

# **EXTRACTION OIL & GAS**

**Weld County  
Sec 18-T4N-R68W  
KENNEDY 17**

**Original Wellbore**

**Plan: Proposal 1**

## **Standard Planning Report**

**07 February, 2017**



## WELL DETAILS: KENNEDY 17

+N/-S	+E/-W	Northing	Easting	4962.0	Latitude	Longitude	Slot
0.0	0.0	1358878.04	3128800.55	40° 19' 3.360 N	105° 2' 17.149 W		

## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	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	2713.3	40.27	151.90	2551.6	-598.8	319.7	2.00	151.90	-83.4	
4	3573.3	40.27	151.90	3207.9	-1089.2	581.5	0.00	0.00	-151.7	
5	5586.7	0.00	0.00	5059.5	-1688.0	901.2	2.00	180.00	-235.1	
6	5786.7	0.00	0.00	5259.5	-1688.0	901.2	0.00	0.00	-235.1	
7	6536.7	90.00	270.52	5737.0	-1683.7	423.7	12.00	270.52	209.0	
8	6687.1	90.00	270.52	5737.0	-1682.3	273.3	0.00	0.00	348.9	Kennedy 17 LP
9	11271.5	90.00	270.08	5737.0	-1658.2	-4311.0	0.01	-90.00	4618.9	Kennedy 17 PBHL

## ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.0	Start Build 2.00
2713.3	40.27	151.90	2551.6	-598.8	319.7	-83.4	678.8	Start 860.0 hold at 2713.3 MD
3573.3	40.27	151.90	3207.9	-1089.2	581.5	-151.7	1234.7	Start Drop -2.00
5586.7	0.00	0.00	5059.5	-1688.0	901.2	-235.1	1913.5	Start 200.0 hold at 5586.7 MD
5786.7	0.00	0.00	5259.5	-1688.0	901.2	-235.1	1913.5	Start Build 12.00
6536.7	90.00	270.52	5737.0	-1683.7	423.7	209.0	2391.0	Start 150.4 hold at 6536.7 MD
6687.1	90.00	270.52	5737.0	-1682.3	273.3	348.9	2541.4	Start DLS 0.01 TFO -90.00
11271.5	90.00	270.08	5737.0	-1658.2	-4311.0	4618.9	7125.8	TD at 11271.5

## DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Kennedy 17 LP	5737.0	-1682.3	273.3	1357197.20	3129082.60	40° 18' 46.735 N	105° 2' 13.621 W	Point
- plan hits target center								
Kennedy 17 PBHL	5737.0	-1658.2	-4311.0	1357197.37	3124498.23	40° 18' 46.969 N	105° 3' 12.802 W	Point
- plan hits target center								

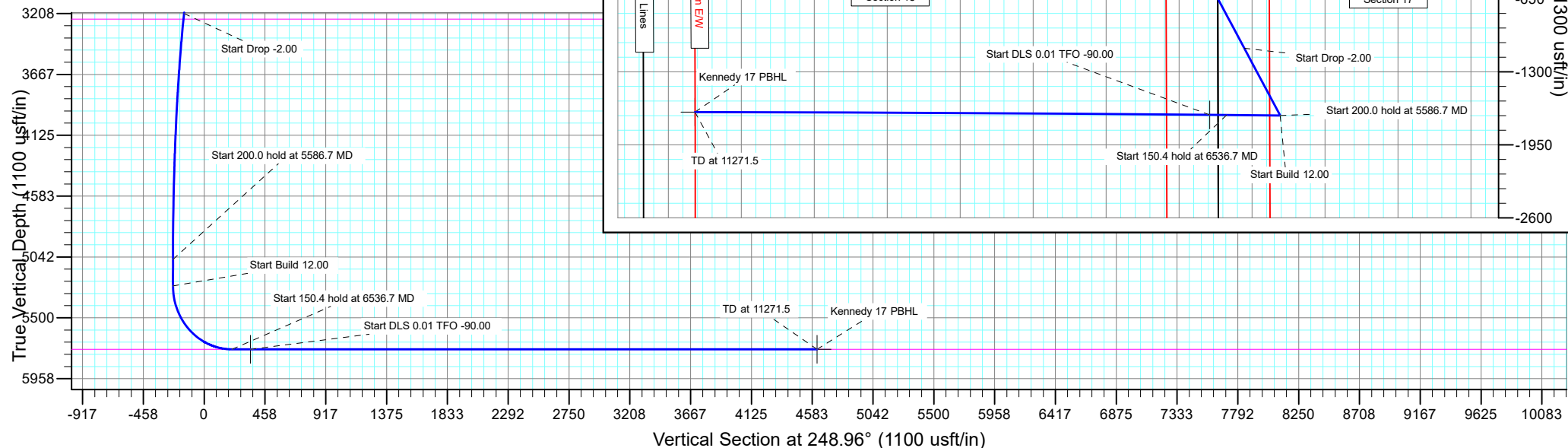
## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2210.0	2290.5	PARKMAN
2810.0	3051.9	SUSSEX
3250.0	3628.1	SHANNON
5737.0	6536.7	NIORARA

## 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:  
953' FNL, 344' FEL  
Sec 18-T4N-R68W  
BHL:  
2530' FNL, 460' FWL  
Sec 18-T4N-R68W  
LP:  
2640' FNL, 75' FEL  
Sec 18-T4N-R68W



## Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well KENNEDY 17
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 11 @ 4973.0usft
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 11 @ 4973.0usft
<b>Site:</b>	Sec 18-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	KENNEDY 17	<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 18-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		KENNEDY 17				
Well Position	+N/-S	-959.2 usft	Northing:	1,358,878.04 usft	Latitude:	40° 19' 3.360 N
	+E/-W	-341.0 usft	Easting:	3,128,800.55 usft	Longitude:	105° 2' 17.149 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	4,962.0 usft

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/17/2017	8.39	66.76	52,366.52278263

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	248.96

Plan Survey Tool Program			Date	2/7/2017	
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	11,271.5	Proposal 1 (Original Wellbore)	MWD OWSG Rev 2	
				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	
2,713.3	40.27	151.90	2,551.6	-598.8	319.7	2.00	2.00	0.00	151.90	
3,573.3	40.27	151.90	3,207.9	-1,089.2	581.5	0.00	0.00	0.00	0.00	
5,586.7	0.00	0.00	5,059.5	-1,688.0	901.2	2.00	-2.00	0.00	180.00	
5,786.7	0.00	0.00	5,259.5	-1,688.0	901.2	0.00	0.00	0.00	0.00	
6,536.7	90.00	270.52	5,737.0	-1,683.7	423.7	12.00	12.00	0.00	270.52	
6,687.1	90.00	270.52	5,737.0	-1,682.3	273.3	0.00	0.00	0.00	0.00	Kennedy 17 LP
11,271.5	90.00	270.08	5,737.0	-1,658.2	-4,311.0	0.01	0.00	-0.01	-90.00	Kennedy 17 PBHL

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well KENNEDY 17
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 11 @ 4973.0usft
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 11 @ 4973.0usft
<b>Site:</b>	Sec 18-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	KENNEDY 17	<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
Start Build 2.00									
800.0	2.00	151.90	800.0	-1.5	0.8	-0.2	2.00	2.00	0.00
900.0	4.00	151.90	899.8	-6.2	3.3	-0.9	2.00	2.00	0.00
1,000.0	6.00	151.90	999.5	-13.8	7.4	-1.9	2.00	2.00	0.00
1,100.0	8.00	151.90	1,098.7	-24.6	13.1	-3.4	2.00	2.00	0.00
1,200.0	10.00	151.90	1,197.5	-38.4	20.5	-5.3	2.00	2.00	0.00
1,300.0	12.00	151.90	1,295.6	-55.2	29.5	-7.7	2.00	2.00	0.00
1,400.0	14.00	151.90	1,393.1	-75.1	40.1	-10.5	2.00	2.00	0.00
1,500.0	16.00	151.90	1,489.6	-97.9	52.3	-13.6	2.00	2.00	0.00
1,600.0	18.00	151.90	1,585.3	-123.7	66.0	-17.2	2.00	2.00	0.00
1,700.0	20.00	151.90	1,679.8	-152.4	81.4	-21.2	2.00	2.00	0.00
1,800.0	22.00	151.90	1,773.2	-184.0	98.2	-25.6	2.00	2.00	0.00
1,900.0	24.00	151.90	1,865.2	-218.5	116.6	-30.4	2.00	2.00	0.00
2,000.0	26.00	151.90	1,955.8	-255.8	136.5	-35.6	2.00	2.00	0.00
2,100.0	28.00	151.90	2,044.9	-295.8	157.9	-41.2	2.00	2.00	0.00
2,200.0	30.00	151.90	2,132.4	-338.6	180.8	-47.2	2.00	2.00	0.00
2,290.5	31.81	151.90	2,210.0	-379.6	202.6	-52.9	2.00	2.00	0.00
PARKMAN									
2,300.0	32.00	151.90	2,218.1	-384.0	205.0	-53.5	2.00	2.00	0.00
2,400.0	34.00	151.90	2,302.0	-432.1	230.7	-60.2	2.00	2.00	0.00
2,500.0	36.00	151.90	2,383.9	-482.6	257.7	-67.2	2.00	2.00	0.00
2,600.0	38.00	151.90	2,463.7	-535.7	286.0	-74.6	2.00	2.00	0.00
2,700.0	40.00	151.90	2,541.5	-591.2	315.7	-82.4	2.00	2.00	0.00
2,713.3	40.27	151.90	2,551.6	-598.8	319.7	-83.4	2.00	2.00	0.00
Start 860.0 hold at 2713.3 MD									
2,800.0	40.27	151.90	2,617.8	-648.2	346.1	-90.3	0.00	0.00	0.00
2,900.0	40.27	151.90	2,694.1	-705.3	376.5	-98.2	0.00	0.00	0.00
3,000.0	40.27	151.90	2,770.4	-762.3	407.0	-106.2	0.00	0.00	0.00
3,051.9	40.27	151.90	2,810.0	-791.9	422.8	-110.3	0.00	0.00	0.00
SUSSEX									
3,100.0	40.27	151.90	2,846.7	-819.3	437.4	-114.1	0.00	0.00	0.00
3,200.0	40.27	151.90	2,923.0	-876.3	467.9	-122.1	0.00	0.00	0.00
3,300.0	40.27	151.90	2,999.3	-933.3	498.3	-130.0	0.00	0.00	0.00
3,400.0	40.27	151.90	3,075.6	-990.3	528.7	-137.9	0.00	0.00	0.00
3,500.0	40.27	151.90	3,151.9	-1,047.4	559.2	-145.9	0.00	0.00	0.00
3,573.3	40.27	151.90	3,207.9	-1,089.2	581.5	-151.7	0.00	0.00	0.00
Start Drop -2.00									
3,600.0	39.73	151.90	3,228.3	-1,104.3	589.6	-153.8	2.00	-2.00	0.00
3,628.1	39.17	151.90	3,250.0	-1,120.1	598.0	-156.0	2.00	-2.00	0.00
SHANNON									
3,700.0	37.73	151.90	3,306.3	-1,159.5	619.0	-161.5	2.00	-2.00	0.00
3,800.0	35.73	151.90	3,386.4	-1,212.2	647.2	-168.9	2.00	-2.00	0.00
3,900.0	33.73	151.90	3,468.6	-1,262.5	674.0	-175.9	2.00	-2.00	0.00
4,000.0	31.73	151.90	3,552.7	-1,310.2	699.5	-182.5	2.00	-2.00	0.00
4,100.0	29.73	151.90	3,638.7	-1,355.3	723.6	-188.8	2.00	-2.00	0.00

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well KENNEDY 17
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 11 @ 4973.0usft
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 11 @ 4973.0usft
<b>Site:</b>	Sec 18-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	KENNEDY 17	<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)
4,200.0	27.73	151.90	3,726.4	-1,397.7	746.2	-194.7	2.00	-2.00	0.00
4,300.0	25.73	151.90	3,815.7	-1,437.4	767.4	-200.2	2.00	-2.00	0.00
4,400.0	23.73	151.90	3,906.5	-1,474.3	787.1	-205.3	2.00	-2.00	0.00
4,500.0	21.73	151.90	3,998.7	-1,508.4	805.3	-210.1	2.00	-2.00	0.00
4,600.0	19.73	151.90	4,092.2	-1,539.6	822.0	-214.4	2.00	-2.00	0.00
4,700.0	17.73	151.90	4,186.9	-1,567.9	837.1	-218.4	2.00	-2.00	0.00
4,800.0	15.73	151.90	4,282.7	-1,593.3	850.7	-221.9	2.00	-2.00	0.00
4,900.0	13.73	151.90	4,379.4	-1,615.8	862.6	-225.1	2.00	-2.00	0.00
5,000.0	11.73	151.90	4,476.9	-1,635.2	873.0	-227.8	2.00	-2.00	0.00
5,100.0	9.73	151.90	4,575.2	-1,651.6	881.8	-230.1	2.00	-2.00	0.00
5,200.0	7.73	151.90	4,674.0	-1,665.0	888.9	-231.9	2.00	-2.00	0.00
5,300.0	5.73	151.90	4,773.3	-1,675.4	894.5	-233.4	2.00	-2.00	0.00
5,400.0	3.73	151.90	4,873.0	-1,682.6	898.3	-234.4	2.00	-2.00	0.00
5,500.0	1.73	151.90	4,972.9	-1,686.8	900.6	-235.0	2.00	-2.00	0.00
5,586.7	0.00	0.00	5,059.5	-1,688.0	901.2	-235.1	2.00	-2.00	0.00
Start 200.0 hold at 5586.7 MD									
5,600.0	0.00	0.00	5,072.8	-1,688.0	901.2	-235.1	0.00	0.00	0.00
5,700.0	0.00	0.00	5,172.8	-1,688.0	901.2	-235.1	0.00	0.00	0.00
5,786.7	0.00	0.00	5,259.5	-1,688.0	901.2	-235.1	0.00	0.00	0.00
Start Build 12.00									
5,800.0	1.60	270.52	5,272.8	-1,688.0	901.0	-234.9	12.00	12.00	0.00
5,825.0	4.60	270.52	5,297.8	-1,688.0	899.7	-233.7	12.00	12.00	0.00
5,850.0	7.60	270.52	5,322.7	-1,688.0	897.0	-231.2	12.00	12.00	0.00
5,875.0	10.60	270.52	5,347.3	-1,687.9	893.1	-227.5	12.00	12.00	0.00
5,900.0	13.60	270.52	5,371.8	-1,687.9	887.8	-222.7	12.00	12.00	0.00
5,925.0	16.60	270.52	5,395.9	-1,687.8	881.3	-216.6	12.00	12.00	0.00
5,950.0	19.60	270.52	5,419.7	-1,687.7	873.5	-209.4	12.00	12.00	0.00
5,975.0	22.60	270.52	5,443.0	-1,687.7	864.5	-201.0	12.00	12.00	0.00
6,000.0	25.60	270.52	5,465.8	-1,687.6	854.3	-191.5	12.00	12.00	0.00
6,025.0	28.60	270.52	5,488.1	-1,687.5	842.9	-180.9	12.00	12.00	0.00
6,050.0	31.60	270.52	5,509.7	-1,687.4	830.4	-169.3	12.00	12.00	0.00
6,075.0	34.60	270.52	5,530.6	-1,687.2	816.8	-156.6	12.00	12.00	0.00
6,100.0	37.60	270.52	5,550.8	-1,687.1	802.0	-142.9	12.00	12.00	0.00
6,125.0	40.60	270.52	5,570.2	-1,687.0	786.3	-128.2	12.00	12.00	0.00
6,150.0	43.60	270.52	5,588.8	-1,686.8	769.5	-112.6	12.00	12.00	0.00
6,175.0	46.60	270.52	5,606.4	-1,686.6	751.8	-96.2	12.00	12.00	0.00
6,200.0	49.60	270.52	5,623.1	-1,686.5	733.2	-78.9	12.00	12.00	0.00
6,225.0	52.60	270.52	5,638.8	-1,686.3	713.7	-60.8	12.00	12.00	0.00
6,250.0	55.60	270.52	5,653.5	-1,686.1	693.5	-41.9	12.00	12.00	0.00
6,275.0	58.60	270.52	5,667.1	-1,685.9	672.5	-22.4	12.00	12.00	0.00
6,300.0	61.60	270.52	5,679.5	-1,685.7	650.8	-2.3	12.00	12.00	0.00
6,325.0	64.60	270.52	5,690.8	-1,685.5	628.6	18.5	12.00	12.00	0.00
6,350.0	67.60	270.52	5,701.0	-1,685.3	605.7	39.7	12.00	12.00	0.00
6,375.0	70.60	270.52	5,709.9	-1,685.1	582.4	61.4	12.00	12.00	0.00
6,400.0	73.60	270.52	5,717.6	-1,684.9	558.6	83.6	12.00	12.00	0.00
6,425.0	76.60	270.52	5,724.0	-1,684.7	534.4	106.0	12.00	12.00	0.00
6,450.0	79.60	270.52	5,729.1	-1,684.4	510.0	128.8	12.00	12.00	0.00
6,475.0	82.60	270.52	5,733.0	-1,684.2	485.3	151.7	12.00	12.00	0.00
6,500.0	85.60	270.52	5,735.6	-1,684.0	460.4	174.9	12.00	12.00	0.00
6,525.0	88.59	270.52	5,736.9	-1,683.8	435.4	198.1	12.00	12.00	0.00
6,536.7	90.00	270.52	5,737.0	-1,683.7	423.7	209.0	12.00	12.00	0.00
Start 150.4 hold at 6536.7 MD - NIOBRARA									
6,600.0	90.00	270.52	5,737.0	-1,683.1	360.4	267.8	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well KENNEDY 17
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 11 @ 4973.0usft
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 11 @ 4973.0usft
<b>Site:</b>	Sec 18-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	KENNEDY 17	<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)
6,687.1	90.00	270.52	5,737.0	-1,682.3	273.3	348.9	0.00	0.00	0.00
Start DLS 0.01 TFO -90.00									
6,700.0	90.00	270.52	5,737.0	-1,682.2	260.4	360.8	0.01	0.00	-0.01
6,800.0	90.00	270.51	5,737.0	-1,681.3	160.4	453.8	0.01	0.00	-0.01
6,900.0	90.00	270.50	5,737.0	-1,680.4	60.4	546.9	0.01	0.00	-0.01
7,000.0	90.00	270.49	5,737.0	-1,679.5	-39.6	639.9	0.01	0.00	-0.01
7,100.0	90.00	270.48	5,737.0	-1,678.7	-139.5	732.9	0.01	0.00	-0.01
7,200.0	90.00	270.47	5,737.0	-1,677.8	-239.5	825.9	0.01	0.00	-0.01
7,300.0	90.00	270.46	5,737.0	-1,677.0	-339.5	919.0	0.01	0.00	-0.01
7,400.0	90.00	270.45	5,737.0	-1,676.2	-439.5	1,012.0	0.01	0.00	-0.01
7,500.0	90.00	270.44	5,737.0	-1,675.4	-539.5	1,105.1	0.01	0.00	-0.01
7,600.0	90.00	270.43	5,737.0	-1,674.7	-639.5	1,198.1	0.01	0.00	-0.01
7,700.0	90.00	270.42	5,737.0	-1,673.9	-739.5	1,291.2	0.01	0.00	-0.01
7,800.0	90.00	270.41	5,737.0	-1,673.2	-839.5	1,384.2	0.01	0.00	-0.01
7,900.0	90.00	270.40	5,737.0	-1,672.5	-939.5	1,477.3	0.01	0.00	-0.01
8,000.0	90.00	270.40	5,737.0	-1,671.8	-1,039.5	1,570.4	0.01	0.00	-0.01
8,100.0	90.00	270.39	5,737.0	-1,671.1	-1,139.5	1,663.5	0.01	0.00	-0.01
8,200.0	90.00	270.38	5,737.0	-1,670.4	-1,239.5	1,756.6	0.01	0.00	-0.01
8,300.0	90.00	270.37	5,737.0	-1,669.8	-1,339.5	1,849.7	0.01	0.00	-0.01
8,400.0	90.00	270.36	5,737.0	-1,669.2	-1,439.5	1,942.8	0.01	0.00	-0.01
8,500.0	90.00	270.35	5,737.0	-1,668.5	-1,539.5	2,035.9	0.01	0.00	-0.01
8,600.0	90.00	270.34	5,737.0	-1,667.9	-1,639.5	2,129.0	0.01	0.00	-0.01
8,700.0	90.00	270.33	5,737.0	-1,667.4	-1,739.5	2,222.1	0.01	0.00	-0.01
8,800.0	90.00	270.32	5,737.0	-1,666.8	-1,839.5	2,315.3	0.01	0.00	-0.01
8,900.0	90.00	270.31	5,737.0	-1,666.3	-1,939.5	2,408.4	0.01	0.00	-0.01
9,000.0	90.00	270.30	5,737.0	-1,665.7	-2,039.5	2,501.5	0.01	0.00	-0.01
9,100.0	90.00	270.29	5,737.0	-1,665.2	-2,139.5	2,594.7	0.01	0.00	-0.01
9,200.0	90.00	270.28	5,737.0	-1,664.7	-2,239.5	2,687.8	0.01	0.00	-0.01
9,300.0	90.00	270.27	5,737.0	-1,664.2	-2,339.5	2,781.0	0.01	0.00	-0.01
9,400.0	90.00	270.26	5,737.0	-1,663.8	-2,439.5	2,874.2	0.01	0.00	-0.01
9,500.0	90.00	270.25	5,737.0	-1,663.3	-2,539.5	2,967.3	0.01	0.00	-0.01
9,600.0	90.00	270.24	5,737.0	-1,662.9	-2,639.5	3,060.5	0.01	0.00	-0.01
9,700.0	90.00	270.23	5,737.0	-1,662.5	-2,739.5	3,153.7	0.01	0.00	-0.01
9,800.0	90.00	270.22	5,737.0	-1,662.1	-2,839.5	3,246.9	0.01	0.00	-0.01
9,900.0	90.00	270.21	5,737.0	-1,661.7	-2,939.5	3,340.1	0.01	0.00	-0.01
10,000.0	90.00	270.20	5,737.0	-1,661.4	-3,039.5	3,433.3	0.01	0.00	-0.01
10,100.0	90.00	270.19	5,737.0	-1,661.0	-3,139.5	3,526.5	0.01	0.00	-0.01
10,200.0	90.00	270.18	5,737.0	-1,660.7	-3,239.5	3,619.7	0.01	0.00	-0.01
10,300.0	90.00	270.17	5,737.0	-1,660.4	-3,339.5	3,712.9	0.01	0.00	-0.01
10,400.0	90.00	270.16	5,737.0	-1,660.1	-3,439.5	3,806.2	0.01	0.00	-0.01
10,500.0	90.00	270.15	5,737.0	-1,659.8	-3,539.5	3,899.4	0.01	0.00	-0.01
10,600.0	90.00	270.14	5,737.0	-1,659.5	-3,639.5	3,992.7	0.01	0.00	-0.01
10,700.0	90.00	270.13	5,737.0	-1,659.3	-3,739.5	4,085.9	0.01	0.00	-0.01
10,800.0	90.00	270.13	5,737.0	-1,659.1	-3,839.5	4,179.1	0.01	0.00	-0.01
10,900.0	90.00	270.12	5,737.0	-1,658.9	-3,939.5	4,272.4	0.01	0.00	-0.01
11,000.0	90.00	270.11	5,737.0	-1,658.7	-4,039.5	4,365.7	0.01	0.00	-0.01
11,100.0	90.00	270.10	5,737.0	-1,658.5	-4,139.5	4,458.9	0.01	0.00	-0.01
11,200.0	90.00	270.09	5,737.0	-1,658.3	-4,239.5	4,552.2	0.01	0.00	-0.01
11,271.5	90.00	270.08	5,737.0	-1,658.2	-4,311.0	4,618.9	0.01	0.00	-0.01
TD at 11271.5									

## Planning Report

<b>Database:</b>	EDT_32Bit_ODBC	<b>Local Co-ordinate Reference:</b>	Well KENNEDY 17
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 11 @ 4973.0usft
<b>Project:</b>	Weld County	<b>MD Reference:</b>	KB 11 @ 4973.0usft
<b>Site:</b>	Sec 18-T4N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	KENNEDY 17	<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)		
Kennedy 17 PBHL	0.00	0.00	5,737.0	-1,658.2	-4,311.0	1,357,197.38	3,124,498.23	40° 18' 46.969 N	105° 3' 12.802 W
- plan hits target center									
- Point									
Kennedy 17 LP	0.00	0.00	5,737.0	-1,682.3	273.3	1,357,197.20	3,129,082.60	40° 18' 46.735 N	105° 2' 13.621 W
- plan hits target center									
- Point									

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
2,290.5	2,210.0	PARKMAN			
3,051.9	2,810.0	SUSSEX			
3,628.1	3,250.0	SHANNON			
6,536.7	5,737.0	NIOBRARA			

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
700.0	700.0	0.0	0.0	Start Build 2.00
2,713.3	2,551.6	-598.8	319.7	Start 860.0 hold at 2713.3 MD
3,573.3	3,207.9	-1,089.2	581.5	Start Drop -2.00
5,586.7	5,059.5	-1,688.0	901.2	Start 200.0 hold at 5586.7 MD
5,786.7	5,259.5	-1,688.0	901.2	Start Build 12.00
6,536.7	5,737.0	-1,683.7	423.7	Start 150.4 hold at 6536.7 MD
6,687.1	5,737.0	-1,682.3	273.3	Start DLS 0.01 TFO -90.00
11,271.5	5,737.0	-1,658.2	-4,311.0	TD at 11271.5