

EXTRACTION OIL & GAS

**Weld County
Sec 17-T7N-R67W
WALT 8N-20-22C**

ORIGINAL WELLBORE

Plan: PROPOSAL 1

Standard Planning Report

14 July, 2017



Project: Weld County
Site: Sec 17-T7N-R67W
Well: WALT 8N-20-22C
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL 1

PROJECT DETAILS: Weld County
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level



Azimuths to True North
Magnetic North: 8.31°
Magnetic Field
Strength: 52476.6snT
Dip Angle: 66.97°
Date: 5/15/2017
Model: IGRF2015

WELL DETAILS: WALT 8N-20-22C

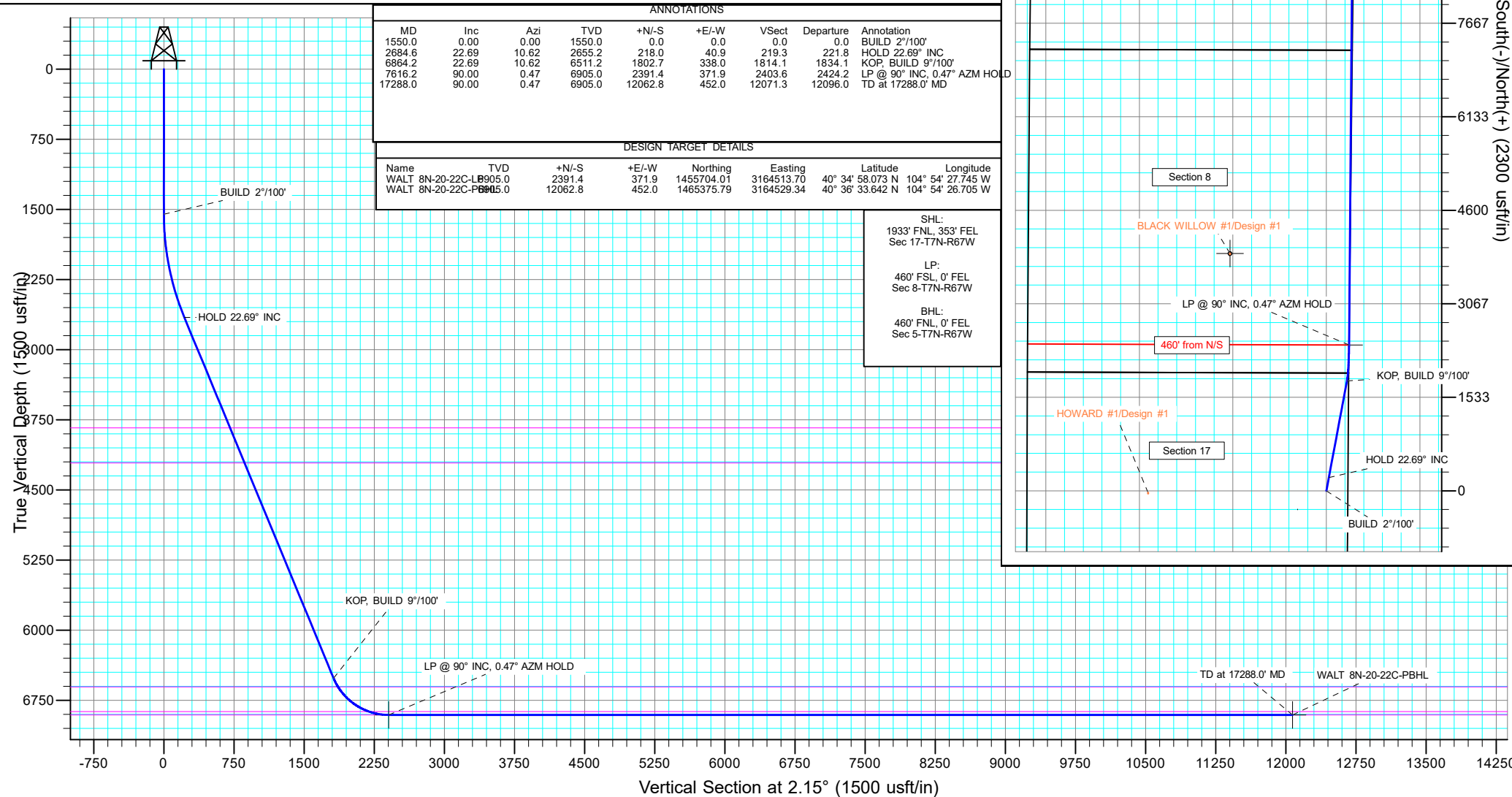
		5080.0						Slot					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude								
0.0	0.0	1453310.22	3164157.73	40° 34' 34.442 N	104° 54' 32.566 W								

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1550.0	0.00	0.00	1550.0	0.0	0.0	0.00	0.00	0.0	
3	2684.6	22.69	10.62	2655.2	218.0	40.9	2.00	10.62	219.3	
4	6864.2	22.69	10.62	6511.2	1802.7	338.0	0.00	0.00	1814.1	
5	7616.2	90.00	0.47	6905.0	2391.4	371.9	9.00	-10.88	2403.6	WALT 8N-20-22C-LP
6	17288.0	90.00	0.47	6905.0	12062.8	452.0	0.00	0.00	12071.3	WALT 8N-20-22C-PBHL

FORMATION TOP DETAILS

TVDPth	MDPath	Formation
3835.0	3963.4	SUSSEX
4210.0	4369.9	SHANNON
6605.0	6969.9	NIOBRARA
6870.0	7403.8	FORT HAYS
6905.0	7616.2	CODELL



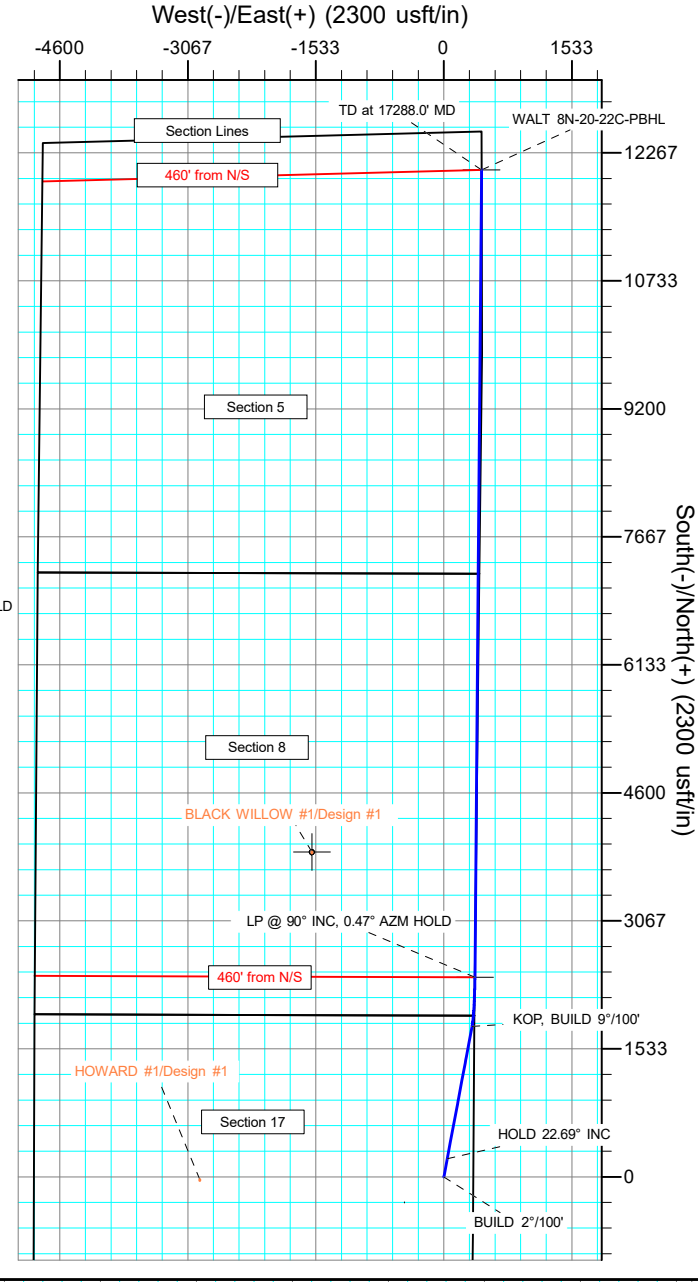
ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation	
1550.0	0.00	0.00	1550.0	0.0	0.0	0.0	0.0	BUILD 2°/100'	
2684.6	22.69	10.62	2655.2	218.0	40.9	219.3	221.8	HOLD 22.69° INC	
6864.2	22.69	10.62	6511.2	1802.7	338.0	1814.1	1834.1	KOP, BUILD 9°/100'	
7616.2	90.00	0.47	6905.0	2391.4	371.9	2403.6	2424.2	LP @ 90° INC, 0.47° AZM HOLD	
17288.0	90.00	0.47	6905.0	12062.8	452.0	12071.3	12096.0	TD at 17288.0' MD	

DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude		
WALT 8N-20-22C-LP	6905.0	2391.4	371.9	1455704.01	3164513.70	40° 34' 58.073 N	104° 54' 27.745 W		
WALT 8N-20-22C-PBHL	6905.0	12062.8	452.0	1465375.79	3164529.34	40° 36' 33.642 N	104° 54' 26.705 W		

SHL:
1933' FNL, 353' FEL
Sec 17-T7N-R67W

LP:
460' FSL, 0' FEL
Sec 8-T7N-R67W

BHL:
460' FNL, 0' FEL
Sec 5-T7N-R67W



Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well WALT 8N-20-22C
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5105.0usft
Project:	Weld County	MD Reference:	KB 25' @ 5105.0usft
Site:	Sec 17-T7N-R67W	North Reference:	True
Well:	WALT 8N-20-22C	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Project	Weld County		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Sec 17-T7N-R67W			
Site Position:		Northing:	1,455,244.22 usft	Latitude:	40° 34' 53.530 N
From:	Lat/Long	Easting:	3,164,511.50 usft	Longitude:	104° 54' 27.814 W
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in	Grid Convergence:	0.38 °

Well	WALT 8N-20-22C					
Well Position	+N/-S	-1,931.6 usft	Northing:	1,453,310.22 usft	Latitude:	40° 34' 34.442 N
	+E/-W	-366.7 usft	Easting:	3,164,157.73 usft	Longitude:	104° 54' 32.566 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	5,080.0 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/15/2017	8.31	66.97	52,476.59688469

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 (°)
	0.0	0.0	0.0	2.15

Plan Survey Tool Program			Date	6/27/2017	
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	17,288.0	PROPOSAL 1 (ORIGINAL WELL	MWD OWSG	
			OWSG MWD - Standard		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,550.0	0.00	0.00	1,550.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,684.6	22.69	10.62	2,655.2	218.0	40.9	2.00	2.00	0.00	10.62	
6,864.2	22.69	10.62	6,511.2	1,802.7	338.0	0.00	0.00	0.00	0.00	
7,616.2	90.00	0.47	6,905.0	2,391.4	371.9	9.00	8.95	-1.35	-10.98	WALT 8N-20-22C-LP
17,288.0	90.00	0.47	6,905.0	12,062.8	452.0	0.00	0.00	0.00	0.00	WALT 8N-20-22C-PB

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well WALT 8N-20-22C
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5105.0usft
Project:	Weld County	MD Reference:	KB 25' @ 5105.0usft
Site:	Sec 17-T7N-R67W	North Reference:	True
Well:	WALT 8N-20-22C	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,550.0	0.00	0.00	1,550.0	0.0	0.0	0.0	0.00	0.00	0.00
BUILD 2°/100'									
1,600.0	1.00	10.62	1,600.0	0.4	0.1	0.4	2.00	2.00	0.00
1,700.0	3.00	10.62	1,699.9	3.9	0.7	3.9	2.00	2.00	0.00
1,800.0	5.00	10.62	1,799.7	10.7	2.0	10.8	2.00	2.00	0.00
1,900.0	7.00	10.62	1,899.1	21.0	3.9	21.1	2.00	2.00	0.00
2,000.0	9.00	10.62	1,998.2	34.7	6.5	34.9	2.00	2.00	0.00
2,100.0	11.00	10.62	2,096.6	51.7	9.7	52.1	2.00	2.00	0.00
2,200.0	13.00	10.62	2,194.4	72.2	13.5	72.6	2.00	2.00	0.00
2,300.0	15.00	10.62	2,291.5	95.9	18.0	96.5	2.00	2.00	0.00
2,400.0	17.00	10.62	2,387.6	123.0	23.1	123.8	2.00	2.00	0.00
2,500.0	19.00	10.62	2,482.7	153.4	28.8	154.4	2.00	2.00	0.00
2,600.0	21.00	10.62	2,576.6	187.0	35.1	188.2	2.00	2.00	0.00
2,684.6	22.69	10.62	2,655.2	218.0	40.9	219.3	2.00	2.00	0.00
HOLD 22.69° INC									
2,700.0	22.69	10.62	2,669.4	223.8	42.0	225.2	0.00	0.00	0.00
2,800.0	22.69	10.62	2,761.6	261.7	49.1	263.4	0.00	0.00	0.00
2,900.0	22.69	10.62	2,853.9	299.6	56.2	301.5	0.00	0.00	0.00
3,000.0	22.69	10.62	2,946.2	337.5	63.3	339.7	0.00	0.00	0.00
3,100.0	22.69	10.62	3,038.4	375.5	70.4	377.8	0.00	0.00	0.00
3,200.0	22.69	10.62	3,130.7	413.4	77.5	416.0	0.00	0.00	0.00
3,300.0	22.69	10.62	3,222.9	451.3	84.6	454.1	0.00	0.00	0.00
3,400.0	22.69	10.62	3,315.2	489.2	91.7	492.3	0.00	0.00	0.00
3,500.0	22.69	10.62	3,407.5	527.1	98.8	530.5	0.00	0.00	0.00
3,600.0	22.69	10.62	3,499.7	565.0	106.0	568.6	0.00	0.00	0.00
3,700.0	22.69	10.62	3,592.0	603.0	113.1	606.8	0.00	0.00	0.00
3,800.0	22.69	10.62	3,684.2	640.9	120.2	644.9	0.00	0.00	0.00
3,900.0	22.69	10.62	3,776.5	678.8	127.3	683.1	0.00	0.00	0.00
3,963.4	22.69	10.62	3,835.0	702.8	131.8	707.3	0.00	0.00	0.00
SUSSEX									
4,000.0	22.69	10.62	3,868.8	716.7	134.4	721.2	0.00	0.00	0.00
4,100.0	22.69	10.62	3,961.0	754.6	141.5	759.4	0.00	0.00	0.00
4,200.0	22.69	10.62	4,053.3	792.5	148.6	797.6	0.00	0.00	0.00
4,300.0	22.69	10.62	4,145.5	830.5	155.7	835.7	0.00	0.00	0.00
4,369.9	22.69	10.62	4,210.0	857.0	160.7	862.4	0.00	0.00	0.00
SHANNON									
4,400.0	22.69	10.62	4,237.8	868.4	162.8	873.9	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well WALT 8N-20-22C
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5105.0usft
Project:	Weld County	MD Reference:	KB 25' @ 5105.0usft
Site:	Sec 17-T7N-R67W	North Reference:	True
Well:	WALT 8N-20-22C	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,500.0	22.69	10.62	4,330.0	906.3	169.9	912.0	0.00	0.00	0.00
4,600.0	22.69	10.62	4,422.3	944.2	177.1	950.2	0.00	0.00	0.00
4,700.0	22.69	10.62	4,514.6	982.1	184.2	988.3	0.00	0.00	0.00
4,800.0	22.69	10.62	4,606.8	1,020.0	191.3	1,026.5	0.00	0.00	0.00
4,900.0	22.69	10.62	4,699.1	1,058.0	198.4	1,064.6	0.00	0.00	0.00
5,000.0	22.69	10.62	4,791.3	1,095.9	205.5	1,102.8	0.00	0.00	0.00
5,100.0	22.69	10.62	4,883.6	1,133.8	212.6	1,141.0	0.00	0.00	0.00
5,200.0	22.69	10.62	4,975.9	1,171.7	219.7	1,179.1	0.00	0.00	0.00
5,300.0	22.69	10.62	5,068.1	1,209.6	226.8	1,217.3	0.00	0.00	0.00
5,400.0	22.69	10.62	5,160.4	1,247.5	233.9	1,255.4	0.00	0.00	0.00
5,500.0	22.69	10.62	5,252.6	1,285.5	241.0	1,293.6	0.00	0.00	0.00
5,600.0	22.69	10.62	5,344.9	1,323.4	248.2	1,331.7	0.00	0.00	0.00
5,700.0	22.69	10.62	5,437.2	1,361.3	255.3	1,369.9	0.00	0.00	0.00
5,800.0	22.69	10.62	5,529.4	1,399.2	262.4	1,408.1	0.00	0.00	0.00
5,900.0	22.69	10.62	5,621.7	1,437.1	269.5	1,446.2	0.00	0.00	0.00
6,000.0	22.69	10.62	5,713.9	1,475.0	276.6	1,484.4	0.00	0.00	0.00
6,100.0	22.69	10.62	5,806.2	1,513.0	283.7	1,522.5	0.00	0.00	0.00
6,200.0	22.69	10.62	5,898.5	1,550.9	290.8	1,560.7	0.00	0.00	0.00
6,300.0	22.69	10.62	5,990.7	1,588.8	297.9	1,598.8	0.00	0.00	0.00
6,400.0	22.69	10.62	6,083.0	1,626.7	305.0	1,637.0	0.00	0.00	0.00
6,500.0	22.69	10.62	6,175.2	1,664.6	312.1	1,675.1	0.00	0.00	0.00
6,600.0	22.69	10.62	6,267.5	1,702.5	319.3	1,713.3	0.00	0.00	0.00
6,700.0	22.69	10.62	6,359.8	1,740.5	326.4	1,751.5	0.00	0.00	0.00
6,800.0	22.69	10.62	6,452.0	1,778.4	333.5	1,789.6	0.00	0.00	0.00
6,864.2	22.69	10.62	6,511.2	1,802.7	338.0	1,814.1	0.00	0.00	0.00
KOP, BUILD 9°/100'									
6,900.0	25.87	9.21	6,543.9	1,817.2	340.6	1,828.7	9.00	8.85	-3.93
6,950.0	30.31	7.71	6,588.0	1,840.5	344.0	1,852.1	9.00	8.89	-3.00
6,969.9	32.08	7.22	6,605.0	1,850.7	345.3	1,862.4	9.00	8.91	-2.47
NIOBRARA									
7,000.0	34.77	6.57	6,630.1	1,867.2	347.3	1,878.9	9.00	8.92	-2.18
7,050.0	39.23	5.65	6,670.0	1,897.1	350.5	1,908.9	9.00	8.93	-1.83
7,100.0	43.71	4.89	6,707.5	1,930.1	353.6	1,941.9	9.00	8.94	-1.51
7,150.0	48.18	4.25	6,742.2	1,965.9	356.4	1,977.8	9.00	8.95	-1.28
7,200.0	52.66	3.70	6,774.1	2,004.3	359.1	2,016.3	9.00	8.96	-1.11
7,250.0	57.14	3.20	6,802.8	2,045.1	361.5	2,057.2	9.00	8.96	-0.99
7,300.0	61.63	2.75	6,828.3	2,088.1	363.8	2,100.2	9.00	8.97	-0.89
7,350.0	66.11	2.34	6,850.3	2,132.9	365.8	2,145.1	9.00	8.97	-0.82
7,400.0	70.60	1.96	6,868.7	2,179.3	367.5	2,191.6	9.00	8.97	-0.77
7,403.8	70.94	1.93	6,870.0	2,182.9	367.6	2,195.2	9.00	8.97	-0.74
FORT HAYS									
7,450.0	75.09	1.60	6,883.5	2,227.1	369.0	2,239.3	9.00	8.97	-0.72
7,500.0	79.57	1.25	6,894.5	2,275.8	370.2	2,288.1	9.00	8.97	-0.69
7,550.0	84.06	0.91	6,901.6	2,325.3	371.1	2,337.6	9.00	8.98	-0.68
7,600.0	88.55	0.58	6,904.8	2,375.2	371.8	2,387.4	9.00	8.98	-0.66
7,616.2	90.00	0.47	6,905.0	2,391.4	371.9	2,403.6	9.00	8.98	-0.66
LP @ 90° INC, 0.47° AZM HOLD - CODELL									
7,700.0	90.00	0.47	6,905.0	2,475.2	372.6	2,487.4	0.00	0.00	0.00
7,800.0	90.00	0.47	6,905.0	2,575.2	373.4	2,587.4	0.00	0.00	0.00
7,900.0	90.00	0.47	6,905.0	2,675.2	374.3	2,687.3	0.00	0.00	0.00
8,000.0	90.00	0.47	6,905.0	2,775.2	375.1	2,787.3	0.00	0.00	0.00
8,100.0	90.00	0.47	6,905.0	2,875.2	375.9	2,887.2	0.00	0.00	0.00
8,200.0	90.00	0.47	6,905.0	2,975.2	376.8	2,987.2	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well WALT 8N-20-22C
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5105.0usft
Project:	Weld County	MD Reference:	KB 25' @ 5105.0usft
Site:	Sec 17-T7N-R67W	North Reference:	True
Well:	WALT 8N-20-22C	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,300.0	90.00	0.47	6,905.0	3,075.2	377.6	3,087.1	0.00	0.00	0.00	
8,400.0	90.00	0.47	6,905.0	3,175.2	378.4	3,187.1	0.00	0.00	0.00	
8,500.0	90.00	0.47	6,905.0	3,275.2	379.2	3,287.1	0.00	0.00	0.00	
8,600.0	90.00	0.47	6,905.0	3,375.2	380.1	3,387.0	0.00	0.00	0.00	
8,700.0	90.00	0.47	6,905.0	3,475.2	380.9	3,487.0	0.00	0.00	0.00	
8,800.0	90.00	0.47	6,905.0	3,575.1	381.7	3,586.9	0.00	0.00	0.00	
8,900.0	90.00	0.47	6,905.0	3,675.1	382.6	3,686.9	0.00	0.00	0.00	
9,000.0	90.00	0.47	6,905.0	3,775.1	383.4	3,786.9	0.00	0.00	0.00	
9,100.0	90.00	0.47	6,905.0	3,875.1	384.2	3,886.8	0.00	0.00	0.00	
9,200.0	90.00	0.47	6,905.0	3,975.1	385.0	3,986.8	0.00	0.00	0.00	
9,300.0	90.00	0.47	6,905.0	4,075.1	385.9	4,086.7	0.00	0.00	0.00	
9,400.0	90.00	0.47	6,905.0	4,175.1	386.7	4,186.7	0.00	0.00	0.00	
9,500.0	90.00	0.47	6,905.0	4,275.1	387.5	4,286.6	0.00	0.00	0.00	
9,600.0	90.00	0.47	6,905.0	4,375.1	388.3	4,386.6	0.00	0.00	0.00	
9,700.0	90.00	0.47	6,905.0	4,475.1	389.2	4,486.6	0.00	0.00	0.00	
9,800.0	90.00	0.47	6,905.0	4,575.1	390.0	4,586.5	0.00	0.00	0.00	
9,900.0	90.00	0.47	6,905.0	4,675.1	390.8	4,686.5	0.00	0.00	0.00	
10,000.0	90.00	0.47	6,905.0	4,775.1	391.7	4,786.4	0.00	0.00	0.00	
10,100.0	90.00	0.47	6,905.0	4,875.1	392.5	4,886.4	0.00	0.00	0.00	
10,200.0	90.00	0.47	6,905.0	4,975.1	393.3	4,986.3	0.00	0.00	0.00	
10,300.0	90.00	0.47	6,905.0	5,075.1	394.1	5,086.3	0.00	0.00	0.00	
10,400.0	90.00	0.47	6,905.0	5,175.1	395.0	5,186.3	0.00	0.00	0.00	
10,500.0	90.00	0.47	6,905.0	5,275.1	395.8	5,286.2	0.00	0.00	0.00	
10,600.0	90.00	0.47	6,905.0	5,375.1	396.6	5,386.2	0.00	0.00	0.00	
10,700.0	90.00	0.47	6,905.0	5,475.1	397.5	5,486.1	0.00	0.00	0.00	
10,800.0	90.00	0.47	6,905.0	5,575.1	398.3	5,586.1	0.00	0.00	0.00	
10,900.0	90.00	0.47	6,905.0	5,675.1	399.1	5,686.0	0.00	0.00	0.00	
11,000.0	90.00	0.47	6,905.0	5,775.1	399.9	5,786.0	0.00	0.00	0.00	
11,100.0	90.00	0.47	6,905.0	5,875.1	400.8	5,886.0	0.00	0.00	0.00	
11,200.0	90.00	0.47	6,905.0	5,975.1	401.6	5,985.9	0.00	0.00	0.00	
11,300.0	90.00	0.47	6,905.0	6,075.1	402.4	6,085.9	0.00	0.00	0.00	
11,400.0	90.00	0.47	6,905.0	6,175.1	403.3	6,185.8	0.00	0.00	0.00	
11,500.0	90.00	0.47	6,905.0	6,275.1	404.1	6,285.8	0.00	0.00	0.00	
11,600.0	90.00	0.47	6,905.0	6,375.1	404.9	6,385.7	0.00	0.00	0.00	
11,700.0	90.00	0.47	6,905.0	6,475.0	405.7	6,485.7	0.00	0.00	0.00	
11,800.0	90.00	0.47	6,905.0	6,575.0	406.6	6,585.7	0.00	0.00	0.00	
11,900.0	90.00	0.47	6,905.0	6,675.0	407.4	6,685.6	0.00	0.00	0.00	
12,000.0	90.00	0.47	6,905.0	6,775.0	408.2	6,785.6	0.00	0.00	0.00	
12,100.0	90.00	0.47	6,905.0	6,875.0	409.1	6,885.5	0.00	0.00	0.00	
12,200.0	90.00	0.47	6,905.0	6,975.0	409.9	6,985.5	0.00	0.00	0.00	
12,300.0	90.00	0.47	6,905.0	7,075.0	410.7	7,085.4	0.00	0.00	0.00	
12,400.0	90.00	0.47	6,905.0	7,175.0	411.5	7,185.4	0.00	0.00	0.00	
12,500.0	90.00	0.47	6,905.0	7,275.0	412.4	7,285.4	0.00	0.00	0.00	
12,600.0	90.00	0.47	6,905.0	7,375.0	413.2	7,385.3	0.00	0.00	0.00	
12,700.0	90.00	0.47	6,905.0	7,475.0	414.0	7,485.3	0.00	0.00	0.00	
12,800.0	90.00	0.47	6,905.0	7,575.0	414.8	7,585.2	0.00	0.00	0.00	
12,900.0	90.00	0.47	6,905.0	7,675.0	415.7	7,685.2	0.00	0.00	0.00	
13,000.0	90.00	0.47	6,905.0	7,775.0	416.5	7,785.1	0.00	0.00	0.00	
13,100.0	90.00	0.47	6,905.0	7,875.0	417.3	7,885.1	0.00	0.00	0.00	
13,200.0	90.00	0.47	6,905.0	7,975.0	418.2	7,985.1	0.00	0.00	0.00	
13,300.0	90.00	0.47	6,905.0	8,075.0	419.0	8,085.0	0.00	0.00	0.00	
13,400.0	90.00	0.47	6,905.0	8,175.0	419.8	8,185.0	0.00	0.00	0.00	
13,500.0	90.00	0.47	6,905.0	8,275.0	420.6	8,284.9	0.00	0.00	0.00	
13,600.0	90.00	0.47	6,905.0	8,375.0	421.5	8,384.9	0.00	0.00	0.00	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well WALT 8N-20-22C
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5105.0usft
Project:	Weld County	MD Reference:	KB 25' @ 5105.0usft
Site:	Sec 17-T7N-R67W	North Reference:	True
Well:	WALT 8N-20-22C	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
13,700.0	90.00	0.47	6,905.0	8,475.0	422.3	8,484.9	0.00	0.00	0.00	
13,800.0	90.00	0.47	6,905.0	8,575.0	423.1	8,584.8	0.00	0.00	0.00	
13,900.0	90.00	0.47	6,905.0	8,675.0	424.0	8,684.8	0.00	0.00	0.00	
14,000.0	90.00	0.47	6,905.0	8,775.0	424.8	8,784.7	0.00	0.00	0.00	
14,100.0	90.00	0.47	6,905.0	8,875.0	425.6	8,884.7	0.00	0.00	0.00	
14,200.0	90.00	0.47	6,905.0	8,975.0	426.4	8,984.6	0.00	0.00	0.00	
14,300.0	90.00	0.47	6,905.0	9,075.0	427.3	9,084.6	0.00	0.00	0.00	
14,400.0	90.00	0.47	6,905.0	9,175.0	428.1	9,184.6	0.00	0.00	0.00	
14,500.0	90.00	0.47	6,905.0	9,275.0	428.9	9,284.5	0.00	0.00	0.00	
14,600.0	90.00	0.47	6,905.0	9,374.9	429.8	9,384.5	0.00	0.00	0.00	
14,700.0	90.00	0.47	6,905.0	9,474.9	430.6	9,484.4	0.00	0.00	0.00	
14,800.0	90.00	0.47	6,905.0	9,574.9	431.4	9,584.4	0.00	0.00	0.00	
14,900.0	90.00	0.47	6,905.0	9,674.9	432.2	9,684.3	0.00	0.00	0.00	
15,000.0	90.00	0.47	6,905.0	9,774.9	433.1	9,784.3	0.00	0.00	0.00	
15,100.0	90.00	0.47	6,905.0	9,874.9	433.9	9,884.3	0.00	0.00	0.00	
15,200.0	90.00	0.47	6,905.0	9,974.9	434.7	9,984.2	0.00	0.00	0.00	
15,300.0	90.00	0.47	6,905.0	10,074.9	435.6	10,084.2	0.00	0.00	0.00	
15,400.0	90.00	0.47	6,905.0	10,174.9	436.4	10,184.1	0.00	0.00	0.00	
15,500.0	90.00	0.47	6,905.0	10,274.9	437.2	10,284.1	0.00	0.00	0.00	
15,600.0	90.00	0.47	6,905.0	10,374.9	438.0	10,384.0	0.00	0.00	0.00	
15,700.0	90.00	0.47	6,905.0	10,474.9	438.9	10,484.0	0.00	0.00	0.00	
15,800.0	90.00	0.47	6,905.0	10,574.9	439.7	10,584.0	0.00	0.00	0.00	
15,900.0	90.00	0.47	6,905.0	10,674.9	440.5	10,683.9	0.00	0.00	0.00	
16,000.0	90.00	0.47	6,905.0	10,774.9	441.3	10,783.9	0.00	0.00	0.00	
16,100.0	90.00	0.47	6,905.0	10,874.9	442.2	10,883.8	0.00	0.00	0.00	
16,200.0	90.00	0.47	6,905.0	10,974.9	443.0	10,983.8	0.00	0.00	0.00	
16,300.0	90.00	0.47	6,905.0	11,074.9	443.8	11,083.7	0.00	0.00	0.00	
16,400.0	90.00	0.47	6,905.0	11,174.9	444.7	11,183.7	0.00	0.00	0.00	
16,500.0	90.00	0.47	6,905.0	11,274.9	445.5	11,283.7	0.00	0.00	0.00	
16,600.0	90.00	0.47	6,905.0	11,374.9	446.3	11,383.6	0.00	0.00	0.00	
16,700.0	90.00	0.47	6,905.0	11,474.9	447.1	11,483.6	0.00	0.00	0.00	
16,800.0	90.00	0.47	6,905.0	11,574.9	448.0	11,583.5	0.00	0.00	0.00	
16,900.0	90.00	0.47	6,905.0	11,674.9	448.8	11,683.5	0.00	0.00	0.00	
17,000.0	90.00	0.47	6,905.0	11,774.9	449.6	11,783.4	0.00	0.00	0.00	
17,100.0	90.00	0.47	6,905.0	11,874.9	450.5	11,883.4	0.00	0.00	0.00	
17,200.0	90.00	0.47	6,905.0	11,974.9	451.3	11,983.4	0.00	0.00	0.00	
17,288.0	90.00	0.47	6,905.0	12,062.8	452.0	12,071.3	0.00	0.00	0.00	
TD at 17288.0' MD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		Longitude
WALT 8N-20-22C-PBHL - hit/miss target - Shape - plan hits target center - Point	0.00	0.00	6,905.0	12,062.8	452.0	1,465,375.79	3,164,529.34	40° 36' 33.642 N		104° 54' 26.705 W
WALT 8N-20-22C-LP - plan hits target center - Point	0.00	0.00	6,905.0	2,391.4	371.9	1,455,704.01	3,164,513.70	40° 34' 58.073 N		104° 54' 27.745 W

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well WALT 8N-20-22C
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5105.0usft
Project:	Weld County	MD Reference:	KB 25' @ 5105.0usft
Site:	Sec 17-T7N-R67W	North Reference:	True
Well:	WALT 8N-20-22C	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,963.4	3,835.0	SUSSEX				
4,369.9	4,210.0	SHANNON				
6,969.9	6,605.0	NIOBRARA				
7,403.8	6,870.0	FORT HAYS				
7,616.2	6,905.0	CODELL				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,550.0	1,550.0	0.0	0.0	BUILD 2°/100'	
2,684.6	2,655.2	218.0	40.9	HOLD 22.69° INC	
6,864.2	6,511.2	1,802.7	338.0	KOP, BUILD 9°/100'	
7,616.2	6,905.0	2,391.4	371.9	LP @ 90° INC, 0.47° AZM HOLD	
17,288.0	6,905.0	12,062.8	452.0	TD at 17288.0' MD	