

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

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

GP-JACKSON C6-17-13

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 C6-17-13
 Wellbore: ORIGINAL WELLBORE
 Design: PROPOSAL #1

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	V Sect	Dep	Annotation
1450.0	1450.0	0.00	0.00	0.0	0.0	0.0	0.0	SURFACE NUUDGE (2°/100ft BUR)
1600.0	1600.1	3.00	324.05	3.2	-2.3	2.9	3.9	9 5/8" SURFACE CASING
1699.9	1700.1	3.00	324.05	7.4	-5.4	6.8	9.2	MAIN NUUDGE (2°/100ft BUR)
3017.0	3090.3	30.81	324.05	331.4	-240.4	302.9	409.4	EOB TO 30.81° INC
6730.7	7414.0	30.81	324.05	2123.9	-1540.4	1940.9	2623.7	KOP (10°/100ft DGLG)
7090.0	8136.7	90.00	270.56	2301.4	-2084.4	2509.6	3212.3	HZ LANDING PNT *NEW* - GP-JACKSON C6-17-13
7090.0	17547.8	90.00	270.56	2392.6	-11495.1	11741.4	12623.4	BHL - GP-JACKSON C6-17-13

WELLBORE TARGET DETAILS (LAT/LONG)

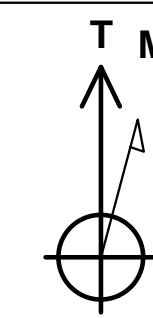
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
HZ LANDING PNT *NEW* - GP-JACKSON C6-17-13	7090.0	2301.4	-2084.4	40.396837	-104.689993
BHL - GP-JACKSON C6-17-13	7090.0	2392.6	-11495.1	40.397080	-104.723780

FORMATION TOP DETAILS

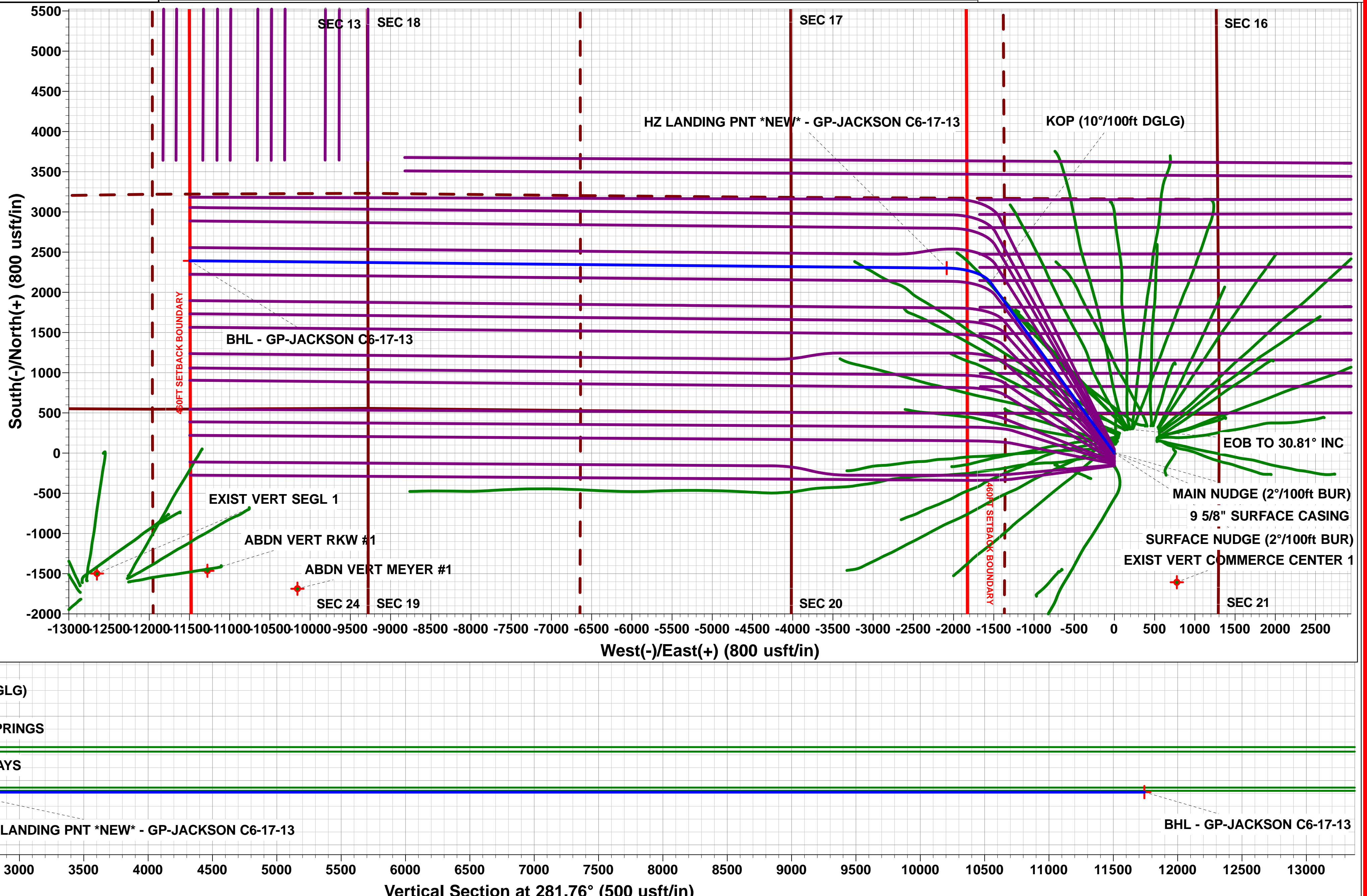
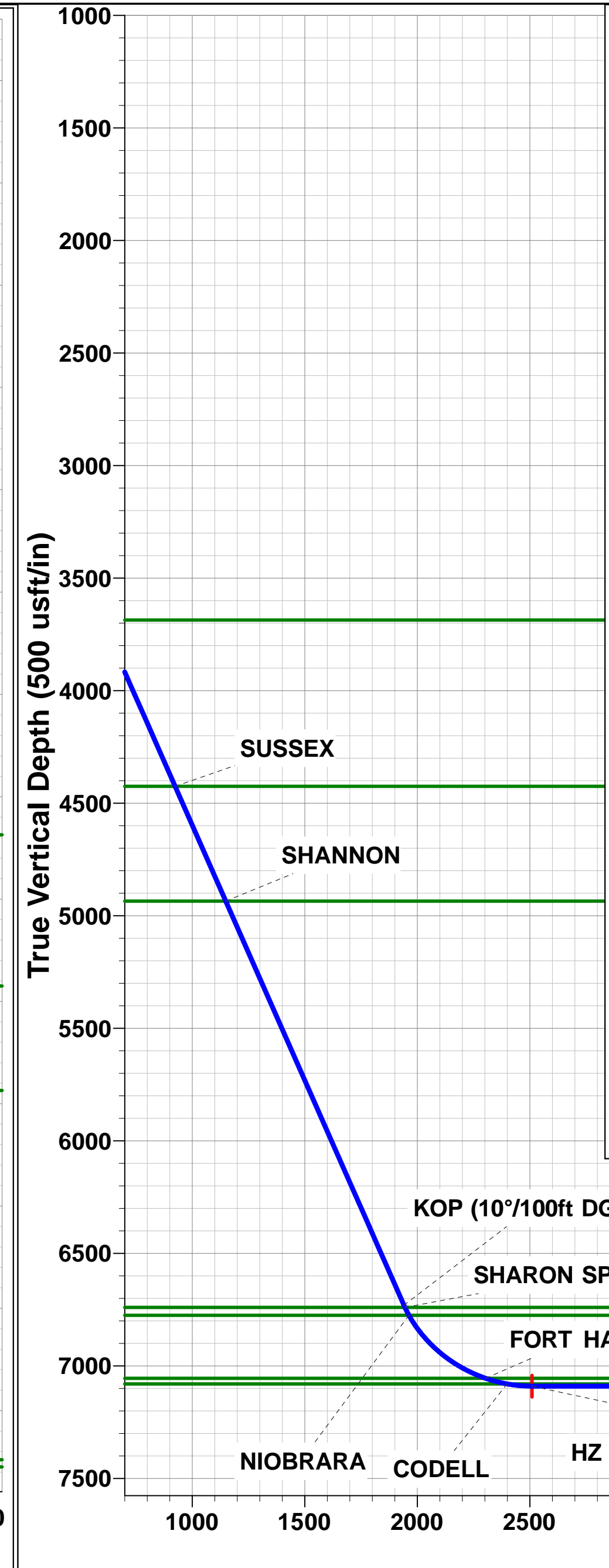
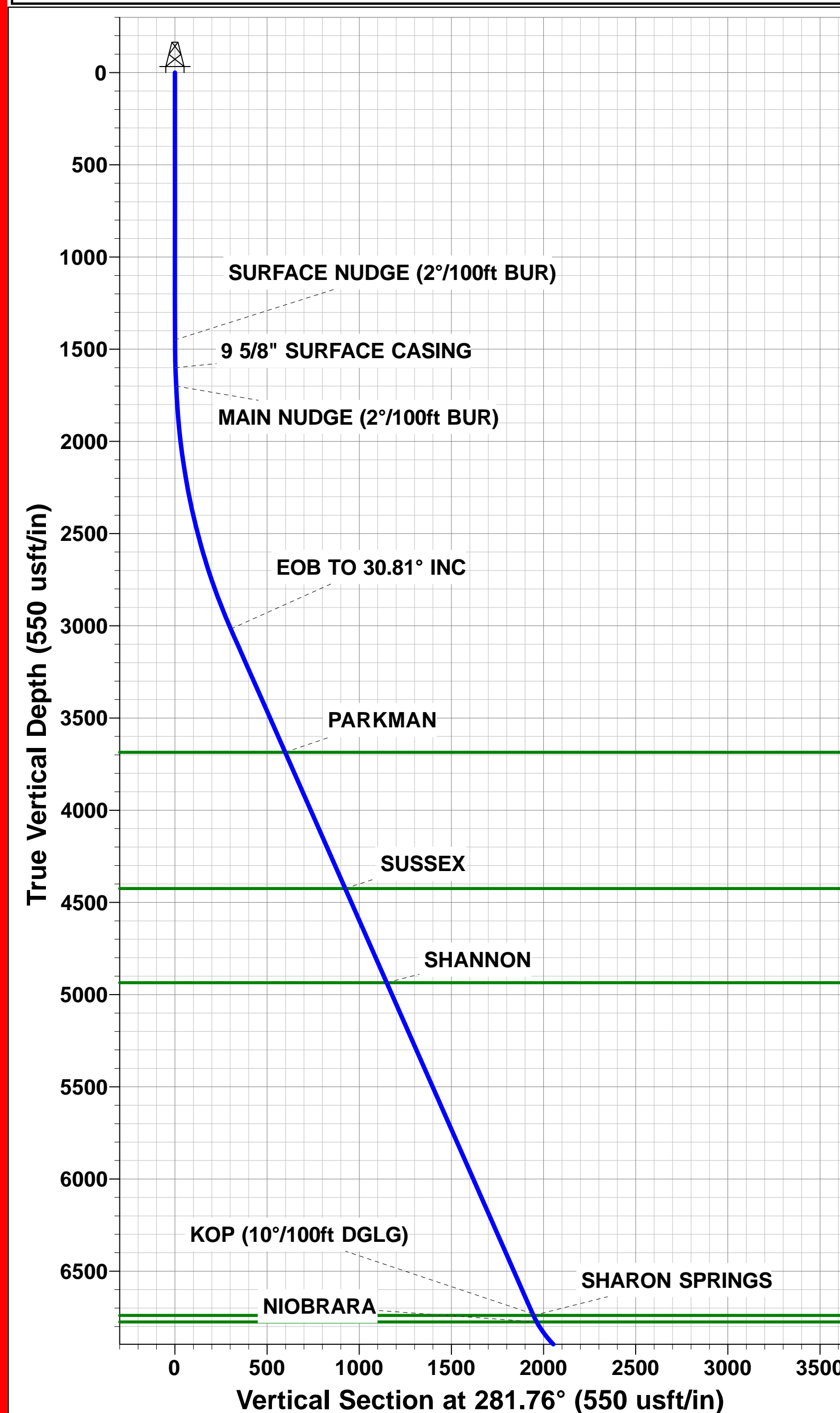
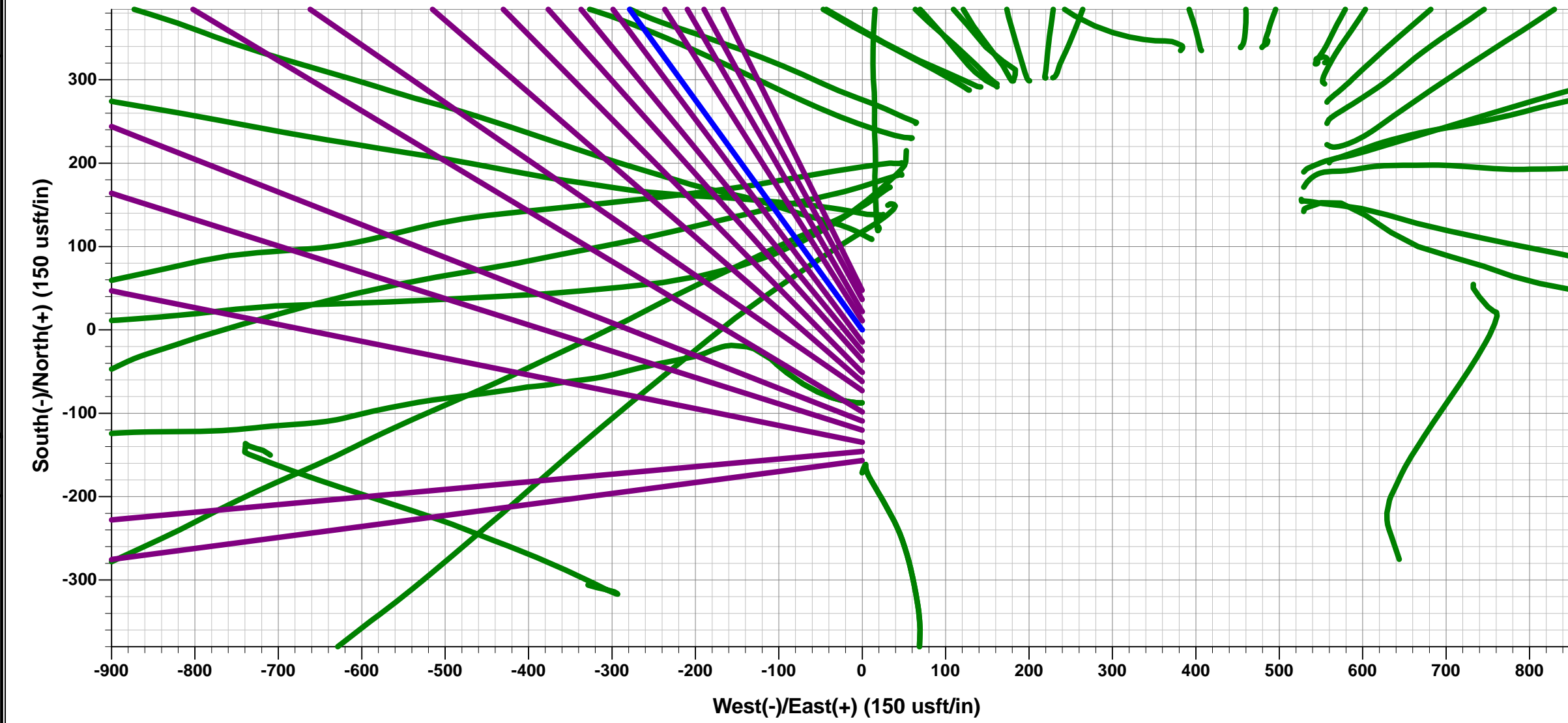
TVDPath	MDPath	Formation
3686.0	3869.2	PARKMAN
4425.0	4729.6	SUSSEX
4935.0	5323.3	SHANNON
6740.0	7424.9	SHARON SPRINGS
6775.0	7466.4	NIOBRARA
7055.0	7924.6	FORT HAYS
7080.0	8023.7	CODELL

PROPOSED LOCAL COORDINATES

SHL: 489ft FNL & 1305ft FEL of Sec 20
 LP *NEW*: 1804ft FSL & 1931ft FWL of Sec 17
 BHL: 1845ft FSL & 2216ft FEL of Sec 13



Azimuths to True North
 Magnetic North: 8.28°
 Magnetic Field
 Strength: 52522.5snT
 Dip Angle: 66.89°
 Date: 12/05/2016
 Model: IGRF2015





Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GP-JACKSON C6-17-13
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 C6-17-13	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 C6-17-13					
Well Position	+N/-S	-47.4 usft	Northing:	1,386,156.48 usft	Latitude:	40.390520
	+E/-W	0.0 usft	Easting:	3,227,708.04 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 (°)
	7,090.0	0.0	0.0	281.76

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	
1,450.0	0.00	0.00	1,450.0	-3,240.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,600.1	3.00	324.05	1,600.0	-3,090.0	3.2	-2.3	2.00	2.00	0.00	324.05	
1,700.1	3.00	324.05	1,699.9	-2,990.1	7.4	-5.4	0.00	0.00	0.00	0.00	
3,090.3	30.81	324.05	3,017.0	-1,673.0	331.4	-240.4	2.00	2.00	0.00	0.00	
7,414.0	30.81	324.05	6,730.7	2,040.7	2,123.9	-1,540.4	0.00	0.00	0.00	0.00	
8,136.7	90.00	270.56	7,090.0	2,400.0	2,301.4	-2,084.4	10.00	8.19	-7.40	-57.56	HZ LANDING PNT
17,547.8	90.00	270.56	7,090.0	2,400.0	2,392.6	-11,495.1	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 C6-17-13	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
SURFACE NUDGE (2°/100ft BUR)										
1,450.0	0.00	0.00	1,450.0	3,240.00	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	1.00	324.05	1,500.0	3,190.00	0.4	-0.3	0.3	2.00	2.00	0.00
1,600.0	3.00	324.05	1,599.9	3,090.07	3.2	-2.3	2.9	2.00	2.00	0.00
9 5/8" SURFACE CASING										
1,600.1	3.00	324.05	1,600.0	3,090.00	3.2	-2.3	2.9	2.00	2.00	0.00
1,700.0	3.00	324.05	1,699.8	2,990.21	7.4	-5.4	6.8	0.00	0.00	0.00
MAIN NUDGE (2°/100ft BUR)										
1,700.1	3.00	324.05	1,699.9	2,990.14	7.4	-5.4	6.8	0.00	0.00	0.00
1,800.0	5.00	324.05	1,799.5	2,890.45	13.1	-9.5	11.9	2.00	2.00	0.00
1,900.0	7.00	324.05	1,899.0	2,791.01	21.5	-15.6	19.7	2.00	2.00	0.00
2,000.0	9.00	324.05	1,998.0	2,691.99	32.8	-23.8	30.0	2.00	2.00	0.00
2,100.0	11.00	324.05	2,096.5	2,593.51	46.8	-34.0	42.8	2.00	2.00	0.00
2,200.0	13.00	324.05	2,194.3	2,495.70	63.7	-46.2	58.2	2.00	2.00	0.00
2,300.0	15.00	324.05	2,291.3	2,398.68	83.3	-60.4	76.1	2.00	2.00	0.00
2,400.0	17.00	324.05	2,387.4	2,302.55	105.6	-76.6	96.5	2.00	2.00	0.00
2,500.0	19.00	324.05	2,482.5	2,207.45	130.6	-94.7	119.3	2.00	2.00	0.00
2,600.0	21.00	324.05	2,576.5	2,113.49	158.3	-114.8	144.6	2.00	2.00	0.00
2,700.0	23.00	324.05	2,669.2	2,020.77	188.6	-136.8	172.3	2.00	2.00	0.00
2,800.0	25.00	324.05	2,760.6	1,929.43	221.5	-160.7	202.4	2.00	2.00	0.00
2,900.0	27.00	324.05	2,850.4	1,839.55	257.0	-186.4	234.8	2.00	2.00	0.00
3,000.0	29.00	324.05	2,938.7	1,751.26	295.0	-214.0	269.6	2.00	2.00	0.00
EOB TO 30.81° INC										
3,090.3	30.81	324.05	3,017.0	1,673.02	331.4	-240.4	302.9	2.00	2.00	0.00
3,100.0	30.81	324.05	3,025.3	1,664.65	335.5	-243.3	306.6	0.00	0.00	0.00
3,200.0	30.81	324.05	3,111.2	1,578.76	376.9	-273.4	344.4	0.00	0.00	0.00
3,300.0	30.81	324.05	3,197.1	1,492.87	418.4	-303.4	382.3	0.00	0.00	0.00
3,400.0	30.81	324.05	3,283.0	1,406.98	459.8	-333.5	420.2	0.00	0.00	0.00
3,500.0	30.81	324.05	3,368.9	1,321.09	501.3	-363.6	458.1	0.00	0.00	0.00
3,600.0	30.81	324.05	3,454.8	1,235.20	542.8	-393.6	496.0	0.00	0.00	0.00
3,700.0	30.81	324.05	3,540.7	1,149.31	584.2	-423.7	533.9	0.00	0.00	0.00
3,800.0	30.81	324.05	3,626.6	1,063.41	625.7	-453.8	571.7	0.00	0.00	0.00
PARKMAN										
3,869.2	30.81	324.05	3,686.0	1,004.00	654.3	-474.6	597.9	0.00	0.00	0.00
3,900.0	30.81	324.05	3,712.5	977.52	667.1	-483.8	609.6	0.00	0.00	0.00
4,000.0	30.81	324.05	3,798.4	891.63	708.6	-513.9	647.5	0.00	0.00	0.00
4,100.0	30.81	324.05	3,884.3	805.74	750.0	-544.0	685.4	0.00	0.00	0.00
4,200.0	30.81	324.05	3,970.2	719.85	791.5	-574.0	723.3	0.00	0.00	0.00
4,300.0	30.81	324.05	4,056.0	633.96	833.0	-604.1	761.2	0.00	0.00	0.00

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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)
4,400.0	30.81	324.05	4,141.9	548.07	874.4	-634.2	799.0	0.00	0.00	0.00
4,500.0	30.81	324.05	4,227.8	462.17	915.9	-664.2	836.9	0.00	0.00	0.00
4,600.0	30.81	324.05	4,313.7	376.28	957.3	-694.3	874.8	0.00	0.00	0.00
4,700.0	30.81	324.05	4,399.6	290.39	998.8	-724.4	912.7	0.00	0.00	0.00
SUSSEX										
4,729.6	30.81	324.05	4,425.0	265.00	1,011.0	-733.2	923.9	0.00	0.00	0.00
4,800.0	30.81	324.05	4,485.5	204.50	1,040.2	-754.4	950.6	0.00	0.00	0.00
4,900.0	30.81	324.05	4,571.4	118.61	1,081.7	-784.5	988.5	0.00	0.00	0.00
5,000.0	30.81	324.05	4,657.3	32.72	1,123.2	-814.6	1,026.3	0.00	0.00	0.00
5,100.0	30.81	324.05	4,743.2	-53.17	1,164.6	-844.6	1,064.2	0.00	0.00	0.00
5,200.0	30.81	324.05	4,829.1	-139.07	1,206.1	-874.7	1,102.1	0.00	0.00	0.00
5,300.0	30.81	324.05	4,915.0	-224.96	1,247.5	-904.8	1,140.0	0.00	0.00	0.00
SHANNON										
5,323.3	30.81	324.05	4,935.0	-245.00	1,257.2	-911.8	1,148.8	0.00	0.00	0.00
5,400.0	30.81	324.05	5,000.8	-310.85	1,289.0	-934.8	1,177.9	0.00	0.00	0.00
5,500.0	30.81	324.05	5,086.7	-396.74	1,330.4	-964.9	1,215.8	0.00	0.00	0.00
5,600.0	30.81	324.05	5,172.6	-482.63	1,371.9	-995.0	1,253.6	0.00	0.00	0.00
5,700.0	30.81	324.05	5,258.5	-568.52	1,413.4	-1,025.0	1,291.5	0.00	0.00	0.00
5,800.0	30.81	324.05	5,344.4	-654.41	1,454.8	-1,055.1	1,329.4	0.00	0.00	0.00
5,900.0	30.81	324.05	5,430.3	-740.30	1,496.3	-1,085.2	1,367.3	0.00	0.00	0.00
6,000.0	30.81	324.05	5,516.2	-826.20	1,537.7	-1,115.2	1,405.2	0.00	0.00	0.00
6,100.0	30.81	324.05	5,602.1	-912.09	1,579.2	-1,145.3	1,443.1	0.00	0.00	0.00
6,200.0	30.81	324.05	5,688.0	-997.98	1,620.6	-1,175.4	1,480.9	0.00	0.00	0.00
6,300.0	30.81	324.05	5,773.9	-1,083.87	1,662.1	-1,205.4	1,518.8	0.00	0.00	0.00
6,400.0	30.81	324.05	5,859.8	-1,169.76	1,703.6	-1,235.5	1,556.7	0.00	0.00	0.00
6,500.0	30.81	324.05	5,945.7	-1,255.65	1,745.0	-1,265.6	1,594.6	0.00	0.00	0.00
6,600.0	30.81	324.05	6,031.5	-1,341.54	1,786.5	-1,295.6	1,632.5	0.00	0.00	0.00
6,700.0	30.81	324.05	6,117.4	-1,427.44	1,827.9	-1,325.7	1,670.4	0.00	0.00	0.00
6,800.0	30.81	324.05	6,203.3	-1,513.33	1,869.4	-1,355.8	1,708.2	0.00	0.00	0.00
6,900.0	30.81	324.05	6,289.2	-1,599.22	1,910.8	-1,385.8	1,746.1	0.00	0.00	0.00
7,000.0	30.81	324.05	6,375.1	-1,685.11	1,952.3	-1,415.9	1,784.0	0.00	0.00	0.00
7,100.0	30.81	324.05	6,461.0	-1,771.00	1,993.7	-1,446.0	1,821.9	0.00	0.00	0.00
7,200.0	30.81	324.05	6,546.9	-1,856.89	2,035.2	-1,476.0	1,859.8	0.00	0.00	0.00
7,300.0	30.81	324.05	6,632.8	-1,942.78	2,076.7	-1,506.1	1,897.7	0.00	0.00	0.00
7,400.0	30.81	324.05	6,718.7	-2,028.68	2,118.1	-1,536.2	1,935.5	0.00	0.00	0.00
KOP (10°/100ft DGLG)										
7,414.0	30.81	324.05	6,730.7	-2,040.73	2,123.9	-1,540.4	1,940.9	0.00	0.00	0.00
SHARON SPRINGS										
7,424.9	31.40	322.30	6,740.0	-2,050.00	2,128.4	-1,543.7	1,945.0	10.00	5.48	-16.20
NIOBRARA										
7,466.4	33.88	316.10	6,775.0	-2,085.00	2,145.3	-1,558.4	1,962.8	10.00	5.96	-14.90
7,500.0	36.08	311.68	6,802.5	-2,112.52	2,158.7	-1,572.3	1,979.1	10.00	6.56	-13.17
7,600.0	43.41	300.99	6,879.4	-2,189.45	2,196.0	-1,623.8	2,037.3	10.00	7.33	-10.69
7,700.0	51.49	292.97	6,947.1	-2,257.08	2,229.1	-1,689.5	2,108.3	10.00	8.08	-8.02
7,800.0	60.01	286.61	7,003.3	-2,313.35	2,256.8	-1,767.2	2,190.0	10.00	8.52	-6.36
7,900.0	68.78	281.28	7,046.5	-2,356.55	2,278.3	-1,854.6	2,280.0	10.00	8.77	-5.33
FORT HAYS										
7,924.6	70.96	280.08	7,055.0	-2,365.00	2,282.6	-1,877.3	2,303.0	10.00	8.88	-4.90
8,000.0	77.70	276.55	7,075.4	-2,385.37	2,293.1	-1,949.1	2,375.5	10.00	8.93	-4.67
CODELL										
8,023.7	79.83	275.49	7,080.0	-2,390.00	2,295.5	-1,972.3	2,398.7	10.00	8.98	-4.49
8,100.0	86.69	272.14	7,088.9	-2,398.94	2,300.5	-2,047.8	2,473.6	10.00	9.00	-4.39
HZ LANDING PNT *NEW* - GP-JACKSON C6-17-13										

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GP-JACKSON C6-17-13
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 C6-17-13	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)
8,136.7	90.00	270.56	7,090.0	-2,400.00	2,301.4	-2,084.4	2,509.6	10.00	9.02	-4.33
8,200.0	90.00	270.56	7,090.0	-2,400.00	2,302.0	-2,147.7	2,571.8	0.00	0.00	0.00
8,300.0	90.00	270.56	7,090.0	-2,400.00	2,303.0	-2,247.7	2,669.9	0.00	0.00	0.00
8,400.0	90.00	270.56	7,090.0	-2,400.00	2,304.0	-2,347.7	2,768.0	0.00	0.00	0.00
8,500.0	90.00	270.56	7,090.0	-2,400.00	2,304.9	-2,447.7	2,866.0	0.00	0.00	0.00
8,600.0	90.00	270.56	7,090.0	-2,400.00	2,305.9	-2,547.7	2,964.1	0.00	0.00	0.00
8,700.0	90.00	270.56	7,090.0	-2,400.00	2,306.9	-2,647.7	3,062.2	0.00	0.00	0.00
8,800.0	90.00	270.56	7,090.0	-2,400.00	2,307.8	-2,747.7	3,160.3	0.00	0.00	0.00
8,900.0	90.00	270.56	7,090.0	-2,400.00	2,308.8	-2,847.7	3,258.4	0.00	0.00	0.00
9,000.0	90.00	270.56	7,090.0	-2,400.00	2,309.8	-2,947.7	3,356.5	0.00	0.00	0.00
9,100.0	90.00	270.56	7,090.0	-2,400.00	2,310.7	-3,047.7	3,454.6	0.00	0.00	0.00
9,200.0	90.00	270.56	7,090.0	-2,400.00	2,311.7	-3,147.7	3,552.7	0.00	0.00	0.00
9,300.0	90.00	270.56	7,090.0	-2,400.00	2,312.7	-3,247.7	3,650.8	0.00	0.00	0.00
9,400.0	90.00	270.56	7,090.0	-2,400.00	2,313.6	-3,347.7	3,748.9	0.00	0.00	0.00
9,500.0	90.00	270.56	7,090.0	-2,400.00	2,314.6	-3,447.7	3,847.0	0.00	0.00	0.00
9,600.0	90.00	270.56	7,090.0	-2,400.00	2,315.6	-3,547.7	3,945.1	0.00	0.00	0.00
9,700.0	90.00	270.56	7,090.0	-2,400.00	2,316.5	-3,647.7	4,043.2	0.00	0.00	0.00
9,800.0	90.00	270.56	7,090.0	-2,400.00	2,317.5	-3,747.7	4,141.3	0.00	0.00	0.00
9,900.0	90.00	270.56	7,090.0	-2,400.00	2,318.5	-3,847.7	4,239.4	0.00	0.00	0.00
10,000.0	90.00	270.56	7,090.0	-2,400.00	2,319.5	-3,947.7	4,337.5	0.00	0.00	0.00
10,100.0	90.00	270.56	7,090.0	-2,400.00	2,320.4	-4,047.7	4,435.6	0.00	0.00	0.00
10,200.0	90.00	270.56	7,090.0	-2,400.00	2,321.4	-4,147.6	4,533.7	0.00	0.00	0.00
10,300.0	90.00	270.56	7,090.0	-2,400.00	2,322.4	-4,247.6	4,631.8	0.00	0.00	0.00
10,400.0	90.00	270.56	7,090.0	-2,400.00	2,323.3	-4,347.6	4,729.8	0.00	0.00	0.00
10,500.0	90.00	270.56	7,090.0	-2,400.00	2,324.3	-4,447.6	4,827.9	0.00	0.00	0.00
10,600.0	90.00	270.56	7,090.0	-2,400.00	2,325.3	-4,547.6	4,926.0	0.00	0.00	0.00
10,700.0	90.00	270.56	7,090.0	-2,400.00	2,326.2	-4,647.6	5,024.1	0.00	0.00	0.00
10,800.0	90.00	270.56	7,090.0	-2,400.00	2,327.2	-4,747.6	5,122.2	0.00	0.00	0.00
10,900.0	90.00	270.56	7,090.0	-2,400.00	2,328.2	-4,847.6	5,220.3	0.00	0.00	0.00
11,000.0	90.00	270.56	7,090.0	-2,400.00	2,329.1	-4,947.6	5,318.4	0.00	0.00	0.00
11,100.0	90.00	270.56	7,090.0	-2,400.00	2,330.1	-5,047.6	5,416.5	0.00	0.00	0.00
11,200.0	90.00	270.56	7,090.0	-2,400.00	2,331.1	-5,147.6	5,514.6	0.00	0.00	0.00
11,300.0	90.00	270.56	7,090.0	-2,400.00	2,332.0	-5,247.6	5,612.7	0.00	0.00	0.00
11,400.0	90.00	270.56	7,090.0	-2,400.00	2,333.0	-5,347.6	5,710.8	0.00	0.00	0.00
11,500.0	90.00	270.56	7,090.0	-2,400.00	2,334.0	-5,447.6	5,808.9	0.00	0.00	0.00
11,600.0	90.00	270.56	7,090.0	-2,400.00	2,335.0	-5,547.6	5,907.0	0.00	0.00	0.00
11,700.0	90.00	270.56	7,090.0	-2,400.00	2,335.9	-5,647.6	6,005.1	0.00	0.00	0.00
11,800.0	90.00	270.56	7,090.0	-2,400.00	2,336.9	-5,747.6	6,103.2	0.00	0.00	0.00
11,900.0	90.00	270.56	7,090.0	-2,400.00	2,337.9	-5,847.6	6,201.3	0.00	0.00	0.00
12,000.0	90.00	270.56	7,090.0	-2,400.00	2,338.8	-5,947.6	6,299.4	0.00	0.00	0.00
12,100.0	90.00	270.56	7,090.0	-2,400.00	2,339.8	-6,047.6	6,397.5	0.00	0.00	0.00
12,200.0	90.00	270.56	7,090.0	-2,400.00	2,340.8	-6,147.6	6,495.5	0.00	0.00	0.00
12,300.0	90.00	270.56	7,090.0	-2,400.00	2,341.7	-6,247.5	6,593.6	0.00	0.00	0.00
12,400.0	90.00	270.56	7,090.0	-2,400.00	2,342.7	-6,347.5	6,691.7	0.00	0.00	0.00
12,500.0	90.00	270.56	7,090.0	-2,400.00	2,343.7	-6,447.5	6,789.8	0.00	0.00	0.00
12,600.0	90.00	270.56	7,090.0	-2,400.00	2,344.6	-6,547.5	6,887.9	0.00	0.00	0.00
12,700.0	90.00	270.56	7,090.0	-2,400.00	2,345.6	-6,647.5	6,986.0	0.00	0.00	0.00
12,800.0	90.00	270.56	7,090.0	-2,400.00	2,346.6	-6,747.5	7,084.1	0.00	0.00	0.00
12,900.0	90.00	270.56	7,090.0	-2,400.00	2,347.6	-6,847.5	7,182.2	0.00	0.00	0.00
13,000.0	90.00	270.56	7,090.0	-2,400.00	2,348.5	-6,947.5	7,280.3	0.00	0.00	0.00
13,100.0	90.00	270.56	7,090.0	-2,400.00	2,349.5	-7,047.5	7,378.4	0.00	0.00	0.00
13,200.0	90.00	270.56	7,090.0	-2,400.00	2,350.5	-7,147.5	7,476.5	0.00	0.00	0.00
13,300.0	90.00	270.56	7,090.0	-2,400.00	2,351.4	-7,247.5	7,574.6	0.00	0.00	0.00
13,400.0	90.00	270.56	7,090.0	-2,400.00	2,352.4	-7,347.5	7,672.7	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GP-JACKSON C6-17-13
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 C6-17-13	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	270.56	7,090.0	-2,400.00	2,353.4	-7,447.5	7,770.8	0.00	0.00	0.00
13,600.0	90.00	270.56	7,090.0	-2,400.00	2,354.3	-7,547.5	7,868.9	0.00	0.00	0.00
13,700.0	90.00	270.56	7,090.0	-2,400.00	2,355.3	-7,647.5	7,967.0	0.00	0.00	0.00
13,800.0	90.00	270.56	7,090.0	-2,400.00	2,356.3	-7,747.5	8,065.1	0.00	0.00	0.00
13,900.0	90.00	270.56	7,090.0	-2,400.00	2,357.2	-7,847.5	8,163.2	0.00	0.00	0.00
14,000.0	90.00	270.56	7,090.0	-2,400.00	2,358.2	-7,947.5	8,261.3	0.00	0.00	0.00
14,100.0	90.00	270.56	7,090.0	-2,400.00	2,359.2	-8,047.5	8,359.3	0.00	0.00	0.00
14,200.0	90.00	270.56	7,090.0	-2,400.00	2,360.1	-8,147.5	8,457.4	0.00	0.00	0.00
14,300.0	90.00	270.56	7,090.0	-2,400.00	2,361.1	-8,247.5	8,555.5	0.00	0.00	0.00
14,400.0	90.00	270.56	7,090.0	-2,400.00	2,362.1	-8,347.5	8,653.6	0.00	0.00	0.00
14,500.0	90.00	270.56	7,090.0	-2,400.00	2,363.1	-8,447.4	8,751.7	0.00	0.00	0.00
14,600.0	90.00	270.56	7,090.0	-2,400.00	2,364.0	-8,547.4	8,849.8	0.00	0.00	0.00
14,700.0	90.00	270.56	7,090.0	-2,400.00	2,365.0	-8,647.4	8,947.9	0.00	0.00	0.00
14,800.0	90.00	270.56	7,090.0	-2,400.00	2,366.0	-8,747.4	9,046.0	0.00	0.00	0.00
14,900.0	90.00	270.56	7,090.0	-2,400.00	2,366.9	-8,847.4	9,144.1	0.00	0.00	0.00
15,000.0	90.00	270.56	7,090.0	-2,400.00	2,367.9	-8,947.4	9,242.2	0.00	0.00	0.00
15,100.0	90.00	270.56	7,090.0	-2,400.00	2,368.9	-9,047.4	9,340.3	0.00	0.00	0.00
15,200.0	90.00	270.56	7,090.0	-2,400.00	2,369.8	-9,147.4	9,438.4	0.00	0.00	0.00
15,300.0	90.00	270.56	7,090.0	-2,400.00	2,370.8	-9,247.4	9,536.5	0.00	0.00	0.00
15,400.0	90.00	270.56	7,090.0	-2,400.00	2,371.8	-9,347.4	9,634.6	0.00	0.00	0.00
15,500.0	90.00	270.56	7,090.0	-2,400.00	2,372.7	-9,447.4	9,732.7	0.00	0.00	0.00
15,600.0	90.00	270.56	7,090.0	-2,400.00	2,373.7	-9,547.4	9,830.8	0.00	0.00	0.00
15,700.0	90.00	270.56	7,090.0	-2,400.00	2,374.7	-9,647.4	9,928.9	0.00	0.00	0.00
15,800.0	90.00	270.56	7,090.0	-2,400.00	2,375.6	-9,747.4	10,027.0	0.00	0.00	0.00
15,900.0	90.00	270.56	7,090.0	-2,400.00	2,376.6	-9,847.4	10,125.1	0.00	0.00	0.00
16,000.0	90.00	270.56	7,090.0	-2,400.00	2,377.6	-9,947.4	10,223.1	0.00	0.00	0.00
16,100.0	90.00	270.56	7,090.0	-2,400.00	2,378.6	-10,047.4	10,321.2	0.00	0.00	0.00
16,200.0	90.00	270.56	7,090.0	-2,400.00	2,379.5	-10,147.4	10,419.3	0.00	0.00	0.00
16,300.0	90.00	270.56	7,090.0	-2,400.00	2,380.5	-10,247.4	10,517.4	0.00	0.00	0.00
16,400.0	90.00	270.56	7,090.0	-2,400.00	2,381.5	-10,347.4	10,615.5	0.00	0.00	0.00
16,500.0	90.00	270.56	7,090.0	-2,400.00	2,382.4	-10,447.4	10,713.6	0.00	0.00	0.00
16,600.0	90.00	270.56	7,090.0	-2,400.00	2,383.4	-10,547.3	10,811.7	0.00	0.00	0.00
16,700.0	90.00	270.56	7,090.0	-2,400.00	2,384.4	-10,647.3	10,909.8	0.00	0.00	0.00
16,800.0	90.00	270.56	7,090.0	-2,400.00	2,385.3	-10,747.3	11,007.9	0.00	0.00	0.00
16,900.0	90.00	270.56	7,090.0	-2,400.00	2,386.3	-10,847.3	11,106.0	0.00	0.00	0.00
17,000.0	90.00	270.56	7,090.0	-2,400.00	2,387.3	-10,947.3	11,204.1	0.00	0.00	0.00
17,100.0	90.00	270.56	7,090.0	-2,400.00	2,388.2	-11,047.3	11,302.2	0.00	0.00	0.00
17,200.0	90.00	270.56	7,090.0	-2,400.00	2,389.2	-11,147.3	11,400.3	0.00	0.00	0.00
17,300.0	90.00	270.56	7,090.0	-2,400.00	2,390.2	-11,247.3	11,498.4	0.00	0.00	0.00
17,400.0	90.00	270.56	7,090.0	-2,400.00	2,391.2	-11,347.3	11,596.5	0.00	0.00	0.00
17,500.0	90.00	270.56	7,090.0	-2,400.00	2,392.1	-11,447.3	11,694.6	0.00	0.00	0.00
BHL - GP-JACKSON C6-17-13										
17,547.8	90.00	270.56	7,090.0	-2,400.00	2,392.6	-11,495.1	11,741.4	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well GP-JACKSON C6-17-13
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 C6-17-13	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,869.2	3,686.0	PARKMAN				
4,729.6	4,425.0	SUSSEX				
5,323.3	4,935.0	SHANNON				
7,424.9	6,740.0	SHARON SPRINGS				
7,466.4	6,775.0	NIOBRARA				
7,924.6	7,055.0	FORT HAYS				
8,023.7	7,080.0	CODELL				

Plan Annotations					
MD (usft)	TVD (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
1,450.0	1,450.0	0.0	0.0	SURFACE NUDGE (2°/100ft BUR)	
1,600.1	1,600.0	3.2	-2.3	9 5/8" SURFACE CASING	
1,700.1	1,699.9	7.4	-5.4	MAIN NUDGE (2°/100ft BUR)	
3,090.3	3,017.0	331.4	-240.4	EOB TO 30.81° INC	
7,414.0	6,730.7	2,123.9	-1,540.4	KOP (10°/100ft DGLG)	
8,136.7	7,090.0	2,301.4	-2,084.4	HZ LANDING PNT *NEW* - GP-JACKSON C6-17-13	
17,547.8	7,090.0	2,392.6	-11,495.1	BHL - GP-JACKSON C6-17-13	