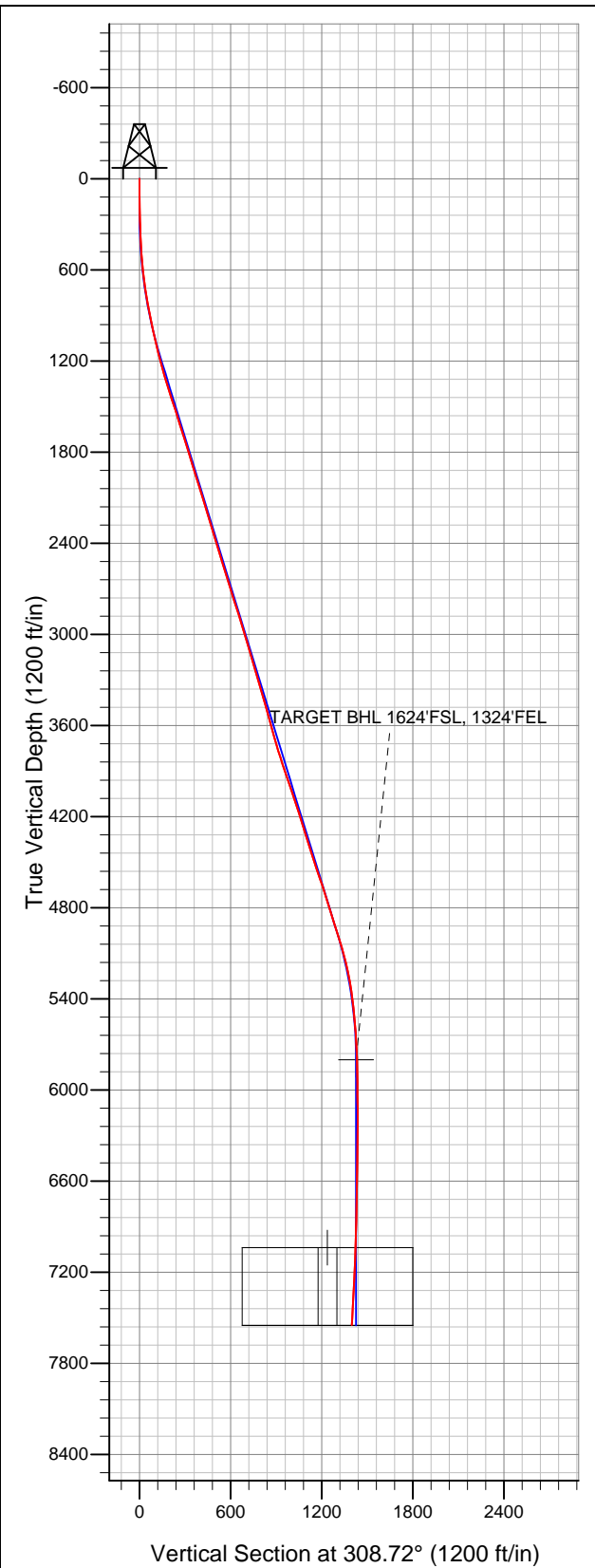




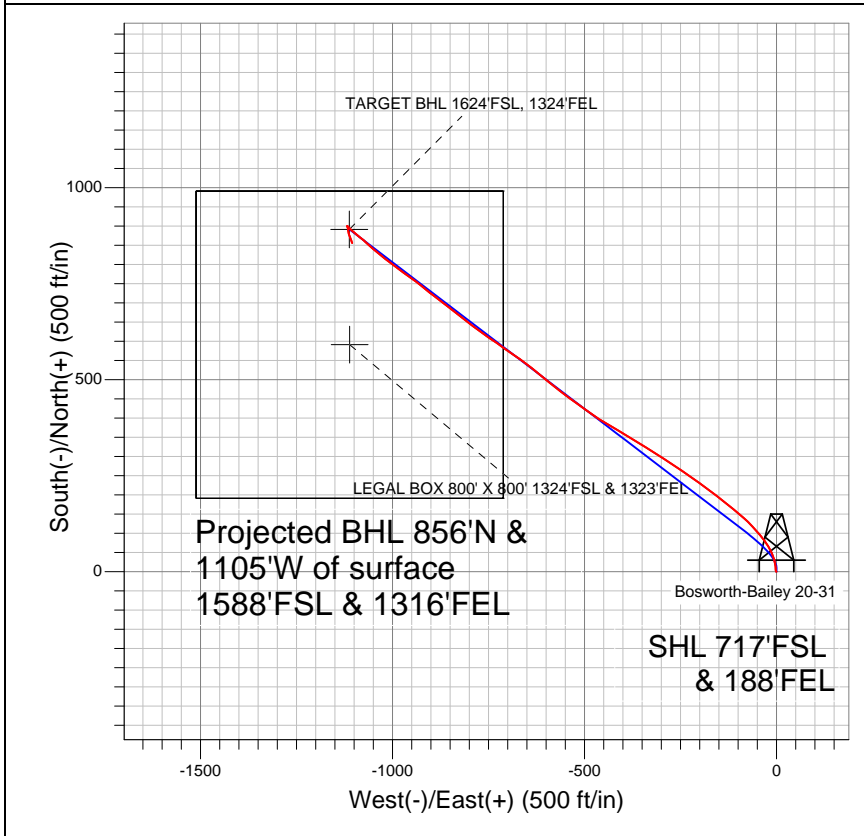
**Well Name: Bosworth-Bailey 20-31**

Surface Location: Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W  
 North American Datum 1983 US State Plane 1983Colorado Northern Zone  
 Ground Elevation: 4875.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1435057.14	3190775.04	40.525606	-104.813738	
		Original Well Elev	WELL @ 4885.0ft (Original Well Elev)			



**BAYSWATER EXPLORATION & PRODUCTION**



LEGEND

- Survey #1
- △ Bosworth-Bailey 20-31, Wellbore #1, Plan #1 (2-21-12) R V0
- Wellbore #1

**Final Survey Plot**

Projected Final Survey -  
 7752'MD & 7546'TVD @ 1398'VS  
 4.00 deg Inc 157.30 deg AZ

Project: SEC.31-T7N-R66W  
 Site: Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W  
 Well: Bosworth-Bailey 20-31  
 Plan: Wellbore #1



# **BAYSWATER EXPLORATION & PRODUCTION**

**SEC.31-T7N-R66W**

**Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W**

**Bosworth-Bailey 20-31**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**01 March, 2012**

<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well Bosworth-Bailey 20-31
<b>Project:</b>	SEC.31-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Site:</b>	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W	<b>MD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Well:</b>	Bosworth-Bailey 20-31	<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.31-T7N-R66W, 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

<b>Site</b>	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W				
<b>Site Position:</b>		<b>Northing:</b>	1,435,057.26 ft	<b>Latitude:</b>	40.525606
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,190,790.05 ft	<b>Longitude:</b>	-104.813684
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"	<b>Grid Convergence:</b>	0.44 °

<b>Well</b>	Bosworth-Bailey 20-31					
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	1,435,057.14 ft	<b>Latitude:</b>	40.525606
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	3,190,775.04 ft	<b>Longitude:</b>	-104.813738
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	4,875.0 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	2/21/2012	8.81	67.12	53,119

<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	308.72	

<b>Survey Program</b>	<b>Date</b>	3/1/2012		
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
98.0	7,752.0	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	
98.0	0.30	329.70	98.0	0.2	-0.1	0.2	0.31	0.31	0.00	
187.0	0.80	319.10	187.0	0.9	-0.7	1.1	0.57	0.56	-11.91	
278.0	1.70	345.00	278.0	2.7	-1.4	2.8	1.14	0.99	28.46	
369.0	3.30	354.50	368.9	6.6	-2.0	5.7	1.81	1.76	10.44	
461.0	5.00	354.10	460.6	13.2	-2.7	10.4	1.85	1.85	-0.43	
553.0	6.80	352.00	552.1	22.6	-3.9	17.1	1.97	1.96	-2.28	
645.0	8.40	343.70	643.3	34.4	-6.5	26.6	2.10	1.74	-9.02	
739.0	9.80	336.10	736.2	48.3	-11.7	39.3	1.96	1.49	-8.09	
833.0	11.20	328.90	828.6	63.5	-19.6	55.0	2.04	1.49	-7.66	
927.0	11.80	323.00	920.7	79.0	-30.1	72.9	1.40	0.64	-6.28	
991.0	11.90	322.50	983.3	89.4	-38.1	85.7	0.22	0.16	-0.78	

<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well Bosworth-Bailey 20-31
<b>Project:</b>	SEC.31-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Site:</b>	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W	<b>MD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Well:</b>	Bosworth-Bailey 20-31	<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)
1,084.0	13.10	320.30	1,074.1	105.1	-50.7	105.3	1.39	1.29	-2.37
1,178.0	14.70	315.50	1,165.4	121.9	-65.8	127.6	2.10	1.70	-5.11
1,272.0	15.60	311.60	1,256.1	138.8	-83.6	152.0	1.45	0.96	-4.15
1,366.0	17.60	310.50	1,346.2	156.4	-103.9	178.9	2.15	2.13	-1.17
1,459.0	18.00	309.00	1,434.7	174.5	-125.7	207.3	0.65	0.43	-1.61
1,553.0	17.50	307.90	1,524.3	192.4	-148.2	236.0	0.64	-0.53	-1.17
1,647.0	17.30	306.10	1,614.0	209.3	-170.6	264.0	0.61	-0.21	-1.91
1,740.0	17.80	305.50	1,702.6	225.7	-193.4	292.1	0.57	0.54	-0.65
1,834.0	17.30	304.70	1,792.3	242.0	-216.6	320.3	0.59	-0.53	-0.85
1,928.0	17.10	304.90	1,882.1	257.9	-239.4	348.1	0.22	-0.21	0.21
2,021.0	17.50	305.40	1,970.8	273.8	-262.0	375.7	0.46	0.43	0.54
2,115.0	17.00	304.80	2,060.6	289.8	-284.8	403.5	0.56	-0.53	-0.64
2,209.0	16.70	300.50	2,150.6	304.5	-307.7	430.6	1.36	-0.32	-4.57
2,302.0	17.20	300.80	2,239.5	318.3	-331.1	457.4	0.55	0.54	0.32
2,396.0	17.50	301.70	2,329.3	332.9	-355.0	485.2	0.43	0.32	0.96
2,490.0	16.70	301.80	2,419.1	347.4	-378.5	512.6	0.85	-0.85	0.11
2,584.0	16.80	301.00	2,509.1	361.5	-401.6	539.5	0.27	0.11	-0.85
2,677.0	17.40	300.30	2,598.0	375.5	-425.2	566.6	0.68	0.65	-0.75
2,771.0	17.00	301.50	2,687.8	389.7	-449.0	594.1	0.57	-0.43	1.28
2,865.0	18.00	304.30	2,777.5	405.1	-472.7	622.2	1.39	1.06	2.98
2,958.0	18.20	305.90	2,865.9	421.7	-496.4	651.1	0.58	0.22	1.72
3,052.0	16.60	305.10	2,955.6	438.0	-519.2	679.1	1.72	-1.70	-0.85
3,146.0	16.40	306.80	3,045.7	453.7	-540.9	705.8	0.56	-0.21	1.81
3,239.0	16.80	308.20	3,134.8	469.9	-561.9	732.4	0.61	0.43	1.51
3,333.0	16.80	308.20	3,224.8	486.7	-583.3	759.5	0.00	0.00	0.00
3,427.0	15.80	310.30	3,315.0	503.4	-603.7	785.9	1.23	-1.06	2.23
3,520.0	15.40	309.10	3,404.6	519.3	-623.0	810.9	0.55	-0.43	-1.29
3,614.0	15.80	307.90	3,495.1	535.1	-642.7	836.2	0.55	0.43	-1.28
3,708.0	15.80	304.50	3,585.6	550.2	-663.4	861.7	0.98	0.00	-3.62
3,801.0	15.40	306.00	3,675.2	564.6	-683.8	886.7	0.61	-0.43	1.61
3,895.0	17.00	305.10	3,765.4	579.9	-705.2	912.9	1.72	1.70	-0.96
3,989.0	18.30	304.50	3,855.0	596.1	-728.6	941.3	1.40	1.38	-0.64
4,083.0	19.20	303.90	3,944.0	613.1	-753.6	971.4	0.98	0.96	-0.64
4,176.0	19.20	307.10	4,031.8	630.9	-778.4	1,002.0	1.13	0.00	3.44
4,270.0	17.90	307.50	4,120.9	649.0	-802.2	1,031.9	1.39	-1.38	0.43
4,364.0	16.80	308.30	4,210.7	666.2	-824.4	1,059.9	1.20	-1.17	0.85
4,457.0	17.70	307.50	4,299.5	683.1	-846.1	1,087.5	1.00	0.97	-0.86
4,551.0	17.70	307.60	4,389.0	700.5	-868.8	1,116.0	0.03	0.00	0.11
4,645.0	18.00	307.50	4,478.5	718.1	-891.6	1,144.8	0.32	0.32	-0.11
4,738.0	19.10	309.80	4,566.7	736.6	-914.7	1,174.4	1.42	1.18	2.47
4,832.0	17.80	307.60	4,655.8	755.2	-937.9	1,204.2	1.57	-1.38	-2.34
4,926.0	17.50	304.50	4,745.4	772.0	-960.9	1,232.6	1.05	-0.32	-3.30
5,019.0	17.70	306.10	4,834.1	788.2	-983.9	1,260.7	0.56	0.22	1.72
5,113.0	17.50	308.30	4,923.7	805.4	-1,006.5	1,289.1	0.74	-0.21	2.34
5,207.0	17.00	308.50	5,013.4	822.7	-1,028.4	1,317.0	0.54	-0.53	0.21
5,301.0	15.60	311.40	5,103.7	839.6	-1,048.6	1,343.3	1.72	-1.49	3.09
5,394.0	12.60	312.00	5,193.9	854.7	-1,065.5	1,366.0	3.23	-3.23	0.65
5,488.0	10.00	309.30	5,286.0	866.7	-1,079.5	1,384.4	2.82	-2.77	-2.87
5,582.0	7.60	309.30	5,378.9	875.8	-1,090.6	1,398.7	2.55	-2.55	0.00
5,675.0	5.80	311.80	5,471.3	882.9	-1,098.9	1,409.6	1.96	-1.94	2.69
5,769.0	4.50	311.60	5,564.9	888.5	-1,105.2	1,418.0	1.38	-1.38	-0.21
5,863.0	4.20	315.90	5,658.6	893.4	-1,110.3	1,425.1	0.47	-0.32	4.57
5,956.0	2.50	316.10	5,751.5	897.3	-1,114.1	1,430.5	1.83	-1.83	0.22

<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well Bosworth-Bailey 20-31
<b>Project:</b>	SEC.31-T7N-R66W	<b>TVD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Site:</b>	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W	<b>MD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Well:</b>	Bosworth-Bailey 20-31	<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)	
6,004.4	1.62	316.61	5,799.8	898.6	-1,115.3	1,432.2	1.81	-1.81	1.05	
<b>TARGET BHL 1624'FSL, 1324'FEL</b>										
6,050.0	0.80	318.10	5,845.4	899.3	-1,116.0	1,433.2	1.81	-1.81	3.27	
6,144.0	0.70	309.20	5,939.4	900.1	-1,116.8	1,434.4	0.16	-0.11	-9.47	
6,237.0	0.40	300.50	6,032.4	900.6	-1,117.6	1,435.3	0.33	-0.32	-9.35	
6,331.0	0.10	289.60	6,126.4	900.8	-1,117.9	1,435.7	0.32	-0.32	-11.60	
6,425.0	0.10	206.70	6,220.4	900.8	-1,118.0	1,435.8	0.14	0.00	-88.19	
6,518.0	0.40	158.80	6,313.4	900.4	-1,117.9	1,435.5	0.37	0.32	-51.51	
6,612.0	0.60	162.40	6,407.4	899.6	-1,117.7	1,434.8	0.22	0.21	3.83	
6,706.0	0.80	155.20	6,501.4	898.6	-1,117.3	1,433.8	0.23	0.21	-7.66	
6,800.0	1.20	162.50	6,595.4	897.0	-1,116.7	1,432.4	0.45	0.43	7.77	
6,893.0	1.50	167.30	6,688.3	894.9	-1,116.1	1,430.6	0.34	0.32	5.16	
6,987.0	1.60	169.30	6,782.3	892.4	-1,115.6	1,428.6	0.12	0.11	2.13	
7,081.0	2.00	173.80	6,876.3	889.5	-1,115.2	1,426.5	0.45	0.43	4.79	
7,174.0	2.20	171.10	6,969.2	886.1	-1,114.7	1,424.0	0.24	0.22	-2.90	
7,254.6	2.45	167.13	7,049.7	882.9	-1,114.1	1,421.5	0.37	0.31	-4.93	
<b>LEGAL BOX 800' X 800' 1324'FSL &amp; 1323'FEL</b>										
7,269.0	2.50	166.50	7,064.1	882.3	-1,114.0	1,421.0	0.37	0.32	-4.34	
7,362.0	2.70	163.60	7,157.0	878.2	-1,112.9	1,417.6	0.26	0.22	-3.12	
7,455.0	3.00	159.60	7,249.9	873.9	-1,111.4	1,413.8	0.39	0.32	-4.30	
7,549.0	3.50	158.80	7,343.8	868.9	-1,109.5	1,409.2	0.53	0.53	-0.85	
7,643.0	3.80	160.60	7,437.6	863.3	-1,107.4	1,404.0	0.34	0.32	1.91	
7,710.0	4.00	157.30	7,504.4	859.0	-1,105.8	1,400.1	0.45	0.30	-4.93	
7,752.0	4.00	157.30	7,546.3	856.3	-1,104.7	1,397.5	0.00	0.00	0.00	

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