

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

SE NE SEC. 22 T6N R67W 6th P.M.

RBFB 3

ORIGINAL WELLBORE

24 October, 2016

Plan: PROPOSAL #1

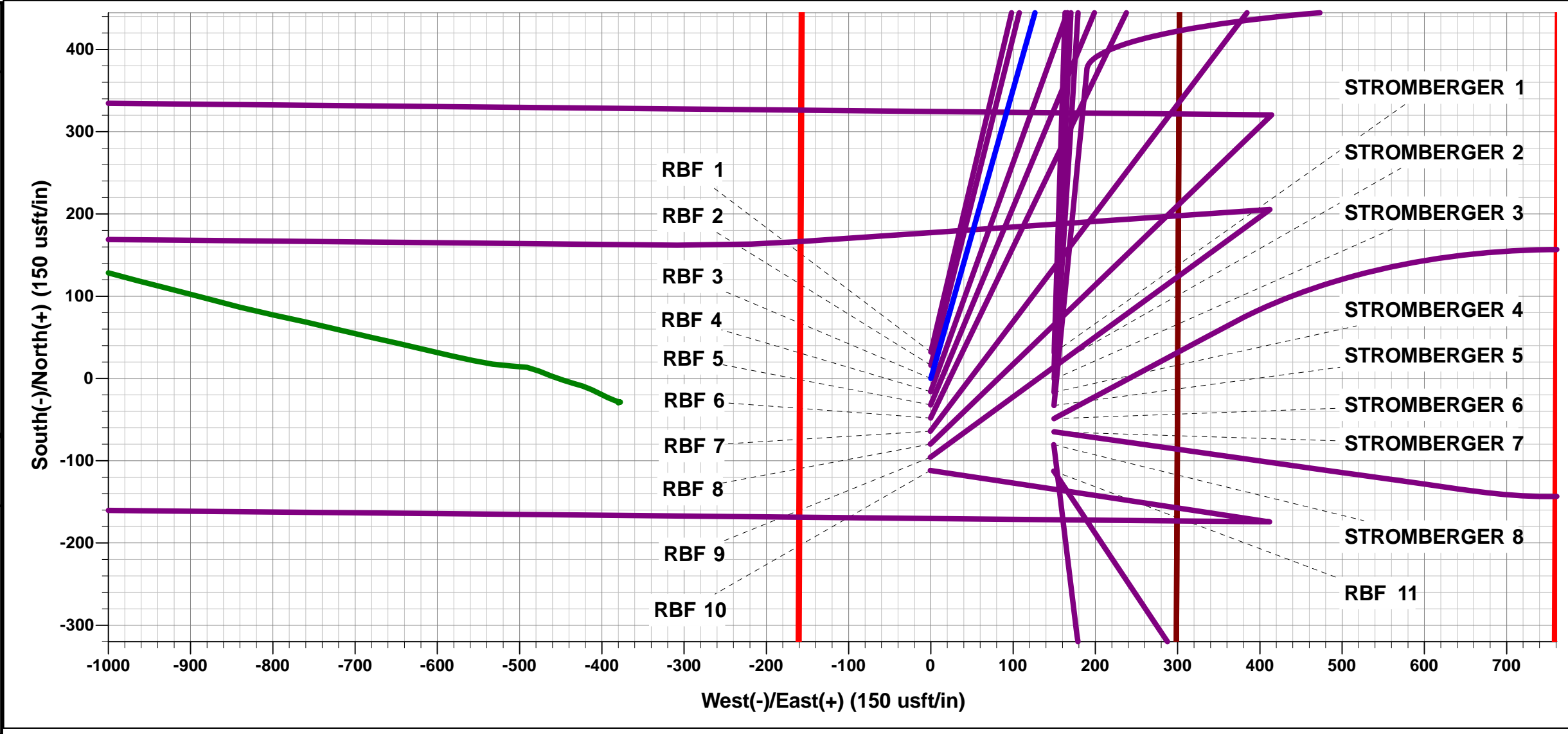




Project: WELD COUNTY, COLORADO (NAD 83)
Site: SE NE SEC. 22 T6N R67W 6th P.M.
Well: RBF 3
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

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: 1977ft FNL & 300ft FEL of Sec 22	
300.0	300.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDDGE (2°/100ft BUR)	
1104.9	1115.9	16.32	15.90	111.0	31.6	-13.3	115.4	EOB TO 16.32° INC	
5557.1	5754.9	16.32	15.90	1364.6	388.6	-163.2	1418.9	END OF TANGENT	
6362.0	6570.9	0.00	0.00	1475.6	420.2	-176.5	1534.3	EOD TO VERTICAL	
6392.0	6600.9	0.00	0.00	1475.6	420.2	-176.5	1534.3	KOP (10°/100ft BUR)	
6965.0	7500.9	90.00	270.57	1481.3	-152.7	389.9	2107.2	HZ LP: 495ft FNL & 460ft FEL of Sec 22	
6965.0	16979.2	90.00	270.57	1575.4	-9630.6	9758.6	11585.6	BHL: 495ft FNL & 460ft FWL of Sec 21	

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - RBF 3	6392.0	1475.6	420.2	40.478331	-104.869889
BHL - RBF 3	6965.0	1575.4	-9630.6	40.478600	-104.906017
HZ LP - RBF 3	6965.0	1481.3	-152.7	40.478347	-104.871948



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3450.0	3559.4	PARKMAN
4215.0	4356.5	SUSSEX
4790.0	4955.7	SHANNON
6809.0	7067.9	SHARON SPRINGS
6846.0	7124.9	NIOBRARA
6965.0	7500.9	NIO B

PROPOSED LOCAL COORDINATES	
SHL: 1977ft FNL & 300ft FEL of Sec 22	
LP: 495ft FNL & 460ft FEL of Sec 22	
BHL: 495ft FNL & 460ft FWL of Sec 21	

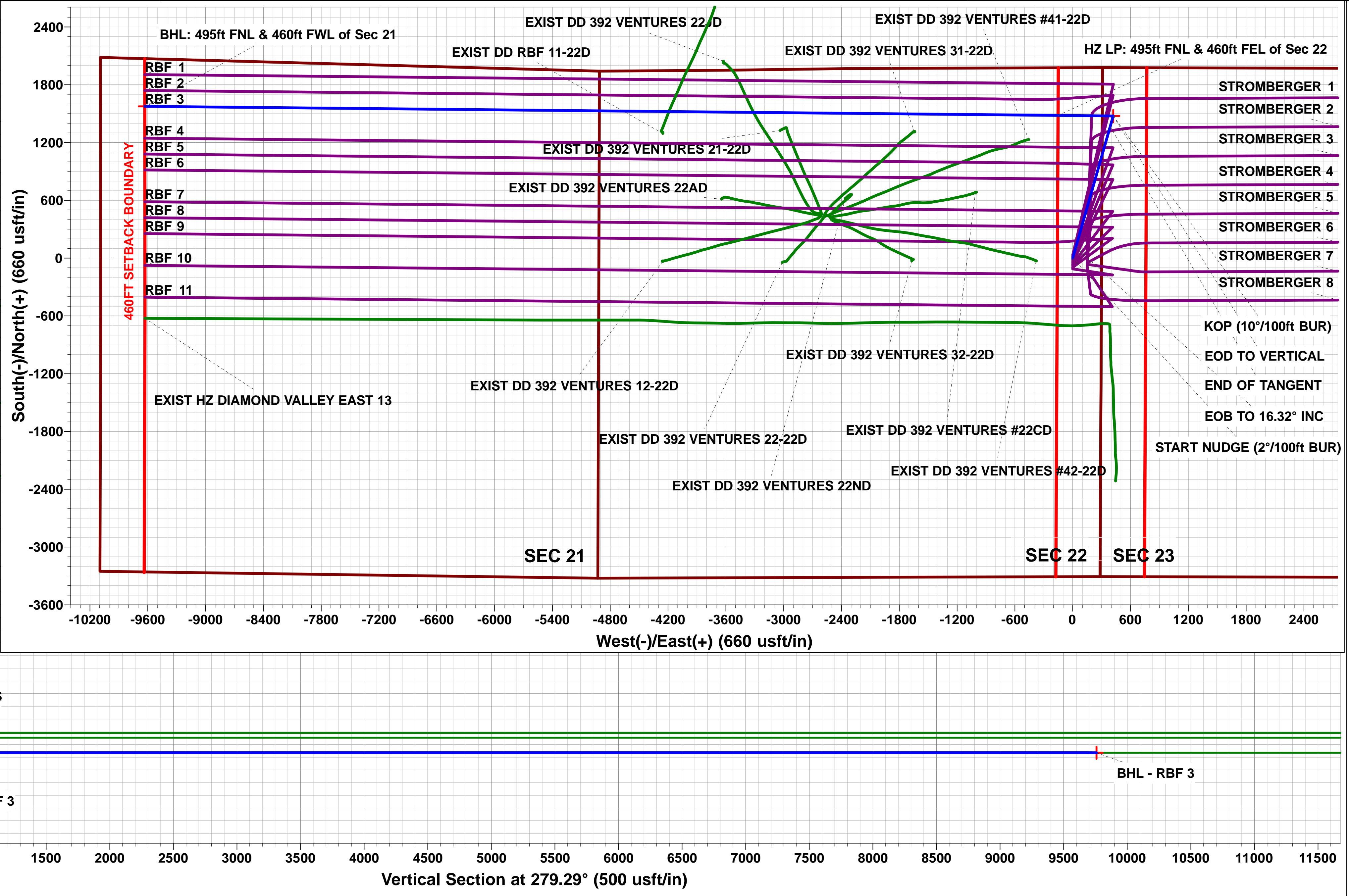
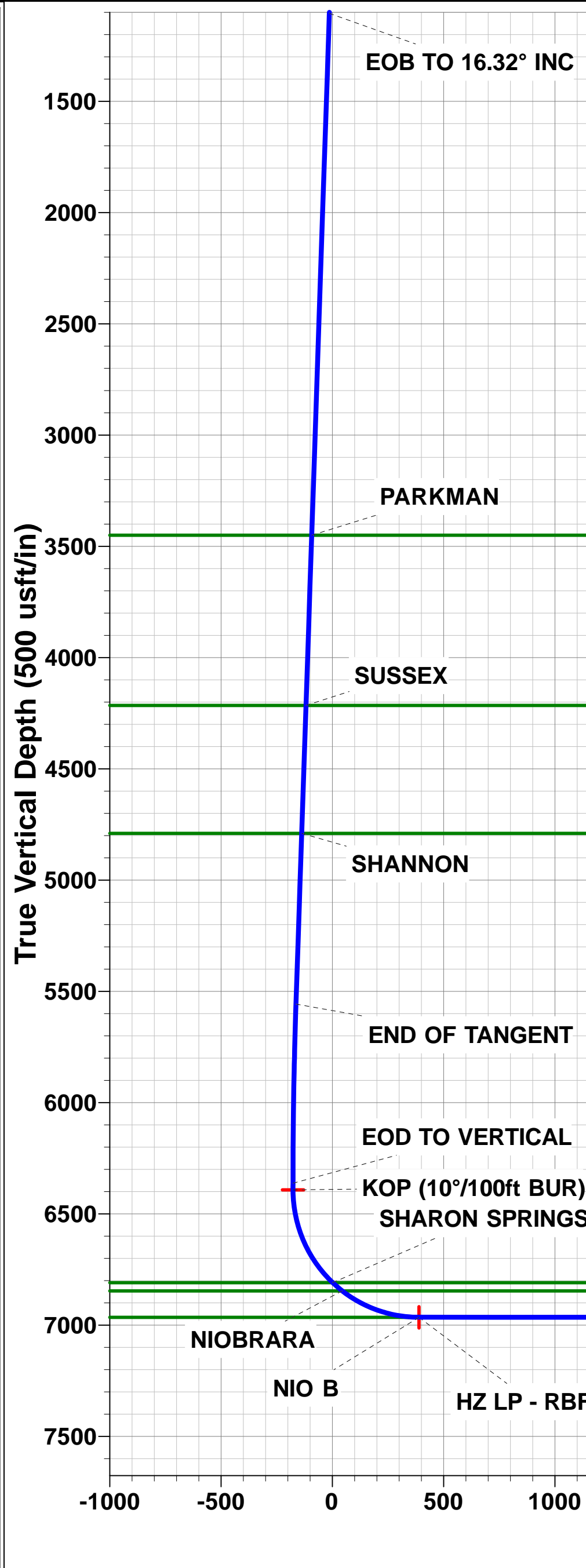
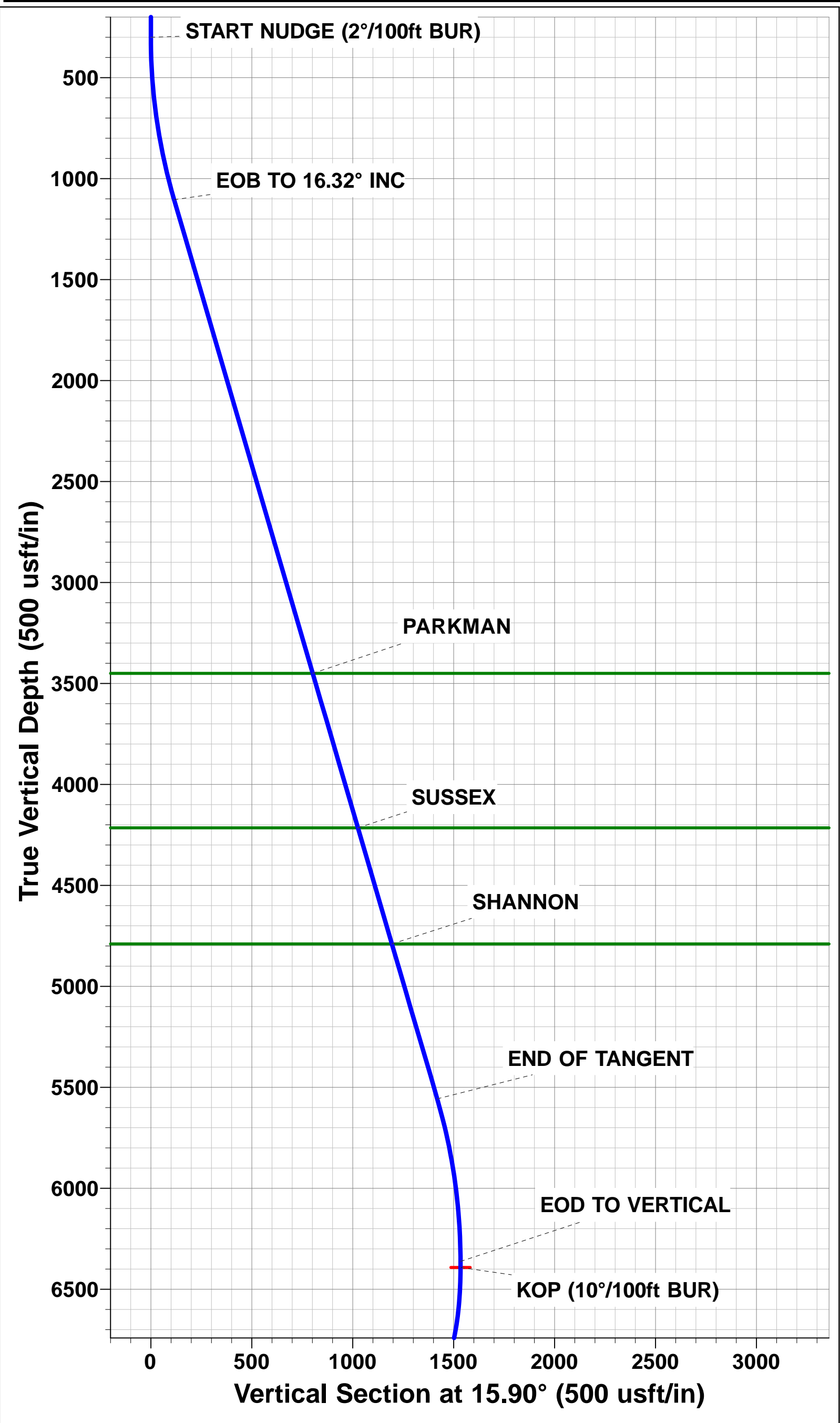
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Azimuths to True North
Magnetic North: 8.34°

Magnetic Field
Strength: 52493.7snT
Dip Angle: 66.91°
Date: 24/10/2016
Model: IGRF2015



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RBF 3
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Site:	SE NE SEC. 22 T6N R67W 6th P.M.	North Reference:	True
Well:	RBF 3	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	SE NE SEC. 22 T6N R67W 6th P.M.		
Site Position:		Northing:	1,417,027.42 usft
From:	Lat/Long	Easting:	3,175,712.36 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.476424
		Longitude:	-104.868382
		Grid Convergence:	0.41 °

Well	RBF 3		
Well Position	+N/-S	-780.7 usft	Northing: 1,416,240.79 usfi
	+E/-W	-839.4 usft	Easting: 3,174,878.60 usfi
Position Uncertainty	0.0 usft	Wellhead Elevation:	usfi
		Latitude:	40.474281
		Longitude:	-104.871399
		Ground Level:	4,778.0 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	24/10/2016	8.34	66.91	52,494

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 (°)
	6,965.0	0.0	0.0	279.29

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	-4,794.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	-4,494.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,115.9	16.32	15.90	1,104.9	-3,689.1	111.0	31.6	2.00	2.00	0.00	15.90	
5,754.9	16.32	15.90	5,557.1	763.1	1,364.6	388.6	0.00	0.00	0.00	0.00	
6,570.9	0.00	0.00	6,362.0	1,568.0	1,475.6	420.2	2.00	-2.00	0.00	180.00	
6,600.9	0.00	0.00	6,392.0	1,598.0	1,475.6	420.2	0.00	0.00	0.00	0.00	KOP - RBF 3
7,500.9	90.00	270.57	6,965.0	2,171.0	1,481.3	-152.7	10.00	10.00	0.00	270.57	
16,979.2	90.00	270.57	6,965.0	2,171.0	1,575.4	-9,630.6	0.00	0.00	0.00	-100.72	BHL - RBF 3

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RBF 3
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Site:	SE NE SEC. 22 T6N R67W 6th P.M.	North Reference:	True
Well:	RBF 3	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: 1977ft FNL & 300ft FEL of Sec 22										
0.0	0.00	0.00	0.0	4,794.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,694.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,594.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
300.0	0.00	0.00	300.0	4,494.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	2.00	15.90	400.0	4,394.02	1.7	0.5	-0.2	2.00	2.00	0.00
500.0	4.00	15.90	499.8	4,294.16	6.7	1.9	-0.8	2.00	2.00	0.00
600.0	6.00	15.90	599.5	4,194.55	15.1	4.3	-1.8	2.00	2.00	0.00
700.0	8.00	15.90	698.7	4,095.30	26.8	7.6	-3.2	2.00	2.00	0.00
800.0	10.00	15.90	797.5	3,996.53	41.9	11.9	-5.0	2.00	2.00	0.00
900.0	12.00	15.90	895.6	3,898.38	60.2	17.1	-7.2	2.00	2.00	0.00
1,000.0	14.00	15.90	993.1	3,800.94	81.8	23.3	-9.8	2.00	2.00	0.00
1,100.0	16.00	15.90	1,089.6	3,704.36	106.7	30.4	-12.8	2.00	2.00	0.00
EOB TO 16.32° INC										
1,115.9	16.32	15.90	1,104.9	3,689.07	111.0	31.6	-13.3	2.00	2.00	0.00
1,200.0	16.32	15.90	1,185.6	3,608.37	133.7	38.1	-16.0	0.00	0.00	0.00
1,300.0	16.32	15.90	1,281.6	3,512.40	160.7	45.8	-19.2	0.00	0.00	0.00
1,400.0	16.32	15.90	1,377.6	3,416.43	187.8	53.5	-22.5	0.00	0.00	0.00
1,500.0	16.32	15.90	1,473.5	3,320.46	214.8	61.2	-25.7	0.00	0.00	0.00
1,600.0	16.32	15.90	1,569.5	3,224.49	241.8	68.9	-28.9	0.00	0.00	0.00
1,700.0	16.32	15.90	1,665.5	3,128.52	268.8	76.6	-32.2	0.00	0.00	0.00
1,800.0	16.32	15.90	1,761.5	3,032.54	295.9	84.2	-35.4	0.00	0.00	0.00
1,900.0	16.32	15.90	1,857.4	2,936.57	322.9	91.9	-38.6	0.00	0.00	0.00
2,000.0	16.32	15.90	1,953.4	2,840.60	349.9	99.6	-41.8	0.00	0.00	0.00
2,100.0	16.32	15.90	2,049.4	2,744.63	376.9	107.3	-45.1	0.00	0.00	0.00
2,200.0	16.32	15.90	2,145.3	2,648.66	403.9	115.0	-48.3	0.00	0.00	0.00
2,300.0	16.32	15.90	2,241.3	2,552.69	431.0	122.7	-51.5	0.00	0.00	0.00
2,400.0	16.32	15.90	2,337.3	2,456.72	458.0	130.4	-54.8	0.00	0.00	0.00
2,500.0	16.32	15.90	2,433.3	2,360.74	485.0	138.1	-58.0	0.00	0.00	0.00
2,600.0	16.32	15.90	2,529.2	2,264.77	512.0	145.8	-61.2	0.00	0.00	0.00
2,700.0	16.32	15.90	2,625.2	2,168.80	539.1	153.5	-64.5	0.00	0.00	0.00
2,800.0	16.32	15.90	2,721.2	2,072.83	566.1	161.2	-67.7	0.00	0.00	0.00
2,900.0	16.32	15.90	2,817.1	1,976.86	593.1	168.9	-70.9	0.00	0.00	0.00
3,000.0	16.32	15.90	2,913.1	1,880.89	620.1	176.6	-74.2	0.00	0.00	0.00
3,100.0	16.32	15.90	3,009.1	1,784.91	647.2	184.3	-77.4	0.00	0.00	0.00
3,200.0	16.32	15.90	3,105.1	1,688.94	674.2	192.0	-80.6	0.00	0.00	0.00
3,300.0	16.32	15.90	3,201.0	1,592.97	701.2	199.7	-83.9	0.00	0.00	0.00
3,400.0	16.32	15.90	3,297.0	1,497.00	728.2	207.4	-87.1	0.00	0.00	0.00
3,500.0	16.32	15.90	3,393.0	1,401.03	755.2	215.1	-90.3	0.00	0.00	0.00
PARKMAN										
3,559.4	16.32	15.90	3,450.0	1,344.00	771.3	219.6	-92.2	0.00	0.00	0.00
3,600.0	16.32	15.90	3,488.9	1,305.06	782.3	222.8	-93.6	0.00	0.00	0.00
3,700.0	16.32	15.90	3,584.9	1,209.09	809.3	230.5	-96.8	0.00	0.00	0.00
3,800.0	16.32	15.90	3,680.9	1,113.11	836.3	238.2	-100.0	0.00	0.00	0.00
3,900.0	16.32	15.90	3,776.9	1,017.14	863.3	245.9	-103.3	0.00	0.00	0.00
4,000.0	16.32	15.90	3,872.8	921.17	890.4	253.5	-106.5	0.00	0.00	0.00
4,100.0	16.32	15.90	3,968.8	825.20	917.4	261.2	-109.7	0.00	0.00	0.00
4,200.0	16.32	15.90	4,064.8	729.23	944.4	268.9	-112.9	0.00	0.00	0.00
4,300.0	16.32	15.90	4,160.7	633.26	971.4	276.6	-116.2	0.00	0.00	0.00
SUSSEX										
4,356.5	16.32	15.90	4,215.0	579.00	986.7	281.0	-118.0	0.00	0.00	0.00
4,400.0	16.32	15.90	4,256.7	537.29	998.5	284.3	-119.4	0.00	0.00	0.00
4,500.0	16.32	15.90	4,352.7	441.31	1,025.5	292.0	-122.6	0.00	0.00	0.00

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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	16.32	15.90	4,448.7	345.34	1,052.5	299.7	-125.9	0.00	0.00	0.00
4,700.0	16.32	15.90	4,544.6	249.37	1,079.5	307.4	-129.1	0.00	0.00	0.00
4,800.0	16.32	15.90	4,640.6	153.40	1,106.6	315.1	-132.3	0.00	0.00	0.00
4,900.0	16.32	15.90	4,736.6	57.43	1,133.6	322.8	-135.6	0.00	0.00	0.00
SHANNON										
4,955.7	16.32	15.90	4,790.0	4.00	1,148.6	327.1	-137.4	0.00	0.00	0.00
5,000.0	16.32	15.90	4,832.5	-38.54	1,160.6	330.5	-138.8	0.00	0.00	0.00
5,100.0	16.32	15.90	4,928.5	-134.52	1,187.6	338.2	-142.0	0.00	0.00	0.00
5,200.0	16.32	15.90	5,024.5	-230.49	1,214.6	345.9	-145.3	0.00	0.00	0.00
5,300.0	16.32	15.90	5,120.5	-326.46	1,241.7	353.6	-148.5	0.00	0.00	0.00
5,400.0	16.32	15.90	5,216.4	-422.43	1,268.7	361.3	-151.7	0.00	0.00	0.00
5,500.0	16.32	15.90	5,312.4	-518.40	1,295.7	369.0	-155.0	0.00	0.00	0.00
5,600.0	16.32	15.90	5,408.4	-614.37	1,322.7	376.7	-158.2	0.00	0.00	0.00
5,700.0	16.32	15.90	5,504.3	-710.34	1,349.8	384.4	-161.4	0.00	0.00	0.00
END OF TANGENT										
5,754.9	16.32	15.90	5,557.1	-763.07	1,364.6	388.6	-163.2	0.00	0.00	0.00
5,800.0	15.42	15.90	5,600.4	-806.41	1,376.5	392.0	-164.6	2.00	-2.00	0.00
5,900.0	13.42	15.90	5,697.3	-903.26	1,400.4	398.8	-167.5	2.00	-2.00	0.00
6,000.0	11.42	15.90	5,794.9	-1,000.92	1,421.1	404.7	-170.0	2.00	-2.00	0.00
6,100.0	9.42	15.90	5,893.3	-1,099.26	1,438.5	409.6	-172.0	2.00	-2.00	0.00
6,200.0	7.42	15.90	5,992.2	-1,198.18	1,452.5	413.6	-173.7	2.00	-2.00	0.00
6,300.0	5.42	15.90	6,091.5	-1,297.55	1,463.3	416.7	-175.0	2.00	-2.00	0.00
6,400.0	3.42	15.90	6,191.2	-1,397.25	1,470.7	418.8	-175.9	2.00	-2.00	0.00
6,500.0	1.42	15.90	6,291.2	-1,497.15	1,474.8	420.0	-176.4	2.00	-2.00	0.00
EOD TO VERTICAL										
6,570.9	0.00	0.00	6,362.0	-1,568.00	1,475.6	420.2	-176.5	2.00	-2.00	0.00
6,600.0	0.00	0.00	6,391.1	-1,597.15	1,475.6	420.2	-176.5	0.00	0.00	0.00
KOP (10°/100ft BUR)										
6,600.9	0.00	0.00	6,392.0	-1,598.00	1,475.6	420.2	-176.5	0.00	0.00	0.00
6,700.0	9.91	270.57	6,490.7	-1,696.65	1,475.7	411.6	-168.0	10.00	10.00	0.00
6,800.0	19.91	270.57	6,587.2	-1,793.16	1,475.9	385.9	-142.6	10.00	10.00	0.00
6,900.0	29.91	270.57	6,677.7	-1,883.74	1,476.4	343.9	-101.0	10.00	10.00	0.00
7,000.0	39.91	270.57	6,759.6	-1,965.64	1,476.9	286.7	-44.5	10.00	10.00	0.00
SHARON SPRINGS										
7,067.9	46.70	270.57	6,809.0	-2,015.00	1,477.4	240.2	1.5	10.00	10.00	0.00
7,100.0	49.91	270.57	6,830.4	-2,036.36	1,477.6	216.2	25.2	10.00	10.00	0.00
NIOBRARA										
7,124.9	52.41	270.57	6,846.0	-2,052.00	1,477.8	196.8	44.4	10.00	10.00	0.00
7,200.0	59.91	270.57	6,887.8	-2,093.77	1,478.4	134.5	106.0	10.00	10.00	0.00
7,300.0	69.91	270.57	6,930.1	-2,136.11	1,479.3	44.0	195.4	10.00	10.00	0.00
7,400.0	79.91	270.57	6,956.1	-2,162.10	1,480.3	-52.4	290.7	10.00	10.00	0.00
7,500.0	89.91	270.57	6,965.0	-2,170.96	1,481.3	-151.9	389.0	10.00	10.00	0.00
HZ LP: 495ft FNL & 460ft FEL of Sec 22 - NIO B										
7,500.9	90.00	270.57	6,965.0	-2,171.00	1,481.3	-152.7	389.9	10.00	10.00	0.00
7,600.0	90.00	270.57	6,965.0	-2,170.96	1,482.3	-251.9	487.9	0.00	0.00	0.00
7,700.0	90.00	270.57	6,965.0	-2,170.96	1,483.3	-351.9	586.7	0.00	0.00	0.00
7,800.0	90.00	270.57	6,965.0	-2,170.96	1,484.3	-451.9	685.5	0.00	0.00	0.00
7,900.0	90.00	270.57	6,965.0	-2,170.96	1,485.3	-551.9	784.4	0.00	0.00	0.00
8,000.0	90.00	270.57	6,965.0	-2,170.96	1,486.3	-651.9	883.2	0.00	0.00	0.00
8,100.0	90.00	270.57	6,965.0	-2,170.96	1,487.3	-751.8	982.1	0.00	0.00	0.00
8,200.0	90.00	270.57	6,965.0	-2,170.96	1,488.3	-851.8	1,080.9	0.00	0.00	0.00
8,300.0	90.00	270.57	6,965.0	-2,170.96	1,489.2	-951.8	1,179.8	0.00	0.00	0.00
8,400.0	90.00	270.57	6,965.0	-2,170.96	1,490.2	-1,051.8	1,278.6	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RBF 3
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Site:	SE NE SEC. 22 T6N R67W 6th P.M.	North Reference:	True
Well:	RBF 3	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	270.57	6,965.0	-2,170.96	1,491.2	-1,151.8	1,377.5	0.00	0.00	0.00
8,600.0	90.00	270.57	6,965.0	-2,170.96	1,492.2	-1,251.8	1,476.3	0.00	0.00	0.00
8,700.0	90.00	270.57	6,965.0	-2,170.96	1,493.2	-1,351.8	1,575.1	0.00	0.00	0.00
8,800.0	90.00	270.57	6,965.0	-2,170.96	1,494.2	-1,451.8	1,674.0	0.00	0.00	0.00
8,900.0	90.00	270.57	6,965.0	-2,170.96	1,495.2	-1,551.8	1,772.8	0.00	0.00	0.00
9,000.0	90.00	270.57	6,965.0	-2,170.96	1,496.2	-1,651.8	1,871.7	0.00	0.00	0.00
9,100.0	90.00	270.57	6,965.0	-2,170.96	1,497.2	-1,751.8	1,970.5	0.00	0.00	0.00
9,200.0	90.00	270.57	6,965.0	-2,170.96	1,498.2	-1,851.8	2,069.4	0.00	0.00	0.00
9,300.0	90.00	270.57	6,965.0	-2,170.96	1,499.2	-1,951.8	2,168.2	0.00	0.00	0.00
9,400.0	90.00	270.57	6,965.0	-2,170.96	1,500.2	-2,051.8	2,267.0	0.00	0.00	0.00
9,500.0	90.00	270.57	6,965.0	-2,170.96	1,501.2	-2,151.8	2,365.9	0.00	0.00	0.00
9,600.0	90.00	270.57	6,965.0	-2,170.96	1,502.2	-2,251.8	2,464.7	0.00	0.00	0.00
9,700.0	90.00	270.57	6,965.0	-2,170.96	1,503.2	-2,351.8	2,563.6	0.00	0.00	0.00
9,800.0	90.00	270.57	6,965.0	-2,170.96	1,504.2	-2,451.8	2,662.4	0.00	0.00	0.00
9,900.0	90.00	270.57	6,965.0	-2,170.96	1,505.2	-2,551.8	2,761.3	0.00	0.00	0.00
10,000.0	90.00	270.57	6,965.0	-2,170.96	1,506.1	-2,651.8	2,860.1	0.00	0.00	0.00
10,100.0	90.00	270.57	6,965.0	-2,170.96	1,507.1	-2,751.7	2,959.0	0.00	0.00	0.00
10,200.0	90.00	270.57	6,965.0	-2,170.96	1,508.1	-2,851.7	3,057.8	0.00	0.00	0.00
10,300.0	90.00	270.57	6,965.0	-2,170.96	1,509.1	-2,951.7	3,156.6	0.00	0.00	0.00
10,400.0	90.00	270.57	6,965.0	-2,170.96	1,510.1	-3,051.7	3,255.5	0.00	0.00	0.00
10,500.0	90.00	270.57	6,965.0	-2,170.96	1,511.1	-3,151.7	3,354.3	0.00	0.00	0.00
10,600.0	90.00	270.57	6,965.0	-2,170.96	1,512.1	-3,251.7	3,453.2	0.00	0.00	0.00
10,700.0	90.00	270.57	6,965.0	-2,170.96	1,513.1	-3,351.7	3,552.0	0.00	0.00	0.00
10,800.0	90.00	270.57	6,965.0	-2,170.96	1,514.1	-3,451.7	3,650.9	0.00	0.00	0.00
10,900.0	90.00	270.57	6,965.0	-2,170.96	1,515.1	-3,551.7	3,749.7	0.00	0.00	0.00
11,000.0	90.00	270.57	6,965.0	-2,170.96	1,516.1	-3,651.7	3,848.6	0.00	0.00	0.00
11,100.0	90.00	270.57	6,965.0	-2,170.96	1,517.1	-3,751.7	3,947.4	0.00	0.00	0.00
11,200.0	90.00	270.57	6,965.0	-2,170.96	1,518.1	-3,851.7	4,046.2	0.00	0.00	0.00
11,300.0	90.00	270.57	6,965.0	-2,170.96	1,519.1	-3,951.7	4,145.1	0.00	0.00	0.00
11,400.0	90.00	270.57	6,965.0	-2,170.96	1,520.1	-4,051.7	4,243.9	0.00	0.00	0.00
11,500.0	90.00	270.57	6,965.0	-2,170.97	1,521.0	-4,151.7	4,342.8	0.00	0.00	0.00
11,600.0	90.00	270.57	6,965.0	-2,170.97	1,522.0	-4,251.7	4,441.6	0.00	0.00	0.00
11,700.0	90.00	270.57	6,965.0	-2,170.97	1,523.0	-4,351.7	4,540.5	0.00	0.00	0.00
11,800.0	90.00	270.57	6,965.0	-2,170.97	1,524.0	-4,451.7	4,639.3	0.00	0.00	0.00
11,900.0	90.00	270.57	6,965.0	-2,170.97	1,525.0	-4,551.7	4,738.1	0.00	0.00	0.00
12,000.0	90.00	270.57	6,965.0	-2,170.97	1,526.0	-4,651.7	4,837.0	0.00	0.00	0.00
12,100.0	90.00	270.57	6,965.0	-2,170.97	1,527.0	-4,751.6	4,935.8	0.00	0.00	0.00
12,200.0	90.00	270.57	6,965.0	-2,170.97	1,528.0	-4,851.6	5,034.7	0.00	0.00	0.00
12,300.0	90.00	270.57	6,965.0	-2,170.97	1,529.0	-4,951.6	5,133.5	0.00	0.00	0.00
12,400.0	90.00	270.57	6,965.0	-2,170.97	1,530.0	-5,051.6	5,232.4	0.00	0.00	0.00
12,500.0	90.00	270.57	6,965.0	-2,170.97	1,531.0	-5,151.6	5,331.2	0.00	0.00	0.00
12,600.0	90.00	270.57	6,965.0	-2,170.97	1,532.0	-5,251.6	5,430.1	0.00	0.00	0.00
12,700.0	90.00	270.57	6,965.0	-2,170.97	1,533.0	-5,351.6	5,528.9	0.00	0.00	0.00
12,800.0	90.00	270.57	6,965.0	-2,170.97	1,533.9	-5,451.6	5,627.7	0.00	0.00	0.00
12,900.0	90.00	270.57	6,965.0	-2,170.97	1,534.9	-5,551.6	5,726.6	0.00	0.00	0.00
13,000.0	90.00	270.57	6,965.0	-2,170.97	1,535.9	-5,651.6	5,825.4	0.00	0.00	0.00
13,100.0	90.00	270.57	6,965.0	-2,170.97	1,536.9	-5,751.6	5,924.3	0.00	0.00	0.00
13,200.0	90.00	270.57	6,965.0	-2,170.97	1,537.9	-5,851.6	6,023.1	0.00	0.00	0.00
13,300.0	90.00	270.57	6,965.0	-2,170.97	1,538.9	-5,951.6	6,122.0	0.00	0.00	0.00
13,400.0	90.00	270.57	6,965.0	-2,170.97	1,539.9	-6,051.6	6,220.8	0.00	0.00	0.00
13,500.0	90.00	270.57	6,965.0	-2,170.97	1,540.9	-6,151.6	6,319.6	0.00	0.00	0.00
13,600.0	90.00	270.57	6,965.0	-2,170.98	1,541.9	-6,251.6	6,418.5	0.00	0.00	0.00
13,700.0	90.00	270.57	6,965.0	-2,170.98	1,542.9	-6,351.6	6,517.3	0.00	0.00	0.00
13,800.0	90.00	270.57	6,965.0	-2,170.98	1,543.9	-6,451.6	6,616.2	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RBF 3
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Site:	SE NE SEC. 22 T6N R67W 6th P.M.	North Reference:	True
Well:	RBF 3	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	270.57	6,965.0	-2,170.98	1,544.9	-6,551.6	6,715.0	0.00	0.00	0.00
14,000.0	90.00	270.57	6,965.0	-2,170.98	1,545.9	-6,651.6	6,813.9	0.00	0.00	0.00
14,100.0	90.00	270.57	6,965.0	-2,170.98	1,546.8	-6,751.5	6,912.7	0.00	0.00	0.00
14,200.0	90.00	270.57	6,965.0	-2,170.98	1,547.8	-6,851.5	7,011.5	0.00	0.00	0.00
14,300.0	90.00	270.57	6,965.0	-2,170.98	1,548.8	-6,951.5	7,110.4	0.00	0.00	0.00
14,400.0	90.00	270.57	6,965.0	-2,170.98	1,549.8	-7,051.5	7,209.2	0.00	0.00	0.00
14,500.0	90.00	270.57	6,965.0	-2,170.98	1,550.8	-7,151.5	7,308.1	0.00	0.00	0.00
14,600.0	90.00	270.57	6,965.0	-2,170.98	1,551.8	-7,251.5	7,406.9	0.00	0.00	0.00
14,700.0	90.00	270.57	6,965.0	-2,170.98	1,552.8	-7,351.5	7,505.8	0.00	0.00	0.00
14,800.0	90.00	270.57	6,965.0	-2,170.98	1,553.8	-7,451.5	7,604.6	0.00	0.00	0.00
14,900.0	90.00	270.57	6,965.0	-2,170.98	1,554.8	-7,551.5	7,703.5	0.00	0.00	0.00
15,000.0	90.00	270.57	6,965.0	-2,170.98	1,555.8	-7,651.5	7,802.3	0.00	0.00	0.00
15,100.0	90.00	270.57	6,965.0	-2,170.98	1,556.8	-7,751.5	7,901.1	0.00	0.00	0.00
15,200.0	90.00	270.57	6,965.0	-2,170.99	1,557.7	-7,851.5	8,000.0	0.00	0.00	0.00
15,300.0	90.00	270.57	6,965.0	-2,170.99	1,558.7	-7,951.5	8,098.8	0.00	0.00	0.00
15,400.0	90.00	270.57	6,965.0	-2,170.99	1,559.7	-8,051.5	8,197.7	0.00	0.00	0.00
15,500.0	90.00	270.57	6,965.0	-2,170.99	1,560.7	-8,151.5	8,296.5	0.00	0.00	0.00
15,600.0	90.00	270.57	6,965.0	-2,170.99	1,561.7	-8,251.5	8,395.4	0.00	0.00	0.00
15,700.0	90.00	270.57	6,965.0	-2,170.99	1,562.7	-8,351.5	8,494.2	0.00	0.00	0.00
15,800.0	90.00	270.57	6,965.0	-2,170.99	1,563.7	-8,451.5	8,593.0	0.00	0.00	0.00
15,900.0	90.00	270.57	6,965.0	-2,170.99	1,564.7	-8,551.5	8,691.9	0.00	0.00	0.00
16,000.0	90.00	270.57	6,965.0	-2,170.99	1,565.7	-8,651.5	8,790.7	0.00	0.00	0.00
16,100.0	90.00	270.57	6,965.0	-2,170.99	1,566.7	-8,751.5	8,889.6	0.00	0.00	0.00
16,200.0	90.00	270.57	6,965.0	-2,170.99	1,567.7	-8,851.4	8,988.4	0.00	0.00	0.00
16,300.0	90.00	270.57	6,965.0	-2,170.99	1,568.6	-8,951.4	9,087.3	0.00	0.00	0.00
16,400.0	90.00	270.57	6,965.0	-2,170.99	1,569.6	-9,051.4	9,186.1	0.00	0.00	0.00
16,500.0	90.00	270.57	6,965.0	-2,171.00	1,570.6	-9,151.4	9,284.9	0.00	0.00	0.00
16,600.0	90.00	270.57	6,965.0	-2,171.00	1,571.6	-9,251.4	9,383.8	0.00	0.00	0.00
16,700.0	90.00	270.57	6,965.0	-2,171.00	1,572.6	-9,351.4	9,482.6	0.00	0.00	0.00
16,800.0	90.00	270.57	6,965.0	-2,171.00	1,573.6	-9,451.4	9,581.5	0.00	0.00	0.00
16,900.0	90.00	270.57	6,965.0	-2,171.00	1,574.6	-9,551.4	9,680.3	0.00	0.00	0.00
BHL: 495ft FNL & 460ft FWL of Sec 21										
16,979.2	90.00	270.57	6,965.0	-2,171.00	1,575.4	-9,630.6	9,758.6	0.00	0.00	0.00

Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,559.4	3,450.0	PARKMAN			
4,356.5	4,215.0	SUSSEX			
4,955.7	4,790.0	SHANNON			
7,067.9	6,809.0	SHARON SPRINGS			
7,124.9	6,846.0	NIOBRARA			
7,500.9	6,965.0	NIO B			

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RBF 3
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Site:	SE NE SEC. 22 T6N R67W 6th P.M.	North Reference:	True
Well:	RBF 3	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: 1977ft FNL & 300ft FEL of Sec 22
300.0	300.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,115.9	1,104.9	111.0	31.6	EOB TO 16.32° INC
5,754.9	5,557.1	1,364.6	388.6	END OF TANGENT
6,570.9	6,362.0	1,475.6	420.2	EOD TO VERTICAL
6,600.9	6,392.0	1,475.6	420.2	KOP (10°/100ft BUR)
7,500.9	6,965.0	1,481.3	-152.7	HZ LP: 495ft FNL & 460ft FEL of Sec 22
16,979.2	6,965.0	1,575.4	-9,630.6	BHL: 495ft FNL & 460ft FWL of Sec 21