

State of New Mexico
Energy, Minerals & Natural ResourcesForm C-104
Revised August 1, 2011Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate District Office

☐ AMENDED REPORT**I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT**

¹ Operator name and Address Marathon Oil Permian LLC 990 Town & Country Blvd. Houston, TX 77024		² OGRID Number 372098
		³ Reason for Filing Code/ Effective Date NW / 12/02/2023
⁴ API Number 30 - 015-48715	⁵ Pool Name PURPLE SAGE; WOLFCAMP (GAS)	⁶ Pool Code 98220
⁷ Property Code 334795	⁸ Property Name CROSSBOW WC FED COM	⁹ Well Number 704H

II. 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
A	8	23S	27E		1266'	NORTH	456'	EAST	EDDY

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L1	7	23S	27E		950'	NORTH	331'	WEST	EDDY

¹² Lse Code P	¹³ Producing Method Code F	¹⁴ Gas Connection Date 12/2/2023	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date
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III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
34053	PLAINS MARKETING LP 333 CLAY STREET SUITE 1900, HOUSTON, TX 77022	O
24650	TARGA MIDSTREAM SERVICES LLC 811 LOUISIANA ST., STE 2100, HOUSTON, TX 77002	G
328710	SAN MATEO STEBBINS WATER MANAGEMNET, LLC 5400 LBJ FREEWAY, STE. 1500, DALLAS, TX 75240	W

IV. Well Completion Data

²¹ Spud Date 6/1/2023	²² Ready Date 12/2/2023	²³ TD 18866'	²⁴ PBTB 18855'	²⁵ Perforations 9085' - 18841'	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
17-1/2"	13-3/8", 54.5#, J55, BTC	542'	Lead: 795 sks, 1.32 yield, Class C		
12-1/4"	9-5/8", 40#, P110, BTC	8338'	Lead: 1260 sks, 3.59 yield, Class C Tail: 380 sks, 1.39 yield, Class C		
8-1/2"	5-1/2", 23#, P110, VTC	18855'	Lead: 1176 sks, 1.14 yield, Class H Tail: 3365 sks, 1.11 yield, Class H		

V. Well Test Data

³¹ Date New Oil 12/2/2023	³² Gas Delivery Date 12/2/2023	³³ Test Date 12/20/2023	³⁴ Test Length 24 hrs	³⁵ Tbg. Pressure	³⁶ Csg. Pressure 984
³⁷ Choke Size 56/64	³⁸ Oil 1390	³⁹ Water 3960	⁴⁰ Gas 2736		⁴¹ Test Method FLOWING
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Adrian Covarrubias</i>			OIL CONSERVATION DIVISION		
Printed name: Adrian Covarrubias			Approved by:		
Title: Regulatory Compliance Representative			Title:		
E-mail Address: acovarrubias@marathonoil.com			Approval Date:		
Date: 1/2/2024		Phone: 713-296-3368			

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

Form C-102 Revised August 1, 2011
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District Office
☒ AMENDED REPORT

WELL LOCATION AND ACERAGE DEDICATION AS-DRILLED PLAT

¹ API Number 30-015-48715	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code 334795	⁵ Property Name CROSSBOW WC FED COM	⁶ Well Number 704H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 3171'

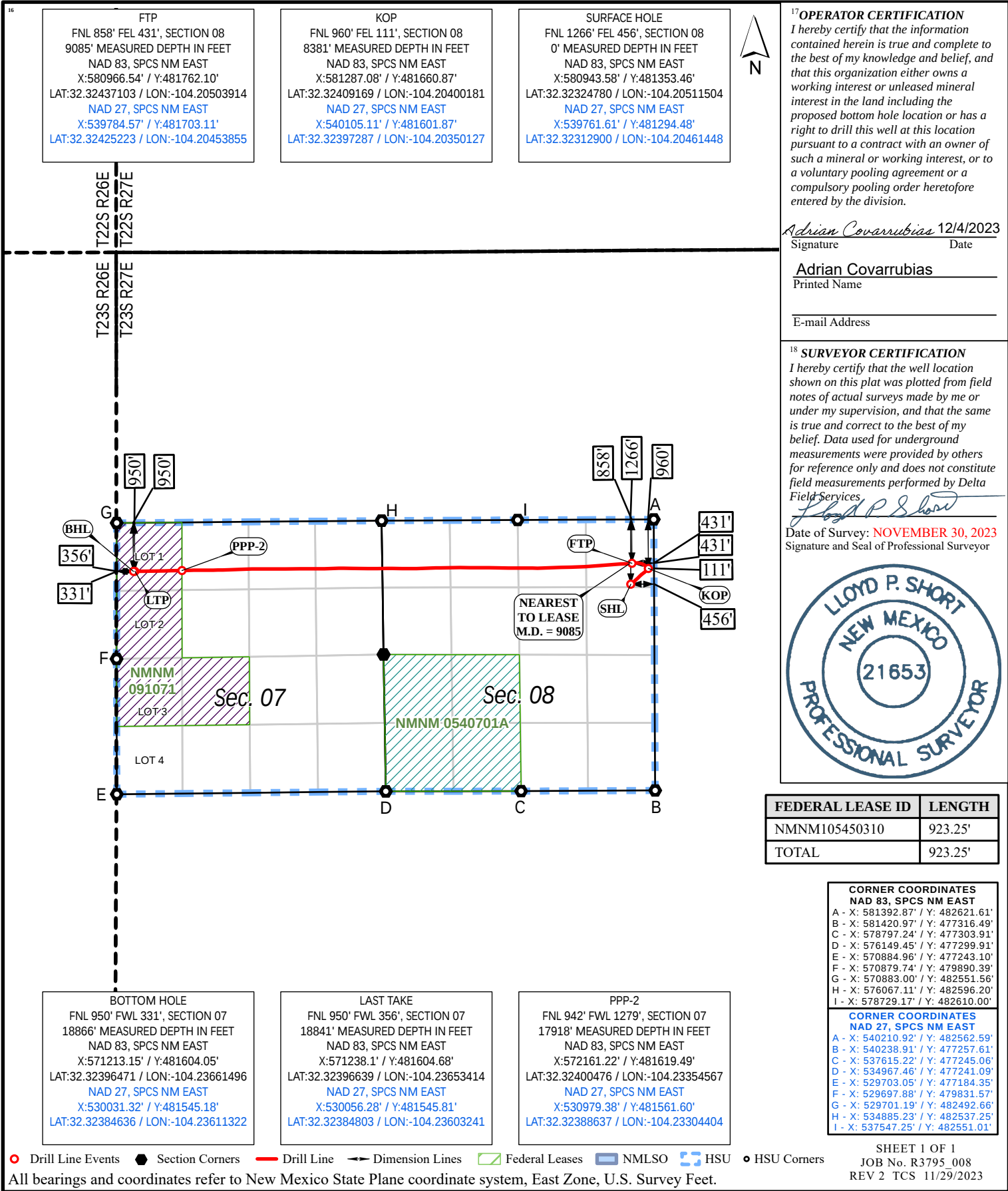
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	8	23S	27E		1266'	NORTH	456'	EAST	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
L 1	7	23S	27E		950'	NORTH	331'	WEST	EDDY
¹² Dedicated Acres 1,275.84	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-20996						

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.





Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

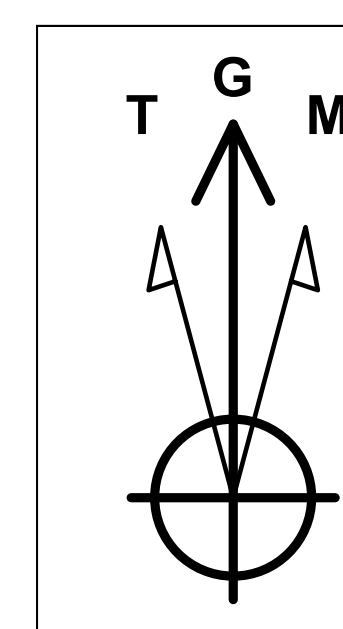
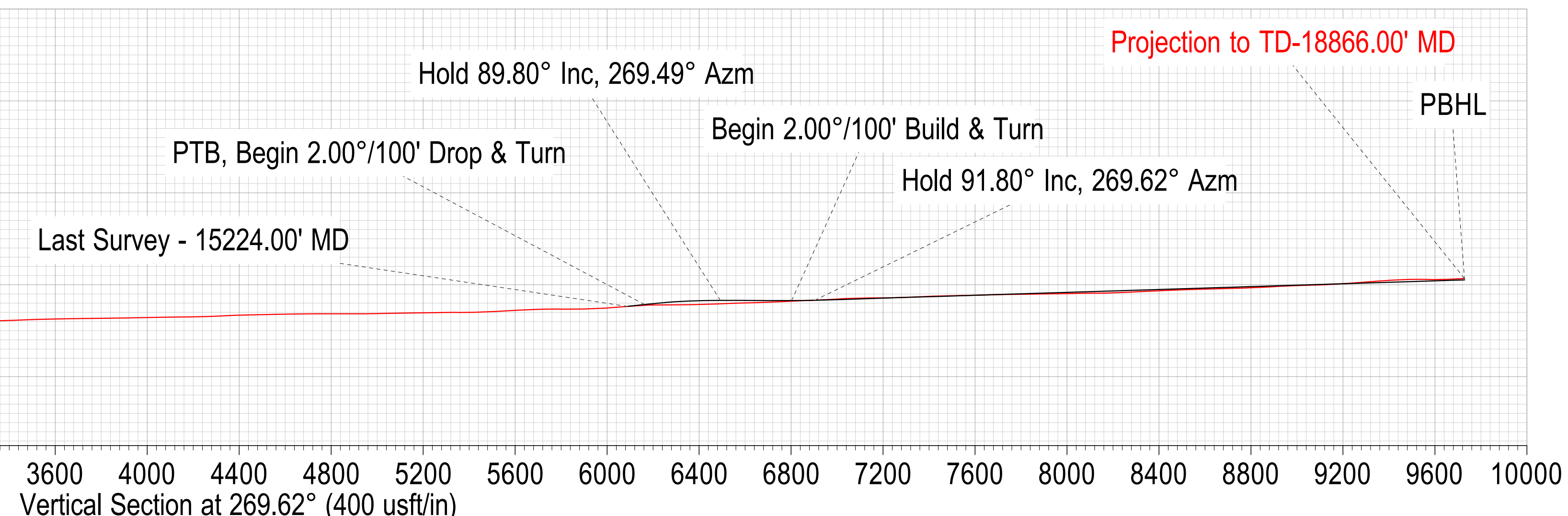
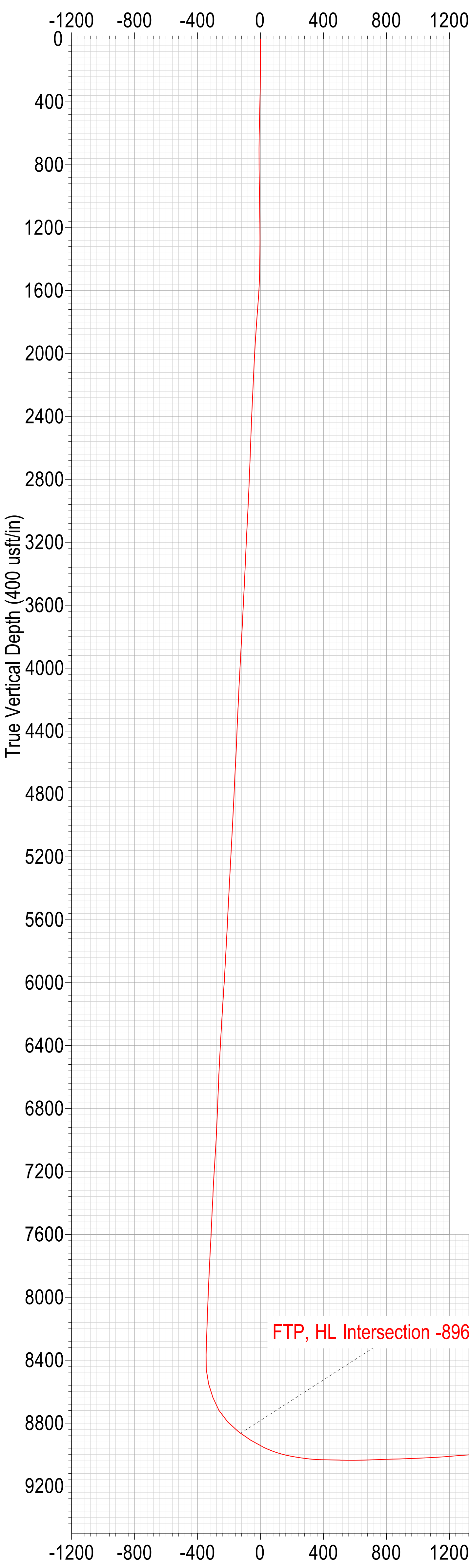
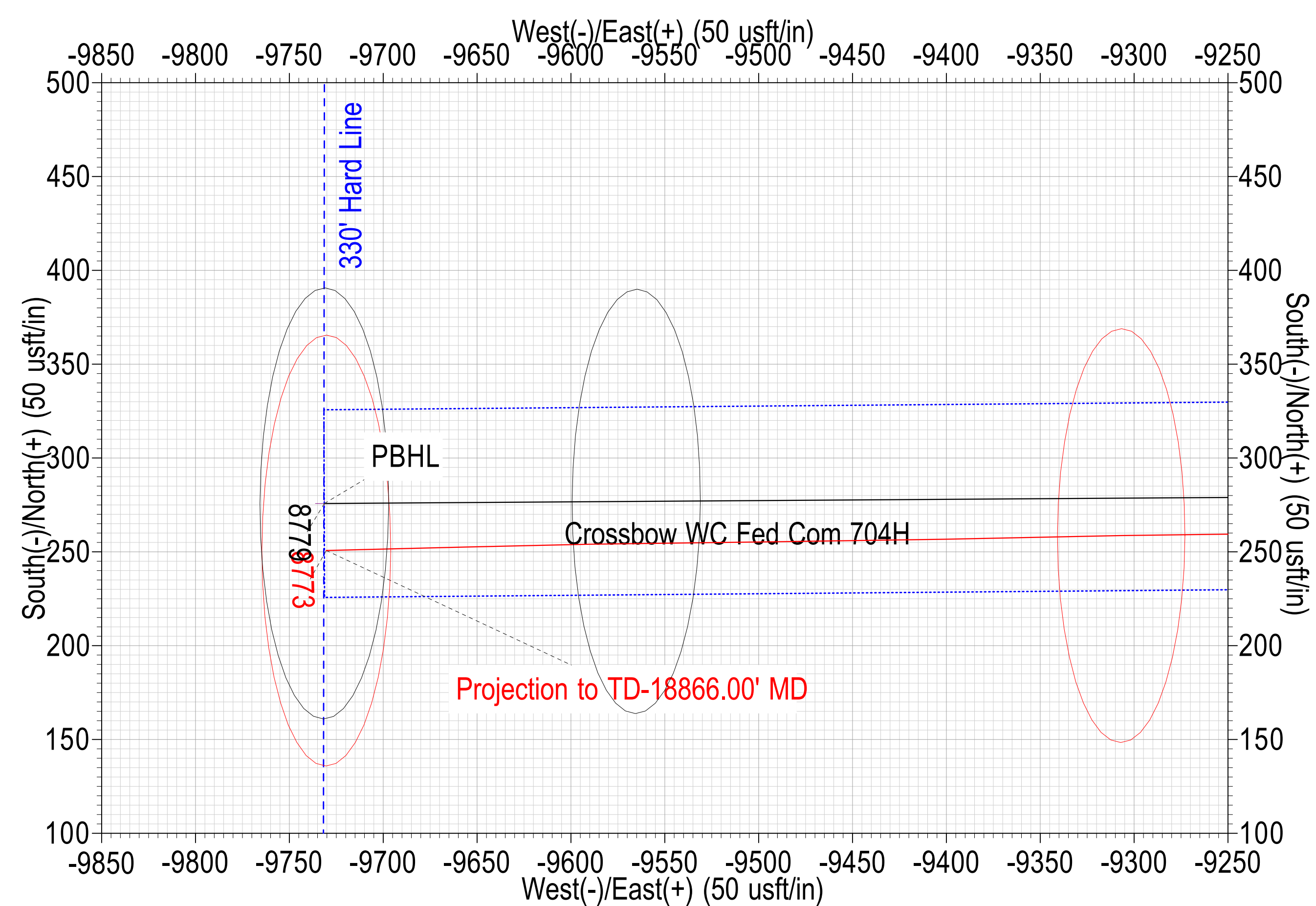
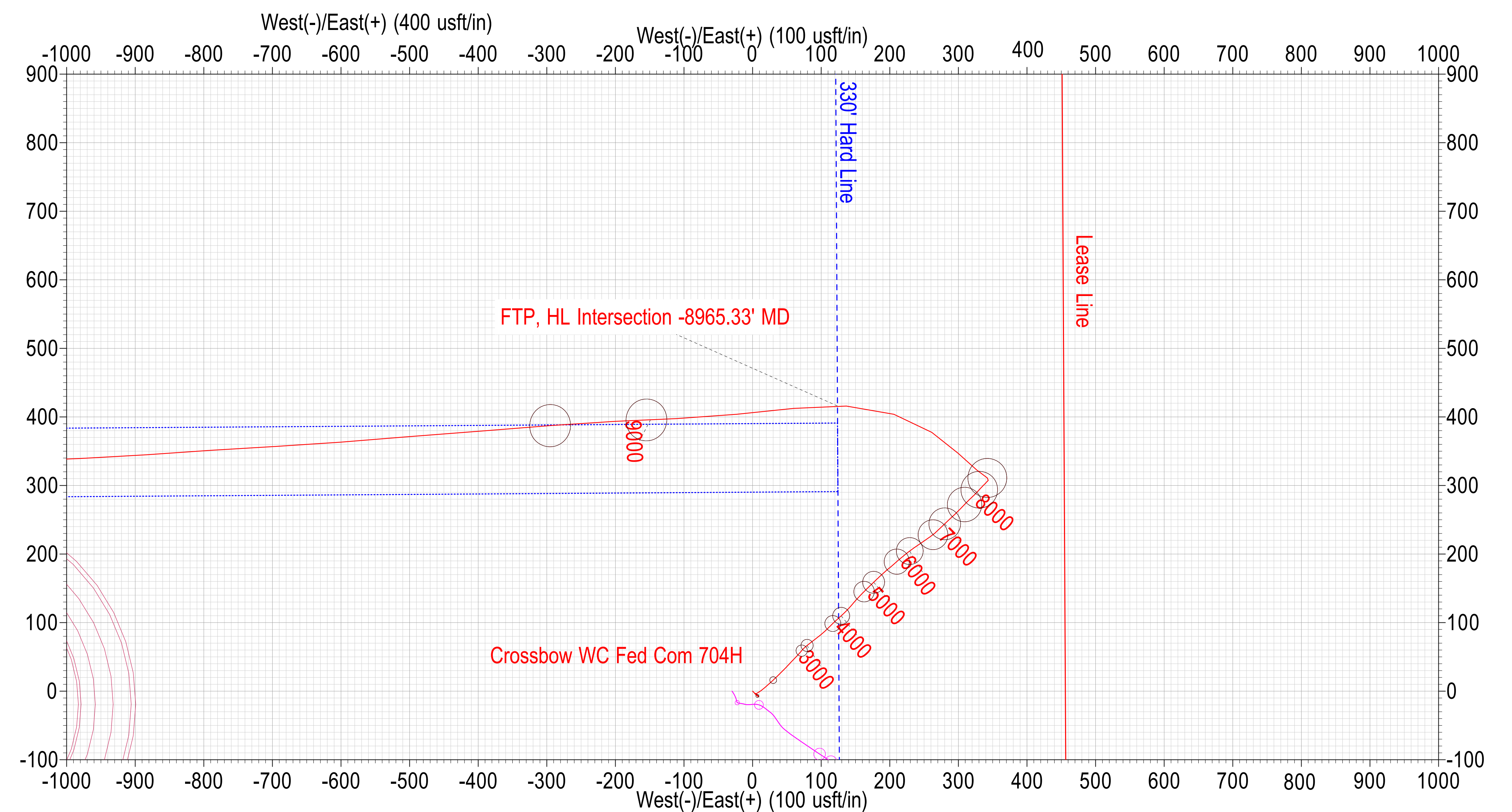
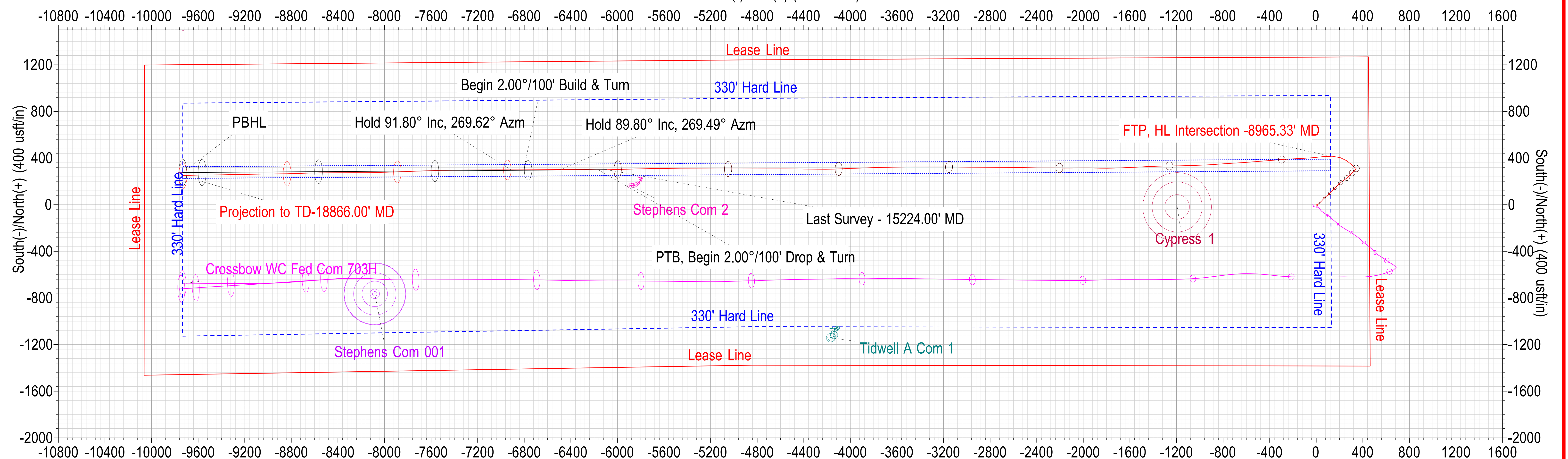
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LTP/PBHL v11_Crossbow 704H	8779.25	275.79	-9731.32	481570.26	530030.29	32° 19' 26.095 N	104° 14' 10.019 W

SURVEY PROGRAM

Depth From	Depth To	Survey/Plan	Tool
148.00	500.00	MS MWD + FDIR (Run 1) (Wellbore #1)	MWD+IFR1
589.00	15224.00	MSMWD FDIR (Wellbore #1)	MWD+IFR1+FDIR
15224.00	18866.24	Design #11 (Wellbore #1)	MWD+IFR1+FDIR

West(-)/East(+) (400 usft/in)



Magnetic Field
Strength: 47460.5nT
Dip Angle: 59.90°
Date: 6/26/2023
Model: IFR



To convert a Magnetic Direction to a Grid Direction, Add 6.896°
 To convert a Magnetic Direction to a True Direction, Add 6.965° East
 To convert a True Direction to a Grid Direction, Subtract 0.069°



Marathon Oil

**Eddy County, New Mexico (NAD 27)
Crossbow WC Fed Com (703H, 704H)
Crossbow WC Fed Com 704H**

Wellbore #1

Design: Surveys

Standard Survey Report

07 July, 2023





MS Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well Crossbow WC Fed Com 704H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3193.50usft (Cactus 171)
Site:	Crossbow WC Fed Com (703H, 704H)	MD Reference:	WELL @ 3193.50usft (Cactus 171)
Well:	Crossbow WC Fed Com 704H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.15 Conroe DB

Project	Eddy County, New Mexico (NAD 27)		
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	Crossbow WC Fed Com (703H, 704H)		
Site Position:		Northing:	481,294.48 usft
From:	Map	Easting:	539,731.60 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 19' 23.265 N
		Longitude:	104° 12' 16.962 W

Well	Crossbow WC Fed Com 704H		
Well Position	+N/-S	0.00 usft	Northing: 481,294.47 usft
	+E/-W	0.00 usft	Easting: 539,761.61 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
Grid Convergence:	0.069 °	Ground Level:	3,170.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IFR	5/26/2023	6.972	59.905	47,470.00
	IFR	6/26/2023	6.965	59.902	47,460.50

Design	Surveys				
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	269.62	

Survey Program		Date	7/7/2023		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
148.00	500.00	MS MWD + FDIR (Run 1) (Wellbore #1)	MWD+IFR1	OWSG MWD + IFR1	
589.00	18,866.00	MSMWD FDIR (Wellbore #1)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction	

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
148.00	0.23	84.92	148.00	0.03	0.30	-0.30	0.16	0.16	0.00
239.00	0.71	156.22	239.00	-0.47	0.71	-0.70	0.74	0.53	78.35
329.00	1.48	131.78	328.98	-1.76	1.80	-1.79	0.98	0.86	-27.16
419.00	1.59	122.53	418.95	-3.20	3.72	-3.69	0.30	0.12	-10.28
500.00	1.57	123.14	499.92	-4.41	5.59	-5.56	0.03	-0.02	0.75
589.00	1.25	131.77	588.89	-5.73	7.34	-7.30	0.43	-0.36	9.70
679.00	1.16	150.87	678.87	-7.18	8.51	-8.47	0.46	-0.10	21.22



MS Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well Crossbow WC Fed Com 704H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3193.50usft (Cactus 171)
Site:	Crossbow WC Fed Com (703H, 704H)	MD Reference:	WELL @ 3193.50usft (Cactus 171)
Well:	Crossbow WC Fed Com 704H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.15 Conroe DB

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)	
769.00	0.32	168.82	768.86	-8.22	9.01	-8.95	0.96	-0.93	19.94	
861.00	1.12	309.72	860.86	-7.90	8.36	-8.31	1.50	0.87	153.15	
952.00	1.05	304.31	951.84	-6.86	6.99	-6.95	0.14	-0.08	-5.95	
1,044.00	1.21	309.36	1,043.82	-5.77	5.54	-5.51	0.20	0.17	5.49	
1,137.00	1.34	314.19	1,136.80	-4.39	4.00	-3.98	0.18	0.14	5.19	
1,230.00	0.35	324.64	1,229.79	-3.40	3.06	-3.04	1.07	-1.06	11.24	
1,322.00	0.46	104.42	1,321.79	-3.26	3.26	-3.23	0.83	0.12	151.93	
1,417.00	0.71	107.29	1,416.78	-3.53	4.19	-4.16	0.26	0.26	3.02	
1,513.00	1.65	69.64	1,512.76	-3.23	6.05	-6.03	1.22	0.98	-39.22	
1,608.00	4.38	55.38	1,607.62	-0.69	10.32	-10.31	2.96	2.87	-15.01	
1,701.00	5.63	50.14	1,700.27	4.25	16.74	-16.77	1.43	1.34	-5.63	
1,795.00	5.54	47.58	1,793.82	10.27	23.63	-23.70	0.28	-0.10	-2.72	
1,890.00	5.04	47.66	1,888.42	16.17	30.10	-30.21	0.53	-0.53	0.08	
1,984.00	4.12	45.90	1,982.12	21.30	35.58	-35.72	0.99	-0.98	-1.87	
2,078.00	4.08	44.24	2,075.87	26.05	40.34	-40.51	0.13	-0.04	-1.77	
2,172.00	3.86	45.92	2,169.65	30.65	44.94	-45.15	0.26	-0.23	1.79	
2,267.00	3.77	43.13	2,264.44	35.15	49.38	-49.61	0.22	-0.09	-2.94	
2,361.00	3.67	42.82	2,358.24	39.61	53.53	-53.79	0.11	-0.11	-0.33	
2,456.00	3.29	44.10	2,453.07	43.80	57.50	-57.79	0.41	-0.40	1.35	
2,550.00	3.09	43.19	2,546.92	47.58	61.11	-61.42	0.22	-0.21	-0.97	
2,645.00	2.85	44.61	2,641.79	51.13	64.52	-64.86	0.26	-0.25	1.49	
2,740.00	3.28	41.18	2,736.66	54.86	67.97	-68.33	0.49	0.45	-3.61	
2,834.00	3.61	40.21	2,830.49	59.14	71.65	-72.04	0.36	0.35	-1.03	
2,929.00	3.70	46.20	2,925.29	63.55	75.79	-76.21	0.41	0.09	6.31	
3,023.00	3.83	53.13	3,019.09	67.53	80.49	-80.94	0.50	0.14	7.37	
3,118.00	3.64	52.55	3,113.89	71.27	85.42	-85.90	0.20	-0.20	-0.61	
3,212.00	3.34	52.10	3,207.71	74.77	89.95	-90.45	0.32	-0.32	-0.48	
3,307.00	3.04	50.96	3,302.57	78.05	94.09	-94.61	0.32	-0.32	-1.20	
3,401.00	3.42	52.54	3,396.42	81.33	98.26	-98.79	0.42	0.40	1.68	
3,495.00	3.86	49.76	3,490.23	85.08	102.90	-103.46	0.50	0.47	-2.96	
3,591.00	4.08	44.47	3,586.00	89.60	107.76	-108.35	0.44	0.23	-5.51	
3,685.00	3.74	46.01	3,679.78	94.12	112.30	-112.93	0.38	-0.36	1.64	
3,780.00	4.16	45.25	3,774.55	98.69	116.98	-117.63	0.45	0.44	-0.80	
3,874.00	4.44	48.06	3,868.29	103.53	122.11	-122.79	0.37	0.30	2.99	
3,968.00	4.08	48.42	3,962.03	108.18	127.32	-128.03	0.38	-0.38	0.38	
4,062.00	3.79	45.96	4,055.81	112.56	132.05	-132.79	0.36	-0.31	-2.62	
4,156.00	3.84	44.96	4,149.60	116.94	136.51	-137.28	0.09	0.05	-1.06	
4,250.00	4.16	43.03	4,243.37	121.66	141.06	-141.86	0.37	0.34	-2.05	
4,344.00	3.69	39.42	4,337.15	126.49	145.31	-146.14	0.56	-0.50	-3.84	
4,439.00	3.49	41.66	4,431.96	131.01	149.17	-150.04	0.26	-0.21	2.36	
4,533.00	3.86	42.32	4,525.77	135.49	153.20	-154.10	0.40	0.39	0.70	
4,628.00	4.38	44.41	4,620.52	140.45	157.89	-158.82	0.57	0.55	2.20	
4,722.00	3.81	44.53	4,714.28	145.24	162.60	-163.55	0.61	-0.61	0.13	



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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.15 Conroe DB

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)
4,816.00	3.61	45.84	4,808.09	149.53	166.91	-167.90	0.23	-0.21	1.39
4,910.00	3.94	45.82	4,901.88	153.84	171.35	-172.36	0.35	0.35	-0.02
5,004.00	4.50	46.44	4,995.63	158.63	176.34	-177.38	0.60	0.60	0.66
5,099.00	4.07	46.46	5,090.36	163.52	181.48	-182.56	0.45	-0.45	0.02
5,193.00	3.70	47.05	5,184.14	167.88	186.12	-187.23	0.40	-0.39	0.63
5,288.00	4.03	47.28	5,278.93	172.24	190.81	-191.95	0.35	0.35	0.24
5,383.00	4.35	49.62	5,373.67	176.84	196.01	-197.18	0.38	0.34	2.46
5,477.00	3.86	51.76	5,467.43	181.10	201.21	-202.41	0.55	-0.52	2.28
5,571.00	3.40	47.02	5,561.24	184.96	205.74	-206.96	0.58	-0.49	-5.04
5,666.00	3.89	48.67	5,656.05	189.01	210.22	-211.47	0.53	0.52	1.74
5,761.00	4.23	50.19	5,750.81	193.38	215.33	-216.61	0.38	0.36	1.60
5,855.00	3.67	51.01	5,844.59	197.50	220.33	-221.63	0.60	-0.60	0.87
5,949.00	4.22	51.90	5,938.37	201.52	225.39	-226.72	0.59	0.59	0.95
6,045.00	4.60	53.45	6,034.08	205.99	231.26	-232.62	0.41	0.40	1.61
6,139.00	4.44	54.61	6,127.79	210.35	237.26	-238.65	0.20	-0.17	1.23
6,234.00	4.14	56.25	6,222.52	214.38	243.11	-244.52	0.34	-0.32	1.73
6,328.00	3.80	55.00	6,316.30	218.05	248.48	-249.92	0.37	-0.36	-1.33
6,422.00	3.85	56.00	6,410.09	221.60	253.65	-255.11	0.09	0.05	1.06
6,518.00	3.56	55.09	6,505.89	225.11	258.76	-260.25	0.31	-0.30	-0.95
6,612.00	2.94	52.49	6,599.74	228.25	263.07	-264.58	0.68	-0.66	-2.77
6,706.00	2.95	46.16	6,693.61	231.39	266.72	-268.25	0.35	0.01	-6.73
6,801.00	3.49	47.01	6,788.46	235.06	270.60	-272.16	0.57	0.57	0.89
6,895.00	3.24	47.81	6,882.30	238.79	274.66	-276.24	0.27	-0.27	0.85
6,990.00	3.94	44.74	6,977.11	242.91	278.95	-280.56	0.76	0.74	-3.23
7,085.00	4.94	46.58	7,071.83	248.04	284.22	-285.86	1.06	1.05	1.94
7,179.00	4.83	48.21	7,165.49	253.46	290.11	-291.78	0.19	-0.12	1.73
7,273.00	4.26	45.59	7,259.19	258.54	295.55	-297.26	0.65	-0.61	-2.79
7,368.00	3.72	44.09	7,353.96	263.23	300.22	-301.96	0.58	-0.57	-1.58
7,463.00	3.86	45.28	7,448.75	267.69	304.64	-306.40	0.17	0.15	1.25
7,558.00	3.86	42.90	7,543.54	272.28	309.08	-310.88	0.17	0.00	-2.51
7,652.00	3.86	45.14	7,637.32	276.83	313.48	-315.31	0.16	0.00	2.38
7,747.00	4.26	46.49	7,732.08	281.52	318.31	-320.17	0.43	0.42	1.42
7,843.00	3.82	46.84	7,827.85	286.16	323.22	-325.12	0.46	-0.46	0.36
7,938.00	3.55	41.74	7,922.65	290.52	327.49	-329.41	0.45	-0.28	-5.37
8,033.00	3.13	42.61	8,017.49	294.62	331.21	-333.15	0.45	-0.44	0.92
8,128.00	3.04	45.45	8,112.35	298.30	334.76	-336.73	0.19	-0.09	2.99
8,222.00	3.03	43.70	8,206.22	301.84	338.25	-340.24	0.10	-0.01	-1.86
8,268.00	2.83	42.43	8,252.16	303.56	339.85	-341.86	0.46	-0.43	-2.76
8,381.00	2.55	44.61	8,365.03	307.41	343.50	-345.53	0.26	-0.25	1.93
8,475.00	4.17	308.42	8,458.92	311.02	342.29	-344.35	5.44	1.72	-102.33
8,570.00	19.40	306.75	8,551.65	322.68	326.85	-328.99	16.03	16.03	-1.76
8,664.00	26.47	315.67	8,638.19	347.04	299.66	-301.96	8.36	7.52	9.49
8,759.00	36.21	303.04	8,719.32	377.59	261.21	-263.71	12.32	10.25	-13.29
8,854.00	44.42	289.14	8,791.84	403.89	206.07	-208.75	12.78	8.64	-14.63



MS Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well Crossbow WC Fed Com 704H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3193.50usft (Cactus 171)
Site:	Crossbow WC Fed Com (703H, 704H)	MD Reference:	WELL @ 3193.50usft (Cactus 171)
Well:	Crossbow WC Fed Com 704H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.15 Conroe DB

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)
8,949.00	52.12	271.48	8,855.31	415.83	136.78	-139.53	16.02	8.11	-18.59
8,965.33	53.22	270.06	8,865.21	416.00	123.80	-126.55	9.64	6.74	-8.68
FTP, HL Intersection -8965.33' MD									
9,043.00	58.66	263.84	8,908.72	412.47	59.62	-62.36	9.64	7.00	-8.01
9,138.00	64.17	264.22	8,954.16	403.81	-23.31	20.63	5.81	5.80	0.40
9,232.00	72.36	267.59	8,988.95	397.65	-110.32	107.68	9.33	8.71	3.59
9,326.00	79.70	267.27	9,011.62	393.56	-201.39	198.77	7.82	7.81	-0.34
9,421.00	82.87	265.12	9,026.02	387.32	-295.07	292.49	4.02	3.34	-2.26
9,515.00	88.72	265.91	9,032.91	380.00	-388.49	385.96	6.28	6.22	0.84
9,634.00	88.79	265.17	9,035.49	370.75	-507.10	504.63	0.62	0.06	-0.62
9,729.00	90.02	265.61	9,036.48	363.11	-601.78	599.36	1.38	1.29	0.46
9,823.00	92.48	266.91	9,034.43	356.98	-695.55	693.17	2.96	2.62	1.38
9,918.00	91.96	266.14	9,030.75	351.23	-790.30	787.96	0.98	-0.55	-0.81
10,012.00	91.34	265.94	9,028.04	344.74	-884.04	881.73	0.69	-0.66	-0.21
10,107.00	92.66	267.63	9,024.73	339.41	-978.83	976.55	2.26	1.39	1.78
10,202.00	92.62	268.33	9,020.35	336.07	-1,073.67	1,071.41	0.74	-0.04	0.74
10,296.00	94.37	269.04	9,014.62	333.92	-1,167.46	1,165.22	2.01	1.86	0.76
10,389.00	95.22	269.19	9,006.85	332.48	-1,260.12	1,257.89	0.93	0.91	0.16
10,484.00	92.76	268.65	9,000.24	330.70	-1,354.87	1,352.65	2.65	-2.59	-0.57
10,578.00	89.11	266.79	8,998.70	326.96	-1,448.76	1,446.56	4.36	-3.88	-1.98
10,672.00	89.64	267.07	8,999.73	321.92	-1,542.62	1,540.45	0.64	0.56	0.30
10,767.00	90.52	267.94	8,999.60	317.79	-1,637.53	1,635.39	1.30	0.93	0.92
10,862.00	90.12	267.92	8,999.06	314.36	-1,732.47	1,730.34	0.42	-0.42	-0.02
10,956.00	92.23	270.48	8,997.14	313.05	-1,826.42	1,824.31	3.53	2.24	2.72
11,051.00	92.00	271.80	8,993.63	314.93	-1,921.34	1,919.21	1.41	-0.24	1.39
11,146.00	88.58	268.39	8,993.15	315.09	-2,016.31	2,014.17	5.08	-3.60	-3.59
11,240.00	91.44	270.39	8,993.13	314.09	-2,110.29	2,108.16	3.71	3.04	2.13
11,335.00	91.04	270.58	8,991.08	314.89	-2,205.26	2,203.13	0.47	-0.42	0.20
11,429.00	90.65	270.05	8,989.69	315.41	-2,299.25	2,297.11	0.70	-0.41	-0.56
11,524.00	93.77	270.73	8,986.03	316.06	-2,394.17	2,392.02	3.36	3.28	0.72
11,619.00	94.73	271.18	8,978.99	317.64	-2,488.89	2,486.73	1.12	1.01	0.47
11,714.00	91.47	270.65	8,973.85	319.15	-2,583.73	2,581.55	3.48	-3.43	-0.56
11,809.00	90.56	270.45	8,972.17	320.06	-2,678.71	2,676.52	0.98	-0.96	-0.21
11,904.00	91.26	270.73	8,970.66	321.04	-2,773.69	2,771.50	0.79	0.74	0.29
11,999.00	89.20	269.78	8,970.28	321.46	-2,868.68	2,866.48	2.39	-2.17	-1.00
12,093.00	90.38	270.40	8,970.62	321.61	-2,962.68	2,960.48	1.42	1.26	0.66
12,188.00	92.62	270.85	8,968.14	322.65	-3,057.63	3,055.43	2.40	2.36	0.47
12,283.00	92.48	270.47	8,963.91	323.74	-3,152.53	3,150.32	0.43	-0.15	-0.40
12,377.00	91.91	270.07	8,960.31	324.18	-3,246.46	3,244.24	0.74	-0.61	-0.43
12,472.00	91.25	269.88	8,957.69	324.14	-3,341.42	3,339.20	0.72	-0.69	-0.20
12,566.00	92.48	269.54	8,954.63	323.66	-3,435.37	3,433.15	1.36	1.31	-0.36
12,661.00	92.09	269.68	8,950.84	323.02	-3,530.29	3,528.07	0.44	-0.41	0.15
12,756.00	90.24	269.00	8,948.91	321.92	-3,625.26	3,623.05	2.07	-1.95	-0.72



MS Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well Crossbow WC Fed Com 704H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3193.50usft (Cactus 171)
Site:	Crossbow WC Fed Com (703H, 704H)	MD Reference:	WELL @ 3193.50usft (Cactus 171)
Well:	Crossbow WC Fed Com 704H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.15 Conroe DB

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)	
12,851.00	91.74	269.00	8,947.27	320.27	-3,720.23	3,718.03	1.58	1.58	0.00	
12,946.00	89.77	267.78	8,946.02	317.60	-3,815.18	3,812.99	2.44	-2.07	-1.28	
13,041.00	91.25	268.17	8,945.17	314.24	-3,910.11	3,907.94	1.61	1.56	0.41	
13,135.00	91.16	267.71	8,943.20	310.86	-4,004.03	4,001.88	0.50	-0.10	-0.49	
13,231.00	90.81	267.64	8,941.55	306.97	-4,099.94	4,097.81	0.37	-0.36	-0.07	
13,325.00	90.59	269.45	8,940.40	304.58	-4,193.90	4,191.79	1.94	-0.23	1.93	
13,419.00	92.70	270.59	8,937.70	304.61	-4,287.85	4,285.74	2.55	2.24	1.21	
13,515.00	92.26	270.70	8,933.54	305.69	-4,383.76	4,381.63	0.47	-0.46	0.11	
13,610.00	90.90	270.43	8,930.93	306.63	-4,478.71	4,476.58	1.46	-1.43	-0.28	
13,707.00	91.34	270.14	8,929.03	307.11	-4,575.69	4,573.55	0.54	0.45	-0.30	
13,802.00	90.68	270.17	8,927.36	307.37	-4,670.68	4,668.54	0.70	-0.69	0.03	
13,897.00	90.20	269.75	8,926.63	307.30	-4,765.67	4,763.53	0.67	-0.51	-0.44	
13,992.00	89.67	269.58	8,926.73	306.75	-4,860.67	4,858.53	0.59	-0.56	-0.18	
14,088.00	90.59	269.84	8,926.52	306.26	-4,956.67	4,954.53	1.00	0.96	0.27	
14,181.00	91.52	270.49	8,924.80	306.53	-5,049.65	5,047.51	1.22	1.00	0.70	
14,276.00	90.07	269.71	8,923.49	306.70	-5,144.64	5,142.49	1.73	-1.53	-0.82	
14,371.00	91.78	270.77	8,921.95	307.09	-5,239.62	5,237.47	2.12	1.80	1.12	
14,467.00	89.67	270.16	8,920.74	307.87	-5,335.60	5,333.44	2.29	-2.20	-0.64	
14,563.00	91.30	270.29	8,919.92	308.25	-5,431.60	5,429.43	1.70	1.70	0.14	
14,657.00	93.32	270.78	8,916.14	309.13	-5,525.51	5,523.34	2.21	2.15	0.52	
14,752.00	93.01	270.65	8,910.89	310.31	-5,620.36	5,618.18	0.35	-0.33	-0.14	
14,845.00	91.82	269.27	8,906.97	310.24	-5,713.27	5,711.09	1.96	-1.28	-1.48	
14,939.00	88.75	267.61	8,906.50	307.68	-5,807.22	5,805.05	3.71	-3.27	-1.77	
15,034.00	92.13	268.70	8,905.77	304.63	-5,902.15	5,900.00	3.74	3.56	1.15	
15,129.00	92.53	267.94	8,901.91	301.84	-5,997.03	5,994.90	0.90	0.42	-0.80	
15,224.00	96.40	269.88	8,894.52	300.04	-6,091.71	6,089.58	4.55	4.07	2.04	
15,318.00	90.95	270.58	8,888.49	300.42	-6,185.48	6,183.35	5.85	-5.80	0.74	
15,413.00	89.98	270.65	8,887.72	301.44	-6,280.47	6,278.33	1.02	-1.02	0.07	
15,507.00	91.12	270.20	8,886.82	302.13	-6,374.46	6,372.31	1.30	1.21	-0.48	
15,603.00	92.18	269.70	8,884.06	302.05	-6,470.42	6,468.27	1.22	1.10	-0.52	
15,697.00	91.87	269.40	8,880.74	301.31	-6,564.35	6,562.21	0.46	-0.33	-0.32	
15,792.00	91.91	269.35	8,877.60	300.28	-6,659.30	6,657.16	0.07	0.04	-0.05	
15,887.00	92.40	269.71	8,874.03	299.50	-6,754.23	6,752.09	0.64	0.52	0.38	
15,982.00	92.84	269.91	8,869.69	299.18	-6,849.13	6,846.99	0.51	0.46	0.21	
16,078.00	91.91	269.68	8,865.71	298.84	-6,945.04	6,942.91	1.00	-0.97	-0.24	
16,172.00	94.11	270.35	8,860.77	298.86	-7,038.91	7,036.77	2.45	2.34	0.71	
16,266.00	89.49	269.47	8,857.82	298.72	-7,132.83	7,130.69	5.00	-4.91	-0.94	
16,361.00	90.86	269.67	8,857.53	298.00	-7,227.83	7,225.69	1.46	1.44	0.21	
16,455.00	92.75	269.85	8,854.57	297.61	-7,321.78	7,319.64	2.02	2.01	0.19	
16,550.00	92.31	269.33	8,850.38	296.93	-7,416.68	7,414.55	0.72	-0.46	-0.55	
16,645.00	90.68	268.22	8,847.90	294.90	-7,511.62	7,509.50	2.08	-1.72	-1.17	
16,740.00	92.09	268.17	8,845.60	291.91	-7,606.54	7,604.44	1.49	1.48	-0.05	
16,834.00	90.68	267.78	8,843.33	288.59	-7,700.46	7,698.37	1.56	-1.50	-0.41	



MS Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well Crossbow WC Fed Com 704H
Project:	Eddy County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3193.50usft (Cactus 171)
Site:	Crossbow WC Fed Com (703H, 704H)	MD Reference:	WELL @ 3193.50usft (Cactus 171)
Well:	Crossbow WC Fed Com 704H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.15 Conroe DB

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)
16,929.00	91.25	267.85	8,841.73	284.97	-7,795.37	7,793.31	0.60	0.60	0.07
17,023.00	89.98	267.58	8,840.72	281.22	-7,889.29	7,887.25	1.38	-1.35	-0.29
17,118.00	91.78	269.05	8,839.26	278.42	-7,984.23	7,982.21	2.45	1.89	1.55
17,213.00	90.68	268.32	8,837.22	276.24	-8,079.18	8,077.17	1.39	-1.16	-0.77
17,307.00	90.29	269.81	8,836.43	274.71	-8,173.16	8,171.16	1.64	-0.41	1.59
17,402.00	93.85	270.20	8,833.00	274.72	-8,268.09	8,266.08	3.77	3.75	0.41
17,496.00	92.18	269.35	8,828.05	274.35	-8,361.95	8,359.95	1.99	-1.78	-0.90
17,591.00	92.53	270.02	8,824.15	273.83	-8,456.87	8,454.87	0.80	0.37	0.71
17,686.00	91.52	268.88	8,820.79	272.92	-8,551.80	8,549.80	1.60	-1.06	-1.20
17,780.00	91.65	268.74	8,818.19	270.97	-8,645.75	8,643.76	0.20	0.14	-0.15
17,875.00	91.47	267.80	8,815.61	268.10	-8,740.67	8,738.70	1.01	-0.19	-0.99
17,970.00	93.19	269.10	8,811.74	265.53	-8,835.55	8,833.59	2.27	1.81	1.37
18,064.00	92.79	269.59	8,806.84	264.46	-8,929.41	8,927.46	0.67	-0.43	0.52
18,159.00	91.16	268.89	8,803.57	263.20	-9,024.34	9,022.40	1.87	-1.72	-0.74
18,253.00	92.40	268.75	8,800.65	261.26	-9,118.28	9,116.34	1.33	1.32	-0.15
18,347.00	94.24	269.56	8,795.20	259.88	-9,212.10	9,210.18	2.14	1.96	0.86
18,442.00	94.15	268.97	8,788.25	258.66	-9,306.84	9,304.92	0.63	-0.09	-0.62
18,536.00	94.07	268.67	8,781.52	256.73	-9,400.58	9,398.67	0.33	-0.09	-0.32
18,632.00	91.08	269.66	8,777.20	255.34	-9,496.46	9,494.56	3.28	-3.11	1.03
18,726.00	88.41	268.82	8,777.62	254.09	-9,590.44	9,588.55	2.98	-2.84	-0.89
18,792.00	92.88	268.55	8,776.88	252.57	-9,656.40	9,654.52	6.79	6.77	-0.41
18,866.00	92.88	268.55	8,773.16	250.70	-9,730.29	9,728.41	0.00	0.00	0.00

Projection to TD-18866.00' MD

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,965.33	8,865.21	416.00	123.80	FTP, HL Intersection -8965.33' MD
18,866.00	8,773.16	250.70	-9,730.29	Projection to TD-18866.00' MD

Submit To Appropriate District Office Two Copies <u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 811 S. First St., Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505		State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505				Form C-105 Revised April 3, 2017				
1. WELL API NO. 30-015-48714										
2. Type of Lease ☐ STATE ☒ FEE ☐ FED/INDIAN										
3. State Oil & Gas Lease No.										
WELL COMPLETION OR RECOMPLETION REPORT AND LOG										
4. Reason for filing: ☒ COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) ☐ C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)						5. Lease Name or Unit Agreement Name CROSSBOW WC FED COM				
7. Type of Completion: ☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER						6. Well Number: 704H				
8. Name of Operator Marathon Oil Permian LLC						9. OGRID 372098				
10. Address of Operator 990 Town & Country Blvd. Houston, TX 77024						11. Pool name or Wildcat PURPLE SAGE; WOLFCAMP (GAS)				
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	A	8	23S	27E		1266'	N	456'	E	EDDY
BH:	D	7	23S	27E	1	950'	N	331'	W	EDDY
13. Date Spudded 6/1/2023	14. Date T.D. Reached 7/6/2023		15. Date Rig Released 7/9/2023		16. Date Completed (Ready to Produce) 12/2/2023			17. Elevations (DF and RKB, RT, GR, etc.) 3171' GL		
18. Total Measured Depth of Well 18866'			19. Plug Back Measured Depth 18855'		20. Was Directional Survey Made? Yes			21. Type Electric and Other Logs Run GR		
22. Producing Interval(s), of this completion - Top, Bottom, Name 9085' - 18841'; WOLFCAMP										
23. CASING RECORD (Report all strings set in well)										
CASING SIZE		WEIGHT LB./FT.		DEPTH SET		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED
13-3/8"		54.5#, J55, BTC		542'		17-1/2"		Tail: 795 sks, 1.32 yield, Class C		
9-5/8"		40#, P110, BTC		8338'		12-1/4"		Lead: 1260 sks, 3.59 yield, Class C Tail: 380 sks, 1.39 yield, Class C		
5-1/2"		23#, P110, VTC		18855'		8-1/2"		Lead: 1176 sks, 1.14 yield, Class H Tail: 3365 sks, 1.11 yield, Class H		
24. LINER RECORD										
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	25. TUBING RECORD					
					SIZE	DEPTH SET	PACKER SET			
26. Perforation record (interval, size, and number) 9085' - 18841'; 0.41", 960 shots					27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.					
					DEPTH INTERVAL		AMOUNT AND KIND MATERIAL USED			
					9085' - 18841'		24,398,416 lbs proppant			
					9085' - 18841'		24,750,180 gal fluid			
28. PRODUCTION										
Date First Production 12/2/2023		Production Method (Flowing, gas lift, pumping - Size and type pump) FLOWING				Well Status (Prod. or Shut-in) PROD.				
Date of Test 12/20/2023	Hours Tested 24	Choke Size 56/64	Prod'n For Test Period	Oil - Bbl 1390	Gas - MCF 2736	Water - Bbl. 3960	Gas - Oil Ratio			
Flow Tubing Press.	Casing Pressure 984	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)				
29. Disposition of Gas (Sold, used for fuel, vented, etc.) SOLD							30. Test Witnessed By			
31. List Attachments										
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.							33. Rig Release Date:			
34. If an on-site burial was used at the well, report the exact location of the on-site burial:										
Latitude			Longitude			NAD83				
I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief										
Signature <i>Adrian Covarrubias</i>			Printed Name Adrian Covarrubias			Title Regulatory Compliance Rep			Date 1/2/2024	
E-mail Address acovarrubias@marathonoil.com										

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon (BELL) 1981'	T. Ojo Alamo	T. Penn A"
T. Salt	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt 1750'	T. Atoka	T. Fruitland	T. Penn. "C"
T. Yates	T. Miss	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers	T. Devonian	T. Cliff House	T. Leadville
T. Queen	T. Silurian	T. Menefee	T. Madison
T. Grayburg	T. Montoya	T. Point Lookout	T. Elbert
T. San Andres	T. Simpson	T. Mancos	T. McCracken
T. Glorieta	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock	T. Ellenburger	Base Greenhorn	T. Granite
T. Blinebry	T. Gr. Wash	T. Dakota	
T. Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard	T. Bone Springs 5436'	T. Todilto	
T. Abo	T.	T. Entrada	
T. Wolfcamp 8989'	T. CASTILE 499'	T. Wingate	
T. Penn	T. LAMAR 1940'	T. Chinle	
T. Cisco (Bough C)	T. T. CHERRY CANYON 2811'	T. Permian	

T. BRUSHY CANYON 3917'

OIL OR GAS
SANDS OR ZONES

No. 1, from.....to.....

No. 2, from.....to.....

No. 3, from.....to.....

No. 4, from.....to.....

IMPORTANT WATER SANDS

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

No. 1, from.....to.....feet.....

No. 2, from.....to.....feet.....

No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

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

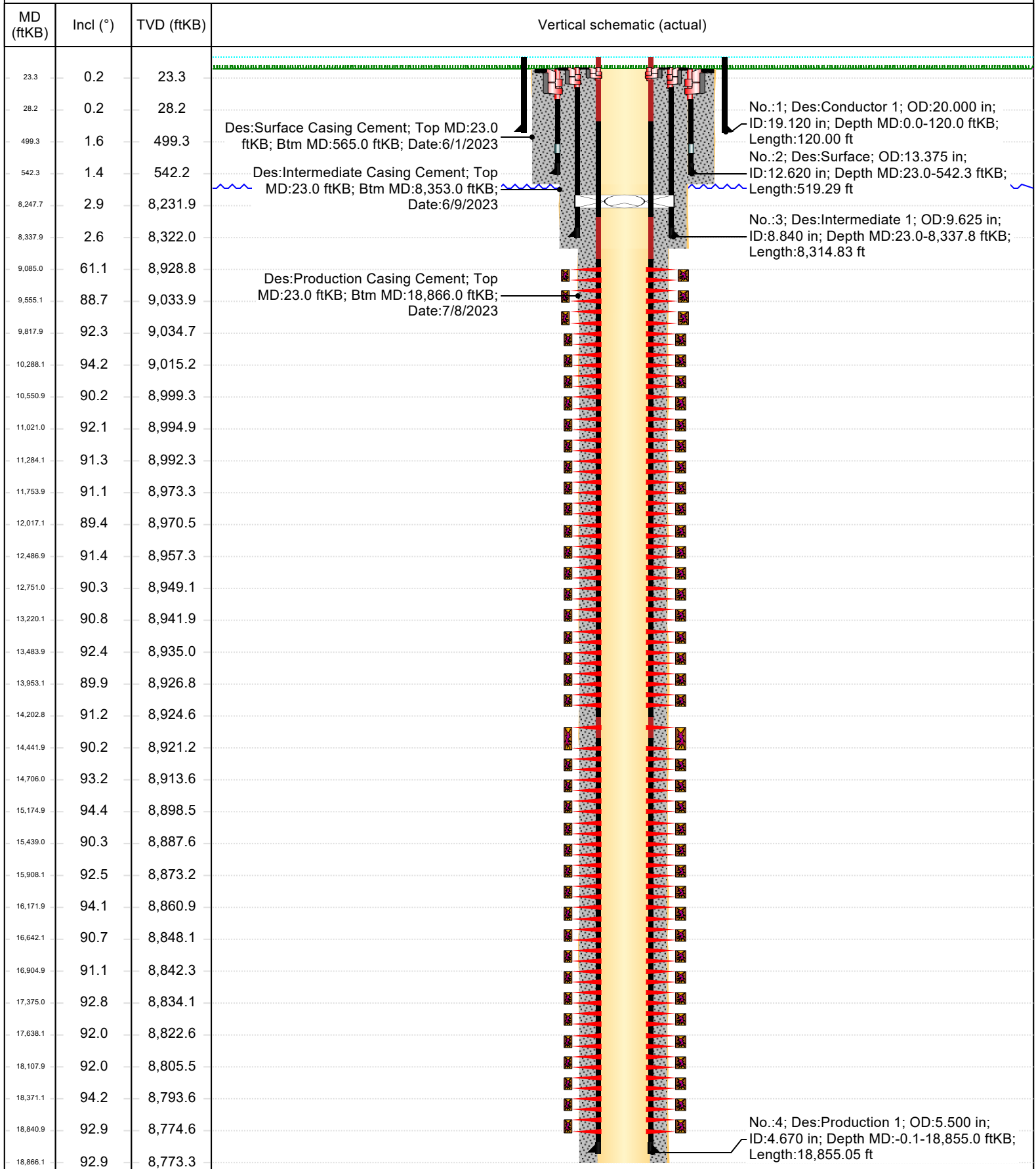


Wellbore Schematic

Well Name: CROSSBOW WC FED COM 704H

State/Province NEW MEXICO	Country UNITED STATES	Field Name PURPLE SAGE	Latitude (°) 32.32312880	Longitude (°) -104.20438790	North/South Distance (ft) 4,153.5	North/South Reference FNL
API/IPO UWI 3001548715	KB-Ground Distance (ft) 23.00	KB-Mud Line Distance (ft)	Ground Elevation (ft) 3,171.00	Drilling Rig Spud Date 6/1/2023	Well Original Completion Date 11/18/2023	Well First Production Date

HORIZONTAL, CROSSBOW WC FED COM 704H, 12/20/2023 11:04:42 AM



District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

ACKNOWLEDGMENTS

Action 298734

ACKNOWLEDGMENTS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 298734
	Action Type: [C-104] Completion Packet (C-104C)

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.

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CONDITIONS

Action 298734

CONDITIONS

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	Action Number: 298734
	Action Type: [C-104] Completion Packet (C-104C)

CONDITIONS

Created By	Condition	Condition Date
smcgrath	File 3160-4 within 10 days of BLM Approval.	10/9/2024
smcgrath	Upload Gamma Ray Log to OCD Permitting/ Well Logs	10/9/2024