

EXTRACTION OIL & GAS

WELD COUNTY

Sec 36-T7N-R67W

MAVERICK 2W-20-04

OWB

Plan: PROPOSAL 1

Standard Planning Report

29 March, 2024



Project: WELD COUNTY
Site: Sec 36-T7N-R67W
Well: MAVERICK 2W-20-04
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-20-04

+N/-S	+E/-W	Northing	Easting	4896.00 Latitude	Longitude	Slot
0.00	0.00	1436583.73	3183591.22	40.529946°N	104.839538°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	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
3	2884.99	55.70	204.81	2466.59	-1135.02	-524.62	2.00	204.81	986.81	
4	10531.79	55.70	204.81	6775.77	-6869.14	-3174.98	0.00	0.00	5972.19	
5	11229.75	90.00	270.09	7001.00	-7168.18	-3713.18	10.00	75.46	6587.60	LP-MAVERICK 2W-20-04
6	21369.95	90.00	270.09	7001.00	-7151.46	-13853.36	0.00	0.00	15590.35	PBHL-MAVERICK 2W-20-04N

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	Start Build 2.00
2884.99	55.70	204.81	2466.59	-1135.02	-524.62	986.81	1250.40	Start 7646.80 hold at 2884.99 MD
10531.79	55.70	204.81	6775.77	-6869.14	-3174.98	5972.19	7567.40	Start DLS 10.00 TFO 75.46
11229.75	90.00	270.09	7001.00	-7168.18	-3713.18	6587.60	8216.42	Start 10140.20 hold at 11229.75 MD
21369.95	90.00	270.09	7001.00	-7151.46	-13853.36	15590.35	18356.62	TD at 21369.95

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
LP-MAVERICK 2W-20-04	7001.00	-7168.18	-3713.18	1429388.09	3179931.53	40.510269°N	104.852892°W	Point
- plan hits target center								
PBHL-MAVERICK 2W-20-04	7001.00	-7151.46	-13853.36	1429329.29	3169791.50	40.510305°N	104.889360°W	Point
- plan hits target center								

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
24.00	24.00	Laramie-Fox Hills Formation
196.00	196.02	Pierre Formation
471.00	472.04	Upper Pierre aquifer
1381.00	1428.06	Base of Upper Pierre aquifer
3716.00	5102.11	Larimer ("Parkman") sandstone
4011.00	5625.60	Pierre Formation
4201.00	5962.76	Terry ("Sussex") sandstone
4471.00	6441.89	Pierre Formation
4781.00	6991.99	Hygiene ("Shannon") sandstone
5016.00	7409.01	Pierre Formation
6961.00	10950.72	Sharon Springs Member
7001.00	11229.75	Niobrara Formation

PROJECT DETAILS: WELD COUNTY

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

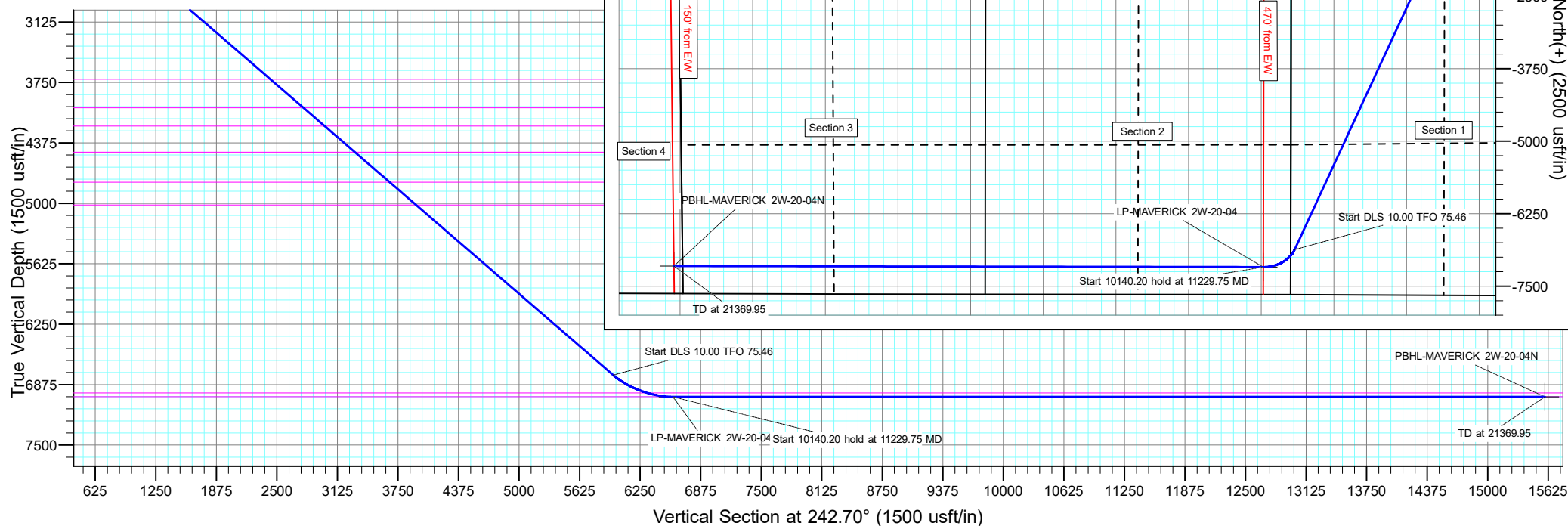
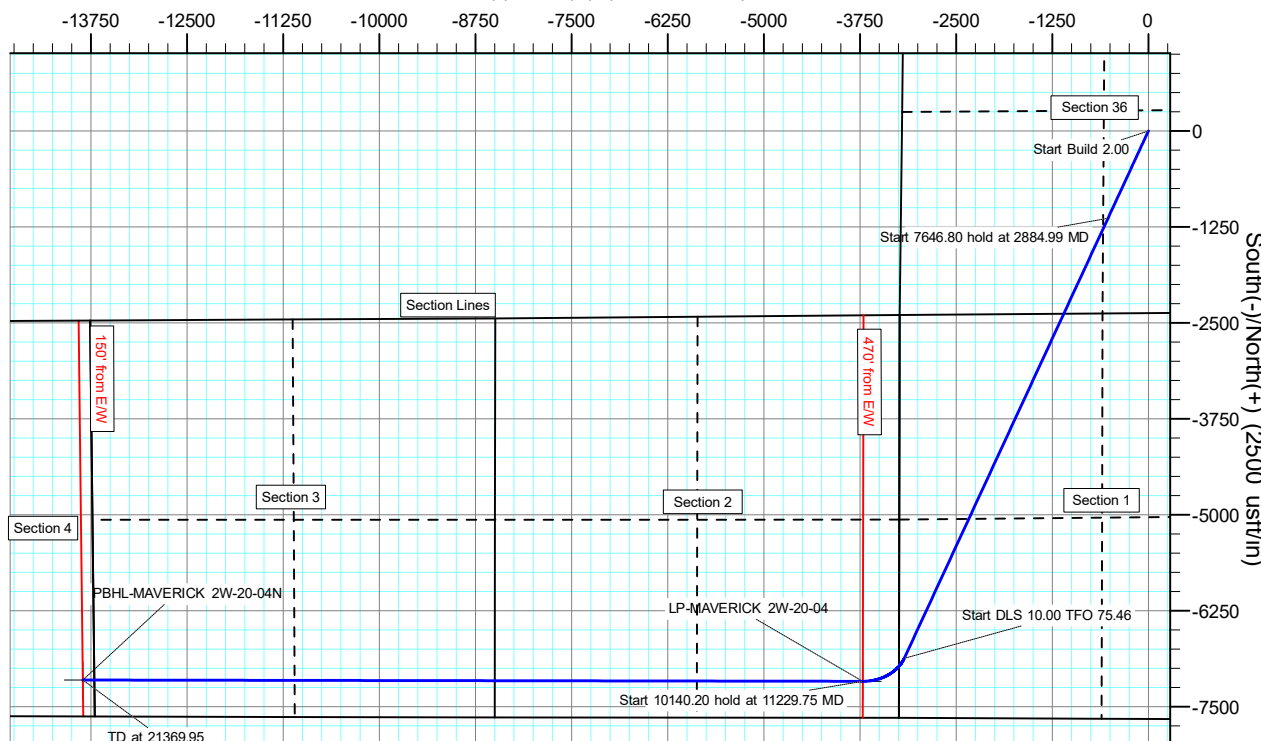
System Datum: Mean Sea Level

SHL:
2373' FSL, 2056' FEL
Sec 36-T7N-R67W

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

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

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



Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well MAVERICK 2W-20-04
Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4921.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4921.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-04	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-20-04					
Well Position	+N/-S	2,395.52 usft	Northing:	1,436,583.73 usft	Latitude:	40.529946°N
	+E/-W	3,232.31 usft	Easting:	3,183,591.22 usft	Longitude:	104.839538°W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	4,896.00 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	2/5/2024	7.63	66.63	51,735.18966662

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	242.70

Plan Survey Tool Program	Date	3/29/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	21,369.95	PROPOSAL 1 (OWB)	MWD OWSG
				OWSG MWD - Standard

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	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,884.99	55.70	204.81	2,466.59	-1,135.02	-524.62	2.00	2.00	0.00	204.81	
10,531.79	55.70	204.81	6,775.77	-6,869.14	-3,174.98	0.00	0.00	0.00	0.00	
11,229.75	90.00	270.09	7,001.00	-7,168.18	-3,713.18	10.00	4.91	9.35	75.46	LP-MAVERICK 2W-20-04
21,369.95	90.00	270.09	7,001.00	-7,151.46	-13,853.36	0.00	0.00	0.00	0.00	PBHL-MAVERICK 2W-20-04

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well MAVERICK 2W-20-04
Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4921.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4921.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-04	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
Start Build 2.00									
196.02	1.92	204.81	196.00	-1.46	-0.68	1.27	2.00	2.00	0.00
Pierre Formation									
200.00	2.00	204.81	199.98	-1.58	-0.73	1.38	2.00	2.00	0.00
300.00	4.00	204.81	299.84	-6.33	-2.93	5.51	2.00	2.00	0.00
400.00	6.00	204.81	399.45	-14.25	-6.58	12.39	2.00	2.00	0.00
472.04	7.44	204.81	471.00	-21.90	-10.12	19.04	2.00	2.00	0.00
Upper Pierre aquifer									
500.00	8.00	204.81	498.70	-25.31	-11.70	22.00	2.00	2.00	0.00
600.00	10.00	204.81	597.47	-39.51	-18.26	34.35	2.00	2.00	0.00
700.00	12.00	204.81	695.62	-56.83	-26.27	49.41	2.00	2.00	0.00
800.00	14.00	204.81	793.06	-77.24	-35.70	67.16	2.00	2.00	0.00
900.00	16.00	204.81	889.64	-100.74	-46.56	87.58	2.00	2.00	0.00
1,000.00	18.00	204.81	985.27	-127.28	-58.83	110.66	2.00	2.00	0.00
1,100.00	20.00	204.81	1,079.82	-156.83	-72.49	136.35	2.00	2.00	0.00
1,200.00	22.00	204.81	1,173.17	-189.35	-87.52	164.63	2.00	2.00	0.00
1,300.00	24.00	204.81	1,265.21	-224.82	-103.91	195.46	2.00	2.00	0.00
1,400.00	26.00	204.81	1,355.84	-263.18	-121.64	228.82	2.00	2.00	0.00
1,428.06	26.56	204.81	1,381.00	-274.46	-126.86	238.62	2.00	2.00	0.00
Base of Upper Pierre aquifer									
1,500.00	28.00	204.81	1,444.94	-304.39	-140.69	264.64	2.00	2.00	0.00
1,600.00	30.00	204.81	1,532.39	-348.39	-161.03	302.90	2.00	2.00	0.00
1,700.00	32.00	204.81	1,618.11	-395.14	-182.64	343.55	2.00	2.00	0.00
1,800.00	34.00	204.81	1,701.97	-444.58	-205.49	386.53	2.00	2.00	0.00
1,900.00	36.00	204.81	1,783.88	-496.64	-229.55	431.79	2.00	2.00	0.00
2,000.00	38.00	204.81	1,863.74	-551.27	-254.80	479.29	2.00	2.00	0.00
2,100.00	40.00	204.81	1,941.45	-608.39	-281.20	528.95	2.00	2.00	0.00
2,200.00	42.00	204.81	2,016.92	-667.94	-308.73	580.72	2.00	2.00	0.00
2,300.00	44.00	204.81	2,090.05	-729.84	-337.34	634.54	2.00	2.00	0.00
2,400.00	46.00	204.81	2,160.76	-794.03	-367.01	690.34	2.00	2.00	0.00
2,500.00	48.00	204.81	2,228.95	-860.41	-397.69	748.06	2.00	2.00	0.00
2,600.00	50.00	204.81	2,294.55	-928.91	-429.35	807.62	2.00	2.00	0.00
2,700.00	52.00	204.81	2,357.48	-999.45	-461.96	868.95	2.00	2.00	0.00
2,800.00	54.00	204.81	2,417.66	-1,071.94	-495.46	931.97	2.00	2.00	0.00
2,884.99	55.70	204.81	2,466.59	-1,135.02	-524.62	986.81	2.00	2.00	0.00
Start 7646.80 hold at 2884.99 MD									
2,900.00	55.70	204.81	2,475.05	-1,146.28	-529.82	996.60	0.00	0.00	0.00
3,000.00	55.70	204.81	2,531.40	-1,221.26	-564.48	1,061.80	0.00	0.00	0.00
3,100.00	55.70	204.81	2,587.75	-1,296.25	-599.14	1,126.99	0.00	0.00	0.00
3,200.00	55.70	204.81	2,644.11	-1,371.24	-633.80	1,192.19	0.00	0.00	0.00
3,300.00	55.70	204.81	2,700.46	-1,446.23	-668.46	1,257.38	0.00	0.00	0.00
3,400.00	55.70	204.81	2,756.81	-1,521.21	-703.12	1,322.58	0.00	0.00	0.00
3,500.00	55.70	204.81	2,813.17	-1,596.20	-737.78	1,387.77	0.00	0.00	0.00
3,600.00	55.70	204.81	2,869.52	-1,671.19	-772.44	1,452.97	0.00	0.00	0.00
3,700.00	55.70	204.81	2,925.87	-1,746.17	-807.10	1,518.16	0.00	0.00	0.00
3,800.00	55.70	204.81	2,982.22	-1,821.16	-841.76	1,583.36	0.00	0.00	0.00
3,900.00	55.70	204.81	3,038.58	-1,896.15	-876.42	1,648.56	0.00	0.00	0.00
4,000.00	55.70	204.81	3,094.93	-1,971.14	-911.08	1,713.75	0.00	0.00	0.00
4,100.00	55.70	204.81	3,151.28	-2,046.12	-945.74	1,778.95	0.00	0.00	0.00

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well MAVERICK 2W-20-04
Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4921.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4921.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-04	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	55.70	204.81	3,207.63	-2,121.11	-980.40	1,844.14	0.00	0.00	0.00	
4,300.00	55.70	204.81	3,263.99	-2,196.10	-1,015.06	1,909.34	0.00	0.00	0.00	
4,400.00	55.70	204.81	3,320.34	-2,271.08	-1,049.72	1,974.53	0.00	0.00	0.00	
4,500.00	55.70	204.81	3,376.69	-2,346.07	-1,084.38	2,039.73	0.00	0.00	0.00	
4,600.00	55.70	204.81	3,433.05	-2,421.06	-1,119.04	2,104.92	0.00	0.00	0.00	
4,700.00	55.70	204.81	3,489.40	-2,496.05	-1,153.70	2,170.12	0.00	0.00	0.00	
4,800.00	55.70	204.81	3,545.75	-2,571.03	-1,188.36	2,235.32	0.00	0.00	0.00	
4,900.00	55.70	204.81	3,602.10	-2,646.02	-1,223.02	2,300.51	0.00	0.00	0.00	
5,000.00	55.70	204.81	3,658.46	-2,721.01	-1,257.68	2,365.71	0.00	0.00	0.00	
5,100.00	55.70	204.81	3,714.81	-2,795.99	-1,292.33	2,430.90	0.00	0.00	0.00	
5,102.11	55.70	204.81	3,716.00	-2,797.58	-1,293.07	2,432.28	0.00	0.00	0.00	
Larimer ("Parkman") sandstone										
5,200.00	55.70	204.81	3,771.16	-2,870.98	-1,326.99	2,496.10	0.00	0.00	0.00	
5,300.00	55.70	204.81	3,827.51	-2,945.97	-1,361.65	2,561.29	0.00	0.00	0.00	
5,400.00	55.70	204.81	3,883.87	-3,020.96	-1,396.31	2,626.49	0.00	0.00	0.00	
5,500.00	55.70	204.81	3,940.22	-3,095.94	-1,430.97	2,691.68	0.00	0.00	0.00	
5,600.00	55.70	204.81	3,996.57	-3,170.93	-1,465.63	2,756.88	0.00	0.00	0.00	
5,625.60	55.70	204.81	4,011.00	-3,190.13	-1,474.51	2,773.57	0.00	0.00	0.00	
Pierre Formation										
5,700.00	55.70	204.81	4,052.93	-3,245.92	-1,500.29	2,822.08	0.00	0.00	0.00	
5,800.00	55.70	204.81	4,109.28	-3,320.90	-1,534.95	2,887.27	0.00	0.00	0.00	
5,900.00	55.70	204.81	4,165.63	-3,395.89	-1,569.61	2,952.47	0.00	0.00	0.00	
5,962.76	55.70	204.81	4,201.00	-3,442.96	-1,591.37	2,993.39	0.00	0.00	0.00	
Terry ("Sussex") sandstone										
6,000.00	55.70	204.81	4,221.98	-3,470.88	-1,604.27	3,017.66	0.00	0.00	0.00	
6,100.00	55.70	204.81	4,278.34	-3,545.87	-1,638.93	3,082.86	0.00	0.00	0.00	
6,200.00	55.70	204.81	4,334.69	-3,620.85	-1,673.59	3,148.05	0.00	0.00	0.00	
6,300.00	55.70	204.81	4,391.04	-3,695.84	-1,708.25	3,213.25	0.00	0.00	0.00	
6,400.00	55.70	204.81	4,447.40	-3,770.83	-1,742.91	3,278.44	0.00	0.00	0.00	
6,441.89	55.70	204.81	4,471.00	-3,802.24	-1,757.43	3,305.75	0.00	0.00	0.00	
Pierre Formation										
6,500.00	55.70	204.81	4,503.75	-3,845.81	-1,777.57	3,343.64	0.00	0.00	0.00	
6,600.00	55.70	204.81	4,560.10	-3,920.80	-1,812.23	3,408.84	0.00	0.00	0.00	
6,700.00	55.70	204.81	4,616.45	-3,995.79	-1,846.89	3,474.03	0.00	0.00	0.00	
6,800.00	55.70	204.81	4,672.81	-4,070.78	-1,881.55	3,539.23	0.00	0.00	0.00	
6,900.00	55.70	204.81	4,729.16	-4,145.76	-1,916.21	3,604.42	0.00	0.00	0.00	
6,991.99	55.70	204.81	4,781.00	-4,214.75	-1,948.10	3,664.40	0.00	0.00	0.00	
Hygiene ("Shannon") sandstone										
7,000.00	55.70	204.81	4,785.51	-4,220.75	-1,950.87	3,669.62	0.00	0.00	0.00	
7,100.00	55.70	204.81	4,841.86	-4,295.74	-1,985.53	3,734.81	0.00	0.00	0.00	
7,200.00	55.70	204.81	4,898.22	-4,370.72	-2,020.19	3,800.01	0.00	0.00	0.00	
7,300.00	55.70	204.81	4,954.57	-4,445.71	-2,054.85	3,865.20	0.00	0.00	0.00	
7,400.00	55.70	204.81	5,010.92	-4,520.70	-2,089.51	3,930.40	0.00	0.00	0.00	
7,409.01	55.70	204.81	5,016.00	-4,527.45	-2,092.63	3,936.27	0.00	0.00	0.00	
Pierre Formation										
7,500.00	55.70	204.81	5,067.28	-4,595.69	-2,124.17	3,995.60	0.00	0.00	0.00	
7,600.00	55.70	204.81	5,123.63	-4,670.67	-2,158.83	4,060.79	0.00	0.00	0.00	
7,700.00	55.70	204.81	5,179.98	-4,745.66	-2,193.49	4,125.99	0.00	0.00	0.00	
7,800.00	55.70	204.81	5,236.33	-4,820.65	-2,228.15	4,191.18	0.00	0.00	0.00	
7,900.00	55.70	204.81	5,292.69	-4,895.63	-2,262.81	4,256.38	0.00	0.00	0.00	
8,000.00	55.70	204.81	5,349.04	-4,970.62	-2,297.47	4,321.57	0.00	0.00	0.00	
8,100.00	55.70	204.81	5,405.39	-5,045.61	-2,332.13	4,386.77	0.00	0.00	0.00	
8,200.00	55.70	204.81	5,461.74	-5,120.60	-2,366.79	4,451.96	0.00	0.00	0.00	

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well MAVERICK 2W-20-04
Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4921.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4921.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-04	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	55.70	204.81	5,518.10	-5,195.58	-2,401.45	4,517.16	0.00	0.00	0.00
8,400.00	55.70	204.81	5,574.45	-5,270.57	-2,436.11	4,582.35	0.00	0.00	0.00
8,500.00	55.70	204.81	5,630.80	-5,345.56	-2,470.77	4,647.55	0.00	0.00	0.00
8,600.00	55.70	204.81	5,687.16	-5,420.54	-2,505.43	4,712.75	0.00	0.00	0.00
8,700.00	55.70	204.81	5,743.51	-5,495.53	-2,540.09	4,777.94	0.00	0.00	0.00
8,800.00	55.70	204.81	5,799.86	-5,570.52	-2,574.75	4,843.14	0.00	0.00	0.00
8,900.00	55.70	204.81	5,856.21	-5,645.51	-2,609.41	4,908.33	0.00	0.00	0.00
9,000.00	55.70	204.81	5,912.57	-5,720.49	-2,644.07	4,973.53	0.00	0.00	0.00
9,100.00	55.70	204.81	5,968.92	-5,795.48	-2,678.73	5,038.72	0.00	0.00	0.00
9,200.00	55.70	204.81	6,025.27	-5,870.47	-2,713.38	5,103.92	0.00	0.00	0.00
9,300.00	55.70	204.81	6,081.63	-5,945.45	-2,748.04	5,169.11	0.00	0.00	0.00
9,400.00	55.70	204.81	6,137.98	-6,020.44	-2,782.70	5,234.31	0.00	0.00	0.00
9,500.00	55.70	204.81	6,194.33	-6,095.43	-2,817.36	5,299.51	0.00	0.00	0.00
9,600.00	55.70	204.81	6,250.68	-6,170.41	-2,852.02	5,364.70	0.00	0.00	0.00
9,700.00	55.70	204.81	6,307.04	-6,245.40	-2,886.68	5,429.90	0.00	0.00	0.00
9,800.00	55.70	204.81	6,363.39	-6,320.39	-2,921.34	5,495.09	0.00	0.00	0.00
9,900.00	55.70	204.81	6,419.74	-6,395.38	-2,956.00	5,560.29	0.00	0.00	0.00
10,000.00	55.70	204.81	6,476.09	-6,470.36	-2,990.66	5,625.48	0.00	0.00	0.00
10,100.00	55.70	204.81	6,532.45	-6,545.35	-3,025.32	5,690.68	0.00	0.00	0.00
10,200.00	55.70	204.81	6,588.80	-6,620.34	-3,059.98	5,755.87	0.00	0.00	0.00
10,300.00	55.70	204.81	6,645.15	-6,695.32	-3,094.64	5,821.07	0.00	0.00	0.00
10,400.00	55.70	204.81	6,701.51	-6,770.31	-3,129.30	5,886.27	0.00	0.00	0.00
10,500.00	55.70	204.81	6,757.86	-6,845.30	-3,163.96	5,951.46	0.00	0.00	0.00
10,531.79	55.70	204.81	6,775.77	-6,869.14	-3,174.98	5,972.19	0.00	0.00	0.00
Start DLS 10.00 TFO 75.46									
10,550.00	56.18	206.93	6,785.97	-6,882.71	-3,181.56	5,984.26	10.00	2.61	11.65
10,600.00	57.66	212.63	6,813.28	-6,919.04	-3,202.37	6,019.42	10.00	2.97	11.40
10,650.00	59.40	218.13	6,839.40	-6,953.78	-3,227.06	6,057.29	10.00	3.47	11.00
10,700.00	61.35	223.42	6,864.12	-6,986.66	-3,255.44	6,097.59	10.00	3.91	10.59
10,750.00	63.51	228.51	6,887.28	-7,017.44	-3,287.30	6,140.02	10.00	4.31	10.18
10,800.00	65.84	233.41	6,908.67	-7,045.88	-3,322.40	6,184.25	10.00	4.66	9.79
10,850.00	68.32	238.12	6,928.16	-7,071.76	-3,360.46	6,229.95	10.00	4.96	9.43
10,900.00	70.92	242.67	6,945.58	-7,094.89	-3,401.21	6,276.76	10.00	5.22	9.10
10,950.00	73.64	247.08	6,960.80	-7,115.09	-3,444.32	6,324.34	10.00	5.43	8.82
10,950.72	73.68	247.14	6,961.00	-7,115.36	-3,444.96	6,325.03	10.00	5.53	8.68
Sharon Springs Member									
11,000.00	76.44	251.37	6,973.71	-7,132.21	-3,489.47	6,372.31	10.00	5.61	8.57
11,050.00	79.32	255.55	6,984.21	-7,146.11	-3,536.32	6,420.32	10.00	5.75	8.37
11,100.00	82.25	259.65	6,992.22	-7,156.70	-3,584.51	6,468.00	10.00	5.86	8.21
11,150.00	85.22	263.70	6,997.67	-7,163.88	-3,633.67	6,514.98	10.00	5.94	8.09
11,200.00	88.21	267.71	7,000.54	-7,167.61	-3,683.44	6,560.91	10.00	5.99	8.02
11,229.75	90.00	270.09	7,001.00	-7,168.18	-3,713.18	6,587.60	10.00	6.00	8.00
Start 10140.20 hold at 11229.75 MD - Niobrara Formation									
11,300.00	90.00	270.09	7,001.00	-7,168.07	-3,783.42	6,649.96	0.00	0.00	0.00
11,400.00	90.00	270.09	7,001.00	-7,167.90	-3,883.42	6,738.75	0.00	0.00	0.00
11,500.00	90.00	270.09	7,001.00	-7,167.74	-3,983.42	6,827.53	0.00	0.00	0.00
11,600.00	90.00	270.09	7,001.00	-7,167.57	-4,083.42	6,916.31	0.00	0.00	0.00
11,700.00	90.00	270.09	7,001.00	-7,167.41	-4,183.42	7,005.10	0.00	0.00	0.00
11,800.00	90.00	270.09	7,001.00	-7,167.24	-4,283.42	7,093.88	0.00	0.00	0.00
11,900.00	90.00	270.09	7,001.00	-7,167.08	-4,383.42	7,182.66	0.00	0.00	0.00
12,000.00	90.00	270.09	7,001.00	-7,166.91	-4,483.42	7,271.44	0.00	0.00	0.00
12,100.00	90.00	270.09	7,001.00	-7,166.75	-4,583.42	7,360.23	0.00	0.00	0.00
12,200.00	90.00	270.09	7,001.00	-7,166.58	-4,683.42	7,449.01	0.00	0.00	0.00

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well MAVERICK 2W-20-04
Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4921.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4921.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-04	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	270.09	7,001.00	-7,166.42	-4,783.42	7,537.79	0.00	0.00	0.00
12,400.00	90.00	270.09	7,001.00	-7,166.25	-4,883.42	7,626.57	0.00	0.00	0.00
12,500.00	90.00	270.09	7,001.00	-7,166.09	-4,983.42	7,715.36	0.00	0.00	0.00
12,600.00	90.00	270.09	7,001.00	-7,165.92	-5,083.42	7,804.14	0.00	0.00	0.00
12,700.00	90.00	270.09	7,001.00	-7,165.76	-5,183.42	7,892.92	0.00	0.00	0.00
12,800.00	90.00	270.09	7,001.00	-7,165.59	-5,283.42	7,981.71	0.00	0.00	0.00
12,900.00	90.00	270.09	7,001.00	-7,165.43	-5,383.42	8,070.49	0.00	0.00	0.00
13,000.00	90.00	270.09	7,001.00	-7,165.26	-5,483.42	8,159.27	0.00	0.00	0.00
13,100.00	90.00	270.09	7,001.00	-7,165.10	-5,583.42	8,248.05	0.00	0.00	0.00
13,200.00	90.00	270.09	7,001.00	-7,164.93	-5,683.42	8,336.84	0.00	0.00	0.00
13,300.00	90.00	270.09	7,001.00	-7,164.77	-5,783.42	8,425.62	0.00	0.00	0.00
13,400.00	90.00	270.09	7,001.00	-7,164.60	-5,883.42	8,514.40	0.00	0.00	0.00
13,500.00	90.00	270.09	7,001.00	-7,164.44	-5,983.42	8,603.19	0.00	0.00	0.00
13,600.00	90.00	270.09	7,001.00	-7,164.27	-6,083.42	8,691.97	0.00	0.00	0.00
13,700.00	90.00	270.09	7,001.00	-7,164.11	-6,183.42	8,780.75	0.00	0.00	0.00
13,800.00	90.00	270.09	7,001.00	-7,163.94	-6,283.42	8,869.53	0.00	0.00	0.00
13,900.00	90.00	270.09	7,001.00	-7,163.78	-6,383.42	8,958.32	0.00	0.00	0.00
14,000.00	90.00	270.09	7,001.00	-7,163.61	-6,483.42	9,047.10	0.00	0.00	0.00
14,100.00	90.00	270.09	7,001.00	-7,163.45	-6,583.42	9,135.88	0.00	0.00	0.00
14,200.00	90.00	270.09	7,001.00	-7,163.28	-6,683.42	9,224.66	0.00	0.00	0.00
14,300.00	90.00	270.09	7,001.00	-7,163.12	-6,783.42	9,313.45	0.00	0.00	0.00
14,400.00	90.00	270.09	7,001.00	-7,162.95	-6,883.42	9,402.23	0.00	0.00	0.00
14,500.00	90.00	270.09	7,001.00	-7,162.79	-6,983.42	9,491.01	0.00	0.00	0.00
14,600.00	90.00	270.09	7,001.00	-7,162.62	-7,083.42	9,579.80	0.00	0.00	0.00
14,700.00	90.00	270.09	7,001.00	-7,162.46	-7,183.42	9,668.58	0.00	0.00	0.00
14,800.00	90.00	270.09	7,001.00	-7,162.29	-7,283.42	9,757.36	0.00	0.00	0.00
14,900.00	90.00	270.09	7,001.00	-7,162.13	-7,383.42	9,846.14	0.00	0.00	0.00
15,000.00	90.00	270.09	7,001.00	-7,161.96	-7,483.42	9,934.93	0.00	0.00	0.00
15,100.00	90.00	270.09	7,001.00	-7,161.80	-7,583.42	10,023.71	0.00	0.00	0.00
15,200.00	90.00	270.09	7,001.00	-7,161.63	-7,683.42	10,112.49	0.00	0.00	0.00
15,300.00	90.00	270.09	7,001.00	-7,161.47	-7,783.42	10,201.28	0.00	0.00	0.00
15,400.00	90.00	270.09	7,001.00	-7,161.30	-7,883.42	10,290.06	0.00	0.00	0.00
15,500.00	90.00	270.09	7,001.00	-7,161.14	-7,983.42	10,378.84	0.00	0.00	0.00
15,600.00	90.00	270.09	7,001.00	-7,160.97	-8,083.42	10,467.62	0.00	0.00	0.00
15,700.00	90.00	270.09	7,001.00	-7,160.81	-8,183.42	10,556.41	0.00	0.00	0.00
15,800.00	90.00	270.09	7,001.00	-7,160.64	-8,283.42	10,645.19	0.00	0.00	0.00
15,900.00	90.00	270.09	7,001.00	-7,160.48	-8,383.42	10,733.97	0.00	0.00	0.00
16,000.00	90.00	270.09	7,001.00	-7,160.31	-8,483.42	10,822.76	0.00	0.00	0.00
16,100.00	90.00	270.09	7,001.00	-7,160.15	-8,583.42	10,911.54	0.00	0.00	0.00
16,200.00	90.00	270.09	7,001.00	-7,159.98	-8,683.42	11,000.32	0.00	0.00	0.00
16,300.00	90.00	270.09	7,001.00	-7,159.82	-8,783.42	11,089.10	0.00	0.00	0.00
16,400.00	90.00	270.09	7,001.00	-7,159.65	-8,883.42	11,177.89	0.00	0.00	0.00
16,500.00	90.00	270.09	7,001.00	-7,159.49	-8,983.42	11,266.67	0.00	0.00	0.00
16,600.00	90.00	270.09	7,001.00	-7,159.32	-9,083.42	11,355.45	0.00	0.00	0.00
16,700.00	90.00	270.09	7,001.00	-7,159.16	-9,183.42	11,444.23	0.00	0.00	0.00
16,800.00	90.00	270.09	7,001.00	-7,158.99	-9,283.42	11,533.02	0.00	0.00	0.00
16,900.00	90.00	270.09	7,001.00	-7,158.83	-9,383.42	11,621.80	0.00	0.00	0.00
17,000.00	90.00	270.09	7,001.00	-7,158.66	-9,483.42	11,710.58	0.00	0.00	0.00
17,100.00	90.00	270.09	7,001.00	-7,158.50	-9,583.42	11,799.37	0.00	0.00	0.00
17,200.00	90.00	270.09	7,001.00	-7,158.33	-9,683.42	11,888.15	0.00	0.00	0.00
17,300.00	90.00	270.09	7,001.00	-7,158.17	-9,783.42	11,976.93	0.00	0.00	0.00
17,400.00	90.00	270.09	7,001.00	-7,158.00	-9,883.42	12,065.71	0.00	0.00	0.00
17,500.00	90.00	270.09	7,001.00	-7,157.84	-9,983.42	12,154.50	0.00	0.00	0.00
17,600.00	90.00	270.09	7,001.00	-7,157.67	-10,083.42	12,243.28	0.00	0.00	0.00

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well MAVERICK 2W-20-04
Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4921.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4921.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-04	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	270.09	7,001.00	-7,157.51	-10,183.42	12,332.06	0.00	0.00	0.00	
17,800.00	90.00	270.09	7,001.00	-7,157.34	-10,283.42	12,420.85	0.00	0.00	0.00	
17,900.00	90.00	270.09	7,001.00	-7,157.18	-10,383.42	12,509.63	0.00	0.00	0.00	
18,000.00	90.00	270.09	7,001.00	-7,157.01	-10,483.42	12,598.41	0.00	0.00	0.00	
18,100.00	90.00	270.09	7,001.00	-7,156.85	-10,583.42	12,687.19	0.00	0.00	0.00	
18,200.00	90.00	270.09	7,001.00	-7,156.68	-10,683.42	12,775.98	0.00	0.00	0.00	
18,300.00	90.00	270.09	7,001.00	-7,156.52	-10,783.42	12,864.76	0.00	0.00	0.00	
18,400.00	90.00	270.09	7,001.00	-7,156.35	-10,883.41	12,953.54	0.00	0.00	0.00	
18,500.00	90.00	270.09	7,001.00	-7,156.19	-10,983.41	13,042.33	0.00	0.00	0.00	
18,600.00	90.00	270.09	7,001.00	-7,156.02	-11,083.41	13,131.11	0.00	0.00	0.00	
18,700.00	90.00	270.09	7,001.00	-7,155.86	-11,183.41	13,219.89	0.00	0.00	0.00	
18,800.00	90.00	270.09	7,001.00	-7,155.69	-11,283.41	13,308.67	0.00	0.00	0.00	
18,900.00	90.00	270.09	7,001.00	-7,155.53	-11,383.41	13,397.46	0.00	0.00	0.00	
19,000.00	90.00	270.09	7,001.00	-7,155.36	-11,483.41	13,486.24	0.00	0.00	0.00	
19,100.00	90.00	270.09	7,001.00	-7,155.20	-11,583.41	13,575.02	0.00	0.00	0.00	
19,200.00	90.00	270.09	7,001.00	-7,155.03	-11,683.41	13,663.80	0.00	0.00	0.00	
19,300.00	90.00	270.09	7,001.00	-7,154.87	-11,783.41	13,752.59	0.00	0.00	0.00	
19,400.00	90.00	270.09	7,001.00	-7,154.70	-11,883.41	13,841.37	0.00	0.00	0.00	
19,500.00	90.00	270.09	7,001.00	-7,154.54	-11,983.41	13,930.15	0.00	0.00	0.00	
19,600.00	90.00	270.09	7,001.00	-7,154.38	-12,083.41	14,018.94	0.00	0.00	0.00	
19,700.00	90.00	270.09	7,001.00	-7,154.21	-12,183.41	14,107.72	0.00	0.00	0.00	
19,800.00	90.00	270.09	7,001.00	-7,154.05	-12,283.41	14,196.50	0.00	0.00	0.00	
19,900.00	90.00	270.09	7,001.00	-7,153.88	-12,383.41	14,285.28	0.00	0.00	0.00	
20,000.00	90.00	270.09	7,001.00	-7,153.72	-12,483.41	14,374.07	0.00	0.00	0.00	
20,100.00	90.00	270.09	7,001.00	-7,153.55	-12,583.41	14,462.85	0.00	0.00	0.00	
20,200.00	90.00	270.09	7,001.00	-7,153.39	-12,683.41	14,551.63	0.00	0.00	0.00	
20,300.00	90.00	270.09	7,001.00	-7,153.22	-12,783.41	14,640.42	0.00	0.00	0.00	
20,400.00	90.00	270.09	7,001.00	-7,153.06	-12,883.41	14,729.20	0.00	0.00	0.00	
20,500.00	90.00	270.09	7,001.00	-7,152.89	-12,983.41	14,817.98	0.00	0.00	0.00	
20,600.00	90.00	270.09	7,001.00	-7,152.73	-13,083.41	14,906.76	0.00	0.00	0.00	
20,700.00	90.00	270.09	7,001.00	-7,152.56	-13,183.41	14,995.55	0.00	0.00	0.00	
20,800.00	90.00	270.09	7,001.00	-7,152.40	-13,283.41	15,084.33	0.00	0.00	0.00	
20,900.00	90.00	270.09	7,001.00	-7,152.23	-13,383.41	15,173.11	0.00	0.00	0.00	
21,000.00	90.00	270.09	7,001.00	-7,152.07	-13,483.41	15,261.90	0.00	0.00	0.00	
21,100.00	90.00	270.09	7,001.00	-7,151.90	-13,583.41	15,350.68	0.00	0.00	0.00	
21,200.00	90.00	270.09	7,001.00	-7,151.74	-13,683.41	15,439.46	0.00	0.00	0.00	
21,300.00	90.00	270.09	7,001.00	-7,151.57	-13,783.41	15,528.24	0.00	0.00	0.00	
21,369.95	90.00	270.09	7,001.00	-7,151.46	-13,853.36	15,590.35	0.00	0.00	0.00	
TD at 21369.95										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		
- hit/miss target										
- Shape										
LP-MAVERICK 2W-20-0	0.00	0.00	7,001.00	-7,168.18	-3,713.18	1,429,388.09	3,179,931.53	40.510269°N		
- plan hits target center										
- Point										
PBHL-MAVERICK 2W-2	0.00	0.00	7,001.00	-7,151.46	-13,853.36	1,429,329.29	3,169,791.50	40.510305°N		
- plan hits target center										
- Point										

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well MAVERICK 2W-20-04
Company:	EXTRACTION OIL & GAS	TVD Reference:	KBE 25' @ 4921.00usft
Project:	WELD COUNTY	MD Reference:	KBE 25' @ 4921.00usft
Site:	Sec 36-T7N-R67W	North Reference:	True
Well:	MAVERICK 2W-20-04	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
24.00	24.00	Laramie-Fox Hills Formation				
196.02	196.00	Pierre Formation				
472.04	471.00	Upper Pierre aquifer				
1,428.06	1,381.00	Base of Upper Pierre aquifer				
5,102.11	3,716.00	Larimer ("Parkman") sandstone				
5,625.60	4,011.00	Pierre Formation				
5,962.76	4,201.00	Terry ("Sussex") sandstone				
6,441.89	4,471.00	Pierre Formation				
6,991.99	4,781.00	Hygiene ("Shannon") sandstone				
7,409.01	5,016.00	Pierre Formation				
10,950.72	6,961.00	Sharon Springs Member				
11,229.75	7,001.00	Niobrara Formation				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
100.00	100.00	0.00	0.00	Start Build 2.00	
2,884.99	2,466.59	-1,135.02	-524.62	Start 7646.80 hold at 2884.99 MD	
10,531.79	6,775.77	-6,869.14	-3,174.98	Start DLS 10.00 TFO 75.46	
11,229.75	7,001.00	-7,168.18	-3,713.18	Start 10140.20 hold at 11229.75 MD	
21,369.95	7,001.00	-7,151.46	-13,853.36	TD at 21369.95	