



Final Survey Plot

Projected Final Survey -
 8345'MD & 8210'TVD @ 1292' VS
 1.5 deg Inc 358.2 deg AZ

Project: SEC.27-T2N-R68W
 Site: Wildflower 9-27 Pad Sec.27-T2N-R68W
 Well: Wildflower 16-27
 Plan: Wellbore #1



Anadarko, Weld County CO

SEC.27-T2N-R68W

Wildflower 9-27 Pad Sec.27-T2N-R68W

Wildflower 16-27

Wellbore #1

Survey: Survey #1

Standard Survey Report

24 February, 2011



Company:	Anadarko, Weld County CO	Local Co-ordinate Reference:	Well Wildflower 16-27
Project:	SEC.27-T2N-R68W	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site:	Wildflower 9-27 Pad Sec.27-T2N-R68W	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Well:	Wildflower 16-27	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.27-T2N-R68W, Weld County, Colorado		
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	Wildflower 9-27 Pad Sec.27-T2N-R68W		
Site Position:		Northing:	1,282,487.63 ft
From:	Lat/Long	Easting:	3,144,830.06 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40.107660
		Longitude:	-104.982213
		Grid Convergence:	0.33 °

Well	Wildflower 16-27		
Well Position	+N/-S	0.0 ft	Northing: 1,282,487.61 ft
	+E/-W	0.0 ft	Easting: 3,144,830.06 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40.107660
		Longitude:	-104.982213
		Ground Level:	4,969.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/4/2011	9.00	66.79	52,990

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	180.34	

Survey Program	Date	2/24/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
144.0	8,345.0	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	
144.0	0.20	329.50	144.0	0.2	-0.1	-0.2	0.14	0.14	0.00	
233.0	0.50	190.10	233.0	0.0	-0.3	0.0	0.75	0.34	-156.63	
323.0	2.90	176.30	323.0	-2.7	-0.2	2.7	2.69	2.67	-15.33	
415.0	5.10	176.40	414.7	-9.1	0.2	9.1	2.39	2.39	0.11	
506.0	6.90	173.50	505.2	-18.6	1.1	18.6	2.01	1.98	-3.19	
598.0	8.00	177.10	596.4	-30.4	2.0	30.4	1.30	1.20	3.91	
690.0	9.70	179.60	687.3	-44.6	2.4	44.6	1.89	1.85	2.72	
785.0	11.10	179.50	780.8	-61.7	2.5	61.7	1.47	1.47	-0.11	
901.0	11.70	183.60	894.5	-84.6	1.9	84.6	0.87	0.52	3.53	
991.0	14.00	184.20	982.2	-104.6	0.5	104.6	2.56	2.56	0.67	
1,086.0	14.40	185.10	1,074.3	-127.8	-1.4	127.8	0.48	0.42	0.95	
1,181.0	15.90	182.80	1,166.0	-152.6	-3.0	152.6	1.70	1.58	-2.42	

Company:	Anadarko, Weld County CO	Local Co-ordinate Reference:	Well Wildflower 16-27
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Site:	Wildflower 9-27 Pad Sec.27-T2N-R68W	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Well:	Wildflower 16-27	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)
1,276.0	16.40	182.40	1,257.3	-179.0	-4.2	179.0	0.54	0.53	-0.42
1,372.0	15.20	182.00	1,349.7	-205.1	-5.2	205.2	1.26	-1.25	-0.42
1,466.0	15.20	180.30	1,440.4	-229.8	-5.7	229.8	0.47	0.00	-1.81
1,562.0	15.00	179.20	1,533.0	-254.8	-5.6	254.8	0.36	-0.21	-1.15
1,657.0	13.80	175.90	1,625.1	-278.4	-4.7	278.4	1.53	-1.26	-3.47
1,752.0	13.00	173.60	1,717.5	-300.3	-2.7	300.3	1.01	-0.84	-2.42
1,847.0	13.30	181.70	1,810.0	-321.8	-1.8	321.8	1.96	0.32	8.53
1,942.0	13.30	181.00	1,902.4	-343.7	-2.3	343.7	0.17	0.00	-0.74
2,040.0	12.90	181.00	1,997.9	-365.9	-2.7	365.9	0.41	-0.41	0.00
2,135.0	12.00	180.70	2,090.7	-386.4	-3.0	386.4	0.95	-0.95	-0.32
2,230.0	12.60	180.10	2,183.5	-406.6	-3.1	406.6	0.65	0.63	-0.63
2,325.0	11.70	183.10	2,276.4	-426.6	-3.7	426.6	1.16	-0.95	3.16
2,421.0	12.00	181.60	2,370.3	-446.3	-4.5	446.3	0.45	0.31	-1.56
2,516.0	11.90	178.40	2,463.2	-465.9	-4.5	466.0	0.71	-0.11	-3.37
2,611.0	11.30	179.70	2,556.3	-485.0	-4.2	485.1	0.69	-0.63	1.37
2,706.0	12.70	182.80	2,649.2	-504.8	-4.6	504.8	1.62	1.47	3.26
2,802.0	12.20	179.20	2,743.0	-525.5	-5.0	525.5	0.96	-0.52	-3.75
2,897.0	12.40	176.70	2,835.8	-545.7	-4.3	545.7	0.60	0.21	-2.63
2,992.0	12.10	179.50	2,928.6	-565.8	-3.6	565.8	0.70	-0.32	2.95
3,087.0	12.70	181.20	3,021.4	-586.2	-3.7	586.2	0.74	0.63	1.79
3,182.0	12.00	179.00	3,114.2	-606.5	-3.8	606.5	0.89	-0.74	-2.32
3,277.0	11.70	178.20	3,207.2	-626.0	-3.3	626.0	0.36	-0.32	-0.84
3,373.0	11.40	184.70	3,301.3	-645.2	-3.8	645.2	1.39	-0.31	6.77
3,467.0	12.20	187.70	3,393.3	-664.3	-5.9	664.3	1.07	0.85	3.19
3,562.0	12.10	182.40	3,486.1	-684.2	-7.6	684.2	1.18	-0.11	-5.58
3,658.0	12.60	182.90	3,579.9	-704.7	-8.6	704.8	0.53	0.52	0.52
3,753.0	11.60	179.50	3,672.8	-724.6	-9.0	724.7	1.29	-1.05	-3.58
3,848.0	12.20	182.80	3,765.8	-744.2	-9.4	744.2	0.95	0.63	3.47
3,943.0	13.30	187.00	3,858.4	-765.1	-11.2	765.1	1.51	1.16	4.42
4,038.0	13.40	185.20	3,950.9	-786.9	-13.6	787.0	0.45	0.11	-1.89
4,134.0	13.30	180.10	4,044.3	-809.0	-14.6	809.1	1.23	-0.10	-5.31
4,229.0	12.90	175.90	4,136.8	-830.5	-13.9	830.6	1.09	-0.42	-4.42
4,324.0	12.40	177.00	4,229.5	-851.3	-12.6	851.3	0.58	-0.53	1.16
4,419.0	11.50	174.80	4,322.4	-870.9	-11.2	870.9	1.06	-0.95	-2.32
4,514.0	10.90	179.00	4,415.6	-889.3	-10.2	889.3	1.07	-0.63	4.42
4,609.0	10.90	177.10	4,508.9	-907.3	-9.5	907.3	0.38	0.00	-2.00
4,704.0	11.00	181.20	4,602.2	-925.3	-9.3	925.3	0.83	0.11	4.32
4,800.0	11.40	178.70	4,696.4	-943.9	-9.3	944.0	0.66	0.42	-2.60
4,895.0	10.70	176.80	4,789.6	-962.1	-8.6	962.2	0.83	-0.74	-2.00
4,989.0	10.10	175.60	4,882.0	-979.1	-7.4	979.1	0.68	-0.64	-1.28
5,084.0	9.30	174.50	4,975.7	-995.0	-6.1	995.0	0.86	-0.84	-1.16
5,180.0	10.20	172.50	5,070.3	-1,011.1	-4.2	1,011.2	1.00	0.94	-2.08
5,275.0	10.30	172.50	5,163.8	-1,027.9	-2.0	1,027.9	0.11	0.11	0.00
5,280.9	10.28	172.78	5,169.6	-1,028.9	-1.9	1,028.9	0.91	-0.35	4.71
5129' MD = 179' Radius									
5,370.0	10.00	177.10	5,257.3	-1,044.6	-0.5	1,044.6	0.91	-0.31	4.85
5,465.0	9.70	183.60	5,350.9	-1,060.8	-0.6	1,060.8	1.21	-0.32	6.84
5,560.0	9.60	177.90	5,444.6	-1,076.7	-0.8	1,076.7	1.01	-0.11	-6.00
5,655.0	10.20	178.40	5,538.1	-1,093.0	-0.2	1,093.0	0.64	0.63	0.53
5,751.0	11.60	175.80	5,632.4	-1,111.1	0.7	1,111.1	1.55	1.46	-2.71
5,846.0	13.90	178.00	5,725.1	-1,132.1	1.8	1,132.0	2.47	2.42	2.32
5,941.0	12.60	178.90	5,817.5	-1,153.8	2.4	1,153.8	1.39	-1.37	0.95
6,036.0	11.60	181.70	5,910.4	-1,173.7	2.3	1,173.7	1.22	-1.05	2.95
6,131.0	11.20	183.60	6,003.5	-1,192.5	1.4	1,192.5	0.58	-0.42	2.00

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6,226.0	9.50	184.20	6,097.0	-1,209.5	0.3	1,209.5	1.79	-1.79	0.63
6,322.0	8.60	183.30	6,191.8	-1,224.6	-0.7	1,224.6	0.95	-0.94	-0.94
6,417.0	8.10	178.00	6,285.8	-1,238.4	-0.9	1,238.4	0.97	-0.53	-5.58
6,512.0	7.90	174.20	6,379.9	-1,251.6	0.0	1,251.5	0.60	-0.21	-4.00
6,607.0	6.90	173.90	6,474.1	-1,263.7	1.3	1,263.7	1.05	-1.05	-0.32
6,702.0	6.10	172.70	6,568.5	-1,274.4	2.5	1,274.4	0.85	-0.84	-1.26
6,797.0	5.40	167.50	6,663.0	-1,283.8	4.1	1,283.7	0.92	-0.74	-5.47
6,892.0	4.00	167.30	6,757.7	-1,291.4	5.8	1,291.3	1.47	-1.47	-0.21
6,988.0	3.60	166.90	6,853.5	-1,297.6	7.3	1,297.5	0.42	-0.42	-0.42
7,083.0	2.80	159.30	6,948.3	-1,302.7	8.8	1,302.6	0.95	-0.84	-8.00
7,178.0	2.10	155.10	7,043.2	-1,306.4	10.3	1,306.3	0.76	-0.74	-4.42
7,273.0	0.60	145.40	7,138.2	-1,308.4	11.3	1,308.3	1.59	-1.58	-10.21
7,319.6	0.60	146.87	7,184.8	-1,308.8	11.6	1,308.7	0.03	0.00	3.16
TARGET BHL 660'FSL, 660'FEL									
7,368.0	0.60	148.40	7,233.2	-1,309.2	11.9	1,309.1	0.03	0.00	3.16
7,463.0	0.40	119.10	7,328.2	-1,309.8	12.4	1,309.7	0.34	-0.21	-30.84
7,519.8	0.31	1.12	7,384.9	-1,309.8	12.6	1,309.7	1.08	-0.16	-207.86
TARGET CIRCLE 660'FSL & 660'FEL									
7,519.8	0.31	1.03	7,385.0	-1,309.8	12.6	1,309.7	1.08	0.88	-114.33
LEGAL BOX 400' X 400' 665'FSL & 661'FEL									
7,559.0	0.70	340.70	7,424.2	-1,309.4	12.5	1,309.3	1.08	0.99	-51.91
7,654.0	1.00	356.20	7,519.2	-1,308.1	12.3	1,308.0	0.40	0.32	16.32
7,749.0	1.10	5.90	7,614.2	-1,306.3	12.3	1,306.2	0.21	0.11	10.21
7,844.0	1.20	9.40	7,709.1	-1,304.4	12.6	1,304.3	0.13	0.11	3.68
7,972.0	1.30	15.40	7,837.1	-1,301.7	13.2	1,301.6	0.13	0.08	4.69
8,066.0	1.50	2.30	7,931.1	-1,299.4	13.5	1,299.3	0.40	0.21	-13.94
8,162.0	1.40	351.40	8,027.0	-1,297.0	13.4	1,296.9	0.31	-0.10	-11.35
8,257.0	1.40	355.40	8,122.0	-1,294.7	13.1	1,294.6	0.10	0.00	4.21
8,295.0	1.50	358.20	8,160.0	-1,293.8	13.1	1,293.7	0.32	0.26	7.37
8,345.0	1.50	358.20	8,210.0	-1,292.5	13.0	1,292.4	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____