

EXTRACTION OIL & GAS

Weld County

Sec 28-T1N-R68W

COYOTE TRAILS 33S-20-4N

ORIGINAL WELLBORE

Plan: PROPOSAL 1

Standard Planning Report

10 August, 2017



Project: Weld County
Site: Sec 28-T1N-R68W
Well: COYOTE TRAILS 33S-20-4N
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-20-4N

+N/-S	+E/-W	Northing	Easting	5244.00	Latitude	Longitude	Spot
0.00	0.00	1249743.73	3137999.90		40° 1' 4.371 N	105° 0' 26.214 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	1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	
3	1912.93	12.26	151.30	1908.27	-57.29	31.37	2.00	151.30	58.90	
4	6638.14	12.26	151.30	6525.73	-937.29	513.23	0.00	0.00	963.59	
5	7251.07	0.00	0.00	7134.00	-994.58	544.60	2.00	180.00	1022.49	
6	7351.07	0.00	0.00	7234.00	-994.58	544.60	0.00	0.00	1022.49	
7	8251.15	90.00	179.66	7807.00	-1567.58	548.01	10.00	179.66	1594.84	CT 33S-20-4N LP
8	17898.35	90.00	179.66	7807.00	-11214.61	605.50	0.00	0.00	11230.95	CT 33S-20-4N PBHL

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4440.00	4503.74	PARKMAN
4910.00	4984.71	SUSSEX
7610.00	7761.20	SHARON SPRINGS
7650.00	7816.63	NIOBRARA
7797.00	8143.93	NIO B

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	BUILD 2°/100'
1912.93	12.26	151.30	1908.27	-57.29	31.37	58.90	65.32	HOLD 12.26° INC
6638.14	12.26	151.30	6525.73	-937.29	513.23	963.59	1068.60	DROP 2°/100'
7251.07	0.00	0.00	7134.00	-994.58	544.60	1022.49	1133.92	HOLD VERTICAL
7351.07	0.00	0.00	7234.00	-994.58	544.60	1022.49	1133.92	KOP, BUILD 10°/100'
8251.15	90.00	179.66	7807.00	-1567.58	548.01	1594.84	1706.93	LP @ 90° INC, 179.66° AZM HOLD
17898.35	90.00	179.66	7806.85	-11214.61	605.50	11230.95	11354.14	TD at 17898.35' MD

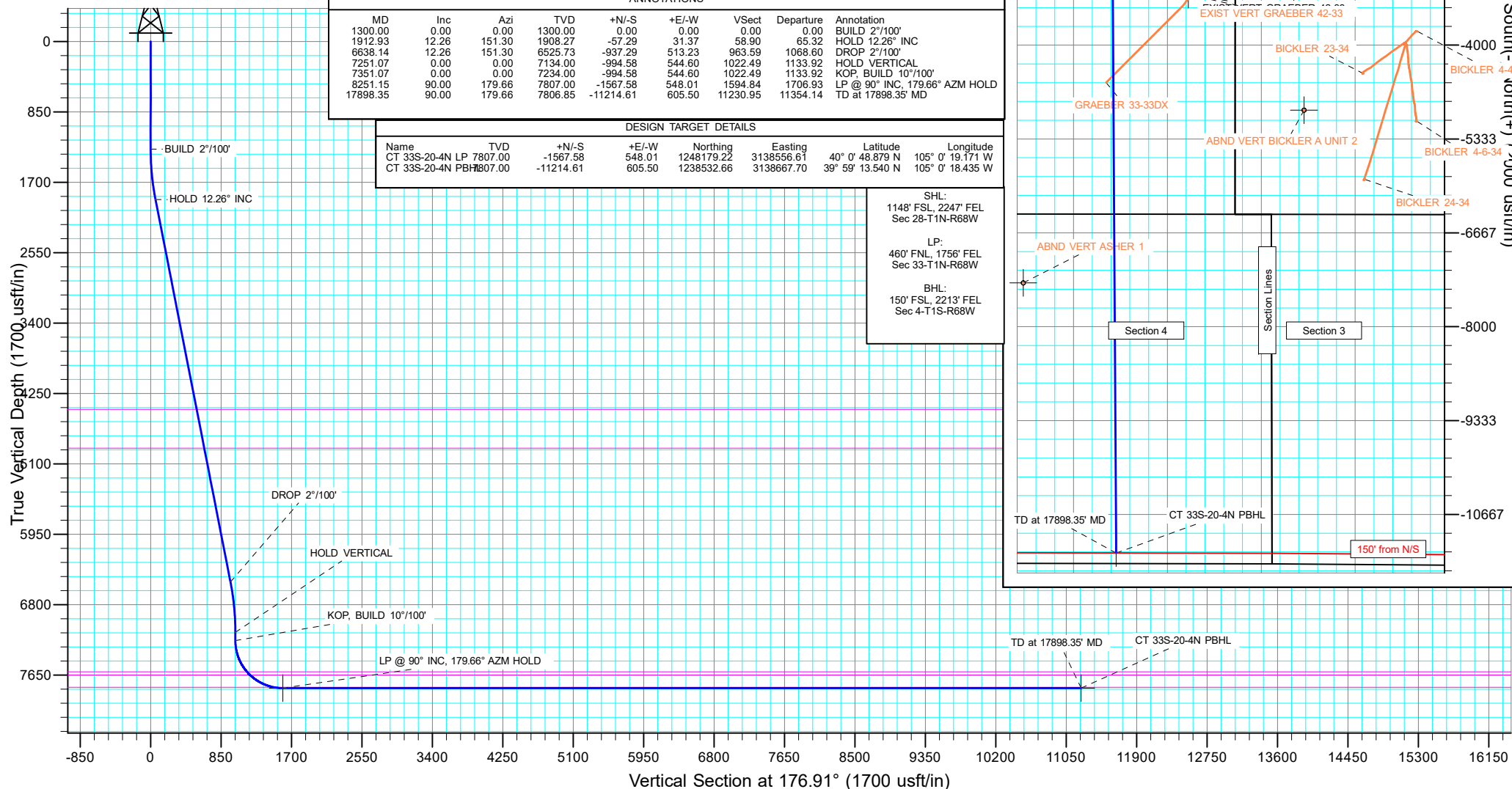
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
CT 33S-20-4N LP	7807.00	-1567.58	548.01	1248179.22	3138556.61	40° 0' 48.879 N	105° 0' 19.171 W
CT 33S-20-4N PBHL	7807.00	-11214.61	605.50	1238532.66	3138667.70	39° 59' 13.540 N	105° 0' 18.435 W

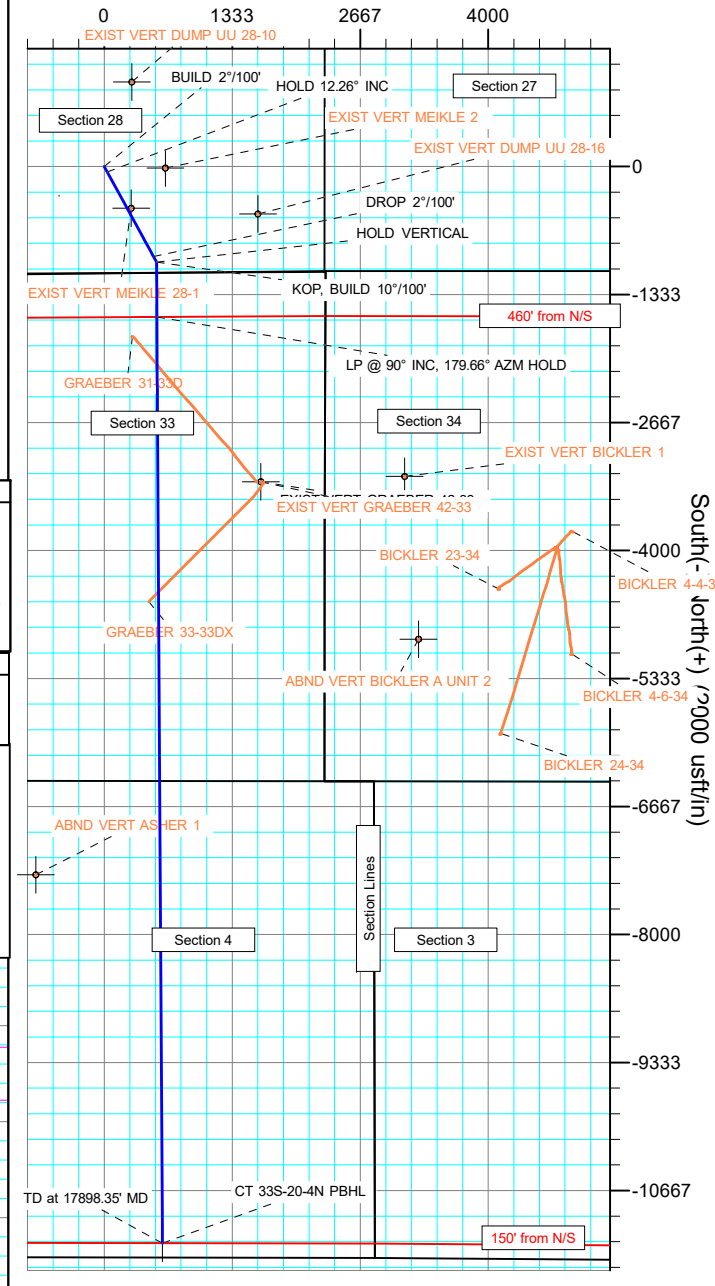
SHL:
1148' FSL, 2247' FEL
Sec 28-T1N-R68W

LP:
460' FNL, 1756' FEL
Sec 33-T1N-R68W

BHL:
150' FSL, 2213' FEL
Sec 4-T1S-R68W



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



Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 33S-20-4N
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-20-4N	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-20-4N					
Well Position	+N/-S	1,096.49 usft	Northing:	1,249,743.73 usft	Latitude:	40° 1' 4.371 N
	+E/-W	-2,293.78 usft	Easting:	3,137,999.90 usft	Longitude:	105° 0' 26.214 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	52,159.92292903

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	176.91

Plan Survey Tool Program	Date	8/10/2017		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	17,898.34	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	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,912.93	12.26	151.30	1,908.27	-57.29	31.37	2.00	2.00	0.00	151.30	
6,638.14	12.26	151.30	6,525.73	-937.29	513.23	0.00	0.00	0.00	0.00	
7,251.07	0.00	0.00	7,134.00	-994.58	544.60	2.00	-2.00	0.00	180.00	
7,351.07	0.00	0.00	7,234.00	-994.58	544.60	0.00	0.00	0.00	0.00	
8,251.15	90.00	179.66	7,807.00	-1,567.58	548.01	10.00	10.00	19.96	179.66	CT 33S-20-4N LP
17,898.35	90.00	179.66	7,807.00	-11,214.61	605.50	0.00	0.00	0.00	0.00	CT 33S-20-4N PBHL

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-20-4N	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
BUILD 2°/100'									
1,400.00	2.00	151.30	1,399.98	-1.53	0.84	1.57	2.00	2.00	0.00
1,500.00	4.00	151.30	1,499.84	-6.12	3.35	6.29	2.00	2.00	0.00
1,600.00	6.00	151.30	1,599.45	-13.77	7.54	14.15	2.00	2.00	0.00
1,700.00	8.00	151.30	1,698.70	-24.45	13.39	25.14	2.00	2.00	0.00
1,800.00	10.00	151.30	1,797.47	-38.17	20.90	39.25	2.00	2.00	0.00
1,900.00	12.00	151.30	1,895.62	-54.91	30.07	56.45	2.00	2.00	0.00
1,912.93	12.26	151.30	1,908.27	-57.29	31.37	58.90	2.00	2.00	0.00
HOLD 12.26° INC									
2,000.00	12.26	151.30	1,993.35	-73.51	40.25	75.57	0.00	0.00	0.00
2,100.00	12.26	151.30	2,091.07	-92.13	50.45	94.72	0.00	0.00	0.00
2,200.00	12.26	151.30	2,188.79	-110.75	60.65	113.86	0.00	0.00	0.00
2,300.00	12.26	151.30	2,286.51	-129.38	70.84	133.01	0.00	0.00	0.00
2,400.00	12.26	151.30	2,384.23	-148.00	81.04	152.16	0.00	0.00	0.00
2,500.00	12.26	151.30	2,481.95	-166.63	91.24	171.30	0.00	0.00	0.00
2,600.00	12.26	151.30	2,579.67	-185.25	101.44	190.45	0.00	0.00	0.00
2,700.00	12.26	151.30	2,677.39	-203.87	111.63	209.59	0.00	0.00	0.00
2,800.00	12.26	151.30	2,775.11	-222.50	121.83	228.74	0.00	0.00	0.00
2,900.00	12.26	151.30	2,872.83	-241.12	132.03	247.89	0.00	0.00	0.00
3,000.00	12.26	151.30	2,970.55	-259.74	142.23	267.03	0.00	0.00	0.00
3,100.00	12.26	151.30	3,068.27	-278.37	152.42	286.18	0.00	0.00	0.00
3,200.00	12.26	151.30	3,165.99	-296.99	162.62	305.32	0.00	0.00	0.00
3,300.00	12.26	151.30	3,263.71	-315.61	172.82	324.47	0.00	0.00	0.00
3,400.00	12.26	151.30	3,361.43	-334.24	183.02	343.62	0.00	0.00	0.00
3,500.00	12.26	151.30	3,459.15	-352.86	193.21	362.76	0.00	0.00	0.00
3,600.00	12.26	151.30	3,556.87	-371.48	203.41	381.91	0.00	0.00	0.00
3,700.00	12.26	151.30	3,654.59	-390.11	213.61	401.05	0.00	0.00	0.00
3,800.00	12.26	151.30	3,752.31	-408.73	223.81	420.20	0.00	0.00	0.00
3,900.00	12.26	151.30	3,850.03	-427.35	234.00	439.35	0.00	0.00	0.00
4,000.00	12.26	151.30	3,947.75	-445.98	244.20	458.49	0.00	0.00	0.00
4,100.00	12.26	151.30	4,045.47	-464.60	254.40	477.64	0.00	0.00	0.00
4,200.00	12.26	151.30	4,143.19	-483.22	264.60	496.79	0.00	0.00	0.00
4,300.00	12.26	151.30	4,240.91	-501.85	274.79	515.93	0.00	0.00	0.00
4,400.00	12.26	151.30	4,338.63	-520.47	284.99	535.08	0.00	0.00	0.00
4,500.00	12.26	151.30	4,436.35	-539.09	295.19	554.22	0.00	0.00	0.00
4,503.74	12.26	151.30	4,440.00	-539.79	295.57	554.94	0.00	0.00	0.00
PARKMAN									
4,600.00	12.26	151.30	4,534.07	-557.72	305.39	573.37	0.00	0.00	0.00
4,700.00	12.26	151.30	4,631.79	-576.34	315.59	592.52	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-20-4N	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	12.26	151.30	4,729.51	-594.96	325.78	611.66	0.00	0.00	0.00
4,900.00	12.26	151.30	4,827.23	-613.59	335.98	630.81	0.00	0.00	0.00
4,984.71	12.26	151.30	4,910.00	-629.36	344.62	647.03	0.00	0.00	0.00
SUSSEX									
5,000.00	12.26	151.30	4,924.95	-632.21	346.18	649.95	0.00	0.00	0.00
5,100.00	12.26	151.30	5,022.67	-650.83	356.38	669.10	0.00	0.00	0.00
5,200.00	12.26	151.30	5,120.39	-669.46	366.57	688.25	0.00	0.00	0.00
5,300.00	12.26	151.30	5,218.11	-688.08	376.77	707.39	0.00	0.00	0.00
5,400.00	12.26	151.30	5,315.83	-706.70	386.97	726.54	0.00	0.00	0.00
5,500.00	12.26	151.30	5,413.55	-725.33	397.17	745.68	0.00	0.00	0.00
5,600.00	12.26	151.30	5,511.27	-743.95	407.36	764.83	0.00	0.00	0.00
5,700.00	12.26	151.30	5,608.99	-762.57	417.56	783.98	0.00	0.00	0.00
5,800.00	12.26	151.30	5,706.71	-781.20	427.76	803.12	0.00	0.00	0.00
5,900.00	12.26	151.30	5,804.43	-799.82	437.96	822.27	0.00	0.00	0.00
6,000.00	12.26	151.30	5,902.15	-818.44	448.15	841.42	0.00	0.00	0.00
6,100.00	12.26	151.30	5,999.87	-837.07	458.35	860.56	0.00	0.00	0.00
6,200.00	12.26	151.30	6,097.59	-855.69	468.55	879.71	0.00	0.00	0.00
6,300.00	12.26	151.30	6,195.30	-874.31	478.75	898.85	0.00	0.00	0.00
6,400.00	12.26	151.30	6,293.02	-892.94	488.94	918.00	0.00	0.00	0.00
6,500.00	12.26	151.30	6,390.74	-911.56	499.14	937.15	0.00	0.00	0.00
6,600.00	12.26	151.30	6,488.46	-930.18	509.34	956.29	0.00	0.00	0.00
6,638.14	12.26	151.30	6,525.73	-937.29	513.23	963.59	0.00	0.00	0.00
DROP 2°/100'									
6,700.00	11.02	151.30	6,586.32	-948.23	519.22	974.85	2.00	-2.00	0.00
6,800.00	9.02	151.30	6,684.79	-963.50	527.58	990.54	2.00	-2.00	0.00
6,900.00	7.02	151.30	6,783.81	-975.74	534.28	1,003.12	2.00	-2.00	0.00
7,000.00	5.02	151.30	6,883.25	-984.94	539.32	1,012.58	2.00	-2.00	0.00
7,100.00	3.02	151.30	6,983.00	-991.09	542.69	1,018.90	2.00	-2.00	0.00
7,200.00	1.02	151.30	7,082.93	-994.18	544.38	1,022.08	2.00	-2.00	0.00
7,251.07	0.00	0.00	7,134.00	-994.58	544.60	1,022.49	2.00	-2.00	0.00
HOLD VERTICAL									
7,300.00	0.00	0.00	7,182.93	-994.58	544.60	1,022.49	0.00	0.00	0.00
7,351.07	0.00	0.00	7,234.00	-994.58	544.60	1,022.49	0.00	0.00	0.00
KOP, BUILD 10°/100'									
7,400.00	4.89	179.66	7,282.87	-996.67	544.61	1,024.58	10.00	10.00	0.00
7,450.00	9.89	179.66	7,332.44	-1,003.10	544.65	1,031.00	10.00	10.00	0.00
7,500.00	14.89	179.66	7,381.26	-1,013.83	544.71	1,041.72	10.00	10.00	0.00
7,550.00	19.89	179.66	7,428.96	-1,028.77	544.80	1,056.64	10.00	10.00	0.00
7,600.00	24.89	179.66	7,475.17	-1,047.81	544.92	1,075.66	10.00	10.00	0.00
7,650.00	29.89	179.66	7,519.55	-1,070.80	545.05	1,098.63	10.00	10.00	0.00
7,700.00	34.89	179.66	7,561.76	-1,097.58	545.21	1,125.37	10.00	10.00	0.00
7,750.00	39.89	179.66	7,601.47	-1,127.93	545.39	1,155.69	10.00	10.00	0.00
7,761.20	41.01	179.66	7,610.00	-1,135.20	545.44	1,162.95	10.00	10.00	0.00
SHARON SPRINGS									
7,800.00	44.89	179.66	7,638.39	-1,161.63	545.60	1,189.35	10.00	10.00	0.00
7,816.63	46.55	179.66	7,650.00	-1,173.53	545.67	1,201.24	10.00	10.00	0.00
NIOBRARA									
7,850.00	49.89	179.66	7,672.23	-1,198.41	545.81	1,226.10	10.00	10.00	0.00
7,900.00	54.89	179.66	7,702.74	-1,238.01	546.05	1,265.65	10.00	10.00	0.00
7,950.00	59.89	179.66	7,729.67	-1,280.11	546.30	1,307.70	10.00	10.00	0.00
8,000.00	64.89	179.66	7,752.84	-1,324.40	546.57	1,351.94	10.00	10.00	0.00
8,050.00	69.89	179.66	7,772.06	-1,370.54	546.84	1,398.03	10.00	10.00	0.00
8,100.00	74.89	179.66	7,787.18	-1,418.18	547.12	1,445.62	10.00	10.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 33S-20-4N
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-20-4N	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)
8,143.93	79.28	179.66	7,797.00	-1,460.99	547.38	1,488.37	10.00	10.00	0.00
NIO B									
8,150.00	79.89	179.66	7,798.10	-1,466.96	547.41	1,494.34	10.00	10.00	0.00
8,200.00	84.89	179.66	7,804.72	-1,516.50	547.71	1,543.83	10.00	10.00	0.00
8,251.15	90.00	179.66	7,807.00	-1,567.58	548.01	1,594.84	10.00	10.00	0.00
LP @ 90° INC, 179.66° AZM HOLD									
8,300.00	90.00	179.66	7,807.00	-1,616.43	548.31	1,643.64	0.00	0.00	0.00
8,400.00	90.00	179.66	7,807.00	-1,716.43	548.90	1,743.53	0.00	0.00	0.00
8,500.00	90.00	179.66	7,807.00	-1,816.43	549.50	1,843.41	0.00	0.00	0.00
8,600.00	90.00	179.66	7,806.99	-1,916.43	550.09	1,943.30	0.00	0.00	0.00
8,700.00	90.00	179.66	7,806.99	-2,016.42	550.69	2,043.18	0.00	0.00	0.00
8,800.00	90.00	179.66	7,806.99	-2,116.42	551.28	2,143.07	0.00	0.00	0.00
8,900.00	90.00	179.66	7,806.99	-2,216.42	551.88	2,242.95	0.00	0.00	0.00
9,000.00	90.00	179.66	7,806.99	-2,316.42	552.48	2,342.84	0.00	0.00	0.00
9,100.00	90.00	179.66	7,806.99	-2,416.42	553.07	2,442.72	0.00	0.00	0.00
9,200.00	90.00	179.66	7,806.99	-2,516.42	553.67	2,542.61	0.00	0.00	0.00
9,300.00	90.00	179.66	7,806.98	-2,616.41	554.26	2,642.49	0.00	0.00	0.00
9,400.00	90.00	179.66	7,806.98	-2,716.41	554.86	2,742.38	0.00	0.00	0.00
9,500.00	90.00	179.66	7,806.98	-2,816.41	555.46	2,842.26	0.00	0.00	0.00
9,600.00	90.00	179.66	7,806.98	-2,916.41	556.05	2,942.15	0.00	0.00	0.00
9,700.00	90.00	179.66	7,806.98	-3,016.41	556.65	3,042.03	0.00	0.00	0.00
9,800.00	90.00	179.66	7,806.98	-3,116.41	557.24	3,141.92	0.00	0.00	0.00
9,900.00	90.00	179.66	7,806.97	-3,216.40	557.84	3,241.80	0.00	0.00	0.00
10,000.00	90.00	179.66	7,806.97	-3,316.40	558.43	3,341.69	0.00	0.00	0.00
10,100.00	90.00	179.66	7,806.97	-3,416.40	559.03	3,441.57	0.00	0.00	0.00
10,200.00	90.00	179.66	7,806.97	-3,516.40	559.63	3,541.46	0.00	0.00	0.00
10,300.00	90.00	179.66	7,806.97	-3,616.40	560.22	3,641.34	0.00	0.00	0.00
10,400.00	90.00	179.66	7,806.97	-3,716.39	560.82	3,741.23	0.00	0.00	0.00
10,500.00	90.00	179.66	7,806.97	-3,816.39	561.41	3,841.11	0.00	0.00	0.00
10,600.00	90.00	179.66	7,806.96	-3,916.39	562.01	3,941.00	0.00	0.00	0.00
10,700.00	90.00	179.66	7,806.96	-4,016.39	562.61	4,040.88	0.00	0.00	0.00
10,800.00	90.00	179.66	7,806.96	-4,116.39	563.20	4,140.77	0.00	0.00	0.00
10,900.00	90.00	179.66	7,806.96	-4,216.39	563.80	4,240.65	0.00	0.00	0.00
11,000.00	90.00	179.66	7,806.96	-4,316.38	564.39	4,340.53	0.00	0.00	0.00
11,100.00	90.00	179.66	7,806.96	-4,416.38	564.99	4,440.42	0.00	0.00	0.00
11,200.00	90.00	179.66	7,806.95	-4,516.38	565.58	4,540.30	0.00	0.00	0.00
11,300.00	90.00	179.66	7,806.95	-4,616.38	566.18	4,640.19	0.00	0.00	0.00
11,400.00	90.00	179.66	7,806.95	-4,716.38	566.78	4,740.07	0.00	0.00	0.00
11,500.00	90.00	179.66	7,806.95	-4,816.38	567.37	4,839.96	0.00	0.00	0.00
11,600.00	90.00	179.66	7,806.95	-4,916.37	567.97	4,939.84	0.00	0.00	0.00
11,700.00	90.00	179.66	7,806.95	-5,016.37	568.56	5,039.73	0.00	0.00	0.00
11,800.00	90.00	179.66	7,806.95	-5,116.37	569.16	5,139.61	0.00	0.00	0.00
11,900.00	90.00	179.66	7,806.94	-5,216.37	569.76	5,239.50	0.00	0.00	0.00
12,000.00	90.00	179.66	7,806.94	-5,316.37	570.35	5,339.38	0.00	0.00	0.00
12,100.00	90.00	179.66	7,806.94	-5,416.36	570.95	5,439.27	0.00	0.00	0.00
12,200.00	90.00	179.66	7,806.94	-5,516.36	571.54	5,539.15	0.00	0.00	0.00
12,300.00	90.00	179.66	7,806.94	-5,616.36	572.14	5,639.04	0.00	0.00	0.00
12,400.00	90.00	179.66	7,806.94	-5,716.36	572.73	5,738.92	0.00	0.00	0.00
12,500.00	90.00	179.66	7,806.93	-5,816.36	573.33	5,838.81	0.00	0.00	0.00
12,600.00	90.00	179.66	7,806.93	-5,916.36	573.93	5,938.69	0.00	0.00	0.00
12,700.00	90.00	179.66	7,806.93	-6,016.35	574.52	6,038.58	0.00	0.00	0.00
12,800.00	90.00	179.66	7,806.93	-6,116.35	575.12	6,138.46	0.00	0.00	0.00
12,900.00	90.00	179.66	7,806.93	-6,216.35	575.71	6,238.35	0.00	0.00	0.00
13,000.00	90.00	179.66	7,806.93	-6,316.35	576.31	6,338.23	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 33S-20-4N
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-20-4N	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	7,806.93	-6,416.35	576.91	6,438.12	0.00	0.00	0.00	
13,200.00	90.00	179.66	7,806.92	-6,516.35	577.50	6,538.00	0.00	0.00	0.00	
13,300.00	90.00	179.66	7,806.92	-6,616.34	578.10	6,637.89	0.00	0.00	0.00	
13,400.00	90.00	179.66	7,806.92	-6,716.34	578.69	6,737.77	0.00	0.00	0.00	
13,500.00	90.00	179.66	7,806.92	-6,816.34	579.29	6,837.66	0.00	0.00	0.00	
13,600.00	90.00	179.66	7,806.92	-6,916.34	579.88	6,937.54	0.00	0.00	0.00	
13,700.00	90.00	179.66	7,806.92	-7,016.34	580.48	7,037.43	0.00	0.00	0.00	
13,800.00	90.00	179.66	7,806.91	-7,116.33	581.08	7,137.31	0.00	0.00	0.00	
13,900.00	90.00	179.66	7,806.91	-7,216.33	581.67	7,237.20	0.00	0.00	0.00	
14,000.00	90.00	179.66	7,806.91	-7,316.33	582.27	7,337.08	0.00	0.00	0.00	
14,100.00	90.00	179.66	7,806.91	-7,416.33	582.86	7,436.97	0.00	0.00	0.00	
14,200.00	90.00	179.66	7,806.91	-7,516.33	583.46	7,536.85	0.00	0.00	0.00	
14,300.00	90.00	179.66	7,806.91	-7,616.33	584.06	7,636.74	0.00	0.00	0.00	
14,400.00	90.00	179.66	7,806.91	-7,716.32	584.65	7,736.62	0.00	0.00	0.00	
14,500.00	90.00	179.66	7,806.90	-7,816.32	585.25	7,836.51	0.00	0.00	0.00	
14,600.00	90.00	179.66	7,806.90	-7,916.32	585.84	7,936.39	0.00	0.00	0.00	
14,700.00	90.00	179.66	7,806.90	-8,016.32	586.44	8,036.28	0.00	0.00	0.00	
14,800.00	90.00	179.66	7,806.90	-8,116.32	587.03	8,136.16	0.00	0.00	0.00	
14,900.00	90.00	179.66	7,806.90	-8,216.32	587.63	8,236.05	0.00	0.00	0.00	
15,000.00	90.00	179.66	7,806.90	-8,316.31	588.23	8,335.93	0.00	0.00	0.00	
15,100.00	90.00	179.66	7,806.89	-8,416.31	588.82	8,435.82	0.00	0.00	0.00	
15,200.00	90.00	179.66	7,806.89	-8,516.31	589.42	8,535.70	0.00	0.00	0.00	
15,300.00	90.00	179.66	7,806.89	-8,616.31	590.01	8,635.59	0.00	0.00	0.00	
15,400.00	90.00	179.66	7,806.89	-8,716.31	590.61	8,735.47	0.00	0.00	0.00	
15,500.00	90.00	179.66	7,806.89	-8,816.30	591.21	8,835.36	0.00	0.00	0.00	
15,600.00	90.00	179.66	7,806.89	-8,916.30	591.80	8,935.24	0.00	0.00	0.00	
15,700.00	90.00	179.66	7,806.89	-9,016.30	592.40	9,035.13	0.00	0.00	0.00	
15,800.00	90.00	179.66	7,806.88	-9,116.30	592.99	9,135.01	0.00	0.00	0.00	
15,900.00	90.00	179.66	7,806.88	-9,216.30	593.59	9,234.90	0.00	0.00	0.00	
16,000.00	90.00	179.66	7,806.88	-9,316.30	594.18	9,334.78	0.00	0.00	0.00	
16,100.00	90.00	179.66	7,806.88	-9,416.29	594.78	9,434.67	0.00	0.00	0.00	
16,200.00	90.00	179.66	7,806.88	-9,516.29	595.38	9,534.55	0.00	0.00	0.00	
16,300.00	90.00	179.66	7,806.88	-9,616.29	595.97	9,634.44	0.00	0.00	0.00	
16,400.00	90.00	179.66	7,806.87	-9,716.29	596.57	9,734.32	0.00	0.00	0.00	
16,500.00	90.00	179.66	7,806.87	-9,816.29	597.16	9,834.21	0.00	0.00	0.00	
16,600.00	90.00	179.66	7,806.87	-9,916.28	597.76	9,934.09	0.00	0.00	0.00	
16,700.00	90.00	179.66	7,806.87	-10,016.28	598.36	10,033.97	0.00	0.00	0.00	
16,800.00	90.00	179.66	7,806.87	-10,116.28	598.95	10,133.86	0.00	0.00	0.00	
16,900.00	90.00	179.66	7,806.87	-10,216.28	599.55	10,233.74	0.00	0.00	0.00	
17,000.00	90.00	179.66	7,806.87	-10,316.28	600.14	10,333.63	0.00	0.00	0.00	
17,100.00	90.00	179.66	7,806.86	-10,416.28	600.74	10,433.51	0.00	0.00	0.00	
17,200.00	90.00	179.66	7,806.86	-10,516.27	601.33	10,533.40	0.00	0.00	0.00	
17,300.00	90.00	179.66	7,806.86	-10,616.27	601.93	10,633.28	0.00	0.00	0.00	
17,400.00	90.00	179.66	7,806.86	-10,716.27	602.53	10,733.17	0.00	0.00	0.00	
17,500.00	90.00	179.66	7,806.86	-10,816.27	603.12	10,833.05	0.00	0.00	0.00	
17,600.00	90.00	179.66	7,806.86	-10,916.27	603.72	10,932.94	0.00	0.00	0.00	
17,700.00	90.00	179.66	7,806.85	-11,016.27	604.31	11,032.82	0.00	0.00	0.00	
17,800.00	90.00	179.66	7,806.85	-11,116.26	604.91	11,132.71	0.00	0.00	0.00	
17,898.35	90.00	179.66	7,807.00	-11,214.61	605.50	11,230.95	0.00	0.00	0.00	
TD at 17898.35' MD										

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 33S-20-4N
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-20-4N	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-20-4N LP - plan hits target center - Point	0.00	0.00	7,807.00	-1,567.58	548.01	1,248,179.22	3,138,556.61	40° 0' 48.879 N	105° 0' 19.171 W
CT 33S-20-4N PBHL - plan hits target center - Point	0.00	0.00	7,807.00	-11,214.61	605.50	1,238,532.65	3,138,667.70	39° 59' 13.540 N	105° 0' 18.435 W

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,503.74	4,440.00	PARKMAN				
4,984.71	4,910.00	SUSSEX				
7,761.20	7,610.00	SHARON SPRINGS				
7,816.63	7,650.00	NIOBRARA				
8,143.93	7,797.00	NIO B				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,300.00	1,300.00	0.00	0.00	BUILD 2°/100'	
1,912.93	1,908.27	-57.29	31.37	HOLD 12.26° INC	
6,638.14	6,525.73	-937.29	513.23	DROP 2°/100'	
7,251.07	7,134.00	-994.58	544.60	HOLD VERTICAL	
7,351.07	7,234.00	-994.58	544.60	KOP, BUILD 10°/100'	
8,251.15	7,807.00	-1,567.58	548.01	LP @ 90° INC, 179.66° AZM HOLD	
17,898.35	7,807.00	-11,214.61	605.50	TD at 17898.35' MD	