

# **EXTRACTION OIL & GAS**

**WELD COUNTY**

**Sec 28-T1N-R68W**

**COYOTE TRAILS 33W-15-8N**

**ORIGINAL WELLBORE**

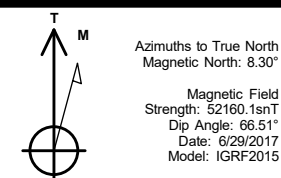
**Plan: PROPOSAL 1**

## **Standard Planning Report**

**07 June, 2018**



Project: WELD COUNTY  
Site: Sec 28-T1N-R68W  
Well: COYOTE TRAILS 33W-15-8N  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL 1



#### WELL DETAILS: COYOTE TRAILS 33W-15-8N

	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
	0.00	0.00	1249828.78	3138017.83	40° 1' 5.210 N	105° 0' 25.978 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	400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	
3	2094.07	33.88	179.78	1997.05	-486.46	1.83	2.00	179.78	192.57	
4	6442.34	33.88	179.78	5606.95	-2910.49	10.94	0.00	0.00	1152.15	
5	8136.40	0.00	0.00	7204.00	-3396.95	12.77	2.00	180.00	1344.72	
6	8166.40	0.00	0.00	7234.00	-3396.95	12.77	0.00	0.00	1344.72	
7	9066.48	90.00	269.90	7807.00	-3397.93	-560.23	10.00	269.90	1870.45	CT 33W-8N LP
8	16336.94	90.00	269.90	7807.00	-3410.55	-7830.69	0.00	0.00	8541.17	CT 33W-8N PBHL

#### ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	Start Build 2.00
2094.07	33.88	179.78	1997.05	-486.46	1.83	192.57	486.46	Start 4348.27 hold at 2094.07 MD
6442.34	33.88	179.78	5606.95	-2910.49	10.94	1152.15	2910.51	Start Drop -2.00
8136.40	0.00	0.00	7204.00	-3396.95	12.77	1344.72	3396.97	Start 30.00 hold at 8136.40 MD
8166.40	0.00	0.00	7234.00	-3396.95	12.77	1344.72	3396.97	Start DLS 10.00 TFO 269.90
9066.48	90.00	269.90	7807.00	-3397.93	-560.23	1870.45	3969.98	Start 7270.46 hold at 9066.48 MD
16336.94	90.00	269.90	7806.93	-3410.40	-7830.69	8541.11	11240.44	TD at 16336.94

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
CT 33W-8N LP	7807.00	-3397.93	-560.23	1246427.79	3137476.48	40° 0' 31.630 N	105° 0' 33.178 W	Point
- plan hits target center								
CT 33W-8N PBHL	7807.00	-3410.55	-7830.69	1246374.77	3130206.21	40° 0' 31.493 N	105° 2' 6.616 W	Point
- plan hits target center								

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4440.00	5036.70	PARKMAN
4910.00	5602.83	SUSSEX
7610.00	8576.54	SHARON SPRINGS
7650.00	8631.96	NIOBRARA
7797.00	8959.26	NIO B

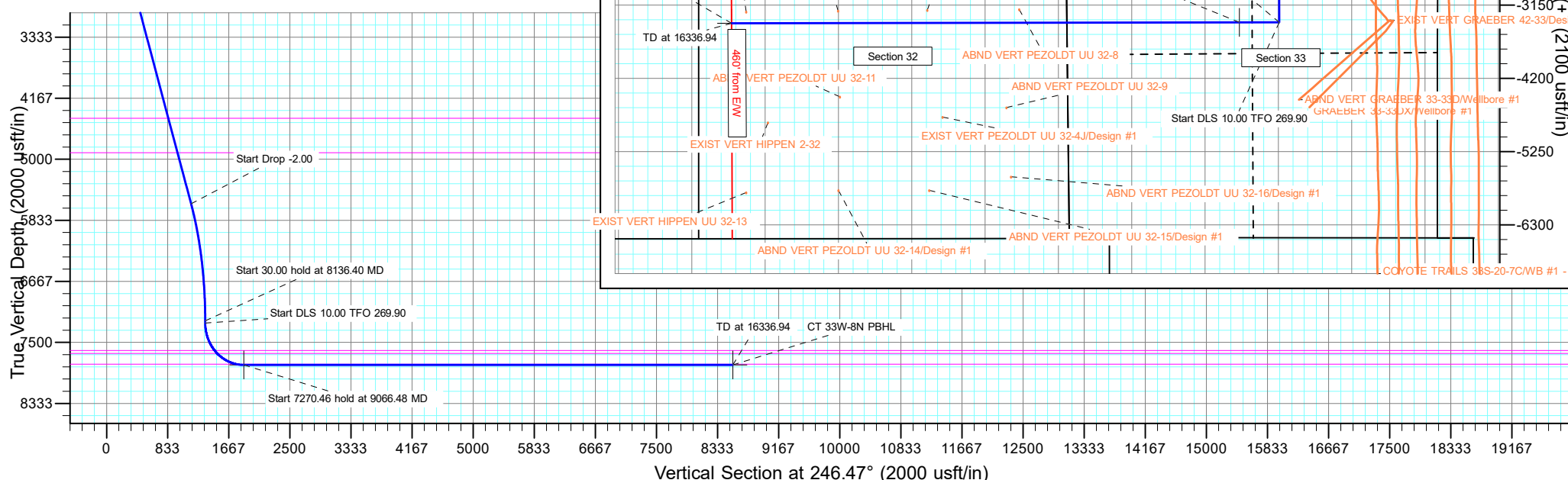
#### PROJECT DETAILS: WELD COUNTY

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

SHL:  
1198' FSL, 2283' FEL  
Sec 28-T1N-R68W

LP:  
2194' FNL, 2470' FWL  
Sec 33-T1N-R68W

BHL:  
2193' FNL, 460' FWL  
Sec 32-T1N-R68W



## Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well COYOTE TRAILS 33W-15-8N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 25' @ 5269.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB 25' @ 5269.00usft
<b>Site:</b>	Sec 28-T1N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	COYOTE TRAILS 33W-15-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL 1		

<b>Project</b>	WELD COUNTY		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	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 33W-15-8N					
Well Position	+N/-S	1,181.43 usft	Northing:	1,249,828.78 usft	Latitude:	40° 1' 5.210 N
	+E/-W	-2,275.36 usft	Easting:	3,138,017.83 usft	Longitude:	105° 0' 25.978 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	5,244.00 usft

<b>Wellbore</b>	ORIGINAL WELLBORE				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	6/29/2017	8.30	66.51	52,160.05233665

<b>Design</b>	PROPOSAL 1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	246.47

<b>Plan Survey Tool Program</b>	<b>Date</b>	6/7/2018		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	16,336.94	PROPOSAL 1 (ORIGINAL WELL	MWD OWSG
			OWSG MWD - Standard	

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	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	
2,094.07	33.88	179.78	1,997.05	-486.46	1.83	2.00	2.00	0.00	179.78	
6,442.34	33.88	179.78	5,606.95	-2,910.49	10.94	0.00	0.00	0.00	0.00	
8,136.41	0.00	0.00	7,204.00	-3,396.95	12.77	2.00	-2.00	0.00	180.00	
8,166.41	0.00	0.00	7,234.00	-3,396.95	12.77	0.00	0.00	0.00	0.00	
9,066.48	90.00	269.90	7,807.00	-3,397.93	-560.24	10.00	10.00	-10.01	269.90	CT 33W-8N LP
16,336.94	90.00	269.90	7,807.00	-3,410.55	-7,830.69	0.00	0.00	0.00	0.00	CT 33W-8N PBHL

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well COYOTE TRAILS 33W-15-8N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 25' @ 5269.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB 25' @ 5269.00usft
<b>Site:</b>	Sec 28-T1N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	COYOTE TRAILS 33W-15-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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
Start Build 2.00									
500.00	2.00	179.78	499.98	-1.75	0.01	0.69	2.00	2.00	0.00
600.00	4.00	179.78	599.84	-6.98	0.03	2.76	2.00	2.00	0.00
700.00	6.00	179.78	699.45	-15.69	0.06	6.21	2.00	2.00	0.00
800.00	8.00	179.78	798.70	-27.88	0.10	11.04	2.00	2.00	0.00
900.00	10.00	179.78	897.47	-43.52	0.16	17.23	2.00	2.00	0.00
1,000.00	12.00	179.78	995.62	-62.60	0.24	24.78	2.00	2.00	0.00
1,100.00	14.00	179.78	1,093.06	-85.10	0.32	33.69	2.00	2.00	0.00
1,200.00	16.00	179.78	1,189.64	-110.98	0.42	43.93	2.00	2.00	0.00
1,300.00	18.00	179.78	1,285.27	-140.21	0.53	55.50	2.00	2.00	0.00
1,400.00	20.00	179.78	1,379.82	-172.77	0.65	68.39	2.00	2.00	0.00
1,500.00	22.00	179.78	1,473.17	-208.60	0.78	82.58	2.00	2.00	0.00
1,600.00	24.00	179.78	1,565.21	-247.67	0.93	98.04	2.00	2.00	0.00
1,700.00	26.00	179.78	1,655.84	-289.93	1.09	114.77	2.00	2.00	0.00
1,800.00	28.00	179.78	1,744.94	-335.33	1.26	132.74	2.00	2.00	0.00
1,900.00	30.00	179.78	1,832.39	-383.81	1.44	151.93	2.00	2.00	0.00
2,000.00	32.00	179.78	1,918.11	-435.31	1.64	172.32	2.00	2.00	0.00
2,094.07	33.88	179.78	1,997.05	-486.46	1.83	192.57	2.00	2.00	0.00
Start 4348.27 hold at 2094.07 MD									
2,100.00	33.88	179.78	2,001.97	-489.76	1.84	193.88	0.00	0.00	0.00
2,200.00	33.88	179.78	2,084.99	-545.51	2.05	215.95	0.00	0.00	0.00
2,300.00	33.88	179.78	2,168.01	-601.26	2.26	238.01	0.00	0.00	0.00
2,400.00	33.88	179.78	2,251.03	-657.01	2.47	260.08	0.00	0.00	0.00
2,500.00	33.88	179.78	2,334.05	-712.75	2.68	282.15	0.00	0.00	0.00
2,600.00	33.88	179.78	2,417.07	-768.50	2.89	304.22	0.00	0.00	0.00
2,700.00	33.88	179.78	2,500.09	-824.25	3.10	326.29	0.00	0.00	0.00
2,800.00	33.88	179.78	2,583.11	-879.99	3.31	348.35	0.00	0.00	0.00
2,900.00	33.88	179.78	2,666.13	-935.74	3.52	370.42	0.00	0.00	0.00
3,000.00	33.88	179.78	2,749.15	-991.49	3.73	392.49	0.00	0.00	0.00
3,100.00	33.88	179.78	2,832.17	-1,047.24	3.94	414.56	0.00	0.00	0.00
3,200.00	33.88	179.78	2,915.19	-1,102.98	4.15	436.63	0.00	0.00	0.00
3,300.00	33.88	179.78	2,998.20	-1,158.73	4.36	458.70	0.00	0.00	0.00
3,400.00	33.88	179.78	3,081.22	-1,214.48	4.57	480.76	0.00	0.00	0.00
3,500.00	33.88	179.78	3,164.24	-1,270.22	4.78	502.83	0.00	0.00	0.00
3,600.00	33.88	179.78	3,247.26	-1,325.97	4.98	524.90	0.00	0.00	0.00
3,700.00	33.88	179.78	3,330.28	-1,381.72	5.19	546.97	0.00	0.00	0.00
3,800.00	33.88	179.78	3,413.30	-1,437.47	5.40	569.04	0.00	0.00	0.00
3,900.00	33.88	179.78	3,496.32	-1,493.21	5.61	591.10	0.00	0.00	0.00
4,000.00	33.88	179.78	3,579.34	-1,548.96	5.82	613.17	0.00	0.00	0.00
4,100.00	33.88	179.78	3,662.36	-1,604.71	6.03	635.24	0.00	0.00	0.00
4,200.00	33.88	179.78	3,745.38	-1,660.45	6.24	657.31	0.00	0.00	0.00
4,300.00	33.88	179.78	3,828.40	-1,716.20	6.45	679.38	0.00	0.00	0.00
4,400.00	33.88	179.78	3,911.42	-1,771.95	6.66	701.44	0.00	0.00	0.00
4,500.00	33.88	179.78	3,994.44	-1,827.70	6.87	723.51	0.00	0.00	0.00
4,600.00	33.88	179.78	4,077.46	-1,883.44	7.08	745.58	0.00	0.00	0.00
4,700.00	33.88	179.78	4,160.48	-1,939.19	7.29	767.65	0.00	0.00	0.00
4,800.00	33.88	179.78	4,243.49	-1,994.94	7.50	789.72	0.00	0.00	0.00
4,900.00	33.88	179.78	4,326.51	-2,050.68	7.71	811.78	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well COYOTE TRAILS 33W-15-8N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 25' @ 5269.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB 25' @ 5269.00usft
<b>Site:</b>	Sec 28-T1N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	COYOTE TRAILS 33W-15-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)
5,000.00	33.88	179.78	4,409.53	-2,106.43	7.92	833.85	0.00	0.00	0.00
5,036.70	33.88	179.78	4,440.00	-2,126.89	8.00	841.95	0.00	0.00	0.00
<b>PARKMAN</b>									
5,100.00	33.88	179.78	4,492.55	-2,162.18	8.13	855.92	0.00	0.00	0.00
5,200.00	33.88	179.78	4,575.57	-2,217.93	8.34	877.99	0.00	0.00	0.00
5,300.00	33.88	179.78	4,658.59	-2,273.67	8.55	900.06	0.00	0.00	0.00
5,400.00	33.88	179.78	4,741.61	-2,329.42	8.76	922.13	0.00	0.00	0.00
5,500.00	33.88	179.78	4,824.63	-2,385.17	8.97	944.19	0.00	0.00	0.00
5,600.00	33.88	179.78	4,907.65	-2,440.91	9.18	966.26	0.00	0.00	0.00
5,602.83	33.88	179.78	4,910.00	-2,442.49	9.18	966.89	0.00	0.00	0.00
<b>SUSSEX</b>									
5,700.00	33.88	179.78	4,990.67	-2,496.66	9.39	988.33	0.00	0.00	0.00
5,800.00	33.88	179.78	5,073.69	-2,552.41	9.60	1,010.40	0.00	0.00	0.00
5,900.00	33.88	179.78	5,156.71	-2,608.16	9.80	1,032.47	0.00	0.00	0.00
6,000.00	33.88	179.78	5,239.73	-2,663.90	10.01	1,054.53	0.00	0.00	0.00
6,100.00	33.88	179.78	5,322.75	-2,719.65	10.22	1,076.60	0.00	0.00	0.00
6,200.00	33.88	179.78	5,405.77	-2,775.40	10.43	1,098.67	0.00	0.00	0.00
6,300.00	33.88	179.78	5,488.78	-2,831.14	10.64	1,120.74	0.00	0.00	0.00
6,400.00	33.88	179.78	5,571.80	-2,886.89	10.85	1,142.81	0.00	0.00	0.00
6,442.34	33.88	179.78	5,606.95	-2,910.49	10.94	1,152.15	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
6,500.00	32.73	179.78	5,655.14	-2,942.15	11.06	1,164.68	2.00	-2.00	0.00
6,600.00	30.73	179.78	5,740.19	-2,994.74	11.26	1,185.50	2.00	-2.00	0.00
6,700.00	28.73	179.78	5,827.03	-3,044.33	11.44	1,205.13	2.00	-2.00	0.00
6,800.00	26.73	179.78	5,915.54	-3,090.85	11.62	1,223.55	2.00	-2.00	0.00
6,900.00	24.73	179.78	6,005.62	-3,134.26	11.78	1,240.73	2.00	-2.00	0.00
7,000.00	22.73	179.78	6,097.16	-3,174.50	11.93	1,256.66	2.00	-2.00	0.00
7,100.00	20.73	179.78	6,190.06	-3,211.51	12.07	1,271.31	2.00	-2.00	0.00
7,200.00	18.73	179.78	6,284.18	-3,245.27	12.20	1,284.67	2.00	-2.00	0.00
7,300.00	16.73	179.78	6,379.43	-3,275.72	12.31	1,296.73	2.00	-2.00	0.00
7,400.00	14.73	179.78	6,475.68	-3,302.82	12.42	1,307.46	2.00	-2.00	0.00
7,500.00	12.73	179.78	6,572.82	-3,326.55	12.51	1,316.85	2.00	-2.00	0.00
7,600.00	10.73	179.78	6,670.72	-3,346.88	12.58	1,324.90	2.00	-2.00	0.00
7,700.00	8.73	179.78	6,769.28	-3,363.77	12.65	1,331.59	2.00	-2.00	0.00
7,800.00	6.73	179.78	6,868.37	-3,377.22	12.70	1,336.91	2.00	-2.00	0.00
7,900.00	4.73	179.78	6,967.86	-3,387.20	12.73	1,340.86	2.00	-2.00	0.00
8,000.00	2.73	179.78	7,067.65	-3,393.70	12.76	1,343.43	2.00	-2.00	0.00
8,100.00	0.73	179.78	7,167.60	-3,396.72	12.77	1,344.63	2.00	-2.00	0.00
8,136.41	0.00	0.00	7,204.00	-3,396.95	12.77	1,344.72	2.00	-2.00	0.00
<b>Start 30.00 hold at 8136.40 MD</b>									
8,166.41	0.00	0.00	7,234.00	-3,396.95	12.77	1,344.72	0.00	0.00	0.00
<b>Start DLS 10.00 TFO 269.90</b>									
8,200.00	3.36	269.90	7,267.58	-3,396.95	11.79	1,345.62	10.00	10.00	0.00
8,250.00	8.36	269.90	7,317.30	-3,396.96	6.68	1,350.30	10.00	10.00	0.00
8,300.00	13.36	269.90	7,366.39	-3,396.98	-2.73	1,358.94	10.00	10.00	0.00
8,350.00	18.36	269.90	7,414.47	-3,397.00	-16.39	1,371.47	10.00	10.00	0.00
8,400.00	23.36	269.90	7,461.18	-3,397.03	-34.19	1,387.80	10.00	10.00	0.00
8,450.00	28.36	269.90	7,506.16	-3,397.07	-55.99	1,407.80	10.00	10.00	0.00
8,500.00	33.36	269.90	7,549.07	-3,397.11	-81.63	1,431.33	10.00	10.00	0.00
8,550.00	38.36	269.90	7,589.58	-3,397.16	-110.90	1,458.19	10.00	10.00	0.00
8,576.54	41.01	269.90	7,610.00	-3,397.19	-127.85	1,473.74	10.00	10.00	0.00
<b>SHARON SPRINGS</b>									
8,600.00	43.36	269.90	7,627.38	-3,397.22	-143.60	1,488.19	10.00	10.00	0.00

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well COYOTE TRAILS 33W-15-8N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 25' @ 5269.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB 25' @ 5269.00usft
<b>Site:</b>	Sec 28-T1N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	COYOTE TRAILS 33W-15-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)
8,631.96	46.55	269.90	7,650.00	-3,397.26	-166.18	1,508.91	10.00	10.00	0.00
<b>NIOBRARA</b>									
8,650.00	48.36	269.90	7,662.20	-3,397.28	-179.47	1,521.10	10.00	10.00	0.00
8,700.00	53.36	269.90	7,693.75	-3,397.35	-218.24	1,556.67	10.00	10.00	0.00
8,750.00	58.36	269.90	7,721.80	-3,397.42	-259.60	1,594.62	10.00	10.00	0.00
8,800.00	63.35	269.90	7,746.15	-3,397.49	-303.26	1,634.68	10.00	10.00	0.00
8,850.00	68.35	269.90	7,766.59	-3,397.57	-348.87	1,676.52	10.00	10.00	0.00
8,900.00	73.35	269.90	7,782.99	-3,397.65	-396.09	1,719.85	10.00	10.00	0.00
8,950.00	78.35	269.90	7,795.20	-3,397.73	-444.56	1,764.32	10.00	10.00	0.00
8,959.26	79.28	269.90	7,797.00	-3,397.75	-453.65	1,772.66	10.00	10.00	0.00
<b>NIO B</b>									
9,000.00	83.35	269.90	7,803.15	-3,397.82	-493.91	1,809.59	10.00	10.00	0.00
9,050.00	88.35	269.90	7,806.76	-3,397.90	-543.76	1,855.34	10.00	10.00	0.00
9,066.48	90.00	269.90	7,807.00	-3,397.93	-560.24	1,870.45	10.00	10.00	0.00
<b>Start 7270.46 hold at 9066.48 MD</b>									
9,100.00	90.00	269.90	7,807.00	-3,397.99	-593.76	1,901.21	0.00	0.00	0.00
9,200.00	90.00	269.90	7,807.00	-3,398.16	-693.76	1,992.96	0.00	0.00	0.00
9,300.00	90.00	269.90	7,807.00	-3,398.33	-793.76	2,084.71	0.00	0.00	0.00
9,400.00	90.00	269.90	7,807.00	-3,398.50	-893.76	2,176.46	0.00	0.00	0.00
9,500.00	90.00	269.90	7,807.00	-3,398.68	-993.76	2,268.21	0.00	0.00	0.00
9,600.00	90.00	269.90	7,806.99	-3,398.85	-1,093.76	2,359.96	0.00	0.00	0.00
9,700.00	90.00	269.90	7,806.99	-3,399.02	-1,193.76	2,451.71	0.00	0.00	0.00
9,800.00	90.00	269.90	7,806.99	-3,399.19	-1,293.76	2,543.46	0.00	0.00	0.00
9,900.00	90.00	269.90	7,806.99	-3,399.36	-1,393.76	2,635.21	0.00	0.00	0.00
10,000.00	90.00	269.90	7,806.99	-3,399.53	-1,493.76	2,726.96	0.00	0.00	0.00
10,100.00	90.00	269.90	7,806.99	-3,399.70	-1,593.76	2,818.71	0.00	0.00	0.00
10,200.00	90.00	269.90	7,806.99	-3,399.88	-1,693.76	2,910.46	0.00	0.00	0.00
10,300.00	90.00	269.90	7,806.99	-3,400.05	-1,793.76	3,002.21	0.00	0.00	0.00
10,400.00	90.00	269.90	7,806.99	-3,400.22	-1,893.76	3,093.96	0.00	0.00	0.00
10,500.00	90.00	269.90	7,806.99	-3,400.39	-1,993.76	3,185.71	0.00	0.00	0.00
10,600.00	90.00	269.90	7,806.98	-3,400.56	-2,093.76	3,277.46	0.00	0.00	0.00
10,700.00	90.00	269.90	7,806.98	-3,400.73	-2,193.76	3,369.21	0.00	0.00	0.00
10,800.00	90.00	269.90	7,806.98	-3,400.90	-2,293.76	3,460.96	0.00	0.00	0.00
10,900.00	90.00	269.90	7,806.98	-3,401.08	-2,393.76	3,552.71	0.00	0.00	0.00
11,000.00	90.00	269.90	7,806.98	-3,401.25	-2,493.76	3,644.46	0.00	0.00	0.00
11,100.00	90.00	269.90	7,806.98	-3,401.42	-2,593.75	3,736.21	0.00	0.00	0.00
11,200.00	90.00	269.90	7,806.98	-3,401.59	-2,693.75	3,827.96	0.00	0.00	0.00
11,300.00	90.00	269.90	7,806.98	-3,401.76	-2,793.75	3,919.71	0.00	0.00	0.00
11,400.00	90.00	269.90	7,806.98	-3,401.93	-2,893.75	4,011.46	0.00	0.00	0.00
11,500.00	90.00	269.90	7,806.98	-3,402.10	-2,993.75	4,103.21	0.00	0.00	0.00
11,600.00	90.00	269.90	7,806.97	-3,402.28	-3,093.75	4,194.96	0.00	0.00	0.00
11,700.00	90.00	269.90	7,806.97	-3,402.45	-3,193.75	4,286.71	0.00	0.00	0.00
11,800.00	90.00	269.90	7,806.97	-3,402.62	-3,293.75	4,378.46	0.00	0.00	0.00
11,900.00	90.00	269.90	7,806.97	-3,402.79	-3,393.75	4,470.21	0.00	0.00	0.00
12,000.00	90.00	269.90	7,806.97	-3,402.96	-3,493.75	4,561.96	0.00	0.00	0.00
12,100.00	90.00	269.90	7,806.97	-3,403.13	-3,593.75	4,653.71	0.00	0.00	0.00
12,200.00	90.00	269.90	7,806.97	-3,403.30	-3,693.75	4,745.46	0.00	0.00	0.00
12,300.00	90.00	269.90	7,806.97	-3,403.48	-3,793.75	4,837.21	0.00	0.00	0.00
12,400.00	90.00	269.90	7,806.97	-3,403.65	-3,893.75	4,928.96	0.00	0.00	0.00
12,500.00	90.00	269.90	7,806.97	-3,403.82	-3,993.75	5,020.71	0.00	0.00	0.00
12,600.00	90.00	269.90	7,806.96	-3,403.99	-4,093.75	5,112.46	0.00	0.00	0.00
12,700.00	90.00	269.90	7,806.96	-3,404.16	-4,193.75	5,204.21	0.00	0.00	0.00
12,800.00	90.00	269.90	7,806.96	-3,404.33	-4,293.75	5,295.96	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well COYOTE TRAILS 33W-15-8N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 25' @ 5269.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB 25' @ 5269.00usft
<b>Site:</b>	Sec 28-T1N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	COYOTE TRAILS 33W-15-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)	
12,900.00	90.00	269.90	7,806.96	-3,404.50	-4,393.75	5,387.71	0.00	0.00	0.00	
13,000.00	90.00	269.90	7,806.96	-3,404.68	-4,493.75	5,479.46	0.00	0.00	0.00	
13,100.00	90.00	269.90	7,806.96	-3,404.85	-4,593.75	5,571.21	0.00	0.00	0.00	
13,200.00	90.00	269.90	7,806.96	-3,405.02	-4,693.75	5,662.96	0.00	0.00	0.00	
13,300.00	90.00	269.90	7,806.96	-3,405.19	-4,793.75	5,754.71	0.00	0.00	0.00	
13,400.00	90.00	269.90	7,806.96	-3,405.36	-4,893.75	5,846.46	0.00	0.00	0.00	
13,500.00	90.00	269.90	7,806.96	-3,405.53	-4,993.75	5,938.21	0.00	0.00	0.00	
13,600.00	90.00	269.90	7,806.95	-3,405.70	-5,093.75	6,029.96	0.00	0.00	0.00	
13,700.00	90.00	269.90	7,806.95	-3,405.88	-5,193.75	6,121.71	0.00	0.00	0.00	
13,800.00	90.00	269.90	7,806.95	-3,406.05	-5,293.75	6,213.46	0.00	0.00	0.00	
13,900.00	90.00	269.90	7,806.95	-3,406.22	-5,393.75	6,305.21	0.00	0.00	0.00	
14,000.00	90.00	269.90	7,806.95	-3,406.39	-5,493.75	6,396.96	0.00	0.00	0.00	
14,100.00	90.00	269.90	7,806.95	-3,406.56	-5,593.75	6,488.71	0.00	0.00	0.00	
14,200.00	90.00	269.90	7,806.95	-3,406.73	-5,693.75	6,580.46	0.00	0.00	0.00	
14,300.00	90.00	269.90	7,806.95	-3,406.90	-5,793.75	6,672.21	0.00	0.00	0.00	
14,400.00	90.00	269.90	7,806.95	-3,407.08	-5,893.75	6,763.96	0.00	0.00	0.00	
14,500.00	90.00	269.90	7,806.94	-3,407.25	-5,993.75	6,855.71	0.00	0.00	0.00	
14,600.00	90.00	269.90	7,806.94	-3,407.42	-6,093.75	6,947.46	0.00	0.00	0.00	
14,700.00	90.00	269.90	7,806.94	-3,407.59	-6,193.75	7,039.21	0.00	0.00	0.00	
14,800.00	90.00	269.90	7,806.94	-3,407.76	-6,293.75	7,130.96	0.00	0.00	0.00	
14,900.00	90.00	269.90	7,806.94	-3,407.93	-6,393.75	7,222.71	0.00	0.00	0.00	
15,000.00	90.00	269.90	7,806.94	-3,408.10	-6,493.75	7,314.46	0.00	0.00	0.00	
15,100.00	90.00	269.90	7,806.94	-3,408.28	-6,593.75	7,406.21	0.00	0.00	0.00	
15,200.00	90.00	269.90	7,806.94	-3,408.45	-6,693.75	7,497.96	0.00	0.00	0.00	
15,300.00	90.00	269.90	7,806.94	-3,408.62	-6,793.75	7,589.71	0.00	0.00	0.00	
15,400.00	90.00	269.90	7,806.94	-3,408.79	-6,893.75	7,681.46	0.00	0.00	0.00	
15,500.00	90.00	269.90	7,806.93	-3,408.96	-6,993.75	7,773.21	0.00	0.00	0.00	
15,600.00	90.00	269.90	7,806.93	-3,409.13	-7,093.75	7,864.96	0.00	0.00	0.00	
15,700.00	90.00	269.90	7,806.93	-3,409.30	-7,193.75	7,956.71	0.00	0.00	0.00	
15,800.00	90.00	269.90	7,806.93	-3,409.48	-7,293.75	8,048.46	0.00	0.00	0.00	
15,900.00	90.00	269.90	7,806.93	-3,409.65	-7,393.75	8,140.21	0.00	0.00	0.00	
16,000.00	90.00	269.90	7,806.93	-3,409.82	-7,493.75	8,231.96	0.00	0.00	0.00	
16,100.00	90.00	269.90	7,806.93	-3,409.99	-7,593.75	8,323.71	0.00	0.00	0.00	
16,200.00	90.00	269.90	7,806.93	-3,410.16	-7,693.75	8,415.46	0.00	0.00	0.00	
16,300.00	90.00	269.90	7,806.93	-3,410.33	-7,793.75	8,507.21	0.00	0.00	0.00	
16,336.94	90.00	269.90	7,806.93	-3,410.40	-7,830.69	8,541.11	0.00	0.00	0.00	
TD at 16336.94										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
CT 33W-8N PBHL - hit/miss target - Shape - Point	0.00	0.00	7,807.00	-3,410.55	-7,830.69	1,246,374.77	3,130,206.21	40° 0' 31.493 N	105° 2' 6.616 W	
- plan misses target center by 0.17usft at 16336.94usft MD (7806.93 TVD, -3410.40 N, -7830.69 E)										
CT 33W-8N LP - plan hits target center - Point	0.00	0.00	7,807.00	-3,397.93	-560.24	1,246,427.78	3,137,476.48	40° 0' 31.630 N	105° 0' 33.178 W	

## Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well COYOTE TRAILS 33W-15-8N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 25' @ 5269.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB 25' @ 5269.00usft
<b>Site:</b>	Sec 28-T1N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	COYOTE TRAILS 33W-15-8N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL 1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
5,036.70	4,440.00	PARKMAN				
5,602.83	4,910.00	SUSSEX				
8,576.54	7,610.00	SHARON SPRINGS				
8,631.96	7,650.00	NIOBRARA				
8,959.26	7,797.00	NIO B				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
400.00	400.00	0.00	0.00	Start Build 2.00	
2,094.07	1,997.05	-486.46	1.83	Start 4348.27 hold at 2094.07 MD	
6,442.34	5,606.95	-2,910.49	10.94	Start Drop -2.00	
8,136.41	7,204.00	-3,396.95	12.77	Start 30.00 hold at 8136.40 MD	
8,166.41	7,234.00	-3,396.95	12.77	Start DLS 10.00 TFO 269.90	
9,066.48	7,807.00	-3,397.93	-560.24	Start 7270.46 hold at 9066.48 MD	
16,336.94	7,806.93	-3,410.40	-7,830.69	TD at 16336.94	