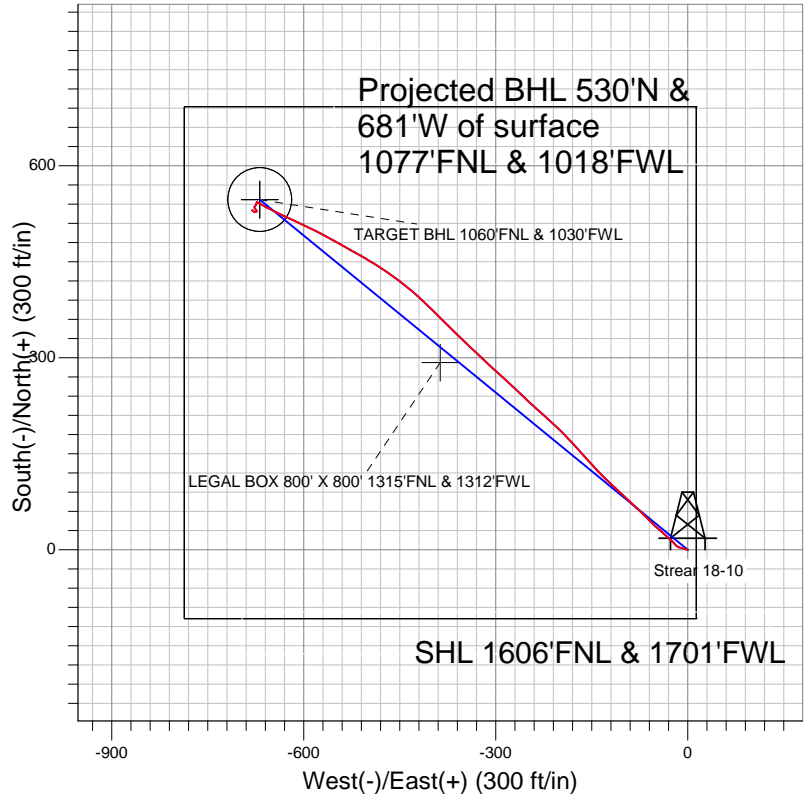


Anadarko, Weld County CO



LEGEND

- △ Strear 18-10, Wellbore #1, Plan #1 (8-23-11) V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
 7791'MD & 7677'TVD @ 863' VS
 0.7 deg Inc 298.6 deg AZ

Project: SEC.10-T2N-R67W
 Site: Strear 18-10-9F Pad Sec.10-T2N-R67W
 Well: Strear 18-10
 Plan: Wellbore #1



Anadarko, Weld County CO

SEC.10-T2N-R67W

Strear 18-10-9F Pad Sec.10-T2N-R67W

Strear 18-10

Wellbore #1

Survey: Survey #1

Standard Survey Report

26 September, 2011



Company:	Anadarko, Weld County CO	Local Co-ordinate Reference:	Well Strear 18-10
Project:	SEC.10-T2N-R67W	TVD Reference:	WELL @ 4957.0ft (Original Well Elev)
Site:	Strear 18-10-9F Pad Sec.10-T2N-R67W	MD Reference:	WELL @ 4957.0ft (Original Well Elev)
Well:	Strear 18-10	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.10-T2N-R67W, 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	Strear 18-10-9F Pad Sec.10-T2N-R67W				
Site Position:		Northing:	1,300,092.30ft	Latitude:	40.155484
From:	Lat/Long	Easting:	3,173,351.75ft	Longitude:	-104.879807
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.40 °

Well	Strear 18-10					
Well Position	+N/-S	0.0 ft	Northing:	1,300,092.29 ft	Latitude:	40.155484
	+E/-W	0.0 ft	Easting:	3,173,351.75 ft	Longitude:	-104.879807
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,942.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/30/2011	8.88	66.83	52,967

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 (°)	
	4,400.0	0.0	0.0	309.29	

Survey Program	Date	9/26/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
148.0	7,791.0	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	
148.0	0.50	288.70	148.0	0.2	-0.6	0.6	0.34	0.34	0.00	
236.0	0.60	282.20	236.0	0.4	-1.4	1.4	0.13	0.11	-7.39	
328.0	1.00	288.40	328.0	0.8	-2.7	2.6	0.44	0.43	6.74	
420.0	1.10	287.70	420.0	1.3	-4.3	4.1	0.11	0.11	-0.76	
512.0	1.30	282.20	511.9	1.8	-6.1	5.9	0.25	0.22	-5.98	
635.0	1.70	284.20	634.9	2.5	-9.3	8.8	0.33	0.33	1.63	
730.0	1.80	284.90	729.9	3.3	-12.1	11.4	0.11	0.11	0.74	
823.0	3.00	295.50	822.8	4.7	-15.7	15.1	1.37	1.29	11.40	
917.0	4.80	319.80	916.6	8.8	-20.4	21.4	2.56	1.91	25.85	
1,012.0	7.00	313.50	1,011.1	15.8	-27.2	31.0	2.41	2.32	-6.63	
1,107.0	8.70	311.00	1,105.2	24.5	-36.8	44.0	1.82	1.79	-2.63	
1,202.0	9.40	311.40	1,199.0	34.3	-48.1	58.9	0.74	0.74	0.42	

Company:	Anadarko, Weld County CO	Local Co-ordinate Reference:	Well Strear 18-10
Project:	SEC.10-T2N-R67W	TVD Reference:	WELL @ 4957.0ft (Original Well Elev)
Site:	Strear 18-10-9F Pad Sec.10-T2N-R67W	MD Reference:	WELL @ 4957.0ft (Original Well Elev)
Well:	Strear 18-10	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)	
1,298.0	12.20	315.30	1,293.3	46.7	-61.1	76.9	3.01	2.92	4.06	
1,393.0	14.00	313.90	1,385.8	61.8	-76.4	98.3	1.92	1.89	-1.47	
1,488.0	14.90	312.10	1,477.8	78.0	-93.8	121.9	1.06	0.95	-1.89	
1,583.0	15.40	313.70	1,569.5	94.9	-111.9	146.7	0.69	0.53	1.68	
1,678.0	15.40	313.70	1,661.1	112.3	-130.2	171.9	0.00	0.00	0.00	
1,773.0	15.70	318.10	1,752.6	130.6	-147.9	197.2	1.28	0.32	4.63	
1,868.0	16.80	318.40	1,843.8	150.4	-165.6	223.4	1.16	1.16	0.32	
1,964.0	16.70	316.70	1,935.7	170.8	-184.3	250.8	0.52	-0.10	-1.77	
2,059.0	17.30	313.90	2,026.6	190.6	-203.8	278.4	1.07	0.63	-2.95	
2,154.0	17.10	311.90	2,117.3	209.7	-224.4	306.4	0.66	-0.21	-2.11	
2,249.0	18.00	312.30	2,207.9	228.9	-245.6	335.0	0.96	0.95	0.42	
2,346.0	17.60	313.20	2,300.3	249.0	-267.4	364.6	0.50	-0.41	0.93	
2,442.0	17.20	312.60	2,391.9	268.6	-288.4	393.3	0.46	-0.42	-0.63	
2,537.0	16.80	312.50	2,482.7	287.3	-308.9	421.0	0.42	-0.42	-0.11	
2,632.0	16.20	313.30	2,573.8	305.7	-328.7	448.0	0.68	-0.63	0.84	
2,727.0	16.40	314.00	2,665.0	324.1	-347.9	474.5	0.30	0.21	0.74	
2,823.0	17.70	314.20	2,756.8	343.7	-368.2	502.6	1.36	1.35	0.21	
2,918.0	17.60	315.10	2,847.3	363.9	-388.7	531.3	0.31	-0.11	0.95	
3,013.0	18.40	314.00	2,937.7	384.5	-409.6	560.5	0.91	0.84	-1.16	
3,108.0	17.40	310.30	3,028.1	404.1	-431.2	589.6	1.59	-1.05	-3.89	
3,203.0	17.60	307.00	3,118.7	422.0	-453.5	618.2	1.07	0.21	-3.47	
3,298.0	17.60	303.30	3,209.2	438.5	-477.0	646.8	1.18	0.00	-3.89	
3,394.0	17.30	300.50	3,300.8	453.7	-501.4	675.4	0.93	-0.31	-2.92	
3,489.0	16.40	298.90	3,391.7	467.4	-525.3	702.5	1.07	-0.95	-1.68	
3,584.0	15.40	299.30	3,483.1	480.0	-548.1	728.1	1.06	-1.05	0.42	
3,679.0	13.50	298.60	3,575.1	491.5	-568.8	751.5	2.01	-2.00	-0.74	
3,774.0	12.50	295.70	3,667.6	501.3	-587.8	772.4	1.26	-1.05	-3.05	
3,869.0	10.50	292.60	3,760.7	509.1	-605.1	790.6	2.20	-2.11	-3.26	
3,964.0	10.10	297.30	3,854.2	516.2	-620.4	807.1	0.98	-0.42	4.95	
4,060.0	9.00	296.10	3,948.9	523.4	-634.7	822.6	1.16	-1.15	-1.25	
4,155.0	7.50	294.30	4,042.9	529.2	-647.0	835.8	1.60	-1.58	-1.89	
4,250.0	6.60	300.00	4,137.2	534.5	-657.4	847.2	1.20	-0.95	6.00	
4,345.0	4.70	300.10	4,231.7	539.2	-665.5	856.5	2.00	-2.00	0.11	
4,440.0	2.80	294.30	4,326.5	542.1	-671.0	862.5	2.04	-2.00	-6.11	
4,513.5	0.72	268.97	4,399.9	542.8	-673.1	864.6	2.95	-2.83	-34.47	
TARGET BHL 1060°FNL & 1030°FWL										
4,535.0	0.40	207.70	4,421.5	542.7	-673.2	864.7	2.95	-1.50	-284.72	
4,630.0	0.30	282.40	4,516.5	542.5	-673.6	864.9	0.45	-0.11	78.63	
4,726.0	0.40	323.90	4,612.4	542.8	-674.1	865.4	0.28	0.10	43.23	
4,821.0	0.30	326.30	4,707.4	543.3	-674.4	866.0	0.11	-0.11	2.53	
4,916.0	0.20	230.90	4,802.4	543.4	-674.7	866.3	0.40	-0.11	-100.42	
5,011.0	0.50	116.50	4,897.4	543.1	-674.4	865.9	0.64	0.32	-120.42	
5,106.0	0.40	143.00	4,992.4	542.6	-673.9	865.2	0.24	-0.11	27.89	
5,202.0	0.40	205.10	5,088.4	542.1	-673.8	864.7	0.43	0.00	64.69	
5,296.0	1.10	195.60	5,182.4	540.9	-674.2	864.3	0.75	0.74	-10.11	
5,391.0	0.40	191.30	5,277.4	539.7	-674.5	863.8	0.74	-0.74	-4.53	
5,486.0	0.40	205.20	5,372.4	539.1	-674.7	863.5	0.10	0.00	14.63	
5,581.0	0.80	213.00	5,467.4	538.2	-675.2	863.4	0.43	0.42	8.21	
5,676.0	0.70	227.20	5,562.4	537.3	-676.0	863.4	0.22	-0.11	14.95	
5,772.0	0.80	217.00	5,658.4	536.3	-676.8	863.5	0.17	0.10	-10.63	
5,867.0	0.60	189.90	5,753.4	535.3	-677.3	863.2	0.40	-0.21	-28.53	
5,962.0	0.90	165.00	5,848.4	534.1	-677.2	862.3	0.46	0.32	-26.21	
6,057.0	0.90	125.40	5,943.4	533.0	-676.4	861.0	0.64	0.00	-41.68	
6,152.0	0.90	143.20	6,038.4	531.9	-675.3	859.5	0.29	0.00	18.74	

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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)	
6,248.0	0.50	169.90	6,134.4	530.9	-674.8	858.5	0.53	-0.42	27.81	
6,343.0	0.40	79.70	6,229.4	530.6	-674.4	857.9	0.68	-0.11	-94.95	
6,438.0	0.40	164.60	6,324.4	530.3	-674.0	857.4	0.57	0.00	89.37	
6,533.0	0.40	155.70	6,419.3	529.7	-673.8	856.9	0.07	0.00	-9.37	
6,628.0	0.20	129.30	6,514.3	529.3	-673.5	856.4	0.25	-0.21	-27.79	
6,720.0	0.30	210.90	6,606.3	529.0	-673.5	856.2	0.36	0.11	88.70	
6,815.0	0.20	171.50	6,701.3	528.6	-673.6	856.1	0.20	-0.11	-41.47	
6,911.0	0.40	258.00	6,797.3	528.3	-673.9	856.1	0.45	0.21	90.10	
7,006.0	0.40	274.70	6,892.3	528.3	-674.6	856.6	0.12	0.00	17.58	
7,101.0	0.50	239.30	6,987.3	528.1	-675.3	857.0	0.30	0.11	-37.26	
7,196.0	0.40	256.00	7,082.3	527.8	-675.9	857.4	0.17	-0.11	17.58	
7,291.0	0.40	249.00	7,177.3	527.6	-676.6	857.7	0.05	0.00	-7.37	
7,362.1	0.31	274.98	7,248.4	527.6	-677.0	858.0	0.26	-0.13	36.54	
LEGAL BOX 800' X 800' 1315'FNL & 1312'FWL										
7,363.6	0.31	275.68	7,250.0	527.6	-677.0	858.0	0.26	-0.07	45.61	
TARGET CIRCLE 1060'FNL & 1030'FWL										
7,386.0	0.30	286.30	7,272.3	527.6	-677.1	858.1	0.26	-0.04	47.49	
7,482.0	0.90	311.00	7,368.3	528.1	-677.9	859.1	0.67	0.63	25.73	
7,577.0	0.60	316.80	7,463.3	529.0	-678.8	860.4	0.33	-0.32	6.11	
7,672.0	0.80	296.60	7,558.3	529.7	-679.8	861.5	0.33	0.21	-21.26	
7,741.0	0.70	298.60	7,627.3	530.1	-680.6	862.4	0.15	-0.14	2.90	
7,791.0	0.70	298.60	7,677.3	530.4	-681.1	863.0	0.00	0.00	0.00	

Checked By: _____ Approved By: _____ Date: _____