

# **EXTRACTION OIL & GAS**

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

**NE NE SEC. 9 T6N R67W 6th P.M.**

**WINDER #10**

**ORIGINAL WELLBORE**

**07 July, 2016**

**Plan: PROPOSAL #1**

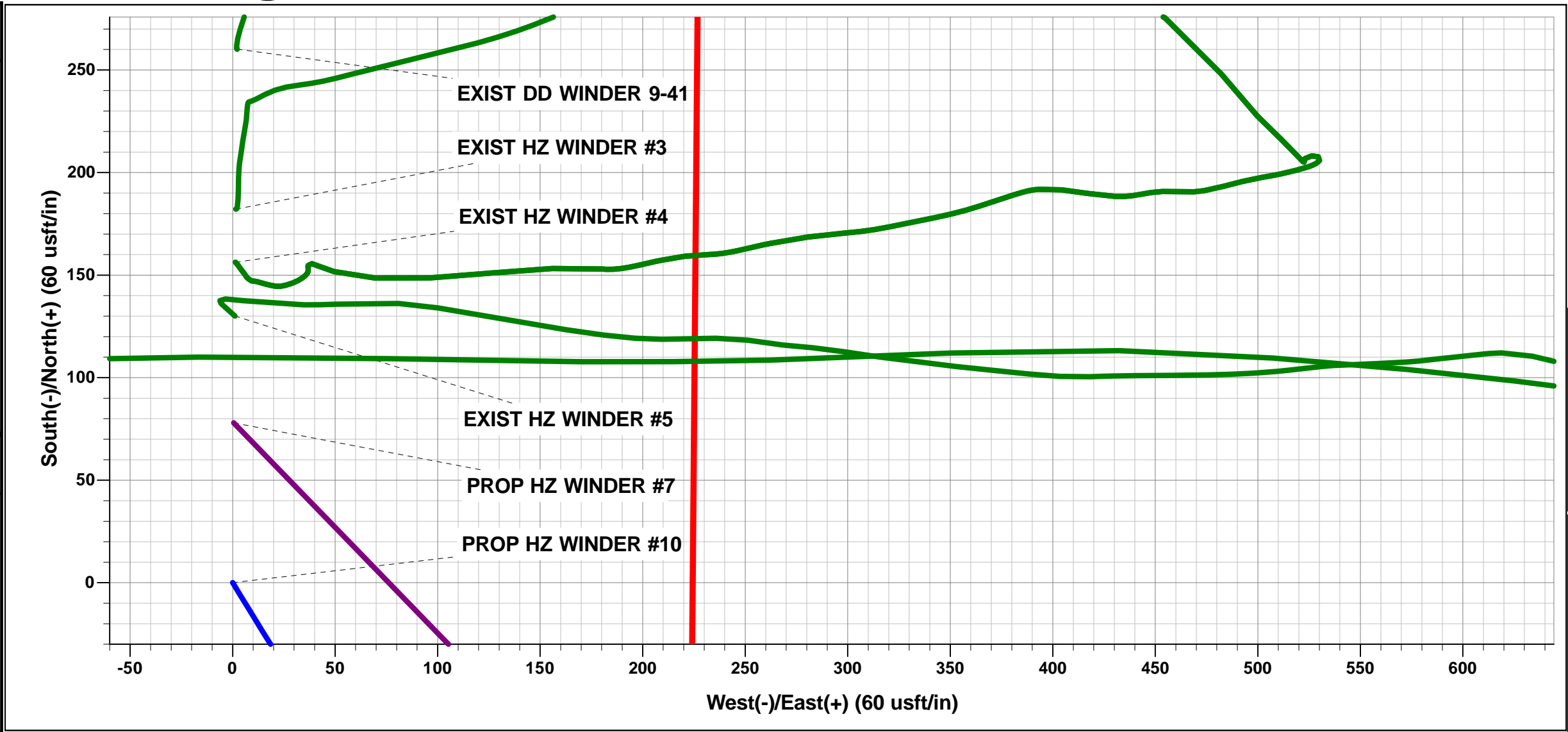




Project: WELD COUNTY, COLORADO (NAD 83)  
Site: NE NE SEC. 9 T6N R67W 6th P.M.  
Well: WINDER #10  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation	
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 910ft FNL & 684ft FEL of Sec 9	
300.0	300.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)	
987.9	994.6	13.89	148.40	-71.4	43.9	-33.1	83.8	EOB TO 13.89° INC	
6673.5	6851.6	13.89	148.40	-1269.1	780.9	-587.9	1490.1	KOP (10°/100ft DGLG)	
7305.0	7824.2	90.00	270.15	-1400.4	212.2	-6.1	2109.7	HZ LANDING PNT : 2310ft FNL & 460ft FEL of Sec 9	
7305.0	17385.8	90.00	270.15	-1375.3	-9349.4	9450.0	11671.3	BHL: 2118ft FNL & 460ft FWL of Sec 8	

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
HZ LANDING PNT - WINDER #10	7305.0	-1400.4	212.2	40.502662	-104.890525
BHL - WINDER #10	7305.0	-1375.3	-9349.4	40.502726	-104.924907



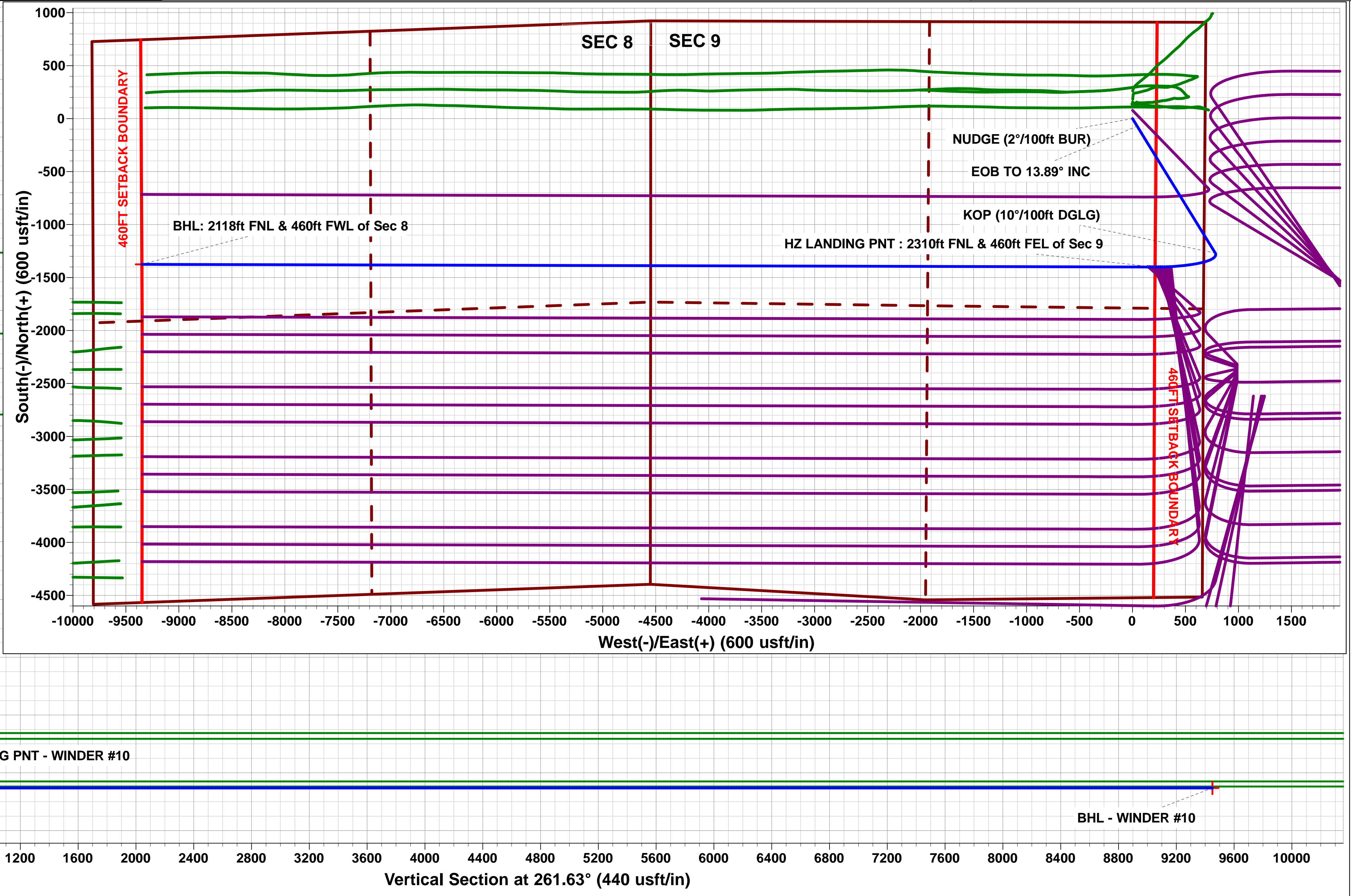
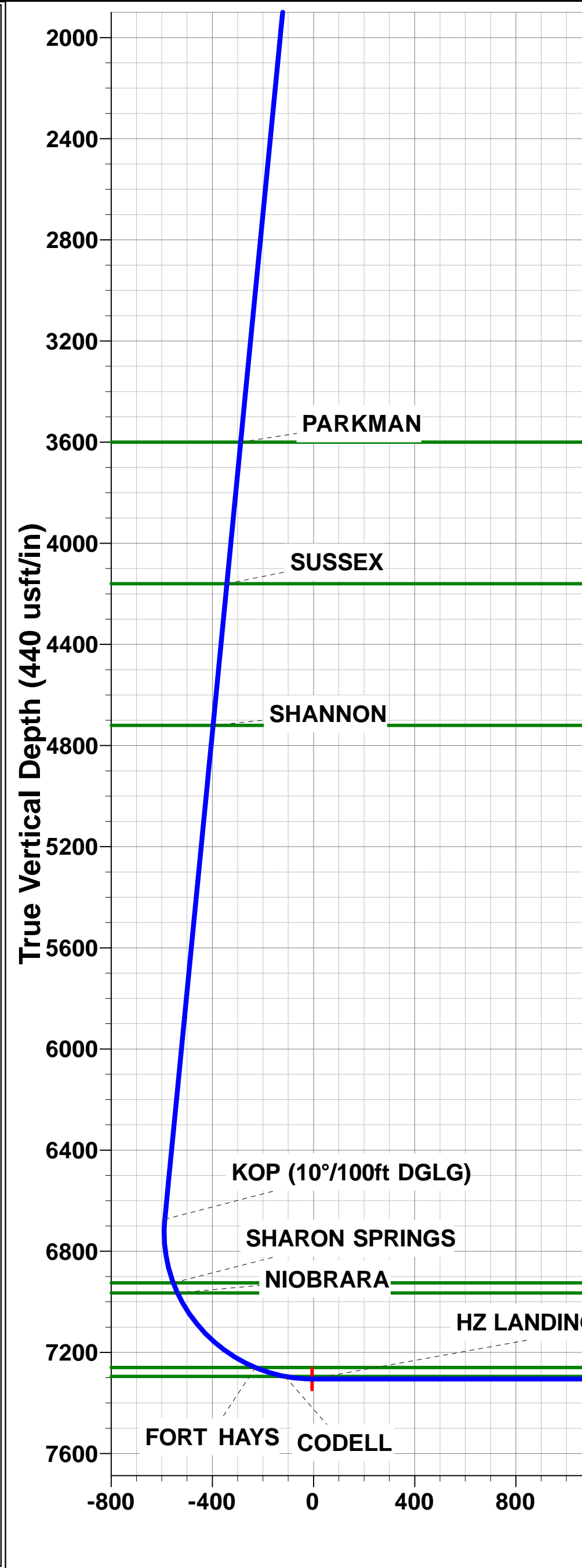
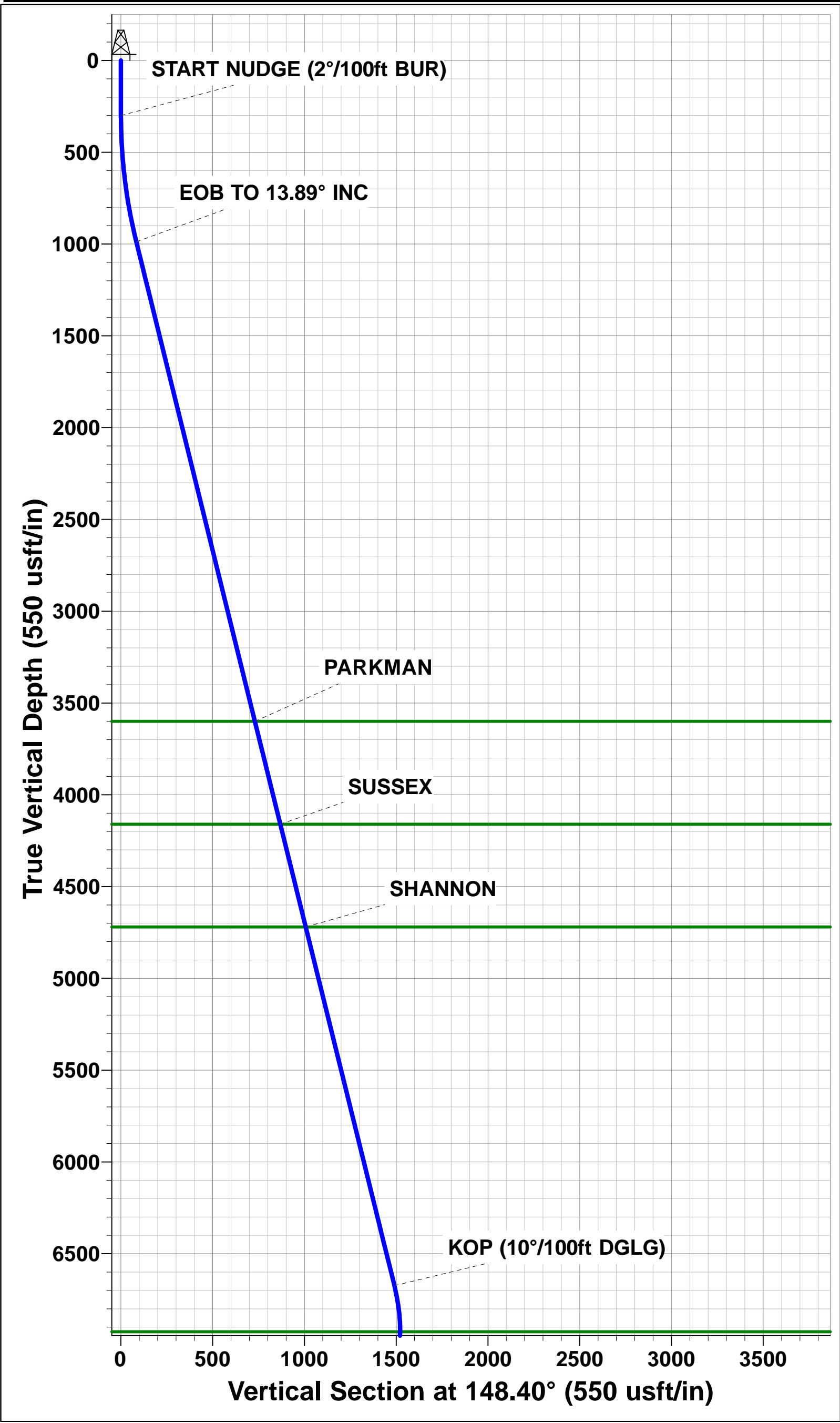
FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3600.0	3685.5	PARKMAN
4160.0	4262.4	SUSSEX
4720.0	4839.3	SHANNON
6925.0	7112.2	SHARON SPRINGS
6965.0	7156.0	NIOBRARA
7260.0	7593.1	FORT HAYS
7295.0	7715.8	CODELL

PROPOSED LOCAL COORDINATES	
SHL: 910ft FNL & 684ft FEL of Sec 9	
LP: 2310ft FNL & 460ft FEL of Sec 9	
BHL: 2118ft FNL & 460ft FWL of Sec 8	

T  
M

Azimuths to True North  
Magnetic North: 8.39°

Magnetic Field  
Strength: 52541.7snT  
Dip Angle: 66.94°  
Date: 07/07/2016  
Model: IGRF2015



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WINDER #10
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4881.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4881.0usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 9 T6N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	WINDER #10	<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. 9 T6N R67W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,428,019.60 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,169,264.94 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	1.10000ft
		<b>Latitude:</b>	40.506720
		<b>Longitude:</b>	-104.891286
		<b>Grid Convergence:</b>	0.39 °

<b>Well</b>	WINDER #10		
<b>Well Position</b>	<b>+N/-S</b>	-78.0 usft	<b>Northing:</b>
	<b>+E/-W</b>	-0.6 usft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	usft
		<b>Latitude:</b>	40.506506
		<b>Longitude:</b>	-104.891288
		<b>Ground Level:</b>	4,865.0 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	07/07/2016	8.39	66.94	52,542

<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>
	7,305.0	0.0	0.0	261.63

<b>Plan Sections</b>											
MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	-4,881.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	-4,581.0	0.0	0.0	0.00	0.00	0.00	0.00	
994.6	13.89	148.40	987.9	-3,893.1	-71.4	43.9	2.00	2.00	0.00	148.40	
6,851.6	13.89	148.40	6,673.5	1,792.5	-1,269.1	780.9	0.00	0.00	0.00	0.00	
7,824.2	90.00	270.15	7,305.0	2,424.0	-1,400.4	212.2	10.00	7.83	12.52	121.00	HZ LANDING PNT
17,385.8	90.00	270.15	7,305.0	2,424.0	-1,375.3	-9,349.4	0.00	0.00	0.00	0.00	BHL - WINDER #10

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WINDER #10
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4881.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4881.0usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 9 T6N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	WINDER #10	<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)
<b>SHL: 910ft FNL &amp; 684ft FEL of Sec 9</b>										
0.0	0.00	0.00	0.0	4,881.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,781.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,681.00	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
300.0	0.00	0.00	300.0	4,581.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	2.00	148.40	400.0	4,481.02	-1.5	0.9	-0.7	2.00	2.00	0.00
500.0	4.00	148.40	499.8	4,381.16	-5.9	3.7	-2.8	2.00	2.00	0.00
600.0	6.00	148.40	599.5	4,281.55	-13.4	8.2	-6.2	2.00	2.00	0.00
700.0	8.00	148.40	698.7	4,182.30	-23.7	14.6	-11.0	2.00	2.00	0.00
800.0	10.00	148.40	797.5	4,083.53	-37.1	22.8	-17.2	2.00	2.00	0.00
900.0	12.00	148.40	895.6	3,985.38	-53.3	32.8	-24.7	2.00	2.00	0.00
<b>EOB TO 13.89° INC</b>										
994.6	13.89	148.40	987.9	3,893.14	-71.4	43.9	-33.1	2.00	2.00	0.00
1,000.0	13.89	148.40	993.1	3,887.94	-72.5	44.6	-33.6	0.00	0.00	0.00
1,100.0	13.89	148.40	1,090.1	3,790.87	-92.9	57.2	-43.0	0.00	0.00	0.00
1,200.0	13.89	148.40	1,187.2	3,693.79	-113.4	69.8	-52.5	0.00	0.00	0.00
1,300.0	13.89	148.40	1,284.3	3,596.72	-133.8	82.3	-62.0	0.00	0.00	0.00
1,400.0	13.89	148.40	1,381.4	3,499.65	-154.3	94.9	-71.5	0.00	0.00	0.00
1,500.0	13.89	148.40	1,478.4	3,402.57	-174.7	107.5	-80.9	0.00	0.00	0.00
1,600.0	13.89	148.40	1,575.5	3,305.50	-195.2	120.1	-90.4	0.00	0.00	0.00
1,700.0	13.89	148.40	1,672.6	3,208.42	-215.6	132.7	-99.9	0.00	0.00	0.00
1,800.0	13.89	148.40	1,769.7	3,111.35	-236.1	145.3	-109.4	0.00	0.00	0.00
1,900.0	13.89	148.40	1,866.7	3,014.27	-256.5	157.8	-118.8	0.00	0.00	0.00
2,000.0	13.89	148.40	1,963.8	2,917.20	-277.0	170.4	-128.3	0.00	0.00	0.00
2,100.0	13.89	148.40	2,060.9	2,820.12	-297.4	183.0	-137.8	0.00	0.00	0.00
2,200.0	13.89	148.40	2,158.0	2,723.05	-317.9	195.6	-147.2	0.00	0.00	0.00
2,300.0	13.89	148.40	2,255.0	2,625.97	-338.3	208.2	-156.7	0.00	0.00	0.00
2,400.0	13.89	148.40	2,352.1	2,528.90	-358.8	220.8	-166.2	0.00	0.00	0.00
2,500.0	13.89	148.40	2,449.2	2,431.82	-379.2	233.3	-175.7	0.00	0.00	0.00
2,600.0	13.89	148.40	2,546.3	2,334.75	-399.7	245.9	-185.1	0.00	0.00	0.00
2,700.0	13.89	148.40	2,643.3	2,237.68	-420.1	258.5	-194.6	0.00	0.00	0.00
2,800.0	13.89	148.40	2,740.4	2,140.60	-440.6	271.1	-204.1	0.00	0.00	0.00
2,900.0	13.89	148.40	2,837.5	2,043.53	-461.0	283.7	-213.6	0.00	0.00	0.00
3,000.0	13.89	148.40	2,934.5	1,946.45	-481.5	296.3	-223.0	0.00	0.00	0.00
3,100.0	13.89	148.40	3,031.6	1,849.38	-501.9	308.8	-232.5	0.00	0.00	0.00
3,200.0	13.89	148.40	3,128.7	1,752.30	-522.4	321.4	-242.0	0.00	0.00	0.00
3,300.0	13.89	148.40	3,225.8	1,655.23	-542.8	334.0	-251.4	0.00	0.00	0.00
3,400.0	13.89	148.40	3,322.8	1,558.15	-563.3	346.6	-260.9	0.00	0.00	0.00
3,500.0	13.89	148.40	3,419.9	1,461.08	-583.7	359.2	-270.4	0.00	0.00	0.00
3,600.0	13.89	148.40	3,517.0	1,364.00	-604.2	371.8	-279.9	0.00	0.00	0.00
<b>PARKMAN</b>										
3,685.5	13.89	148.40	3,600.0	1,281.00	-621.6	382.5	-288.0	0.00	0.00	0.00
3,700.0	13.89	148.40	3,614.1	1,266.93	-624.6	384.3	-289.3	0.00	0.00	0.00
3,800.0	13.89	148.40	3,711.1	1,169.85	-645.1	396.9	-298.8	0.00	0.00	0.00
3,900.0	13.89	148.40	3,808.2	1,072.78	-665.5	409.5	-308.3	0.00	0.00	0.00
4,000.0	13.89	148.40	3,905.3	975.71	-686.0	422.1	-317.8	0.00	0.00	0.00
4,100.0	13.89	148.40	4,002.4	878.63	-706.4	434.7	-327.2	0.00	0.00	0.00
4,200.0	13.89	148.40	4,099.4	781.56	-726.9	447.3	-336.7	0.00	0.00	0.00
<b>SUSSEX</b>										
4,262.4	13.89	148.40	4,160.0	721.00	-739.6	455.1	-342.6	0.00	0.00	0.00
4,300.0	13.89	148.40	4,196.5	684.48	-747.3	459.8	-346.2	0.00	0.00	0.00
4,400.0	13.89	148.40	4,293.6	587.41	-767.8	472.4	-355.6	0.00	0.00	0.00
4,500.0	13.89	148.40	4,390.7	490.33	-788.2	485.0	-365.1	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WINDER #10
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4881.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4881.0usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 9 T6N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	WINDER #10	<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	13.89	148.40	4,487.7	393.26	-808.7	497.6	-374.6	0.00	0.00	0.00
4,700.0	13.89	148.40	4,584.8	296.18	-829.1	510.2	-384.1	0.00	0.00	0.00
4,800.0	13.89	148.40	4,681.9	199.11	-849.6	522.7	-393.5	0.00	0.00	0.00
<b>SHANNON</b>										
<b>4,839.3</b>	<b>13.89</b>	<b>148.40</b>	<b>4,720.0</b>	<b>161.00</b>	<b>-857.6</b>	<b>527.7</b>	<b>-397.3</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
4,900.0	13.89	148.40	4,779.0	102.03	-870.0	535.3	-403.0	0.00	0.00	0.00
5,000.0	13.89	148.40	4,876.0	4.96	-890.5	547.9	-412.5	0.00	0.00	0.00
5,100.0	13.89	148.40	4,973.1	-92.12	-910.9	560.5	-422.0	0.00	0.00	0.00
5,200.0	13.89	148.40	5,070.2	-189.19	-931.4	573.1	-431.4	0.00	0.00	0.00
5,300.0	13.89	148.40	5,167.3	-286.26	-951.8	585.7	-440.9	0.00	0.00	0.00
5,400.0	13.89	148.40	5,264.3	-383.34	-972.3	598.2	-450.4	0.00	0.00	0.00
5,500.0	13.89	148.40	5,361.4	-480.41	-992.7	610.8	-459.8	0.00	0.00	0.00
5,600.0	13.89	148.40	5,458.5	-577.49	-1,013.2	623.4	-469.3	0.00	0.00	0.00
5,700.0	13.89	148.40	5,555.6	-674.56	-1,033.6	636.0	-478.8	0.00	0.00	0.00
5,800.0	13.89	148.40	5,652.6	-771.64	-1,054.1	648.6	-488.3	0.00	0.00	0.00
5,900.0	13.89	148.40	5,749.7	-868.71	-1,074.5	661.2	-497.7	0.00	0.00	0.00
6,000.0	13.89	148.40	5,846.8	-965.79	-1,095.0	673.7	-507.2	0.00	0.00	0.00
6,100.0	13.89	148.40	5,943.9	-1,062.86	-1,115.4	686.3	-516.7	0.00	0.00	0.00
6,200.0	13.89	148.40	6,040.9	-1,159.94	-1,135.9	698.9	-526.2	0.00	0.00	0.00
6,300.0	13.89	148.40	6,138.0	-1,257.01	-1,156.3	711.5	-535.6	0.00	0.00	0.00
6,400.0	13.89	148.40	6,235.1	-1,354.09	-1,176.7	724.1	-545.1	0.00	0.00	0.00
6,500.0	13.89	148.40	6,332.2	-1,451.16	-1,197.2	736.7	-554.6	0.00	0.00	0.00
6,600.0	13.89	148.40	6,429.2	-1,548.23	-1,217.6	749.2	-564.1	0.00	0.00	0.00
6,700.0	13.89	148.40	6,526.3	-1,645.31	-1,238.1	761.8	-573.5	0.00	0.00	0.00
6,800.0	13.89	148.40	6,623.4	-1,742.38	-1,258.5	774.4	-583.0	0.00	0.00	0.00
<b>KOP (10°/100ft DGLG)</b>										
<b>6,851.6</b>	<b>13.89</b>	<b>148.40</b>	<b>6,673.5</b>	<b>-1,792.46</b>	<b>-1,269.1</b>	<b>780.9</b>	<b>-587.9</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,900.0	12.12	168.56	6,720.7	-1,839.66	-1,279.0	785.0	-590.4	10.00	-3.67	41.64
7,000.0	14.06	213.04	6,818.3	-1,937.29	-1,299.6	780.4	-583.0	10.00	1.94	44.49
7,100.0	21.11	237.15	6,913.7	-2,032.68	-1,319.6	758.6	-558.5	10.00	7.05	24.10
<b>SHARON SPRINGS</b>										
<b>7,112.2</b>	<b>22.12</b>	<b>238.99</b>	<b>6,925.0</b>	<b>-2,044.00</b>	<b>-1,321.9</b>	<b>754.8</b>	<b>-554.4</b>	<b>10.00</b>	<b>8.29</b>	<b>15.17</b>
<b>NIORARA</b>										
<b>7,156.0</b>	<b>25.89</b>	<b>244.48</b>	<b>6,965.0</b>	<b>-2,084.00</b>	<b>-1,330.3</b>	<b>739.1</b>	<b>-537.6</b>	<b>10.00</b>	<b>8.61</b>	<b>12.52</b>
7,200.0	29.85	248.65	7,003.9	-2,122.92	-1,338.4	720.2	-517.7	10.00	8.97	9.47
7,300.0	39.15	255.18	7,086.3	-2,205.27	-1,355.6	666.4	-462.0	10.00	9.30	6.53
7,400.0	48.69	259.50	7,158.2	-2,277.24	-1,370.6	598.7	-392.9	10.00	9.54	4.32
7,500.0	58.36	262.70	7,217.6	-2,336.62	-1,382.9	519.4	-312.6	10.00	9.66	3.20
<b>FORT HAYS</b>										
<b>7,593.1</b>	<b>67.41</b>	<b>265.13</b>	<b>7,260.0</b>	<b>-2,379.00</b>	<b>-1,391.6</b>	<b>437.1</b>	<b>-229.9</b>	<b>10.00</b>	<b>9.73</b>	<b>2.61</b>
7,600.0	68.09	265.30	7,262.6	-2,381.63	-1,392.1	430.7	-223.5	10.00	9.75	2.40
7,700.0	77.85	267.56	7,291.9	-2,410.88	-1,398.0	335.4	-128.4	10.00	9.76	2.26
<b>CODELL</b>										
<b>7,715.8</b>	<b>79.40</b>	<b>267.89</b>	<b>7,295.0</b>	<b>-2,414.00</b>	<b>-1,398.6</b>	<b>319.9</b>	<b>-113.0</b>	<b>10.00</b>	<b>9.78</b>	<b>2.14</b>
7,800.0	87.63	269.65	7,304.5	-2,423.50	-1,400.4	236.4	-30.0	10.00	9.78	2.09
<b>HZ LANDING PNT : 2310ft FNL &amp; 460ft FEL of Sec 9</b>										
<b>7,824.2</b>	<b>90.00</b>	<b>270.15</b>	<b>7,305.0</b>	<b>-2,424.00</b>	<b>-1,400.4</b>	<b>212.2</b>	<b>-6.1</b>	<b>10.00</b>	<b>9.79</b>	<b>2.06</b>
7,900.0	90.00	270.15	7,305.0	-2,424.00	-1,400.2	136.4	68.9	0.00	0.00	0.00
8,000.0	90.00	270.15	7,305.0	-2,424.00	-1,400.0	36.4	167.8	0.00	0.00	0.00
8,100.0	90.00	270.15	7,305.0	-2,424.00	-1,399.7	-63.6	266.7	0.00	0.00	0.00
8,200.0	90.00	270.15	7,305.0	-2,424.00	-1,399.4	-163.6	365.6	0.00	0.00	0.00
8,300.0	90.00	270.15	7,305.0	-2,424.00	-1,399.2	-263.6	464.5	0.00	0.00	0.00
8,400.0	90.00	270.15	7,305.0	-2,424.00	-1,398.9	-363.6	563.4	0.00	0.00	0.00



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WINDER #10
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4881.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4881.0usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 9 T6N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	WINDER #10	<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	270.15	7,305.0	-2,424.00	-1,398.7	-463.6	662.3	0.00	0.00	0.00
8,600.0	90.00	270.15	7,305.0	-2,424.00	-1,398.4	-563.6	761.2	0.00	0.00	0.00
8,700.0	90.00	270.15	7,305.0	-2,424.00	-1,398.1	-663.6	860.0	0.00	0.00	0.00
8,800.0	90.00	270.15	7,305.0	-2,424.00	-1,397.9	-763.6	958.9	0.00	0.00	0.00
8,900.0	90.00	270.15	7,305.0	-2,424.00	-1,397.6	-863.6	1,057.8	0.00	0.00	0.00
9,000.0	90.00	270.15	7,305.0	-2,424.00	-1,397.3	-963.6	1,156.7	0.00	0.00	0.00
9,100.0	90.00	270.15	7,305.0	-2,424.00	-1,397.1	-1,063.6	1,255.6	0.00	0.00	0.00
9,200.0	90.00	270.15	7,305.0	-2,424.00	-1,396.8	-1,163.6	1,354.5	0.00	0.00	0.00
9,300.0	90.00	270.15	7,305.0	-2,424.00	-1,396.6	-1,263.6	1,453.4	0.00	0.00	0.00
9,400.0	90.00	270.15	7,305.0	-2,424.00	-1,396.3	-1,363.6	1,552.3	0.00	0.00	0.00
9,500.0	90.00	270.15	7,305.0	-2,424.00	-1,396.0	-1,463.6	1,651.2	0.00	0.00	0.00
9,600.0	90.00	270.15	7,305.0	-2,424.00	-1,395.8	-1,563.6	1,750.1	0.00	0.00	0.00
9,700.0	90.00	270.15	7,305.0	-2,424.00	-1,395.5	-1,663.6	1,849.0	0.00	0.00	0.00
9,800.0	90.00	270.15	7,305.0	-2,424.00	-1,395.2	-1,763.6	1,947.9	0.00	0.00	0.00
9,900.0	90.00	270.15	7,305.0	-2,424.00	-1,395.0	-1,863.6	2,046.8	0.00	0.00	0.00
10,000.0	90.00	270.15	7,305.0	-2,424.00	-1,394.7	-1,963.6	2,145.7	0.00	0.00	0.00
10,100.0	90.00	270.15	7,305.0	-2,424.00	-1,394.5	-2,063.6	2,244.6	0.00	0.00	0.00
10,200.0	90.00	270.15	7,305.0	-2,424.00	-1,394.2	-2,163.6	2,343.5	0.00	0.00	0.00
10,300.0	90.00	270.15	7,305.0	-2,424.00	-1,393.9	-2,263.6	2,442.4	0.00	0.00	0.00
10,400.0	90.00	270.15	7,305.0	-2,424.00	-1,393.7	-2,363.6	2,541.3	0.00	0.00	0.00
10,500.0	90.00	270.15	7,305.0	-2,424.00	-1,393.4	-2,463.6	2,640.2	0.00	0.00	0.00
10,600.0	90.00	270.15	7,305.0	-2,424.00	-1,393.1	-2,563.6	2,739.1	0.00	0.00	0.00
10,700.0	90.00	270.15	7,305.0	-2,424.00	-1,392.9	-2,663.6	2,838.0	0.00	0.00	0.00
10,800.0	90.00	270.15	7,305.0	-2,424.00	-1,392.6	-2,763.6	2,936.9	0.00	0.00	0.00
10,900.0	90.00	270.15	7,305.0	-2,424.00	-1,392.4	-2,863.6	3,035.8	0.00	0.00	0.00
11,000.0	90.00	270.15	7,305.0	-2,424.00	-1,392.1	-2,963.6	3,134.7	0.00	0.00	0.00
11,100.0	90.00	270.15	7,305.0	-2,424.00	-1,391.8	-3,063.6	3,233.6	0.00	0.00	0.00
11,200.0	90.00	270.15	7,305.0	-2,424.00	-1,391.6	-3,163.6	3,332.5	0.00	0.00	0.00
11,300.0	90.00	270.15	7,305.0	-2,424.00	-1,391.3	-3,263.6	3,431.4	0.00	0.00	0.00
11,400.0	90.00	270.15	7,305.0	-2,424.00	-1,391.0	-3,363.6	3,530.3	0.00	0.00	0.00
11,500.0	90.00	270.15	7,305.0	-2,424.00	-1,390.8	-3,463.6	3,629.2	0.00	0.00	0.00
11,600.0	90.00	270.15	7,305.0	-2,424.00	-1,390.5	-3,563.6	3,728.1	0.00	0.00	0.00
11,700.0	90.00	270.15	7,305.0	-2,424.00	-1,390.3	-3,663.6	3,826.9	0.00	0.00	0.00
11,800.0	90.00	270.15	7,305.0	-2,424.00	-1,390.0	-3,763.6	3,925.8	0.00	0.00	0.00
11,900.0	90.00	270.15	7,305.0	-2,424.00	-1,389.7	-3,863.6	4,024.7	0.00	0.00	0.00
12,000.0	90.00	270.15	7,305.0	-2,424.00	-1,389.5	-3,963.6	4,123.6	0.00	0.00	0.00
12,100.0	90.00	270.15	7,305.0	-2,424.00	-1,389.2	-4,063.6	4,222.5	0.00	0.00	0.00
12,200.0	90.00	270.15	7,305.0	-2,424.00	-1,388.9	-4,163.6	4,321.4	0.00	0.00	0.00
12,300.0	90.00	270.15	7,305.0	-2,424.00	-1,388.7	-4,263.6	4,420.3	0.00	0.00	0.00
12,400.0	90.00	270.15	7,305.0	-2,424.00	-1,388.4	-4,363.6	4,519.2	0.00	0.00	0.00
12,500.0	90.00	270.15	7,305.0	-2,424.00	-1,388.2	-4,463.6	4,618.1	0.00	0.00	0.00
12,600.0	90.00	270.15	7,305.0	-2,424.00	-1,387.9	-4,563.6	4,717.0	0.00	0.00	0.00
12,700.0	90.00	270.15	7,305.0	-2,424.00	-1,387.6	-4,663.6	4,815.9	0.00	0.00	0.00
12,800.0	90.00	270.15	7,305.0	-2,424.00	-1,387.4	-4,763.6	4,914.8	0.00	0.00	0.00
12,900.0	90.00	270.15	7,305.0	-2,424.00	-1,387.1	-4,863.6	5,013.7	0.00	0.00	0.00
13,000.0	90.00	270.15	7,305.0	-2,424.00	-1,386.8	-4,963.6	5,112.6	0.00	0.00	0.00
13,100.0	90.00	270.15	7,305.0	-2,424.00	-1,386.6	-5,063.6	5,211.5	0.00	0.00	0.00
13,200.0	90.00	270.15	7,305.0	-2,424.00	-1,386.3	-5,163.6	5,310.4	0.00	0.00	0.00
13,300.0	90.00	270.15	7,305.0	-2,424.00	-1,386.1	-5,263.6	5,409.3	0.00	0.00	0.00
13,400.0	90.00	270.15	7,305.0	-2,424.00	-1,385.8	-5,363.6	5,508.2	0.00	0.00	0.00
13,500.0	90.00	270.15	7,305.0	-2,424.00	-1,385.5	-5,463.6	5,607.1	0.00	0.00	0.00
13,600.0	90.00	270.15	7,305.0	-2,424.00	-1,385.3	-5,563.6	5,706.0	0.00	0.00	0.00
13,700.0	90.00	270.15	7,305.0	-2,424.00	-1,385.0	-5,663.6	5,804.9	0.00	0.00	0.00
13,800.0	90.00	270.15	7,305.0	-2,424.00	-1,384.7	-5,763.6	5,903.8	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WINDER #10
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4881.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4881.0usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 9 T6N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	WINDER #10	<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	270.15	7,305.0	-2,424.00	-1,384.5	-5,863.6	6,002.7	0.00	0.00	0.00
14,000.0	90.00	270.15	7,305.0	-2,424.00	-1,384.2	-5,963.6	6,101.6	0.00	0.00	0.00
14,100.0	90.00	270.15	7,305.0	-2,424.00	-1,384.0	-6,063.6	6,200.5	0.00	0.00	0.00
14,200.0	90.00	270.15	7,305.0	-2,424.00	-1,383.7	-6,163.6	6,299.4	0.00	0.00	0.00
14,300.0	90.00	270.15	7,305.0	-2,424.00	-1,383.4	-6,263.6	6,398.3	0.00	0.00	0.00
14,400.0	90.00	270.15	7,305.0	-2,424.00	-1,383.2	-6,363.6	6,497.2	0.00	0.00	0.00
14,500.0	90.00	270.15	7,305.0	-2,424.00	-1,382.9	-6,463.6	6,596.1	0.00	0.00	0.00
14,600.0	90.00	270.15	7,305.0	-2,424.00	-1,382.7	-6,563.6	6,695.0	0.00	0.00	0.00
14,700.0	90.00	270.15	7,305.0	-2,424.00	-1,382.4	-6,663.6	6,793.9	0.00	0.00	0.00
14,800.0	90.00	270.15	7,305.0	-2,424.00	-1,382.1	-6,763.6	6,892.7	0.00	0.00	0.00
14,900.0	90.00	270.15	7,305.0	-2,424.00	-1,381.9	-6,863.6	6,991.6	0.00	0.00	0.00
15,000.0	90.00	270.15	7,305.0	-2,424.00	-1,381.6	-6,963.6	7,090.5	0.00	0.00	0.00
15,100.0	90.00	270.15	7,305.0	-2,424.00	-1,381.3	-7,063.6	7,189.4	0.00	0.00	0.00
15,200.0	90.00	270.15	7,305.0	-2,424.00	-1,381.1	-7,163.6	7,288.3	0.00	0.00	0.00
15,300.0	90.00	270.15	7,305.0	-2,424.00	-1,380.8	-7,263.6	7,387.2	0.00	0.00	0.00
15,400.0	90.00	270.15	7,305.0	-2,424.00	-1,380.6	-7,363.6	7,486.1	0.00	0.00	0.00
15,500.0	90.00	270.15	7,305.0	-2,424.00	-1,380.3	-7,463.6	7,585.0	0.00	0.00	0.00
15,600.0	90.00	270.15	7,305.0	-2,424.00	-1,380.0	-7,563.6	7,683.9	0.00	0.00	0.00
15,700.0	90.00	270.15	7,305.0	-2,424.00	-1,379.8	-7,663.6	7,782.8	0.00	0.00	0.00
15,800.0	90.00	270.15	7,305.0	-2,424.00	-1,379.5	-7,763.6	7,881.7	0.00	0.00	0.00
15,900.0	90.00	270.15	7,305.0	-2,424.00	-1,379.2	-7,863.6	7,980.6	0.00	0.00	0.00
16,000.0	90.00	270.15	7,305.0	-2,424.00	-1,379.0	-7,963.6	8,079.5	0.00	0.00	0.00
16,100.0	90.00	270.15	7,305.0	-2,424.00	-1,378.7	-8,063.6	8,178.4	0.00	0.00	0.00
16,200.0	90.00	270.15	7,305.0	-2,424.00	-1,378.5	-8,163.6	8,277.3	0.00	0.00	0.00
16,300.0	90.00	270.15	7,305.0	-2,424.00	-1,378.2	-8,263.6	8,376.2	0.00	0.00	0.00
16,400.0	90.00	270.15	7,305.0	-2,424.00	-1,377.9	-8,363.6	8,475.1	0.00	0.00	0.00
16,500.0	90.00	270.15	7,305.0	-2,424.00	-1,377.7	-8,463.6	8,574.0	0.00	0.00	0.00
16,600.0	90.00	270.15	7,305.0	-2,424.00	-1,377.4	-8,563.6	8,672.9	0.00	0.00	0.00
16,700.0	90.00	270.15	7,305.0	-2,424.00	-1,377.1	-8,663.6	8,771.8	0.00	0.00	0.00
16,800.0	90.00	270.15	7,305.0	-2,424.00	-1,376.9	-8,763.6	8,870.7	0.00	0.00	0.00
16,900.0	90.00	270.15	7,305.0	-2,424.00	-1,376.6	-8,863.6	8,969.6	0.00	0.00	0.00
17,000.0	90.00	270.15	7,305.0	-2,424.00	-1,376.4	-8,963.6	9,068.5	0.00	0.00	0.00
17,100.0	90.00	270.15	7,305.0	-2,424.00	-1,376.1	-9,063.6	9,167.4	0.00	0.00	0.00
17,200.0	90.00	270.15	7,305.0	-2,424.00	-1,375.8	-9,163.6	9,266.3	0.00	0.00	0.00
17,300.0	90.00	270.15	7,305.0	-2,424.00	-1,375.6	-9,263.6	9,365.2	0.00	0.00	0.00
<b>BHL: 2118ft FNL &amp; 460ft FWL of Sec 8</b>										
<b>17,385.8</b>	<b>90.00</b>	<b>270.15</b>	<b>7,305.0</b>	<b>-2,424.00</b>	<b>-1,375.3</b>	<b>-9,349.4</b>	<b>9,450.0</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,685.5	3,600.0	PARKMAN		0.00	
4,262.4	4,160.0	SUSSEX		0.00	
4,839.3	4,720.0	SHANNON		0.00	
7,112.2	6,925.0	SHARON SPRINGS		0.00	
7,156.0	6,965.0	NIOBRARA		0.00	
7,593.1	7,260.0	FORT HAYS		0.00	
7,715.8	7,295.0	CODELL		0.00	

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WINDER #10
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4881.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4881.0usft (Original Well Elev)
<b>Site:</b>	NE NE SEC. 9 T6N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	WINDER #10	<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)	
0.0	0.0	0.0	0.0	SHL: 910ft FNL & 684ft FEL of Sec 9
300.0	300.0	0.0	0.0	START NUDGE (2°/100ft BUR)
994.6	987.9	-71.4	43.9	EOB TO 13.89° INC
6,851.6	6,673.5	-1,269.1	780.9	KOP (10°/100ft DGLG)
7,824.2	7,305.0	-1,400.4	212.2	HZ LANDING PNT : 2310ft FNL & 460ft FEL of Sec 9
17,385.8	7,305.0	-1,375.3	-9,349.4	BHL: 2118ft FNL & 460ft FWL of Sec 8