

Project: COLORADO NORTHERN ZONE - 83
Site: WELD CAMP 37-31HZ PAD
Well: CAMP 10N-30HZ
Wellbore: CAMP 10N-30HZ
Section:
SHL: CAMP 10N-30HZ (wp04)
Design: 40.175917
Latitude: -104.701640
Longitude: 4949.00
GL: 25' RXB +4949' GL @ 4974.00ft
KB:



WELL DETAILS: CAMP 10N-30HZ				
+N/S	0.00	+E/W	0.00	
		Northings	1307933.66	
		Easting	3223083.46	
		Ground Level:	4949.00	
		Latitude	40.175917	
		Longitude	-104.701640	Slot

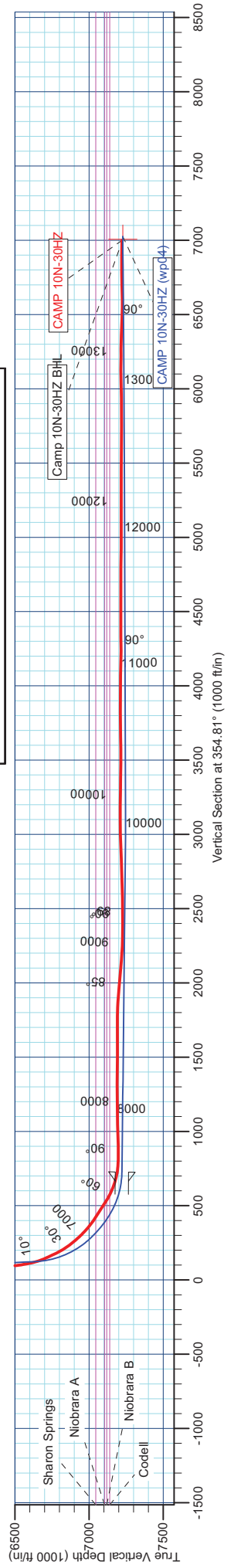
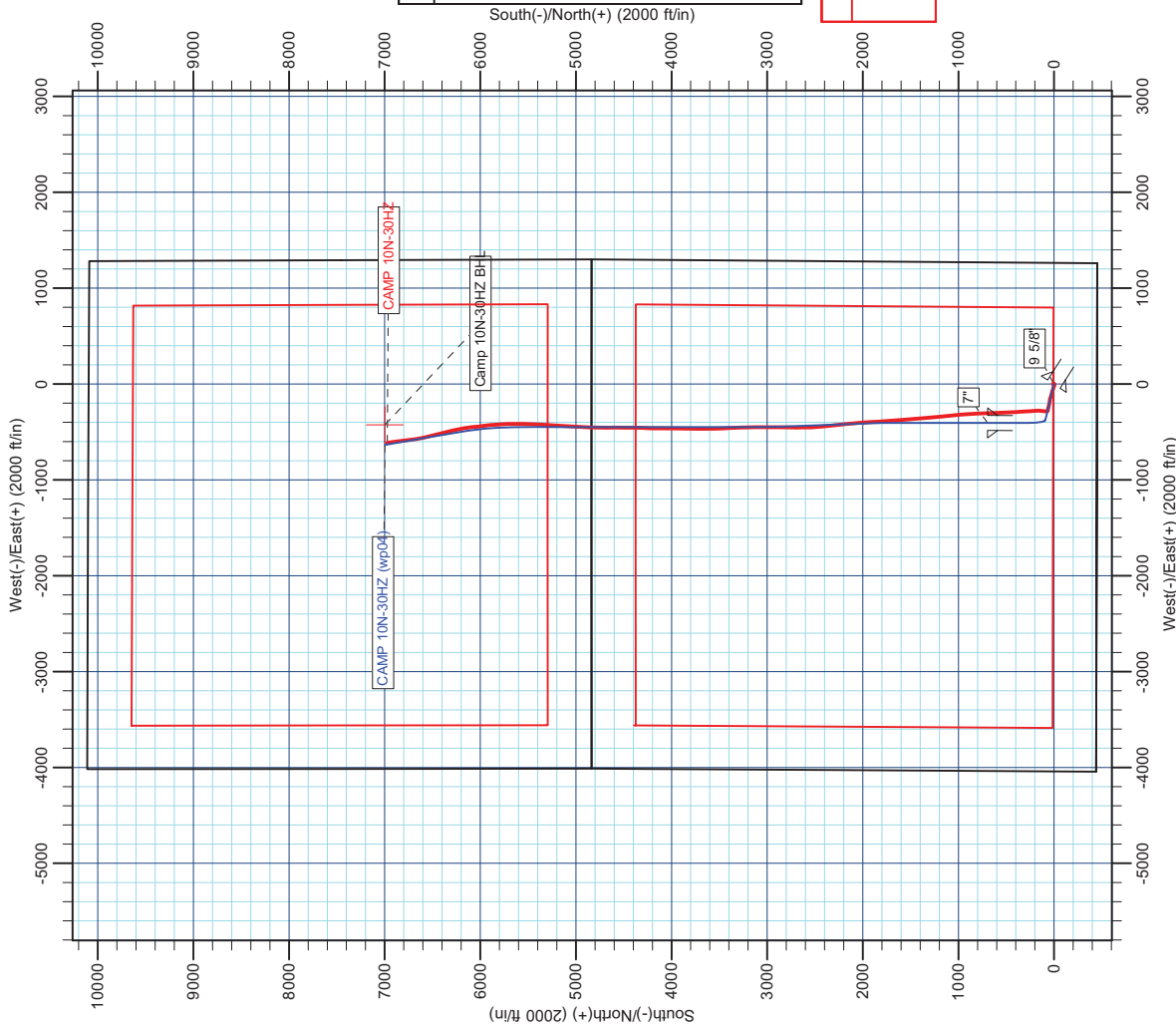
SECTION DETAILS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
800.00	0.09	302.87	799.99	0.81	0.10	0.00	0.00	0.80
3400.00	0.00	0.00	3399.99	1.92	-1.62	0.00	180.00	2.06
3758.37	7.17	283.23	3757.43	7.04	-32.41	0.00	283.23	9.13
6656.98	7.17	283.23	6633.39	89.83	-375.46	2.00	0.00	123.42
7123.24	47.87	0.00	7044.00	280.00	-405.45	10.00	83.30	315.52
7217.03	52.56	0.00	7104.00	352.05	-405.45	5.00	0.00	387.28
7584.80	89.34	0.00	7222.00	693.74	-405.45	10.00	0.00	727.56
8584.80	89.34	0.00	7233.58	1693.67	-405.45	0.00	0.00	1723.40
8720.96	89.43	357.96	7233.05	1629.80	-407.87	1.50	-87.43	1889.18
9844.08	89.43	357.96	7246.25	2952.15	-447.86	0.00	0.00	2960.55
9989.51	90.20	0.00	7246.73	3097.55	-450.45	1.50	69.29	3125.59
12489.51	90.20	0.00	7238.00	5597.53	-450.45	0.00	0.00	5615.33
13141.89	90.47	350.22	7234.20	6246.74	-506.00	1.50	-88.42	6266.90
13903.79	90.47	350.22	7228.00	6997.53	-635.45	0.00	0.00	7026.32

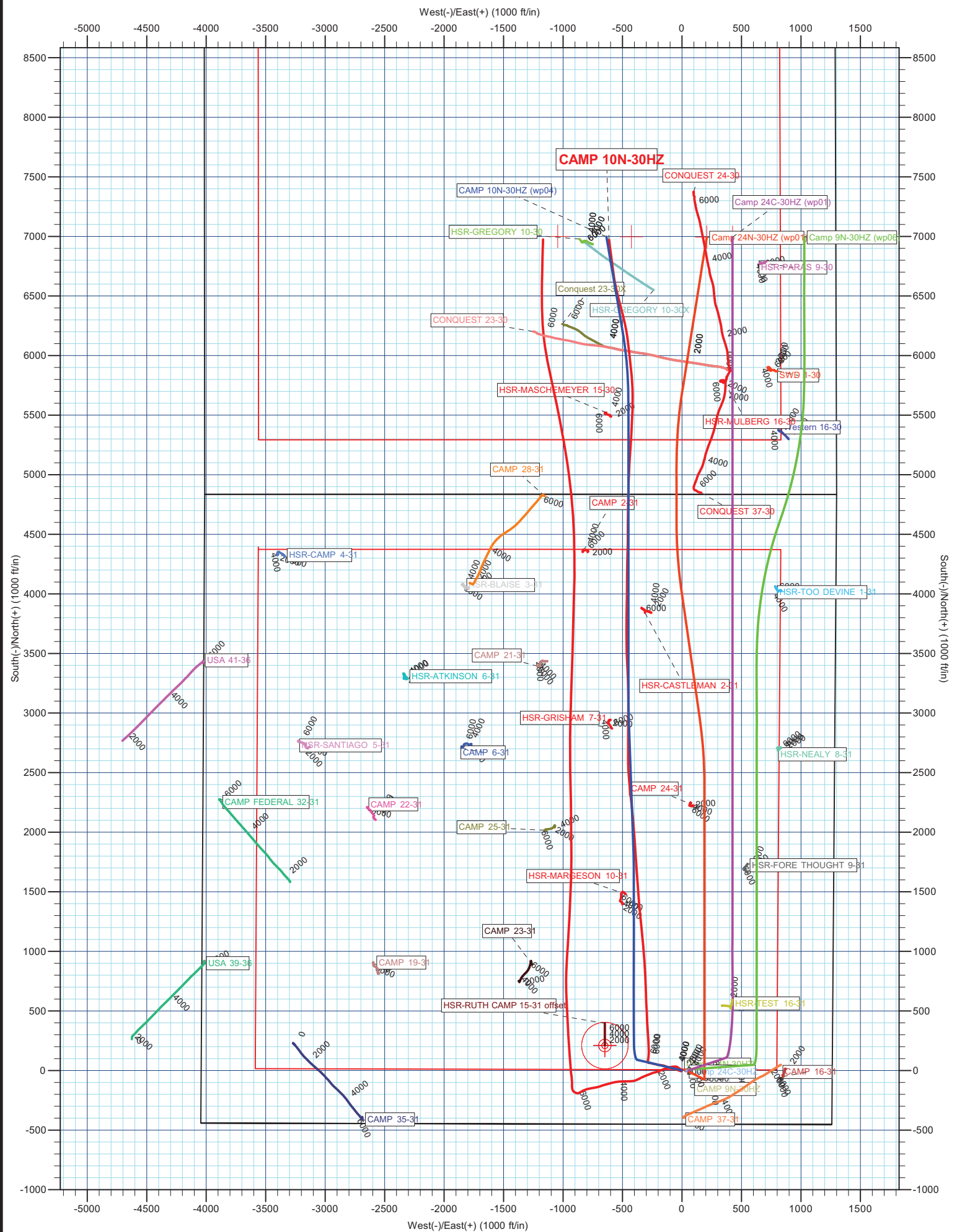
WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N-S	+E-W	Latitude	Longitude	Shape
Camp 10N-30HZ BHL	7228.00	6997.54	-425.45	40.195126	-104.703163	Point

FORMATION TOP DETAILS	
MDPath	Formation
3943.00	Parkman
3945.40	Sussex
4361.00	Sharon Springs
4366.69	Niobrara A
7045.00	Niobrara B
7124.73	Codell
7127.03	
7104.00	
7119.00	
7242.45	
7279.11	

CASING DETAILS			
	TVD	MD	Name Size
	800.00	800.01	9 5/8" 9-5/8
	7222.00	7594.80	7" 7





Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well CAMP 10N-30HZ
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	25' RKB +4949' GL @ 4974.00ft
Site:	WELD_CAMP 37-31HZ PAD	MD Reference:	25' RKB +4949' GL @ 4974.00ft
Well:	CAMP 10N-30HZ	North Reference:	True
Wellbore:	CAMP 10N-30HZ	Survey Calculation Method:	Minimum Curvature
Design:	CAMP 10N-30HZ	Database:	edmp

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_CAMP 37-31HZ PAD				
Site Position:		Northing:	1,307,943.36 usft	Latitude:	40.175944
From:	Lat/Long	Easting:	3,223,064.93 usft	Longitude:	-104.701706
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.52 °

Well	CAMP 10N-30HZ					
Well Position	+N/-S	0.00 ft	Northing:	1,307,933.66 usft	Latitude:	40.175917
	+E/-W	0.00 ft	Easting:	3,223,083.46 usft	Longitude:	-104.701640
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,949.00 ft

Wellbore	CAMP 10N-30HZ				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	5/2/2012	8.69	66.85	52,926

Design	CAMP 10N-30HZ				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	354.97	

Survey Program	Date	6/15/2012			
From	To	Survey (Wellbore)	Tool Name	Description	
(ft)	(ft)				
100.00	800.00	Survey #1 (CAMP 10N-30HZ)	NS-GYRO-MS	NORTH SENSING GYROCOMPASSING M/S	
948.00	13,812.00	Survey #2 (CAMP 10N-30HZ)	MWD	MWD - STANDARD	

Survey										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn	
Depth	(°)	(°)	Depth	(ft)	(ft)	Section	Rate	Rate	Rate	
(ft)			(ft)			(ft)	(°/100usft)	(°/100usft)	(°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.32	12.22	100.00	0.27	0.06	0.27	0.32	0.32	0.00	
200.00	0.29	19.05	200.00	0.79	0.20	0.76	0.05	-0.03	6.83	
300.00	0.20	197.24	300.00	0.86	0.23	0.83	0.49	-0.09	178.19	
400.00	0.22	179.00	400.00	0.50	0.18	0.48	0.07	0.02	-18.24	
500.00	0.17	157.48	500.00	0.17	0.24	0.15	0.09	-0.05	-21.52	
600.00	0.19	19.17	600.00	0.19	0.35	0.16	0.34	0.02	-138.31	
700.00	0.28	329.78	700.00	0.56	0.29	0.53	0.21	0.09	-49.39	
800.00	0.09	302.87	799.99	0.81	0.10	0.80	0.20	-0.19	-26.91	
Tie On to Gyro										

Anadarko Petroleum Corp

Survey Report

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Site:	WELD_CAMP 37-31HZ PAD	MD Reference:	25' RKB +4949' GL @ 4974.00ft
Well:	CAMP 10N-30HZ	North Reference:	True
Wellbore:	CAMP 10N-30HZ	Survey Calculation Method:	Minimum Curvature
Design:	CAMP 10N-30HZ	Database:	edmp

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)
862.98	0.25	352.71	862.97	0.97	0.04	0.97	0.32	0.25	79.14
9 5/8"									
948.00	0.51	3.20	947.99	1.53	0.04	1.52	0.32	0.31	12.34
1,040.00	0.41	346.29	1,039.99	2.26	-0.02	2.25	0.18	-0.11	-18.38
1,130.00	0.43	341.89	1,129.99	2.89	-0.20	2.90	0.04	0.02	-4.89
1,221.00	0.63	349.67	1,220.98	3.71	-0.40	3.73	0.23	0.22	8.55
1,312.00	0.60	356.61	1,311.98	4.68	-0.51	4.71	0.09	-0.03	7.63
1,403.00	0.59	353.32	1,402.97	5.62	-0.60	5.65	0.04	-0.01	-3.62
1,498.00	0.76	355.76	1,497.97	6.73	-0.70	6.77	0.18	0.18	2.57
1,593.00	0.84	349.60	1,592.96	8.05	-0.87	8.09	0.12	0.08	-6.48
1,687.00	0.70	162.69	1,686.95	8.18	-0.83	8.22	1.64	-0.15	184.14
1,783.00	0.89	174.88	1,782.95	6.87	-0.58	6.90	0.26	0.20	12.70
1,877.00	1.07	181.96	1,876.93	5.27	-0.55	5.30	0.23	0.19	7.53
1,972.00	1.32	179.89	1,971.91	3.29	-0.58	3.33	0.27	0.26	-2.18
2,067.00	0.35	169.97	2,066.90	1.91	-0.53	1.95	1.03	-1.02	-10.44
2,162.00	0.45	9.68	2,161.90	1.99	-0.41	2.02	0.83	0.11	-168.73
2,257.00	1.50	32.63	2,256.88	3.41	0.32	3.36	1.16	1.11	24.16
2,351.00	0.07	189.74	2,350.87	4.39	0.97	4.28	1.66	-1.52	167.14
2,447.00	0.47	210.19	2,446.87	3.99	0.77	3.90	0.42	0.42	21.30
2,542.00	0.70	228.74	2,541.87	3.27	0.13	3.24	0.31	0.24	19.53
2,636.00	1.05	232.42	2,635.86	2.36	-0.98	2.44	0.38	0.37	3.91
2,731.00	0.77	224.45	2,730.84	1.38	-2.12	1.56	0.32	-0.29	-8.39
2,826.00	1.16	203.26	2,825.83	0.04	-2.94	0.30	0.55	0.41	-22.31
2,921.00	1.23	198.87	2,920.81	-1.81	-3.65	-1.48	0.12	0.07	-4.62
3,016.00	0.56	243.23	3,015.80	-2.98	-4.40	-2.59	0.97	-0.71	46.69
3,110.00	0.64	224.27	3,109.79	-3.57	-5.17	-3.10	0.23	0.09	-20.17
3,205.00	0.66	229.98	3,204.79	-4.30	-5.96	-3.76	0.07	0.02	6.01
3,300.00	1.33	270.25	3,299.77	-4.65	-7.48	-3.97	0.98	0.71	42.39
3,395.00	1.95	279.59	3,394.74	-4.37	-10.18	-3.46	0.71	0.65	9.83
3,490.00	2.61	279.32	3,489.66	-3.75	-13.91	-2.52	0.69	0.69	-0.28
3,585.00	4.41	294.59	3,584.48	-1.88	-19.36	-0.17	2.12	1.89	16.07
3,680.00	5.72	292.78	3,679.11	1.47	-27.05	3.84	1.39	1.38	-1.91
3,774.00	5.95	283.62	3,772.62	4.43	-36.11	7.58	1.02	0.24	-9.74
3,869.00	7.47	291.14	3,866.97	7.82	-46.65	11.88	1.84	1.60	7.92
3,964.00	5.97	286.09	3,961.31	11.42	-57.16	16.39	1.70	-1.58	-5.32
4,059.00	7.85	286.19	4,055.62	14.59	-68.14	20.52	1.98	1.98	0.11
4,154.00	6.96	288.43	4,149.83	18.22	-79.83	25.16	0.98	-0.94	2.36
4,249.00	5.36	284.03	4,244.28	21.12	-89.59	28.90	1.75	-1.68	-4.63
4,345.00	7.29	286.18	4,339.69	23.90	-99.79	32.57	2.03	2.01	2.24
4,439.00	6.98	283.37	4,432.96	26.89	-111.08	36.53	0.50	-0.33	-2.99
4,534.00	5.88	283.64	4,527.36	29.37	-121.42	39.91	1.16	-1.16	0.28
4,629.00	7.53	291.36	4,621.71	32.78	-131.95	44.24	1.98	1.74	8.13
4,724.00	7.10	293.85	4,715.94	37.42	-143.12	49.84	0.56	-0.45	2.62

Anadarko Petroleum Corp

Survey Report

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Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	25' RKB +4949' GL @ 4974.00ft
Site:	WELD_CAMP 37-31HZ PAD	MD Reference:	25' RKB +4949' GL @ 4974.00ft
Well:	CAMP 10N-30HZ	North Reference:	True
Wellbore:	CAMP 10N-30HZ	Survey Calculation Method:	Minimum Curvature
Design:	CAMP 10N-30HZ	Database:	edmp

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)
4,819.00	6.81	287.26	4,810.24	41.47	-153.87	54.81	0.89	-0.31	-6.94
4,914.00	7.78	278.47	4,904.47	44.09	-165.61	58.45	1.55	1.02	-9.25
5,010.00	5.93	272.58	4,999.78	45.27	-176.99	60.63	2.06	-1.93	-6.14
5,104.00	6.61	276.97	5,093.22	46.14	-187.21	62.40	0.88	0.72	4.67
5,200.00	7.44	279.65	5,188.50	47.86	-198.82	65.12	0.93	0.86	2.79
5,294.00	7.87	285.27	5,281.66	50.57	-211.03	68.90	0.92	0.46	5.98
5,388.00	5.47	285.39	5,375.02	53.46	-221.56	72.69	2.55	-2.55	0.13
5,483.00	6.74	281.94	5,469.48	55.81	-231.38	75.90	1.39	1.34	-3.63
5,578.00	5.35	281.02	5,563.95	57.81	-241.18	78.75	1.47	-1.46	-0.97
5,672.00	4.71	282.36	5,657.59	59.47	-249.25	81.12	0.69	-0.68	1.43
5,767.00	4.39	284.01	5,752.29	61.19	-256.59	83.47	0.36	-0.34	1.74
5,862.00	3.08	283.68	5,847.08	62.67	-262.60	85.48	1.38	-1.38	-0.35
5,957.00	3.12	279.12	5,941.94	63.69	-267.63	86.93	0.26	0.04	-4.80
6,052.00	2.31	270.52	6,036.84	64.11	-272.10	87.75	0.95	-0.85	-9.05
6,146.00	1.62	276.03	6,130.78	64.27	-275.31	88.19	0.76	-0.73	5.86
6,241.00	1.40	277.84	6,225.75	64.57	-277.80	88.70	0.24	-0.23	1.91
6,336.00	1.41	279.89	6,320.72	64.93	-280.10	89.26	0.05	0.01	2.16
6,396.00	1.85	288.71	6,380.70	65.37	-281.74	89.84	0.84	0.73	14.70
6,431.00	2.12	289.89	6,415.67	65.77	-282.89	90.34	0.78	0.77	3.37
6,462.00	3.02	332.36	6,446.65	66.69	-283.81	91.34	6.59	2.90	137.00
6,494.00	4.71	348.44	6,478.57	68.72	-284.46	93.42	6.22	5.28	50.25
6,525.00	6.75	354.24	6,509.42	71.78	-284.90	96.51	6.83	6.58	18.71
6,557.00	8.57	355.80	6,541.13	76.03	-285.26	100.77	5.72	5.69	4.88
6,590.00	10.00	358.15	6,573.70	81.35	-285.53	106.09	4.48	4.33	7.12
6,622.00	12.99	359.25	6,605.05	87.72	-285.67	112.45	9.37	9.34	3.44
6,654.00	15.54	8.78	6,636.07	95.56	-285.06	120.21	10.81	7.97	29.78
6,685.00	19.15	11.12	6,665.65	104.65	-283.45	129.12	11.86	11.65	7.55
6,717.00	23.66	6.42	6,695.44	116.19	-281.72	140.47	15.07	14.09	-14.69
6,749.00	25.97	4.49	6,724.48	129.56	-280.45	153.67	7.65	7.22	-6.03
6,781.00	25.22	3.09	6,753.34	143.35	-279.54	167.33	3.01	-2.34	-4.38
6,812.00	25.63	0.73	6,781.34	156.65	-279.09	180.54	3.53	1.32	-7.61
6,844.00	30.30	358.29	6,809.60	171.65	-279.25	195.49	15.02	14.59	-7.63
6,875.00	33.25	357.39	6,835.95	187.96	-279.87	211.79	9.64	9.52	-2.90
6,907.00	35.56	357.96	6,862.35	206.02	-280.60	229.85	7.29	7.22	1.78
6,939.00	38.33	357.04	6,887.92	225.24	-281.44	249.07	8.83	8.66	-2.88
6,970.00	41.22	356.40	6,911.74	245.03	-282.58	268.89	9.42	9.32	-2.06
7,002.00	43.39	356.44	6,935.41	266.53	-283.92	290.42	6.78	6.78	0.13
7,033.00	45.78	355.94	6,957.49	288.24	-285.37	312.17	7.79	7.71	-1.61
7,065.00	48.47	356.26	6,979.26	311.63	-286.97	335.62	8.44	8.41	1.00
7,097.00	50.41	356.34	7,000.06	335.89	-288.53	359.92	6.07	6.06	0.25
7,128.00	53.34	356.30	7,019.20	360.23	-290.10	384.30	9.45	9.45	-0.13
7,160.00	55.74	356.38	7,037.76	386.24	-291.76	410.35	7.50	7.50	0.25
7,191.00	57.00	357.47	7,054.93	412.01	-293.15	436.15	5.01	4.06	3.52
7,223.00	57.32	357.92	7,072.29	438.87	-294.23	463.00	1.55	1.00	1.41

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Wellbore:	CAMP 10N-30HZ	Survey Calculation Method:	Minimum Curvature
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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)
7,254.00	57.43	357.47	7,089.00	464.96	-295.28	489.08	1.27	0.35	-1.45
7,286.00	57.42	357.58	7,106.23	491.90	-296.44	516.02	0.29	-0.03	0.34
7,318.00	58.55	357.23	7,123.19	519.01	-297.67	543.13	3.65	3.53	-1.09
7,349.00	62.80	356.63	7,138.37	545.99	-299.12	570.13	13.81	13.71	-1.94
7,381.00	66.38	357.18	7,152.10	574.85	-300.68	599.02	11.29	11.19	1.72
7,412.00	69.64	358.16	7,163.71	603.56	-301.84	627.73	10.92	10.52	3.16
7,444.00	72.65	358.42	7,174.05	633.83	-302.75	657.95	9.44	9.41	0.81
7,476.00	76.23	358.07	7,182.63	664.64	-303.69	688.73	11.24	11.19	-1.09
7,507.00	79.88	357.98	7,189.04	694.94	-304.74	719.01	11.78	11.77	-0.29
7,539.00	83.91	357.90	7,193.56	726.60	-305.88	750.64	12.60	12.59	-0.25
7,565.65	85.74	357.63	7,195.96	753.12	-306.91	777.15	6.94	6.87	-1.01
7"									
7,652.00	91.67	356.77	7,197.91	839.30	-311.12	863.37	6.94	6.87	-1.00
7,743.00	91.42	356.04	7,195.46	930.09	-316.83	954.31	0.85	-0.27	-0.80
7,834.00	90.93	354.68	7,193.59	1,020.77	-324.19	1,045.28	1.59	-0.54	-1.49
7,926.00	91.06	354.57	7,191.99	1,112.35	-332.81	1,137.27	0.19	0.14	-0.12
8,017.00	91.05	354.50	7,190.32	1,202.92	-341.47	1,228.25	0.08	-0.01	-0.08
8,108.00	90.12	354.85	7,189.39	1,293.52	-349.92	1,319.24	1.09	-1.02	0.38
8,199.00	88.02	354.29	7,190.86	1,384.10	-358.52	1,410.22	2.39	-2.31	-0.62
8,290.00	90.62	356.33	7,191.94	1,474.77	-365.96	1,501.20	3.63	2.86	2.24
8,381.00	89.63	354.83	7,191.75	1,565.50	-372.98	1,592.19	1.97	-1.09	-1.65
8,473.00	90.74	355.54	7,191.45	1,657.17	-380.70	1,684.19	1.43	1.21	0.77
8,564.00	89.26	356.24	7,191.45	1,747.94	-387.22	1,775.17	1.80	-1.63	0.77
8,656.00	86.61	356.62	7,194.76	1,839.69	-392.94	1,867.08	2.91	-2.88	0.41
8,751.00	84.44	356.73	7,202.18	1,934.23	-398.44	1,961.74	2.29	-2.28	0.12
8,846.00	84.94	355.82	7,210.97	2,028.63	-404.58	2,056.31	1.09	0.53	-0.96
8,941.00	85.95	354.21	7,218.51	2,122.96	-412.81	2,151.00	2.00	1.06	-1.69
9,036.00	87.41	353.53	7,224.01	2,217.26	-422.94	2,245.82	1.69	1.54	-0.72
9,131.00	89.51	354.20	7,226.57	2,311.67	-433.09	2,340.76	2.32	2.21	0.71
9,226.00	90.09	354.92	7,226.90	2,406.24	-442.09	2,435.76	0.97	0.61	0.76
9,320.00	89.94	355.98	7,226.87	2,499.95	-449.55	2,529.75	1.14	-0.16	1.13
9,415.00	91.97	359.77	7,225.29	2,594.85	-453.07	2,624.60	4.53	2.14	3.99
9,510.00	92.22	359.69	7,221.82	2,689.78	-453.52	2,719.20	0.28	0.26	-0.08
9,605.00	91.97	0.87	7,218.34	2,784.71	-453.06	2,813.73	1.27	-0.26	1.24
9,700.00	92.65	0.45	7,214.52	2,879.63	-451.96	2,908.18	0.84	0.72	-0.44
9,795.00	91.23	0.58	7,211.30	2,974.57	-451.11	3,002.68	1.50	-1.49	0.14
9,890.00	89.94	359.85	7,210.33	3,069.56	-450.75	3,097.28	1.56	-1.36	-0.77
9,985.00	89.32	359.14	7,210.94	3,164.55	-451.59	3,191.98	0.99	-0.65	-0.75
10,081.00	88.95	357.38	7,212.39	3,260.50	-454.51	3,287.80	1.87	-0.39	-1.83
10,175.00	89.63	358.14	7,213.56	3,354.42	-458.18	3,381.68	1.08	0.72	0.81
10,271.00	89.03	357.03	7,214.68	3,450.32	-462.22	3,477.57	1.31	-0.63	-1.16
10,366.00	90.68	358.95	7,214.92	3,545.25	-465.56	3,572.43	2.66	1.74	2.02
10,461.00	91.11	358.82	7,213.44	3,640.23	-467.40	3,667.20	0.47	0.45	-0.14

Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well CAMP 10N-30HZ
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	25' RKB +4949' GL @ 4974.00ft
Site:	WELD_CAMP 37-31HZ PAD	MD Reference:	25' RKB +4949' GL @ 4974.00ft
Well:	CAMP 10N-30HZ	North Reference:	True
Wellbore:	CAMP 10N-30HZ	Survey Calculation Method:	Minimum Curvature
Design:	CAMP 10N-30HZ	Database:	edmp

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)
10,556.00	90.62	1.12	7,212.00	3,735.21	-467.45	3,761.82	2.48	-0.52	2.42
10,651.00	90.53	0.91	7,211.05	3,830.19	-465.77	3,856.29	0.24	-0.09	-0.22
10,746.00	89.32	0.70	7,211.17	3,925.18	-464.44	3,950.79	1.29	-1.27	-0.22
10,841.00	88.94	0.74	7,212.62	4,020.16	-463.24	4,045.30	0.40	-0.40	0.04
10,937.00	87.84	359.95	7,215.31	4,116.12	-462.66	4,140.84	1.41	-1.15	-0.82
11,032.00	91.32	1.62	7,216.01	4,211.09	-461.36	4,235.33	4.06	3.66	1.76
11,127.00	90.25	1.55	7,214.71	4,306.04	-458.74	4,329.68	1.13	-1.13	-0.07
11,222.00	90.00	1.16	7,214.50	4,401.01	-456.49	4,424.09	0.49	-0.26	-0.41
11,317.00	89.75	0.20	7,214.71	4,496.00	-455.36	4,518.62	1.04	-0.26	-1.01
11,412.00	90.37	0.42	7,214.61	4,591.00	-454.85	4,613.21	0.69	0.65	0.23
11,507.00	89.32	0.00	7,214.87	4,686.00	-454.50	4,707.81	1.19	-1.11	-0.44
11,601.00	89.82	1.63	7,215.57	4,779.98	-453.16	4,801.31	1.81	0.53	1.73
11,697.00	88.58	1.46	7,216.91	4,875.94	-450.57	4,896.67	1.30	-1.29	-0.18
11,792.00	90.53	1.97	7,217.65	4,970.89	-447.73	4,991.00	2.12	2.05	0.54
11,887.00	89.88	2.75	7,217.31	5,065.81	-443.82	5,085.21	1.07	-0.68	0.82
11,983.00	89.94	4.17	7,217.46	5,161.63	-438.03	5,180.15	1.48	0.06	1.48
12,078.00	89.94	4.11	7,217.56	5,256.38	-431.17	5,273.94	0.06	0.00	-0.06
12,173.00	89.82	3.03	7,217.76	5,351.19	-425.25	5,367.87	1.14	-0.13	-1.14
12,269.00	89.51	2.21	7,218.32	5,447.09	-420.86	5,463.01	0.91	-0.32	-0.85
12,363.00	90.00	3.02	7,218.72	5,540.99	-416.58	5,556.17	1.01	0.52	0.86
12,458.00	89.75	358.32	7,218.93	5,635.96	-415.46	5,650.67	4.95	-0.26	-4.95
12,554.00	89.44	358.99	7,219.61	5,731.93	-417.72	5,746.47	0.77	-0.32	0.70
12,650.00	90.55	355.15	7,219.62	5,827.78	-422.62	5,842.39	4.16	1.16	-4.00
12,745.00	90.74	352.49	7,218.55	5,922.22	-432.85	5,937.35	2.81	0.20	-2.80
12,841.00	92.28	354.73	7,216.02	6,017.58	-443.53	6,033.28	2.83	1.60	2.33
12,936.00	89.14	352.99	7,214.84	6,112.01	-453.69	6,128.24	3.78	-3.31	-1.83
13,030.00	89.26	349.77	7,216.15	6,204.93	-467.77	6,222.04	3.43	0.13	-3.43
13,125.00	89.32	346.36	7,217.33	6,297.85	-487.42	6,316.33	3.59	0.06	-3.59
13,219.00	87.16	346.12	7,220.22	6,389.11	-509.76	6,409.19	2.31	-2.30	-0.26
13,314.00	88.41	345.22	7,223.89	6,481.08	-533.26	6,502.87	1.62	1.32	-0.95
13,409.00	90.62	346.76	7,224.69	6,573.24	-556.25	6,596.70	2.84	2.33	1.62
13,504.00	91.67	352.45	7,222.79	6,666.62	-573.38	6,691.22	6.09	1.11	5.99
13,599.00	90.62	352.34	7,220.89	6,760.77	-585.95	6,786.11	1.11	-1.11	-0.12
13,694.00	89.51	352.55	7,220.79	6,854.94	-598.44	6,881.01	1.19	-1.17	0.22
13,758.00	88.71	352.21	7,221.78	6,918.37	-606.93	6,944.94	1.36	-1.25	-0.53
Final MWD Survey									
13,812.00	88.71	352.21	7,223.00	6,971.86	-614.25	6,998.86	0.00	0.00	0.00
Projection to Bit @ TD									

Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well CAMP 10N-30HZ
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	25' RKB +4949' GL @ 4974.00ft
Site:	WELD_CAMP 37-31HZ PAD	MD Reference:	25' RKB +4949' GL @ 4974.00ft
Well:	CAMP 10N-30HZ	North Reference:	True
Wellbore:	CAMP 10N-30HZ	Survey Calculation Method:	Minimum Curvature
Design:	CAMP 10N-30HZ	Database:	edmp

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (")	Hole Diameter (")
862.98	862.97	9 5/8"		9-5/8	12-1/4
7,565.65	7,195.96	7"		7	8-3/4

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
800.00	799.99	0.81	0.10	Tie On to Gyro	
13,758.00	7,221.78	6,918.37	-606.93	Final MWD Survey	
13,812.00	7,223.00	6,971.86	-614.25	Projection to Bit @ TD	

Checked By: _____ Approved By: _____ Date: _____