

### Well Name: Gittlein 7-4

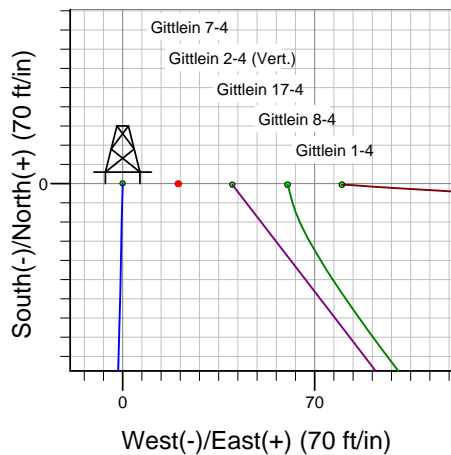
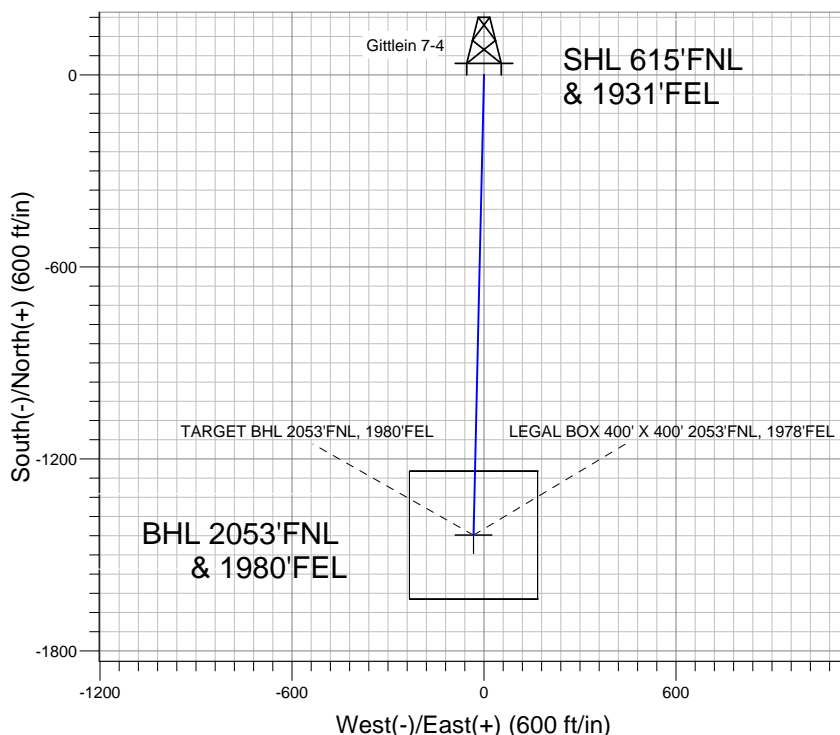
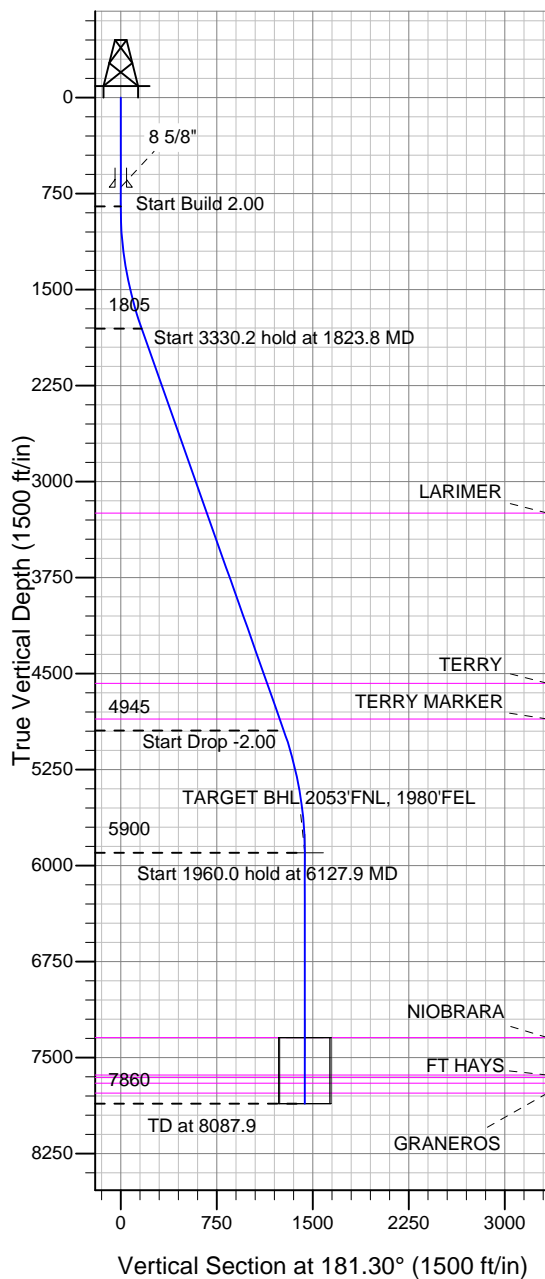
Surface Location: Gittlein 7-4 Pad Sec.4-T1N-R67W  
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 5006.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1274703.05	3169740.73	40.085857	-104.893347	

Original Well Elev WELL @ 5018.0ft (Original Well Elev)

## BAYSWATER EXPLORATION & PRODUCTION



Gittlein 7-4 Pad Sec.4-T1N-R67W  
Gittlein 7-4  
Plan #1 (11-28-11)  
12:46, December 01 2011



Azimuths to True North  
Magnetic North: 8.84°  
Magnetic Field  
Strength: 52902.6snT  
Dip Angle: 66.76°  
Date: 11/28/2011  
Model: IGRF2010

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2053'FNL, 1980'FEL	5900.0	-1437.8	-32.7	40.081910	-104.893464	Point
LEGAL BOX 400' X 400' 2053'FNL, 1978'FEL	7344.0	-1437.8	-32.7	40.081910	-104.893464	Rectangle (Sides: L400.0 W400.0)

### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	850.0	0.00	0.00	850.0	0.0	0.0	0.00	0.00	0.0	
3	1823.8	19.48	181.30	1805.2	-163.9	-3.7	2.00	181.30	163.9	
4	5154.0	19.48	181.30	4944.8	-1274.0	-29.0	0.00	0.00	1274.3	
5	6127.9	0.00	0.00	5900.0	-1437.8	-32.7	2.00	180.00	1438.2	TARGET BHL 2053'FNL, 1980'FEL
6	8087.9	0.00	0.00	7860.0	-1437.8	-32.7	0.00	0.00	1438.2	



# **BAYSWATER EXPLORATION & PRODUCTION**

**SEC.4-T1N-R67W**

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

**Gittlein 7-4**

**Wellbore #1**

**Plan: Plan #1 (11-28-11)**

## **Standard Planning Report**

**01 December, 2011**

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Gittlein 7-4
<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>TVD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T1N-R67W	<b>MD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Site:</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Gittlein 7-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-28-11)		

<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

<b>Site</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W		
<b>Site Position:</b>		<b>Northing:</b>	1,274,703.06ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,169,740.73ft
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	40.085857
		<b>Longitude:</b>	-104.893347
		<b>Grid Convergence:</b>	0.39 °

<b>Well</b>	Gittlein 7-4		
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>
			ft
			<b>Latitude:</b>
			<b>Longitude:</b>
			<b>Ground Level:</b>
			5,006.0 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	11/28/2011	8.84	66.76	52,903

<b>Design</b>	Plan #1 (11-28-11)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<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	181.30

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
850.0	0.00	0.00	850.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,823.8	19.48	181.30	1,805.2	-163.9	-3.7	2.00	2.00	0.00	181.30	
5,154.0	19.48	181.30	4,944.8	-1,274.0	-29.0	0.00	0.00	0.00	0.00	
6,127.9	0.00	0.00	5,900.0	-1,437.8	-32.7	2.00	-2.00	0.00	180.00	TARGET BHL 2053
8,087.9	0.00	0.00	7,860.0	-1,437.8	-32.7	0.00	0.00	0.00	0.00	

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Gittlein 7-4
<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>TVD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T1N-R67W	<b>MD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Site:</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Gittlein 7-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-28-11)		

Planned 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
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
8 5/8"									
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
850.0	0.00	0.00	850.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.60	181.30	880.0	-0.2	0.0	0.2	2.00	2.00	0.00
920.0	1.40	181.30	920.0	-0.9	0.0	0.9	2.00	2.00	0.00
960.0	2.20	181.30	960.0	-2.1	0.0	2.1	2.00	2.00	0.00
1,000.0	3.00	181.30	999.9	-3.9	-0.1	3.9	2.00	2.00	0.00
1,040.0	3.80	181.30	1,039.9	-6.3	-0.1	6.3	2.00	2.00	0.00
1,080.0	4.60	181.30	1,079.8	-9.2	-0.2	9.2	2.00	2.00	0.00
1,120.0	5.40	181.30	1,119.6	-12.7	-0.3	12.7	2.00	2.00	0.00
1,160.0	6.20	181.30	1,159.4	-16.8	-0.4	16.8	2.00	2.00	0.00
1,200.0	7.00	181.30	1,199.1	-21.3	-0.5	21.4	2.00	2.00	0.00
1,240.0	7.80	181.30	1,238.8	-26.5	-0.6	26.5	2.00	2.00	0.00
1,280.0	8.60	181.30	1,278.4	-32.2	-0.7	32.2	2.00	2.00	0.00
1,320.0	9.40	181.30	1,317.9	-38.5	-0.9	38.5	2.00	2.00	0.00
1,360.0	10.20	181.30	1,357.3	-45.3	-1.0	45.3	2.00	2.00	0.00
1,400.0	11.00	181.30	1,396.6	-52.6	-1.2	52.6	2.00	2.00	0.00
1,440.0	11.80	181.30	1,435.8	-60.5	-1.4	60.5	2.00	2.00	0.00
1,480.0	12.60	181.30	1,474.9	-69.0	-1.6	69.0	2.00	2.00	0.00
1,520.0	13.40	181.30	1,513.9	-78.0	-1.8	78.0	2.00	2.00	0.00
1,560.0	14.20	181.30	1,552.8	-87.5	-2.0	87.5	2.00	2.00	0.00
1,600.0	15.00	181.30	1,591.5	-97.6	-2.2	97.6	2.00	2.00	0.00
1,640.0	15.80	181.30	1,630.0	-108.2	-2.5	108.2	2.00	2.00	0.00
1,680.0	16.60	181.30	1,668.4	-119.4	-2.7	119.4	2.00	2.00	0.00
1,720.0	17.40	181.30	1,706.7	-131.1	-3.0	131.1	2.00	2.00	0.00
1,760.0	18.20	181.30	1,744.8	-143.3	-3.3	143.3	2.00	2.00	0.00
1,800.0	19.00	181.30	1,782.7	-156.0	-3.6	156.1	2.00	2.00	0.00
1,823.8	19.48	181.30	1,805.2	-163.9	-3.7	163.9	2.00	2.00	0.00
1,840.0	19.48	181.30	1,820.4	-169.3	-3.9	169.3	0.00	0.00	0.00
1,880.0	19.48	181.30	1,858.1	-182.6	-4.2	182.7	0.00	0.00	0.00
1,920.0	19.48	181.30	1,895.9	-195.9	-4.5	196.0	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Gittlein 7-4
<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>TVD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T1N-R67W	<b>MD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Site:</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Gittlein 7-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-28-11)		

Planned 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)
1,960.0	19.48	181.30	1,933.6	-209.3	-4.8	209.3	0.00	0.00	0.00
2,000.0	19.48	181.30	1,971.3	-222.6	-5.1	222.7	0.00	0.00	0.00
2,040.0	19.48	181.30	2,009.0	-235.9	-5.4	236.0	0.00	0.00	0.00
2,080.0	19.48	181.30	2,046.7	-249.3	-5.7	249.3	0.00	0.00	0.00
2,120.0	19.48	181.30	2,084.4	-262.6	-6.0	262.7	0.00	0.00	0.00
2,160.0	19.48	181.30	2,122.1	-275.9	-6.3	276.0	0.00	0.00	0.00
2,200.0	19.48	181.30	2,159.8	-289.3	-6.6	289.4	0.00	0.00	0.00
2,240.0	19.48	181.30	2,197.5	-302.6	-6.9	302.7	0.00	0.00	0.00
2,280.0	19.48	181.30	2,235.3	-315.9	-7.2	316.0	0.00	0.00	0.00
2,320.0	19.48	181.30	2,273.0	-329.3	-7.5	329.4	0.00	0.00	0.00
2,360.0	19.48	181.30	2,310.7	-342.6	-7.8	342.7	0.00	0.00	0.00
2,400.0	19.48	181.30	2,348.4	-355.9	-8.1	356.0	0.00	0.00	0.00
2,440.0	19.48	181.30	2,386.1	-369.3	-8.4	369.4	0.00	0.00	0.00
2,480.0	19.48	181.30	2,423.8	-382.6	-8.7	382.7	0.00	0.00	0.00
2,520.0	19.48	181.30	2,461.5	-395.9	-9.0	396.0	0.00	0.00	0.00
2,560.0	19.48	181.30	2,499.2	-409.3	-9.3	409.4	0.00	0.00	0.00
2,600.0	19.48	181.30	2,536.9	-422.6	-9.6	422.7	0.00	0.00	0.00
2,640.0	19.48	181.30	2,574.6	-435.9	-9.9	436.1	0.00	0.00	0.00
2,680.0	19.48	181.30	2,612.4	-449.3	-10.2	449.4	0.00	0.00	0.00
2,720.0	19.48	181.30	2,650.1	-462.6	-10.5	462.7	0.00	0.00	0.00
2,760.0	19.48	181.30	2,687.8	-475.9	-10.8	476.1	0.00	0.00	0.00
2,800.0	19.48	181.30	2,725.5	-489.3	-11.1	489.4	0.00	0.00	0.00
2,840.0	19.48	181.30	2,763.2	-502.6	-11.4	502.7	0.00	0.00	0.00
2,880.0	19.48	181.30	2,800.9	-515.9	-11.7	516.1	0.00	0.00	0.00
2,920.0	19.48	181.30	2,838.6	-529.3	-12.1	529.4	0.00	0.00	0.00
2,960.0	19.48	181.30	2,876.3	-542.6	-12.4	542.8	0.00	0.00	0.00
3,000.0	19.48	181.30	2,914.0	-555.9	-12.7	556.1	0.00	0.00	0.00
3,040.0	19.48	181.30	2,951.8	-569.3	-13.0	569.4	0.00	0.00	0.00
3,080.0	19.48	181.30	2,989.5	-582.6	-13.3	582.8	0.00	0.00	0.00
3,120.0	19.48	181.30	3,027.2	-595.9	-13.6	596.1	0.00	0.00	0.00
3,160.0	19.48	181.30	3,064.9	-609.3	-13.9	609.4	0.00	0.00	0.00
3,200.0	19.48	181.30	3,102.6	-622.6	-14.2	622.8	0.00	0.00	0.00
3,240.0	19.48	181.30	3,140.3	-635.9	-14.5	636.1	0.00	0.00	0.00
3,280.0	19.48	181.30	3,178.0	-649.3	-14.8	649.4	0.00	0.00	0.00
3,320.0	19.48	181.30	3,215.7	-662.6	-15.1	662.8	0.00	0.00	0.00
3,352.1	19.48	181.30	3,246.0	-673.3	-15.3	673.5	0.00	0.00	0.00
<b>LARIMER</b>									
3,360.0	19.48	181.30	3,253.4	-675.9	-15.4	676.1	0.00	0.00	0.00
3,400.0	19.48	181.30	3,291.2	-689.3	-15.7	689.5	0.00	0.00	0.00
3,440.0	19.48	181.30	3,328.9	-702.6	-16.0	702.8	0.00	0.00	0.00
3,480.0	19.48	181.30	3,366.6	-715.9	-16.3	716.1	0.00	0.00	0.00
3,520.0	19.48	181.30	3,404.3	-729.3	-16.6	729.5	0.00	0.00	0.00
3,560.0	19.48	181.30	3,442.0	-742.6	-16.9	742.8	0.00	0.00	0.00
3,600.0	19.48	181.30	3,479.7	-755.9	-17.2	756.1	0.00	0.00	0.00
3,640.0	19.48	181.30	3,517.4	-769.3	-17.5	769.5	0.00	0.00	0.00
3,680.0	19.48	181.30	3,555.1	-782.6	-17.8	782.8	0.00	0.00	0.00
3,720.0	19.48	181.30	3,592.8	-795.9	-18.1	796.2	0.00	0.00	0.00
3,760.0	19.48	181.30	3,630.6	-809.3	-18.4	809.5	0.00	0.00	0.00
3,800.0	19.48	181.30	3,668.3	-822.6	-18.7	822.8	0.00	0.00	0.00
3,840.0	19.48	181.30	3,706.0	-835.9	-19.0	836.2	0.00	0.00	0.00
3,880.0	19.48	181.30	3,743.7	-849.3	-19.3	849.5	0.00	0.00	0.00
3,920.0	19.48	181.30	3,781.4	-862.6	-19.6	862.8	0.00	0.00	0.00
3,960.0	19.48	181.30	3,819.1	-875.9	-19.9	876.2	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Gittlein 7-4
<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>TVD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T1N-R67W	<b>MD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Site:</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Gittlein 7-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-28-11)		

#### Planned 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)
4,000.0	19.48	181.30	3,856.8	-889.3	-20.2	889.5	0.00	0.00	0.00
4,040.0	19.48	181.30	3,894.5	-902.6	-20.6	902.9	0.00	0.00	0.00
4,080.0	19.48	181.30	3,932.2	-916.0	-20.9	916.2	0.00	0.00	0.00
4,120.0	19.48	181.30	3,970.0	-929.3	-21.2	929.5	0.00	0.00	0.00
4,160.0	19.48	181.30	4,007.7	-942.6	-21.5	942.9	0.00	0.00	0.00
4,200.0	19.48	181.30	4,045.4	-956.0	-21.8	956.2	0.00	0.00	0.00
4,240.0	19.48	181.30	4,083.1	-969.3	-22.1	969.5	0.00	0.00	0.00
4,280.0	19.48	181.30	4,120.8	-982.6	-22.4	982.9	0.00	0.00	0.00
4,320.0	19.48	181.30	4,158.5	-996.0	-22.7	996.2	0.00	0.00	0.00
4,360.0	19.48	181.30	4,196.2	-1,009.3	-23.0	1,009.5	0.00	0.00	0.00
4,400.0	19.48	181.30	4,233.9	-1,022.6	-23.3	1,022.9	0.00	0.00	0.00
4,440.0	19.48	181.30	4,271.6	-1,036.0	-23.6	1,036.2	0.00	0.00	0.00
4,480.0	19.48	181.30	4,309.4	-1,049.3	-23.9	1,049.6	0.00	0.00	0.00
4,520.0	19.48	181.30	4,347.1	-1,062.6	-24.2	1,062.9	0.00	0.00	0.00
4,560.0	19.48	181.30	4,384.8	-1,076.0	-24.5	1,076.2	0.00	0.00	0.00
4,600.0	19.48	181.30	4,422.5	-1,089.3	-24.8	1,089.6	0.00	0.00	0.00
4,640.0	19.48	181.30	4,460.2	-1,102.6	-25.1	1,102.9	0.00	0.00	0.00
4,680.0	19.48	181.30	4,497.9	-1,116.0	-25.4	1,116.2	0.00	0.00	0.00
4,720.0	19.48	181.30	4,535.6	-1,129.3	-25.7	1,129.6	0.00	0.00	0.00
4,760.0	19.48	181.30	4,573.3	-1,142.6	-26.0	1,142.9	0.00	0.00	0.00
4,762.8	19.48	181.30	4,576.0	-1,143.6	-26.0	1,143.9	0.00	0.00	0.00
<b>TERRY</b>									
4,800.0	19.48	181.30	4,611.0	-1,156.0	-26.3	1,156.3	0.00	0.00	0.00
4,840.0	19.48	181.30	4,648.8	-1,169.3	-26.6	1,169.6	0.00	0.00	0.00
4,880.0	19.48	181.30	4,686.5	-1,182.6	-26.9	1,182.9	0.00	0.00	0.00
4,920.0	19.48	181.30	4,724.2	-1,196.0	-27.2	1,196.3	0.00	0.00	0.00
4,960.0	19.48	181.30	4,761.9	-1,209.3	-27.5	1,209.6	0.00	0.00	0.00
5,000.0	19.48	181.30	4,799.6	-1,222.6	-27.8	1,222.9	0.00	0.00	0.00
5,040.0	19.48	181.30	4,837.3	-1,236.0	-28.1	1,236.3	0.00	0.00	0.00
5,059.8	19.48	181.30	4,856.0	-1,242.6	-28.3	1,242.9	0.00	0.00	0.00
<b>TERRY MARKER</b>									
5,080.0	19.48	181.30	4,875.0	-1,249.3	-28.4	1,249.6	0.00	0.00	0.00
5,120.0	19.48	181.30	4,912.7	-1,262.6	-28.7	1,262.9	0.00	0.00	0.00
5,154.0	19.48	181.30	4,944.8	-1,274.0	-29.0	1,274.3	0.00	0.00	0.00
5,160.0	19.36	181.30	4,950.5	-1,275.9	-29.1	1,276.3	2.00	-2.00	0.00
5,200.0	18.56	181.30	4,988.3	-1,288.9	-29.3	1,289.3	2.00	-2.00	0.00
5,240.0	17.76	181.30	5,026.3	-1,301.4	-29.6	1,301.7	2.00	-2.00	0.00
5,280.0	16.96	181.30	5,064.5	-1,313.3	-29.9	1,313.7	2.00	-2.00	0.00
5,320.0	16.16	181.30	5,102.8	-1,324.7	-30.2	1,325.1	2.00	-2.00	0.00
5,360.0	15.36	181.30	5,141.3	-1,335.6	-30.4	1,335.9	2.00	-2.00	0.00
5,400.0	14.56	181.30	5,179.9	-1,345.9	-30.6	1,346.3	2.00	-2.00	0.00
5,440.0	13.76	181.30	5,218.7	-1,355.7	-30.9	1,356.0	2.00	-2.00	0.00
5,480.0	12.96	181.30	5,257.7	-1,364.9	-31.1	1,365.3	2.00	-2.00	0.00
5,520.0	12.16	181.30	5,296.7	-1,373.6	-31.3	1,374.0	2.00	-2.00	0.00
5,560.0	11.36	181.30	5,335.9	-1,381.8	-31.5	1,382.1	2.00	-2.00	0.00
5,600.0	10.56	181.30	5,375.1	-1,389.4	-31.6	1,389.7	2.00	-2.00	0.00
5,640.0	9.76	181.30	5,414.5	-1,396.4	-31.8	1,396.8	2.00	-2.00	0.00
5,680.0	8.96	181.30	5,454.0	-1,402.9	-31.9	1,403.3	2.00	-2.00	0.00
5,720.0	8.16	181.30	5,493.5	-1,408.9	-32.1	1,409.2	2.00	-2.00	0.00
5,760.0	7.36	181.30	5,533.2	-1,414.3	-32.2	1,414.6	2.00	-2.00	0.00
5,800.0	6.56	181.30	5,572.9	-1,419.1	-32.3	1,419.5	2.00	-2.00	0.00
5,840.0	5.76	181.30	5,612.6	-1,423.4	-32.4	1,423.8	2.00	-2.00	0.00
5,880.0	4.96	181.30	5,652.5	-1,427.1	-32.5	1,427.5	2.00	-2.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Gittlein 7-4
<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>TVD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T1N-R67W	<b>MD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Site:</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Gittlein 7-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-28-11)		

### Planned 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)
5,920.0	4.16	181.30	5,692.3	-1,430.3	-32.6	1,430.7	2.00	-2.00	0.00
5,960.0	3.36	181.30	5,732.2	-1,432.9	-32.6	1,433.3	2.00	-2.00	0.00
6,000.0	2.56	181.30	5,772.2	-1,435.0	-32.7	1,435.4	2.00	-2.00	0.00
6,040.0	1.76	181.30	5,812.2	-1,436.5	-32.7	1,436.9	2.00	-2.00	0.00
6,080.0	0.96	181.30	5,852.1	-1,437.4	-32.7	1,437.8	2.00	-2.00	0.00
6,120.0	0.16	181.30	5,892.1	-1,437.8	-32.7	1,438.2	2.00	-2.00	0.00
6,127.9	0.00	0.00	5,900.0	-1,437.8	-32.7	1,438.2	2.00	-2.00	0.00
<b>TARGET BHL 2053'FNL, 1980'FEL</b>									
6,160.0	0.00	0.00	5,932.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,200.0	0.00	0.00	5,972.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,240.0	0.00	0.00	6,012.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,280.0	0.00	0.00	6,052.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,320.0	0.00	0.00	6,092.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,360.0	0.00	0.00	6,132.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,400.0	0.00	0.00	6,172.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,440.0	0.00	0.00	6,212.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,480.0	0.00	0.00	6,252.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,520.0	0.00	0.00	6,292.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,560.0	0.00	0.00	6,332.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,600.0	0.00	0.00	6,372.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,640.0	0.00	0.00	6,412.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,680.0	0.00	0.00	6,452.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,720.0	0.00	0.00	6,492.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,760.0	0.00	0.00	6,532.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,800.0	0.00	0.00	6,572.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,840.0	0.00	0.00	6,612.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,880.0	0.00	0.00	6,652.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,920.0	0.00	0.00	6,692.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
6,960.0	0.00	0.00	6,732.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,000.0	0.00	0.00	6,772.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,040.0	0.00	0.00	6,812.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,080.0	0.00	0.00	6,852.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,120.0	0.00	0.00	6,892.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,160.0	0.00	0.00	6,932.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,200.0	0.00	0.00	6,972.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,240.0	0.00	0.00	7,012.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,280.0	0.00	0.00	7,052.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,320.0	0.00	0.00	7,092.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,360.0	0.00	0.00	7,132.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,400.0	0.00	0.00	7,172.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,440.0	0.00	0.00	7,212.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,480.0	0.00	0.00	7,252.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,520.0	0.00	0.00	7,292.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,560.0	0.00	0.00	7,332.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,571.9	0.00	0.00	7,344.0	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
<b>NIOBRARA - LEGAL BOX 400' X 400' 2053'FNL, 1978'FEL</b>									
7,600.0	0.00	0.00	7,372.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,640.0	0.00	0.00	7,412.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,680.0	0.00	0.00	7,452.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,720.0	0.00	0.00	7,492.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,760.0	0.00	0.00	7,532.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00
7,800.0	0.00	0.00	7,572.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Gittlein 7-4
<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>TVD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T1N-R67W	<b>MD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Site:</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Gittlein 7-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-28-11)		

Planned 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)	
7,840.0	0.00	0.00	7,612.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00	
7,863.9	0.00	0.00	7,636.0	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00	
<b>FT HAYS</b>										
7,880.0	0.00	0.00	7,652.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00	
7,883.9	0.00	0.00	7,656.0	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00	
<b>CODELL</b>										
7,920.0	0.00	0.00	7,692.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00	
7,927.9	0.00	0.00	7,700.0	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00	
<b>GREENHORN</b>										
7,960.0	0.00	0.00	7,732.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,772.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00	
8,005.9	0.00	0.00	7,778.0	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00	
<b>GRANEROS</b>										
8,040.0	0.00	0.00	7,812.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00	
8,080.0	0.00	0.00	7,852.1	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00	
8,087.9	0.00	0.00	7,860.0	-1,437.8	-32.7	1,438.2	0.00	0.00	0.00	

Targets										
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
TARGET BHL 2053'F	- plan hits target center	0.00	0.00	5,900.0	-1,437.8	-32.7	1,273,265.07	3,169,717.82	40.081910	-104.893464
LEGAL BOX 400' X 400'	- plan misses target center by 0.1ft at 7571.9ft MD (7344.0 TVD, -1437.8 N, -32.7 E)	0.00	0.00	7,344.0	-1,437.8	-32.7	1,273,265.12	3,169,717.86	40.081910	-104.893464
	- Rectangle (sides W400.0 H400.0 D516.0)									

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")		
700.0	700.0	8 5/8"	8-5/8	12-1/4		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,352.1	3,246.0	LARIMER		0.00		
4,762.8	4,576.0	TERRY		0.00		
5,059.8	4,856.0	TERRY MARKER		0.00		
7,571.9	7,344.0	NIOBRARA		0.00		
7,863.9	7,636.0	FT HAYS		0.00		
7,883.9	7,656.0	CODELL		0.00		
7,927.9	7,700.0	GREENHORN		0.00		
8,005.9	7,778.0	GRANEROS		0.00		



<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Gittlein 7-4
<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>TVD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T1N-R67W	<b>MD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Site:</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Gittlein 7-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-28-11)		



# **BAYSWATER EXPLORATION & PRODUCTION**

**SEC.4-T1N-R67W**

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

**Gittlein 7-4**

**Wellbore #1**

**Plan #1 (11-28-11)**

## **Anticollision Report**

**01 December, 2011**



Gittlein 7-4 Pad Sec.4-T1N-R67W - Gittlein 17-4 - Wellbore #1 - Plan #1 (11-28-11)													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
1,900.0	1,877.0	1,887.3	1,873.8	5.3	4.7	-122.55	-106.9	121.8	150.7	141.2	9.51	15.839		
2,000.0	1,971.3	1,985.1	1,968.0	5.8	5.1	-123.02	-127.7	137.8	171.6	161.1	10.47	16.384		
2,100.0	2,065.6	2,082.9	2,062.2	6.5	5.6	-123.39	-148.5	153.8	192.5	181.0	11.46	16.796		
2,200.0	2,159.8	2,180.7	2,156.4	7.1	6.1	-123.68	-169.3	169.8	213.3	200.9	12.47	17.109		
2,300.0	2,254.1	2,278.5	2,250.6	7.7	6.6	-123.93	-190.1	185.8	234.2	220.7	13.50	17.352		
2,400.0	2,348.4	2,376.3	2,344.8	8.3	7.1	-124.13	-210.9	201.8	255.1	240.6	14.54	17.544		
2,500.0	2,442.7	2,474.1	2,439.0	9.0	7.7	-124.30	-231.7	217.7	276.0	260.4	15.60	17.697		
2,600.0	2,536.9	2,571.9	2,533.2	9.6	8.2	-124.45	-252.6	233.7	296.9	280.3	16.66	17.822		
2,700.0	2,631.2	2,669.6	2,627.4	10.3	8.7	-124.58	-273.4	249.7	317.8	300.1	17.73	17.923		
2,800.0	2,725.5	2,767.4	2,721.6	10.9	9.3	-124.70	-294.2	265.7	338.7	319.9	18.81	18.007		
2,900.0	2,819.8	2,865.2	2,815.8	11.6	9.8	-124.80	-315.0	281.7	359.6	339.7	19.89	18.078		
3,000.0	2,914.0	2,963.0	2,910.0	12.2	10.3	-124.89	-335.8	297.7	380.5	359.5	20.98	18.137		
3,100.0	3,008.3	3,060.8	3,004.2	12.9	10.9	-124.96	-356.6	313.7	401.4	379.3	22.07	18.187		
3,200.0	3,102.6	3,158.6	3,098.4	13.6	11.4	-125.04	-377.4	329.6	422.3	399.2	23.17	18.230		
3,300.0	3,196.9	3,256.4	3,192.6	14.2	12.0	-125.10	-398.2	345.6	443.2	419.0	24.26	18.267		
3,400.0	3,291.2	3,354.2	3,286.8	14.9	12.5	-125.16	-419.0	361.6	464.1	438.8	25.36	18.299		
3,500.0	3,385.4	3,452.0	3,381.0	15.5	13.1	-125.22	-439.8	377.6	485.0	458.6	26.46	18.327		
3,600.0	3,479.7	3,549.7	3,475.2	16.2	13.6	-125.27	-460.7	393.6	505.9	478.4	27.57	18.352		
3,700.0	3,574.0	3,647.5	3,569.4	16.9	14.2	-125.31	-481.5	409.6	526.8	498.2	28.67	18.373		
3,800.0	3,668.3	3,745.3	3,663.7	17.5	14.7	-125.35	-502.3	425.5	547.7	518.0	29.78	18.392		
3,900.0	3,762.5	3,843.1	3,757.9	18.2	15.3	-125.39	-523.1	441.5	568.7	537.8	30.89	18.409		
4,000.0	3,856.8	3,940.9	3,852.1	18.9	15.8	-125.43	-543.9	457.5	589.6	557.6	32.00	18.424		
4,100.0	3,951.1	4,038.7	3,946.3	19.5	16.4	-125.46	-564.7	473.5	610.5	577.4	33.11	18.438		
4,200.0	4,045.4	4,136.5	4,040.5	20.2	16.9	-125.49	-585.5	489.5	631.4	597.2	34.22	18.450		
4,300.0	4,139.7	4,234.3	4,134.7	20.9	17.5	-125.52	-606.3	505.5	652.3	616.9	35.33	18.461		
4,400.0	4,233.9	4,332.1	4,228.9	21.5	18.1	-125.55	-627.1	521.5	673.2	636.7	36.45	18.471		
4,500.0	4,328.2	4,429.9	4,323.1	22.2	18.6	-125.58	-647.9	537.4	694.1	656.5	37.56	18.480		
4,600.0	4,422.5	4,527.6	4,417.3	22.9	19.2	-125.60	-668.7	553.4	715.0	676.3	38.67	18.488		
4,700.0	4,516.8	4,626.0	4,512.3	23.5	19.6	-125.72	-688.7	568.8	735.9	696.2	39.68	18.545		
4,800.0	4,611.0	4,724.2	4,608.1	24.2	20.0	-126.10	-706.1	582.1	756.7	716.1	40.55	18.661		
4,900.0	4,705.3	4,822.1	4,704.2	24.9	20.3	-126.70	-720.9	593.5	777.5	736.2	41.33	18.811		
5,000.0	4,799.6	4,919.3	4,800.2	25.6	20.6	-127.51	-732.9	602.7	798.4	756.4	42.03	18.996		
5,100.0	4,893.9	5,015.7	4,895.8	26.2	20.8	-128.50	-742.3	609.9	819.5	776.8	42.64	19.221		
5,154.0	4,944.8	5,067.3	4,947.2	26.6	20.9	-129.10	-746.3	613.0	831.0	788.1	42.92	19.361		
5,200.0	4,988.3	5,111.1	4,990.9	26.8	21.0	-129.79	-749.1	615.1	840.7	797.6	43.13	19.493		
5,300.0	5,083.6	5,206.2	5,085.8	27.3	21.2	-131.23	-753.4	618.4	860.6	817.1	43.44	19.808		
5,400.0	5,179.9	5,300.9	5,180.4	27.7	21.3	-132.63	-755.1	619.8	878.7	835.0	43.67	20.119		
5,500.0	5,277.2	5,397.6	5,277.2	28.1	21.4	-133.94	-755.2	619.8	895.0	851.1	43.85	20.411		
5,600.0	5,375.1	5,495.6	5,375.1	28.4	21.5	-135.05	-755.2	619.8	909.2	865.2	44.02	20.656		
5,700.0	5,473.7	5,594.2	5,473.7	28.7	21.6	-135.94	-755.2	619.8	921.1	876.9	44.18	20.848		
5,800.0	5,572.9	5,693.3	5,572.9	28.9	21.7	-136.63	-755.2	619.8	930.6	886.3	44.34	20.986		
5,900.0	5,672.4	5,792.8	5,672.4	29.1	21.8	-137.13	-755.2	619.8	937.7	893.2	44.51	21.069		
6,000.0	5,772.2	5,892.6	5,772.2	29.3	21.9	-137.45	-755.2	619.8	942.3	897.6	44.67	21.094		
6,100.0	5,872.1	5,992.6	5,872.1	29.4	22.0	-137.59	-755.2	619.8	944.3	899.5	44.83	21.063		
6,127.9	5,900.0	6,020.4	5,900.0	29.4	22.1	43.71	-755.2	619.8	944.4	899.5	44.88	21.043		
6,200.0	5,972.1	6,092.6	5,972.1	29.5	22.2	43.71	-755.2	619.8	944.4	899.3	45.04	20.967		
6,300.0	6,072.1	6,192.6	6,072.1	29.5	22.3	43.71	-755.2	619.8	944.4	899.1	45.26	20.865		
6,400.0	6,172.1	6,292.6	6,172.1	29.6	22.4	43.71	-755.2	619.8	944.4	898.9	45.49	20.763		
6,500.0	6,272.1	6,392.6	6,272.1	29.7	22.5	43.71	-755.2	619.8	944.4	898.7	45.71	20.660		
6,600.0	6,372.1	6,492.6	6,372.1	29.8	22.6	43.71	-755.2	619.8	944.4	898.5	45.94	20.557		
6,700.0	6,472.1	6,592.6	6,472.1	29.9	22.8	43.71	-755.2	619.8	944.4	898.2	46.17	20.453		

<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well Gittlein 7-4
<b>Project:</b>	SEC.4-T1N-R67W	<b>TVD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Reference Site:</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W	<b>MD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Gittlein 7-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (11-28-11)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Gittlein 7-4 Pad Sec.4-T1N-R67W - Gittlein 17-4 - Wellbore #1 - Plan #1 (11-28-11)												<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,800.0	6,572.1	6,692.6	6,572.1	30.0	22.9	43.71	-755.2	619.8	944.4	898.0	46.41	20.349	
6,900.0	6,672.1	6,792.6	6,672.1	30.0	23.0	43.71	-755.2	619.8	944.4	897.7	46.65	20.245	
7,000.0	6,772.1	6,892.6	6,772.1	30.1	23.1	43.71	-755.2	619.8	944.4	897.5	46.89	20.140	
7,100.0	6,872.1	6,992.6	6,872.1	30.2	23.3	43.71	-755.2	619.8	944.4	897.3	47.14	20.036	
7,200.0	6,972.1	7,092.6	6,972.1	30.3	23.4	43.71	-755.2	619.8	944.4	897.0	47.38	19.931	
7,300.0	7,072.1	7,192.6	7,072.1	30.4	23.5	43.71	-755.2	619.8	944.4	896.8	47.63	19.826	
7,400.0	7,172.1	7,292.6	7,172.1	30.5	23.7	43.71	-755.2	619.8	944.4	896.5	47.89	19.721	
7,500.0	7,272.1	7,392.6	7,272.1	30.6	23.8	43.71	-755.2	619.8	944.4	896.2	48.15	19.615	
7,600.0	7,372.1	7,492.6	7,372.1	30.7	23.9	43.71	-755.2	619.8	944.4	896.0	48.41	19.510	
7,700.0	7,472.1	7,592.6	7,472.1	30.8	24.1	43.71	-755.2	619.8	944.4	895.7	48.67	19.405	
7,800.0	7,572.1	7,692.6	7,572.1	30.9	24.2	43.71	-755.2	619.8	944.4	895.5	48.93	19.300	
7,900.0	7,672.1	7,792.6	7,672.1	31.0	24.3	43.71	-755.2	619.8	944.4	895.2	49.20	19.195	
8,000.0	7,772.1	7,892.6	7,772.1	31.1	24.5	43.71	-755.2	619.8	944.4	894.9	49.47	19.090	
8,087.9	7,860.0	7,980.4	7,860.0	31.2	24.6	43.71	-755.2	619.8	944.4	894.7	49.71	18.998	

Gittlein 7-4 Pad Sec.4-T1N-R67W - Gittlein 2-4 (Vert.) - Wellbore #1 - Plan #1 (11-28-11)													Offset Site Error:	0.0 ft	
Survey Program: 0-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	90.04	0.0	20.1	20.1						
100.0	100.0	100.0	100.0	0.1	0.1	90.04	0.0	20.1	20.1	19.9	0.22	89.633			
200.0	200.0	200.0	200.0	0.3	0.3	90.04	0.0	20.1	20.1	19.5	0.67	29.878			
300.0	300.0	300.0	300.0	0.6	0.6	90.04	0.0	20.1	20.1	19.0	1.12	17.927			
400.0	400.0	400.0	400.0	0.8	0.8	90.04	0.0	20.1	20.1	18.6	1.57	12.805			
500.0	500.0	500.0	500.0	1.0	1.0	90.04	0.0	20.1	20.1	18.1	2.02	9.959			
600.0	600.0	600.0	600.0	1.2	1.2	90.04	0.0	20.1	20.1	17.7	2.47	8.148			
700.0	700.0	700.0	700.0	1.5	1.5	90.04	0.0	20.1	20.1	17.2	2.92	6.895			
800.0	800.0	800.0	800.0	1.7	1.7	90.04	0.0	20.1	20.1	16.8	3.37	5.976			
850.0	850.0	850.0	850.0	1.8	1.8	90.04	0.0	20.1	20.1	16.6	3.60	5.602 CC			
900.0	900.0	900.0	900.0	1.9	1.9	-92.51	0.0	20.1	20.2	16.4	3.81	5.297 ES			
1,000.0	999.9	999.9	999.9	2.1	2.1	-102.23	0.0	20.1	20.6	16.4	4.20	4.902 SF			
1,100.0	1,099.7	1,099.7	1,099.7	2.3	2.4	-119.30	0.0	20.1	23.1	18.5	4.61	5.009			
1,200.0	1,199.1	1,199.1	1,199.1	2.5	2.6	-137.05	0.0	20.1	29.7	24.6	5.03	5.898			
1,300.0	1,298.2	1,298.2	1,298.2	2.7	2.8	-150.28	0.0	20.1	41.0	35.6	5.45	7.527			
1,400.0	1,396.6	1,396.6	1,396.6	3.0	3.0	-158.87	0.0	20.1	56.8	50.9	5.86	9.690			
1,500.0	1,494.4	1,494.4	1,494.4	3.3	3.2	-164.37	0.0	20.1	76.6	70.3	6.27	12.215			
1,600.0	1,591.5	1,591.5	1,591.5	3.7	3.5	-168.00	0.0	20.1	100.1	93.4	6.68	14.993			
1,700.0	1,687.6	1,687.6	1,687.6	4.2	3.7	-170.48	0.0	20.1	127.2	120.1	7.09	17.956			
1,800.0	1,782.7	1,782.7	1,782.7	4.7	3.9	-172.25	0.0	20.1	157.8	150.3	7.49	21.058			
1,823.8	1,805.2	1,805.2	1,805.2	4.8	3.9	-172.59	0.0	20.1	165.6	158.0	7.59	21.815			
1,900.0	1,877.0	1,877.0	1,877.0	5.3	4.1	-173.58	0.0	20.1	190.8	182.9	7.95	24.015			
2,000.0	1,971.3	1,971.3	1,971.3	5.8	4.3	-174.53	0.0	20.1	224.0	215.6	8.42	26.604			
2,100.0	2,065.6	2,065.6	2,065.6	6.5	4.5	-175.24	0.0	20.1	257.2	248.3	8.90	28.899			
2,200.0	2,159.8	2,159.8	2,159.8	7.1	4.7	-175.78	0.0	20.1	290.5	281.1	9.39	30.942			
2,300.0	2,254.1	2,254.1	2,254.1	7.7	5.0	-176.22	0.0	20.1	323.8	313.9	9.88	32.769			
2,400.0	2,348.4	2,348.4	2,348.4	8.3	5.2	-176.57	0.0	20.1	357.1	346.7	10.38	34.411			
2,500.0	2,442.7	2,442.7	2,442.7	9.0	5.4	-176.86	0.0	20.1	390.3	379.5	10.88	35.892			
2,600.0	2,536.9	2,536.9	2,536.9	9.6	5.6	-177.11	0.0	20.1	423.6	412.3	11.38	37.235			
2,700.0	2,631.2	2,631.2	2,631.2	10.3	5.8	-177.32	0.0	20.1	457.0	445.1	11.88	38.456			
2,800.0	2,725.5	2,725.5	2,725.5	10.9	6.0	-177.50	0.0	20.1	490.3	477.9	12.39	39.571			
2,900.0	2,819.8	2,819.8	2,819.8	11.6	6.2	-177.66	0.0	20.1	523.6	510.7	12.90	40.592			
3,000.0	2,914.0	2,914.0	2,914.0	12.2	6.4	-177.80	0.0	20.1	556.9	543.5	13.41	41.531			
3,100.0	3,008.3	3,008.3	3,008.3	12.9	6.6	-177.93	0.0	20.1	590.2	576.3	13.92	42.396			
3,200.0	3,102.6	3,102.6	3,102.6	13.6	6.9	-178.04	0.0	20.1	623.5	609.1	14.44	43.197			
3,300.0	3,196.9	3,196.9	3,196.9	14.2	7.1	-178.14	0.0	20.1	656.9	641.9	14.95	43.938			
3,400.0	3,291.2	3,291.2	3,291.2	14.9	7.3	-178.23	0.0	20.1	690.2	674.7	15.47	44.628			
3,500.0	3,385.4	3,385.4	3,385.4	15.5	7.5	-178.31	0.0	20.1	723.5	707.5	15.98	45.270			
3,600.0	3,479.7	3,479.7	3,479.7	16.2	7.7	-178.38	0.0	20.1	756.9	740.4	16.50	45.870			
3,700.0	3,574.0	3,574.0	3,574.0	16.9	7.9	-178.45	0.0	20.1	790.2	773.2	17.02	46.431			
3,800.0	3,668.3	3,668.3	3,668.3	17.5	8.1	-178.51	0.0	20.1	823.5	806.0	17.54	46.957			
3,900.0	3,762.5	3,762.5	3,762.5	18.2	8.3	-178.57	0.0	20.1	856.9	838.8	18.06	47.451			
4,000.0	3,856.8	3,856.8	3,856.8	18.9	8.6	-178.62	0.0	20.1	890.2	871.6	18.58	47.915			
4,100.0	3,951.1	3,951.1	3,951.1	19.5	8.8	-178.67	0.0	20.1	923.5	904.4	19.10	48.353			
4,200.0	4,045.4	4,045.4	4,045.4	20.2	9.0	-178.72	0.0	20.1	956.9	937.2	19.62	48.767			
4,300.0	4,139.7	4,139.7	4,139.7	20.9	9.2	-178.76	0.0	20.1	990.2	970.0	20.14	49.157			
4,400.0	4,233.9	4,233.9	4,233.9	21.5	9.4	-178.80	0.0	20.1	1,023.5	1,002.9	20.67	49.527			
4,500.0	4,328.2	4,328.2	4,328.2	22.2	9.6	-178.84	0.0	20.1	1,056.9	1,035.7	21.19	49.878			
4,600.0	4,422.5	4,422.5	4,422.5	22.9	9.8	-178.88	0.0	20.1	1,090.2	1,068.5	21.71	50.210			
4,700.0	4,516.8	4,516.8	4,516.8	23.5	10.0	-178.91	0.0	20.1	1,123.5	1,101.3	22.24	50.526			
4,800.0	4,611.0	4,611.0	4,611.0	24.2	10.3	-178.94	0.0	20.1	1,156.9	1,134.1	22.76	50.827			

COMPASS 2003.21 Build 46

<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well Gittlein 7-4
<b>Project:</b>	SEC.4-T1N-R67W	<b>TVD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Reference Site:</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W	<b>MD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Gittlein 7-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (11-28-11)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference														
		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
4,900.0	4,705.3	4,705.3	4,705.3	24.9	10.5	-178.97	0.0	20.1	1,190.2	1,166.9	23.29	51.113		
5,000.0	4,799.6	4,799.6	4,799.6	25.6	10.7	-179.00	0.0	20.1	1,223.5	1,199.7	23.81	51.386		
5,100.0	4,893.9	4,893.9	4,893.9	26.2	10.9	-179.03	0.0	20.1	1,256.9	1,232.5	24.34	51.647		
5,154.0	4,944.8	4,944.8	4,944.8	26.6	11.0	-179.04	0.0	20.1	1,274.9	1,250.3	24.62	51.782		
5,200.0	4,988.3	4,988.3	4,988.3	26.8	11.1	-179.06	0.0	20.1	1,289.9	1,265.0	24.91	51.781		
5,300.0	5,083.6	5,083.6	5,083.6	27.3	11.3	-179.09	0.0	20.1	1,320.0	1,294.5	25.50	51.764		
5,400.0	5,179.9	5,179.9	5,179.9	27.7	11.5	-179.11	0.0	20.1	1,346.9	1,320.8	26.06	51.689		
5,500.0	5,277.2	5,277.2	5,277.2	28.1	11.7	-179.14	0.0	20.1	1,370.3	1,343.7	26.58	51.563		
5,600.0	5,375.1	5,375.1	5,375.1	28.4	12.0	-179.16	0.0	20.1	1,390.3	1,363.3	27.06	51.389		
5,700.0	5,473.7	5,473.7	5,473.7	28.7	12.2	-179.17	0.0	20.1	1,406.9	1,379.4	27.50	51.170		
5,800.0	5,572.9	5,572.9	5,572.9	28.9	12.4	-179.18	0.0	20.1	1,420.1	1,392.2	27.89	50.909		
5,900.0	5,672.4	5,672.4	5,672.4	29.1	12.6	-179.19	0.0	20.1	1,429.8	1,401.5	28.25	50.608		
6,000.0	5,772.2	5,772.2	5,772.2	29.3	12.9	-179.20	0.0	20.1	1,436.0	1,407.4	28.57	50.268		
6,100.0	5,872.1	5,872.1	5,872.1	29.4	13.1	-179.20	0.0	20.1	1,438.7	1,409.8	28.84	49.889		
6,127.9	5,900.0	5,900.0	5,900.0	29.4	13.1	2.11	0.0	20.1	1,438.8	1,409.9	28.91	49.772		
6,200.0	5,972.1	5,972.1	5,972.1	29.5	13.3	2.11	0.0	20.1	1,438.8	1,409.6	29.18	49.302		
6,300.0	6,072.1	6,072.1	6,072.1	29.5	13.5	2.11	0.0	20.1	1,438.8	1,409.3	29.56	48.678		
6,400.0	6,172.1	6,172.1	6,172.1	29.6	13.8	2.11	0.0	20.1	1,438.8	1,408.9	29.93	48.066		
6,500.0	6,272.1	6,272.1	6,272.1	29.7	14.0	2.11	0.0	20.1	1,438.8	1,408.5	30.31	47.467		
6,600.0	6,372.1	6,372.1	6,372.1	29.8	14.2	2.11	0.0	20.1	1,438.8	1,408.1	30.69	46.881		
6,700.0	6,472.1	6,472.1	6,472.1	29.9	14.4	2.11	0.0	20.1	1,438.8	1,407.7	31.07	46.306		
6,800.0	6,572.1	6,572.1	6,572.1	30.0	14.7	2.11	0.0	20.1	1,438.8	1,407.4	31.45	45.743		
6,900.0	6,672.1	6,672.1	6,672.1	30.0	14.9	2.11	0.0	20.1	1,438.8	1,407.0	31.84	45.191		
7,000.0	6,772.1	6,772.1	6,772.1	30.1	15.1	2.11	0.0	20.1	1,438.8	1,406.6	32.22	44.651		
7,100.0	6,872.1	6,872.1	6,872.1	30.2	15.3	2.11	0.0	20.1	1,438.8	1,406.2	32.61	44.121		
7,200.0	6,972.1	6,972.1	6,972.1	30.3	15.6	2.11	0.0	20.1	1,438.8	1,405.8	33.00	43.602		
7,300.0	7,072.1	7,072.1	7,072.1	30.4	15.8	2.11	0.0	20.1	1,438.8	1,405.4	33.39	43.093		
7,400.0	7,172.1	7,172.1	7,172.1	30.5	16.0	2.11	0.0	20.1	1,438.8	1,405.0	33.78	42.594		
7,500.0	7,272.1	7,272.1	7,272.1	30.6	16.2	2.11	0.0	20.1	1,438.8	1,404.6	34.17	42.105		
7,600.0	7,372.1	7,372.1	7,372.1	30.7	16.5	2.11	0.0	20.1	1,438.8	1,404.2	34.56	41.626		
7,700.0	7,472.1	7,472.1	7,472.1	30.8	16.7	2.11	0.0	20.1	1,438.8	1,403.8	34.96	41.156		
7,800.0	7,572.1	7,572.1	7,572.1	30.9	16.9	2.11	0.0	20.1	1,438.8	1,403.5	35.36	40.695		
7,900.0	7,672.1	7,672.1	7,672.1	31.0	17.1	2.11	0.0	20.1	1,438.8	1,403.1	35.75	40.244		
8,000.0	7,772.1	7,772.1	7,772.1	31.1	17.4	2.11	0.0	20.1	1,438.8	1,402.7	36.15	39.800		
8,054.8	7,827.0	7,827.0	7,827.0	31.1	17.5	2.11	0.0	20.1	1,438.8	1,402.4	36.37	39.561		
8,087.9	7,860.0	7,860.0	7,860.0	31.2	17.5	2.11	0.0	20.1	1,438.8	1,402.4	36.48	39.443		

<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well Gittlein 7-4
<b>Project:</b>	SEC.4-T1N-R67W	<b>TVD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Reference Site:</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W	<b>MD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Gittlein 7-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (11-28-11)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 5018.0ft (Original Well Elev) Coordinates are relative to: Gittlein 7-4  
 Offset Depths are relative to Offset Datum  
 Central Meridian is -105.500000 °  
 Coordinate System is US State Plane 1983, Colorado Northern Zone  
 Grid Convergence at Surface is: 0.39°





<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well Gittlein 7-4
<b>Project:</b>	SEC.4-T1N-R67W	<b>TVD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Reference Site:</b>	Gittlein 7-4 Pad Sec.4-T1N-R67W	<b>MD Reference:</b>	WELL @ 5018.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Gittlein 7-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (11-28-11)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 5018.0ft (Original Well Elev) Coordinates are relative to: Gittlein 7-4  
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone  
Central Meridian is -105.500000 ° Grid Convergence at Surface is: 0.39°

