

EXTRACTION OIL & GAS

Weld County

Sec 28-T1N-R68W

COYOTE TRAILS 33S-20-3N

ORIGINAL WELLBORE

Plan: PROPOSAL 1

Standard Planning Report

10 August, 2017



Project: Weld County
Site: Sec 28-T1N-R68W
Well: COYOTE TRAILS 33S-20-3N
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: 8.30°

Magnetic Field
Strength: 52159.9snT
Dip Angle: 66.51°
Date: 6/29/2017
Model: IGRF2015

WELL DETAILS: COYOTE TRAILS 33S-20-3N

+N/-S	+E/-W	Northing	Easting	5244.00	Latitude	Longitude	Spot
0.00	0.00	1249743.73	3137963.91		40° 1' 4.373 N	105° 0' 26.677 W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00	
3	1969.08	11.38	163.76	1965.35	-54.09	15.76	2.00	163.76	54.56	
4	6664.73	11.38	163.76	6568.65	-943.76	274.94	0.00	0.00	951.91	
5	7233.81	0.00	0.00	7134.00	-997.85	290.70	2.00	180.00	1006.47	
6	7333.81	0.00	0.00	7234.00	-997.85	290.70	0.00	0.00	1006.47	
7	8233.89	90.00	179.66	7807.00	-1570.85	294.11	10.00	179.66	1579.30	CT 33S-20-3N LP
8	17877.44	90.00	179.66	7807.00	-11214.23	351.49	0.00	0.00	11219.74	CT 33S-20-3N PBHL

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4440.00	4493.38	PARKMAN
4910.00	4972.81	SUSSEX
7610.00	7743.95	SHARON SPRINGS
7650.00	7799.37	NIOBRARA
7797.00	8126.67	NIO B

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	BUILD 2°/100'
1969.08	11.38	163.76	1965.35	-54.09	15.76	54.56	56.34	HOLD 11.38° INC
6664.73	11.38	163.76	6568.65	-943.76	274.94	951.91	982.99	DROP 2°/100'
7233.81	0.00	0.00	7134.00	-997.85	290.70	1006.47	1039.33	HOLD VERTICAL
7333.81	0.00	0.00	7234.00	-997.85	290.70	1006.47	1039.33	KOP, BUILD 10°/100'
8233.89	90.00	179.66	7807.00	-1570.85	294.11	1579.30	1612.35	LP @ 90° INC, 179.66° AZM HOLD
17877.44	90.00	179.66	7806.76	-11214.23	351.42	11219.74	11255.90	TD at 17877.44' MD

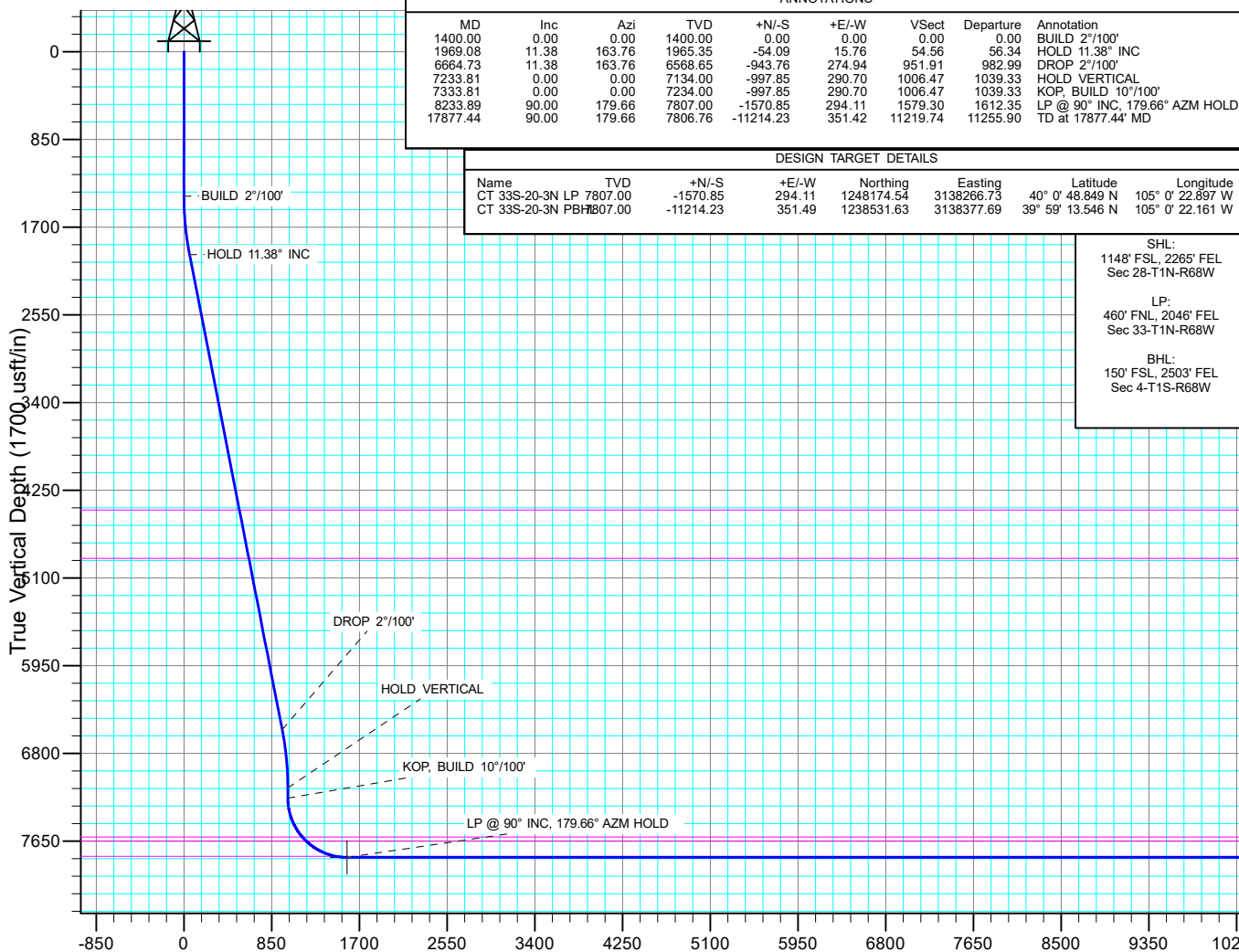
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	North	Easting	Latitude	Longitude
CT 33S-20-3N LP	7807.00	-1570.85	294.11	1248174.54	3138266.73	40° 0' 48.849 N	105° 0' 22.897 W
CT 33S-20-3N PBHL	7807.00	-11214.23	351.49	1238531.63	3138377.69	39° 59' 13.546 N	105° 0' 22.161 W

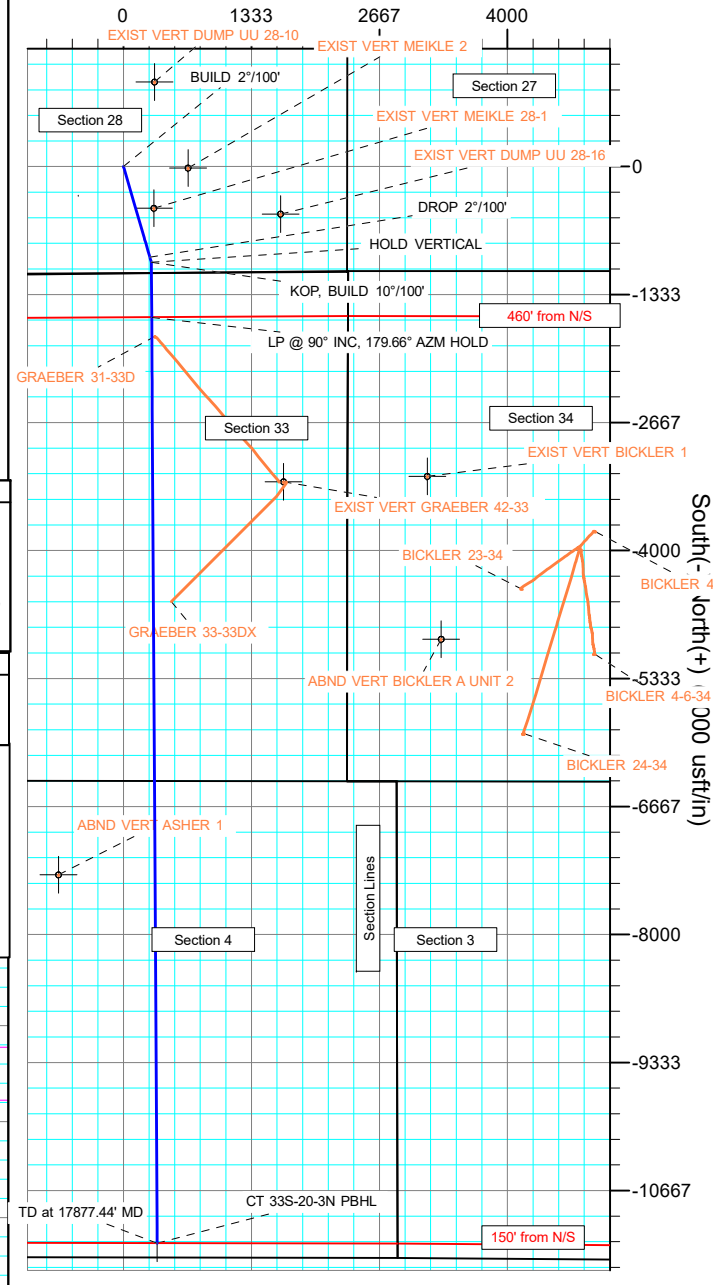
SHL:
1148' FSL, 2265' FEL
Sec 28-T1N-R68W

LP:
460' FNL, 2046' FEL
Sec 33-T1N-R68W

BHL:
150' FSL, 2503' FEL
Sec 4-T1S-R68W



West(-)/East(+) (2000 usft/in)



Vertical Section at 178.20° (1700 usft/in)

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 33S-20-3N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5269.00usft
Project:	Weld County	MD Reference:	KB 25' @ 5269.00usft
Site:	Sec 28-T1N-R68W	North Reference:	True
Well:	COYOTE TRAILS 33S-20-3N	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 28-T1N-R68W			
Site Position:		Northing:	1,248,660.21 usft	Latitude:	40° 0' 53.536 N
From:	Lat/Long	Easting:	3,140,299.83 usft	Longitude:	104° 59' 56.731 W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.32 °

Well	COYOTE TRAILS 33S-20-3N					
Well Position	+N/-S	1,096.69 usft	Northing:	1,249,743.73 usft	Latitude:	40° 1' 4.373 N
	+E/-W	-2,329.77 usft	Easting:	3,137,963.91 usft	Longitude:	105° 0' 26.677 W
Position Uncertainty	0.00 usft		Wellhead Elevation:		Ground Level:	5,244.00 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	6/29/2017	8.30	66.51	52,159.90938840

Design	PROPOSAL 1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	178.20

Plan Survey Tool Program	Date	8/10/2017		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	17,877.44	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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,969.08	11.38	163.76	1,965.35	-54.09	15.76	2.00	2.00	0.00	163.76	
6,664.73	11.38	163.76	6,568.65	-943.76	274.94	0.00	0.00	0.00	0.00	
7,233.81	0.00	0.00	7,134.00	-997.85	290.70	2.00	-2.00	0.00	180.00	
7,333.81	0.00	0.00	7,234.00	-997.85	290.70	0.00	0.00	0.00	0.00	
8,233.89	90.00	179.66	7,807.00	-1,570.85	294.11	10.00	10.00	19.96	179.66	CT 33S-20-3N LP
17,877.44	90.00	179.66	7,807.00	-11,214.23	351.49	0.00	0.00	0.00	0.00	CT 33S-20-3N PBHL

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 33S-20-3N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5269.00usft
Project:	Weld County	MD Reference:	KB 25' @ 5269.00usft
Site:	Sec 28-T1N-R68W	North Reference:	True
Well:	COYOTE TRAILS 33S-20-3N	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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
BUILD 2°/100'									
1,500.00	2.00	163.76	1,499.98	-1.68	0.49	1.69	2.00	2.00	0.00
1,600.00	4.00	163.76	1,599.84	-6.70	1.95	6.76	2.00	2.00	0.00
1,700.00	6.00	163.76	1,699.45	-15.07	4.39	15.20	2.00	2.00	0.00
1,800.00	8.00	163.76	1,798.70	-26.77	7.80	27.00	2.00	2.00	0.00
1,900.00	10.00	163.76	1,897.47	-41.79	12.17	42.15	2.00	2.00	0.00
1,969.08	11.38	163.76	1,965.35	-54.09	15.76	54.56	2.00	2.00	0.00
HOLD 11.38° INC									
2,000.00	11.38	163.76	1,995.66	-59.95	17.46	60.46	0.00	0.00	0.00
2,100.00	11.38	163.76	2,093.69	-78.89	22.98	79.58	0.00	0.00	0.00
2,200.00	11.38	163.76	2,191.72	-97.84	28.50	98.69	0.00	0.00	0.00
2,300.00	11.38	163.76	2,289.76	-116.79	34.02	117.80	0.00	0.00	0.00
2,400.00	11.38	163.76	2,387.79	-135.73	39.54	136.91	0.00	0.00	0.00
2,500.00	11.38	163.76	2,485.82	-154.68	45.06	156.02	0.00	0.00	0.00
2,600.00	11.38	163.76	2,583.86	-173.63	50.58	175.13	0.00	0.00	0.00
2,700.00	11.38	163.76	2,681.89	-192.57	56.10	194.24	0.00	0.00	0.00
2,800.00	11.38	163.76	2,779.92	-211.52	61.62	213.35	0.00	0.00	0.00
2,900.00	11.38	163.76	2,877.96	-230.47	67.14	232.46	0.00	0.00	0.00
3,000.00	11.38	163.76	2,975.99	-249.41	72.66	251.57	0.00	0.00	0.00
3,100.00	11.38	163.76	3,074.02	-268.36	78.18	270.68	0.00	0.00	0.00
3,200.00	11.38	163.76	3,172.06	-287.31	83.70	289.79	0.00	0.00	0.00
3,300.00	11.38	163.76	3,270.09	-306.25	89.22	308.90	0.00	0.00	0.00
3,400.00	11.38	163.76	3,368.12	-325.20	94.74	328.01	0.00	0.00	0.00
3,500.00	11.38	163.76	3,466.16	-344.15	100.26	347.12	0.00	0.00	0.00
3,600.00	11.38	163.76	3,564.19	-363.09	105.78	366.23	0.00	0.00	0.00
3,700.00	11.38	163.76	3,662.23	-382.04	111.30	385.34	0.00	0.00	0.00
3,800.00	11.38	163.76	3,760.26	-400.99	116.82	404.45	0.00	0.00	0.00
3,900.00	11.38	163.76	3,858.29	-419.93	122.34	423.56	0.00	0.00	0.00
4,000.00	11.38	163.76	3,956.33	-438.88	127.86	442.67	0.00	0.00	0.00
4,100.00	11.38	163.76	4,054.36	-457.83	133.38	461.78	0.00	0.00	0.00
4,200.00	11.38	163.76	4,152.39	-476.78	138.90	480.89	0.00	0.00	0.00
4,300.00	11.38	163.76	4,250.43	-495.72	144.42	500.00	0.00	0.00	0.00
4,400.00	11.38	163.76	4,348.46	-514.67	149.94	519.11	0.00	0.00	0.00
4,493.38	11.38	163.76	4,440.00	-532.36	155.09	536.96	0.00	0.00	0.00
PARKMAN									
4,500.00	11.38	163.76	4,446.49	-533.62	155.46	538.22	0.00	0.00	0.00
4,600.00	11.38	163.76	4,544.53	-552.56	160.98	557.33	0.00	0.00	0.00
4,700.00	11.38	163.76	4,642.56	-571.51	166.50	576.44	0.00	0.00	0.00

Planning Report

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Project:	Weld County	MD Reference:	KB 25' @ 5269.00usft
Site:	Sec 28-T1N-R68W	North Reference:	True
Well:	COYOTE TRAILS 33S-20-3N	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)
4,800.00	11.38	163.76	4,740.59	-590.46	172.02	595.55	0.00	0.00	0.00
4,900.00	11.38	163.76	4,838.63	-609.40	177.53	614.66	0.00	0.00	0.00
4,972.81	11.38	163.76	4,910.00	-623.20	181.55	628.58	0.00	0.00	0.00
SUSSEX									
5,000.00	11.38	163.76	4,936.66	-628.35	183.05	633.78	0.00	0.00	0.00
5,100.00	11.38	163.76	5,034.69	-647.30	188.57	652.89	0.00	0.00	0.00
5,200.00	11.38	163.76	5,132.73	-666.24	194.09	672.00	0.00	0.00	0.00
5,300.00	11.38	163.76	5,230.76	-685.19	199.61	691.11	0.00	0.00	0.00
5,400.00	11.38	163.76	5,328.79	-704.14	205.13	710.22	0.00	0.00	0.00
5,500.00	11.38	163.76	5,426.83	-723.08	210.65	729.33	0.00	0.00	0.00
5,600.00	11.38	163.76	5,524.86	-742.03	216.17	748.44	0.00	0.00	0.00
5,700.00	11.38	163.76	5,622.89	-760.98	221.69	767.55	0.00	0.00	0.00
5,800.00	11.38	163.76	5,720.93	-779.92	227.21	786.66	0.00	0.00	0.00
5,900.00	11.38	163.76	5,818.96	-798.87	232.73	805.77	0.00	0.00	0.00
6,000.00	11.38	163.76	5,916.99	-817.82	238.25	824.88	0.00	0.00	0.00
6,100.00	11.38	163.76	6,015.03	-836.76	243.77	843.99	0.00	0.00	0.00
6,200.00	11.38	163.76	6,113.06	-855.71	249.29	863.10	0.00	0.00	0.00
6,300.00	11.38	163.76	6,211.09	-874.66	254.81	882.21	0.00	0.00	0.00
6,400.00	11.38	163.76	6,309.13	-893.60	260.33	901.32	0.00	0.00	0.00
6,500.00	11.38	163.76	6,407.16	-912.55	265.85	920.43	0.00	0.00	0.00
6,600.00	11.38	163.76	6,505.19	-931.50	271.37	939.54	0.00	0.00	0.00
6,664.73	11.38	163.76	6,568.65	-943.76	274.94	951.91	0.00	0.00	0.00
DROP 2°/100'									
6,700.00	10.68	163.76	6,603.27	-950.24	276.83	958.44	2.00	-2.00	0.00
6,800.00	8.68	163.76	6,701.84	-966.38	281.53	974.72	2.00	-2.00	0.00
6,900.00	6.68	163.76	6,800.94	-979.20	285.27	987.66	2.00	-2.00	0.00
7,000.00	4.68	163.76	6,900.45	-988.69	288.03	997.23	2.00	-2.00	0.00
7,100.00	2.68	163.76	7,000.24	-994.85	289.83	1,003.44	2.00	-2.00	0.00
7,200.00	0.68	163.76	7,100.19	-997.66	290.64	1,006.27	2.00	-2.00	0.00
7,233.81	0.00	0.00	7,134.00	-997.85	290.70	1,006.47	2.00	-2.00	0.00
HOLD VERTICAL									
7,300.00	0.00	0.00	7,200.19	-997.85	290.70	1,006.47	0.00	0.00	0.00
7,333.81	0.00	0.00	7,234.00	-997.85	290.70	1,006.47	0.00	0.00	0.00
KOP, BUILD 10°/100'									
7,350.00	1.62	179.66	7,250.18	-998.08	290.70	1,006.70	10.00	10.00	0.00
7,400.00	6.62	179.66	7,300.04	-1,001.67	290.72	1,010.28	10.00	10.00	0.00
7,450.00	11.62	179.66	7,349.39	-1,009.59	290.77	1,018.20	10.00	10.00	0.00
7,500.00	16.62	179.66	7,397.87	-1,021.78	290.84	1,030.39	10.00	10.00	0.00
7,550.00	21.62	179.66	7,445.09	-1,038.15	290.94	1,046.76	10.00	10.00	0.00
7,600.00	26.62	179.66	7,490.72	-1,058.57	291.06	1,067.17	10.00	10.00	0.00
7,650.00	31.62	179.66	7,534.38	-1,082.89	291.21	1,091.49	10.00	10.00	0.00
7,700.00	36.62	179.66	7,575.77	-1,110.93	291.37	1,119.51	10.00	10.00	0.00
7,743.95	41.01	179.66	7,610.00	-1,138.47	291.54	1,147.04	10.00	10.00	0.00
SHARON SPRINGS									
7,750.00	41.62	179.66	7,614.55	-1,142.46	291.56	1,151.04	10.00	10.00	0.00
7,799.37	46.55	179.66	7,650.00	-1,176.80	291.76	1,185.36	10.00	10.00	0.00
NIOBRARA									
7,800.00	46.62	179.66	7,650.43	-1,177.26	291.77	1,185.82	10.00	10.00	0.00
7,850.00	51.61	179.66	7,683.15	-1,215.04	291.99	1,223.60	10.00	10.00	0.00
7,900.00	56.61	179.66	7,712.45	-1,255.54	292.23	1,264.08	10.00	10.00	0.00
7,950.00	61.61	179.66	7,738.11	-1,298.44	292.49	1,306.96	10.00	10.00	0.00
8,000.00	66.61	179.66	7,759.93	-1,343.40	292.75	1,351.92	10.00	10.00	0.00
8,050.00	71.61	179.66	7,777.75	-1,390.10	293.03	1,398.60	10.00	10.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 33S-20-3N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5269.00usft
Project:	Weld County	MD Reference:	KB 25' @ 5269.00usft
Site:	Sec 28-T1N-R68W	North Reference:	True
Well:	COYOTE TRAILS 33S-20-3N	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)	
8,100.00	76.61	179.66	7,791.43	-1,438.18	293.32	1,446.66	10.00	10.00	0.00	
8,126.67	79.28	179.66	7,797.00	-1,464.26	293.47	1,472.73	10.00	10.00	0.00	
NIO B										
8,150.00	81.61	179.66	7,800.87	-1,487.26	293.61	1,495.73	10.00	10.00	0.00	
8,200.00	86.61	179.66	7,806.00	-1,536.98	293.90	1,545.43	10.00	10.00	0.00	
8,233.89	90.00	179.66	7,807.00	-1,570.85	294.11	1,579.30	10.00	10.00	0.00	
LP @ 90° INC, 179.66° AZM HOLD										
8,300.00	90.00	179.66	7,807.00	-1,636.96	294.50	1,645.38	0.00	0.00	0.00	
8,400.00	90.00	179.66	7,807.00	-1,736.96	295.09	1,745.35	0.00	0.00	0.00	
8,500.00	90.00	179.66	7,806.99	-1,836.96	295.69	1,845.32	0.00	0.00	0.00	
8,600.00	90.00	179.66	7,806.99	-1,936.95	296.28	1,945.28	0.00	0.00	0.00	
8,700.00	90.00	179.66	7,806.99	-2,036.95	296.88	2,045.25	0.00	0.00	0.00	
8,800.00	90.00	179.66	7,806.99	-2,136.95	297.47	2,145.22	0.00	0.00	0.00	
8,900.00	90.00	179.66	7,806.98	-2,236.95	298.06	2,245.19	0.00	0.00	0.00	
9,000.00	90.00	179.66	7,806.98	-2,336.95	298.66	2,345.16	0.00	0.00	0.00	
9,100.00	90.00	179.66	7,806.98	-2,436.94	299.25	2,445.12	0.00	0.00	0.00	
9,200.00	90.00	179.66	7,806.98	-2,536.94	299.85	2,545.09	0.00	0.00	0.00	
9,300.00	90.00	179.66	7,806.97	-2,636.94	300.44	2,645.06	0.00	0.00	0.00	
9,400.00	90.00	179.66	7,806.97	-2,736.94	301.04	2,745.03	0.00	0.00	0.00	
9,500.00	90.00	179.66	7,806.97	-2,836.94	301.63	2,844.99	0.00	0.00	0.00	
9,600.00	90.00	179.66	7,806.97	-2,936.94	302.22	2,944.96	0.00	0.00	0.00	
9,700.00	90.00	179.66	7,806.96	-3,036.93	302.82	3,044.93	0.00	0.00	0.00	
9,800.00	90.00	179.66	7,806.96	-3,136.93	303.41	3,144.90	0.00	0.00	0.00	
9,900.00	90.00	179.66	7,806.96	-3,236.93	304.01	3,244.87	0.00	0.00	0.00	
10,000.00	90.00	179.66	7,806.96	-3,336.93	304.60	3,344.83	0.00	0.00	0.00	
10,100.00	90.00	179.66	7,806.95	-3,436.93	305.20	3,444.80	0.00	0.00	0.00	
10,200.00	90.00	179.66	7,806.95	-3,536.93	305.79	3,544.77	0.00	0.00	0.00	
10,300.00	90.00	179.66	7,806.95	-3,636.92	306.38	3,644.74	0.00	0.00	0.00	
10,400.00	90.00	179.66	7,806.95	-3,736.92	306.98	3,744.70	0.00	0.00	0.00	
10,500.00	90.00	179.66	7,806.94	-3,836.92	307.57	3,844.67	0.00	0.00	0.00	
10,600.00	90.00	179.66	7,806.94	-3,936.92	308.17	3,944.64	0.00	0.00	0.00	
10,700.00	90.00	179.66	7,806.94	-4,036.92	308.76	4,044.61	0.00	0.00	0.00	
10,800.00	90.00	179.66	7,806.94	-4,136.91	309.36	4,144.58	0.00	0.00	0.00	
10,900.00	90.00	179.66	7,806.93	-4,236.91	309.95	4,244.54	0.00	0.00	0.00	
11,000.00	90.00	179.66	7,806.93	-4,336.91	310.55	4,344.51	0.00	0.00	0.00	
11,100.00	90.00	179.66	7,806.93	-4,436.91	311.14	4,444.48	0.00	0.00	0.00	
11,200.00	90.00	179.66	7,806.93	-4,536.91	311.73	4,544.45	0.00	0.00	0.00	
11,300.00	90.00	179.66	7,806.92	-4,636.91	312.33	4,644.41	0.00	0.00	0.00	
11,400.00	90.00	179.66	7,806.92	-4,736.90	312.92	4,744.38	0.00	0.00	0.00	
11,500.00	90.00	179.66	7,806.92	-4,836.90	313.52	4,844.35	0.00	0.00	0.00	
11,600.00	90.00	179.66	7,806.92	-4,936.90	314.11	4,944.32	0.00	0.00	0.00	
11,700.00	90.00	179.66	7,806.91	-5,036.90	314.71	5,044.29	0.00	0.00	0.00	
11,800.00	90.00	179.66	7,806.91	-5,136.90	315.30	5,144.25	0.00	0.00	0.00	
11,900.00	90.00	179.66	7,806.91	-5,236.90	315.89	5,244.22	0.00	0.00	0.00	
12,000.00	90.00	179.66	7,806.91	-5,336.89	316.49	5,344.19	0.00	0.00	0.00	
12,100.00	90.00	179.66	7,806.90	-5,436.89	317.08	5,444.16	0.00	0.00	0.00	
12,200.00	90.00	179.66	7,806.90	-5,536.89	317.68	5,544.12	0.00	0.00	0.00	
12,300.00	90.00	179.66	7,806.90	-5,636.89	318.27	5,644.09	0.00	0.00	0.00	
12,400.00	90.00	179.66	7,806.90	-5,736.89	318.87	5,744.06	0.00	0.00	0.00	
12,500.00	90.00	179.66	7,806.89	-5,836.88	319.46	5,844.03	0.00	0.00	0.00	
12,600.00	90.00	179.66	7,806.89	-5,936.88	320.05	5,944.00	0.00	0.00	0.00	
12,700.00	90.00	179.66	7,806.89	-6,036.88	320.65	6,043.96	0.00	0.00	0.00	
12,800.00	90.00	179.66	7,806.89	-6,136.88	321.24	6,143.93	0.00	0.00	0.00	
12,900.00	90.00	179.66	7,806.88	-6,236.88	321.84	6,243.90	0.00	0.00	0.00	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 33S-20-3N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5269.00usft
Project:	Weld County	MD Reference:	KB 25' @ 5269.00usft
Site:	Sec 28-T1N-R68W	North Reference:	True
Well:	COYOTE TRAILS 33S-20-3N	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)
13,000.00	90.00	179.66	7,806.88	-6,336.88	322.43	6,343.87	0.00	0.00	0.00
13,100.00	90.00	179.66	7,806.88	-6,436.87	323.03	6,443.83	0.00	0.00	0.00
13,200.00	90.00	179.66	7,806.88	-6,536.87	323.62	6,543.80	0.00	0.00	0.00
13,300.00	90.00	179.66	7,806.87	-6,636.87	324.21	6,643.77	0.00	0.00	0.00
13,400.00	90.00	179.66	7,806.87	-6,736.87	324.81	6,743.74	0.00	0.00	0.00
13,500.00	90.00	179.66	7,806.87	-6,836.87	325.40	6,843.71	0.00	0.00	0.00
13,600.00	90.00	179.66	7,806.87	-6,936.87	326.00	6,943.67	0.00	0.00	0.00
13,700.00	90.00	179.66	7,806.86	-7,036.86	326.59	7,043.64	0.00	0.00	0.00
13,800.00	90.00	179.66	7,806.86	-7,136.86	327.19	7,143.61	0.00	0.00	0.00
13,900.00	90.00	179.66	7,806.86	-7,236.86	327.78	7,243.58	0.00	0.00	0.00
14,000.00	90.00	179.66	7,806.86	-7,336.86	328.37	7,343.54	0.00	0.00	0.00
14,100.00	90.00	179.66	7,806.85	-7,436.86	328.97	7,443.51	0.00	0.00	0.00
14,200.00	90.00	179.66	7,806.85	-7,536.85	329.56	7,543.48	0.00	0.00	0.00
14,300.00	90.00	179.66	7,806.85	-7,636.85	330.16	7,643.45	0.00	0.00	0.00
14,400.00	90.00	179.66	7,806.85	-7,736.85	330.75	7,743.42	0.00	0.00	0.00
14,500.00	90.00	179.66	7,806.84	-7,836.85	331.35	7,843.38	0.00	0.00	0.00
14,600.00	90.00	179.66	7,806.84	-7,936.85	331.94	7,943.35	0.00	0.00	0.00
14,700.00	90.00	179.66	7,806.84	-8,036.85	332.53	8,043.32	0.00	0.00	0.00
14,800.00	90.00	179.66	7,806.84	-8,136.84	333.13	8,143.29	0.00	0.00	0.00
14,900.00	90.00	179.66	7,806.83	-8,236.84	333.72	8,243.25	0.00	0.00	0.00
15,000.00	90.00	179.66	7,806.83	-8,336.84	334.32	8,343.22	0.00	0.00	0.00
15,100.00	90.00	179.66	7,806.83	-8,436.84	334.91	8,443.19	0.00	0.00	0.00
15,200.00	90.00	179.66	7,806.83	-8,536.84	335.51	8,543.16	0.00	0.00	0.00
15,300.00	90.00	179.66	7,806.82	-8,636.84	336.10	8,643.13	0.00	0.00	0.00
15,400.00	90.00	179.66	7,806.82	-8,736.83	336.70	8,743.09	0.00	0.00	0.00
15,500.00	90.00	179.66	7,806.82	-8,836.83	337.29	8,843.06	0.00	0.00	0.00
15,600.00	90.00	179.66	7,806.82	-8,936.83	337.88	8,943.03	0.00	0.00	0.00
15,700.00	90.00	179.66	7,806.81	-9,036.83	338.48	9,043.00	0.00	0.00	0.00
15,800.00	90.00	179.66	7,806.81	-9,136.83	339.07	9,142.96	0.00	0.00	0.00
15,900.00	90.00	179.66	7,806.81	-9,236.82	339.67	9,242.93	0.00	0.00	0.00
16,000.00	90.00	179.66	7,806.81	-9,336.82	340.26	9,342.90	0.00	0.00	0.00
16,100.00	90.00	179.66	7,806.80	-9,436.82	340.86	9,442.87	0.00	0.00	0.00
16,200.00	90.00	179.66	7,806.80	-9,536.82	341.45	9,542.84	0.00	0.00	0.00
16,300.00	90.00	179.66	7,806.80	-9,636.82	342.04	9,642.80	0.00	0.00	0.00
16,400.00	90.00	179.66	7,806.80	-9,736.82	342.64	9,742.77	0.00	0.00	0.00
16,500.00	90.00	179.66	7,806.79	-9,836.81	343.23	9,842.74	0.00	0.00	0.00
16,600.00	90.00	179.66	7,806.79	-9,936.81	343.83	9,942.71	0.00	0.00	0.00
16,700.00	90.00	179.66	7,806.79	-10,036.81	344.42	10,042.67	0.00	0.00	0.00
16,800.00	90.00	179.66	7,806.79	-10,136.81	345.02	10,142.64	0.00	0.00	0.00
16,900.00	90.00	179.66	7,806.78	-10,236.81	345.61	10,242.61	0.00	0.00	0.00
17,000.00	90.00	179.66	7,806.78	-10,336.81	346.20	10,342.58	0.00	0.00	0.00
17,100.00	90.00	179.66	7,806.78	-10,436.80	346.80	10,442.55	0.00	0.00	0.00
17,200.00	90.00	179.66	7,806.78	-10,536.80	347.39	10,542.51	0.00	0.00	0.00
17,300.00	90.00	179.66	7,806.77	-10,636.80	347.99	10,642.48	0.00	0.00	0.00
17,400.00	90.00	179.66	7,806.77	-10,736.80	348.58	10,742.45	0.00	0.00	0.00
17,500.00	90.00	179.66	7,806.77	-10,836.80	349.18	10,842.42	0.00	0.00	0.00
17,600.00	90.00	179.66	7,806.77	-10,936.79	349.77	10,942.38	0.00	0.00	0.00
17,700.00	90.00	179.66	7,806.76	-11,036.79	350.36	11,042.35	0.00	0.00	0.00
17,800.00	90.00	179.66	7,806.76	-11,136.79	350.96	11,142.32	0.00	0.00	0.00
17,877.44	90.00	179.66	7,807.00	-11,214.23	351.49	11,219.74	0.00	0.00	0.00
TD at 17877.44' MD									

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 33S-20-3N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 5269.00usft
Project:	Weld County	MD Reference:	KB 25' @ 5269.00usft
Site:	Sec 28-T1N-R68W	North Reference:	True
Well:	COYOTE TRAILS 33S-20-3N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
CT 33S-20-3N LP - plan hits target center - Point	0.00	0.00	7,807.00	-1,570.85	294.11	1,248,174.54	3,138,266.73	40° 0' 48.849 N	105° 0' 22.897 W
CT 33S-20-3N PBHL - plan hits target center - Point	0.00	0.00	7,807.00	-11,214.23	351.49	1,238,531.62	3,138,377.69	39° 59' 13.546 N	105° 0' 22.161 W

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,493.38	4,440.00	PARKMAN				
4,972.81	4,910.00	SUSSEX				
7,743.95	7,610.00	SHARON SPRINGS				
7,799.37	7,650.00	NIOBRARA				
8,126.67	7,797.00	NIO B				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,400.00	1,400.00	0.00	0.00	BUILD 2°/100'	
1,969.08	1,965.35	-54.09	15.76	HOLD 11.38° INC	
6,664.73	6,568.65	-943.76	274.94	DROP 2°/100'	
7,233.81	7,134.00	-997.85	290.70	HOLD VERTICAL	
7,333.81	7,234.00	-997.85	290.70	KOP, BUILD 10°/100'	
8,233.89	7,807.00	-1,570.85	294.11	LP @ 90° INC, 179.66° AZM HOLD	
17,877.44	7,807.00	-11,214.23	351.49	TD at 17877.44' MD	