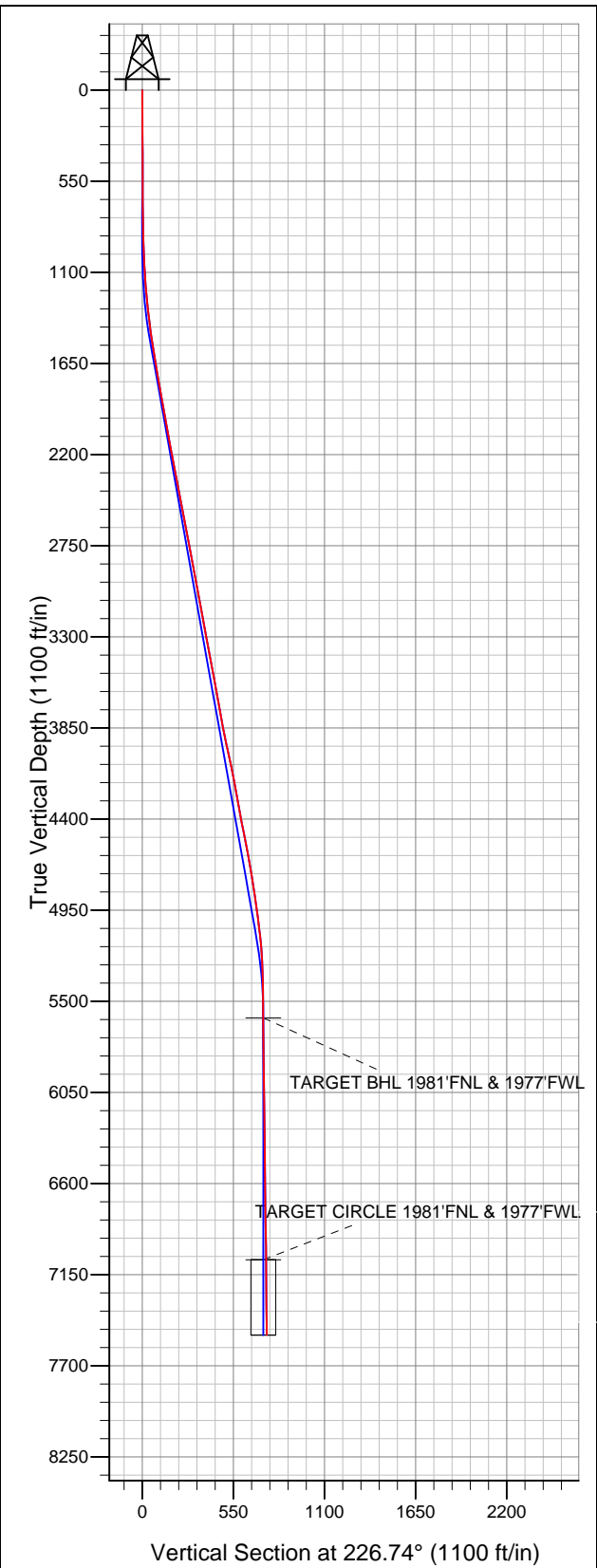


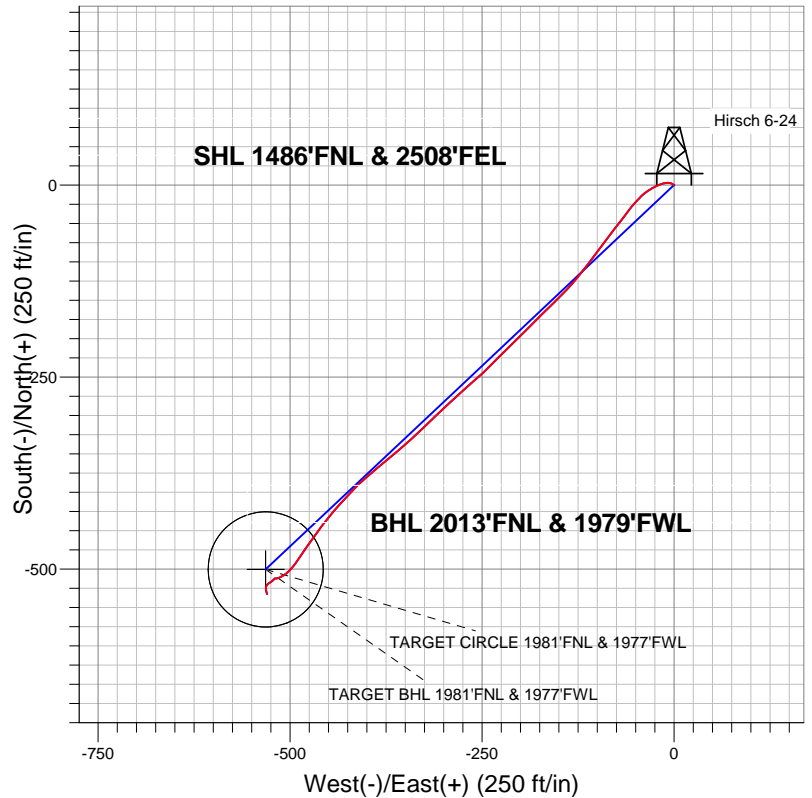


# Well Name: Hirsch 6-24

Surface Location: Hirsch 24-G Pad Sec. 24-T7N-R67W  
North American Datum 1983 US State Plane 1983 Colorado Northern Zone  
Ground Elevation: 5035.0  
+N/-S +E/-W Northing Easting Latitude Longitude Slot  
0.0 0.0 1448568.44 3182862.90 40.562857 -104.841838  
RKB-16' WELL @ 5051.0ft (RKB-16')



## Bayswater Exploration & Production, LLC



### LEGEND

- Hirsch 6-24, Wellbore #1, Plan #1 (01-17-14)R V0
- Wellbore #1
- Survey #1

## Final Survey Plot

Projected Final Survey -  
7577'MD & 7513'TVD @ 751'VS  
0.80 deg Inc 180.90 deg AZ

Project: SEC.24-T7N-R67W  
Site: Hirsch 24-G Pad Sec. 24-T7N-R67W  
Well: Hirsch 6-24  
Plan: Wellbore #1



# **Bayswater Exploration & Production, LLC**

**SEC.24-T7N-R67W**

**Hirsch 24-G Pad Sec. 24-T7N-R67W**

**Hirsch 6-24**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**23 January, 2014**



<b>Company:</b>	Bayswater Exploration & Production, LLC	<b>Local Co-ordinate Reference:</b>	Well Hirsch 6-24
<b>Project:</b>	SEC.24-T7N-R67W	<b>TVD Reference:</b>	WELL @ 5051.0ft (RKB-16')
<b>Site:</b>	Hirsch 24-G Pad Sec. 24-T7N-R67W	<b>MD Reference:</b>	WELL @ 5051.0ft (RKB-16')
<b>Well:</b>	Hirsch 6-24	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

<b>Project</b>	SEC.24-T7N-R67W		
<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	Hirsch 24-G Pad Sec. 24-T7N-R67W				
Site Position:		Northing:	1,448,553.15ft	Latitude:	40.562815
From:	Lat/Long	Easting:	3,182,862.74ft	Longitude:	-104.841839
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.43 °

Well	Hirsch 6-24					
Well Position	+N/-S	0.0 ft	Northing:	1,448,568.44 ft	Latitude:	40.562857
	+E/-W	0.0 ft	Easting:	3,182,862.90 ft	Longitude:	-104.841838
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,035.0 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	1/17/2014	8.57	67.08	52,933

<b>Design</b>	Wellbore #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<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	226.74	

<b>Survey Program</b>	<b>Date</b>	1/23/2014			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
67.0	7,577.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
67.0	0.30	296.80	67.0	0.1	-0.2	0.1	0.45	0.45	0.00	
156.0	0.50	302.20	156.0	0.4	-0.7	0.2	0.23	0.22	6.07	
246.0	0.80	313.60	246.0	1.0	-1.5	0.4	0.36	0.33	12.67	
336.0	0.70	292.00	336.0	1.7	-2.4	0.6	0.33	-0.11	-24.00	
428.0	0.70	288.30	428.0	2.1	-3.5	1.1	0.05	0.00	-4.02	
519.0	0.80	305.90	519.0	2.6	-4.5	1.5	0.27	0.11	19.34	
609.0	1.10	276.50	609.0	3.1	-5.9	2.2	0.63	0.33	-32.67	
787.0	1.10	269.20	786.9	3.2	-9.3	4.6	0.08	0.00	-4.10	
886.0	0.90	258.60	885.9	3.1	-11.0	5.9	0.27	-0.20	-10.71	
1,015.0	2.50	251.60	1,014.8	2.0	-14.7	9.3	1.25	1.24	-5.43	
1,143.0	4.70	248.10	1,142.6	-0.9	-22.2	16.8	1.73	1.72	-2.73	
1,271.0	5.90	236.80	1,270.0	-6.4	-32.6	28.1	1.24	0.94	-8.83	

<b>Company:</b>	Bayswater Exploration & Production, LLC	<b>Local Co-ordinate Reference:</b>	Well Hirsch 6-24
<b>Project:</b>	SEC.24-T7N-R67W	<b>TVD Reference:</b>	WELL @ 5051.0ft (RKB-16')
<b>Site:</b>	Hirsch 24-G Pad Sec. 24-T7N-R67W	<b>MD Reference:</b>	WELL @ 5051.0ft (RKB-16')
<b>Well:</b>	Hirsch 6-24	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

## Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,399.0	7.00	225.70	1,397.2	-15.5	-43.7	42.4	1.30	0.86	-8.67
1,528.0	8.60	218.90	1,525.0	-28.5	-55.3	59.8	1.43	1.24	-5.27
1,656.0	9.40	216.40	1,651.5	-44.3	-67.6	79.6	0.70	0.63	-1.95
1,785.0	9.90	218.20	1,778.6	-61.5	-80.7	100.9	0.45	0.39	1.40
1,913.0	10.50	218.00	1,904.6	-79.4	-94.7	123.3	0.47	0.47	-0.16
2,041.0	10.90	215.50	2,030.4	-98.4	-108.9	146.7	0.48	0.31	-1.95
2,169.0	10.70	218.70	2,156.1	-117.5	-123.3	170.3	0.49	-0.16	2.50
2,298.0	10.80	223.60	2,282.9	-135.6	-139.1	194.3	0.71	0.08	3.80
2,426.0	10.30	225.90	2,408.7	-152.3	-155.6	217.7	0.51	-0.39	1.80
2,554.0	10.80	224.90	2,534.5	-168.7	-172.3	241.1	0.42	0.39	-0.78
2,682.0	10.70	225.40	2,660.3	-185.6	-189.2	265.0	0.11	-0.08	0.39
2,810.0	11.80	225.70	2,785.8	-203.0	-207.1	289.9	0.86	0.86	0.23
2,938.0	10.40	224.70	2,911.4	-220.4	-224.6	314.6	1.10	-1.09	-0.78
3,067.0	9.90	225.00	3,038.4	-236.5	-240.6	337.3	0.39	-0.39	0.23
3,195.0	10.70	230.00	3,164.3	-251.9	-257.5	360.2	0.94	0.63	3.91
3,323.0	10.60	227.00	3,290.1	-267.6	-275.2	383.8	0.44	-0.08	-2.34
3,451.0	10.60	227.10	3,416.0	-283.6	-292.4	407.3	0.01	0.00	0.08
3,580.0	10.20	226.10	3,542.8	-299.6	-309.3	430.6	0.34	-0.31	-0.78
3,708.0	10.60	227.10	3,668.7	-315.5	-326.1	453.7	0.34	0.31	0.78
3,836.0	10.20	226.60	3,794.6	-331.3	-343.0	476.8	0.32	-0.31	-0.39
3,965.0	11.90	230.70	3,921.2	-347.6	-361.6	501.5	1.45	1.32	3.18
4,093.0	12.40	229.60	4,046.4	-364.9	-382.3	528.4	0.43	0.39	-0.86
4,221.0	10.70	229.10	4,171.8	-381.5	-401.7	554.0	1.33	-1.33	-0.39
4,349.0	10.30	223.60	4,297.6	-397.6	-418.6	577.3	0.84	-0.31	-4.30
4,478.0	10.60	221.50	4,424.5	-414.9	-434.4	600.7	0.38	0.23	-1.63
4,606.0	11.50	219.40	4,550.1	-433.5	-450.3	625.0	0.77	0.70	-1.64
4,734.0	10.30	215.70	4,675.8	-452.7	-465.1	648.9	1.08	-0.94	-2.89
4,862.0	8.70	214.80	4,802.1	-469.9	-477.3	669.6	1.26	-1.25	-0.70
4,990.0	8.20	213.60	4,928.7	-485.5	-487.9	688.0	0.41	-0.39	-0.94
5,119.0	7.10	221.30	5,056.5	-499.1	-498.2	704.9	1.16	-0.85	5.97
5,247.0	4.80	238.90	5,183.8	-507.8	-508.0	718.0	2.27	-1.80	13.75
5,375.0	2.20	250.90	5,311.6	-511.4	-514.9	725.5	2.10	-2.03	9.38
5,503.0	0.50	279.90	5,439.5	-512.1	-517.8	728.1	1.39	-1.33	22.66
5,663.6	0.50	275.77	5,600.1	-511.9	-519.2	728.9	0.02	0.00	-2.57
<b>TARGET BHL 1981'FNL &amp; 1977'FWL</b>									
5,674.0	0.50	275.50	5,610.5	-511.9	-519.3	729.0	0.02	0.00	-2.57
5,845.0	1.00	217.50	5,781.5	-513.0	-520.9	731.0	0.50	0.29	-33.92
6,015.0	0.60	223.50	5,951.5	-514.9	-522.5	733.3	0.24	-0.24	3.53
6,186.0	0.80	238.60	6,122.5	-516.1	-524.1	735.4	0.16	0.12	8.83
6,357.0	0.60	231.20	6,293.5	-517.3	-525.8	737.4	0.13	-0.12	-4.33
6,528.0	0.50	241.00	6,464.5	-518.2	-527.2	739.1	0.08	-0.06	5.73
6,699.0	0.80	234.00	6,635.5	-519.3	-528.8	741.0	0.18	0.18	-4.09
6,870.0	0.90	208.90	6,806.4	-521.2	-530.4	743.4	0.22	0.06	-14.68
7,041.0	1.10	189.20	6,977.4	-524.0	-531.3	746.0	0.23	0.12	-11.52
7,124.2	0.90	182.67	7,060.6	-525.4	-531.5	747.1	0.28	-0.25	-7.85
<b>TARGET CIRCLE 1981'FNL &amp; 1977'FWL</b>									
7,212.0	0.70	171.80	7,148.4	-526.6	-531.4	747.9	0.28	-0.22	-12.38
7,383.0	1.10	157.50	7,319.4	-529.2	-530.6	749.1	0.27	0.23	-8.36
7,577.0	0.80	180.90	7,513.3	-532.3	-529.9	750.7	0.25	-0.15	12.06

**Company:** Bayswater Exploration & Production, LLC  
**Project:** SEC.24-T7N-R67W  
**Site:** Hirsch 24-G Pad Sec. 24-T7N-R67W  
**Well:** Hirsch 6-24  
**Wellbore:** Wellbore #1  
**Design:** Wellbore #1

**Local Co-ordinate Reference:** Well Hirsch 6-24  
**TVD Reference:** WELL @ 5051.0ft (RKB-16')  
**MD Reference:** WELL @ 5051.0ft (RKB-16')  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** Landmark

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