

# **US ROCKIES WATTENBERG PLANNING**

**WELD-NAD83-UTMFT13N**

**1N-68W-08 PAPA JO 2-25 19-8HZ Pad**

**PAPA JO 2-25 29N3-8HZ**

**Plan A**

**Plan: Permit Rev-1**

## **Standard Planning Report**

**11 August, 2016**



Azimuths to True North  
Magnetic North: 8.28°

Magnetic Field  
Strength: 52381.9snT  
Dip Angle: 66.56°  
Date: 8/9/2016  
Model: IGRF2010

SITE: 1N-68W-08 PAPA JO 2-25 19-8HZ Pad

Well: PAPA JO 2-25 29N3-8HZ  
Wellbore: Plan A  
Design: Permit Rev-1

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1020.00	1025.31	Fox Hills
4196.00	4424.88	Parkman
4624.00	4885.74	Sussex
7409.00	7758.52	Sharon Springs
7450.00	7808.00	Niobrara
7585.00	7999.11	Nio B
7686.00	8229.00	Nio C

#### WELL DETAILS: PAPA JO 2-25 29N3-8HZ

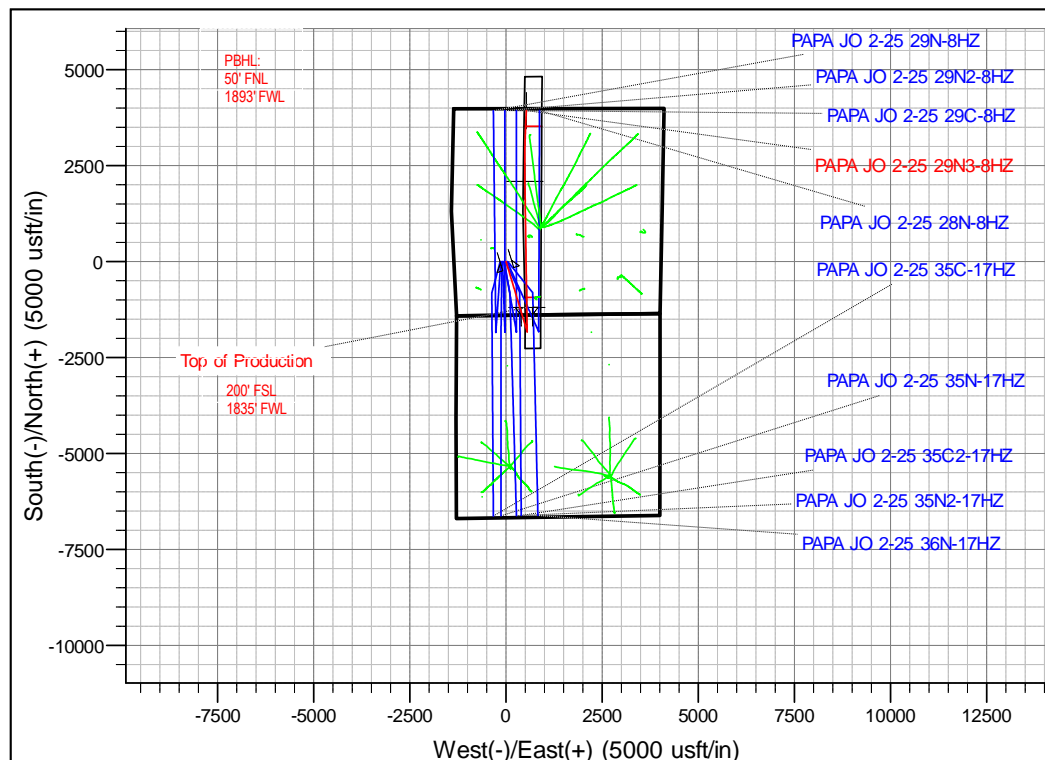
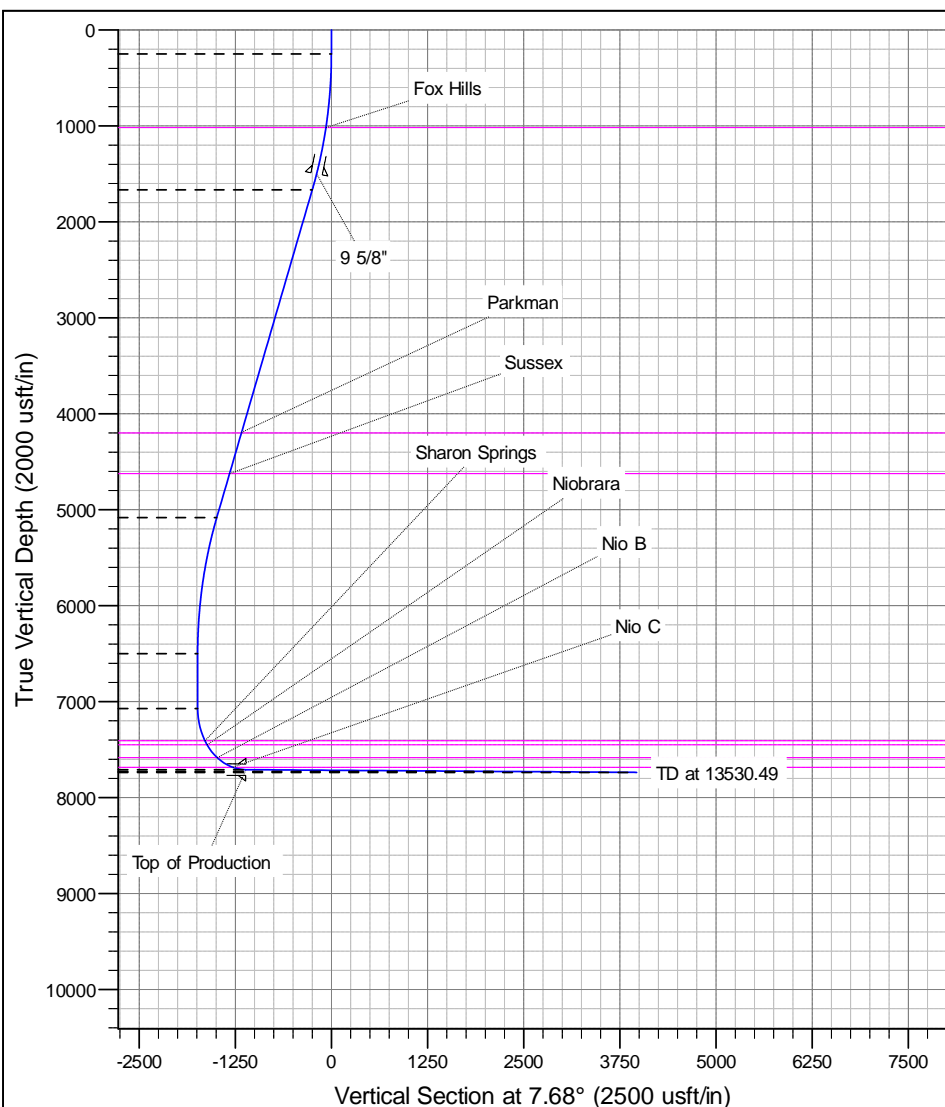
+N/-S	+E/-W	GL: 5065.00 Northing	RKB @ 5082.00usft (Original Well Elev) Easting	Latitude 40.062069	Longitude -105.032498	Slot
0.00	0.00	14549337.09	1631323.82			

#### SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00
1701.20	21.77	163.26	1666.54	-260.83	78.46	1.50	-248.01
5380.48	21.77	163.26	5083.46	-1567.44	471.54	0.00	1490.41
6831.68	0.00	0.00	6500.00	-1828.27	550.00	1.50	-1738.42
7405.32	0.00	0.00	7073.64	-1828.27	550.00	0.00	-1738.42
8401.88	89.69	359.12	7710.25	-1195.17	540.31	9.00	-1112.28
11687.66	89.69	359.12	7728.03	2090.18	490.00	0.00	2136.90
13530.49	89.69	3.37	7738.00	3932.13	530.00	0.23	3967.69

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PAPA JO 2-25 29N3-8HZ-PBHL	7738.00	3932.13	530.00	14553269.02	1631855.25	40.072867	-105.030603



# Anadarko

## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well PAPA JO 2-25 29N3-8HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB @ 5082.00usft (Original Well Elev)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB @ 5082.00usft (Original Well Elev)
<b>Site:</b>	1N-68W-08 PAPA JO 2-25 19-8HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	PAPA JO 2-25 29N3-8HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-1		

<b>Project</b>	WELD-NAD83-UTMFT13N		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Zone 13N (108 W to 102 W)		

Site						1N-68W-08 PAPA JO 2-25 19-8HZ Pad											
Site Position:						Northing:			14,549,337.87 usft			Latitude:			40.062071		
From:			Lat/Long			Easting:			1,631,173.84 usft			Longitude:			-105.033034		
Position Uncertainty:			0.00 usft			Slot Radius:			13-3/16 "			Grid Convergence:			-0.02		

Well	PAPA JO 2-25 29N3-8HZ					
Well Position	+N-S	-0.73 usft	Northing:	14,549,337.08 usft	Latitude:	40.062069
	+E-W	149.97 usft	Easting:	1,631,323.81 usft	Longitude:	-105.032498
Position Uncertainty		3.28 usft	Wellhead Elevation:	0.00 usft	Ground Level:	5,065.00 usft

<b>Wellbore</b>	Plan A				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	8/9/2016	8.29	66.56	52,382

<b>Design</b>	Permit Rev-1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N-S (usft)</b>	<b>+E-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	7.68

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,701.20	21.77	163.26	1,666.54	-260.83	78.46	1.50	1.50	0.00	163.26	
5,380.48	21.77	163.26	5,083.46	-1,567.44	471.54	0.00	0.00	0.00	0.00	
6,831.68	0.00	0.00	6,500.00	-1,828.27	550.00	1.50	-1.50	0.00	180.00	
7,405.32	0.00	0.00	7,073.64	-1,828.27	550.00	0.00	0.00	0.00	0.00	
8,401.88	89.69	359.12	7,710.25	-1,195.17	540.31	9.00	9.00	0.00	359.12	
11,687.66	89.69	359.12	7,728.03	2,090.18	490.00	0.00	0.00	0.00	0.00	PAPA JO 2-25 29N:
13,530.49	89.69	3.37	7,738.00	3,932.13	530.00	0.23	0.00	0.23	90.01	PAPA JO 2-25 29N:

# Anadarko

## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well PAPA JO 2-25 29N3-8HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB @ 5082.00usft (Original Well Elev)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB @ 5082.00usft (Original Well Elev)
<b>Site:</b>	1N-68W-08 PAPA JO 2-25 19-8HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	PAPA JO 2-25 29N3-8HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
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
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.75	163.26	300.00	-0.31	0.09	-0.30	1.50	1.50	0.00
400.00	2.25	163.26	399.96	-2.82	0.85	-2.68	1.50	1.50	0.00
500.00	3.75	163.26	499.82	-7.83	2.36	-7.45	1.50	1.50	0.00
600.00	5.25	163.26	599.51	-15.34	4.62	-14.59	1.50	1.50	0.00
700.00	6.75	163.26	698.96	-25.35	7.63	-24.11	1.50	1.50	0.00
800.00	8.25	163.26	798.10	-37.85	11.39	-35.99	1.50	1.50	0.00
900.00	9.75	163.26	896.87	-52.83	15.89	-50.24	1.50	1.50	0.00
1,000.00	11.25	163.26	995.19	-70.28	21.14	-66.83	1.50	1.50	0.00
1,025.31	11.63	163.26	1,020.00	-75.09	22.59	-71.40	1.50	1.50	0.00
<b>Fox Hills</b>									
1,100.00	12.75	163.26	1,093.00	-90.19	27.13	-85.76	1.50	1.50	0.00
1,200.00	14.25	163.26	1,190.24	-112.55	33.86	-107.02	1.50	1.50	0.00
1,300.00	15.75	163.26	1,286.83	-137.33	41.31	-130.58	1.50	1.50	0.00
1,400.00	17.25	163.26	1,382.71	-164.53	49.49	-156.44	1.50	1.50	0.00
1,500.00	18.75	163.26	1,477.81	-194.12	58.40	-184.58	1.50	1.50	0.00
1,523.46	19.10	163.26	1,500.00	-201.40	60.59	-191.51	1.50	1.50	0.00
<b>9 5/8"</b>									
1,600.00	20.25	163.26	1,572.07	-226.08	68.01	-214.97	1.50	1.50	0.00
1,700.00	21.75	163.26	1,665.43	-260.40	78.34	-247.60	1.50	1.50	0.00
1,701.20	21.77	163.26	1,666.54	-260.83	78.46	-248.01	1.50	1.50	0.00
1,800.00	21.77	163.26	1,758.29	-295.91	89.02	-281.37	0.00	0.00	0.00
1,900.00	21.77	163.26	1,851.16	-331.43	99.70	-315.14	0.00	0.00	0.00
2,000.00	21.77	163.26	1,944.03	-366.94	110.39	-348.90	0.00	0.00	0.00
2,100.00	21.77	163.26	2,036.90	-402.45	121.07	-382.67	0.00	0.00	0.00
2,200.00	21.77	163.26	2,129.77	-437.96	131.75	-416.44	0.00	0.00	0.00
2,300.00	21.77	163.26	2,222.64	-473.48	142.44	-450.21	0.00	0.00	0.00
2,400.00	21.77	163.26	2,315.51	-508.99	153.12	-483.97	0.00	0.00	0.00
2,500.00	21.77	163.26	2,408.38	-544.50	163.80	-517.74	0.00	0.00	0.00
2,600.00	21.77	163.26	2,501.25	-580.02	174.49	-551.51	0.00	0.00	0.00
2,700.00	21.77	163.26	2,594.12	-615.53	185.17	-585.28	0.00	0.00	0.00
2,800.00	21.77	163.26	2,686.99	-651.04	195.85	-619.04	0.00	0.00	0.00
2,900.00	21.77	163.26	2,779.86	-686.55	206.54	-652.81	0.00	0.00	0.00
3,000.00	21.77	163.26	2,872.73	-722.07	217.22	-686.58	0.00	0.00	0.00
3,100.00	21.77	163.26	2,965.59	-757.58	227.90	-720.35	0.00	0.00	0.00
3,200.00	21.77	163.26	3,058.46	-793.09	238.59	-754.12	0.00	0.00	0.00
3,300.00	21.77	163.26	3,151.33	-828.61	249.27	-787.88	0.00	0.00	0.00
3,400.00	21.77	163.26	3,244.20	-864.12	259.95	-821.65	0.00	0.00	0.00
3,500.00	21.77	163.26	3,337.07	-899.63	270.64	-855.42	0.00	0.00	0.00
3,600.00	21.77	163.26	3,429.94	-935.14	281.32	-889.19	0.00	0.00	0.00
3,700.00	21.77	163.26	3,522.81	-970.66	292.00	-922.95	0.00	0.00	0.00
3,800.00	21.77	163.26	3,615.68	-1,006.17	302.69	-956.72	0.00	0.00	0.00
3,900.00	21.77	163.26	3,708.55	-1,041.68	313.37	-990.49	0.00	0.00	0.00
4,000.00	21.77	163.26	3,801.42	-1,077.20	324.05	-1,024.26	0.00	0.00	0.00
4,100.00	21.77	163.26	3,894.29	-1,112.71	334.74	-1,058.02	0.00	0.00	0.00
4,200.00	21.77	163.26	3,987.16	-1,148.22	345.42	-1,091.79	0.00	0.00	0.00
4,300.00	21.77	163.26	4,080.03	-1,183.73	356.10	-1,125.56	0.00	0.00	0.00
4,400.00	21.77	163.26	4,172.90	-1,219.25	366.79	-1,159.33	0.00	0.00	0.00
4,424.88	21.77	163.26	4,196.00	-1,228.08	369.45	-1,167.73	0.00	0.00	0.00
<b>Parkman</b>									

# Anadarko

## Planning Report

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<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB @ 5082.00usft (Original Well Elev)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB @ 5082.00usft (Original Well Elev)
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<b>Well:</b>	PAPA JO 2-25 29N3-8HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,500.00	21.77	163.26	4,265.76	-1,254.76	377.47	-1,193.09	0.00	0.00	0.00
4,600.00	21.77	163.26	4,358.63	-1,290.27	388.15	-1,226.86	0.00	0.00	0.00
4,700.00	21.77	163.26	4,451.50	-1,325.79	398.84	-1,260.63	0.00	0.00	0.00
4,800.00	21.77	163.26	4,544.37	-1,361.30	409.52	-1,294.40	0.00	0.00	0.00
4,885.74	21.77	163.26	4,624.00	-1,391.75	418.68	-1,323.35	0.00	0.00	0.00
<b>Sussex</b>									
4,900.00	21.77	163.26	4,637.24	-1,396.81	420.20	-1,328.16	0.00	0.00	0.00
5,000.00	21.77	163.26	4,730.11	-1,432.32	430.89	-1,361.93	0.00	0.00	0.00
5,100.00	21.77	163.26	4,822.98	-1,467.84	441.57	-1,395.70	0.00	0.00	0.00
5,200.00	21.77	163.26	4,915.85	-1,503.35	452.25	-1,429.47	0.00	0.00	0.00
5,300.00	21.77	163.26	5,008.72	-1,538.86	462.94	-1,463.23	0.00	0.00	0.00
5,380.48	21.77	163.26	5,083.46	-1,567.44	471.54	-1,490.41	0.00	0.00	0.00
5,400.00	21.48	163.26	5,101.61	-1,574.33	473.61	-1,496.96	1.50	-1.50	0.00
5,500.00	19.98	163.26	5,195.13	-1,608.22	483.80	-1,529.18	1.50	-1.50	0.00
5,600.00	18.48	163.26	5,289.55	-1,639.75	493.29	-1,559.16	1.50	-1.50	0.00
5,700.00	16.98	163.26	5,384.80	-1,668.90	502.06	-1,586.88	1.50	-1.50	0.00
5,800.00	15.48	163.26	5,480.82	-1,695.66	510.11	-1,612.32	1.50	-1.50	0.00
5,900.00	13.98	163.26	5,577.53	-1,720.00	517.43	-1,635.47	1.50	-1.50	0.00
6,000.00	12.48	163.26	5,674.88	-1,741.91	524.02	-1,656.30	1.50	-1.50	0.00
6,100.00	10.98	163.26	5,772.79	-1,761.37	529.87	-1,674.80	1.50	-1.50	0.00
6,200.00	9.48	163.26	5,871.20	-1,778.37	534.99	-1,690.97	1.50	-1.50	0.00
6,300.00	7.98	163.26	5,970.03	-1,792.89	539.36	-1,704.78	1.50	-1.50	0.00
6,400.00	6.48	163.26	6,069.24	-1,804.94	542.98	-1,716.23	1.50	-1.50	0.00
6,500.00	4.98	163.26	6,168.74	-1,814.49	545.85	-1,725.31	1.50	-1.50	0.00
6,600.00	3.48	163.26	6,268.46	-1,821.54	547.98	-1,732.02	1.50	-1.50	0.00
6,700.00	1.98	163.26	6,368.35	-1,826.10	549.35	-1,736.35	1.50	-1.50	0.00
6,800.00	0.48	163.26	6,468.32	-1,828.14	549.96	-1,738.30	1.50	-1.50	0.00
6,831.68	0.00	0.00	6,500.00	-1,828.27	550.00	-1,738.42	1.50	-1.50	0.00
6,900.00	0.00	0.00	6,568.32	-1,828.27	550.00	-1,738.42	0.00	0.00	0.00
7,000.00	0.00	0.00	6,668.32	-1,828.27	550.00	-1,738.42	0.00	0.00	0.00
7,100.00	0.00	0.00	6,768.32	-1,828.27	550.00	-1,738.42	0.00	0.00	0.00
7,200.00	0.00	0.00	6,868.32	-1,828.27	550.00	-1,738.42	0.00	0.00	0.00
7,300.00	0.00	0.00	6,968.32	-1,828.27	550.00	-1,738.42	0.00	0.00	0.00
7,400.00	0.00	0.00	7,068.32	-1,828.27	550.00	-1,738.42	0.00	0.00	0.00
7,405.32	0.00	0.00	7,073.64	-1,828.27	550.00	-1,738.42	0.00	0.00	0.00
7,500.00	8.52	359.12	7,167.97	-1,821.24	549.89	-1,731.47	9.00	9.00	0.00
7,600.00	17.52	359.12	7,265.30	-1,798.74	549.55	-1,709.21	9.00	9.00	0.00
7,700.00	26.52	359.12	7,357.91	-1,761.29	548.97	-1,672.17	9.00	9.00	0.00
7,758.52	31.79	359.12	7,409.00	-1,732.79	548.54	-1,643.99	9.00	9.00	0.00
<b>Sharon Springs</b>									
7,800.00	35.52	359.12	7,443.52	-1,709.81	548.19	-1,621.26	9.00	9.00	0.00
7,808.00	36.24	359.12	7,450.00	-1,705.12	548.11	-1,616.63	9.00	9.00	0.00
<b>Niobrara</b>									
7,900.00	44.52	359.12	7,520.02	-1,645.58	547.20	-1,557.74	9.00	9.00	0.00
7,999.11	53.44	359.12	7,585.00	-1,570.89	546.06	-1,483.87	9.00	9.00	0.00
<b>Nio B</b>									
8,000.00	53.52	359.12	7,585.53	-1,570.17	546.05	-1,483.16	9.00	9.00	0.00
8,100.00	62.52	359.12	7,638.44	-1,485.44	544.75	-1,399.36	9.00	9.00	0.00
8,200.00	71.52	359.12	7,677.44	-1,393.48	543.34	-1,308.42	9.00	9.00	0.00
8,229.00	74.13	359.12	7,686.00	-1,365.78	542.92	-1,281.02	9.00	9.00	0.00
<b>Nio C</b>									
8,300.00	80.52	359.12	7,701.57	-1,296.56	541.86	-1,212.55	9.00	9.00	0.00
8,400.00	89.52	359.12	7,710.24	-1,197.05	540.33	-1,114.14	9.00	9.00	0.00
8,401.88	89.69	359.12	7,710.25	-1,195.17	540.31	-1,112.28	8.99	8.99	0.00

# Anadarko

## Planning Report

**Database:** PLANNING  
**Company:** US ROCKIES WATTENBERG PLANNING  
**Project:** WELD-NAD83-UTMFT13N  
**Site:** 1N-68W-08 PAPA JO 2-25 19-8HZ Pad  
**Well:** PAPA JO 2-25 29N3-8HZ  
**Wellbore:** Plan A  
**Design:** Permit Rev-1

**Local Co-ordinate Reference:**  
**TVD Reference:**  
**MD Reference:**  
**North Reference:**  
**Survey Calculation Method:**

Well PAPA JO 2-25 29N3-8HZ  
 RKB @ 5082.00usft (Original Well Elev)  
 RKB @ 5082.00usft (Original Well Elev)  
 True  
 Minimum Curvature

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
<b>Top of Production - PAPA JO 2-25 29N3-8HZ_PHL</b>									
8,500.00	89.69	359.12	7,710.78	-1,097.06	538.80	-1,015.26	0.00	0.00	0.00
8,600.00	89.69	359.12	7,711.32	-997.07	537.27	-916.37	0.00	0.00	0.00
8,700.00	89.69	359.12	7,711.87	-897.09	535.74	-817.48	0.00	0.00	0.00
8,800.00	89.69	359.12	7,712.41	-797.10	534.21	-718.60	0.00	0.00	0.00
8,900.00	89.69	359.12	7,712.95	-697.11	532.68	-619.71	0.00	0.00	0.00
9,000.00	89.69	359.12	7,713.49	-597.13	531.15	-520.82	0.00	0.00	0.00
9,100.00	89.69	359.12	7,714.03	-497.14	529.62	-421.94	0.00	0.00	0.00
9,200.00	89.69	359.12	7,714.57	-397.15	528.09	-323.05	0.00	0.00	0.00
9,300.00	89.69	359.12	7,715.11	-297.17	526.56	-224.17	0.00	0.00	0.00
9,400.00	89.69	359.12	7,715.65	-197.18	525.02	-125.28	0.00	0.00	0.00
9,500.00	89.69	359.12	7,716.19	-97.19	523.49	-26.39	0.00	0.00	0.00
9,600.00	89.69	359.12	7,716.73	2.80	521.96	72.49	0.00	0.00	0.00
9,700.00	89.69	359.12	7,717.28	102.78	520.43	171.38	0.00	0.00	0.00
9,800.00	89.69	359.12	7,717.82	202.77	518.90	270.27	0.00	0.00	0.00
9,900.00	89.69	359.12	7,718.36	302.76	517.37	369.15	0.00	0.00	0.00
10,000.00	89.69	359.12	7,718.90	402.74	515.84	468.04	0.00	0.00	0.00
10,100.00	89.69	359.12	7,719.44	502.73	514.31	566.92	0.00	0.00	0.00
10,200.00	89.69	359.12	7,719.98	602.72	512.78	665.81	0.00	0.00	0.00
10,300.00	89.69	359.12	7,720.52	702.70	511.25	764.70	0.00	0.00	0.00
10,400.00	89.69	359.12	7,721.06	802.69	509.71	863.58	0.00	0.00	0.00
10,500.00	89.69	359.12	7,721.60	902.68	508.18	962.47	0.00	0.00	0.00
10,600.00	89.69	359.12	7,722.15	1,002.66	506.65	1,061.36	0.00	0.00	0.00
10,700.00	89.69	359.12	7,722.69	1,102.65	505.12	1,160.24	0.00	0.00	0.00
10,800.00	89.69	359.12	7,723.23	1,202.64	503.59	1,259.13	0.00	0.00	0.00
10,900.00	89.69	359.12	7,723.77	1,302.62	502.06	1,358.01	0.00	0.00	0.00
11,000.00	89.69	359.12	7,724.31	1,402.61	500.53	1,456.90	0.00	0.00	0.00
11,100.00	89.69	359.12	7,724.85	1,502.60	499.00	1,555.79	0.00	0.00	0.00
11,200.00	89.69	359.12	7,725.39	1,602.58	497.47	1,654.67	0.00	0.00	0.00
11,300.00	89.69	359.12	7,725.93	1,702.57	495.94	1,753.56	0.00	0.00	0.00
11,400.00	89.69	359.12	7,726.47	1,802.56	494.40	1,852.45	0.00	0.00	0.00
11,500.00	89.69	359.12	7,727.01	1,902.54	492.87	1,951.33	0.00	0.00	0.00
11,600.00	89.69	359.12	7,727.56	2,002.53	491.34	2,050.22	0.00	0.00	0.00
11,687.66	89.69	359.12	7,728.03	2,090.18	490.00	2,136.90	0.00	0.00	0.00
<b>PAPA JO 2-25 29N3-8HZ_PITL1</b>									
11,700.00	89.69	359.15	7,728.10	2,102.52	489.81	2,149.11	0.23	0.00	0.23
11,800.00	89.69	359.38	7,728.64	2,202.51	488.53	2,248.03	0.23	0.00	0.23
11,900.00	89.69	359.61	7,729.18	2,302.50	487.65	2,347.01	0.23	0.00	0.23
12,000.00	89.69	359.84	7,729.72	2,402.50	487.18	2,446.05	0.23	0.00	0.23
12,100.00	89.69	0.07	7,730.26	2,502.50	487.10	2,545.14	0.23	0.00	0.23
12,200.00	89.69	0.30	7,730.80	2,602.50	487.43	2,644.28	0.23	0.00	0.23
12,300.00	89.69	0.53	7,731.34	2,702.49	488.16	2,743.48	0.23	0.00	0.23
12,400.00	89.69	0.76	7,731.89	2,802.49	489.29	2,842.73	0.23	0.00	0.23
12,500.00	89.69	0.99	7,732.43	2,902.47	490.82	2,942.02	0.23	0.00	0.23
12,600.00	89.69	1.22	7,732.97	3,002.45	492.75	3,041.37	0.23	0.00	0.23
12,700.00	89.69	1.45	7,733.51	3,102.42	495.09	3,140.75	0.23	0.00	0.23
12,800.00	89.69	1.68	7,734.05	3,202.38	497.83	3,240.18	0.23	0.00	0.23
12,900.00	89.69	1.91	7,734.59	3,302.33	500.97	3,339.66	0.23	0.00	0.23
13,000.00	89.69	2.14	7,735.13	3,402.27	504.51	3,439.17	0.23	0.00	0.23
13,100.00	89.69	2.37	7,735.67	3,502.19	508.45	3,538.72	0.23	0.00	0.23
13,200.00	89.69	2.60	7,736.21	3,602.09	512.79	3,638.31	0.23	0.00	0.23
13,300.00	89.69	2.83	7,736.75	3,701.98	517.54	3,737.93	0.23	0.00	0.23
13,400.00	89.69	3.06	7,737.29	3,801.85	522.68	3,837.59	0.23	0.00	0.23

# Anadarko

## Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well PAPA JO 2-25 29N3-8HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB @ 5082.00usft (Original Well Elev)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB @ 5082.00usft (Original Well Elev)
<b>Site:</b>	1N-68W-08 PAPA JO 2-25 19-8HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	PAPA JO 2-25 29N3-8HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,500.00	89.69	3.30	7,737.84	3,901.69	528.23	3,937.28	0.23	0.00	0.23
13,530.49	89.69	3.37	7,738.00	3,932.13	530.00	3,967.69	0.23	0.00	0.23
PAPA JO 2-25 29N3-8HZ_PBHL									

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									
PAPA JO 2-25 29N3-8HZ - plan hits target center	0.00	0.00	7,710.25	-1,195.17	540.31	14,548,141.72	1,631,863.68	40.058787	-105.030567
- Point									
PAPA JO 2-25 29N3-8HZ - plan hits target center	0.00	0.00	7,728.03	2,090.18	490.00	14,551,427.08	1,631,814.58	40.067809	-105.030747
- Point									
PAPA JO 2-25 29N3-8HZ - plan hits target center	0.00	0.00	7,738.00	3,932.13	530.00	14,553,269.02	1,631,855.25	40.072867	-105.030604
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,523.46	1,500.00	9 5/8"	9-5/8	13-1/2	
8,401.88	7,710.25	Top of Production	5-1/2	8-1/2	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,025.31	1,020.00	Fox Hills				
4,424.88	4,196.00	Parkman				
4,885.74	4,624.00	Sussex				
7,758.52	7,409.00	Sharon Springs				
7,808.00	7,450.00	Niobrara				
7,999.11	7,585.00	Nio B				
8,229.00	7,686.00	Nio C				