

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

NE NE SEC. 20 T5N R65W 6th P.M.

GP-JACKSON 5-17-13

ORIGINAL WELLBORE

12 May, 2016

Plan: PROPOSAL #1





Project: WELD COUNTY, COLORADO (NAD 83)
Site: NE NE SEC. 20 T5N R65W 6th P.M.
Well: GP-JACKSON 5-17-13
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation
2000.0	2000.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
3216.0	3255.8	25.12	310.91	177.4	-204.7	223.3	270.9	EOB TO 25.12° INC
6523.0	6908.1	25.12	310.91	1192.7	-1376.2	1501.5	1821.1	KOP (10°/100ft DGLG)
6895.0	7621.0	90.00	270.00	1306.9	-1918.9	2053.6	2383.7	HZ LANDING PNT *NEW* - GP-JACKSON 5-17-13
6895.0	9121.0	90.00	270.00	1306.9	-3418.9	3544.1	3883.7	END OF TANGENT
6895.0	9481.0	90.00	259.20	1273.1	-3776.8	3895.9	4243.7	EOT TO 259.2° AZ
6895.0	9531.0	90.00	259.20	1263.7	-3825.9	3943.6	4293.7	END OF TANGENT
6895.0	9909.3	90.00	270.55	1230.0	-4202.0	4313.6	4672.0	EOT TO 270.55° AZ
6895.0	17203.2	90.00	270.55	1299.6	-11495.6	11568.8	11965.9	BHL - GP-JACKSON 5-17-13

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
HZ LANDING PNT *NEW* - GP-JACKSON 5-17-13	6895.0	1306.9	-1918.9	40.393937	-104.689399
BHL - GP-JACKSON 5-17-13	6895.0	1299.6	-11495.6	40.393910	-104.723780

FORMATION TOP DETAILS

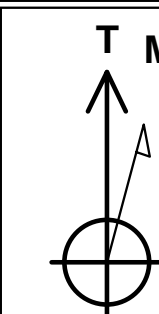
TVDPath	MDPath	Formation
3686.0	3774.9	PARKMAN
4425.0	4591.1	SUSSEX
4935.0	5154.3	SHANNON
6740.0	7179.1	SHARON SPRINGS
6775.0	7234.5	NIOBRARA

PROPOSED LOCAL COORDINATES

SHL: 550ft FNL & 1305ft FEL of Sec 20

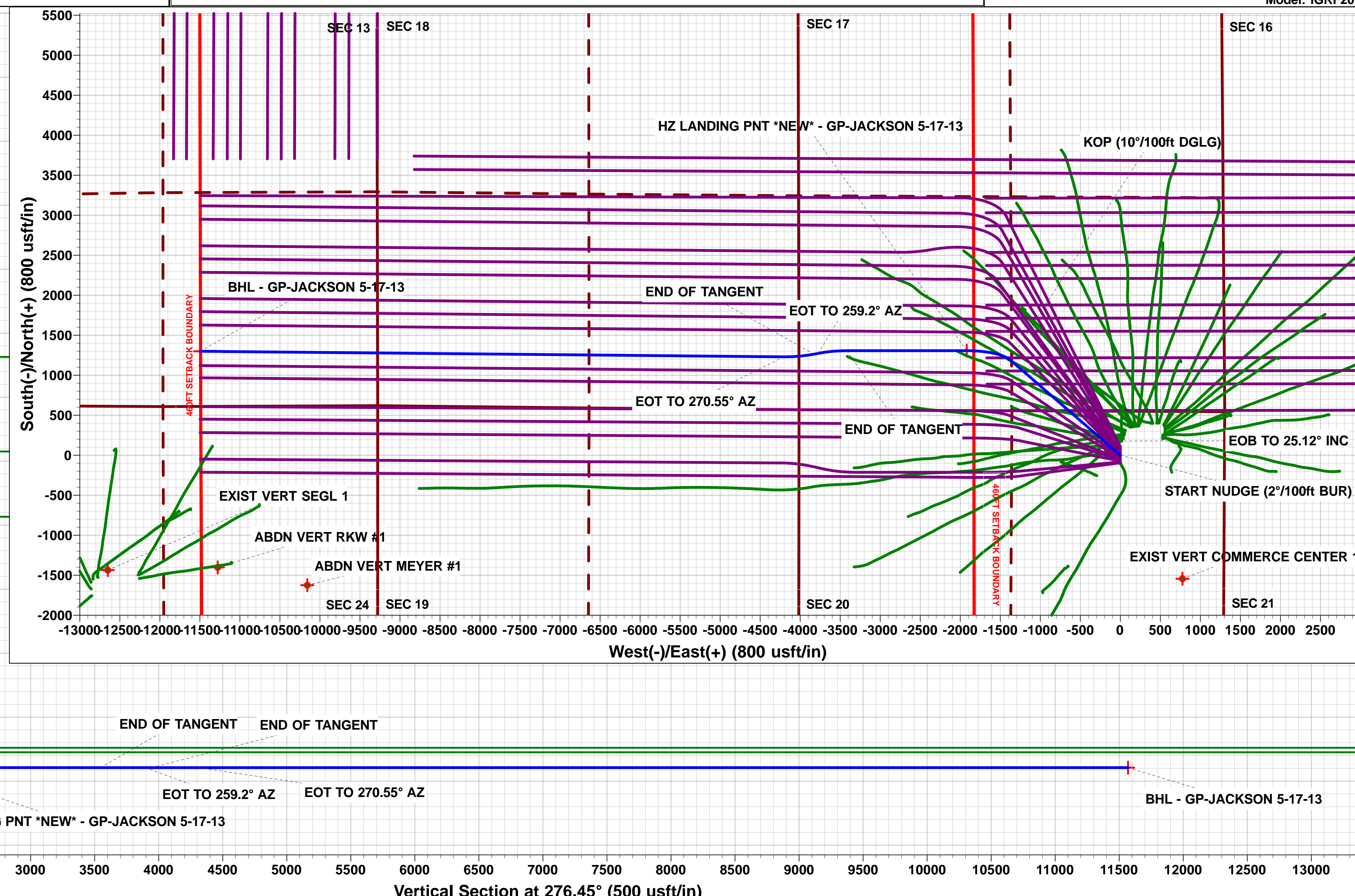
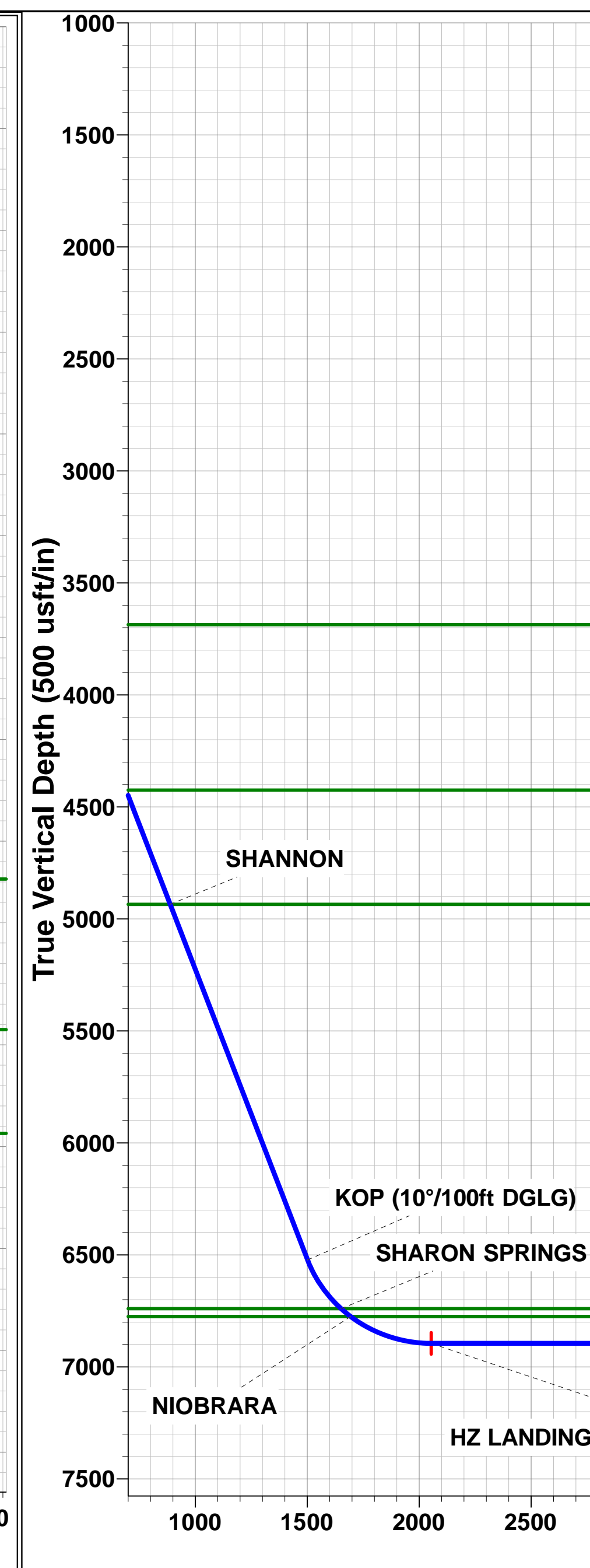
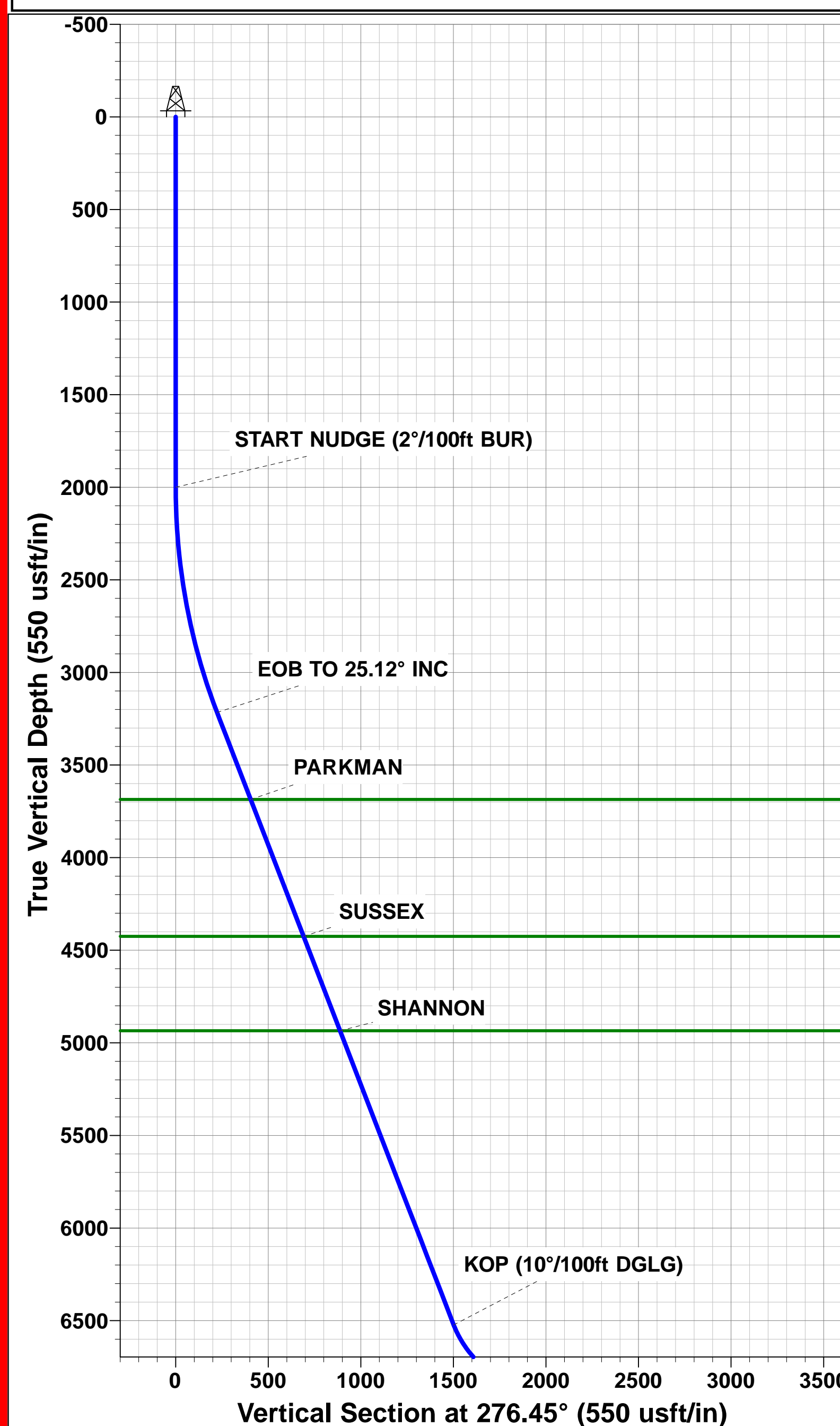
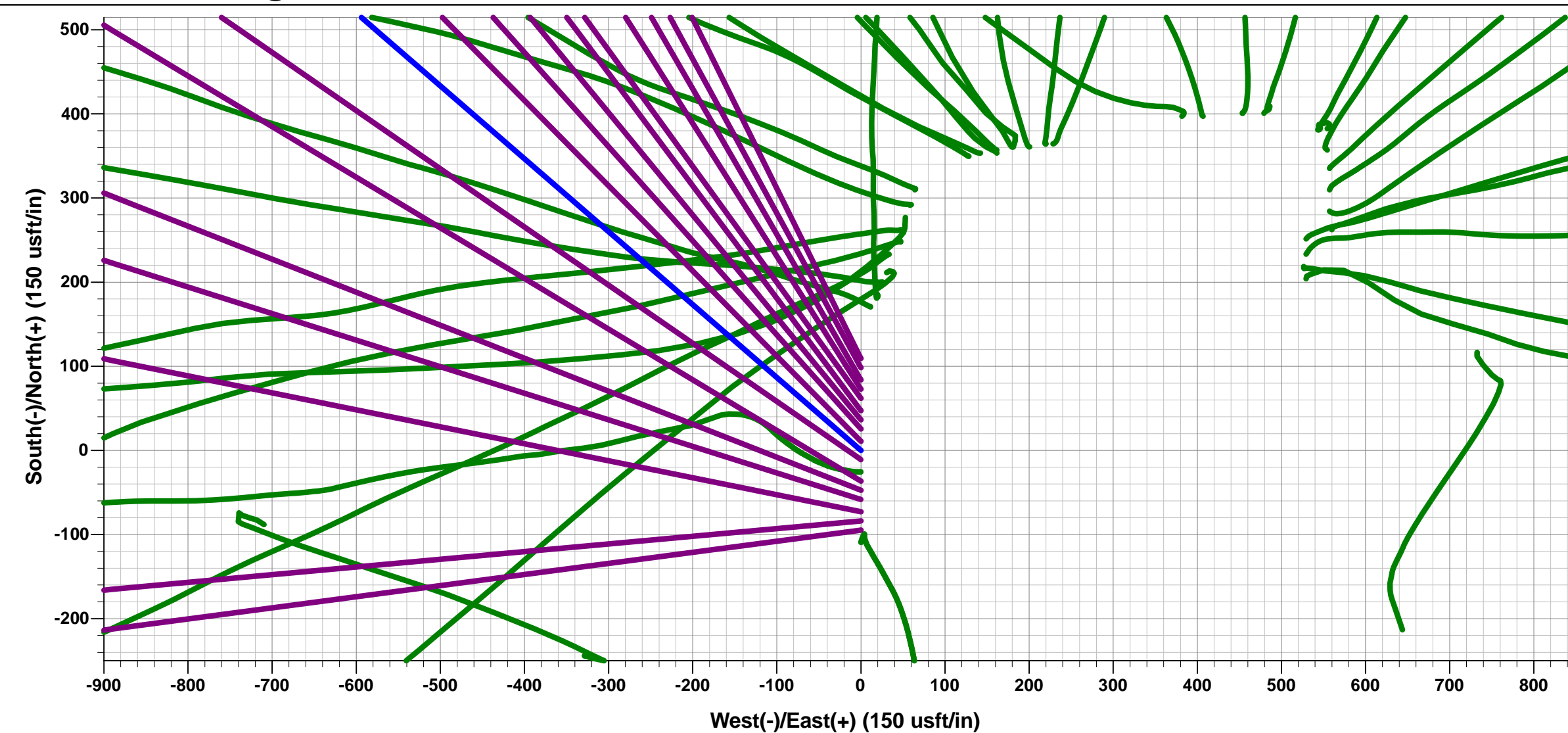
LP *NEW*: 749ft FSL & 2095ft FWL of Sec 17

BHL: 690ft FSL & 2221ft FEL of Sec 13



Azimuths to True North
Magnetic North: 8.28°

Magnetic Field
Strength: 52522.4snT
Dip Angle: 66.89°
Date: 12/05/2016
Model: IGRF2015



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GP-JACKSON 5-17-13
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4689.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4689.0usft (Original Well Elev)
Site:	NE NE SEC. 20 T5N R65W 6th P.M.	North Reference:	True
Well:	GP-JACKSON 5-17-13	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Project	WELD COUNTY, COLORADO (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	NE NE SEC. 20 T5N R65W 6th P.M.		
Site Position:		Northing:	1,386,203.84 usft
From:	Lat/Long	Easting:	3,227,707.61 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.390650
		Longitude:	-104.682510
		Grid Convergence:	0.53 °

Well	GP-JACKSON 5-17-13		
Well Position	+N/-S	-109.3 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty		0.0 usft	Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/05/2016	8.28	66.89	52,522

Design	PROPOSAL #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	6,895.0	0.0	0.0	276.45

Plan Sections											
MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100usf)	Turn Rate (°/100usf)	TFO (°)	Target
0.0	0.00	0.00	0.0	-4,689.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	-2,689.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,255.8	25.12	310.91	3,216.0	-1,473.0	177.4	-204.7	2.00	2.00	0.00	310.91	
6,908.1	25.12	310.91	6,523.0	1,834.0	1,192.7	-1,376.2	0.00	0.00	0.00	0.00	
7,621.0	90.00	270.00	6,895.0	2,206.0	1,306.9	-1,918.9	10.00	9.10	-5.74	-43.75	HZ LANDING PNT
9,121.0	90.00	270.00	6,895.0	2,206.0	1,306.9	-3,418.9	0.00	0.00	0.00	0.00	
9,481.0	90.00	259.20	6,895.0	2,206.0	1,273.1	-3,776.8	3.00	0.00	-3.00	270.00	
9,531.0	90.00	259.20	6,895.0	2,206.0	1,263.7	-3,825.9	0.00	0.00	0.00	0.00	
9,909.3	90.00	270.55	6,895.0	2,206.0	1,230.0	-4,202.0	3.00	0.00	3.00	90.00	
17,203.2	90.00	270.55	6,895.0	2,206.0	1,299.6	-11,495.6	0.00	0.00	0.00	0.00	BHL - GP-JACKSO

Planning Report



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Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4689.0usft (Original Well Elev)
Site:	NE NE SEC. 20 T5N R65W 6th P.M.	North Reference:	True
Well:	GP-JACKSON 5-17-13	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	4,689.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,589.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,489.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,389.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,289.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,189.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,089.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,989.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	3,889.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,789.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,689.00	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,589.00	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,489.00	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,389.00	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,289.00	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	3,189.00	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	3,089.00	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	2,989.00	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	2,889.00	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	2,789.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
2,000.0	0.00	0.00	2,000.0	2,689.00	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	2.00	310.91	2,100.0	2,589.02	1.1	-1.3	1.4	2.00	2.00	0.00
2,200.0	4.00	310.91	2,199.8	2,489.16	4.6	-5.3	5.8	2.00	2.00	0.00
2,300.0	6.00	310.91	2,299.5	2,389.55	10.3	-11.9	12.9	2.00	2.00	0.00
2,400.0	8.00	310.91	2,398.7	2,290.30	18.3	-21.1	23.0	2.00	2.00	0.00
2,500.0	10.00	310.91	2,497.5	2,191.53	28.5	-32.9	35.9	2.00	2.00	0.00
2,600.0	12.00	310.91	2,595.6	2,093.38	41.0	-47.3	51.6	2.00	2.00	0.00
2,700.0	14.00	310.91	2,693.1	1,995.94	55.7	-64.3	70.2	2.00	2.00	0.00
2,800.0	16.00	310.91	2,789.6	1,899.36	72.7	-83.9	91.5	2.00	2.00	0.00
2,900.0	18.00	310.91	2,885.3	1,803.73	91.8	-106.0	115.6	2.00	2.00	0.00
3,000.0	20.00	310.91	2,979.8	1,709.18	113.1	-130.6	142.4	2.00	2.00	0.00
3,100.0	22.00	310.91	3,073.2	1,615.83	136.6	-157.6	172.0	2.00	2.00	0.00
3,200.0	24.00	310.91	3,165.2	1,523.79	162.2	-187.2	204.2	2.00	2.00	0.00
EOB TO 25.12° INC										
3,255.8	25.12	310.91	3,216.0	1,473.03	177.4	-204.7	223.3	2.00	2.00	0.00
3,300.0	25.12	310.91	3,256.0	1,433.01	189.7	-218.9	238.8	0.00	0.00	0.00
3,400.0	25.12	310.91	3,346.5	1,342.47	217.5	-250.9	273.8	0.00	0.00	0.00
3,500.0	25.12	310.91	3,437.1	1,251.92	245.3	-283.0	308.8	0.00	0.00	0.00
3,600.0	25.12	310.91	3,527.6	1,161.38	273.1	-315.1	343.8	0.00	0.00	0.00
3,700.0	25.12	310.91	3,618.2	1,070.83	300.9	-347.2	378.8	0.00	0.00	0.00
PARKMAN										
3,774.9	25.12	310.91	3,686.0	1,003.00	321.7	-371.2	405.0	0.00	0.00	0.00
3,800.0	25.12	310.91	3,708.7	980.29	328.7	-379.3	413.8	0.00	0.00	0.00
3,900.0	25.12	310.91	3,799.3	889.74	356.5	-411.3	448.8	0.00	0.00	0.00
4,000.0	25.12	310.91	3,889.8	799.20	384.3	-443.4	483.8	0.00	0.00	0.00
4,100.0	25.12	310.91	3,980.3	708.65	412.1	-475.5	518.8	0.00	0.00	0.00
4,200.0	25.12	310.91	4,070.9	618.11	439.9	-507.6	553.8	0.00	0.00	0.00
4,300.0	25.12	310.91	4,161.4	527.56	467.7	-539.6	588.8	0.00	0.00	0.00
4,400.0	25.12	310.91	4,252.0	437.02	495.5	-571.7	623.7	0.00	0.00	0.00
4,500.0	25.12	310.91	4,342.5	346.47	523.3	-603.8	658.7	0.00	0.00	0.00
SUSSEX										
4,591.1	25.12	310.91	4,425.0	264.00	548.6	-633.0	690.6	0.00	0.00	0.00
4,600.0	25.12	310.91	4,433.1	255.93	551.1	-635.9	693.7	0.00	0.00	0.00

Planning Report



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Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4689.0usft (Original Well Elev)
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Site:	NE NE SEC. 20 T5N R65W 6th P.M.	North Reference:	True
Well:	GP-JACKSON 5-17-13	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,700.0	25.12	310.91	4,523.6	165.38	578.9	-667.9	728.7	0.00	0.00	0.00
4,800.0	25.12	310.91	4,614.2	74.84	606.7	-700.0	763.7	0.00	0.00	0.00
4,900.0	25.12	310.91	4,704.7	-15.71	634.5	-732.1	798.7	0.00	0.00	0.00
5,000.0	25.12	310.91	4,795.3	-106.25	662.3	-764.2	833.7	0.00	0.00	0.00
5,100.0	25.12	310.91	4,885.8	-196.80	690.1	-796.2	868.7	0.00	0.00	0.00
SHANNON										
5,154.3	25.12	310.91	4,935.0	-246.00	705.2	-813.7	887.7	0.00	0.00	0.00
5,200.0	25.12	310.91	4,976.3	-287.34	717.8	-828.3	903.7	0.00	0.00	0.00
5,300.0	25.12	310.91	5,066.9	-377.88	745.6	-860.4	938.7	0.00	0.00	0.00
5,400.0	25.12	310.91	5,157.4	-468.43	773.4	-892.5	973.7	0.00	0.00	0.00
5,500.0	25.12	310.91	5,248.0	-558.97	801.2	-924.5	1,008.7	0.00	0.00	0.00
5,600.0	25.12	310.91	5,338.5	-649.52	829.0	-956.6	1,043.7	0.00	0.00	0.00
5,700.0	25.12	310.91	5,429.1	-740.06	856.8	-988.7	1,078.7	0.00	0.00	0.00
5,800.0	25.12	310.91	5,519.6	-830.61	884.6	-1,020.8	1,113.7	0.00	0.00	0.00
5,900.0	25.12	310.91	5,610.2	-921.15	912.4	-1,052.8	1,148.7	0.00	0.00	0.00
6,000.0	25.12	310.91	5,700.7	-1,011.70	940.2	-1,084.9	1,183.7	0.00	0.00	0.00
6,100.0	25.12	310.91	5,791.2	-1,102.24	968.0	-1,117.0	1,218.7	0.00	0.00	0.00
6,200.0	25.12	310.91	5,881.8	-1,192.79	995.8	-1,149.1	1,253.7	0.00	0.00	0.00
6,300.0	25.12	310.91	5,972.3	-1,283.33	1,023.6	-1,181.2	1,288.7	0.00	0.00	0.00
6,400.0	25.12	310.91	6,062.9	-1,373.88	1,051.4	-1,213.2	1,323.7	0.00	0.00	0.00
6,500.0	25.12	310.91	6,153.4	-1,464.42	1,079.2	-1,245.3	1,358.7	0.00	0.00	0.00
6,600.0	25.12	310.91	6,244.0	-1,554.97	1,107.0	-1,277.4	1,393.7	0.00	0.00	0.00
6,700.0	25.12	310.91	6,334.5	-1,645.51	1,134.8	-1,309.5	1,428.7	0.00	0.00	0.00
6,800.0	25.12	310.91	6,425.1	-1,736.06	1,162.6	-1,341.5	1,463.6	0.00	0.00	0.00
6,900.0	25.12	310.91	6,515.6	-1,826.60	1,190.4	-1,373.6	1,498.6	0.00	0.00	0.00
KOP (10°/100ft DGLG)										
6,908.1	25.12	310.91	6,523.0	-1,833.96	1,192.7	-1,376.2	1,501.5	0.00	0.00	0.00
7,000.0	32.34	299.00	6,603.5	-1,914.54	1,217.4	-1,412.5	1,540.3	10.00	7.86	-12.96
7,100.0	41.03	290.66	6,683.7	-1,994.70	1,242.0	-1,466.8	1,597.0	10.00	8.69	-8.34
SHARON SPRINGS										
7,179.1	48.21	285.92	6,740.0	-2,051.00	1,259.3	-1,519.5	1,651.4	10.00	9.08	-5.98
7,200.0	50.14	284.85	6,753.6	-2,064.65	1,263.5	-1,534.7	1,667.0	10.00	9.22	-5.13
NIOBRARA										
7,234.5	53.34	283.21	6,775.0	-2,086.00	1,270.1	-1,561.0	1,693.8	10.00	9.27	-4.76
7,300.0	59.47	280.43	6,811.2	-2,122.24	1,281.2	-1,614.4	1,748.1	10.00	9.36	-4.24
7,400.0	68.92	276.80	6,854.7	-2,165.74	1,294.5	-1,703.3	1,837.9	10.00	9.45	-3.64
7,500.0	78.44	273.60	6,882.8	-2,193.82	1,303.2	-1,798.8	1,933.8	10.00	9.52	-3.20
7,600.0	87.99	270.62	6,894.6	-2,205.63	1,306.8	-1,897.9	2,032.7	10.00	9.55	-2.98
HZ LANDING PNT *NEW* - GP-JACKSON 5-17-13										
7,621.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-1,918.9	2,053.6	10.00	9.56	-2.94
7,700.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-1,997.9	2,132.0	0.00	0.00	0.00
7,800.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-2,097.9	2,231.4	0.00	0.00	0.00
7,900.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-2,197.9	2,330.8	0.00	0.00	0.00
8,000.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-2,297.9	2,430.1	0.00	0.00	0.00
8,100.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-2,397.9	2,529.5	0.00	0.00	0.00
8,200.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-2,497.9	2,628.9	0.00	0.00	0.00
8,300.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-2,597.9	2,728.2	0.00	0.00	0.00
8,400.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-2,697.9	2,827.6	0.00	0.00	0.00
8,500.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-2,797.9	2,927.0	0.00	0.00	0.00
8,600.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-2,897.9	3,026.3	0.00	0.00	0.00
8,700.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-2,997.9	3,125.7	0.00	0.00	0.00
8,800.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-3,097.9	3,225.1	0.00	0.00	0.00
8,900.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-3,197.9	3,324.4	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GP-JACKSON 5-17-13
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4689.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4689.0usft (Original Well Elev)
Site:	NE NE SEC. 20 T5N R65W 6th P.M.	North Reference:	True
Well:	GP-JACKSON 5-17-13	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,000.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-3,297.9	3,423.8	0.00	0.00	0.00
9,100.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-3,397.9	3,523.2	0.00	0.00	0.00
END OF TANGENT										
9,121.0	90.00	270.00	6,895.0	-2,206.00	1,306.9	-3,418.9	3,544.1	0.00	0.00	0.00
9,200.0	90.00	267.63	6,895.0	-2,206.00	1,305.3	-3,497.8	3,622.3	3.00	0.00	-3.00
9,300.0	90.00	264.63	6,895.0	-2,206.00	1,298.5	-3,597.6	3,720.7	3.00	0.00	-3.00
9,400.0	90.00	261.63	6,895.0	-2,206.00	1,286.6	-3,696.9	3,818.0	3.00	0.00	-3.00
EOT TO 259.2° AZ										
9,481.0	90.00	259.20	6,895.0	-2,206.00	1,273.1	-3,776.8	3,895.9	3.00	0.00	-3.00
9,500.0	90.00	259.20	6,895.0	-2,206.00	1,269.5	-3,795.4	3,914.0	0.00	0.00	0.00
END OF TANGENT										
9,531.0	90.00	259.20	6,895.0	-2,206.00	1,263.7	-3,825.9	3,943.6	0.00	0.00	0.00
9,600.0	90.00	261.27	6,895.0	-2,206.00	1,252.0	-3,893.8	4,009.8	3.00	0.00	3.00
9,700.0	90.00	264.27	6,895.0	-2,206.00	1,239.4	-3,993.0	4,107.0	3.00	0.00	3.00
9,800.0	90.00	267.27	6,895.0	-2,206.00	1,232.0	-4,092.8	4,205.3	3.00	0.00	3.00
9,900.0	90.00	270.27	6,895.0	-2,206.00	1,229.9	-4,192.7	4,304.3	3.00	0.00	3.00
EOT TO 270.55° AZ										
9,909.3	90.00	270.55	6,895.0	-2,206.00	1,230.0	-4,202.0	4,313.6	3.00	0.00	3.00
10,000.0	90.00	270.55	6,895.0	-2,206.00	1,230.8	-4,292.7	4,403.8	0.00	0.00	0.00
10,100.0	90.00	270.55	6,895.0	-2,206.00	1,231.8	-4,392.7	4,503.3	0.00	0.00	0.00
10,200.0	90.00	270.55	6,895.0	-2,206.00	1,232.7	-4,492.7	4,602.8	0.00	0.00	0.00
10,300.0	90.00	270.55	6,895.0	-2,206.00	1,233.7	-4,592.7	4,702.2	0.00	0.00	0.00
10,400.0	90.00	270.55	6,895.0	-2,206.00	1,234.6	-4,692.7	4,801.7	0.00	0.00	0.00
10,500.0	90.00	270.55	6,895.0	-2,206.00	1,235.6	-4,792.7	4,901.2	0.00	0.00	0.00
10,600.0	90.00	270.55	6,895.0	-2,206.00	1,236.6	-4,892.7	5,000.6	0.00	0.00	0.00
10,700.0	90.00	270.55	6,895.0	-2,206.00	1,237.5	-4,992.7	5,100.1	0.00	0.00	0.00
10,800.0	90.00	270.55	6,895.0	-2,206.00	1,238.5	-5,092.7	5,199.6	0.00	0.00	0.00
10,900.0	90.00	270.55	6,895.0	-2,206.00	1,239.4	-5,192.7	5,299.0	0.00	0.00	0.00
11,000.0	90.00	270.55	6,895.0	-2,206.00	1,240.4	-5,292.7	5,398.5	0.00	0.00	0.00
11,100.0	90.00	270.55	6,895.0	-2,206.00	1,241.3	-5,392.7	5,498.0	0.00	0.00	0.00
11,200.0	90.00	270.55	6,895.0	-2,206.00	1,242.3	-5,492.7	5,597.4	0.00	0.00	0.00
11,300.0	90.00	270.55	6,895.0	-2,206.00	1,243.2	-5,592.7	5,696.9	0.00	0.00	0.00
11,400.0	90.00	270.55	6,895.0	-2,206.00	1,244.2	-5,692.7	5,796.4	0.00	0.00	0.00
11,500.0	90.00	270.55	6,895.0	-2,206.00	1,245.2	-5,792.6	5,895.9	0.00	0.00	0.00
11,600.0	90.00	270.55	6,895.0	-2,206.00	1,246.1	-5,892.6	5,995.3	0.00	0.00	0.00
11,700.0	90.00	270.55	6,895.0	-2,206.00	1,247.1	-5,992.6	6,094.8	0.00	0.00	0.00
11,800.0	90.00	270.55	6,895.0	-2,206.00	1,248.0	-6,092.6	6,194.3	0.00	0.00	0.00
11,900.0	90.00	270.55	6,895.0	-2,206.00	1,249.0	-6,192.6	6,293.7	0.00	0.00	0.00
12,000.0	90.00	270.55	6,895.0	-2,206.00	1,249.9	-6,292.6	6,393.2	0.00	0.00	0.00
12,100.0	90.00	270.55	6,895.0	-2,206.00	1,250.9	-6,392.6	6,492.7	0.00	0.00	0.00
12,200.0	90.00	270.55	6,895.0	-2,206.00	1,251.8	-6,492.6	6,592.1	0.00	0.00	0.00
12,300.0	90.00	270.55	6,895.0	-2,206.00	1,252.8	-6,592.6	6,691.6	0.00	0.00	0.00
12,400.0	90.00	270.55	6,895.0	-2,206.00	1,253.8	-6,692.6	6,791.1	0.00	0.00	0.00
12,500.0	90.00	270.55	6,895.0	-2,206.00	1,254.7	-6,792.6	6,890.6	0.00	0.00	0.00
12,600.0	90.00	270.55	6,895.0	-2,206.00	1,255.7	-6,892.6	6,990.0	0.00	0.00	0.00
12,700.0	90.00	270.55	6,895.0	-2,206.00	1,256.6	-6,992.6	7,089.5	0.00	0.00	0.00
12,800.0	90.00	270.55	6,895.0	-2,206.00	1,257.6	-7,092.6	7,189.0	0.00	0.00	0.00
12,900.0	90.00	270.55	6,895.0	-2,206.00	1,258.5	-7,192.6	7,288.4	0.00	0.00	0.00
13,000.0	90.00	270.55	6,895.0	-2,206.00	1,259.5	-7,292.6	7,387.9	0.00	0.00	0.00
13,100.0	90.00	270.55	6,895.0	-2,206.00	1,260.4	-7,392.6	7,487.4	0.00	0.00	0.00
13,200.0	90.00	270.55	6,895.0	-2,206.00	1,261.4	-7,492.6	7,586.8	0.00	0.00	0.00
13,300.0	90.00	270.55	6,895.0	-2,206.00	1,262.3	-7,592.6	7,686.3	0.00	0.00	0.00
13,400.0	90.00	270.55	6,895.0	-2,206.00	1,263.3	-7,692.6	7,785.8	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GP-JACKSON 5-17-13
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4689.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4689.0usft (Original Well Elev)
Site:	NE NE SEC. 20 T5N R65W 6th P.M.	North Reference:	True
Well:	GP-JACKSON 5-17-13	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,500.0	90.00	270.55	6,895.0	-2,206.00	1,264.3	-7,792.6	7,885.3	0.00	0.00	0.00
13,600.0	90.00	270.55	6,895.0	-2,206.00	1,265.2	-7,892.6	7,984.7	0.00	0.00	0.00
13,700.0	90.00	270.55	6,895.0	-2,206.00	1,266.2	-7,992.5	8,084.2	0.00	0.00	0.00
13,800.0	90.00	270.55	6,895.0	-2,206.00	1,267.1	-8,092.5	8,183.7	0.00	0.00	0.00
13,900.0	90.00	270.55	6,895.0	-2,206.00	1,268.1	-8,192.5	8,283.1	0.00	0.00	0.00
14,000.0	90.00	270.55	6,895.0	-2,206.00	1,269.0	-8,292.5	8,382.6	0.00	0.00	0.00
14,100.0	90.00	270.55	6,895.0	-2,206.00	1,270.0	-8,392.5	8,482.1	0.00	0.00	0.00
14,200.0	90.00	270.55	6,895.0	-2,206.00	1,270.9	-8,492.5	8,581.5	0.00	0.00	0.00
14,300.0	90.00	270.55	6,895.0	-2,206.00	1,271.9	-8,592.5	8,681.0	0.00	0.00	0.00
14,400.0	90.00	270.55	6,895.0	-2,206.00	1,272.9	-8,692.5	8,780.5	0.00	0.00	0.00
14,500.0	90.00	270.55	6,895.0	-2,206.00	1,273.8	-8,792.5	8,880.0	0.00	0.00	0.00
14,600.0	90.00	270.55	6,895.0	-2,206.00	1,274.8	-8,892.5	8,979.4	0.00	0.00	0.00
14,700.0	90.00	270.55	6,895.0	-2,206.00	1,275.7	-8,992.5	9,078.9	0.00	0.00	0.00
14,800.0	90.00	270.55	6,895.0	-2,206.00	1,276.7	-9,092.5	9,178.4	0.00	0.00	0.00
14,900.0	90.00	270.55	6,895.0	-2,206.00	1,277.6	-9,192.5	9,277.8	0.00	0.00	0.00
15,000.0	90.00	270.55	6,895.0	-2,206.00	1,278.6	-9,292.5	9,377.3	0.00	0.00	0.00
15,100.0	90.00	270.55	6,895.0	-2,206.00	1,279.5	-9,392.5	9,476.8	0.00	0.00	0.00
15,200.0	90.00	270.55	6,895.0	-2,206.00	1,280.5	-9,492.5	9,576.2	0.00	0.00	0.00
15,300.0	90.00	270.55	6,895.0	-2,206.00	1,281.5	-9,592.5	9,675.7	0.00	0.00	0.00
15,400.0	90.00	270.55	6,895.0	-2,206.00	1,282.4	-9,692.5	9,775.2	0.00	0.00	0.00
15,500.0	90.00	270.55	6,895.0	-2,206.00	1,283.4	-9,792.5	9,874.6	0.00	0.00	0.00
15,600.0	90.00	270.55	6,895.0	-2,206.00	1,284.3	-9,892.5	9,974.1	0.00	0.00	0.00
15,700.0	90.00	270.55	6,895.0	-2,206.00	1,285.3	-9,992.5	10,073.6	0.00	0.00	0.00
15,800.0	90.00	270.55	6,895.0	-2,206.00	1,286.2	-10,092.5	10,173.1	0.00	0.00	0.00
15,900.0	90.00	270.55	6,895.0	-2,206.00	1,287.2	-10,192.4	10,272.5	0.00	0.00	0.00
16,000.0	90.00	270.55	6,895.0	-2,206.00	1,288.1	-10,292.4	10,372.0	0.00	0.00	0.00
16,100.0	90.00	270.55	6,895.0	-2,206.00	1,289.1	-10,392.4	10,471.5	0.00	0.00	0.00
16,200.0	90.00	270.55	6,895.0	-2,206.00	1,290.0	-10,492.4	10,570.9	0.00	0.00	0.00
16,300.0	90.00	270.55	6,895.0	-2,206.00	1,291.0	-10,592.4	10,670.4	0.00	0.00	0.00
16,400.0	90.00	270.55	6,895.0	-2,206.00	1,292.0	-10,692.4	10,769.9	0.00	0.00	0.00
16,500.0	90.00	270.55	6,895.0	-2,206.00	1,292.9	-10,792.4	10,869.3	0.00	0.00	0.00
16,600.0	90.00	270.55	6,895.0	-2,206.00	1,293.9	-10,892.4	10,968.8	0.00	0.00	0.00
16,700.0	90.00	270.55	6,895.0	-2,206.00	1,294.8	-10,992.4	11,068.3	0.00	0.00	0.00
16,800.0	90.00	270.55	6,895.0	-2,206.00	1,295.8	-11,092.4	11,167.8	0.00	0.00	0.00
16,900.0	90.00	270.55	6,895.0	-2,206.00	1,296.7	-11,192.4	11,267.2	0.00	0.00	0.00
17,000.0	90.00	270.55	6,895.0	-2,206.00	1,297.7	-11,292.4	11,366.7	0.00	0.00	0.00
17,100.0	90.00	270.55	6,895.0	-2,206.00	1,298.6	-11,392.4	11,466.2	0.00	0.00	0.00
17,200.0	90.00	270.55	6,895.0	-2,206.00	1,299.6	-11,492.4	11,565.6	0.00	0.00	0.00
BHL - GP-JACKSON 5-17-13										
17,203.2	90.00	270.55	6,895.0	-2,206.00	1,299.6	-11,495.6	11,568.8	0.00	0.00	0.00

Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,774.9	3,686.0	PARKMAN			
4,591.1	4,425.0	SUSSEX			
5,154.3	4,935.0	SHANNON			
7,179.1	6,740.0	SHARON SPRINGS			
7,234.5	6,775.0	NIOBRARA			

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GP-JACKSON 5-17-13
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4689.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4689.0usft (Original Well Elev)
Site:	NE NE SEC. 20 T5N R65W 6th P.M.	North Reference:	True
Well:	GP-JACKSON 5-17-13	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,000.0	2,000.0	0.0	0.0	START NUDGE (2°/100ft BUR)
3,255.8	3,216.0	177.4	-204.7	EOB TO 25.12° INC
6,908.1	6,523.0	1,192.7	-1,376.2	KOP (10°/100ft DGLG)
7,621.0	6,895.0	1,306.9	-1,918.9	HZ LANDING PNT *NEW* - GP-JACKSON 5-17-13
9,121.0	6,895.0	1,306.9	-3,418.9	END OF TANGENT
9,481.0	6,895.0	1,273.1	-3,776.8	EOT TO 259.2° AZ
9,531.0	6,895.0	1,263.7	-3,825.9	END OF TANGENT
9,909.3	6,895.0	1,230.0	-4,202.0	EOT TO 270.55° AZ
17,203.2	6,895.0	1,299.6	-11,495.6	BHL - GP-JACKSON 5-17-13