

EXTRACTION OIL & GAS

**Weld County
Sec 7-T4N-R68W
TROT 8E-10-15C**

ORIGINAL WELLBORE

Plan: PROPOSAL 1

Standard Planning Report

23 May, 2017



WELL DETAILS: TROTT 8E-10-15C

+N/-S	+E/-W	Northing	Easting	5035.0	Latitude	Longitude	Slot
0.0	0.0	1361363.08	3127993.79	40° 19' 27.959 N	105° 2' 27.398 W		

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.0	
3	1785.7	17.71	211.70	1771.6	-115.6	-71.4	2.00	211.70	-52.9	
4	4860.2	17.71	211.70	4700.4	-911.4	-562.9	0.00	0.00	-416.9	
5	5745.8	0.00	0.00	5672.0	-1027.0	-634.3	2.00	180.00	-469.8	
6	5845.8	0.00	0.00	5672.0	-1027.0	-634.3	0.00	0.00	-469.8	
7	6745.9	90.00	89.23	6245.0	-1019.3	-61.4	10.00	89.23	95.2	
8	8014.7	90.00	89.23	6245.0	-1002.1	1207.3	0.00	0.00	1346.4	
9	12807.0	90.00	89.01	6245.0	-928.2	5999.1	0.00	-90.00	6070.4	

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.0	BUILD 2°/100'
1785.7	17.71	211.70	1771.6	-115.6	-71.4	-52.9	135.8	HOLD 17.71° INC
4860.2	17.71	211.70	4700.4	-911.4	-562.9	-416.9	1071.3	DROP 2°/100'
5745.8	0.00	0.00	5672.0	-1027.0	-634.3	-469.8	1207.1	HOLD VERTICAL
5845.8	0.00	0.00	5672.0	-1027.0	-634.3	-469.8	1207.1	KOP, BUILD 10°/100'
6745.9	90.00	89.23	6245.0	-1019.3	-61.4	95.2	1780.1	LP @ 90° INC
8014.7	90.00	89.23	6245.0	-1002.1	1207.3	1346.4	3048.9	HOLD
12807.0	90.00	89.01	6245.0	-928.2	5999.1	6070.4	7841.2	TD at 12807.0' MD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
TROTT 15 - LP REV 2	6245.0	-1002.1	1207.3	1360367.22	3129206.30	40° 19' 18.055 N	105° 2' 11.810 W	Point
- plan hits target center								
TROTT 15 - PBHL REV 2	6245.0	-928.2	5999.1	1360465.95	3133997.57	40° 19' 18.779 N	105° 1' 9.944 W	Point
- plan hits target center								
WAGGENER #8-44	6895.0	-761.8	5792.4	1360631.30	3133790.06	40° 19' 20.424 N	105° 1' 12.612 W	Circle (Radius: 50.0)
- plan misses target center by 671.9usft at 12603.3usft MD (6245.0 TVD, -931.7 N, 5795.3 E)								

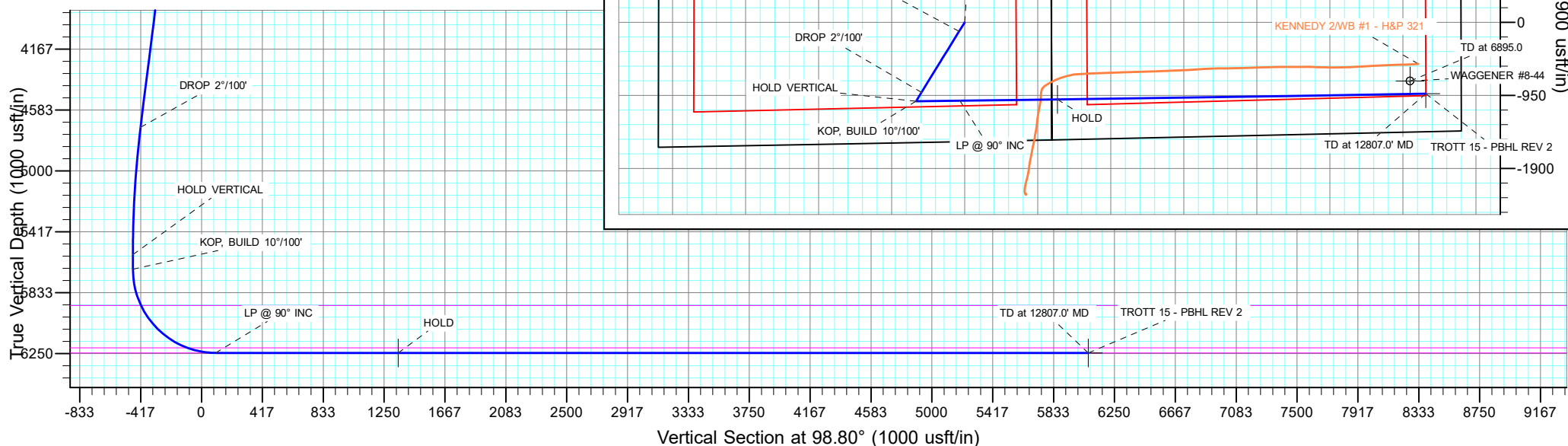
FORMATION TOP DETAILS

MDPath	MDPath	Formation
2410.0	2455.8	PARKMAN
3010.0	3085.7	SUSSEX
3450.0	3547.6	SHANNON
5920.0	6102.3	NIOBRARA
6210.0	6544.6	FORT HAYS
6245.0	6745.9	CODELL

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:
1551' FSL, 1128' FEL
Sec 7-T4N-R68W
LP:
526' FSL, 75' FWL
Sec 8-T4N-R68W
BHL:
494' FSL, 460' FEL
Sec 8-T4N-R68W



Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well TROTT 8E-10-15C
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 24' @ 5059.0usft
Project:	Weld County	MD Reference:	KB 24' @ 5059.0usft
Site:	Sec 7-T4N-R68W	North Reference:	True
Well:	TROTT 8E-10-15C	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 7-T4N-R68W			
Site Position:		Northing:	1,359,838.99 usft	Latitude:	40° 19' 12.839 N
From:	Lat/Long	Easting:	3,129,136.57 usft	Longitude:	105° 2' 12.746 W
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in	Grid Convergence:	0.30 °

Well	TROTT 8E-10-15C					
Well Position	+N/-S	1,530.0 usft	Northing:	1,361,363.08 usft	Latitude:	40° 19' 27.959 N
	+E/-W	-1,134.8 usft	Easting:	3,127,993.79 usft	Longitude:	105° 2' 27.398 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	5,035.0 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/4/2017	8.37	66.76	52,345.05554384

Design	PROPOSAL 1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	98.80

Plan Survey Tool Program			Date	5/23/2017	
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	12,807.0	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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,785.7	17.71	211.70	1,771.6	-115.6	-71.4	2.00	2.00	0.00	211.70	
4,860.2	17.71	211.70	4,700.4	-911.4	-562.9	0.00	0.00	0.00	0.00	
5,745.8	0.00	0.00	5,572.0	-1,027.0	-634.3	2.00	-2.00	0.00	180.00	
5,845.8	0.00	0.00	5,672.0	-1,027.0	-634.3	0.00	0.00	0.00	0.00	
6,745.9	90.00	89.23	6,245.0	-1,019.3	-61.4	10.00	10.00	0.00	89.23	
8,014.7	90.00	89.23	6,245.0	-1,002.1	1,207.3	0.00	0.00	0.00	0.00	TROTT 15 - LP REV :
12,807.0	90.00	89.01	6,245.0	-928.2	5,999.1	0.00	0.00	0.00	-90.00	TROTT 15 - PBHL RE

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well TROTT 8E-10-15C
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 24' @ 5059.0usft
Project:	Weld County	MD Reference:	KB 24' @ 5059.0usft
Site:	Sec 7-T4N-R68W	North Reference:	True
Well:	TROTT 8E-10-15C	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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
BUILD 2°/100'									
1,000.0	2.00	211.70	1,000.0	-1.5	-0.9	-0.7	2.00	2.00	0.00
1,100.0	4.00	211.70	1,099.8	-5.9	-3.7	-2.7	2.00	2.00	0.00
1,200.0	6.00	211.70	1,199.5	-13.4	-8.2	-6.1	2.00	2.00	0.00
1,300.0	8.00	211.70	1,298.7	-23.7	-14.7	-10.9	2.00	2.00	0.00
1,400.0	10.00	211.70	1,397.5	-37.0	-22.9	-16.9	2.00	2.00	0.00
1,500.0	12.00	211.70	1,495.6	-53.3	-32.9	-24.4	2.00	2.00	0.00
1,600.0	14.00	211.70	1,593.1	-72.4	-44.7	-33.1	2.00	2.00	0.00
1,700.0	16.00	211.70	1,689.6	-94.4	-58.3	-43.2	2.00	2.00	0.00
1,785.7	17.71	211.70	1,771.6	-115.6	-71.4	-52.9	2.00	2.00	0.00
HOLD 17.71° INC									
1,800.0	17.71	211.70	1,785.3	-119.3	-73.7	-54.6	0.00	0.00	0.00
1,900.0	17.71	211.70	1,880.5	-145.2	-89.6	-66.4	0.00	0.00	0.00
2,000.0	17.71	211.70	1,975.8	-171.0	-105.6	-78.2	0.00	0.00	0.00
2,100.0	17.71	211.70	2,071.1	-196.9	-121.6	-90.1	0.00	0.00	0.00
2,200.0	17.71	211.70	2,166.3	-222.8	-137.6	-101.9	0.00	0.00	0.00
2,300.0	17.71	211.70	2,261.6	-248.7	-153.6	-113.8	0.00	0.00	0.00
2,400.0	17.71	211.70	2,356.8	-274.6	-169.6	-125.6	0.00	0.00	0.00
2,455.8	17.71	211.70	2,410.0	-289.0	-178.5	-132.2	0.00	0.00	0.00
PARKMAN									
2,500.0	17.71	211.70	2,452.1	-300.5	-185.6	-137.5	0.00	0.00	0.00
2,600.0	17.71	211.70	2,547.4	-326.4	-201.6	-149.3	0.00	0.00	0.00
2,700.0	17.71	211.70	2,642.6	-352.2	-217.6	-161.1	0.00	0.00	0.00
2,800.0	17.71	211.70	2,737.9	-378.1	-233.5	-173.0	0.00	0.00	0.00
2,900.0	17.71	211.70	2,833.1	-404.0	-249.5	-184.8	0.00	0.00	0.00
3,000.0	17.71	211.70	2,928.4	-429.9	-265.5	-196.7	0.00	0.00	0.00
3,085.7	17.71	211.70	3,010.0	-452.1	-279.2	-206.8	0.00	0.00	0.00
SUSSEX									
3,100.0	17.71	211.70	3,023.6	-455.8	-281.5	-208.5	0.00	0.00	0.00
3,200.0	17.71	211.70	3,118.9	-481.7	-297.5	-220.3	0.00	0.00	0.00
3,300.0	17.71	211.70	3,214.2	-507.6	-313.5	-232.2	0.00	0.00	0.00
3,400.0	17.71	211.70	3,309.4	-533.5	-329.5	-244.0	0.00	0.00	0.00
3,500.0	17.71	211.70	3,404.7	-559.3	-345.5	-255.9	0.00	0.00	0.00
3,547.6	17.71	211.70	3,450.0	-571.7	-353.1	-261.5	0.00	0.00	0.00
SHANNON									
3,600.0	17.71	211.70	3,499.9	-585.2	-361.4	-267.7	0.00	0.00	0.00
3,700.0	17.71	211.70	3,595.2	-611.1	-377.4	-279.6	0.00	0.00	0.00
3,800.0	17.71	211.70	3,690.5	-637.0	-393.4	-291.4	0.00	0.00	0.00
3,900.0	17.71	211.70	3,785.7	-662.9	-409.4	-303.2	0.00	0.00	0.00
4,000.0	17.71	211.70	3,881.0	-688.8	-425.4	-315.1	0.00	0.00	0.00
4,100.0	17.71	211.70	3,976.2	-714.7	-441.4	-326.9	0.00	0.00	0.00
4,200.0	17.71	211.70	4,071.5	-740.5	-457.4	-338.8	0.00	0.00	0.00
4,300.0	17.71	211.70	4,166.8	-766.4	-473.4	-350.6	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well TROTT 8E-10-15C
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 24' @ 5059.0usft
Project:	Weld County	MD Reference:	KB 24' @ 5059.0usft
Site:	Sec 7-T4N-R68W	North Reference:	True
Well:	TROTT 8E-10-15C	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)
4,400.0	17.71	211.70	4,262.0	-792.3	-489.4	-362.5	0.00	0.00	0.00
4,500.0	17.71	211.70	4,357.3	-818.2	-505.3	-374.3	0.00	0.00	0.00
4,600.0	17.71	211.70	4,452.5	-844.1	-521.3	-386.1	0.00	0.00	0.00
4,700.0	17.71	211.70	4,547.8	-870.0	-537.3	-398.0	0.00	0.00	0.00
4,800.0	17.71	211.70	4,643.0	-895.9	-553.3	-409.8	0.00	0.00	0.00
4,860.2	17.71	211.70	4,700.4	-911.4	-562.9	-416.9	0.00	0.00	0.00
DROP 2°/100'									
4,900.0	16.92	211.70	4,738.4	-921.5	-569.2	-421.6	2.00	-2.00	0.00
5,000.0	14.92	211.70	4,834.5	-944.9	-583.6	-432.2	2.00	-2.00	0.00
5,100.0	12.92	211.70	4,931.6	-965.3	-596.2	-441.6	2.00	-2.00	0.00
5,200.0	10.92	211.70	5,029.4	-982.9	-607.1	-449.6	2.00	-2.00	0.00
5,300.0	8.92	211.70	5,127.9	-997.5	-616.1	-456.3	2.00	-2.00	0.00
5,400.0	6.92	211.70	5,227.0	-1,009.3	-623.3	-461.7	2.00	-2.00	0.00
5,500.0	4.92	211.70	5,326.5	-1,018.0	-628.8	-465.7	2.00	-2.00	0.00
5,600.0	2.92	211.70	5,426.2	-1,023.8	-632.3	-468.4	2.00	-2.00	0.00
5,700.0	0.92	211.70	5,526.2	-1,026.7	-634.1	-469.7	2.00	-2.00	0.00
5,745.8	0.00	0.00	5,572.0	-1,027.0	-634.3	-469.8	2.00	-2.00	0.00
HOLD VERTICAL									
5,800.0	0.00	0.00	5,626.2	-1,027.0	-634.3	-469.8	0.00	0.00	0.00
5,845.8	0.00	0.00	5,672.0	-1,027.0	-634.3	-469.8	0.00	0.00	0.00
KOP, BUILD 10°/100'									
5,850.0	0.42	89.23	5,676.2	-1,027.0	-634.3	-469.8	10.00	10.00	0.00
5,900.0	5.41	89.23	5,726.1	-1,027.0	-631.7	-467.3	10.00	10.00	0.00
5,950.0	10.41	89.23	5,775.6	-1,026.9	-624.9	-460.5	10.00	10.00	0.00
6,000.0	15.41	89.23	5,824.3	-1,026.7	-613.7	-449.5	10.00	10.00	0.00
6,050.0	20.41	89.23	5,871.9	-1,026.5	-598.3	-434.3	10.00	10.00	0.00
6,100.0	25.41	89.23	5,917.9	-1,026.3	-578.9	-415.1	10.00	10.00	0.00
6,102.3	25.65	89.23	5,920.0	-1,026.2	-577.9	-414.1	10.00	10.00	0.00
NIOBRARA									
6,150.0	30.41	89.23	5,962.1	-1,025.9	-555.5	-392.1	10.00	10.00	0.00
6,200.0	35.41	89.23	6,004.0	-1,025.6	-528.3	-365.3	10.00	10.00	0.00
6,250.0	40.41	89.23	6,043.5	-1,025.2	-497.6	-335.0	10.00	10.00	0.00
6,300.0	45.41	89.23	6,080.1	-1,024.7	-463.6	-301.4	10.00	10.00	0.00
6,350.0	50.41	89.23	6,113.6	-1,024.2	-426.5	-264.9	10.00	10.00	0.00
6,400.0	55.41	89.23	6,143.7	-1,023.7	-386.6	-225.5	10.00	10.00	0.00
6,450.0	60.41	89.23	6,170.3	-1,023.1	-344.3	-183.8	10.00	10.00	0.00
6,500.0	65.41	89.23	6,193.0	-1,022.5	-299.8	-139.9	10.00	10.00	0.00
6,544.6	69.87	89.23	6,210.0	-1,021.9	-258.5	-99.2	10.00	10.00	0.00
FORT HAYS									
6,550.0	70.41	89.23	6,211.8	-1,021.9	-253.5	-94.2	10.00	10.00	0.00
6,600.0	75.41	89.23	6,226.5	-1,021.2	-205.7	-47.1	10.00	10.00	0.00
6,650.0	80.41	89.23	6,237.0	-1,020.6	-156.8	1.1	10.00	10.00	0.00
6,700.0	85.41	89.23	6,243.2	-1,019.9	-107.2	50.0	10.00	10.00	0.00
6,745.9	90.00	89.23	6,245.0	-1,019.3	-61.4	95.2	10.00	10.00	0.00
LP @ 90° INC - CODELL									
6,800.0	90.00	89.23	6,245.0	-1,018.5	-7.3	148.6	0.00	0.00	0.00
6,900.0	90.00	89.23	6,245.0	-1,017.2	92.7	247.2	0.00	0.00	0.00
7,000.0	90.00	89.23	6,245.0	-1,015.8	192.7	345.8	0.00	0.00	0.00
7,100.0	90.00	89.23	6,245.0	-1,014.5	292.7	444.4	0.00	0.00	0.00
7,200.0	90.00	89.23	6,245.0	-1,013.1	392.7	543.0	0.00	0.00	0.00
7,300.0	90.00	89.23	6,245.0	-1,011.8	492.7	641.6	0.00	0.00	0.00
7,400.0	90.00	89.23	6,245.0	-1,010.4	592.7	740.2	0.00	0.00	0.00
7,500.0	90.00	89.23	6,245.0	-1,009.1	692.7	838.8	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well TROTT 8E-10-15C
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 24' @ 5059.0usft
Project:	Weld County	MD Reference:	KB 24' @ 5059.0usft
Site:	Sec 7-T4N-R68W	North Reference:	True
Well:	TROTT 8E-10-15C	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)
7,600.0	90.00	89.23	6,245.0	-1,007.7	792.7	937.4	0.00	0.00	0.00
7,700.0	90.00	89.23	6,245.0	-1,006.4	892.6	1,036.0	0.00	0.00	0.00
7,800.0	90.00	89.23	6,245.0	-1,005.0	992.6	1,134.6	0.00	0.00	0.00
7,900.0	90.00	89.23	6,245.0	-1,003.7	1,092.6	1,233.2	0.00	0.00	0.00
8,000.0	90.00	89.23	6,245.0	-1,002.3	1,192.6	1,331.9	0.00	0.00	0.00
8,014.7	90.00	89.23	6,245.0	-1,002.1	1,207.3	1,346.4	0.00	0.00	0.00
HOLD									
8,100.0	90.00	89.22	6,245.0	-1,001.0	1,292.6	1,430.5	0.00	0.00	0.00
8,200.0	90.00	89.22	6,245.0	-999.6	1,392.6	1,529.1	0.00	0.00	0.00
8,300.0	90.00	89.21	6,245.0	-998.2	1,492.6	1,627.7	0.00	0.00	0.00
8,400.0	90.00	89.21	6,245.0	-996.9	1,592.6	1,726.3	0.00	0.00	0.00
8,500.0	90.00	89.20	6,245.0	-995.5	1,692.6	1,824.9	0.00	0.00	0.00
8,600.0	90.00	89.20	6,245.0	-994.1	1,792.6	1,923.5	0.00	0.00	0.00
8,700.0	90.00	89.19	6,245.0	-992.7	1,892.6	2,022.1	0.00	0.00	0.00
8,800.0	90.00	89.19	6,245.0	-991.3	1,992.5	2,120.7	0.00	0.00	0.00
8,900.0	90.00	89.19	6,245.0	-989.9	2,092.5	2,219.3	0.00	0.00	0.00
9,000.0	90.00	89.18	6,245.0	-988.4	2,192.5	2,317.9	0.00	0.00	0.00
9,100.0	90.00	89.18	6,245.0	-987.0	2,292.5	2,416.5	0.00	0.00	0.00
9,200.0	90.00	89.17	6,245.0	-985.6	2,392.5	2,515.1	0.00	0.00	0.00
9,300.0	90.00	89.17	6,245.0	-984.1	2,492.5	2,613.7	0.00	0.00	0.00
9,400.0	90.00	89.16	6,245.0	-982.7	2,592.5	2,712.2	0.00	0.00	0.00
9,500.0	90.00	89.16	6,245.0	-981.2	2,692.5	2,810.8	0.00	0.00	0.00
9,600.0	90.00	89.15	6,245.0	-979.7	2,792.5	2,909.4	0.00	0.00	0.00
9,700.0	90.00	89.15	6,245.0	-978.2	2,892.4	3,008.0	0.00	0.00	0.00
9,800.0	90.00	89.14	6,245.0	-976.7	2,992.4	3,106.6	0.00	0.00	0.00
9,900.0	90.00	89.14	6,245.0	-975.2	3,092.4	3,205.2	0.00	0.00	0.00
10,000.0	90.00	89.14	6,245.0	-973.7	3,192.4	3,303.8	0.00	0.00	0.00
10,100.0	90.00	89.13	6,245.0	-972.2	3,292.4	3,402.3	0.00	0.00	0.00
10,200.0	90.00	89.13	6,245.0	-970.7	3,392.4	3,500.9	0.00	0.00	0.00
10,300.0	90.00	89.12	6,245.0	-969.2	3,492.4	3,599.5	0.00	0.00	0.00
10,400.0	90.00	89.12	6,245.0	-967.6	3,592.4	3,698.1	0.00	0.00	0.00
10,500.0	90.00	89.11	6,245.0	-966.1	3,692.4	3,796.7	0.00	0.00	0.00
10,600.0	90.00	89.11	6,245.0	-964.5	3,792.3	3,895.2	0.00	0.00	0.00
10,700.0	90.00	89.10	6,245.0	-963.0	3,892.3	3,993.8	0.00	0.00	0.00
10,800.0	90.00	89.10	6,245.0	-961.4	3,992.3	4,092.4	0.00	0.00	0.00
10,900.0	90.00	89.09	6,245.0	-959.8	4,092.3	4,190.9	0.00	0.00	0.00
11,000.0	90.00	89.09	6,245.0	-958.2	4,192.3	4,289.5	0.00	0.00	0.00
11,100.0	90.00	89.08	6,245.0	-956.6	4,292.3	4,388.1	0.00	0.00	0.00
11,200.0	90.00	89.08	6,245.0	-955.0	4,392.3	4,486.7	0.00	0.00	0.00
11,300.0	90.00	89.08	6,245.0	-953.4	4,492.3	4,585.2	0.00	0.00	0.00
11,400.0	90.00	89.07	6,245.0	-951.8	4,592.2	4,683.8	0.00	0.00	0.00
11,500.0	90.00	89.07	6,245.0	-950.2	4,692.2	4,782.3	0.00	0.00	0.00
11,600.0	90.00	89.06	6,245.0	-948.6	4,792.2	4,880.9	0.00	0.00	0.00
11,700.0	90.00	89.06	6,245.0	-946.9	4,892.2	4,979.5	0.00	0.00	0.00
11,800.0	90.00	89.05	6,245.0	-945.3	4,992.2	5,078.0	0.00	0.00	0.00
11,900.0	90.00	89.05	6,245.0	-943.6	5,092.2	5,176.6	0.00	0.00	0.00
12,000.0	90.00	89.04	6,245.0	-941.9	5,192.2	5,275.1	0.00	0.00	0.00
12,100.0	90.00	89.04	6,245.0	-940.3	5,292.1	5,373.7	0.00	0.00	0.00
12,200.0	90.00	89.03	6,245.0	-938.6	5,392.1	5,472.2	0.00	0.00	0.00
12,300.0	90.00	89.03	6,245.0	-936.9	5,492.1	5,570.8	0.00	0.00	0.00
12,400.0	90.00	89.02	6,245.0	-935.2	5,592.1	5,669.3	0.00	0.00	0.00
12,500.0	90.00	89.02	6,245.0	-933.5	5,692.1	5,767.9	0.00	0.00	0.00
12,600.0	90.00	89.02	6,245.0	-931.8	5,792.1	5,866.4	0.00	0.00	0.00
12,700.0	90.00	89.01	6,245.0	-930.1	5,892.1	5,965.0	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well TROTT 8E-10-15C
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 24' @ 5059.0usft
Project:	Weld County	MD Reference:	KB 24' @ 5059.0usft
Site:	Sec 7-T4N-R68W	North Reference:	True
Well:	TROTT 8E-10-15C	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)
12,807.0	90.00	89.01	6,245.0	-928.2	5,999.1	6,070.4	0.00	0.00	0.00
TD at 12807.0' MD									

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
TROTT 15 - LP REV 2 - plan hits target center - Point	0.00	0.00	6,245.0	-1,002.1	1,207.3	1,360,367.22	3,129,206.30	40° 19' 18.055 N	105° 2' 11.810 W
TROTT 15 - PBHL REV - plan hits target center - Point	0.00	0.00	6,245.0	-928.2	5,999.1	1,360,465.95	3,133,997.57	40° 19' 18.779 N	105° 1' 9.944 W

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,455.8	2,410.0	PARKMAN				
3,085.7	3,010.0	SUSSEX				
3,547.6	3,450.0	SHANNON				
6,102.3	5,920.0	NIOBRARA				
6,544.6	6,210.0	FORT HAYS				
6,745.9	6,245.0	CODELL				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
900.0	900.0	0.0	0.0	BUILD 2°/100'
1,785.7	1,771.6	-115.6	-71.4	HOLD 17.71° INC
4,860.2	4,700.4	-911.4	-562.9	DROP 2°/100'
5,745.8	5,572.0	-1,027.0	-634.3	HOLD VERTICAL
5,845.8	5,672.0	-1,027.0	-634.3	KOP, BUILD 10°/100'
6,745.9	6,245.0	-1,019.3	-61.4	LP @ 90° INC
8,014.7	6,245.0	-1,002.1	1,207.3	HOLD
12,807.0	6,245.0	-928.2	5,999.1	TD at 12807.0' MD