

Well Name: **Wildflower 36-27**

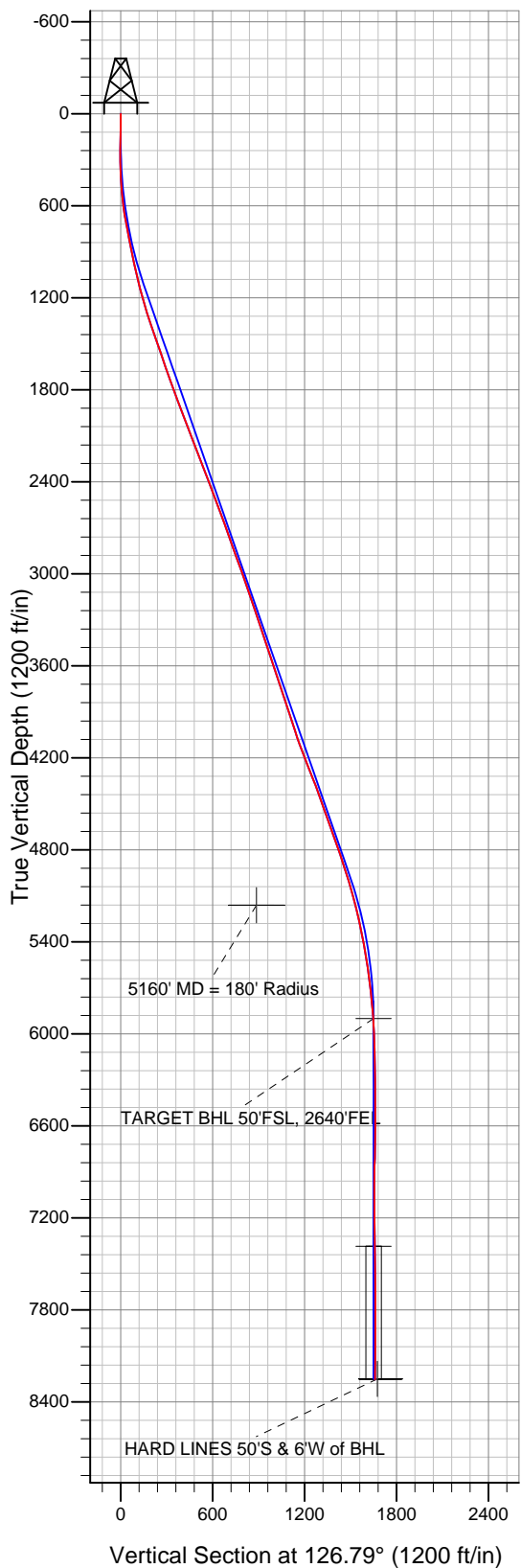
Surface Location: Wildflower 19-27 Pad Sec.27-T2N-R68W  
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 5008.0

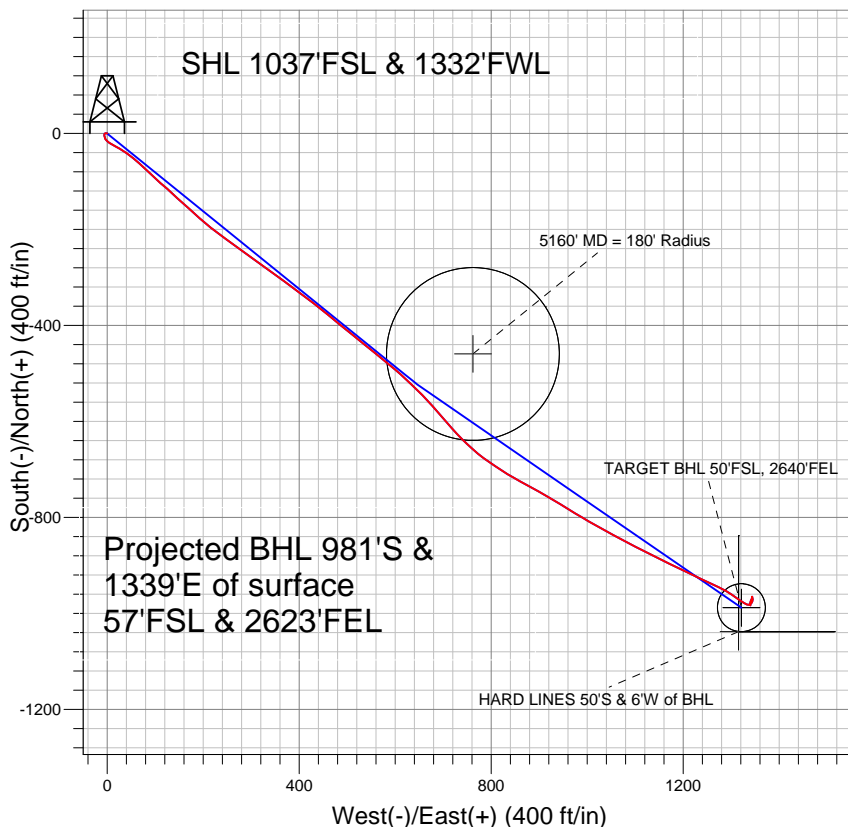
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1281542.52	3141524.46	40.105118	-104.994050

Original Well Elev WELL @ 5023.0ft (Original Well Elev)

Slot



## Anadarko, Weld County CO



### LEGEND

- + Wildflower 36-27, Wellbore #1, Plan #1 (1-17-11) V0
- Wellbore #1
- Survey #1

## Final Survey Plot

Projected Final Survey -  
8520'MD & 8254'TVD @ 1659'VS  
0.5 deg Inc 315.9 deg AZ

Project: SEC.27-T2N-R68W  
Site: Wildflower 19-27 Pad Sec.27-T2N-R68W  
Well: Wildflower 36-27  
Plan: Wellbore #1



## **Directional**

### **Anadarko, Weld County CO**

**SEC.27-T2N-R68W**

**Wildflower 19-27 Pad Sec.27-T2N-R68W**

**Wildflower 36-27**

**Wellbore #1**

**Survey: Survey #1**

### **Standard Survey Report**

**11 April, 2011**

<b>Company:</b>	Anadarko, Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Wildflower 36-27
<b>Project:</b>	SEC.27-T2N-R68W	<b>TVD Reference:</b>	WELL @ 5023.0ft (Original Well Elev)
<b>Site:</b>	Wildflower 19-27 Pad Sec.27-T2N-R68W	<b>MD Reference:</b>	WELL @ 5023.0ft (Original Well Elev)
<b>Well:</b>	Wildflower 36-27	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

<b>Project</b>	SEC.27-T2N-R68W, Weld County, Colorado		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site		Wildflower 19-27 Pad Sec.27-T2N-R68W			
Site Position:		Northing:	1,281,592.81 ft	Latitude:	40.105256
From:	Lat/Long	Easting:	3,141,524.17 ft	Longitude:	-104.994050
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.33 °

Well	Wildflower 36-27					
Well Position	+N/-S	0.0 ft	Northing:	1,281,542.52 ft	Latitude:	40.105118
	+E/-W	0.0 ft	Easting:	3,141,524.46 ft	Longitude:	-104.994050
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,008.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	3/30/2011	8.99	66.78	52,972

<b>Design</b>	Wellbore #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	126.79	

<b>Survey Program</b>	<b>Date</b>	4/11/2011			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
142.0	8,520.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
142.0	1.70	279.40	142.0	0.3	-2.1	-1.9	1.20	1.20	0.00	
231.0	1.40	241.20	230.9	0.0	-4.3	-3.5	1.18	-0.34	-42.92	
323.0	2.60	190.40	322.9	-2.6	-5.7	-3.0	2.21	1.30	-55.22	
415.0	4.00	165.60	414.7	-7.7	-5.3	0.4	2.14	1.52	-26.96	
506.0	5.30	140.20	505.5	-14.0	-1.8	7.0	2.64	1.43	-27.91	
598.0	7.30	120.50	596.9	-20.3	6.0	16.9	3.17	2.17	-21.41	
691.0	9.70	120.60	688.9	-27.2	17.8	30.6	2.58	2.58	0.11	
775.0	11.10	120.90	771.5	-35.0	30.8	45.6	1.67	1.67	0.36	
830.0	11.10	124.20	825.5	-40.7	39.8	56.2	1.15	0.00	6.00	
925.0	11.60	128.70	918.6	-51.8	54.8	74.9	1.07	0.53	4.74	
1,020.0	12.30	134.00	1,011.6	-64.8	69.5	94.5	1.37	0.74	5.58	
1,115.0	14.10	132.20	1,104.0	-79.6	85.4	116.0	1.94	1.89	-1.89	

<b>Company:</b>	Anadarko, Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Wildflower 36-27
<b>Project:</b>	SEC.27-T2N-R68W	<b>TVD Reference:</b>	WELL @ 5023.0ft (Original Well Elev)
<b>Site:</b>	Wildflower 19-27 Pad Sec.27-T2N-R68W	<b>MD Reference:</b>	WELL @ 5023.0ft (Original Well Elev)
<b>Well:</b>	Wildflower 36-27	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)
1,211.0	16.40	132.30	1,196.7	-96.6	104.0	141.2	2.40	2.40	0.10
1,306.0	17.70	131.50	1,287.5	-115.2	124.8	168.9	1.39	1.37	-0.84
1,401.0	18.50	132.70	1,377.8	-135.0	146.7	198.3	0.93	0.84	1.26
1,496.0	19.00	132.60	1,467.7	-155.7	169.1	228.7	0.53	0.53	-0.11
1,591.0	19.30	131.20	1,557.5	-176.5	192.3	259.7	0.58	0.32	-1.47
1,686.0	18.80	128.60	1,647.3	-196.4	216.1	290.7	1.04	-0.53	-2.74
1,782.0	19.50	126.30	1,738.0	-215.5	241.1	322.1	1.07	0.73	-2.40
1,877.0	20.40	125.70	1,827.3	-234.6	267.3	354.6	0.97	0.95	-0.63
1,972.0	20.80	126.00	1,916.2	-254.1	294.4	388.0	0.44	0.42	0.32
2,069.0	21.00	125.60	2,006.8	-274.4	322.5	422.6	0.25	0.21	-0.41
2,164.0	21.10	125.60	2,095.5	-294.2	350.2	456.7	0.11	0.11	0.00
2,260.0	21.40	126.90	2,184.9	-314.8	378.3	491.5	0.58	0.31	1.35
2,355.0	21.50	126.50	2,273.4	-335.6	406.1	526.2	0.19	0.11	-0.42
2,450.0	20.70	127.90	2,362.0	-356.2	433.4	560.4	1.00	-0.84	1.47
2,545.0	20.30	130.00	2,451.0	-377.1	459.3	593.7	0.88	-0.42	2.21
2,641.0	20.30	128.60	2,541.0	-398.2	485.0	626.9	0.51	0.00	-1.46
2,736.0	19.80	129.40	2,630.3	-418.7	510.3	659.5	0.60	-0.53	0.84
2,831.0	20.30	129.30	2,719.5	-439.4	535.5	692.0	0.53	0.53	-0.11
2,926.0	20.20	128.80	2,808.6	-460.1	561.1	724.9	0.21	-0.11	-0.53
3,021.0	20.10	129.30	2,897.8	-480.7	586.5	757.6	0.21	-0.11	0.53
3,116.0	19.30	132.30	2,987.3	-501.6	610.7	789.5	1.36	-0.84	3.16
3,212.0	19.20	132.90	3,077.9	-523.0	634.0	821.0	0.23	-0.10	0.63
3,307.0	19.30	135.90	3,167.6	-545.0	656.4	852.0	1.05	0.11	3.16
3,402.0	19.20	138.70	3,257.3	-568.0	677.6	882.8	0.98	-0.11	2.95
3,497.0	18.80	138.30	3,347.1	-591.1	698.1	913.1	0.44	-0.42	-0.42
3,592.0	18.90	139.40	3,437.0	-614.2	718.3	943.1	0.39	0.11	1.16
3,687.0	18.20	135.10	3,527.1	-636.4	738.8	972.8	1.62	-0.74	-4.53
3,782.0	18.90	131.60	3,617.1	-657.2	760.8	1,002.8	1.38	0.74	-3.68
3,877.0	18.40	126.30	3,707.1	-676.2	784.4	1,033.1	1.86	-0.53	-5.58
3,972.0	18.50	124.00	3,797.3	-693.6	809.0	1,063.2	0.77	0.11	-2.42
4,068.0	18.00	121.60	3,888.4	-709.8	834.2	1,093.2	0.94	-0.52	-2.50
4,163.0	17.90	118.30	3,978.8	-724.5	859.6	1,122.2	1.08	-0.11	-3.47
4,258.0	19.20	118.50	4,068.9	-738.8	886.2	1,152.1	1.37	1.37	0.21
4,353.0	21.00	119.80	4,158.1	-754.7	914.7	1,184.5	1.95	1.89	1.37
4,448.0	21.70	121.60	4,246.6	-772.4	944.4	1,218.9	1.01	0.74	1.89
4,544.0	21.70	121.60	4,335.8	-791.0	974.6	1,254.2	0.00	0.00	0.00
4,639.0	20.00	119.60	4,424.5	-808.2	1,003.7	1,287.8	1.94	-1.79	-2.11
4,734.0	19.40	120.00	4,514.0	-824.2	1,031.5	1,319.6	0.65	-0.63	0.42
4,829.0	19.60	117.10	4,603.5	-839.3	1,059.4	1,351.0	1.04	0.21	-3.05
4,924.0	20.60	117.50	4,692.7	-854.3	1,088.4	1,383.2	1.06	1.05	0.42
5,019.0	19.70	117.90	4,781.9	-869.5	1,117.3	1,415.5	0.96	-0.95	0.42
5,114.0	18.10	116.80	4,871.8	-883.6	1,144.7	1,445.9	1.73	-1.68	-1.16
5,209.0	17.30	114.40	4,962.3	-896.1	1,170.7	1,474.2	1.14	-0.84	-2.53
5,239.1	16.95	114.92	4,991.1	-899.8	1,178.7	1,482.9	1.27	-1.16	1.71
<b>5160' MD = 180' Radius</b>									
5,304.0	16.20	116.10	5,053.3	-907.8	1,195.5	1,501.0	1.27	-1.16	1.83
5,399.0	14.80	115.90	5,144.8	-918.9	1,218.3	1,526.0	1.47	-1.47	-0.21
5,494.0	13.60	115.40	5,236.9	-929.0	1,239.3	1,548.8	1.27	-1.26	-0.53
5,590.0	11.60	115.20	5,330.6	-938.0	1,258.2	1,569.4	2.08	-2.08	-0.21
5,685.0	10.50	115.30	5,423.8	-945.7	1,274.7	1,587.2	1.16	-1.16	0.11
5,780.0	9.50	120.60	5,517.4	-953.4	1,289.3	1,603.5	1.43	-1.05	5.58
5,875.0	7.70	122.80	5,611.3	-960.9	1,301.4	1,617.6	1.93	-1.89	2.32
5,970.0	6.20	126.10	5,705.6	-967.3	1,310.9	1,629.1	1.63	-1.58	3.47
6,065.0	5.60	124.50	5,800.1	-973.0	1,318.8	1,638.9	0.65	-0.63	-1.68

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<b>Well:</b>	Wildflower 36-27	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)	
6,161.0	4.10	123.50	5,895.8	-977.5	1,325.5	1,647.0	1.56	-1.56	-1.04	
6,165.3	4.04	123.22	5,900.1	-977.7	1,325.8	1,647.3	1.48	-1.40	-6.62	
<b>TARGET BHL 50'FSL, 2640'FEL</b>										
6,256.0	2.80	114.40	5,990.6	-980.4	1,330.5	1,652.6	1.48	-1.37	-9.72	
6,351.0	1.40	103.40	6,085.5	-981.6	1,333.7	1,656.0	1.53	-1.47	-11.58	
6,446.0	1.30	90.10	6,180.5	-981.9	1,335.9	1,657.9	0.35	-0.11	-14.00	
6,541.0	1.10	72.00	6,275.5	-981.6	1,337.9	1,659.3	0.45	-0.21	-19.05	
6,636.0	0.90	66.10	6,370.5	-981.0	1,339.4	1,660.2	0.24	-0.21	-6.21	
6,732.0	1.00	43.30	6,466.5	-980.1	1,340.7	1,660.6	0.40	0.10	-23.75	
6,827.0	1.00	36.60	6,561.4	-978.8	1,341.8	1,660.7	0.12	0.00	-7.05	
6,922.0	1.50	31.90	6,656.4	-977.1	1,342.9	1,660.6	0.54	0.53	-4.95	
7,017.0	2.80	19.60	6,751.4	-973.8	1,344.3	1,659.8	1.44	1.37	-12.95	
7,112.0	4.10	347.70	6,846.2	-968.3	1,344.4	1,656.6	2.39	1.37	-33.58	
7,207.0	0.10	171.70	6,941.1	-965.1	1,343.7	1,654.1	4.42	-4.21	-185.26	
7,302.0	1.50	193.20	7,036.1	-966.4	1,343.4	1,654.6	1.48	1.47	22.63	
7,398.0	1.80	193.50	7,132.1	-969.1	1,342.8	1,655.7	0.31	0.31	0.31	
7,493.0	1.90	206.60	7,227.0	-971.9	1,341.7	1,656.6	0.46	0.11	13.79	
7,588.0	2.10	201.20	7,322.0	-975.0	1,340.4	1,657.3	0.29	0.21	-5.68	
7,651.6	1.95	191.81	7,385.5	-977.1	1,339.7	1,658.1	0.57	-0.23	-14.77	
<b>TARGET CIRCLE 50'FSL &amp; 2640'FEL</b>										
7,683.0	1.90	186.70	7,416.9	-978.2	1,339.6	1,658.6	0.57	-0.16	-16.27	
7,778.0	1.10	177.90	7,511.9	-980.6	1,339.4	1,659.9	0.87	-0.84	-9.26	
7,906.0	0.60	159.30	7,639.8	-982.5	1,339.7	1,661.3	0.44	-0.39	-14.53	
8,096.0	0.20	359.40	7,829.8	-983.1	1,340.1	1,661.9	0.42	-0.21	-84.16	
8,191.0	0.30	340.90	7,924.8	-982.7	1,340.0	1,661.6	0.13	0.11	-19.47	
8,414.0	0.40	306.50	8,147.8	-981.7	1,339.2	1,660.4	0.10	0.04	-15.43	
8,470.0	0.50	315.90	8,203.8	-981.4	1,338.8	1,659.9	0.22	0.18	16.79	
8,515.9	0.50	315.90	8,249.8	-981.1	1,338.5	1,659.5	0.00	0.00	0.00	
<b>HARD LINES 50'S &amp; 6'W of BHL</b>										
8,520.0	0.50	315.90	8,253.8	-981.1	1,338.5	1,659.5	0.00	0.00	0.00	

Checked By: _____	Approved By: _____	Date: _____
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