

Bayswater Exploration & Production, LLC

DJ Basin

Topaz Pad 6-I HZ Pad

TOPAZ 13

Wellbore #1

Plan: Design #1

Standard Planning Report

25 November, 2020



Pad Name: Topaz Pad 6-I HZ Pad
Well Name: TOPAZ 13
Ground Level: 4946.0
SHL Latitude: 40° 36' 3.729 N
SHL Longitude: 104° 42' 52.582 W

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	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	2102.0	12.04	347.12	2097.5	61.4	-14.0	2.00	347.12	20.3	
4	7045.3	12.04	347.12	6932.1	1066.6	-243.9	0.00	0.00	352.7	
5	7919.1	89.94	269.50	7468.0	1173.1	-816.6	10.00	-77.89	933.4	TOPAZ 13 LP
6	17594.7	89.94	269.50	7478.0	1089.0	-10491.8	0.00	0.00	10548.2	TOPAZ 13 PBHL

DESIGN TARGET DETAILS

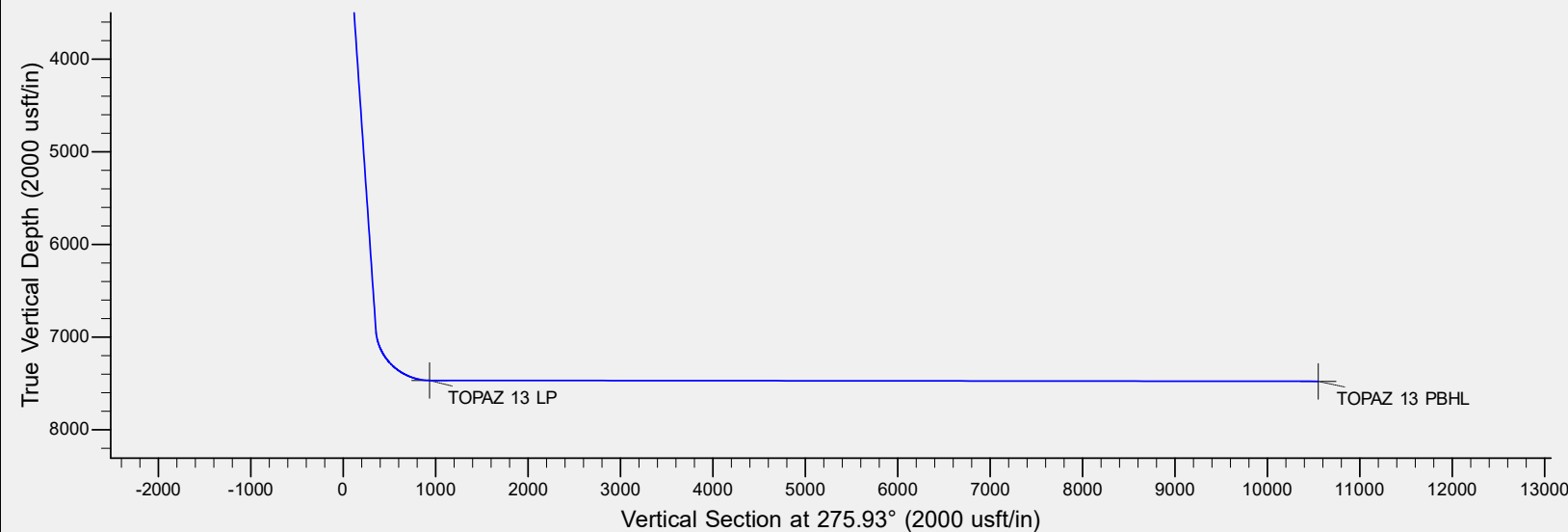
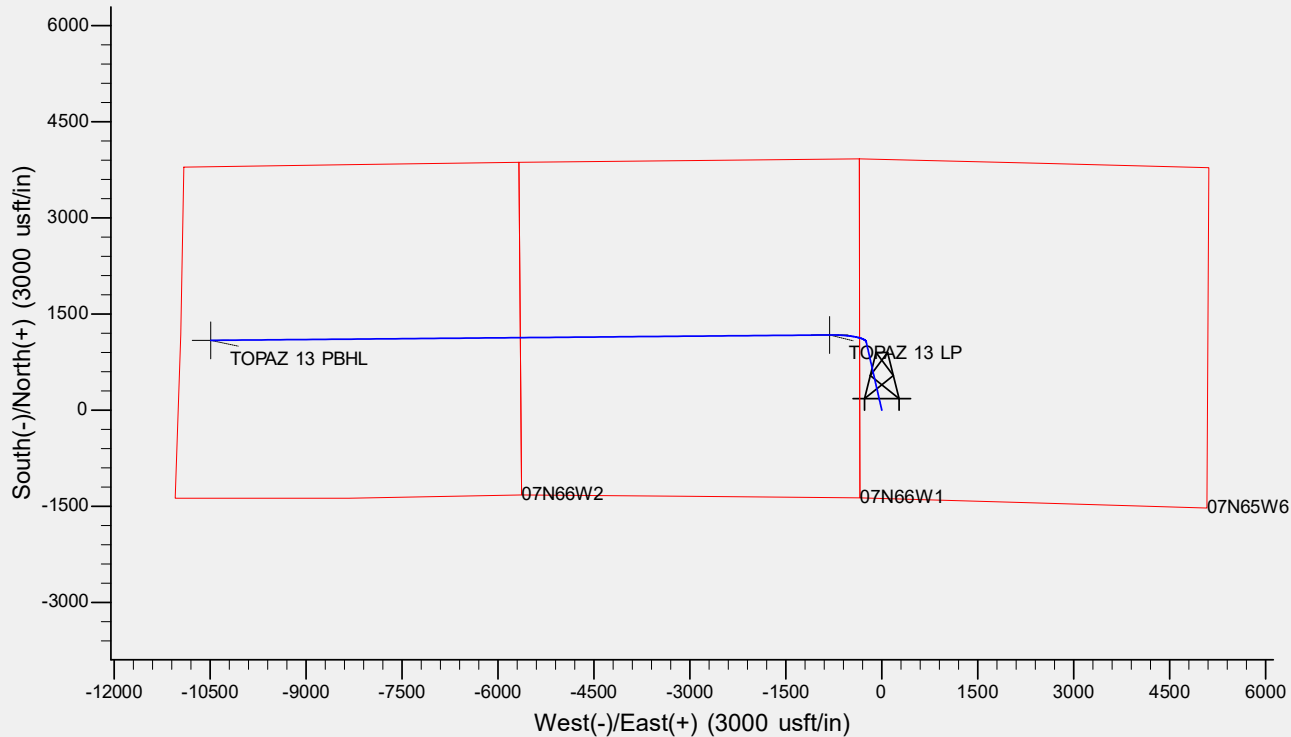
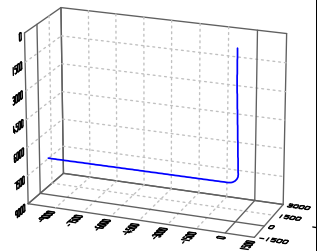
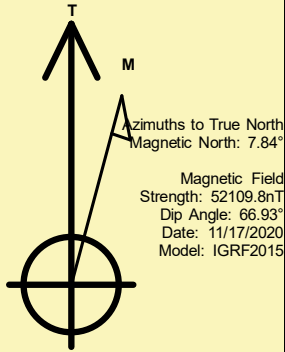
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
TOPAZ 13 LP	7468.0	1173.1	-816.6	1463930.59	3217261.85	40° 36' 15.322 N	104° 43' 3.169 W	Point
TOPAZ 13 PBHL	- plan hits target center 7478.0	1089.0	-10491.8	1463760.78	3207587.76	40° 36' 14.468 N	104° 45' 8.608 W	Point
	- plan hits target center							

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well TOPAZ 13, 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

Database:	edm	Local Co-ordinate Reference:	Well TOPAZ 13
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	KB @ 4966.0usft (Original Well Elev)
Project:	DJ Basin	MD Reference:	KB @ 4966.0usft (Original Well Elev)
Site:	Topaz Pad 6-I HZ Pad	North Reference:	True
Well:	TOPAZ 13	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	DJ Basin, DJ Basin		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	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 13					
Well Position	+N/-S	-32.1 usft	Northing:	1,462,764.75 usft	Latitude:	40° 36' 3.729 N
	+E/-W	-9.7 usft	Easting:	3,218,088.84 usft	Longitude:	104° 42' 52.582 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	4,946.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	11/17/2020	7.84	66.93	52,109.77519227

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	275.93

Plan Survey Tool Program	Date	11/25/2020		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,594.7	Design #1 (Wellbore #1)	MWD
				OWSG MWD - Standard

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
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	
2,102.0	12.04	347.12	2,097.5	61.4	-14.0	2.00	2.00	0.00	347.12	
7,045.3	12.04	347.12	6,932.1	1,066.6	-243.9	0.00	0.00	0.00	0.00	
7,919.1	89.94	269.50	7,468.0	1,173.1	-816.6	10.00	8.92	-8.88	-77.89	TOPAZ 13 LP
17,594.7	89.94	269.50	7,478.0	1,089.0	-10,491.8	0.00	0.00	0.00	0.00	TOPAZ 13 PBHL

Bayswater Exploration & Production LLC

Planning Report

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Company:	Bayswater Exploration & Production, LLC	TVD Reference:	KB @ 4966.0usft (Original Well Elev)
Project:	DJ Basin	MD Reference:	KB @ 4966.0usft (Original Well Elev)
Site:	Topaz Pad 6-I HZ Pad	North Reference:	True
Well:	TOPAZ 13	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	347.12	1,600.0	1.7	-0.4	0.6	2.00	2.00	0.00
1,700.0	4.00	347.12	1,699.8	6.8	-1.6	2.2	2.00	2.00	0.00
1,800.0	6.00	347.12	1,799.5	15.3	-3.5	5.1	2.00	2.00	0.00
1,900.0	8.00	347.12	1,898.7	27.2	-6.2	9.0	2.00	2.00	0.00
2,000.0	10.00	347.12	1,997.5	42.4	-9.7	14.0	2.00	2.00	0.00
2,100.0	12.00	347.12	2,095.6	61.0	-14.0	20.2	2.00	2.00	0.00
2,102.0	12.04	347.12	2,097.5	61.4	-14.0	20.3	2.00	2.00	0.00
2,200.0	12.04	347.12	2,193.4	81.4	-18.6	26.9	0.00	0.00	0.00
2,300.0	12.04	347.12	2,291.2	101.7	-23.3	33.6	0.00	0.00	0.00
2,400.0	12.04	347.12	2,389.0	122.0	-27.9	40.4	0.00	0.00	0.00
2,500.0	12.04	347.12	2,486.8	142.4	-32.6	47.1	0.00	0.00	0.00
2,600.0	12.04	347.12	2,584.6	162.7	-37.2	53.8	0.00	0.00	0.00
2,700.0	12.04	347.12	2,682.4	183.0	-41.9	60.5	0.00	0.00	0.00
2,800.0	12.04	347.12	2,780.2	203.4	-46.5	67.2	0.00	0.00	0.00
2,900.0	12.04	347.12	2,878.0	223.7	-51.1	74.0	0.00	0.00	0.00
3,000.0	12.04	347.12	2,975.8	244.0	-55.8	80.7	0.00	0.00	0.00
3,100.0	12.04	347.12	3,073.6	264.4	-60.4	87.4	0.00	0.00	0.00
3,200.0	12.04	347.12	3,171.4	284.7	-65.1	94.1	0.00	0.00	0.00
3,300.0	12.04	347.12	3,269.2	305.0	-69.7	100.9	0.00	0.00	0.00
3,400.0	12.04	347.12	3,367.0	325.4	-74.4	107.6	0.00	0.00	0.00
3,500.0	12.04	347.12	3,464.8	345.7	-79.0	114.3	0.00	0.00	0.00
3,600.0	12.04	347.12	3,562.6	366.0	-83.7	121.0	0.00	0.00	0.00
3,700.0	12.04	347.12	3,660.4	386.4	-88.3	127.8	0.00	0.00	0.00
3,800.0	12.04	347.12	3,758.2	406.7	-93.0	134.5	0.00	0.00	0.00
3,900.0	12.04	347.12	3,856.0	427.0	-97.6	141.2	0.00	0.00	0.00
4,000.0	12.04	347.12	3,953.8	447.4	-102.3	147.9	0.00	0.00	0.00
4,100.0	12.04	347.12	4,051.6	467.7	-106.9	154.7	0.00	0.00	0.00
4,200.0	12.04	347.12	4,149.4	488.0	-111.6	161.4	0.00	0.00	0.00
4,300.0	12.04	347.12	4,247.2	508.4	-116.2	168.1	0.00	0.00	0.00
4,400.0	12.04	347.12	4,345.0	528.7	-120.9	174.8	0.00	0.00	0.00
4,500.0	12.04	347.12	4,442.8	549.0	-125.5	181.5	0.00	0.00	0.00
4,600.0	12.04	347.12	4,540.6	569.4	-130.2	188.3	0.00	0.00	0.00
4,700.0	12.04	347.12	4,638.4	589.7	-134.8	195.0	0.00	0.00	0.00
4,800.0	12.04	347.12	4,736.2	610.0	-139.5	201.7	0.00	0.00	0.00
4,900.0	12.04	347.12	4,834.0	630.4	-144.1	208.4	0.00	0.00	0.00
5,000.0	12.04	347.12	4,931.8	650.7	-148.8	215.2	0.00	0.00	0.00
5,100.0	12.04	347.12	5,029.6	671.0	-153.4	221.9	0.00	0.00	0.00
5,200.0	12.04	347.12	5,127.4	691.4	-158.1	228.6	0.00	0.00	0.00

Bayswater Exploration & Production LLC

Planning Report

Database:	edm	Local Co-ordinate Reference:	Well TOPAZ 13
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	KB @ 4966.0usft (Original Well Elev)
Project:	DJ Basin	MD Reference:	KB @ 4966.0usft (Original Well Elev)
Site:	Topaz Pad 6-I HZ Pad	North Reference:	True
Well:	TOPAZ 13	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	12.04	347.12	5,225.2	711.7	-162.7	235.3	0.00	0.00	0.00
5,400.0	12.04	347.12	5,323.0	732.0	-167.4	242.1	0.00	0.00	0.00
5,500.0	12.04	347.12	5,420.8	752.4	-172.0	248.8	0.00	0.00	0.00
5,600.0	12.04	347.12	5,518.6	772.7	-176.7	255.5	0.00	0.00	0.00
5,700.0	12.04	347.12	5,616.4	793.0	-181.3	262.2	0.00	0.00	0.00
5,800.0	12.04	347.12	5,714.2	813.4	-186.0	269.0	0.00	0.00	0.00
5,900.0	12.04	347.12	5,812.0	833.7	-190.6	275.7	0.00	0.00	0.00
6,000.0	12.04	347.12	5,909.8	854.0	-195.3	282.4	0.00	0.00	0.00
6,100.0	12.04	347.12	6,007.6	874.4	-199.9	289.1	0.00	0.00	0.00
6,200.0	12.04	347.12	6,105.4	894.7	-204.6	295.9	0.00	0.00	0.00
6,300.0	12.04	347.12	6,203.2	915.0	-209.2	302.6	0.00	0.00	0.00
6,400.0	12.04	347.12	6,301.0	935.4	-213.9	309.3	0.00	0.00	0.00
6,500.0	12.04	347.12	6,398.8	955.7	-218.5	316.0	0.00	0.00	0.00
6,600.0	12.04	347.12	6,496.6	976.0	-223.2	322.7	0.00	0.00	0.00
6,700.0	12.04	347.12	6,594.4	996.4	-227.8	329.5	0.00	0.00	0.00
6,800.0	12.04	347.12	6,692.2	1,016.7	-232.5	336.2	0.00	0.00	0.00
6,900.0	12.04	347.12	6,790.0	1,037.0	-237.1	342.9	0.00	0.00	0.00
7,000.0	12.04	347.12	6,887.8	1,057.4	-241.8	349.6	0.00	0.00	0.00
7,045.3	12.04	347.12	6,932.1	1,066.6	-243.9	352.7	0.00	0.00	0.00
7,100.0	14.22	324.81	6,985.5	1,077.6	-249.0	358.9	10.00	3.98	-40.78
7,200.0	21.42	301.56	7,080.7	1,097.3	-271.7	383.6	10.00	7.21	-23.26
7,300.0	30.22	290.45	7,170.7	1,115.7	-311.0	424.5	10.00	8.79	-11.11
7,400.0	39.55	284.10	7,252.7	1,132.3	-365.5	480.5	10.00	9.33	-6.35
7,500.0	49.11	279.88	7,324.1	1,146.6	-433.8	549.9	10.00	9.56	-4.22
7,600.0	58.78	276.74	7,382.9	1,158.1	-513.7	630.5	10.00	9.67	-3.14
7,700.0	68.52	274.19	7,427.3	1,166.5	-602.8	720.0	10.00	9.74	-2.55
7,800.0	78.29	271.97	7,455.8	1,171.6	-698.4	815.6	10.00	9.77	-2.23
7,900.0	88.07	269.89	7,467.7	1,173.2	-797.6	914.4	10.00	9.79	-2.07
7,919.1	89.94	269.50	7,468.0	1,173.1	-816.6	933.4	10.00	9.79	-2.04
8,000.0	89.94	269.50	7,468.1	1,172.4	-897.5	1,013.8	0.00	0.00	0.00
8,100.0	89.94	269.50	7,468.2	1,171.5	-997.5	1,113.2	0.00	0.00	0.00
8,200.0	89.94	269.50	7,468.3	1,170.7	-1,097.5	1,212.5	0.00	0.00	0.00
8,300.0	89.94	269.50	7,468.4	1,169.8	-1,197.5	1,311.9	0.00	0.00	0.00
8,400.0	89.94	269.50	7,468.5	1,168.9	-1,297.5	1,411.3	0.00	0.00	0.00
8,500.0	89.94	269.50	7,468.6	1,168.1	-1,397.5	1,510.6	0.00	0.00	0.00
8,600.0	89.94	269.50	7,468.7	1,167.2	-1,497.5	1,610.0	0.00	0.00	0.00
8,700.0	89.94	269.50	7,468.8	1,166.3	-1,597.5	1,709.4	0.00	0.00	0.00
8,800.0	89.94	269.50	7,468.9	1,165.5	-1,697.5	1,808.8	0.00	0.00	0.00
8,900.0	89.94	269.50	7,469.0	1,164.6	-1,797.5	1,908.1	0.00	0.00	0.00
9,000.0	89.94	269.50	7,469.1	1,163.7	-1,897.5	2,007.5	0.00	0.00	0.00
9,100.0	89.94	269.50	7,469.2	1,162.8	-1,997.5	2,106.9	0.00	0.00	0.00
9,200.0	89.94	269.50	7,469.3	1,162.0	-2,097.5	2,206.3	0.00	0.00	0.00
9,300.0	89.94	269.50	7,469.4	1,161.1	-2,197.5	2,305.6	0.00	0.00	0.00
9,400.0	89.94	269.50	7,469.5	1,160.2	-2,297.5	2,405.0	0.00	0.00	0.00
9,500.0	89.94	269.50	7,469.6	1,159.4	-2,397.5	2,504.4	0.00	0.00	0.00
9,600.0	89.94	269.50	7,469.7	1,158.5	-2,497.5	2,603.7	0.00	0.00	0.00
9,700.0	89.94	269.50	7,469.8	1,157.6	-2,597.5	2,703.1	0.00	0.00	0.00
9,800.0	89.94	269.50	7,469.9	1,156.8	-2,697.5	2,802.5	0.00	0.00	0.00
9,900.0	89.94	269.50	7,470.0	1,155.9	-2,797.5	2,901.9	0.00	0.00	0.00
10,000.0	89.94	269.50	7,470.2	1,155.0	-2,897.5	3,001.2	0.00	0.00	0.00
10,100.0	89.94	269.50	7,470.3	1,154.2	-2,997.5	3,100.6	0.00	0.00	0.00
10,200.0	89.94	269.50	7,470.4	1,153.3	-3,097.5	3,200.0	0.00	0.00	0.00
10,300.0	89.94	269.50	7,470.5	1,152.4	-3,197.5	3,299.3	0.00	0.00	0.00
10,400.0	89.94	269.50	7,470.6	1,151.5	-3,297.5	3,398.7	0.00	0.00	0.00

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Planning Report

Database:	edm	Local Co-ordinate Reference:	Well TOPAZ 13
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	KB @ 4966.0usft (Original Well Elev)
Project:	DJ Basin	MD Reference:	KB @ 4966.0usft (Original Well Elev)
Site:	Topaz Pad 6-I HZ Pad	North Reference:	True
Well:	TOPAZ 13	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	89.94	269.50	7,470.7	1,150.7	-3,397.4	3,498.1	0.00	0.00	0.00	
10,600.0	89.94	269.50	7,470.8	1,149.8	-3,497.4	3,597.5	0.00	0.00	0.00	
10,700.0	89.94	269.50	7,470.9	1,148.9	-3,597.4	3,696.8	0.00	0.00	0.00	
10,800.0	89.94	269.50	7,471.0	1,148.1	-3,697.4	3,796.2	0.00	0.00	0.00	
10,900.0	89.94	269.50	7,471.1	1,147.2	-3,797.4	3,895.6	0.00	0.00	0.00	
11,000.0	89.94	269.50	7,471.2	1,146.3	-3,897.4	3,994.9	0.00	0.00	0.00	
11,100.0	89.94	269.50	7,471.3	1,145.5	-3,997.4	4,094.3	0.00	0.00	0.00	
11,200.0	89.94	269.50	7,471.4	1,144.6	-4,097.4	4,193.7	0.00	0.00	0.00	
11,300.0	89.94	269.50	7,471.5	1,143.7	-4,197.4	4,293.1	0.00	0.00	0.00	
11,400.0	89.94	269.50	7,471.6	1,142.9	-4,297.4	4,392.4	0.00	0.00	0.00	
11,500.0	89.94	269.50	7,471.7	1,142.0	-4,397.4	4,491.8	0.00	0.00	0.00	
11,600.0	89.94	269.50	7,471.8	1,141.1	-4,497.4	4,591.2	0.00	0.00	0.00	
11,700.0	89.94	269.50	7,471.9	1,140.2	-4,597.4	4,690.6	0.00	0.00	0.00	
11,800.0	89.94	269.50	7,472.0	1,139.4	-4,697.4	4,789.9	0.00	0.00	0.00	
11,900.0	89.94	269.50	7,472.1	1,138.5	-4,797.4	4,889.3	0.00	0.00	0.00	
12,000.0	89.94	269.50	7,472.2	1,137.6	-4,897.4	4,988.7	0.00	0.00	0.00	
12,100.0	89.94	269.50	7,472.3	1,136.8	-4,997.4	5,088.0	0.00	0.00	0.00	
12,200.0	89.94	269.50	7,472.4	1,135.9	-5,097.4	5,187.4	0.00	0.00	0.00	
12,300.0	89.94	269.50	7,472.5	1,135.0	-5,197.4	5,286.8	0.00	0.00	0.00	
12,400.0	89.94	269.50	7,472.6	1,134.2	-5,297.4	5,386.2	0.00	0.00	0.00	
12,500.0	89.94	269.50	7,472.7	1,133.3	-5,397.4	5,485.5	0.00	0.00	0.00	
12,600.0	89.94	269.50	7,472.8	1,132.4	-5,497.4	5,584.9	0.00	0.00	0.00	
12,700.0	89.94	269.50	7,472.9	1,131.6	-5,597.4	5,684.3	0.00	0.00	0.00	
12,800.0	89.94	269.50	7,473.0	1,130.7	-5,697.4	5,783.6	0.00	0.00	0.00	
12,900.0	89.94	269.50	7,473.1	1,129.8	-5,797.4	5,883.0	0.00	0.00	0.00	
13,000.0	89.94	269.50	7,473.2	1,128.9	-5,897.4	5,982.4	0.00	0.00	0.00	
13,100.0	89.94	269.50	7,473.3	1,128.1	-5,997.3	6,081.8	0.00	0.00	0.00	
13,200.0	89.94	269.50	7,473.4	1,127.2	-6,097.3	6,181.1	0.00	0.00	0.00	
13,300.0	89.94	269.50	7,473.5	1,126.3	-6,197.3	6,280.5	0.00	0.00	0.00	
13,400.0	89.94	269.50	7,473.6	1,125.5	-6,297.3	6,379.9	0.00	0.00	0.00	
13,500.0	89.94	269.50	7,473.7	1,124.6	-6,397.3	6,479.3	0.00	0.00	0.00	
13,600.0	89.94	269.50	7,473.8	1,123.7	-6,497.3	6,578.6	0.00	0.00	0.00	
13,700.0	89.94	269.50	7,473.9	1,122.9	-6,597.3	6,678.0	0.00	0.00	0.00	
13,800.0	89.94	269.50	7,474.0	1,122.0	-6,697.3	6,777.4	0.00	0.00	0.00	
13,900.0	89.94	269.50	7,474.1	1,121.1	-6,797.3	6,876.7	0.00	0.00	0.00	
14,000.0	89.94	269.50	7,474.2	1,121.1	-6,797.3	6,876.7	0.00	0.00	0.00	
14,100.0	89.94	269.50	7,474.3	1,120.2	-6,897.3	6,976.1	0.00	0.00	0.00	
14,200.0	89.94	269.50	7,474.4	1,119.4	-6,997.3	7,075.5	0.00	0.00	0.00	
14,300.0	89.94	269.50	7,474.5	1,118.5	-7,097.3	7,174.9	0.00	0.00	0.00	
14,400.0	89.94	269.50	7,474.6	1,117.6	-7,197.3	7,274.2	0.00	0.00	0.00	
14,500.0	89.94	269.50	7,474.7	1,116.8	-7,297.3	7,373.6	0.00	0.00	0.00	
14,600.0	89.94	269.50	7,474.8	1,115.9	-7,397.3	7,473.0	0.00	0.00	0.00	
14,700.0	89.94	269.50	7,474.9	1,115.0	-7,497.3	7,572.3	0.00	0.00	0.00	
14,800.0	89.94	269.50	7,475.0	1,114.2	-7,597.3	7,671.7	0.00	0.00	0.00	
14,900.0	89.94	269.50	7,475.1	1,113.3	-7,697.3	7,771.1	0.00	0.00	0.00	
15,000.0	89.94	269.50	7,475.2	1,112.4	-7,797.3	7,870.5	0.00	0.00	0.00	
15,100.0	89.94	269.50	7,475.3	1,111.6	-7,897.3	7,969.8	0.00	0.00	0.00	
15,200.0	89.94	269.50	7,475.4	1,110.7	-7,997.3	8,069.2	0.00	0.00	0.00	
15,300.0	89.94	269.50	7,475.5	1,109.8	-8,097.3	8,168.6	0.00	0.00	0.00	
15,400.0	89.94	269.50	7,475.6	1,108.9	-8,197.3	8,267.9	0.00	0.00	0.00	
15,500.0	89.94	269.50	7,475.7	1,108.1	-8,297.3	8,367.3	0.00	0.00	0.00	
15,600.0	89.94	269.50	7,475.8	1,107.2	-8,397.3	8,466.7	0.00	0.00	0.00	
15,700.0	89.94	269.50	7,475.9	1,106.3	-8,497.3	8,566.1	0.00	0.00	0.00	
15,800.0	89.94	269.50	7,476.0	1,105.5	-8,597.2	8,665.4	0.00	0.00	0.00	
15,900.0	89.94	269.50	7,476.1	1,104.6	-8,697.2	8,764.8	0.00	0.00	0.00	

Bayswater Exploration & Production LLC

Planning Report

Database:	edm	Local Co-ordinate Reference:	Well TOPAZ 13
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	KB @ 4966.0usft (Original Well Elev)
Project:	DJ Basin	MD Reference:	KB @ 4966.0usft (Original Well Elev)
Site:	Topaz Pad 6-I HZ Pad	North Reference:	True
Well:	TOPAZ 13	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	89.94	269.50	7,476.2	1,103.7	-8,797.2	8,864.2	0.00	0.00	0.00	
16,000.0	89.94	269.50	7,476.4	1,102.9	-8,897.2	8,963.6	0.00	0.00	0.00	
16,100.0	89.94	269.50	7,476.5	1,102.0	-8,997.2	9,062.9	0.00	0.00	0.00	
16,200.0	89.94	269.50	7,476.6	1,101.1	-9,097.2	9,162.3	0.00	0.00	0.00	
16,300.0	89.94	269.50	7,476.7	1,100.3	-9,197.2	9,261.7	0.00	0.00	0.00	
16,400.0	89.94	269.50	7,476.8	1,099.4	-9,297.2	9,361.0	0.00	0.00	0.00	
16,500.0	89.94	269.50	7,476.9	1,098.5	-9,397.2	9,460.4	0.00	0.00	0.00	
16,600.0	89.94	269.50	7,477.0	1,097.6	-9,497.2	9,559.8	0.00	0.00	0.00	
16,700.0	89.94	269.50	7,477.1	1,096.8	-9,597.2	9,659.2	0.00	0.00	0.00	
16,800.0	89.94	269.50	7,477.2	1,095.9	-9,697.2	9,758.5	0.00	0.00	0.00	
16,900.0	89.94	269.50	7,477.3	1,095.0	-9,797.2	9,857.9	0.00	0.00	0.00	
17,000.0	89.94	269.50	7,477.4	1,094.2	-9,897.2	9,957.3	0.00	0.00	0.00	
17,100.0	89.94	269.50	7,477.5	1,093.3	-9,997.2	10,056.6	0.00	0.00	0.00	
17,200.0	89.94	269.50	7,477.6	1,092.4	-10,097.2	10,156.0	0.00	0.00	0.00	
17,300.0	89.94	269.50	7,477.7	1,091.6	-10,197.2	10,255.4	0.00	0.00	0.00	
17,400.0	89.94	269.50	7,477.8	1,090.7	-10,297.2	10,354.8	0.00	0.00	0.00	
17,500.0	89.94	269.50	7,477.9	1,089.8	-10,397.2	10,454.1	0.00	0.00	0.00	
17,594.7	89.94	269.50	7,478.0	1,089.0	-10,491.8	10,548.2	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 13 LP	0.00	0.00	7,468.0	1,173.1	-816.6	1,463,930.59	3,217,261.85	40° 36' 15.322 N	104° 43' 3.169 W
- plan hits target center									
- Point									
TOPAZ 13 PBHL	0.00	0.00	7,478.0	1,089.0	-10,491.8	1,463,760.78	3,207,587.76	40° 36' 14.468 N	104° 45' 8.608 W
- plan hits target center									
- Point									