

EXTRACTION OIL & GAS

Weld County

Sec 28-T1N-R68W

COYOTE TRAILS 33S-20-7N

ORIGINAL WELLBORE

Plan: PROPOSAL 1

Standard Planning Report

10 August, 2017



Project: Weld County
Site: Sec 28-T1N-R68W
Well: COYOTE TRAILS 33S-20-7N
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: 52202.3snT
Dip Angle: 66.51°
Date: 6/29/2017
Model: IGRF2015

WELL DETAILS: COYOTE TRAILS 33S-20-7N

+N/-S	+E/-W	Northing	Easting	5244.00	Latitude	Longitude	Slot
0.00	0.00	1249743.73	3138107.86		40° 1' 4.365 N	105° 0' 24.826 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	1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	
3	1863.26	17.27	127.01	1850.25	-77.69	103.08	2.00	127.01	89.60	
4	6505.95	17.27	127.01	6283.75	-907.06	1203.47	0.00	0.00	1046.08	
5	7369.20	0.00	0.00	7134.00	-984.75	1306.55	2.00	180.00	1135.68	
6	7469.20	0.00	0.00	7234.00	-984.75	1306.55	0.00	0.00	1135.68	
7	8369.28	90.00	179.66	7807.00	-1557.75	1310.00	10.00	179.66	1704.88	CT 33S-20-7N LP
8	18027.46	90.00	179.66	7807.00	-11215.76	1367.84	0.00	0.00	11298.86	CT 33S-20-7N PBHL

FORMATION TOP DETAILS

TVDPth	MDPath	Formation
4440.00	4575.20	PARKMAN
4910.00	5067.38	SUSSEX
7610.00	7879.34	SHARON SPRINGS
7650.00	7934.76	NIOBRARA
7797.00		NIO B

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	BUILD 2°/100'
1863.26	17.27	127.01	1850.25	-77.69	103.08	89.60	129.08	HOLD 17.27° INC
6505.95	17.27	127.01	6283.75	-907.06	1203.47	1046.08	1507.01	DROP 2°/100'
7369.20	0.00	0.00	7134.00	-984.75	1306.55	1135.68	1636.09	HOLD VERTICAL
7469.20	0.00	0.00	7234.00	-984.75	1306.55	1135.68	1636.09	KOP, BUILD 10°/100'
8369.28	90.00	179.66	7807.00	-1557.75	1310.00	1704.88	2209.10	LP @ 90° INC, 179.66° AZM HOLD
18027.46	90.00	179.66	7806.88	-11215.76	1368.10	11298.89	11867.29	TD at 18027.46' MD

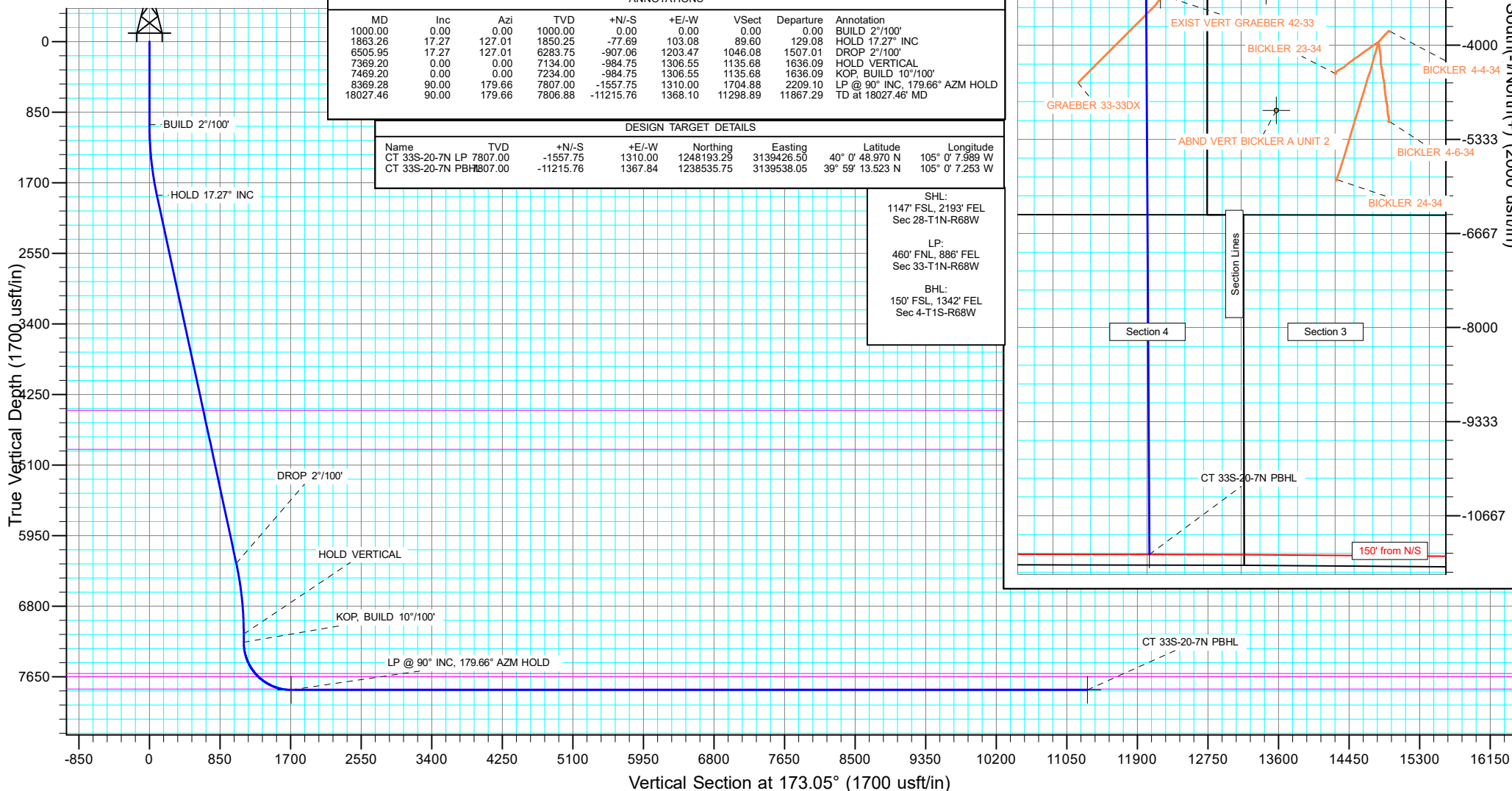
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
CT 33S-20-7N LP	7807.00	-1557.75	1310.00	1248193.29	3139426.50	40° 0' 48.970 N	105° 0' 7.989 W
CT 33S-20-7N PBHL	7807.00	-11215.76	1367.84	1238535.75	3139538.05	39° 59' 13.523 N	105° 0' 7.253 W

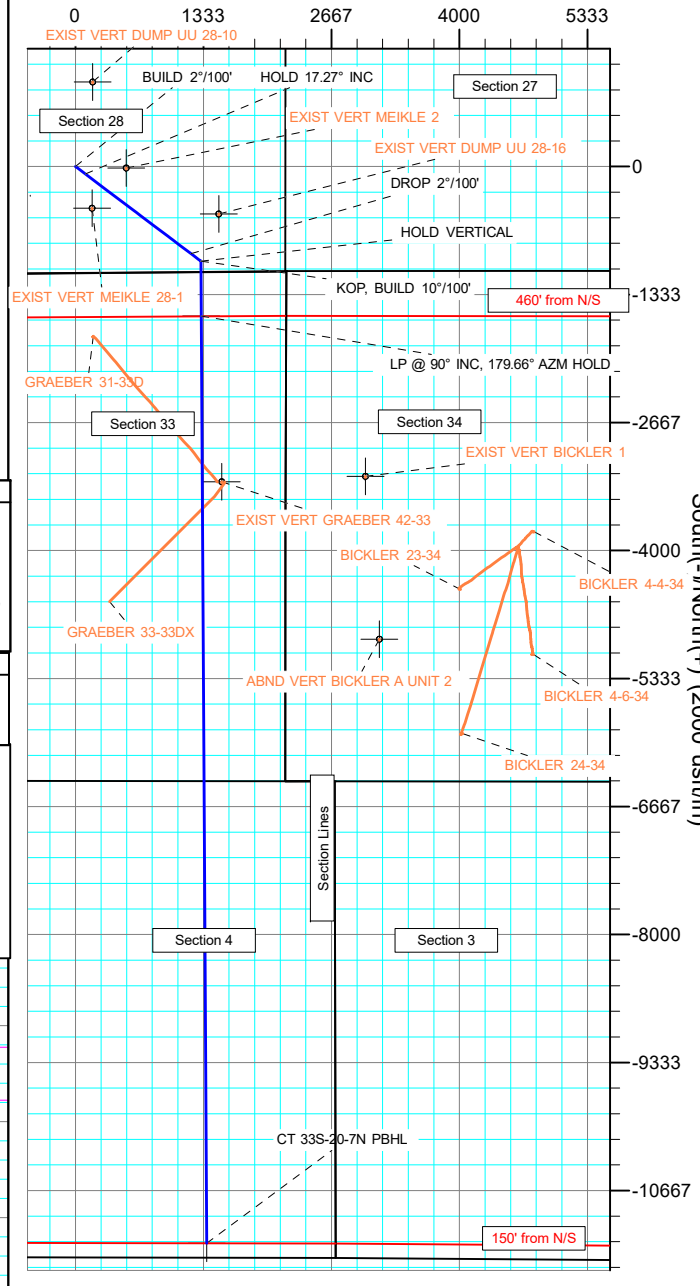
SHL:
1147' FSL, 2193' FEL
Sec 28-T1N-R68W

LP:
460' FNL, 886' FEL
Sec 33-T1N-R68W

BHL:
150' FSL, 1342' FEL
Sec 4-T1S-R68W



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



Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 33S-20-7N
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-20-7N	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-20-7N					
Well Position	+N/-S	1,095.88 usft	Northing:	1,249,743.73 usft	Latitude:	40° 1' 4.365 N
	+E/-W	-2,185.81 usft	Easting:	3,138,107.86 usft	Longitude:	105° 0' 24.826 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	8.31	66.51	52,202.31499767

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	173.05

Plan Survey Tool Program	Date	8/10/2017		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,027.34	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	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,863.26	17.27	127.01	1,850.25	-77.69	103.08	2.00	2.00	0.00	127.01	
6,505.95	17.27	127.01	6,283.75	-907.06	1,203.47	0.00	0.00	0.00	0.00	
7,369.20	0.00	0.00	7,134.00	-984.75	1,306.55	2.00	-2.00	0.00	180.00	
7,469.20	0.00	0.00	7,234.00	-984.75	1,306.55	0.00	0.00	0.00	0.00	
8,369.28	90.00	179.66	7,807.00	-1,557.75	1,310.00	10.00	10.00	19.96	179.66	CT 33S-20-7N LP
18,027.46	90.00	179.66	7,807.00	-11,215.76	1,367.84	0.00	0.00	0.00	0.00	CT 33S-20-7N PBHL

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-20-7N	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
BUILD 2°/100'									
1,100.00	2.00	127.01	1,099.98	-1.05	1.39	1.21	2.00	2.00	0.00
1,200.00	4.00	127.01	1,199.84	-4.20	5.57	4.84	2.00	2.00	0.00
1,300.00	6.00	127.01	1,299.45	-9.45	12.53	10.89	2.00	2.00	0.00
1,400.00	8.00	127.01	1,398.70	-16.78	22.26	19.35	2.00	2.00	0.00
1,500.00	10.00	127.01	1,497.47	-26.20	34.76	30.21	2.00	2.00	0.00
1,600.00	12.00	127.01	1,595.62	-37.68	49.99	43.45	2.00	2.00	0.00
1,700.00	14.00	127.01	1,693.06	-51.22	67.96	59.07	2.00	2.00	0.00
1,800.00	16.00	127.01	1,789.64	-66.80	88.62	77.03	2.00	2.00	0.00
1,863.26	17.27	127.01	1,850.25	-77.69	103.08	89.60	2.00	2.00	0.00
HOLD 17.27° INC									
1,900.00	17.27	127.01	1,885.34	-84.26	111.79	97.17	0.00	0.00	0.00
2,000.00	17.27	127.01	1,980.83	-102.12	135.49	117.77	0.00	0.00	0.00
2,100.00	17.27	127.01	2,076.33	-119.99	159.19	138.37	0.00	0.00	0.00
2,200.00	17.27	127.01	2,171.82	-137.85	182.90	158.98	0.00	0.00	0.00
2,300.00	17.27	127.01	2,267.32	-155.71	206.60	179.58	0.00	0.00	0.00
2,400.00	17.27	127.01	2,362.81	-173.58	230.30	200.18	0.00	0.00	0.00
2,500.00	17.27	127.01	2,458.30	-191.44	254.00	220.78	0.00	0.00	0.00
2,600.00	17.27	127.01	2,553.80	-209.30	277.70	241.38	0.00	0.00	0.00
2,700.00	17.27	127.01	2,649.29	-227.17	301.40	261.99	0.00	0.00	0.00
2,800.00	17.27	127.01	2,744.79	-245.03	325.10	282.59	0.00	0.00	0.00
2,900.00	17.27	127.01	2,840.28	-262.90	348.81	303.19	0.00	0.00	0.00
3,000.00	17.27	127.01	2,935.77	-280.76	372.51	323.79	0.00	0.00	0.00
3,100.00	17.27	127.01	3,031.27	-298.62	396.21	344.39	0.00	0.00	0.00
3,200.00	17.27	127.01	3,126.76	-316.49	419.91	364.99	0.00	0.00	0.00
3,300.00	17.27	127.01	3,222.26	-334.35	443.61	385.60	0.00	0.00	0.00
3,400.00	17.27	127.01	3,317.75	-352.22	467.31	406.20	0.00	0.00	0.00
3,500.00	17.27	127.01	3,413.25	-370.08	491.01	426.80	0.00	0.00	0.00
3,600.00	17.27	127.01	3,508.74	-387.94	514.72	447.40	0.00	0.00	0.00
3,700.00	17.27	127.01	3,604.23	-405.81	538.42	468.00	0.00	0.00	0.00
3,800.00	17.27	127.01	3,699.73	-423.67	562.12	488.60	0.00	0.00	0.00
3,900.00	17.27	127.01	3,795.22	-441.53	585.82	509.21	0.00	0.00	0.00
4,000.00	17.27	127.01	3,890.72	-459.40	609.52	529.81	0.00	0.00	0.00
4,100.00	17.27	127.01	3,986.21	-477.26	633.22	550.41	0.00	0.00	0.00
4,200.00	17.27	127.01	4,081.70	-495.13	656.92	571.01	0.00	0.00	0.00
4,300.00	17.27	127.01	4,177.20	-512.99	680.63	591.61	0.00	0.00	0.00
4,400.00	17.27	127.01	4,272.69	-530.85	704.33	612.21	0.00	0.00	0.00
4,500.00	17.27	127.01	4,368.19	-548.72	728.03	632.82	0.00	0.00	0.00
4,575.20	17.27	127.01	4,440.00	-562.15	745.85	648.31	0.00	0.00	0.00
PARKMAN									
4,600.00	17.27	127.01	4,463.68	-566.58	751.73	653.42	0.00	0.00	0.00
4,700.00	17.27	127.01	4,559.17	-584.44	775.43	674.02	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-20-7N	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	17.27	127.01	4,654.67	-602.31	799.13	694.62	0.00	0.00	0.00
4,900.00	17.27	127.01	4,750.16	-620.17	822.83	715.22	0.00	0.00	0.00
5,000.00	17.27	127.01	4,845.66	-638.04	846.54	735.83	0.00	0.00	0.00
5,067.38	17.27	127.01	4,910.00	-650.07	862.51	749.71	0.00	0.00	0.00
SUSSEX									
5,100.00	17.27	127.01	4,941.15	-655.90	870.24	756.43	0.00	0.00	0.00
5,200.00	17.27	127.01	5,036.65	-673.76	893.94	777.03	0.00	0.00	0.00
5,300.00	17.27	127.01	5,132.14	-691.63	917.64	797.63	0.00	0.00	0.00
5,400.00	17.27	127.01	5,227.63	-709.49	941.34	818.23	0.00	0.00	0.00
5,500.00	17.27	127.01	5,323.13	-727.36	965.04	838.83	0.00	0.00	0.00
5,600.00	17.27	127.01	5,418.62	-745.22	988.74	859.44	0.00	0.00	0.00
5,700.00	17.27	127.01	5,514.12	-763.08	1,012.45	880.04	0.00	0.00	0.00
5,800.00	17.27	127.01	5,609.61	-780.95	1,036.15	900.64	0.00	0.00	0.00
5,900.00	17.27	127.01	5,705.10	-798.81	1,059.85	921.24	0.00	0.00	0.00
6,000.00	17.27	127.01	5,800.60	-816.67	1,083.55	941.84	0.00	0.00	0.00
6,100.00	17.27	127.01	5,896.09	-834.54	1,107.25	962.44	0.00	0.00	0.00
6,200.00	17.27	127.01	5,991.59	-852.40	1,130.95	983.05	0.00	0.00	0.00
6,300.00	17.27	127.01	6,087.08	-870.27	1,154.65	1,003.65	0.00	0.00	0.00
6,400.00	17.27	127.01	6,182.57	-888.13	1,178.36	1,024.25	0.00	0.00	0.00
6,505.95	17.27	127.01	6,283.75	-907.06	1,203.47	1,046.08	0.00	0.00	0.00
DROP 2°/100'									
6,600.00	15.38	127.01	6,374.00	-922.97	1,224.58	1,064.43	2.00	-2.00	0.00
6,700.00	13.38	127.01	6,470.87	-937.92	1,244.41	1,081.67	2.00	-2.00	0.00
6,800.00	11.38	127.01	6,568.53	-950.83	1,261.54	1,096.55	2.00	-2.00	0.00
6,900.00	9.38	127.01	6,666.89	-961.67	1,275.93	1,109.07	2.00	-2.00	0.00
7,000.00	7.38	127.01	6,765.82	-970.45	1,287.58	1,119.19	2.00	-2.00	0.00
7,100.00	5.38	127.01	6,865.19	-977.14	1,296.46	1,126.90	2.00	-2.00	0.00
7,200.00	3.38	127.01	6,964.89	-981.74	1,302.56	1,132.21	2.00	-2.00	0.00
7,300.00	1.38	127.01	7,064.80	-984.25	1,305.88	1,135.10	2.00	-2.00	0.00
7,369.20	0.00	0.00	7,134.00	-984.75	1,306.55	1,135.68	2.00	-2.00	0.00
HOLD VERTICAL									
7,400.00	0.00	0.00	7,164.80	-984.75	1,306.55	1,135.68	0.00	0.00	0.00
7,469.20	0.00	0.00	7,234.00	-984.75	1,306.55	1,135.68	0.00	0.00	0.00
KOP, BUILD 10°/100'									
7,500.00	3.08	179.66	7,264.78	-985.58	1,306.56	1,136.50	10.00	10.00	0.00
7,550.00	8.08	179.66	7,314.53	-990.44	1,306.58	1,141.33	10.00	10.00	0.00
7,600.00	13.08	179.66	7,363.66	-999.61	1,306.64	1,150.44	10.00	10.00	0.00
7,650.00	18.08	179.66	7,411.81	-1,013.04	1,306.72	1,163.78	10.00	10.00	0.00
7,700.00	23.08	179.66	7,458.61	-1,030.60	1,306.83	1,181.23	10.00	10.00	0.00
7,750.00	28.08	179.66	7,503.69	-1,052.18	1,306.96	1,202.67	10.00	10.00	0.00
7,800.00	33.08	179.66	7,546.72	-1,077.61	1,307.11	1,227.92	10.00	10.00	0.00
7,850.00	38.08	179.66	7,587.38	-1,106.69	1,307.28	1,256.81	10.00	10.00	0.00
7,879.34	41.01	179.66	7,610.00	-1,125.37	1,307.40	1,275.36	10.00	10.00	0.00
SHARON SPRINGS									
7,900.00	43.08	179.66	7,625.34	-1,139.20	1,307.48	1,289.11	10.00	10.00	0.00
7,934.76	46.55	179.66	7,650.00	-1,163.70	1,307.63	1,313.44	10.00	10.00	0.00
NIOBRARA									
7,950.00	48.08	179.66	7,660.33	-1,174.90	1,307.69	1,324.57	10.00	10.00	0.00
8,000.00	53.08	179.66	7,692.07	-1,213.51	1,307.93	1,362.92	10.00	10.00	0.00
8,050.00	58.08	179.66	7,720.33	-1,254.74	1,308.17	1,403.88	10.00	10.00	0.00
8,100.00	63.07	179.66	7,744.89	-1,298.28	1,308.44	1,447.13	10.00	10.00	0.00
8,150.00	68.07	179.66	7,765.56	-1,343.79	1,308.71	1,492.33	10.00	10.00	0.00
8,200.00	73.07	179.66	7,782.18	-1,390.92	1,308.99	1,539.16	10.00	10.00	0.00

Planning Report

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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-20-7N	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)	
8,250.00	78.07	179.66	7,794.63	-1,439.33	1,309.28	1,587.25	10.00	10.00	0.00	
8,262.06	79.28	179.66	7,797.00	-1,451.16	1,309.36	1,599.00	10.00	10.00	0.00	
NIO B										
8,300.00	83.07	179.66	7,802.82	-1,488.64	1,309.58	1,636.23	10.00	10.00	0.00	
8,350.00	88.07	179.66	7,806.68	-1,538.47	1,309.88	1,685.73	10.00	10.00	0.00	
8,369.28	90.00	179.66	7,807.00	-1,557.75	1,310.00	1,704.88	10.00	10.00	0.00	
LP @ 90° INC, 179.66° AZM HOLD										
8,400.00	90.00	179.66	7,807.00	-1,588.47	1,310.18	1,735.40	0.00	0.00	0.00	
8,500.00	90.00	179.66	7,807.00	-1,688.47	1,310.78	1,834.73	0.00	0.00	0.00	
8,600.00	90.00	179.66	7,807.00	-1,788.46	1,311.39	1,934.07	0.00	0.00	0.00	
8,700.00	90.00	179.66	7,807.00	-1,888.46	1,311.99	2,033.40	0.00	0.00	0.00	
8,800.00	90.00	179.66	7,806.99	-1,988.46	1,312.59	2,132.74	0.00	0.00	0.00	
8,900.00	90.00	179.66	7,806.99	-2,088.46	1,313.19	2,232.07	0.00	0.00	0.00	
9,000.00	90.00	179.66	7,806.99	-2,188.46	1,313.79	2,331.41	0.00	0.00	0.00	
9,100.00	90.00	179.66	7,806.99	-2,288.46	1,314.39	2,430.74	0.00	0.00	0.00	
9,200.00	90.00	179.66	7,806.99	-2,388.45	1,315.00	2,530.08	0.00	0.00	0.00	
9,300.00	90.00	179.66	7,806.99	-2,488.45	1,315.60	2,629.42	0.00	0.00	0.00	
9,400.00	90.00	179.66	7,806.99	-2,588.45	1,316.20	2,728.75	0.00	0.00	0.00	
9,500.00	90.00	179.66	7,806.99	-2,688.45	1,316.80	2,828.09	0.00	0.00	0.00	
9,600.00	90.00	179.66	7,806.98	-2,788.45	1,317.40	2,927.42	0.00	0.00	0.00	
9,700.00	90.00	179.66	7,806.98	-2,888.44	1,318.00	3,026.76	0.00	0.00	0.00	
9,800.00	90.00	179.66	7,806.98	-2,988.44	1,318.61	3,126.09	0.00	0.00	0.00	
9,900.00	90.00	179.66	7,806.98	-3,088.44	1,319.21	3,225.43	0.00	0.00	0.00	
10,000.00	90.00	179.66	7,806.98	-3,188.44	1,319.81	3,324.76	0.00	0.00	0.00	
10,100.00	90.00	179.66	7,806.98	-3,288.44	1,320.41	3,424.10	0.00	0.00	0.00	
10,200.00	90.00	179.66	7,806.98	-3,388.44	1,321.01	3,523.44	0.00	0.00	0.00	
10,300.00	90.00	179.66	7,806.98	-3,488.43	1,321.61	3,622.77	0.00	0.00	0.00	
10,400.00	90.00	179.66	7,806.97	-3,588.43	1,322.21	3,722.11	0.00	0.00	0.00	
10,500.00	90.00	179.66	7,806.97	-3,688.43	1,322.82	3,821.44	0.00	0.00	0.00	
10,600.00	90.00	179.66	7,806.97	-3,788.43	1,323.42	3,920.78	0.00	0.00	0.00	
10,700.00	90.00	179.66	7,806.97	-3,888.43	1,324.02	4,020.11	0.00	0.00	0.00	
10,800.00	90.00	179.66	7,806.97	-3,988.42	1,324.62	4,119.45	0.00	0.00	0.00	
10,900.00	90.00	179.66	7,806.97	-4,088.42	1,325.22	4,218.78	0.00	0.00	0.00	
11,000.00	90.00	179.66	7,806.97	-4,188.42	1,325.82	4,318.12	0.00	0.00	0.00	
11,100.00	90.00	179.66	7,806.97	-4,288.42	1,326.43	4,417.46	0.00	0.00	0.00	
11,200.00	90.00	179.66	7,806.96	-4,388.42	1,327.03	4,516.79	0.00	0.00	0.00	
11,300.00	90.00	179.66	7,806.96	-4,488.42	1,327.63	4,616.13	0.00	0.00	0.00	
11,400.00	90.00	179.66	7,806.96	-4,588.41	1,328.23	4,715.46	0.00	0.00	0.00	
11,500.00	90.00	179.66	7,806.96	-4,688.41	1,328.83	4,814.80	0.00	0.00	0.00	
11,600.00	90.00	179.66	7,806.96	-4,788.41	1,329.43	4,914.13	0.00	0.00	0.00	
11,700.00	90.00	179.66	7,806.96	-4,888.41	1,330.04	5,013.47	0.00	0.00	0.00	
11,800.00	90.00	179.66	7,806.96	-4,988.41	1,330.64	5,112.80	0.00	0.00	0.00	
11,900.00	90.00	179.66	7,806.95	-5,088.41	1,331.24	5,212.14	0.00	0.00	0.00	
12,000.00	90.00	179.66	7,806.95	-5,188.40	1,331.84	5,311.48	0.00	0.00	0.00	
12,100.00	90.00	179.66	7,806.95	-5,288.40	1,332.44	5,410.81	0.00	0.00	0.00	
12,200.00	90.00	179.66	7,806.95	-5,388.40	1,333.04	5,510.15	0.00	0.00	0.00	
12,300.00	90.00	179.66	7,806.95	-5,488.40	1,333.65	5,609.48	0.00	0.00	0.00	
12,400.00	90.00	179.66	7,806.95	-5,588.40	1,334.25	5,708.82	0.00	0.00	0.00	
12,500.00	90.00	179.66	7,806.95	-5,688.39	1,334.85	5,808.15	0.00	0.00	0.00	
12,600.00	90.00	179.66	7,806.95	-5,788.39	1,335.45	5,907.49	0.00	0.00	0.00	
12,700.00	90.00	179.66	7,806.94	-5,888.39	1,336.05	6,006.82	0.00	0.00	0.00	
12,800.00	90.00	179.66	7,806.94	-5,988.39	1,336.65	6,106.16	0.00	0.00	0.00	
12,900.00	90.00	179.66	7,806.94	-6,088.39	1,337.26	6,205.50	0.00	0.00	0.00	
13,000.00	90.00	179.66	7,806.94	-6,188.39	1,337.86	6,304.83	0.00	0.00	0.00	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 33S-20-7N
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-20-7N	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)
13,100.00	90.00	179.66	7,806.94	-6,288.38	1,338.46	6,404.17	0.00	0.00	0.00
13,200.00	90.00	179.66	7,806.94	-6,388.38	1,339.06	6,503.50	0.00	0.00	0.00
13,300.00	90.00	179.66	7,806.94	-6,488.38	1,339.66	6,602.84	0.00	0.00	0.00
13,400.00	90.00	179.66	7,806.94	-6,588.38	1,340.26	6,702.17	0.00	0.00	0.00
13,500.00	90.00	179.66	7,806.93	-6,688.38	1,340.87	6,801.51	0.00	0.00	0.00
13,600.00	90.00	179.66	7,806.93	-6,788.37	1,341.47	6,900.85	0.00	0.00	0.00
13,700.00	90.00	179.66	7,806.93	-6,888.37	1,342.07	7,000.18	0.00	0.00	0.00
13,800.00	90.00	179.66	7,806.93	-6,988.37	1,342.67	7,099.52	0.00	0.00	0.00
13,900.00	90.00	179.66	7,806.93	-7,088.37	1,343.27	7,198.85	0.00	0.00	0.00
14,000.00	90.00	179.66	7,806.93	-7,188.37	1,343.87	7,298.19	0.00	0.00	0.00
14,100.00	90.00	179.66	7,806.93	-7,288.37	1,344.48	7,397.52	0.00	0.00	0.00
14,200.00	90.00	179.66	7,806.93	-7,388.36	1,345.08	7,496.86	0.00	0.00	0.00
14,300.00	90.00	179.66	7,806.92	-7,488.36	1,345.68	7,596.19	0.00	0.00	0.00
14,400.00	90.00	179.66	7,806.92	-7,588.36	1,346.28	7,695.53	0.00	0.00	0.00
14,500.00	90.00	179.66	7,806.92	-7,688.36	1,346.88	7,794.87	0.00	0.00	0.00
14,600.00	90.00	179.66	7,806.92	-7,788.36	1,347.48	7,894.20	0.00	0.00	0.00
14,700.00	90.00	179.66	7,806.92	-7,888.35	1,348.08	7,993.54	0.00	0.00	0.00
14,800.00	90.00	179.66	7,806.92	-7,988.35	1,348.69	8,092.87	0.00	0.00	0.00
14,900.00	90.00	179.66	7,806.92	-8,088.35	1,349.29	8,192.21	0.00	0.00	0.00
15,000.00	90.00	179.66	7,806.92	-8,188.35	1,349.89	8,291.54	0.00	0.00	0.00
15,100.00	90.00	179.66	7,806.91	-8,288.35	1,350.49	8,390.88	0.00	0.00	0.00
15,200.00	90.00	179.66	7,806.91	-8,388.35	1,351.09	8,490.21	0.00	0.00	0.00
15,300.00	90.00	179.66	7,806.91	-8,488.34	1,351.69	8,589.55	0.00	0.00	0.00
15,400.00	90.00	179.66	7,806.91	-8,588.34	1,352.30	8,688.89	0.00	0.00	0.00
15,500.00	90.00	179.66	7,806.91	-8,688.34	1,352.90	8,788.22	0.00	0.00	0.00
15,600.00	90.00	179.66	7,806.91	-8,788.34	1,353.50	8,887.56	0.00	0.00	0.00
15,700.00	90.00	179.66	7,806.91	-8,888.34	1,354.10	8,986.89	0.00	0.00	0.00
15,800.00	90.00	179.66	7,806.91	-8,988.33	1,354.70	9,086.23	0.00	0.00	0.00
15,900.00	90.00	179.66	7,806.90	-9,088.33	1,355.30	9,185.56	0.00	0.00	0.00
16,000.00	90.00	179.66	7,806.90	-9,188.33	1,355.91	9,284.90	0.00	0.00	0.00
16,100.00	90.00	179.66	7,806.90	-9,288.33	1,356.51	9,384.23	0.00	0.00	0.00
16,200.00	90.00	179.66	7,806.90	-9,388.33	1,357.11	9,483.57	0.00	0.00	0.00
16,300.00	90.00	179.66	7,806.90	-9,488.33	1,357.71	9,582.91	0.00	0.00	0.00
16,400.00	90.00	179.66	7,806.90	-9,588.32	1,358.31	9,682.24	0.00	0.00	0.00
16,500.00	90.00	179.66	7,806.90	-9,688.32	1,358.91	9,781.58	0.00	0.00	0.00
16,600.00	90.00	179.66	7,806.89	-9,788.32	1,359.52	9,880.91	0.00	0.00	0.00
16,700.00	90.00	179.66	7,806.89	-9,888.32	1,360.12	9,980.25	0.00	0.00	0.00
16,800.00	90.00	179.66	7,806.89	-9,988.32	1,360.72	10,079.58	0.00	0.00	0.00
16,900.00	90.00	179.66	7,806.89	-10,088.31	1,361.32	10,178.92	0.00	0.00	0.00
17,000.00	90.00	179.66	7,806.89	-10,188.31	1,361.92	10,278.25	0.00	0.00	0.00
17,100.00	90.00	179.66	7,806.89	-10,288.31	1,362.52	10,377.59	0.00	0.00	0.00
17,200.00	90.00	179.66	7,806.89	-10,388.31	1,363.13	10,476.93	0.00	0.00	0.00
17,300.00	90.00	179.66	7,806.89	-10,488.31	1,363.73	10,576.26	0.00	0.00	0.00
17,400.00	90.00	179.66	7,806.88	-10,588.31	1,364.33	10,675.60	0.00	0.00	0.00
17,500.00	90.00	179.66	7,806.88	-10,688.30	1,364.93	10,774.93	0.00	0.00	0.00
17,600.00	90.00	179.66	7,806.88	-10,788.30	1,365.53	10,874.27	0.00	0.00	0.00
17,700.00	90.00	179.66	7,806.88	-10,888.30	1,366.13	10,973.60	0.00	0.00	0.00
17,800.00	90.00	179.66	7,806.88	-10,988.30	1,366.74	11,072.94	0.00	0.00	0.00
17,900.00	90.00	179.66	7,806.88	-11,088.30	1,367.34	11,172.27	0.00	0.00	0.00
18,000.00	90.00	179.66	7,806.88	-11,188.29	1,367.94	11,271.61	0.00	0.00	0.00
18,027.46	90.00	179.66	7,807.00	-11,215.76	1,367.84	11,298.86	0.00	0.00	0.00
TD at 18027.46' MD									

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 33S-20-7N
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-20-7N	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-20-7N LP - plan hits target center - Point	0.00	0.00	7,807.00	-1,557.75	1,310.00	1,248,193.29	3,139,426.50	40° 0' 48.970 N	105° 0' 7.989 W
CT 33S-20-7N PBHL - plan hits target center - Point	0.00	0.00	7,807.00	-11,215.76	1,367.84	1,238,535.75	3,139,538.05	39° 59' 13.523 N	105° 0' 7.253 W

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,575.20	4,440.00	PARKMAN				
5,067.38	4,910.00	SUSSEX				
7,879.34	7,610.00	SHARON SPRINGS				
7,934.76	7,650.00	NIOBRARA				
8,262.06	7,797.00	NIO B				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,000.00	1,000.00	0.00	0.00	BUILD 2°/100'	
1,863.26	1,850.25	-77.69	103.08	HOLD 17.27° INC	
6,505.95	6,283.75	-907.06	1,203.47	DROP 2°/100'	
7,369.20	7,134.00	-984.75	1,306.55	HOLD VERTICAL	
7,469.20	7,234.00	-984.75	1,306.55	KOP, BUILD 10°/100'	
8,369.28	7,807.00	-1,557.75	1,310.00	LP @ 90° INC, 179.66° AZM HOLD	
18,027.46	7,807.00	-11,215.76	1,367.84	TD at 18027.46' MD	