

EXTRACTION OIL & GAS

WELD COUNTY

Sec 20-T5N-R65W

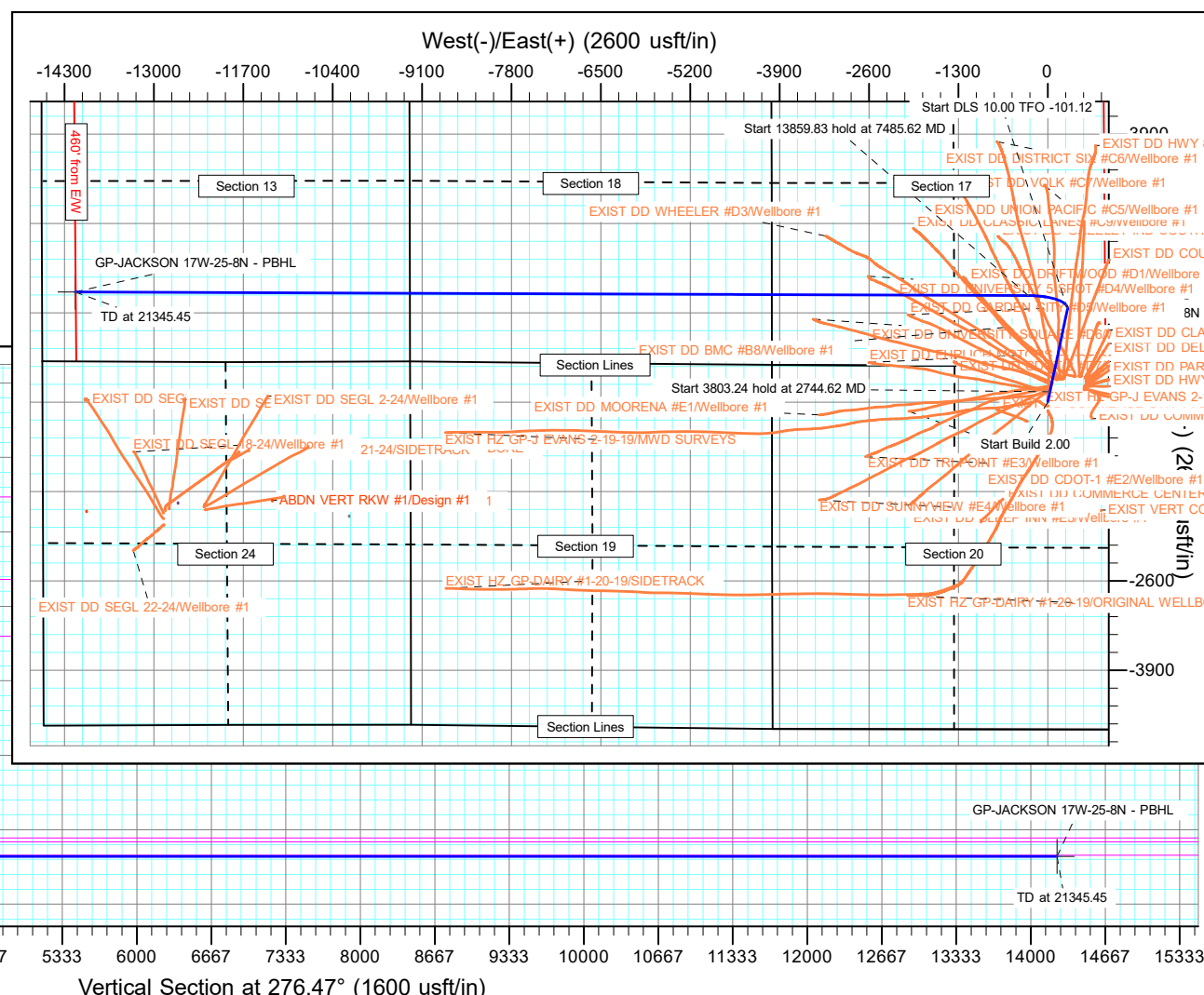
GP-JACKSON FED 17W-25-8N

ORIGINAL WELLBORE

Plan: PROPOSAL #1

Standard Planning Report

12 July, 2018



Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well GP-JACKSON FED 17W-25-8N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4703.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4703.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP-JACKSON FED 17W-25-8N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
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 20-T5N-R65W			
Site Position:		Northing:	1,386,203.84 usft	Latitude:	40° 23' 26.340 N
From:	Lat/Long	Easting:	3,227,707.61 usft	Longitude:	104° 40' 57.036 W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.53 °

Well	GP-JACKSON FED 17W-25-8N					
Well Position	+N/-S	-83.80 usft	Northing:	1,386,120.05 usft	Latitude:	40° 23' 25.512 N
	+E/-W	0.00 usft	Easting:	3,227,708.38 usft	Longitude:	104° 40' 57.036 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	4,674.00 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/12/2016	8.28	66.89	52,522.30704042

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	0.00

Plan Survey Tool Program	Date	7/12/2018		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	21,345.44	PROPOSAL #1 (ORIGINAL WEL	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	
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,744.62	18.89	11.95	2,727.59	150.99	31.95	2.00	2.00	0.00	11.95	
6,547.86	18.89	11.95	6,325.95	1,355.77	286.89	0.00	0.00	0.00	0.00	
7,485.62	90.00	270.21	6,905.00	1,551.91	-284.10	10.00	7.58	-10.85	-101.12	GP-JACKSON 17W-2
21,345.45	90.00	270.21	6,905.00	1,603.32	-14,143.84	0.00	0.00	0.00	0.00	GP-JACKSON 17W-2

Planning Report

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Project:	WELD COUNTY	MD Reference:	KB 29' @ 4703.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP-JACKSON FED 17W-25-8N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
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
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,900.00	2.00	11.95	1,899.98	1.71	0.36	1.71	2.00	2.00	0.00
2,000.00	4.00	11.95	1,999.84	6.83	1.44	6.83	2.00	2.00	0.00
2,100.00	6.00	11.95	2,099.45	15.35	3.25	15.35	2.00	2.00	0.00
2,200.00	8.00	11.95	2,198.70	27.28	5.77	27.28	2.00	2.00	0.00
2,300.00	10.00	11.95	2,297.47	42.58	9.01	42.58	2.00	2.00	0.00
2,400.00	12.00	11.95	2,395.62	61.25	12.96	61.25	2.00	2.00	0.00
2,500.00	14.00	11.95	2,493.06	83.25	17.62	83.25	2.00	2.00	0.00
2,600.00	16.00	11.95	2,589.64	108.57	22.97	108.57	2.00	2.00	0.00
2,700.00	18.00	11.95	2,685.27	137.18	29.03	137.18	2.00	2.00	0.00
2,744.62	18.89	11.95	2,727.59	150.99	31.95	150.99	2.00	2.00	0.00
Start 3803.24 hold at 2744.62 MD									
2,800.00	18.89	11.95	2,779.99	168.53	35.66	168.53	0.00	0.00	0.00
2,900.00	18.89	11.95	2,874.61	200.21	42.37	200.21	0.00	0.00	0.00
3,000.00	18.89	11.95	2,969.22	231.89	49.07	231.89	0.00	0.00	0.00
3,100.00	18.89	11.95	3,063.83	263.56	55.77	263.56	0.00	0.00	0.00
3,200.00	18.89	11.95	3,158.44	295.24	62.47	295.24	0.00	0.00	0.00
3,300.00	18.89	11.95	3,253.06	326.92	69.18	326.92	0.00	0.00	0.00
3,400.00	18.89	11.95	3,347.67	358.60	75.88	358.60	0.00	0.00	0.00
3,500.00	18.89	11.95	3,442.28	390.27	82.58	390.27	0.00	0.00	0.00
3,600.00	18.89	11.95	3,536.89	421.95	89.29	421.95	0.00	0.00	0.00
3,700.00	18.89	11.95	3,631.51	453.63	95.99	453.63	0.00	0.00	0.00
3,757.60	18.89	11.95	3,686.00	471.88	99.85	471.88	0.00	0.00	0.00
PARKMAN									
3,800.00	18.89	11.95	3,726.12	485.31	102.69	485.31	0.00	0.00	0.00
3,900.00	18.89	11.95	3,820.73	516.99	109.40	516.99	0.00	0.00	0.00
4,000.00	18.89	11.95	3,915.35	548.66	116.10	548.66	0.00	0.00	0.00
4,100.00	18.89	11.95	4,009.96	580.34	122.80	580.34	0.00	0.00	0.00
4,200.00	18.89	11.95	4,104.57	612.02	129.51	612.02	0.00	0.00	0.00
4,300.00	18.89	11.95	4,199.18	643.70	136.21	643.70	0.00	0.00	0.00
4,400.00	18.89	11.95	4,293.80	675.37	142.91	675.37	0.00	0.00	0.00
4,500.00	18.89	11.95	4,388.41	707.05	149.62	707.05	0.00	0.00	0.00
4,538.67	18.89	11.95	4,425.00	719.30	152.21	719.30	0.00	0.00	0.00
SUSSEX									

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Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP-JACKSON FED 17W-25-8N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
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)
4,600.00	18.89	11.95	4,483.02	738.73	156.32	738.73	0.00	0.00	0.00
4,700.00	18.89	11.95	4,577.64	770.41	163.02	770.41	0.00	0.00	0.00
4,800.00	18.89	11.95	4,672.25	802.09	169.73	802.09	0.00	0.00	0.00
4,900.00	18.89	11.95	4,766.86	833.76	176.43	833.76	0.00	0.00	0.00
5,000.00	18.89	11.95	4,861.47	865.44	183.13	865.44	0.00	0.00	0.00
5,077.71	18.89	11.95	4,935.00	890.06	188.34	890.06	0.00	0.00	0.00
SHANNON									
5,100.00	18.89	11.95	4,956.09	897.12	189.83	897.12	0.00	0.00	0.00
5,200.00	18.89	11.95	5,050.70	928.80	196.54	928.80	0.00	0.00	0.00
5,300.00	18.89	11.95	5,145.31	960.47	203.24	960.47	0.00	0.00	0.00
5,400.00	18.89	11.95	5,239.93	992.15	209.94	992.15	0.00	0.00	0.00
5,500.00	18.89	11.95	5,334.54	1,023.83	216.65	1,023.83	0.00	0.00	0.00
5,600.00	18.89	11.95	5,429.15	1,055.51	223.35	1,055.51	0.00	0.00	0.00
5,700.00	18.89	11.95	5,523.76	1,087.18	230.05	1,087.18	0.00	0.00	0.00
5,800.00	18.89	11.95	5,618.38	1,118.86	236.76	1,118.86	0.00	0.00	0.00
5,900.00	18.89	11.95	5,712.99	1,150.54	243.46	1,150.54	0.00	0.00	0.00
6,000.00	18.89	11.95	5,807.60	1,182.22	250.16	1,182.22	0.00	0.00	0.00
6,100.00	18.89	11.95	5,902.22	1,213.90	256.87	1,213.90	0.00	0.00	0.00
6,200.00	18.89	11.95	5,996.83	1,245.57	263.57	1,245.57	0.00	0.00	0.00
6,300.00	18.89	11.95	6,091.44	1,277.25	270.27	1,277.25	0.00	0.00	0.00
6,400.00	18.89	11.95	6,186.05	1,308.93	276.98	1,308.93	0.00	0.00	0.00
6,500.00	18.89	11.95	6,280.67	1,340.61	283.68	1,340.61	0.00	0.00	0.00
6,547.86	18.89	11.95	6,325.95	1,355.77	286.89	1,355.77	0.00	0.00	0.00
Start DLS 10.00 TFO -101.12									
6,550.00	18.85	11.30	6,327.97	1,356.45	287.03	1,356.45	10.00	-1.88	-30.37
6,600.00	18.58	355.70	6,375.36	1,372.32	288.01	1,372.32	10.00	-0.55	-31.21
6,650.00	19.57	340.66	6,422.64	1,388.18	284.64	1,388.18	10.00	1.99	-30.07
6,700.00	21.67	327.72	6,469.46	1,403.89	276.93	1,403.89	10.00	4.18	-25.87
6,750.00	24.57	317.33	6,515.46	1,419.35	264.95	1,419.35	10.00	5.82	-20.78
6,800.00	28.04	309.19	6,560.29	1,434.43	248.78	1,434.43	10.00	6.94	-16.28
6,850.00	31.89	302.79	6,603.61	1,449.02	228.56	1,449.02	10.00	7.70	-12.80
6,900.00	36.00	297.67	6,645.08	1,463.01	204.42	1,463.01	10.00	8.21	-10.23
6,950.00	40.29	293.50	6,684.40	1,476.29	176.57	1,476.29	10.00	8.57	-8.36
7,000.00	44.70	290.01	6,721.27	1,488.76	145.20	1,488.76	10.00	8.82	-6.98
7,026.92	47.11	288.35	6,740.00	1,495.10	126.94	1,495.10	10.00	8.97	-6.16
SHARON SPRINGS									
7,050.00	49.20	287.03	6,755.40	1,500.32	110.56	1,500.32	10.00	9.04	-5.73
7,080.89	52.01	285.38	6,775.00	1,506.97	87.64	1,506.97	10.00	9.12	-5.32
NIOBRARA									
7,100.00	53.77	284.43	6,786.53	1,510.89	72.91	1,510.89	10.00	9.17	-5.00
7,150.00	58.39	282.12	6,814.43	1,520.39	32.54	1,520.39	10.00	9.24	-4.62
7,200.00	63.04	280.02	6,838.88	1,528.74	-10.25	1,528.74	10.00	9.31	-4.18
7,250.00	67.73	278.10	6,859.71	1,535.89	-55.12	1,535.89	10.00	9.37	-3.85
7,300.00	72.43	276.30	6,876.74	1,541.77	-101.75	1,541.77	10.00	9.41	-3.60
7,350.00	77.15	274.60	6,889.85	1,546.34	-149.76	1,546.34	10.00	9.44	-3.41
7,375.52	79.57	273.75	6,895.00	1,548.16	-174.69	1,548.16	10.00	9.46	-3.31
NIO B TARGET									
7,400.00	81.88	272.95	6,898.95	1,549.57	-198.81	1,549.57	10.00	9.47	-3.26
7,450.00	86.62	271.35	6,903.95	1,551.43	-248.50	1,551.43	10.00	9.48	-3.21
7,485.62	90.00	270.21	6,905.00	1,551.91	-284.10	1,551.91	10.00	9.48	-3.18
Start 13859.83 hold at 7485.62 MD									
7,500.00	90.00	270.21	6,905.00	1,551.97	-298.48	1,551.97	0.00	0.00	0.00
7,600.00	90.00	270.21	6,905.00	1,552.34	-398.48	1,552.34	0.00	0.00	0.00

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Wellbore:	ORIGINAL WELLBORE		
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)
7,700.00	90.00	270.21	6,905.00	1,552.71	-498.48	1,552.71	0.00	0.00	0.00
7,800.00	90.00	270.21	6,905.00	1,553.08	-598.48	1,553.08	0.00	0.00	0.00
7,900.00	90.00	270.21	6,905.00	1,553.45	-698.48	1,553.45	0.00	0.00	0.00
8,000.00	90.00	270.21	6,905.00	1,553.82	-798.48	1,553.82	0.00	0.00	0.00
8,100.00	90.00	270.21	6,905.00	1,554.19	-898.48	1,554.19	0.00	0.00	0.00
8,200.00	90.00	270.21	6,905.00	1,554.56	-998.48	1,554.56	0.00	0.00	0.00
8,300.00	90.00	270.21	6,905.00	1,554.93	-1,098.47	1,554.93	0.00	0.00	0.00
8,400.00	90.00	270.21	6,905.00	1,555.30	-1,198.47	1,555.30	0.00	0.00	0.00
8,500.00	90.00	270.21	6,905.00	1,555.67	-1,298.47	1,555.67	0.00	0.00	0.00
8,600.00	90.00	270.21	6,905.00	1,556.05	-1,398.47	1,556.05	0.00	0.00	0.00
8,700.00	90.00	270.21	6,905.00	1,556.42	-1,498.47	1,556.42	0.00	0.00	0.00
8,800.00	90.00	270.21	6,905.00	1,556.79	-1,598.47	1,556.79	0.00	0.00	0.00
8,900.00	90.00	270.21	6,905.00	1,557.16	-1,698.47	1,557.16	0.00	0.00	0.00
9,000.00	90.00	270.21	6,905.00	1,557.53	-1,798.47	1,557.53	0.00	0.00	0.00
9,100.00	90.00	270.21	6,905.00	1,557.90	-1,898.47	1,557.90	0.00	0.00	0.00
9,200.00	90.00	270.21	6,905.00	1,558.27	-1,998.47	1,558.27	0.00	0.00	0.00
9,300.00	90.00	270.21	6,905.00	1,558.64	-2,098.47	1,558.64	0.00	0.00	0.00
9,400.00	90.00	270.21	6,905.00	1,559.01	-2,198.47	1,559.01	0.00	0.00	0.00
9,500.00	90.00	270.21	6,905.00	1,559.38	-2,298.47	1,559.38	0.00	0.00	0.00
9,600.00	90.00	270.21	6,905.00	1,559.75	-2,398.47	1,559.75	0.00	0.00	0.00
9,700.00	90.00	270.21	6,905.00	1,560.13	-2,498.47	1,560.13	0.00	0.00	0.00
9,800.00	90.00	270.21	6,905.00	1,560.50	-2,598.46	1,560.50	0.00	0.00	0.00
9,900.00	90.00	270.21	6,905.00	1,560.87	-2,698.46	1,560.87	0.00	0.00	0.00
10,000.00	90.00	270.21	6,905.00	1,561.24	-2,798.46	1,561.24	0.00	0.00	0.00
10,100.00	90.00	270.21	6,905.00	1,561.61	-2,898.46	1,561.61	0.00	0.00	0.00
10,200.00	90.00	270.21	6,905.00	1,561.98	-2,998.46	1,561.98	0.00	0.00	0.00
10,300.00	90.00	270.21	6,905.00	1,562.35	-3,098.46	1,562.35	0.00	0.00	0.00
10,400.00	90.00	270.21	6,905.00	1,562.72	-3,198.46	1,562.72	0.00	0.00	0.00
10,500.00	90.00	270.21	6,905.00	1,563.09	-3,298.46	1,563.09	0.00	0.00	0.00
10,600.00	90.00	270.21	6,905.00	1,563.46	-3,398.46	1,563.46	0.00	0.00	0.00
10,700.00	90.00	270.21	6,905.00	1,563.83	-3,498.46	1,563.83	0.00	0.00	0.00
10,800.00	90.00	270.21	6,905.00	1,564.21	-3,598.46	1,564.21	0.00	0.00	0.00
10,900.00	90.00	270.21	6,905.00	1,564.58	-3,698.46	1,564.58	0.00	0.00	0.00
11,000.00	90.00	270.21	6,905.00	1,564.95	-3,798.46	1,564.95	0.00	0.00	0.00
11,100.00	90.00	270.21	6,905.00	1,565.32	-3,898.46	1,565.32	0.00	0.00	0.00
11,200.00	90.00	270.21	6,905.00	1,565.69	-3,998.45	1,565.69	0.00	0.00	0.00
11,300.00	90.00	270.21	6,905.00	1,566.06	-4,098.45	1,566.06	0.00	0.00	0.00
11,400.00	90.00	270.21	6,905.00	1,566.43	-4,198.45	1,566.43	0.00	0.00	0.00
11,500.00	90.00	270.21	6,905.00	1,566.80	-4,298.45	1,566.80	0.00	0.00	0.00
11,600.00	90.00	270.21	6,905.00	1,567.17	-4,398.45	1,567.17	0.00	0.00	0.00
11,700.00	90.00	270.21	6,905.00	1,567.54	-4,498.45	1,567.54	0.00	0.00	0.00
11,800.00	90.00	270.21	6,905.00	1,567.91	-4,598.45	1,567.91	0.00	0.00	0.00
11,900.00	90.00	270.21	6,905.00	1,568.29	-4,698.45	1,568.29	0.00	0.00	0.00
12,000.00	90.00	270.21	6,905.00	1,568.66	-4,798.45	1,568.66	0.00	0.00	0.00
12,100.00	90.00	270.21	6,905.00	1,569.03	-4,898.45	1,569.03	0.00	0.00	0.00
12,200.00	90.00	270.21	6,905.00	1,569.40	-4,998.45	1,569.40	0.00	0.00	0.00
12,300.00	90.00	270.21	6,905.00	1,569.77	-5,098.45	1,569.77	0.00	0.00	0.00
12,400.00	90.00	270.21	6,905.00	1,570.14	-5,198.45	1,570.14	0.00	0.00	0.00
12,500.00	90.00	270.21	6,905.00	1,570.51	-5,298.45	1,570.51	0.00	0.00	0.00
12,600.00	90.00	270.21	6,905.00	1,570.88	-5,398.45	1,570.88	0.00	0.00	0.00
12,700.00	90.00	270.21	6,905.00	1,571.25	-5,498.44	1,571.25	0.00	0.00	0.00
12,800.00	90.00	270.21	6,905.00	1,571.62	-5,598.44	1,571.62	0.00	0.00	0.00
12,900.00	90.00	270.21	6,905.00	1,571.99	-5,698.44	1,571.99	0.00	0.00	0.00
13,000.00	90.00	270.21	6,905.00	1,572.37	-5,798.44	1,572.37	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well GP-JACKSON FED 17W-25-8N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4703.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4703.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP-JACKSON FED 17W-25-8N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
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)
13,100.00	90.00	270.21	6,905.00	1,572.74	-5,898.44	1,572.74	0.00	0.00	0.00
13,200.00	90.00	270.21	6,905.00	1,573.11	-5,998.44	1,573.11	0.00	0.00	0.00
13,300.00	90.00	270.21	6,905.00	1,573.48	-6,098.44	1,573.48	0.00	0.00	0.00
13,400.00	90.00	270.21	6,905.00	1,573.85	-6,198.44	1,573.85	0.00	0.00	0.00
13,500.00	90.00	270.21	6,905.00	1,574.22	-6,298.44	1,574.22	0.00	0.00	0.00
13,600.00	90.00	270.21	6,905.00	1,574.59	-6,398.44	1,574.59	0.00	0.00	0.00
13,700.00	90.00	270.21	6,905.00	1,574.96	-6,498.44	1,574.96	0.00	0.00	0.00
13,800.00	90.00	270.21	6,905.00	1,575.33	-6,598.44	1,575.33	0.00	0.00	0.00
13,900.00	90.00	270.21	6,905.00	1,575.70	-6,698.44	1,575.70	0.00	0.00	0.00
14,000.00	90.00	270.21	6,905.00	1,576.07	-6,798.44	1,576.07	0.00	0.00	0.00
14,100.00	90.00	270.21	6,905.00	1,576.45	-6,898.43	1,576.45	0.00	0.00	0.00
14,200.00	90.00	270.21	6,905.00	1,576.82	-6,998.43	1,576.82	0.00	0.00	0.00
14,300.00	90.00	270.21	6,905.00	1,577.19	-7,098.43	1,577.19	0.00	0.00	0.00
14,400.00	90.00	270.21	6,905.00	1,577.56	-7,198.43	1,577.56	0.00	0.00	0.00
14,500.00	90.00	270.21	6,905.00	1,577.93	-7,298.43	1,577.93	0.00	0.00	0.00
14,600.00	90.00	270.21	6,905.00	1,578.30	-7,398.43	1,578.30	0.00	0.00	0.00
14,700.00	90.00	270.21	6,905.00	1,578.67	-7,498.43	1,578.67	0.00	0.00	0.00
14,800.00	90.00	270.21	6,905.00	1,579.04	-7,598.43	1,579.04	0.00	0.00	0.00
14,900.00	90.00	270.21	6,905.00	1,579.41	-7,698.43	1,579.41	0.00	0.00	0.00
15,000.00	90.00	270.21	6,905.00	1,579.78	-7,798.43	1,579.78	0.00	0.00	0.00
15,100.00	90.00	270.21	6,905.00	1,580.15	-7,898.43	1,580.15	0.00	0.00	0.00
15,200.00	90.00	270.21	6,905.00	1,580.53	-7,998.43	1,580.53	0.00	0.00	0.00
15,300.00	90.00	270.21	6,905.00	1,580.90	-8,098.43	1,580.90	0.00	0.00	0.00
15,400.00	90.00	270.21	6,905.00	1,581.27	-8,198.43	1,581.27	0.00	0.00	0.00
15,500.00	90.00	270.21	6,905.00	1,581.64	-8,298.43	1,581.64	0.00	0.00	0.00
15,600.00	90.00	270.21	6,905.00	1,582.01	-8,398.42	1,582.01	0.00	0.00	0.00
15,700.00	90.00	270.21	6,905.00	1,582.38	-8,498.42	1,582.38	0.00	0.00	0.00
15,800.00	90.00	270.21	6,905.00	1,582.75	-8,598.42	1,582.75	0.00	0.00	0.00
15,900.00	90.00	270.21	6,905.00	1,583.12	-8,698.42	1,583.12	0.00	0.00	0.00
16,000.00	90.00	270.21	6,905.00	1,583.49	-8,798.42	1,583.49	0.00	0.00	0.00
16,100.00	90.00	270.21	6,905.00	1,583.86	-8,898.42	1,583.86	0.00	0.00	0.00
16,200.00	90.00	270.21	6,905.00	1,584.23	-8,998.42	1,584.23	0.00	0.00	0.00
16,300.00	90.00	270.21	6,905.00	1,584.60	-9,098.42	1,584.60	0.00	0.00	0.00
16,400.00	90.00	270.21	6,905.00	1,584.98	-9,198.42	1,584.98	0.00	0.00	0.00
16,500.00	90.00	270.21	6,905.00	1,585.35	-9,298.42	1,585.35	0.00	0.00	0.00
16,600.00	90.00	270.21	6,905.00	1,585.72	-9,398.42	1,585.72	0.00	0.00	0.00
16,700.00	90.00	270.21	6,905.00	1,586.09	-9,498.42	1,586.09	0.00	0.00	0.00
16,800.00	90.00	270.21	6,905.00	1,586.46	-9,598.42	1,586.46	0.00	0.00	0.00
16,900.00	90.00	270.21	6,905.00	1,586.83	-9,698.42	1,586.83	0.00	0.00	0.00
17,000.00	90.00	270.21	6,905.00	1,587.20	-9,798.41	1,587.20	0.00	0.00	0.00
17,100.00	90.00	270.21	6,905.00	1,587.57	-9,898.41	1,587.57	0.00	0.00	0.00
17,200.00	90.00	270.21	6,905.00	1,587.94	-9,998.41	1,587.94	0.00	0.00	0.00
17,300.00	90.00	270.21	6,905.00	1,588.31	-10,098.41	1,588.31	0.00	0.00	0.00
17,400.00	90.00	270.21	6,905.00	1,588.68	-10,198.41	1,588.68	0.00	0.00	0.00
17,500.00	90.00	270.21	6,905.00	1,589.06	-10,298.41	1,589.06	0.00	0.00	0.00
17,600.00	90.00	270.21	6,905.00	1,589.43	-10,398.41	1,589.43	0.00	0.00	0.00
17,700.00	90.00	270.21	6,905.00	1,589.80	-10,498.41	1,589.80	0.00	0.00	0.00
17,800.00	90.00	270.21	6,905.00	1,590.17	-10,598.41	1,590.17	0.00	0.00	0.00
17,900.00	90.00	270.21	6,905.00	1,590.54	-10,698.41	1,590.54	0.00	0.00	0.00
18,000.00	90.00	270.21	6,905.00	1,590.91	-10,798.41	1,590.91	0.00	0.00	0.00
18,100.00	90.00	270.21	6,905.00	1,591.28	-10,898.41	1,591.28	0.00	0.00	0.00
18,200.00	90.00	270.21	6,905.00	1,591.65	-10,998.41	1,591.65	0.00	0.00	0.00
18,300.00	90.00	270.21	6,905.00	1,592.02	-11,098.41	1,592.02	0.00	0.00	0.00
18,400.00	90.00	270.21	6,905.00	1,592.39	-11,198.41	1,592.39	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well GP-JACKSON FED 17W-25-8N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4703.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4703.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP-JACKSON FED 17W-25-8N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
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)
18,500.00	90.00	270.21	6,905.00	1,592.76	-11,298.40	1,592.76	0.00	0.00	0.00
18,600.00	90.00	270.21	6,905.00	1,593.14	-11,398.40	1,593.14	0.00	0.00	0.00
18,700.00	90.00	270.21	6,905.00	1,593.51	-11,498.40	1,593.51	0.00	0.00	0.00
18,800.00	90.00	270.21	6,905.00	1,593.88	-11,598.40	1,593.88	0.00	0.00	0.00
18,900.00	90.00	270.21	6,905.00	1,594.25	-11,698.40	1,594.25	0.00	0.00	0.00
19,000.00	90.00	270.21	6,905.00	1,594.62	-11,798.40	1,594.62	0.00	0.00	0.00
19,100.00	90.00	270.21	6,905.00	1,594.99	-11,898.40	1,594.99	0.00	0.00	0.00
19,200.00	90.00	270.21	6,905.00	1,595.36	-11,998.40	1,595.36	0.00	0.00	0.00
19,300.00	90.00	270.21	6,905.00	1,595.73	-12,098.40	1,595.73	0.00	0.00	0.00
19,400.00	90.00	270.21	6,905.00	1,596.10	-12,198.40	1,596.10	0.00	0.00	0.00
19,500.00	90.00	270.21	6,905.00	1,596.47	-12,298.40	1,596.47	0.00	0.00	0.00
19,600.00	90.00	270.21	6,905.00	1,596.84	-12,398.40	1,596.84	0.00	0.00	0.00
19,700.00	90.00	270.21	6,905.00	1,597.22	-12,498.40	1,597.22	0.00	0.00	0.00
19,800.00	90.00	270.21	6,905.00	1,597.59	-12,598.40	1,597.59	0.00	0.00	0.00
19,900.00	90.00	270.21	6,905.00	1,597.96	-12,698.40	1,597.96	0.00	0.00	0.00
20,000.00	90.00	270.21	6,905.00	1,598.33	-12,798.39	1,598.33	0.00	0.00	0.00
20,100.00	90.00	270.21	6,905.00	1,598.70	-12,898.39	1,598.70	0.00	0.00	0.00
20,200.00	90.00	270.21	6,905.00	1,599.07	-12,998.39	1,599.07	0.00	0.00	0.00
20,300.00	90.00	270.21	6,905.00	1,599.44	-13,098.39	1,599.44	0.00	0.00	0.00
20,400.00	90.00	270.21	6,905.00	1,599.81	-13,198.39	1,599.81	0.00	0.00	0.00
20,500.00	90.00	270.21	6,905.00	1,600.18	-13,298.39	1,600.18	0.00	0.00	0.00
20,600.00	90.00	270.21	6,905.00	1,600.55	-13,398.39	1,600.55	0.00	0.00	0.00
20,700.00	90.00	270.21	6,905.00	1,600.92	-13,498.39	1,600.92	0.00	0.00	0.00
20,800.00	90.00	270.21	6,905.00	1,601.30	-13,598.39	1,601.30	0.00	0.00	0.00
20,900.00	90.00	270.21	6,905.00	1,601.67	-13,698.39	1,601.67	0.00	0.00	0.00
21,000.00	90.00	270.21	6,905.00	1,602.04	-13,798.39	1,602.04	0.00	0.00	0.00
21,345.45	90.00	270.21	6,905.00	1,603.32	-14,143.84	1,603.32	0.00	0.00	0.00
TD at 21345.45									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
GP-JACKSON 17W-25-8N	0.00	0.00	6,905.00	1,551.91	-284.10	1,387,669.28	3,227,409.98	40° 23' 40.848 N	104° 41' 0.708 W
- plan hits target center									
- Point									
GP-JACKSON 17W-25-8N	0.00	0.00	6,905.00	1,603.32	-14,143.84	1,387,592.91	3,213,550.36	40° 23' 41.316 N	104° 43' 59.844 W
- plan hits target center									
- Point									

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well GP-JACKSON FED 17W-25-8N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 29' @ 4703.00usft
Project:	WELD COUNTY	MD Reference:	KB 29' @ 4703.00usft
Site:	Sec 20-T5N-R65W	North Reference:	True
Well:	GP-JACKSON FED 17W-25-8N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,757.60	3,686.00	PARKMAN				
4,538.67	4,425.00	SUSSEX				
5,077.71	4,935.00	SHANNON				
7,026.92	6,740.00	SHARON SPRINGS				
7,080.89	6,775.00	NIOBRARA				
7,375.52	6,895.00	NIO B TARGET				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,800.00	1,800.00	0.00	0.00	Start Build 2.00	
2,744.62	2,727.59	150.99	31.95	Start 3803.24 hold at 2744.62 MD	
6,547.86	6,325.95	1,355.77	286.89	Start DLS 10.00 TFO -101.12	
7,485.62	6,905.00	1,551.91	-284.10	Start 13859.83 hold at 7485.62 MD	
21,345.45	6,905.00	1,603.32	-14,143.84	TD at 21345.45	