

# **Bayswater Exploration & Production, LLC**

**DJ Basin**

**Topaz Pad 6-I HZ Pad**

**TOPAZ 14**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**25 November, 2020**



Pad Name: Topaz Pad 6-I HZ Pad  
Well Name: TOPAZ 14  
Ground Level: 4946.0  
SHL Latitude: 40° 36' 3.697 N  
SHL Longitude: 104° 42' 52.391 W

## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	2015.4	10.31	343.52	2012.6	44.3	-13.1	2.00	343.52	16.8	
4	6842.1	10.31	343.52	6761.4	872.5	-258.0	0.00	0.00	329.8	
5	7713.8	90.00	269.51	7298.0	961.5	-831.1	10.00	-74.26	908.3	TOPAZ 14 LP
6	17396.7	90.00	269.51	7298.0	879.2	-10513.6	0.00	0.00	10550.3	TOPAZ 14 PBHL

## DESIGN TARGET DETAILS

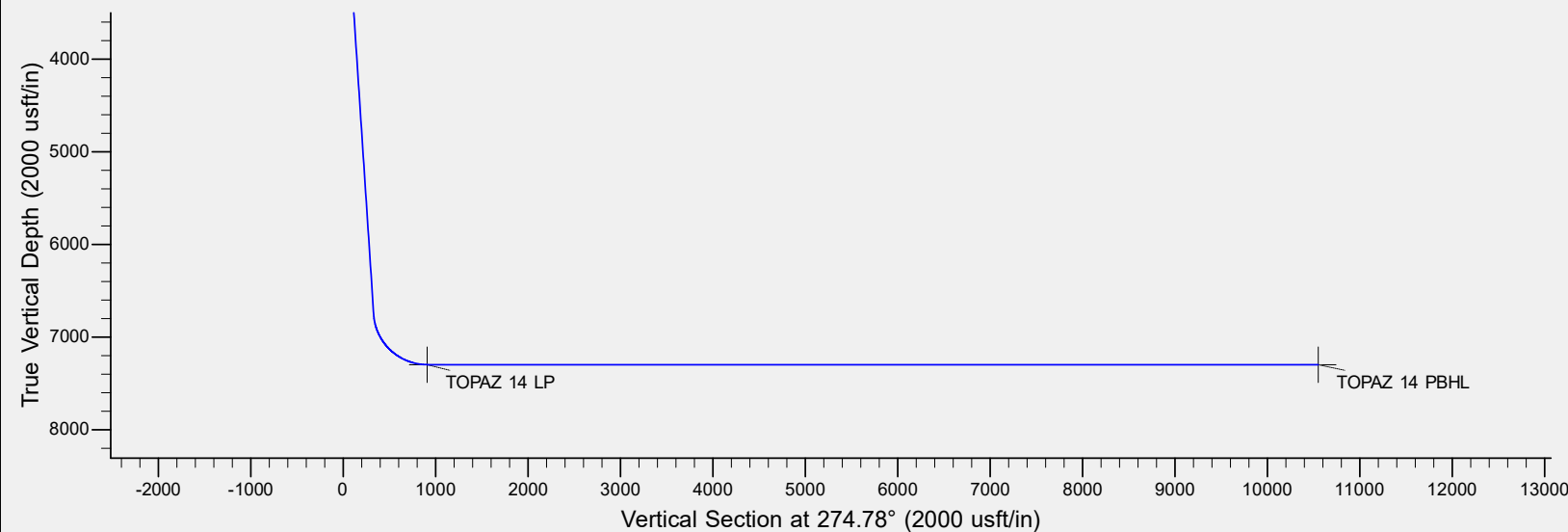
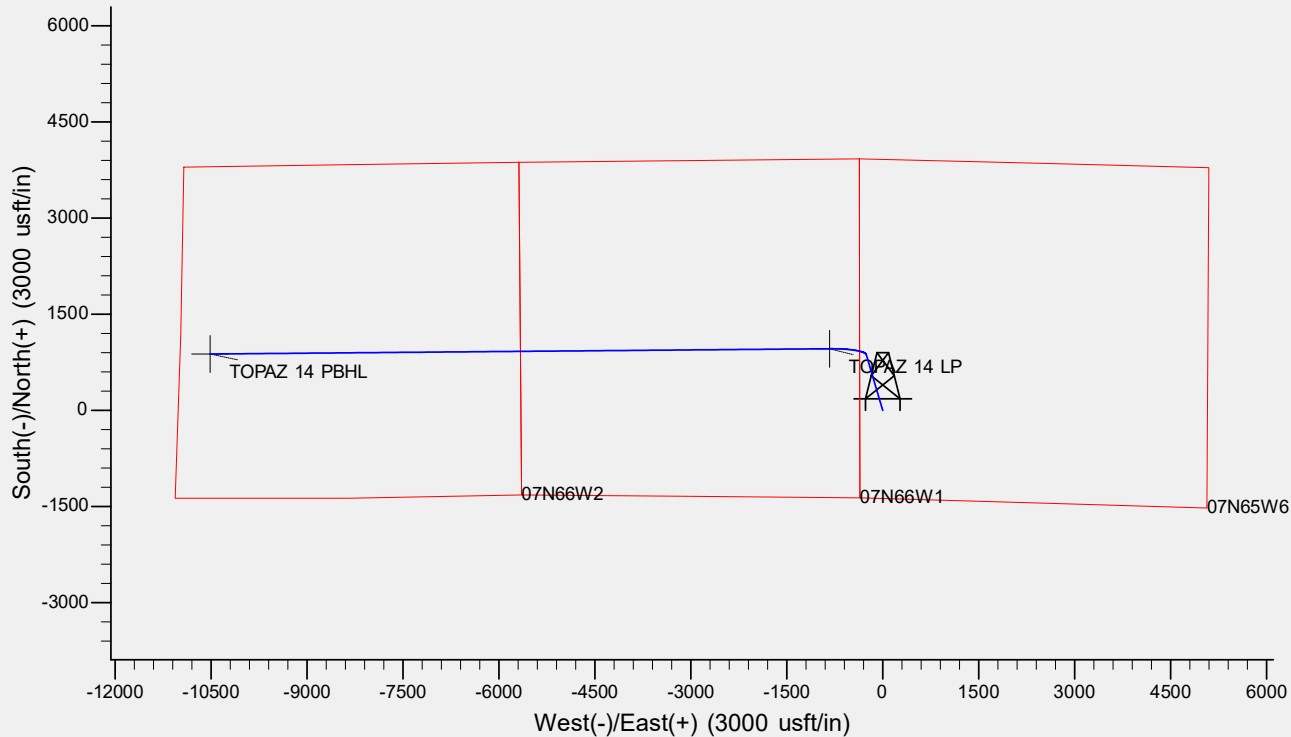
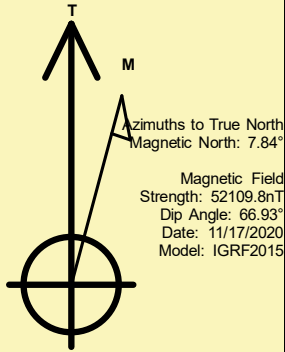
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
TOPAZ 14 LP	7298.0	961.5	-831.1	1463715.65	3217264.02	40° 36' 13.198 N	104° 43' 3.166 W	Point
TOPAZ 14 PBHL	- plan hits target center 7298.0	879.2	-10513.6	1463547.60	3207582.62	40° 36' 12.362 N	104° 45' 8.698 W	Point
	- plan hits target center							

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well TOPAZ 14, True North  
Vertical (TVD) Reference: KB @ 4966.0usft (Original Well Elev)  
Section (VS) Reference: Slot - (0.0N, 0.0E)  
Measured Depth Reference: KB @ 4966.0usft (Original Well Elev)  
Calculation Method: Minimum Curvature

## CASING DETAILS

No casing data is available



# Bayswater Exploration & Production LLC

## Planning Report

<b>Database:</b>	edm	<b>Local Co-ordinate Reference:</b>	Well TOPAZ 14
<b>Company:</b>	Bayswater Exploration & Production, LLC	<b>TVD Reference:</b>	KB @ 4966.0usft (Original Well Elev)
<b>Project:</b>	DJ Basin	<b>MD Reference:</b>	KB @ 4966.0usft (Original Well Elev)
<b>Site:</b>	Topaz Pad 6-I HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	TOPAZ 14	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	DJ Basin, DJ Basin		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Site		Topaz Pad 6-I HZ Pad			
Site Position:		Northing:	1,462,796.90 usft	Latitude:	40° 36' 4.046 N
From:	Lat/Long	Easting:	3,218,098.27 usft	Longitude:	104° 42' 52.456 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.51 °

Well	TOPAZ 14					
Well Position	+N/-S	-35.3 usft	Northing:	1,462,761.60 usft	Latitude:	40° 36' 3.697 N
	+E/-W	5.0 usft	Easting:	3,218,103.58 usft	Longitude:	104° 42' 52.391 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	4,946.0 usft

<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>
	IGRF2015	11/17/2020	7.84	66.93	52,109.77602437

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	274.78

<b>Plan Survey Tool Program</b>	<b>Date</b>	11/25/2020		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.0	17,396.7	Design #1 (Wellbore #1)	MWD
				OWSG MWD - Standard

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,015.4	10.31	343.52	2,012.6	44.3	-13.1	2.00	2.00	0.00	343.52	
6,842.1	10.31	343.52	6,761.4	872.5	-258.0	0.00	0.00	0.00	0.00	
7,713.8	90.00	269.51	7,298.0	961.5	-831.1	10.00	9.14	-8.49	-74.26	TOPAZ 14 LP
17,396.7	90.00	269.51	7,298.0	879.2	-10,513.6	0.00	0.00	0.00	0.00	TOPAZ 14 PBHL

# Bayswater Exploration & Production LLC

## Planning Report

<b>Database:</b>	edm	<b>Local Co-ordinate Reference:</b>	Well TOPAZ 14
<b>Company:</b>	Bayswater Exploration & Production, LLC	<b>TVD Reference:</b>	KB @ 4966.0usft (Original Well Elev)
<b>Project:</b>	DJ Basin	<b>MD Reference:</b>	KB @ 4966.0usft (Original Well Elev)
<b>Site:</b>	Topaz Pad 6-I HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	TOPAZ 14	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	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
300.0	0.00	0.00	300.0	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
500.0	0.00	0.00	500.0	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
700.0	0.00	0.00	700.0	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
900.0	0.00	0.00	900.0	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
1,100.0	0.00	0.00	1,100.0	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
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	2.00	343.52	1,600.0	1.7	-0.5	0.6	2.00	2.00	0.00
1,700.0	4.00	343.52	1,699.8	6.7	-2.0	2.5	2.00	2.00	0.00
1,800.0	6.00	343.52	1,799.5	15.0	-4.5	5.7	2.00	2.00	0.00
1,900.0	8.00	343.52	1,898.7	26.7	-7.9	10.1	2.00	2.00	0.00
2,000.0	10.00	343.52	1,997.5	41.7	-12.3	15.8	2.00	2.00	0.00
2,015.4	10.31	343.52	2,012.6	44.3	-13.1	16.8	2.00	2.00	0.00
2,100.0	10.31	343.52	2,095.9	58.9	-17.4	22.2	0.00	0.00	0.00
2,200.0	10.31	343.52	2,194.2	76.0	-22.5	28.7	0.00	0.00	0.00
2,300.0	10.31	343.52	2,292.6	93.2	-27.6	35.2	0.00	0.00	0.00
2,400.0	10.31	343.52	2,391.0	110.3	-32.6	41.7	0.00	0.00	0.00
2,500.0	10.31	343.52	2,489.4	127.5	-37.7	48.2	0.00	0.00	0.00
2,600.0	10.31	343.52	2,587.8	144.6	-42.8	54.7	0.00	0.00	0.00
2,700.0	10.31	343.52	2,686.2	161.8	-47.9	61.2	0.00	0.00	0.00
2,800.0	10.31	343.52	2,784.6	179.0	-52.9	67.7	0.00	0.00	0.00
2,900.0	10.31	343.52	2,882.9	196.1	-58.0	74.1	0.00	0.00	0.00
3,000.0	10.31	343.52	2,981.3	213.3	-63.1	80.6	0.00	0.00	0.00
3,100.0	10.31	343.52	3,079.7	230.4	-68.2	87.1	0.00	0.00	0.00
3,200.0	10.31	343.52	3,178.1	247.6	-73.2	93.6	0.00	0.00	0.00
3,300.0	10.31	343.52	3,276.5	264.8	-78.3	100.1	0.00	0.00	0.00
3,400.0	10.31	343.52	3,374.9	281.9	-83.4	106.6	0.00	0.00	0.00
3,500.0	10.31	343.52	3,473.3	299.1	-88.4	113.1	0.00	0.00	0.00
3,600.0	10.31	343.52	3,571.7	316.2	-93.5	119.5	0.00	0.00	0.00
3,700.0	10.31	343.52	3,670.0	333.4	-98.6	126.0	0.00	0.00	0.00
3,800.0	10.31	343.52	3,768.4	350.5	-103.7	132.5	0.00	0.00	0.00
3,900.0	10.31	343.52	3,866.8	367.7	-108.7	139.0	0.00	0.00	0.00
4,000.0	10.31	343.52	3,965.2	384.9	-113.8	145.5	0.00	0.00	0.00
4,100.0	10.31	343.52	4,063.6	402.0	-118.9	152.0	0.00	0.00	0.00
4,200.0	10.31	343.52	4,162.0	419.2	-124.0	158.5	0.00	0.00	0.00
4,300.0	10.31	343.52	4,260.4	436.3	-129.0	165.0	0.00	0.00	0.00
4,400.0	10.31	343.52	4,358.7	453.5	-134.1	171.4	0.00	0.00	0.00
4,500.0	10.31	343.52	4,457.1	470.6	-139.2	177.9	0.00	0.00	0.00
4,600.0	10.31	343.52	4,555.5	487.8	-144.3	184.4	0.00	0.00	0.00
4,700.0	10.31	343.52	4,653.9	505.0	-149.3	190.9	0.00	0.00	0.00
4,800.0	10.31	343.52	4,752.3	522.1	-154.4	197.4	0.00	0.00	0.00
4,900.0	10.31	343.52	4,850.7	539.3	-159.5	203.9	0.00	0.00	0.00
5,000.0	10.31	343.52	4,949.1	556.4	-164.6	210.4	0.00	0.00	0.00
5,100.0	10.31	343.52	5,047.4	573.6	-169.6	216.8	0.00	0.00	0.00
5,200.0	10.31	343.52	5,145.8	590.8	-174.7	223.3	0.00	0.00	0.00

# Bayswater Exploration & Production LLC

## Planning Report

<b>Database:</b>	edm	<b>Local Co-ordinate Reference:</b>	Well TOPAZ 14
<b>Company:</b>	Bayswater Exploration & Production, LLC	<b>TVD Reference:</b>	KB @ 4966.0usft (Original Well Elev)
<b>Project:</b>	DJ Basin	<b>MD Reference:</b>	KB @ 4966.0usft (Original Well Elev)
<b>Site:</b>	Topaz Pad 6-I HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	TOPAZ 14	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	10.31	343.52	5,244.2	607.9	-179.8	229.8	0.00	0.00	0.00
5,400.0	10.31	343.52	5,342.6	625.1	-184.9	236.3	0.00	0.00	0.00
5,500.0	10.31	343.52	5,441.0	642.2	-189.9	242.8	0.00	0.00	0.00
5,600.0	10.31	343.52	5,539.4	659.4	-195.0	249.3	0.00	0.00	0.00
5,700.0	10.31	343.52	5,637.8	676.5	-200.1	255.8	0.00	0.00	0.00
5,800.0	10.31	343.52	5,736.1	693.7	-205.2	262.3	0.00	0.00	0.00
5,900.0	10.31	343.52	5,834.5	710.9	-210.2	268.7	0.00	0.00	0.00
6,000.0	10.31	343.52	5,932.9	728.0	-215.3	275.2	0.00	0.00	0.00
6,100.0	10.31	343.52	6,031.3	745.2	-220.4	281.7	0.00	0.00	0.00
6,200.0	10.31	343.52	6,129.7	762.3	-225.5	288.2	0.00	0.00	0.00
6,300.0	10.31	343.52	6,228.1	779.5	-230.5	294.7	0.00	0.00	0.00
6,400.0	10.31	343.52	6,326.5	796.7	-235.6	301.2	0.00	0.00	0.00
6,500.0	10.31	343.52	6,424.9	813.8	-240.7	307.7	0.00	0.00	0.00
6,600.0	10.31	343.52	6,523.2	831.0	-245.8	314.1	0.00	0.00	0.00
6,700.0	10.31	343.52	6,621.6	848.1	-250.8	320.6	0.00	0.00	0.00
6,800.0	10.31	343.52	6,720.0	865.3	-255.9	327.1	0.00	0.00	0.00
6,842.1	10.31	343.52	6,761.4	872.5	-258.0	329.8	0.00	0.00	0.00
6,900.0	13.11	318.17	6,818.2	882.4	-263.9	336.5	10.00	4.84	-43.78
7,000.0	21.01	296.59	6,913.8	898.9	-287.5	361.5	10.00	7.90	-21.58
7,100.0	30.15	287.03	7,003.9	914.3	-327.7	402.7	10.00	9.14	-9.56
7,200.0	39.68	281.68	7,085.8	928.2	-383.1	459.1	10.00	9.53	-5.35
7,300.0	49.37	278.14	7,157.1	940.0	-452.1	528.9	10.00	9.69	-3.54
7,400.0	59.14	275.51	7,215.4	949.6	-532.6	609.9	10.00	9.77	-2.63
7,500.0	68.95	273.37	7,259.1	956.4	-622.1	699.7	10.00	9.81	-2.14
7,600.0	78.79	271.50	7,286.9	960.5	-718.0	795.5	10.00	9.84	-1.87
7,700.0	88.64	269.75	7,297.8	961.5	-817.2	894.5	10.00	9.85	-1.75
7,713.8	90.00	269.51	7,298.0	961.5	-831.1	908.3	10.00	9.85	-1.72
7,800.0	90.00	269.51	7,298.0	960.7	-917.2	994.1	0.00	0.00	0.00
7,900.0	90.00	269.51	7,298.0	959.9	-1,017.2	1,093.7	0.00	0.00	0.00
8,000.0	90.00	269.51	7,298.0	959.0	-1,117.2	1,193.3	0.00	0.00	0.00
8,100.0	90.00	269.51	7,298.0	958.2	-1,217.2	1,292.8	0.00	0.00	0.00
8,200.0	90.00	269.51	7,298.0	957.3	-1,317.2	1,392.4	0.00	0.00	0.00
8,300.0	90.00	269.51	7,298.0	956.5	-1,417.2	1,492.0	0.00	0.00	0.00
8,400.0	90.00	269.51	7,298.0	955.6	-1,517.2	1,591.6	0.00	0.00	0.00
8,500.0	90.00	269.51	7,298.0	954.8	-1,617.2	1,691.1	0.00	0.00	0.00
8,600.0	90.00	269.51	7,298.0	953.9	-1,717.2	1,790.7	0.00	0.00	0.00
8,700.0	90.00	269.51	7,298.0	953.1	-1,817.2	1,890.3	0.00	0.00	0.00
8,800.0	90.00	269.51	7,298.0	952.2	-1,917.2	1,989.9	0.00	0.00	0.00
8,900.0	90.00	269.51	7,298.0	951.4	-2,017.2	2,089.5	0.00	0.00	0.00
9,000.0	90.00	269.51	7,298.0	950.5	-2,117.2	2,189.0	0.00	0.00	0.00
9,100.0	90.00	269.51	7,298.0	949.7	-2,217.2	2,288.6	0.00	0.00	0.00
9,200.0	90.00	269.51	7,298.0	948.8	-2,317.2	2,388.2	0.00	0.00	0.00
9,300.0	90.00	269.51	7,298.0	948.0	-2,417.2	2,487.8	0.00	0.00	0.00
9,400.0	90.00	269.51	7,298.0	947.1	-2,517.2	2,587.3	0.00	0.00	0.00
9,500.0	90.00	269.51	7,298.0	946.3	-2,617.2	2,686.9	0.00	0.00	0.00
9,600.0	90.00	269.51	7,298.0	945.4	-2,717.2	2,786.5	0.00	0.00	0.00
9,700.0	90.00	269.51	7,298.0	944.6	-2,817.2	2,886.1	0.00	0.00	0.00
9,800.0	90.00	269.51	7,298.0	943.7	-2,917.2	2,985.7	0.00	0.00	0.00
9,900.0	90.00	269.51	7,298.0	942.9	-3,017.2	3,085.2	0.00	0.00	0.00
10,000.0	90.00	269.51	7,298.0	942.0	-3,117.2	3,184.8	0.00	0.00	0.00
10,100.0	90.00	269.51	7,298.0	941.2	-3,217.2	3,284.4	0.00	0.00	0.00
10,200.0	90.00	269.51	7,298.0	940.3	-3,317.2	3,384.0	0.00	0.00	0.00
10,300.0	90.00	269.51	7,298.0	939.5	-3,417.1	3,483.5	0.00	0.00	0.00
10,400.0	90.00	269.51	7,298.0	938.6	-3,517.1	3,583.1	0.00	0.00	0.00

# Bayswater Exploration & Production LLC

## Planning Report

<b>Database:</b>	edm	<b>Local Co-ordinate Reference:</b>	Well TOPAZ 14
<b>Company:</b>	Bayswater Exploration & Production, LLC	<b>TVD Reference:</b>	KB @ 4966.0usft (Original Well Elev)
<b>Project:</b>	DJ Basin	<b>MD Reference:</b>	KB @ 4966.0usft (Original Well Elev)
<b>Site:</b>	Topaz Pad 6-I HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	TOPAZ 14	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,500.0	90.00	269.51	7,298.0	937.8	-3,617.1	3,682.7	0.00	0.00	0.00	
10,600.0	90.00	269.51	7,298.0	936.9	-3,717.1	3,782.3	0.00	0.00	0.00	
10,700.0	90.00	269.51	7,298.0	936.1	-3,817.1	3,881.9	0.00	0.00	0.00	
10,800.0	90.00	269.51	7,298.0	935.2	-3,917.1	3,981.4	0.00	0.00	0.00	
10,900.0	90.00	269.51	7,298.0	934.4	-4,017.1	4,081.0	0.00	0.00	0.00	
11,000.0	90.00	269.51	7,298.0	933.5	-4,117.1	4,180.6	0.00	0.00	0.00	
11,100.0	90.00	269.51	7,298.0	932.7	-4,217.1	4,280.2	0.00	0.00	0.00	
11,200.0	90.00	269.51	7,298.0	931.8	-4,317.1	4,379.7	0.00	0.00	0.00	
11,300.0	90.00	269.51	7,298.0	931.0	-4,417.1	4,479.3	0.00	0.00	0.00	
11,400.0	90.00	269.51	7,298.0	930.1	-4,517.1	4,578.9	0.00	0.00	0.00	
11,500.0	90.00	269.51	7,298.0	929.3	-4,617.1	4,678.5	0.00	0.00	0.00	
11,600.0	90.00	269.51	7,298.0	928.4	-4,717.1	4,778.1	0.00	0.00	0.00	
11,700.0	90.00	269.51	7,298.0	927.6	-4,817.1	4,877.6	0.00	0.00	0.00	
11,800.0	90.00	269.51	7,298.0	926.7	-4,917.1	4,977.2	0.00	0.00	0.00	
11,900.0	90.00	269.51	7,298.0	925.9	-5,017.1	5,076.8	0.00	0.00	0.00	
12,000.0	90.00	269.51	7,298.0	925.0	-5,117.1	5,176.4	0.00	0.00	0.00	
12,100.0	90.00	269.51	7,298.0	924.2	-5,217.1	5,275.9	0.00	0.00	0.00	
12,200.0	90.00	269.51	7,298.0	923.3	-5,317.1	5,375.5	0.00	0.00	0.00	
12,300.0	90.00	269.51	7,298.0	922.5	-5,417.1	5,475.1	0.00	0.00	0.00	
12,400.0	90.00	269.51	7,298.0	921.6	-5,517.1	5,574.7	0.00	0.00	0.00	
12,500.0	90.00	269.51	7,298.0	920.8	-5,617.1	5,674.3	0.00	0.00	0.00	
12,600.0	90.00	269.51	7,298.0	919.9	-5,717.1	5,773.8	0.00	0.00	0.00	
12,700.0	90.00	269.51	7,298.0	919.1	-5,817.1	5,873.4	0.00	0.00	0.00	
12,800.0	90.00	269.51	7,298.0	918.2	-5,917.1	5,973.0	0.00	0.00	0.00	
12,900.0	90.00	269.51	7,298.0	917.4	-6,017.1	6,072.6	0.00	0.00	0.00	
13,000.0	90.00	269.51	7,298.0	916.5	-6,117.0	6,172.1	0.00	0.00	0.00	
13,100.0	90.00	269.51	7,298.0	915.7	-6,217.0	6,271.7	0.00	0.00	0.00	
13,200.0	90.00	269.51	7,298.0	914.8	-6,317.0	6,371.3	0.00	0.00	0.00	
13,300.0	90.00	269.51	7,298.0	914.0	-6,417.0	6,470.9	0.00	0.00	0.00	
13,400.0	90.00	269.51	7,298.0	913.1	-6,517.0	6,570.5	0.00	0.00	0.00	
13,500.0	90.00	269.51	7,298.0	912.3	-6,617.0	6,670.0	0.00	0.00	0.00	
13,600.0	90.00	269.51	7,298.0	911.4	-6,717.0	6,769.6	0.00	0.00	0.00	
13,700.0	90.00	269.51	7,298.0	910.6	-6,817.0	6,869.2	0.00	0.00	0.00	
13,800.0	90.00	269.51	7,298.0	909.7	-6,917.0	6,968.8	0.00	0.00	0.00	
13,900.0	90.00	269.51	7,298.0	908.9	-7,017.0	7,068.3	0.00	0.00	0.00	
14,000.0	90.00	269.51	7,298.0	908.0	-7,117.0	7,167.9	0.00	0.00	0.00	
14,100.0	90.00	269.51	7,298.0	907.2	-7,217.0	7,267.5	0.00	0.00	0.00	
14,200.0	90.00	269.51	7,298.0	906.3	-7,317.0	7,367.1	0.00	0.00	0.00	
14,300.0	90.00	269.51	7,298.0	905.5	-7,417.0	7,466.7	0.00	0.00	0.00	
14,400.0	90.00	269.51	7,298.0	904.6	-7,517.0	7,566.2	0.00	0.00	0.00	
14,500.0	90.00	269.51	7,298.0	903.8	-7,617.0	7,665.8	0.00	0.00	0.00	
14,600.0	90.00	269.51	7,298.0	902.9	-7,717.0	7,765.4	0.00	0.00	0.00	
14,700.0	90.00	269.51	7,298.0	902.1	-7,817.0	7,865.0	0.00	0.00	0.00	
14,800.0	90.00	269.51	7,298.0	901.2	-7,917.0	7,964.5	0.00	0.00	0.00	
14,900.0	90.00	269.51	7,298.0	900.4	-8,017.0	8,064.1	0.00	0.00	0.00	
15,000.0	90.00	269.51	7,298.0	899.5	-8,117.0	8,163.7	0.00	0.00	0.00	
15,100.0	90.00	269.51	7,298.0	898.7	-8,217.0	8,263.3	0.00	0.00	0.00	
15,200.0	90.00	269.51	7,298.0	897.8	-8,317.0	8,362.9	0.00	0.00	0.00	
15,300.0	90.00	269.51	7,298.0	897.0	-8,417.0	8,462.4	0.00	0.00	0.00	
15,400.0	90.00	269.51	7,298.0	896.1	-8,517.0	8,562.0	0.00	0.00	0.00	
15,500.0	90.00	269.51	7,298.0	895.3	-8,617.0	8,661.6	0.00	0.00	0.00	
15,600.0	90.00	269.51	7,298.0	894.4	-8,717.0	8,761.2	0.00	0.00	0.00	
15,700.0	90.00	269.51	7,298.0	893.6	-8,817.0	8,860.7	0.00	0.00	0.00	
15,800.0	90.00	269.51	7,298.0	892.7	-8,916.9	8,960.3	0.00	0.00	0.00	

# Bayswater Exploration & Production LLC

## Planning Report

<b>Database:</b>	edm	<b>Local Co-ordinate Reference:</b>	Well TOPAZ 14
<b>Company:</b>	Bayswater Exploration & Production, LLC	<b>TVD Reference:</b>	KB @ 4966.0usft (Original Well Elev)
<b>Project:</b>	DJ Basin	<b>MD Reference:</b>	KB @ 4966.0usft (Original Well Elev)
<b>Site:</b>	Topaz Pad 6-I HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	TOPAZ 14	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
15,900.0	90.00	269.51	7,298.0	891.9	-9,016.9	9,059.9	0.00	0.00	0.00	
16,000.0	90.00	269.51	7,298.0	891.0	-9,116.9	9,159.5	0.00	0.00	0.00	
16,100.0	90.00	269.51	7,298.0	890.2	-9,216.9	9,259.1	0.00	0.00	0.00	
16,200.0	90.00	269.51	7,298.0	889.3	-9,316.9	9,358.6	0.00	0.00	0.00	
16,300.0	90.00	269.51	7,298.0	888.5	-9,416.9	9,458.2	0.00	0.00	0.00	
16,400.0	90.00	269.51	7,298.0	887.6	-9,516.9	9,557.8	0.00	0.00	0.00	
16,500.0	90.00	269.51	7,298.0	886.8	-9,616.9	9,657.4	0.00	0.00	0.00	
16,600.0	90.00	269.51	7,298.0	885.9	-9,716.9	9,756.9	0.00	0.00	0.00	
16,700.0	90.00	269.51	7,298.0	885.1	-9,816.9	9,856.5	0.00	0.00	0.00	
16,800.0	90.00	269.51	7,298.0	884.2	-9,916.9	9,956.1	0.00	0.00	0.00	
16,900.0	90.00	269.51	7,298.0	883.4	-10,016.9	10,055.7	0.00	0.00	0.00	
17,000.0	90.00	269.51	7,298.0	882.5	-10,116.9	10,155.3	0.00	0.00	0.00	
17,100.0	90.00	269.51	7,298.0	881.7	-10,216.9	10,254.8	0.00	0.00	0.00	
17,200.0	90.00	269.51	7,298.0	880.8	-10,316.9	10,354.4	0.00	0.00	0.00	
17,300.0	90.00	269.51	7,298.0	880.0	-10,416.9	10,454.0	0.00	0.00	0.00	
17,396.7	90.00	269.51	7,298.0	879.2	-10,513.6	10,550.3	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
TOPAZ 14 PBHL	0.00	0.00	7,298.0	879.2	-10,513.6	1,463,547.60	3,207,582.62	40° 36' 12.362 N	104° 45' 8.698 W	
- plan hits target center										
- Point										
TOPAZ 14 LP	0.00	0.00	7,298.0	961.5	-831.1	1,463,715.65	3,217,264.02	40° 36' 13.198 N	104° 43' 3.166 W	
- plan hits target center										
- Point										