

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

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

WINDER #7

ORIGINAL WELLBORE

07 July, 2016

Plan: PROPOSAL #1

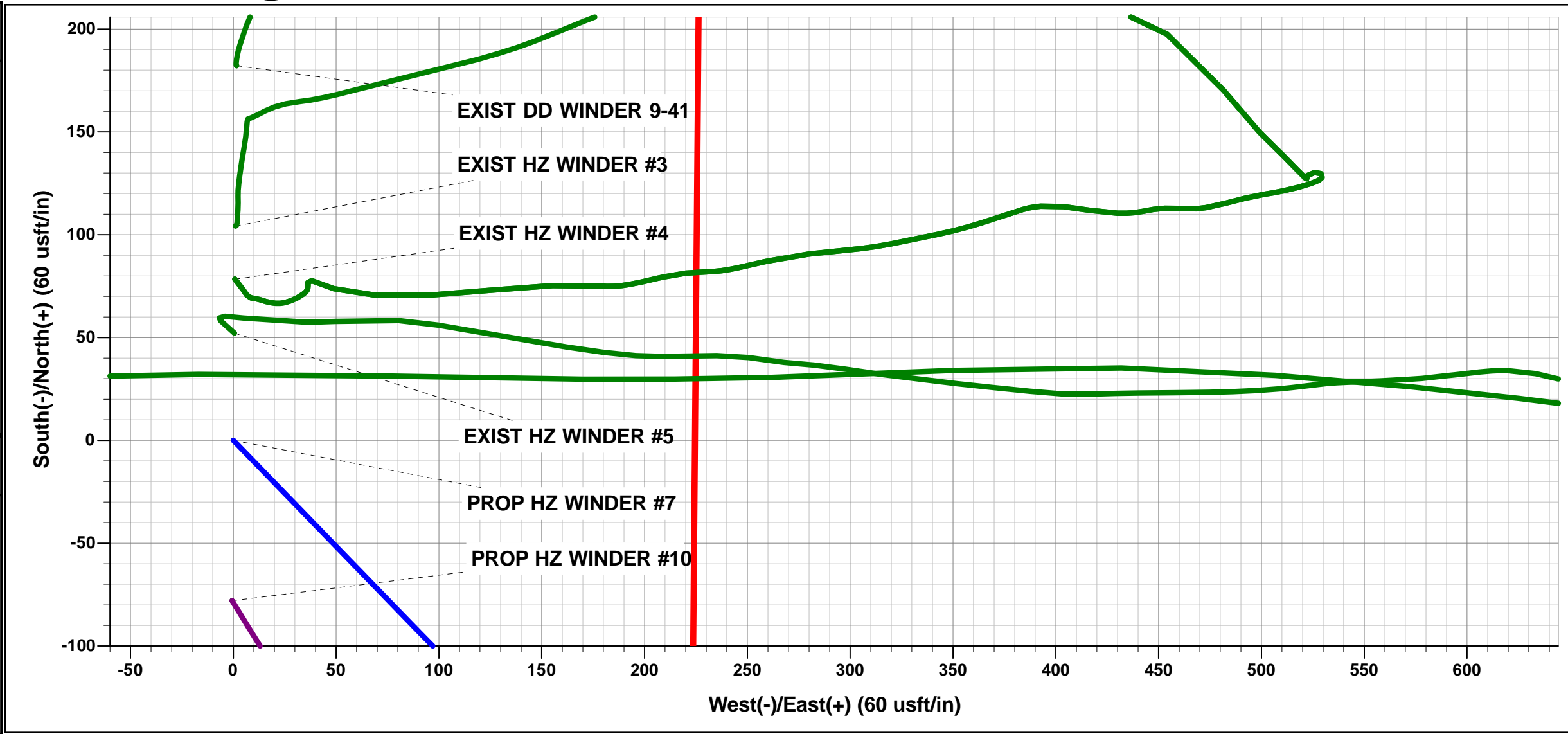




Project: WELD COUNTY, COLORADO (NAD 83)
Site: NE NE SEC. 9 T6N R67W 6th P.M.
Well: WINDER #7
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

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: 832ft FNL & 684ft FEL of Sec 9	
600.0	600.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)	
1099.1	1101.7	10.03	135.88	-31.5	30.5	-27.7	43.8	EOB TO 10.03° INC	
6667.5	6756.5	10.03	135.88	-738.7	716.4	-651.4	1029.0	KOP (10°/100ft DGLG)	
7305.0	7726.4	90.00	270.15	-818.0	147.5	-77.8	1626.0	HZ LANDING PNT *NEW*: 1650ft FNL & 530ft FEL of Sec 9	
7305.0	17227.2	90.00	270.15	-793.5	-9353.3	9386.9	11126.8	BHL: 1459ft FNL & 460ft FWL of Sec 8	

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
HZ LANDING PNT *NEW* - WINDER #7	7305.0	-818.0	147.5	40.504475	-104.890756
BHL - WINDER #7	7305.0	-793.5	-9353.3	40.504537	-104.924920



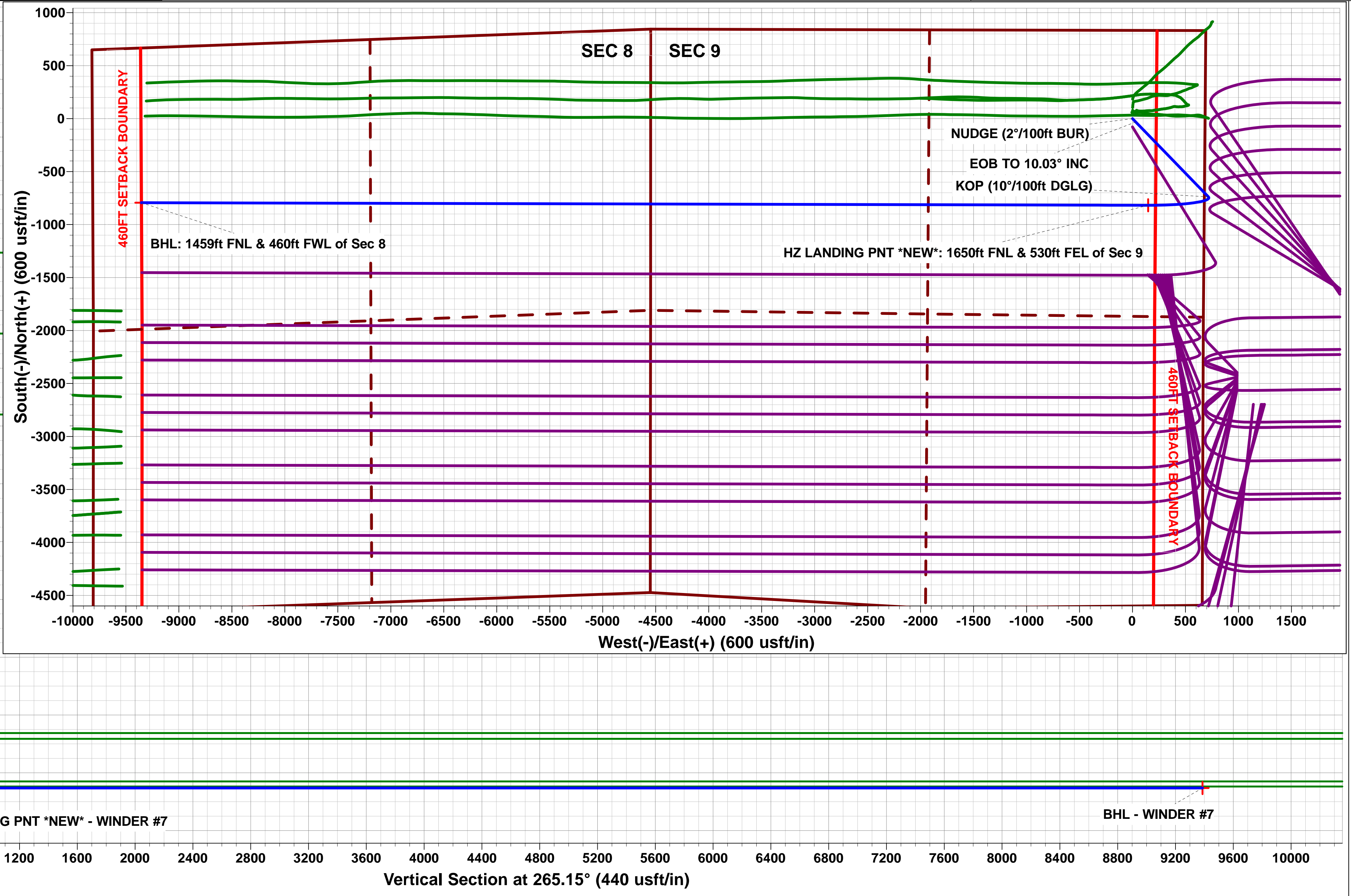
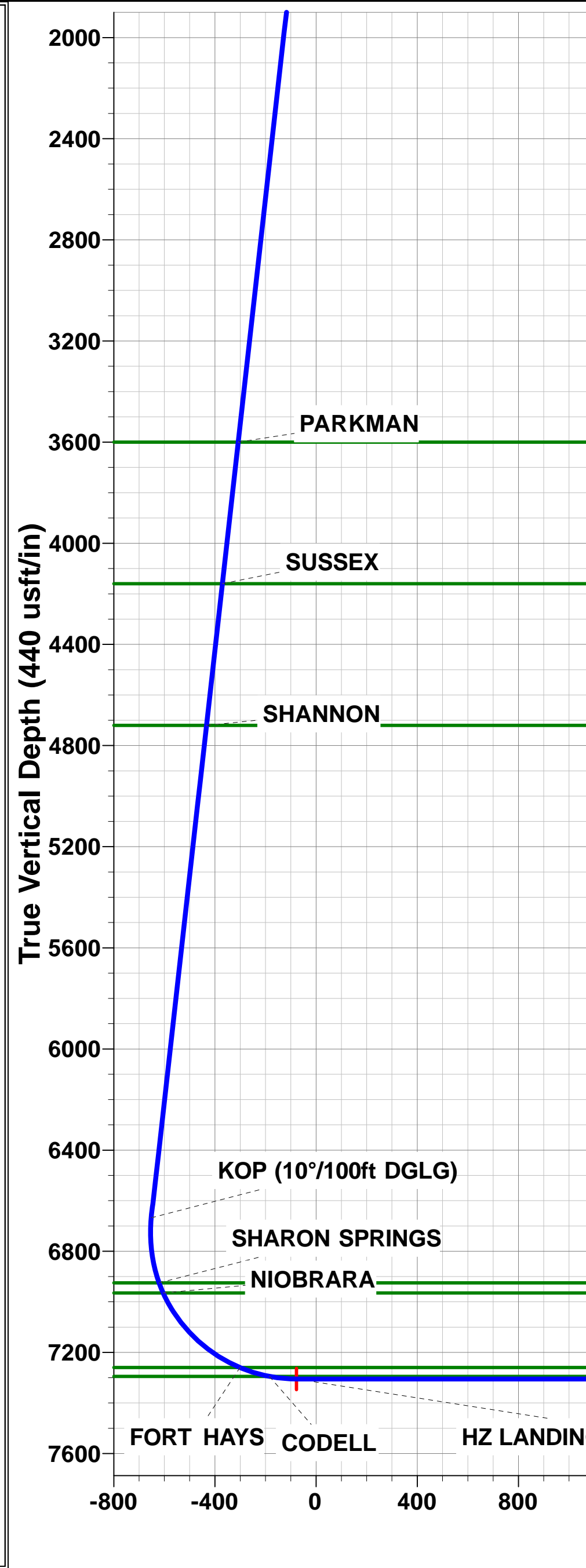
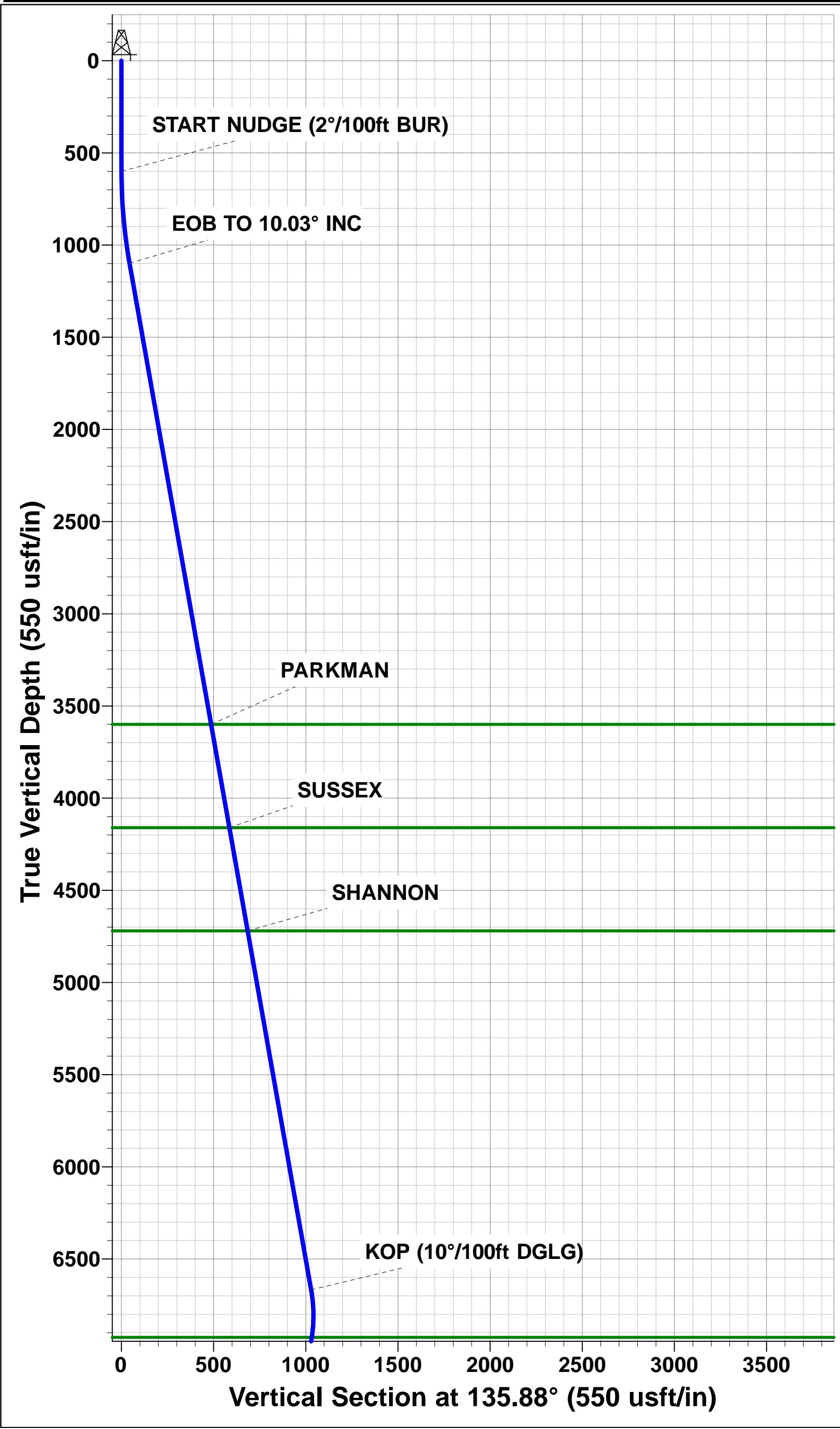
FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3600.0	3641.4	PARKMAN
4160.0	4210.1	SUSSEX
4720.0	4778.8	SHANNON
6925.0	7019.9	SHARON SPRINGS
6965.0	7063.3	NIOBRARA
7260.0	7496.8	FORT HAYS
7295.0	7618.7	CODELL

PROPOSED LOCAL COORDINATES		
SHL: 832ft FNL & 684ft FEL of Sec 9		
LP *NEW*: 1650ft FNL & 530ft FEL of Sec 9		
BHL: 1459ft FNL & 460ft FWL of Sec 8		

T
M

Azimuths to True North
Magnetic North: 8.39°

Magnetic Field
Strength: 52547.1snT
Dip Angle: 66.94°
Date: 20/06/2016
Model: IGRF2015



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well WINDER #7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4882.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4882.0usft (Original Well Elev)
Site:	NE NE SEC. 9 T6N R67W 6th P.M.	North Reference:	True
Well:	WINDER #7	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. 9 T6N R67W 6th P.M.		
Site Position:		Northing:	1,428,019.60 usft
From:	Lat/Long	Easting:	3,169,264.94 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.506720
		Longitude:	-104.891286
		Grid Convergence:	0.39 °

Well	WINDER #7		
Well Position	+N/-S	0.0 usft	Northing: 1,428,019.59 usft
	+E/-W	0.0 usft	Easting: 3,169,264.94 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	40.506720
		Longitude:	-104.891286
		Ground Level:	4,866.0 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	20/06/2016	8.39	66.94	52,547

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 (°)
	7,305.0	0.0	0.0	265.15

Plan Sections											
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	-4,882.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	-4,282.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,101.7	10.03	135.88	1,099.1	-3,782.9	-31.5	30.5	2.00	2.00	0.00	135.88	
6,756.5	10.03	135.88	6,667.5	1,785.5	-738.7	716.4	0.00	0.00	0.00	0.00	
7,726.4	90.00	270.15	7,305.0	2,423.0	-818.0	147.5	10.00	8.25	13.84	133.83	HZ LANDING PNT
17,227.2	90.00	270.15	7,305.0	2,423.0	-793.5	-9,353.3	0.00	0.00	0.00	0.00	BHL - WINDER #7

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well WINDER #7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4882.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4882.0usft (Original Well Elev)
Site:	NE NE SEC. 9 T6N R67W 6th P.M.	North Reference:	True
Well:	WINDER #7	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)
SHL: 832ft FNL & 684ft FEL of Sec 9										
0.0	0.00	0.00	0.0	4,882.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,782.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,682.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,582.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,482.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,382.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
600.0	0.00	0.00	600.0	4,282.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	2.00	135.88	700.0	4,182.02	-1.3	1.2	-1.1	2.00	2.00	0.00
800.0	4.00	135.88	799.8	4,082.16	-5.0	4.9	-4.4	2.00	2.00	0.00
900.0	6.00	135.88	899.5	3,982.55	-11.3	10.9	-9.9	2.00	2.00	0.00
1,000.0	8.00	135.88	998.7	3,883.30	-20.0	19.4	-17.6	2.00	2.00	0.00
1,100.0	10.00	135.88	1,097.5	3,784.53	-31.2	30.3	-27.6	2.00	2.00	0.00
EOB TO 10.03° INC										
1,101.7	10.03	135.88	1,099.1	3,782.88	-31.5	30.5	-27.7	2.00	2.00	0.00
1,200.0	10.03	135.88	1,195.9	3,686.06	-43.7	42.4	-38.6	0.00	0.00	0.00
1,300.0	10.03	135.88	1,294.4	3,587.59	-56.3	54.6	-49.6	0.00	0.00	0.00
1,400.0	10.03	135.88	1,392.9	3,489.12	-68.8	66.7	-60.6	0.00	0.00	0.00
1,500.0	10.03	135.88	1,491.3	3,390.65	-81.3	78.8	-71.7	0.00	0.00	0.00
1,600.0	10.03	135.88	1,589.8	3,292.18	-93.8	90.9	-82.7	0.00	0.00	0.00
1,700.0	10.03	135.88	1,688.3	3,193.71	-106.3	103.1	-93.7	0.00	0.00	0.00
1,800.0	10.03	135.88	1,786.8	3,095.24	-118.8	115.2	-104.8	0.00	0.00	0.00
1,900.0	10.03	135.88	1,885.2	2,996.77	-131.3	127.3	-115.8	0.00	0.00	0.00
2,000.0	10.03	135.88	1,983.7	2,898.30	-143.8	139.5	-126.8	0.00	0.00	0.00
2,100.0	10.03	135.88	2,082.2	2,799.83	-156.3	151.6	-137.8	0.00	0.00	0.00
2,200.0	10.03	135.88	2,180.6	2,701.36	-168.8	163.7	-148.9	0.00	0.00	0.00
2,300.0	10.03	135.88	2,279.1	2,602.89	-181.3	175.9	-159.9	0.00	0.00	0.00
2,400.0	10.03	135.88	2,377.6	2,504.42	-193.8	188.0	-170.9	0.00	0.00	0.00
2,500.0	10.03	135.88	2,476.1	2,405.95	-206.3	200.1	-182.0	0.00	0.00	0.00
2,600.0	10.03	135.88	2,574.5	2,307.48	-218.8	212.2	-193.0	0.00	0.00	0.00
2,700.0	10.03	135.88	2,673.0	2,209.01	-231.4	224.4	-204.0	0.00	0.00	0.00
2,800.0	10.03	135.88	2,771.5	2,110.54	-243.9	236.5	-215.0	0.00	0.00	0.00
2,900.0	10.03	135.88	2,869.9	2,012.06	-256.4	248.6	-226.1	0.00	0.00	0.00
3,000.0	10.03	135.88	2,968.4	1,913.59	-268.9	260.8	-237.1	0.00	0.00	0.00
3,100.0	10.03	135.88	3,066.9	1,815.12	-281.4	272.9	-248.1	0.00	0.00	0.00
3,200.0	10.03	135.88	3,165.3	1,716.65	-293.9	285.0	-259.2	0.00	0.00	0.00
3,300.0	10.03	135.88	3,263.8	1,618.18	-306.4	297.2	-270.2	0.00	0.00	0.00
3,400.0	10.03	135.88	3,362.3	1,519.71	-318.9	309.3	-281.2	0.00	0.00	0.00
3,500.0	10.03	135.88	3,460.8	1,421.24	-331.4	321.4	-292.2	0.00	0.00	0.00
3,600.0	10.03	135.88	3,559.2	1,322.77	-343.9	333.5	-303.3	0.00	0.00	0.00
PARKMAN										
3,641.4	10.03	135.88	3,600.0	1,282.00	-349.1	338.6	-307.8	0.00	0.00	0.00
3,700.0	10.03	135.88	3,657.7	1,224.30	-356.4	345.7	-314.3	0.00	0.00	0.00
3,800.0	10.03	135.88	3,756.2	1,125.83	-368.9	357.8	-325.3	0.00	0.00	0.00
3,900.0	10.03	135.88	3,854.6	1,027.36	-381.4	369.9	-336.4	0.00	0.00	0.00
4,000.0	10.03	135.88	3,953.1	928.89	-393.9	382.1	-347.4	0.00	0.00	0.00
4,100.0	10.03	135.88	4,051.6	830.42	-406.5	394.2	-358.4	0.00	0.00	0.00
4,200.0	10.03	135.88	4,150.1	731.95	-419.0	406.3	-369.4	0.00	0.00	0.00
SUSSEX										
4,210.1	10.03	135.88	4,160.0	722.00	-420.2	407.5	-370.6	0.00	0.00	0.00
4,300.0	10.03	135.88	4,248.5	633.48	-431.5	418.4	-380.5	0.00	0.00	0.00
4,400.0	10.03	135.88	4,347.0	535.01	-444.0	430.6	-391.5	0.00	0.00	0.00
4,500.0	10.03	135.88	4,445.5	436.54	-456.5	442.7	-402.5	0.00	0.00	0.00

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Well:	WINDER #7	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,600.0	10.03	135.88	4,543.9	338.07	-469.0	454.8	-413.6	0.00	0.00	0.00
4,700.0	10.03	135.88	4,642.4	239.59	-481.5	467.0	-424.6	0.00	0.00	0.00
SHANNON										
4,778.8	10.03	135.88	4,720.0	162.00	-491.3	476.5	-433.3	0.00	0.00	0.00
4,800.0	10.03	135.88	4,740.9	141.12	-494.0	479.1	-435.6	0.00	0.00	0.00
4,900.0	10.03	135.88	4,839.3	42.65	-506.5	491.2	-446.6	0.00	0.00	0.00
5,000.0	10.03	135.88	4,937.8	-55.82	-519.0	503.4	-457.7	0.00	0.00	0.00
5,100.0	10.03	135.88	5,036.3	-154.29	-531.5	515.5	-468.7	0.00	0.00	0.00
5,200.0	10.03	135.88	5,134.8	-252.76	-544.0	527.6	-479.7	0.00	0.00	0.00
5,300.0	10.03	135.88	5,233.2	-351.23	-556.5	539.7	-490.8	0.00	0.00	0.00
5,400.0	10.03	135.88	5,331.7	-449.70	-569.0	551.9	-501.8	0.00	0.00	0.00
5,500.0	10.03	135.88	5,430.2	-548.17	-581.5	564.0	-512.8	0.00	0.00	0.00
5,600.0	10.03	135.88	5,528.6	-646.64	-594.1	576.1	-523.9	0.00	0.00	0.00
5,700.0	10.03	135.88	5,627.1	-745.11	-606.6	588.3	-534.9	0.00	0.00	0.00
5,800.0	10.03	135.88	5,725.6	-843.58	-619.1	600.4	-545.9	0.00	0.00	0.00
5,900.0	10.03	135.88	5,824.1	-942.05	-631.6	612.5	-556.9	0.00	0.00	0.00
6,000.0	10.03	135.88	5,922.5	-1,040.52	-644.1	624.7	-568.0	0.00	0.00	0.00
6,100.0	10.03	135.88	6,021.0	-1,138.99	-656.6	636.8	-579.0	0.00	0.00	0.00
6,200.0	10.03	135.88	6,119.5	-1,237.46	-669.1	648.9	-590.0	0.00	0.00	0.00
6,300.0	10.03	135.88	6,217.9	-1,335.93	-681.6	661.0	-601.1	0.00	0.00	0.00
6,400.0	10.03	135.88	6,316.4	-1,434.40	-694.1	673.2	-612.1	0.00	0.00	0.00
6,500.0	10.03	135.88	6,414.9	-1,532.88	-706.6	685.3	-623.1	0.00	0.00	0.00
6,600.0	10.03	135.88	6,513.3	-1,631.35	-719.1	697.4	-634.1	0.00	0.00	0.00
6,700.0	10.03	135.88	6,611.8	-1,729.82	-731.6	709.6	-645.2	0.00	0.00	0.00
KOP (10°/100ft DGLG)										
6,756.5	10.03	135.88	6,667.5	-1,785.46	-738.7	716.4	-651.4	0.00	0.00	0.00
6,800.0	7.68	160.03	6,710.4	-1,828.44	-744.2	720.0	-654.6	10.00	-5.40	55.53
6,900.0	10.30	225.95	6,809.4	-1,927.44	-756.7	715.9	-649.4	10.00	2.62	65.92
7,000.0	18.76	248.25	6,906.2	-2,024.22	-768.9	694.5	-627.0	10.00	8.46	22.30
SHARON SPRINGS										
7,019.9	20.61	250.46	6,925.0	-2,043.00	-771.3	688.2	-620.5	10.00	9.28	11.10
NIOBRARA										
7,063.3	24.71	254.17	6,965.0	-2,083.00	-776.3	672.3	-604.2	10.00	9.45	8.54
7,100.0	28.23	256.50	6,997.9	-2,115.85	-780.4	656.4	-588.1	10.00	9.59	6.35
7,200.0	37.96	260.80	7,081.5	-2,199.54	-790.9	603.0	-533.9	10.00	9.73	4.30
7,300.0	47.78	263.55	7,154.8	-2,272.75	-800.0	535.6	-466.1	10.00	9.83	2.75
7,400.0	57.65	265.55	7,215.3	-2,333.26	-807.4	456.5	-386.6	10.00	9.87	2.00
FORT HAYS										
7,496.8	67.24	267.10	7,260.0	-2,378.00	-812.9	370.9	-300.9	10.00	9.90	1.61
7,500.0	67.55	267.15	7,261.2	-2,379.21	-813.0	368.0	-298.0	10.00	9.91	1.47
7,600.0	77.47	268.53	7,291.2	-2,409.23	-816.6	272.8	-202.8	10.00	9.91	1.39
CODELL										
7,618.7	79.32	268.78	7,295.0	-2,413.00	-817.0	254.5	-184.5	10.00	9.92	1.31
7,700.0	87.38	269.82	7,304.4	-2,422.40	-818.0	173.9	-104.1	10.00	9.92	1.28
HZ LANDING PNT *NEW*: 1650ft FNL & 530ft FEL of Sec 9										
7,726.4	90.00	270.15	7,305.0	-2,423.00	-818.0	147.5	-77.8	10.00	9.92	1.26
7,800.0	90.00	270.15	7,305.0	-2,423.00	-817.8	73.9	-4.5	0.00	0.00	0.00
7,900.0	90.00	270.15	7,305.0	-2,423.00	-817.6	-26.1	95.2	0.00	0.00	0.00
8,000.0	90.00	270.15	7,305.0	-2,423.00	-817.3	-126.1	194.8	0.00	0.00	0.00
8,100.0	90.00	270.15	7,305.0	-2,423.00	-817.0	-226.1	294.4	0.00	0.00	0.00
8,200.0	90.00	270.15	7,305.0	-2,423.00	-816.8	-326.1	394.0	0.00	0.00	0.00
8,300.0	90.00	270.15	7,305.0	-2,423.00	-816.5	-426.1	493.6	0.00	0.00	0.00
8,400.0	90.00	270.15	7,305.0	-2,423.00	-816.3	-526.1	593.3	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well WINDER #7
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Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4882.0usft (Original Well Elev)
Site:	NE NE SEC. 9 T6N R67W 6th P.M.	North Reference:	True
Well:	WINDER #7	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	270.15	7,305.0	-2,423.00	-816.0	-626.1	692.9	0.00	0.00	0.00
8,600.0	90.00	270.15	7,305.0	-2,423.00	-815.7	-726.1	792.5	0.00	0.00	0.00
8,700.0	90.00	270.15	7,305.0	-2,423.00	-815.5	-826.1	892.1	0.00	0.00	0.00
8,800.0	90.00	270.15	7,305.0	-2,423.00	-815.2	-926.1	991.7	0.00	0.00	0.00
8,900.0	90.00	270.15	7,305.0	-2,423.00	-815.0	-1,026.1	1,091.4	0.00	0.00	0.00
9,000.0	90.00	270.15	7,305.0	-2,423.00	-814.7	-1,126.1	1,191.0	0.00	0.00	0.00
9,100.0	90.00	270.15	7,305.0	-2,423.00	-814.5	-1,226.1	1,290.6	0.00	0.00	0.00
9,200.0	90.00	270.15	7,305.0	-2,423.00	-814.2	-1,326.1	1,390.2	0.00	0.00	0.00
9,300.0	90.00	270.15	7,305.0	-2,423.00	-813.9	-1,426.1	1,489.8	0.00	0.00	0.00
9,400.0	90.00	270.15	7,305.0	-2,423.00	-813.7	-1,526.1	1,589.5	0.00	0.00	0.00
9,500.0	90.00	270.15	7,305.0	-2,423.00	-813.4	-1,626.1	1,689.1	0.00	0.00	0.00
9,600.0	90.00	270.15	7,305.0	-2,423.00	-813.2	-1,726.1	1,788.7	0.00	0.00	0.00
9,700.0	90.00	270.15	7,305.0	-2,423.00	-812.9	-1,826.1	1,888.3	0.00	0.00	0.00
9,800.0	90.00	270.15	7,305.0	-2,423.00	-812.6	-1,926.1	1,987.9	0.00	0.00	0.00
9,900.0	90.00	270.15	7,305.0	-2,423.00	-812.4	-2,026.1	2,087.6	0.00	0.00	0.00
10,000.0	90.00	270.15	7,305.0	-2,423.00	-812.1	-2,126.1	2,187.2	0.00	0.00	0.00
10,100.0	90.00	270.15	7,305.0	-2,423.00	-811.9	-2,226.1	2,286.8	0.00	0.00	0.00
10,200.0	90.00	270.15	7,305.0	-2,423.00	-811.6	-2,326.1	2,386.4	0.00	0.00	0.00
10,300.0	90.00	270.15	7,305.0	-2,423.00	-811.4	-2,426.1	2,486.0	0.00	0.00	0.00
10,400.0	90.00	270.15	7,305.0	-2,423.00	-811.1	-2,526.1	2,585.7	0.00	0.00	0.00
10,500.0	90.00	270.15	7,305.0	-2,423.00	-810.8	-2,626.1	2,685.3	0.00	0.00	0.00
10,600.0	90.00	270.15	7,305.0	-2,423.00	-810.6	-2,726.1	2,784.9	0.00	0.00	0.00
10,700.0	90.00	270.15	7,305.0	-2,423.00	-810.3	-2,826.1	2,884.5	0.00	0.00	0.00
10,800.0	90.00	270.15	7,305.0	-2,423.00	-810.1	-2,926.1	2,984.1	0.00	0.00	0.00
10,900.0	90.00	270.15	7,305.0	-2,423.00	-809.8	-3,026.1	3,083.8	0.00	0.00	0.00
11,000.0	90.00	270.15	7,305.0	-2,423.00	-809.5	-3,126.1	3,183.4	0.00	0.00	0.00
11,100.0	90.00	270.15	7,305.0	-2,423.00	-809.3	-3,226.1	3,283.0	0.00	0.00	0.00
11,200.0	90.00	270.15	7,305.0	-2,423.00	-809.0	-3,326.1	3,382.6	0.00	0.00	0.00
11,300.0	90.00	270.15	7,305.0	-2,423.00	-808.8	-3,426.1	3,482.2	0.00	0.00	0.00
11,400.0	90.00	270.15	7,305.0	-2,423.00	-808.5	-3,526.1	3,581.9	0.00	0.00	0.00
11,500.0	90.00	270.15	7,305.0	-2,423.00	-808.3	-3,626.1	3,681.5	0.00	0.00	0.00
11,600.0	90.00	270.15	7,305.0	-2,423.00	-808.0	-3,726.1	3,781.1	0.00	0.00	0.00
11,700.0	90.00	270.15	7,305.0	-2,423.00	-807.7	-3,826.1	3,880.7	0.00	0.00	0.00
11,800.0	90.00	270.15	7,305.0	-2,423.00	-807.5	-3,926.1	3,980.3	0.00	0.00	0.00
11,900.0	90.00	270.15	7,305.0	-2,423.00	-807.2	-4,026.1	4,080.0	0.00	0.00	0.00
12,000.0	90.00	270.15	7,305.0	-2,423.00	-807.0	-4,126.1	4,179.6	0.00	0.00	0.00
12,100.0	90.00	270.15	7,305.0	-2,423.00	-806.7	-4,226.1	4,279.2	0.00	0.00	0.00
12,200.0	90.00	270.15	7,305.0	-2,423.00	-806.4	-4,326.1	4,378.8	0.00	0.00	0.00
12,300.0	90.00	270.15	7,305.0	-2,423.00	-806.2	-4,426.1	4,478.4	0.00	0.00	0.00
12,400.0	90.00	270.15	7,305.0	-2,423.00	-805.9	-4,526.1	4,578.1	0.00	0.00	0.00
12,500.0	90.00	270.15	7,305.0	-2,423.00	-805.7	-4,626.1	4,677.7	0.00	0.00	0.00
12,600.0	90.00	270.15	7,305.0	-2,423.00	-805.4	-4,726.1	4,777.3	0.00	0.00	0.00
12,700.0	90.00	270.15	7,305.0	-2,423.00	-805.2	-4,826.1	4,876.9	0.00	0.00	0.00
12,800.0	90.00	270.15	7,305.0	-2,423.00	-804.9	-4,926.1	4,976.5	0.00	0.00	0.00
12,900.0	90.00	270.15	7,305.0	-2,423.00	-804.6	-5,026.1	5,076.2	0.00	0.00	0.00
13,000.0	90.00	270.15	7,305.0	-2,423.00	-804.4	-5,126.1	5,175.8	0.00	0.00	0.00
13,100.0	90.00	270.15	7,305.0	-2,423.00	-804.1	-5,226.1	5,275.4	0.00	0.00	0.00
13,200.0	90.00	270.15	7,305.0	-2,423.00	-803.9	-5,326.1	5,375.0	0.00	0.00	0.00
13,300.0	90.00	270.15	7,305.0	-2,423.00	-803.6	-5,426.1	5,474.6	0.00	0.00	0.00
13,400.0	90.00	270.15	7,305.0	-2,423.00	-803.3	-5,526.1	5,574.3	0.00	0.00	0.00
13,500.0	90.00	270.15	7,305.0	-2,423.00	-803.1	-5,626.1	5,673.9	0.00	0.00	0.00
13,600.0	90.00	270.15	7,305.0	-2,423.00	-802.8	-5,726.1	5,773.5	0.00	0.00	0.00
13,700.0	90.00	270.15	7,305.0	-2,423.00	-802.6	-5,826.1	5,873.1	0.00	0.00	0.00
13,800.0	90.00	270.15	7,305.0	-2,423.00	-802.3	-5,926.1	5,972.7	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well WINDER #7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4882.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4882.0usft (Original Well Elev)
Site:	NE NE SEC. 9 T6N R67W 6th P.M.	North Reference:	True
Well:	WINDER #7	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	270.15	7,305.0	-2,423.00	-802.1	-6,026.1	6,072.4	0.00	0.00	0.00
14,000.0	90.00	270.15	7,305.0	-2,423.00	-801.8	-6,126.1	6,172.0	0.00	0.00	0.00
14,100.0	90.00	270.15	7,305.0	-2,423.00	-801.5	-6,226.1	6,271.6	0.00	0.00	0.00
14,200.0	90.00	270.15	7,305.0	-2,423.00	-801.3	-6,326.1	6,371.2	0.00	0.00	0.00
14,300.0	90.00	270.15	7,305.0	-2,423.00	-801.0	-6,426.1	6,470.8	0.00	0.00	0.00
14,400.0	90.00	270.15	7,305.0	-2,423.00	-800.8	-6,526.1	6,570.5	0.00	0.00	0.00
14,500.0	90.00	270.15	7,305.0	-2,423.00	-800.5	-6,626.1	6,670.1	0.00	0.00	0.00
14,600.0	90.00	270.15	7,305.0	-2,423.00	-800.2	-6,726.1	6,769.7	0.00	0.00	0.00
14,700.0	90.00	270.15	7,305.0	-2,423.00	-800.0	-6,826.1	6,869.3	0.00	0.00	0.00
14,800.0	90.00	270.15	7,305.0	-2,423.00	-799.7	-6,926.1	6,968.9	0.00	0.00	0.00
14,900.0	90.00	270.15	7,305.0	-2,423.00	-799.5	-7,026.1	7,068.5	0.00	0.00	0.00
15,000.0	90.00	270.15	7,305.0	-2,423.00	-799.2	-7,126.1	7,168.2	0.00	0.00	0.00
15,100.0	90.00	270.15	7,305.0	-2,423.00	-799.0	-7,226.1	7,267.8	0.00	0.00	0.00
15,200.0	90.00	270.15	7,305.0	-2,423.00	-798.7	-7,326.1	7,367.4	0.00	0.00	0.00
15,300.0	90.00	270.15	7,305.0	-2,423.00	-798.4	-7,426.1	7,467.0	0.00	0.00	0.00
15,400.0	90.00	270.15	7,305.0	-2,423.00	-798.2	-7,526.1	7,566.6	0.00	0.00	0.00
15,500.0	90.00	270.15	7,305.0	-2,423.00	-797.9	-7,626.1	7,666.3	0.00	0.00	0.00
15,600.0	90.00	270.15	7,305.0	-2,423.00	-797.7	-7,726.1	7,765.9	0.00	0.00	0.00
15,700.0	90.00	270.15	7,305.0	-2,423.00	-797.4	-7,826.1	7,865.5	0.00	0.00	0.00
15,800.0	90.00	270.15	7,305.0	-2,423.00	-797.1	-7,926.1	7,965.1	0.00	0.00	0.00
15,900.0	90.00	270.15	7,305.0	-2,423.00	-796.9	-8,026.1	8,064.7	0.00	0.00	0.00
16,000.0	90.00	270.15	7,305.0	-2,423.00	-796.6	-8,126.1	8,164.4	0.00	0.00	0.00
16,100.0	90.00	270.15	7,305.0	-2,423.00	-796.4	-8,226.1	8,264.0	0.00	0.00	0.00
16,200.0	90.00	270.15	7,305.0	-2,423.00	-796.1	-8,326.1	8,363.6	0.00	0.00	0.00
16,300.0	90.00	270.15	7,305.0	-2,423.00	-795.9	-8,426.1	8,463.2	0.00	0.00	0.00
16,400.0	90.00	270.15	7,305.0	-2,423.00	-795.6	-8,526.1	8,562.8	0.00	0.00	0.00
16,500.0	90.00	270.15	7,305.0	-2,423.00	-795.3	-8,626.1	8,662.5	0.00	0.00	0.00
16,600.0	90.00	270.15	7,305.0	-2,423.00	-795.1	-8,726.1	8,762.1	0.00	0.00	0.00
16,700.0	90.00	270.15	7,305.0	-2,423.00	-794.8	-8,826.1	8,861.7	0.00	0.00	0.00
16,800.0	90.00	270.15	7,305.0	-2,423.00	-794.6	-8,926.1	8,961.3	0.00	0.00	0.00
16,900.0	90.00	270.15	7,305.0	-2,423.00	-794.3	-9,026.1	9,060.9	0.00	0.00	0.00
17,000.0	90.00	270.15	7,305.0	-2,423.00	-794.0	-9,126.1	9,160.6	0.00	0.00	0.00
17,100.0	90.00	270.15	7,305.0	-2,423.00	-793.8	-9,226.1	9,260.2	0.00	0.00	0.00
17,200.0	90.00	270.15	7,305.0	-2,423.00	-793.5	-9,326.1	9,359.8	0.00	0.00	0.00
BHL: 1459ft FNL & 460ft FWL of Sec 8										
17,227.2	90.00	270.15	7,305.0	-2,423.00	-793.5	-9,353.3	9,386.9	0.00	0.00	0.00

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,641.4	3,600.0	PARKMAN		0.00		
4,210.1	4,160.0	SUSSEX		0.00		
4,778.8	4,720.0	SHANNON		0.00		
7,019.9	6,925.0	SHARON SPRINGS		0.00		
7,063.3	6,965.0	NIOBRARA		0.00		
7,496.8	7,260.0	FORT HAYS		0.00		
7,618.7	7,295.0	CODELL		0.00		

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well WINDER #7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4882.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4882.0usft (Original Well Elev)
Site:	NE NE SEC. 9 T6N R67W 6th P.M.	North Reference:	True
Well:	WINDER #7	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.0	0.0	0.0	0.0	SHL: 832ft FNL & 684ft FEL of Sec 9
600.0	600.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,101.7	1,099.1	-31.5	30.5	EOB TO 10.03° INC
6,756.5	6,667.5	-738.7	716.4	KOP (10°/100ft DGLG)
7,726.4	7,305.0	-818.0	147.5	HZ LANDING PNT *NEW*: 1650ft FNL & 530ft FEL of Sec 9
17,227.2	7,305.0	-793.5	-9,353.3	BHL: 1459ft FNL & 460ft FWL of Sec 8