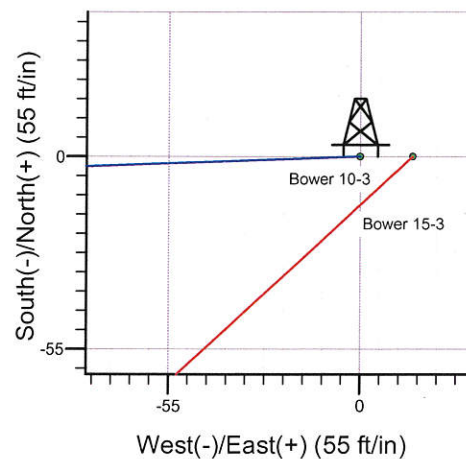
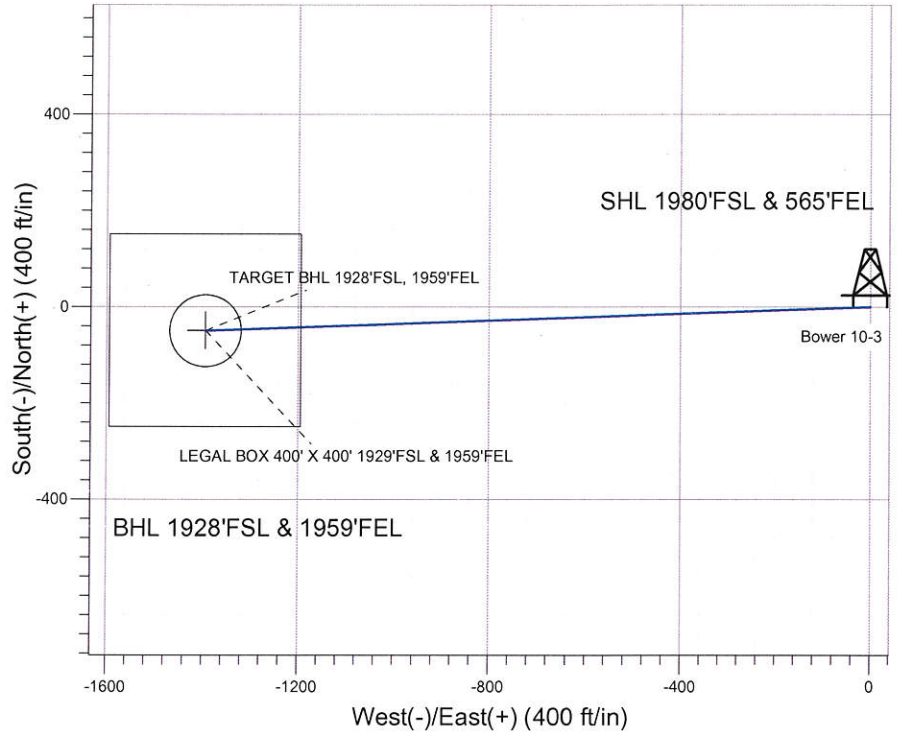
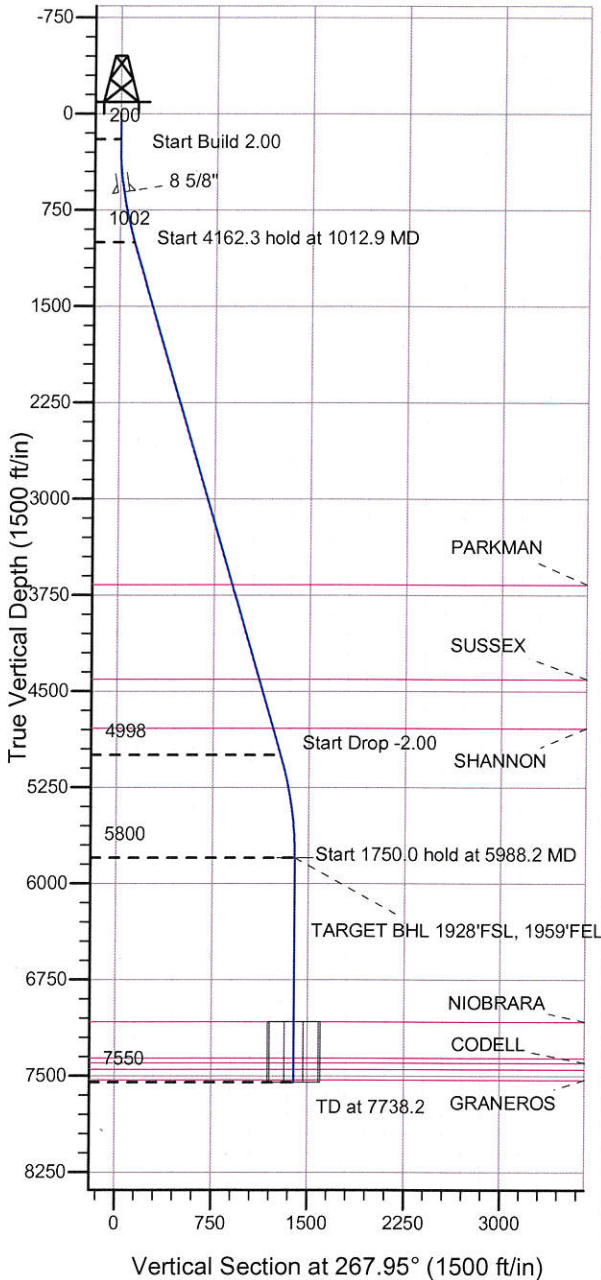


Surface Location: Bowers 2 Pad Sec.3-T6N-R67W  
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone  
 Ground Elevation: 4952.0  
 +N/-S +E/-W Northing Easting Latitude Longitude Slot  
 0.0 0.0 1430859.63 3174571.99 40.514414 -104.872129  
 Original Well Elev WELL @ 4958.0ft (Original Well Elev)

### BAYSWATER EXPLORATION & PRODUCTION



Bowers 2 Pad Sec.3-T6N-R67W  
 Bower 10-3  
 Plan #1 (9-24-12)



Azimuths to True North  
 Magnetic North: 8.76°  
 Magnetic Field  
 Strength: 53044.1snT  
 Dip Angle: 67.08°  
 Date: 9/24/2012  
 Model: IGRF2010

#### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1928'FSL, 1959'FEL	5800.0	-49.9	-1393.6	40.514277	-104.877141	Point
LEGAL BOX 400' X 400' 1929'FSL & 1959'FEL	7078.0	-48.9	-1393.6	40.514280	-104.877141	Rectangle (Sides: L400.0 W400.0)
TARGET CIRCLE 1928'FSL & 1959'FEL	7078.0	-49.9	-1393.6	40.514277	-104.877141	Circle (Radius: 75.0)

#### 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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1012.9	16.26	267.95	1002.1	-4.1	-114.5	2.00	267.95	114.6	
4	5175.3	16.26	267.95	4997.9	-45.8	-1279.1	0.00	0.00	1279.9	
5	5988.2	0.00	0.00	5800.0	-49.9	-1393.6	2.00	180.00	1394.5	TARGET BHL 1928'FSL, 1959'FEL
6	7738.2	0.00	0.00	7550.0	-49.9	-1393.6	0.00	0.00	1394.5	



**Directional**

## **BAYSWATER EXPLORATION & PRODUCTION**

**SEC.3-T6N-R67W**

**Bowers 2 Pad Sec.3-T6N-R67W**

**Bower 10-3**

**Wellbore #1**

**Plan: Plan #1 (9-24-12)**

## **Standard Planning Report**

**25 September, 2012**



**Database:** Landmark  
**Company:** BAYSWATER EXPLORATION & PRODUCTION  
**Project:** SEC.3-T6N-R67W  
**Site:** Bowers 2 Pad Sec.3-T6N-R67W  
**Well:** Bower 10-3  
**Wellbore:** Wellbore #1  
**Design:** Plan #1 (9-24-12)

**Local Co-ordinate Reference:** Well Bower 10-3  
**TVD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

**Project** SEC.3-T6N-R67W, Weld County, Colorado

**Map System:** US State Plane 1983  
**Geo Datum:** North American Datum 1983  
**Map Zone:** Colorado Northern Zone  
**System Datum:** Mean Sea Level  
 Using Well Reference Point  
 Using geodetic scale factor

**Site** Bowers 2 Pad Sec.3-T6N-R67W

**Site Position:**  
**From:** Lat/Long  
**Position Uncertainty:** 0.0 ft  
**Northing:** 1,430,859.75 ft  
**Easting:** 3,174,587.00 ft  
**Slot Radius:** "  
**Latitude:** 40.514414  
**Longitude:** -104.872075  
**Grid Convergence:** 0.41 °

**Well** Bower 10-3

**Well Position** +N/-S 0.0 ft  
 +E/-W -15.0 ft  
**Position Uncertainty** 0.0 ft  
**Northing:** 1,430,859.63 ft  
**Easting:** 3,174,571.99 ft  
**Wellhead Elevation:** ft  
**Latitude:** 40.514414  
**Longitude:** -104.872129  
**Ground Level:** 4,942.0 ft

**Wellbore** Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/24/2012	8.76	67.08	53,044

**Design** Plan #1 (9-24-12)

**Audit Notes:**

**Version:**  
**Phase:** PROTOTYPE  
**Tie On Depth:** 0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	267.95

### Plan Sections

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	
1,012.9	16.26	267.95	1,002.1	-4.1	-114.5	2.00	2.00	0.00	267.95	
5,175.3	16.26	267.95	4,997.9	-45.8	-1,279.1	0.00	0.00	0.00	0.00	
5,988.2	0.00	0.00	5,800.0	-49.9	-1,393.6	2.00	-2.00	0.00	180.00	TARGET BHL 1928
7,738.2	0.00	0.00	7,550.0	-49.9	-1,393.6	0.00	0.00	0.00	0.00	



**Database:** Landmark  
**Company:** BAYSWATER EXPLORATION & PRODUCTION  
**Project:** SEC.3-T6N-R67W  
**Site:** Bowers 2 Pad Sec.3-T6N-R67W  
**Well:** Bower 10-3  
**Wellbore:** Wellbore #1  
**Design:** Plan #1 (9-24-12)

**Local Co-ordinate Reference:** Well Bower 10-3  
**TVD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

### 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	267.95	240.0	0.0	-0.3	0.3	2.00	2.00	0.00
280.0	1.60	267.95	280.0	0.0	-1.1	1.1	2.00	2.00	0.00
320.0	2.40	267.95	320.0	-0.1	-2.5	2.5	2.00	2.00	0.00
360.0	3.20	267.95	359.9	-0.2	-4.5	4.5	2.00	2.00	0.00
400.0	4.00	267.95	399.8	-0.2	-7.0	7.0	2.00	2.00	0.00
440.0	4.80	267.95	439.7	-0.4	-10.0	10.0	2.00	2.00	0.00
480.0	5.60	267.95	479.6	-0.5	-13.7	13.7	2.00	2.00	0.00
520.0	6.40	267.95	519.3	-0.6	-17.8	17.9	2.00	2.00	0.00
560.0	7.20	267.95	559.1	-0.8	-22.6	22.6	2.00	2.00	0.00
600.0	8.00	267.95	598.7	-1.0	-27.9	27.9	2.00	2.00	0.00
611.4	8.23	267.95	610.0	-1.1	-29.5	29.5	2.00	2.00	0.00
<b>8 5/8"</b>									
640.0	8.80	267.95	638.3	-1.2	-33.7	33.7	2.00	2.00	0.00
680.0	9.60	267.95	677.8	-1.4	-40.1	40.1	2.00	2.00	0.00
720.0	10.40	267.95	717.1	-1.7	-47.0	47.1	2.00	2.00	0.00
760.0	11.20	267.95	756.4	-2.0	-54.5	54.6	2.00	2.00	0.00
800.0	12.00	267.95	795.6	-2.2	-62.6	62.6	2.00	2.00	0.00
840.0	12.80	267.95	834.7	-2.5	-71.1	71.2	2.00	2.00	0.00
880.0	13.60	267.95	873.6	-2.9	-80.3	80.3	2.00	2.00	0.00
920.0	14.40	267.95	912.4	-3.2	-89.9	90.0	2.00	2.00	0.00
960.0	15.20	267.95	951.1	-3.6	-100.2	100.2	2.00	2.00	0.00
1,000.0	16.00	267.95	989.6	-4.0	-110.9	111.0	2.00	2.00	0.00
1,012.9	16.26	267.95	1,002.1	-4.1	-114.5	114.6	2.00	2.00	0.00
1,040.0	16.26	267.95	1,028.1	-4.4	-122.1	122.1	0.00	0.00	0.00
1,080.0	16.26	267.95	1,066.5	-4.8	-133.3	133.3	0.00	0.00	0.00
1,120.0	16.26	267.95	1,104.9	-5.2	-144.5	144.5	0.00	0.00	0.00
1,160.0	16.26	267.95	1,143.3	-5.6	-155.6	155.7	0.00	0.00	0.00
1,200.0	16.26	267.95	1,181.7	-6.0	-166.8	166.9	0.00	0.00	0.00
1,240.0	16.26	267.95	1,220.1	-6.4	-178.0	178.1	0.00	0.00	0.00
1,280.0	16.26	267.95	1,258.5	-6.8	-189.2	189.3	0.00	0.00	0.00
1,320.0	16.26	267.95	1,296.9	-7.2	-200.4	200.5	0.00	0.00	0.00
1,360.0	16.26	267.95	1,335.3	-7.6	-211.6	211.7	0.00	0.00	0.00
1,400.0	16.26	267.95	1,373.7	-8.0	-222.8	222.9	0.00	0.00	0.00
1,440.0	16.26	267.95	1,412.1	-8.4	-234.0	234.1	0.00	0.00	0.00
1,480.0	16.26	267.95	1,450.5	-8.8	-245.2	245.3	0.00	0.00	0.00
1,520.0	16.26	267.95	1,488.9	-9.2	-256.4	256.5	0.00	0.00	0.00
1,560.0	16.26	267.95	1,527.3	-9.6	-267.6	267.7	0.00	0.00	0.00
1,600.0	16.26	267.95	1,565.7	-10.0	-278.8	278.9	0.00	0.00	0.00
1,640.0	16.26	267.95	1,604.1	-10.4	-289.9	290.1	0.00	0.00	0.00
1,680.0	16.26	267.95	1,642.5	-10.8	-301.1	301.3	0.00	0.00	0.00
1,720.0	16.26	267.95	1,680.9	-11.2	-312.3	312.5	0.00	0.00	0.00
1,760.0	16.26	267.95	1,719.3	-11.6	-323.5	323.7	0.00	0.00	0.00
1,800.0	16.26	267.95	1,757.7	-12.0	-334.7	334.9	0.00	0.00	0.00
1,840.0	16.26	267.95	1,796.1	-12.4	-345.9	346.1	0.00	0.00	0.00
1,880.0	16.26	267.95	1,834.5	-12.8	-357.1	357.3	0.00	0.00	0.00
1,920.0	16.26	267.95	1,872.9	-13.2	-368.3	368.5	0.00	0.00	0.00
1,960.0	16.26	267.95	1,911.3	-13.6	-379.5	379.7	0.00	0.00	0.00



**Database:** Landmark  
**Company:** BAYSWATER EXPLORATION & PRODUCTION  
**Project:** SEC.3-T6N-R67W  
**Site:** Bowers 2 Pad Sec.3-T6N-R67W  
**Well:** Bower 10-3  
**Wellbore:** Wellbore #1  
**Design:** Plan #1 (9-24-12)

**Local Co-ordinate Reference:** Well Bower 10-3  
**TVD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

### 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	16.26	267.95	1,949.7	-14.0	-390.7	390.9	0.00	0.00	0.00
2,040.0	16.26	267.95	1,988.1	-14.4	-401.9	402.1	0.00	0.00	0.00
2,080.0	16.26	267.95	2,026.5	-14.8	-413.1	413.3	0.00	0.00	0.00
2,120.0	16.26	267.95	2,064.9	-15.2	-424.2	424.5	0.00	0.00	0.00
2,160.0	16.26	267.95	2,103.3	-15.6	-435.4	435.7	0.00	0.00	0.00
2,200.0	16.26	267.95	2,141.7	-16.0	-446.6	446.9	0.00	0.00	0.00
2,240.0	16.26	267.95	2,180.1	-16.4	-457.8	458.1	0.00	0.00	0.00
2,280.0	16.26	267.95	2,218.5	-16.8	-469.0	469.3	0.00	0.00	0.00
2,320.0	16.26	267.95	2,256.9	-17.2	-480.2	480.5	0.00	0.00	0.00
2,360.0	16.26	267.95	2,295.3	-17.6	-491.4	491.7	0.00	0.00	0.00
2,400.0	16.26	267.95	2,333.7	-18.0	-502.6	502.9	0.00	0.00	0.00
2,440.0	16.26	267.95	2,372.1	-18.4	-513.8	514.1	0.00	0.00	0.00
2,480.0	16.26	267.95	2,410.5	-18.8	-525.0	525.3	0.00	0.00	0.00
2,520.0	16.26	267.95	2,448.9	-19.2	-536.2	536.5	0.00	0.00	0.00
2,560.0	16.26	267.95	2,487.3	-19.6	-547.4	547.7	0.00	0.00	0.00
2,600.0	16.26	267.95	2,525.7	-20.0	-558.5	558.9	0.00	0.00	0.00
2,640.0	16.26	267.95	2,564.1	-20.4	-569.7	570.1	0.00	0.00	0.00
2,680.0	16.26	267.95	2,602.5	-20.8	-580.9	581.3	0.00	0.00	0.00
2,720.0	16.26	267.95	2,640.9	-21.2	-592.1	592.5	0.00	0.00	0.00
2,760.0	16.26	267.95	2,679.3	-21.6	-603.3	603.7	0.00	0.00	0.00
2,800.0	16.26	267.95	2,717.7	-22.0	-614.5	614.9	0.00	0.00	0.00
2,840.0	16.26	267.95	2,756.1	-22.4	-625.7	626.1	0.00	0.00	0.00
2,880.0	16.26	267.95	2,794.5	-22.8	-636.9	637.3	0.00	0.00	0.00
2,920.0	16.26	267.95	2,832.9	-23.2	-648.1	648.5	0.00	0.00	0.00
2,960.0	16.26	267.95	2,871.3	-23.6	-659.3	659.7	0.00	0.00	0.00
3,000.0	16.26	267.95	2,909.7	-24.0	-670.5	670.9	0.00	0.00	0.00
3,040.0	16.26	267.95	2,948.1	-24.4	-681.7	682.1	0.00	0.00	0.00
3,080.0	16.26	267.95	2,986.5	-24.8	-692.9	693.3	0.00	0.00	0.00
3,120.0	16.26	267.95	3,024.9	-25.2	-704.0	704.5	0.00	0.00	0.00
3,160.0	16.26	267.95	3,063.3	-25.6	-715.2	715.7	0.00	0.00	0.00
3,200.0	16.26	267.95	3,101.7	-26.0	-726.4	726.9	0.00	0.00	0.00
3,240.0	16.26	267.95	3,140.1	-26.4	-737.6	738.1	0.00	0.00	0.00
3,280.0	16.26	267.95	3,178.5	-26.8	-748.8	749.3	0.00	0.00	0.00
3,320.0	16.26	267.95	3,216.9	-27.2	-760.0	760.5	0.00	0.00	0.00
3,360.0	16.26	267.95	3,255.3	-27.6	-771.2	771.7	0.00	0.00	0.00
3,400.0	16.26	267.95	3,293.7	-28.0	-782.4	782.9	0.00	0.00	0.00
3,440.0	16.26	267.95	3,332.1	-28.4	-793.6	794.1	0.00	0.00	0.00
3,480.0	16.26	267.95	3,370.5	-28.8	-804.8	805.3	0.00	0.00	0.00
3,520.0	16.26	267.95	3,408.9	-29.2	-816.0	816.5	0.00	0.00	0.00
3,560.0	16.26	267.95	3,447.3	-29.6	-827.2	827.7	0.00	0.00	0.00
3,600.0	16.26	267.95	3,485.7	-30.0	-838.3	838.9	0.00	0.00	0.00
3,640.0	16.26	267.95	3,524.1	-30.4	-849.5	850.1	0.00	0.00	0.00
3,680.0	16.26	267.95	3,562.5	-30.8	-860.7	861.3	0.00	0.00	0.00
3,720.0	16.26	267.95	3,600.9	-31.2	-871.9	872.5	0.00	0.00	0.00
3,760.0	16.26	267.95	3,639.3	-31.6	-883.1	883.7	0.00	0.00	0.00
3,789.9	16.26	267.95	3,668.0	-31.9	-891.5	892.1	0.00	0.00	0.00
<b>PARKMAN</b>									
3,800.0	16.26	267.95	3,677.7	-32.0	-894.3	894.9	0.00	0.00	0.00
3,840.0	16.26	267.95	3,716.1	-32.4	-905.5	906.1	0.00	0.00	0.00
3,880.0	16.26	267.95	3,754.5	-32.8	-916.7	917.3	0.00	0.00	0.00
3,920.0	16.26	267.95	3,792.9	-33.2	-927.9	928.5	0.00	0.00	0.00
3,960.0	16.26	267.95	3,831.3	-33.6	-939.1	939.7	0.00	0.00	0.00
4,000.0	16.26	267.95	3,869.7	-34.0	-950.3	950.9	0.00	0.00	0.00



**Database:** Landmark  
**Company:** BAYSWATER EXPLORATION & PRODUCTION  
**Project:** SEC.3-T6N-R67W  
**Site:** Bowers 2 Pad Sec.3-T6N-R67W  
**Well:** Bower 10-3  
**Wellbore:** Wellbore #1  
**Design:** Plan #1 (9-24-12)

**Local Co-ordinate Reference:** Well Bower 10-3  
**TVD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

### 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)
4,040.0	16.26	267.95	3,908.1	-34.4	-961.5	962.1	0.00	0.00	0.00
4,080.0	16.26	267.95	3,946.5	-34.8	-972.6	973.3	0.00	0.00	0.00
4,120.0	16.26	267.95	3,984.9	-35.2	-983.8	984.5	0.00	0.00	0.00
4,160.0	16.26	267.95	4,023.3	-35.6	-995.0	995.7	0.00	0.00	0.00
4,200.0	16.26	267.95	4,061.7	-36.0	-1,006.2	1,006.9	0.00	0.00	0.00
4,240.0	16.26	267.95	4,100.1	-36.4	-1,017.4	1,018.1	0.00	0.00	0.00
4,280.0	16.26	267.95	4,138.5	-36.8	-1,028.6	1,029.3	0.00	0.00	0.00
4,320.0	16.26	267.95	4,176.9	-37.2	-1,039.8	1,040.5	0.00	0.00	0.00
4,360.0	16.26	267.95	4,215.3	-37.6	-1,051.0	1,051.7	0.00	0.00	0.00
4,400.0	16.26	267.95	4,253.7	-38.0	-1,062.2	1,062.9	0.00	0.00	0.00
4,440.0	16.26	267.95	4,292.1	-38.4	-1,073.4	1,074.1	0.00	0.00	0.00
4,480.0	16.26	267.95	4,330.5	-38.8	-1,084.6	1,085.3	0.00	0.00	0.00
4,520.0	16.26	267.95	4,368.9	-39.2	-1,095.8	1,096.5	0.00	0.00	0.00
4,558.7	16.26	267.95	4,406.0	-39.6	-1,106.6	1,107.3	0.00	0.00	0.00
<b>SUSSEX</b>									
4,560.0	16.26	267.95	4,407.3	-39.6	-1,106.9	1,107.7	0.00	0.00	0.00
4,600.0	16.26	267.95	4,445.7	-40.0	-1,118.1	1,118.9	0.00	0.00	0.00
4,640.0	16.26	267.95	4,484.1	-40.4	-1,129.3	1,130.1	0.00	0.00	0.00
4,680.0	16.26	267.95	4,522.5	-40.8	-1,140.5	1,141.3	0.00	0.00	0.00
4,720.0	16.26	267.95	4,560.9	-41.2	-1,151.7	1,152.5	0.00	0.00	0.00
4,760.0	16.26	267.95	4,599.3	-41.6	-1,162.9	1,163.6	0.00	0.00	0.00
4,800.0	16.26	267.95	4,637.7	-42.0	-1,174.1	1,174.8	0.00	0.00	0.00
4,840.0	16.26	267.95	4,676.1	-42.4	-1,185.3	1,186.0	0.00	0.00	0.00
4,880.0	16.26	267.95	4,714.5	-42.8	-1,196.5	1,197.2	0.00	0.00	0.00
4,920.0	16.26	267.95	4,752.9	-43.2	-1,207.7	1,208.4	0.00	0.00	0.00
4,956.6	16.26	267.95	4,788.0	-43.6	-1,217.9	1,218.7	0.00	0.00	0.00
<b>SHANNON</b>									
4,960.0	16.26	267.95	4,791.3	-43.6	-1,218.9	1,219.6	0.00	0.00	0.00
5,000.0	16.26	267.95	4,829.7	-44.0	-1,230.1	1,230.8	0.00	0.00	0.00
5,040.0	16.26	267.95	4,868.1	-44.4	-1,241.2	1,242.0	0.00	0.00	0.00
5,080.0	16.26	267.95	4,906.5	-44.8	-1,252.4	1,253.2	0.00	0.00	0.00
5,120.0	16.26	267.95	4,944.9	-45.2	-1,263.6	1,264.4	0.00	0.00	0.00
5,160.0	16.26	267.95	4,983.3	-45.6	-1,274.8	1,275.6	0.00	0.00	0.00
5,175.3	16.26	267.95	4,997.9	-45.8	-1,279.1	1,279.9	0.00	0.00	0.00
5,200.0	15.76	267.95	5,021.7	-46.0	-1,285.9	1,286.7	2.00	-2.00	0.00
5,240.0	14.96	267.95	5,060.3	-46.4	-1,296.5	1,297.3	2.00	-2.00	0.00
5,280.0	14.16	267.95	5,099.0	-46.7	-1,306.6	1,307.4	2.00	-2.00	0.00
5,320.0	13.36	267.95	5,137.8	-47.1	-1,316.1	1,316.9	2.00	-2.00	0.00
5,360.0	12.56	267.95	5,176.8	-47.4	-1,325.0	1,325.9	2.00	-2.00	0.00
5,400.0	11.76	267.95	5,215.9	-47.7	-1,333.5	1,334.3	2.00	-2.00	0.00
5,440.0	10.96	267.95	5,255.1	-48.0	-1,341.3	1,342.2	2.00	-2.00	0.00
5,480.0	10.16	267.95	5,294.5	-48.2	-1,348.7	1,349.5	2.00	-2.00	0.00
5,520.0	9.36	267.95	5,333.9	-48.5	-1,355.4	1,356.3	2.00	-2.00	0.00
5,560.0	8.56	267.95	5,373.4	-48.7	-1,361.7	1,362.5	2.00	-2.00	0.00
5,600.0	7.76	267.95	5,413.0	-48.9	-1,367.3	1,368.2	2.00	-2.00	0.00
5,640.0	6.96	267.95	5,452.7	-49.1	-1,372.5	1,373.3	2.00	-2.00	0.00
5,680.0	6.16	267.95	5,492.4	-49.3	-1,377.0	1,377.9	2.00	-2.00	0.00
5,720.0	5.36	267.95	5,532.2	-49.4	-1,381.1	1,381.9	2.00	-2.00	0.00
5,760.0	4.56	267.95	5,572.0	-49.5	-1,384.5	1,385.4	2.00	-2.00	0.00
5,800.0	3.76	267.95	5,611.9	-49.6	-1,387.4	1,388.3	2.00	-2.00	0.00
5,840.0	2.96	267.95	5,651.9	-49.7	-1,389.8	1,390.6	2.00	-2.00	0.00
5,880.0	2.16	267.95	5,691.8	-49.8	-1,391.5	1,392.4	2.00	-2.00	0.00
5,920.0	1.36	267.95	5,731.8	-49.8	-1,392.8	1,393.7	2.00	-2.00	0.00



**Database:** Landmark  
**Company:** BAYSWATER EXPLORATION & PRODUCTION  
**Project:** SEC.3-T6N-R67W  
**Site:** Bowers 2 Pad Sec.3-T6N-R67W  
**Well:** Bower 10-3  
**Wellbore:** Wellbore #1  
**Design:** Plan #1 (9-24-12)

**Local Co-ordinate Reference:** Well Bower 10-3  
**TVD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

### 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	0.56	267.95	5,771.8	-49.9	-1,393.5	1,394.3	2.00	-2.00	0.00
5,988.2	0.00	0.00	5,800.0	-49.9	-1,393.6	1,394.5	2.00	-2.00	0.00
6,000.0	0.00	0.00	5,811.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,040.0	0.00	0.00	5,851.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,080.0	0.00	0.00	5,891.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,120.0	0.00	0.00	5,931.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,160.0	0.00	0.00	5,971.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,200.0	0.00	0.00	6,011.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,240.0	0.00	0.00	6,051.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,280.0	0.00	0.00	6,091.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,320.0	0.00	0.00	6,131.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,360.0	0.00	0.00	6,171.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,400.0	0.00	0.00	6,211.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,440.0	0.00	0.00	6,251.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,480.0	0.00	0.00	6,291.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,520.0	0.00	0.00	6,331.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,560.0	0.00	0.00	6,371.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,600.0	0.00	0.00	6,411.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,640.0	0.00	0.00	6,451.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,680.0	0.00	0.00	6,491.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,720.0	0.00	0.00	6,531.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,760.0	0.00	0.00	6,571.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,611.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,840.0	0.00	0.00	6,651.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,880.0	0.00	0.00	6,691.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,920.0	0.00	0.00	6,731.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
6,960.0	0.00	0.00	6,771.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,000.0	0.00	0.00	6,811.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,040.0	0.00	0.00	6,851.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,080.0	0.00	0.00	6,891.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,120.0	0.00	0.00	6,931.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,160.0	0.00	0.00	6,971.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,200.0	0.00	0.00	7,011.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,240.0	0.00	0.00	7,051.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,266.2	0.00	0.00	7,078.0	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
<b>NIOBRARA</b>									
7,280.0	0.00	0.00	7,091.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,320.0	0.00	0.00	7,131.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,360.0	0.00	0.00	7,171.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,400.0	0.00	0.00	7,211.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,440.0	0.00	0.00	7,251.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,480.0	0.00	0.00	7,291.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,520.0	0.00	0.00	7,331.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,548.2	0.00	0.00	7,360.0	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
<b>FORT HAYS</b>									
7,560.0	0.00	0.00	7,371.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,586.2	0.00	0.00	7,398.0	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
<b>CODELL</b>									
7,600.0	0.00	0.00	7,411.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,636.2	0.00	0.00	7,448.0	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
<b>GREENHORN</b>									
7,640.0	0.00	0.00	7,451.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00

**Database:** Landmark  
**Company:** BAYSWATER EXPLORATION & PRODUCTION  
**Project:** SEC.3-T6N-R67W  
**Site:** Bowers 2 Pad Sec.3-T6N-R67W  
**Well:** Bower 10-3  
**Wellbore:** Wellbore #1  
**Design:** Plan #1 (9-24-12)

**Local Co-ordinate Reference:** Well Bower 10-3  
**TVD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

### 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)
7,680.0	0.00	0.00	7,491.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,718.2	0.00	0.00	7,530.0	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
<b>GRANEROS</b>									
7,720.0	0.00	0.00	7,531.8	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00
7,738.2	0.00	0.00	7,550.0	-49.9	-1,393.6	1,394.5	0.00	0.00	0.00

### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
611.4	610.0	8 5/8"	8-5/8	12-1/4

### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,789.9	3,668.0	PARKMAN		0.00	
4,558.7	4,406.0	SUSSEX		0.00	
4,956.6	4,788.0	SHANNON		0.00	
7,266.2	7,078.0	NIOBRARA		0.00	
7,548.2	7,360.0	FORT HAYS		0.00	
7,586.2	7,398.0	CODELL		0.00	
7,636.2	7,448.0	GREENHORN		0.00	
7,718.2	7,530.0	GRANEROS		0.00	





**Directional**

# **BAYSWATER EXPLORATION & PRODUCTION**

**SEC.3-T6N-R67W**

**Bowers 2 Pad Sec.3-T6N-R67W**

**Bower 10-3**

**Wellbore #1**

**Plan #1 (9-24-12)**

## **Anticollision Report**

**25 September, 2012**

**Company:** BAYSWATER EXPLORATION & PRODUCTION  
**Project:** SEC.3-T6N-R67W  
**Reference Site:** Bowers 2 Pad Sec.3-T6N-R67W  
**Site Error:** 0.0ft  
**Reference Well:** Bower 10-3  
**Well Error:** 0.0ft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan #1 (9-24-12)

**Local Co-ordinate Reference:** Well Bower 10-3  
**TVD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at:** 2.00 sigma  
**Database:** Landmark  
**Offset TVD Reference:** Offset Datum

<b>Reference</b>	Plan #1 (9-24-12)		
<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>Warning Levels Evaluated at:</b>	2.00 Sigma	<b>Error Surface:</b>	Elliptical Conic

<b>Survey Tool Program</b>	<b>Date</b> 9/25/2012			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	7,738.2	Plan #1 (9-24-12) (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>Distance Between Ellipses (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>
Offset Well - Wellbore - Design						
Bowers 2 Pad Sec.3-T6N-R67W						
Bower 15-3 - Wellbore #1 - Plan #1 (9-24-12)	200.0	199.0	15.0	14.3	22.342	CC, ES
Bower 15-3 - Wellbore #1 - Plan #1 (9-24-12)	400.0	398.8	22.0	20.4	14.051	SF

<b>Offset Design</b> Bowers 2 Pad Sec.3-T6N-R67W - Bower 15-3 - Wellbore #1 - Plan #1 (9-24-12)													<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>Minimum Separation</b>		<b>Separation Factor</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	89.97	0.0	15.0	15.0	15.0	0.00	N/A	
100.0	100.0	99.0	99.0	0.1	0.1	89.97	0.0	15.0	15.0	14.8	0.22	67.137	
200.0	200.0	199.0	199.0	0.3	0.3	89.97	0.0	15.0	15.0	14.3	0.67	22.342	CC, ES
300.0	300.0	299.0	299.0	0.6	0.6	-178.19	0.0	15.0	16.8	15.6	1.12	15.000	
400.0	399.8	398.8	398.8	0.8	0.8	-178.62	0.0	15.0	22.0	20.4	1.57	14.051	SF
500.0	499.5	499.2	499.2	1.0	1.0	-176.78	-1.2	13.8	29.5	27.5	1.99	14.773	
600.0	598.7	599.6	599.5	1.3	1.2	-172.32	-4.7	9.9	38.0	35.6	2.42	15.711	
700.0	697.5	700.0	699.5	1.7	1.4	-166.97	-10.6	3.5	47.9	45.0	2.88	16.640	
800.0	795.6	800.2	798.9	2.0	1.7	-161.56	-18.9	-5.5	59.6	56.2	3.40	17.509	
900.0	893.1	900.3	897.7	2.5	2.0	-156.49	-29.5	-17.0	73.2	69.2	4.01	18.243	
1,000.0	989.6	1,000.0	995.6	3.0	2.4	-151.92	-42.4	-31.0	88.9	84.2	4.73	18.799	
1,012.9	1,002.1	1,012.8	1,008.2	3.1	2.4	-151.36	-44.2	-33.0	91.1	86.3	4.83	18.848	
1,100.0	1,085.7	1,099.4	1,092.5	3.6	2.8	-147.63	-57.6	-47.5	105.7	100.1	5.58	18.952	
1,200.0	1,181.7	1,198.7	1,188.4	4.1	3.3	-142.99	-74.9	-66.4	122.1	115.6	6.56	18.605	
1,300.0	1,277.7	1,297.6	1,283.0	4.7	3.8	-138.07	-94.5	-87.6	138.6	130.9	7.68	18.039	
1,400.0	1,373.7	1,395.8	1,375.9	5.3	4.4	-132.99	-116.1	-111.0	155.5	146.6	8.92	17.445	
1,500.0	1,469.7	1,493.2	1,466.9	5.9	5.1	-127.85	-139.6	-136.5	173.5	163.3	10.24	16.945	
1,600.0	1,565.7	1,589.5	1,555.6	6.5	5.8	-122.75	-164.9	-164.0	193.0	181.4	11.63	16.600	
1,700.0	1,661.7	1,685.8	1,643.6	7.1	6.6	-118.10	-191.4	-192.7	214.1	201.0	13.02	16.440	
1,800.0	1,757.7	1,782.2	1,731.7	7.7	7.4	-114.27	-217.8	-221.5	236.3	221.9	14.38	16.431	
1,900.0	1,853.7	1,878.5	1,819.8	8.3	8.1	-111.11	-244.3	-250.2	259.3	243.6	15.71	16.510	
2,000.0	1,949.7	1,974.9	1,907.9	8.9	8.9	-108.45	-270.8	-279.0	283.0	266.0	17.01	16.640	
2,100.0	2,045.7	2,071.3	1,996.0	9.5	9.7	-106.21	-297.2	-307.7	307.2	288.9	18.29	16.797	
2,200.0	2,141.7	2,167.7	2,084.1	10.1	10.5	-104.29	-323.7	-336.4	331.7	312.2	19.55	16.968	



**Company:** BAYSWATER EXPLORATION & PRODUCTION  
**Project:** SEC.3-T6N-R67W  
**Reference Site:** Bowers 2 Pad Sec.3-T6N-R67W  
**Site Error:** 0.0ft  
**Reference Well:** Bower 10-3  
**Well Error:** 0.0ft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan #1 (9-24-12)

**Local Co-ordinate Reference:** Well Bower 10-3  
**TVD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** Landmark  
**Offset TVD Reference:** Offset Datum

Offset Design Bowers 2 Pad Sec.3-T6N-R67W - Bower 15-3 - Wellbore #1 - Plan #1 (9-24-12)													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 (ft)	Offset (ft)	Semi Major Axis (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
2,300.0	2,237.7	2,264.0	2,172.2	10.7	11.3	-102.63		-350.2	-365.2	356.6	335.8	20.80	17.143	
2,400.0	2,333.7	2,360.4	2,260.3	11.3	12.1	-101.19		-376.7	-393.9	381.7	359.7	22.04	17.318	
2,500.0	2,429.7	2,456.8	2,348.4	11.9	12.9	-99.93		-403.1	-422.7	407.0	383.7	23.27	17.489	
2,600.0	2,525.7	2,553.2	2,436.5	12.5	13.7	-98.81		-429.6	-451.4	432.5	408.0	24.50	17.655	
2,700.0	2,621.7	2,649.5	2,524.6	13.1	14.5	-97.82		-456.1	-480.1	458.1	432.4	25.72	17.814	
2,800.0	2,717.7	2,745.9	2,612.7	13.7	15.3	-96.93		-482.6	-508.9	483.8	456.9	26.93	17.966	
2,900.0	2,813.7	2,842.3	2,700.8	14.3	16.1	-96.14		-509.0	-537.6	509.6	481.5	28.14	18.110	
3,000.0	2,909.7	2,938.7	2,788.9	14.9	16.9	-95.42		-535.5	-566.3	535.6	506.2	29.35	18.248	
3,100.0	3,005.7	3,035.0	2,877.0	15.5	17.8	-94.76		-562.0	-595.1	561.5	531.0	30.55	18.379	
3,200.0	3,101.7	3,131.4	2,965.1	16.1	18.6	-94.16		-588.4	-623.8	587.6	555.8	31.76	18.503	
3,300.0	3,197.7	3,227.8	3,053.2	16.7	19.4	-93.62		-614.9	-652.6	613.7	580.7	32.96	18.621	
3,400.0	3,293.7	3,324.2	3,141.3	17.3	20.2	-93.11		-641.4	-681.3	639.8	605.7	34.16	18.733	
3,500.0	3,389.7	3,420.5	3,229.4	17.9	21.0	-92.65		-667.9	-710.0	666.0	630.7	35.35	18.839	
3,600.0	3,485.7	3,516.9	3,317.5	18.5	21.8	-92.22		-694.3	-738.8	692.2	655.7	36.55	18.940	
3,700.0	3,581.7	3,613.3	3,405.6	19.1	22.6	-91.83		-720.8	-767.5	718.5	680.8	37.74	19.036	
3,800.0	3,677.7	3,709.7	3,493.7	19.7	23.4	-91.46		-747.3	-796.3	744.8	705.9	38.94	19.128	
3,900.0	3,773.7	3,806.0	3,581.8	20.3	24.2	-91.11		-773.8	-825.0	771.1	731.0	40.13	19.215	
4,000.0	3,869.7	3,902.4	3,669.9	20.9	25.0	-90.79		-800.2	-853.7	797.4	756.1	41.32	19.298	
4,100.0	3,965.7	3,998.8	3,758.0	21.5	25.9	-90.49		-826.7	-882.5	823.8	781.3	42.52	19.377	
4,200.0	4,061.7	4,095.2	3,846.1	22.1	26.7	-90.21		-853.2	-911.2	850.2	806.5	43.71	19.452	
4,300.0	4,157.7	4,191.5	3,934.2	22.7	27.5	-89.95		-879.6	-940.0	876.6	831.7	44.90	19.524	
4,400.0	4,253.7	4,287.9	4,022.3	23.3	28.3	-89.70		-906.1	-968.7	903.0	856.9	46.09	19.593	
4,500.0	4,349.7	4,384.3	4,110.4	23.9	29.1	-89.46		-932.6	-997.4	929.4	882.2	47.28	19.659	
4,600.0	4,445.7	4,480.7	4,198.5	24.5	29.9	-89.24		-959.1	-1,026.2	955.9	907.4	48.47	19.722	
4,700.0	4,541.7	4,577.1	4,286.6	25.1	30.7	-89.03		-985.5	-1,054.9	982.3	932.7	49.66	19.783	
4,800.0	4,637.7	4,673.4	4,374.7	25.7	31.5	-88.83		-1,012.0	-1,083.7	1,008.8	958.0	50.85	19.841	
4,900.0	4,733.7	4,769.8	4,462.8	26.4	32.3	-88.64		-1,038.5	-1,112.4	1,035.3	983.3	52.03	19.896	
5,000.0	4,829.7	4,866.2	4,550.9	27.0	33.2	-88.46		-1,065.0	-1,141.1	1,061.8	1,008.6	53.22	19.950	
5,100.0	4,925.7	4,962.6	4,639.0	27.6	34.0	-88.29		-1,091.4	-1,169.9	1,088.3	1,033.9	54.41	20.001	
5,175.3	4,997.9	5,035.1	4,705.3	28.0	34.6	-88.17		-1,111.3	-1,191.5	1,108.2	1,052.9	55.30	20.039	
5,200.0	5,021.7	5,058.9	4,727.1	28.1	34.8	-88.26		-1,117.9	-1,198.6	1,114.8	1,059.2	55.62	20.044	
5,300.0	5,118.4	5,155.2	4,815.1	28.6	35.6	-88.52		-1,144.3	-1,227.3	1,141.4	1,084.6	56.75	20.113	
5,400.0	5,215.9	5,276.9	4,927.0	28.9	36.4	-88.54		-1,176.8	-1,262.5	1,167.4	1,109.6	57.78	20.203	
5,500.0	5,314.2	5,410.1	5,051.6	29.3	37.1	-88.47		-1,208.6	-1,297.1	1,190.6	1,131.9	58.69	20.288	
5,600.0	5,413.0	5,545.4	5,180.3	29.5	37.8	-88.35		-1,236.9	-1,327.8	1,211.0	1,151.5	59.47	20.364	
5,700.0	5,512.3	5,682.9	5,312.9	29.8	38.4	-88.18		-1,261.4	-1,354.4	1,228.4	1,168.3	60.13	20.431	
5,800.0	5,611.9	5,822.1	5,448.8	29.9	38.9	-87.97		-1,281.8	-1,376.5	1,242.8	1,182.2	60.65	20.491	
5,900.0	5,711.8	5,962.9	5,587.6	30.1	39.3	-87.70		-1,297.8	-1,394.0	1,254.1	1,193.1	61.04	20.546	
5,988.2	5,800.0	6,088.2	5,712.0	30.2	39.6	-179.47		-1,308.2	-1,405.2	1,261.4	1,200.1	61.27	20.587	
6,000.0	5,811.8	6,105.1	5,728.7	30.2	39.6	-179.42		-1,309.3	-1,406.4	1,262.2	1,200.9	61.29	20.593	
6,100.0	5,911.8	6,248.3	5,871.7	30.3	39.8	-179.09		-1,316.1	-1,413.8	1,267.0	1,205.5	61.47	20.613	
6,200.0	6,011.8	6,387.5	6,010.8	30.3	40.0	-178.99		-1,318.0	-1,415.9	1,268.4	1,206.7	61.66	20.570	
6,300.0	6,111.8	6,487.5	6,110.8	30.4	40.0	-178.99		-1,318.0	-1,415.9	1,268.4	1,206.6	61.84	20.511	
6,400.0	6,211.8	6,587.5	6,210.8	30.5	40.1	-178.99		-1,318.0	-1,415.9	1,268.4	1,206.4	62.02	20.453	
6,500.0	6,311.8	6,687.5	6,310.8	30.6	40.1	-178.99		-1,318.0	-1,415.9	1,268.4	1,206.2	62.20	20.394	
6,600.0	6,411.8	6,787.5	6,410.8	30.7	40.2	-178.99		-1,318.0	-1,415.9	1,268.4	1,206.0	62.38	20.334	
6,700.0	6,511.8	6,887.5	6,510.8	30.8	40.3	-178.99		-1,318.0	-1,415.9	1,268.4	1,205.8	62.56	20.274	
6,800.0	6,611.8	6,987.5	6,610.8	30.9	40.3	-178.99		-1,318.0	-1,415.9	1,268.4	1,205.6	62.75	20.213	
6,900.0	6,711.8	7,087.5	6,710.8	31.0	40.4	-178.99		-1,318.0	-1,415.9	1,268.4	1,205.4	62.94	20.152	
7,000.0	6,811.8	7,187.5	6,810.8	31.1	40.5	-178.99		-1,318.0	-1,415.9	1,268.4	1,205.3	63.14	20.090	
7,100.0	6,911.8	7,287.5	6,910.8	31.2	40.6	-178.99		-1,318.0	-1,415.9	1,268.4	1,205.1	63.33	20.028	

**Company:** BAYSWATER EXPLORATION & PRODUCTION  
**Project:** SEC.3-T6N-R67W  
**Reference Site:** Bowers 2 Pad Sec.3-T6N-R67W  
**Site Error:** 0.0ft  
**Reference Well:** Bower 10-3  
**Well Error:** 0.0ft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan #1 (9-24-12)

**Local Co-ordinate Reference:** Well Bower 10-3  
**TVD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** Landmark  
**Offset TVD Reference:** Offset Datum

Offset Design Bowers 2 Pad Sec.3-T6N-R67W - Bower 15-3 - Wellbore #1 - Plan #1 (9-24-12)													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		
7,200.0	7,011.8	7,387.5	7,010.8	31.3	40.6	-178.99	-1,318.0	-1,415.9	1,268.4	1,204.9	63.53	19.965		
7,300.0	7,111.8	7,487.5	7,110.8	31.4	40.7	-178.99	-1,318.0	-1,415.9	1,268.4	1,204.7	63.73	19.902		
7,400.0	7,211.8	7,587.5	7,210.8	31.6	40.8	-178.99	-1,318.0	-1,415.9	1,268.4	1,204.5	63.93	19.839		
7,500.0	7,311.8	7,687.5	7,310.8	31.7	40.9	-178.99	-1,318.0	-1,415.9	1,268.4	1,204.2	64.14	19.775		
7,600.0	7,411.8	7,787.5	7,410.8	31.8	40.9	-178.99	-1,318.0	-1,415.9	1,268.4	1,204.0	64.35	19.711		
7,700.0	7,511.8	7,887.5	7,510.8	31.9	41.0	-178.99	-1,318.0	-1,415.9	1,268.4	1,203.8	64.56	19.646		
7,738.2	7,550.0	7,925.7	7,549.0	31.9	41.0	-178.99	-1,318.0	-1,415.9	1,268.4	1,203.7	64.64	19.622		



**Company:** BAYSWATER EXPLORATION & PRODUCTION  
**Project:** SEC.3-T6N-R67W  
**Reference Site:** Bowers 2 Pad Sec.3-T6N-R67W  
**Site Error:** 0.0ft  
**Reference Well:** Bower 10-3  
**Well Error:** 0.0ft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan #1 (9-24-12)

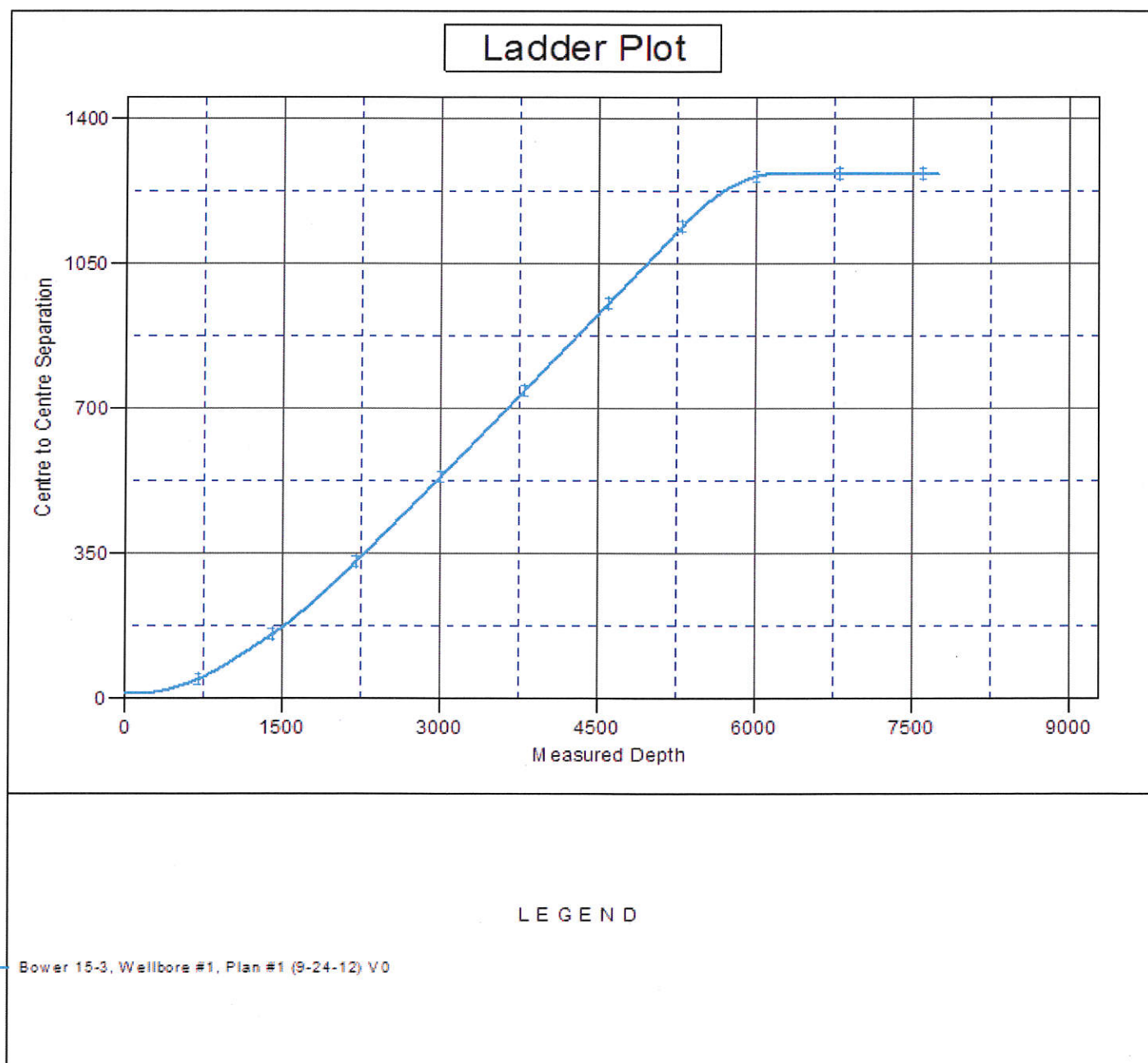
**Local Co-ordinate Reference:** Well Bower 10-3  
**TVD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** Landmark  
**Offset TVD Reference:** Offset Datum

Reference Depths are relative to WELL @ 4958.0ft (Original Well Elev) Coordinates are relative to: Bower 10-3

Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.41°



**Company:** BAYSWATER EXPLORATION & PRODUCTION  
**Project:** SEC.3-T6N-R67W  
**Reference Site:** Bowers 2 Pad Sec.3-T6N-R67W  
**Site Error:** 0.0ft  
**Reference Well:** Bower 10-3  
**Well Error:** 0.0ft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan #1 (9-24-12)

**Local Co-ordinate Reference:** Well Bower 10-3  
**TVD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4958.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** Landmark  
**Offset TVD Reference:** Offset Datum

Reference Depths are relative to WELL @ 4958.0ft (Original Well Elev) Coordinates are relative to: Bower 10-3

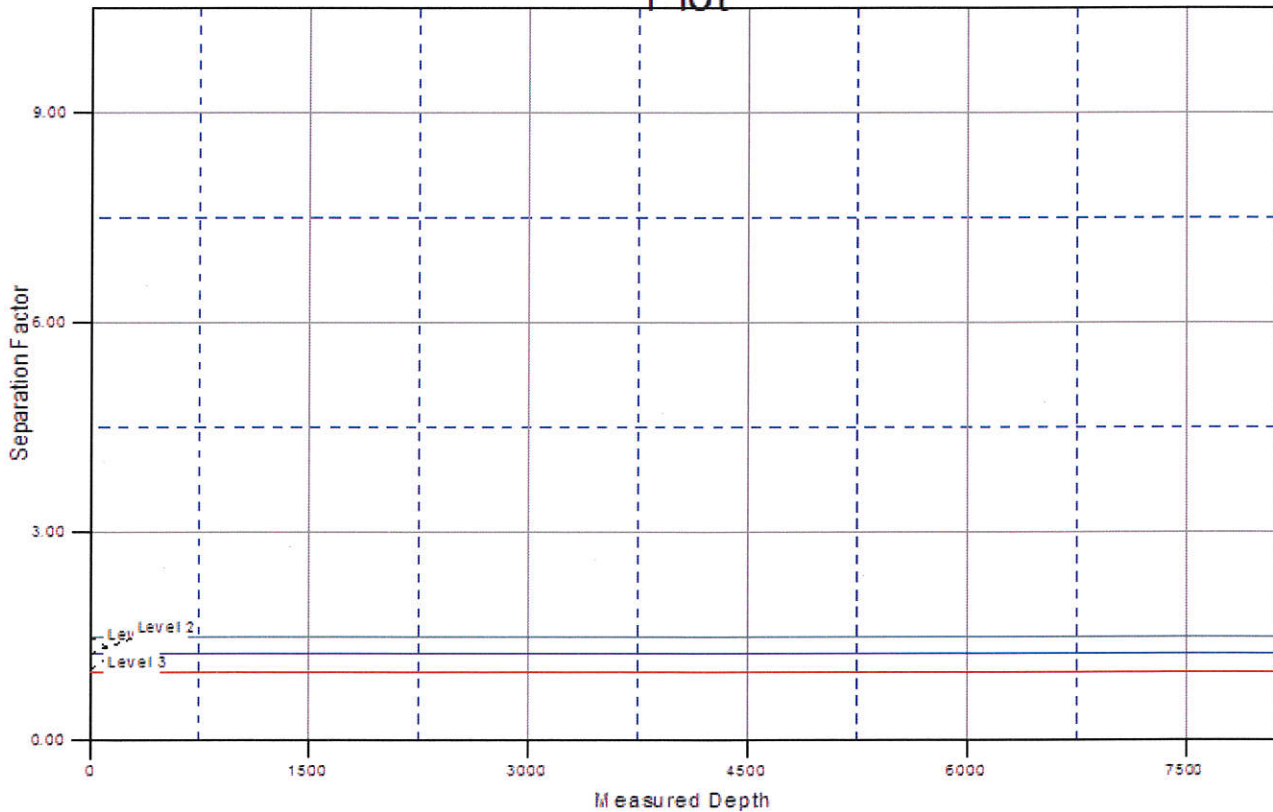
Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, Colorado Northern Zone

Central Meridian is -105.500000 °

Grid Convergence at Surface is: 0.41°

## Separation Factor Plot



### LEGEND

— Bower 15-3, Wellbore #1, Plan #1 (9-24-12) V0