

EXTRACTION OIL & GAS

WELD COUNTY

Sec 36-T7N-R67W

MAVERICK 2W-20-02

OWB

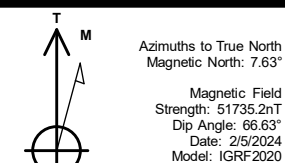
Plan: PROPOSAL 1

Standard Planning Report

29 March, 2024



Project: WELD COUNTY
Site: Sec 36-T7N-R67W
Well: MAVERICK 2W-20-02
Wellbore: OWB
Design: PROPOSAL 1



WELL DETAILS: MAVERICK 2W-20-02

+N/-S	+E/-W	Northing	Easting	4897.00 Latitude	Longitude	Slot
0.00	0.00	1436570.29	3183548.23	40.529910°N	104.839693°W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
3	2934.50	52.69	208.26	2578.56	-993.92	-534.17	2.00	208.26	895.66	
4	9844.72	52.69	208.26	6767.02	-5835.21	-3136.05	0.00	0.00	5258.33	
5	10524.11	90.00	270.08	7001.00	-6105.14	-3667.42	10.00	72.01	5853.69	LP-MAVERICK 2W-20-02
6	17949.60	90.00	270.08	7001.00	-6095.27	-11092.90	0.00	0.00	12618.11	IP 1-MAVERICK 2W-20-02
7	18198.49	90.00	265.10	7001.00	-6105.74	-11341.49	2.00	-90.00	12849.02	IP 2-MAVERICK 2W-20-02
8	19633.50	90.00	265.10	7001.00	-6228.36	-12771.26	0.00	0.00	14202.70	IP 2-MAVERICK 2W-20-02
9	19890.16	90.00	270.23	7001.00	-6238.81	-13027.62	2.00	90.00	14440.68	PBHL-MAVERICK 2W-20-02
10	20683.43	90.00	270.23	7001.00	-6235.61	-13820.88	0.00	0.00	15162.44	PBHL-MAVERICK 2W-20-02

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
24.00	24.00	Laramie-Fox Hills Formation
196.00	196.00	Pierre Formation
471.00	471.10	Upper Pierre aquifer
1381.00	1408.45	Base of Upper Pierre aquifer
3716.00	4811.08	Larimer ("Parkman") sandstone
4011.00	5297.77	Pierre Formation
4201.00	5611.24	Terry ("Sussex") sandstone
4471.00	6056.69	Pierre Formation
4781.00	6568.14	Hygiene ("Shannon") sandstone
5016.00	6955.84	Pierre Formation
6961.00	10256.96	Sharon Springs Member
7001.00	10524.11	Niobrara Formation

PROJECT DETAILS: WELD COUNTY

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

System Datum: Mean Sea Level

SHL:
2360' FSL, 2099' FEL
Sec 36-T7N-R67W

LP:
1525' FSL, 470' FEL
Sec 2-T6N-R67W

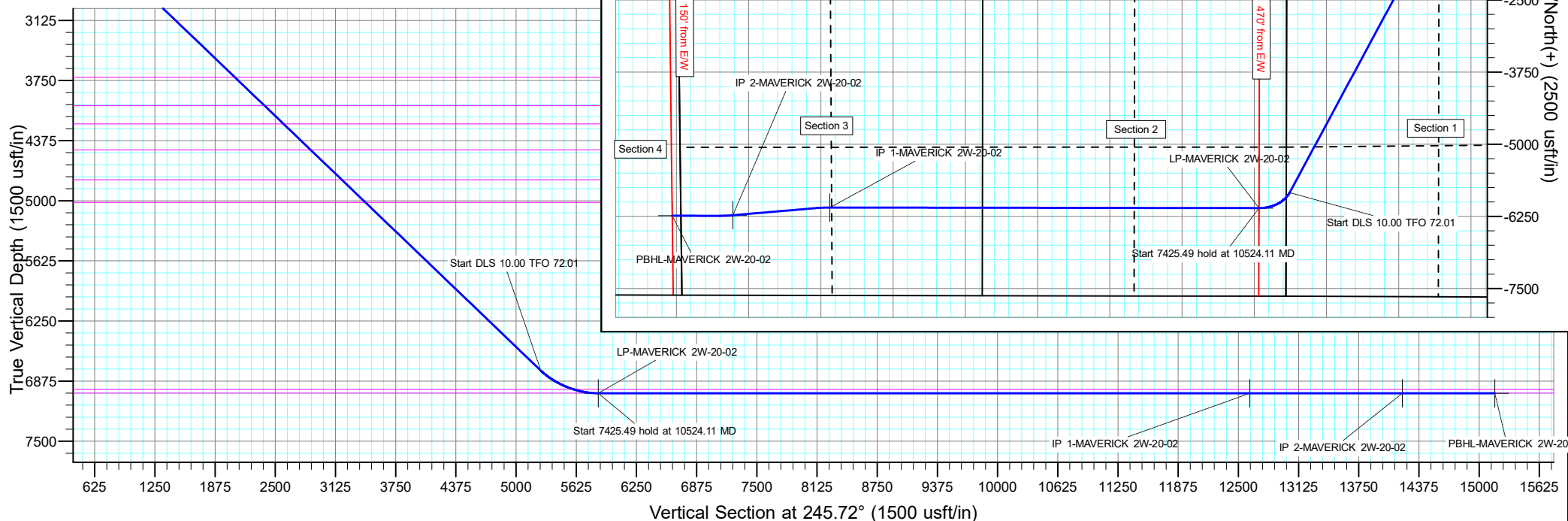
BHL:
1378' FSL, 150' FEL
Sec 4-T6N-R67W

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	Start Build 2.00
2934.50	52.69	208.26	2578.56	-993.92	-534.17	895.66	1128.36	Start 6910.22 hold at 2934.50 MD
9844.72	52.69	208.26	6767.02	-5835.21	-3136.05	5258.33	6624.54	Start DLS 10.00 TFO 72.01
10524.11	90.00	270.08	7001.00	-6105.14	-3667.42	5853.69	7248.98	Start 7425.49 hold at 10524.11 MD
17949.60	90.00	270.08	7001.00	-6095.27	-11092.90	12618.11	14674.47	Start DLS 2.00 TFO -90.00
18198.49	90.00	265.10	7001.00	-6105.74	-11341.49	12849.02	14923.36	Start 1435.01 hold at 18198.49 MD
19633.50	90.00	265.10	7001.00	-6228.36	-12771.26	14202.70	16358.37	Start Turn 2.00
19890.16	90.00	270.23	7001.00	-6238.81	-13027.62	14440.68	16615.03	Start 793.27 hold at 19890.16 MD
20683.43	90.00	270.23	7001.00	-6235.61	-13820.88	15162.44	17408.30	TD at 20683.43

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
IP 1-MAVERICK 2W-20-02	7001.00	-6095.27	-11092.90	1430392.59	3172501.03	40.513172°N	104.879589°W	Point
- plan hits target center								
IP 2-MAVERICK 2W-20-02	7001.00	-6228.36	-12771.26	1430247.00	3170823.71	40.512804°N	104.885625°W	Point
- plan hits target center								
LP-MAVERICK 2W-20-02	7001.00	-6105.14	-3667.42	1430438.01	3179926.37	40.513151°N	104.852883°W	Point
- plan hits target center								
PBHL-MAVERICK 2W-20-02	7001.00	-6235.61	-13820.88	1430231.94	3169774.16	40.512783°N	104.889400°W	Point
- plan hits target center								



Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well MAVERICK 2W-20-02
Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4922.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4922.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-02	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Project	WELD COUNTY		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Sec 36-T7N-R67W			
Site Position:		Northing:	1,434,164.62 usft	Latitude:	40.523371°N
From:	Lat/Long	Easting:	3,180,376.52 usft	Longitude:	104.851166°W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.42 °

Well	MAVERICK 2W-20-02					
Well Position	+N/-S	2,382.40 usft	Northing:	1,436,570.29 usft	Latitude:	40.529910°N
	+E/-W	3,189.23 usft	Easting:	3,183,548.23 usft	Longitude:	104.839693°W
Position Uncertainty	0.00 usft		Wellhead Elevation:		Ground Level:	4,897.00 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	2/5/2024	7.63	66.63	51,735.15498003

Design	PROPOSAL 1				
Audit Notes:					
Version:		Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	245.72	

Plan Survey Tool Program	Date	3/29/2024			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	20,682.58	PROPOSAL 1 (OWB)	MWD OWSG	
			OWSG MWD - Standard		

Civitas Resources

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Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4922.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4922.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-02	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	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	
2,934.50	52.69	208.26	2,578.56	-993.92	-534.17	2.00	2.00	0.00	208.26	
9,844.72	52.69	208.26	6,767.02	-5,835.21	-3,136.05	0.00	0.00	0.00	0.00	
10,524.11	90.00	270.08	7,001.00	-6,105.14	-3,667.42	10.00	5.49	9.10	72.01	LP-MAVERICK 2W-20-02
17,949.60	90.00	270.08	7,001.00	-6,095.27	-11,092.90	0.00	0.00	0.00	0.00	IP 1-MAVERICK 2W-20-02
18,198.49	90.00	265.10	7,001.00	-6,105.74	-11,341.49	2.00	0.00	-2.00	-90.00	IP 2-MAVERICK 2W-20-02
19,633.50	90.00	265.10	7,001.00	-6,228.36	-12,771.26	0.00	0.00	0.00	0.00	IP 2-MAVERICK 2W-20-02
19,890.16	90.00	270.23	7,001.00	-6,238.81	-13,027.62	2.00	0.00	2.00	90.00	PBHL-MAVERICK 2W-20-02
20,683.43	90.00	270.23	7,001.00	-6,235.61	-13,820.88	0.00	0.00	0.00	0.00	PBHL-MAVERICK 2W-20-02

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well MAVERICK 2W-20-02
Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4922.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4922.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-02	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24.00	0.00	0.00	24.00	0.00	0.00	0.00	0.00	0.00	0.00
Laramie-Fox Hills Formation									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
196.00	0.00	0.00	196.00	0.00	0.00	0.00	0.00	0.00	0.00
Pierre Formation									
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
Start Build 2.00									
400.00	2.00	208.26	399.98	-1.54	-0.83	1.39	2.00	2.00	0.00
471.10	3.42	208.26	471.00	-4.50	-2.42	4.05	2.00	2.00	0.00
Upper Pierre aquifer									
500.00	4.00	208.26	499.84	-6.15	-3.30	5.54	2.00	2.00	0.00
600.00	6.00	208.26	599.45	-13.82	-7.43	12.46	2.00	2.00	0.00
700.00	8.00	208.26	698.70	-24.56	-13.20	22.13	2.00	2.00	0.00
800.00	10.00	208.26	797.47	-38.34	-20.60	34.55	2.00	2.00	0.00
900.00	12.00	208.26	895.62	-55.14	-29.64	49.69	2.00	2.00	0.00
1,000.00	14.00	208.26	993.06	-74.96	-40.28	67.55	2.00	2.00	0.00
1,100.00	16.00	208.26	1,089.64	-97.75	-52.54	88.09	2.00	2.00	0.00
1,200.00	18.00	208.26	1,185.27	-123.51	-66.38	111.30	2.00	2.00	0.00
1,300.00	20.00	208.26	1,279.82	-152.18	-81.79	137.14	2.00	2.00	0.00
1,400.00	22.00	208.26	1,373.17	-183.75	-98.75	165.58	2.00	2.00	0.00
1,408.45	22.17	208.26	1,381.00	-186.55	-100.26	168.10	2.00	2.00	0.00
Base of Upper Pierre aquifer									
1,500.00	24.00	208.26	1,465.21	-218.16	-117.25	196.60	2.00	2.00	0.00
1,600.00	26.00	208.26	1,555.84	-255.39	-137.25	230.14	2.00	2.00	0.00
1,700.00	28.00	208.26	1,644.94	-295.38	-158.75	266.17	2.00	2.00	0.00
1,800.00	30.00	208.26	1,732.39	-338.08	-181.70	304.65	2.00	2.00	0.00
1,900.00	32.00	208.26	1,818.11	-383.44	-206.08	345.53	2.00	2.00	0.00
2,000.00	34.00	208.26	1,901.97	-431.41	-231.86	388.76	2.00	2.00	0.00
2,100.00	36.00	208.26	1,983.88	-481.94	-259.01	434.29	2.00	2.00	0.00
2,200.00	38.00	208.26	2,063.74	-534.94	-287.50	482.06	2.00	2.00	0.00
2,300.00	40.00	208.26	2,141.45	-590.37	-317.29	532.01	2.00	2.00	0.00
2,400.00	42.00	208.26	2,216.92	-648.16	-348.34	584.08	2.00	2.00	0.00
2,500.00	44.00	208.26	2,290.05	-708.23	-380.63	638.21	2.00	2.00	0.00
2,600.00	46.00	208.26	2,360.76	-770.51	-414.10	694.34	2.00	2.00	0.00
2,700.00	48.00	208.26	2,428.95	-834.93	-448.72	752.39	2.00	2.00	0.00
2,800.00	50.00	208.26	2,494.55	-901.41	-484.45	812.29	2.00	2.00	0.00
2,900.00	52.00	208.26	2,557.48	-969.86	-521.24	873.98	2.00	2.00	0.00
2,934.50	52.69	208.26	2,578.56	-993.92	-534.17	895.66	2.00	2.00	0.00
Start 6910.22 hold at 2934.50 MD									
3,000.00	52.69	208.26	2,618.26	-1,039.81	-558.83	937.01	0.00	0.00	0.00
3,100.00	52.69	208.26	2,678.87	-1,109.87	-596.48	1,000.14	0.00	0.00	0.00
3,200.00	52.69	208.26	2,739.49	-1,179.93	-634.14	1,063.28	0.00	0.00	0.00
3,300.00	52.69	208.26	2,800.10	-1,249.99	-671.79	1,126.41	0.00	0.00	0.00
3,400.00	52.69	208.26	2,860.71	-1,320.05	-709.44	1,189.54	0.00	0.00	0.00
3,500.00	52.69	208.26	2,921.32	-1,390.11	-747.09	1,252.68	0.00	0.00	0.00
3,600.00	52.69	208.26	2,981.94	-1,460.17	-784.75	1,315.81	0.00	0.00	0.00
3,700.00	52.69	208.26	3,042.55	-1,530.23	-822.40	1,378.94	0.00	0.00	0.00
3,800.00	52.69	208.26	3,103.16	-1,600.29	-860.05	1,442.08	0.00	0.00	0.00
3,900.00	52.69	208.26	3,163.77	-1,670.35	-897.70	1,505.21	0.00	0.00	0.00
4,000.00	52.69	208.26	3,224.39	-1,740.41	-935.36	1,568.35	0.00	0.00	0.00
4,100.00	52.69	208.26	3,285.00	-1,810.47	-973.01	1,631.48	0.00	0.00	0.00

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well MAVERICK 2W-20-02
Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4922.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4922.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-02	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,200.00	52.69	208.26	3,345.61	-1,880.53	-1,010.66	1,694.61	0.00	0.00	0.00	
4,300.00	52.69	208.26	3,406.22	-1,950.59	-1,048.32	1,757.75	0.00	0.00	0.00	
4,400.00	52.69	208.26	3,466.84	-2,020.64	-1,085.97	1,820.88	0.00	0.00	0.00	
4,500.00	52.69	208.26	3,527.45	-2,090.70	-1,123.62	1,884.01	0.00	0.00	0.00	
4,600.00	52.69	208.26	3,588.06	-2,160.76	-1,161.27	1,947.15	0.00	0.00	0.00	
4,700.00	52.69	208.26	3,648.67	-2,230.82	-1,198.93	2,010.28	0.00	0.00	0.00	
4,800.00	52.69	208.26	3,709.29	-2,300.88	-1,236.58	2,073.41	0.00	0.00	0.00	
4,811.08	52.69	208.26	3,716.00	-2,308.64	-1,240.75	2,080.41	0.00	0.00	0.00	
Larimer ("Parkman") sandstone										
4,900.00	52.69	208.26	3,769.90	-2,370.94	-1,274.23	2,136.55	0.00	0.00	0.00	
5,000.00	52.69	208.26	3,830.51	-2,441.00	-1,311.88	2,199.68	0.00	0.00	0.00	
5,100.00	52.69	208.26	3,891.12	-2,511.06	-1,349.54	2,262.82	0.00	0.00	0.00	
5,200.00	52.69	208.26	3,951.74	-2,581.12	-1,387.19	2,325.95	0.00	0.00	0.00	
5,297.77	52.69	208.26	4,011.00	-2,649.62	-1,424.00	2,387.68	0.00	0.00	0.00	
Pierre Formation										
5,300.00	52.69	208.26	4,012.35	-2,651.18	-1,424.84	2,389.08	0.00	0.00	0.00	
5,400.00	52.69	208.26	4,072.96	-2,721.24	-1,462.49	2,452.22	0.00	0.00	0.00	
5,500.00	52.69	208.26	4,133.58	-2,791.30	-1,500.15	2,515.35	0.00	0.00	0.00	
5,600.00	52.69	208.26	4,194.19	-2,861.36	-1,537.80	2,578.48	0.00	0.00	0.00	
5,611.24	52.69	208.26	4,201.00	-2,869.24	-1,542.03	2,585.58	0.00	0.00	0.00	
Terry ("Sussex") sandstone										
5,700.00	52.69	208.26	4,254.80	-2,931.42	-1,575.45	2,641.62	0.00	0.00	0.00	
5,800.00	52.69	208.26	4,315.41	-3,001.48	-1,613.11	2,704.75	0.00	0.00	0.00	
5,900.00	52.69	208.26	4,376.03	-3,071.54	-1,650.76	2,767.88	0.00	0.00	0.00	
6,000.00	52.69	208.26	4,436.64	-3,141.60	-1,688.41	2,831.02	0.00	0.00	0.00	
6,056.69	52.69	208.26	4,471.00	-3,181.32	-1,709.76	2,866.81	0.00	0.00	0.00	
Pierre Formation										
6,100.00	52.69	208.26	4,497.25	-3,211.66	-1,726.06	2,894.15	0.00	0.00	0.00	
6,200.00	52.69	208.26	4,557.86	-3,281.72	-1,763.72	2,957.28	0.00	0.00	0.00	
6,300.00	52.69	208.26	4,618.48	-3,351.78	-1,801.37	3,020.42	0.00	0.00	0.00	
6,400.00	52.69	208.26	4,679.09	-3,421.84	-1,839.02	3,083.55	0.00	0.00	0.00	
6,500.00	52.69	208.26	4,739.70	-3,491.90	-1,876.67	3,146.69	0.00	0.00	0.00	
6,568.14	52.69	208.26	4,781.00	-3,539.64	-1,902.33	3,189.70	0.00	0.00	0.00	
Hygiene ("Shannon") sandstone										
6,600.00	52.69	208.26	4,800.31	-3,561.96	-1,914.33	3,209.82	0.00	0.00	0.00	
6,700.00	52.69	208.26	4,860.93	-3,632.02	-1,951.98	3,272.95	0.00	0.00	0.00	
6,800.00	52.69	208.26	4,921.54	-3,702.08	-1,989.63	3,336.09	0.00	0.00	0.00	
6,900.00	52.69	208.26	4,982.15	-3,772.14	-2,027.29	3,399.22	0.00	0.00	0.00	
6,955.84	52.69	208.26	5,016.00	-3,811.27	-2,048.31	3,434.48	0.00	0.00	0.00	
Pierre Formation										
7,000.00	52.69	208.26	5,042.76	-3,842.20	-2,064.94	3,462.35	0.00	0.00	0.00	
7,100.00	52.69	208.26	5,103.38	-3,912.26	-2,102.59	3,525.49	0.00	0.00	0.00	
7,200.00	52.69	208.26	5,163.99	-3,982.32	-2,140.24	3,588.62	0.00	0.00	0.00	
7,300.00	52.69	208.26	5,224.60	-4,052.38	-2,177.90	3,651.75	0.00	0.00	0.00	
7,400.00	52.69	208.26	5,285.21	-4,122.44	-2,215.55	3,714.89	0.00	0.00	0.00	
7,500.00	52.69	208.26	5,345.83	-4,192.50	-2,253.20	3,778.02	0.00	0.00	0.00	
7,600.00	52.69	208.26	5,406.44	-4,262.56	-2,290.85	3,841.16	0.00	0.00	0.00	
7,700.00	52.69	208.26	5,467.05	-4,332.62	-2,328.51	3,904.29	0.00	0.00	0.00	
7,800.00	52.69	208.26	5,527.66	-4,402.68	-2,366.16	3,967.42	0.00	0.00	0.00	
7,900.00	52.69	208.26	5,588.28	-4,472.74	-2,403.81	4,030.56	0.00	0.00	0.00	
8,000.00	52.69	208.26	5,648.89	-4,542.80	-2,441.47	4,093.69	0.00	0.00	0.00	
8,100.00	52.69	208.26	5,709.50	-4,612.86	-2,479.12	4,156.82	0.00	0.00	0.00	
8,200.00	52.69	208.26	5,770.11	-4,682.92	-2,516.77	4,219.96	0.00	0.00	0.00	

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well MAVERICK 2W-20-02
Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4922.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4922.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-02	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,300.00	52.69	208.26	5,830.73	-4,752.98	-2,554.42	4,283.09	0.00	0.00	0.00
8,400.00	52.69	208.26	5,891.34	-4,823.04	-2,592.08	4,346.22	0.00	0.00	0.00
8,500.00	52.69	208.26	5,951.95	-4,893.10	-2,629.73	4,409.36	0.00	0.00	0.00
8,600.00	52.69	208.26	6,012.57	-4,963.16	-2,667.38	4,472.49	0.00	0.00	0.00
8,700.00	52.69	208.26	6,073.18	-5,033.22	-2,705.03	4,535.63	0.00	0.00	0.00
8,800.00	52.69	208.26	6,133.79	-5,103.28	-2,742.69	4,598.76	0.00	0.00	0.00
8,900.00	52.69	208.26	6,194.40	-5,173.34	-2,780.34	4,661.89	0.00	0.00	0.00
9,000.00	52.69	208.26	6,255.02	-5,243.40	-2,817.99	4,725.03	0.00	0.00	0.00
9,100.00	52.69	208.26	6,315.63	-5,313.46	-2,855.65	4,788.16	0.00	0.00	0.00
9,200.00	52.69	208.26	6,376.24	-5,383.52	-2,893.30	4,851.29	0.00	0.00	0.00
9,300.00	52.69	208.26	6,436.85	-5,453.58	-2,930.95	4,914.43	0.00	0.00	0.00
9,400.00	52.69	208.26	6,497.47	-5,523.64	-2,968.60	4,977.56	0.00	0.00	0.00
9,500.00	52.69	208.26	6,558.08	-5,593.70	-3,006.26	5,040.69	0.00	0.00	0.00
9,600.00	52.69	208.26	6,618.69	-5,663.76	-3,043.91	5,103.83	0.00	0.00	0.00
9,700.00	52.69	208.26	6,679.30	-5,733.82	-3,081.56	5,166.96	0.00	0.00	0.00
9,800.00	52.69	208.26	6,739.92	-5,803.88	-3,119.21	5,230.10	0.00	0.00	0.00
9,844.72	52.69	208.26	6,767.02	-5,835.21	-3,136.05	5,258.33	0.00	0.00	0.00
Start DLS 10.00 TFO 72.01									
9,850.00	52.85	208.88	6,770.22	-5,838.90	-3,138.06	5,261.68	10.00	3.12	11.93
9,900.00	54.57	214.71	6,799.82	-5,873.12	-3,159.30	5,295.11	10.00	3.44	11.65
9,950.00	56.56	220.28	6,828.11	-5,905.80	-3,184.41	5,331.43	10.00	3.97	11.13
10,000.00	58.79	225.58	6,854.86	-5,936.70	-3,213.18	5,370.37	10.00	4.45	10.60
10,050.00	61.22	230.62	6,879.87	-5,965.59	-3,245.41	5,411.63	10.00	4.86	10.09
10,100.00	63.83	235.43	6,902.95	-5,992.24	-3,280.84	5,454.89	10.00	5.22	9.62
10,150.00	66.59	240.02	6,923.92	-6,016.45	-3,319.21	5,499.82	10.00	5.52	9.18
10,200.00	69.48	244.42	6,942.63	-6,038.03	-3,360.23	5,546.08	10.00	5.78	8.80
10,250.00	72.48	248.66	6,958.93	-6,056.83	-3,403.58	5,593.33	10.00	6.00	8.47
10,256.96	72.90	249.23	6,961.00	-6,059.22	-3,409.78	5,599.96	10.00	6.10	8.30
Sharon Springs Member									
10,300.00	75.56	252.75	6,972.70	-6,072.70	-3,448.94	5,641.20	10.00	6.18	8.17
10,350.00	78.71	256.73	6,983.83	-6,085.51	-3,495.95	5,689.32	10.00	6.31	7.96
10,400.00	81.92	260.62	6,992.24	-6,095.18	-3,544.27	5,737.34	10.00	6.41	7.79
10,450.00	85.16	264.46	6,997.87	-6,101.62	-3,593.51	5,784.87	10.00	6.48	7.66
10,500.00	88.42	268.25	7,000.67	-6,104.79	-3,643.32	5,831.58	10.00	6.53	7.59
10,524.11	90.00	270.08	7,001.00	-6,105.14	-3,667.42	5,853.69	10.00	6.54	7.57
Start 7425.49 hold at 10524.11 MD - Niobrara Formation									
10,600.00	90.00	270.08	7,001.00	-6,105.04	-3,743.31	5,922.83	0.00	0.00	0.00
10,700.00	90.00	270.08	7,001.00	-6,104.91	-3,843.31	6,013.92	0.00	0.00	0.00
10,800.00	90.00	270.08	7,001.00	-6,104.78	-3,943.31	6,105.02	0.00	0.00	0.00
10,900.00	90.00	270.08	7,001.00	-6,104.64	-4,043.31	6,196.12	0.00	0.00	0.00
11,000.00	90.00	270.08	7,001.00	-6,104.51	-4,143.31	6,287.22	0.00	0.00	0.00
11,100.00	90.00	270.08	7,001.00	-6,104.38	-4,243.31	6,378.31	0.00	0.00	0.00
11,200.00	90.00	270.08	7,001.00	-6,104.24	-4,343.31	6,469.41	0.00	0.00	0.00
11,300.00	90.00	270.08	7,001.00	-6,104.11	-4,443.31	6,560.51	0.00	0.00	0.00
11,400.00	90.00	270.08	7,001.00	-6,103.98	-4,543.31	6,651.60	0.00	0.00	0.00
11,500.00	90.00	270.08	7,001.00	-6,103.85	-4,643.31	6,742.70	0.00	0.00	0.00
11,600.00	90.00	270.08	7,001.00	-6,103.71	-4,743.31	6,833.80	0.00	0.00	0.00
11,700.00	90.00	270.08	7,001.00	-6,103.58	-4,843.31	6,924.90	0.00	0.00	0.00
11,800.00	90.00	270.08	7,001.00	-6,103.45	-4,943.31	7,015.99	0.00	0.00	0.00
11,900.00	90.00	270.08	7,001.00	-6,103.31	-5,043.31	7,107.09	0.00	0.00	0.00
12,000.00	90.00	270.08	7,001.00	-6,103.18	-5,143.31	7,198.19	0.00	0.00	0.00
12,100.00	90.00	270.08	7,001.00	-6,103.05	-5,243.31	7,289.29	0.00	0.00	0.00
12,200.00	90.00	270.08	7,001.00	-6,102.91	-5,343.31	7,380.38	0.00	0.00	0.00

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well MAVERICK 2W-20-02
Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4922.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4922.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-02	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,300.00	90.00	270.08	7,001.00	-6,102.78	-5,443.31	7,471.48	0.00	0.00	0.00
12,400.00	90.00	270.08	7,001.00	-6,102.65	-5,543.31	7,562.58	0.00	0.00	0.00
12,500.00	90.00	270.08	7,001.00	-6,102.52	-5,643.31	7,653.68	0.00	0.00	0.00
12,600.00	90.00	270.08	7,001.00	-6,102.38	-5,743.31	7,744.77	0.00	0.00	0.00
12,700.00	90.00	270.08	7,001.00	-6,102.25	-5,843.31	7,835.87	0.00	0.00	0.00
12,800.00	90.00	270.08	7,001.00	-6,102.12	-5,943.31	7,926.97	0.00	0.00	0.00
12,900.00	90.00	270.08	7,001.00	-6,101.98	-6,043.31	8,018.06	0.00	0.00	0.00
13,000.00	90.00	270.08	7,001.00	-6,101.85	-6,143.31	8,109.16	0.00	0.00	0.00
13,100.00	90.00	270.08	7,001.00	-6,101.72	-6,243.31	8,200.26	0.00	0.00	0.00
13,200.00	90.00	270.08	7,001.00	-6,101.59	-6,343.31	8,291.36	0.00	0.00	0.00
13,300.00	90.00	270.08	7,001.00	-6,101.45	-6,443.31	8,382.45	0.00	0.00	0.00
13,400.00	90.00	270.08	7,001.00	-6,101.32	-6,543.31	8,473.55	0.00	0.00	0.00
13,500.00	90.00	270.08	7,001.00	-6,101.19	-6,643.31	8,564.65	0.00	0.00	0.00
13,600.00	90.00	270.08	7,001.00	-6,101.05	-6,743.31	8,655.75	0.00	0.00	0.00
13,700.00	90.00	270.08	7,001.00	-6,100.92	-6,843.31	8,746.84	0.00	0.00	0.00
13,800.00	90.00	270.08	7,001.00	-6,100.79	-6,943.31	8,837.94	0.00	0.00	0.00
13,900.00	90.00	270.08	7,001.00	-6,100.65	-7,043.31	8,929.04	0.00	0.00	0.00
14,000.00	90.00	270.08	7,001.00	-6,100.52	-7,143.31	9,020.14	0.00	0.00	0.00
14,100.00	90.00	270.08	7,001.00	-6,100.39	-7,243.31	9,111.23	0.00	0.00	0.00
14,200.00	90.00	270.08	7,001.00	-6,100.26	-7,343.31	9,202.33	0.00	0.00	0.00
14,300.00	90.00	270.08	7,001.00	-6,100.12	-7,443.31	9,293.43	0.00	0.00	0.00
14,400.00	90.00	270.08	7,001.00	-6,099.99	-7,543.31	9,384.52	0.00	0.00	0.00
14,500.00	90.00	270.08	7,001.00	-6,099.86	-7,643.31	9,475.62	0.00	0.00	0.00
14,600.00	90.00	270.08	7,001.00	-6,099.72	-7,743.31	9,566.72	0.00	0.00	0.00
14,700.00	90.00	270.08	7,001.00	-6,099.59	-7,843.31	9,657.82	0.00	0.00	0.00
14,800.00	90.00	270.08	7,001.00	-6,099.46	-7,943.31	9,748.91	0.00	0.00	0.00
14,900.00	90.00	270.08	7,001.00	-6,099.32	-8,043.31	9,840.01	0.00	0.00	0.00
15,000.00	90.00	270.08	7,001.00	-6,099.19	-8,143.31	9,931.11	0.00	0.00	0.00
15,100.00	90.00	270.08	7,001.00	-6,099.06	-8,243.31	10,022.21	0.00	0.00	0.00
15,200.00	90.00	270.08	7,001.00	-6,098.93	-8,343.31	10,113.30	0.00	0.00	0.00
15,300.00	90.00	270.08	7,001.00	-6,098.79	-8,443.31	10,204.40	0.00	0.00	0.00
15,400.00	90.00	270.08	7,001.00	-6,098.66	-8,543.31	10,295.50	0.00	0.00	0.00
15,500.00	90.00	270.08	7,001.00	-6,098.53	-8,643.31	10,386.60	0.00	0.00	0.00
15,600.00	90.00	270.08	7,001.00	-6,098.39	-8,743.31	10,477.69	0.00	0.00	0.00
15,700.00	90.00	270.08	7,001.00	-6,098.26	-8,843.31	10,568.79	0.00	0.00	0.00
15,800.00	90.00	270.08	7,001.00	-6,098.13	-8,943.31	10,659.89	0.00	0.00	0.00
15,900.00	90.00	270.08	7,001.00	-6,098.00	-9,043.31	10,750.98	0.00	0.00	0.00
16,000.00	90.00	270.08	7,001.00	-6,097.86	-9,143.31	10,842.08	0.00	0.00	0.00
16,100.00	90.00	270.08	7,001.00	-6,097.73	-9,243.31	10,933.18	0.00	0.00	0.00
16,200.00	90.00	270.08	7,001.00	-6,097.60	-9,343.31	11,024.28	0.00	0.00	0.00
16,300.00	90.00	270.08	7,001.00	-6,097.46	-9,443.31	11,115.37	0.00	0.00	0.00
16,400.00	90.00	270.08	7,001.00	-6,097.33	-9,543.31	11,206.47	0.00	0.00	0.00
16,500.00	90.00	270.08	7,001.00	-6,097.20	-9,643.31	11,297.57	0.00	0.00	0.00
16,600.00	90.00	270.08	7,001.00	-6,097.06	-9,743.31	11,388.67	0.00	0.00	0.00
16,700.00	90.00	270.08	7,001.00	-6,096.93	-9,843.30	11,479.76	0.00	0.00	0.00
16,800.00	90.00	270.08	7,001.00	-6,096.80	-9,943.30	11,570.86	0.00	0.00	0.00
16,900.00	90.00	270.08	7,001.00	-6,096.67	-10,043.30	11,661.96	0.00	0.00	0.00
17,000.00	90.00	270.08	7,001.00	-6,096.53	-10,143.30	11,753.06	0.00	0.00	0.00
17,100.00	90.00	270.08	7,001.00	-6,096.40	-10,243.30	11,844.15	0.00	0.00	0.00
17,200.00	90.00	270.08	7,001.00	-6,096.27	-10,343.30	11,935.25	0.00	0.00	0.00
17,300.00	90.00	270.08	7,001.00	-6,096.13	-10,443.30	12,026.35	0.00	0.00	0.00
17,400.00	90.00	270.08	7,001.00	-6,096.00	-10,543.30	12,117.45	0.00	0.00	0.00
17,500.00	90.00	270.08	7,001.00	-6,095.87	-10,643.30	12,208.54	0.00	0.00	0.00
17,600.00	90.00	270.08	7,001.00	-6,095.73	-10,743.30	12,299.64	0.00	0.00	0.00

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well MAVERICK 2W-20-02
Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4922.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4922.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-02	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
17,700.00	90.00	270.08	7,001.00	-6,095.60	-10,843.30	12,390.74	0.00	0.00	0.00	
17,800.00	90.00	270.08	7,001.00	-6,095.47	-10,943.30	12,481.83	0.00	0.00	0.00	
17,900.00	90.00	270.08	7,001.00	-6,095.34	-11,043.30	12,572.93	0.00	0.00	0.00	
17,949.60	90.00	270.08	7,001.00	-6,095.27	-11,092.90	12,618.11	0.00	0.00	0.00	
Start DLS 2.00 TFO -90.00										
18,000.00	90.00	269.07	7,001.00	-6,095.65	-11,143.30	12,664.21	2.00	0.00	-2.00	
18,100.00	90.00	267.07	7,001.00	-6,099.02	-11,243.24	12,756.69	2.00	0.00	-2.00	
18,198.49	90.00	265.10	7,001.00	-6,105.74	-11,341.49	12,849.02	2.00	0.00	-2.00	
Start 1435.01 hold at 18198.49 MD										
18,200.00	90.00	265.10	7,001.00	-6,105.87	-11,343.00	12,850.44	0.00	0.00	0.00	
18,300.00	90.00	265.10	7,001.00	-6,114.42	-11,442.63	12,944.78	0.00	0.00	0.00	
18,400.00	90.00	265.10	7,001.00	-6,122.96	-11,542.27	13,039.11	0.00	0.00	0.00	
18,500.00	90.00	265.10	7,001.00	-6,131.51	-11,641.90	13,133.44	0.00	0.00	0.00	
18,600.00	90.00	265.10	7,001.00	-6,140.05	-11,741.54	13,227.78	0.00	0.00	0.00	
18,700.00	90.00	265.10	7,001.00	-6,148.60	-11,841.17	13,322.11	0.00	0.00	0.00	
18,800.00	90.00	265.10	7,001.00	-6,157.14	-11,940.81	13,416.44	0.00	0.00	0.00	
18,900.00	90.00	265.10	7,001.00	-6,165.69	-12,040.44	13,510.77	0.00	0.00	0.00	
19,000.00	90.00	265.10	7,001.00	-6,174.23	-12,140.07	13,605.11	0.00	0.00	0.00	
19,100.00	90.00	265.10	7,001.00	-6,182.77	-12,239.71	13,699.44	0.00	0.00	0.00	
19,200.00	90.00	265.10	7,001.00	-6,191.32	-12,339.34	13,793.77	0.00	0.00	0.00	
19,300.00	90.00	265.10	7,001.00	-6,199.86	-12,438.98	13,888.10	0.00	0.00	0.00	
19,400.00	90.00	265.10	7,001.00	-6,208.41	-12,538.61	13,982.44	0.00	0.00	0.00	
19,500.00	90.00	265.10	7,001.00	-6,216.95	-12,638.25	14,076.77	0.00	0.00	0.00	
19,600.00	90.00	265.10	7,001.00	-6,225.50	-12,737.88	14,171.10	0.00	0.00	0.00	
19,633.50	90.00	265.10	7,001.00	-6,228.36	-12,771.26	14,202.70	0.00	0.00	0.00	
Start Turn 2.00										
19,700.00	90.00	266.43	7,001.00	-6,233.27	-12,837.57	14,265.17	2.00	0.00	2.00	
19,800.00	90.00	268.43	7,001.00	-6,237.76	-12,937.47	14,358.07	2.00	0.00	2.00	
19,890.16	90.00	270.23	7,001.00	-6,238.81	-13,027.62	14,440.68	2.00	0.00	2.00	
Start 793.27 hold at 19890.16 MD										
19,900.00	90.00	270.23	7,001.00	-6,238.77	-13,037.46	14,449.63	0.00	0.00	0.00	
20,000.00	90.00	270.23	7,001.00	-6,238.37	-13,137.46	14,540.62	0.00	0.00	0.00	
20,100.00	90.00	270.23	7,001.00	-6,237.97	-13,237.46	14,631.60	0.00	0.00	0.00	
20,200.00	90.00	270.23	7,001.00	-6,237.56	-13,337.46	14,722.59	0.00	0.00	0.00	
20,300.00	90.00	270.23	7,001.00	-6,237.16	-13,437.45	14,813.58	0.00	0.00	0.00	
20,400.00	90.00	270.23	7,001.00	-6,236.75	-13,537.45	14,904.56	0.00	0.00	0.00	
20,500.00	90.00	270.23	7,001.00	-6,236.35	-13,637.45	14,995.55	0.00	0.00	0.00	
20,600.00	90.00	270.23	7,001.00	-6,235.94	-13,737.45	15,086.53	0.00	0.00	0.00	
20,683.43	90.00	270.23	7,001.00	-6,235.61	-13,820.88	15,162.44	0.00	0.00	0.00	
TD at 20683.43										

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well MAVERICK 2W-20-02
Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4922.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4922.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-02	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
IP 1-MAVERICK 2W-20- - plan hits target center - Point	0.00	0.00	7,001.00	-6,095.27	-11,092.90	1,430,392.59	3,172,501.03	40.513172°N	104.879589°W
IP 2-MAVERICK 2W-20- - plan hits target center - Point	0.00	0.00	7,001.00	-6,228.36	-12,771.26	1,430,247.01	3,170,823.71	40.512805°N	104.885625°W
LP-MAVERICK 2W-20-0 - plan hits target center - Point	0.00	0.00	7,001.00	-6,105.14	-3,667.42	1,430,438.01	3,179,926.37	40.513151°N	104.852883°W
PBHL-MAVERICK 2W-2 - plan hits target center - Point	0.00	0.00	7,001.00	-6,235.61	-13,820.88	1,430,231.94	3,169,774.16	40.512783°N	104.889400°W

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
24.00	24.00	Laramie-Fox Hills Formation				
196.00	196.00	Pierre Formation				
471.10	471.00	Upper Pierre aquifer				
1,408.45	1,381.00	Base of Upper Pierre aquifer				
4,811.08	3,716.00	Larimer ("Parkman") sandstone				
5,297.77	4,011.00	Pierre Formation				
5,611.24	4,201.00	Terry ("Sussex") sandstone				
6,056.69	4,471.00	Pierre Formation				
6,568.14	4,781.00	Hygiene ("Shannon") sandstone				
6,955.84	5,016.00	Pierre Formation				
10,256.96	6,961.00	Sharon Springs Member				
10,524.11	7,001.00	Niobrara Formation				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
300.00	300.00	0.00	0.00	Start Build 2.00	
2,934.50	2,578.56	-993.92	-534.17	Start 6910.22 hold at 2934.50 MD	
9,844.72	6,767.02	-5,835.21	-3,136.05	Start DLS 10.00 TFO 72.01	
10,524.11	7,001.00	-6,105.14	-3,667.42	Start 7425.49 hold at 10524.11 MD	
17,949.60	7,001.00	-6,095.27	-11,092.90	Start DLS 2.00 TFO -90.00	
18,198.49	7,001.00	-6,105.74	-11,341.49	Start 1435.01 hold at 18198.49 MD	
19,633.50	7,001.00	-6,228.36	-12,771.26	Start Turn 2.00	
19,890.16	7,001.00	-6,238.81	-13,027.62	Start 793.27 hold at 19890.16 MD	
20,683.43	7,001.00	-6,235.61	-13,820.88	TD at 20683.43	