

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_WEICHEL 3 PAD

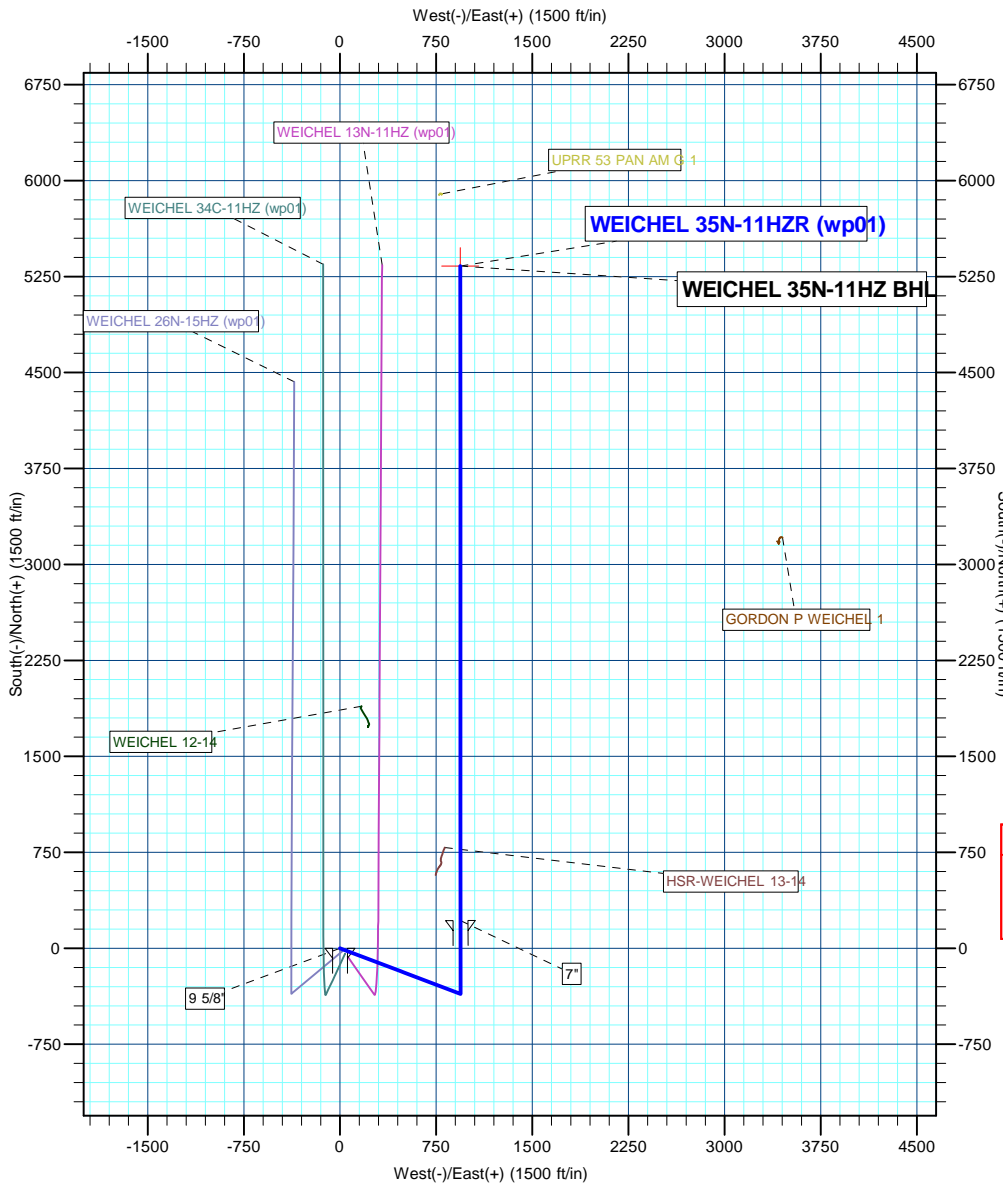
WEICHEL 35N-11HZR

WEICHEL 35N-11HZR

Plan: WEICHEL 35N-11HZR (wp01)

Standard Planning Report

23 August, 2012



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Azimuths to True North

Magnetic North: 8.61°

Magnetic Field

Strength: 52878.2snT

Dip Angle: 66.81°

Date: 8/23/2012

Model: IGRF2010



Project: COLORADO NORTHERN ZONE - 83

Site: WELD WEICHEL 3 PAD

Well: WEICHEL 35N-11HZR

Wellbore: WEICHEL 35N-11HZR

Section:

SHL:

Design: WEICHEL 35N-11HZR (wp01)

Latitude: 40.132521

Longitude: -104.639647

GL: 4893.00

KB: 17' RKB + 4893' GL @ 4910.00ft

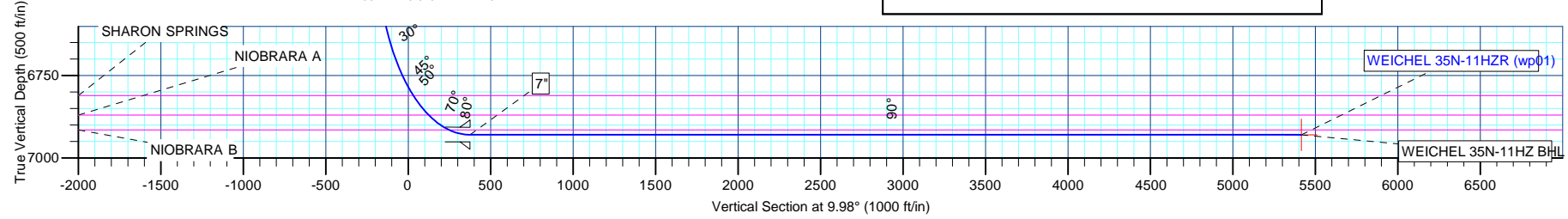
WELL DETAILS: WEICHEL 35N-11HZR						
+N/-S	+E/-W	Northing	Ground Level: Easting	4893.00 Latitude	Longitude	Slot
0.00	0.00	1292288.11	3240558.84	40.132521	-104.639647	

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
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00
2565.09	19.30	110.79	2546.94	-57.17	150.54	2.00	110.79	-30.21
4634.47	19.30	110.79	4500.00	-300.00	790.00	0.00	0.00	-158.55
5597.58	0.00	0.00	5445.00	-357.05	940.23	2.00	180.00	-188.70
6509.62	0.00	0.00	6357.04	-357.05	940.23	0.00	0.00	-188.70
7409.62	90.00	359.98	6930.00	215.91	940.05	10.00	359.98	375.56
12526.81	90.00	359.98	6930.00	5333.09	938.45	0.00	0.00	5415.03

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
WEICHEL 35N-11HZ BHL	6930.00	5333.09	938.45	40.147161	-104.636290	Point

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3919.00	4018.87	PARKMAN
4301.00	4423.62	SUSSEX
6811.00	7033.64	SHARON SPRINGS
6870.00	7145.07	NIOBRARA A
6915.00	7278.23	NIOBRARA B

CASING DETAILS			
TVD	MD	Name	Size
900.00	900.00	9 5/8"	9-5/8
6930.00	7409.62	7"	7



Andarko Petroleum Corporation

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well WEICHEL 35N-11HZR
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + 4893' GL @ 4910.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + 4893' GL @ 4910.00ft
Site:	WELD_WEICHEL 3 PAD	North Reference:	True
Well:	WEICHEL 35N-11HZR	Survey Calculation Method:	Minimum Curvature
Wellbore:	WEICHEL 35N-11HZR		
Design:	WEICHEL 35N-11HZR (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 3 PAD			
Site Position:		Northing:	1,292,398.97 usft	Latitude:	40.132701
From:	Lat/Long	Easting:	3,245,181.03 usft	Longitude:	-104.623113
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.57 °

Well	WEICHEL 35N-11HZR					
Well Position	+N/-S	-65.15 ft	Northing:	1,292,288.11 usft	Latitude:	40.132521
	+E/-W	-4,623.07 ft	Easting:	3,240,558.84 usft	Longitude:	-104.639647
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,893.00 ft

Wellbore	WEICHEL 35N-11HZR				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/23/2012	8.61	66.81	52,878

Design	WEICHEL 35N-11HZR (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	9.98

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	
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,565.09	19.30	110.79	2,546.94	-57.17	150.54	2.00	2.00	11.48	110.79	
4,634.47	19.30	110.79	4,500.00	-300.00	790.00	0.00	0.00	0.00	0.00	
5,597.58	0.00	0.00	5,445.00	-357.05	940.23	2.00	-2.00	0.00	180.00	
6,509.62	0.00	0.00	6,357.04	-357.05	940.23	0.00	0.00	0.00	0.00	
7,409.62	90.00	359.98	6,930.00	215.91	940.05	10.00	10.00	0.00	359.98	
12,526.81	90.00	359.98	6,930.00	5,333.09	938.45	0.00	0.00	0.00	0.00	WEICHEL 35N-11HZ

Andarko Petroleum Corporation

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Site:	WELD_WEICHEL 3 PAD	North Reference:	True
Well:	WEICHEL 35N-11HZR	Survey Calculation Method:	Minimum Curvature
Wellbore:	WEICHEL 35N-11HZR		
Design:	WEICHEL 35N-11HZR (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
Start DLS 2.00 TFO 110.79									
1,700.00	2.00	110.79	1,699.98	-0.62	1.63	-0.33	2.00	2.00	0.00
1,800.00	4.00	110.79	1,799.84	-2.48	6.52	-1.31	2.00	2.00	0.00
1,900.00	6.00	110.79	1,899.45	-5.57	14.67	-2.94	2.00	2.00	0.00
2,000.00	8.00	110.79	1,998.70	-9.90	26.06	-5.23	2.00	2.00	0.00
2,100.00	10.00	110.79	2,097.47	-15.45	40.69	-8.17	2.00	2.00	0.00
2,200.00	12.00	110.79	2,195.62	-22.22	58.52	-11.75	2.00	2.00	0.00
2,300.00	14.00	110.79	2,293.06	-30.21	79.55	-15.97	2.00	2.00	0.00
2,400.00	16.00	110.79	2,389.64	-39.40	103.75	-20.82	2.00	2.00	0.00
2,500.00	18.00	110.79	2,485.27	-49.78	131.08	-26.31	2.00	2.00	0.00
2,565.09	19.30	110.79	2,546.94	-57.17	150.54	-30.21	2.00	2.00	0.00
Start 2069.38 hold at 2565.09 MD									
2,600.00	19.30	110.79	2,579.89	-61.26	161.33	-32.38	0.00	0.00	0.00
2,700.00	19.30	110.79	2,674.27	-73.00	192.23	-38.58	0.00	0.00	0.00
2,800.00	19.30	110.79	2,768.65	-84.73	223.13	-44.78	0.00	0.00	0.00
2,900.00	19.30	110.79	2,863.02	-96.47	254.03	-50.98	0.00	0.00	0.00
3,000.00	19.30	110.79	2,957.40	-108.20	284.93	-57.18	0.00	0.00	0.00
3,100.00	19.30	110.79	3,051.78	-119.94	315.83	-63.39	0.00	0.00	0.00
3,200.00	19.30	110.79	3,146.16	-131.67	346.73	-69.59	0.00	0.00	0.00
3,300.00	19.30	110.79	3,240.54	-143.41	377.63	-75.79	0.00	0.00	0.00
3,400.00	19.30	110.79	3,334.92	-155.14	408.54	-81.99	0.00	0.00	0.00
3,500.00	19.30	110.79	3,429.30	-166.87	439.44	-88.19	0.00	0.00	0.00
3,600.00	19.30	110.79	3,523.68	-178.61	470.34	-94.40	0.00	0.00	0.00
3,700.00	19.30	110.79	3,618.06	-190.34	501.24	-100.60	0.00	0.00	0.00
3,800.00	19.30	110.79	3,712.44	-202.08	532.14	-106.80	0.00	0.00	0.00
3,900.00	19.30	110.79	3,806.82	-213.81	563.04	-113.00	0.00	0.00	0.00
4,000.00	19.30	110.79	3,901.19	-225.55	593.94	-119.20	0.00	0.00	0.00
4,018.87	19.30	110.79	3,919.00	-227.76	599.77	-120.37	0.00	0.00	0.00
PARKMAN									
4,100.00	19.30	110.79	3,995.57	-237.28	624.84	-125.40	0.00	0.00	0.00
4,200.00	19.30	110.79	4,089.95	-249.02	655.74	-131.61	0.00	0.00	0.00
4,300.00	19.30	110.79	4,184.33	-260.75	686.65	-137.81	0.00	0.00	0.00
4,400.00	19.30	110.79	4,278.71	-272.49	717.55	-144.01	0.00	0.00	0.00
4,423.62	19.30	110.79	4,301.00	-275.26	724.84	-145.47	0.00	0.00	0.00
SUSSEX									
4,500.00	19.30	110.79	4,373.09	-284.22	748.45	-150.21	0.00	0.00	0.00

Andarko Petroleum Corporation

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well WEICHEL 35N-11HZR
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + 4893' GL @ 4910.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + 4893' GL @ 4910.00ft
Site:	WELD_WEICHEL 3 PAD	North Reference:	True
Well:	WEICHEL 35N-11HZR	Survey Calculation Method:	Minimum Curvature
Wellbore:	WEICHEL 35N-11HZR		
Design:	WEICHEL 35N-11HZR (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)
4,600.00	19.30	110.79	4,467.47	-295.96	779.35	-156.41	0.00	0.00	0.00
4,634.47	19.30	110.79	4,500.00	-300.00	790.00	-158.55	0.00	0.00	0.00
Start Drop -2.00									
4,700.00	17.99	110.79	4,562.09	-307.44	809.59	-162.48	2.00	-2.00	0.00
4,800.00	15.98	110.79	4,657.72	-317.81	836.90	-167.96	2.00	-2.00	0.00
4,900.00	13.98	110.79	4,754.32	-326.99	861.06	-172.81	2.00	-2.00	0.00
5,000.00	11.98	110.79	4,851.76	-334.96	882.06	-177.03	2.00	-2.00	0.00
5,100.00	9.97	110.79	4,949.93	-341.72	899.85	-180.60	2.00	-2.00	0.00
5,200.00	7.97	110.79	5,048.70	-347.25	914.43	-183.52	2.00	-2.00	0.00
5,300.00	5.96	110.79	5,147.96	-351.56	925.76	-185.80	2.00	-2.00	0.00
5,400.00	3.96	110.79	5,247.58	-354.63	933.85	-187.42	2.00	-2.00	0.00
5,500.00	1.96	110.79	5,347.44	-356.46	938.67	-188.39	2.00	-2.00	0.00
5,597.58	0.00	0.00	5,445.00	-357.05	940.23	-188.70	2.00	-2.00	0.00
Start 912.04 hold at 5597.58 MD									
5,600.00	0.00	0.00	5,447.42	-357.05	940.23	-188.70	0.00	0.00	0.00
5,700.00	0.00	0.00	5,547.42	-357.05	940.23	-188.70	0.00	0.00	0.00
5,800.00	0.00	0.00	5,647.42	-357.05	940.23	-188.70	0.00	0.00	0.00
5,900.00	0.00	0.00	5,747.42	-357.05	940.23	-188.70	0.00	0.00	0.00
6,000.00	0.00	0.00	5,847.42	-357.05	940.23	-188.70	0.00	0.00	0.00
6,100.00	0.00	0.00	5,947.42	-357.05	940.23	-188.70	0.00	0.00	0.00
6,200.00	0.00	0.00	6,047.42	-357.05	940.23	-188.70	0.00	0.00	0.00
6,300.00	0.00	0.00	6,147.42	-357.05	940.23	-188.70	0.00	0.00	0.00
6,400.00	0.00	0.00	6,247.42	-357.05	940.23	-188.70	0.00	0.00	0.00
6,509.62	0.00	0.00	6,357.04	-357.05	940.23	-188.70	0.00	0.00	0.00
Start DLS 10.00 TFO 359.98									
6,550.00	4.04	359.98	6,397.38	-355.63	940.23	-187.30	10.00	10.00	0.00
6,600.00	9.04	359.98	6,447.04	-349.94	940.23	-181.70	10.00	10.00	0.00
6,650.00	14.04	359.98	6,496.02	-339.94	940.22	-171.85	10.00	10.00	0.00
6,700.00	19.04	359.98	6,543.93	-325.71	940.22	-157.84	10.00	10.00	0.00
6,750.00	24.04	359.98	6,590.43	-307.36	940.21	-139.77	10.00	10.00	0.00
6,800.00	29.04	359.98	6,635.15	-285.03	940.21	-117.77	10.00	10.00	0.00
6,850.00	34.04	359.98	6,677.75	-258.88	940.20	-92.03	10.00	10.00	0.00
6,900.00	39.04	359.98	6,717.91	-229.13	940.19	-62.72	10.00	10.00	0.00
6,950.00	44.04	359.98	6,755.32	-195.98	940.18	-30.08	10.00	10.00	0.00
7,000.00	49.04	359.98	6,789.71	-159.70	940.17	5.65	10.00	10.00	0.00
7,033.64	52.40	359.98	6,811.00	-133.66	940.16	31.29	10.00	10.00	0.00
SHARON SPRINGS									
7,050.00	54.04	359.98	6,820.80	-120.56	940.16	44.20	10.00	10.00	0.00
7,100.00	59.04	359.98	6,848.36	-78.86	940.14	85.26	10.00	10.00	0.00
7,145.07	63.54	359.98	6,870.00	-39.34	940.13	124.18	10.00	10.00	0.00
NIOBRARA A									
7,150.00	64.04	359.98	6,872.18	-34.92	940.13	128.54	10.00	10.00	0.00
7,200.00	69.04	359.98	6,892.08	10.93	940.11	173.69	10.00	10.00	0.00
7,250.00	74.04	359.98	6,907.91	58.34	940.10	220.38	10.00	10.00	0.00
7,278.23	76.86	359.98	6,915.00	85.67	940.09	247.29	10.00	10.00	0.00
NIOBRARA B									
7,300.00	79.04	359.98	6,919.54	106.95	940.08	268.26	10.00	10.00	0.00
7,350.00	84.04	359.98	6,926.90	156.39	940.07	316.94	10.00	10.00	0.00
7,400.00	89.04	359.98	6,929.92	206.29	940.05	366.08	10.00	10.00	0.00
7,409.62	90.00	359.98	6,930.00	215.91	940.05	375.55	10.00	10.00	0.00
Start 5117.19 hold at 7409.62 MD - 7"									
7,500.00	90.00	359.98	6,930.00	306.29	940.02	464.56	0.00	0.00	0.00
7,600.00	90.00	359.98	6,930.00	406.29	939.99	563.04	0.00	0.00	0.00

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + 4893' GL @ 4910.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + 4893' GL @ 4910.00ft
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Wellbore:	WEICHEL 35N-11HZR		
Design:	WEICHEL 35N-11HZR (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)
7,700.00	90.00	359.98	6,930.00	506.29	939.96	661.52	0.00	0.00	0.00
7,800.00	90.00	359.98	6,930.00	606.29	939.93	760.01	0.00	0.00	0.00
7,900.00	90.00	359.98	6,930.00	706.29	939.90	858.49	0.00	0.00	0.00
8,000.00	90.00	359.98	6,930.00	806.29	939.87	956.97	0.00	0.00	0.00
8,100.00	90.00	359.98	6,930.00	906.29	939.83	1,055.45	0.00	0.00	0.00
8,200.00	90.00	359.98	6,930.00	1,006.29	939.80	1,153.93	0.00	0.00	0.00
8,300.00	90.00	359.98	6,930.00	1,106.29	939.77	1,252.41	0.00	0.00	0.00
8,400.00	90.00	359.98	6,930.00	1,206.29	939.74	1,350.89	0.00	0.00	0.00
8,500.00	90.00	359.98	6,930.00	1,306.29	939.71	1,449.38	0.00	0.00	0.00
8,600.00	90.00	359.98	6,930.00	1,406.29	939.68	1,547.86	0.00	0.00	0.00
8,700.00	90.00	359.98	6,930.00	1,506.29	939.65	1,646.34	0.00	0.00	0.00
8,800.00	90.00	359.98	6,930.00	1,606.29	939.62	1,744.82	0.00	0.00	0.00
8,900.00	90.00	359.98	6,930.00	1,706.29	939.58	1,843.30	0.00	0.00	0.00
9,000.00	90.00	359.98	6,930.00	1,806.29	939.55	1,941.78	0.00	0.00	0.00
9,100.00	90.00	359.98	6,930.00	1,906.29	939.52	2,040.26	0.00	0.00	0.00
9,200.00	90.00	359.98	6,930.00	2,006.29	939.49	2,138.75	0.00	0.00	0.00
9,300.00	90.00	359.98	6,930.00	2,106.29	939.46	2,237.23	0.00	0.00	0.00
9,400.00	90.00	359.98	6,930.00	2,206.29	939.43	2,335.71	0.00	0.00	0.00
9,500.00	90.00	359.98	6,930.00	2,306.29	939.40	2,434.19	0.00	0.00	0.00
9,600.00	90.00	359.98	6,930.00	2,406.29	939.36	2,532.67	0.00	0.00	0.00
9,700.00	90.00	359.98	6,930.00	2,506.29	939.33	2,631.15	0.00	0.00	0.00
9,800.00	90.00	359.98	6,930.00	2,606.29	939.30	2,729.63	0.00	0.00	0.00
9,900.00	90.00	359.98	6,930.00	2,706.29	939.27	2,828.11	0.00	0.00	0.00
10,000.00	90.00	359.98	6,930.00	2,806.29	939.24	2,926.60	0.00	0.00	0.00
10,100.00	90.00	359.98	6,930.00	2,906.29	939.21	3,025.08	0.00	0.00	0.00
10,200.00	90.00	359.98	6,930.00	3,006.29	939.18	3,123.56	0.00	0.00	0.00
10,300.00	90.00	359.98	6,930.00	3,106.29	939.15	3,222.04	0.00	0.00	0.00
10,400.00	90.00	359.98	6,930.00	3,206.29	939.11	3,320.52	0.00	0.00	0.00
10,500.00	90.00	359.98	6,930.00	3,306.29	939.08	3,419.00	0.00	0.00	0.00
10,600.00	90.00	359.98	6,930.00	3,406.29	939.05	3,517.48	0.00	0.00	0.00
10,700.00	90.00	359.98	6,930.00	3,506.29	939.02	3,615.97	0.00	0.00	0.00
10,800.00	90.00	359.98	6,930.00	3,606.29	938.99	3,714.45	0.00	0.00	0.00
10,900.00	90.00	359.98	6,930.00	3,706.29	938.96	3,812.93	0.00	0.00	0.00
11,000.00	90.00	359.98	6,930.00	3,806.29	938.93	3,911.41	0.00	0.00	0.00
11,100.00	90.00	359.98	6,930.00	3,906.29	938.89	4,009.89	0.00	0.00	0.00
11,200.00	90.00	359.98	6,930.00	4,006.29	938.86	4,108.37	0.00	0.00	0.00
11,300.00	90.00	359.98	6,930.00	4,106.29	938.83	4,206.85	0.00	0.00	0.00
11,400.00	90.00	359.98	6,930.00	4,206.29	938.80	4,305.34	0.00	0.00	0.00
11,500.00	90.00	359.98	6,930.00	4,306.29	938.77	4,403.82	0.00	0.00	0.00
11,600.00	90.00	359.98	6,930.00	4,406.29	938.74	4,502.30	0.00	0.00	0.00
11,700.00	90.00	359.98	6,930.00	4,506.29	938.71	4,600.78	0.00	0.00	0.00
11,800.00	90.00	359.98	6,930.00	4,606.29	938.68	4,699.26	0.00	0.00	0.00
11,900.00	90.00	359.98	6,930.00	4,706.29	938.64	4,797.74	0.00	0.00	0.00
12,000.00	90.00	359.98	6,930.00	4,806.29	938.61	4,896.22	0.00	0.00	0.00
12,100.00	90.00	359.98	6,930.00	4,906.29	938.58	4,994.71	0.00	0.00	0.00
12,200.00	90.00	359.98	6,930.00	5,006.29	938.55	5,093.19	0.00	0.00	0.00
12,300.00	90.00	359.98	6,930.00	5,106.29	938.52	5,191.67	0.00	0.00	0.00
12,400.00	90.00	359.98	6,930.00	5,206.29	938.49	5,290.15	0.00	0.00	0.00
12,500.00	90.00	359.98	6,930.00	5,306.29	938.46	5,388.63	0.00	0.00	0.00
12,526.81	90.00	359.98	6,930.00	5,333.09	938.45	5,415.03	0.00	0.00	0.00
TD at 12526.81 - WEICHEL 35N-11HZ BHL									

Andarko Petroleum Corporation

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well WEICHEL 35N-11HZR
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + 4893' GL @ 4910.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + 4893' GL @ 4910.00ft
Site:	WELD_WEICHEL 3 PAD	North Reference:	True
Well:	WEICHEL 35N-11HZR	Survey Calculation Method:	Minimum Curvature
Wellbore:	WEICHEL 35N-11HZR		
Design:	WEICHEL 35N-11HZR (wp01)		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
WEICHEL 35N-11HZ Bf	0.00	0.00	6,930.00	5,333.09	938.45	1,297,630.05	3,241,445.50	40.147161	-104.636290
- plan hits target center									
- Point									

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(ft)	(ft)			(")	(")
900.00	900.00	9 5/8"		9-5/8	12-1/4
7,409.62	6,930.00	7"		7	7-1/2

Formations						
Measured Depth	Vertical Depth	Name		Lithology	Dip	Dip Direction
(ft)	(ft)				(°)	(°)
4,018.87	3,919.00	PARKMAN				
4,423.62	4,301.00	SUSSEX				
7,033.64	6,811.00	SHARON SPRINGS				
7,145.07	6,870.00	NIOBRARA A				
7,278.23	6,915.00	NIOBRARA B				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W	Comment	
(ft)	(ft)	(ft)	(ft)		
1,600.00	1,600.00	0.00	0.00	Start DLS 2.00 TFO 110.79	
2,565.09	2,546.94	-57.17	150.54	Start 2069.38 hold at 2565.09 MD	
4,634.47	4,500.00	-300.00	790.00	Start Drop -2.00	
5,597.58	5,445.00	-357.05	940.23	Start 912.04 hold at 5597.58 MD	
6,509.62	6,357.04	-357.05	940.23	Start DLS 10.00 TFO 359.98	
7,409.62	6,930.00	215.91	940.05	Start 5117.19 hold at 7409.62 MD	
12,526.81	6,930.00	5,333.09	938.45	TD at 12526.81	