

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_WEICHEL PAD

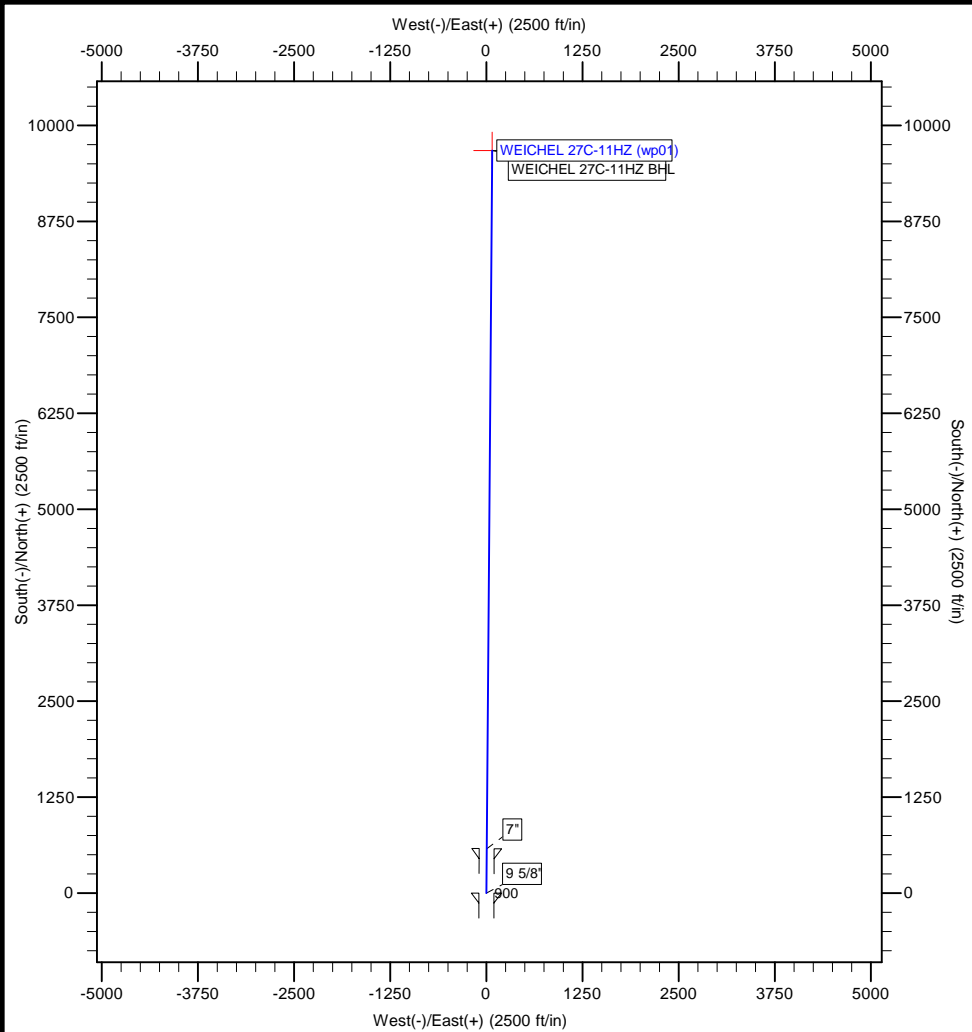
WEICHEL 27C-11HZ

WEICHEL 27C-11HZ

Plan: WEICHEL 27C-11HZ (wp01)

Standard Planning Report

21 November, 2011



Project: COLORADO NORTHERN ZONE - 83
Site: WELD WEICHEL PAD
Well: WEICHEL 27C-11HZ
Wellbore: WEICHEL 27C-11HZ
Section:
SHL:
Design: WEICHEL 27C-11HZ (wp01)
Latitude: 40.132621
Longitude: -104.627729
GL: 4882.00
KB: GL + RKB @ 4899.00ft

WELL DETAILS: WEICHEL 27C-11HZ

+N/-S	+E/-W	Northing	Ground Level: Easting	4882.00 Latitude 40.132621	Longitude -104.627729	Slot
0.00	0.00	1292357.10	3243890.70			

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
6610.05	0.00	0.00	6610.05	0.00	0.00	0.00	0.00	0.00
7513.01	90.30	0.44	7183.00	575.90	4.39	10.00	0.44	575.92
16609.16	90.30	0.44	7136.00	9671.67	73.79	0.00	0.00	9671.95

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

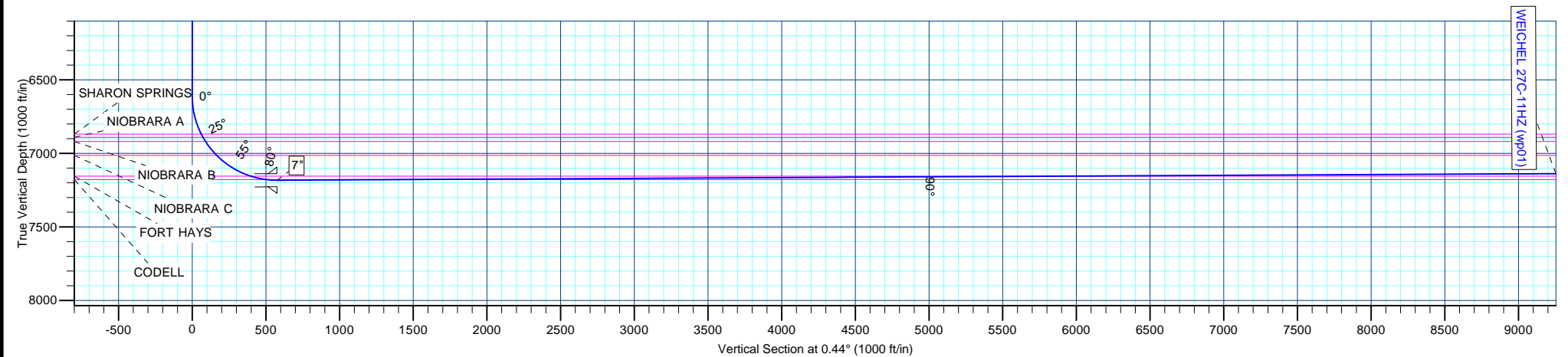
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
WEICHEL 27C-11HZ BHL	7136.00	9671.67	73.79	40.159171	-104.627465	Point

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4040.00	4040.00	PARKMAN
4352.00	4352.00	SUSSEX
6869.00	6878.74	SHARON SPRINGS
6891.00	6903.69	NIOBRARA A
6919.00	6936.36	NIOBRARA B
7013.00	7056.96	NIOBRARA C
7155.00	7330.16	FORT HAYS
7178.00	7434.23	CODELL

CASING DETAILS

TVD	MD	Name	Size
900.00	900.00	9 5/8"	9-5/8
7183.00	7513.01	7"	7



Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well WEICHEL 27C-11HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL + RKB @ 4899.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4899.00ft
Site:	WELD_WEICHEL PAD	North Reference:	True
Well:	WEICHEL 27C-11HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	WEICHEL 27C-11HZ		
Design:	WEICHEL 27C-11HZ (wp01)		

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

Site		WELD_WEICHEL PAD			
Site Position:		Northing:	1,292,377.36 usft	Latitude:	40.132676
From:	Lat/Long	Easting:	3,243,912.87 usft	Longitude:	-104.627649
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.56 °

Well	WEICHEL 27C-11HZ					
Well Position	+N/-S	-20.04 ft	Northing:	1,292,357.09 usft	Latitude:	40.132621
	+E/-W	-22.37 ft	Easting:	3,243,890.70 usft	Longitude:	-104.627729
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,882.00 ft

Wellbore	WEICHEL 27C-11HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/16/2011	8.71	66.84	52,961

Design	WEICHEL 27C-11HZ (wp01)			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	0.44

Plan Sections										
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	
6,610.05	0.00	0.00	6,610.05	0.00	0.00	0.00	0.00	0.00	0.00	
7,513.01	90.30	0.44	7,183.00	575.90	4.39	10.00	10.00	0.00	0.44	
16,609.16	90.30	0.44	7,136.00	9,671.67	73.79	0.00	0.00	0.00	0.00	WEICHEL 27C-11HZ

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well WEICHEL 27C-11HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL + RKB @ 4899.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4899.00ft
Site:	WELD_WEICHEL PAD	North Reference:	True
Well:	WEICHEL 27C-11HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	WEICHEL 27C-11HZ		
Design:	WEICHEL 27C-11HZ (wp01)		

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	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,040.00	0.00	0.00	4,040.00	0.00	0.00	0.00	0.00	0.00	0.00
PARKMAN									
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,352.00	0.00	0.00	4,352.00	0.00	0.00	0.00	0.00	0.00	0.00
SUSSEX									
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00

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Planned Survey									
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4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,610.05	0.00	0.00	6,610.05	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 10.00									
6,700.00	8.99	0.44	6,699.63	7.05	0.05	7.05	10.00	10.00	0.00
6,800.00	18.99	0.44	6,796.54	31.20	0.24	31.20	10.00	10.00	0.00
6,878.74	26.87	0.44	6,869.00	61.85	0.47	61.86	10.00	10.00	0.00
SHARON SPRINGS									
6,900.00	28.99	0.44	6,887.78	71.81	0.55	71.81	10.00	10.00	0.00
6,903.69	29.36	0.44	6,891.00	73.61	0.56	73.61	10.00	10.00	0.00
NIOBRARA A									
6,936.36	32.63	0.44	6,919.00	90.43	0.69	90.43	10.00	10.00	0.00
NIOBRARA B									
7,000.00	38.99	0.44	6,970.59	127.65	0.97	127.65	10.00	10.00	0.00
7,056.96	44.69	0.44	7,013.00	165.63	1.26	165.63	10.00	10.00	0.00
NIOBRARA C									
7,100.00	48.99	0.44	7,042.43	197.02	1.50	197.03	10.00	10.00	0.00
7,200.00	58.99	0.44	7,101.15	277.81	2.12	277.82	10.00	10.00	0.00
7,300.00	68.99	0.44	7,144.93	367.57	2.80	367.58	10.00	10.00	0.00
7,330.16	72.01	0.44	7,155.00	396.00	3.02	396.01	10.00	10.00	0.00
FORT HAYS									
7,400.00	78.99	0.44	7,172.47	463.57	3.54	463.58	10.00	10.00	0.00
7,434.23	82.42	0.44	7,178.00	497.35	3.79	497.36	10.00	10.00	0.00
CODELL									
7,500.00	88.99	0.44	7,182.92	562.89	4.29	562.91	10.00	10.00	0.00
7,513.01	90.30	0.44	7,183.00	575.90	4.39	575.92	10.00	10.00	0.00
Start 9096.15 hold at 7513.01 MD - 7"									
7,600.00	90.30	0.44	7,182.55	662.89	5.06	662.91	0.00	0.00	0.00
7,700.00	90.30	0.44	7,182.04	762.88	5.82	762.90	0.00	0.00	0.00
7,800.00	90.30	0.44	7,181.52	862.88	6.58	862.90	0.00	0.00	0.00
7,900.00	90.30	0.44	7,181.00	962.87	7.35	962.90	0.00	0.00	0.00
8,000.00	90.30	0.44	7,180.49	1,062.87	8.11	1,062.90	0.00	0.00	0.00
8,100.00	90.30	0.44	7,179.97	1,162.87	8.87	1,162.90	0.00	0.00	0.00
8,200.00	90.30	0.44	7,179.45	1,262.86	9.63	1,262.90	0.00	0.00	0.00
8,300.00	90.30	0.44	7,178.93	1,362.86	10.40	1,362.90	0.00	0.00	0.00
8,400.00	90.30	0.44	7,178.42	1,462.85	11.16	1,462.90	0.00	0.00	0.00

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Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4899.00ft
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Wellbore:	WEICHEL 27C-11HZ		
Design:	WEICHEL 27C-11HZ (wp01)		

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)
8,500.00	90.30	0.44	7,177.90	1,562.85	11.92	1,562.89	0.00	0.00	0.00
8,600.00	90.30	0.44	7,177.38	1,662.84	12.69	1,662.89	0.00	0.00	0.00
8,700.00	90.30	0.44	7,176.87	1,762.84	13.45	1,762.89	0.00	0.00	0.00
8,800.00	90.30	0.44	7,176.35	1,862.84	14.21	1,862.89	0.00	0.00	0.00
8,900.00	90.30	0.44	7,175.83	1,962.83	14.98	1,962.89	0.00	0.00	0.00
9,000.00	90.30	0.44	7,175.32	2,062.83	15.74	2,062.89	0.00	0.00	0.00
9,100.00	90.30	0.44	7,174.80	2,162.82	16.50	2,162.89	0.00	0.00	0.00
9,200.00	90.30	0.44	7,174.28	2,262.82	17.26	2,262.88	0.00	0.00	0.00
9,300.00	90.30	0.44	7,173.77	2,362.81	18.03	2,362.88	0.00	0.00	0.00
9,400.00	90.30	0.44	7,173.25	2,462.81	18.79	2,462.88	0.00	0.00	0.00
9,500.00	90.30	0.44	7,172.73	2,562.81	19.55	2,562.88	0.00	0.00	0.00
9,600.00	90.30	0.44	7,172.22	2,662.80	20.32	2,662.88	0.00	0.00	0.00
9,700.00	90.30	0.44	7,171.70	2,762.80	21.08	2,762.88	0.00	0.00	0.00
9,800.00	90.30	0.44	7,171.18	2,862.79	21.84	2,862.88	0.00	0.00	0.00
9,900.00	90.30	0.44	7,170.67	2,962.79	22.60	2,962.88	0.00	0.00	0.00
10,000.00	90.30	0.44	7,170.15	3,062.78	23.37	3,062.87	0.00	0.00	0.00
10,100.00	90.30	0.44	7,169.63	3,162.78	24.13	3,162.87	0.00	0.00	0.00
10,200.00	90.30	0.44	7,169.12	3,262.78	24.89	3,262.87	0.00	0.00	0.00
10,300.00	90.30	0.44	7,168.60	3,362.77	25.66	3,362.87	0.00	0.00	0.00
10,400.00	90.30	0.44	7,168.08	3,462.77	26.42	3,462.87	0.00	0.00	0.00
10,500.00	90.30	0.44	7,167.57	3,562.76	27.18	3,562.87	0.00	0.00	0.00
10,600.00	90.30	0.44	7,167.05	3,662.76	27.94	3,662.87	0.00	0.00	0.00
10,700.00	90.30	0.44	7,166.53	3,762.76	28.71	3,762.86	0.00	0.00	0.00
10,800.00	90.30	0.44	7,166.02	3,862.75	29.47	3,862.86	0.00	0.00	0.00
10,900.00	90.30	0.44	7,165.50	3,962.75	30.23	3,962.86	0.00	0.00	0.00
11,000.00	90.30	0.44	7,164.98	4,062.74	31.00	4,062.86	0.00	0.00	0.00
11,100.00	90.30	0.44	7,164.47	4,162.74	31.76	4,162.86	0.00	0.00	0.00
11,200.00	90.30	0.44	7,163.95	4,262.73	32.52	4,262.86	0.00	0.00	0.00
11,300.00	90.30	0.44	7,163.43	4,362.73	33.28	4,362.86	0.00	0.00	0.00
11,400.00	90.30	0.44	7,162.92	4,462.73	34.05	4,462.86	0.00	0.00	0.00
11,500.00	90.30	0.44	7,162.40	4,562.72	34.81	4,562.85	0.00	0.00	0.00
11,600.00	90.30	0.44	7,161.88	4,662.72	35.57	4,662.85	0.00	0.00	0.00
11,700.00	90.30	0.44	7,161.37	4,762.71	36.34	4,762.85	0.00	0.00	0.00
11,800.00	90.30	0.44	7,160.85	4,862.71	37.10	4,862.85	0.00	0.00	0.00
11,900.00	90.30	0.44	7,160.33	4,962.70	37.86	4,962.85	0.00	0.00	0.00
12,000.00	90.30	0.44	7,159.82	5,062.70	38.62	5,062.85	0.00	0.00	0.00
12,100.00	90.30	0.44	7,159.30	5,162.70	39.39	5,162.85	0.00	0.00	0.00
12,200.00	90.30	0.44	7,158.78	5,262.69	40.15	5,262.84	0.00	0.00	0.00
12,300.00	90.30	0.44	7,158.27	5,362.69	40.91	5,362.84	0.00	0.00	0.00
12,400.00	90.30	0.44	7,157.75	5,462.68	41.68	5,462.84	0.00	0.00	0.00
12,500.00	90.30	0.44	7,157.23	5,562.68	42.44	5,562.84	0.00	0.00	0.00
12,600.00	90.30	0.44	7,156.72	5,662.67	43.20	5,662.84	0.00	0.00	0.00
12,700.00	90.30	0.44	7,156.20	5,762.67	43.97	5,762.84	0.00	0.00	0.00
12,800.00	90.30	0.44	7,155.68	5,862.67	44.73	5,862.84	0.00	0.00	0.00
12,900.00	90.30	0.44	7,155.17	5,962.66	45.49	5,962.84	0.00	0.00	0.00
13,000.00	90.30	0.44	7,154.65	6,062.66	46.25	6,062.83	0.00	0.00	0.00
13,100.00	90.30	0.44	7,154.13	6,162.65	47.02	6,162.83	0.00	0.00	0.00
13,200.00	90.30	0.44	7,153.62	6,262.65	47.78	6,262.83	0.00	0.00	0.00
13,300.00	90.30	0.44	7,153.10	6,362.64	48.54	6,362.83	0.00	0.00	0.00
13,400.00	90.30	0.44	7,152.58	6,462.64	49.31	6,462.83	0.00	0.00	0.00
13,500.00	90.30	0.44	7,152.07	6,562.64	50.07	6,562.83	0.00	0.00	0.00
13,600.00	90.30	0.44	7,151.55	6,662.63	50.83	6,662.83	0.00	0.00	0.00
13,700.00	90.30	0.44	7,151.03	6,762.63	51.59	6,762.82	0.00	0.00	0.00
13,800.00	90.30	0.44	7,150.52	6,862.62	52.36	6,862.82	0.00	0.00	0.00

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well WEICHEL 27C-11HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL + RKB @ 4899.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4899.00ft
Site:	WELD_WEICHEL PAD	North Reference:	True
Well:	WEICHEL 27C-11HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	WEICHEL 27C-11HZ		
Design:	WEICHEL 27C-11HZ (wp01)		

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)
13,900.00	90.30	0.44	7,150.00	6,962.62	53.12	6,962.82	0.00	0.00	0.00
14,000.00	90.30	0.44	7,149.48	7,062.62	53.88	7,062.82	0.00	0.00	0.00
14,100.00	90.30	0.44	7,148.97	7,162.61	54.65	7,162.82	0.00	0.00	0.00
14,200.00	90.30	0.44	7,148.45	7,262.61	55.41	7,262.82	0.00	0.00	0.00
14,300.00	90.30	0.44	7,147.93	7,362.60	56.17	7,362.82	0.00	0.00	0.00
14,400.00	90.30	0.44	7,147.42	7,462.60	56.93	7,462.82	0.00	0.00	0.00
14,500.00	90.30	0.44	7,146.90	7,562.59	57.70	7,562.81	0.00	0.00	0.00
14,600.00	90.30	0.44	7,146.38	7,662.59	58.46	7,662.81	0.00	0.00	0.00
14,700.00	90.30	0.44	7,145.87	7,762.59	59.22	7,762.81	0.00	0.00	0.00
14,800.00	90.30	0.44	7,145.35	7,862.58	59.99	7,862.81	0.00	0.00	0.00
14,900.00	90.30	0.44	7,144.83	7,962.58	60.75	7,962.81	0.00	0.00	0.00
15,000.00	90.30	0.44	7,144.31	8,062.57	61.51	8,062.81	0.00	0.00	0.00
15,100.00	90.30	0.44	7,143.80	8,162.57	62.27	8,162.81	0.00	0.00	0.00
15,200.00	90.30	0.44	7,143.28	8,262.56	63.04	8,262.80	0.00	0.00	0.00
15,300.00	90.30	0.44	7,142.76	8,362.56	63.80	8,362.80	0.00	0.00	0.00
15,400.00	90.30	0.44	7,142.25	8,462.56	64.56	8,462.80	0.00	0.00	0.00
15,500.00	90.30	0.44	7,141.73	8,562.55	65.33	8,562.80	0.00	0.00	0.00
15,600.00	90.30	0.44	7,141.21	8,662.55	66.09	8,662.80	0.00	0.00	0.00
15,700.00	90.30	0.44	7,140.70	8,762.54	66.85	8,762.80	0.00	0.00	0.00
15,800.00	90.30	0.44	7,140.18	8,862.54	67.61	8,862.80	0.00	0.00	0.00
15,900.00	90.30	0.44	7,139.66	8,962.53	68.38	8,962.80	0.00	0.00	0.00
16,000.00	90.30	0.44	7,139.15	9,062.53	69.14	9,062.79	0.00	0.00	0.00
16,100.00	90.30	0.44	7,138.63	9,162.53	69.90	9,162.79	0.00	0.00	0.00
16,200.00	90.30	0.44	7,138.11	9,262.52	70.67	9,262.79	0.00	0.00	0.00
16,300.00	90.30	0.44	7,137.60	9,362.52	71.43	9,362.79	0.00	0.00	0.00
16,400.00	90.30	0.44	7,137.08	9,462.51	72.19	9,462.79	0.00	0.00	0.00
16,500.00	90.30	0.44	7,136.56	9,562.51	72.96	9,562.79	0.00	0.00	0.00
16,600.00	90.30	0.44	7,136.05	9,662.50	73.72	9,662.79	0.00	0.00	0.00
16,609.16	90.30	0.44	7,136.00	9,671.67	73.79	9,671.95	0.00	0.00	0.00
TD at 16609.16 - WEICHEL 27C-11HZ BHL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
WEICHEL 27C-11HZ Bt - hit/miss target - Shape - plan hits target center - Point	0.00	0.00	7,136.00	9,671.67	73.79	1,302,029.00	3,243,869.35	40.159171	-104.627465

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	
7,513.01	7,183.00	7"	7	8-3/4	

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well WEICHEL 27C-11HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL + RKB @ 4899.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL + RKB @ 4899.00ft
Site:	WELD_WEICHEL PAD	North Reference:	True
Well:	WEICHEL 27C-11HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	WEICHEL 27C-11HZ		
Design:	WEICHEL 27C-11HZ (wp01)		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,040.00	4,040.00	PARKMAN		0.00	
4,352.00	4,352.00	SUSSEX		0.00	
6,878.74	6,869.00	SHARON SPRINGS		0.00	
6,903.69	6,891.00	NIOBRARA A		0.00	
6,936.36	6,919.00	NIOBRARA B		0.00	
7,056.96	7,013.00	NIOBRARA C		0.00	
7,330.16	7,155.00	FORT HAYS		0.00	
7,434.23	7,178.00	CODELL		0.00	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
6,610.05	6,610.05	0.00	0.00	Start Build 10.00	
7,513.01	7,183.00	575.90	4.39	Start 9096.15 hold at 7513.01 MD	
16,609.16	7,136.00	9,671.67	73.79	TD at 16609.16	