target center										
- Point										

Checked By: _____	Approved By: _____	Date: _____
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Marathon Oil
Eddy County, NM
Ares 7
WXY No. 5H
Prelim Plan A
GL: 3060' + KB: 25' (PD101)

US State Plane 1927 (Exact solution)
NAD 1927 (NADCON CONUS)
Clarke 1866
New Mexico East 3001
Mean Sea Level

RKB Elevation: Well @ 3085.00usft (GL: 3060' + KB: 25' (PD101))

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Spot
0.00	0.00	476998.22	562372.60	32.311223	-104.131443	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
1	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00
3	1700.00	10.00	310.84	1697.47	28.46	-32.93	2.00	28.35
4	6055.43	10.00	310.84	5986.73	523.08	-605.08	0.00	520.96
5	6555.43	0.00	0.00	6484.20	551.54	-638.01	2.00	549.31
6	8879.24	0.00	0.00	8808.00	551.54	-638.01	0.00	549.31
7	9779.23	90.00	0.20	9380.96	1124.49	-636.05	10.00	1122.26
8	14084.83	90.00	0.20	9381.00	5430.06	-621.35	0.00	5427.88
9	14129.83	90.00	0.20	9381.00	5475.06	-621.20	0.00	5472.86

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
[Ares7WXY#5H]FTP	0.00	781.53	-637.22	477779.75	561735.38
[Ares7WXY#5H]KOP	8808.00	551.54	-638.01	477549.76	561734.59
[Ares7WXY#5H]LTP/BHL	9381.00	5430.06	-621.35	482428.28	561751.25



PRODIRECTIONAL

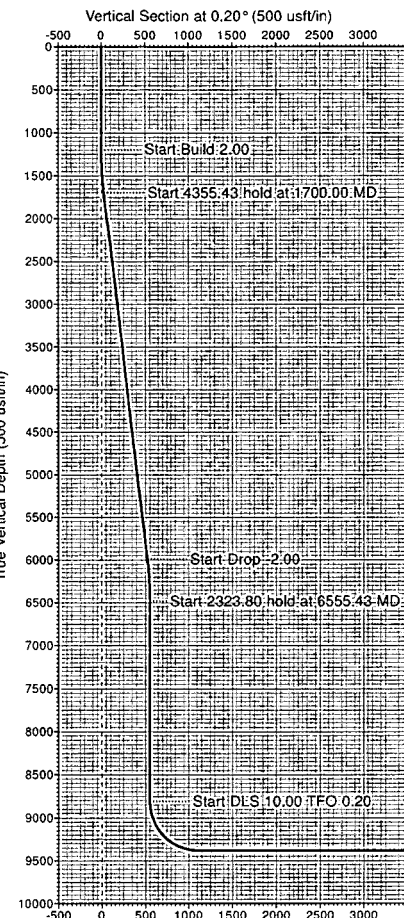


Azimuths to Grid North
True North: -0.11°
Magnetic North: 7.06°
Magnetic Field
Strength: 47892.4nT
Dip Angle: 60.03°
Date: 6/21/2019
Model: HDGM

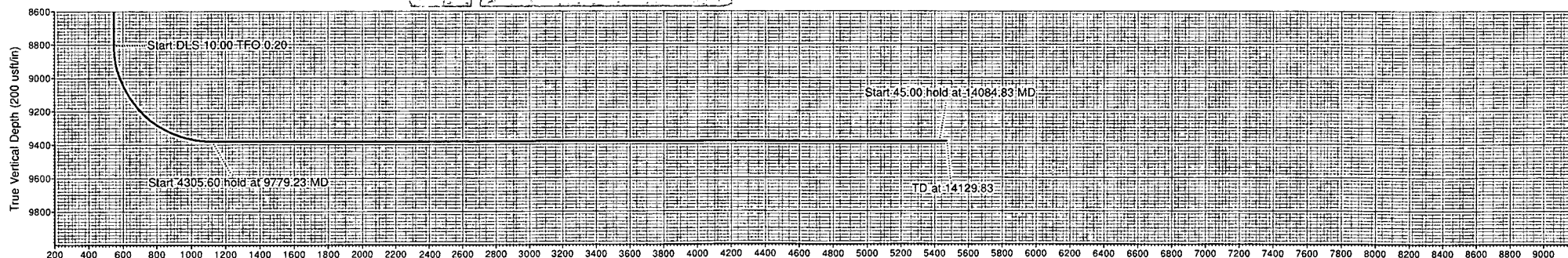
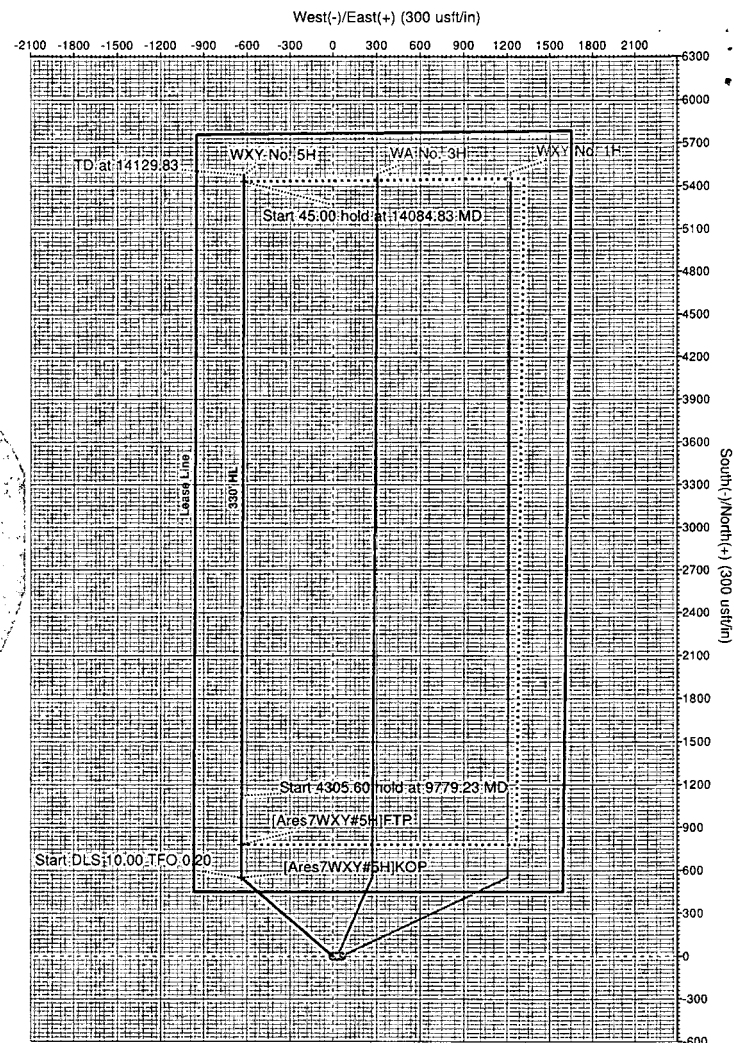
Azimuth Corrections

Total Magnetic Corr. (M to G): 7.06°

Declination (M to T): 7.17° East



Target Line: 9381' TVD @ 0° VS :: 90° INC



36" x 48"