

# **EXTRACTION OIL & GAS**

**WELD COUNTY, COLORADO (NAD 83)**

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

**GP-HILLSIDE C1-20-24**

**ORIGINAL WELLBORE**

**14 May, 2016**

**Plan: PROPOSAL #1**





Project: WELD COUNTY, COLORADO (NAD 83)  
 Site: NE NE SEC. 20 T5N R65W 6th P.M.  
 Well: GP-HILLSIDE C1-20-24  
 Wellbore: ORIGINAL WELLBORE  
 Design: PROPOSAL #1

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Dep	Annotation
1600.0	1600.0	0.00	0.00	0.0	0.0	0.0	0.0	9 5/8" SURFACE CASING
2400.0	2400.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
3344.4	3362.4	19.25	287.51	48.2	-152.7	154.7	160.1	EOB TO 19.25° INC
6699.6	6916.2	19.25	287.51	400.8	-1269.9	1286.4	1331.6	KOP (10°/100ft DGLG)
7090.0	7632.6	90.00	270.38	444.5	-1813.4	1831.3	1878.0	HZ LANDING PNT - GP-HILLSIDE C1-20-24
7090.0	17315.4	90.00	270.38	509.1	-11496.0	11507.3	11560.8	BHL - GP-HILLSIDE C1-20-24

WELLBORE TARGET DETAILS (LAT/LONG)

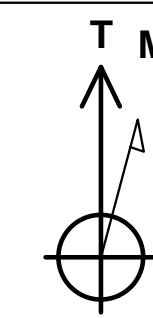
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
HZ LANDING PNT - GP-HILLSIDE C1-20-24	7090.0	444.5	-1813.4	40.391410	-104.689020
BHL - GP-HILLSIDE C1-20-24	7090.0	509.1	-11496.0	40.391580	-104.723780

FORMATION TOP DETAILS

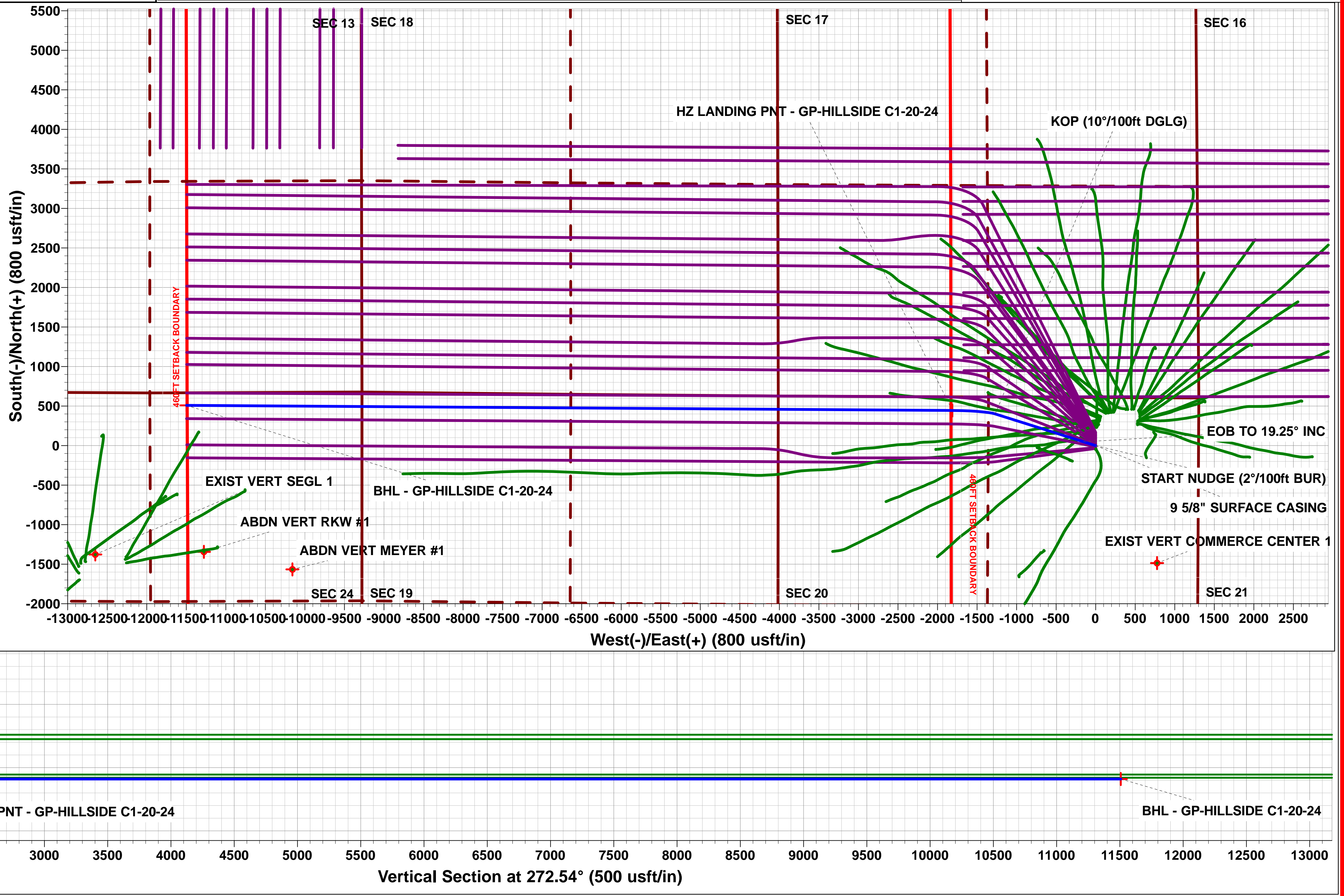
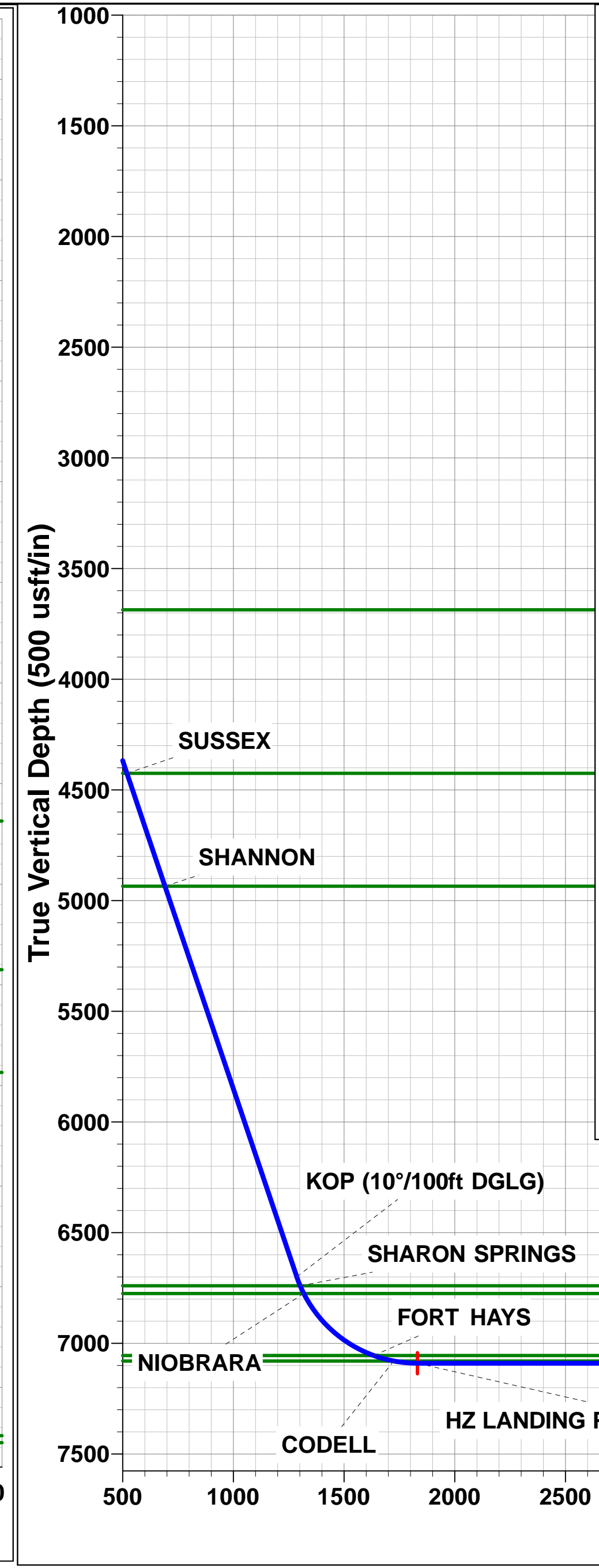
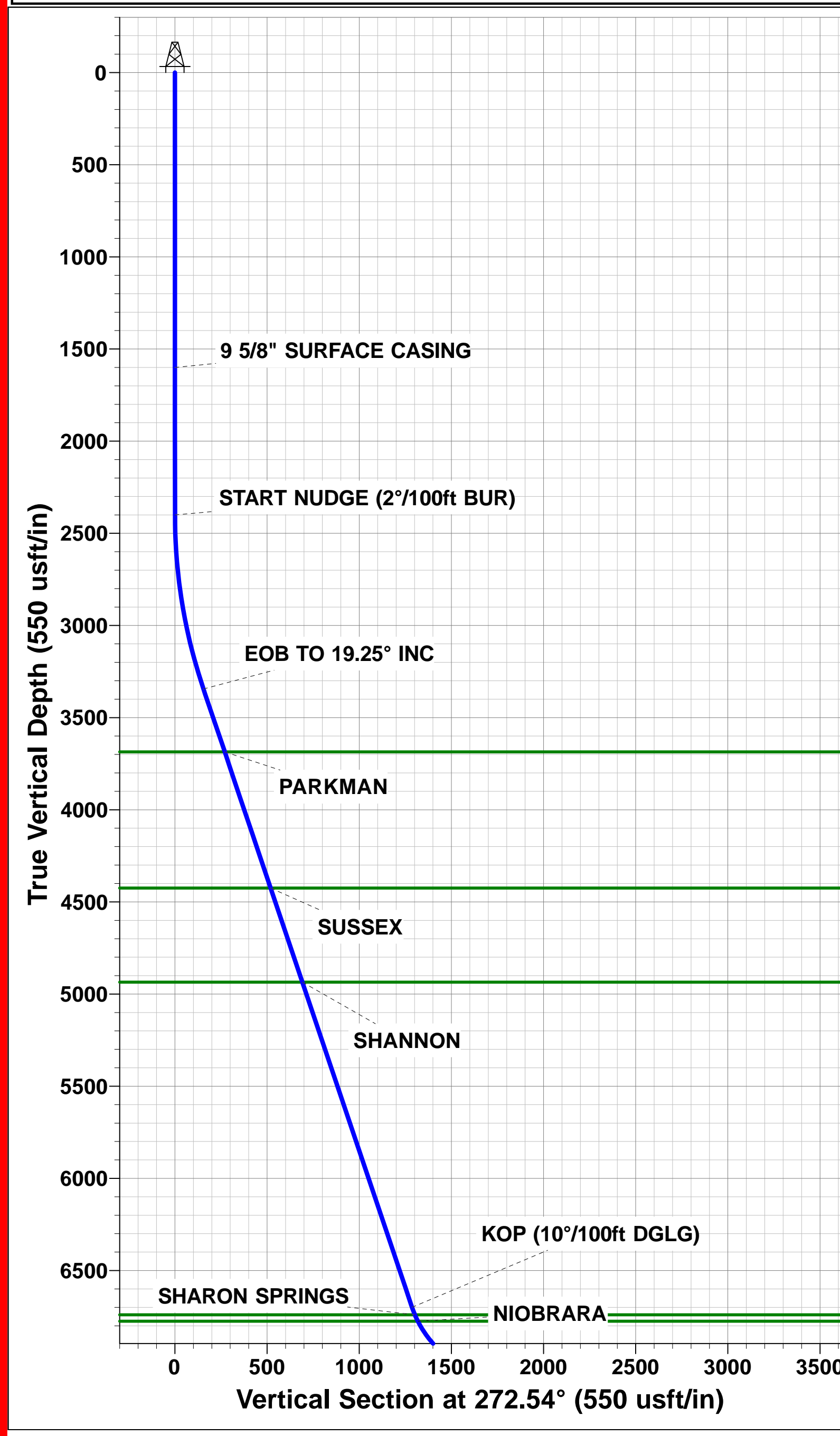
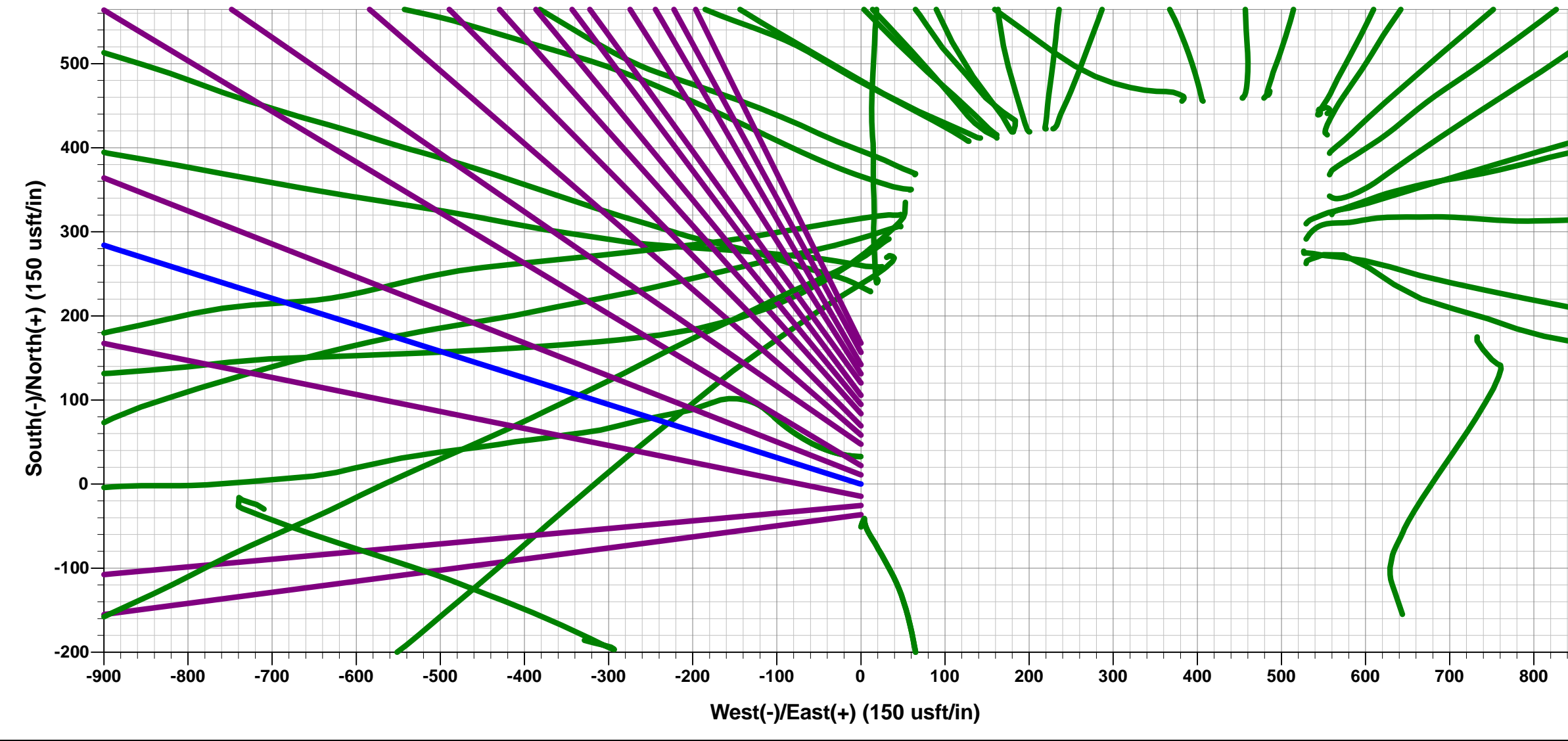
TVDPath	MDPath	Formation
3686.0	3724.2	PARKMAN
4425.0	4507.0	SUSSEX
4935.0	5047.2	SHANNON
6740.0	6959.6	SHARON SPRINGS
6775.0	6998.3	NIOBRARA
7055.0	7430.8	FORT HAYS
7080.0	7525.1	CODELL

PROPOSED LOCAL COORDINATES

SHL: 610ft FNL & 1305ft FEL of Sec 20  
 LP \*NEW\*: 173ft FNL & 2198ft FWL of Sec 20  
 BHL: 158ft FNL & 2223ft FEL of Sec 24



Azimuths to True North  
 Magnetic North: 8.28°  
 Magnetic Field  
 Strength: 52521.7snT  
 Dip Angle: 66.89°  
 Date: 14/05/2016  
 Model: IGRF2015





<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well GP-HILLSIDE C1-20-24
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4689.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4689.0usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 20 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	GP-HILLSIDE C1-20-24	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

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

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

<b>Well</b>	GP-HILLSIDE C1-20-24					
<b>Well Position</b>	<b>+N-S</b>	-167.6 usft	<b>Northing:</b>	1,386,036.26 usft	<b>Latitude:</b>	40.390190
	<b>+E-W</b>	0.0 usft	<b>Easting:</b>	3,227,709.15 usft	<b>Longitude:</b>	-104.682510
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>	usft	<b>Ground Level:</b>	4,673.0 usft

<b>Wellbore</b>	ORIGINAL WELLBORE				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	14/05/2016	8.28	66.89	52,522

<b>Design</b>	PROPOSAL #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N-S (usft)</b>	<b>+E-W (usft)</b>	<b>Direction (°)</b>
	7,090.0	0.0	0.0	272.54

<b>Plan Sections</b>											
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	
2,400.0	0.00	0.00	2,400.0	-2,289.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,362.4	19.25	287.51	3,344.4	-1,344.6	48.2	-152.7	2.00	2.00	0.00	287.51	
6,916.2	19.25	287.51	6,699.6	2,010.6	400.8	-1,269.9	0.00	0.00	0.00	0.00	
7,632.6	90.00	270.38	7,090.0	2,401.0	444.5	-1,813.4	10.00	9.88	-2.39	-18.08	HZ LANDING PNT
17,315.4	90.00	270.38	7,090.0	2,401.0	509.1	-11,496.0	0.00	0.00	0.00	0.00	BHL - GP-HILLSIDE

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well GP-HILLSIDE C1-20-24
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4689.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4689.0usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 20 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	GP-HILLSIDE C1-20-24	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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
<b>9 5/8" SURFACE CASING</b>										
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
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	0.00	0.00	2,100.0	2,589.00	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	2,489.00	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	2,389.00	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
2,400.0	0.00	0.00	2,400.0	2,289.00	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	2.00	287.51	2,500.0	2,189.02	0.5	-1.7	1.7	2.00	2.00	0.00
2,600.0	4.00	287.51	2,599.8	2,089.16	2.1	-6.7	6.7	2.00	2.00	0.00
2,700.0	6.00	287.51	2,699.5	1,989.55	4.7	-15.0	15.2	2.00	2.00	0.00
2,800.0	8.00	287.51	2,798.7	1,890.30	8.4	-26.6	26.9	2.00	2.00	0.00
2,900.0	10.00	287.51	2,897.5	1,791.53	13.1	-41.5	42.0	2.00	2.00	0.00
3,000.0	12.00	287.51	2,995.6	1,693.38	18.8	-59.7	60.5	2.00	2.00	0.00
3,100.0	14.00	287.51	3,093.1	1,595.94	25.6	-81.2	82.2	2.00	2.00	0.00
3,200.0	16.00	287.51	3,189.6	1,499.36	33.4	-105.8	107.2	2.00	2.00	0.00
3,300.0	18.00	287.51	3,285.3	1,403.73	42.2	-133.7	135.4	2.00	2.00	0.00
<b>EOB TO 19.25° INC</b>										
3,362.4	19.25	287.51	3,344.4	1,344.64	48.2	-152.7	154.7	2.00	2.00	0.00
3,400.0	19.25	287.51	3,379.9	1,309.10	51.9	-164.5	166.7	0.00	0.00	0.00
3,500.0	19.25	287.51	3,474.3	1,214.69	61.8	-196.0	198.5	0.00	0.00	0.00
3,600.0	19.25	287.51	3,568.7	1,120.28	71.8	-227.4	230.4	0.00	0.00	0.00
3,700.0	19.25	287.51	3,663.1	1,025.87	81.7	-258.8	262.2	0.00	0.00	0.00
<b>PARKMAN</b>										
3,724.2	19.25	287.51	3,686.0	1,003.00	84.1	-266.5	269.9	0.00	0.00	0.00
3,800.0	19.25	287.51	3,757.5	931.46	91.6	-290.3	294.0	0.00	0.00	0.00
3,900.0	19.25	287.51	3,852.0	837.05	101.5	-321.7	325.9	0.00	0.00	0.00
4,000.0	19.25	287.51	3,946.4	742.64	111.4	-353.2	357.7	0.00	0.00	0.00
4,100.0	19.25	287.51	4,040.8	648.23	121.4	-384.6	389.6	0.00	0.00	0.00
4,200.0	19.25	287.51	4,135.2	553.82	131.3	-416.0	421.4	0.00	0.00	0.00
4,300.0	19.25	287.51	4,229.6	459.41	141.2	-447.5	453.3	0.00	0.00	0.00
4,400.0	19.25	287.51	4,324.0	365.00	151.1	-478.9	485.1	0.00	0.00	0.00
4,500.0	19.25	287.51	4,418.4	270.59	161.1	-510.3	517.0	0.00	0.00	0.00
<b>SUSSEX</b>										
4,507.0	19.25	287.51	4,425.0	264.00	161.7	-512.5	519.2	0.00	0.00	0.00

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<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4689.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4689.0usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 20 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	GP-HILLSIDE C1-20-24	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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	19.25	287.51	4,512.8	176.17	171.0	-541.8	548.8	0.00	0.00	0.00
4,700.0	19.25	287.51	4,607.2	81.76	180.9	-573.2	580.6	0.00	0.00	0.00
4,800.0	19.25	287.51	4,701.6	-12.65	190.8	-604.6	612.5	0.00	0.00	0.00
4,900.0	19.25	287.51	4,796.1	-107.06	200.7	-636.1	644.3	0.00	0.00	0.00
5,000.0	19.25	287.51	4,890.5	-201.47	210.7	-667.5	676.2	0.00	0.00	0.00
<b>SHANNON</b>										
<b>5,047.2</b>	<b>19.25</b>	<b>287.51</b>	<b>4,935.0</b>	<b>-246.00</b>	<b>215.3</b>	<b>-682.3</b>	<b>691.2</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,100.0	19.25	287.51	4,984.9	-295.88	220.6	-698.9	708.0	0.00	0.00	0.00
5,200.0	19.25	287.51	5,079.3	-390.29	230.5	-730.4	739.9	0.00	0.00	0.00
5,300.0	19.25	287.51	5,173.7	-484.70	240.4	-761.8	771.7	0.00	0.00	0.00
5,400.0	19.25	287.51	5,268.1	-579.11	250.3	-793.3	803.6	0.00	0.00	0.00
5,500.0	19.25	287.51	5,362.5	-673.52	260.3	-824.7	835.4	0.00	0.00	0.00
5,600.0	19.25	287.51	5,456.9	-767.93	270.2	-856.1	867.2	0.00	0.00	0.00
5,700.0	19.25	287.51	5,551.3	-862.34	280.1	-887.6	899.1	0.00	0.00	0.00
5,800.0	19.25	287.51	5,645.8	-956.75	290.0	-919.0	930.9	0.00	0.00	0.00
5,900.0	19.25	287.51	5,740.2	-1,051.16	299.9	-950.4	962.8	0.00	0.00	0.00
6,000.0	19.25	287.51	5,834.6	-1,145.57	309.9	-981.9	994.6	0.00	0.00	0.00
6,100.0	19.25	287.51	5,929.0	-1,239.98	319.8	-1,013.3	1,026.5	0.00	0.00	0.00
6,200.0	19.25	287.51	6,023.4	-1,334.39	329.7	-1,044.7	1,058.3	0.00	0.00	0.00
6,300.0	19.25	287.51	6,117.8	-1,428.81	339.6	-1,076.2	1,090.2	0.00	0.00	0.00
6,400.0	19.25	287.51	6,212.2	-1,523.22	349.5	-1,107.6	1,122.0	0.00	0.00	0.00
6,500.0	19.25	287.51	6,306.6	-1,617.63	359.5	-1,139.1	1,153.8	0.00	0.00	0.00
6,600.0	19.25	287.51	6,401.0	-1,712.04	369.4	-1,170.5	1,185.7	0.00	0.00	0.00
6,700.0	19.25	287.51	6,495.4	-1,806.45	379.3	-1,201.9	1,217.5	0.00	0.00	0.00
6,800.0	19.25	287.51	6,589.9	-1,900.86	389.2	-1,233.4	1,249.4	0.00	0.00	0.00
6,900.0	19.25	287.51	6,684.3	-1,995.27	399.1	-1,264.8	1,281.2	0.00	0.00	0.00
<b>KOP (10°/100ft DGLG)</b>										
<b>6,916.2</b>	<b>19.25</b>	<b>287.51</b>	<b>6,699.6</b>	<b>-2,010.59</b>	<b>400.8</b>	<b>-1,269.9</b>	<b>1,286.4</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>SHARON SPRINGS</b>										
<b>6,959.6</b>	<b>23.41</b>	<b>284.13</b>	<b>6,740.0</b>	<b>-2,051.00</b>	<b>405.0</b>	<b>-1,285.1</b>	<b>1,301.7</b>	<b>10.00</b>	<b>9.59</b>	<b>-7.81</b>
<b>NIOBRARA</b>										
<b>6,998.3</b>	<b>27.17</b>	<b>281.94</b>	<b>6,775.0</b>	<b>-2,086.00</b>	<b>408.7</b>	<b>-1,301.2</b>	<b>1,318.0</b>	<b>10.00</b>	<b>9.71</b>	<b>-5.64</b>
7,000.0	27.33	281.86	6,776.5	-2,087.48	408.9	-1,301.9	1,318.8	10.00	9.75	-4.88
7,100.0	37.14	278.19	6,861.0	-2,171.97	417.9	-1,354.4	1,371.6	10.00	9.81	-3.68
7,200.0	47.02	275.88	6,935.1	-2,246.11	426.0	-1,420.9	1,438.3	10.00	9.88	-2.31
7,300.0	56.94	274.22	6,996.6	-2,307.63	432.8	-1,499.2	1,516.9	10.00	9.91	-1.66
7,400.0	66.87	272.90	7,043.7	-2,354.67	438.3	-1,587.2	1,605.0	10.00	9.93	-1.32
<b>FORT HAYS</b>										
<b>7,430.8</b>	<b>69.93</b>	<b>272.54</b>	<b>7,055.0</b>	<b>-2,366.00</b>	<b>439.6</b>	<b>-1,615.7</b>	<b>1,633.6</b>	<b>10.00</b>	<b>9.94</b>	<b>-1.18</b>
7,500.0	76.81	271.76	7,074.8	-2,385.80	442.1	-1,682.0	1,699.9	10.00	9.94	-1.12
<b>CODELL</b>										
<b>7,525.1</b>	<b>79.31</b>	<b>271.49</b>	<b>7,080.0</b>	<b>-2,391.00</b>	<b>442.8</b>	<b>-1,706.6</b>	<b>1,724.5</b>	<b>10.00</b>	<b>9.95</b>	<b>-1.07</b>
7,600.0	86.76	270.72	7,089.1	-2,400.08	444.2	-1,780.8	1,798.7	10.00	9.95	-1.04
<b>HZ LANDING PNT - GP-HILLSIDE C1-20-24</b>										
<b>7,632.6</b>	<b>90.00</b>	<b>270.38</b>	<b>7,090.0</b>	<b>-2,401.00</b>	<b>444.5</b>	<b>-1,813.4</b>	<b>1,831.3</b>	<b>10.00</b>	<b>9.95</b>	<b>-1.02</b>
7,700.0	90.00	270.38	7,090.0	-2,401.00	445.0	-1,880.8	1,898.6	0.00	0.00	0.00
7,800.0	90.00	270.38	7,090.0	-2,401.00	445.6	-1,980.8	1,998.6	0.00	0.00	0.00
7,900.0	90.00	270.38	7,090.0	-2,401.00	446.3	-2,080.8	2,098.5	0.00	0.00	0.00
8,000.0	90.00	270.38	7,090.0	-2,401.00	447.0	-2,180.8	2,198.4	0.00	0.00	0.00
8,100.0	90.00	270.38	7,090.0	-2,401.00	447.6	-2,280.8	2,298.4	0.00	0.00	0.00
8,200.0	90.00	270.38	7,090.0	-2,401.00	448.3	-2,380.8	2,398.3	0.00	0.00	0.00
8,300.0	90.00	270.38	7,090.0	-2,401.00	449.0	-2,480.8	2,498.2	0.00	0.00	0.00
8,400.0	90.00	270.38	7,090.0	-2,401.00	449.6	-2,580.8	2,598.1	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well GP-HILLSIDE C1-20-24
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4689.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4689.0usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 20 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	GP-HILLSIDE C1-20-24	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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	270.38	7,090.0	-2,401.00	450.3	-2,680.8	2,698.1	0.00	0.00	0.00
8,600.0	90.00	270.38	7,090.0	-2,401.00	451.0	-2,780.8	2,798.0	0.00	0.00	0.00
8,700.0	90.00	270.38	7,090.0	-2,401.00	451.6	-2,880.8	2,897.9	0.00	0.00	0.00
8,800.0	90.00	270.38	7,090.0	-2,401.00	452.3	-2,980.8	2,997.9	0.00	0.00	0.00
8,900.0	90.00	270.38	7,090.0	-2,401.00	453.0	-3,080.8	3,097.8	0.00	0.00	0.00
9,000.0	90.00	270.38	7,090.0	-2,401.00	453.6	-3,180.8	3,197.7	0.00	0.00	0.00
9,100.0	90.00	270.38	7,090.0	-2,401.00	454.3	-3,280.8	3,297.6	0.00	0.00	0.00
9,200.0	90.00	270.38	7,090.0	-2,401.00	455.0	-3,380.8	3,397.6	0.00	0.00	0.00
9,300.0	90.00	270.38	7,090.0	-2,401.00	455.6	-3,480.8	3,497.5	0.00	0.00	0.00
9,400.0	90.00	270.38	7,090.0	-2,401.00	456.3	-3,580.8	3,597.4	0.00	0.00	0.00
9,500.0	90.00	270.38	7,090.0	-2,401.00	457.0	-3,680.8	3,697.4	0.00	0.00	0.00
9,600.0	90.00	270.38	7,090.0	-2,401.00	457.6	-3,780.7	3,797.3	0.00	0.00	0.00
9,700.0	90.00	270.38	7,090.0	-2,401.00	458.3	-3,880.7	3,897.2	0.00	0.00	0.00
9,800.0	90.00	270.38	7,090.0	-2,401.00	459.0	-3,980.7	3,997.2	0.00	0.00	0.00
9,900.0	90.00	270.38	7,090.0	-2,401.00	459.6	-4,080.7	4,097.1	0.00	0.00	0.00
10,000.0	90.00	270.38	7,090.0	-2,401.00	460.3	-4,180.7	4,197.0	0.00	0.00	0.00
10,100.0	90.00	270.38	7,090.0	-2,401.00	461.0	-4,280.7	4,296.9	0.00	0.00	0.00
10,200.0	90.00	270.38	7,090.0	-2,401.00	461.6	-4,380.7	4,396.9	0.00	0.00	0.00
10,300.0	90.00	270.38	7,090.0	-2,401.00	462.3	-4,480.7	4,496.8	0.00	0.00	0.00
10,400.0	90.00	270.38	7,090.0	-2,401.00	463.0	-4,580.7	4,596.7	0.00	0.00	0.00
10,500.0	90.00	270.38	7,090.0	-2,401.00	463.6	-4,680.7	4,696.7	0.00	0.00	0.00
10,600.0	90.00	270.38	7,090.0	-2,401.00	464.3	-4,780.7	4,796.6	0.00	0.00	0.00
10,700.0	90.00	270.38	7,090.0	-2,401.00	465.0	-4,880.7	4,896.5	0.00	0.00	0.00
10,800.0	90.00	270.38	7,090.0	-2,401.00	465.6	-4,980.7	4,996.4	0.00	0.00	0.00
10,900.0	90.00	270.38	7,090.0	-2,401.00	466.3	-5,080.7	5,096.4	0.00	0.00	0.00
11,000.0	90.00	270.38	7,090.0	-2,401.00	467.0	-5,180.7	5,196.3	0.00	0.00	0.00
11,100.0	90.00	270.38	7,090.0	-2,401.00	467.6	-5,280.7	5,296.2	0.00	0.00	0.00
11,200.0	90.00	270.38	7,090.0	-2,401.00	468.3	-5,380.7	5,396.2	0.00	0.00	0.00
11,300.0	90.00	270.38	7,090.0	-2,401.00	469.0	-5,480.7	5,496.1	0.00	0.00	0.00
11,400.0	90.00	270.38	7,090.0	-2,401.00	469.6	-5,580.7	5,596.0	0.00	0.00	0.00
11,500.0	90.00	270.38	7,090.0	-2,401.00	470.3	-5,680.7	5,696.0	0.00	0.00	0.00
11,600.0	90.00	270.38	7,090.0	-2,401.00	471.0	-5,780.7	5,795.9	0.00	0.00	0.00
11,700.0	90.00	270.38	7,090.0	-2,401.00	471.6	-5,880.7	5,895.8	0.00	0.00	0.00
11,800.0	90.00	270.38	7,090.0	-2,401.00	472.3	-5,980.7	5,995.7	0.00	0.00	0.00
11,900.0	90.00	270.38	7,090.0	-2,401.00	473.0	-6,080.7	6,095.7	0.00	0.00	0.00
12,000.0	90.00	270.38	7,090.0	-2,401.00	473.6	-6,180.7	6,195.6	0.00	0.00	0.00
12,100.0	90.00	270.38	7,090.0	-2,401.00	474.3	-6,280.7	6,295.5	0.00	0.00	0.00
12,200.0	90.00	270.38	7,090.0	-2,401.00	475.0	-6,380.7	6,395.5	0.00	0.00	0.00
12,300.0	90.00	270.38	7,090.0	-2,401.00	475.6	-6,480.7	6,495.4	0.00	0.00	0.00
12,400.0	90.00	270.38	7,090.0	-2,401.00	476.3	-6,580.7	6,595.3	0.00	0.00	0.00
12,500.0	90.00	270.38	7,090.0	-2,401.00	477.0	-6,680.7	6,695.2	0.00	0.00	0.00
12,600.0	90.00	270.38	7,090.0	-2,401.00	477.6	-6,780.7	6,795.2	0.00	0.00	0.00
12,700.0	90.00	270.38	7,090.0	-2,401.00	478.3	-6,880.7	6,895.1	0.00	0.00	0.00
12,800.0	90.00	270.38	7,090.0	-2,401.00	479.0	-6,980.7	6,995.0	0.00	0.00	0.00
12,900.0	90.00	270.38	7,090.0	-2,401.00	479.6	-7,080.7	7,095.0	0.00	0.00	0.00
13,000.0	90.00	270.38	7,090.0	-2,401.00	480.3	-7,180.7	7,194.9	0.00	0.00	0.00
13,100.0	90.00	270.38	7,090.0	-2,401.00	481.0	-7,280.7	7,294.8	0.00	0.00	0.00
13,200.0	90.00	270.38	7,090.0	-2,401.00	481.6	-7,380.7	7,394.7	0.00	0.00	0.00
13,300.0	90.00	270.38	7,090.0	-2,401.00	482.3	-7,480.7	7,494.7	0.00	0.00	0.00
13,400.0	90.00	270.38	7,090.0	-2,401.00	483.0	-7,580.7	7,594.6	0.00	0.00	0.00
13,500.0	90.00	270.38	7,090.0	-2,401.00	483.6	-7,680.7	7,694.5	0.00	0.00	0.00
13,600.0	90.00	270.38	7,090.0	-2,401.00	484.3	-7,780.7	7,794.5	0.00	0.00	0.00
13,700.0	90.00	270.38	7,090.0	-2,401.00	485.0	-7,880.7	7,894.4	0.00	0.00	0.00
13,800.0	90.00	270.38	7,090.0	-2,401.00	485.6	-7,980.7	7,994.3	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well GP-HILLSIDE C1-20-24
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4689.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4689.0usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 20 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	GP-HILLSIDE C1-20-24	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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	270.38	7,090.0	-2,401.00	486.3	-8,080.7	8,094.3	0.00	0.00	0.00
14,000.0	90.00	270.38	7,090.0	-2,401.00	487.0	-8,180.7	8,194.2	0.00	0.00	0.00
14,100.0	90.00	270.38	7,090.0	-2,401.00	487.6	-8,280.6	8,294.1	0.00	0.00	0.00
14,200.0	90.00	270.38	7,090.0	-2,401.00	488.3	-8,380.6	8,394.0	0.00	0.00	0.00
14,300.0	90.00	270.38	7,090.0	-2,401.00	489.0	-8,480.6	8,494.0	0.00	0.00	0.00
14,400.0	90.00	270.38	7,090.0	-2,401.00	489.6	-8,580.6	8,593.9	0.00	0.00	0.00
14,500.0	90.00	270.38	7,090.0	-2,401.00	490.3	-8,680.6	8,693.8	0.00	0.00	0.00
14,600.0	90.00	270.38	7,090.0	-2,401.00	491.0	-8,780.6	8,793.8	0.00	0.00	0.00
14,700.0	90.00	270.38	7,090.0	-2,401.00	491.6	-8,880.6	8,893.7	0.00	0.00	0.00
14,800.0	90.00	270.38	7,090.0	-2,401.00	492.3	-8,980.6	8,993.6	0.00	0.00	0.00
14,900.0	90.00	270.38	7,090.0	-2,401.00	493.0	-9,080.6	9,093.5	0.00	0.00	0.00
15,000.0	90.00	270.38	7,090.0	-2,401.00	493.6	-9,180.6	9,193.5	0.00	0.00	0.00
15,100.0	90.00	270.38	7,090.0	-2,401.00	494.3	-9,280.6	9,293.4	0.00	0.00	0.00
15,200.0	90.00	270.38	7,090.0	-2,401.00	495.0	-9,380.6	9,393.3	0.00	0.00	0.00
15,300.0	90.00	270.38	7,090.0	-2,401.00	495.6	-9,480.6	9,493.3	0.00	0.00	0.00
15,400.0	90.00	270.38	7,090.0	-2,401.00	496.3	-9,580.6	9,593.2	0.00	0.00	0.00
15,500.0	90.00	270.38	7,090.0	-2,401.00	497.0	-9,680.6	9,693.1	0.00	0.00	0.00
15,600.0	90.00	270.38	7,090.0	-2,401.00	497.6	-9,780.6	9,793.1	0.00	0.00	0.00
15,700.0	90.00	270.38	7,090.0	-2,401.00	498.3	-9,880.6	9,893.0	0.00	0.00	0.00
15,800.0	90.00	270.38	7,090.0	-2,401.00	499.0	-9,980.6	9,992.9	0.00	0.00	0.00
15,900.0	90.00	270.38	7,090.0	-2,401.00	499.6	-10,080.6	10,092.8	0.00	0.00	0.00
16,000.0	90.00	270.38	7,090.0	-2,401.00	500.3	-10,180.6	10,192.8	0.00	0.00	0.00
16,100.0	90.00	270.38	7,090.0	-2,401.00	501.0	-10,280.6	10,292.7	0.00	0.00	0.00
16,200.0	90.00	270.38	7,090.0	-2,401.00	501.6	-10,380.6	10,392.6	0.00	0.00	0.00
16,300.0	90.00	270.38	7,090.0	-2,401.00	502.3	-10,480.6	10,492.6	0.00	0.00	0.00
16,400.0	90.00	270.38	7,090.0	-2,401.00	503.0	-10,580.6	10,592.5	0.00	0.00	0.00
16,500.0	90.00	270.38	7,090.0	-2,401.00	503.6	-10,680.6	10,692.4	0.00	0.00	0.00
16,600.0	90.00	270.38	7,090.0	-2,401.00	504.3	-10,780.6	10,792.3	0.00	0.00	0.00
16,700.0	90.00	270.38	7,090.0	-2,401.00	505.0	-10,880.6	10,892.3	0.00	0.00	0.00
16,800.0	90.00	270.38	7,090.0	-2,401.00	505.6	-10,980.6	10,992.2	0.00	0.00	0.00
16,900.0	90.00	270.38	7,090.0	-2,401.00	506.3	-11,080.6	11,092.1	0.00	0.00	0.00
17,000.0	90.00	270.38	7,090.0	-2,401.00	507.0	-11,180.6	11,192.1	0.00	0.00	0.00
17,100.0	90.00	270.38	7,090.0	-2,401.00	507.6	-11,280.6	11,292.0	0.00	0.00	0.00
17,200.0	90.00	270.38	7,090.0	-2,401.00	508.3	-11,380.6	11,391.9	0.00	0.00	0.00
17,300.0	90.00	270.38	7,090.0	-2,401.00	509.0	-11,480.6	11,491.9	0.00	0.00	0.00
<b>BHL - GP-HILLSIDE C1-20-24</b>										
<b>17,315.4</b>	<b>90.00</b>	<b>270.38</b>	<b>7,090.0</b>	<b>-2,401.00</b>	<b>509.1</b>	<b>-11,496.0</b>	<b>11,507.3</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**Formations**

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,724.2	3,686.0	PARKMAN			
4,507.0	4,425.0	SUSSEX			
5,047.2	4,935.0	SHANNON			
6,959.6	6,740.0	SHARON SPRINGS			
6,998.3	6,775.0	NIOBRARA			
7,430.8	7,055.0	FORT HAYS			
7,525.1	7,080.0	CODELL			

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well GP-HILLSIDE C1-20-24
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4689.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4689.0usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 20 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	GP-HILLSIDE C1-20-24	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
1,600.0	1,600.0	0.0	0.0	9 5/8" SURFACE CASING
2,400.0	2,400.0	0.0	0.0	START NUDGE (2°/100ft BUR)
3,362.4	3,344.4	48.2	-152.7	EOB TO 19.25° INC
6,916.2	6,699.6	400.8	-1,269.9	KOP (10°/100ft DGLG)
7,632.6	7,090.0	444.5	-1,813.4	HZ LANDING PNT - GP-HILLSIDE C1-20-24
17,315.4	7,090.0	509.1	-11,496.0	BHL - GP-HILLSIDE C1-20-24