EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)
NE NE SEC. 20 T5N R65W 6th P.M.
GP-ALLES 2-17-13

ORIGINAL WELLBORE
11 May, 2016

Plan: PROPOSAL #1

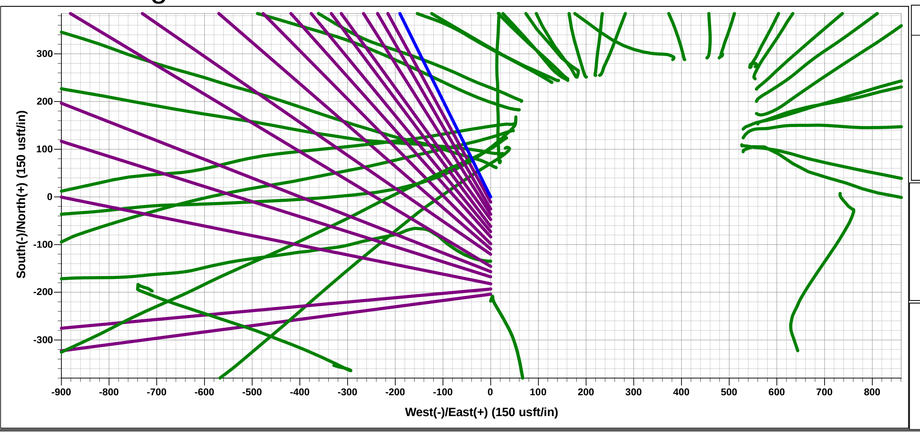
Project: WELD COUNTY, COLORADO (NAD 83)
Site: NE NE SEC. 20 T5N R65W 6th P.M.
Well: GP-ALLES 2-17-13
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation
1050.0	1050.0	0.00	0.00	0.0	0.0	0.0	0.0	SURFACE NUDGE (2°/100ft BUR)
1600.0	1603.4	11.07	333.67	47.8	-23.6	35.4	53.3	9 5/8" SURFACE CASING
1698.1	1703.4	11.07	333.67	65.0	-32.2	48.1	72.5	MAIN NUDGE (2°/100ft BUR)
2812.6	2926.0	35.52	333.67	495.0	-245.0	366.6	552.3	EOB TO 35.52° INC
6537.3	7502.4	35.52	333.67	2878.0	-1424.4	2131.6	3211.2	KOP (10°/100ft DGLG)
6895.0	8252.2	90.00	270.17	3108.1	-1977.1	2725.4	3836.2	HZ LANDING PNT *NEW* - GP-ALLES 2-17-13
6895.0	17769.8	90.00	270.17	3135.8	-11494.7	11914.8	13353.8	BHL - GP-ALLES 2-17-13

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
HZ LANDING PNT *NEW* - GP-ALLES 2-17-13	6895.0	3108.1	-1977.1	40.399181	-104.689608
BHL - GP-ALLES 2-17-13	6895.0	3135.8	-11494.7	40.399250	-104.723780



FORMATION TOP DETAILS

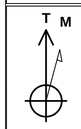
TVDPath	MDPath	Formation
3686.0	3999.2	PARKMAN
4425.0	4907.1	SUSSEX
4935.0	5533.7	SHANNON
6740.0	7779.8	SHARON SPRINGS
6775.0	7839.4	NIOBRARA

PROPOSED LOCAL COORDINATES

SHL: 441ft FNL & 1305ft FEL of Sec 20

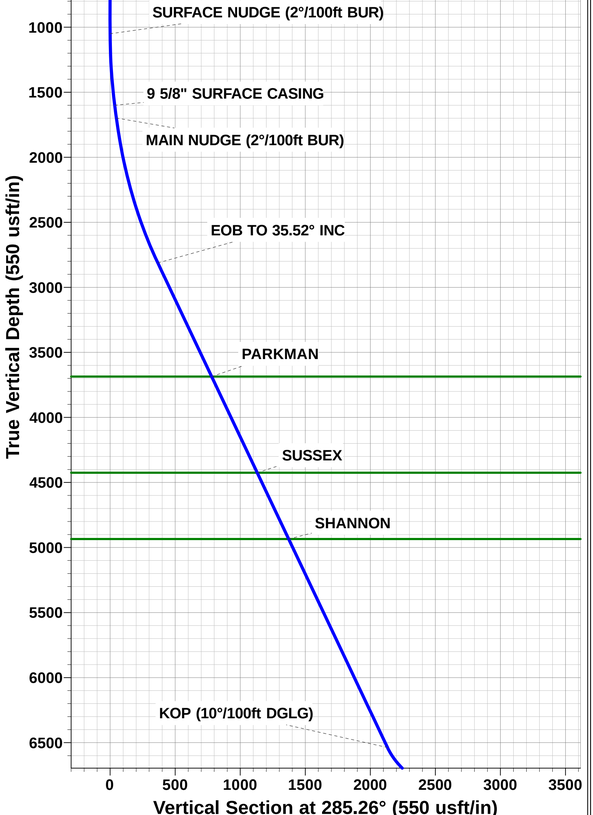
LP *NEW*: 2645ft FNL & 1987ft FWL of Sec 17

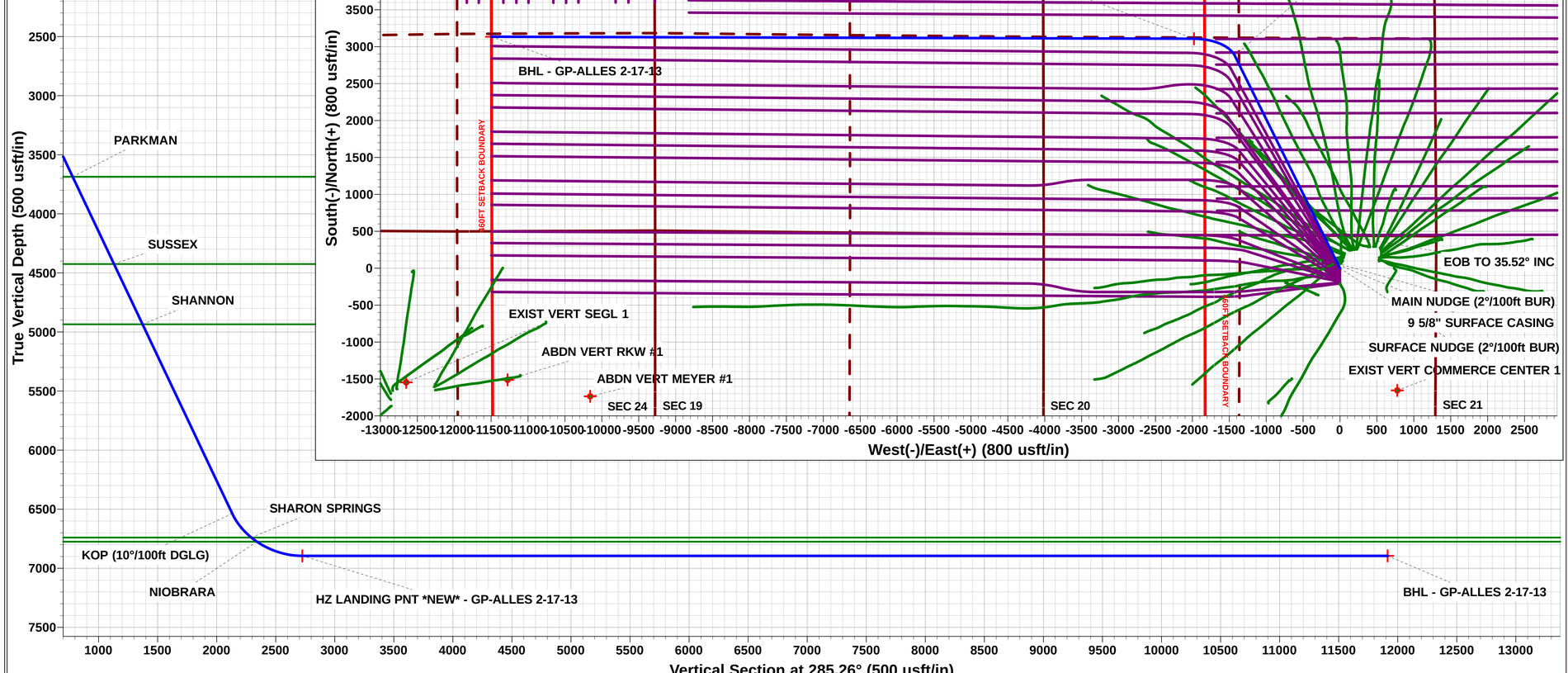
BHL: 2636ft FSL & 2214ft FEL of Sec 13



Azimuths to True North
Magnetic North: 8.28°

Magnetic Field
Strength: 52524.1snT
Dip Angle: 66.89°
Date: 07/05/2016
Model: IGRF2015





Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well GP-ALLES 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-ALLES 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:**	1.10000 ft	**Grid Convergence:**	0.53 °

Well GP-ALLES 2-17-13

Well Position	**+N/-S**	0.0 usft	**Northing:**	1,386,203.84 usft	**Latitude:**	40.390650
	+E/-W	0.0 usft	**Easting:**	3,227,707.61 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	07/05/2016	8.28	66.89	52,524

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	285.26

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	
1,050.0	0.00	0.00	1,050.0	-3,640.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,603.4	11.07	333.67	1,600.0	-3,090.0	47.8	-23.6	2.00	2.00	0.00	333.67	
1,703.4	11.07	333.67	1,698.1	-2,991.9	65.0	-32.2	0.00	0.00	0.00	0.00	
2,926.0	35.52	333.67	2,812.6	-1,877.4	495.0	-245.0	2.00	2.00	0.00	0.00	
7,502.4	35.52	333.67	6,537.3	1,847.3	2,878.0	-1,424.4	0.00	0.00	0.00	0.00	
8,252.2	90.00	270.17	6,895.0	2,205.0	3,108.1	-1,977.1	10.00	7.27	-8.47	-67.91	HZ LANDING PNT
17,769.8	90.00	270.17	6,895.0	2,205.0	3,135.8	-11,494.7	0.00	0.00	0.00	0.00	BHL - GP-ALLES 2

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well GP-ALLES 2-17-13
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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-ALLES 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
SURFACE NUDGE (2°/100ft BUR)										
1,050.0	***0.00***	***0.00***	***1,050.0***	***3,640.00***	***0.0***	***0.0***	***0.0***	***0.00***	***0.00***	***0.00***
1,100.0	1.00	333.67	1,100.0	3,590.00	0.4	-0.2	0.3	2.00	2.00	0.00
1,200.0	3.00	333.67	1,199.9	3,490.07	3.5	-1.7	2.6	2.00	2.00	0.00
1,300.0	5.00	333.67	1,299.7	3,390.32	9.8	-4.8	7.2	2.00	2.00	0.00
1,400.0	7.00	333.67	1,399.1	3,290.87	19.1	-9.5	14.2	2.00	2.00	0.00
1,500.0	9.00	333.67	1,498.2	3,191.85	31.6	-15.6	23.4	2.00	2.00	0.00
1,600.0	11.00	333.67	1,596.6	3,093.37	47.2	-23.3	34.9	2.00	2.00	0.00
9 5/8" SURFACE CASING										
1,603.4	***11.07***	***333.67***	***1,600.0***	***3,090.00***	***47.8***	***-23.6***	***35.4***	***2.00***	***2.00***	***0.00***
1,700.0	11.07	333.67	1,694.8	2,995.23	64.4	-31.9	47.7	0.00	0.00	0.00
MAIN NUDGE (2°/100ft BUR)										
1,703.4	***11.07***	***333.67***	***1,698.1***	***2,991.86***	***65.0***	***-32.2***	***48.1***	***0.00***	***0.00***	***0.00***
1,800.0	13.00	333.67	1,792.6	2,897.42	83.0	-41.1	61.5	2.00	2.00	0.00
1,900.0	15.00	333.67	1,889.6	2,800.40	104.7	-51.8	77.5	2.00	2.00	0.00
2,000.0	17.00	333.67	1,985.7	2,704.28	129.4	-64.0	95.8	2.00	2.00	0.00
2,100.0	19.00	333.67	2,080.8	2,609.18	157.1	-77.7	116.3	2.00	2.00	0.00
2,200.0	21.00	333.67	2,174.8	2,515.21	187.7	-92.9	139.0	2.00	2.00	0.00
2,300.0	23.00	333.67	2,267.5	2,422.50	221.3	-109.5	163.9	2.00	2.00	0.00
2,400.0	25.00	333.67	2,358.9	2,331.15	257.8	-127.6	190.9	2.00	2.00	0.00
2,500.0	27.00	333.67	2,448.7	2,241.27	297.1	-147.0	220.0	2.00	2.00	0.00
2,600.0	29.00	333.67	2,537.0	2,152.98	339.1	-167.8	251.2	2.00	2.00	0.00
2,700.0	31.00	333.67	2,623.6	2,066.38	383.9	-190.0	284.4	2.00	2.00	0.00
2,800.0	33.00	333.67	2,708.4	1,981.58	431.4	-213.5	319.5	2.00	2.00	0.00
2,900.0	35.00	333.67	2,791.3	1,898.68	481.5	-238.3	356.7	2.00	2.00	0.00
EOB TO 35.52° INC										
2,926.0	***35.52***	***333.67***	***2,812.6***	***1,877.43***	***495.0***	***-245.0***	***366.6***	***2.00***	***2.00***	***0.00***
3,000.0	35.52	333.67	2,872.8	1,817.23	533.5	-264.1	395.2	0.00	0.00	0.00
3,100.0	35.52	333.67	2,954.2	1,735.84	585.6	-289.8	433.7	0.00	0.00	0.00
3,200.0	35.52	333.67	3,035.6	1,654.44	637.7	-315.6	472.3	0.00	0.00	0.00
3,300.0	35.52	333.67	3,116.9	1,573.05	689.7	-341.4	510.9	0.00	0.00	0.00
3,400.0	35.52	333.67	3,198.3	1,491.66	741.8	-367.1	549.4	0.00	0.00	0.00
3,500.0	35.52	333.67	3,279.7	1,410.27	793.9	-392.9	588.0	0.00	0.00	0.00
3,600.0	35.52	333.67	3,361.1	1,328.88	846.0	-418.7	626.6	0.00	0.00	0.00
3,700.0	35.52	333.67	3,442.5	1,247.49	898.0	-444.5	665.1	0.00	0.00	0.00
3,800.0	35.52	333.67	3,523.9	1,166.10	950.1	-470.2	703.7	0.00	0.00	0.00
3,900.0	35.52	333.67	3,605.3	1,084.71	1,002.2	-496.0	742.3	0.00	0.00	0.00
PARKMAN										
3,999.2	***35.52***	***333.67***	***3,686.0***	***1,004.00***	***1,053.8***	***-521.5***	***780.5***	***0.00***	***0.00***	***0.00***
4,000.0	35.52	333.67	3,686.7	1,003.32	1,054.2	-521.8	780.8	0.00	0.00	0.00
4,100.0	35.52	333.67	3,768.1	921.93	1,106.3	-547.5	819.4	0.00	0.00	0.00
4,200.0	35.52	333.67	3,849.5	840.54	1,158.4	-573.3	858.0	0.00	0.00	0.00
4,300.0	35.52	333.67	3,930.9	759.15	1,210.5	-599.1	896.5	0.00	0.00	0.00

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Well:	GP-ALLES 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)
4,400.0	35.52	333.67	4,012.2	677.76	1,262.5	-624.9	935.1	0.00	0.00	0.00
4,500.0	35.52	333.67	4,093.6	596.37	1,314.6	-650.6	973.7	0.00	0.00	0.00
4,600.0	35.52	333.67	4,175.0	514.98	1,366.7	-676.4	1,012.2	0.00	0.00	0.00
4,700.0	35.52	333.67	4,256.4	433.59	1,418.7	-702.2	1,050.8	0.00	0.00	0.00
4,800.0	35.52	333.67	4,337.8	352.20	1,470.8	-727.9	1,089.4	0.00	0.00	0.00
4,900.0	35.52	333.67	4,419.2	270.81	1,522.9	-753.7	1,127.9	0.00	0.00	0.00
SUSSEX										
4,907.1	***35.52***	***333.67***	***4,425.0***	***265.00***	***1,526.6***	***-755.5***	***1,130.7***	***0.00***	***0.00***	***0.00***
5,000.0	35.52	333.67	4,500.6	189.41	1,575.0	-779.5	1,166.5	0.00	0.00	0.00
5,100.0	35.52	333.67	4,582.0	108.02	1,627.0	-805.3	1,205.1	0.00	0.00	0.00
5,200.0	35.52	333.67	4,663.4	26.63	1,679.1	-831.0	1,243.6	0.00	0.00	0.00
5,300.0	35.52	333.67	4,744.8	-54.76	1,731.2	-856.8	1,282.2	0.00	0.00	0.00
5,400.0	35.52	333.67	4,826.1	-136.15	1,783.2	-882.6	1,320.8	0.00	0.00	0.00
5,500.0	35.52	333.67	4,907.5	-217.54	1,835.3	-908.3	1,359.3	0.00	0.00	0.00
SHANNON										
5,533.7	***35.52***	***333.67***	***4,935.0***	***-245.00***	***1,852.9***	***-917.0***	***1,372.3***	***0.00***	***0.00***	***0.00***
5,600.0	35.52	333.67	4,988.9	-298.93	1,887.4	-934.1	1,397.9	0.00	0.00	0.00
5,700.0	35.52	333.67	5,070.3	-380.32	1,939.4	-959.9	1,436.5	0.00	0.00	0.00
5,800.0	35.52	333.67	5,151.7	-461.71	1,991.5	-985.7	1,475.0	0.00	0.00	0.00
5,900.0	35.52	333.67	5,233.1	-543.10	2,043.6	-1,011.4	1,513.6	0.00	0.00	0.00
6,000.0	35.52	333.67	5,314.5	-624.49	2,095.7	-1,037.2	1,552.2	0.00	0.00	0.00
6,100.0	35.52	333.67	5,395.9	-705.88	2,147.7	-1,063.0	1,590.7	0.00	0.00	0.00
6,200.0	35.52	333.67	5,477.3	-787.27	2,199.8	-1,088.7	1,629.3	0.00	0.00	0.00
6,300.0	35.52	333.67	5,558.7	-868.66	2,251.9	-1,114.5	1,667.9	0.00	0.00	0.00
6,400.0	35.52	333.67	5,640.1	-950.05	2,303.9	-1,140.3	1,706.4	0.00	0.00	0.00
6,500.0	35.52	333.67	5,721.4	-1,031.44	2,356.0	-1,166.1	1,745.0	0.00	0.00	0.00
6,600.0	35.52	333.67	5,802.8	-1,112.83	2,408.1	-1,191.8	1,783.6	0.00	0.00	0.00
6,700.0	35.52	333.67	5,884.2	-1,194.22	2,460.2	-1,217.6	1,822.1	0.00	0.00	0.00
6,800.0	35.52	333.67	5,965.6	-1,275.62	2,512.2	-1,243.4	1,860.7	0.00	0.00	0.00
6,900.0	35.52	333.67	6,047.0	-1,357.01	2,564.3	-1,269.1	1,899.3	0.00	0.00	0.00
7,000.0	35.52	333.67	6,128.4	-1,438.40	2,616.4	-1,294.9	1,937.8	0.00	0.00	0.00
7,100.0	35.52	333.67	6,209.8	-1,519.79	2,668.4	-1,320.7	1,976.4	0.00	0.00	0.00
7,200.0	35.52	333.67	6,291.2	-1,601.18	2,720.5	-1,346.5	2,015.0	0.00	0.00	0.00
7,300.0	35.52	333.67	6,372.6	-1,682.57	2,772.6	-1,372.2	2,053.5	0.00	0.00	0.00
7,400.0	35.52	333.67	6,454.0	-1,763.96	2,824.7	-1,398.0	2,092.1	0.00	0.00	0.00
7,500.0	35.52	333.67	6,535.3	-1,845.35	2,876.7	-1,423.8	2,130.7	0.00	0.00	0.00
KOP (10°/100ft DGLG)										
7,502.4	***35.52***	***333.67***	***6,537.3***	***-1,847.33***	***2,878.0***	***-1,424.4***	***2,131.6***	***0.00***	***0.00***	***0.00***
7,600.0	40.08	319.55	6,614.5	-1,924.55	2,927.4	-1,457.4	2,176.5	10.00	4.68	-14.47
7,700.0	46.20	307.95	6,687.6	-1,997.59	2,974.2	-1,506.9	2,236.5	10.00	6.12	-11.60
SHARON SPRINGS										
7,779.8	***51.78***	***300.37***	***6,740.0***	***-2,050.00***	***3,007.9***	***-1,556.7***	***2,293.5***	***10.00***	***6.99***	***-9.49***
7,800.0	53.26	298.65	6,752.3	-2,062.27	3,015.7	-1,570.7	2,309.0	10.00	7.35	-8.55
NIOBRARA										
7,839.4	***56.22***	***295.47***	***6,775.0***	***-2,085.00***	***3,030.3***	***-1,599.3***	***2,340.5***	***10.00***	***7.52***	***-8.08***
7,900.0	60.92	290.98	6,806.6	-2,116.62	3,050.7	-1,646.8	2,391.7	10.00	7.75	-7.40
8,000.0	68.96	284.39	6,849.0	-2,158.98	3,078.0	-1,733.1	2,482.0	10.00	8.04	-6.58
8,100.0	77.22	278.50	6,878.1	-2,188.07	3,096.8	-1,826.7	2,577.4	10.00	8.26	-5.90
8,200.0	85.60	272.98	6,893.0	-2,203.00	3,106.7	-1,925.0	2,674.7	10.00	8.38	-5.52
HZ LANDING PNT *NEW* - GP-ALLES 2-17-13										
8,252.2	***90.00***	***270.17***	***6,895.0***	***-2,205.00***	***3,108.1***	***-1,977.1***	***2,725.4***	***10.00***	***8.42***	***-5.39***
8,300.0	90.00	270.17	6,895.0	-2,205.00	3,108.2	-2,024.9	2,771.6	0.00	0.00	0.00
8,400.0	90.00	270.17	6,895.0	-2,205.00	3,108.5	-2,124.9	2,868.1	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well GP-ALLES 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-ALLES 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)
8,500.0	90.00	270.17	6,895.0	-2,205.00	3,108.8	-2,224.9	2,964.7	0.00	0.00	0.00
8,600.0	90.00	270.17	6,895.0	-2,205.00	3,109.1	-2,324.9	3,061.2	0.00	0.00	0.00
8,700.0	90.00	270.17	6,895.0	-2,205.00	3,109.4	-2,424.9	3,157.8	0.00	0.00	0.00
8,800.0	90.00	270.17	6,895.0	-2,205.00	3,109.7	-2,524.9	3,254.3	0.00	0.00	0.00
8,900.0	90.00	270.17	6,895.0	-2,205.00	3,110.0	-2,624.9	3,350.9	0.00	0.00	0.00
9,000.0	90.00	270.17	6,895.0	-2,205.00	3,110.3	-2,724.9	3,447.4	0.00	0.00	0.00
9,100.0	90.00	270.17	6,895.0	-2,205.00	3,110.6	-2,824.9	3,544.0	0.00	0.00	0.00
9,200.0	90.00	270.17	6,895.0	-2,205.00	3,110.9	-2,924.9	3,640.5	0.00	0.00	0.00
9,300.0	90.00	270.17	6,895.0	-2,205.00	3,111.1	-3,024.9	3,737.1	0.00	0.00	0.00
9,400.0	90.00	270.17	6,895.0	-2,205.00	3,111.4	-3,124.9	3,833.6	0.00	0.00	0.00
9,500.0	90.00	270.17	6,895.0	-2,205.00	3,111.7	-3,224.9	3,930.2	0.00	0.00	0.00
9,600.0	90.00	270.17	6,895.0	-2,205.00	3,112.0	-3,324.9	4,026.7	0.00	0.00	0.00
9,700.0	90.00	270.17	6,895.0	-2,205.00	3,112.3	-3,424.9	4,123.3	0.00	0.00	0.00
9,800.0	90.00	270.17	6,895.0	-2,205.00	3,112.6	-3,524.9	4,219.8	0.00	0.00	0.00
9,900.0	90.00	270.17	6,895.0	-2,205.00	3,112.9	-3,624.9	4,316.4	0.00	0.00	0.00
10,000.0	90.00	270.17	6,895.0	-2,205.00	3,113.2	-3,724.9	4,412.9	0.00	0.00	0.00
10,100.0	90.00	270.17	6,895.0	-2,205.00	3,113.5	-3,824.9	4,509.5	0.00	0.00	0.00
10,200.0	90.00	270.17	6,895.0	-2,205.00	3,113.8	-3,924.9	4,606.0	0.00	0.00	0.00
10,300.0	90.00	270.17	6,895.0	-2,205.00	3,114.0	-4,024.9	4,702.6	0.00	0.00	0.00
10,400.0	90.00	270.17	6,895.0	-2,205.00	3,114.3	-4,124.9	4,799.1	0.00	0.00	0.00
10,500.0	90.00	270.17	6,895.0	-2,205.00	3,114.6	-4,224.9	4,895.7	0.00	0.00	0.00
10,600.0	90.00	270.17	6,895.0	-2,205.00	3,114.9	-4,324.9	4,992.2	0.00	0.00	0.00
10,700.0	90.00	270.17	6,895.0	-2,205.00	3,115.2	-4,424.9	5,088.8	0.00	0.00	0.00
10,800.0	90.00	270.17	6,895.0	-2,205.00	3,115.5	-4,524.9	5,185.3	0.00	0.00	0.00
10,900.0	90.00	270.17	6,895.0	-2,205.00	3,115.8	-4,624.9	5,281.9	0.00	0.00	0.00
11,000.0	90.00	270.17	6,895.0	-2,205.00	3,116.1	-4,724.9	5,378.4	0.00	0.00	0.00
11,100.0	90.00	270.17	6,895.0	-2,205.00	3,116.4	-4,824.9	5,475.0	0.00	0.00	0.00
11,200.0	90.00	270.17	6,895.0	-2,205.00	3,116.7	-4,924.9	5,571.5	0.00	0.00	0.00
11,300.0	90.00	270.17	6,895.0	-2,205.00	3,117.0	-5,024.9	5,668.1	0.00	0.00	0.00
11,400.0	90.00	270.17	6,895.0	-2,205.00	3,117.2	-5,124.9	5,764.6	0.00	0.00	0.00
11,500.0	90.00	270.17	6,895.0	-2,205.00	3,117.5	-5,224.9	5,861.2	0.00	0.00	0.00
11,600.0	90.00	270.17	6,895.0	-2,205.00	3,117.8	-5,324.9	5,957.7	0.00	0.00	0.00
11,700.0	90.00	270.17	6,895.0	-2,205.00	3,118.1	-5,424.9	6,054.3	0.00	0.00	0.00
11,800.0	90.00	270.17	6,895.0	-2,205.00	3,118.4	-5,524.9	6,150.8	0.00	0.00	0.00
11,900.0	90.00	270.17	6,895.0	-2,205.00	3,118.7	-5,624.9	6,247.4	0.00	0.00	0.00
12,000.0	90.00	270.17	6,895.0	-2,205.00	3,119.0	-5,724.9	6,343.9	0.00	0.00	0.00
12,100.0	90.00	270.17	6,895.0	-2,205.00	3,119.3	-5,824.9	6,440.5	0.00	0.00	0.00
12,200.0	90.00	270.17	6,895.0	-2,205.00	3,119.6	-5,924.9	6,537.0	0.00	0.00	0.00
12,300.0	90.00	270.17	6,895.0	-2,205.00	3,119.9	-6,024.9	6,633.6	0.00	0.00	0.00
12,400.0	90.00	270.17	6,895.0	-2,205.00	3,120.2	-6,124.9	6,730.1	0.00	0.00	0.00
12,500.0	90.00	270.17	6,895.0	-2,205.00	3,120.4	-6,224.9	6,826.7	0.00	0.00	0.00
12,600.0	90.00	270.17	6,895.0	-2,205.00	3,120.7	-6,324.9	6,923.2	0.00	0.00	0.00
12,700.0	90.00	270.17	6,895.0	-2,205.00	3,121.0	-6,424.9	7,019.8	0.00	0.00	0.00
12,800.0	90.00	270.17	6,895.0	-2,205.00	3,121.3	-6,524.9	7,116.3	0.00	0.00	0.00
12,900.0	90.00	270.17	6,895.0	-2,205.00	3,121.6	-6,624.9	7,212.9	0.00	0.00	0.00
13,000.0	90.00	270.17	6,895.0	-2,205.00	3,121.9	-6,724.9	7,309.4	0.00	0.00	0.00
13,100.0	90.00	270.17	6,895.0	-2,205.00	3,122.2	-6,824.9	7,406.0	0.00	0.00	0.00
13,200.0	90.00	270.17	6,895.0	-2,205.00	3,122.5	-6,924.9	7,502.5	0.00	0.00	0.00
13,300.0	90.00	270.17	6,895.0	-2,205.00	3,122.8	-7,024.9	7,599.1	0.00	0.00	0.00
13,400.0	90.00	270.17	6,895.0	-2,205.00	3,123.1	-7,124.9	7,695.6	0.00	0.00	0.00
13,500.0	90.00	270.17	6,895.0	-2,205.00	3,123.3	-7,224.9	7,792.2	0.00	0.00	0.00
13,600.0	90.00	270.17	6,895.0	-2,205.00	3,123.6	-7,324.9	7,888.7	0.00	0.00	0.00
13,700.0	90.00	270.17	6,895.0	-2,205.00	3,123.9	-7,424.9	7,985.3	0.00	0.00	0.00
13,800.0	90.00	270.17	6,895.0	-2,205.00	3,124.2	-7,524.9	8,081.8	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well GP-ALLES 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-ALLES 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)
13,900.0	90.00	270.17	6,895.0	-2,205.00	3,124.5	-7,624.9	8,178.4	0.00	0.00	0.00
14,000.0	90.00	270.17	6,895.0	-2,205.00	3,124.8	-7,724.9	8,274.9	0.00	0.00	0.00
14,100.0	90.00	270.17	6,895.0	-2,205.00	3,125.1	-7,824.9	8,371.5	0.00	0.00	0.00
14,200.0	90.00	270.17	6,895.0	-2,205.00	3,125.4	-7,924.9	8,468.0	0.00	0.00	0.00
14,300.0	90.00	270.17	6,895.0	-2,205.00	3,125.7	-8,024.9	8,564.6	0.00	0.00	0.00
14,400.0	90.00	270.17	6,895.0	-2,205.00	3,126.0	-8,124.9	8,661.2	0.00	0.00	0.00
14,500.0	90.00	270.17	6,895.0	-2,205.00	3,126.3	-8,224.9	8,757.7	0.00	0.00	0.00
14,600.0	90.00	270.17	6,895.0	-2,205.00	3,126.5	-8,324.9	8,854.3	0.00	0.00	0.00
14,700.0	90.00	270.17	6,895.0	-2,205.00	3,126.8	-8,424.9	8,950.8	0.00	0.00	0.00
14,800.0	90.00	270.17	6,895.0	-2,205.00	3,127.1	-8,524.9	9,047.4	0.00	0.00	0.00
14,900.0	90.00	270.17	6,895.0	-2,205.00	3,127.4	-8,624.9	9,143.9	0.00	0.00	0.00
15,000.0	90.00	270.17	6,895.0	-2,205.00	3,127.7	-8,724.9	9,240.5	0.00	0.00	0.00
15,100.0	90.00	270.17	6,895.0	-2,205.00	3,128.0	-8,824.9	9,337.0	0.00	0.00	0.00
15,200.0	90.00	270.17	6,895.0	-2,205.00	3,128.3	-8,924.9	9,433.6	0.00	0.00	0.00
15,300.0	90.00	270.17	6,895.0	-2,205.00	3,128.6	-9,024.9	9,530.1	0.00	0.00	0.00
15,400.0	90.00	270.17	6,895.0	-2,205.00	3,128.9	-9,124.9	9,626.7	0.00	0.00	0.00
15,500.0	90.00	270.17	6,895.0	-2,205.00	3,129.2	-9,224.9	9,723.2	0.00	0.00	0.00
15,600.0	90.00	270.17	6,895.0	-2,205.00	3,129.4	-9,324.9	9,819.8	0.00	0.00	0.00
15,700.0	90.00	270.17	6,895.0	-2,205.00	3,129.7	-9,424.9	9,916.3	0.00	0.00	0.00
15,800.0	90.00	270.17	6,895.0	-2,205.00	3,130.0	-9,524.9	10,012.9	0.00	0.00	0.00
15,900.0	90.00	270.17	6,895.0	-2,205.00	3,130.3	-9,624.9	10,109.4	0.00	0.00	0.00
16,000.0	90.00	270.17	6,895.0	-2,205.00	3,130.6	-9,724.9	10,206.0	0.00	0.00	0.00
16,100.0	90.00	270.17	6,895.0	-2,205.00	3,130.9	-9,824.9	10,302.5	0.00	0.00	0.00
16,200.0	90.00	270.17	6,895.0	-2,205.00	3,131.2	-9,924.9	10,399.1	0.00	0.00	0.00
16,300.0	90.00	270.17	6,895.0	-2,205.00	3,131.5	-10,024.9	10,495.6	0.00	0.00	0.00
16,400.0	90.00	270.17	6,895.0	-2,205.00	3,131.8	-10,124.9	10,592.2	0.00	0.00	0.00
16,500.0	90.00	270.17	6,895.0	-2,205.00	3,132.1	-10,224.9	10,688.7	0.00	0.00	0.00
16,600.0	90.00	270.17	6,895.0	-2,205.00	3,132.4	-10,324.9	10,785.3	0.00	0.00	0.00
16,700.0	90.00	270.17	6,895.0	-2,205.00	3,132.6	-10,424.9	10,881.8	0.00	0.00	0.00
16,800.0	90.00	270.17	6,895.0	-2,205.00	3,132.9	-10,524.9	10,978.4	0.00	0.00	0.00
16,900.0	90.00	270.17	6,895.0	-2,205.00	3,133.2	-10,624.9	11,074.9	0.00	0.00	0.00
17,000.0	90.00	270.17	6,895.0	-2,205.00	3,133.5	-10,724.9	11,171.5	0.00	0.00	0.00
17,100.0	90.00	270.17	6,895.0	-2,205.00	3,133.8	-10,824.9	11,268.0	0.00	0.00	0.00
17,200.0	90.00	270.17	6,895.0	-2,205.00	3,134.1	-10,924.9	11,364.6	0.00	0.00	0.00
17,300.0	90.00	270.17	6,895.0	-2,205.00	3,134.4	-11,024.9	11,461.1	0.00	0.00	0.00
17,400.0	90.00	270.17	6,895.0	-2,205.00	3,134.7	-11,124.9	11,557.7	0.00	0.00	0.00
17,500.0	90.00	270.17	6,895.0	-2,205.00	3,135.0	-11,224.9	11,654.2	0.00	0.00	0.00
17,600.0	90.00	270.17	6,895.0	-2,205.00	3,135.3	-11,324.9	11,750.8	0.00	0.00	0.00
17,700.0	90.00	270.17	6,895.0	-2,205.00	3,135.5	-11,424.9	11,847.3	0.00	0.00	0.00
BHL - GP-ALLES 2-17-13										
17,769.8	***90.00***	***270.17***	***6,895.0***	***-2,205.00***	***3,135.8***	***-11,494.7***	***11,914.8***	***0.00***	***0.00***	***0.00***

Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,999.2	3,686.0	PARKMAN			
4,907.1	4,425.0	SUSSEX			
5,533.7	4,935.0	SHANNON			
7,779.8	6,740.0	SHARON SPRINGS			
7,839.4	6,775.0	NIOBRARA			

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well GP-ALLES 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-ALLES 2-17-13	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,050.0	1,050.0	0.0	0.0	SURFACE NUDGE (2°/100ft BUR)
1,603.4	1,600.0	47.8	-23.6	9 5/8" SURFACE CASING
1,703.4	1,698.1	65.0	-32.2	MAIN NUDGE (2°/100ft BUR)
2,926.0	2,812.6	495.0	-245.0	EOB TO 35.52° INC
7,502.4	6,537.3	2,878.0	-1,424.4	KOP (10°/100ft DGLG)
8,252.2	6,895.0	3,108.1	-1,977.1	HZ LANDING PNT *NEW* - GP-ALLES 2-17-13
17,769.8	6,895.0	3,135.8	-11,494.7	BHL - GP-ALLES 2-17-13