

Well Name: **Wildflower 11-27**

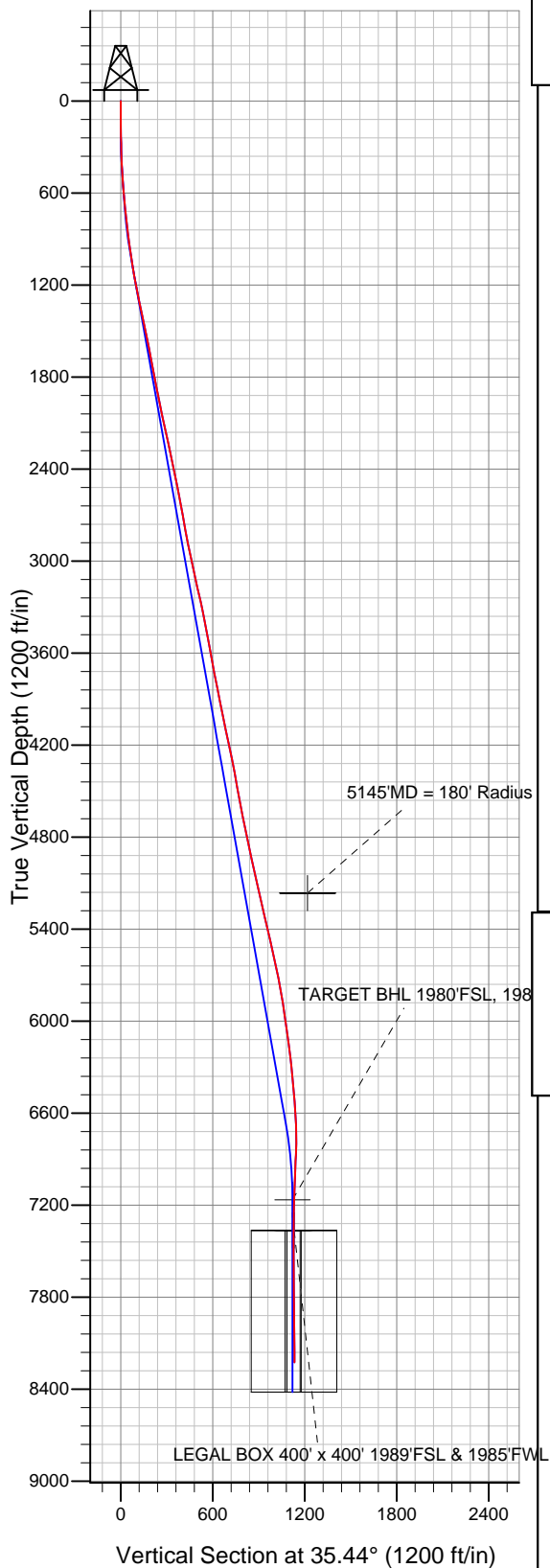
Surface Location: Wildflower 19-27 Pad Sec.27-T2N-R68W  
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 5008.0

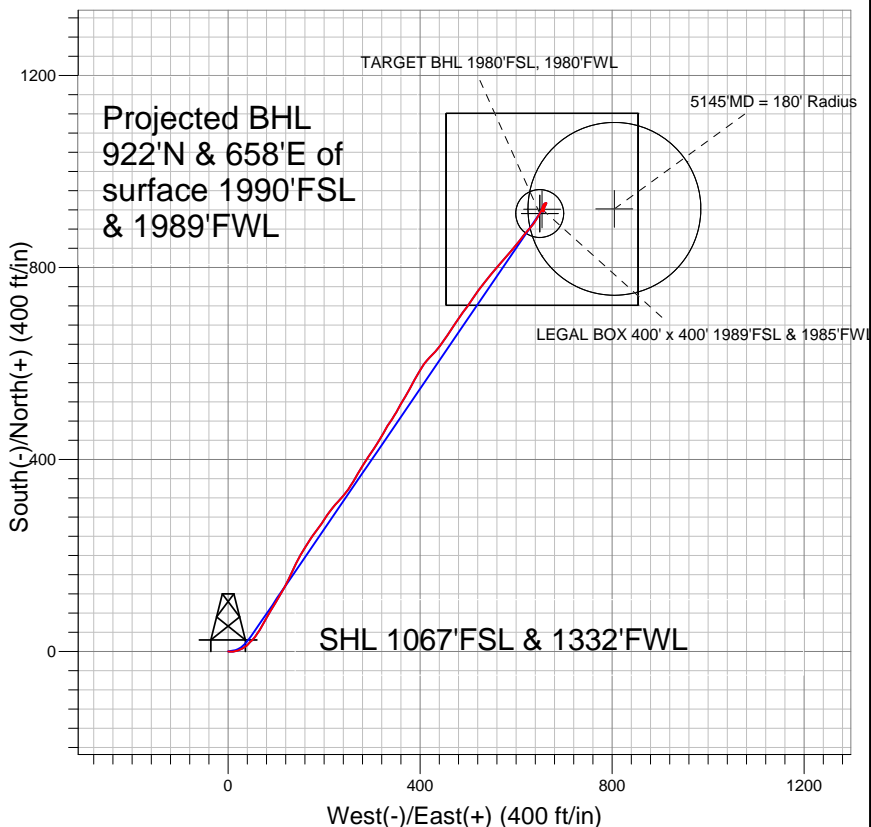
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1281572.76	3141524.29	40.105201	-104.994050

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

Slot



## Anadarko, Weld County CO



### LEGEND

- x Wildflower 11-27, Wellbore #1, Plan #3 (2-7-11) V0
- Wellbore #1
- Survey #1

## Final Survey Plot

Projected Final Survey -  
8336' MD & 8226' TVD @ 1133' VS  
0.7 deg Inc 350.4 deg AZ

Project: SEC.27-T2N-R68W  
Site: Wildflower 19-27 Pad Sec.27-T2N-R68W  
Well: Wildflower 11-27  
Plan: Wellbore #1



## **Directional**

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

**SEC.27-T2N-R68W**

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

**Wildflower 11-27**

**Wellbore #1**

**Survey: Survey #1**

### **Standard Survey Report**

**29 March, 2011**

<b>Company:</b>	Anadarko, Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Wildflower 11-27
<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 11-27	<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 11-27					
Well Position	+N/-S	0.0 ft	Northing:	1,281,572.76 ft	Latitude:	40.105201
	+E/-W	0.0 ft	Easting:	3,141,524.29 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	1/5/2011	9.02	66.79	52,996

<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	35.44	

<b>Survey Program</b>	<b>Date</b>	3/29/2011			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
142.0	8,336.0	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	0.70	109.80	142.0	-0.3	0.8	0.2	0.49	0.49	0.00	
232.0	1.40	93.90	232.0	-0.6	2.4	1.0	0.84	0.78	-17.67	
323.0	2.50	91.50	322.9	-0.7	5.5	2.6	1.21	1.21	-2.64	
415.0	4.10	83.30	414.8	-0.4	10.8	6.0	1.81	1.74	-8.91	
507.0	5.40	74.80	506.5	1.2	18.2	11.5	1.60	1.41	-9.24	
599.0	5.50	64.00	598.0	4.2	26.4	18.7	1.12	0.11	-11.74	
691.0	5.90	55.50	689.6	8.8	34.2	27.1	1.01	0.43	-9.24	
775.0	6.60	45.80	773.1	14.7	41.3	35.9	1.51	0.83	-11.55	
836.0	6.90	45.00	833.7	19.7	46.4	42.9	0.52	0.49	-1.31	
931.0	7.70	40.00	927.9	28.6	54.5	54.9	1.07	0.84	-5.26	
1,026.0	8.30	34.20	1,022.0	39.2	62.4	68.1	1.06	0.63	-6.11	
1,121.0	9.90	28.00	1,115.8	52.0	70.1	83.1	1.97	1.68	-6.53	

<b>Company:</b>	Anadarko, Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Wildflower 11-27
<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 11-27	<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)
1,217.0	11.00	30.60	1,210.2	67.2	78.7	100.4	1.25	1.15	2.71
1,312.0	12.10	29.50	1,303.3	83.7	88.2	119.3	1.18	1.16	-1.16
1,407.0	11.60	31.90	1,396.2	100.4	98.1	138.7	0.74	-0.53	2.53
1,502.0	12.00	31.40	1,489.2	117.0	108.3	158.1	0.43	0.42	-0.53
1,597.0	11.50	27.20	1,582.2	133.8	117.8	177.3	1.04	-0.53	-4.42
1,692.0	11.00	26.30	1,675.4	150.4	126.1	195.7	0.56	-0.53	-0.95
1,788.0	10.80	24.10	1,769.7	166.8	133.9	213.5	0.48	-0.21	-2.29
1,883.0	11.60	25.60	1,862.9	183.5	141.6	231.7	0.90	0.84	1.58
1,978.0	11.60	29.60	1,955.9	200.5	150.5	250.6	0.85	0.00	4.21
2,075.0	11.90	33.30	2,050.9	217.3	160.8	270.3	0.84	0.31	3.81
2,170.0	12.10	32.20	2,143.8	233.9	171.5	290.0	0.32	0.21	-1.16
2,266.0	12.20	37.90	2,237.7	250.4	183.1	310.2	1.25	0.10	5.94
2,361.0	12.30	33.60	2,330.5	266.8	194.8	330.3	0.97	0.11	-4.53
2,456.0	12.00	34.60	2,423.4	283.3	206.0	350.3	0.39	-0.32	1.05
2,551.0	11.30	38.60	2,516.4	298.7	217.5	369.5	1.12	-0.74	4.21
2,647.0	9.90	44.50	2,610.8	312.0	229.1	387.0	1.84	-1.46	6.15
2,742.0	10.20	39.30	2,704.3	324.3	240.2	403.5	1.01	0.32	-5.47
2,837.0	10.70	35.00	2,797.8	338.0	250.5	420.7	0.97	0.53	-4.53
2,932.0	11.50	30.40	2,891.0	353.4	260.4	438.9	1.26	0.84	-4.84
3,027.0	11.90	30.70	2,984.0	370.0	270.2	458.1	0.43	0.42	0.32
3,122.0	12.70	31.70	3,076.8	387.3	280.7	478.3	0.87	0.84	1.05
3,218.0	12.60	34.20	3,170.5	405.0	292.1	499.3	0.58	-0.10	2.60
3,313.0	12.70	33.20	3,263.2	422.3	303.6	520.1	0.25	0.11	-1.05
3,408.0	11.10	32.10	3,356.2	438.8	314.2	539.7	1.70	-1.68	-1.16
3,503.0	10.90	28.90	3,449.4	454.4	323.4	557.7	0.68	-0.21	-3.37
3,598.0	10.60	31.60	3,542.7	469.7	332.3	575.4	0.62	-0.32	2.84
3,693.0	10.10	34.20	3,636.2	484.0	341.6	592.4	0.72	-0.53	2.74
3,788.0	11.00	29.40	3,729.6	498.8	350.7	609.8	1.32	0.95	-5.05
3,884.0	11.30	29.70	3,823.8	515.0	359.9	628.2	0.32	0.31	0.31
3,978.0	11.10	29.70	3,916.0	530.8	368.9	646.4	0.21	-0.21	0.00
4,074.0	11.80	30.20	4,010.1	547.3	378.5	665.4	0.74	0.73	0.52
4,169.0	12.00	27.60	4,103.0	564.5	387.9	684.8	0.60	0.21	-2.74
4,264.0	12.40	30.60	4,195.9	582.0	397.7	704.8	0.79	0.42	3.16
4,359.0	11.50	35.40	4,288.8	598.5	408.4	724.4	1.41	-0.95	5.05
4,454.0	10.50	44.00	4,382.1	612.5	419.9	742.4	2.02	-1.05	9.05
4,550.0	10.00	43.60	4,476.6	624.8	431.7	759.3	0.53	-0.52	-0.42
4,645.0	10.30	36.80	4,570.1	637.6	442.5	776.0	1.30	0.32	-7.16
4,740.0	11.60	32.10	4,663.3	652.4	452.6	794.0	1.66	1.37	-4.95
4,835.0	12.50	34.20	4,756.3	669.0	463.5	813.8	1.05	0.95	2.21
4,930.0	11.60	35.70	4,849.2	685.3	474.8	833.7	1.00	-0.95	1.58
5,025.0	11.90	35.20	4,942.2	701.1	486.1	853.0	0.33	0.32	-0.53
5,120.0	12.70	35.30	5,035.0	717.6	497.7	873.2	0.84	0.84	0.11
5,215.0	13.30	33.40	5,127.6	735.2	509.8	894.6	0.78	0.63	-2.00
5,310.0	12.60	36.20	5,220.1	752.7	521.9	915.9	0.99	-0.74	2.95
5,323.7	12.63	36.62	5,233.5	755.1	523.7	918.9	0.70	0.20	3.09
<b>5145' MD = 180' Radius</b>									
5,405.0	12.80	39.10	5,312.8	769.2	534.7	936.8	0.70	0.21	3.05
5,500.0	13.10	39.90	5,405.4	785.7	548.2	958.0	0.37	0.32	0.84
5,596.0	13.10	40.70	5,498.9	802.3	562.3	979.7	0.19	0.00	0.83
5,691.0	12.90	40.10	5,591.5	818.5	576.1	1,001.0	0.25	-0.21	-0.63
5,786.0	11.40	41.30	5,684.3	833.7	589.2	1,020.9	1.60	-1.58	1.26
5,881.0	10.50	39.00	5,777.6	847.5	600.8	1,038.9	1.05	-0.95	-2.42
5,976.0	9.20	36.50	5,871.2	860.3	610.8	1,055.1	1.44	-1.37	-2.63
6,072.0	8.00	43.60	5,966.1	871.3	620.0	1,069.4	1.67	-1.25	7.40

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<b>Well:</b>	Wildflower 11-27	<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)
6,167.0	8.20	38.70	6,060.2	881.4	628.7	1,082.7	0.76	0.21	-5.16
6,262.0	7.30	35.80	6,154.3	891.6	636.5	1,095.5	1.03	-0.95	-3.05
6,357.0	6.80	29.70	6,248.6	901.4	642.8	1,107.1	0.95	-0.53	-6.42
6,452.0	5.80	31.10	6,343.0	910.4	648.1	1,117.5	1.06	-1.05	1.47
6,547.0	5.30	24.80	6,437.6	918.5	652.4	1,126.6	0.83	-0.53	-6.63
6,642.0	4.00	14.30	6,532.3	925.6	655.1	1,134.0	1.63	-1.37	-11.05
6,738.0	3.50	41.40	6,628.1	931.1	657.8	1,140.0	1.90	-0.52	28.23
6,833.0	2.50	67.80	6,722.9	934.1	661.7	1,144.7	1.77	-1.05	27.79
6,928.0	2.90	208.40	6,817.9	932.7	662.5	1,144.0	5.35	0.42	148.00
7,023.0	2.50	203.30	6,912.8	928.7	660.5	1,139.6	0.49	-0.42	-5.37
7,118.0	2.20	198.90	7,007.7	925.1	659.1	1,135.8	0.37	-0.32	-4.63
7,213.0	2.00	206.00	7,102.6	921.9	657.8	1,132.5	0.35	-0.21	7.47
7,275.7	1.86	200.02	7,165.3	919.9	656.9	1,130.4	0.39	-0.22	-9.54
<b>TARGET BHL 1980'FSL, 1980'FWL</b>									
7,308.0	1.80	196.60	7,197.6	918.9	656.6	1,129.4	0.39	-0.19	-10.59
7,404.0	0.40	181.40	7,293.6	917.2	656.2	1,127.7	1.48	-1.46	-15.83
7,475.4	0.30	144.90	7,365.0	916.8	656.3	1,127.4	0.33	-0.14	-51.12
<b>TARGET CIRCLE 1980'FSL &amp; 1980'FWL - LEGAL BOX 400' x 400' 1989'FSL &amp; 1985'FWL</b>									
7,499.0	0.30	129.70	7,388.6	916.7	656.4	1,127.4	0.33	0.01	-64.40
7,594.0	0.30	104.70	7,483.6	916.4	656.8	1,127.5	0.14	0.00	-26.32
7,689.0	0.20	69.80	7,578.6	916.4	657.2	1,127.7	0.19	-0.11	-36.74
7,784.0	0.30	38.90	7,673.6	916.7	657.5	1,128.1	0.17	0.11	-32.53
7,880.0	0.50	15.40	7,769.6	917.3	657.8	1,128.7	0.27	0.21	-24.48
7,976.0	0.50	10.40	7,865.6	918.1	658.0	1,129.5	0.05	0.00	-5.21
8,070.0	0.70	355.00	7,959.6	919.1	658.0	1,130.3	0.27	0.21	-16.38
8,165.0	0.60	10.10	8,054.5	920.1	658.0	1,131.2	0.21	-0.11	15.89
8,261.0	0.70	350.40	8,150.5	921.2	658.0	1,132.1	0.25	0.10	-20.52
8,286.0	0.70	350.40	8,175.5	921.5	658.0	1,132.3	0.00	0.00	0.00
8,336.0	0.70	350.40	8,225.5	922.1	657.8	1,132.7	0.00	0.00	0.00

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_