

# **Bayswater Exploration & Production, LLC**

**DJ Basin**

**Topaz Pad 6-I HZ Pad**

**TOPAZ 15**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**25 November, 2020**



Pad Name: Topaz Pad 6-I HZ Pad  
Well Name: TOPAZ 15  
Ground Level: 4946.0  
SHL Latitude: 40° 36' 3.661 N  
SHL Longitude: 104° 42' 52.204 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	1907.7	8.15	338.22	1906.3	26.9	-10.7	2.00	338.22	12.4	
4	6881.0	8.15	338.22	6829.4	681.9	-272.5	0.00	0.00	315.2	
5	7751.4	90.00	269.53	7368.0	749.1	-845.2	10.00	-68.88	891.1	TOPAZ 15 LP
6	17441.6	90.00	269.53	7368.0	669.7	-10535.1	0.00	0.00	10556.3	TOPAZ 15 PBHL

## DESIGN TARGET DETAILS

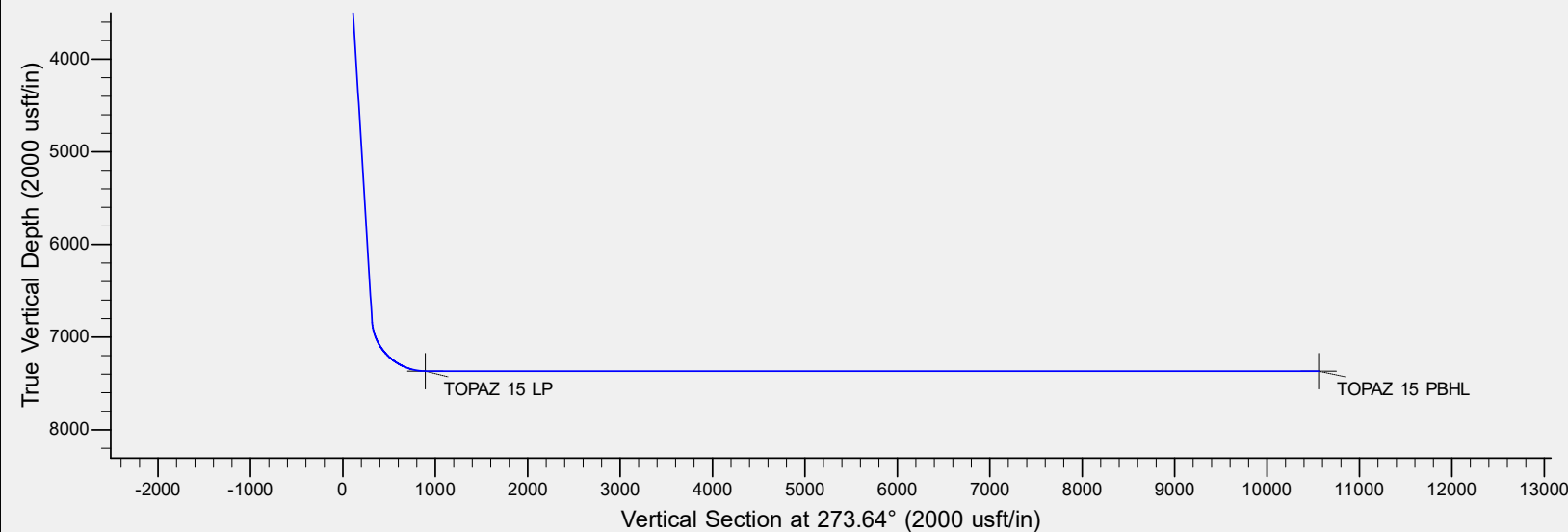
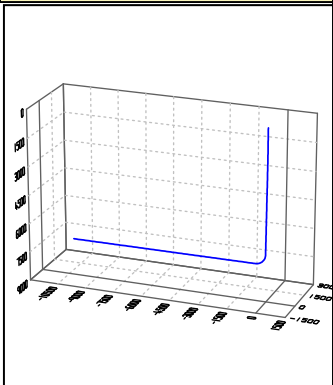
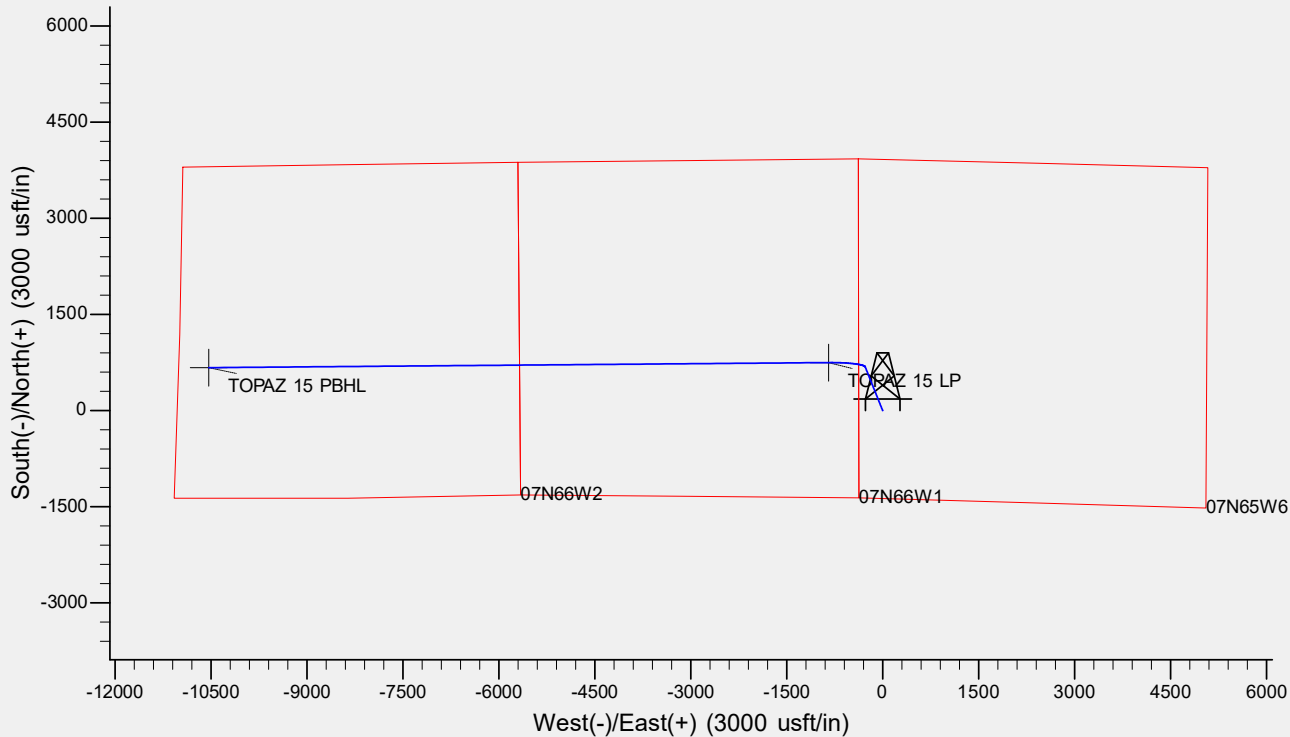
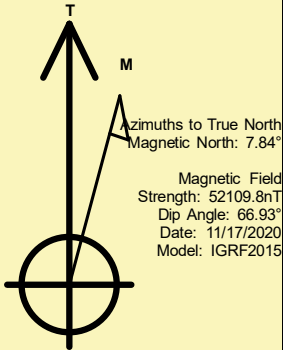
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
TOPAZ 15 LP	7368.0	749.1	-845.2	1463499.62	3217266.21	40° 36' 11.063 N	104° 43' 3.162 W	Point
TOPAZ 15 PBHL	- plan hits target center 7368.0	669.7	-10535.1	1463334.43	3207577.47	40° 36' 10.256 N	104° 45' 8.788 W	Point
	- plan hits target center							

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well TOPAZ 15, 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 15
<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 15	<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 15					
Well Position	+N/-S	-39.0 usft	Northing:	1,462,758.09 usft	Latitude:	40° 36' 3.661 N
	+E/-W	19.4 usft	Easting:	3,218,118.06 usft	Longitude:	104° 42' 52.204 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	52,109.77624133

<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	273.64

<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	17,441.6	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	
1,907.7	8.15	338.22	1,906.3	26.9	-10.7	2.00	2.00	0.00	338.22	
6,881.0	8.15	338.22	6,829.4	681.9	-272.5	0.00	0.00	0.00	0.00	
7,751.4	90.00	269.53	7,368.0	749.1	-845.2	10.00	9.40	-7.89	-68.88	TOPAZ 15 LP
17,441.6	90.00	269.53	7,368.0	669.7	-10,535.1	0.00	0.00	0.00	0.00	TOPAZ 15 PBHL

# Bayswater Exploration & Production LLC

## Planning Report

<b>Database:</b>	edm	<b>Local Co-ordinate Reference:</b>	Well TOPAZ 15
<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 15	<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	338.22	1,600.0	1.6	-0.6	0.7	2.00	2.00	0.00
1,700.0	4.00	338.22	1,699.8	6.5	-2.6	3.0	2.00	2.00	0.00
1,800.0	6.00	338.22	1,799.5	14.6	-5.8	6.7	2.00	2.00	0.00
1,900.0	8.00	338.22	1,898.7	25.9	-10.3	12.0	2.00	2.00	0.00
1,907.7	8.15	338.22	1,906.3	26.9	-10.7	12.4	2.00	2.00	0.00
2,000.0	8.15	338.22	1,997.7	39.0	-15.6	18.1	0.00	0.00	0.00
2,100.0	8.15	338.22	2,096.7	52.2	-20.9	24.1	0.00	0.00	0.00
2,200.0	8.15	338.22	2,195.7	65.4	-26.1	30.2	0.00	0.00	0.00
2,300.0	8.15	338.22	2,294.7	78.6	-31.4	36.3	0.00	0.00	0.00
2,400.0	8.15	338.22	2,393.6	91.7	-36.7	42.4	0.00	0.00	0.00
2,500.0	8.15	338.22	2,492.6	104.9	-41.9	48.5	0.00	0.00	0.00
2,600.0	8.15	338.22	2,591.6	118.1	-47.2	54.6	0.00	0.00	0.00
2,700.0	8.15	338.22	2,690.6	131.2	-52.4	60.7	0.00	0.00	0.00
2,800.0	8.15	338.22	2,789.6	144.4	-57.7	66.8	0.00	0.00	0.00
2,900.0	8.15	338.22	2,888.6	157.6	-63.0	72.8	0.00	0.00	0.00
3,000.0	8.15	338.22	2,987.6	170.7	-68.2	78.9	0.00	0.00	0.00
3,100.0	8.15	338.22	3,086.6	183.9	-73.5	85.0	0.00	0.00	0.00
3,200.0	8.15	338.22	3,185.6	197.1	-78.8	91.1	0.00	0.00	0.00
3,300.0	8.15	338.22	3,284.6	210.3	-84.0	97.2	0.00	0.00	0.00
3,400.0	8.15	338.22	3,383.5	223.4	-89.3	103.3	0.00	0.00	0.00
3,500.0	8.15	338.22	3,482.5	236.6	-94.5	109.4	0.00	0.00	0.00
3,600.0	8.15	338.22	3,581.5	249.8	-99.8	115.5	0.00	0.00	0.00
3,700.0	8.15	338.22	3,680.5	262.9	-105.1	121.5	0.00	0.00	0.00
3,800.0	8.15	338.22	3,779.5	276.1	-110.3	127.6	0.00	0.00	0.00
3,900.0	8.15	338.22	3,878.5	289.3	-115.6	133.7	0.00	0.00	0.00
4,000.0	8.15	338.22	3,977.5	302.4	-120.9	139.8	0.00	0.00	0.00
4,100.0	8.15	338.22	4,076.5	315.6	-126.1	145.9	0.00	0.00	0.00
4,200.0	8.15	338.22	4,175.5	328.8	-131.4	152.0	0.00	0.00	0.00
4,300.0	8.15	338.22	4,274.4	341.9	-136.6	158.1	0.00	0.00	0.00
4,400.0	8.15	338.22	4,373.4	355.1	-141.9	164.2	0.00	0.00	0.00
4,500.0	8.15	338.22	4,472.4	368.3	-147.2	170.2	0.00	0.00	0.00
4,600.0	8.15	338.22	4,571.4	381.5	-152.4	176.3	0.00	0.00	0.00
4,700.0	8.15	338.22	4,670.4	394.6	-157.7	182.4	0.00	0.00	0.00
4,800.0	8.15	338.22	4,769.4	407.8	-163.0	188.5	0.00	0.00	0.00
4,900.0	8.15	338.22	4,868.4	421.0	-168.2	194.6	0.00	0.00	0.00
5,000.0	8.15	338.22	4,967.4	434.1	-173.5	200.7	0.00	0.00	0.00
5,100.0	8.15	338.22	5,066.4	447.3	-178.8	206.8	0.00	0.00	0.00
5,200.0	8.15	338.22	5,165.3	460.5	-184.0	212.9	0.00	0.00	0.00

# Bayswater Exploration & Production LLC

## Planning Report

<b>Database:</b>	edm	<b>Local Co-ordinate Reference:</b>	Well TOPAZ 15
<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 15	<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	8.15	338.22	5,264.3	473.6	-189.3	218.9	0.00	0.00	0.00
5,400.0	8.15	338.22	5,363.3	486.8	-194.5	225.0	0.00	0.00	0.00
5,500.0	8.15	338.22	5,462.3	500.0	-199.8	231.1	0.00	0.00	0.00
5,600.0	8.15	338.22	5,561.3	513.1	-205.1	237.2	0.00	0.00	0.00
5,700.0	8.15	338.22	5,660.3	526.3	-210.3	243.3	0.00	0.00	0.00
5,800.0	8.15	338.22	5,759.3	539.5	-215.6	249.4	0.00	0.00	0.00
5,900.0	8.15	338.22	5,858.3	552.7	-220.9	255.5	0.00	0.00	0.00
6,000.0	8.15	338.22	5,957.3	565.8	-226.1	261.6	0.00	0.00	0.00
6,100.0	8.15	338.22	6,056.3	579.0	-231.4	267.6	0.00	0.00	0.00
6,200.0	8.15	338.22	6,155.2	592.2	-236.6	273.7	0.00	0.00	0.00
6,300.0	8.15	338.22	6,254.2	605.3	-241.9	279.8	0.00	0.00	0.00
6,400.0	8.15	338.22	6,353.2	618.5	-247.2	285.9	0.00	0.00	0.00
6,500.0	8.15	338.22	6,452.2	631.7	-252.4	292.0	0.00	0.00	0.00
6,600.0	8.15	338.22	6,551.2	644.8	-257.7	298.1	0.00	0.00	0.00
6,700.0	8.15	338.22	6,650.2	658.0	-263.0	304.2	0.00	0.00	0.00
6,800.0	8.15	338.22	6,749.2	671.2	-268.2	310.3	0.00	0.00	0.00
6,881.0	8.15	338.22	6,829.4	681.9	-272.5	315.2	0.00	0.00	0.00
6,900.0	9.01	326.83	6,848.1	684.3	-273.8	316.7	10.00	4.52	-59.93
7,000.0	16.65	296.04	6,945.7	697.2	-291.0	334.6	10.00	7.64	-30.79
7,100.0	25.92	285.47	7,038.8	709.4	-325.0	369.4	10.00	9.27	-10.57
7,200.0	35.57	280.29	7,124.6	720.4	-374.8	419.8	10.00	9.65	-5.18
7,300.0	45.36	277.10	7,200.6	730.0	-438.9	484.3	10.00	9.79	-3.18
7,400.0	55.21	274.85	7,264.5	737.9	-515.3	561.1	10.00	9.85	-2.25
7,500.0	65.09	273.08	7,314.2	743.9	-601.7	647.7	10.00	9.88	-1.77
7,600.0	74.99	271.58	7,348.3	747.6	-695.5	741.6	10.00	9.90	-1.50
7,700.0	84.90	270.21	7,365.7	749.2	-793.9	839.8	10.00	9.91	-1.37
7,751.4	90.00	269.53	7,368.0	749.1	-845.2	891.1	10.00	9.91	-1.33
7,800.0	90.00	269.53	7,368.0	748.7	-893.8	939.5	0.00	0.00	0.00
7,900.0	90.00	269.53	7,368.0	747.8	-993.8	1,039.2	0.00	0.00	0.00
8,000.0	90.00	269.53	7,368.0	747.0	-1,093.8	1,139.0	0.00	0.00	0.00
8,100.0	90.00	269.53	7,368.0	746.2	-1,193.8	1,238.7	0.00	0.00	0.00
8,200.0	90.00	269.53	7,368.0	745.4	-1,293.8	1,338.5	0.00	0.00	0.00
8,300.0	90.00	269.53	7,368.0	744.6	-1,393.8	1,438.2	0.00	0.00	0.00
8,400.0	90.00	269.53	7,368.0	743.7	-1,493.8	1,537.9	0.00	0.00	0.00
8,500.0	90.00	269.53	7,368.0	742.9	-1,593.8	1,637.7	0.00	0.00	0.00
8,600.0	90.00	269.53	7,368.0	742.1	-1,693.8	1,737.4	0.00	0.00	0.00
8,700.0	90.00	269.53	7,368.0	741.3	-1,793.8	1,837.2	0.00	0.00	0.00
8,800.0	90.00	269.53	7,368.0	740.5	-1,893.8	1,936.9	0.00	0.00	0.00
8,900.0	90.00	269.53	7,368.0	739.6	-1,993.8	2,036.7	0.00	0.00	0.00
9,000.0	90.00	269.53	7,368.0	738.8	-2,093.8	2,136.4	0.00	0.00	0.00
9,100.0	90.00	269.53	7,368.0	738.0	-2,193.8	2,236.2	0.00	0.00	0.00
9,200.0	90.00	269.53	7,368.0	737.2	-2,293.7	2,335.9	0.00	0.00	0.00
9,300.0	90.00	269.53	7,368.0	736.4	-2,393.7	2,435.6	0.00	0.00	0.00
9,400.0	90.00	269.53	7,368.0	735.6	-2,493.7	2,535.4	0.00	0.00	0.00
9,500.0	90.00	269.53	7,368.0	734.7	-2,593.7	2,635.1	0.00	0.00	0.00
9,600.0	90.00	269.53	7,368.0	733.9	-2,693.7	2,734.9	0.00	0.00	0.00
9,700.0	90.00	269.53	7,368.0	733.1	-2,793.7	2,834.6	0.00	0.00	0.00
9,800.0	90.00	269.53	7,368.0	732.3	-2,893.7	2,934.4	0.00	0.00	0.00
9,900.0	90.00	269.53	7,368.0	731.5	-2,993.7	3,034.1	0.00	0.00	0.00
10,000.0	90.00	269.53	7,368.0	730.6	-3,093.7	3,133.8	0.00	0.00	0.00
10,100.0	90.00	269.53	7,368.0	729.8	-3,193.7	3,233.6	0.00	0.00	0.00
10,200.0	90.00	269.53	7,368.0	729.0	-3,293.7	3,333.3	0.00	0.00	0.00
10,300.0	90.00	269.53	7,368.0	728.2	-3,393.7	3,433.1	0.00	0.00	0.00
10,400.0	90.00	269.53	7,368.0	727.4	-3,493.7	3,532.8	0.00	0.00	0.00

# Bayswater Exploration & Production LLC

## Planning Report

<b>Database:</b>	edm	<b>Local Co-ordinate Reference:</b>	Well TOPAZ 15
<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 15	<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	269.53	7,368.0	726.5	-3,593.7	3,632.6	0.00	0.00	0.00	
10,600.0	90.00	269.53	7,368.0	725.7	-3,693.7	3,732.3	0.00	0.00	0.00	
10,700.0	90.00	269.53	7,368.0	724.9	-3,793.7	3,832.0	0.00	0.00	0.00	
10,800.0	90.00	269.53	7,368.0	724.1	-3,893.7	3,931.8	0.00	0.00	0.00	
10,900.0	90.00	269.53	7,368.0	723.3	-3,993.7	4,031.5	0.00	0.00	0.00	
11,000.0	90.00	269.53	7,368.0	722.4	-4,093.7	4,131.3	0.00	0.00	0.00	
11,100.0	90.00	269.53	7,368.0	721.6	-4,193.7	4,231.0	0.00	0.00	0.00	
11,200.0	90.00	269.53	7,368.0	720.8	-4,293.7	4,330.8	0.00	0.00	0.00	
11,300.0	90.00	269.53	7,368.0	720.0	-4,393.7	4,430.5	0.00	0.00	0.00	
11,400.0	90.00	269.53	7,368.0	719.2	-4,493.7	4,530.2	0.00	0.00	0.00	
11,500.0	90.00	269.53	7,368.0	718.4	-4,593.7	4,630.0	0.00	0.00	0.00	
11,600.0	90.00	269.53	7,368.0	717.5	-4,693.7	4,729.7	0.00	0.00	0.00	
11,700.0	90.00	269.53	7,368.0	716.7	-4,793.7	4,829.5	0.00	0.00	0.00	
11,800.0	90.00	269.53	7,368.0	715.9	-4,893.7	4,929.2	0.00	0.00	0.00	
11,900.0	90.00	269.53	7,368.0	715.1	-4,993.7	5,029.0	0.00	0.00	0.00	
12,000.0	90.00	269.53	7,368.0	714.3	-5,093.7	5,128.7	0.00	0.00	0.00	
12,100.0	90.00	269.53	7,368.0	713.4	-5,193.7	5,228.4	0.00	0.00	0.00	
12,200.0	90.00	269.53	7,368.0	712.6	-5,293.6	5,328.2	0.00	0.00	0.00	
12,300.0	90.00	269.53	7,368.0	711.8	-5,393.6	5,427.9	0.00	0.00	0.00	
12,400.0	90.00	269.53	7,368.0	711.0	-5,493.6	5,527.7	0.00	0.00	0.00	
12,500.0	90.00	269.53	7,368.0	710.2	-5,593.6	5,627.4	0.00	0.00	0.00	
12,600.0	90.00	269.53	7,368.0	709.3	-5,693.6	5,727.2	0.00	0.00	0.00	
12,700.0	90.00	269.53	7,368.0	708.5	-5,793.6	5,826.9	0.00	0.00	0.00	
12,800.0	90.00	269.53	7,368.0	707.7	-5,893.6	5,926.7	0.00	0.00	0.00	
12,900.0	90.00	269.53	7,368.0	706.9	-5,993.6	6,026.4	0.00	0.00	0.00	
13,000.0	90.00	269.53	7,368.0	706.1	-6,093.6	6,126.1	0.00	0.00	0.00	
13,100.0	90.00	269.53	7,368.0	705.2	-6,193.6	6,225.9	0.00	0.00	0.00	
13,200.0	90.00	269.53	7,368.0	704.4	-6,293.6	6,325.6	0.00	0.00	0.00	
13,300.0	90.00	269.53	7,368.0	703.6	-6,393.6	6,425.4	0.00	0.00	0.00	
13,400.0	90.00	269.53	7,368.0	702.8	-6,493.6	6,525.1	0.00	0.00	0.00	
13,500.0	90.00	269.53	7,368.0	702.0	-6,593.6	6,624.9	0.00	0.00	0.00	
13,600.0	90.00	269.53	7,368.0	701.2	-6,693.6	6,724.6	0.00	0.00	0.00	
13,700.0	90.00	269.53	7,368.0	700.3	-6,793.6	6,824.3	0.00	0.00	0.00	
13,800.0	90.00	269.53	7,368.0	699.5	-6,893.6	6,924.1	0.00	0.00	0.00	
13,900.0	90.00	269.53	7,368.0	698.7	-6,993.6	7,023.8	0.00	0.00	0.00	
14,000.0	90.00	269.53	7,368.0	697.9	-7,093.6	7,123.6	0.00	0.00	0.00	
14,100.0	90.00	269.53	7,368.0	697.1	-7,193.6	7,223.3	0.00	0.00	0.00	
14,200.0	90.00	269.53	7,368.0	696.2	-7,293.6	7,323.1	0.00	0.00	0.00	
14,300.0	90.00	269.53	7,368.0	695.4	-7,393.6	7,422.8	0.00	0.00	0.00	
14,400.0	90.00	269.53	7,368.0	694.6	-7,493.6	7,522.5	0.00	0.00	0.00	
14,500.0	90.00	269.53	7,368.0	693.8	-7,593.6	7,622.3	0.00	0.00	0.00	
14,600.0	90.00	269.53	7,368.0	693.0	-7,693.6	7,722.0	0.00	0.00	0.00	
14,700.0	90.00	269.53	7,368.0	692.1	-7,793.6	7,821.8	0.00	0.00	0.00	
14,800.0	90.00	269.53	7,368.0	691.3	-7,893.6	7,921.5	0.00	0.00	0.00	
14,900.0	90.00	269.53	7,368.0	690.5	-7,993.6	8,021.3	0.00	0.00	0.00	
15,000.0	90.00	269.53	7,368.0	689.7	-8,093.6	8,121.0	0.00	0.00	0.00	
15,100.0	90.00	269.53	7,368.0	688.9	-8,193.6	8,220.7	0.00	0.00	0.00	
15,200.0	90.00	269.53	7,368.0	688.0	-8,293.5	8,320.5	0.00	0.00	0.00	
15,300.0	90.00	269.53	7,368.0	687.2	-8,393.5	8,420.2	0.00	0.00	0.00	
15,400.0	90.00	269.53	7,368.0	686.4	-8,493.5	8,520.0	0.00	0.00	0.00	
15,500.0	90.00	269.53	7,368.0	685.6	-8,593.5	8,619.7	0.00	0.00	0.00	
15,600.0	90.00	269.53	7,368.0	684.8	-8,693.5	8,719.5	0.00	0.00	0.00	
15,700.0	90.00	269.53	7,368.0	684.0	-8,793.5	8,819.2	0.00	0.00	0.00	
15,800.0	90.00	269.53	7,368.0	683.1	-8,893.5	8,919.0	0.00	0.00	0.00	

# Bayswater Exploration & Production LLC

## Planning Report

<b>Database:</b>	edm	<b>Local Co-ordinate Reference:</b>	Well TOPAZ 15
<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 15	<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	269.53	7,368.0	682.3	-8,993.5	9,018.7	0.00	0.00	0.00	
16,000.0	90.00	269.53	7,368.0	681.5	-9,093.5	9,118.4	0.00	0.00	0.00	
16,100.0	90.00	269.53	7,368.0	680.7	-9,193.5	9,218.2	0.00	0.00	0.00	
16,200.0	90.00	269.53	7,368.0	679.9	-9,293.5	9,317.9	0.00	0.00	0.00	
16,300.0	90.00	269.53	7,368.0	679.0	-9,393.5	9,417.7	0.00	0.00	0.00	
16,400.0	90.00	269.53	7,368.0	678.2	-9,493.5	9,517.4	0.00	0.00	0.00	
16,500.0	90.00	269.53	7,368.0	677.4	-9,593.5	9,617.2	0.00	0.00	0.00	
16,600.0	90.00	269.53	7,368.0	676.6	-9,693.5	9,716.9	0.00	0.00	0.00	
16,700.0	90.00	269.53	7,368.0	675.8	-9,793.5	9,816.6	0.00	0.00	0.00	
16,800.0	90.00	269.53	7,368.0	674.9	-9,893.5	9,916.4	0.00	0.00	0.00	
16,900.0	90.00	269.53	7,368.0	674.1	-9,993.5	10,016.1	0.00	0.00	0.00	
17,000.0	90.00	269.53	7,368.0	673.3	-10,093.5	10,115.9	0.00	0.00	0.00	
17,100.0	90.00	269.53	7,368.0	672.5	-10,193.5	10,215.6	0.00	0.00	0.00	
17,200.0	90.00	269.53	7,368.0	671.7	-10,293.5	10,315.4	0.00	0.00	0.00	
17,300.0	90.00	269.53	7,368.0	670.8	-10,393.5	10,415.1	0.00	0.00	0.00	
17,400.0	90.00	269.53	7,368.0	670.0	-10,493.5	10,514.8	0.00	0.00	0.00	
17,441.6	90.00	269.53	7,368.0	669.7	-10,535.1	10,556.3	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 15 LP	0.00	0.00	7,368.0	749.1	-845.2	1,463,499.63	3,217,266.21	40° 36' 11.063 N	104° 43' 3.162 W	
- plan hits target center										
- Point										
TOPAZ 15 PBHL	0.00	0.00	7,368.0	669.7	-10,535.1	1,463,334.43	3,207,577.47	40° 36' 10.256 N	104° 45' 8.788 W	
- plan hits target center										
- Point										