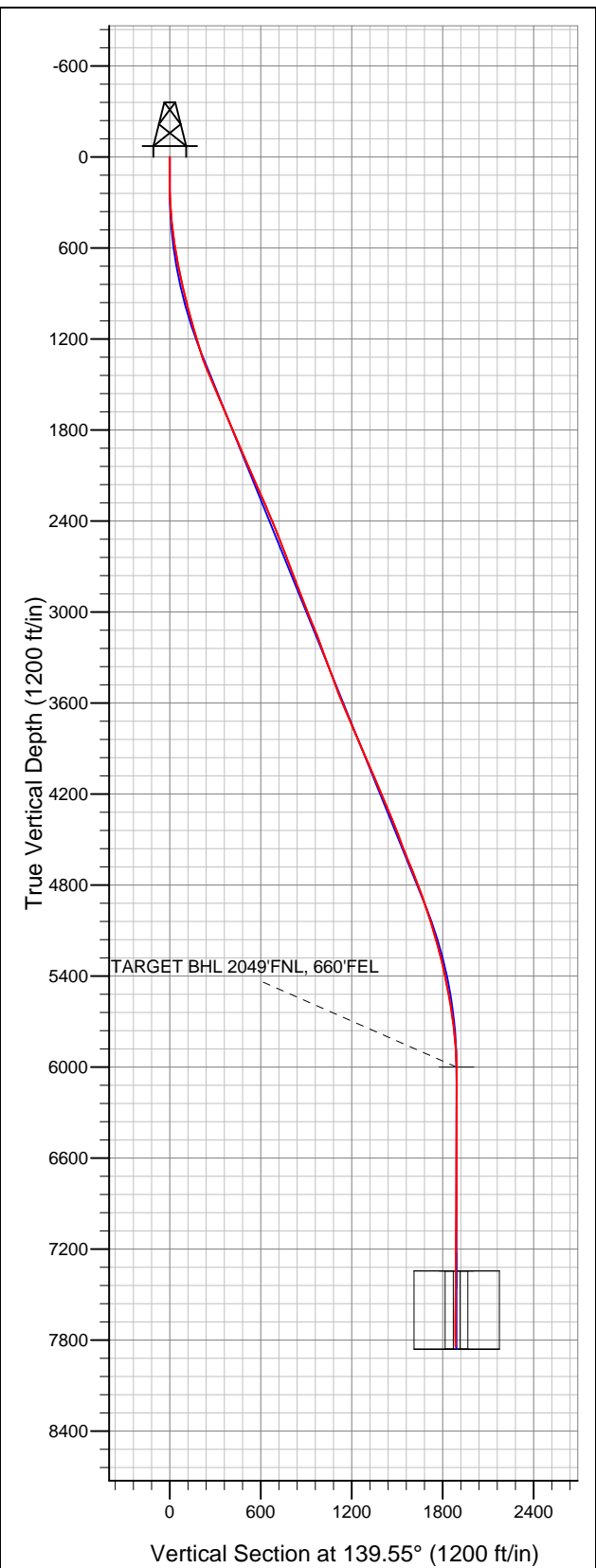


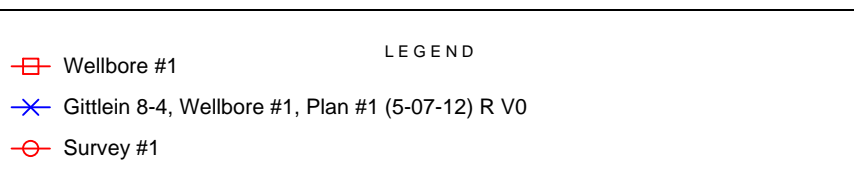
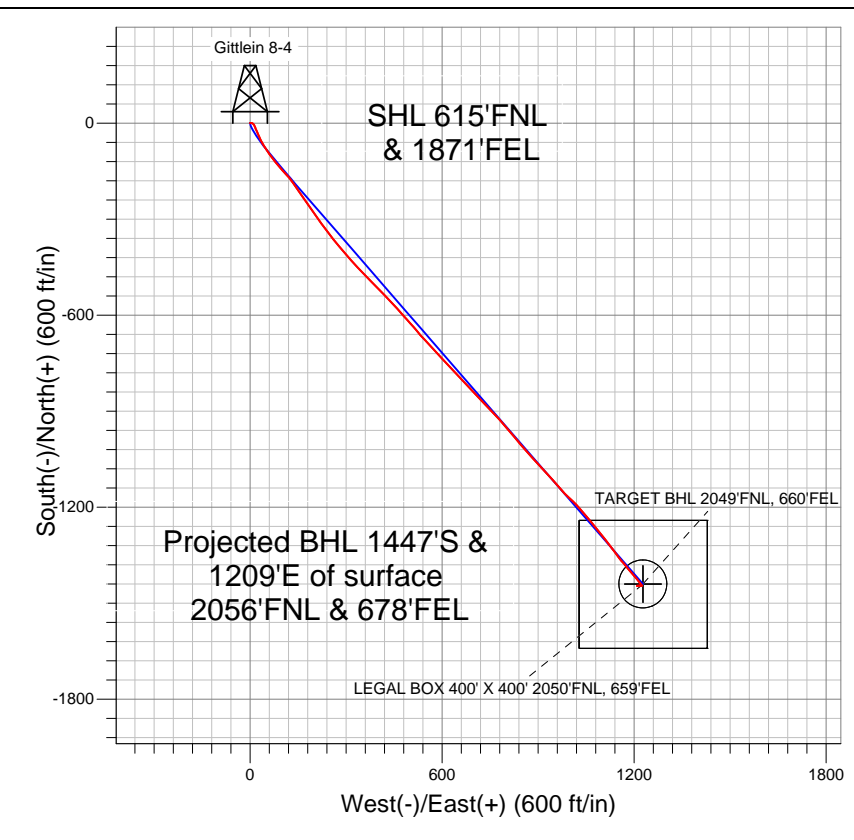
# Well Name: Gittlein 8-4

Surface Location: Gittlein 7-4 Pad Sec.4-T1N-R67W  
 North American Datum 1983 US State Plane 1983Colorado Northern Zone  
 Ground Elevation: 5006.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1274703.09	3169800.88	40.085856	-104.893132	
Original Well Elev			WELL @ 5018.0ft (Original Well Elev)			



## BAYSWATER EXPLORATION & PRODUCTION



## Final Survey Plot

Projected Final Survey -  
 8182'MD & 7843'TVD @ 1885'VS  
 0.50 deg Inc 180.70 deg AZ

Project: SEC.4-T1N-R67W  
 Site: Gittlein 7-4 Pad Sec.4-T1N-R67W  
 Well: Gittlein 8-4  
 Plan: Wellbore #1



# **BAYSWATER EXPLORATION & PRODUCTION**

**SEC.4-T1N-R67W**

**Gittlein 7-4 Pad Sec.4-T1N-R67W**

**Gittlein 8-4**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**17 May, 2012**

<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well Gittlein 8-4
<b>Project:</b>	SEC.4-T1N-R67W	<b>TVD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Site:</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W	<b>MD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Well:</b>	Gittlein 8-4	<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.4-T1N-R67W, Weld County, CO		
<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		Gittlein 7-4 Pad Sec.4-T1N-R67W			
Site Position:		Northing:	1,274,703.06ft	Latitude:	40.085857
From:	Lat/Long	Easting:	3,169,740.73ft	Longitude:	-104.893347
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.39 °

Well	Gittlein 8-4					
Well Position	+N/-S	0.0 ft	Northing:	1,274,703.09 ft	Latitude:	40.085856
	+E/-W	0.0 ft	Easting:	3,169,800.88 ft	Longitude:	-104.893132
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,006.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/7/2012	8.78	66.74	52,856

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 (°)
	6,000.0	0.0	0.0	139.55

Survey Program		Date	5/17/2012	
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
99.0	8,182.0	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
	99.0	0.60	40.70	99.0	0.4	0.3	-0.1	0.61	0.61	0.00
	186.0	1.10	67.80	186.0	1.1	1.4	0.1	0.72	0.57	31.15
	277.0	3.30	105.70	276.9	0.7	4.7	2.6	2.77	2.42	41.65
	368.0	4.50	132.10	367.7	-2.4	9.9	8.3	2.34	1.32	29.01
	459.0	6.50	156.40	458.3	-9.5	14.6	16.7	3.33	2.20	26.70
	551.0	8.60	158.30	549.5	-20.7	19.3	28.2	2.30	2.28	2.07
	642.0	10.20	156.60	639.3	-34.4	25.0	42.4	1.78	1.76	-1.87
	736.0	11.40	153.50	731.6	-50.4	32.4	59.4	1.42	1.28	-3.30
	829.0	13.30	150.30	822.5	-67.9	41.8	78.8	2.17	2.04	-3.44
	876.0	13.30	147.20	868.2	-77.1	47.4	89.5	1.52	0.00	-6.60
	895.0	13.90	145.90	886.7	-80.9	49.9	93.9	3.54	3.16	-6.84

<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well Gittlein 8-4
<b>Project:</b>	SEC.4-T1N-R67W	<b>TVD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Site:</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W	<b>MD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Well:</b>	Gittlein 8-4	<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)
989.0	14.20	145.40	977.8	-99.7	62.8	116.6	0.34	0.32	-0.53
1,082.0	15.10	141.00	1,067.8	-118.5	76.9	140.1	1.54	0.97	-4.73
1,176.0	16.10	139.60	1,158.4	-137.9	93.0	165.3	1.14	1.06	-1.49
1,270.0	17.10	137.10	1,248.4	-158.0	110.9	192.2	1.31	1.06	-2.66
1,363.0	19.40	142.00	1,336.8	-180.2	129.7	221.3	2.97	2.47	5.27
1,457.0	22.50	146.80	1,424.5	-207.6	149.2	254.7	3.77	3.30	5.11
1,551.0	23.80	145.70	1,511.0	-238.3	169.7	291.4	1.46	1.38	-1.17
1,644.0	24.10	145.00	1,596.0	-269.3	191.2	329.0	0.44	0.32	-0.75
1,738.0	23.30	144.00	1,682.0	-300.1	213.1	366.6	0.95	-0.85	-1.06
1,832.0	23.00	143.40	1,768.5	-329.9	235.0	403.5	0.41	-0.32	-0.64
1,925.0	22.20	141.90	1,854.3	-358.3	256.7	439.2	1.06	-0.86	-1.61
2,019.0	22.70	139.20	1,941.2	-386.0	279.5	475.0	1.22	0.53	-2.87
2,113.0	23.90	140.10	2,027.5	-414.3	303.5	512.2	1.33	1.28	0.96
2,206.0	24.60	135.90	2,112.3	-442.7	329.1	550.4	2.00	0.75	-4.52
2,300.0	23.80	137.60	2,198.1	-470.7	355.5	588.9	1.13	-0.85	1.81
2,394.0	23.20	134.90	2,284.3	-497.8	381.4	626.3	1.31	-0.64	-2.87
2,488.0	23.00	136.10	2,370.8	-524.1	407.2	663.1	0.54	-0.21	1.28
2,581.0	22.90	136.20	2,456.4	-550.3	432.4	699.3	0.12	-0.11	0.11
2,675.0	21.00	138.00	2,543.6	-576.0	456.3	734.4	2.14	-2.02	1.91
2,769.0	20.70	139.00	2,631.4	-601.0	478.5	767.8	0.50	-0.32	1.06
2,862.0	20.00	136.60	2,718.6	-625.0	500.2	800.1	1.17	-0.75	-2.58
2,956.0	21.00	140.30	2,806.7	-649.6	522.0	833.0	1.74	1.06	3.94
3,050.0	22.00	137.50	2,894.1	-675.6	544.6	867.5	1.52	1.06	-2.98
3,143.0	22.00	136.60	2,980.4	-701.1	568.4	902.3	0.36	0.00	-0.97
3,237.0	22.00	137.00	3,067.5	-726.8	592.5	937.4	0.16	0.00	0.43
3,331.0	20.80	137.60	3,155.0	-752.0	615.7	971.7	1.30	-1.28	0.64
3,424.0	20.30	136.90	3,242.1	-775.9	637.9	1,004.3	0.60	-0.54	-0.75
3,518.0	20.60	136.90	3,330.2	-799.9	660.3	1,037.1	0.32	0.32	0.00
3,612.0	20.20	137.10	3,418.3	-823.9	682.7	1,069.9	0.43	-0.43	0.21
3,706.0	20.50	136.80	3,506.4	-847.8	705.0	1,102.5	0.34	0.32	-0.32
3,799.0	22.10	135.40	3,593.1	-872.1	728.4	1,136.2	1.81	1.72	-1.51
3,893.0	23.50	136.20	3,679.7	-898.2	753.8	1,172.6	1.53	1.49	0.85
3,987.0	23.60	138.50	3,765.9	-925.8	779.3	1,210.1	0.98	0.11	2.45
4,080.0	23.10	139.20	3,851.3	-953.6	803.5	1,247.0	0.61	-0.54	0.75
4,174.0	23.10	141.50	3,937.7	-982.0	827.1	1,283.8	0.96	0.00	2.45
4,268.0	23.00	139.60	4,024.2	-1,010.4	850.4	1,320.6	0.80	-0.11	-2.02
4,361.0	23.60	137.10	4,109.7	-1,037.9	874.9	1,357.4	1.24	0.65	-2.69
4,455.0	23.50	135.90	4,195.8	-1,065.1	900.7	1,394.9	0.52	-0.11	-1.28
4,549.0	23.00	138.30	4,282.2	-1,092.3	926.0	1,432.0	1.14	-0.53	2.55
4,642.0	22.40	140.10	4,368.0	-1,119.4	949.4	1,467.9	0.99	-0.65	1.94
4,736.0	20.30	137.50	4,455.5	-1,145.2	972.0	1,502.1	2.45	-2.23	-2.77
4,830.0	21.30	133.10	4,543.4	-1,168.9	995.4	1,535.3	1.97	1.06	-4.68
4,924.0	21.30	136.20	4,631.0	-1,192.9	1,019.7	1,569.3	1.20	0.00	3.30
5,017.0	22.10	140.30	4,717.4	-1,218.5	1,042.6	1,603.7	1.84	0.86	4.41
5,111.0	21.60	140.80	4,804.7	-1,245.6	1,064.8	1,638.7	0.57	-0.53	0.53
5,205.0	20.00	140.30	4,892.5	-1,271.3	1,086.0	1,672.0	1.71	-1.70	-0.53
5,298.0	17.60	141.50	4,980.6	-1,294.6	1,104.9	1,702.0	2.61	-2.58	1.29
5,392.0	16.50	143.60	5,070.4	-1,316.4	1,121.7	1,729.5	1.34	-1.17	2.23
5,486.0	16.20	143.40	5,160.6	-1,337.7	1,137.4	1,755.9	0.32	-0.32	-0.21
5,579.0	14.90	141.50	5,250.2	-1,357.5	1,152.6	1,780.8	1.50	-1.40	-2.04
5,673.0	13.20	139.90	5,341.4	-1,375.2	1,167.1	1,803.6	1.85	-1.81	-1.70
5,767.0	11.30	140.30	5,433.3	-1,390.5	1,179.9	1,823.6	2.02	-2.02	0.43
5,860.0	10.30	138.70	5,524.6	-1,403.7	1,191.2	1,841.0	1.12	-1.08	-1.72

<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well Gittlein 8-4
<b>Project:</b>	SEC.4-T1N-R67W	<b>TVD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Site:</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W	<b>MD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Well:</b>	Gittlein 8-4	<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)
5,954.0	9.00	140.10	5,617.3	-1,415.7	1,201.4	1,856.8	1.41	-1.38	1.49
6,048.0	7.10	140.30	5,710.4	-1,425.8	1,209.9	1,869.9	2.02	-2.02	0.21
6,141.0	5.40	142.20	5,802.8	-1,433.7	1,216.2	1,880.0	1.84	-1.83	2.04
6,235.0	4.00	144.70	5,896.5	-1,439.8	1,220.8	1,887.7	1.50	-1.49	2.66
6,329.0	2.10	141.50	5,990.3	-1,443.8	1,223.8	1,892.7	2.03	-2.02	-3.40
6,338.6	1.89	143.67	5,999.9	-1,444.1	1,224.0	1,893.0	2.37	-2.23	22.64
<b>TARGET BHL 2049'FNL, 660'FEL</b>									
6,423.0	0.70	232.60	6,084.3	-1,445.5	1,224.4	1,894.4	2.37	-1.40	105.37
6,516.0	0.90	271.10	6,177.3	-1,445.9	1,223.2	1,893.9	0.60	0.22	41.40
6,610.0	0.60	289.20	6,271.3	-1,445.7	1,222.0	1,893.0	0.40	-0.32	19.26
6,704.0	0.50	311.30	6,365.3	-1,445.3	1,221.2	1,892.1	0.25	-0.11	23.51
6,797.0	0.20	315.20	6,458.3	-1,444.9	1,220.8	1,891.6	0.32	-0.32	4.19
6,891.0	0.20	241.50	6,552.3	-1,444.8	1,220.6	1,891.4	0.26	0.00	-78.40
6,985.0	0.40	286.30	6,646.3	-1,444.8	1,220.1	1,891.1	0.31	0.21	47.66
7,078.0	0.30	271.80	6,739.3	-1,444.7	1,219.6	1,890.6	0.14	-0.11	-15.59
7,172.0	0.40	256.10	6,833.3	-1,444.8	1,219.0	1,890.3	0.15	0.11	-16.70
7,266.0	0.40	244.50	6,927.3	-1,445.0	1,218.4	1,890.1	0.09	0.00	-12.34
7,359.0	0.50	244.30	7,020.3	-1,445.3	1,217.7	1,889.9	0.11	0.11	-0.22
7,453.0	0.80	258.00	7,114.3	-1,445.7	1,216.7	1,889.5	0.36	0.32	14.57
7,547.0	1.00	294.10	7,208.3	-1,445.5	1,215.3	1,888.4	0.63	0.21	38.40
7,641.0	1.00	295.70	7,302.3	-1,444.8	1,213.8	1,886.9	0.03	0.00	1.70
7,682.5	0.80	258.65	7,343.8	-1,444.7	1,213.2	1,886.5	1.45	-0.48	-89.21
<b>LEGAL BOX 400' X 400' 2050'FNL, 659'FEL - TARGET CIRCLE 2049'FNL &amp; 660'FEL</b>									
7,734.0	1.10	215.90	7,395.2	-1,445.1	1,212.6	1,886.4	1.45	0.58	-83.06
7,828.0	0.70	303.20	7,489.2	-1,445.6	1,211.6	1,886.1	1.36	-0.43	92.87
7,922.0	0.70	266.70	7,583.2	-1,445.3	1,210.5	1,885.2	0.47	0.00	-38.83
8,015.0	0.40	259.50	7,676.2	-1,445.4	1,209.6	1,884.7	0.33	-0.32	-7.74
8,109.0	0.50	187.30	7,770.2	-1,445.8	1,209.2	1,884.8	0.57	0.11	-76.81
8,140.0	0.50	180.70	7,801.2	-1,446.1	1,209.2	1,885.0	0.19	0.00	-21.29
8,182.0	0.50	180.70	7,843.2	-1,446.5	1,209.2	1,885.2	0.00	0.00	0.00

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