

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

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

GP-JACKSON 2-17-13

ORIGINAL WELLBORE

12 May, 2016

Plan: PROPOSAL #1

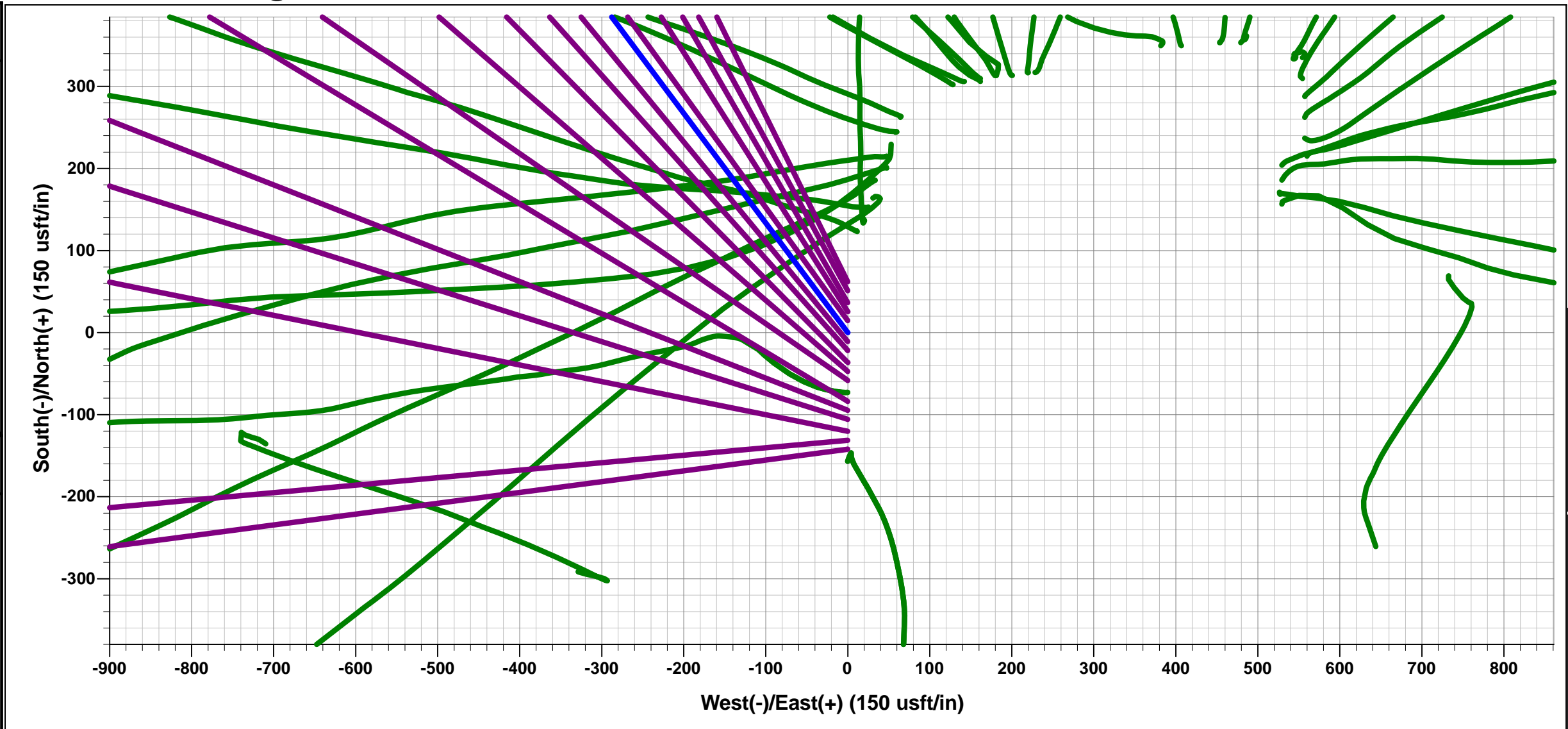




Project: WELD COUNTY, COLORADO (NAD 83)
Site: NE NE SEC. 20 T5N R65W 6th P.M.
Well: GP-JACKSON 2-17-13
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation	
1550.0	1550.0	0.00	0.00	0.0	0.0	0.0	0.0	SURFACE NUDGE (2°/100ft BUR)	
1600.0	1600.0	1.00	323.19	0.3	-0.3	0.3	0.4	9 5/8" SURFACE CASING	
1700.0	1700.0	1.00	323.19	1.7	-1.3	1.6	2.2	MAIN NUDGE (2°/100ft BUR)	
3128.6	3203.6	31.07	323.19	330.5	-247.3	306.0	412.8	EOB TO 31.07° INC	
6540.0	7186.6	31.07	323.19	1976.3	-1479.1	1829.7	2468.5	KOP (10°/100ft DGLG)	
6895.0	7904.1	90.00	270.53	2151.4	-2021.6	2395.7	3054.4	HZ LANDING PNT *NEW*: GP-JACKSON 2-17-13	
6895.0	17378.1	90.00	270.53	2239.6	-11495.2	11711.3	12528.4	BHL - GP-JACKSON 2-17-13	

WELLBORE TARGET DETAILS (LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	
HZ LANDING PNT *NEW* - GP-JACKSON 2-17-13	6895.0	2151.4	-2021.6	40.396385	-104.689768	
BHL - GP-JACKSON 2-17-13	6895.0	2239.6	-11495.2	40.396620	-104.723780	



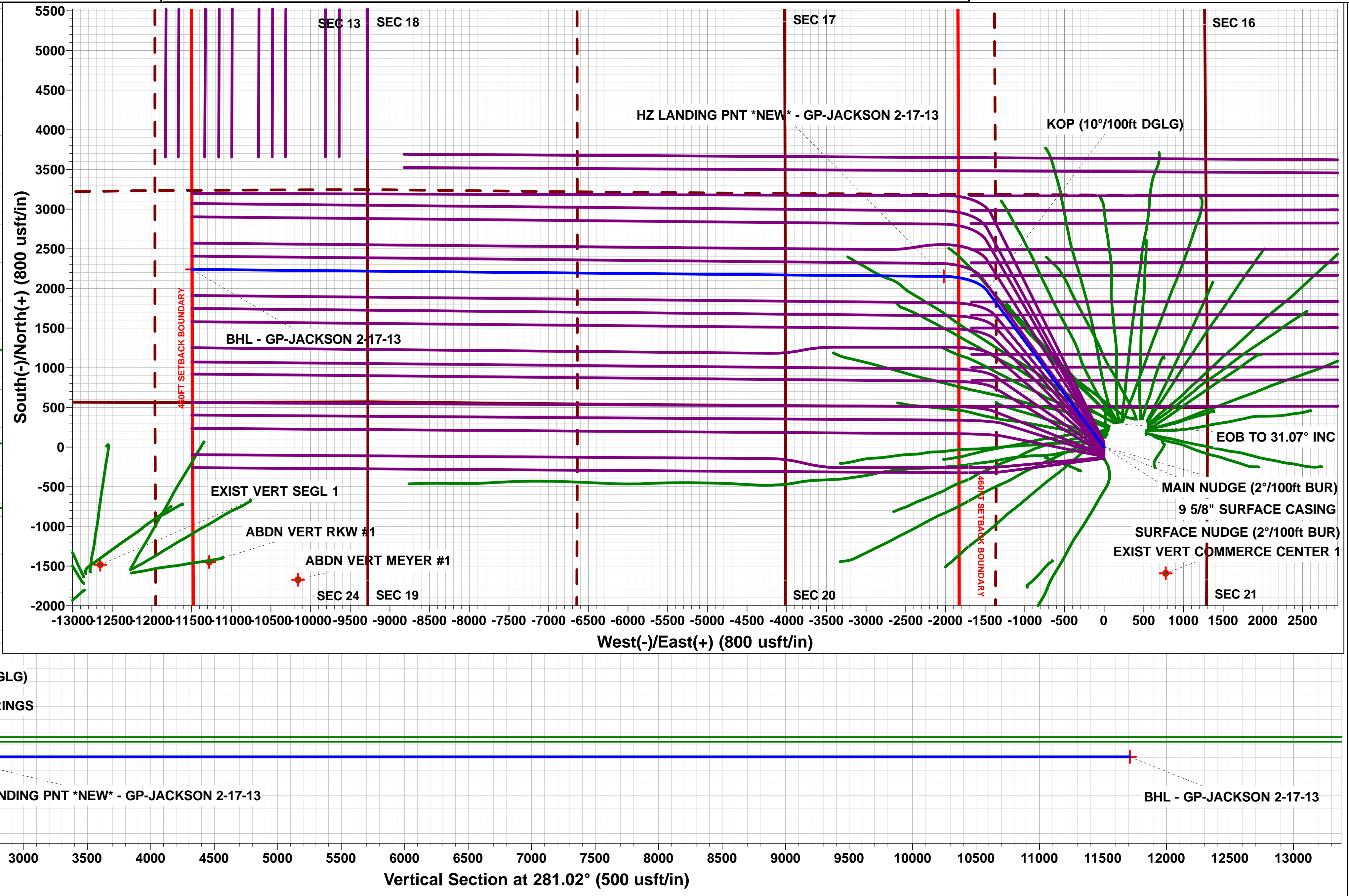
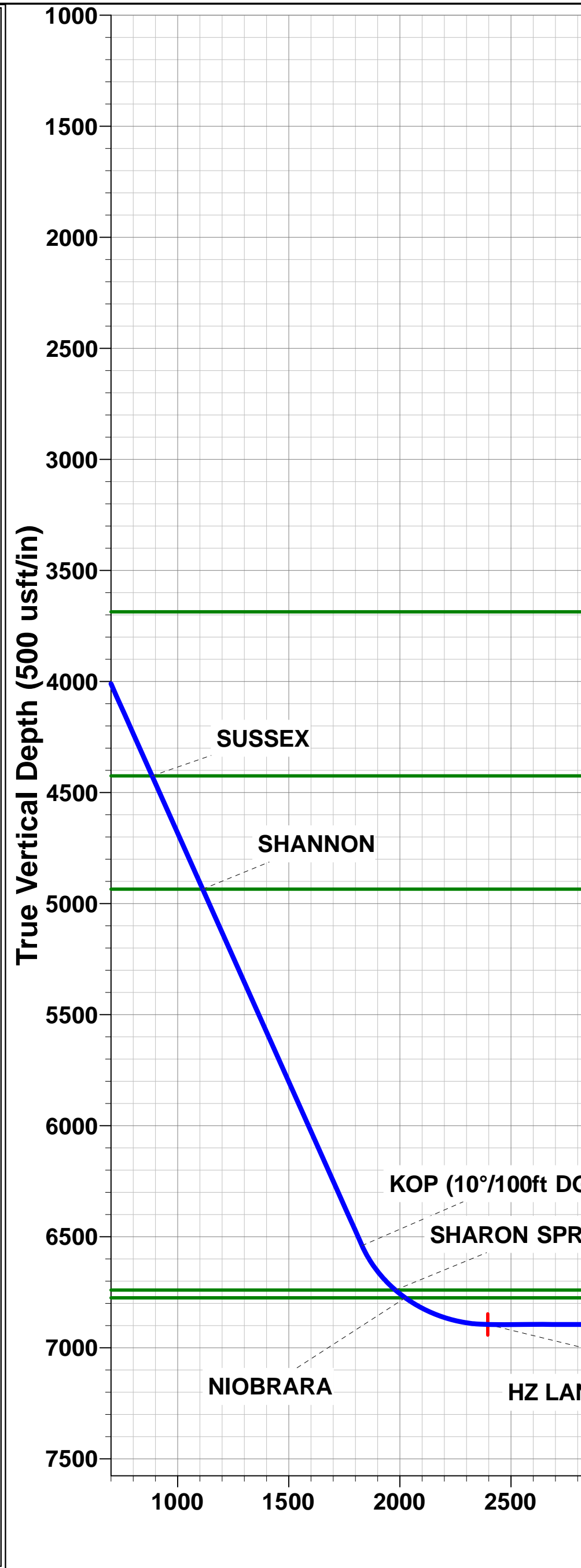
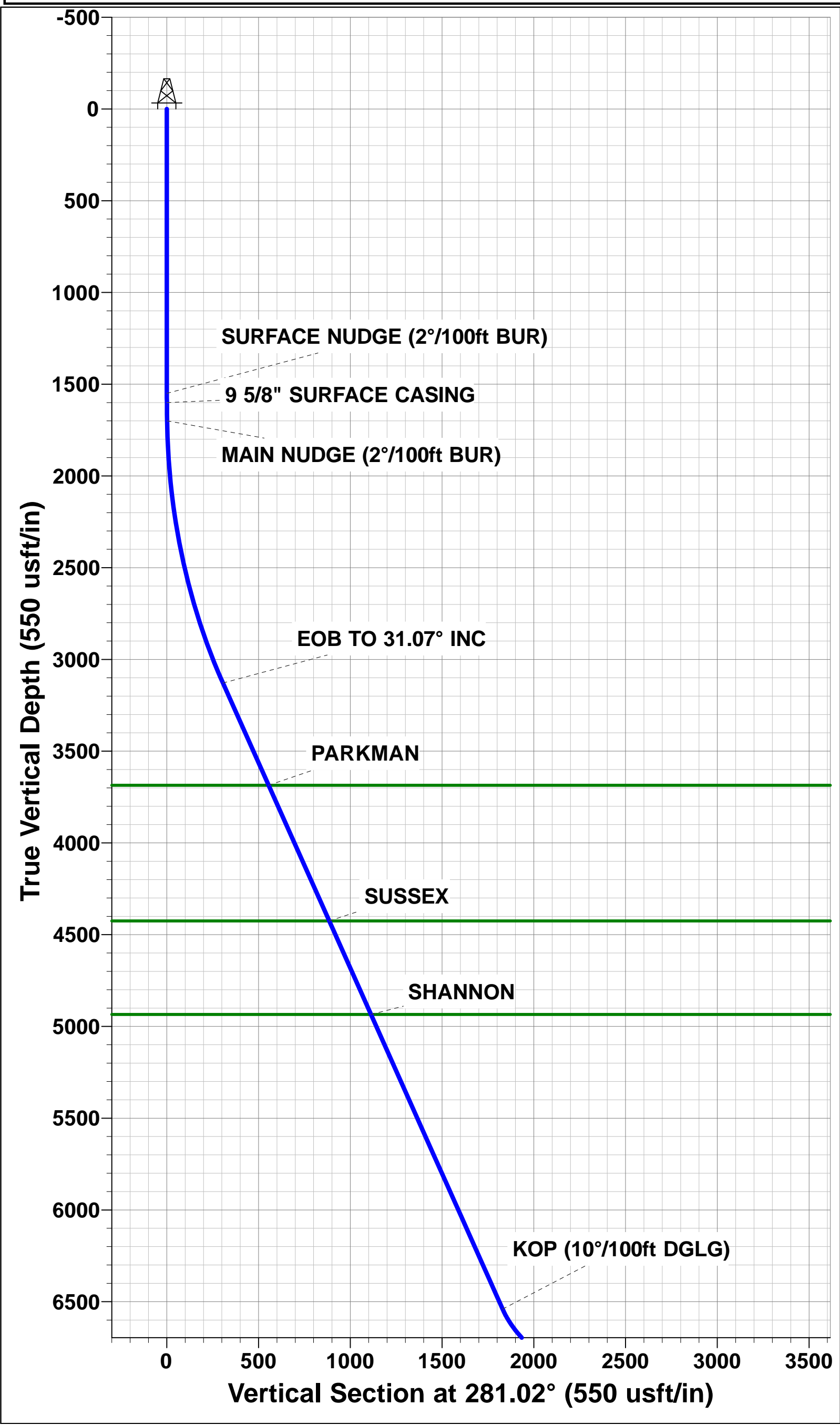
FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3686.0	3854.4	PARKMAN
4425.0	4717.2	SUSSEX
4935.0	5312.7	SHANNON
6740.0	7448.4	SHARON SPRINGS
6775.0	7505.7	NIOBRARA

PROPOSED LOCAL COORDINATES	
SHL: 501ft FNL & 1305ft FEL of Sec 20	
LP *NEW*: 1639ft FSL & 1991ft FWL of Sec 17	
BHL: 1680ft FSL & 2218ft FEL of Sec 13	

T
M

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 2-17-13
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4690.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4690.0usft (Original Well Elev)
Site:	NE NE SEC. 20 T5N R65W 6th P.M.	North Reference:	True
Well:	GP-JACKSON 2-17-13	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	Latitude:	40.390650
From:	Lat/Long	Easting:	3,227,707.61 usft	Longitude:	-104.682510
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft	Grid Convergence:	0.53 °

Well	GP-JACKSON 2-17-13					
Well Position	+N/-S	-61.9 usft	Northing:	1,386,141.90 usft	Latitude:	40.390480
	+E/-W	0.0 usft	Easting:	3,227,708.18 usft	Longitude:	-104.682510
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	4,674.0 usft

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	281.02

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	-4,690.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,550.0	0.00	0.00	1,550.0	-3,140.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,600.0	1.00	323.19	1,600.0	-3,090.0	0.3	-0.3	2.00	2.00	0.00	323.19	
1,700.0	1.00	323.19	1,700.0	-2,990.0	1.7	-1.3	0.00	0.00	0.00	0.00	
3,203.6	31.07	323.19	3,128.6	-1,561.4	330.5	-247.3	2.00	2.00	0.00	0.00	
7,186.6	31.07	323.19	6,540.0	1,850.0	1,976.3	-1,479.1	0.00	0.00	0.00	0.00	
7,904.1	90.00	270.53	6,895.0	2,205.0	2,151.4	-2,021.6	10.00	8.21	-7.34	-56.83	HZ LANDING PNT
17,378.1	90.00	270.53	6,895.0	2,205.0	2,239.6	-11,495.2	0.00	0.00	0.00	0.00	BHL - GP-JACKSO

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Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4690.0usft (Original Well Elev)
Site:	NE NE SEC. 20 T5N R65W 6th P.M.	North Reference:	True
Well:	GP-JACKSON 2-17-13	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	4,690.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,590.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,490.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,390.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,290.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,190.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,090.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,990.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	3,890.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,790.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,690.00	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,590.00	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,490.00	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,390.00	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,290.00	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	3,190.00	0.0	0.0	0.0	0.00	0.00	0.00
SURFACE NUDGE (2°/100ft BUR)										
1,550.0	0.00	0.00	1,550.0	3,140.00	0.0	0.0	0.0	0.00	0.00	0.00
9 5/8" SURFACE CASING										
1,600.0	1.00	323.19	1,600.0	3,090.00	0.3	-0.3	0.3	2.00	2.00	0.00
MAIN NUDGE (2°/100ft BUR)										
1,700.0	1.00	323.19	1,700.0	2,990.02	1.7	-1.3	1.6	0.00	0.00	0.00
1,800.0	3.00	323.19	1,799.9	2,890.08	4.5	-3.4	4.2	2.00	2.00	0.00
1,900.0	5.00	323.19	1,899.7	2,790.33	10.1	-7.6	9.4	2.00	2.00	0.00
2,000.0	7.00	323.19	1,999.1	2,690.89	18.5	-13.8	17.1	2.00	2.00	0.00
2,100.0	9.00	323.19	2,098.1	2,591.86	29.6	-22.2	27.4	2.00	2.00	0.00
2,200.0	11.00	323.19	2,196.6	2,493.39	43.5	-32.6	40.3	2.00	2.00	0.00
2,300.0	13.00	323.19	2,294.4	2,395.58	60.2	-45.0	55.7	2.00	2.00	0.00
2,400.0	15.00	323.19	2,391.4	2,298.55	79.5	-59.5	73.6	2.00	2.00	0.00
2,500.0	17.00	323.19	2,487.6	2,202.43	101.6	-76.0	94.1	2.00	2.00	0.00
2,600.0	19.00	323.19	2,582.7	2,107.33	126.4	-94.6	117.0	2.00	2.00	0.00
2,700.0	21.00	323.19	2,676.6	2,013.37	153.7	-115.1	142.3	2.00	2.00	0.00
2,800.0	23.00	323.19	2,769.3	1,920.65	183.7	-137.5	170.1	2.00	2.00	0.00
2,900.0	25.00	323.19	2,860.7	1,829.30	216.3	-161.9	200.2	2.00	2.00	0.00
3,000.0	27.00	323.19	2,950.6	1,739.43	251.4	-188.1	232.7	2.00	2.00	0.00
3,100.0	29.00	323.19	3,038.9	1,651.14	289.0	-216.3	267.5	2.00	2.00	0.00
3,200.0	31.00	323.19	3,125.5	1,564.54	329.0	-246.2	304.6	2.00	2.00	0.00
EOB TO 31.07° INC										
3,203.6	31.07	323.19	3,128.6	1,561.45	330.5	-247.3	306.0	2.00	2.00	0.00
3,300.0	31.07	323.19	3,211.1	1,478.89	370.3	-277.1	342.8	0.00	0.00	0.00
3,400.0	31.07	323.19	3,296.8	1,393.24	411.6	-308.1	381.1	0.00	0.00	0.00
3,500.0	31.07	323.19	3,382.4	1,307.58	453.0	-339.0	419.4	0.00	0.00	0.00
3,600.0	31.07	323.19	3,468.1	1,221.93	494.3	-369.9	457.6	0.00	0.00	0.00
3,700.0	31.07	323.19	3,553.7	1,136.28	535.6	-400.8	495.9	0.00	0.00	0.00
3,800.0	31.07	323.19	3,639.4	1,050.63	576.9	-431.8	534.1	0.00	0.00	0.00
PARKMAN										
3,854.4	31.07	323.19	3,686.0	1,004.00	599.4	-448.6	554.9	0.00	0.00	0.00
3,900.0	31.07	323.19	3,725.0	964.98	618.2	-462.7	572.4	0.00	0.00	0.00
4,000.0	31.07	323.19	3,810.7	879.32	659.6	-493.6	610.6	0.00	0.00	0.00
4,100.0	31.07	323.19	3,896.3	793.67	700.9	-524.5	648.9	0.00	0.00	0.00
4,200.0	31.07	323.19	3,982.0	708.02	742.2	-555.5	687.1	0.00	0.00	0.00
4,300.0	31.07	323.19	4,067.6	622.37	783.5	-586.4	725.4	0.00	0.00	0.00
4,400.0	31.07	323.19	4,153.3	536.72	824.9	-617.3	763.7	0.00	0.00	0.00
4,500.0	31.07	323.19	4,238.9	451.07	866.2	-648.2	801.9	0.00	0.00	0.00

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Well:	GP-JACKSON 2-17-13	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)
4,600.0	31.07	323.19	4,324.6	365.41	907.5	-679.2	840.2	0.00	0.00	0.00
4,700.0	31.07	323.19	4,410.2	279.76	948.8	-710.1	878.4	0.00	0.00	0.00
SUSSEX										
4,717.2	31.07	323.19	4,425.0	265.00	955.9	-715.4	885.0	0.00	0.00	0.00
4,800.0	31.07	323.19	4,495.9	194.11	990.1	-741.0	916.7	0.00	0.00	0.00
4,900.0	31.07	323.19	4,581.5	108.46	1,031.5	-771.9	954.9	0.00	0.00	0.00
5,000.0	31.07	323.19	4,667.2	22.81	1,072.8	-802.9	993.2	0.00	0.00	0.00
5,100.0	31.07	323.19	4,752.8	-62.85	1,114.1	-833.8	1,031.4	0.00	0.00	0.00
5,200.0	31.07	323.19	4,838.5	-148.50	1,155.4	-864.7	1,069.7	0.00	0.00	0.00
5,300.0	31.07	323.19	4,924.1	-234.15	1,196.7	-895.6	1,108.0	0.00	0.00	0.00
SHANNON										
5,312.7	31.07	323.19	4,935.0	-245.00	1,202.0	-899.6	1,112.8	0.00	0.00	0.00
5,400.0	31.07	323.19	5,009.8	-319.80	1,238.1	-926.6	1,146.2	0.00	0.00	0.00
5,500.0	31.07	323.19	5,095.5	-405.45	1,279.4	-957.5	1,184.5	0.00	0.00	0.00
5,600.0	31.07	323.19	5,181.1	-491.10	1,320.7	-988.4	1,222.7	0.00	0.00	0.00
5,700.0	31.07	323.19	5,266.8	-576.76	1,362.0	-1,019.3	1,261.0	0.00	0.00	0.00
5,800.0	31.07	323.19	5,352.4	-662.41	1,403.3	-1,050.3	1,299.2	0.00	0.00	0.00
5,900.0	31.07	323.19	5,438.1	-748.06	1,444.7	-1,081.2	1,337.5	0.00	0.00	0.00
6,000.0	31.07	323.19	5,523.7	-833.71	1,486.0	-1,112.1	1,375.7	0.00	0.00	0.00
6,100.0	31.07	323.19	5,609.4	-919.36	1,527.3	-1,143.0	1,414.0	0.00	0.00	0.00
6,200.0	31.07	323.19	5,695.0	-1,005.02	1,568.6	-1,174.0	1,452.3	0.00	0.00	0.00
6,300.0	31.07	323.19	5,780.7	-1,090.67	1,610.0	-1,204.9	1,490.5	0.00	0.00	0.00
6,400.0	31.07	323.19	5,866.3	-1,176.32	1,651.3	-1,235.8	1,528.8	0.00	0.00	0.00
6,500.0	31.07	323.19	5,952.0	-1,261.97	1,692.6	-1,266.7	1,567.0	0.00	0.00	0.00
6,600.0	31.07	323.19	6,037.6	-1,347.62	1,733.9	-1,297.7	1,605.3	0.00	0.00	0.00
6,700.0	31.07	323.19	6,123.3	-1,433.27	1,775.2	-1,328.6	1,643.5	0.00	0.00	0.00
6,800.0	31.07	323.19	6,208.9	-1,518.93	1,816.6	-1,359.5	1,681.8	0.00	0.00	0.00
6,900.0	31.07	323.19	6,294.6	-1,604.58	1,857.9	-1,390.4	1,720.0	0.00	0.00	0.00
7,000.0	31.07	323.19	6,380.2	-1,690.23	1,899.2	-1,421.3	1,758.3	0.00	0.00	0.00
7,100.0	31.07	323.19	6,465.9	-1,775.88	1,940.5	-1,452.3	1,796.6	0.00	0.00	0.00
KOP (10°/100ft DGLG)										
7,186.6	31.07	323.19	6,540.0	-1,850.05	1,976.3	-1,479.1	1,829.7	0.00	0.00	0.00
7,200.0	31.82	321.06	6,551.5	-1,861.49	1,981.8	-1,483.3	1,835.0	10.00	5.60	-15.88
7,300.0	38.35	307.80	6,633.4	-1,943.39	2,021.4	-1,524.5	1,883.0	10.00	6.52	-13.26
7,400.0	45.97	298.12	6,707.5	-2,017.55	2,057.5	-1,580.9	1,945.2	10.00	7.62	-9.68
SHARON SPRINGS										
7,448.4	49.91	294.32	6,740.0	-2,050.00	2,073.3	-1,613.2	1,979.9	10.00	8.13	-7.85
7,500.0	54.22	290.73	6,771.7	-2,081.70	2,088.9	-1,650.7	2,019.7	10.00	8.36	-6.96
NIOBRARA										
7,505.7	54.70	290.36	6,775.0	-2,085.00	2,090.5	-1,655.0	2,024.3	10.00	8.47	-6.53
7,600.0	62.83	284.76	6,823.9	-2,133.89	2,114.6	-1,731.9	2,104.3	10.00	8.62	-5.93
7,700.0	71.66	279.67	6,862.5	-2,172.55	2,134.0	-1,821.9	2,196.4	10.00	8.83	-5.10
7,800.0	80.62	275.07	6,886.5	-2,196.49	2,146.4	-1,918.1	2,293.1	10.00	8.95	-4.59
7,900.0	89.63	270.71	6,895.0	-2,204.99	2,151.4	-2,017.5	2,391.6	10.00	9.01	-4.36
HZ LANDING PNT *NEW*: GP-JACKSON 2-17-13										
7,904.1	90.00	270.53	6,895.0	-2,205.00	2,151.4	-2,021.6	2,395.7	10.00	9.02	-4.32
8,000.0	90.00	270.53	6,895.0	-2,205.00	2,152.3	-2,117.5	2,490.0	0.00	0.00	0.00
8,100.0	90.00	270.53	6,895.0	-2,205.00	2,153.2	-2,217.4	2,588.3	0.00	0.00	0.00
8,200.0	90.00	270.53	6,895.0	-2,205.00	2,154.2	-2,317.4	2,686.6	0.00	0.00	0.00
8,300.0	90.00	270.53	6,895.0	-2,205.00	2,155.1	-2,417.4	2,784.9	0.00	0.00	0.00
8,400.0	90.00	270.53	6,895.0	-2,205.00	2,156.0	-2,517.4	2,883.3	0.00	0.00	0.00
8,500.0	90.00	270.53	6,895.0	-2,205.00	2,156.9	-2,617.4	2,981.6	0.00	0.00	0.00
8,600.0	90.00	270.53	6,895.0	-2,205.00	2,157.9	-2,717.4	3,079.9	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GP-JACKSON 2-17-13
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4690.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4690.0usft (Original Well Elev)
Site:	NE NE SEC. 20 T5N R65W 6th P.M.	North Reference:	True
Well:	GP-JACKSON 2-17-13	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)
8,700.0	90.00	270.53	6,895.0	-2,205.00	2,158.8	-2,817.4	3,178.3	0.00	0.00	0.00
8,800.0	90.00	270.53	6,895.0	-2,205.00	2,159.7	-2,917.4	3,276.6	0.00	0.00	0.00
8,900.0	90.00	270.53	6,895.0	-2,205.00	2,160.7	-3,017.4	3,374.9	0.00	0.00	0.00
9,000.0	90.00	270.53	6,895.0	-2,205.00	2,161.6	-3,117.4	3,473.2	0.00	0.00	0.00
9,100.0	90.00	270.53	6,895.0	-2,205.00	2,162.5	-3,217.4	3,571.6	0.00	0.00	0.00
9,200.0	90.00	270.53	6,895.0	-2,205.00	2,163.5	-3,317.4	3,669.9	0.00	0.00	0.00
9,300.0	90.00	270.53	6,895.0	-2,205.00	2,164.4	-3,417.4	3,768.2	0.00	0.00	0.00
9,400.0	90.00	270.53	6,895.0	-2,205.00	2,165.3	-3,517.4	3,866.6	0.00	0.00	0.00
9,500.0	90.00	270.53	6,895.0	-2,205.00	2,166.2	-3,617.4	3,964.9	0.00	0.00	0.00
9,600.0	90.00	270.53	6,895.0	-2,205.00	2,167.2	-3,717.4	4,063.2	0.00	0.00	0.00
9,700.0	90.00	270.53	6,895.0	-2,205.00	2,168.1	-3,817.4	4,161.5	0.00	0.00	0.00
9,800.0	90.00	270.53	6,895.0	-2,205.00	2,169.0	-3,917.4	4,259.9	0.00	0.00	0.00
9,900.0	90.00	270.53	6,895.0	-2,205.00	2,170.0	-4,017.4	4,358.2	0.00	0.00	0.00
10,000.0	90.00	270.53	6,895.0	-2,205.00	2,170.9	-4,117.4	4,456.5	0.00	0.00	0.00
10,100.0	90.00	270.53	6,895.0	-2,205.00	2,171.8	-4,217.4	4,554.9	0.00	0.00	0.00
10,200.0	90.00	270.53	6,895.0	-2,205.00	2,172.8	-4,317.4	4,653.2	0.00	0.00	0.00
10,300.0	90.00	270.53	6,895.0	-2,205.00	2,173.7	-4,417.4	4,751.5	0.00	0.00	0.00
10,400.0	90.00	270.53	6,895.0	-2,205.00	2,174.6	-4,517.3	4,849.8	0.00	0.00	0.00
10,500.0	90.00	270.53	6,895.0	-2,205.00	2,175.6	-4,617.3	4,948.2	0.00	0.00	0.00
10,600.0	90.00	270.53	6,895.0	-2,205.00	2,176.5	-4,717.3	5,046.5	0.00	0.00	0.00
10,700.0	90.00	270.53	6,895.0	-2,205.00	2,177.4	-4,817.3	5,144.8	0.00	0.00	0.00
10,800.0	90.00	270.53	6,895.0	-2,205.00	2,178.3	-4,917.3	5,243.1	0.00	0.00	0.00
10,900.0	90.00	270.53	6,895.0	-2,205.00	2,179.3	-5,017.3	5,341.5	0.00	0.00	0.00
11,000.0	90.00	270.53	6,895.0	-2,205.00	2,180.2	-5,117.3	5,439.8	0.00	0.00	0.00
11,100.0	90.00	270.53	6,895.0	-2,205.00	2,181.1	-5,217.3	5,538.1	0.00	0.00	0.00
11,200.0	90.00	270.53	6,895.0	-2,205.00	2,182.1	-5,317.3	5,636.5	0.00	0.00	0.00
11,300.0	90.00	270.53	6,895.0	-2,205.00	2,183.0	-5,417.3	5,734.8	0.00	0.00	0.00
11,400.0	90.00	270.53	6,895.0	-2,205.00	2,183.9	-5,517.3	5,833.1	0.00	0.00	0.00
11,500.0	90.00	270.53	6,895.0	-2,205.00	2,184.9	-5,617.3	5,931.4	0.00	0.00	0.00
11,600.0	90.00	270.53	6,895.0	-2,205.00	2,185.8	-5,717.3	6,029.8	0.00	0.00	0.00
11,700.0	90.00	270.53	6,895.0	-2,205.00	2,186.7	-5,817.3	6,128.1	0.00	0.00	0.00
11,800.0	90.00	270.53	6,895.0	-2,205.00	2,187.6	-5,917.3	6,226.4	0.00	0.00	0.00
11,900.0	90.00	270.53	6,895.0	-2,205.00	2,188.6	-6,017.3	6,324.8	0.00	0.00	0.00
12,000.0	90.00	270.53	6,895.0	-2,205.00	2,189.5	-6,117.3	6,423.1	0.00	0.00	0.00
12,100.0	90.00	270.53	6,895.0	-2,205.00	2,190.4	-6,217.3	6,521.4	0.00	0.00	0.00
12,200.0	90.00	270.53	6,895.0	-2,205.00	2,191.4	-6,317.3	6,619.7	0.00	0.00	0.00
12,300.0	90.00	270.53	6,895.0	-2,205.00	2,192.3	-6,417.3	6,718.1	0.00	0.00	0.00
12,400.0	90.00	270.53	6,895.0	-2,205.00	2,193.2	-6,517.3	6,816.4	0.00	0.00	0.00
12,500.0	90.00	270.53	6,895.0	-2,205.00	2,194.2	-6,617.3	6,914.7	0.00	0.00	0.00
12,600.0	90.00	270.53	6,895.0	-2,205.00	2,195.1	-6,717.3	7,013.1	0.00	0.00	0.00
12,700.0	90.00	270.53	6,895.0	-2,205.00	2,196.0	-6,817.2	7,111.4	0.00	0.00	0.00
12,800.0	90.00	270.53	6,895.0	-2,205.00	2,197.0	-6,917.2	7,209.7	0.00	0.00	0.00
12,900.0	90.00	270.53	6,895.0	-2,205.00	2,197.9	-7,017.2	7,308.0	0.00	0.00	0.00
13,000.0	90.00	270.53	6,895.0	-2,205.00	2,198.8	-7,117.2	7,406.4	0.00	0.00	0.00
13,100.0	90.00	270.53	6,895.0	-2,205.00	2,199.7	-7,217.2	7,504.7	0.00	0.00	0.00
13,200.0	90.00	270.53	6,895.0	-2,205.00	2,200.7	-7,317.2	7,603.0	0.00	0.00	0.00
13,300.0	90.00	270.53	6,895.0	-2,205.00	2,201.6	-7,417.2	7,701.4	0.00	0.00	0.00
13,400.0	90.00	270.53	6,895.0	-2,205.00	2,202.5	-7,517.2	7,799.7	0.00	0.00	0.00
13,500.0	90.00	270.53	6,895.0	-2,205.00	2,203.5	-7,617.2	7,898.0	0.00	0.00	0.00
13,600.0	90.00	270.53	6,895.0	-2,205.00	2,204.4	-7,717.2	7,996.3	0.00	0.00	0.00
13,700.0	90.00	270.53	6,895.0	-2,205.00	2,205.3	-7,817.2	8,094.7	0.00	0.00	0.00
13,800.0	90.00	270.53	6,895.0	-2,205.00	2,206.3	-7,917.2	8,193.0	0.00	0.00	0.00
13,900.0	90.00	270.53	6,895.0	-2,205.00	2,207.2	-8,017.2	8,291.3	0.00	0.00	0.00
14,000.0	90.00	270.53	6,895.0	-2,205.00	2,208.1	-8,117.2	8,389.7	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GP-JACKSON 2-17-13
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4690.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4690.0usft (Original Well Elev)
Site:	NE NE SEC. 20 T5N R65W 6th P.M.	North Reference:	True
Well:	GP-JACKSON 2-17-13	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)
14,100.0	90.00	270.53	6,895.0	-2,205.00	2,209.1	-8,217.2	8,488.0	0.00	0.00	0.00
14,200.0	90.00	270.53	6,895.0	-2,205.00	2,210.0	-8,317.2	8,586.3	0.00	0.00	0.00
14,300.0	90.00	270.53	6,895.0	-2,205.00	2,210.9	-8,417.2	8,684.6	0.00	0.00	0.00
14,400.0	90.00	270.53	6,895.0	-2,205.00	2,211.8	-8,517.2	8,783.0	0.00	0.00	0.00
14,500.0	90.00	270.53	6,895.0	-2,205.00	2,212.8	-8,617.2	8,881.3	0.00	0.00	0.00
14,600.0	90.00	270.53	6,895.0	-2,205.00	2,213.7	-8,717.2	8,979.6	0.00	0.00	0.00
14,700.0	90.00	270.53	6,895.0	-2,205.00	2,214.6	-8,817.2	9,077.9	0.00	0.00	0.00
14,800.0	90.00	270.53	6,895.0	-2,205.00	2,215.6	-8,917.2	9,176.3	0.00	0.00	0.00
14,900.0	90.00	270.53	6,895.0	-2,205.00	2,216.5	-9,017.2	9,274.6	0.00	0.00	0.00
15,000.0	90.00	270.53	6,895.0	-2,205.00	2,217.4	-9,117.1	9,372.9	0.00	0.00	0.00
15,100.0	90.00	270.53	6,895.0	-2,205.00	2,218.4	-9,217.1	9,471.3	0.00	0.00	0.00
15,200.0	90.00	270.53	6,895.0	-2,205.00	2,219.3	-9,317.1	9,569.6	0.00	0.00	0.00
15,300.0	90.00	270.53	6,895.0	-2,205.00	2,220.2	-9,417.1	9,667.9	0.00	0.00	0.00
15,400.0	90.00	270.53	6,895.0	-2,205.00	2,221.1	-9,517.1	9,766.2	0.00	0.00	0.00
15,500.0	90.00	270.53	6,895.0	-2,205.00	2,222.1	-9,617.1	9,864.6	0.00	0.00	0.00
15,600.0	90.00	270.53	6,895.0	-2,205.00	2,223.0	-9,717.1	9,962.9	0.00	0.00	0.00
15,700.0	90.00	270.53	6,895.0	-2,205.00	2,223.9	-9,817.1	10,061.2	0.00	0.00	0.00
15,800.0	90.00	270.53	6,895.0	-2,205.00	2,224.9	-9,917.1	10,159.6	0.00	0.00	0.00
15,900.0	90.00	270.53	6,895.0	-2,205.00	2,225.8	-10,017.1	10,257.9	0.00	0.00	0.00
16,000.0	90.00	270.53	6,895.0	-2,205.00	2,226.7	-10,117.1	10,356.2	0.00	0.00	0.00
16,100.0	90.00	270.53	6,895.0	-2,205.00	2,227.7	-10,217.1	10,454.5	0.00	0.00	0.00
16,200.0	90.00	270.53	6,895.0	-2,205.00	2,228.6	-10,317.1	10,552.9	0.00	0.00	0.00
16,300.0	90.00	270.53	6,895.0	-2,205.00	2,229.5	-10,417.1	10,651.2	0.00	0.00	0.00
16,400.0	90.00	270.53	6,895.0	-2,205.00	2,230.5	-10,517.1	10,749.5	0.00	0.00	0.00
16,500.0	90.00	270.53	6,895.0	-2,205.00	2,231.4	-10,617.1	10,847.9	0.00	0.00	0.00
16,600.0	90.00	270.53	6,895.0	-2,205.00	2,232.3	-10,717.1	10,946.2	0.00	0.00	0.00
16,700.0	90.00	270.53	6,895.0	-2,205.00	2,233.2	-10,817.1	11,044.5	0.00	0.00	0.00
16,800.0	90.00	270.53	6,895.0	-2,205.00	2,234.2	-10,917.1	11,142.8	0.00	0.00	0.00
16,900.0	90.00	270.53	6,895.0	-2,205.00	2,235.1	-11,017.1	11,241.2	0.00	0.00	0.00
17,000.0	90.00	270.53	6,895.0	-2,205.00	2,236.0	-11,117.1	11,339.5	0.00	0.00	0.00
17,100.0	90.00	270.53	6,895.0	-2,205.00	2,237.0	-11,217.1	11,437.8	0.00	0.00	0.00
17,200.0	90.00	270.53	6,895.0	-2,205.00	2,237.9	-11,317.1	11,536.2	0.00	0.00	0.00
17,300.0	90.00	270.53	6,895.0	-2,205.00	2,238.8	-11,417.0	11,634.5	0.00	0.00	0.00
BHL - GP-JACKSON 2-17-13										
17,378.1	90.00	270.53	6,895.0	-2,205.00	2,239.6	-11,495.2	11,711.3	0.00	0.00	0.00

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,854.4	3,686.0	PARKMAN				
4,717.2	4,425.0	SUSSEX				
5,312.7	4,935.0	SHANNON				
7,448.4	6,740.0	SHARON SPRINGS				
7,505.7	6,775.0	NIOBRARA				

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GP-JACKSON 2-17-13
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4690.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4690.0usft (Original Well Elev)
Site:	NE NE SEC. 20 T5N R65W 6th P.M.	North Reference:	True
Well:	GP-JACKSON 2-17-13	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)	
1,550.0	1,550.0	0.0	0.0	SURFACE NUDGE (2°/100ft BUR)
1,600.0	1,600.0	0.3	-0.3	9 5/8" SURFACE CASING
1,700.0	1,700.0	1.7	-1.3	MAIN NUDGE (2°/100ft BUR)
3,203.6	3,128.6	330.5	-247.3	EOB TO 31.07° INC
7,186.6	6,540.0	1,976.3	-1,479.1	KOP (10°/100ft DGLG)
7,904.1	6,895.0	2,151.4	-2,021.6	HZ LANDING PNT *NEW*: GP-JACKSON 2-17-13
17,378.1	6,895.0	2,239.6	-11,495.2	BHL - GP-JACKSON 2-17-13