

# **EXTRACTION OIL & GAS**

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

**ORIGINAL WELLBORE**

**Plan: PROPOSAL 1**

## **Standard Planning Report**

**23 May, 2017**



WELL DETAILS: TROTT 8E-10-7C

+N/-S	+E/-W	Northing	Easting	5034.0	Latitude	Longitude	Slot
0.0	0.0	1361363.35	3127975.94	40° 19' 27.962 N	105° 2' 27.629 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	700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.0	
3	1290.4	11.81	313.87	1286.2	42.0	-43.7	2.00	313.87	-38.1	
4	5070.0	11.81	313.87	4985.8	578.0	-601.2	0.00	0.00	-524.2	
5	5660.3	0.00	0.00	5672.0	620.0	-644.9	2.00	180.00	-562.3	
6	5760.3	0.00	0.00	5672.0	620.0	-644.9	0.00	0.00	-562.3	
7	6660.4	90.00	88.81	6245.0	631.9	-72.0	10.00	88.81	7.6	
8	7950.5	90.00	88.81	6245.0	658.7	1217.9	0.00	0.00	1290.7	TROTT 7 - LP REV 2
9	12744.6	90.00	88.82	6245.0	757.7	6010.9	0.00	0.00	6058.5	TROTT 7 - PBHL REV 2

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.0	BUILD 2°/100'
1290.4	11.81	313.87	1286.2	42.0	-43.7	-38.1	60.6	HOLD 11.81° INC
5070.0	11.81	313.87	4985.8	578.0	-601.2	-524.2	834.0	DROP 2°/100'
5660.3	0.00	0.00	5672.0	620.0	-644.9	-562.3	894.6	HOLD VERTICAL
5760.3	0.00	0.00	5672.0	620.0	-644.9	-562.3	894.6	KOP, BUILD 10°/100'
6660.4	90.00	88.81	6245.0	631.9	-72.0	7.6	1467.6	LP @ 90° INC
7950.5	90.00	88.81	6245.0	658.7	1217.9	1290.7	2757.8	HOLD
12744.6	90.00	88.82	6245.0	757.7	6010.9	6058.5	7551.8	TD at 12744.6' MD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	40° 19'	Latitude	105° 2'	Longitude	Shape
TROTT 7 - LP REV 2	6245.0	658.7	1217.9	1362028.33	3129190.38	40° 19'	34.471 N	105° 2'	11.904 W	Point
- plan hits target center										
TROTT 7 - PBHL REV 2	6245.0	757.7	6010.9	1362152.19	3133982.85	40° 19'	35.443 N	105° 1'	10.016 W	Point
- plan hits target center										

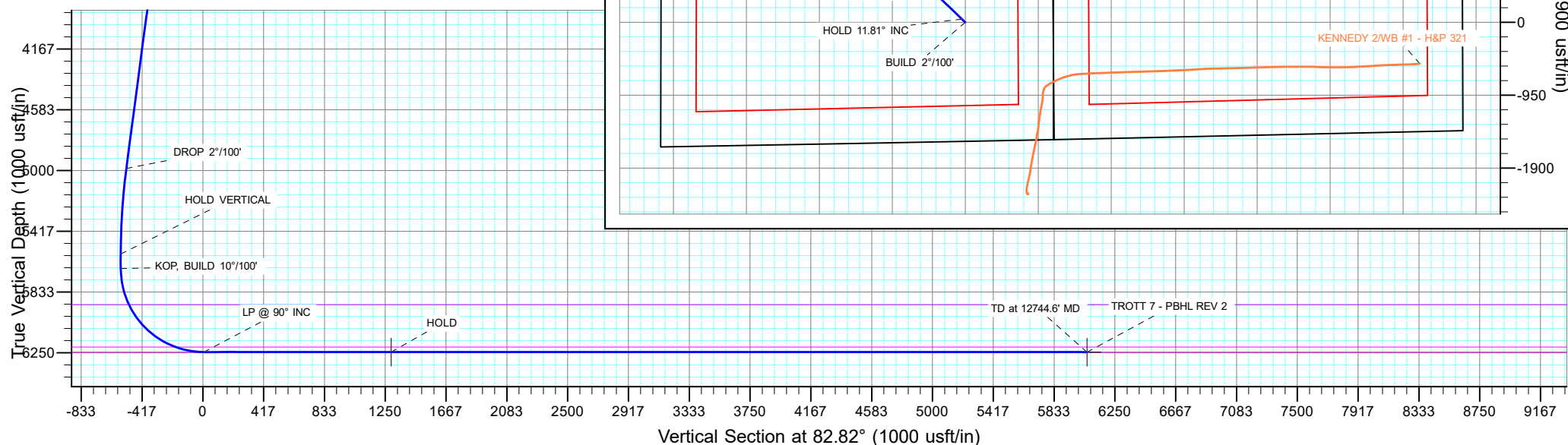
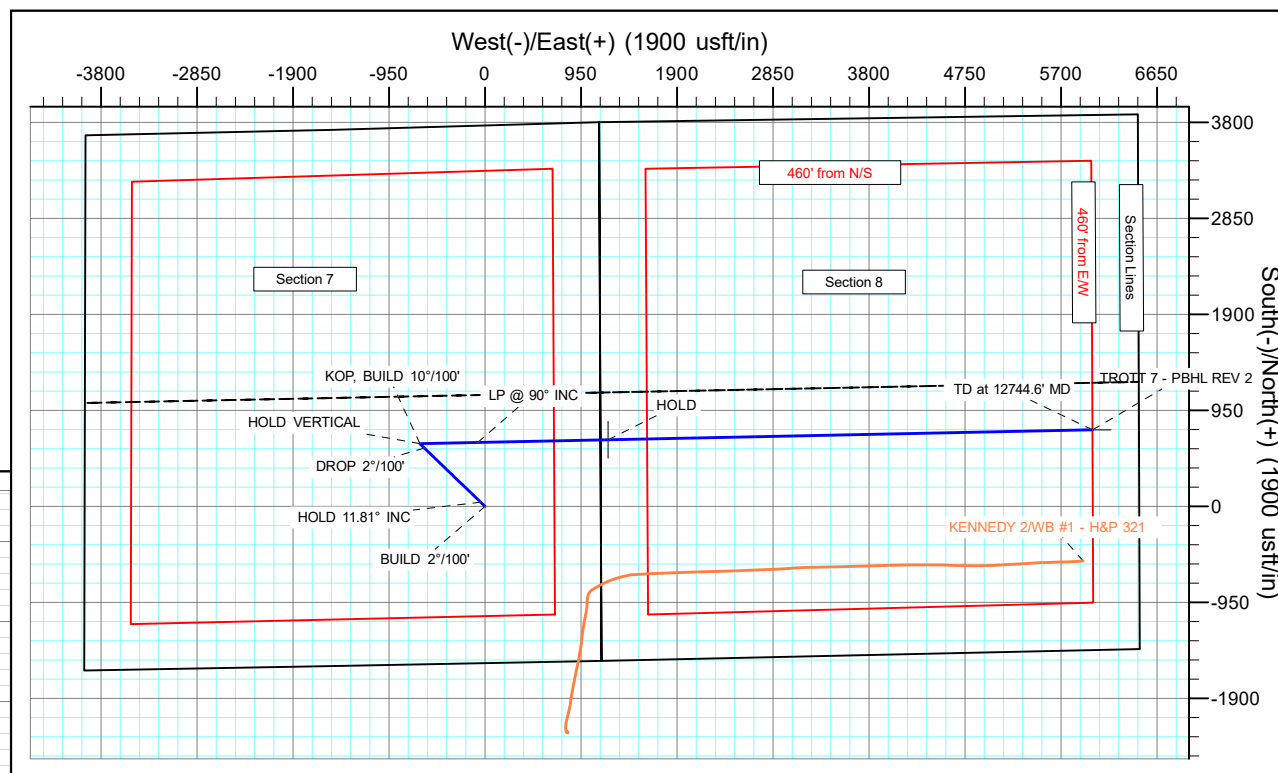
FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2410.0	2438.5	PARKMAN
3010.0	3051.4	SUSSEX
3450.0	3500.9	SHANNON
5920.0	6016.8	NIOBARRA
6210.0	6459.1	FORT HAYS
6245.0	6660.4	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, 1146' FEL  
Sec 7-T4N-R68W  
LP:  
2187' FSL, 75' FWL  
Sec 8-T4N-R68W  
BHL:  
2180' FSL, 460' FEL  
Sec 8-T4N-R68W



## Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well TROTT 8E-10-7C
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 24' @ 5058.0usft
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 24' @ 5058.0usft
<b>Site:</b>	Sec 7-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	TROTT 8E-10-7C	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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-10-7C					
Well Position	+N/-S	1,530.4 usft	Northing:	1,361,363.36 usft	Latitude:	40° 19' 27.962 N
	+E/-W	-1,152.6 usft	Easting:	3,127,975.94 usft	Longitude:	105° 2' 27.629 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	5,034.0 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/4/2017	8.37	66.76	52,345.05726947

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	82.82

Plan Survey Tool Program			Date	5/23/2017	
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	12,744.6	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	
700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,290.4	11.81	313.87	1,286.2	42.0	-43.7	2.00	2.00	0.00	313.87	
5,070.0	11.81	313.87	4,985.8	578.0	-601.2	0.00	0.00	0.00	0.00	
5,660.3	0.00	0.00	5,572.0	620.0	-644.9	2.00	-2.00	0.00	180.00	
5,760.3	0.00	0.00	5,672.0	620.0	-644.9	0.00	0.00	0.00	0.00	
6,660.4	90.00	88.81	6,245.0	631.9	-72.0	10.00	10.00	0.00	88.81	
7,950.5	90.00	88.81	6,245.0	658.7	1,217.9	0.00	0.00	0.00	0.00	TROTT 7 - LP REV 2
12,744.6	90.00	88.82	6,245.0	757.7	6,010.9	0.00	0.00	0.00	90.00	TROTT 7 - PBHL REV 2

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well TROTT 8E-10-7C
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 24' @ 5058.0usft
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 24' @ 5058.0usft
<b>Site:</b>	Sec 7-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	TROTT 8E-10-7C	<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)
0.0	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
<b>BUILD 2°/100'</b>									
800.0	2.00	313.87	800.0	1.2	-1.3	-1.1	2.00	2.00	0.00
900.0	4.00	313.87	899.8	4.8	-5.0	-4.4	2.00	2.00	0.00
1,000.0	6.00	313.87	999.5	10.9	-11.3	-9.9	2.00	2.00	0.00
1,100.0	8.00	313.87	1,098.7	19.3	-20.1	-17.5	2.00	2.00	0.00
1,200.0	10.00	313.87	1,197.5	30.2	-31.4	-27.4	2.00	2.00	0.00
1,290.4	11.81	313.87	1,286.2	42.0	-43.7	-38.1	2.00	2.00	0.00
<b>HOLD 11.81° INC</b>									
1,300.0	11.81	313.87	1,295.6	43.4	-45.1	-39.3	0.00	0.00	0.00
1,400.0	11.81	313.87	1,393.5	57.6	-59.9	-52.2	0.00	0.00	0.00
1,500.0	11.81	313.87	1,491.4	71.7	-74.6	-65.1	0.00	0.00	0.00
1,600.0	11.81	313.87	1,589.3	85.9	-89.4	-77.9	0.00	0.00	0.00
1,700.0	11.81	313.87	1,687.2	100.1	-104.1	-90.8	0.00	0.00	0.00
1,800.0	11.81	313.87	1,785.0	114.3	-118.9	-103.6	0.00	0.00	0.00
1,900.0	11.81	313.87	1,882.9	128.5	-133.6	-116.5	0.00	0.00	0.00
2,000.0	11.81	313.87	1,980.8	142.6	-148.4	-129.4	0.00	0.00	0.00
2,100.0	11.81	313.87	2,078.7	156.8	-163.1	-142.2	0.00	0.00	0.00
2,200.0	11.81	313.87	2,176.6	171.0	-177.9	-155.1	0.00	0.00	0.00
2,300.0	11.81	313.87	2,274.5	185.2	-192.6	-167.9	0.00	0.00	0.00
2,400.0	11.81	313.87	2,372.4	199.4	-207.4	-180.8	0.00	0.00	0.00
2,438.5	11.81	313.87	2,410.0	204.8	-213.0	-185.8	0.00	0.00	0.00
<b>PARKMAN</b>									
2,500.0	11.81	313.87	2,470.2	213.5	-222.1	-193.7	0.00	0.00	0.00
2,600.0	11.81	313.87	2,568.1	227.7	-236.9	-206.5	0.00	0.00	0.00
2,700.0	11.81	313.87	2,666.0	241.9	-251.6	-219.4	0.00	0.00	0.00
2,800.0	11.81	313.87	2,763.9	256.1	-266.4	-232.3	0.00	0.00	0.00
2,900.0	11.81	313.87	2,861.8	270.3	-281.1	-245.1	0.00	0.00	0.00
3,000.0	11.81	313.87	2,959.7	284.5	-295.9	-258.0	0.00	0.00	0.00
3,051.4	11.81	313.87	3,010.0	291.7	-303.5	-264.6	0.00	0.00	0.00
<b>SUSSEX</b>									
3,100.0	11.81	313.87	3,057.5	298.6	-310.6	-270.8	0.00	0.00	0.00
3,200.0	11.81	313.87	3,155.4	312.8	-325.4	-283.7	0.00	0.00	0.00
3,300.0	11.81	313.87	3,253.3	327.0	-340.1	-296.6	0.00	0.00	0.00
3,400.0	11.81	313.87	3,351.2	341.2	-354.9	-309.4	0.00	0.00	0.00
3,500.0	11.81	313.87	3,449.1	355.4	-369.6	-322.3	0.00	0.00	0.00
3,500.9	11.81	313.87	3,450.0	355.5	-369.8	-322.4	0.00	0.00	0.00
<b>SHANNON</b>									
3,600.0	11.81	313.87	3,547.0	369.5	-384.4	-335.1	0.00	0.00	0.00
3,700.0	11.81	313.87	3,644.8	383.7	-399.1	-348.0	0.00	0.00	0.00
3,800.0	11.81	313.87	3,742.7	397.9	-413.9	-360.9	0.00	0.00	0.00
3,900.0	11.81	313.87	3,840.6	412.1	-428.6	-373.7	0.00	0.00	0.00
4,000.0	11.81	313.87	3,938.5	426.3	-443.4	-386.6	0.00	0.00	0.00
4,100.0	11.81	313.87	4,036.4	440.4	-458.1	-399.4	0.00	0.00	0.00
4,200.0	11.81	313.87	4,134.3	454.6	-472.9	-412.3	0.00	0.00	0.00
4,300.0	11.81	313.87	4,232.2	468.8	-487.6	-425.2	0.00	0.00	0.00

# Planning Report

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<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 24' @ 5058.0usft
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 24' @ 5058.0usft
<b>Site:</b>	Sec 7-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	TROTT 8E-10-7C	<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)
4,400.0	11.81	313.87	4,330.0	483.0	-502.4	-438.0	0.00	0.00	0.00
4,500.0	11.81	313.87	4,427.9	497.2	-517.1	-450.9	0.00	0.00	0.00
4,600.0	11.81	313.87	4,525.8	511.3	-531.9	-463.8	0.00	0.00	0.00
4,700.0	11.81	313.87	4,623.7	525.5	-546.6	-476.6	0.00	0.00	0.00
4,800.0	11.81	313.87	4,721.6	539.7	-561.4	-489.5	0.00	0.00	0.00
4,900.0	11.81	313.87	4,819.5	553.9	-576.1	-502.3	0.00	0.00	0.00
5,000.0	11.81	313.87	4,917.3	568.1	-590.9	-515.2	0.00	0.00	0.00
5,070.0	11.81	313.87	4,985.8	578.0	-601.2	-524.2	0.00	0.00	0.00
<b>DROP 2°/100'</b>									
5,100.0	11.21	313.87	5,015.3	582.1	-605.5	-528.0	2.00	-2.00	0.00
5,200.0	9.21	313.87	5,113.7	594.4	-618.3	-539.1	2.00	-2.00	0.00
5,300.0	7.21	313.87	5,212.6	604.3	-628.6	-548.1	2.00	-2.00	0.00
5,400.0	5.21	313.87	5,312.1	611.8	-636.4	-554.9	2.00	-2.00	0.00
5,500.0	3.21	313.87	5,411.8	616.9	-641.7	-559.5	2.00	-2.00	0.00
5,600.0	1.21	313.87	5,511.7	619.6	-644.4	-561.9	2.00	-2.00	0.00
5,660.3	0.00	0.00	5,572.0	620.0	-644.9	-562.3	2.00	-2.00	0.00
<b>HOLD VERTICAL</b>									
5,700.0	0.00	0.00	5,611.7	620.0	-644.9	-562.3	0.00	0.00	0.00
5,760.3	0.00	0.00	5,672.0	620.0	-644.9	-562.3	0.00	0.00	0.00
<b>KOP, BUILD 10°/100'</b>									
5,800.0	3.97	88.81	5,711.7	620.0	-643.5	-560.9	10.00	10.00	0.00
5,850.0	8.97	88.81	5,761.3	620.1	-637.9	-555.3	10.00	10.00	0.00
5,900.0	13.97	88.81	5,810.3	620.4	-628.0	-545.4	10.00	10.00	0.00
5,950.0	18.97	88.81	5,858.2	620.6	-613.8	-531.3	10.00	10.00	0.00
6,000.0	23.97	88.81	5,904.8	621.0	-595.5	-513.2	10.00	10.00	0.00
6,016.8	25.65	88.81	5,920.0	621.2	-588.5	-506.2	10.00	10.00	0.00
<b>NIOBRARA</b>									
6,050.0	28.97	88.81	5,949.5	621.5	-573.2	-491.0	10.00	10.00	0.00
6,100.0	33.97	88.81	5,992.1	622.0	-547.1	-465.1	10.00	10.00	0.00
6,150.0	38.97	88.81	6,032.3	622.6	-517.4	-435.5	10.00	10.00	0.00
6,200.0	43.97	88.81	6,069.8	623.3	-484.4	-402.6	10.00	10.00	0.00
6,250.0	48.97	88.81	6,104.2	624.1	-448.1	-366.5	10.00	10.00	0.00
6,300.0	53.97	88.81	6,135.4	624.9	-409.0	-327.7	10.00	10.00	0.00
6,350.0	58.97	88.81	6,163.0	625.8	-367.4	-286.2	10.00	10.00	0.00
6,400.0	63.96	88.81	6,186.9	626.7	-323.5	-242.6	10.00	10.00	0.00
6,450.0	68.96	88.81	6,206.8	627.6	-277.7	-197.0	10.00	10.00	0.00
6,459.1	69.87	88.81	6,210.0	627.8	-269.2	-188.5	10.00	10.00	0.00
<b>FORT HAYS</b>									
6,500.0	73.96	88.81	6,222.7	628.6	-230.3	-149.8	10.00	10.00	0.00
6,550.0	78.96	88.81	6,234.4	629.6	-181.7	-101.5	10.00	10.00	0.00
6,600.0	83.96	88.81	6,241.8	630.6	-132.3	-52.4	10.00	10.00	0.00
6,650.0	88.96	88.81	6,244.9	631.7	-82.4	-2.7	10.00	10.00	0.00
6,660.4	90.00	88.81	6,245.0	631.9	-72.0	7.6	10.00	10.00	0.00
<b>LP @ 90° INC - CODELL</b>									
6,700.0	90.00	88.81	6,245.0	632.7	-32.4	47.0	0.00	0.00	0.00
6,800.0	90.00	88.81	6,245.0	634.8	67.6	146.4	0.00	0.00	0.00
6,900.0	90.00	88.81	6,245.0	636.9	167.6	245.9	0.00	0.00	0.00
7,000.0	90.00	88.81	6,245.0	638.9	267.5	345.3	0.00	0.00	0.00
7,100.0	90.00	88.81	6,245.0	641.0	367.5	444.8	0.00	0.00	0.00
7,200.0	90.00	88.81	6,245.0	643.1	467.5	544.2	0.00	0.00	0.00
7,300.0	90.00	88.81	6,245.0	645.2	567.5	643.7	0.00	0.00	0.00
7,400.0	90.00	88.81	6,245.0	647.2	667.4	743.2	0.00	0.00	0.00
7,500.0	90.00	88.81	6,245.0	649.3	767.4	842.6	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well TROTT 8E-10-7C
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 24' @ 5058.0usft
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 24' @ 5058.0usft
<b>Site:</b>	Sec 7-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	TROTT 8E-10-7C	<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)
7,600.0	90.00	88.81	6,245.0	651.4	867.4	942.1	0.00	0.00	0.00
7,700.0	90.00	88.81	6,245.0	653.5	967.4	1,041.5	0.00	0.00	0.00
7,800.0	90.00	88.81	6,245.0	655.6	1,067.4	1,141.0	0.00	0.00	0.00
7,900.0	90.00	88.81	6,245.0	657.6	1,167.3	1,240.4	0.00	0.00	0.00
7,950.5	90.00	88.81	6,245.0	658.7	1,217.9	1,290.7	0.00	0.00	0.00
HOLD									
8,000.0	90.00	88.81	6,245.0	659.7	1,267.3	1,339.9	0.00	0.00	0.00
8,100.0	90.00	88.81	6,245.0	661.8	1,367.3	1,439.3	0.00	0.00	0.00
8,200.0	90.00	88.81	6,245.0	663.9	1,467.3	1,538.8	0.00	0.00	0.00
8,300.0	90.00	88.81	6,245.0	665.9	1,567.3	1,638.2	0.00	0.00	0.00
8,400.0	90.00	88.81	6,245.0	668.0	1,667.2	1,737.7	0.00	0.00	0.00
8,500.0	90.00	88.81	6,245.0	670.1	1,767.2	1,837.1	0.00	0.00	0.00
8,600.0	90.00	88.81	6,245.0	672.2	1,867.2	1,936.6	0.00	0.00	0.00
8,700.0	90.00	88.81	6,245.0	674.2	1,967.2	2,036.0	0.00	0.00	0.00
8,800.0	90.00	88.81	6,245.0	676.3	2,067.1	2,135.5	0.00	0.00	0.00
8,900.0	90.00	88.81	6,245.0	678.4	2,167.1	2,234.9	0.00	0.00	0.00
9,000.0	90.00	88.81	6,245.0	680.4	2,267.1	2,334.4	0.00	0.00	0.00
9,100.0	90.00	88.81	6,245.0	682.5	2,367.1	2,433.9	0.00	0.00	0.00
9,200.0	90.00	88.81	6,245.0	684.6	2,467.1	2,533.3	0.00	0.00	0.00
9,300.0	90.00	88.81	6,245.0	686.7	2,567.0	2,632.8	0.00	0.00	0.00
9,400.0	90.00	88.81	6,245.0	688.7	2,667.0	2,732.2	0.00	0.00	0.00
9,500.0	90.00	88.81	6,245.0	690.8	2,767.0	2,831.7	0.00	0.00	0.00
9,600.0	90.00	88.81	6,245.0	692.9	2,867.0	2,931.1	0.00	0.00	0.00
9,700.0	90.00	88.81	6,245.0	694.9	2,966.9	3,030.6	0.00	0.00	0.00
9,800.0	90.00	88.81	6,245.0	697.0	3,066.9	3,130.0	0.00	0.00	0.00
9,900.0	90.00	88.81	6,245.0	699.1	3,166.9	3,229.5	0.00	0.00	0.00
10,000.0	90.00	88.82	6,245.0	701.1	3,266.9	3,328.9	0.00	0.00	0.00
10,100.0	90.00	88.82	6,245.0	703.2	3,366.9	3,428.4	0.00	0.00	0.00
10,200.0	90.00	88.82	6,245.0	705.3	3,466.8	3,527.8	0.00	0.00	0.00
10,300.0	90.00	88.82	6,245.0	707.3	3,566.8	3,627.3	0.00	0.00	0.00
10,400.0	90.00	88.82	6,245.0	709.4	3,666.8	3,726.7	0.00	0.00	0.00
10,500.0	90.00	88.82	6,245.0	711.5	3,766.8	3,826.2	0.00	0.00	0.00
10,600.0	90.00	88.82	6,245.0	713.5	3,866.8	3,925.6	0.00	0.00	0.00
10,700.0	90.00	88.82	6,245.0	715.6	3,966.7	4,025.1	0.00	0.00	0.00
10,800.0	90.00	88.82	6,245.0	717.7	4,066.7	4,124.5	0.00	0.00	0.00
10,900.0	90.00	88.82	6,245.0	719.7	4,166.7	4,224.0	0.00	0.00	0.00
11,000.0	90.00	88.82	6,245.0	721.8	4,266.7	4,323.4	0.00	0.00	0.00
11,100.0	90.00	88.82	6,245.0	723.9	4,366.7	4,422.9	0.00	0.00	0.00
11,200.0	90.00	88.82	6,245.0	725.9	4,466.6	4,522.3	0.00	0.00	0.00
11,300.0	90.00	88.82	6,245.0	728.0	4,566.6	4,621.8	0.00	0.00	0.00
11,400.0	90.00	88.82	6,245.0	730.0	4,666.6	4,721.3	0.00	0.00	0.00
11,500.0	90.00	88.82	6,245.0	732.1	4,766.6	4,820.7	0.00	0.00	0.00
11,600.0	90.00	88.82	6,245.0	734.2	4,866.5	4,920.2	0.00	0.00	0.00
11,700.0	90.00	88.82	6,245.0	736.2	4,966.5	5,019.6	0.00	0.00	0.00
11,800.0	90.00	88.82	6,245.0	738.3	5,066.5	5,119.1	0.00	0.00	0.00
11,900.0	90.00	88.82	6,245.0	740.4	5,166.5	5,218.5	0.00	0.00	0.00
12,000.0	90.00	88.82	6,245.0	742.4	5,266.5	5,318.0	0.00	0.00	0.00
12,100.0	90.00	88.82	6,245.0	744.5	5,366.4	5,417.4	0.00	0.00	0.00
12,200.0	90.00	88.82	6,245.0	746.5	5,466.4	5,516.9	0.00	0.00	0.00
12,300.0	90.00	88.82	6,245.0	748.6	5,566.4	5,616.3	0.00	0.00	0.00
12,400.0	90.00	88.82	6,245.0	750.6	5,666.4	5,715.8	0.00	0.00	0.00
12,500.0	90.00	88.82	6,245.0	752.7	5,766.4	5,815.2	0.00	0.00	0.00
12,600.0	90.00	88.82	6,245.0	754.8	5,866.3	5,914.7	0.00	0.00	0.00
12,700.0	90.00	88.82	6,245.0	756.8	5,966.3	6,014.1	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well TROTT 8E-10-7C
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 24' @ 5058.0usft
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 24' @ 5058.0usft
<b>Site:</b>	Sec 7-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	TROTT 8E-10-7C	<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)
12,744.6	90.00	88.82	6,245.0	757.7	6,010.9	6,058.5	0.00	0.00	0.00
TD at 12744.6' 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 7 - PBHL REV 2 - plan hits target center - Point	0.00	0.00	6,245.0	757.7	6,010.9	1,362,152.19	3,133,982.85	40° 19' 35.443 N	105° 1' 10.016 W
TROTT 7 - LP REV 2 - plan hits target center - Point	0.00	0.00	6,245.0	658.7	1,217.9	1,362,028.33	3,129,190.38	40° 19' 34.471 N	105° 2' 11.904 W

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,438.5	2,410.0	PARKMAN				
3,051.4	3,010.0	SUSSEX				
3,500.9	3,450.0	SHANNON				
6,016.8	5,920.0	NIOBRARA				
6,459.1	6,210.0	FORT HAYS				
6,660.4	6,245.0	CODELL				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
700.0	700.0	0.0	0.0	BUILD 2°/100'
1,290.4	1,286.2	42.0	-43.7	HOLD 11.81° INC
5,070.0	4,985.8	578.0	-601.2	DROP 2°/100'
5,660.3	5,572.0	620.0	-644.9	HOLD VERTICAL
5,760.3	5,672.0	620.0	-644.9	KOP, BUILD 10°/100'
6,660.4	6,245.0	631.9	-72.0	LP @ 90° INC
7,950.5	6,245.0	658.7	1,217.9	HOLD
12,744.6	6,245.0	757.7	6,010.9	TD at 12744.6' MD