

# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**WELD\_WEICHEL 3 PAD**

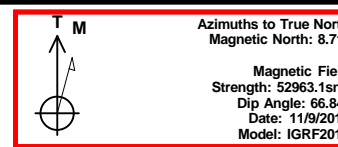
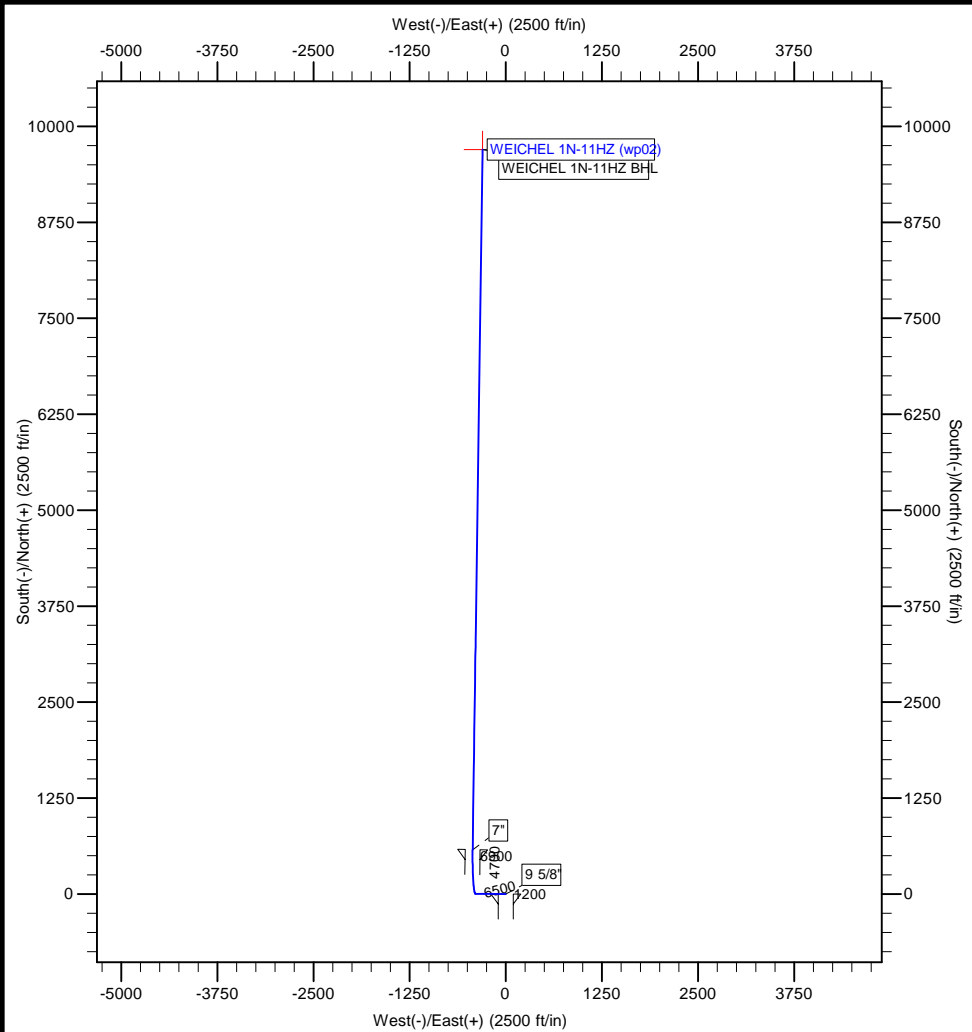
**WEICHEL 1N-11HZ**

**WEICHEL 1N-11HZ**

**Plan: WEICHEL 1N-11HZ (wp02)**

## **Standard Planning Report**

**05 December, 2011**



Project: COLORADO NORTHERN ZONE - 83  
Site: WELD WEICHEL 3 PAD  
Well: WEICHEL 1N-11HZ  
Wellbore: WEICHEL 1N-11HZ  
Section:  
SHL:  
Design: WEICHEL 1N-11HZ (wp02)  
Latitude: 40.132536  
Longitude: -104.623099  
GL: 4879.00  
KB: GL + RKB @ 4896.00ft

WELL DETAILS: WEICHEL 1N-11HZ

+N/-S	+E/-W	Northing	Ground Level: Easting	4879.00 Latitude	40.132536 Longitude	Slot
0.00	0.00	1292338.90	3245185.53			

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.00
1424.44	4.49	270.34	1424.21	0.05	-8.79	2.00	270.34	0.33
6354.83	4.49	270.34	6339.48	2.32	-394.66	0.00	0.00	14.62
7256.34	90.12	0.76	6911.00	577.00	-432.00	10.00	90.41	590.19
7261.80	90.13	0.81	6910.99	582.46	-431.92	1.00	82.13	595.64
16376.72	90.13	0.81	6891.00	9696.44	-302.42	0.00	0.00	9701.16

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

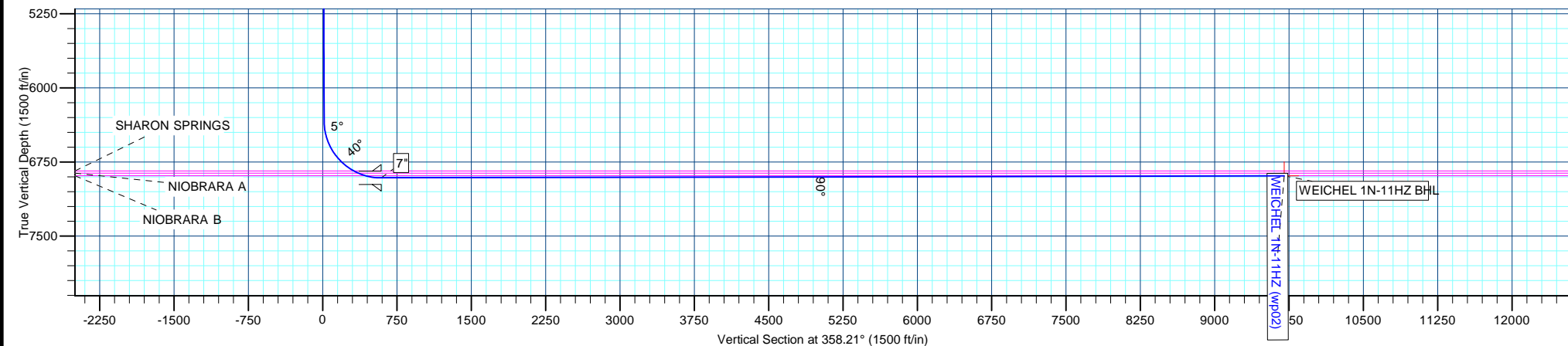
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
WEICHEL 1N-11HZ BHL	6891.00	9696.44	-302.42	40.159154	-104.624181	Point

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4011.00	4019.19	PARKMAN
4323.00	4332.15	SUSSEX
6840.00	6966.43	SHARON SPRINGS
6862.00	7016.10	NIOBRARA A
6890.00	7099.30	NIOBRARA B

CASING DETAILS

TVD	MD	Name	Size
900.00	900.00	9 5/8"	9-5/8
6911.00	7256.34	7"	7



# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well WEICHEL 1N-11HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + RKB @ 4896.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + RKB @ 4896.00ft
<b>Site:</b>	WELD_WEICHEL 3 PAD	<b>North Reference:</b>	True
<b>Well:</b>	WEICHEL 1N-11HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	WEICHEL 1N-11HZ		
<b>Design:</b>	WEICHEL 1N-11HZ (wp02)		

<b>Project</b>	COLORADO NORTHERN ZONE - 83		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

<b>Site</b>	WELD_WEICHEL 3 PAD			
<b>Site Position:</b>		<b>Northing:</b>	1,292,398.97 usft	<b>Latitude:</b> 40.132701
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,245,181.03 usft	<b>Longitude:</b> -104.623113
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b> 0.57 °

<b>Well</b>	WEICHEL 1N-11HZ			
<b>Well Position</b>	<b>+N/-S</b>	-60.11 ft	<b>Northing:</b>	1,292,338.90 usft
	<b>+E/-W</b>	3.91 ft	<b>Easting:</b>	3,245,185.53 usft
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	<b>Ground Level:</b> 4,879.00 ft

<b>Wellbore</b>	WEICHEL 1N-11HZ				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	11/9/2011	8.71	66.84	52,963

<b>Design</b>	WEICHEL 1N-11HZ (wp02)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	358.21

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	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	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,424.44	4.49	270.34	1,424.21	0.05	-8.79	2.00	2.00	0.00	270.34	
6,354.83	4.49	270.34	6,339.48	2.32	-394.66	0.00	0.00	0.00	0.00	
7,256.34	90.12	0.76	6,911.00	577.00	-432.00	10.00	9.50	10.03	90.41	
7,261.80	90.13	0.81	6,910.99	582.46	-431.93	1.00	0.14	0.99	82.13	
16,376.72	90.13	0.81	6,891.00	9,696.44	-302.42	0.00	0.00	0.00	0.00	WEICHEL 1N-11HZ E

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well WEICHEL 1N-11HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + RKB @ 4896.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + RKB @ 4896.00ft
<b>Site:</b>	WELD_WEICHEL 3 PAD	<b>North Reference:</b>	True
<b>Well:</b>	WEICHEL 1N-11HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	WEICHEL 1N-11HZ		
<b>Design:</b>	WEICHEL 1N-11HZ (wp02)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	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
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	2.00	270.34	1,299.98	0.01	-1.75	0.06	2.00	2.00	0.00
1,400.00	4.00	270.34	1,399.84	0.04	-6.98	0.26	2.00	2.00	0.00
1,424.44	4.49	270.34	1,424.21	0.05	-8.79	0.33	2.00	2.00	0.00
1,500.00	4.49	270.34	1,499.54	0.09	-14.70	0.54	0.00	0.00	0.00
1,600.00	4.49	270.34	1,599.23	0.13	-22.53	0.83	0.00	0.00	0.00
1,700.00	4.49	270.34	1,698.93	0.18	-30.35	1.12	0.00	0.00	0.00
1,800.00	4.49	270.34	1,798.62	0.22	-38.18	1.41	0.00	0.00	0.00
1,900.00	4.49	270.34	1,898.31	0.27	-46.01	1.70	0.00	0.00	0.00
2,000.00	4.49	270.34	1,998.01	0.32	-53.83	1.99	0.00	0.00	0.00
2,100.00	4.49	270.34	2,097.70	0.36	-61.66	2.28	0.00	0.00	0.00
2,200.00	4.49	270.34	2,197.39	0.41	-69.49	2.57	0.00	0.00	0.00
2,300.00	4.49	270.34	2,297.08	0.45	-77.31	2.86	0.00	0.00	0.00
2,400.00	4.49	270.34	2,396.78	0.50	-85.14	3.15	0.00	0.00	0.00
2,500.00	4.49	270.34	2,496.47	0.55	-92.96	3.44	0.00	0.00	0.00
2,600.00	4.49	270.34	2,596.16	0.59	-100.79	3.73	0.00	0.00	0.00
2,700.00	4.49	270.34	2,695.86	0.64	-108.62	4.02	0.00	0.00	0.00
2,800.00	4.49	270.34	2,795.55	0.68	-116.44	4.31	0.00	0.00	0.00
2,900.00	4.49	270.34	2,895.24	0.73	-124.27	4.60	0.00	0.00	0.00
3,000.00	4.49	270.34	2,994.94	0.78	-132.10	4.89	0.00	0.00	0.00
3,100.00	4.49	270.34	3,094.63	0.82	-139.92	5.18	0.00	0.00	0.00
3,200.00	4.49	270.34	3,194.32	0.87	-147.75	5.47	0.00	0.00	0.00
3,300.00	4.49	270.34	3,294.02	0.91	-155.58	5.76	0.00	0.00	0.00
3,400.00	4.49	270.34	3,393.71	0.96	-163.40	6.05	0.00	0.00	0.00
3,500.00	4.49	270.34	3,493.40	1.01	-171.23	6.34	0.00	0.00	0.00
3,600.00	4.49	270.34	3,593.10	1.05	-179.06	6.63	0.00	0.00	0.00
3,700.00	4.49	270.34	3,692.79	1.10	-186.88	6.92	0.00	0.00	0.00
3,800.00	4.49	270.34	3,792.48	1.14	-194.71	7.21	0.00	0.00	0.00
3,900.00	4.49	270.34	3,892.18	1.19	-202.53	7.50	0.00	0.00	0.00
4,000.00	4.49	270.34	3,991.87	1.24	-210.36	7.79	0.00	0.00	0.00
4,019.19	4.49	270.34	4,011.00	1.24	-211.86	7.85	0.00	0.00	0.00
PARKMAN									
4,100.00	4.49	270.34	4,091.56	1.28	-218.19	8.08	0.00	0.00	0.00
4,200.00	4.49	270.34	4,191.26	1.33	-226.01	8.37	0.00	0.00	0.00
4,300.00	4.49	270.34	4,290.95	1.37	-233.84	8.66	0.00	0.00	0.00
4,332.15	4.49	270.34	4,323.00	1.39	-236.36	8.76	0.00	0.00	0.00
SUSSEX									
4,400.00	4.49	270.34	4,390.64	1.42	-241.67	8.95	0.00	0.00	0.00
4,500.00	4.49	270.34	4,490.34	1.47	-249.49	9.24	0.00	0.00	0.00
4,600.00	4.49	270.34	4,590.03	1.51	-257.32	9.53	0.00	0.00	0.00

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well WEICHEL 1N-11HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + RKB @ 4896.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + RKB @ 4896.00ft
<b>Site:</b>	WELD_WEICHEL 3 PAD	<b>North Reference:</b>	True
<b>Well:</b>	WEICHEL 1N-11HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	WEICHEL 1N-11HZ		
<b>Design:</b>	WEICHEL 1N-11HZ (wp02)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,700.00	4.49	270.34	4,689.72	1.56	-265.15	9.82	0.00	0.00	0.00
4,800.00	4.49	270.34	4,789.42	1.60	-272.97	10.11	0.00	0.00	0.00
4,900.00	4.49	270.34	4,889.11	1.65	-280.80	10.40	0.00	0.00	0.00
5,000.00	4.49	270.34	4,988.80	1.70	-288.62	10.69	0.00	0.00	0.00
5,100.00	4.49	270.34	5,088.50	1.74	-296.45	10.98	0.00	0.00	0.00
5,200.00	4.49	270.34	5,188.19	1.79	-304.28	11.27	0.00	0.00	0.00
5,300.00	4.49	270.34	5,287.88	1.83	-312.10	11.56	0.00	0.00	0.00
5,400.00	4.49	270.34	5,387.58	1.88	-319.93	11.85	0.00	0.00	0.00
5,500.00	4.49	270.34	5,487.27	1.92	-327.76	12.14	0.00	0.00	0.00
5,600.00	4.49	270.34	5,586.96	1.97	-335.58	12.43	0.00	0.00	0.00
5,700.00	4.49	270.34	5,686.66	2.02	-343.41	12.72	0.00	0.00	0.00
5,800.00	4.49	270.34	5,786.35	2.06	-351.24	13.01	0.00	0.00	0.00
5,900.00	4.49	270.34	5,886.04	2.11	-359.06	13.30	0.00	0.00	0.00
6,000.00	4.49	270.34	5,985.74	2.15	-366.89	13.59	0.00	0.00	0.00
6,100.00	4.49	270.34	6,085.43	2.20	-374.72	13.88	0.00	0.00	0.00
6,200.00	4.49	270.34	6,185.12	2.25	-382.54	14.17	0.00	0.00	0.00
6,300.00	4.49	270.34	6,284.82	2.29	-390.37	14.46	0.00	0.00	0.00
6,354.83	4.49	270.34	6,339.48	2.32	-394.66	14.62	0.00	0.00	0.00
6,400.00	6.34	315.81	6,384.46	4.12	-398.17	16.53	10.00	4.10	100.68
6,500.00	15.15	343.90	6,482.67	20.67	-405.66	33.31	10.00	8.81	28.08
6,600.00	24.87	351.00	6,576.53	54.08	-412.59	66.92	10.00	9.72	7.10
6,700.00	34.74	354.25	6,663.20	103.32	-418.75	116.33	10.00	9.87	3.25
6,800.00	44.66	356.19	6,740.05	166.90	-423.95	180.04	10.00	9.92	1.94
6,900.00	54.61	357.55	6,804.73	242.89	-428.03	256.11	10.00	9.95	1.36
6,966.43	61.22	358.28	6,840.00	299.11	-430.07	312.37	10.00	9.96	1.09
SHARON SPRINGS									
7,000.00	64.57	358.61	6,855.29	328.97	-430.88	342.25	10.00	9.96	0.99
7,016.10	66.17	358.76	6,862.00	343.60	-431.21	356.88	10.00	9.96	0.95
NIOBRARA A									
7,099.30	74.46	359.50	6,890.00	421.87	-432.38	435.14	10.00	9.97	0.88
NIOBRARA B									
7,100.00	74.53	359.51	6,890.19	422.54	-432.39	435.81	10.00	9.97	0.84
7,200.00	84.50	0.32	6,908.36	520.75	-432.53	533.98	10.00	9.97	0.81
7,256.34	90.12	0.76	6,911.00	577.00	-432.00	590.19	10.00	9.97	0.78
7"									
7,261.80	90.13	0.81	6,910.99	582.46	-431.93	595.64	1.00	0.14	0.99
7,300.00	90.13	0.81	6,910.90	620.65	-431.38	633.80	0.00	0.00	0.00
7,400.00	90.13	0.81	6,910.69	720.64	-429.96	733.70	0.00	0.00	0.00
7,500.00	90.13	0.81	6,910.47	820.63	-428.54	833.59	0.00	0.00	0.00
7,600.00	90.13	0.81	6,910.25	920.62	-427.12	933.49	0.00	0.00	0.00
7,700.00	90.13	0.81	6,910.03	1,020.61	-425.70	1,033.39	0.00	0.00	0.00
7,800.00	90.13	0.81	6,909.81	1,120.60	-424.28	1,133.28	0.00	0.00	0.00
7,900.00	90.13	0.81	6,909.59	1,220.59	-422.86	1,233.18	0.00	0.00	0.00
8,000.00	90.13	0.81	6,909.37	1,320.58	-421.44	1,333.08	0.00	0.00	0.00
8,100.00	90.13	0.81	6,909.15	1,420.57	-420.02	1,432.97	0.00	0.00	0.00
8,200.00	90.13	0.81	6,908.93	1,520.56	-418.59	1,532.87	0.00	0.00	0.00
8,300.00	90.13	0.81	6,908.71	1,620.55	-417.17	1,632.77	0.00	0.00	0.00
8,400.00	90.13	0.81	6,908.49	1,720.54	-415.75	1,732.67	0.00	0.00	0.00
8,500.00	90.13	0.81	6,908.27	1,820.53	-414.33	1,832.56	0.00	0.00	0.00
8,600.00	90.13	0.81	6,908.05	1,920.52	-412.91	1,932.46	0.00	0.00	0.00
8,700.00	90.13	0.81	6,907.83	2,020.51	-411.49	2,032.36	0.00	0.00	0.00
8,800.00	90.13	0.81	6,907.62	2,120.50	-410.07	2,132.25	0.00	0.00	0.00
8,900.00	90.13	0.81	6,907.40	2,220.49	-408.65	2,232.15	0.00	0.00	0.00
9,000.00	90.13	0.81	6,907.18	2,320.48	-407.23	2,332.05	0.00	0.00	0.00

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well WEICHEL 1N-11HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + RKB @ 4896.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + RKB @ 4896.00ft
<b>Site:</b>	WELD_WEICHEL 3 PAD	<b>North Reference:</b>	True
<b>Well:</b>	WEICHEL 1N-11HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	WEICHEL 1N-11HZ		
<b>Design:</b>	WEICHEL 1N-11HZ (wp02)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,100.00	90.13	0.81	6,906.96	2,420.47	-405.81	2,431.94	0.00	0.00	0.00
9,200.00	90.13	0.81	6,906.74	2,520.46	-404.39	2,531.84	0.00	0.00	0.00
9,300.00	90.13	0.81	6,906.52	2,620.45	-402.97	2,631.74	0.00	0.00	0.00
9,400.00	90.13	0.81	6,906.30	2,720.44	-401.55	2,731.63	0.00	0.00	0.00
9,500.00	90.13	0.81	6,906.08	2,820.43	-400.12	2,831.53	0.00	0.00	0.00
9,600.00	90.13	0.81	6,905.86	2,920.42	-398.70	2,931.43	0.00	0.00	0.00
9,700.00	90.13	0.81	6,905.64	3,020.41	-397.28	3,031.32	0.00	0.00	0.00
9,800.00	90.13	0.81	6,905.42	3,120.40	-395.86	3,131.22	0.00	0.00	0.00
9,900.00	90.13	0.81	6,905.20	3,220.39	-394.44	3,231.12	0.00	0.00	0.00
10,000.00	90.13	0.81	6,904.98	3,320.38	-393.02	3,331.01	0.00	0.00	0.00
10,100.00	90.13	0.81	6,904.76	3,420.37	-391.60	3,430.91	0.00	0.00	0.00
10,200.00	90.13	0.81	6,904.55	3,520.35	-390.18	3,530.81	0.00	0.00	0.00
10,300.00	90.13	0.81	6,904.33	3,620.34	-388.76	3,630.70	0.00	0.00	0.00
10,400.00	90.13	0.81	6,904.11	3,720.33	-387.34	3,730.60	0.00	0.00	0.00
10,500.00	90.13	0.81	6,903.89	3,820.32	-385.92	3,830.50	0.00	0.00	0.00
10,600.00	90.13	0.81	6,903.67	3,920.31	-384.50	3,930.39	0.00	0.00	0.00
10,700.00	90.13	0.81	6,903.45	4,020.30	-383.07	4,030.29	0.00	0.00	0.00
10,800.00	90.13	0.81	6,903.23	4,120.29	-381.65	4,130.19	0.00	0.00	0.00
10,900.00	90.13	0.81	6,903.01	4,220.28	-380.23	4,230.08	0.00	0.00	0.00
11,000.00	90.13	0.81	6,902.79	4,320.27	-378.81	4,329.98	0.00	0.00	0.00
11,100.00	90.13	0.81	6,902.57	4,420.26	-377.39	4,429.88	0.00	0.00	0.00
11,200.00	90.13	0.81	6,902.35	4,520.25	-375.97	4,529.77	0.00	0.00	0.00
11,300.00	90.13	0.81	6,902.13	4,620.24	-374.55	4,629.67	0.00	0.00	0.00
11,400.00	90.13	0.81	6,901.91	4,720.23	-373.13	4,729.57	0.00	0.00	0.00
11,500.00	90.13	0.81	6,901.69	4,820.22	-371.71	4,829.47	0.00	0.00	0.00
11,600.00	90.13	0.81	6,901.48	4,920.21	-370.29	4,929.36	0.00	0.00	0.00
11,700.00	90.13	0.81	6,901.26	5,020.20	-368.87	5,029.26	0.00	0.00	0.00
11,800.00	90.13	0.81	6,901.04	5,120.19	-367.45	5,129.16	0.00	0.00	0.00
11,900.00	90.13	0.81	6,900.82	5,220.18	-366.03	5,229.05	0.00	0.00	0.00
12,000.00	90.13	0.81	6,900.60	5,320.17	-364.60	5,328.95	0.00	0.00	0.00
12,100.00	90.13	0.81	6,900.38	5,420.16	-363.18	5,428.85	0.00	0.00	0.00
12,200.00	90.13	0.81	6,900.16	5,520.15	-361.76	5,528.74	0.00	0.00	0.00
12,300.00	90.13	0.81	6,899.94	5,620.14	-360.34	5,628.64	0.00	0.00	0.00
12,400.00	90.13	0.81	6,899.72	5,720.13	-358.92	5,728.54	0.00	0.00	0.00
12,500.00	90.13	0.81	6,899.50	5,820.12	-357.50	5,828.43	0.00	0.00	0.00
12,600.00	90.13	0.81	6,899.28	5,920.11	-356.08	5,928.33	0.00	0.00	0.00
12,700.00	90.13	0.81	6,899.06	6,020.10	-354.66	6,028.23	0.00	0.00	0.00
12,800.00	90.13	0.81	6,898.84	6,120.09	-353.24	6,128.12	0.00	0.00	0.00
12,900.00	90.13	0.81	6,898.62	6,220.08	-351.82	6,228.02	0.00	0.00	0.00
13,000.00	90.13	0.81	6,898.41	6,320.07	-350.40	6,327.92	0.00	0.00	0.00
13,100.00	90.13	0.81	6,898.19	6,420.06	-348.98	6,427.81	0.00	0.00	0.00
13,200.00	90.13	0.81	6,897.97	6,520.04	-347.55	6,527.71	0.00	0.00	0.00
13,300.00	90.13	0.81	6,897.75	6,620.03	-346.13	6,627.61	0.00	0.00	0.00
13,400.00	90.13	0.81	6,897.53	6,720.02	-344.71	6,727.50	0.00	0.00	0.00
13,500.00	90.13	0.81	6,897.31	6,820.01	-343.29	6,827.40	0.00	0.00	0.00
13,600.00	90.13	0.81	6,897.09	6,920.00	-341.87	6,927.30	0.00	0.00	0.00
13,700.00	90.13	0.81	6,896.87	7,019.99	-340.45	7,027.19	0.00	0.00	0.00
13,800.00	90.13	0.81	6,896.65	7,119.98	-339.03	7,127.09	0.00	0.00	0.00
13,900.00	90.13	0.81	6,896.43	7,219.97	-337.61	7,226.99	0.00	0.00	0.00
14,000.00	90.13	0.81	6,896.21	7,319.96	-336.19	7,326.88	0.00	0.00	0.00
14,100.00	90.13	0.81	6,895.99	7,419.95	-334.77	7,426.78	0.00	0.00	0.00
14,200.00	90.13	0.81	6,895.77	7,519.94	-333.35	7,526.68	0.00	0.00	0.00
14,300.00	90.13	0.81	6,895.55	7,619.93	-331.93	7,626.58	0.00	0.00	0.00
14,400.00	90.13	0.81	6,895.33	7,719.92	-330.50	7,726.47	0.00	0.00	0.00

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well WEICHEL 1N-11HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + RKB @ 4896.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + RKB @ 4896.00ft
<b>Site:</b>	WELD_WEICHEL 3 PAD	<b>North Reference:</b>	True
<b>Well:</b>	WEICHEL 1N-11HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	WEICHEL 1N-11HZ		
<b>Design:</b>	WEICHEL 1N-11HZ (wp02)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
14,500.00	90.13	0.81	6,895.12	7,819.91	-329.08	7,826.37	0.00	0.00	0.00	
14,600.00	90.13	0.81	6,894.90	7,919.90	-327.66	7,926.27	0.00	0.00	0.00	
14,700.00	90.13	0.81	6,894.68	8,019.89	-326.24	8,026.16	0.00	0.00	0.00	
14,800.00	90.13	0.81	6,894.46	8,119.88	-324.82	8,126.06	0.00	0.00	0.00	
14,900.00	90.13	0.81	6,894.24	8,219.87	-323.40	8,225.96	0.00	0.00	0.00	
15,000.00	90.13	0.81	6,894.02	8,319.86	-321.98	8,325.85	0.00	0.00	0.00	
15,100.00	90.13	0.81	6,893.80	8,419.85	-320.56	8,425.75	0.00	0.00	0.00	
15,200.00	90.13	0.81	6,893.58	8,519.84	-319.14	8,525.65	0.00	0.00	0.00	
15,300.00	90.13	0.81	6,893.36	8,619.83	-317.72	8,625.54	0.00	0.00	0.00	
15,400.00	90.13	0.81	6,893.14	8,719.82	-316.30	8,725.44	0.00	0.00	0.00	
15,500.00	90.13	0.81	6,892.92	8,819.81	-314.88	8,825.34	0.00	0.00	0.00	
15,600.00	90.13	0.81	6,892.70	8,919.80	-313.46	8,925.23	0.00	0.00	0.00	
15,700.00	90.13	0.81	6,892.48	9,019.79	-312.03	9,025.13	0.00	0.00	0.00	
15,800.00	90.13	0.81	6,892.26	9,119.78	-310.61	9,125.03	0.00	0.00	0.00	
15,900.00	90.13	0.81	6,892.05	9,219.77	-309.19	9,224.92	0.00	0.00	0.00	
16,000.00	90.13	0.81	6,891.83	9,319.76	-307.77	9,324.82	0.00	0.00	0.00	
16,100.00	90.13	0.81	6,891.61	9,419.75	-306.35	9,424.72	0.00	0.00	0.00	
16,200.00	90.13	0.81	6,891.39	9,519.73	-304.93	9,524.61	0.00	0.00	0.00	
16,300.00	90.13	0.81	6,891.17	9,619.72	-303.51	9,624.51	0.00	0.00	0.00	
16,376.72	90.13	0.81	6,891.00	9,696.44	-302.42	9,701.16	0.00	0.00	0.00	
WEICHEL 1N-11HZ BHL										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
WEICHEL 1N-11HZ BHL	0.00	0.00	6,891.00	9,696.44	-302.42	1,302,031.86	3,244,787.24	40.159154	-104.624181
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
900.00	900.00	9 5/8"	9-5/8	12-1/4	
7,256.34	6,911.00	7"	7	8-3/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,019.19	4,011.00	PARKMAN		0.00		
4,332.15	4,323.00	SUSSEX		0.00		
6,966.43	6,840.00	SHARON SPRINGS		0.00		
7,016.10	6,862.00	NIOBRARA A		0.00		
7,099.30	6,890.00	NIOBRARA B		0.00		

# Anadarko Petroleum Corp

## Planning Report

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well WEICHEL 1N-11HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL + RKB @ 4896.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL + RKB @ 4896.00ft
<b>Site:</b>	WELD_WEICHEL 3 PAD	<b>North Reference:</b>	True
<b>Well:</b>	WEICHEL 1N-11HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	WEICHEL 1N-11HZ		
<b>Design:</b>	WEICHEL 1N-11HZ (wp02)		