

Well Name: **Camp 35-31**

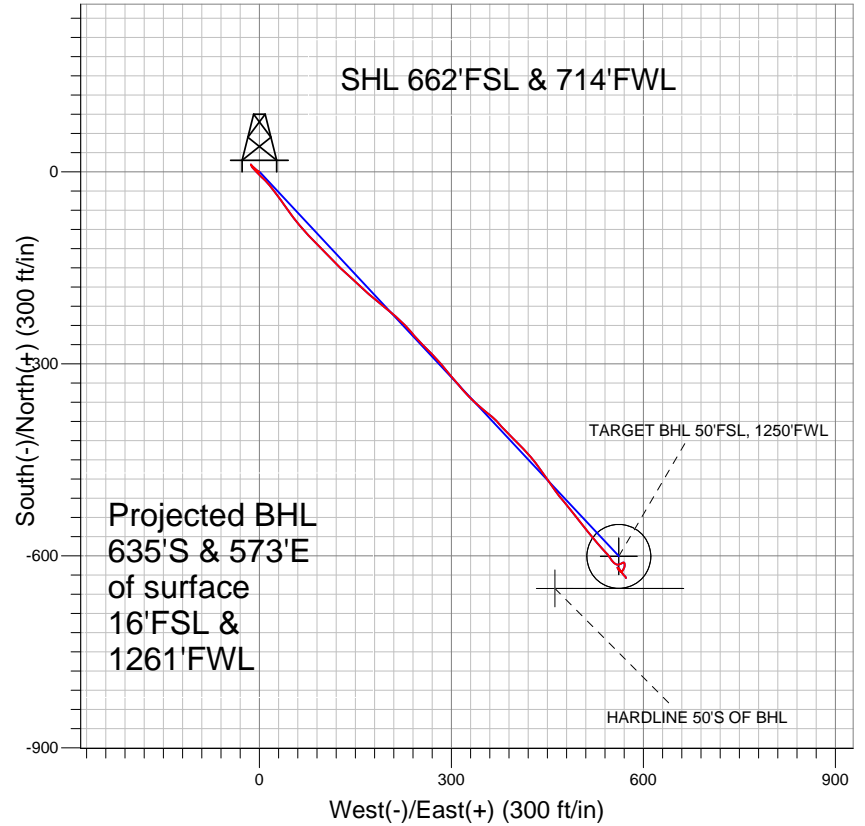
Surface Location: Camp 35-31 Pad Sec.31-T3N-R65W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 4982.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1308124.26	3219829.06	40° 10' 35.472 N	104° 42' 47.808 W	

Original Well Elev WELL @ 4996.0ft (Original Well Elev)

Anadarko, Weld County CO

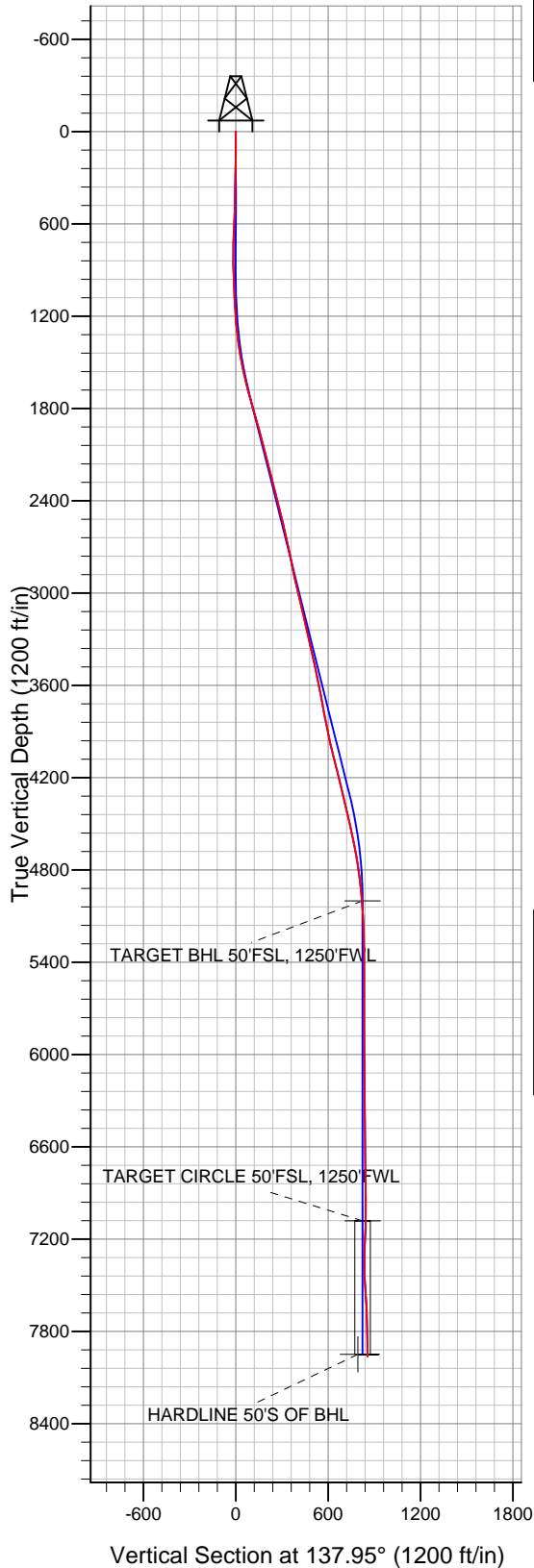


LEGEND

- Camp 35-31, Wellbore #1, Plan #1 (10-12-10) V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
8057'MD & 7963'TVD @ 855' VS
0.9 deg Inc 174.0 deg AZ



Project: SEC.31-T3N-R65W
Site: Camp 35-31 Pad Sec.31-T3N-R65W
Well: Camp 35-31
Plan: Wellbore #1



Directional

Anadarko, Weld County CO

SEC.31-T3N-R65W

Camp 35-31 Pad Sec.31-T3N-R65W

Camp 35-31

Wellbore #1

Survey: Survey #1

Standard Survey Report

26 October, 2010

Company:	Anadarko, Weld County CO	Local Co-ordinate Reference:	Well Camp 35-31
Project:	SEC.31-T3N-R65W	TVD Reference:	WELL @ 4996.0ft (Original Well Elev)
Site:	Camp 35-31 Pad Sec.31-T3N-R65W	MD Reference:	WELL @ 4996.0ft (Original Well Elev)
Well:	Camp 35-31	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.31-T3N-R65W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	Camp 35-31 Pad Sec.31-T3N-R65W		
Site Position:		Northing:	1,308,124.27 ft
From:	Lat/Long	Easting:	3,219,829.06 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40° 10' 35.472 N
		Longitude:	104° 42' 47.808 W
		Grid Convergence:	0.51 °

Well	Camp 35-31		
Well Position	+N/-S	0.0 ft	Northing: 1,308,124.26 ft
	+E/-W	0.0 ft	Easting: 3,219,829.06 ft
Position Uncertainty		0.0 ft	Wellhead Elevation: ft
			Latitude: 40° 10' 35.472 N
			Longitude: 104° 42' 47.808 W
			Ground Level: 4,982.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/14/2010	8.91	66.90	53,089

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	137.95	

Survey Program	Date	10/26/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
152.0	8,057.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
152.0	0.80	289.70	152.0	0.4	-1.0	-0.9	0.53	0.53	0.00	
396.0	1.10	310.20	396.0	2.4	-4.4	-4.8	0.18	0.12	8.40	
642.0	2.60	313.20	641.8	7.8	-10.3	-12.7	0.61	0.61	1.22	
765.0	1.10	328.80	764.8	10.7	-12.9	-16.6	1.28	-1.22	12.68	
892.0	0.90	155.20	891.8	10.8	-13.1	-16.8	1.57	-0.16	-136.69	
995.0	3.80	147.50	994.7	7.2	-10.9	-12.7	2.83	2.82	-7.48	
1,090.0	2.20	132.80	1,089.5	3.3	-7.9	-7.8	1.86	-1.68	-15.47	
1,185.0	4.00	136.90	1,184.4	-0.3	-4.3	-2.7	1.91	1.89	4.32	
1,281.0	5.70	134.20	1,280.0	-6.1	1.4	5.5	1.79	1.77	-2.81	
1,376.0	7.70	135.50	1,374.4	-13.9	9.2	16.5	2.11	2.11	1.37	
1,471.0	10.20	141.60	1,468.2	-25.1	18.9	31.3	2.81	2.63	6.42	
1,566.0	12.20	143.60	1,561.4	-39.7	30.1	49.7	2.14	2.11	2.11	

Company:	Anadarko, Weld County CO	Local Co-ordinate Reference:	Well Camp 35-31
Project:	SEC.31-T3N-R65W	TVD Reference:	WELL @ 4996.0ft (Original Well Elev)
Site:	Camp 35-31 Pad Sec.31-T3N-R65W	MD Reference:	WELL @ 4996.0ft (Original Well Elev)
Well:	Camp 35-31	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,661.0	14.40	145.10	1,653.9	-57.5	42.8	71.4	2.34	2.32	1.58
1,756.0	16.00	142.00	1,745.5	-77.5	57.6	96.2	1.89	1.68	-3.26
1,852.0	15.80	136.40	1,837.9	-97.4	74.8	122.4	1.61	-0.21	-5.83
1,947.0	15.20	134.60	1,929.4	-115.5	92.6	147.8	0.81	-0.63	-1.89
2,042.0	15.20	137.50	2,021.1	-133.4	109.9	172.7	0.80	0.00	3.05
2,137.0	14.50	133.20	2,112.9	-150.8	127.0	197.0	1.37	-0.74	-4.53
2,232.0	13.60	132.50	2,205.1	-166.4	143.9	219.9	0.96	-0.95	-0.74
2,328.0	14.20	132.70	2,298.3	-182.1	160.8	242.9	0.63	0.63	0.21
2,423.0	14.70	129.80	2,390.3	-197.7	178.7	266.4	0.93	0.53	-3.05
2,518.0	14.20	129.30	2,482.2	-212.8	196.9	289.9	0.54	-0.53	-0.53
2,613.0	13.30	131.00	2,574.5	-227.3	214.2	312.3	1.04	-0.95	1.79
2,708.0	11.80	137.80	2,667.3	-241.7	229.0	332.8	2.21	-1.58	7.16
2,803.0	11.50	139.00	2,760.3	-256.0	241.7	352.0	0.41	-0.32	1.26
2,898.0	11.90	134.80	2,853.3	-270.1	254.9	371.3	0.99	0.42	-4.42
2,994.0	13.00	136.00	2,947.1	-284.8	269.4	391.9	1.18	1.15	1.25
3,089.0	12.90	139.00	3,039.7	-300.5	283.8	413.2	0.72	-0.11	3.16
3,184.0	13.50	141.10	3,132.1	-317.1	297.7	434.9	0.81	0.63	2.21
3,279.0	13.00	138.90	3,224.6	-333.8	311.7	456.6	0.75	-0.53	-2.32
3,374.0	13.70	137.20	3,317.0	-350.1	326.4	478.6	0.84	0.74	-1.79
3,469.0	12.30	130.10	3,409.6	-364.9	341.7	499.9	2.23	-1.47	-7.47
3,564.0	11.00	128.60	3,502.7	-377.1	356.6	518.8	1.40	-1.37	-1.58
3,659.0	11.20	134.80	3,595.9	-389.2	370.2	537.0	1.27	0.21	6.53
3,755.0	11.00	138.50	3,690.1	-402.7	382.9	555.4	0.77	-0.21	3.85
3,850.0	11.10	134.70	3,783.3	-415.9	395.4	573.6	0.77	0.11	-4.00
3,945.0	11.70	134.90	3,876.5	-429.1	408.7	592.4	0.63	0.63	0.21
4,040.0	12.00	138.50	3,969.4	-443.3	422.1	611.9	0.84	0.32	3.79
4,135.0	14.20	144.60	4,062.0	-460.2	435.4	633.3	2.73	2.32	6.42
4,230.0	14.70	144.90	4,154.0	-479.6	449.1	656.9	0.53	0.53	0.32
4,325.0	13.40	144.30	4,246.1	-498.4	462.4	679.8	1.38	-1.37	-0.63
4,421.0	12.80	139.80	4,339.6	-515.5	475.8	701.5	1.23	-0.63	-4.69
4,516.0	13.90	141.40	4,432.0	-532.5	489.7	723.4	1.22	1.16	1.68
4,611.0	12.70	141.70	4,524.5	-549.6	503.3	745.2	1.27	-1.26	0.32
4,706.0	11.10	141.00	4,617.4	-564.9	515.5	764.7	1.69	-1.68	-0.74
4,801.0	9.80	141.00	4,710.9	-578.3	526.3	781.9	1.37	-1.37	0.00
4,897.0	8.50	136.10	4,805.6	-589.8	536.4	797.2	1.58	-1.35	-5.10
4,991.0	5.90	140.70	4,898.9	-598.5	544.3	809.0	2.83	-2.77	4.89
5,086.0	4.60	147.10	4,993.5	-605.5	549.4	817.6	1.50	-1.37	6.74
5,181.0	3.80	134.90	5,088.2	-610.9	553.7	824.5	1.26	-0.84	-12.84
5,277.0	2.60	101.70	5,184.1	-613.6	558.1	829.4	2.25	-1.25	-34.58
5,372.0	0.40	98.90	5,279.1	-614.1	560.6	831.4	2.32	-2.32	-2.95
5,467.0	0.50	79.00	5,374.1	-614.0	561.3	831.9	0.19	0.11	-20.95
5,562.0	0.40	47.40	5,469.1	-613.7	561.9	832.1	0.28	-0.11	-33.26
5,657.0	0.60	58.80	5,564.1	-613.3	562.6	832.2	0.23	0.21	12.00
5,752.0	0.40	98.90	5,659.1	-613.1	563.4	832.6	0.41	-0.21	42.21
5,847.0	0.50	86.00	5,754.0	-613.1	564.1	833.1	0.15	0.11	-13.58
5,943.0	0.50	44.20	5,850.0	-612.7	564.8	833.3	0.37	0.00	-43.54
6,038.0	0.80	59.00	5,945.0	-612.1	565.7	833.4	0.36	0.32	15.58
6,133.0	1.60	64.00	6,040.0	-611.2	567.4	833.9	0.85	0.84	5.26
6,228.0	0.60	76.80	6,135.0	-610.5	569.1	834.5	1.08	-1.05	13.47
6,323.0	0.80	144.30	6,230.0	-610.9	570.0	835.4	0.84	0.21	71.05
6,418.0	0.80	162.70	6,325.0	-612.1	570.6	836.7	0.27	0.00	19.37
6,513.0	0.80	182.50	6,420.0	-614.7	570.9	838.8	0.14	0.00	10.37
6,608.0	1.20	190.80	6,515.0	-616.9	570.6	840.3	0.33	0.31	6.54
6,703.0	1.20	203.70	6,610.0	-618.8	570.0	841.3	0.28	0.00	13.58

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6,926.0	1.40	208.20	6,832.9	-620.7	569.1	842.1	0.24	0.21	4.74	
7,021.0	1.50	204.20	6,927.9	-622.9	568.0	843.0	0.15	0.11	-4.21	
7,116.0	1.70	228.40	7,022.8	-624.9	566.5	843.5	0.74	0.21	25.47	
7,212.0	2.10	308.40	7,118.8	-624.8	564.0	841.7	2.56	0.42	83.33	
7,307.0	2.30	322.70	7,213.7	-622.2	561.5	838.1	0.61	0.21	15.05	
7,402.0	1.80	337.20	7,308.7	-619.3	559.8	834.8	0.75	-0.53	15.26	
7,497.0	1.60	124.30	7,403.7	-618.7	560.3	834.7	3.43	-0.21	154.84	
7,592.0	4.20	143.90	7,498.5	-622.2	563.4	839.4	2.89	2.74	20.63	
7,687.0	3.90	143.50	7,593.3	-627.6	567.4	846.1	0.32	-0.32	-0.42	
7,783.0	1.60	135.30	7,689.2	-631.2	570.3	850.7	2.42	-2.40	-8.54	
7,878.0	1.00	143.80	7,784.1	-632.8	571.7	852.8	0.66	-0.63	8.95	
7,974.0	0.50	135.20	7,880.1	-633.8	572.5	854.1	0.53	-0.52	-8.96	
8,003.0	0.90	174.00	7,909.1	-634.1	572.6	854.4	2.06	1.38	133.79	
8,057.0	0.90	174.00	7,963.1	-635.0	572.7	855.1	0.00	0.00	0.00	

Checked By: _____ Approved By: _____ Date: _____