

# **EXTRACTION OIL & GAS**

**WELD COUNTY**

**Sec 36-T7N-R67W**

**MAVERICK 2W-20-03**

**OWB**

**Plan: PROPOSAL 1**

## **Standard Planning Report**

**29 March, 2024**



Project: WELD COUNTY  
Site: Sec 36-T7N-R67W  
Well: MAVERICK 2W-20-03  
Wellbore: OWB  
Design: PROPOSAL 1



Azimuths to True North  
Magnetic North: 7.63°  
Magnetic Field  
Strength: 51735.2nT  
Dip Angle: 66.63°  
Date: 2/5/2024  
Model: IGRF2020

WELL DETAILS: MAVERICK 2W-20-03

+N/-S	+E/-W	Northing	Easting	4897.00 Latitude	Longitude	Slot
0.00	0.00	1436577.01	3183569.59	40.529928°N	104.839616°W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dieg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	2842.80	52.86	205.96	2483.58	-1020.47	-496.79	2.00	205.96	893.72	
4	10455.58	52.86	205.96	7080.33	-6476.59	-3152.94	0.00	0.00	5672.16	
5	11152.08	90.00	270.09	7321.00	-6761.62	-3690.60	10.00	73.68	6280.34	LP-MAVERICK 2W-20-03
6	21297.96	90.00	270.09	7321.00	-6745.26	-13836.46	0.00	0.00	15393.05	PBHL-MAVERICK 2W-20-03

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	Start Build 2.00
2842.80	52.86	205.96	2483.58	-1020.47	-496.79	893.72	1134.97	Start 7612.78 hold at 2842.80 MD
10455.58	52.86	205.96	7080.33	-6476.59	-3152.94	5672.16	7203.28	Start DLS 10.00 TFO 73.68
11152.08	90.00	270.09	7321.00	-6761.62	-3690.60	6280.34	7843.21	Start 10145.87 hold at 11152.08 MD
21297.96	90.00	270.09	7321.00	-6745.26	-13836.46	15393.05	17989.08	TD at 21297.96

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
LP-MAVERICK 2W-20-03 7321.00	7321.00	-6761.62	-3690.60	1429788.09	3179929.45	40.511367°N	104.852889°W	Point
- plan hits target center								
PBHL-MAVERICK 2W-20-03 7321.00	7321.00	-6745.26	-13836.46	1429728.89	3169783.75	40.511402°N	104.889378°W	Point
- plan hits target center								

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
24.00	24.00	Laramie-Fox Hills Formation
196.00	196.00	Pierre Formation
471.00	471.41	Upper Pierre aquifer
1381.00	1417.30	Base of Upper Pierre aquifer
3716.00	4883.84	Larimer ("Parkman") sandstone
4011.00	5372.40	Pierre Formation
4201.00	5687.06	Terry ("Sussex") sandstone
4471.00	6134.21	Pierre Formation
4781.00	6647.61	Hygiene ("Shannon") sandstone
5016.00	7036.80	Pierre Formation
6961.00	10257.96	Sharon Springs Member
7001.00	10324.21	Niobrara Formation
7296.00	10939.96	Fort Hays limestone
7321.00	11152.08	Codell sandstone

PROJECT DETAILS: WELD COUNTY

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

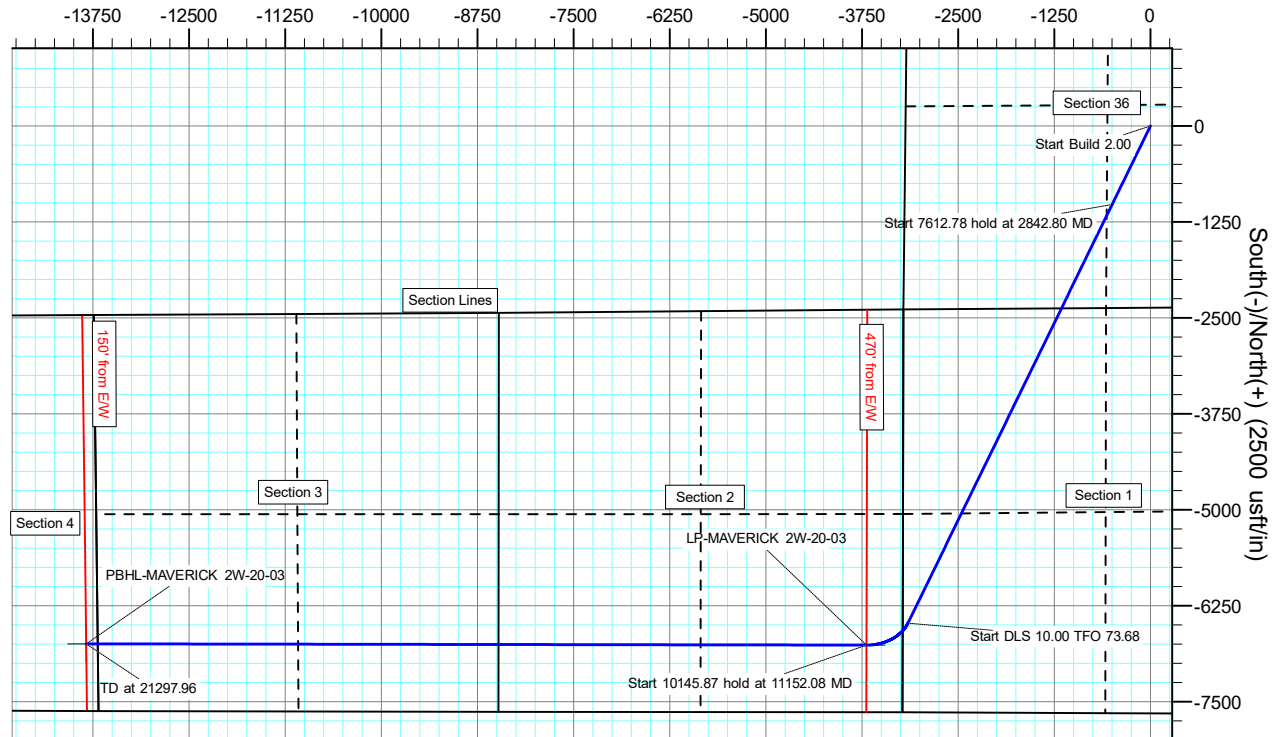
System Datum: Mean Sea Level

SHL:  
2367' FSL, 2077' FEL  
Sec 36-T7N-R67W

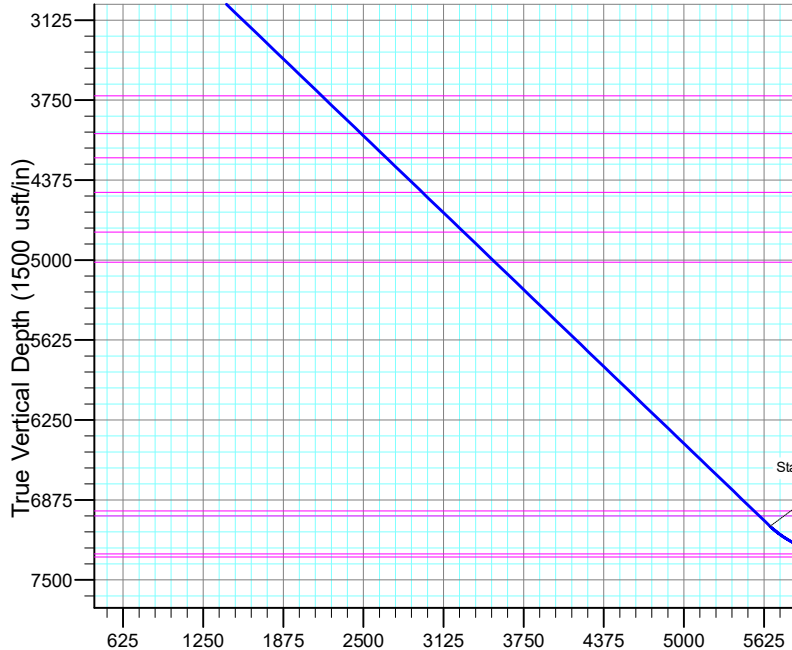
LP:  
875' FSL, 470' FEL  
Sec 2-T6N-R67W

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

West(-)/East(+) (2500 usft/in)



South(-)/North(+) (2500 usft/in)



Vertical Section at 244.01° (1500 usft/in)

# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well MAVERICK 2W-20-03
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KBE 25' @ 4922.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KBE 25' @ 4922.00usft
<b>Site:</b>	Sec 36-T7N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	MAVERICK 2W-20-03	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PROPOSAL 1		

<b>Project</b>	WELD COUNTY		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	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-20-03					
Well Position	+N/-S	2,388.96 usft	Northing:	1,436,577.01 usft	Latitude:	40.529928°N
	+E/-W	3,210.63 usft	Easting:	3,183,569.59 usft	Longitude:	104.839616°W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	4,897.00 usft

<b>Wellbore</b>	OWB				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2020	2/5/2024	7.63	66.63	51,735.17227191

<b>Design</b>	PROPOSAL 1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	244.01

<b>Plan Survey Tool Program</b>	<b>Date</b>	3/29/2024		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	21,297.95	PROPOSAL 1 (OWB)	MWD OWSG
				OWSG MWD - Standard

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	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	
2,842.80	52.86	205.96	2,483.58	-1,020.47	-496.79	2.00	2.00	0.00	205.96	
10,455.58	52.86	205.96	7,080.33	-6,476.59	-3,152.94	0.00	0.00	0.00	0.00	
11,152.08	90.00	270.09	7,321.00	-6,761.62	-3,690.60	10.00	5.33	9.21	73.68	LP-MAVERICK 2W-20-03
21,297.96	90.00	270.09	7,321.00	-6,745.26	-13,836.46	0.00	0.00	0.00	0.00	PBHL-MAVERICK 2W-20-03

# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well MAVERICK 2W-20-03
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KBE 25' @ 4922.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KBE 25' @ 4922.00usft
<b>Site:</b>	Sec 36-T7N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	MAVERICK 2W-20-03	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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
<b>Laramie-Fox Hills Formation</b>									
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
<b>Pierre Formation</b>									
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>									
300.00	2.00	205.96	299.98	-1.57	-0.76	1.37	2.00	2.00	0.00
400.00	4.00	205.96	399.84	-6.27	-3.05	5.50	2.00	2.00	0.00
471.41	5.43	205.96	471.00	-11.55	-5.62	10.12	2.00	2.00	0.00
<b>Upper Pierre aquifer</b>									
500.00	6.00	205.96	499.45	-14.11	-6.87	12.36	2.00	2.00	0.00
600.00	8.00	205.96	598.70	-25.07	-12.20	21.95	2.00	2.00	0.00
700.00	10.00	205.96	697.47	-39.13	-19.05	34.27	2.00	2.00	0.00
800.00	12.00	205.96	795.62	-56.29	-27.40	49.30	2.00	2.00	0.00
900.00	14.00	205.96	893.06	-76.51	-37.25	67.01	2.00	2.00	0.00
1,000.00	16.00	205.96	989.64	-99.78	-48.58	87.39	2.00	2.00	0.00
1,100.00	18.00	205.96	1,085.27	-126.07	-61.37	110.41	2.00	2.00	0.00
1,200.00	20.00	205.96	1,179.82	-155.34	-75.62	136.04	2.00	2.00	0.00
1,300.00	22.00	205.96	1,273.17	-187.56	-91.31	164.26	2.00	2.00	0.00
1,400.00	24.00	205.96	1,365.21	-222.69	-108.41	195.03	2.00	2.00	0.00
1,417.30	24.35	205.96	1,381.00	-229.06	-111.51	200.61	2.00	2.00	0.00
<b>Base of Upper Pierre aquifer</b>									
1,500.00	26.00	205.96	1,455.84	-260.68	-126.91	228.31	2.00	2.00	0.00
1,600.00	28.00	205.96	1,544.94	-301.50	-146.78	264.05	2.00	2.00	0.00
1,700.00	30.00	205.96	1,632.39	-345.09	-168.00	302.23	2.00	2.00	0.00
1,800.00	32.00	205.96	1,718.11	-391.40	-190.54	342.78	2.00	2.00	0.00
1,900.00	34.00	205.96	1,801.97	-440.36	-214.38	385.67	2.00	2.00	0.00
2,000.00	36.00	205.96	1,883.88	-491.93	-239.48	430.83	2.00	2.00	0.00
2,100.00	38.00	205.96	1,963.74	-546.04	-265.82	478.22	2.00	2.00	0.00
2,200.00	40.00	205.96	2,041.45	-602.62	-293.37	527.77	2.00	2.00	0.00
2,300.00	42.00	205.96	2,116.92	-661.60	-322.08	579.43	2.00	2.00	0.00
2,400.00	44.00	205.96	2,190.05	-722.92	-351.93	633.13	2.00	2.00	0.00
2,500.00	46.00	205.96	2,260.76	-786.49	-382.88	688.81	2.00	2.00	0.00
2,600.00	48.00	205.96	2,328.95	-852.25	-414.89	746.39	2.00	2.00	0.00
2,700.00	50.00	205.96	2,394.55	-920.10	-447.92	805.82	2.00	2.00	0.00
2,800.00	52.00	205.96	2,457.48	-989.97	-481.94	867.01	2.00	2.00	0.00
2,842.80	52.86	205.96	2,483.58	-1,020.47	-496.79	893.72	2.00	2.00	0.00
<b>Start 7612.78 hold at 2842.80 MD</b>									
2,900.00	52.86	205.96	2,518.12	-1,061.47	-516.74	929.63	0.00	0.00	0.00
3,000.00	52.86	205.96	2,578.50	-1,133.14	-551.64	992.40	0.00	0.00	0.00
3,100.00	52.86	205.96	2,638.88	-1,204.81	-586.53	1,055.16	0.00	0.00	0.00
3,200.00	52.86	205.96	2,699.26	-1,276.48	-621.42	1,117.93	0.00	0.00	0.00
3,300.00	52.86	205.96	2,759.65	-1,348.15	-656.31	1,180.70	0.00	0.00	0.00
3,400.00	52.86	205.96	2,820.03	-1,419.82	-691.20	1,243.47	0.00	0.00	0.00
3,500.00	52.86	205.96	2,880.41	-1,491.49	-726.09	1,306.24	0.00	0.00	0.00
3,600.00	52.86	205.96	2,940.79	-1,563.16	-760.98	1,369.01	0.00	0.00	0.00
3,700.00	52.86	205.96	3,001.17	-1,634.83	-795.87	1,431.78	0.00	0.00	0.00
3,800.00	52.86	205.96	3,061.56	-1,706.50	-830.76	1,494.54	0.00	0.00	0.00
3,900.00	52.86	205.96	3,121.94	-1,778.17	-865.65	1,557.31	0.00	0.00	0.00
4,000.00	52.86	205.96	3,182.32	-1,849.84	-900.54	1,620.08	0.00	0.00	0.00
4,100.00	52.86	205.96	3,242.70	-1,921.52	-935.43	1,682.85	0.00	0.00	0.00

# Civitas Resources

## Planning Report

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<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KBE 25' @ 4922.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KBE 25' @ 4922.00usft
<b>Site:</b>	Sec 36-T7N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	MAVERICK 2W-20-03	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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	52.86	205.96	3,303.08	-1,993.19	-970.32	1,745.62	0.00	0.00	0.00	
4,300.00	52.86	205.96	3,363.47	-2,064.86	-1,005.21	1,808.39	0.00	0.00	0.00	
4,400.00	52.86	205.96	3,423.85	-2,136.53	-1,040.11	1,871.16	0.00	0.00	0.00	
4,500.00	52.86	205.96	3,484.23	-2,208.20	-1,075.00	1,933.92	0.00	0.00	0.00	
4,600.00	52.86	205.96	3,544.61	-2,279.87	-1,109.89	1,996.69	0.00	0.00	0.00	
4,700.00	52.86	205.96	3,604.99	-2,351.54	-1,144.78	2,059.46	0.00	0.00	0.00	
4,800.00	52.86	205.96	3,665.38	-2,423.21	-1,179.67	2,122.23	0.00	0.00	0.00	
4,883.84	52.86	205.96	3,716.00	-2,483.30	-1,208.92	2,174.86	0.00	0.00	0.00	
Larimer ("Parkman") sandstone										
4,900.00	52.86	205.96	3,725.76	-2,494.88	-1,214.56	2,185.00	0.00	0.00	0.00	
5,000.00	52.86	205.96	3,786.14	-2,566.55	-1,249.45	2,247.77	0.00	0.00	0.00	
5,100.00	52.86	205.96	3,846.52	-2,638.22	-1,284.34	2,310.54	0.00	0.00	0.00	
5,200.00	52.86	205.96	3,906.90	-2,709.89	-1,319.23	2,373.30	0.00	0.00	0.00	
5,300.00	52.86	205.96	3,967.29	-2,781.56	-1,354.12	2,436.07	0.00	0.00	0.00	
5,372.40	52.86	205.96	4,011.00	-2,833.45	-1,379.38	2,481.52	0.00	0.00	0.00	
Pierre Formation										
5,400.00	52.86	205.96	4,027.67	-2,853.23	-1,389.01	2,498.84	0.00	0.00	0.00	
5,500.00	52.86	205.96	4,088.05	-2,924.90	-1,423.90	2,561.61	0.00	0.00	0.00	
5,600.00	52.86	205.96	4,148.43	-2,996.57	-1,458.79	2,624.38	0.00	0.00	0.00	
5,687.06	52.86	205.96	4,201.00	-3,058.97	-1,489.17	2,679.03	0.00	0.00	0.00	
Terry ("Sussex") sandstone										
5,700.00	52.86	205.96	4,208.81	-3,068.24	-1,493.68	2,687.15	0.00	0.00	0.00	
5,800.00	52.86	205.96	4,269.20	-3,139.91	-1,528.57	2,749.92	0.00	0.00	0.00	
5,900.00	52.86	205.96	4,329.58	-3,211.58	-1,563.47	2,812.68	0.00	0.00	0.00	
6,000.00	52.86	205.96	4,389.96	-3,283.26	-1,598.36	2,875.45	0.00	0.00	0.00	
6,100.00	52.86	205.96	4,450.34	-3,354.93	-1,633.25	2,938.22	0.00	0.00	0.00	
6,134.21	52.86	205.96	4,471.00	-3,379.45	-1,645.18	2,959.70	0.00	0.00	0.00	
Pierre Formation										
6,200.00	52.86	205.96	4,510.72	-3,426.60	-1,668.14	3,000.99	0.00	0.00	0.00	
6,300.00	52.86	205.96	4,571.10	-3,498.27	-1,703.03	3,063.76	0.00	0.00	0.00	
6,400.00	52.86	205.96	4,631.49	-3,569.94	-1,737.92	3,126.53	0.00	0.00	0.00	
6,500.00	52.86	205.96	4,691.87	-3,641.61	-1,772.81	3,189.30	0.00	0.00	0.00	
6,600.00	52.86	205.96	4,752.25	-3,713.28	-1,807.70	3,252.06	0.00	0.00	0.00	
6,647.61	52.86	205.96	4,781.00	-3,747.40	-1,824.31	3,281.95	0.00	0.00	0.00	
Hygiene ("Shannon") sandstone										
6,700.00	52.86	205.96	4,812.63	-3,784.95	-1,842.59	3,314.83	0.00	0.00	0.00	
6,800.00	52.86	205.96	4,873.01	-3,856.62	-1,877.48	3,377.60	0.00	0.00	0.00	
6,900.00	52.86	205.96	4,933.40	-3,928.29	-1,912.37	3,440.37	0.00	0.00	0.00	
7,000.00	52.86	205.96	4,993.78	-3,999.96	-1,947.26	3,503.14	0.00	0.00	0.00	
7,036.80	52.86	205.96	5,016.00	-4,026.34	-1,960.10	3,526.24	0.00	0.00	0.00	
Pierre Formation										
7,100.00	52.86	205.96	5,054.16	-4,071.63	-1,982.15	3,565.91	0.00	0.00	0.00	
7,200.00	52.86	205.96	5,114.54	-4,143.30	-2,017.04	3,628.68	0.00	0.00	0.00	
7,300.00	52.86	205.96	5,174.92	-4,214.97	-2,051.93	3,691.44	0.00	0.00	0.00	
7,400.00	52.86	205.96	5,235.31	-4,286.64	-2,086.83	3,754.21	0.00	0.00	0.00	
7,500.00	52.86	205.96	5,295.69	-4,358.31	-2,121.72	3,816.98	0.00	0.00	0.00	
7,600.00	52.86	205.96	5,356.07	-4,429.98	-2,156.61	3,879.75	0.00	0.00	0.00	
7,700.00	52.86	205.96	5,416.45	-4,501.65	-2,191.50	3,942.52	0.00	0.00	0.00	
7,800.00	52.86	205.96	5,476.83	-4,573.32	-2,226.39	4,005.29	0.00	0.00	0.00	
7,900.00	52.86	205.96	5,537.22	-4,644.99	-2,261.28	4,068.06	0.00	0.00	0.00	
8,000.00	52.86	205.96	5,597.60	-4,716.67	-2,296.17	4,130.82	0.00	0.00	0.00	
8,100.00	52.86	205.96	5,657.98	-4,788.34	-2,331.06	4,193.59	0.00	0.00	0.00	
8,200.00	52.86	205.96	5,718.36	-4,860.01	-2,365.95	4,256.36	0.00	0.00	0.00	

# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well MAVERICK 2W-20-03
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KBE 25' @ 4922.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KBE 25' @ 4922.00usft
<b>Site:</b>	Sec 36-T7N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	MAVERICK 2W-20-03	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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	52.86	205.96	5,778.74	-4,931.68	-2,400.84	4,319.13	0.00	0.00	0.00
8,400.00	52.86	205.96	5,839.13	-5,003.35	-2,435.73	4,381.90	0.00	0.00	0.00
8,500.00	52.86	205.96	5,899.51	-5,075.02	-2,470.62	4,444.67	0.00	0.00	0.00
8,600.00	52.86	205.96	5,959.89	-5,146.69	-2,505.51	4,507.44	0.00	0.00	0.00
8,700.00	52.86	205.96	6,020.27	-5,218.36	-2,540.40	4,570.20	0.00	0.00	0.00
8,800.00	52.86	205.96	6,080.65	-5,290.03	-2,575.29	4,632.97	0.00	0.00	0.00
8,900.00	52.86	205.96	6,141.04	-5,361.70	-2,610.19	4,695.74	0.00	0.00	0.00
9,000.00	52.86	205.96	6,201.42	-5,433.37	-2,645.08	4,758.51	0.00	0.00	0.00
9,100.00	52.86	205.96	6,261.80	-5,505.04	-2,679.97	4,821.28	0.00	0.00	0.00
9,200.00	52.86	205.96	6,322.18	-5,576.71	-2,714.86	4,884.05	0.00	0.00	0.00
9,300.00	52.86	205.96	6,382.56	-5,648.38	-2,749.75	4,946.82	0.00	0.00	0.00
9,400.00	52.86	205.96	6,442.95	-5,720.05	-2,784.64	5,009.58	0.00	0.00	0.00
9,500.00	52.86	205.96	6,503.33	-5,791.72	-2,819.53	5,072.35	0.00	0.00	0.00
9,600.00	52.86	205.96	6,563.71	-5,863.39	-2,854.42	5,135.12	0.00	0.00	0.00
9,700.00	52.86	205.96	6,624.09	-5,935.06	-2,889.31	5,197.89	0.00	0.00	0.00
9,800.00	52.86	205.96	6,684.47	-6,006.73	-2,924.20	5,260.66	0.00	0.00	0.00
9,900.00	52.86	205.96	6,744.85	-6,078.41	-2,959.09	5,323.43	0.00	0.00	0.00
10,000.00	52.86	205.96	6,805.24	-6,150.08	-2,993.98	5,386.20	0.00	0.00	0.00
10,100.00	52.86	205.96	6,865.62	-6,221.75	-3,028.87	5,448.96	0.00	0.00	0.00
10,200.00	52.86	205.96	6,926.00	-6,293.42	-3,063.76	5,511.73	0.00	0.00	0.00
10,257.96	52.86	205.96	6,961.00	-6,334.96	-3,083.99	5,548.12	0.00	0.00	0.00
Sharon Springs Member									
10,300.00	52.86	205.96	6,986.38	-6,365.09	-3,098.66	5,574.50	0.00	0.00	0.00
10,324.21	52.86	205.96	7,001.00	-6,382.44	-3,107.10	5,589.70	0.00	0.00	0.00
Niobrara Formation									
10,400.00	52.86	205.96	7,046.76	-6,436.76	-3,133.55	5,637.27	0.00	0.00	0.00
10,455.58	52.86	205.96	7,080.33	-6,476.59	-3,152.94	5,672.16	0.00	0.00	0.00
Start DLS 10.00 TFO 73.68									
10,500.00	54.22	211.21	7,106.73	-6,507.94	-3,170.03	5,701.26	10.00	3.07	11.83
10,550.00	56.02	216.90	7,135.34	-6,541.88	-3,193.01	5,736.78	10.00	3.60	11.38
10,600.00	58.07	222.34	7,162.55	-6,574.16	-3,219.76	5,774.98	10.00	4.10	10.87
10,650.00	60.34	227.53	7,188.16	-6,604.53	-3,250.10	5,815.55	10.00	4.54	10.37
10,700.00	62.80	232.47	7,211.97	-6,632.77	-3,283.78	5,858.20	10.00	4.93	9.90
10,750.00	65.43	237.20	7,233.81	-6,658.64	-3,320.55	5,902.59	10.00	5.26	9.46
10,800.00	68.20	241.73	7,253.50	-6,681.97	-3,360.13	5,948.39	10.00	5.54	9.06
10,850.00	71.09	246.08	7,270.89	-6,702.56	-3,402.22	5,995.25	10.00	5.78	8.71
10,900.00	74.08	250.29	7,285.86	-6,720.27	-3,446.50	6,042.81	10.00	5.97	8.41
10,939.96	76.53	253.56	7,296.00	-6,732.26	-3,483.24	6,081.09	10.00	6.12	8.18
Fort Hays limestone									
10,950.00	77.15	254.37	7,298.29	-6,734.96	-3,492.63	6,090.72	10.00	6.19	8.07
11,000.00	80.27	258.34	7,308.08	-6,746.51	-3,540.27	6,138.60	10.00	6.25	7.96
11,050.00	83.45	262.25	7,315.16	-6,754.85	-3,589.04	6,186.09	10.00	6.35	7.81
11,100.00	86.65	266.10	7,319.48	-6,759.89	-3,638.58	6,232.83	10.00	6.40	7.71
11,152.08	90.00	270.09	7,321.00	-6,761.62	-3,690.60	6,280.34	10.00	6.43	7.66
Start 10145.87 hold at 11152.08 MD - Codell sandstone									
11,200.00	90.00	270.09	7,321.00	-6,761.54	-3,738.51	6,323.38	0.00	0.00	0.00
11,300.00	90.00	270.09	7,321.00	-6,761.38	-3,838.51	6,413.20	0.00	0.00	0.00
11,400.00	90.00	270.09	7,321.00	-6,761.22	-3,938.51	6,503.02	0.00	0.00	0.00
11,500.00	90.00	270.09	7,321.00	-6,761.06	-4,038.51	6,592.83	0.00	0.00	0.00
11,600.00	90.00	270.09	7,321.00	-6,760.90	-4,138.51	6,682.65	0.00	0.00	0.00
11,700.00	90.00	270.09	7,321.00	-6,760.74	-4,238.51	6,772.47	0.00	0.00	0.00
11,800.00	90.00	270.09	7,321.00	-6,760.58	-4,338.51	6,862.28	0.00	0.00	0.00
11,900.00	90.00	270.09	7,321.00	-6,760.41	-4,438.51	6,952.10	0.00	0.00	0.00

# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well MAVERICK 2W-20-03
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KBE 25' @ 4922.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KBE 25' @ 4922.00usft
<b>Site:</b>	Sec 36-T7N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	MAVERICK 2W-20-03	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
12,000.00	90.00	270.09	7,321.00	-6,760.25	-4,538.51	7,041.92	0.00	0.00	0.00	
12,100.00	90.00	270.09	7,321.00	-6,760.09	-4,638.51	7,131.73	0.00	0.00	0.00	
12,200.00	90.00	270.09	7,321.00	-6,759.93	-4,738.51	7,221.55	0.00	0.00	0.00	
12,300.00	90.00	270.09	7,321.00	-6,759.77	-4,838.51	7,311.37	0.00	0.00	0.00	
12,400.00	90.00	270.09	7,321.00	-6,759.61	-4,938.51	7,401.19	0.00	0.00	0.00	
12,500.00	90.00	270.09	7,321.00	-6,759.45	-5,038.51	7,491.00	0.00	0.00	0.00	
12,600.00	90.00	270.09	7,321.00	-6,759.29	-5,138.51	7,580.82	0.00	0.00	0.00	
12,700.00	90.00	270.09	7,321.00	-6,759.12	-5,238.51	7,670.64	0.00	0.00	0.00	
12,800.00	90.00	270.09	7,321.00	-6,758.96	-5,338.51	7,760.45	0.00	0.00	0.00	
12,900.00	90.00	270.09	7,321.00	-6,758.80	-5,438.51	7,850.27	0.00	0.00	0.00	
13,000.00	90.00	270.09	7,321.00	-6,758.64	-5,538.51	7,940.09	0.00	0.00	0.00	
13,100.00	90.00	270.09	7,321.00	-6,758.48	-5,638.51	8,029.90	0.00	0.00	0.00	
13,200.00	90.00	270.09	7,321.00	-6,758.32	-5,738.51	8,119.72	0.00	0.00	0.00	
13,300.00	90.00	270.09	7,321.00	-6,758.16	-5,838.51	8,209.54	0.00	0.00	0.00	
13,400.00	90.00	270.09	7,321.00	-6,758.00	-5,938.51	8,299.35	0.00	0.00	0.00	
13,500.00	90.00	270.09	7,321.00	-6,757.83	-6,038.51	8,389.17	0.00	0.00	0.00	
13,600.00	90.00	270.09	7,321.00	-6,757.67	-6,138.51	8,478.99	0.00	0.00	0.00	
13,700.00	90.00	270.09	7,321.00	-6,757.51	-6,238.51	8,568.81	0.00	0.00	0.00	
13,800.00	90.00	270.09	7,321.00	-6,757.35	-6,338.51	8,658.62	0.00	0.00	0.00	
13,900.00	90.00	270.09	7,321.00	-6,757.19	-6,438.51	8,748.44	0.00	0.00	0.00	
14,000.00	90.00	270.09	7,321.00	-6,757.03	-6,538.51	8,838.26	0.00	0.00	0.00	
14,100.00	90.00	270.09	7,321.00	-6,756.87	-6,638.51	8,928.07	0.00	0.00	0.00	
14,200.00	90.00	270.09	7,321.00	-6,756.71	-6,738.51	9,017.89	0.00	0.00	0.00	
14,300.00	90.00	270.09	7,321.00	-6,756.54	-6,838.51	9,107.71	0.00	0.00	0.00	
14,400.00	90.00	270.09	7,321.00	-6,756.38	-6,938.51	9,197.52	0.00	0.00	0.00	
14,500.00	90.00	270.09	7,321.00	-6,756.22	-7,038.51	9,287.34	0.00	0.00	0.00	
14,600.00	90.00	270.09	7,321.00	-6,756.06	-7,138.51	9,377.16	0.00	0.00	0.00	
14,700.00	90.00	270.09	7,321.00	-6,755.90	-7,238.51	9,466.97	0.00	0.00	0.00	
14,800.00	90.00	270.09	7,321.00	-6,755.74	-7,338.51	9,556.79	0.00	0.00	0.00	
14,900.00	90.00	270.09	7,321.00	-6,755.58	-7,438.51	9,646.61	0.00	0.00	0.00	
15,000.00	90.00	270.09	7,321.00	-6,755.42	-7,538.51	9,736.42	0.00	0.00	0.00	
15,100.00	90.00	270.09	7,321.00	-6,755.26	-7,638.51	9,826.24	0.00	0.00	0.00	
15,200.00	90.00	270.09	7,321.00	-6,755.09	-7,738.51	9,916.06	0.00	0.00	0.00	
15,300.00	90.00	270.09	7,321.00	-6,754.93	-7,838.51	10,005.88	0.00	0.00	0.00	
15,400.00	90.00	270.09	7,321.00	-6,754.77	-7,938.51	10,095.69	0.00	0.00	0.00	
15,500.00	90.00	270.09	7,321.00	-6,754.61	-8,038.51	10,185.51	0.00	0.00	0.00	
15,600.00	90.00	270.09	7,321.00	-6,754.45	-8,138.51	10,275.33	0.00	0.00	0.00	
15,700.00	90.00	270.09	7,321.00	-6,754.29	-8,238.51	10,365.14	0.00	0.00	0.00	
15,800.00	90.00	270.09	7,321.00	-6,754.13	-8,338.51	10,454.96	0.00	0.00	0.00	
15,900.00	90.00	270.09	7,321.00	-6,753.97	-8,438.51	10,544.78	0.00	0.00	0.00	
16,000.00	90.00	270.09	7,321.00	-6,753.80	-8,538.51	10,634.59	0.00	0.00	0.00	
16,100.00	90.00	270.09	7,321.00	-6,753.64	-8,638.51	10,724.41	0.00	0.00	0.00	
16,200.00	90.00	270.09	7,321.00	-6,753.48	-8,738.51	10,814.23	0.00	0.00	0.00	
16,300.00	90.00	270.09	7,321.00	-6,753.32	-8,838.51	10,904.04	0.00	0.00	0.00	
16,400.00	90.00	270.09	7,321.00	-6,753.16	-8,938.51	10,993.86	0.00	0.00	0.00	
16,500.00	90.00	270.09	7,321.00	-6,753.00	-9,038.51	11,083.68	0.00	0.00	0.00	
16,600.00	90.00	270.09	7,321.00	-6,752.84	-9,138.51	11,173.50	0.00	0.00	0.00	
16,700.00	90.00	270.09	7,321.00	-6,752.68	-9,238.51	11,263.31	0.00	0.00	0.00	
16,800.00	90.00	270.09	7,321.00	-6,752.51	-9,338.51	11,353.13	0.00	0.00	0.00	
16,900.00	90.00	270.09	7,321.00	-6,752.35	-9,438.51	11,442.95	0.00	0.00	0.00	
17,000.00	90.00	270.09	7,321.00	-6,752.19	-9,538.51	11,532.76	0.00	0.00	0.00	
17,100.00	90.00	270.09	7,321.00	-6,752.03	-9,638.51	11,622.58	0.00	0.00	0.00	
17,200.00	90.00	270.09	7,321.00	-6,751.87	-9,738.51	11,712.40	0.00	0.00	0.00	
17,300.00	90.00	270.09	7,321.00	-6,751.71	-9,838.51	11,802.21	0.00	0.00	0.00	

# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well MAVERICK 2W-20-03
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KBE 25' @ 4922.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KBE 25' @ 4922.00usft
<b>Site:</b>	Sec 36-T7N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	MAVERICK 2W-20-03	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
17,400.00	90.00	270.09	7,321.00	-6,751.55	-9,938.51	11,892.03	0.00	0.00	0.00	
17,500.00	90.00	270.09	7,321.00	-6,751.39	-10,038.51	11,981.85	0.00	0.00	0.00	
17,600.00	90.00	270.09	7,321.00	-6,751.22	-10,138.51	12,071.66	0.00	0.00	0.00	
17,700.00	90.00	270.09	7,321.00	-6,751.06	-10,238.51	12,161.48	0.00	0.00	0.00	
17,800.00	90.00	270.09	7,321.00	-6,750.90	-10,338.51	12,251.30	0.00	0.00	0.00	
17,900.00	90.00	270.09	7,321.00	-6,750.74	-10,438.51	12,341.12	0.00	0.00	0.00	
18,000.00	90.00	270.09	7,321.00	-6,750.58	-10,538.51	12,430.93	0.00	0.00	0.00	
18,100.00	90.00	270.09	7,321.00	-6,750.42	-10,638.50	12,520.75	0.00	0.00	0.00	
18,200.00	90.00	270.09	7,321.00	-6,750.26	-10,738.50	12,610.57	0.00	0.00	0.00	
18,300.00	90.00	270.09	7,321.00	-6,750.10	-10,838.50	12,700.38	0.00	0.00	0.00	
18,400.00	90.00	270.09	7,321.00	-6,749.94	-10,938.50	12,790.20	0.00	0.00	0.00	
18,500.00	90.00	270.09	7,321.00	-6,749.77	-11,038.50	12,880.02	0.00	0.00	0.00	
18,600.00	90.00	270.09	7,321.00	-6,749.61	-11,138.50	12,969.83	0.00	0.00	0.00	
18,700.00	90.00	270.09	7,321.00	-6,749.45	-11,238.50	13,059.65	0.00	0.00	0.00	
18,800.00	90.00	270.09	7,321.00	-6,749.29	-11,338.50	13,149.47	0.00	0.00	0.00	
18,900.00	90.00	270.09	7,321.00	-6,749.13	-11,438.50	13,239.28	0.00	0.00	0.00	
19,000.00	90.00	270.09	7,321.00	-6,748.97	-11,538.50	13,329.10	0.00	0.00	0.00	
19,100.00	90.00	270.09	7,321.00	-6,748.81	-11,638.50	13,418.92	0.00	0.00	0.00	
19,200.00	90.00	270.09	7,321.00	-6,748.65	-11,738.50	13,508.73	0.00	0.00	0.00	
19,300.00	90.00	270.09	7,321.00	-6,748.48	-11,838.50	13,598.55	0.00	0.00	0.00	
19,400.00	90.00	270.09	7,321.00	-6,748.32	-11,938.50	13,688.37	0.00	0.00	0.00	
19,500.00	90.00	270.09	7,321.00	-6,748.16	-12,038.50	13,778.19	0.00	0.00	0.00	
19,600.00	90.00	270.09	7,321.00	-6,748.00	-12,138.50	13,868.00	0.00	0.00	0.00	
19,700.00	90.00	270.09	7,321.00	-6,747.84	-12,238.50	13,957.82	0.00	0.00	0.00	
19,800.00	90.00	270.09	7,321.00	-6,747.68	-12,338.50	14,047.64	0.00	0.00	0.00	
19,900.00	90.00	270.09	7,321.00	-6,747.52	-12,438.50	14,137.45	0.00	0.00	0.00	
20,000.00	90.00	270.09	7,321.00	-6,747.36	-12,538.50	14,227.27	0.00	0.00	0.00	
20,100.00	90.00	270.09	7,321.00	-6,747.19	-12,638.50	14,317.09	0.00	0.00	0.00	
20,200.00	90.00	270.09	7,321.00	-6,747.03	-12,738.50	14,406.90	0.00	0.00	0.00	
20,300.00	90.00	270.09	7,321.00	-6,746.87	-12,838.50	14,496.72	0.00	0.00	0.00	
20,400.00	90.00	270.09	7,321.00	-6,746.71	-12,938.50	14,586.54	0.00	0.00	0.00	
20,500.00	90.00	270.09	7,321.00	-6,746.55	-13,038.50	14,676.35	0.00	0.00	0.00	
20,600.00	90.00	270.09	7,321.00	-6,746.39	-13,138.50	14,766.17	0.00	0.00	0.00	
20,700.00	90.00	270.09	7,321.00	-6,746.23	-13,238.50	14,855.99	0.00	0.00	0.00	
20,800.00	90.00	270.09	7,321.00	-6,746.07	-13,338.50	14,945.81	0.00	0.00	0.00	
20,900.00	90.00	270.09	7,321.00	-6,745.90	-13,438.50	15,035.62	0.00	0.00	0.00	
21,000.00	90.00	270.09	7,321.00	-6,745.74	-13,538.50	15,125.44	0.00	0.00	0.00	
21,100.00	90.00	270.09	7,321.00	-6,745.58	-13,638.50	15,215.26	0.00	0.00	0.00	
21,200.00	90.00	270.09	7,321.00	-6,745.42	-13,738.50	15,305.07	0.00	0.00	0.00	
21,297.96	90.00	270.09	7,321.00	-6,745.26	-13,836.46	15,393.05	0.00	0.00	0.00	
TD at 21297.96										



# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well MAVERICK 2W-20-03
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KBE 25' @ 4922.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KBE 25' @ 4922.00usft
<b>Site:</b>	Sec 36-T7N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	MAVERICK 2W-20-03	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PROPOSAL 1		

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)		
LP-MAVERICK 2W-20-0	0.00	0.00	7,321.00	-6,761.62	-3,690.60	1,429,788.09	3,179,929.45	40.511367°N	104.852889°W
- plan hits target center									
- Point									
PBHL-MAVERICK 2W-2	0.00	0.00	7,321.00	-6,745.26	-13,836.46	1,429,728.89	3,169,783.75	40.511402°N	104.889378°W
- plan hits target center									
- Point									

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
24.00	24.00	Laramie-Fox Hills Formation			
196.00	196.00	Pierre Formation			
471.41	471.00	Upper Pierre aquifer			
1,417.30	1,381.00	Base of Upper Pierre aquifer			
4,883.84	3,716.00	Larimer ("Parkman") sandstone			
5,372.40	4,011.00	Pierre Formation			
5,687.06	4,201.00	Terry ("Sussex") sandstone			
6,134.21	4,471.00	Pierre Formation			
6,647.61	4,781.00	Hygiene ("Shannon") sandstone			
7,036.80	5,016.00	Pierre Formation			
10,257.96	6,961.00	Sharon Springs Member			
10,324.21	7,001.00	Niobrara Formation			
10,939.96	7,296.00	Fort Hays limestone			
11,152.08	7,321.00	Codell sandstone			

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		
(usft)	(usft)	+N/-S	+E/-W	Comment
(usft)	(usft)	(usft)	(usft)	
200.00	200.00	0.00	0.00	Start Build 2.00
2,842.80	2,483.58	-1,020.47	-496.79	Start 7612.78 hold at 2842.80 MD
10,455.58	7,080.33	-6,476.59	-3,152.94	Start DLS 10.00 TFO 73.68
11,152.08	7,321.00	-6,761.62	-3,690.60	Start 10145.87 hold at 11152.08 MD
21,297.96	7,321.00	-6,745.26	-13,836.46	TD at 21297.96