

# **EXTRACTION OIL & GAS**

**Weld County**

**Sec 28-T1N-R68W**

**COYOTE TRAILS 34S-20-11C**

**ORIGINAL WELLBORE**

**Plan: PROPOSAL 1**

## **Standard Planning Report**

**10 August, 2017**



Project: Weld County  
Site: Sec 28-T1N-R68W  
Well: COYOTE TRAILS 34S-20-11C  
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 34S-20-11C

+N/-S	+E/-W	Northing	Easting	5244.00	Latitude	Longitude	Slot
0.00	0.00	1249743.73	3138179.85		40° 1' 4.361 N	105° 0' 23.901 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	600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	
3	1994.77	27.90	110.05	1940.32	-114.11	312.71	2.00	110.05	184.89	
4	6650.07	27.90	110.05	6054.68	-860.70	2358.79	0.00	0.00	1394.62	
5	8044.84	0.00	0.00	7395.00	-974.81	2671.50	2.00	180.00	1579.51	
6	8144.84	0.00	0.00	7495.00	-974.81	2671.50	0.00	0.00	1579.51	
7	9044.92	90.00	179.65	8068.00	-1547.81	2674.97	10.00	179.65	2137.04	CT 34S-20-11C LP
8	18716.07	90.00	179.65	8068.00	-11218.78	2733.42	0.00	0.00	11546.97	CT 34S-20-11C PBHL

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4440.00	4823.10	PARKMAN
4910.00	5354.89	SUSSEX
7610.00	8260.63	SHARON SPRINGS
7650.00	8301.80	NIOBRARA
7797.00	8462.93	NIO B
8048.00	8893.07	FORT HAYS
8068.00	9044.92	CODELL

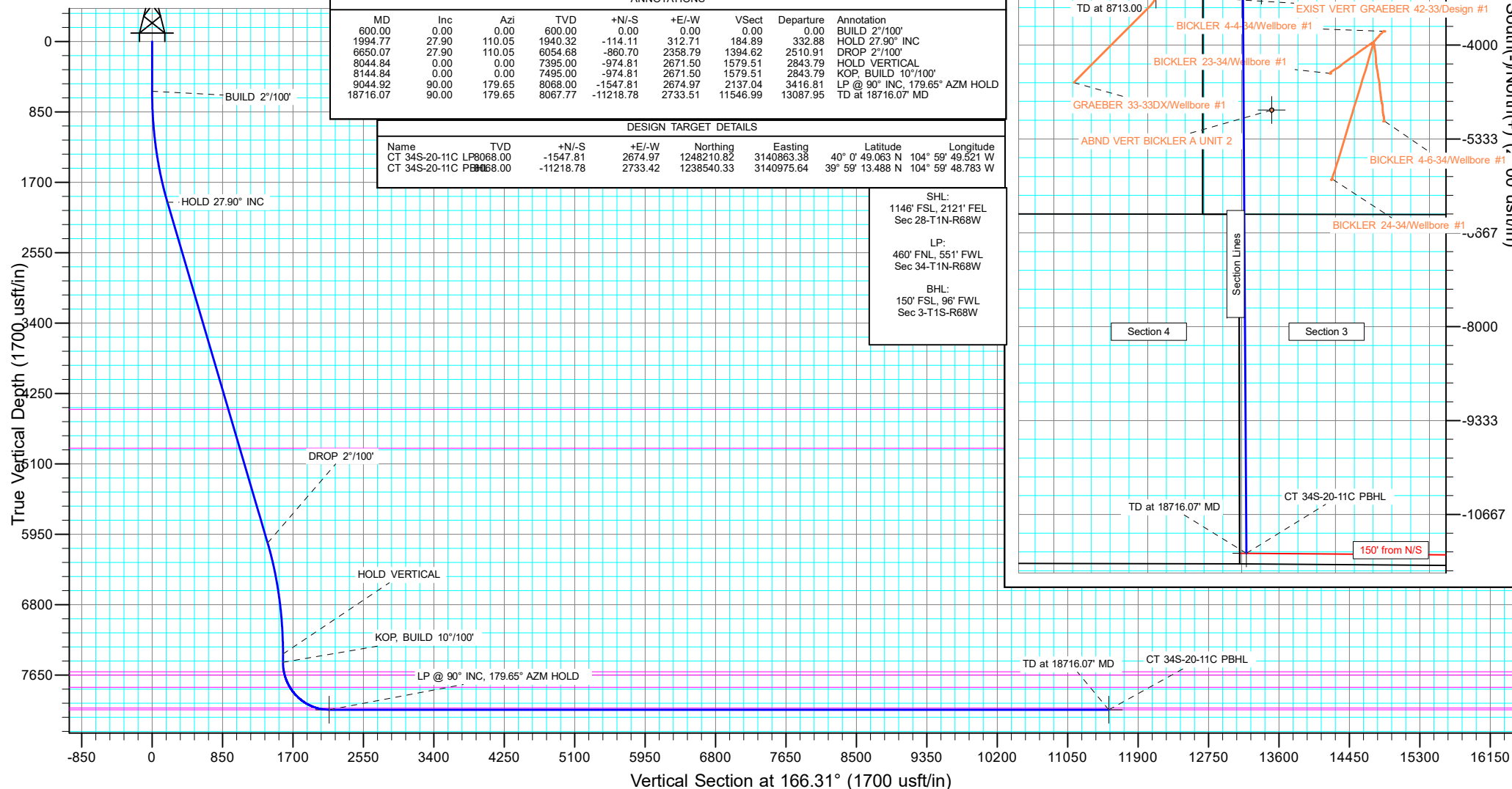
ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	BUILD 2°/100'
1994.77	27.90	110.05	1940.32	-114.11	312.71	184.89	332.88	HOLD 27.90° INC
6650.07	27.90	110.05	6054.68	-860.70	2358.79	1394.62	2510.91	DROP 2°/100'
8044.84	0.00	0.00	7395.00	-974.81	2671.50	1579.51	2843.79	HOLD VERTICAL
8144.84	0.00	0.00	7495.00	-974.81	2671.50	1579.51	2843.79	KOP, BUILD 10°/100'
9044.92	90.00	179.65	8068.00	-1547.81	2674.97	2137.04	3416.81	LP @ 90° INC, 179.65° AZM HOLD
18716.07	90.00	179.65	8067.77	-11218.78	2733.51	11546.99	13087.95	TD at 18716.07' MD

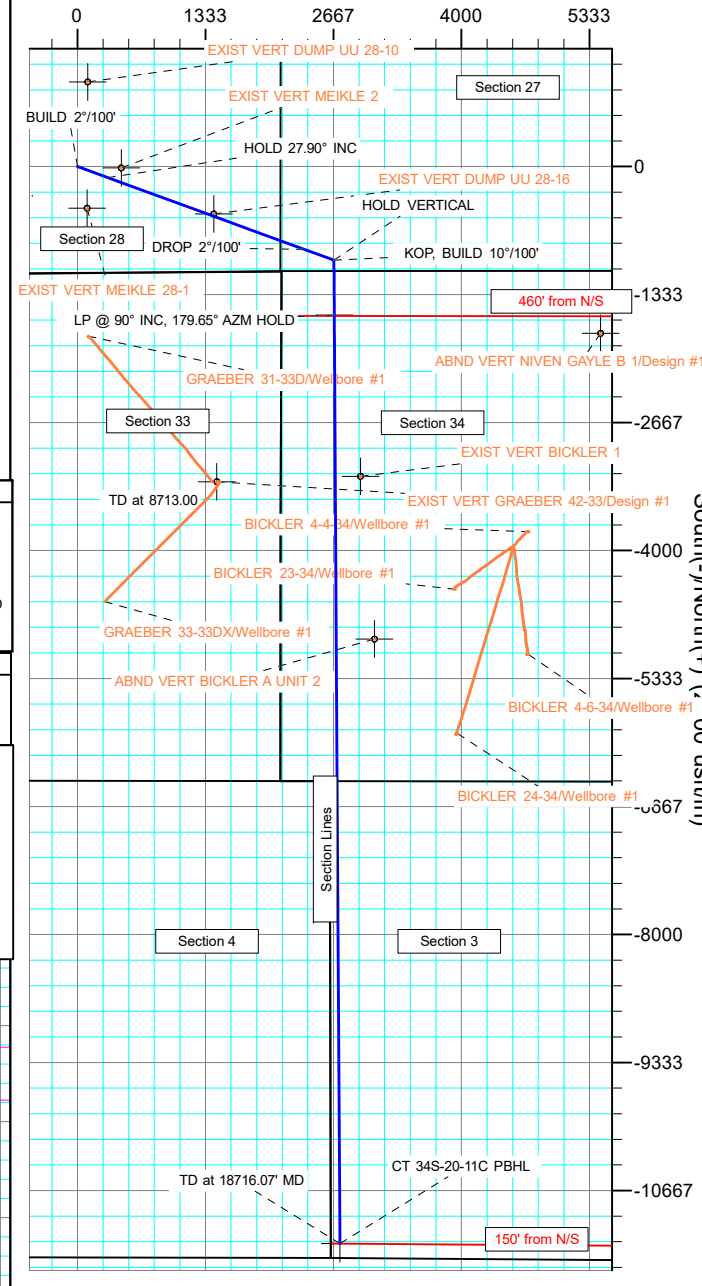
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
CT 34S-20-11C LP	8068.00	-1547.81	2674.97	1248210.82	3140863.38	40° 0' 49.063 N	104° 59' 49.521 W
CT 34S-20-11C PBHL	8068.00	-11218.78	2733.42	1238540.33	3140975.64	39° 59' 13.488 N	104° 59' 48.783 W

SHL:  
1146' FSL, 2121' FEL  
Sec 28-T1N-R68W  
  
LP:  
460' FNL, 551' FWL  
Sec 34-T1N-R68W  
  
BHL:  
150' FSL, 96' FWL  
Sec 3-T1S-R68W



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



## Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well COYOTE TRAILS 34S-20-11C
<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 34S-20-11C	<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 34S-20-11C				
Well Position	+N/-S	1,095.47 usft	Northing:	1,249,743.73 usft	Latitude:	40° 1' 4.361 N
	+E/-W	-2,113.83 usft	Easting:	3,138,179.85 usft	Longitude:	105° 0' 23.901 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	8.31	66.51	52,202.34212137

<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	166.31

<b>Plan Survey Tool Program</b>	<b>Date</b>	8/10/2017		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	18,716.07	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	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,994.77	27.90	110.05	1,940.32	-114.11	312.71	2.00	2.00	0.00	110.05	
6,650.07	27.90	110.05	6,054.68	-860.70	2,358.79	0.00	0.00	0.00	0.00	
8,044.84	0.00	0.00	7,395.00	-974.81	2,671.50	2.00	-2.00	0.00	180.00	
8,144.84	0.00	0.00	7,495.00	-974.81	2,671.50	0.00	0.00	0.00	0.00	
9,044.92	90.00	179.65	8,068.00	-1,547.81	2,674.97	10.00	10.00	19.96	179.65	CT 34S-20-11C LP
18,716.07	90.00	179.65	8,068.00	-11,218.78	2,733.42	0.00	0.00	0.00	0.00	CT 34S-20-11C PBHL

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well COYOTE TRAILS 34S-20-11C
<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 34S-20-11C	<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
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
BUILD 2°/100'									
700.00	2.00	110.05	699.98	-0.60	1.64	0.97	2.00	2.00	0.00
800.00	4.00	110.05	799.84	-2.39	6.56	3.88	2.00	2.00	0.00
900.00	6.00	110.05	899.45	-5.38	14.74	8.72	2.00	2.00	0.00
1,000.00	8.00	110.05	998.70	-9.56	26.19	15.49	2.00	2.00	0.00
1,100.00	10.00	110.05	1,097.47	-14.92	40.89	24.17	2.00	2.00	0.00
1,200.00	12.00	110.05	1,195.62	-21.46	58.81	34.77	2.00	2.00	0.00
1,300.00	14.00	110.05	1,293.06	-29.17	79.94	47.26	2.00	2.00	0.00
1,400.00	16.00	110.05	1,389.64	-38.04	104.25	61.64	2.00	2.00	0.00
1,500.00	18.00	110.05	1,485.27	-48.06	131.72	77.88	2.00	2.00	0.00
1,600.00	20.00	110.05	1,579.82	-59.22	162.30	95.96	2.00	2.00	0.00
1,700.00	22.00	110.05	1,673.17	-71.51	195.96	115.86	2.00	2.00	0.00
1,800.00	24.00	110.05	1,765.21	-84.90	232.67	137.56	2.00	2.00	0.00
1,900.00	26.00	110.05	1,855.84	-99.39	272.37	161.04	2.00	2.00	0.00
1,994.77	27.90	110.05	1,940.32	-114.11	312.71	184.89	2.00	2.00	0.00
HOLD 27.90° INC									
2,000.00	27.90	110.05	1,944.94	-114.95	315.01	186.25	0.00	0.00	0.00
2,100.00	27.90	110.05	2,033.32	-130.98	358.96	212.23	0.00	0.00	0.00
2,200.00	27.90	110.05	2,121.70	-147.02	402.91	238.22	0.00	0.00	0.00
2,300.00	27.90	110.05	2,210.08	-163.06	446.87	264.21	0.00	0.00	0.00
2,400.00	27.90	110.05	2,298.46	-179.10	490.82	290.19	0.00	0.00	0.00
2,500.00	27.90	110.05	2,386.84	-195.13	534.77	316.18	0.00	0.00	0.00
2,600.00	27.90	110.05	2,475.22	-211.17	578.72	342.16	0.00	0.00	0.00
2,700.00	27.90	110.05	2,563.60	-227.21	622.67	368.15	0.00	0.00	0.00
2,800.00	27.90	110.05	2,651.98	-243.25	666.62	394.14	0.00	0.00	0.00
2,900.00	27.90	110.05	2,740.36	-259.28	710.57	420.12	0.00	0.00	0.00
3,000.00	27.90	110.05	2,828.74	-275.32	754.53	446.11	0.00	0.00	0.00
3,100.00	27.90	110.05	2,917.12	-291.36	798.48	472.09	0.00	0.00	0.00
3,200.00	27.90	110.05	3,005.50	-307.40	842.43	498.08	0.00	0.00	0.00
3,300.00	27.90	110.05	3,093.88	-323.43	886.38	524.07	0.00	0.00	0.00
3,400.00	27.90	110.05	3,182.26	-339.47	930.33	550.05	0.00	0.00	0.00
3,500.00	27.90	110.05	3,270.64	-355.51	974.28	576.04	0.00	0.00	0.00
3,600.00	27.90	110.05	3,359.02	-371.55	1,018.23	602.02	0.00	0.00	0.00
3,700.00	27.90	110.05	3,447.40	-387.58	1,062.19	628.01	0.00	0.00	0.00
3,800.00	27.90	110.05	3,535.78	-403.62	1,106.14	654.00	0.00	0.00	0.00
3,900.00	27.90	110.05	3,624.16	-419.66	1,150.09	679.98	0.00	0.00	0.00
4,000.00	27.90	110.05	3,712.54	-435.70	1,194.04	705.97	0.00	0.00	0.00
4,100.00	27.90	110.05	3,800.92	-451.73	1,237.99	731.95	0.00	0.00	0.00
4,200.00	27.90	110.05	3,889.30	-467.77	1,281.94	757.94	0.00	0.00	0.00
4,300.00	27.90	110.05	3,977.68	-483.81	1,325.90	783.93	0.00	0.00	0.00
4,400.00	27.90	110.05	4,066.06	-499.85	1,369.85	809.91	0.00	0.00	0.00
4,500.00	27.90	110.05	4,154.44	-515.88	1,413.80	835.90	0.00	0.00	0.00
4,600.00	27.90	110.05	4,242.82	-531.92	1,457.75	861.88	0.00	0.00	0.00
4,700.00	27.90	110.05	4,331.20	-547.96	1,501.70	887.87	0.00	0.00	0.00
4,800.00	27.90	110.05	4,419.58	-564.00	1,545.65	913.86	0.00	0.00	0.00
4,823.10	27.90	110.05	4,440.00	-567.70	1,555.81	919.86	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well COYOTE TRAILS 34S-20-11C
<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 34S-20-11C	<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)
<b>PARKMAN</b>									
4,900.00	27.90	110.05	4,507.97	-580.03	1,589.60	939.84	0.00	0.00	0.00
5,000.00	27.90	110.05	4,596.35	-596.07	1,633.56	965.83	0.00	0.00	0.00
5,100.00	27.90	110.05	4,684.73	-612.11	1,677.51	991.82	0.00	0.00	0.00
5,200.00	27.90	110.05	4,773.11	-628.15	1,721.46	1,017.80	0.00	0.00	0.00
5,300.00	27.90	110.05	4,861.49	-644.18	1,765.41	1,043.79	0.00	0.00	0.00
5,354.89	27.90	110.05	4,910.00	-652.99	1,789.54	1,058.05	0.00	0.00	0.00
<b>SUSSEX</b>									
5,400.00	27.90	110.05	4,949.87	-660.22	1,809.36	1,069.77	0.00	0.00	0.00
5,500.00	27.90	110.05	5,038.25	-676.26	1,853.31	1,095.76	0.00	0.00	0.00
5,600.00	27.90	110.05	5,126.63	-692.30	1,897.27	1,121.75	0.00	0.00	0.00
5,700.00	27.90	110.05	5,215.01	-708.34	1,941.22	1,147.73	0.00	0.00	0.00
5,800.00	27.90	110.05	5,303.39	-724.37	1,985.17	1,173.72	0.00	0.00	0.00
5,900.00	27.90	110.05	5,391.77	-740.41	2,029.12	1,199.70	0.00	0.00	0.00
6,000.00	27.90	110.05	5,480.15	-756.45	2,073.07	1,225.69	0.00	0.00	0.00
6,100.00	27.90	110.05	5,568.53	-772.49	2,117.02	1,251.68	0.00	0.00	0.00
6,200.00	27.90	110.05	5,656.91	-788.52	2,160.97	1,277.66	0.00	0.00	0.00
6,300.00	27.90	110.05	5,745.29	-804.56	2,204.93	1,303.65	0.00	0.00	0.00
6,400.00	27.90	110.05	5,833.67	-820.60	2,248.88	1,329.63	0.00	0.00	0.00
6,500.00	27.90	110.05	5,922.05	-836.64	2,292.83	1,355.62	0.00	0.00	0.00
6,600.00	27.90	110.05	6,010.43	-852.67	2,336.78	1,381.61	0.00	0.00	0.00
6,650.07	27.90	110.05	6,054.68	-860.70	2,358.79	1,394.62	0.00	0.00	0.00
<b>DROP 2°/100'</b>									
6,700.00	26.90	110.05	6,099.01	-868.58	2,380.37	1,407.38	2.00	-2.00	0.00
6,800.00	24.90	110.05	6,188.96	-883.55	2,421.40	1,431.63	2.00	-2.00	0.00
6,900.00	22.90	110.05	6,280.39	-897.43	2,459.45	1,454.13	2.00	-2.00	0.00
7,000.00	20.90	110.05	6,373.17	-910.22	2,494.48	1,474.85	2.00	-2.00	0.00
7,100.00	18.90	110.05	6,467.19	-921.88	2,526.45	1,493.75	2.00	-2.00	0.00
7,200.00	16.90	110.05	6,562.35	-932.42	2,555.32	1,510.81	2.00	-2.00	0.00
7,300.00	14.90	110.05	6,658.52	-941.80	2,581.05	1,526.03	2.00	-2.00	0.00
7,400.00	12.90	110.05	6,755.59	-950.04	2,603.61	1,539.37	2.00	-2.00	0.00
7,500.00	10.90	110.05	6,853.44	-957.10	2,622.97	1,550.82	2.00	-2.00	0.00
7,600.00	8.90	110.05	6,951.94	-962.99	2,639.12	1,560.36	2.00	-2.00	0.00
7,700.00	6.90	110.05	7,050.99	-967.70	2,652.03	1,567.99	2.00	-2.00	0.00
7,800.00	4.90	110.05	7,150.46	-971.23	2,661.68	1,573.70	2.00	-2.00	0.00
7,900.00	2.90	110.05	7,250.22	-973.56	2,668.06	1,577.47	2.00	-2.00	0.00
8,000.00	0.90	110.05	7,350.16	-974.69	2,671.17	1,579.31	2.00	-2.00	0.00
8,044.84	0.00	0.00	7,395.00	-974.81	2,671.50	1,579.51	2.00	-2.00	0.00
<b>HOLD VERTICAL</b>									
8,100.00	0.00	0.00	7,450.16	-974.81	2,671.50	1,579.51	0.00	0.00	0.00
8,144.84	0.00	0.00	7,495.00	-974.81	2,671.50	1,579.51	0.00	0.00	0.00
<b>KOP, BUILD 10°/100'</b>									
8,150.00	0.52	179.65	7,500.16	-974.83	2,671.50	1,579.53	10.00	10.00	0.00
8,200.00	5.52	179.65	7,550.07	-977.46	2,671.52	1,582.09	10.00	10.00	0.00
8,250.00	10.51	179.65	7,599.57	-984.43	2,671.56	1,588.87	10.00	10.00	0.00
8,260.63	11.58	179.65	7,610.00	-986.47	2,671.57	1,590.85	10.00	10.00	0.00
<b>SHARON SPRINGS</b>									
8,300.00	15.51	179.65	7,648.27	-995.69	2,671.63	1,599.82	10.00	10.00	0.00
8,301.80	15.69	179.65	7,650.00	-996.17	2,671.63	1,600.29	10.00	10.00	0.00
<b>NIOBRARA</b>									
8,350.00	20.51	179.65	7,695.80	-1,011.15	2,671.72	1,614.86	10.00	10.00	0.00
8,400.00	25.51	179.65	7,741.81	-1,030.69	2,671.84	1,633.88	10.00	10.00	0.00
8,450.00	30.51	179.65	7,785.94	-1,054.16	2,671.98	1,656.72	10.00	10.00	0.00

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well COYOTE TRAILS 34S-20-11C
<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 34S-20-11C	<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)
8,462.93	31.81	179.65	7,797.00	-1,060.85	2,672.02	1,663.23	10.00	10.00	0.00
<b>NIO B</b>									
8,500.00	35.51	179.65	7,827.85	-1,081.40	2,672.15	1,683.22	10.00	10.00	0.00
8,550.00	40.51	179.65	7,867.23	-1,112.18	2,672.33	1,713.17	10.00	10.00	0.00
8,600.00	45.51	179.65	7,903.78	-1,146.27	2,672.54	1,746.34	10.00	10.00	0.00
8,650.00	50.51	179.65	7,937.22	-1,183.43	2,672.76	1,782.49	10.00	10.00	0.00
8,700.00	55.51	179.65	7,967.29	-1,223.35	2,673.00	1,821.34	10.00	10.00	0.00
8,750.00	60.51	179.65	7,993.77	-1,265.74	2,673.26	1,862.59	10.00	10.00	0.00
8,800.00	65.51	179.65	8,016.45	-1,310.28	2,673.53	1,905.93	10.00	10.00	0.00
8,850.00	70.51	179.65	8,035.17	-1,356.63	2,673.81	1,951.02	10.00	10.00	0.00
8,893.07	74.82	179.65	8,048.00	-1,397.74	2,674.06	1,991.02	10.00	10.00	0.00
<b>FORT HAYS</b>									
8,900.00	75.51	179.65	8,049.77	-1,404.43	2,674.10	1,997.53	10.00	10.00	0.00
8,950.00	80.51	179.65	8,060.16	-1,453.33	2,674.40	2,045.11	10.00	10.00	0.00
9,000.00	85.51	179.65	8,066.24	-1,502.94	2,674.70	2,093.38	10.00	10.00	0.00
9,044.92	90.00	179.65	8,068.00	-1,547.81	2,674.97	2,137.04	10.00	10.00	0.00
<b>LP @ 90° INC, 179.65° AZM HOLD - CODELL</b>									
9,100.00	90.00	179.65	8,068.00	-1,602.89	2,675.30	2,190.63	0.00	0.00	0.00
9,200.00	90.00	179.65	8,068.00	-1,702.89	2,675.91	2,287.93	0.00	0.00	0.00
9,300.00	90.00	179.65	8,067.99	-1,802.89	2,676.51	2,385.23	0.00	0.00	0.00
9,400.00	90.00	179.65	8,067.99	-1,902.88	2,677.12	2,482.53	0.00	0.00	0.00
9,500.00	90.00	179.65	8,067.99	-2,002.88	2,677.72	2,579.83	0.00	0.00	0.00
9,600.00	90.00	179.65	8,067.99	-2,102.88	2,678.33	2,677.13	0.00	0.00	0.00
9,700.00	90.00	179.65	8,067.98	-2,202.88	2,678.93	2,774.43	0.00	0.00	0.00
9,800.00	90.00	179.65	8,067.98	-2,302.88	2,679.54	2,871.73	0.00	0.00	0.00
9,900.00	90.00	179.65	8,067.98	-2,402.87	2,680.14	2,969.03	0.00	0.00	0.00
10,000.00	90.00	179.65	8,067.98	-2,502.87	2,680.75	3,066.33	0.00	0.00	0.00
10,100.00	90.00	179.65	8,067.98	-2,602.87	2,681.36	3,163.63	0.00	0.00	0.00
10,200.00	90.00	179.65	8,067.97	-2,702.87	2,681.96	3,260.93	0.00	0.00	0.00
10,300.00	90.00	179.65	8,067.97	-2,802.87	2,682.57	3,358.23	0.00	0.00	0.00
10,400.00	90.00	179.65	8,067.97	-2,902.87	2,683.17	3,455.52	0.00	0.00	0.00
10,500.00	90.00	179.65	8,067.97	-3,002.86	2,683.78	3,552.82	0.00	0.00	0.00
10,600.00	90.00	179.65	8,067.96	-3,102.86	2,684.38	3,650.12	0.00	0.00	0.00
10,700.00	90.00	179.65	8,067.96	-3,202.86	2,684.99	3,747.42	0.00	0.00	0.00
10,800.00	90.00	179.65	8,067.96	-3,302.86	2,685.59	3,844.72	0.00	0.00	0.00
10,900.00	90.00	179.65	8,067.96	-3,402.86	2,686.20	3,942.02	0.00	0.00	0.00
11,000.00	90.00	179.65	8,067.95	-3,502.85	2,686.80	4,039.32	0.00	0.00	0.00
11,100.00	90.00	179.65	8,067.95	-3,602.85	2,687.41	4,136.62	0.00	0.00	0.00
11,200.00	90.00	179.65	8,067.95	-3,702.85	2,688.01	4,233.92	0.00	0.00	0.00
11,300.00	90.00	179.65	8,067.95	-3,802.85	2,688.62	4,331.22	0.00	0.00	0.00
11,400.00	90.00	179.65	8,067.94	-3,902.85	2,689.22	4,428.52	0.00	0.00	0.00
11,500.00	90.00	179.65	8,067.94	-4,002.85	2,689.83	4,525.82	0.00	0.00	0.00
11,600.00	90.00	179.65	8,067.94	-4,102.84	2,690.43	4,623.12	0.00	0.00	0.00
11,700.00	90.00	179.65	8,067.94	-4,202.84	2,691.04	4,720.41	0.00	0.00	0.00
11,800.00	90.00	179.65	8,067.94	-4,302.84	2,691.65	4,817.71	0.00	0.00	0.00
11,900.00	90.00	179.65	8,067.93	-4,402.84	2,692.25	4,915.01	0.00	0.00	0.00
12,000.00	90.00	179.65	8,067.93	-4,502.84	2,692.86	5,012.31	0.00	0.00	0.00
12,100.00	90.00	179.65	8,067.93	-4,602.83	2,693.46	5,109.61	0.00	0.00	0.00
12,200.00	90.00	179.65	8,067.93	-4,702.83	2,694.07	5,206.91	0.00	0.00	0.00
12,300.00	90.00	179.65	8,067.92	-4,802.83	2,694.67	5,304.21	0.00	0.00	0.00
12,400.00	90.00	179.65	8,067.92	-4,902.83	2,695.28	5,401.51	0.00	0.00	0.00
12,500.00	90.00	179.65	8,067.92	-5,002.83	2,695.88	5,498.81	0.00	0.00	0.00
12,600.00	90.00	179.65	8,067.92	-5,102.83	2,696.49	5,596.11	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well COYOTE TRAILS 34S-20-11C
<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 34S-20-11C	<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)	
12,700.00	90.00	179.65	8,067.91	-5,202.82	2,697.09	5,693.41	0.00	0.00	0.00	
12,800.00	90.00	179.65	8,067.91	-5,302.82	2,697.70	5,790.71	0.00	0.00	0.00	
12,900.00	90.00	179.65	8,067.91	-5,402.82	2,698.30	5,888.01	0.00	0.00	0.00	
13,000.00	90.00	179.65	8,067.91	-5,502.82	2,698.91	5,985.30	0.00	0.00	0.00	
13,100.00	90.00	179.65	8,067.90	-5,602.82	2,699.51	6,082.60	0.00	0.00	0.00	
13,200.00	90.00	179.65	8,067.90	-5,702.81	2,700.12	6,179.90	0.00	0.00	0.00	
13,300.00	90.00	179.65	8,067.90	-5,802.81	2,700.73	6,277.20	0.00	0.00	0.00	
13,400.00	90.00	179.65	8,067.90	-5,902.81	2,701.33	6,374.50	0.00	0.00	0.00	
13,500.00	90.00	179.65	8,067.90	-6,002.81	2,701.94	6,471.80	0.00	0.00	0.00	
13,600.00	90.00	179.65	8,067.89	-6,102.81	2,702.54	6,569.10	0.00	0.00	0.00	
13,700.00	90.00	179.65	8,067.89	-6,202.80	2,703.15	6,666.40	0.00	0.00	0.00	
13,800.00	90.00	179.65	8,067.89	-6,302.80	2,703.75	6,763.70	0.00	0.00	0.00	
13,900.00	90.00	179.65	8,067.89	-6,402.80	2,704.36	6,861.00	0.00	0.00	0.00	
14,000.00	90.00	179.65	8,067.88	-6,502.80	2,704.96	6,958.30	0.00	0.00	0.00	
14,100.00	90.00	179.65	8,067.88	-6,602.80	2,705.57	7,055.60	0.00	0.00	0.00	
14,200.00	90.00	179.65	8,067.88	-6,702.80	2,706.17	7,152.90	0.00	0.00	0.00	
14,300.00	90.00	179.65	8,067.88	-6,802.79	2,706.78	7,250.20	0.00	0.00	0.00	
14,400.00	90.00	179.65	8,067.87	-6,902.79	2,707.38	7,347.49	0.00	0.00	0.00	
14,500.00	90.00	179.65	8,067.87	-7,002.79	2,707.99	7,444.79	0.00	0.00	0.00	
14,600.00	90.00	179.65	8,067.87	-7,102.79	2,708.59	7,542.09	0.00	0.00	0.00	
14,700.00	90.00	179.65	8,067.87	-7,202.79	2,709.20	7,639.39	0.00	0.00	0.00	
14,800.00	90.00	179.65	8,067.86	-7,302.78	2,709.80	7,736.69	0.00	0.00	0.00	
14,900.00	90.00	179.65	8,067.86	-7,402.78	2,710.41	7,833.99	0.00	0.00	0.00	
15,000.00	90.00	179.65	8,067.86	-7,502.78	2,711.02	7,931.29	0.00	0.00	0.00	
15,100.00	90.00	179.65	8,067.86	-7,602.78	2,711.62	8,028.59	0.00	0.00	0.00	
15,200.00	90.00	179.65	8,067.86	-7,702.78	2,712.23	8,125.89	0.00	0.00	0.00	
15,300.00	90.00	179.65	8,067.85	-7,802.78	2,712.83	8,223.19	0.00	0.00	0.00	
15,400.00	90.00	179.65	8,067.85	-7,902.77	2,713.44	8,320.49	0.00	0.00	0.00	
15,500.00	90.00	179.65	8,067.85	-8,002.77	2,714.04	8,417.79	0.00	0.00	0.00	
15,600.00	90.00	179.65	8,067.85	-8,102.77	2,714.65	8,515.09	0.00	0.00	0.00	
15,700.00	90.00	179.65	8,067.84	-8,202.77	2,715.25	8,612.38	0.00	0.00	0.00	
15,800.00	90.00	179.65	8,067.84	-8,302.77	2,715.86	8,709.68	0.00	0.00	0.00	
15,900.00	90.00	179.65	8,067.84	-8,402.76	2,716.46	8,806.98	0.00	0.00	0.00	
16,000.00	90.00	179.65	8,067.84	-8,502.76	2,717.07	8,904.28	0.00	0.00	0.00	
16,100.00	90.00	179.65	8,067.83	-8,602.76	2,717.67	9,001.58	0.00	0.00	0.00	
16,200.00	90.00	179.65	8,067.83	-8,702.76	2,718.28	9,098.88	0.00	0.00	0.00	
16,300.00	90.00	179.65	8,067.83	-8,802.76	2,718.88	9,196.18	0.00	0.00	0.00	
16,400.00	90.00	179.65	8,067.83	-8,902.76	2,719.49	9,293.48	0.00	0.00	0.00	
16,500.00	90.00	179.65	8,067.82	-9,002.75	2,720.10	9,390.78	0.00	0.00	0.00	
16,600.00	90.00	179.65	8,067.82	-9,102.75	2,720.70	9,488.08	0.00	0.00	0.00	
16,700.00	90.00	179.65	8,067.82	-9,202.75	2,721.31	9,585.38	0.00	0.00	0.00	
16,800.00	90.00	179.65	8,067.82	-9,302.75	2,721.91	9,682.68	0.00	0.00	0.00	
16,900.00	90.00	179.65	8,067.82	-9,402.75	2,722.52	9,779.98	0.00	0.00	0.00	
17,000.00	90.00	179.65	8,067.81	-9,502.74	2,723.12	9,877.27	0.00	0.00	0.00	
17,100.00	90.00	179.65	8,067.81	-9,602.74	2,723.73	9,974.57	0.00	0.00	0.00	
17,200.00	90.00	179.65	8,067.81	-9,702.74	2,724.33	10,071.87	0.00	0.00	0.00	
17,300.00	90.00	179.65	8,067.81	-9,802.74	2,724.94	10,169.17	0.00	0.00	0.00	
17,400.00	90.00	179.65	8,067.80	-9,902.74	2,725.54	10,266.47	0.00	0.00	0.00	
17,500.00	90.00	179.65	8,067.80	-10,002.74	2,726.15	10,363.77	0.00	0.00	0.00	
17,600.00	90.00	179.65	8,067.80	-10,102.73	2,726.75	10,461.07	0.00	0.00	0.00	
17,700.00	90.00	179.65	8,067.80	-10,202.73	2,727.36	10,558.37	0.00	0.00	0.00	
17,800.00	90.00	179.65	8,067.79	-10,302.73	2,727.96	10,655.67	0.00	0.00	0.00	
17,900.00	90.00	179.65	8,067.79	-10,402.73	2,728.57	10,752.97	0.00	0.00	0.00	
18,000.00	90.00	179.65	8,067.79	-10,502.73	2,729.17	10,850.27	0.00	0.00	0.00	

## Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well COYOTE TRAILS 34S-20-11C
<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 34S-20-11C	<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)	
18,100.00	90.00	179.65	8,067.79	-10,602.72	2,729.78	10,947.57	0.00	0.00	0.00	
18,200.00	90.00	179.65	8,067.78	-10,702.72	2,730.39	11,044.87	0.00	0.00	0.00	
18,300.00	90.00	179.65	8,067.78	-10,802.72	2,730.99	11,142.17	0.00	0.00	0.00	
18,400.00	90.00	179.65	8,067.78	-10,902.72	2,731.60	11,239.46	0.00	0.00	0.00	
18,500.00	90.00	179.65	8,067.78	-11,002.72	2,732.20	11,336.76	0.00	0.00	0.00	
18,600.00	90.00	179.65	8,067.78	-11,102.72	2,732.81	11,434.06	0.00	0.00	0.00	
18,700.00	90.00	179.65	8,067.77	-11,202.71	2,733.41	11,531.36	0.00	0.00	0.00	
18,716.07	90.00	179.65	8,068.00	-11,218.78	2,733.42	11,546.97	0.00	0.00	0.00	
TD at 18716.07' MD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
CT 34S-20-11C PBHL	0.00	0.00	8,068.00	-11,218.78	2,733.42	1,238,540.33	3,140,975.65	39° 59' 13.488 N	104° 59' 48.783 W	
- plan hits target center										
- Point										
CT 34S-20-11C LP	0.00	0.00	8,068.00	-1,547.81	2,674.97	1,248,210.82	3,140,863.38	40° 0' 49.063 N	104° 59' 49.521 W	
- plan hits target center										
- Point										

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,823.10	4,440.00	PARKMAN				
5,354.89	4,910.00	SUSSEX				
8,260.63	7,610.00	SHARON SPRINGS				
8,301.80	7,650.00	NIOBRARA				
8,462.93	7,797.00	NIO B				
8,893.07	8,048.00	FORT HAYS				
9,044.92	8,068.00	CODELL				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
600.00	600.00	0.00	0.00	BUILD 2°/100'	
1,994.77	1,940.32	-114.11	312.71	HOLD 27.90° INC	
6,650.07	6,054.68	-860.70	2,358.79	DROP 2°/100'	
8,044.84	7,395.00	-974.81	2,671.50	HOLD VERTICAL	
8,144.84	7,495.00	-974.81	2,671.50	KOP, BUILD 10°/100'	
9,044.92	8,068.00	-1,547.81	2,674.97	LP @ 90° INC, 179.65° AZM HOLD	
18,716.07	8,068.00	-11,218.78	2,733.42	TD at 18716.07' MD	