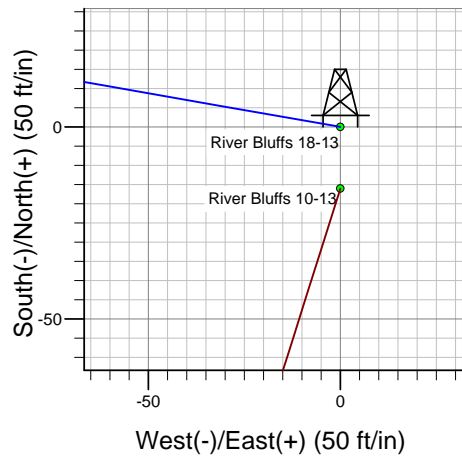
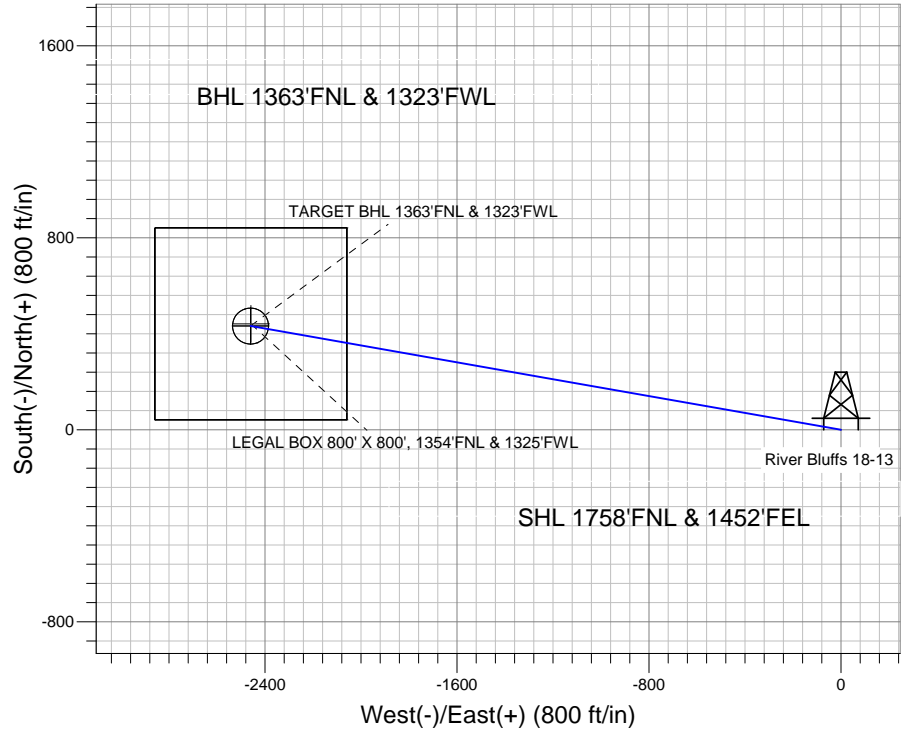
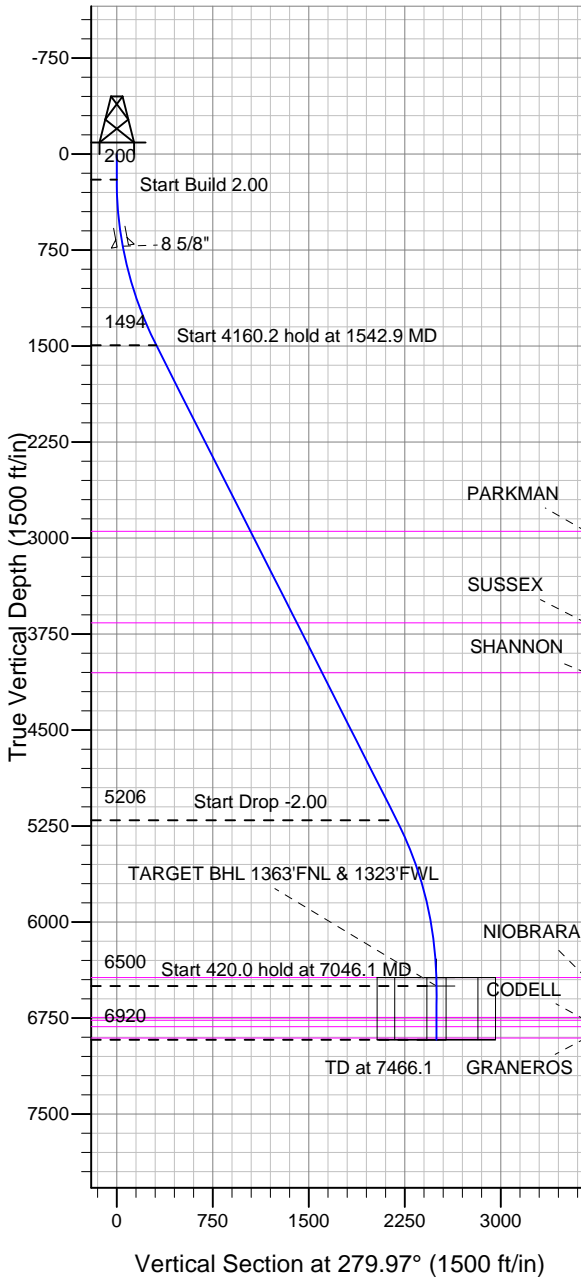


### Well Name: River Bluffs 18-13

Surface Location: River Bluffs 10-13 Pad Sec.13-T6N-R68W  
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone  
 Ground Elevation: 4802.0  
 +N/-S +E/-W Northing Easting Latitude Longitude Slot  
 0.0 0.0 1421494.01 3153158.91 40.489097 -104.949351  
 Original Well Elev WELL @ 4818.0ft (Original Well Elev)

## BAYSWATER EXPLORATION & PRODUCTION



River Bluffs 10-13 Pad Sec.13-T6N-R68W  
 River Bluffs 18-13  
 Plan #1 (6-28-12)  
 11:27, July 03 2012



Azimuths to True North  
 Magnetic North: 8.83°

Magnetic Field  
 Strength: 53047.6nT  
 Dip Angle: 67.06°  
 Date: 7/3/2012  
 Model: IGRF2010

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
LEGAL BOX 800' X 800', 1354'FNL & 1325'FWL	6433.0	441.2	-2458.0	40.490308	-104.958188	Rectangle (Sides: L800.0 W800.0)
TARGET CIRCLE 1363'FNL & 1323'FWL	6433.0	432.2	-2460.0	40.490283	-104.958195	Circle (Radius: 75.0)
TARGET BHL 1363'FNL & 1323'FWL	6500.0	432.2	-2460.0	40.490283	-104.958195	Point

### 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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1542.9	26.86	279.97	1494.3	53.5	-304.4	2.00	279.97	309.0	
4	5703.1	26.86	279.97	5205.7	378.7	-2155.6	0.00	0.00	2188.6	
5	7046.1	0.00	0.00	6500.0	432.2	-2460.0	2.00	180.00	2497.6	TARGET BHL 1363'FNL & 1323'FWL
6	7466.1	0.00	0.00	6920.0	432.2	-2460.0	0.00	0.00	2497.6	



## **Directional**

# **BAYSWATER EXPLORATION & PRODUCTION**

**SEC.13-T6N-R68W**

**River Bluffs 10-13 Pad Sec.13-T6N-R68W**

**River Bluffs 18-13**

**Wellbore #1**

**Plan: Plan #1 (6-28-12)**

## **Standard Planning Report**

**03 July, 2012**

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well River Bluffs 18-13
<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>TVD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Project:</b>	SEC.13-T6N-R68W	<b>MD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Site:</b>	River Bluffs 10-13 Pad Sec.13-T6N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	River Bluffs 18-13	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (6-28-12)		

<b>Project</b>	SEC.13-T6N-R68W, Larimer 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						River Bluffs 10-13 Pad Sec.13-T6N-R68W											
Site Position:						Northing:			1,421,477.99 ft			Latitude:			40.489053		
From:			Lat/Long			Easting:			3,153,159.01 ft			Longitude:			-104.949351		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.36 °		

Well	River Bluffs 18-13					
Well Position	+N/-S	16.0 ft	Northing:	1,421,494.01 ft	Latitude:	40.489097
	+E/-W	0.0 ft	Easting:	3,153,158.91 ft	Longitude:	-104.949351
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,802.0 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	7/3/2012	8.83	67.06	53,048

<b>Design</b>	Plan #1 (6-28-12)			
<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	279.97

<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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,542.9	26.86	279.97	1,494.3	53.5	-304.4	2.00	2.00	0.00	279.97	
5,703.1	26.86	279.97	5,205.7	378.7	-2,155.6	0.00	0.00	0.00	0.00	
7,046.1	0.00	0.00	6,500.0	432.2	-2,460.0	2.00	-2.00	0.00	180.00	TARGET BHL 1363
7,466.1	0.00	0.00	6,920.0	432.2	-2,460.0	0.00	0.00	0.00	0.00	

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well River Bluffs 18-13
<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>TVD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Project:</b>	SEC.13-T6N-R68W	<b>MD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Site:</b>	River Bluffs 10-13 Pad Sec.13-T6N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	River Bluffs 18-13	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (6-28-12)		

### 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	0.80	279.97	240.0	0.0	-0.3	0.3	2.00	2.00	0.00
280.0	1.60	279.97	280.0	0.2	-1.1	1.1	2.00	2.00	0.00
320.0	2.40	279.97	320.0	0.4	-2.5	2.5	2.00	2.00	0.00
360.0	3.20	279.97	359.9	0.8	-4.4	4.5	2.00	2.00	0.00
400.0	4.00	279.97	399.8	1.2	-6.9	7.0	2.00	2.00	0.00
440.0	4.80	279.97	439.7	1.7	-9.9	10.0	2.00	2.00	0.00
480.0	5.60	279.97	479.6	2.4	-13.5	13.7	2.00	2.00	0.00
520.0	6.40	279.97	519.3	3.1	-17.6	17.9	2.00	2.00	0.00
560.0	7.20	279.97	559.1	3.9	-22.2	22.6	2.00	2.00	0.00
600.0	8.00	279.97	598.7	4.8	-27.5	27.9	2.00	2.00	0.00
640.0	8.80	279.97	638.3	5.8	-33.2	33.7	2.00	2.00	0.00
680.0	9.60	279.97	677.8	6.9	-39.5	40.1	2.00	2.00	0.00
720.0	10.40	279.97	717.1	8.1	-46.4	47.1	2.00	2.00	0.00
722.9	10.46	279.97	720.0	8.2	-46.9	47.6	2.00	2.00	0.00
<b>8 5/8"</b>									
760.0	11.20	279.97	756.4	9.4	-53.7	54.6	2.00	2.00	0.00
800.0	12.00	279.97	795.6	10.8	-61.7	62.6	2.00	2.00	0.00
840.0	12.80	279.97	834.7	12.3	-70.1	71.2	2.00	2.00	0.00
880.0	13.60	279.97	873.6	13.9	-79.1	80.3	2.00	2.00	0.00
920.0	14.40	279.97	912.4	15.6	-88.6	90.0	2.00	2.00	0.00
960.0	15.20	279.97	951.1	17.3	-98.7	100.2	2.00	2.00	0.00
1,000.0	16.00	279.97	989.6	19.2	-109.3	111.0	2.00	2.00	0.00
1,040.0	16.80	279.97	1,028.0	21.2	-120.4	122.3	2.00	2.00	0.00
1,080.0	17.60	279.97	1,066.2	23.2	-132.1	134.1	2.00	2.00	0.00
1,120.0	18.40	279.97	1,104.3	25.3	-144.2	146.5	2.00	2.00	0.00
1,160.0	19.20	279.97	1,142.1	27.6	-156.9	159.3	2.00	2.00	0.00
1,200.0	20.00	279.97	1,179.8	29.9	-170.2	172.8	2.00	2.00	0.00
1,240.0	20.80	279.97	1,217.3	32.3	-183.9	186.7	2.00	2.00	0.00
1,280.0	21.60	279.97	1,254.6	34.8	-198.1	201.2	2.00	2.00	0.00
1,320.0	22.40	279.97	1,291.7	37.4	-212.9	216.2	2.00	2.00	0.00
1,360.0	23.20	279.97	1,328.6	40.1	-228.2	231.7	2.00	2.00	0.00
1,400.0	24.00	279.97	1,365.2	42.9	-243.9	247.7	2.00	2.00	0.00
1,440.0	24.80	279.97	1,401.6	45.7	-260.2	264.2	2.00	2.00	0.00
1,480.0	25.60	279.97	1,437.8	48.7	-277.0	281.2	2.00	2.00	0.00
1,520.0	26.40	279.97	1,473.8	51.7	-294.3	298.8	2.00	2.00	0.00
1,542.9	26.86	279.97	1,494.3	53.5	-304.4	309.0	2.00	2.00	0.00
1,560.0	26.86	279.97	1,509.5	54.8	-312.0	316.8	0.00	0.00	0.00
1,600.0	26.86	279.97	1,545.2	57.9	-329.8	334.8	0.00	0.00	0.00
1,640.0	26.86	279.97	1,580.9	61.1	-347.6	352.9	0.00	0.00	0.00
1,680.0	26.86	279.97	1,616.6	64.2	-365.4	371.0	0.00	0.00	0.00
1,720.0	26.86	279.97	1,652.3	67.3	-383.2	389.0	0.00	0.00	0.00
1,760.0	26.86	279.97	1,687.9	70.5	-401.0	407.1	0.00	0.00	0.00
1,800.0	26.86	279.97	1,723.6	73.6	-418.8	425.2	0.00	0.00	0.00
1,840.0	26.86	279.97	1,759.3	76.7	-436.6	443.3	0.00	0.00	0.00
1,880.0	26.86	279.97	1,795.0	79.8	-454.4	461.3	0.00	0.00	0.00
1,920.0	26.86	279.97	1,830.7	83.0	-472.2	479.4	0.00	0.00	0.00
1,960.0	26.86	279.97	1,866.4	86.1	-490.0	497.5	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well River Bluffs 18-13
<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>TVD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Project:</b>	SEC.13-T6N-R68W	<b>MD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Site:</b>	River Bluffs 10-13 Pad Sec.13-T6N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	River Bluffs 18-13	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (6-28-12)		

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)
2,000.0	26.86	279.97	1,902.0	89.2	-507.8	515.5	0.00	0.00	0.00
2,040.0	26.86	279.97	1,937.7	92.3	-525.6	533.6	0.00	0.00	0.00
2,080.0	26.86	279.97	1,973.4	95.5	-543.4	551.7	0.00	0.00	0.00
2,120.0	26.86	279.97	2,009.1	98.6	-561.2	569.8	0.00	0.00	0.00
2,160.0	26.86	279.97	2,044.8	101.7	-579.0	587.8	0.00	0.00	0.00
2,200.0	26.86	279.97	2,080.5	104.9	-596.8	605.9	0.00	0.00	0.00
2,240.0	26.86	279.97	2,116.2	108.0	-614.6	624.0	0.00	0.00	0.00
2,280.0	26.86	279.97	2,151.8	111.1	-632.4	642.0	0.00	0.00	0.00
2,320.0	26.86	279.97	2,187.5	114.2	-650.2	660.1	0.00	0.00	0.00
2,360.0	26.86	279.97	2,223.2	117.4	-668.0	678.2	0.00	0.00	0.00
2,400.0	26.86	279.97	2,258.9	120.5	-685.8	696.3	0.00	0.00	0.00
2,440.0	26.86	279.97	2,294.6	123.6	-703.6	714.3	0.00	0.00	0.00
2,480.0	26.86	279.97	2,330.3	126.7	-721.4	732.4	0.00	0.00	0.00
2,520.0	26.86	279.97	2,366.0	129.9	-739.2	750.5	0.00	0.00	0.00
2,560.0	26.86	279.97	2,401.6	133.0	-756.9	768.5	0.00	0.00	0.00
2,600.0	26.86	279.97	2,437.3	136.1	-774.7	786.6	0.00	0.00	0.00
2,640.0	26.86	279.97	2,473.0	139.3	-792.5	804.7	0.00	0.00	0.00
2,680.0	26.86	279.97	2,508.7	142.4	-810.3	822.8	0.00	0.00	0.00
2,720.0	26.86	279.97	2,544.4	145.5	-828.1	840.8	0.00	0.00	0.00
2,760.0	26.86	279.97	2,580.1	148.6	-845.9	858.9	0.00	0.00	0.00
2,800.0	26.86	279.97	2,615.7	151.8	-863.7	877.0	0.00	0.00	0.00
2,840.0	26.86	279.97	2,651.4	154.9	-881.5	895.0	0.00	0.00	0.00
2,880.0	26.86	279.97	2,687.1	158.0	-899.3	913.1	0.00	0.00	0.00
2,920.0	26.86	279.97	2,722.8	161.1	-917.1	931.2	0.00	0.00	0.00
2,960.0	26.86	279.97	2,758.5	164.3	-934.9	949.3	0.00	0.00	0.00
3,000.0	26.86	279.97	2,794.2	167.4	-952.7	967.3	0.00	0.00	0.00
3,040.0	26.86	279.97	2,829.9	170.5	-970.5	985.4	0.00	0.00	0.00
3,080.0	26.86	279.97	2,865.5	173.7	-988.3	1,003.5	0.00	0.00	0.00
3,120.0	26.86	279.97	2,901.2	176.8	-1,006.1	1,021.5	0.00	0.00	0.00
3,160.0	26.86	279.97	2,936.9	179.9	-1,023.9	1,039.6	0.00	0.00	0.00
3,172.4	26.86	279.97	2,948.0	180.9	-1,029.5	1,045.2	0.00	0.00	0.00
<b>PARKMAN</b>									
3,200.0	26.86	279.97	2,972.6	183.0	-1,041.7	1,057.7	0.00	0.00	0.00
3,240.0	26.86	279.97	3,008.3	186.2	-1,059.5	1,075.8	0.00	0.00	0.00
3,280.0	26.86	279.97	3,044.0	189.3	-1,077.3	1,093.8	0.00	0.00	0.00
3,320.0	26.86	279.97	3,079.6	192.4	-1,095.1	1,111.9	0.00	0.00	0.00
3,360.0	26.86	279.97	3,115.3	195.5	-1,112.9	1,130.0	0.00	0.00	0.00
3,400.0	26.86	279.97	3,151.0	198.7	-1,130.7	1,148.0	0.00	0.00	0.00
3,440.0	26.86	279.97	3,186.7	201.8	-1,148.5	1,166.1	0.00	0.00	0.00
3,480.0	26.86	279.97	3,222.4	204.9	-1,166.3	1,184.2	0.00	0.00	0.00
3,520.0	26.86	279.97	3,258.1	208.1	-1,184.1	1,202.3	0.00	0.00	0.00
3,560.0	26.86	279.97	3,293.8	211.2	-1,201.9	1,220.3	0.00	0.00	0.00
3,600.0	26.86	279.97	3,329.4	214.3	-1,219.7	1,238.4	0.00	0.00	0.00
3,640.0	26.86	279.97	3,365.1	217.4	-1,237.5	1,256.5	0.00	0.00	0.00
3,680.0	26.86	279.97	3,400.8	220.6	-1,255.3	1,274.6	0.00	0.00	0.00
3,720.0	26.86	279.97	3,436.5	223.7	-1,273.1	1,292.6	0.00	0.00	0.00
3,760.0	26.86	279.97	3,472.2	226.8	-1,290.9	1,310.7	0.00	0.00	0.00
3,800.0	26.86	279.97	3,507.9	229.9	-1,308.7	1,328.8	0.00	0.00	0.00
3,840.0	26.86	279.97	3,543.6	233.1	-1,326.5	1,346.8	0.00	0.00	0.00
3,880.0	26.86	279.97	3,579.2	236.2	-1,344.3	1,364.9	0.00	0.00	0.00
3,920.0	26.86	279.97	3,614.9	239.3	-1,362.1	1,383.0	0.00	0.00	0.00
3,960.0	26.86	279.97	3,650.6	242.5	-1,379.9	1,401.1	0.00	0.00	0.00
3,973.9	26.86	279.97	3,663.0	243.5	-1,386.1	1,407.3	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well River Bluffs 18-13
<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>TVD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Project:</b>	SEC.13-T6N-R68W	<b>MD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Site:</b>	River Bluffs 10-13 Pad Sec.13-T6N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	River Bluffs 18-13	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (6-28-12)		

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)
<b>SUSSEX</b>									
4,000.0	26.86	279.97	3,686.3	245.6	-1,397.7	1,419.1	0.00	0.00	0.00
4,040.0	26.86	279.97	3,722.0	248.7	-1,415.5	1,437.2	0.00	0.00	0.00
4,080.0	26.86	279.97	3,757.7	251.8	-1,433.3	1,455.3	0.00	0.00	0.00
4,120.0	26.86	279.97	3,793.3	255.0	-1,451.1	1,473.3	0.00	0.00	0.00
4,160.0	26.86	279.97	3,829.0	258.1	-1,468.9	1,491.4	0.00	0.00	0.00
4,200.0	26.86	279.97	3,864.7	261.2	-1,486.7	1,509.5	0.00	0.00	0.00
4,240.0	26.86	279.97	3,900.4	264.3	-1,504.5	1,527.6	0.00	0.00	0.00
4,280.0	26.86	279.97	3,936.1	267.5	-1,522.3	1,545.6	0.00	0.00	0.00
4,320.0	26.86	279.97	3,971.8	270.6	-1,540.1	1,563.7	0.00	0.00	0.00
4,360.0	26.86	279.97	4,007.5	273.7	-1,557.9	1,581.8	0.00	0.00	0.00
4,400.0	26.86	279.97	4,043.1	276.9	-1,575.7	1,599.8	0.00	0.00	0.00
4,411.0	26.86	279.97	4,053.0	277.7	-1,580.6	1,604.8	0.00	0.00	0.00
<b>SHANNON</b>									
4,440.0	26.86	279.97	4,078.8	280.0	-1,593.5	1,617.9	0.00	0.00	0.00
4,480.0	26.86	279.97	4,114.5	283.1	-1,611.3	1,636.0	0.00	0.00	0.00
4,520.0	26.86	279.97	4,150.2	286.2	-1,629.1	1,654.1	0.00	0.00	0.00
4,560.0	26.86	279.97	4,185.9	289.4	-1,646.9	1,672.1	0.00	0.00	0.00
4,600.0	26.86	279.97	4,221.6	292.5	-1,664.7	1,690.2	0.00	0.00	0.00
4,640.0	26.86	279.97	4,257.3	295.6	-1,682.5	1,708.3	0.00	0.00	0.00
4,680.0	26.86	279.97	4,292.9	298.7	-1,700.3	1,726.3	0.00	0.00	0.00
4,720.0	26.86	279.97	4,328.6	301.9	-1,718.1	1,744.4	0.00	0.00	0.00
4,760.0	26.86	279.97	4,364.3	305.0	-1,735.9	1,762.5	0.00	0.00	0.00
4,800.0	26.86	279.97	4,400.0	308.1	-1,753.7	1,780.6	0.00	0.00	0.00
4,840.0	26.86	279.97	4,435.7	311.3	-1,771.5	1,798.6	0.00	0.00	0.00
4,880.0	26.86	279.97	4,471.4	314.4	-1,789.3	1,816.7	0.00	0.00	0.00
4,920.0	26.86	279.97	4,507.0	317.5	-1,807.1	1,834.8	0.00	0.00	0.00
4,960.0	26.86	279.97	4,542.7	320.6	-1,824.9	1,852.8	0.00	0.00	0.00
5,000.0	26.86	279.97	4,578.4	323.8	-1,842.7	1,870.9	0.00	0.00	0.00
5,040.0	26.86	279.97	4,614.1	326.9	-1,860.5	1,889.0	0.00	0.00	0.00
5,080.0	26.86	279.97	4,649.8	330.0	-1,878.3	1,907.1	0.00	0.00	0.00
5,120.0	26.86	279.97	4,685.5	333.1	-1,896.1	1,925.1	0.00	0.00	0.00
5,160.0	26.86	279.97	4,721.2	336.3	-1,913.9	1,943.2	0.00	0.00	0.00
5,200.0	26.86	279.97	4,756.8	339.4	-1,931.7	1,961.3	0.00	0.00	0.00
5,240.0	26.86	279.97	4,792.5	342.5	-1,949.5	1,979.3	0.00	0.00	0.00
5,280.0	26.86	279.97	4,828.2	345.7	-1,967.3	1,997.4	0.00	0.00	0.00
5,320.0	26.86	279.97	4,863.9	348.8	-1,985.1	2,015.5	0.00	0.00	0.00
5,360.0	26.86	279.97	4,899.6	351.9	-2,002.9	2,033.6	0.00	0.00	0.00
5,400.0	26.86	279.97	4,935.3	355.0	-2,020.7	2,051.6	0.00	0.00	0.00
5,440.0	26.86	279.97	4,971.0	358.2	-2,038.5	2,069.7	0.00	0.00	0.00
5,480.0	26.86	279.97	5,006.6	361.3	-2,056.3	2,087.8	0.00	0.00	0.00
5,520.0	26.86	279.97	5,042.3	364.4	-2,074.1	2,105.8	0.00	0.00	0.00
5,560.0	26.86	279.97	5,078.0	367.5	-2,091.9	2,123.9	0.00	0.00	0.00
5,600.0	26.86	279.97	5,113.7	370.7	-2,109.7	2,142.0	0.00	0.00	0.00
5,640.0	26.86	279.97	5,149.4	373.8	-2,127.5	2,160.1	0.00	0.00	0.00
5,680.0	26.86	279.97	5,185.1	376.9	-2,145.3	2,178.1	0.00	0.00	0.00
5,703.1	26.86	279.97	5,205.7	378.7	-2,155.6	2,188.6	0.00	0.00	0.00
5,720.0	26.52	279.97	5,220.8	380.0	-2,163.0	2,196.2	2.00	-2.00	0.00
5,760.0	25.72	279.97	5,256.7	383.1	-2,180.4	2,213.8	2.00	-2.00	0.00
5,800.0	24.92	279.97	5,292.8	386.1	-2,197.2	2,230.9	2.00	-2.00	0.00
5,840.0	24.12	279.97	5,329.2	388.9	-2,213.6	2,247.5	2.00	-2.00	0.00
5,880.0	23.32	279.97	5,365.9	391.7	-2,229.4	2,263.6	2.00	-2.00	0.00
5,920.0	22.52	279.97	5,402.7	394.4	-2,244.8	2,279.2	2.00	-2.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well River Bluffs 18-13
<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>TVD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Project:</b>	SEC.13-T6N-R68W	<b>MD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Site:</b>	River Bluffs 10-13 Pad Sec.13-T6N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	River Bluffs 18-13	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (6-28-12)		

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)
5,960.0	21.72	279.97	5,439.7	397.0	-2,259.6	2,294.2	2.00	-2.00	0.00
6,000.0	20.92	279.97	5,477.0	399.5	-2,273.9	2,308.8	2.00	-2.00	0.00
6,040.0	20.12	279.97	5,514.5	402.0	-2,287.7	2,322.8	2.00	-2.00	0.00
6,080.0	19.32	279.97	5,552.1	404.3	-2,301.0	2,336.3	2.00	-2.00	0.00
6,120.0	18.52	279.97	5,590.0	406.5	-2,313.8	2,349.3	2.00	-2.00	0.00
6,160.0	17.72	279.97	5,628.0	408.7	-2,326.1	2,361.7	2.00	-2.00	0.00
6,200.0	16.92	279.97	5,666.2	410.8	-2,337.8	2,373.6	2.00	-2.00	0.00
6,240.0	16.12	279.97	5,704.5	412.7	-2,349.0	2,385.0	2.00	-2.00	0.00
6,280.0	15.32	279.97	5,743.0	414.6	-2,359.7	2,395.8	2.00	-2.00	0.00
6,320.0	14.52	279.97	5,781.7	416.4	-2,369.8	2,406.1	2.00	-2.00	0.00
6,360.0	13.72	279.97	5,820.5	418.1	-2,379.4	2,415.9	2.00	-2.00	0.00
6,400.0	12.92	279.97	5,859.4	419.7	-2,388.5	2,425.1	2.00	-2.00	0.00
6,440.0	12.12	279.97	5,898.4	421.2	-2,397.0	2,433.8	2.00	-2.00	0.00
6,480.0	11.32	279.97	5,937.6	422.6	-2,405.0	2,441.9	2.00	-2.00	0.00
6,520.0	10.52	279.97	5,976.9	423.9	-2,412.5	2,449.5	2.00	-2.00	0.00
6,560.0	9.72	279.97	6,016.2	425.1	-2,419.4	2,456.5	2.00	-2.00	0.00
6,600.0	8.92	279.97	6,055.7	426.2	-2,425.8	2,463.0	2.00	-2.00	0.00
6,640.0	8.12	279.97	6,095.3	427.2	-2,431.7	2,468.9	2.00	-2.00	0.00
6,680.0	7.32	279.97	6,134.9	428.2	-2,436.9	2,474.3	2.00	-2.00	0.00
6,720.0	6.52	279.97	6,174.6	429.0	-2,441.7	2,479.1	2.00	-2.00	0.00
6,760.0	5.72	279.97	6,214.4	429.7	-2,445.9	2,483.4	2.00	-2.00	0.00
6,800.0	4.92	279.97	6,254.2	430.4	-2,449.6	2,487.1	2.00	-2.00	0.00
6,840.0	4.12	279.97	6,294.1	430.9	-2,452.7	2,490.2	2.00	-2.00	0.00
6,880.0	3.32	279.97	6,334.0	431.4	-2,455.2	2,492.8	2.00	-2.00	0.00
6,920.0	2.52	279.97	6,374.0	431.7	-2,457.2	2,494.9	2.00	-2.00	0.00
6,960.0	1.72	279.97	6,413.9	432.0	-2,458.7	2,496.3	2.00	-2.00	0.00
6,979.1	1.34	279.97	6,433.0	432.1	-2,459.2	2,496.9	2.00	-2.00	0.00
<b>NIORARA</b>									
7,000.0	0.92	279.97	6,453.9	432.2	-2,459.6	2,497.3	2.00	-2.00	0.00
7,040.0	0.12	279.97	6,493.9	432.2	-2,459.9	2,497.6	2.00	-2.00	0.00
7,046.1	0.00	0.00	6,500.0	432.2	-2,460.0	2,497.6	2.00	-2.00	0.00
7,080.0	0.00	0.00	6,533.9	432.2	-2,460.0	2,497.6	0.00	0.00	0.00
7,120.0	0.00	0.00	6,573.9	432.2	-2,460.0	2,497.6	0.00	0.00	0.00
7,160.0	0.00	0.00	6,613.9	432.2	-2,460.0	2,497.6	0.00	0.00	0.00
7,200.0	0.00	0.00	6,653.9	432.2	-2,460.0	2,497.6	0.00	0.00	0.00
7,240.0	0.00	0.00	6,693.9	432.2	-2,460.0	2,497.6	0.00	0.00	0.00
7,280.0	0.00	0.00	6,733.9	432.2	-2,460.0	2,497.6	0.00	0.00	0.00
7,292.1	0.00	0.00	6,746.0	432.2	-2,460.0	2,497.6	0.00	0.00	0.00
<b>FORT HAYES</b>									
7,314.1	0.00	0.00	6,768.0	432.2	-2,460.0	2,497.6	0.00	0.00	0.00
<b>CODELL</b>									
7,320.0	0.00	0.00	6,773.9	432.2	-2,460.0	2,497.6	0.00	0.00	0.00
7,360.0	0.00	0.00	6,813.9	432.2	-2,460.0	2,497.6	0.00	0.00	0.00
7,364.1	0.00	0.00	6,818.0	432.2	-2,460.0	2,497.6	0.00	0.00	0.00
<b>GREENHORN</b>									
7,400.0	0.00	0.00	6,853.9	432.2	-2,460.0	2,497.6	0.00	0.00	0.00
7,440.0	0.00	0.00	6,893.9	432.2	-2,460.0	2,497.6	0.00	0.00	0.00
7,452.1	0.00	0.00	6,906.0	432.2	-2,460.0	2,497.6	0.00	0.00	0.00
<b>GRANEROS</b>									
7,466.1	0.00	0.00	6,920.0	432.2	-2,460.0	2,497.6	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well River Bluffs 18-13
<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>TVD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Project:</b>	SEC.13-T6N-R68W	<b>MD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Site:</b>	River Bluffs 10-13 Pad Sec.13-T6N-R68W	<b>North Reference:</b>	True
<b>Well:</b>	River Bluffs 18-13	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (6-28-12)		

#### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
722.9	720.0	8 5/8"	8-5/8	12-1/4

#### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,172.4	2,948.0	PARKMAN		0.00	
3,973.9	3,663.0	SUSSEX		0.00	
4,411.0	4,053.0	SHANNON		0.00	
6,979.1	6,433.0	NIOBRARA		0.00	
7,292.1	6,746.0	FORT HAYES		0.00	
7,314.1	6,768.0	CODELL		0.00	
7,364.1	6,818.0	GREENHORN		0.00	
7,452.1	6,906.0	GRANEROS		0.00	





## **Directional**

# **BAYSWATER EXPLORATION & PRODUCTION**

**SEC.13-T6N-R68W**

**River Bluffs 10-13 Pad Sec.13-T6N-R68W**

**River Bluffs 18-13**

**Wellbore #1**

**Plan #1 (6-28-12)**

## **Anticollision Report**

**03 July, 2012**

<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well River Bluffs 18-13
<b>Project:</b>	SEC.13-T6N-R68W	<b>TVD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Reference Site:</b>	River Bluffs 10-13 Pad Sec.13-T6N-R68W	<b>MD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	River Bluffs 18-13	<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 (6-28-12)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #1 (6-28-12)		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	Stations	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 10,000.0ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

<b>Survey Tool Program</b>	<b>Date</b> 7/3/2012			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	7,466.1	Plan #1 (6-28-12) (Wellbore #1)	MWD	MWD - Standard

<b>Summary</b>						
<b>Site Name</b>	<b>Reference Measured Depth (ft)</b>	<b>Offset Measured Depth (ft)</b>	<b>Distance Between Centres (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>	
<b>Offset Well - Wellbore - Design</b>						
River Bluffs 10-13 Pad Sec.13-T6N-R68W						
River Bluffs 10-13 - Wellbore #1 - Plan #1 (6-28-12)	200.0	200.0	16.0	15.4	23.779 CC	
River Bluffs 10-13 - Wellbore #1 - Plan #1 (6-28-12)	300.0	300.0	16.4	15.3	14.714 ES	
River Bluffs 10-13 - Wellbore #1 - Plan #1 (6-28-12)	400.0	399.8	18.6	17.0	11.832 SF	

<b>Offset Design</b>	River Bluffs 10-13 Pad Sec.13-T6N-R68W - River Bluffs 10-13 - Wellbore #1 - Plan #1 (6-28-12)											<b>Offset Site Error:</b>	0.0 ft
<b>Survey Program:</b>	0-MWD											<b>Offset Well Error:</b>	0.0 ft
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>		<b>Distance</b>				<b>Warning</b>					
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre +N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>	
0.0	0.0	0.0	0.0	0.0	0.0	180.00	-16.0	0.0	16.0	16.0	0.00	N/A	
100.0	100.0	100.0	100.0	0.1	0.1	180.00	-16.0	0.0	16.0	15.8	0.22	71.337	
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-16.0	0.0	16.0	15.4	0.67	23.779 CC	
300.0	300.0	300.0	300.0	0.6	0.6	-105.96	-16.0	0.0	16.4	15.3	1.12	14.714 ES	
400.0	399.8	399.8	399.8	0.8	0.8	-121.64	-16.0	0.0	18.6	17.0	1.57	11.832 SF	
500.0	499.5	499.0	498.9	1.0	1.0	-135.97	-17.7	-0.5	25.3	23.3	2.02	12.534	
600.0	598.7	597.6	597.4	1.3	1.2	-142.42	-22.5	-2.0	37.4	34.9	2.47	15.108	
700.0	697.5	695.4	694.9	1.7	1.4	-144.43	-30.5	-4.6	54.1	51.1	2.97	18.210	
800.0	795.6	792.2	791.0	2.0	1.6	-144.57	-41.6	-8.1	75.1	71.6	3.52	21.364	
900.0	893.1	887.6	885.2	2.5	1.9	-143.96	-55.5	-12.4	100.4	96.3	4.12	24.357	
1,000.0	989.6	981.4	977.4	3.0	2.3	-143.07	-72.1	-17.7	129.9	125.1	4.80	27.089	
1,100.0	1,085.3	1,073.3	1,067.1	3.6	2.6	-142.10	-91.2	-23.7	163.5	158.0	5.54	29.526	
1,200.0	1,179.8	1,163.2	1,154.2	4.2	3.0	-141.10	-112.4	-30.4	201.1	194.8	6.35	31.671	
1,300.0	1,273.2	1,250.9	1,238.5	5.0	3.5	-140.12	-135.7	-37.7	242.6	235.4	7.23	33.546	
1,400.0	1,365.2	1,336.2	1,319.6	5.8	4.0	-139.15	-160.6	-45.6	287.8	279.6	8.18	35.181	
1,500.0	1,455.8	1,419.0	1,397.6	6.6	4.5	-138.20	-187.1	-53.9	336.7	327.5	9.20	36.600	
1,542.9	1,494.3	1,455.5	1,431.9	7.0	4.7	-137.81	-199.3	-57.7	358.6	349.0	9.66	37.140	
1,600.0	1,545.2	1,504.4	1,477.6	7.6	5.0	-137.80	-215.6	-62.9	388.1	377.8	10.29	37.708	
1,700.0	1,634.4	1,590.0	1,557.8	8.5	5.6	-137.79	-244.2	-71.9	439.7	428.3	11.41	38.532	
1,800.0	1,723.6	1,675.6	1,638.0	9.5	6.2	-137.79	-272.8	-80.9	491.4	478.8	12.55	39.163	
1,900.0	1,812.8	1,761.3	1,718.2	10.5	6.8	-137.78	-301.4	-89.9	543.0	529.3	13.69	39.656	
2,000.0	1,902.0	1,846.9	1,798.4	11.5	7.4	-137.78	-330.0	-99.0	594.7	579.8	14.85	40.048	
2,100.0	1,991.3	1,932.5	1,878.6	12.5	7.9	-137.78	-358.7	-108.0	646.3	630.3	16.01	40.367	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well River Bluffs 18-13
<b>Project:</b>	SEC.13-T6N-R68W	<b>TVD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Reference Site:</b>	River Bluffs 10-13 Pad Sec.13-T6N-R68W	<b>MD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	River Bluffs 18-13	<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 (6-28-12)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design River Bluffs 10-13 Pad Sec.13-T6N-R68W - River Bluffs 10-13 - Wellbore #1 - Plan #1 (6-28-12)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	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
2,200.0	2,080.5	2,018.2	1,958.8	13.4	8.5	-137.77	-137.77	-387.3	-117.0	698.0	680.8	17.18	40.628	
2,300.0	2,169.7	2,103.8	2,039.0	14.4	9.1	-137.77	-137.77	-415.9	-126.0	749.6	731.3	18.35	40.846	
2,400.0	2,258.9	2,189.4	2,119.2	15.4	9.7	-137.77	-137.77	-444.5	-135.0	801.3	781.7	19.53	41.029	
2,500.0	2,348.1	2,275.1	2,199.4	16.4	10.3	-137.77	-137.77	-473.1	-144.0	852.9	832.2	20.71	41.186	
2,600.0	2,437.3	2,360.7	2,279.7	17.4	10.9	-137.77	-137.77	-501.7	-153.1	904.6	882.7	21.89	41.320	
2,700.0	2,526.5	2,446.3	2,359.9	18.4	11.5	-137.76	-137.76	-530.3	-162.1	956.2	933.1	23.08	41.436	
2,800.0	2,615.7	2,531.9	2,440.1	19.4	12.1	-137.76	-137.76	-559.0	-171.1	1,007.8	983.6	24.26	41.538	
2,900.0	2,705.0	2,617.6	2,520.3	20.4	12.7	-137.76	-137.76	-587.6	-180.1	1,059.5	1,034.0	25.45	41.628	
3,000.0	2,794.2	2,703.2	2,600.5	21.4	13.3	-137.76	-137.76	-616.2	-189.1	1,111.1	1,084.5	26.64	41.707	
3,100.0	2,883.4	2,788.8	2,680.7	22.4	13.9	-137.76	-137.76	-644.8	-198.1	1,162.8	1,135.0	27.83	41.778	
3,200.0	2,972.6	2,874.5	2,760.9	23.4	14.5	-137.76	-137.76	-673.4	-207.2	1,214.4	1,185.4	29.03	41.841	
3,300.0	3,061.8	2,960.1	2,841.1	24.3	15.1	-137.76	-137.76	-702.0	-216.2	1,266.1	1,235.9	30.22	41.897	
3,400.0	3,151.0	3,045.7	2,921.3	25.3	15.7	-137.76	-137.76	-730.6	-225.2	1,317.7	1,286.3	31.41	41.949	
3,500.0	3,240.2	3,131.4	3,001.5	26.3	16.3	-137.76	-137.76	-759.3	-234.2	1,369.4	1,336.8	32.61	41.995	
3,600.0	3,329.4	3,217.0	3,081.7	27.3	16.9	-137.76	-137.76	-787.9	-243.2	1,421.0	1,387.2	33.80	42.037	
3,700.0	3,418.7	3,302.6	3,161.9	28.3	17.5	-137.75	-137.75	-816.5	-252.2	1,472.7	1,437.7	35.00	42.076	
3,800.0	3,507.9	3,388.3	3,242.1	29.3	18.1	-137.75	-137.75	-845.1	-261.3	1,524.3	1,488.1	36.20	42.111	
3,900.0	3,597.1	3,473.9	3,322.3	30.3	18.7	-137.75	-137.75	-873.7	-270.3	1,576.0	1,538.6	37.40	42.143	
4,000.0	3,686.3	3,559.5	3,402.5	31.3	19.3	-137.75	-137.75	-902.3	-279.3	1,627.6	1,589.0	38.59	42.173	
4,100.0	3,775.5	3,645.2	3,482.7	32.3	19.9	-137.75	-137.75	-930.9	-288.3	1,679.2	1,639.5	39.79	42.200	
4,200.0	3,864.7	3,730.8	3,562.9	33.3	20.5	-137.75	-137.75	-959.6	-297.3	1,730.9	1,689.9	40.99	42.226	
4,300.0	3,953.9	3,816.4	3,643.1	34.3	21.1	-137.75	-137.75	-988.2	-306.4	1,782.5	1,740.3	42.19	42.249	
4,400.0	4,043.1	3,902.0	3,723.3	35.3	21.7	-137.75	-137.75	-1,016.8	-315.4	1,834.2	1,790.8	43.39	42.271	
4,500.0	4,132.4	3,987.7	3,803.5	36.3	22.3	-137.75	-137.75	-1,045.4	-324.4	1,885.8	1,841.2	44.59	42.291	
4,600.0	4,221.6	4,073.3	3,883.7	37.3	22.9	-137.75	-137.75	-1,074.0	-333.4	1,937.5	1,891.7	45.79	42.310	
4,700.0	4,310.8	4,158.9	3,963.9	38.3	23.5	-137.75	-137.75	-1,102.6	-342.4	1,989.1	1,942.1	46.99	42.328	
4,800.0	4,400.0	4,244.6	4,044.1	39.3	24.1	-137.75	-137.75	-1,131.2	-351.4	2,040.8	1,992.6	48.19	42.344	
4,900.0	4,489.2	4,330.2	4,124.3	40.3	24.7	-137.75	-137.75	-1,159.9	-360.5	2,092.4	2,043.0	49.40	42.360	
5,000.0	4,578.4	4,415.8	4,204.5	41.3	25.3	-137.75	-137.75	-1,188.5	-369.5	2,144.1	2,093.5	50.60	42.374	
5,100.0	4,667.6	4,501.5	4,284.7	42.3	25.9	-137.75	-137.75	-1,217.1	-378.5	2,195.7	2,143.9	51.80	42.388	
5,200.0	4,756.8	4,587.1	4,364.9	43.3	26.5	-137.75	-137.75	-1,245.7	-387.5	2,247.4	2,194.3	53.00	42.401	
5,300.0	4,846.1	4,672.7	4,445.1	44.3	27.2	-137.75	-137.75	-1,274.3	-396.5	2,299.0	2,244.8	54.21	42.413	
5,400.0	4,935.3	4,758.4	4,525.4	45.3	27.8	-137.75	-137.75	-1,302.9	-405.5	2,350.6	2,295.2	55.41	42.424	
5,500.0	5,024.5	4,844.0	4,605.6	46.3	28.4	-137.75	-137.75	-1,331.5	-414.6	2,402.3	2,345.7	56.61	42.435	
5,600.0	5,113.7	4,929.6	4,685.8	47.3	29.0	-137.75	-137.75	-1,360.1	-423.6	2,453.9	2,396.1	57.81	42.445	
5,703.1	5,205.7	5,017.9	4,768.5	48.3	29.6	-137.75	-137.75	-1,389.7	-432.9	2,507.2	2,448.2	59.06	42.455	
5,800.0	5,292.8	5,101.5	4,846.7	49.1	30.2	-138.48	-138.48	-1,417.6	-441.7	2,556.2	2,495.9	60.26	42.420	
5,900.0	5,384.2	5,217.7	4,955.8	49.9	30.9	-139.10	-139.10	-1,455.8	-453.7	2,604.3	2,542.8	61.51	42.340	
6,000.0	5,477.0	5,383.5	5,113.9	50.5	31.6	-139.65	-139.65	-1,503.6	-468.8	2,648.1	2,585.3	62.74	42.208	
6,100.0	5,571.0	5,556.0	5,281.1	51.1	32.3	-140.22	-140.22	-1,543.9	-481.5	2,686.7	2,622.9	63.84	42.087	
6,200.0	5,666.2	5,734.1	5,456.1	51.7	32.8	-140.81	-140.81	-1,575.4	-491.4	2,720.0	2,655.2	64.78	41.991	
6,300.0	5,762.3	5,916.7	5,637.2	52.1	33.2	-141.43	-141.43	-1,596.9	-498.2	2,747.7	2,682.2	65.53	41.932	
6,400.0	5,859.4	6,102.2	5,822.3	52.6	33.5	-142.10	-142.10	-1,607.4	-501.5	2,769.7	2,703.6	66.07	41.923	
6,500.0	5,957.2	6,237.1	5,957.2	52.9	33.6	-142.65	-142.65	-1,608.4	-501.8	2,786.5	2,720.1	66.43	41.949	
6,600.0	6,055.7	6,335.6	6,055.7	53.2	33.7	-143.03	-143.03	-1,608.4	-501.8	2,800.3	2,733.6	66.71	41.974	
6,700.0	6,154.8	6,434.6	6,154.8	53.4	33.7	-143.33	-143.33	-1,608.4	-501.8	2,811.4	2,744.4	66.95	41.990	
6,800.0	6,254.2	6,534.1	6,254.2	53.6	33.8	-143.55	-143.55	-1,608.4	-501.8	2,819.7	2,752.5	67.15	41.993	
6,900.0	6,354.0	6,633.8	6,354.0	53.8	33.9	-143.70	-143.70	-1,608.4	-501.8	2,825.2	2,757.9	67.29	41.983	
7,000.0	6,453.9	6,733.8	6,453.9	53.9	33.9	-143.77	-143.77	-1,608.4	-501.8	2,827.9	2,760.5	67.40	41.958	
7,046.1	6,500.0	6,779.9	6,500.0	53.9	34.0	136.18	136.18	-1,608.4	-501.8	2,828.2	2,760.7	67.43	41.940	
7,100.0	6,553.9	6,833.8	6,553.9	53.9	34.0	136.18	136.18	-1,608.4	-501.8	2,828.2	2,760.7	67.52	41.888	

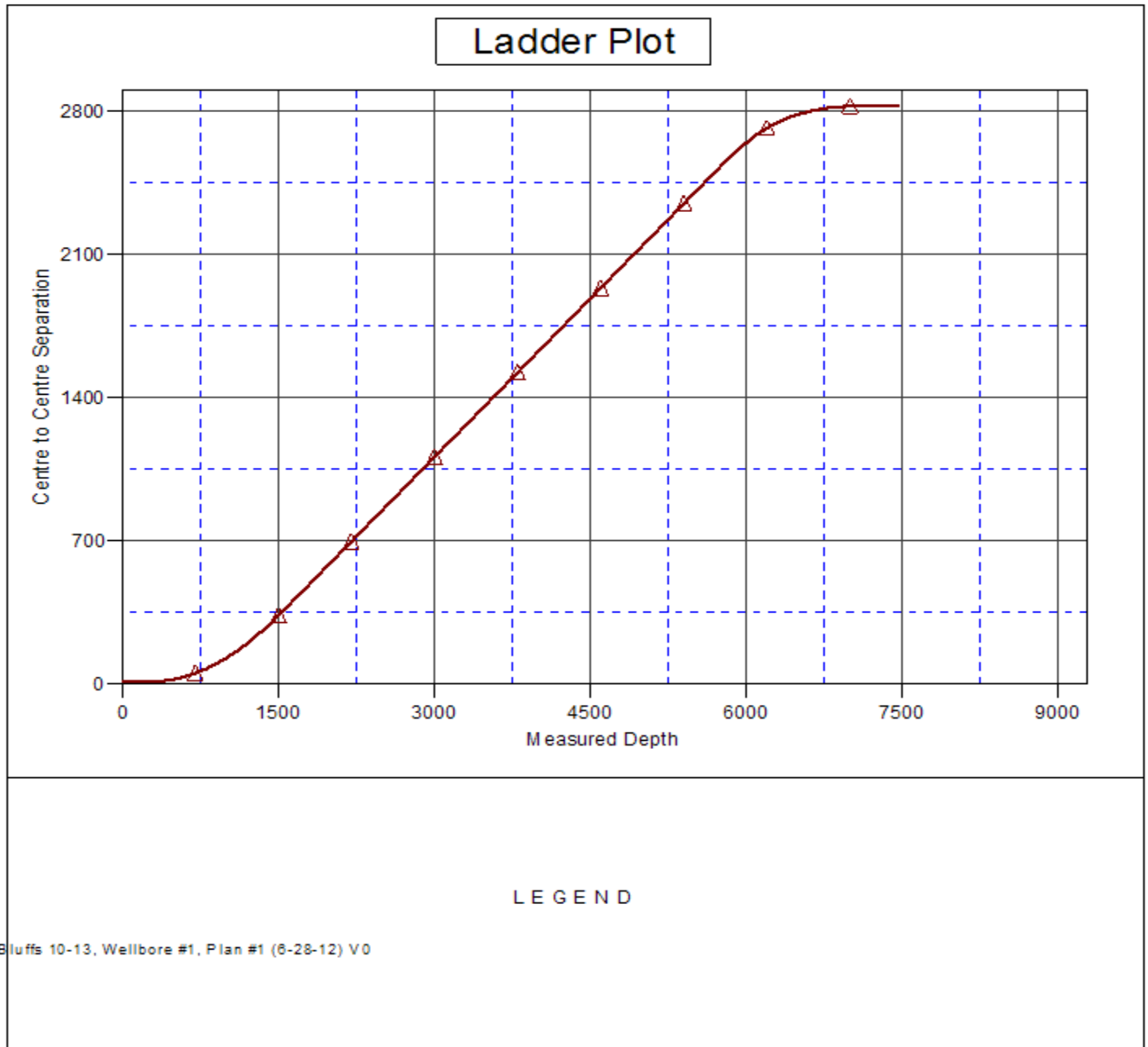
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well River Bluffs 18-13
<b>Project:</b>	SEC.13-T6N-R68W	<b>TVD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Reference Site:</b>	River Bluffs 10-13 Pad Sec.13-T6N-R68W	<b>MD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	River Bluffs 18-13	<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 (6-28-12)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design										River Bluffs 10-13 Pad Sec.13-T6N-R68W - River Bluffs 10-13 - Wellbore #1 - Plan #1 (6-28-12)				Offset Site Error:		0.0 ft	
Survey Program: 0-MWD														Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance										
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
7,200.0	6,653.9	6,933.8	6,653.9	54.0	34.1	136.18	-1,608.4	-501.8	2,828.2	2,760.5	67.68	41.787					
7,300.0	6,753.9	7,033.8	6,753.9	54.0	34.2	136.18	-1,608.4	-501.8	2,828.2	2,760.3	67.85	41.685					
7,400.0	6,853.9	7,133.8	6,853.9	54.1	34.2	136.18	-1,608.4	-501.8	2,828.2	2,760.2	68.01	41.582					
7,466.1	6,920.0	7,199.9	6,920.0	54.1	34.3	136.18	-1,608.4	-501.8	2,828.2	2,760.1	68.13	41.514					

<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well River Bluffs 18-13
<b>Project:</b>	SEC.13-T6N-R68W	<b>TVD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Reference Site:</b>	River Bluffs 10-13 Pad Sec.13-T6N-R68W	<b>MD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	River Bluffs 18-13	<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 (6-28-12)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4818.0ft (Original Well Elev) Coordinates are relative to: River Bluffs 18-13  
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: 0.36°



<b>Company:</b>	BAYSWATER EXPLORATION & PRODUCTION	<b>Local Co-ordinate Reference:</b>	Well River Bluffs 18-13
<b>Project:</b>	SEC.13-T6N-R68W	<b>TVD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Reference Site:</b>	River Bluffs 10-13 Pad Sec.13-T6N-R68W	<b>MD Reference:</b>	WELL @ 4818.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	River Bluffs 18-13	<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 (6-28-12)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4818.0ft (Original Well Elev) Coordinates are relative to: River Bluffs 18-13  
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: 0.36°

