

EXTRACTION OIL & GAS

Weld County

Sec 28-T1N-R68W

COYOTE TRAILS 34S-20-14C

ORIGINAL WELLBORE

Plan: PROPOSAL 1

Standard Planning Report

12 September, 2017



Project: Weld County
Site: Sec 28-T1N-R68W
Well: COYOTE TRAILS 34S-20-14C
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: 52202.4snT
Dip Angle: 66.51°
Date: 6/29/2017
Model: IGRF2015

WELL DETAILS: COYOTE TRAILS 34S-20-14C

+N/-S	+E/-W	Northing	Easting	5244.00	Latitude	Longitude	Slot
0.00	0.00	1249743.73	3138233.83		40° 1' 4.358 N	105° 0' 23.207 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	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
3	2122.94	36.46	104.67	2002.38	-141.97	542.41	2.00	104.67	307.81	
4	6711.16	36.46	104.67	5692.62	-832.35	3180.09	0.00	0.00	1804.64	
5	8534.10	0.00	0.00	7395.00	-974.32	3722.50	2.00	180.00	2112.45	
6	8634.10	0.00	0.00	7495.00	-974.32	3722.50	0.00	0.00	2112.45	
7	9534.18	90.00	179.65	8068.00	-1547.32	3725.98	10.00	179.65	2656.54	CT 34S-20-14C LP
8	19214.18	90.00	179.65	8068.00	-11227.15	3784.94	0.00	0.00	11847.98	CT 34S-20-14C PBHL

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4440.00	5153.73	PARKMAN
4910.00	5738.10	SUSSEX
7610.00	8749.88	SHARON SPRINGS
7650.00	8791.05	NIOBRARA
7797.00	8952.19	NIO B
8048.00	9382.33	FORT HAYS
8068.00	9534.18	CODELL

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	BUILD 2°/100'
2122.94	36.46	104.67	2002.38	-141.97	542.41	307.81	560.88	HOLD 36.46° INC
6711.16	36.46	104.67	5692.62	-832.35	3180.09	1804.64	3287.21	DROP 2°/100'
8534.10	0.00	0.00	7395.00	-974.32	3722.50	2112.45	3847.90	HOLD VERTICAL
8634.10	0.00	0.00	7495.00	-974.32	3722.50	2112.45	3847.90	KOP, BUILD 10°/100'
9534.18	90.00	179.65	8068.00	-1547.32	3725.98	2656.54	4420.91	LP @ 90° INC, 179.65° AZM HOLD
19214.18	90.00	179.65	8067.78	-11227.15	3784.77	11847.93	14100.92	TD at 19214.18' MD

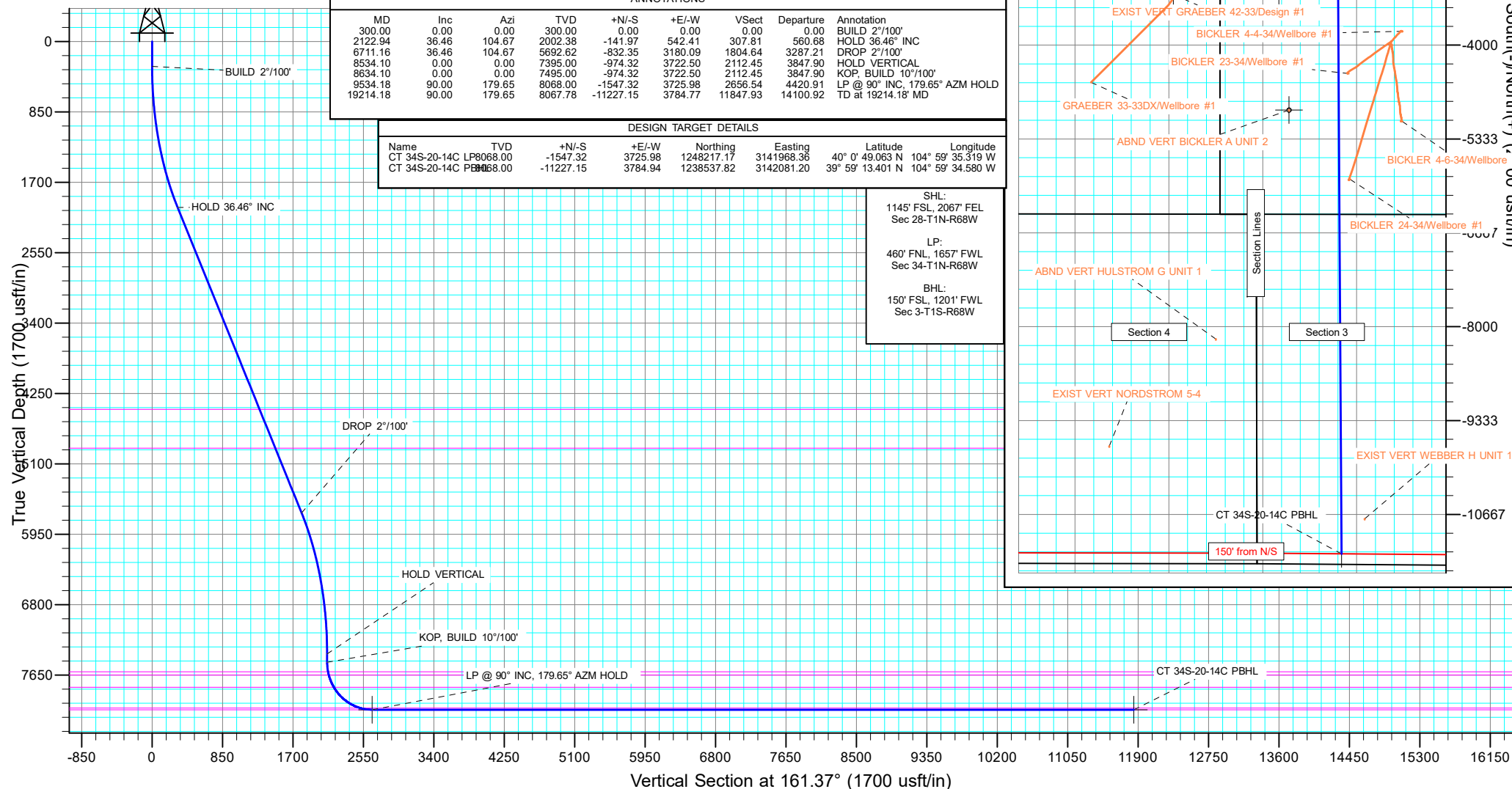
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
CT 34S-20-14C LP	8068.00	-1547.32	3725.98	1248217.17	3141968.36	40° 0' 49.063 N	104° 59' 35.319 W
CT 34S-20-14C PBHL	8068.00	-11227.15	3784.94	1238537.82	3142081.20	39° 59' 13.401 N	104° 59' 34.580 W

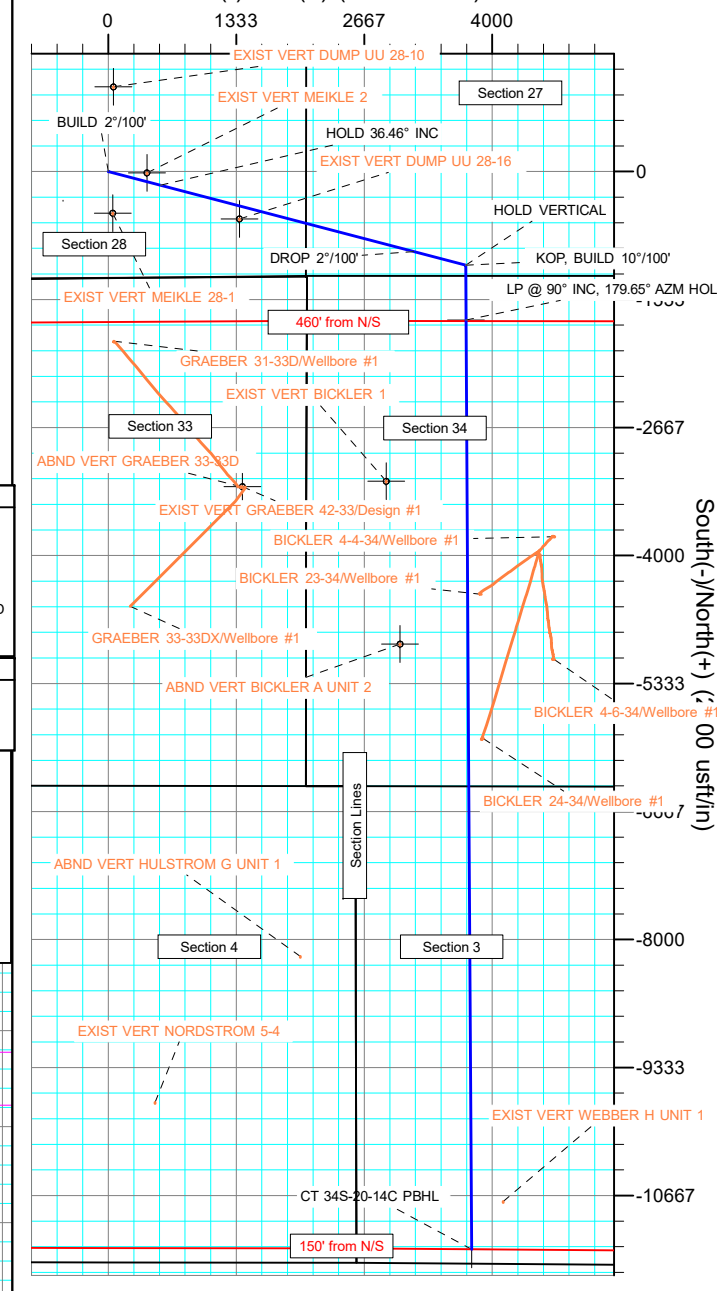
SHL:
1145' FSL, 2067' FEL
Sec 28-T1N-R68W

LP:
460' FNL, 1657' FWL
Sec 34-T1N-R68W

BHL:
150' FSL, 1201' FWL
Sec 3-T1S-R68W



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



Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 34S-20-14C
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 34S-20-14C	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 34S-20-14C					
Well Position	+N/-S	1,095.17 usft	Northing:	1,249,743.73 usft	Latitude:	40° 1' 4.358 N
	+E/-W	-2,059.85 usft	Easting:	3,138,233.83 usft	Longitude:	105° 0' 23.207 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	52,202.36246016

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	161.37

Plan Survey Tool Program	Date	9/12/2017		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	19,213.90	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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,122.94	36.46	104.67	2,002.38	-141.97	542.41	2.00	2.00	0.00	104.67	
6,711.16	36.46	104.67	5,692.62	-832.35	3,180.09	0.00	0.00	0.00	0.00	
8,534.10	0.00	0.00	7,395.00	-974.32	3,722.50	2.00	-2.00	0.00	180.00	
8,634.10	0.00	0.00	7,495.00	-974.32	3,722.50	0.00	0.00	0.00	0.00	
9,534.18	90.00	179.65	8,068.00	-1,547.32	3,725.98	10.00	10.00	19.96	179.65	CT 34S-20-14C LP
19,214.18	90.00	179.65	8,068.00	-11,227.15	3,784.94	0.00	0.00	0.00	0.00	CT 34S-20-14C PBHI

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 34S-20-14C
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 34S-20-14C	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
BUILD 2°/100'									
400.00	2.00	104.67	399.98	-0.44	1.69	0.96	2.00	2.00	0.00
500.00	4.00	104.67	499.84	-1.77	6.75	3.83	2.00	2.00	0.00
600.00	6.00	104.67	599.45	-3.97	15.18	8.62	2.00	2.00	0.00
700.00	8.00	104.67	698.70	-7.06	26.97	15.31	2.00	2.00	0.00
800.00	10.00	104.67	797.47	-11.02	42.10	23.89	2.00	2.00	0.00
900.00	12.00	104.67	895.62	-15.85	60.56	34.37	2.00	2.00	0.00
1,000.00	14.00	104.67	993.06	-21.55	82.32	46.72	2.00	2.00	0.00
1,100.00	16.00	104.67	1,089.64	-28.10	107.36	60.93	2.00	2.00	0.00
1,200.00	18.00	104.67	1,185.27	-35.50	135.64	76.98	2.00	2.00	0.00
1,300.00	20.00	104.67	1,279.82	-43.75	167.14	94.85	2.00	2.00	0.00
1,400.00	22.00	104.67	1,373.17	-52.82	201.81	114.52	2.00	2.00	0.00
1,500.00	24.00	104.67	1,465.21	-62.71	239.60	135.97	2.00	2.00	0.00
1,600.00	26.00	104.67	1,555.84	-73.41	280.49	159.17	2.00	2.00	0.00
1,700.00	28.00	104.67	1,644.94	-84.91	324.40	184.09	2.00	2.00	0.00
1,800.00	30.00	104.67	1,732.39	-97.18	371.30	210.71	2.00	2.00	0.00
1,900.00	32.00	104.67	1,818.11	-110.22	421.12	238.98	2.00	2.00	0.00
2,000.00	34.00	104.67	1,901.97	-124.01	473.81	268.88	2.00	2.00	0.00
2,100.00	36.00	104.67	1,983.88	-138.54	529.30	300.37	2.00	2.00	0.00
2,122.94	36.46	104.67	2,002.38	-141.97	542.41	307.81	2.00	2.00	0.00
HOLD 36.46° INC									
2,200.00	36.46	104.67	2,064.36	-153.57	586.71	332.95	0.00	0.00	0.00
2,300.00	36.46	104.67	2,144.79	-168.61	644.20	365.57	0.00	0.00	0.00
2,400.00	36.46	104.67	2,225.22	-183.66	701.69	398.20	0.00	0.00	0.00
2,500.00	36.46	104.67	2,305.65	-198.71	759.18	430.82	0.00	0.00	0.00
2,600.00	36.46	104.67	2,386.08	-213.75	816.67	463.44	0.00	0.00	0.00
2,700.00	36.46	104.67	2,466.51	-228.80	874.15	496.07	0.00	0.00	0.00
2,800.00	36.46	104.67	2,546.93	-243.85	931.64	528.69	0.00	0.00	0.00
2,900.00	36.46	104.67	2,627.36	-258.89	989.13	561.31	0.00	0.00	0.00
3,000.00	36.46	104.67	2,707.79	-273.94	1,046.62	593.94	0.00	0.00	0.00
3,100.00	36.46	104.67	2,788.22	-288.99	1,104.11	626.56	0.00	0.00	0.00
3,200.00	36.46	104.67	2,868.65	-304.03	1,161.59	659.18	0.00	0.00	0.00
3,300.00	36.46	104.67	2,949.08	-319.08	1,219.08	691.81	0.00	0.00	0.00
3,400.00	36.46	104.67	3,029.50	-334.13	1,276.57	724.43	0.00	0.00	0.00
3,500.00	36.46	104.67	3,109.93	-349.17	1,334.06	757.05	0.00	0.00	0.00
3,600.00	36.46	104.67	3,190.36	-364.22	1,391.55	789.68	0.00	0.00	0.00
3,700.00	36.46	104.67	3,270.79	-379.27	1,449.03	822.30	0.00	0.00	0.00
3,800.00	36.46	104.67	3,351.22	-394.31	1,506.52	854.92	0.00	0.00	0.00
3,900.00	36.46	104.67	3,431.65	-409.36	1,564.01	887.55	0.00	0.00	0.00
4,000.00	36.46	104.67	3,512.07	-424.41	1,621.50	920.17	0.00	0.00	0.00
4,100.00	36.46	104.67	3,592.50	-439.45	1,678.99	952.79	0.00	0.00	0.00
4,200.00	36.46	104.67	3,672.93	-454.50	1,736.47	985.42	0.00	0.00	0.00
4,300.00	36.46	104.67	3,753.36	-469.55	1,793.96	1,018.04	0.00	0.00	0.00
4,400.00	36.46	104.67	3,833.79	-484.59	1,851.45	1,050.66	0.00	0.00	0.00
4,500.00	36.46	104.67	3,914.22	-499.64	1,908.94	1,083.29	0.00	0.00	0.00
4,600.00	36.46	104.67	3,994.64	-514.69	1,966.42	1,115.91	0.00	0.00	0.00
4,700.00	36.46	104.67	4,075.07	-529.74	2,023.91	1,148.53	0.00	0.00	0.00
4,800.00	36.46	104.67	4,155.50	-544.78	2,081.40	1,181.16	0.00	0.00	0.00
4,900.00	36.46	104.67	4,235.93	-559.83	2,138.89	1,213.78	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 34S-20-14C
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 34S-20-14C	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)	
5,000.00	36.46	104.67	4,316.36	-574.88	2,196.38	1,246.40	0.00	0.00	0.00	
5,100.00	36.46	104.67	4,396.79	-589.92	2,253.86	1,279.03	0.00	0.00	0.00	
5,153.73	36.46	104.67	4,440.00	-598.01	2,284.75	1,296.56	0.00	0.00	0.00	
PARKMAN										
5,200.00	36.46	104.67	4,477.22	-604.97	2,311.35	1,311.65	0.00	0.00	0.00	
5,300.00	36.46	104.67	4,557.64	-620.02	2,368.84	1,344.27	0.00	0.00	0.00	
5,400.00	36.46	104.67	4,638.07	-635.06	2,426.33	1,376.90	0.00	0.00	0.00	
5,500.00	36.46	104.67	4,718.50	-650.11	2,483.82	1,409.52	0.00	0.00	0.00	
5,600.00	36.46	104.67	4,798.93	-665.16	2,541.30	1,442.14	0.00	0.00	0.00	
5,700.00	36.46	104.67	4,879.36	-680.20	2,598.79	1,474.77	0.00	0.00	0.00	
5,738.10	36.46	104.67	4,910.00	-685.94	2,620.70	1,487.20	0.00	0.00	0.00	
SUSSEX										
5,800.00	36.46	104.67	4,959.79	-695.25	2,656.28	1,507.39	0.00	0.00	0.00	
5,900.00	36.46	104.67	5,040.21	-710.30	2,713.77	1,540.01	0.00	0.00	0.00	
6,000.00	36.46	104.67	5,120.64	-725.34	2,771.26	1,572.64	0.00	0.00	0.00	
6,100.00	36.46	104.67	5,201.07	-740.39	2,828.74	1,605.26	0.00	0.00	0.00	
6,200.00	36.46	104.67	5,281.50	-755.44	2,886.23	1,637.88	0.00	0.00	0.00	
6,300.00	36.46	104.67	5,361.93	-770.48	2,943.72	1,670.51	0.00	0.00	0.00	
6,400.00	36.46	104.67	5,442.36	-785.53	3,001.21	1,703.13	0.00	0.00	0.00	
6,500.00	36.46	104.67	5,522.78	-800.58	3,058.70	1,735.75	0.00	0.00	0.00	
6,600.00	36.46	104.67	5,603.21	-815.62	3,116.18	1,768.38	0.00	0.00	0.00	
6,700.00	36.46	104.67	5,683.64	-830.67	3,173.67	1,801.00	0.00	0.00	0.00	
6,711.16	36.46	104.67	5,692.62	-832.35	3,180.09	1,804.64	0.00	0.00	0.00	
DROP 2°/100'										
6,800.00	34.68	104.67	5,764.88	-845.44	3,230.08	1,833.01	2.00	-2.00	0.00	
6,900.00	32.68	104.67	5,848.09	-859.48	3,283.73	1,863.46	2.00	-2.00	0.00	
7,000.00	30.68	104.67	5,933.18	-872.77	3,334.54	1,892.29	2.00	-2.00	0.00	
7,100.00	28.68	104.67	6,020.05	-885.31	3,382.44	1,919.47	2.00	-2.00	0.00	
7,200.00	26.68	104.67	6,108.60	-897.08	3,427.38	1,944.97	2.00	-2.00	0.00	
7,300.00	24.68	104.67	6,198.72	-908.05	3,469.30	1,968.76	2.00	-2.00	0.00	
7,400.00	22.68	104.67	6,290.29	-918.22	3,508.16	1,990.81	2.00	-2.00	0.00	
7,500.00	20.68	104.67	6,383.21	-927.57	3,543.90	2,011.10	2.00	-2.00	0.00	
7,600.00	18.68	104.67	6,477.37	-936.10	3,576.48	2,029.58	2.00	-2.00	0.00	
7,700.00	16.68	104.67	6,572.64	-943.79	3,605.86	2,046.26	2.00	-2.00	0.00	
7,800.00	14.68	104.67	6,668.91	-950.63	3,632.01	2,061.10	2.00	-2.00	0.00	
7,900.00	12.68	104.67	6,766.07	-956.62	3,654.89	2,074.08	2.00	-2.00	0.00	
8,000.00	10.68	104.67	6,863.99	-961.75	3,674.47	2,085.20	2.00	-2.00	0.00	
8,100.00	8.68	104.67	6,962.56	-966.01	3,690.74	2,094.43	2.00	-2.00	0.00	
8,200.00	6.68	104.67	7,061.66	-969.39	3,703.67	2,101.77	2.00	-2.00	0.00	
8,300.00	4.68	104.67	7,161.16	-971.90	3,713.25	2,107.20	2.00	-2.00	0.00	
8,400.00	2.68	104.67	7,260.95	-973.53	3,719.46	2,110.73	2.00	-2.00	0.00	
8,500.00	0.68	104.67	7,360.90	-974.27	3,722.30	2,112.34	2.00	-2.00	0.00	
8,534.10	0.00	0.00	7,395.00	-974.32	3,722.50	2,112.45	2.00	-2.00	0.00	
HOLD VERTICAL										
8,600.00	0.00	0.00	7,460.90	-974.32	3,722.50	2,112.45	0.00	0.00	0.00	
8,634.10	0.00	0.00	7,495.00	-974.32	3,722.50	2,112.45	0.00	0.00	0.00	
KOP, BUILD 10°/100'										
8,650.00	1.59	179.65	7,510.90	-974.54	3,722.50	2,112.66	10.00	10.00	0.00	
8,700.00	6.59	179.65	7,560.76	-978.11	3,722.52	2,116.05	10.00	10.00	0.00	
8,749.88	11.58	179.65	7,610.00	-985.98	3,722.57	2,123.52	10.00	10.00	0.00	
SHARON SPRINGS										
8,750.00	11.59	179.65	7,610.11	-986.00	3,722.57	2,123.54	10.00	10.00	0.00	
8,791.05	15.69	179.65	7,650.00	-995.68	3,722.63	2,132.73	10.00	10.00	0.00	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 34S-20-14C
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 34S-20-14C	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)
NIOBARA									
8,800.00	16.59	179.65	7,658.59	-998.17	3,722.64	2,135.10	10.00	10.00	0.00
8,850.00	21.59	179.65	7,705.83	-1,014.52	3,722.74	2,150.62	10.00	10.00	0.00
8,900.00	26.59	179.65	7,751.46	-1,034.92	3,722.87	2,169.99	10.00	10.00	0.00
8,950.00	31.59	179.65	7,795.14	-1,059.22	3,723.02	2,193.06	10.00	10.00	0.00
8,952.19	31.81	179.65	7,797.00	-1,060.36	3,723.02	2,194.15	10.00	10.00	0.00
NIO B									
9,000.00	36.59	179.65	7,836.54	-1,087.23	3,723.19	2,219.66	10.00	10.00	0.00
9,050.00	41.59	179.65	7,875.33	-1,118.74	3,723.38	2,249.59	10.00	10.00	0.00
9,100.00	46.59	179.65	7,911.24	-1,153.52	3,723.59	2,282.61	10.00	10.00	0.00
9,150.00	51.59	179.65	7,943.97	-1,191.29	3,723.82	2,318.47	10.00	10.00	0.00
9,200.00	56.59	179.65	7,973.29	-1,231.77	3,724.06	2,356.91	10.00	10.00	0.00
9,250.00	61.59	179.65	7,998.97	-1,274.66	3,724.32	2,397.63	10.00	10.00	0.00
9,300.00	66.59	179.65	8,020.82	-1,319.61	3,724.60	2,440.32	10.00	10.00	0.00
9,350.00	71.58	179.65	8,038.66	-1,366.30	3,724.88	2,484.65	10.00	10.00	0.00
9,382.33	74.82	179.65	8,048.00	-1,397.25	3,725.07	2,514.04	10.00	10.00	0.00
FORT HAYS									
9,400.00	76.58	179.65	8,052.36	-1,414.37	3,725.17	2,530.30	10.00	10.00	0.00
9,450.00	81.58	179.65	8,061.83	-1,463.45	3,725.47	2,576.90	10.00	10.00	0.00
9,500.00	86.58	179.65	8,066.98	-1,513.17	3,725.77	2,624.11	10.00	10.00	0.00
9,534.18	90.00	179.65	8,068.00	-1,547.32	3,725.98	2,656.54	10.00	10.00	0.00
LP @ 90° INC, 179.65° AZM HOLD - CODELL									
9,600.00	90.00	179.65	8,068.00	-1,613.14	3,726.38	2,719.04	0.00	0.00	0.00
9,700.00	90.00	179.65	8,068.00	-1,713.14	3,726.99	2,813.99	0.00	0.00	0.00
9,800.00	90.00	179.65	8,067.99	-1,813.14	3,727.59	2,908.94	0.00	0.00	0.00
9,900.00	90.00	179.65	8,067.99	-1,913.14	3,728.20	3,003.90	0.00	0.00	0.00
10,000.00	90.00	179.65	8,067.99	-2,013.14	3,728.81	3,098.85	0.00	0.00	0.00
10,100.00	90.00	179.65	8,067.99	-2,113.13	3,729.42	3,193.80	0.00	0.00	0.00
10,200.00	90.00	179.65	8,067.98	-2,213.13	3,730.02	3,288.75	0.00	0.00	0.00
10,300.00	90.00	179.65	8,067.98	-2,313.13	3,730.63	3,383.71	0.00	0.00	0.00
10,400.00	90.00	179.65	8,067.98	-2,413.13	3,731.24	3,478.66	0.00	0.00	0.00
10,500.00	90.00	179.65	8,067.98	-2,513.13	3,731.85	3,573.61	0.00	0.00	0.00
10,600.00	90.00	179.65	8,067.98	-2,613.13	3,732.45	3,668.56	0.00	0.00	0.00
10,700.00	90.00	179.65	8,067.97	-2,713.12	3,733.06	3,763.52	0.00	0.00	0.00
10,800.00	90.00	179.65	8,067.97	-2,813.12	3,733.67	3,858.47	0.00	0.00	0.00
10,900.00	90.00	179.65	8,067.97	-2,913.12	3,734.27	3,953.42	0.00	0.00	0.00
11,000.00	90.00	179.65	8,067.97	-3,013.12	3,734.88	4,048.37	0.00	0.00	0.00
11,100.00	90.00	179.65	8,067.96	-3,113.12	3,735.49	4,143.32	0.00	0.00	0.00
11,200.00	90.00	179.65	8,067.96	-3,213.11	3,736.10	4,238.28	0.00	0.00	0.00
11,300.00	90.00	179.65	8,067.96	-3,313.11	3,736.70	4,333.23	0.00	0.00	0.00
11,400.00	90.00	179.65	8,067.96	-3,413.11	3,737.31	4,428.18	0.00	0.00	0.00
11,500.00	90.00	179.65	8,067.96	-3,513.11	3,737.92	4,523.13	0.00	0.00	0.00
11,600.00	90.00	179.65	8,067.95	-3,613.11	3,738.53	4,618.09	0.00	0.00	0.00
11,700.00	90.00	179.65	8,067.95	-3,713.11	3,739.13	4,713.04	0.00	0.00	0.00
11,800.00	90.00	179.65	8,067.95	-3,813.10	3,739.74	4,807.99	0.00	0.00	0.00
11,900.00	90.00	179.65	8,067.95	-3,913.10	3,740.35	4,902.94	0.00	0.00	0.00
12,000.00	90.00	179.65	8,067.94	-4,013.10	3,740.96	4,997.89	0.00	0.00	0.00
12,100.00	90.00	179.65	8,067.94	-4,113.10	3,741.56	5,092.85	0.00	0.00	0.00
12,200.00	90.00	179.65	8,067.94	-4,213.10	3,742.17	5,187.80	0.00	0.00	0.00
12,300.00	90.00	179.65	8,067.94	-4,313.09	3,742.78	5,282.75	0.00	0.00	0.00
12,400.00	90.00	179.65	8,067.93	-4,413.09	3,743.38	5,377.70	0.00	0.00	0.00
12,500.00	90.00	179.65	8,067.93	-4,513.09	3,743.99	5,472.66	0.00	0.00	0.00
12,600.00	90.00	179.65	8,067.93	-4,613.09	3,744.60	5,567.61	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 34S-20-14C
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 34S-20-14C	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)
12,700.00	90.00	179.65	8,067.93	-4,713.09	3,745.21	5,662.56	0.00	0.00	0.00
12,800.00	90.00	179.65	8,067.93	-4,813.09	3,745.81	5,757.51	0.00	0.00	0.00
12,900.00	90.00	179.65	8,067.92	-4,913.08	3,746.42	5,852.47	0.00	0.00	0.00
13,000.00	90.00	179.65	8,067.92	-5,013.08	3,747.03	5,947.42	0.00	0.00	0.00
13,100.00	90.00	179.65	8,067.92	-5,113.08	3,747.64	6,042.37	0.00	0.00	0.00
13,200.00	90.00	179.65	8,067.92	-5,213.08	3,748.24	6,137.32	0.00	0.00	0.00
13,300.00	90.00	179.65	8,067.91	-5,313.08	3,748.85	6,232.27	0.00	0.00	0.00
13,400.00	90.00	179.65	8,067.91	-5,413.07	3,749.46	6,327.23	0.00	0.00	0.00
13,500.00	90.00	179.65	8,067.91	-5,513.07	3,750.07	6,422.18	0.00	0.00	0.00
13,600.00	90.00	179.65	8,067.91	-5,613.07	3,750.67	6,517.13	0.00	0.00	0.00
13,700.00	90.00	179.65	8,067.90	-5,713.07	3,751.28	6,612.08	0.00	0.00	0.00
13,800.00	90.00	179.65	8,067.90	-5,813.07	3,751.89	6,707.04	0.00	0.00	0.00
13,900.00	90.00	179.65	8,067.90	-5,913.06	3,752.49	6,801.99	0.00	0.00	0.00
14,000.00	90.00	179.65	8,067.90	-6,013.06	3,753.10	6,896.94	0.00	0.00	0.00
14,100.00	90.00	179.65	8,067.90	-6,113.06	3,753.71	6,991.89	0.00	0.00	0.00
14,200.00	90.00	179.65	8,067.89	-6,213.06	3,754.32	7,086.85	0.00	0.00	0.00
14,300.00	90.00	179.65	8,067.89	-6,313.06	3,754.92	7,181.80	0.00	0.00	0.00
14,400.00	90.00	179.65	8,067.89	-6,413.06	3,755.53	7,276.75	0.00	0.00	0.00
14,500.00	90.00	179.65	8,067.89	-6,513.05	3,756.14	7,371.70	0.00	0.00	0.00
14,600.00	90.00	179.65	8,067.88	-6,613.05	3,756.75	7,466.65	0.00	0.00	0.00
14,700.00	90.00	179.65	8,067.88	-6,713.05	3,757.35	7,561.61	0.00	0.00	0.00
14,800.00	90.00	179.65	8,067.88	-6,813.05	3,757.96	7,656.56	0.00	0.00	0.00
14,900.00	90.00	179.65	8,067.88	-6,913.05	3,758.57	7,751.51	0.00	0.00	0.00
15,000.00	90.00	179.65	8,067.87	-7,013.04	3,759.17	7,846.46	0.00	0.00	0.00
15,100.00	90.00	179.65	8,067.87	-7,113.04	3,759.78	7,941.42	0.00	0.00	0.00
15,200.00	90.00	179.65	8,067.87	-7,213.04	3,760.39	8,036.37	0.00	0.00	0.00
15,300.00	90.00	179.65	8,067.87	-7,313.04	3,761.00	8,131.32	0.00	0.00	0.00
15,400.00	90.00	179.65	8,067.87	-7,413.04	3,761.60	8,226.27	0.00	0.00	0.00
15,500.00	90.00	179.65	8,067.86	-7,513.04	3,762.21	8,321.22	0.00	0.00	0.00
15,600.00	90.00	179.65	8,067.86	-7,613.03	3,762.82	8,416.18	0.00	0.00	0.00
15,700.00	90.00	179.65	8,067.86	-7,713.03	3,763.43	8,511.13	0.00	0.00	0.00
15,800.00	90.00	179.65	8,067.86	-7,813.03	3,764.03	8,606.08	0.00	0.00	0.00
15,900.00	90.00	179.65	8,067.85	-7,913.03	3,764.64	8,701.03	0.00	0.00	0.00
16,000.00	90.00	179.65	8,067.85	-8,013.03	3,765.25	8,795.99	0.00	0.00	0.00
16,100.00	90.00	179.65	8,067.85	-8,113.02	3,765.86	8,890.94	0.00	0.00	0.00
16,200.00	90.00	179.65	8,067.85	-8,213.02	3,766.46	8,985.89	0.00	0.00	0.00
16,300.00	90.00	179.65	8,067.84	-8,313.02	3,767.07	9,080.84	0.00	0.00	0.00
16,400.00	90.00	179.65	8,067.84	-8,413.02	3,767.68	9,175.80	0.00	0.00	0.00
16,500.00	90.00	179.65	8,067.84	-8,513.02	3,768.28	9,270.75	0.00	0.00	0.00
16,600.00	90.00	179.65	8,067.84	-8,613.02	3,768.89	9,365.70	0.00	0.00	0.00
16,700.00	90.00	179.65	8,067.84	-8,713.01	3,769.50	9,460.65	0.00	0.00	0.00
16,800.00	90.00	179.65	8,067.83	-8,813.01	3,770.11	9,555.60	0.00	0.00	0.00
16,900.00	90.00	179.65	8,067.83	-8,913.01	3,770.71	9,650.56	0.00	0.00	0.00
17,000.00	90.00	179.65	8,067.83	-9,013.01	3,771.32	9,745.51	0.00	0.00	0.00
17,100.00	90.00	179.65	8,067.83	-9,113.01	3,771.93	9,840.46	0.00	0.00	0.00
17,200.00	90.00	179.65	8,067.82	-9,213.00	3,772.54	9,935.41	0.00	0.00	0.00
17,300.00	90.00	179.65	8,067.82	-9,313.00	3,773.14	10,030.37	0.00	0.00	0.00
17,400.00	90.00	179.65	8,067.82	-9,413.00	3,773.75	10,125.32	0.00	0.00	0.00
17,500.00	90.00	179.65	8,067.82	-9,513.00	3,774.36	10,220.27	0.00	0.00	0.00
17,600.00	90.00	179.65	8,067.82	-9,613.00	3,774.97	10,315.22	0.00	0.00	0.00
17,700.00	90.00	179.65	8,067.81	-9,712.99	3,775.57	10,410.18	0.00	0.00	0.00
17,800.00	90.00	179.65	8,067.81	-9,812.99	3,776.18	10,505.13	0.00	0.00	0.00
17,900.00	90.00	179.65	8,067.81	-9,912.99	3,776.79	10,600.08	0.00	0.00	0.00
18,000.00	90.00	179.65	8,067.81	-10,012.99	3,777.39	10,695.03	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 34S-20-14C
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 34S-20-14C	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)
18,100.00	90.00	179.65	8,067.80	-10,112.99	3,778.00	10,789.98	0.00	0.00	0.00
18,200.00	90.00	179.65	8,067.80	-10,212.99	3,778.61	10,884.94	0.00	0.00	0.00
18,300.00	90.00	179.65	8,067.80	-10,312.98	3,779.22	10,979.89	0.00	0.00	0.00
18,400.00	90.00	179.65	8,067.80	-10,412.98	3,779.82	11,074.84	0.00	0.00	0.00
18,500.00	90.00	179.65	8,067.79	-10,512.98	3,780.43	11,169.79	0.00	0.00	0.00
18,600.00	90.00	179.65	8,067.79	-10,612.98	3,781.04	11,264.75	0.00	0.00	0.00
18,700.00	90.00	179.65	8,067.79	-10,712.98	3,781.65	11,359.70	0.00	0.00	0.00
18,800.00	90.00	179.65	8,067.79	-10,812.97	3,782.25	11,454.65	0.00	0.00	0.00
18,900.00	90.00	179.65	8,067.79	-10,912.97	3,782.86	11,549.60	0.00	0.00	0.00
19,000.00	90.00	179.65	8,067.78	-11,012.97	3,783.47	11,644.55	0.00	0.00	0.00
19,100.00	90.00	179.65	8,067.78	-11,112.97	3,784.07	11,739.51	0.00	0.00	0.00
19,200.00	90.00	179.65	8,067.78	-11,212.97	3,784.68	11,834.46	0.00	0.00	0.00
19,214.18	90.00	179.65	8,068.00	-11,227.15	3,784.94	11,847.98	0.00	0.00	0.00
TD at 19214.18' 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-20-14C LP	0.00	0.00	8,068.00	-1,547.32	3,725.98	1,248,217.17	3,141,968.36	40° 0' 49.063 N	104° 59' 35.319 W
- plan hits target center									
- Point									
CT 34S-20-14C PBHL	0.00	0.00	8,068.00	-11,227.15	3,784.94	1,238,537.82	3,142,081.20	39° 59' 13.401 N	104° 59' 34.580 W
- plan hits target center									
- Point									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
5,153.73	4,440.00	PARKMAN				
5,738.10	4,910.00	SUSSEX				
8,749.88	7,610.00	SHARON SPRINGS				
8,791.05	7,650.00	NIOBRARA				
8,952.19	7,797.00	NIO B				
9,382.33	8,048.00	FORT HAYS				
9,534.18	8,068.00	CODELL				

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well COYOTE TRAILS 34S-20-14C
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 34S-20-14C	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
300.00	300.00	0.00	0.00	BUILD 2°/100'
2,122.94	2,002.38	-141.97	542.41	HOLD 36.46° INC
6,711.16	5,692.62	-832.35	3,180.09	DROP 2°/100'
8,534.10	7,395.00	-974.32	3,722.50	HOLD VERTICAL
8,634.10	7,495.00	-974.32	3,722.50	KOP, BUILD 10°/100'
9,534.18	8,068.00	-1,547.32	3,725.98	LP @ 90° INC, 179.65° AZM HOLD
19,214.18	8,068.00	-11,227.15	3,784.94	TD at 19214.18' MD