

# **EXTRACTION OIL & GAS**

**Weld County**

**Sec 35-T5N-R68W**

**JOHNSONS CORNER 13-N**

**ORIGINAL WELLBORE**

**Plan: PROPOSAL #1**

## **Standard Planning Report**

**28 March, 2017**



Project: Weld County  
Site: Sec 35-T5N-R68W  
Well: JOHNSONS CORNER 13-N  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1



Azimuths to True North  
Magnetic North: 8.62°

Magnetic Field  
Strength: 52673.3snT  
Dip Angle: 66.86°  
Date: 8/14/2014  
Model: IGRF2015

#### WELL DETAILS: JOHNSONS CORNER 13-N

+N/-S	+E/-W	Northing	Ground Level:	5009.0	Latitude	Longitude	Slot
0.0	0.0	1373308.83	Easting	3146750.83	40° 21' 24.977 N	104° 58' 24.305 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	950.0	0.00	0.00	950.0	0.0	0.0	0.00	0.00	0.0	
3	1217.8	5.36	195.29	1217.4	-12.1	-3.3	2.00	195.29	3.5	
4	3115.2	5.36	195.29	3106.6	-182.9	-50.0	0.00	0.00	52.4	
5	3383.1	0.00	0.00	3374.0	-195.0	-53.3	2.00	180.00	55.9	
6	6465.1	0.00	0.00	6456.0	-195.0	-53.3	0.00	0.00	55.9	
7	7365.1	89.99	270.34	7029.0	-191.6	-626.2	10.00	270.34	628.7	
8	17024.6	90.01	270.32	7029.0	-135.9	-10285.6	0.00	-50.12	10286.5	

#### ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
950.0	0.00	0.00	950.0	0.0	0.0	0.0	0.0	Build 2"/100'
1217.8	5.36	195.29	1217.4	-12.1	-3.3	3.5	12.5	Hold 5.36" Inc
3115.2	5.36	195.29	3106.6	-182.9	-50.0	52.4	189.6	Drop 2"/100'
3383.1	0.00	0.00	3374.0	-195.0	-53.3	55.9	202.1	Hold Vertical
6465.1	0.00	0.00	6456.0	-195.0	-53.3	55.9	202.1	KOP, Build 10"/100'
7365.1	89.99	270.34	7029.0	-191.6	-626.2	628.7	775.1	LP @ 89.99° Inc, Hold
17024.6	90.01	270.32	7029.0	-135.9	-10285.6	10286.5	10434.6	TD at 17024.6' MD

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
BHL - JOHNSONS CORNER 13	7029.0	-135.9	-10285.6	1373111.84	3136466.26	40° 21' 23.612 N	105° 0' 37.170 W	Point
LP - JOHNSONS CORNER 13	7029.0	-191.6	-626.2	1373113.52	3146125.77	40° 21' 23.083 N	104° 58' 32.394 W	Point

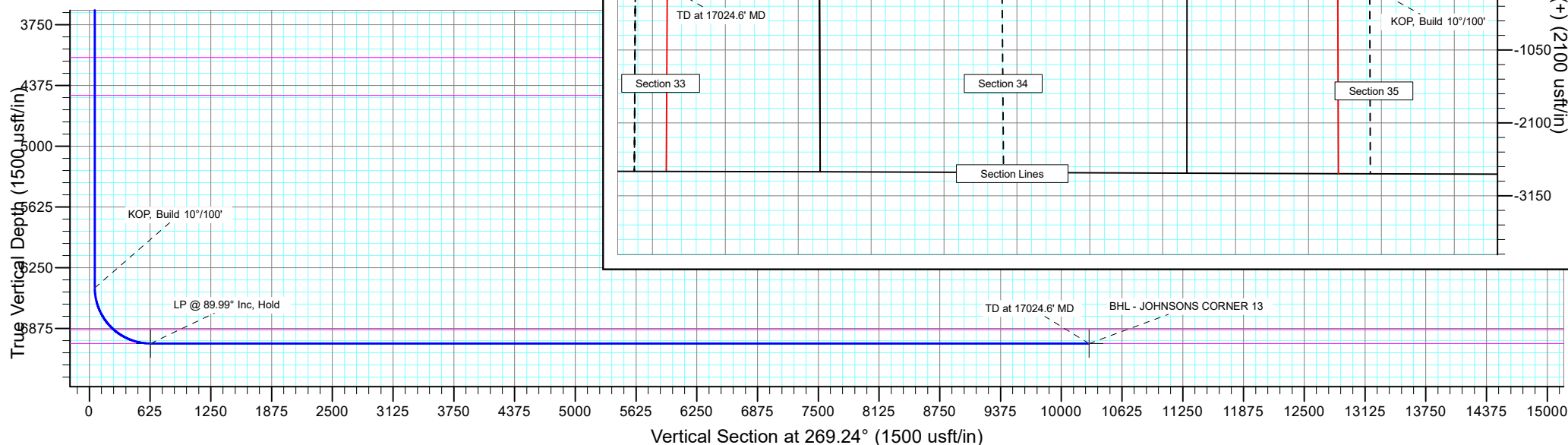
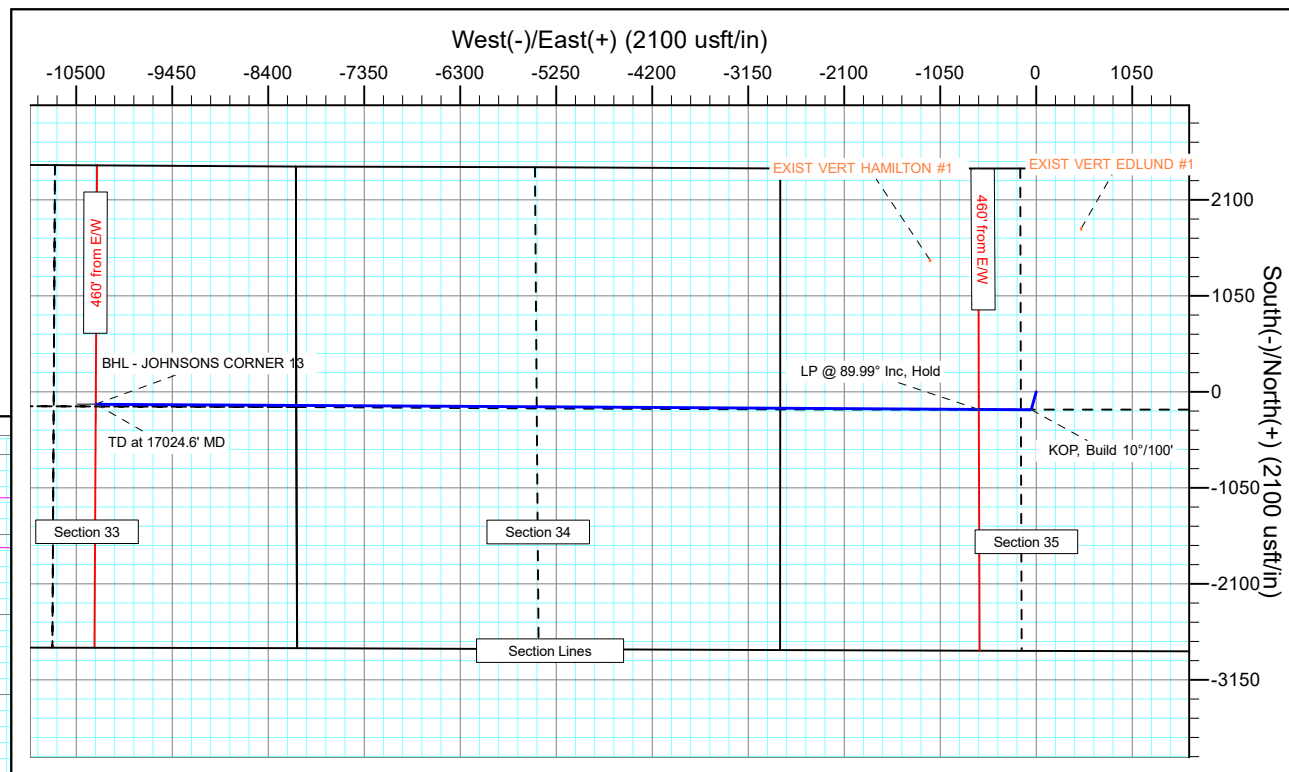
#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3360.0	3369.1	PARKMAN
4087.0	4096.1	SUSSEX
4477.0	4486.1	SHANNON
6887.0	6952.9	NIOBRARA
7029.0	7365.1	NIO B TARGET

#### 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:  
2444' FNL, 2458' FEL  
Sec 35-T5N-R68W  
LP:  
2635' FNL, 2172' FWL  
Sec 35-T5N-R68W  
BHL:  
2613' FNL, 2193' FEL  
Sec 33-T5N-R68W



## Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well JOHNSONS CORNER 13-N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 24' @ 5033.0usft (Original Well Elev)
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 24' @ 5033.0usft (Original Well Elev)
<b>Site:</b>	Sec 35-T5N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	JOHNSONS CORNER 13-N	<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 35-T5N-R68W			
Site Position:		Northing:	1,373,645.09 usft	Latitude:	40° 21' 28.300 N
From:	Lat/Long	Easting:	3,146,750.79 usft	Longitude:	104° 58' 24.280 W
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in	Grid Convergence:	0.34 °

Well	JOHNSONS CORNER 13-N					
Well Position	+N/-S	-336.3 usft	Northing:	1,373,308.83 usft	Latitude:	40° 21' 24.977 N
	+E/-W	-2.0 usft	Easting:	3,146,750.84 usft	Longitude:	104° 58' 24.305 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	5,009.0 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/14/2014	8.62	66.86	52,673.29778510

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	269.24

Plan Survey Tool Program			Date	3/28/2017	
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	17,024.6	PROPOSAL #1 (ORIGINAL WEL	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	
950.0	0.00	0.00	950.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,217.8	5.36	195.29	1,217.4	-12.1	-3.3	2.00	2.00	0.00	195.29	
3,115.2	5.36	195.29	3,106.6	-182.9	-50.0	0.00	0.00	0.00	0.00	
3,383.1	0.00	0.00	3,374.0	-195.0	-53.3	2.00	-2.00	0.00	180.00	
6,465.1	0.00	0.00	6,456.0	-195.0	-53.3	0.00	0.00	0.00	0.00	KOP - JOHNSONS C
7,365.1	89.99	270.34	7,029.0	-191.6	-626.2	10.00	10.00	-9.96	270.34	LP - JOHNSONS COI
17,024.6	90.01	270.32	7,029.0	-135.9	-10,285.6	0.00	0.00	0.00	-50.12	BHL - JOHNSONS C

# Planning Report

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<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 24' @ 5033.0usft (Original Well Elev)
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 24' @ 5033.0usft (Original Well Elev)
<b>Site:</b>	Sec 35-T5N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	JOHNSONS CORNER 13-N	<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
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
950.0	0.00	0.00	950.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Build 2°/100'</b>									
1,000.0	1.00	195.29	1,000.0	-0.4	-0.1	0.1	2.00	2.00	0.00
1,100.0	3.00	195.29	1,099.9	-3.8	-1.0	1.1	2.00	2.00	0.00
1,200.0	5.00	195.29	1,199.7	-10.5	-2.9	3.0	2.00	2.00	0.00
1,217.8	5.36	195.29	1,217.4	-12.1	-3.3	3.5	2.00	2.00	0.00
<b>Hold 5.36° Inc</b>									
1,300.0	5.36	195.29	1,299.3	-19.5	-5.3	5.6	0.00	0.00	0.00
1,400.0	5.36	195.29	1,398.8	-28.5	-7.8	8.2	0.00	0.00	0.00
1,500.0	5.36	195.29	1,498.4	-37.5	-10.2	10.7	0.00	0.00	0.00
1,600.0	5.36	195.29	1,597.9	-46.5	-12.7	13.3	0.00	0.00	0.00
1,700.0	5.36	195.29	1,697.5	-55.5	-15.2	15.9	0.00	0.00	0.00
1,800.0	5.36	195.29	1,797.1	-64.5	-17.6	18.5	0.00	0.00	0.00
1,900.0	5.36	195.29	1,896.6	-73.5	-20.1	21.1	0.00	0.00	0.00
2,000.0	5.36	195.29	1,996.2	-82.5	-22.6	23.6	0.00	0.00	0.00
2,100.0	5.36	195.29	2,095.8	-91.5	-25.0	26.2	0.00	0.00	0.00
2,200.0	5.36	195.29	2,195.3	-100.5	-27.5	28.8	0.00	0.00	0.00
2,300.0	5.36	195.29	2,294.9	-109.5	-29.9	31.4	0.00	0.00	0.00
2,400.0	5.36	195.29	2,394.4	-118.5	-32.4	34.0	0.00	0.00	0.00
2,500.0	5.36	195.29	2,494.0	-127.5	-34.9	36.5	0.00	0.00	0.00
2,600.0	5.36	195.29	2,593.6	-136.5	-37.3	39.1	0.00	0.00	0.00
2,700.0	5.36	195.29	2,693.1	-145.5	-39.8	41.7	0.00	0.00	0.00
2,800.0	5.36	195.29	2,792.7	-154.5	-42.2	44.3	0.00	0.00	0.00
2,900.0	5.36	195.29	2,892.3	-163.5	-44.7	46.9	0.00	0.00	0.00
3,000.0	5.36	195.29	2,991.8	-172.5	-47.2	49.4	0.00	0.00	0.00
3,100.0	5.36	195.29	3,091.4	-181.6	-49.6	52.0	0.00	0.00	0.00
3,115.2	5.36	195.29	3,106.6	-182.9	-50.0	52.4	0.00	0.00	0.00
<b>Drop 2°/100'</b>									
3,200.0	3.66	195.29	3,191.1	-189.4	-51.8	54.3	2.00	-2.00	0.00
3,300.0	1.66	195.29	3,290.9	-193.8	-53.0	55.5	2.00	-2.00	0.00
3,369.1	0.28	195.29	3,360.0	-195.0	-53.3	55.9	2.00	-2.00	0.00
<b>PARKMAN</b>									
3,383.1	0.00	0.00	3,374.0	-195.0	-53.3	55.9	2.00	-2.00	0.00
<b>Hold Vertical</b>									
3,400.0	0.00	0.00	3,390.9	-195.0	-53.3	55.9	0.00	0.00	0.00
3,500.0	0.00	0.00	3,490.9	-195.0	-53.3	55.9	0.00	0.00	0.00
3,600.0	0.00	0.00	3,590.9	-195.0	-53.3	55.9	0.00	0.00	0.00
3,700.0	0.00	0.00	3,690.9	-195.0	-53.3	55.9	0.00	0.00	0.00
3,800.0	0.00	0.00	3,790.9	-195.0	-53.3	55.9	0.00	0.00	0.00
3,900.0	0.00	0.00	3,890.9	-195.0	-53.3	55.9	0.00	0.00	0.00
4,000.0	0.00	0.00	3,990.9	-195.0	-53.3	55.9	0.00	0.00	0.00
4,096.1	0.00	0.00	4,087.0	-195.0	-53.3	55.9	0.00	0.00	0.00
<b>SUSSEX</b>									

# Planning Report

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<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 24' @ 5033.0usft (Original Well Elev)
<b>Site:</b>	Sec 35-T5N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	JOHNSONS CORNER 13-N	<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)
4,100.0	0.00	0.00	4,090.9	-195.0	-53.3	55.9	0.00	0.00	0.00
4,200.0	0.00	0.00	4,190.9	-195.0	-53.3	55.9	0.00	0.00	0.00
4,300.0	0.00	0.00	4,290.9	-195.0	-53.3	55.9	0.00	0.00	0.00
4,400.0	0.00	0.00	4,390.9	-195.0	-53.3	55.9	0.00	0.00	0.00
4,486.1	0.00	0.00	4,477.0	-195.0	-53.3	55.9	0.00	0.00	0.00
<b>SHANNON</b>									
4,500.0	0.00	0.00	4,490.9	-195.0	-53.3	55.9	0.00	0.00	0.00
4,600.0	0.00	0.00	4,590.9	-195.0	-53.3	55.9	0.00	0.00	0.00
4,700.0	0.00	0.00	4,690.9	-195.0	-53.3	55.9	0.00	0.00	0.00
4,800.0	0.00	0.00	4,790.9	-195.0	-53.3	55.9	0.00	0.00	0.00
4,900.0	0.00	0.00	4,890.9	-195.0	-53.3	55.9	0.00	0.00	0.00
5,000.0	0.00	0.00	4,990.9	-195.0	-53.3	55.9	0.00	0.00	0.00
5,100.0	0.00	0.00	5,090.9	-195.0	-53.3	55.9	0.00	0.00	0.00
5,200.0	0.00	0.00	5,190.9	-195.0	-53.3	55.9	0.00	0.00	0.00
5,300.0	0.00	0.00	5,290.9	-195.0	-53.3	55.9	0.00	0.00	0.00
5,400.0	0.00	0.00	5,390.9	-195.0	-53.3	55.9	0.00	0.00	0.00
5,500.0	0.00	0.00	5,490.9	-195.0	-53.3	55.9	0.00	0.00	0.00
5,600.0	0.00	0.00	5,590.9	-195.0	-53.3	55.9	0.00	0.00	0.00
5,700.0	0.00	0.00	5,690.9	-195.0	-53.3	55.9	0.00	0.00	0.00
5,800.0	0.00	0.00	5,790.9	-195.0	-53.3	55.9	0.00	0.00	0.00
5,900.0	0.00	0.00	5,890.9	-195.0	-53.3	55.9	0.00	0.00	0.00
6,000.0	0.00	0.00	5,990.9	-195.0	-53.3	55.9	0.00	0.00	0.00
6,100.0	0.00	0.00	6,090.9	-195.0	-53.3	55.9	0.00	0.00	0.00
6,200.0	0.00	0.00	6,190.9	-195.0	-53.3	55.9	0.00	0.00	0.00
6,300.0	0.00	0.00	6,290.9	-195.0	-53.3	55.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,390.9	-195.0	-53.3	55.9	0.00	0.00	0.00
6,465.1	0.00	0.00	6,456.0	-195.0	-53.3	55.9	0.00	0.00	0.00
<b>KOP, Build 10°/100'</b>									
6,500.0	3.49	270.34	6,490.9	-195.0	-54.4	56.9	10.00	10.00	0.00
6,550.0	8.49	270.34	6,540.6	-195.0	-59.6	62.2	10.00	10.00	0.00
6,600.0	13.49	270.34	6,589.7	-194.9	-69.1	71.7	10.00	10.00	0.00
6,650.0	18.49	270.34	6,637.7	-194.8	-82.9	85.4	10.00	10.00	0.00
6,700.0	23.49	270.34	6,684.4	-194.7	-100.8	103.4	10.00	10.00	0.00
6,750.0	28.49	270.34	6,729.3	-194.6	-122.7	125.3	10.00	10.00	0.00
6,800.0	33.49	270.34	6,772.2	-194.4	-148.4	151.0	10.00	10.00	0.00
6,850.0	38.49	270.34	6,812.6	-194.3	-177.8	180.4	10.00	10.00	0.00
6,900.0	43.49	270.34	6,850.4	-194.1	-210.6	213.1	10.00	10.00	0.00
6,950.0	48.49	270.34	6,885.1	-193.8	-246.5	249.1	10.00	10.00	0.00
6,952.9	48.78	270.34	6,887.0	-193.8	-248.7	251.3	10.00	10.00	0.00
<b>NIOBRARA</b>									
7,000.0	53.49	270.34	6,916.5	-193.6	-285.4	287.9	10.00	10.00	0.00
7,050.0	58.49	270.34	6,944.5	-193.4	-326.8	329.3	10.00	10.00	0.00
7,100.0	63.49	270.34	6,968.7	-193.1	-370.5	373.0	10.00	10.00	0.00
7,150.0	68.49	270.34	6,989.1	-192.8	-416.2	418.7	10.00	10.00	0.00
7,200.0	73.49	270.34	7,005.4	-192.6	-463.4	465.9	10.00	10.00	0.00
7,250.0	78.49	270.34	7,017.5	-192.3	-511.9	514.4	10.00	10.00	0.00
7,300.0	83.49	270.34	7,025.3	-192.0	-561.3	563.8	10.00	10.00	0.00
7,350.0	88.49	270.34	7,028.8	-191.7	-611.2	613.6	10.00	10.00	0.00
7,365.1	89.99	270.34	7,029.0	-191.6	-626.2	628.7	10.00	10.00	0.00
<b>LP @ 89.99° Inc, Hold - NIO B TARGET</b>									
7,400.0	89.99	270.34	7,029.0	-191.4	-661.2	663.6	0.00	0.00	0.00
7,500.0	89.99	270.34	7,029.0	-190.8	-761.2	763.6	0.00	0.00	0.00
7,600.0	89.99	270.34	7,029.0	-190.2	-861.2	863.6	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well JOHNSONS CORNER 13-N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 24' @ 5033.0usft (Original Well Elev)
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 24' @ 5033.0usft (Original Well Elev)
<b>Site:</b>	Sec 35-T5N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	JOHNSONS CORNER 13-N	<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)	
7,700.0	89.99	270.34	7,029.0	-189.6	-961.2	963.6	0.00	0.00	0.00	
7,800.0	89.99	270.34	7,029.1	-189.0	-1,061.1	1,063.6	0.00	0.00	0.00	
7,900.0	89.99	270.34	7,029.1	-188.4	-1,161.1	1,163.5	0.00	0.00	0.00	
8,000.0	89.99	270.34	7,029.1	-187.9	-1,261.1	1,263.5	0.00	0.00	0.00	
8,100.0	89.99	270.34	7,029.1	-187.3	-1,361.1	1,363.5	0.00	0.00	0.00	
8,200.0	89.99	270.34	7,029.1	-186.7	-1,461.1	1,463.5	0.00	0.00	0.00	
8,300.0	89.99	270.34	7,029.1	-186.1	-1,561.1	1,563.5	0.00	0.00	0.00	
8,400.0	89.99	270.34	7,029.1	-185.5	-1,661.1	1,663.4	0.00	0.00	0.00	
8,500.0	89.99	270.34	7,029.1	-184.9	-1,761.1	1,763.4	0.00	0.00	0.00	
8,600.0	89.99	270.34	7,029.1	-184.3	-1,861.1	1,863.4	0.00	0.00	0.00	
8,700.0	89.99	270.34	7,029.1	-183.7	-1,961.1	1,963.4	0.00	0.00	0.00	
8,800.0	89.99	270.34	7,029.2	-183.1	-2,061.1	2,063.4	0.00	0.00	0.00	
8,900.0	90.00	270.34	7,029.2	-182.6	-2,161.1	2,163.4	0.00	0.00	0.00	
9,000.0	90.00	270.34	7,029.2	-182.0	-2,261.1	2,263.3	0.00	0.00	0.00	
9,100.0	90.00	270.34	7,029.2	-181.4	-2,361.1	2,363.3	0.00	0.00	0.00	
9,200.0	90.00	270.34	7,029.2	-180.8	-2,461.1	2,463.3	0.00	0.00	0.00	
9,300.0	90.00	270.34	7,029.2	-180.2	-2,561.1	2,563.3	0.00	0.00	0.00	
9,400.0	90.00	270.34	7,029.2	-179.6	-2,661.1	2,663.3	0.00	0.00	0.00	
9,500.0	90.00	270.34	7,029.2	-179.0	-2,761.1	2,763.2	0.00	0.00	0.00	
9,600.0	90.00	270.33	7,029.2	-178.5	-2,861.1	2,863.2	0.00	0.00	0.00	
9,700.0	90.00	270.33	7,029.2	-177.9	-2,961.1	2,963.2	0.00	0.00	0.00	
9,800.0	90.00	270.33	7,029.2	-177.3	-3,061.1	3,063.2	0.00	0.00	0.00	
9,900.0	90.00	270.33	7,029.2	-176.7	-3,161.1	3,163.2	0.00	0.00	0.00	
10,000.0	90.00	270.33	7,029.2	-176.1	-3,261.1	3,263.2	0.00	0.00	0.00	
10,100.0	90.00	270.33	7,029.2	-175.5	-3,361.1	3,363.1	0.00	0.00	0.00	
10,200.0	90.00	270.33	7,029.3	-175.0	-3,461.1	3,463.1	0.00	0.00	0.00	
10,300.0	90.00	270.33	7,029.3	-174.4	-3,561.1	3,563.1	0.00	0.00	0.00	
10,400.0	90.00	270.33	7,029.3	-173.8	-3,661.1	3,663.1	0.00	0.00	0.00	
10,500.0	90.00	270.33	7,029.3	-173.2	-3,761.1	3,763.1	0.00	0.00	0.00	
10,600.0	90.00	270.33	7,029.3	-172.6	-3,861.1	3,863.0	0.00	0.00	0.00	
10,700.0	90.00	270.33	7,029.3	-172.0	-3,961.1	3,963.0	0.00	0.00	0.00	
10,800.0	90.00	270.33	7,029.3	-171.5	-4,061.1	4,063.0	0.00	0.00	0.00	
10,900.0	90.00	270.33	7,029.3	-170.9	-4,161.1	4,163.0	0.00	0.00	0.00	
11,000.0	90.00	270.33	7,029.3	-170.3	-4,261.1	4,263.0	0.00	0.00	0.00	
11,100.0	90.00	270.33	7,029.3	-169.7	-4,361.1	4,363.0	0.00	0.00	0.00	
11,200.0	90.00	270.33	7,029.3	-169.1	-4,461.1	4,462.9	0.00	0.00	0.00	
11,300.0	90.00	270.33	7,029.3	-168.6	-4,561.1	4,562.9	0.00	0.00	0.00	
11,400.0	90.00	270.33	7,029.3	-168.0	-4,661.1	4,662.9	0.00	0.00	0.00	
11,500.0	90.00	270.33	7,029.3	-167.4	-4,761.1	4,762.9	0.00	0.00	0.00	
11,600.0	90.00	270.33	7,029.3	-166.8	-4,861.1	4,862.9	0.00	0.00	0.00	
11,700.0	90.00	270.33	7,029.3	-166.3	-4,961.1	4,962.8	0.00	0.00	0.00	
11,800.0	90.00	270.33	7,029.3	-165.7	-5,061.1	5,062.8	0.00	0.00	0.00	
11,900.0	90.00	270.33	7,029.3	-165.1	-5,161.1	5,162.8	0.00	0.00	0.00	
12,000.0	90.00	270.33	7,029.3	-164.5	-5,261.1	5,262.8	0.00	0.00	0.00	
12,100.0	90.00	270.33	7,029.3	-163.9	-5,361.1	5,362.8	0.00	0.00	0.00	
12,200.0	90.00	270.33	7,029.3	-163.4	-5,461.1	5,462.8	0.00	0.00	0.00	
12,300.0	90.00	270.33	7,029.3	-162.8	-5,561.1	5,562.7	0.00	0.00	0.00	
12,400.0	90.00	270.33	7,029.3	-162.2	-5,661.1	5,662.7	0.00	0.00	0.00	
12,500.0	90.00	270.33	7,029.3	-161.6	-5,761.1	5,762.7	0.00	0.00	0.00	
12,600.0	90.00	270.33	7,029.3	-161.1	-5,861.1	5,862.7	0.00	0.00	0.00	
12,700.0	90.00	270.33	7,029.3	-160.5	-5,961.1	5,962.7	0.00	0.00	0.00	
12,800.0	90.00	270.33	7,029.3	-159.9	-6,061.1	6,062.6	0.00	0.00	0.00	
12,900.0	90.00	270.33	7,029.3	-159.3	-6,161.1	6,162.6	0.00	0.00	0.00	
13,000.0	90.00	270.33	7,029.3	-158.8	-6,261.1	6,262.6	0.00	0.00	0.00	

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well JOHNSONS CORNER 13-N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 24' @ 5033.0usft (Original Well Elev)
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 24' @ 5033.0usft (Original Well Elev)
<b>Site:</b>	Sec 35-T5N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	JOHNSONS CORNER 13-N	<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)	
13,100.0	90.00	270.33	7,029.3	-158.2	-6,361.1	6,362.6	0.00	0.00	0.00	
13,200.0	90.00	270.33	7,029.3	-157.6	-6,461.1	6,462.6	0.00	0.00	0.00	
13,300.0	90.00	270.33	7,029.3	-157.0	-6,561.1	6,562.6	0.00	0.00	0.00	
13,400.0	90.00	270.33	7,029.3	-156.5	-6,661.1	6,662.5	0.00	0.00	0.00	
13,500.0	90.00	270.33	7,029.3	-155.9	-6,761.1	6,762.5	0.00	0.00	0.00	
13,600.0	90.00	270.33	7,029.3	-155.3	-6,861.1	6,862.5	0.00	0.00	0.00	
13,700.0	90.00	270.33	7,029.3	-154.8	-6,961.0	6,962.5	0.00	0.00	0.00	
13,800.0	90.00	270.33	7,029.3	-154.2	-7,061.0	7,062.5	0.00	0.00	0.00	
13,900.0	90.00	270.33	7,029.3	-153.6	-7,161.0	7,162.5	0.00	0.00	0.00	
14,000.0	90.00	270.33	7,029.3	-153.0	-7,261.0	7,262.4	0.00	0.00	0.00	
14,100.0	90.00	270.33	7,029.3	-152.5	-7,361.0	7,362.4	0.00	0.00	0.00	
14,200.0	90.00	270.33	7,029.3	-151.9	-7,461.0	7,462.4	0.00	0.00	0.00	
14,300.0	90.00	270.33	7,029.2	-151.3	-7,561.0	7,562.4	0.00	0.00	0.00	
14,400.0	90.00	270.33	7,029.2	-150.8	-7,661.0	7,662.4	0.00	0.00	0.00	
14,500.0	90.00	270.33	7,029.2	-150.2	-7,761.0	7,762.3	0.00	0.00	0.00	
14,600.0	90.00	270.33	7,029.2	-149.6	-7,861.0	7,862.3	0.00	0.00	0.00	
14,700.0	90.00	270.33	7,029.2	-149.1	-7,961.0	7,962.3	0.00	0.00	0.00	
14,800.0	90.00	270.33	7,029.2	-148.5	-8,061.0	8,062.3	0.00	0.00	0.00	
14,900.0	90.00	270.33	7,029.2	-147.9	-8,161.0	8,162.3	0.00	0.00	0.00	
15,000.0	90.00	270.33	7,029.2	-147.3	-8,261.0	8,262.3	0.00	0.00	0.00	
15,100.0	90.00	270.33	7,029.2	-146.8	-8,361.0	8,362.2	0.00	0.00	0.00	
15,200.0	90.00	270.32	7,029.2	-146.2	-8,461.0	8,462.2	0.00	0.00	0.00	
15,300.0	90.00	270.32	7,029.2	-145.6	-8,561.0	8,562.2	0.00	0.00	0.00	
15,400.0	90.00	270.32	7,029.2	-145.1	-8,661.0	8,662.2	0.00	0.00	0.00	
15,500.0	90.00	270.32	7,029.2	-144.5	-8,761.0	8,762.2	0.00	0.00	0.00	
15,600.0	90.01	270.32	7,029.2	-143.9	-8,861.0	8,862.1	0.00	0.00	0.00	
15,700.0	90.01	270.32	7,029.1	-143.4	-8,961.0	8,962.1	0.00	0.00	0.00	
15,800.0	90.01	270.32	7,029.1	-142.8	-9,061.0	9,062.1	0.00	0.00	0.00	
15,900.0	90.01	270.32	7,029.1	-142.3	-9,161.0	9,162.1	0.00	0.00	0.00	
16,000.0	90.01	270.32	7,029.1	-141.7	-9,261.0	9,262.1	0.00	0.00	0.00	
16,100.0	90.01	270.32	7,029.1	-141.1	-9,361.0	9,362.1	0.00	0.00	0.00	
16,200.0	90.01	270.32	7,029.1	-140.6	-9,461.0	9,462.0	0.00	0.00	0.00	
16,300.0	90.01	270.32	7,029.1	-140.0	-9,561.0	9,562.0	0.00	0.00	0.00	
16,400.0	90.01	270.32	7,029.1	-139.4	-9,661.0	9,662.0	0.00	0.00	0.00	
16,500.0	90.01	270.32	7,029.1	-138.9	-9,761.0	9,762.0	0.00	0.00	0.00	
16,600.0	90.01	270.32	7,029.1	-138.3	-9,861.0	9,862.0	0.00	0.00	0.00	
16,700.0	90.01	270.32	7,029.0	-137.7	-9,961.0	9,962.0	0.00	0.00	0.00	
16,800.0	90.01	270.32	7,029.0	-137.2	-10,061.0	10,061.9	0.00	0.00	0.00	
16,900.0	90.01	270.32	7,029.0	-136.6	-10,161.0	10,161.9	0.00	0.00	0.00	
17,000.0	90.01	270.32	7,029.0	-136.1	-10,261.0	10,261.9	0.00	0.00	0.00	
17,024.6	90.01	270.32	7,029.0	-135.9	-10,285.6	10,286.5	0.00	0.00	0.00	
TD at 17024.6' MD										

## Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well JOHNSONS CORNER 13-N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 24' @ 5033.0usft (Original Well Elev)
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 24' @ 5033.0usft (Original Well Elev)
<b>Site:</b>	Sec 35-T5N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	JOHNSONS CORNER 13-N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
LP - JOHNSONS CORN	0.00	0.00	7,029.0	-191.6	-626.2	1,373,113.52	3,146,125.77	40° 21' 23.083 N	104° 58' 32.394 W
- plan hits target center									
- Point									
BHL - JOHNSONS COR	0.00	0.00	7,029.0	-135.9	-10,285.6	1,373,111.84	3,136,466.26	40° 21' 23.612 N	105° 0' 37.170 W
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
3,369.1	3,360.0	PARKMAN				
4,096.1	4,087.0	SUSSEX				
4,486.1	4,477.0	SHANNON				
6,952.9	6,887.0	NIOBRARA				
7,365.1	7,029.0	NIO B TARGET				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
(usft)	(usft)	(usft)	(usft)		
950.0	950.0	0.0	0.0	Build 2°/100'	
1,217.8	1,217.4	-12.1	-3.3	Hold 5.36° Inc	
3,115.2	3,106.6	-182.9	-50.0	Drop 2°/100'	
3,383.1	3,374.0	-195.0	-53.3	Hold Vertical	
6,465.1	6,456.0	-195.0	-53.3	KOP, Build 10°/100'	
7,365.1	7,029.0	-191.6	-626.2	LP @ 89.99° Inc, Hold	
17,024.6	7,029.0	-135.9	-10,285.6	TD at 17024.6' MD	