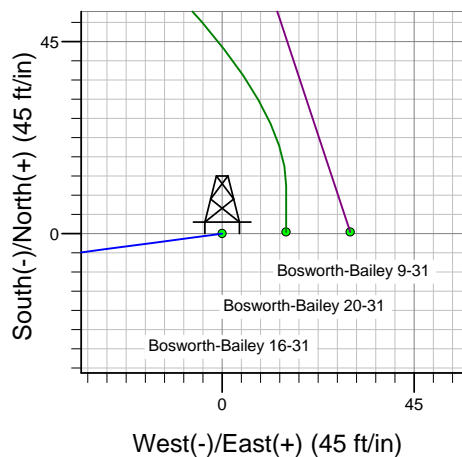
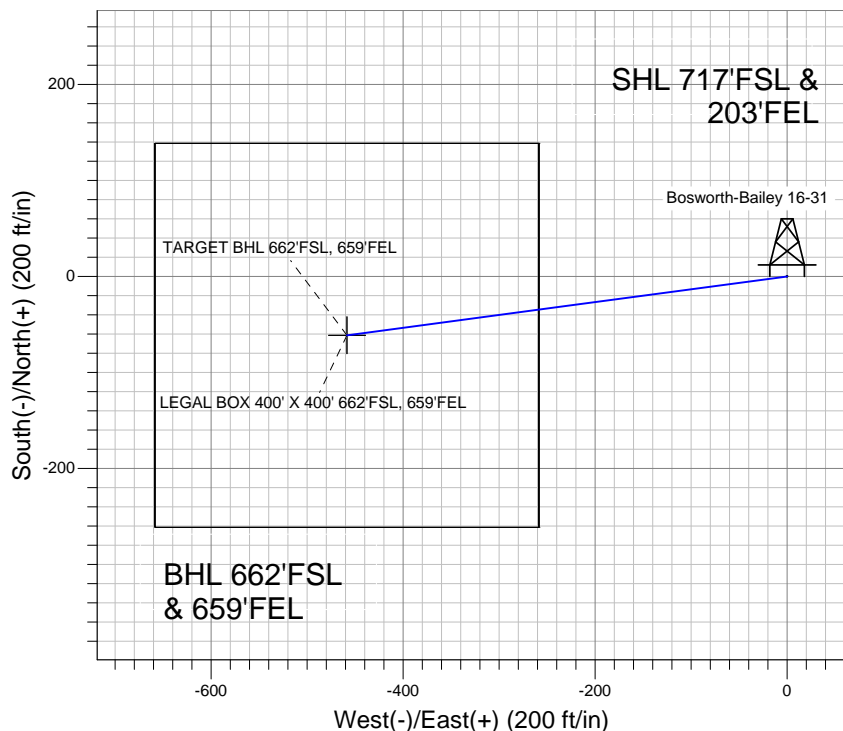
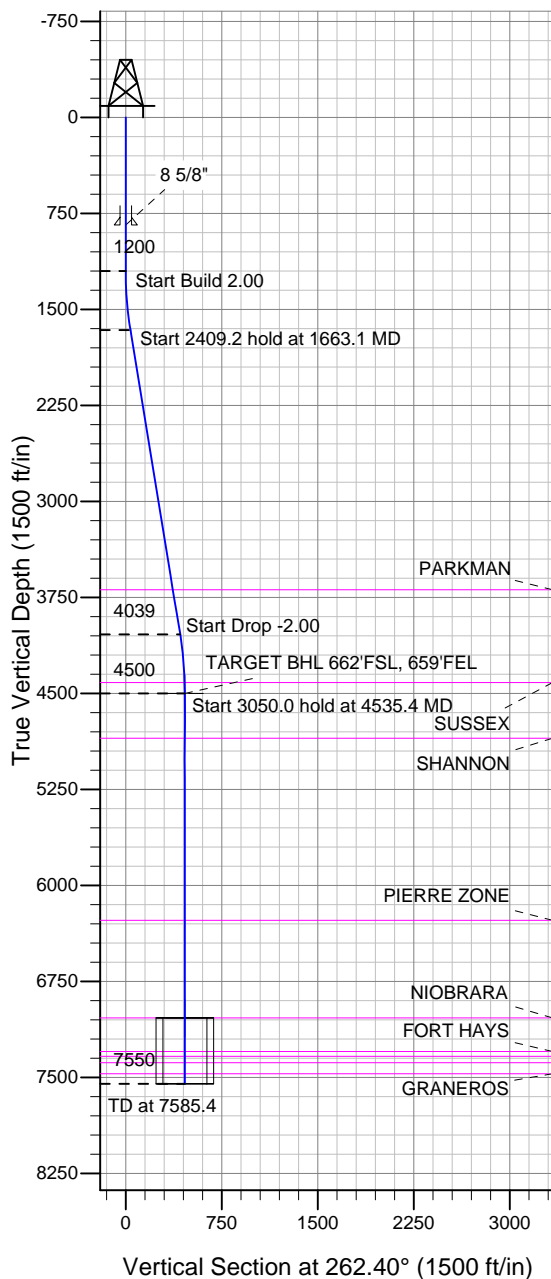


Well Name: Bosworth-Bailey 16-31

Surface Location: Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W
 North American Datum 1983, US State Plane 1983 Colorado Northern Zone
 Ground Elevation: 4875.0
 +N/-S 0.0 +E/-W 0.0 Northing 1435056.66 Easting 3190760.03 Latitude 40.525605 Longitude -104.813792
 Original Well EleWELL @ 4885.0ft (Original Well Elev)

BAYSWATER EXPLORATION & PRODUCTION



Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W
 Bosworth-Bailey 16-31
 Plan #1 (10-24-11)
 16:30, October 24 2011



Azimuths to True North
 Magnetic North: 8.85°
 Magnetic Field
 Strength: 53153.7snT
 Dip Angle: 67.13°
 Date: 10/24/2011
 Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 662'FSL, 659'FEL	4500.0	-61.2	-458.4	40.525437	-104.815441	Point
LEGAL BOX 400' X 400' 662'FSL, 659'FEL	7035.0	-61.2	-458.4	40.525437	-104.815441	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	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	1663.1	9.26	262.40	1661.1	-4.9	-37.0	2.00	262.40	37.4	
4	4072.3	9.26	262.40	4038.9	-56.3	-421.4	0.00	0.00	425.1	
5	4535.4	0.00	0.00	4500.0	-61.2	-458.4	2.00	180.00	462.5	TARGET BHL 662'FSL, 659'FEL
6	7585.4	0.00	0.00	7550.0	-61.2	-458.4	0.00	0.00	462.5	



BAYSWATER EXPLORATION & PRODUCTION

SEC.31-T7N-R66W

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

Bosworth-Bailey 16-31

Wellbore #1

Plan: Plan #1 (10-24-11)

Standard Planning Report

24 October, 2011

Database:	Landmark	Local Co-ordinate Reference:	Well Bosworth-Bailey 16-31
Company:	BAYSWATER EXPLORATION & PRODUCTION	TVD Reference:	WELL @ 4885.0ft (Original Well Elev)
Project:	SEC.31-T7N-R66W	MD Reference:	WELL @ 4885.0ft (Original Well Elev)
Site:	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W	North Reference:	True
Well:	Bosworth-Bailey 16-31	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-24-11)		

Project	SEC.31-T7N-R66W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

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

Well	Bosworth-Bailey 16-31				
Well Position	+N/-S	-0.4 ft	Northing:	1,435,056.66 ft	Latitude: 40.525605
	+E/-W	-30.0 ft	Easting:	3,190,760.03 ft	Longitude: -104.813792
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level: 4,875.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/24/2011	8.85	67.13	53,154

Design	Plan #1 (10-24-11)			
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	262.40

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	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,663.1	9.26	262.40	1,661.1	-4.9	-37.0	2.00	2.00	0.00	262.40	
4,072.3	9.26	262.40	4,038.9	-56.3	-421.4	0.00	0.00	0.00	0.00	
4,535.4	0.00	0.00	4,500.0	-61.2	-458.4	2.00	-2.00	0.00	180.00	TARGET BHL 662°
7,585.4	0.00	0.00	7,550.0	-61.2	-458.4	0.00	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well Bosworth-Bailey 16-31
Company:	BAYSWATER EXPLORATION & PRODUCTION	TVD Reference:	WELL @ 4885.0ft (Original Well Elev)
Project:	SEC.31-T7N-R66W	MD Reference:	WELL @ 4885.0ft (Original Well Elev)
Site:	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W	North Reference:	True
Well:	Bosworth-Bailey 16-31	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-24-11)		

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
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
8 5/8"									
880.0	0.00	0.00	880.0	0.0	0.0	0.0	0.00	0.00	0.00
920.0	0.00	0.00	920.0	0.0	0.0	0.0	0.00	0.00	0.00
960.0	0.00	0.00	960.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,040.0	0.00	0.00	1,040.0	0.0	0.0	0.0	0.00	0.00	0.00
1,080.0	0.00	0.00	1,080.0	0.0	0.0	0.0	0.00	0.00	0.00
1,120.0	0.00	0.00	1,120.0	0.0	0.0	0.0	0.00	0.00	0.00
1,160.0	0.00	0.00	1,160.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,240.0	0.80	262.40	1,240.0	0.0	-0.3	0.3	2.00	2.00	0.00
1,280.0	1.60	262.40	1,280.0	-0.1	-1.1	1.1	2.00	2.00	0.00
1,320.0	2.40	262.40	1,320.0	-0.3	-2.5	2.5	2.00	2.00	0.00
1,360.0	3.20	262.40	1,359.9	-0.6	-4.4	4.5	2.00	2.00	0.00
1,400.0	4.00	262.40	1,399.8	-0.9	-6.9	7.0	2.00	2.00	0.00
1,440.0	4.80	262.40	1,439.7	-1.3	-10.0	10.0	2.00	2.00	0.00
1,480.0	5.60	262.40	1,479.6	-1.8	-13.6	13.7	2.00	2.00	0.00
1,520.0	6.40	262.40	1,519.3	-2.4	-17.7	17.9	2.00	2.00	0.00
1,560.0	7.20	262.40	1,559.1	-3.0	-22.4	22.6	2.00	2.00	0.00
1,600.0	8.00	262.40	1,598.7	-3.7	-27.6	27.9	2.00	2.00	0.00
1,640.0	8.80	262.40	1,638.3	-4.5	-33.4	33.7	2.00	2.00	0.00
1,663.1	9.26	262.40	1,661.1	-4.9	-37.0	37.4	2.00	2.00	0.00
1,680.0	9.26	262.40	1,677.8	-5.3	-39.7	40.1	0.00	0.00	0.00
1,720.0	9.26	262.40	1,717.2	-6.2	-46.1	46.5	0.00	0.00	0.00
1,760.0	9.26	262.40	1,756.7	-7.0	-52.5	52.9	0.00	0.00	0.00
1,800.0	9.26	262.40	1,796.2	-7.9	-58.9	59.4	0.00	0.00	0.00
1,840.0	9.26	262.40	1,835.7	-8.7	-65.2	65.8	0.00	0.00	0.00
1,880.0	9.26	262.40	1,875.2	-9.6	-71.6	72.3	0.00	0.00	0.00
1,920.0	9.26	262.40	1,914.6	-10.4	-78.0	78.7	0.00	0.00	0.00
1,960.0	9.26	262.40	1,954.1	-11.3	-84.4	85.1	0.00	0.00	0.00
2,000.0	9.26	262.40	1,993.6	-12.1	-90.8	91.6	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Bosworth-Bailey 16-31
Company:	BAYSWATER EXPLORATION & PRODUCTION	TVD Reference:	WELL @ 4885.0ft (Original Well Elev)
Project:	SEC.31-T7N-R66W	MD Reference:	WELL @ 4885.0ft (Original Well Elev)
Site:	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W	North Reference:	True
Well:	Bosworth-Bailey 16-31	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-24-11)		

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)
2,040.0	9.26	262.40	2,033.1	-13.0	-97.2	98.0	0.00	0.00	0.00
2,080.0	9.26	262.40	2,072.5	-13.8	-103.5	104.5	0.00	0.00	0.00
2,120.0	9.26	262.40	2,112.0	-14.7	-109.9	110.9	0.00	0.00	0.00
2,160.0	9.26	262.40	2,151.5	-15.5	-116.3	117.3	0.00	0.00	0.00
2,200.0	9.26	262.40	2,191.0	-16.4	-122.7	123.8	0.00	0.00	0.00
2,240.0	9.26	262.40	2,230.5	-17.2	-129.1	130.2	0.00	0.00	0.00
2,280.0	9.26	262.40	2,269.9	-18.1	-135.4	136.6	0.00	0.00	0.00
2,320.0	9.26	262.40	2,309.4	-18.9	-141.8	143.1	0.00	0.00	0.00
2,360.0	9.26	262.40	2,348.9	-19.8	-148.2	149.5	0.00	0.00	0.00
2,400.0	9.26	262.40	2,388.4	-20.6	-154.6	156.0	0.00	0.00	0.00
2,440.0	9.26	262.40	2,427.9	-21.5	-161.0	162.4	0.00	0.00	0.00
2,480.0	9.26	262.40	2,467.3	-22.3	-167.4	168.8	0.00	0.00	0.00
2,520.0	9.26	262.40	2,506.8	-23.2	-173.7	175.3	0.00	0.00	0.00
2,560.0	9.26	262.40	2,546.3	-24.0	-180.1	181.7	0.00	0.00	0.00
2,600.0	9.26	262.40	2,585.8	-24.9	-186.5	188.2	0.00	0.00	0.00
2,640.0	9.26	262.40	2,625.2	-25.7	-192.9	194.6	0.00	0.00	0.00
2,680.0	9.26	262.40	2,664.7	-26.6	-199.3	201.0	0.00	0.00	0.00
2,720.0	9.26	262.40	2,704.2	-27.5	-205.6	207.5	0.00	0.00	0.00
2,760.0	9.26	262.40	2,743.7	-28.3	-212.0	213.9	0.00	0.00	0.00
2,800.0	9.26	262.40	2,783.2	-29.2	-218.4	220.3	0.00	0.00	0.00
2,840.0	9.26	262.40	2,822.6	-30.0	-224.8	226.8	0.00	0.00	0.00
2,880.0	9.26	262.40	2,862.1	-30.9	-231.2	233.2	0.00	0.00	0.00
2,920.0	9.26	262.40	2,901.6	-31.7	-237.6	239.7	0.00	0.00	0.00
2,960.0	9.26	262.40	2,941.1	-32.6	-243.9	246.1	0.00	0.00	0.00
3,000.0	9.26	262.40	2,980.6	-33.4	-250.3	252.5	0.00	0.00	0.00
3,040.0	9.26	262.40	3,020.0	-34.3	-256.7	259.0	0.00	0.00	0.00
3,080.0	9.26	262.40	3,059.5	-35.1	-263.1	265.4	0.00	0.00	0.00
3,120.0	9.26	262.40	3,099.0	-36.0	-269.5	271.9	0.00	0.00	0.00
3,160.0	9.26	262.40	3,138.5	-36.8	-275.8	278.3	0.00	0.00	0.00
3,200.0	9.26	262.40	3,177.9	-37.7	-282.2	284.7	0.00	0.00	0.00
3,240.0	9.26	262.40	3,217.4	-38.5	-288.6	291.2	0.00	0.00	0.00
3,280.0	9.26	262.40	3,256.9	-39.4	-295.0	297.6	0.00	0.00	0.00
3,320.0	9.26	262.40	3,296.4	-40.2	-301.4	304.0	0.00	0.00	0.00
3,360.0	9.26	262.40	3,335.9	-41.1	-307.8	310.5	0.00	0.00	0.00
3,400.0	9.26	262.40	3,375.3	-41.9	-314.1	316.9	0.00	0.00	0.00
3,440.0	9.26	262.40	3,414.8	-42.8	-320.5	323.4	0.00	0.00	0.00
3,480.0	9.26	262.40	3,454.3	-43.6	-326.9	329.8	0.00	0.00	0.00
3,520.0	9.26	262.40	3,493.8	-44.5	-333.3	336.2	0.00	0.00	0.00
3,560.0	9.26	262.40	3,533.3	-45.3	-339.7	342.7	0.00	0.00	0.00
3,600.0	9.26	262.40	3,572.7	-46.2	-346.0	349.1	0.00	0.00	0.00
3,640.0	9.26	262.40	3,612.2	-47.0	-352.4	355.6	0.00	0.00	0.00
3,680.0	9.26	262.40	3,651.7	-47.9	-358.8	362.0	0.00	0.00	0.00
3,718.8	9.26	262.40	3,690.0	-48.7	-365.0	368.2	0.00	0.00	0.00
PARKMAN									
3,720.0	9.26	262.40	3,691.2	-48.7	-365.2	368.4	0.00	0.00	0.00
3,760.0	9.26	262.40	3,730.6	-49.6	-371.6	374.9	0.00	0.00	0.00
3,800.0	9.26	262.40	3,770.1	-50.5	-378.0	381.3	0.00	0.00	0.00
3,840.0	9.26	262.40	3,809.6	-51.3	-384.3	387.7	0.00	0.00	0.00
3,880.0	9.26	262.40	3,849.1	-52.2	-390.7	394.2	0.00	0.00	0.00
3,920.0	9.26	262.40	3,888.6	-53.0	-397.1	400.6	0.00	0.00	0.00
3,960.0	9.26	262.40	3,928.0	-53.9	-403.5	407.1	0.00	0.00	0.00
4,000.0	9.26	262.40	3,967.5	-54.7	-409.9	413.5	0.00	0.00	0.00
4,040.0	9.26	262.40	4,007.0	-55.6	-416.2	419.9	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Bosworth-Bailey 16-31
Company:	BAYSWATER EXPLORATION & PRODUCTION	TVD Reference:	WELL @ 4885.0ft (Original Well Elev)
Project:	SEC.31-T7N-R66W	MD Reference:	WELL @ 4885.0ft (Original Well Elev)
Site:	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W	North Reference:	True
Well:	Bosworth-Bailey 16-31	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-24-11)		

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)
4,072.3	9.26	262.40	4,038.9	-56.3	-421.4	425.1	0.00	0.00	0.00
4,080.0	9.11	262.40	4,046.5	-56.4	-422.6	426.4	2.00	-2.00	0.00
4,120.0	8.31	262.40	4,086.0	-57.2	-428.6	432.4	2.00	-2.00	0.00
4,160.0	7.51	262.40	4,125.6	-57.9	-434.1	437.9	2.00	-2.00	0.00
4,200.0	6.71	262.40	4,165.3	-58.6	-439.0	442.9	2.00	-2.00	0.00
4,240.0	5.91	262.40	4,205.1	-59.2	-443.3	447.3	2.00	-2.00	0.00
4,280.0	5.11	262.40	4,244.9	-59.7	-447.1	451.1	2.00	-2.00	0.00
4,320.0	4.31	262.40	4,284.8	-60.1	-450.4	454.4	2.00	-2.00	0.00
4,360.0	3.51	262.40	4,324.7	-60.5	-453.1	457.1	2.00	-2.00	0.00
4,400.0	2.71	262.40	4,364.6	-60.8	-455.3	459.3	2.00	-2.00	0.00
4,440.0	1.91	262.40	4,404.6	-61.0	-456.9	460.9	2.00	-2.00	0.00
4,450.4	1.70	262.40	4,415.0	-61.0	-457.2	461.2	2.00	-2.00	0.00
SUSSEX									
4,480.0	1.11	262.40	4,444.6	-61.1	-457.9	462.0	2.00	-2.00	0.00
4,520.0	0.31	262.40	4,484.6	-61.2	-458.4	462.5	2.00	-2.00	0.00
4,535.4	0.00	0.00	4,500.0	-61.2	-458.4	462.5	2.00	-2.00	631.99
TARGET BHL 662°FSL, 659°FEL									
4,560.0	0.00	0.00	4,524.6	-61.2	-458.4	462.5	0.00	0.00	0.00
4,600.0	0.00	0.00	4,564.6	-61.2	-458.4	462.5	0.00	0.00	0.00
4,640.0	0.00	0.00	4,604.6	-61.2	-458.4	462.5	0.00	0.00	0.00
4,680.0	0.00	0.00	4,644.6	-61.2	-458.4	462.5	0.00	0.00	0.00
4,720.0	0.00	0.00	4,684.6	-61.2	-458.4	462.5	0.00	0.00	0.00
4,760.0	0.00	0.00	4,724.6	-61.2	-458.4	462.5	0.00	0.00	0.00
4,800.0	0.00	0.00	4,764.6	-61.2	-458.4	462.5	0.00	0.00	0.00
4,840.0	0.00	0.00	4,804.6	-61.2	-458.4	462.5	0.00	0.00	0.00
4,880.0	0.00	0.00	4,844.6	-61.2	-458.4	462.5	0.00	0.00	0.00
4,885.4	0.00	0.00	4,850.0	-61.2	-458.4	462.5	0.00	0.00	0.00
SHANNON									
4,920.0	0.00	0.00	4,884.6	-61.2	-458.4	462.5	0.00	0.00	0.00
4,960.0	0.00	0.00	4,924.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,000.0	0.00	0.00	4,964.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,040.0	0.00	0.00	5,004.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,080.0	0.00	0.00	5,044.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,120.0	0.00	0.00	5,084.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,160.0	0.00	0.00	5,124.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,200.0	0.00	0.00	5,164.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,240.0	0.00	0.00	5,204.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,280.0	0.00	0.00	5,244.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,320.0	0.00	0.00	5,284.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,360.0	0.00	0.00	5,324.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,400.0	0.00	0.00	5,364.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,440.0	0.00	0.00	5,404.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,480.0	0.00	0.00	5,444.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,520.0	0.00	0.00	5,484.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,560.0	0.00	0.00	5,524.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,600.0	0.00	0.00	5,564.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,640.0	0.00	0.00	5,604.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,680.0	0.00	0.00	5,644.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,720.0	0.00	0.00	5,684.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,760.0	0.00	0.00	5,724.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,800.0	0.00	0.00	5,764.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,840.0	0.00	0.00	5,804.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,880.0	0.00	0.00	5,844.6	-61.2	-458.4	462.5	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Bosworth-Bailey 16-31
Company:	BAYSWATER EXPLORATION & PRODUCTION	TVD Reference:	WELL @ 4885.0ft (Original Well Elev)
Project:	SEC.31-T7N-R66W	MD Reference:	WELL @ 4885.0ft (Original Well Elev)
Site:	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W	North Reference:	True
Well:	Bosworth-Bailey 16-31	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-24-11)		

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	0.00	0.00	5,884.6	-61.2	-458.4	462.5	0.00	0.00	0.00
5,960.0	0.00	0.00	5,924.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,000.0	0.00	0.00	5,964.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,040.0	0.00	0.00	6,004.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,080.0	0.00	0.00	6,044.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,120.0	0.00	0.00	6,084.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,160.0	0.00	0.00	6,124.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,200.0	0.00	0.00	6,164.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,240.0	0.00	0.00	6,204.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,280.0	0.00	0.00	6,244.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,307.4	0.00	0.00	6,272.0	-61.2	-458.4	462.5	0.00	0.00	0.00
PIERRE ZONE									
6,320.0	0.00	0.00	6,284.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,360.0	0.00	0.00	6,324.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,400.0	0.00	0.00	6,364.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,440.0	0.00	0.00	6,404.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,480.0	0.00	0.00	6,444.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,520.0	0.00	0.00	6,484.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,560.0	0.00	0.00	6,524.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,600.0	0.00	0.00	6,564.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,640.0	0.00	0.00	6,604.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,680.0	0.00	0.00	6,644.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,720.0	0.00	0.00	6,684.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,760.0	0.00	0.00	6,724.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,764.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,840.0	0.00	0.00	6,804.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,880.0	0.00	0.00	6,844.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,920.0	0.00	0.00	6,884.6	-61.2	-458.4	462.5	0.00	0.00	0.00
6,960.0	0.00	0.00	6,924.6	-61.2	-458.4	462.5	0.00	0.00	0.00
7,000.0	0.00	0.00	6,964.6	-61.2	-458.4	462.5	0.00	0.00	0.00
7,040.0	0.00	0.00	7,004.6	-61.2	-458.4	462.5	0.00	0.00	0.00
7,070.4	0.00	0.00	7,035.0	-61.2	-458.4	462.5	0.00	0.00	0.00
NIOBRARA - LEGAL BOX 400' X 400' 662'FSL, 659'FEL									
7,080.0	0.00	0.00	7,044.6	-61.2	-458.4	462.5	0.00	0.00	0.00
7,120.0	0.00	0.00	7,084.6	-61.2	-458.4	462.5	0.00	0.00	0.00
7,160.0	0.00	0.00	7,124.6	-61.2	-458.4	462.5	0.00	0.00	0.00
7,200.0	0.00	0.00	7,164.6	-61.2	-458.4	462.5	0.00	0.00	0.00
7,240.0	0.00	0.00	7,204.6	-61.2	-458.4	462.5	0.00	0.00	0.00
7,280.0	0.00	0.00	7,244.6	-61.2	-458.4	462.5	0.00	0.00	0.00
7,320.0	0.00	0.00	7,284.6	-61.2	-458.4	462.5	0.00	0.00	0.00
7,332.4	0.00	0.00	7,297.0	-61.2	-458.4	462.5	0.00	0.00	0.00
FORT HAYS									
7,360.0	0.00	0.00	7,324.6	-61.2	-458.4	462.5	0.00	0.00	0.00
7,370.4	0.00	0.00	7,335.0	-61.2	-458.4	462.5	0.00	0.00	0.00
CODELL									
7,400.0	0.00	0.00	7,364.6	-61.2	-458.4	462.5	0.00	0.00	0.00
7,420.4	0.00	0.00	7,385.0	-61.2	-458.4	462.5	0.00	0.00	0.00
GREENHORN									
7,440.0	0.00	0.00	7,404.6	-61.2	-458.4	462.5	0.00	0.00	0.00
7,480.0	0.00	0.00	7,444.6	-61.2	-458.4	462.5	0.00	0.00	0.00
7,506.4	0.00	0.00	7,471.0	-61.2	-458.4	462.5	0.00	0.00	0.00
GRANEROS									

Formations						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	3,718.8	3,690.0	PARKMAN		0.00	
	4,450.4	4,415.0	SUSSEX		0.00	
	4,885.4	4,850.0	SHANNON		0.00	
	6,307.4	6,272.0	PIERRE ZONE		0.00	
	7,070.4	7,035.0	NIOBRARA		0.00	
	7,332.4	7,297.0	FORT HAYS		0.00	
	7,370.4	7,335.0	CODELL		0.00	
	7,420.4	7,385.0	GREENHORN		0.00	
	7,506.4	7,471.0	GRANEROS		0.00	



Directional

BAYSWATER EXPLORATION & PRODUCTION

SEC.31-T7N-R66W

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

Bosworth-Bailey 16-31

Wellbore #1

Plan #1 (10-24-11)

Anticollision Report

24 October, 2011

Company:	BAYSWATER EXPLORATION & PRODUCTION	Local Co-ordinate Reference:	Well Bosworth-Bailey 16-31
Project:	SEC.31-T7N-R66W	TVD Reference:	WELL @ 4885.0ft (Original Well Elev)
Reference Site:	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W	MD Reference:	WELL @ 4885.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bosworth-Bailey 16-31	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-24-11)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (10-24-11)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	10/24/2011		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	7,585.4	Plan #1 (10-24-11) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W						
Bosworth-Bailey 20-31 - Wellbore #1 - Plan #1 (10-24-11)	200.0	200.0	15.0	14.3	22.270	CC
Bosworth-Bailey 20-31 - Wellbore #1 - Plan #1 (10-24-11)	300.0	299.9	15.2	14.0	13.456	ES
Bosworth-Bailey 20-31 - Wellbore #1 - Plan #1 (10-24-11)	500.0	499.3	21.5	19.5	10.497	SF
Bosworth-Bailey 9-31 - Wellbore #1 - Plan #1 (10-24-11)	1,177.7	1,178.0	28.6	23.6	5.642	CC
Bosworth-Bailey 9-31 - Wellbore #1 - Plan #1 (10-24-11)	1,200.0	1,200.2	28.7	23.5	5.544	ES, SF

Offset Design	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W - Bosworth-Bailey 20-31 - Wellbore #1 - Plan #1 (10-24-11)												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	88.63	0.4	15.0	15.0	15.0	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	88.63	0.4	15.0	15.0	14.8	0.22	66.810		
200.0	200.0	200.0	200.0	0.3	0.3	88.63	0.4	15.0	15.0	14.3	0.67	22.270	CC	
213.4	213.4	213.4	213.4	0.4	0.4	88.50	0.4	15.0	15.0	14.3	0.74	20.429		
300.0	300.0	299.9	299.9	0.6	0.6	82.02	2.1	15.0	15.2	14.0	1.13	13.456	ES	
400.0	400.0	399.7	399.5	0.8	0.8	64.02	7.3	15.0	16.7	15.1	1.59	10.531		
500.0	500.0	499.3	498.8	1.0	1.0	42.93	15.7	14.6	21.5	19.5	2.05	10.497	SF	
600.0	600.0	598.9	597.8	1.2	1.3	23.99	25.7	11.4	28.2	25.7	2.51	11.209		
700.0	700.0	697.9	696.0	1.5	1.6	7.84	36.8	5.1	37.4	34.4	3.02	12.395		
800.0	800.0	796.1	792.9	1.7	1.9	-5.06	49.1	-4.4	49.8	46.3	3.56	14.017		
900.0	900.0	893.3	888.4	1.9	2.3	-14.98	62.5	-16.7	65.7	61.6	4.13	15.910		
1,000.0	1,000.0	989.2	982.0	2.1	2.7	-22.55	76.8	-31.9	85.1	80.4	4.75	17.921		
1,100.0	1,100.0	1,083.7	1,073.6	2.4	3.1	-28.37	92.1	-49.7	107.9	102.5	5.41	19.940		
1,200.0	1,200.0	1,176.7	1,162.9	2.6	3.6	-32.93	108.1	-70.0	134.0	127.9	6.12	21.912		
1,300.0	1,300.0	1,272.5	1,254.5	2.8	4.1	61.24	125.2	-92.4	161.3	155.5	5.78	27.919		
1,400.0	1,399.8	1,369.1	1,346.8	3.0	4.7	59.64	142.4	-114.9	187.1	180.9	6.24	29.980		
1,500.0	1,499.5	1,466.1	1,439.5	3.2	5.2	59.19	159.7	-137.6	211.3	204.5	6.73	31.388		
1,600.0	1,598.7	1,563.5	1,532.6	3.4	5.8	59.53	177.0	-160.3	233.7	226.4	7.26	32.208		
1,663.1	1,661.1	1,625.1	1,591.5	3.6	6.2	60.05	188.0	-174.7	247.0	239.4	7.61	32.458		
1,700.0	1,697.5	1,661.1	1,626.0	3.7	6.4	60.54	194.4	-183.1	254.6	246.8	7.83	32.526		
1,800.0	1,796.2	1,758.8	1,719.4	4.0	7.0	61.74	211.8	-205.9	275.3	266.8	8.44	32.629		

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

Company:	BAYSWATER EXPLORATION & PRODUCTION	Local Co-ordinate Reference:	Well Bosworth-Bailey 16-31
Project:	SEC.31-T7N-R66W	TVD Reference:	WELL @ 4885.0ft (Original Well Elev)
Reference Site:	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W	MD Reference:	WELL @ 4885.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bosworth-Bailey 16-31	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-24-11)	Offset TVD Reference:	Offset Datum

Offset Design Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W - Bosworth-Bailey 20-31 - Wellbore #1 - Plan #1 (10-24-11)													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	1,894.9	1,856.5	1,812.7	4.3	7.6	62.77	229.2	-228.7	296.1	287.0	9.07	32.638		
2,000.0	1,993.6	1,954.2	1,906.1	4.6	8.2	63.66	246.6	-251.5	316.9	307.2	9.73	32.585		
2,100.0	2,092.3	2,051.9	1,999.5	4.9	8.8	64.44	264.0	-274.3	337.8	327.4	10.40	32.491		
2,200.0	2,191.0	2,149.6	2,092.9	5.3	9.4	65.13	281.4	-297.1	358.8	347.7	11.08	32.371		
2,300.0	2,289.7	2,247.3	2,186.3	5.6	10.0	65.75	298.8	-319.9	379.8	368.0	11.78	32.236		
2,400.0	2,388.4	2,345.0	2,279.6	5.9	10.5	66.30	316.3	-342.7	400.9	388.4	12.49	32.093		
2,500.0	2,487.1	2,442.7	2,373.0	6.3	11.1	66.79	333.7	-365.5	422.0	408.8	13.21	31.948		
2,600.0	2,585.8	2,540.3	2,466.4	6.6	11.7	67.24	351.1	-388.3	443.1	429.1	13.93	31.802		
2,700.0	2,684.5	2,638.0	2,559.8	7.0	12.3	67.65	368.5	-411.1	464.2	449.6	14.66	31.659		
2,800.0	2,783.2	2,735.7	2,653.2	7.4	12.9	68.02	385.9	-433.9	485.4	470.0	15.40	31.520		
2,900.0	2,881.9	2,833.4	2,746.6	7.7	13.5	68.36	403.3	-456.7	506.5	490.4	16.14	31.386		
3,000.0	2,980.6	2,931.1	2,839.9	8.1	14.1	68.68	420.7	-479.5	527.7	510.9	16.88	31.257		
3,100.0	3,079.2	3,028.8	2,933.3	8.5	14.7	68.97	438.1	-502.3	548.9	531.3	17.63	31.133		
3,200.0	3,177.9	3,126.5	3,026.7	8.8	15.3	69.23	455.5	-525.1	570.2	551.8	18.38	31.015		
3,300.0	3,276.6	3,224.2	3,120.1	9.2	15.9	69.48	472.9	-547.9	591.4	572.3	19.14	30.902		
3,400.0	3,375.3	3,321.9	3,213.5	9.6	16.6	69.71	490.3	-570.7	612.6	592.7	19.89	30.794		
3,500.0	3,474.0	3,419.6	3,306.9	9.9	17.2	69.93	507.7	-593.5	633.9	613.2	20.65	30.692		
3,600.0	3,572.7	3,517.2	3,400.2	10.3	17.8	70.13	525.1	-616.3	655.1	633.7	21.41	30.594		
3,700.0	3,671.4	3,614.9	3,493.6	10.7	18.4	70.32	542.5	-639.1	676.4	654.2	22.18	30.501		
3,800.0	3,770.1	3,712.6	3,587.0	11.1	19.0	70.50	559.9	-661.9	697.7	674.7	22.94	30.412		
3,900.0	3,868.8	3,810.3	3,680.4	11.4	19.6	70.67	577.3	-684.7	719.0	695.2	23.71	30.327		
4,000.0	3,967.5	3,908.0	3,773.8	11.8	20.2	70.82	594.8	-707.5	740.2	715.8	24.47	30.246		
4,072.3	4,038.9	3,978.6	3,841.3	12.1	20.6	70.93	607.3	-724.0	755.6	730.6	25.03	30.190		
4,100.0	4,066.2	4,005.7	3,867.1	12.2	20.8	71.08	612.2	-730.3	761.6	736.3	25.24	30.175		
4,200.0	4,165.3	4,103.2	3,960.4	12.4	21.4	71.46	629.5	-753.1	783.7	757.8	25.90	30.124		
4,300.0	4,264.8	4,200.4	4,053.3	12.6	22.0	71.62	646.8	-775.8	806.9	780.4	26.50	30.446		
4,400.0	4,364.6	4,297.1	4,145.7	12.8	22.6	71.59	664.1	-798.4	831.3	804.3	27.04	30.748		
4,500.0	4,464.6	4,393.3	4,237.6	13.0	23.2	71.39	681.2	-820.8	856.8	829.3	27.50	31.157		
4,535.4	4,500.0	4,427.2	4,270.1	13.1	23.4	-26.32	687.3	-828.7	866.1	838.5	27.65	31.326		
4,600.0	4,564.6	4,488.9	4,329.1	13.2	23.8	-26.86	698.3	-843.1	883.3	855.4	27.87	31.696		
4,700.0	4,664.6	4,584.5	4,420.4	13.3	24.3	-27.66	715.3	-865.4	910.0	881.8	28.22	32.248		
4,800.0	4,764.6	4,680.1	4,511.8	13.5	24.9	-28.42	732.3	-887.8	936.9	908.4	28.58	32.786		
4,900.0	4,864.6	4,775.7	4,603.2	13.6	25.5	-29.13	749.4	-910.1	964.0	935.0	28.94	33.310		
5,000.0	4,964.6	4,871.3	4,694.6	13.8	26.1	-29.80	766.4	-932.4	991.2	961.9	29.31	33.819		
5,100.0	5,064.6	4,966.9	4,785.9	14.0	26.7	-30.44	783.4	-954.7	1,018.5	988.8	29.68	34.314		
5,200.0	5,164.6	5,062.4	4,877.3	14.1	27.3	-31.04	800.4	-977.0	1,045.9	1,015.8	30.06	34.795		
5,300.0	5,264.6	5,163.7	4,974.1	14.3	27.9	-31.65	818.5	-1,000.6	1,073.4	1,042.9	30.45	35.253		
5,400.0	5,364.6	5,263.6	5,071.8	14.5	28.6	-32.40	842.4	-1,032.0	1,098.1	1,067.2	30.86	35.586		
5,500.0	5,464.6	5,367.4	5,169.0	14.7	29.1	-32.99	862.1	-1,057.8	1,118.1	1,086.8	31.26	35.764		
5,600.0	5,564.6	5,464.4	5,264.0	14.8	29.6	-33.42	877.2	-1,077.6	1,133.0	1,101.4	31.67	35.777		
5,700.0	5,664.6	5,563.7	5,362.5	15.0	29.9	-33.69	887.2	-1,090.7	1,142.8	1,110.8	32.07	35.636		
5,800.0	5,764.6	5,664.4	5,462.9	15.2	30.2	-33.81	891.9	-1,096.8	1,147.4	1,114.9	32.46	35.349		
5,900.0	5,864.6	5,766.0	5,564.6	15.4	30.3	-33.82	892.3	-1,097.3	1,147.7	1,114.9	32.80	34.987		
6,000.0	5,964.6	5,866.0	5,664.6	15.5	30.4	-33.82	892.3	-1,097.3	1,147.7	1,114.6	33.13	34.638		
6,100.0	6,064.6	5,966.0	5,764.6	15.7	30.5	-33.82	892.3	-1,097.3	1,147.7	1,114.2	33.47	34.290		
6,200.0	6,164.6	6,066.0	5,864.6	15.9	30.6	-33.82	892.3	-1,097.3	1,147.7	1,113.9	33.81	33.946		
6,300.0	6,264.6	6,166.0	5,964.6	16.1	30.6	-33.82	892.3	-1,097.3	1,147.7	1,113.5	34.15	33.606		
6,400.0	6,364.6	6,266.0	6,064.6	16.3	30.7	-33.82	892.3	-1,097.3	1,147.7	1,113.2	34.50	33.271		
6,500.0	6,464.6	6,366.0	6,164.6	16.5	30.8	-33.82	892.3	-1,097.3	1,147.7	1,112.9	34.84	32.940		
6,600.0	6,564.6	6,466.0	6,264.6	16.6	30.9	-33.82	892.3	-1,097.3	1,147.7	1,112.5	35.19	32.614		
6,700.0	6,664.6	6,566.0	6,364.6	16.8	31.0	-33.82	892.3	-1,097.3	1,147.7	1,112.2	35.54	32.292		

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

Company:	BAYSWATER EXPLORATION & PRODUCTION	Local Co-ordinate Reference:	Well Bosworth-Bailey 16-31
Project:	SEC.31-T7N-R66W	TVD Reference:	WELL @ 4885.0ft (Original Well Elev)
Reference Site:	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W	MD Reference:	WELL @ 4885.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bosworth-Bailey 16-31	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-24-11)	Offset TVD Reference:	Offset Datum

Offset Design Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W - Bosworth-Bailey 20-31 - Wellbore #1 - Plan #1 (10-24-11)													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)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
6,800.0	6,764.6	6,966.0	6,764.6	17.0	31.2	-33.82	892.3	-1,097.3	1,147.7	1,111.8	35.89	31.974		
6,900.0	6,864.6	7,066.0	6,864.6	17.2	31.3	-33.82	892.3	-1,097.3	1,147.7	1,111.4	36.25	31.661		
7,000.0	6,964.6	7,166.0	6,964.6	17.4	31.4	-33.82	892.3	-1,097.3	1,147.7	1,111.1	36.61	31.352		
7,100.0	7,064.6	7,266.0	7,064.6	17.6	31.5	-33.82	892.3	-1,097.3	1,147.7	1,110.7	36.97	31.048		
7,200.0	7,164.6	7,366.0	7,164.6	17.8	31.6	-33.82	892.3	-1,097.3	1,147.7	1,110.4	37.33	30.747		
7,300.0	7,264.6	7,466.0	7,264.6	18.0	31.7	-33.82	892.3	-1,097.3	1,147.7	1,110.0	37.69	30.451		
7,400.0	7,364.6	7,566.0	7,364.6	18.2	31.8	-33.82	892.3	-1,097.3	1,147.7	1,109.6	38.05	30.159		
7,500.0	7,464.6	7,666.0	7,464.6	18.4	31.9	-33.82	892.3	-1,097.3	1,147.7	1,109.3	38.42	29.872		
7,585.4	7,550.0	7,751.5	7,550.0	18.5	32.0	-33.82	892.3	-1,097.3	1,147.7	1,109.0	38.74	29.629		

Company:	BAYSWATER EXPLORATION & PRODUCTION	Local Co-ordinate Reference:	Well Bosworth-Bailey 16-31
Project:	SEC.31-T7N-R66W	TVD Reference:	WELL @ 4885.0ft (Original Well Elev)
Reference Site:	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W	MD Reference:	WELL @ 4885.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bosworth-Bailey 16-31	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-24-11)	Offset TVD Reference:	Offset Datum

Offset Design Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W - Bosworth-Bailey 9-31 - Wellbore #1 - Plan #1 (10-24-11)													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)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	89.30	0.4	30.0	30.0					
100.0	100.0	100.0	100.0	0.1	0.1	89.30	0.4	30.0	30.0	29.8	0.22	133.591		
200.0	200.0	200.0	200.0	0.3	0.3	89.30	0.4	30.0	30.0	29.4	0.67	44.530		
300.0	300.0	300.0	300.0	0.6	0.6	89.30	0.4	30.0	30.0	28.9	1.12	26.718		
400.0	400.0	400.0	400.0	0.8	0.8	89.30	0.4	30.0	30.0	28.5	1.57	19.084		
500.0	500.0	500.0	500.0	1.0	1.0	89.30	0.4	30.0	30.0	28.0	2.02	14.843		
600.0	600.0	600.0	600.0	1.2	1.2	89.30	0.4	30.0	30.0	27.6	2.47	12.145		
700.0	700.0	700.0	700.0	1.5	1.5	89.30	0.4	30.0	30.0	27.1	2.92	10.276		
800.0	800.0	800.0	800.0	1.7	1.7	89.30	0.4	30.0	30.0	26.7	3.37	8.906		
900.0	900.0	900.0	900.0	1.9	1.9	89.30	0.4	30.0	30.0	26.2	3.82	7.858		
1,000.0	1,000.0	1,000.2	1,000.2	2.1	2.1	88.49	0.8	29.9	29.9	25.6	4.27	7.001		
1,100.0	1,100.0	1,100.3	1,100.3	2.4	2.4	81.87	4.1	28.8	29.1	24.4	4.72	6.159		
1,177.7	1,177.7	1,178.0	1,177.7	2.5	2.5	71.72	9.0	27.2	28.6	23.6	5.07	5.642 CC		
1,200.0	1,200.0	1,200.2	1,199.8	2.6	2.6	68.03	10.7	26.6	28.7	23.5	5.17	5.544 ES, SF		
1,300.0	1,300.0	1,299.4	1,298.5	2.8	2.8	147.86	20.6	23.4	32.6	27.0	5.62	5.806		
1,400.0	1,399.8	1,397.8	1,396.0	3.0	3.1	134.30	33.5	19.1	43.3	37.3	6.07	7.141		
1,500.0	1,499.5	1,495.1	1,491.8	3.2	3.4	126.51	49.5	13.8	59.8	53.3	6.54	9.152		
1,600.0	1,598.7	1,591.0	1,585.7	3.4	3.7	122.38	68.2	7.6	81.1	74.1	7.03	11.541		
1,663.1	1,661.1	1,650.8	1,643.8	3.6	3.9	120.85	81.4	3.3	96.8	89.4	7.36	13.156		
1,700.0	1,697.5	1,685.4	1,677.3	3.7	4.0	120.27	89.5	0.6	106.6	99.1	7.56	14.107		
1,800.0	1,796.2	1,778.3	1,766.8	4.0	4.4	118.53	113.3	-7.3	134.9	126.8	8.12	16.606		
1,900.0	1,894.9	1,869.6	1,853.9	4.3	4.9	116.72	139.3	-15.9	165.7	157.0	8.72	19.009		
2,000.0	1,993.6	1,959.2	1,938.5	4.6	5.3	114.95	167.4	-25.1	199.0	189.6	9.33	21.327		
2,100.0	2,092.3	2,052.6	2,026.1	4.9	5.9	113.39	198.1	-35.3	233.7	223.7	9.97	23.434		
2,200.0	2,191.0	2,146.2	2,113.9	5.3	6.4	112.22	229.0	-45.5	268.5	257.9	10.62	25.272		
2,300.0	2,289.7	2,239.8	2,201.7	5.6	7.0	111.32	259.8	-55.6	303.4	292.1	11.29	26.873		
2,400.0	2,388.4	2,333.4	2,289.5	5.9	7.6	110.61	290.6	-65.8	338.4	326.4	11.97	28.275		
2,500.0	2,487.1	2,427.0	2,377.3	6.3	8.2	110.03	321.4	-76.0	373.4	360.7	12.65	29.508		
2,600.0	2,585.8	2,520.6	2,465.1	6.6	8.8	109.55	352.2	-86.2	408.4	395.1	13.35	30.599		
2,700.0	2,684.5	2,614.3	2,552.9	7.0	9.4	109.14	383.0	-96.3	443.5	429.4	14.05	31.569		
2,800.0	2,783.2	2,707.9	2,640.7	7.4	10.1	108.80	413.8	-106.5	478.6	463.8	14.75	32.435		
2,900.0	2,881.9	2,801.5	2,728.5	7.7	10.7	108.50	444.6	-116.7	513.6	498.2	15.47	33.212		
3,000.0	2,980.6	2,895.1	2,816.3	8.1	11.3	108.24	475.4	-126.9	548.7	532.5	16.18	33.912		
3,100.0	3,079.2	2,988.7	2,904.2	8.5	11.9	108.01	506.2	-137.0	583.8	566.9	16.90	34.546		
3,200.0	3,177.9	3,082.3	2,992.0	8.8	12.6	107.80	537.0	-147.2	618.9	601.3	17.62	35.122		
3,300.0	3,276.6	3,175.9	3,079.8	9.2	13.2	107.62	567.8	-157.4	654.1	635.7	18.35	35.647		
3,400.0	3,375.3	3,269.5	3,167.6	9.6	13.8	107.46	598.6	-167.5	689.2	670.1	19.08	36.127		
3,500.0	3,474.0	3,363.2	3,255.4	9.9	14.5	107.31	629.4	-177.7	724.3	704.5	19.81	36.568		
3,600.0	3,572.7	3,456.8	3,343.2	10.3	15.1	107.18	660.2	-187.9	759.4	738.9	20.54	36.975		
3,700.0	3,671.4	3,550.4	3,431.0	10.7	15.7	107.06	691.1	-198.1	794.6	773.3	21.27	37.350		
3,800.0	3,770.1	3,644.0	3,518.8	11.1	16.4	106.95	721.9	-208.2	829.7	807.7	22.01	37.697		
3,900.0	3,868.8	3,737.6	3,606.6	11.4	17.0	106.85	752.7	-218.4	864.8	842.1	22.75	38.019		
4,000.0	3,967.5	3,831.2	3,694.5	11.8	17.7	106.75	783.5	-228.6	900.0	876.5	23.49	38.319		
4,072.3	4,038.9	3,898.9	3,758.0	12.1	18.1	106.69	805.7	-235.9	925.4	901.4	24.02	38.523		
4,100.0	4,066.2	3,924.8	3,782.3	12.2	18.3	106.85	814.3	-238.8	935.1	910.8	24.24	38.571		
4,200.0	4,165.3	4,018.7	3,870.3	12.4	19.0	107.31	845.2	-249.0	969.5	944.5	24.97	38.825		
4,300.0	4,264.8	4,112.6	3,958.4	12.6	19.6	107.56	876.1	-259.2	1,003.0	977.3	25.65	39.100		
4,400.0	4,364.6	4,206.6	4,046.6	12.8	20.2	107.62	907.0	-269.4	1,035.5	1,009.2	26.28	39.404		
4,500.0	4,464.6	4,300.6	4,134.7	13.0	20.9	107.52	937.9	-279.6	1,067.2	1,040.3	26.85	39.742		
4,535.4	4,500.0	4,333.8	4,165.9	13.1	21.1	9.84	948.9	-283.2	1,078.2	1,051.2	27.04	39.870		
4,600.0	4,564.6	4,394.4	4,222.7	13.2	21.5	9.30	968.8	-289.8	1,098.3	1,070.9	27.32	40.195		

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

Company:	BAYSWATER EXPLORATION & PRODUCTION	Local Co-ordinate Reference:	Well Bosworth-Bailey 16-31
Project:	SEC.31-T7N-R66W	TVD Reference:	WELL @ 4885.0ft (Original Well Elev)
Reference Site:	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W	MD Reference:	WELL @ 4885.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bosworth-Bailey 16-31	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-24-11)	Offset TVD Reference:	Offset Datum

Offset Design		Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W - Bosworth-Bailey 9-31 - Wellbore #1 - Plan #1 (10-24-11)										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					
4,700.0	4,664.6	4,488.2	4,310.7	13.3	22.2	8.49	999.7	-300.0	1,129.5	1,101.7	27.76	40.681					
4,800.0	4,764.6	4,582.0	4,398.7	13.5	22.8	7.73	1,030.5	-310.2	1,160.9	1,132.7	28.20	41.160					
4,900.0	4,864.6	4,675.8	4,486.7	13.6	23.5	7.01	1,061.4	-320.4	1,192.5	1,163.9	28.64	41.631					
5,000.0	4,964.6	4,769.6	4,574.7	13.8	24.1	6.33	1,092.3	-330.6	1,224.3	1,195.2	29.08	42.095					
5,100.0	5,064.6	4,863.4	4,662.7	14.0	24.8	5.67	1,123.2	-340.8	1,256.2	1,226.7	29.52	42.549					
5,200.0	5,164.6	4,957.2	4,750.7	14.1	25.4	5.05	1,154.0	-351.0	1,288.3	1,258.3	29.96	42.995					
5,300.0	5,264.6	5,051.0	4,838.7	14.3	26.1	4.46	1,184.9	-361.2	1,320.4	1,290.0	30.40	43.431					
5,400.0	5,364.6	5,161.2	4,942.1	14.5	26.8	3.81	1,220.9	-373.1	1,352.6	1,321.8	30.87	43.810					
5,500.0	5,464.6	5,333.2	5,105.8	14.7	27.7	2.96	1,270.9	-389.6	1,381.3	1,349.8	31.41	43.971					
5,600.0	5,564.6	5,511.4	5,278.4	14.8	28.4	2.30	1,312.7	-403.4	1,404.5	1,372.5	31.93	43.981					
5,700.0	5,664.6	5,694.6	5,458.4	15.0	29.0	1.81	1,345.0	-414.0	1,421.9	1,389.5	32.44	43.834					
5,800.0	5,764.6	5,881.5	5,643.9	15.2	29.5	1.49	1,366.6	-421.2	1,433.4	1,400.5	32.92	43.547					
5,900.0	5,864.6	6,070.6	5,832.7	15.4	29.8	1.35	1,376.8	-424.5	1,438.7	1,405.3	33.36	43.126					
6,000.0	5,964.6	6,202.5	5,964.6	15.5	29.9	1.34	1,377.5	-424.8	1,439.1	1,405.4	33.72	42.682					
6,100.0	6,064.6	6,302.5	6,064.6	15.7	30.0	1.34	1,377.5	-424.8	1,439.1	1,405.0	34.05	42.262					
6,200.0	6,164.6	6,402.5	6,164.6	15.9	30.1	1.34	1,377.5	-424.8	1,439.1	1,404.7	34.39	41.848					
6,300.0	6,264.6	6,502.5	6,264.6	16.1	30.2	1.34	1,377.5	-424.8	1,439.1	1,404.4	34.73	41.439					
6,400.0	6,364.6	6,602.5	6,364.6	16.3	30.3	1.34	1,377.5	-424.8	1,439.1	1,404.0	35.07	41.035					
6,500.0	6,464.6	6,702.5	6,464.6	16.5	30.4	1.34	1,377.5	-424.8	1,439.1	1,403.7	35.41	40.636					
6,600.0	6,564.6	6,802.5	6,564.6	16.6	30.5	1.34	1,377.5	-424.8	1,439.1	1,403.3	35.76	40.243					
6,700.0	6,664.6	6,902.5	6,664.6	16.8	30.6	1.34	1,377.5	-424.8	1,439.1	1,403.0	36.11	39.854					
6,800.0	6,764.6	7,002.5	6,764.6	17.0	30.7	1.34	1,377.5	-424.8	1,439.1	1,402.6	36.46	39.470					
6,900.0	6,864.6	7,102.5	6,864.6	17.2	30.8	1.34	1,377.5	-424.8	1,439.1	1,402.3	36.81	39.092					
7,000.0	6,964.6	7,202.5	6,964.6	17.4	30.9	1.34	1,377.5	-424.8	1,439.1	1,401.9	37.17	38.718					
7,100.0	7,064.6	7,302.5	7,064.6	17.6	31.0	1.34	1,377.5	-424.8	1,439.1	1,401.6	37.53	38.350					
7,200.0	7,164.6	7,402.5	7,164.6	17.8	31.1	1.34	1,377.5	-424.8	1,439.1	1,401.2	37.88	37.987					
7,300.0	7,264.6	7,502.5	7,264.6	18.0	31.2	1.34	1,377.5	-424.8	1,439.1	1,400.8	38.25	37.628					
7,400.0	7,364.6	7,602.5	7,364.6	18.2	31.3	1.34	1,377.5	-424.8	1,439.1	1,400.5	38.61	37.275					
7,500.0	7,464.6	7,702.5	7,464.6	18.4	31.4	1.34	1,377.5	-424.8	1,439.1	1,400.1	38.97	36.926					
7,585.4	7,550.0	7,787.9	7,550.0	18.5	31.5	1.34	1,377.5	-424.8	1,439.1	1,399.8	39.28	36.632					

Reference Depths are relative to WELL @ 4885.0ft (Original Well Elev) Coordinates are relative to: Bosworth-Bailey 16-31
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: 0.44°



Company:	BAYSWATER EXPLORATION & PRODUCTION	Local Co-ordinate Reference:	Well Bosworth-Bailey 16-31
Project:	SEC.31-T7N-R66W	TVD Reference:	WELL @ 4885.0ft (Original Well Elev)
Reference Site:	Bosworth-Bailey 9-31 Pad Sec.31-T7N-R66W	MD Reference:	WELL @ 4885.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bosworth-Bailey 16-31	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-24-11)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4885.0ft (Original Well Elev) Coordinates are relative to: Bosworth-Bailey 16-31
 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: 0.44°

