

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

NW NW SEC. 22 T4N R68W 6th P.M.

MLD 9

ORIGINAL WELLBORE

07 July, 2017

Plan: PROPOSAL #3

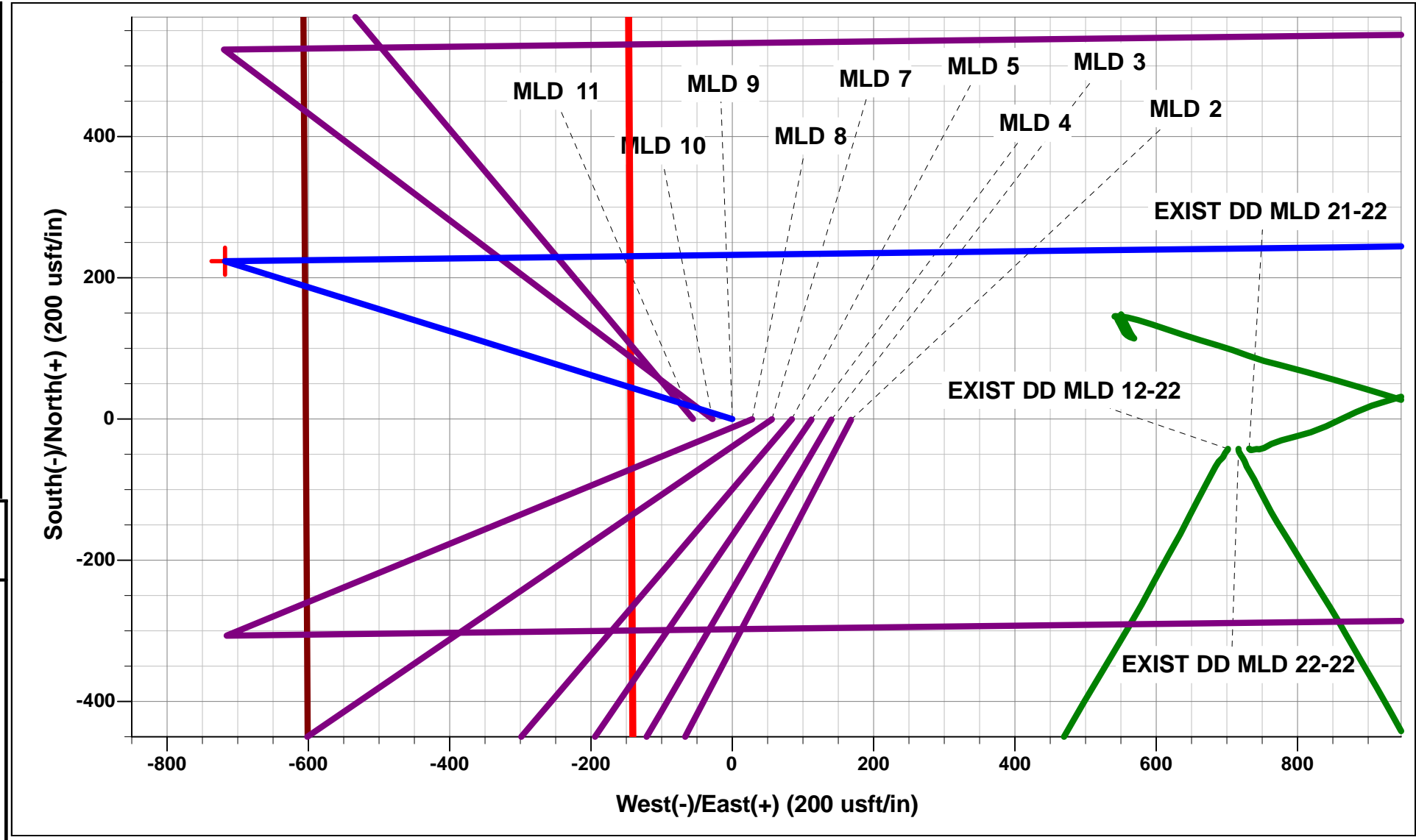




Project: WELD COUNTY, COLORADO (NAD 83)
Site: NW NW SEC. 22 T4N R68W 6th P.M.
Well: MLD 9
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #3

ANNOTATIONS								
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 802ft FNL & 604ft FWL of Sec 22
1450.0	1450.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1947.4	1949.9	10.00	287.29	12.9	-41.5	-40.6	43.5	EOB TO 10° INC
5718.7	5779.4	10.00	287.29	210.5	-676.3	-660.8	708.3	END OF TANGENT
6216.1	6279.3	0.00	287.29	223.4	-717.9	-701.4	751.9	EOD TO VERTICAL
6336.1	6399.3	0.00	0.00	223.4	-717.9	-701.4	751.9	KOP (10°/100ft BUR)
6909.0	7299.2	90.00	89.28	230.6	-145.1	-129.3	1324.7	HZ LP (P3): 570ft FNL & 460ft FWL of Sec 22
6909.0	11702.8	90.00	89.30	285.3	4258.2	4267.7	5728.3	BHL (P3): 570ft FNL & 460ft FEL of Sec 22

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - MLD 9 (P3)	6336.1	223.4	-717.9	40.304584	-104.999242
HZ LP - MLD 9 (P3)	6909.0	230.6	-145.0	40.304604	-104.997188
BHL - MLD 9 (P3)	6909.0	285.3	4258.2	40.304753	-104.981401



PROPOSED LOCAL COORDINATES		
SHL: 802ft FNL & 604ft FWL of Sec 22		
HZ LP: 570ft FNL & 460ft FWL of Sec 22		
BHL: 570ft FNL & 460ft FEL of Sec 22		
FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3265.0	3287.9	PARKMAN
3910.0	3942.8	SUSSEX
4309.0	4347.9	SHANNON
6789.0	6921.6	NIOBRARA

T

M

Azimuths to True North

Magnetic North: 8.33°

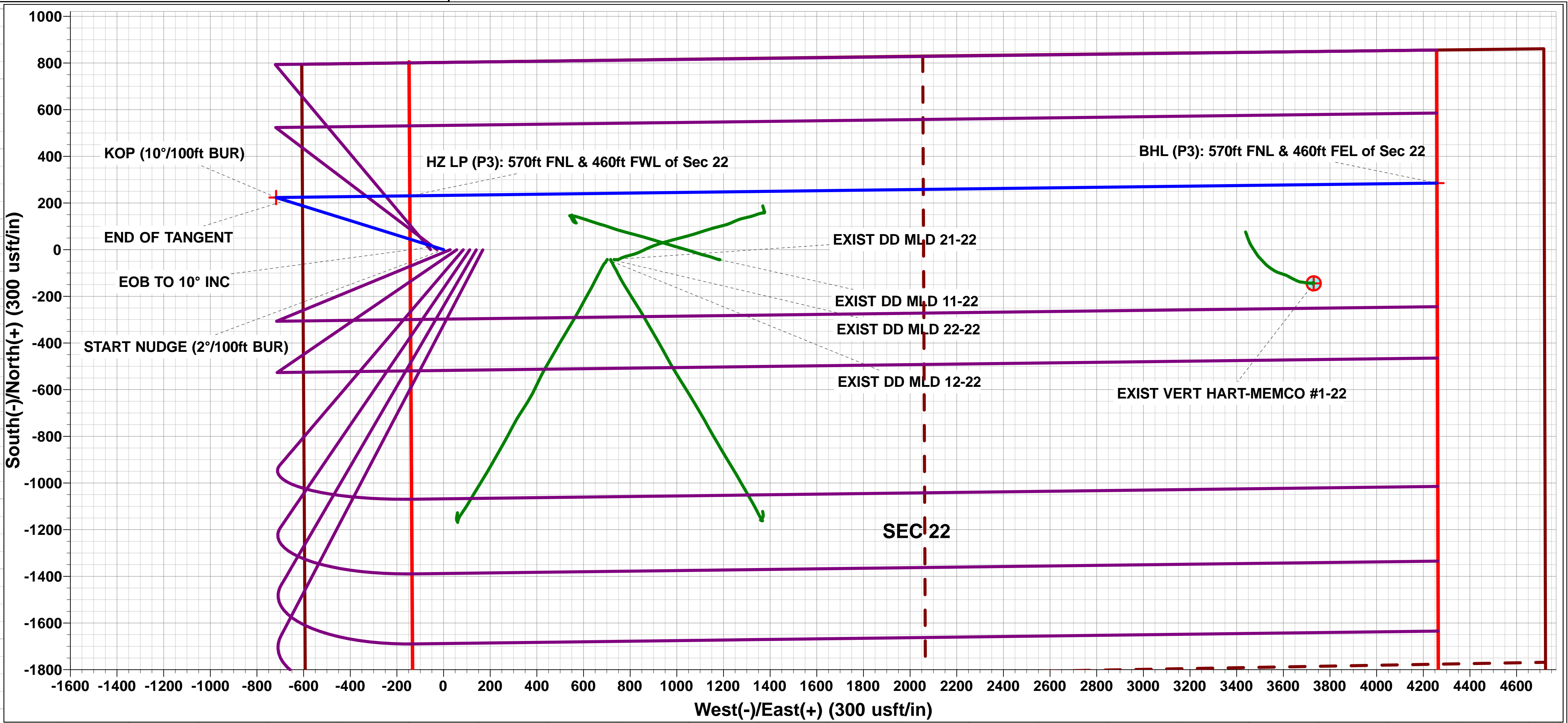
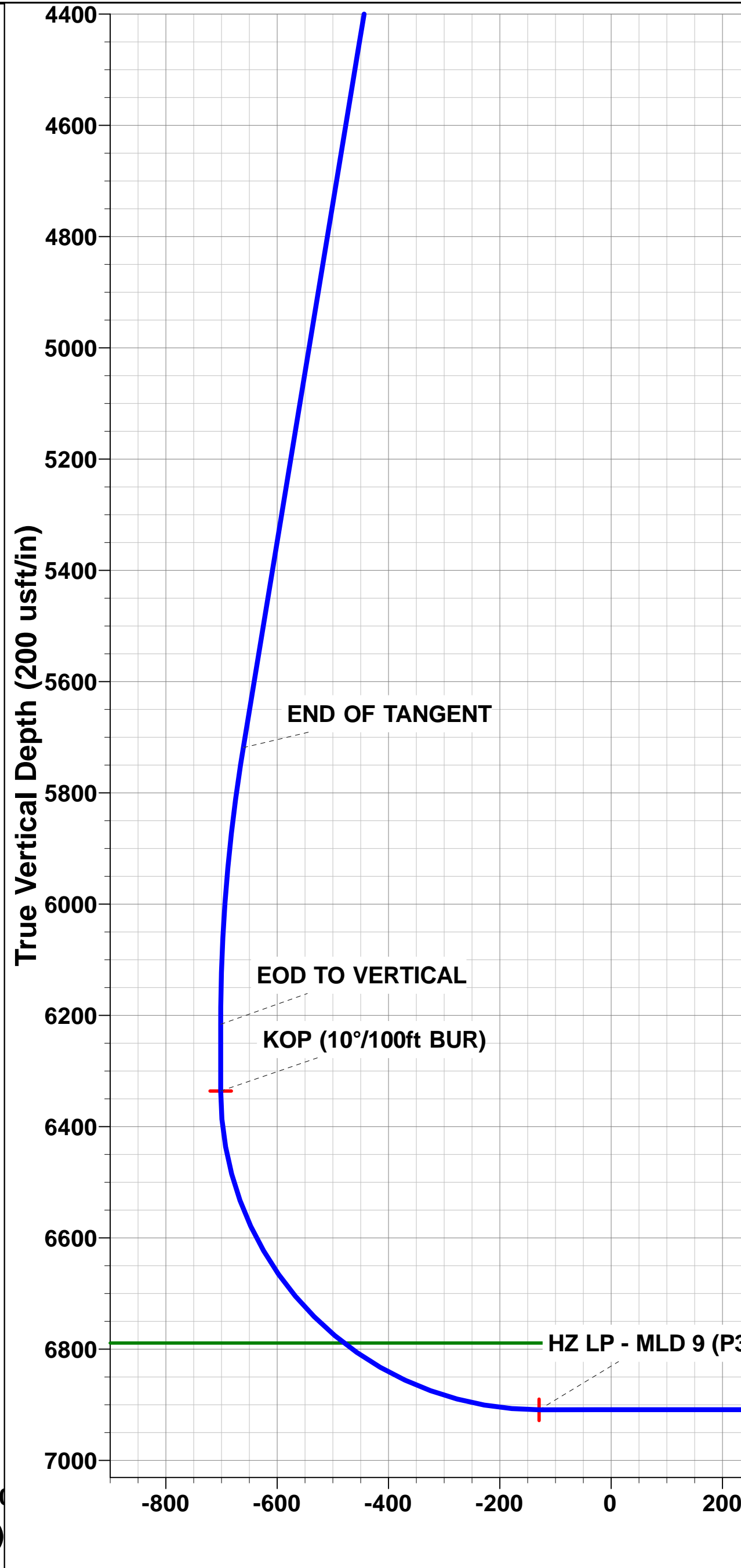
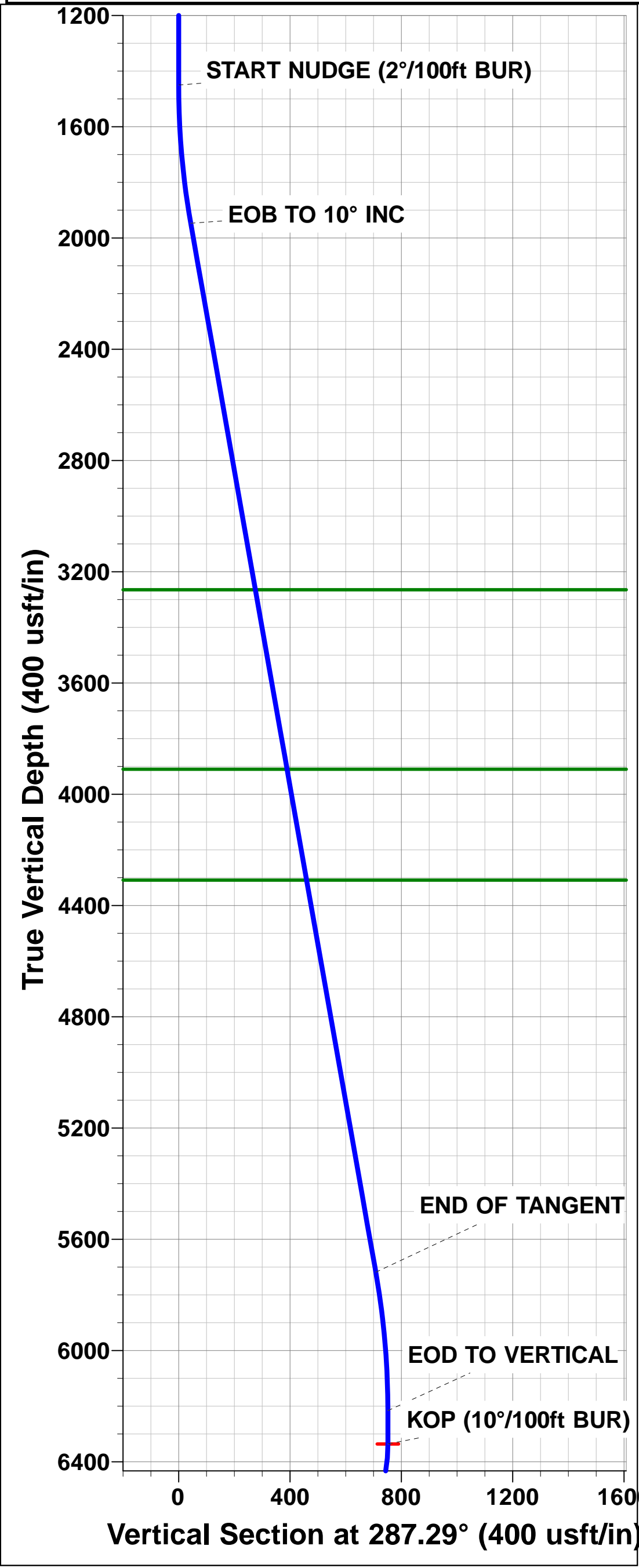
Magnetic Field

Strength: 52322.3snT

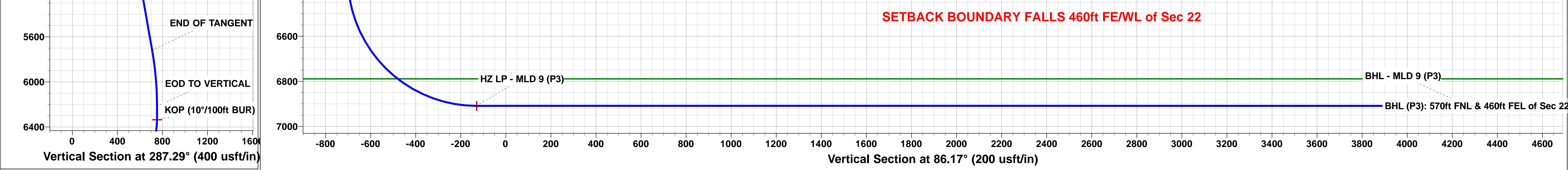
Dip Angle: 66.74°

Date: 01/06/2017

Model: IGRF2015



SETBACK BOUNDARY FALLS 460ft FE/WL of Sec 22



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MLD 9
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4900.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4900.0usft (Original Well Elev)
Site:	NW NW SEC. 22 T4N R68W 6th P.M.	North Reference:	True
Well:	MLD 9	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

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	NW NW SEC. 22 T4N R68W 6th P.M.		
Site Position:		Northing:	1,350,393.79 usft
From:	Lat/Long	Easting:	3,140,798.83 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.294131
		Longitude:	-104.995243
		Grid Convergence:	0.33 °

Well	MLD 9		
Well Position	+N-S	3,584.8 usft	Northing: 1,353,976.07 usfi
	+E-W	-397.5 usft	Easting: 3,140,380.99 usfi
Position Uncertainty	0.0 usft	Wellhead Elevation:	usfi
		Latitude:	40.303971
		Longitude:	-104.996668
		Ground Level:	4,876.0 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	01/06/2017	8.33	66.74	52,322

Design	PROPOSAL #3			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)
	6,909.0	0.0	0.0	86.17

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	-4,900.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,450.0	0.00	0.00	1,450.0	-3,450.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,949.9	10.00	287.29	1,947.4	-2,952.6	12.9	-41.5	2.00	2.00	0.00	287.29	
5,779.4	10.00	287.29	5,718.7	818.7	210.5	-676.4	0.00	0.00	0.00	0.00	
6,279.3	0.00	0.00	6,216.1	1,316.1	223.4	-717.9	2.00	-2.00	0.00	180.00	
6,399.3	0.00	0.00	6,336.1	1,436.1	223.4	-717.9	0.00	0.00	0.00	0.00	KOP - MLD 9 (P3)
7,299.2	90.00	89.28	6,909.0	2,009.0	230.6	-145.0	10.00	10.00	9.92	89.28	HZ LP - MLD 9 (P3)
11,702.8	90.00	89.30	6,909.0	2,009.0	285.3	4,258.2	0.00	0.00	0.00	90.81	BHL - MLD 9 (P3)

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MLD 9
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4900.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4900.0usft (Original Well Elev)
Site:	NW NW SEC. 22 T4N R6W 6th P.M.	North Reference:	True
Well:	MLD 9	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

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: 802ft FNL & 604ft FWL of Sec 22										
0.0	0.00	0.00	0.0	4,900.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,800.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,700.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,600.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,500.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,400.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,300.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	4,200.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	4,100.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	4,000.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,900.00	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,800.00	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,700.00	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,600.00	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,500.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
1,450.0	0.00	0.00	1,450.0	3,450.00	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	1.00	287.29	1,500.0	3,400.00	0.1	-0.4	-0.4	2.00	2.00	0.00
1,600.0	3.00	287.29	1,599.9	3,300.07	1.2	-3.7	-3.7	2.00	2.00	0.00
1,700.0	5.00	287.29	1,699.7	3,200.32	3.2	-10.4	-10.2	2.00	2.00	0.00
1,800.0	7.00	287.29	1,799.1	3,100.87	6.3	-20.4	-19.9	2.00	2.00	0.00
1,900.0	9.00	287.29	1,898.2	3,001.85	10.5	-33.7	-32.9	2.00	2.00	0.00
EOB TO 10° INC										
1,949.9	10.00	287.29	1,947.4	2,952.63	12.9	-41.5	-40.6	2.00	2.00	0.00
2,000.0	10.00	287.29	1,996.7	2,903.29	15.5	-49.8	-48.7	0.00	0.00	0.00
2,100.0	10.00	287.29	2,095.2	2,804.81	20.7	-66.4	-64.9	0.00	0.00	0.00
2,200.0	10.00	287.29	2,193.7	2,706.33	25.8	-83.0	-81.1	0.00	0.00	0.00
2,300.0	10.00	287.29	2,292.2	2,607.85	31.0	-99.6	-97.3	0.00	0.00	0.00
2,400.0	10.00	287.29	2,390.6	2,509.37	36.1	-116.2	-113.5	0.00	0.00	0.00
2,500.0	10.00	287.29	2,489.1	2,410.89	41.3	-132.7	-129.7	0.00	0.00	0.00
2,600.0	10.00	287.29	2,587.6	2,312.41	46.5	-149.3	-145.9	0.00	0.00	0.00
2,700.0	10.00	287.29	2,686.1	2,213.92	51.6	-165.9	-162.1	0.00	0.00	0.00
2,800.0	10.00	287.29	2,784.6	2,115.44	56.8	-182.5	-178.3	0.00	0.00	0.00
2,900.0	10.00	287.29	2,883.0	2,016.96	61.9	-199.0	-194.5	0.00	0.00	0.00
3,000.0	10.00	287.29	2,981.5	1,918.48	67.1	-215.6	-210.6	0.00	0.00	0.00
3,100.0	10.00	287.29	3,080.0	1,820.00	72.3	-232.2	-226.8	0.00	0.00	0.00
3,200.0	10.00	287.29	3,178.5	1,721.52	77.4	-248.8	-243.0	0.00	0.00	0.00
PARKMAN										
3,287.9	10.00	287.29	3,265.0	1,635.00	81.9	-263.3	-257.3	0.00	0.00	0.00
3,300.0	10.00	287.29	3,277.0	1,623.03	82.6	-265.3	-259.2	0.00	0.00	0.00
3,400.0	10.00	287.29	3,375.4	1,524.55	87.7	-281.9	-275.4	0.00	0.00	0.00
3,500.0	10.00	287.29	3,473.9	1,426.07	92.9	-298.5	-291.6	0.00	0.00	0.00
3,600.0	10.00	287.29	3,572.4	1,327.59	98.1	-315.1	-307.8	0.00	0.00	0.00
3,700.0	10.00	287.29	3,670.9	1,229.11	103.2	-331.7	-324.0	0.00	0.00	0.00
3,800.0	10.00	287.29	3,769.4	1,130.63	108.4	-348.2	-340.2	0.00	0.00	0.00
3,900.0	10.00	287.29	3,867.9	1,032.15	113.5	-364.8	-356.4	0.00	0.00	0.00
SUSSEX										
3,942.8	10.00	287.29	3,910.0	990.00	115.7	-371.9	-363.3	0.00	0.00	0.00
4,000.0	10.00	287.29	3,966.3	933.66	118.7	-381.4	-372.6	0.00	0.00	0.00
4,100.0	10.00	287.29	4,064.8	835.18	123.8	-398.0	-388.8	0.00	0.00	0.00
4,200.0	10.00	287.29	4,163.3	736.70	129.0	-414.5	-405.0	0.00	0.00	0.00
4,300.0	10.00	287.29	4,261.8	638.22	134.2	-431.1	-421.2	0.00	0.00	0.00

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Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

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)
SHANNON										
4,347.9	10.00	287.29	4,309.0	591.00	136.6	-439.1	-428.9	0.00	0.00	0.00
4,400.0	10.00	287.29	4,360.3	539.74	139.3	-447.7	-437.4	0.00	0.00	0.00
4,500.0	10.00	287.29	4,458.7	441.26	144.5	-464.3	-453.6	0.00	0.00	0.00
4,600.0	10.00	287.29	4,557.2	342.78	149.6	-480.8	-469.8	0.00	0.00	0.00
4,700.0	10.00	287.29	4,655.7	244.29	154.8	-497.4	-486.0	0.00	0.00	0.00
4,800.0	10.00	287.29	4,754.2	145.81	160.0	-514.0	-502.2	0.00	0.00	0.00
4,900.0	10.00	287.29	4,852.7	47.33	165.1	-530.6	-518.3	0.00	0.00	0.00
5,000.0	10.00	287.29	4,951.1	-51.15	170.3	-547.1	-534.5	0.00	0.00	0.00
5,100.0	10.00	287.29	5,049.6	-149.63	175.4	-563.7	-550.7	0.00	0.00	0.00
5,200.0	10.00	287.29	5,148.1	-248.11	180.6	-580.3	-566.9	0.00	0.00	0.00
5,300.0	10.00	287.29	5,246.6	-346.59	185.7	-596.9	-583.1	0.00	0.00	0.00
5,400.0	10.00	287.29	5,345.1	-445.08	190.9	-613.5	-599.3	0.00	0.00	0.00
5,500.0	10.00	287.29	5,443.6	-543.56	196.1	-630.0	-615.5	0.00	0.00	0.00
5,600.0	10.00	287.29	5,542.0	-642.04	201.2	-646.6	-631.7	0.00	0.00	0.00
5,700.0	10.00	287.29	5,640.5	-740.52	206.4	-663.2	-647.9	0.00	0.00	0.00
END OF TANGENT										
5,779.4	10.00	287.29	5,718.7	-818.71	210.5	-676.3	-660.8	0.00	0.00	0.00
5,800.0	9.59	287.29	5,739.0	-839.01	211.5	-679.7	-664.0	2.00	-2.00	0.00
5,900.0	7.59	287.29	5,837.9	-937.89	216.0	-693.9	-678.0	2.00	-2.00	0.00
6,000.0	5.59	287.29	5,937.2	-1,037.22	219.4	-704.9	-688.7	2.00	-2.00	0.00
6,100.0	3.59	287.29	6,036.9	-1,136.90	221.7	-712.5	-696.1	2.00	-2.00	0.00
6,200.0	1.59	287.29	6,136.8	-1,236.79	223.1	-716.8	-700.3	2.00	-2.00	0.00
EOD TO VERTICAL										
6,279.3	0.00	287.29	6,216.1	-1,316.08	223.4	-717.9	-701.4	2.00	-2.00	0.00
6,300.0	0.00	0.00	6,236.8	-1,336.78	223.4	-717.9	-701.4	0.00	0.00	0.00
KOP (10°/100ft BUR)										
6,399.3	0.00	0.00	6,336.1	-1,436.08	223.4	-717.9	-701.4	0.00	0.00	0.00
6,400.0	0.07	89.28	6,336.8	-1,436.78	223.4	-717.9	-701.4	9.73	9.73	0.00
6,500.0	10.07	89.28	6,436.3	-1,536.26	223.5	-709.1	-692.5	10.00	10.00	0.00
6,600.0	20.07	89.28	6,532.7	-1,632.70	223.8	-683.1	-666.6	10.00	10.00	0.00
6,700.0	30.07	89.28	6,623.2	-1,723.17	224.4	-640.8	-624.4	10.00	10.00	0.00
6,800.0	40.07	89.28	6,704.9	-1,804.91	225.1	-583.4	-567.1	10.00	10.00	0.00
6,900.0	50.07	89.28	6,775.4	-1,875.44	226.0	-512.7	-496.4	10.00	10.00	0.00
NIOBRARA										
6,921.6	52.24	89.28	6,789.0	-1,889.00	226.2	-495.9	-479.6	10.00	10.00	0.00
7,000.0	60.07	89.28	6,832.6	-1,932.62	227.0	-430.8	-414.7	10.00	10.00	0.00
7,100.0	70.08	89.28	6,874.7	-1,974.71	228.2	-340.3	-324.2	10.00	10.00	0.00
7,200.0	80.08	89.28	6,900.4	-2,000.43	229.4	-243.8	-227.9	10.00	10.00	0.00
HZ LP (P3): 570ft FNL & 460ft FWL of Sec 22										
7,299.2	90.00	89.28	6,909.0	-2,009.00	230.6	-145.1	-129.3	10.00	10.00	0.00
7,300.0	90.00	89.28	6,909.0	-2,009.00	230.6	-144.3	-128.5	0.37	0.37	0.00
7,400.0	90.00	89.28	6,909.0	-2,009.00	231.9	-44.3	-28.7	0.00	0.00	0.00
7,500.0	90.00	89.28	6,909.0	-2,009.00	233.1	55.7	71.2	0.00	0.00	0.00
7,600.0	90.00	89.28	6,909.0	-2,009.00	234.4	155.7	171.0	0.00	0.00	0.00
7,700.0	90.00	89.28	6,909.0	-2,009.00	235.7	255.7	270.9	0.00	0.00	0.00
7,800.0	90.00	89.28	6,909.0	-2,009.00	236.9	355.7	370.7	0.00	0.00	0.00
7,900.0	90.00	89.28	6,909.0	-2,009.00	238.2	455.7	470.6	0.00	0.00	0.00
8,000.0	90.00	89.28	6,909.0	-2,009.00	239.4	555.7	570.4	0.00	0.00	0.00
8,100.0	90.00	89.28	6,909.0	-2,009.00	240.7	655.7	670.3	0.00	0.00	0.00
8,200.0	90.00	89.28	6,909.0	-2,009.00	241.9	755.7	770.1	0.00	0.00	0.00
8,300.0	90.00	89.28	6,909.0	-2,009.00	243.2	855.7	870.0	0.00	0.00	0.00
8,400.0	90.00	89.28	6,909.0	-2,009.00	244.4	955.6	969.8	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MLD 9
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4900.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4900.0usft (Original Well Elev)
Site:	NW NW SEC. 22 T4N R6W 6th P.M.	North Reference:	True
Well:	MLD 9	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

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	89.28	6,909.0	-2,009.00	245.7	1,055.6	1,069.7	0.00	0.00	0.00
8,600.0	90.00	89.28	6,909.0	-2,009.00	246.9	1,155.6	1,169.6	0.00	0.00	0.00
8,700.0	90.00	89.29	6,909.0	-2,009.00	248.2	1,255.6	1,269.4	0.00	0.00	0.00
8,800.0	90.00	89.29	6,909.0	-2,009.00	249.4	1,355.6	1,369.3	0.00	0.00	0.00
8,900.0	90.00	89.29	6,909.0	-2,009.00	250.7	1,455.6	1,469.1	0.00	0.00	0.00
9,000.0	90.00	89.29	6,909.0	-2,009.00	251.9	1,555.6	1,569.0	0.00	0.00	0.00
9,100.0	90.00	89.29	6,909.0	-2,009.00	253.2	1,655.6	1,668.8	0.00	0.00	0.00
9,200.0	90.00	89.29	6,909.0	-2,009.00	254.4	1,755.6	1,768.7	0.00	0.00	0.00
9,300.0	90.00	89.29	6,909.0	-2,009.00	255.6	1,855.6	1,868.5	0.00	0.00	0.00
9,400.0	90.00	89.29	6,909.0	-2,009.00	256.9	1,955.6	1,968.4	0.00	0.00	0.00
9,500.0	90.00	89.29	6,909.0	-2,009.00	258.1	2,055.6	2,068.2	0.00	0.00	0.00
9,600.0	90.00	89.29	6,909.0	-2,009.00	259.4	2,155.6	2,168.1	0.00	0.00	0.00
9,700.0	90.00	89.29	6,909.0	-2,009.00	260.6	2,255.5	2,267.9	0.00	0.00	0.00
9,800.0	90.00	89.29	6,909.0	-2,009.00	261.9	2,355.5	2,367.8	0.00	0.00	0.00
9,900.0	90.00	89.29	6,909.0	-2,009.00	263.1	2,455.5	2,467.6	0.00	0.00	0.00
10,000.0	90.00	89.29	6,909.0	-2,009.00	264.3	2,555.5	2,567.5	0.00	0.00	0.00
10,100.0	90.00	89.29	6,909.0	-2,009.00	265.6	2,655.5	2,667.3	0.00	0.00	0.00
10,200.0	90.00	89.29	6,909.0	-2,009.00	266.8	2,755.5	2,767.2	0.00	0.00	0.00
10,300.0	90.00	89.29	6,909.0	-2,009.00	268.0	2,855.5	2,867.0	0.00	0.00	0.00
10,400.0	90.00	89.29	6,909.0	-2,009.00	269.3	2,955.5	2,966.9	0.00	0.00	0.00
10,500.0	90.00	89.29	6,909.0	-2,009.00	270.5	3,055.5	3,066.7	0.00	0.00	0.00
10,600.0	90.00	89.29	6,909.0	-2,009.00	271.7	3,155.5	3,166.6	0.00	0.00	0.00
10,700.0	90.00	89.29	6,909.0	-2,009.00	273.0	3,255.5	3,266.4	0.00	0.00	0.00
10,800.0	90.00	89.30	6,909.0	-2,009.00	274.2	3,355.5	3,366.3	0.00	0.00	0.00
10,900.0	90.00	89.30	6,909.0	-2,009.00	275.4	3,455.5	3,466.1	0.00	0.00	0.00
11,000.0	90.00	89.30	6,909.0	-2,009.00	276.7	3,555.4	3,566.0	0.00	0.00	0.00
11,100.0	90.00	89.30	6,909.0	-2,009.00	277.9	3,655.4	3,665.8	0.00	0.00	0.00
11,200.0	90.00	89.30	6,909.0	-2,009.00	279.1	3,755.4	3,765.7	0.00	0.00	0.00
11,300.0	90.00	89.30	6,909.0	-2,009.00	280.3	3,855.4	3,865.5	0.00	0.00	0.00
11,400.0	90.00	89.30	6,909.0	-2,009.00	281.6	3,955.4	3,965.4	0.00	0.00	0.00
11,500.0	90.00	89.30	6,909.0	-2,009.00	282.8	4,055.4	4,065.2	0.00	0.00	0.00
11,600.0	90.00	89.30	6,909.0	-2,009.00	284.0	4,155.4	4,165.1	0.00	0.00	0.00
11,700.0	90.00	89.30	6,909.0	-2,009.00	285.2	4,255.4	4,264.9	0.00	0.00	0.00
BHL (P3): 570ft FNL & 460ft FEL of Sec 22										
11,702.8	90.00	89.30	6,909.0	-2,009.00	285.3	4,258.2	4,267.7	0.02	0.00	0.02

Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,287.9	3,265.0	PARKMAN		0.00	
3,942.8	3,910.0	SUSSEX		0.00	
4,347.9	4,309.0	SHANNON		0.00	
6,921.6	6,789.0	NIOBRARA		0.00	

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MLD 9
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4900.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4900.0usft (Original Well Elev)
Site:	NW NW SEC. 22 T4N R68W 6th P.M.	North Reference:	True
Well:	MLD 9	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.0	0.0	0.0	0.0	SHL: 802ft FNL & 604ft FWL of Sec 22
1,450.0	1,450.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,949.9	1,947.4	12.9	-41.5	EOB TO 10° INC
5,779.4	5,718.7	210.5	-676.3	END OF TANGENT
6,279.3	6,216.1	223.4	-717.9	EOD TO VERTICAL
6,399.3	6,336.1	223.4	-717.9	KOP (10°/100ft BUR)
7,299.2	6,909.0	230.6	-145.1	HZ LP (P3): 570ft FNL & 460ft FWL of Sec 22
11,702.8	6,909.0	285.3	4,258.2	BHL (P3): 570ft FNL & 460ft FEL of Sec 22