

BAYSWATER EXPLORATION & PRODUCTION

**WELD COUNTY
SEC 6-T7N-R66W
OPAL 5**

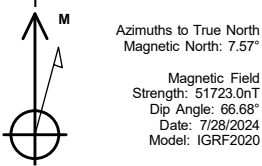
OWB

Plan: PROPOSAL 1

Standard Planning Report

28 July, 2024

Project: WELD COUNTY
Site: SEC 6-T7N-R66W
Well: OPAL 5
Wellbore: OWB
Design: PROPOSAL 1



WELL DETAILS: OPAL 5

+N/-S	+E/-W	Northing	Easting	5120.00	Latitude	Longitude	Slot
0.00	0.00	1462976.54	3190952.45		40.602236°N	104.812321°W	

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	Start Build 2.00
773.96	9.48	134.96	771.80	-27.64	27.68	-24.93	39.12	Start 6139.47 hold at 773.96 MD
6913.43	9.48	134.96	6827.44	-742.07	743.17	-669.28	1050.22	Start DLS 10.00 TFO 133.51
7896.31	91.72	269.07	7461.00	-829.92	158.29	-78.70	1662.28	Start 10674.24 hold at 7896.31 MD
18570.54	91.72	269.07	7141.00	-1003.28	-10509.74	10557.52	12331.72	TD at 18570.54

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
3	773.96	9.48	134.96	771.80	-27.64	27.68	2.00	134.96	-24.93	
4	6913.43	9.48	134.96	6827.44	-742.07	743.17	0.00	0.00	-669.28	
5	7896.31	91.72	269.07	7461.00	-829.92	158.29	10.00	133.51	-78.70	LP-C
6	18570.54	91.72	269.07	7141.00	-1003.28	-10509.74	0.00	0.00	10557.52	PBH

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL-OPAL 5	7141.00	-1003.28	-10509.74	1461891.81	3180451.06	40.599476°N	104.850167°W	Point
- plan hits target center								
LP-OPAL 5	7461.00	-829.92	158.29	1462147.89	3191117.16	40.599958°N	104.811751°W	Point
- plan hits target center								

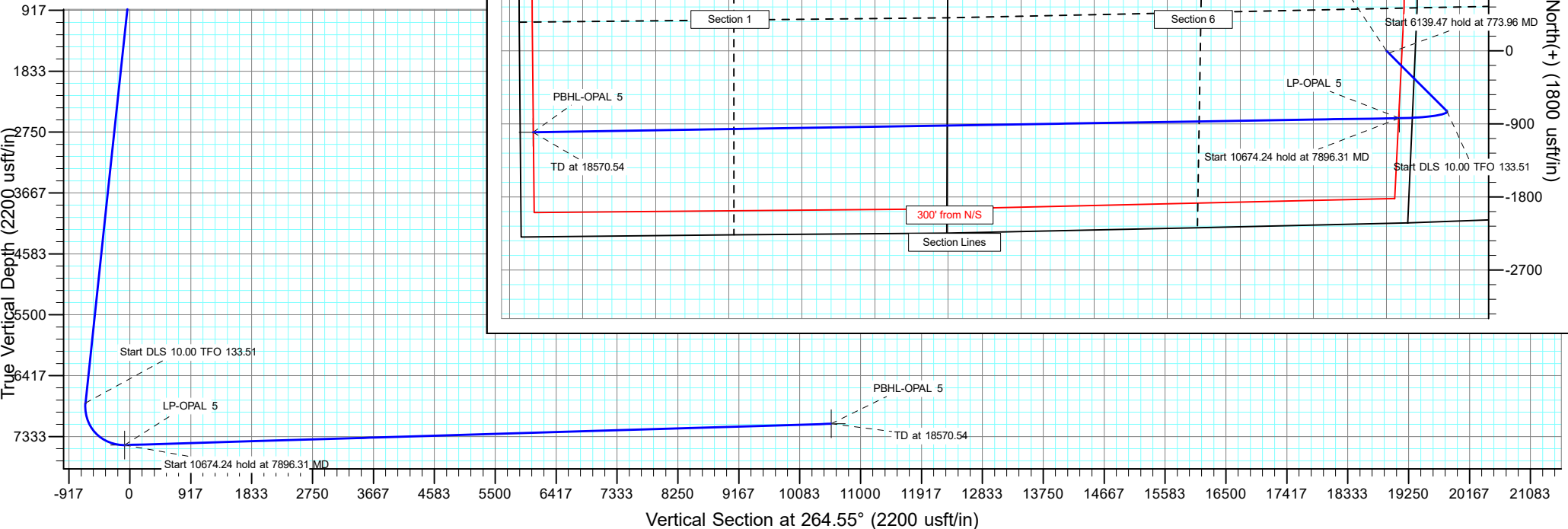
PROJECT DETAILS: WELD COUNTY

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level

SHL:
2125' FSL, 354' FEL
Sec 6-T7N-R66W

LP:
1292' FSL, 160' FEL
Sec 6-T7N-R66W

BHL:
1288' FSL, 160' FWL
Sec 1-T7N-R67W



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well OPAL 5
Company:	BAYSWATER EXPLORATION & PRODUCTION	TVD Reference:	KBE 23' @ 5143.00usft
Project:	WELD COUNTY	MD Reference:	KBE 23' @ 5143.00usft
Site:	SEC 6-T7N-R66W	North Reference:	True
Well:	OPAL 5	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Project	WELD COUNTY		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site		SEC 6-T7N-R66W				
Site Position:		Northing:	1,460,687.83	usft	Latitude:	40.596067°N
From:	Lat/Long	Easting:	3,185,555.14	usft	Longitude:	104.831820°W
Position Uncertainty:		0.00	usft	Slot Radius:	13.200	in

Well	OPAL 5					
Well Position	+N/-S	0.00 usft	Northing:	1,462,976.54 usft	Latitude:	40.602236°N
	+E/-W	0.00 usft	Easting:	3,190,952.45 usft	Longitude:	104.812321°W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	5,120.00 usft
Grid Convergence:		0.44 °				

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/28/2024	7.57	66.68	51,723.02787094

Design	PROPOSAL 1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	264.55

Plan Survey Tool Program	Date	7/28/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,570.54	PROPOSAL 1 (OWB)	MWD
				OWSG MWD - Standard

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
773.96	9.48	134.96	771.80	-27.64	27.68	2.00	2.00	0.00	134.96	
6,913.43	9.48	134.96	6,827.44	-742.07	743.17	0.00	0.00	0.00	0.00	
7,896.31	91.72	269.07	7,461.00	-829.92	158.29	10.00	8.37	13.64	133.51	LP-OPAL 5
18,570.54	91.72	269.07	7,141.00	-1,003.28	-10,509.74	0.00	0.00	0.00	0.00	PBHL-OPAL 5

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Company:	BAYSWATER EXPLORATION & PRODUCTION	TVD Reference:	KBE 23' @ 5143.00usft
Project:	WELD COUNTY	MD Reference:	KBE 23' @ 5143.00usft
Site:	SEC 6-T7N-R66W	North Reference:	True
Well:	OPAL 5	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
400.00	2.00	134.96	399.98	-1.23	1.23	-1.11	2.00	2.00	0.00
500.00	4.00	134.96	499.84	-4.93	4.94	-4.45	2.00	2.00	0.00
600.00	6.00	134.96	599.45	-11.09	11.11	-10.00	2.00	2.00	0.00
700.00	8.00	134.96	698.70	-19.70	19.73	-17.77	2.00	2.00	0.00
773.96	9.48	134.96	771.80	-27.64	27.68	-24.93	2.00	2.00	0.00
Start 6139.47 hold at 773.96 MD									
800.00	9.48	134.96	797.49	-30.67	30.72	-27.66	0.00	0.00	0.00
900.00	9.48	134.96	896.12	-42.31	42.37	-38.16	0.00	0.00	0.00
1,000.00	9.48	134.96	994.75	-53.94	54.02	-48.65	0.00	0.00	0.00
1,100.00	9.48	134.96	1,093.39	-65.58	65.68	-59.15	0.00	0.00	0.00
1,200.00	9.48	134.96	1,192.02	-77.22	77.33	-69.64	0.00	0.00	0.00
1,300.00	9.48	134.96	1,290.66	-88.85	88.98	-80.14	0.00	0.00	0.00
1,400.00	9.48	134.96	1,389.29	-100.49	100.64	-90.63	0.00	0.00	0.00
1,500.00	9.48	134.96	1,487.93	-112.13	112.29	-101.13	0.00	0.00	0.00
1,600.00	9.48	134.96	1,586.56	-123.76	123.95	-111.62	0.00	0.00	0.00
1,700.00	9.48	134.96	1,685.20	-135.40	135.60	-122.12	0.00	0.00	0.00
1,800.00	9.48	134.96	1,783.83	-147.04	147.25	-132.61	0.00	0.00	0.00
1,900.00	9.48	134.96	1,882.47	-158.67	158.91	-143.11	0.00	0.00	0.00
2,000.00	9.48	134.96	1,981.10	-170.31	170.56	-153.61	0.00	0.00	0.00
2,100.00	9.48	134.96	2,079.73	-181.95	182.22	-164.10	0.00	0.00	0.00
2,200.00	9.48	134.96	2,178.37	-193.58	193.87	-174.60	0.00	0.00	0.00
2,300.00	9.48	134.96	2,277.00	-205.22	205.52	-185.09	0.00	0.00	0.00
2,400.00	9.48	134.96	2,375.64	-216.86	217.18	-195.59	0.00	0.00	0.00
2,500.00	9.48	134.96	2,474.27	-228.49	228.83	-206.08	0.00	0.00	0.00
2,600.00	9.48	134.96	2,572.91	-240.13	240.48	-216.58	0.00	0.00	0.00
2,700.00	9.48	134.96	2,671.54	-251.77	252.14	-227.07	0.00	0.00	0.00
2,800.00	9.48	134.96	2,770.18	-263.40	263.79	-237.57	0.00	0.00	0.00
2,900.00	9.48	134.96	2,868.81	-275.04	275.45	-248.06	0.00	0.00	0.00
3,000.00	9.48	134.96	2,967.45	-286.68	287.10	-258.56	0.00	0.00	0.00
3,100.00	9.48	134.96	3,066.08	-298.31	298.75	-269.05	0.00	0.00	0.00
3,200.00	9.48	134.96	3,164.71	-309.95	310.41	-279.55	0.00	0.00	0.00
3,300.00	9.48	134.96	3,263.35	-321.59	322.06	-290.04	0.00	0.00	0.00
3,400.00	9.48	134.96	3,361.98	-333.22	333.72	-300.54	0.00	0.00	0.00
3,500.00	9.48	134.96	3,460.62	-344.86	345.37	-311.03	0.00	0.00	0.00
3,600.00	9.48	134.96	3,559.25	-356.50	357.02	-321.53	0.00	0.00	0.00
3,700.00	9.48	134.96	3,657.89	-368.14	368.68	-332.02	0.00	0.00	0.00
3,800.00	9.48	134.96	3,756.52	-379.77	380.33	-342.52	0.00	0.00	0.00
3,900.00	9.48	134.96	3,855.16	-391.41	391.98	-353.02	0.00	0.00	0.00
4,000.00	9.48	134.96	3,953.79	-403.05	403.64	-363.51	0.00	0.00	0.00
4,100.00	9.48	134.96	4,052.43	-414.68	415.29	-374.01	0.00	0.00	0.00
4,200.00	9.48	134.96	4,151.06	-426.32	426.95	-384.50	0.00	0.00	0.00
4,300.00	9.48	134.96	4,249.69	-437.96	438.60	-395.00	0.00	0.00	0.00
4,400.00	9.48	134.96	4,348.33	-449.59	450.25	-405.49	0.00	0.00	0.00
4,500.00	9.48	134.96	4,446.96	-461.23	461.91	-415.99	0.00	0.00	0.00
4,600.00	9.48	134.96	4,545.60	-472.87	473.56	-426.48	0.00	0.00	0.00
4,700.00	9.48	134.96	4,644.23	-484.50	485.22	-436.98	0.00	0.00	0.00
4,800.00	9.48	134.96	4,742.87	-496.14	496.87	-447.47	0.00	0.00	0.00
4,900.00	9.48	134.96	4,841.50	-507.78	508.52	-457.97	0.00	0.00	0.00
5,000.00	9.48	134.96	4,940.14	-519.41	520.18	-468.46	0.00	0.00	0.00
5,100.00	9.48	134.96	5,038.77	-531.05	531.83	-478.96	0.00	0.00	0.00

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Project:	WELD COUNTY	MD Reference:	KBE 23' @ 5143.00usft
Site:	SEC 6-T7N-R66W	North Reference:	True
Well:	OPAL 5	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,200.00	9.48	134.96	5,137.41	-542.69	543.49	-489.45	0.00	0.00	0.00	
5,300.00	9.48	134.96	5,236.04	-554.32	555.14	-499.95	0.00	0.00	0.00	
5,400.00	9.48	134.96	5,334.67	-565.96	566.79	-510.44	0.00	0.00	0.00	
5,500.00	9.48	134.96	5,433.31	-577.60	578.45	-520.94	0.00	0.00	0.00	
5,600.00	9.48	134.96	5,531.94	-589.23	590.10	-531.44	0.00	0.00	0.00	
5,700.00	9.48	134.96	5,630.58	-600.87	601.75	-541.93	0.00	0.00	0.00	
5,800.00	9.48	134.96	5,729.21	-612.51	613.41	-552.43	0.00	0.00	0.00	
5,900.00	9.48	134.96	5,827.85	-624.14	625.06	-562.92	0.00	0.00	0.00	
6,000.00	9.48	134.96	5,926.48	-635.78	636.72	-573.42	0.00	0.00	0.00	
6,100.00	9.48	134.96	6,025.12	-647.42	648.37	-583.91	0.00	0.00	0.00	
6,200.00	9.48	134.96	6,123.75	-659.05	660.02	-594.41	0.00	0.00	0.00	
6,300.00	9.48	134.96	6,222.39	-670.69	671.68	-604.90	0.00	0.00	0.00	
6,400.00	9.48	134.96	6,321.02	-682.33	683.33	-615.40	0.00	0.00	0.00	
6,500.00	9.48	134.96	6,419.65	-693.96	694.99	-625.89	0.00	0.00	0.00	
6,600.00	9.48	134.96	6,518.29	-705.60	706.64	-636.39	0.00	0.00	0.00	
6,700.00	9.48	134.96	6,616.92	-717.24	718.29	-646.88	0.00	0.00	0.00	
6,800.00	9.48	134.96	6,715.56	-728.87	729.95	-657.38	0.00	0.00	0.00	
6,900.00	9.48	134.96	6,814.19	-740.51	741.60	-667.87	0.00	0.00	0.00	
6,913.43	9.48	134.96	6,827.44	-742.07	743.17	-669.28	0.00	0.00	0.00	
Start DLS 10.00 TFO 133.51										
7,000.00	7.17	195.92	6,913.24	-752.33	746.73	-671.86	10.00	-2.66	70.42	
7,100.00	13.88	239.74	7,011.64	-764.41	734.63	-658.66	10.00	6.71	43.81	
7,200.00	23.09	252.47	7,106.42	-776.39	705.49	-628.52	10.00	9.21	12.73	
7,300.00	32.75	258.08	7,194.69	-787.91	660.22	-582.36	10.00	9.66	5.61	
7,400.00	42.55	261.33	7,273.78	-798.62	600.18	-521.57	10.00	9.80	3.25	
7,500.00	52.42	263.55	7,341.28	-808.19	527.19	-448.00	10.00	9.87	2.22	
7,600.00	62.32	265.24	7,395.14	-816.33	443.48	-363.90	10.00	9.90	1.69	
7,700.00	72.23	266.65	7,433.72	-822.80	351.59	-271.81	10.00	9.92	1.41	
7,800.00	82.16	267.91	7,455.86	-827.40	254.31	-174.53	10.00	9.92	1.26	
7,896.31	91.72	269.07	7,461.00	-829.92	158.29	-78.70	10.00	9.93	1.20	
Start 10674.24 hold at 7896.31 MD										
7,900.00	91.72	269.07	7,460.89	-829.98	154.60	-75.02	0.00	0.00	0.00	
8,000.00	91.72	269.07	7,457.89	-831.61	54.65	24.62	0.00	0.00	0.00	
8,100.00	91.72	269.07	7,454.89	-833.23	-45.29	124.26	0.00	0.00	0.00	
8,200.00	91.72	269.07	7,451.90	-834.85	-145.23	223.91	0.00	0.00	0.00	
8,300.00	91.72	269.07	7,448.90	-836.48	-245.17	323.55	0.00	0.00	0.00	
8,400.00	91.72	269.07	7,445.90	-838.10	-345.11	423.20	0.00	0.00	0.00	
8,500.00	91.72	269.07	7,442.90	-839.73	-445.05	522.84	0.00	0.00	0.00	
8,600.00	91.72	269.07	7,439.90	-841.35	-545.00	622.48	0.00	0.00	0.00	
8,700.00	91.72	269.07	7,436.91	-842.97	-644.94	722.13	0.00	0.00	0.00	
8,800.00	91.72	269.07	7,433.91	-844.60	-744.88	821.77	0.00	0.00	0.00	
8,900.00	91.72	269.07	7,430.91	-846.22	-844.82	921.42	0.00	0.00	0.00	
9,000.00	91.72	269.07	7,427.91	-847.85	-944.76	1,021.06	0.00	0.00	0.00	
9,100.00	91.72	269.07	7,424.92	-849.47	-1,044.71	1,120.70	0.00	0.00	0.00	
9,200.00	91.72	269.07	7,421.92	-851.10	-1,144.65	1,220.35	0.00	0.00	0.00	
9,300.00	91.72	269.07	7,418.92	-852.72	-1,244.59	1,319.99	0.00	0.00	0.00	
9,400.00	91.72	269.07	7,415.92	-854.34	-1,344.53	1,419.64	0.00	0.00	0.00	
9,500.00	91.72	269.07	7,412.92	-855.97	-1,444.47	1,519.28	0.00	0.00	0.00	
9,600.00	91.72	269.07	7,409.93	-857.59	-1,544.42	1,618.92	0.00	0.00	0.00	
9,700.00	91.72	269.07	7,406.93	-859.22	-1,644.36	1,718.57	0.00	0.00	0.00	
9,800.00	91.72	269.07	7,403.93	-860.84	-1,744.30	1,818.21	0.00	0.00	0.00	
9,900.00	91.72	269.07	7,400.93	-862.46	-1,844.24	1,917.85	0.00	0.00	0.00	
10,000.00	91.72	269.07	7,397.93	-864.09	-1,944.18	2,017.50	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well OPAL 5
Company:	BAYSWATER EXPLORATION & PRODUCTION	TVD Reference:	KBE 23' @ 5143.00usft
Project:	WELD COUNTY	MD Reference:	KBE 23' @ 5143.00usft
Site:	SEC 6-T7N-R66W	North Reference:	True
Well:	OPAL 5	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
10,100.00	91.72	269.07	7,394.94	-865.71	-2,044.12	2,117.14	0.00	0.00	0.00	
10,200.00	91.72	269.07	7,391.94	-867.34	-2,144.07	2,216.79	0.00	0.00	0.00	
10,300.00	91.72	269.07	7,388.94	-868.96	-2,244.01	2,316.43	0.00	0.00	0.00	
10,400.00	91.72	269.07	7,385.94	-870.58	-2,343.95	2,416.07	0.00	0.00	0.00	
10,500.00	91.72	269.07	7,382.94	-872.21	-2,443.89	2,515.72	0.00	0.00	0.00	
10,600.00	91.72	269.07	7,379.95	-873.83	-2,543.83	2,615.36	0.00	0.00	0.00	
10,700.00	91.72	269.07	7,376.95	-875.46	-2,643.78	2,715.01	0.00	0.00	0.00	
10,800.00	91.72	269.07	7,373.95	-877.08	-2,743.72	2,814.65	0.00	0.00	0.00	
10,900.00	91.72	269.07	7,370.95	-878.71	-2,843.66	2,914.29	0.00	0.00	0.00	
11,000.00	91.72	269.07	7,367.96	-880.33	-2,943.60	3,013.94	0.00	0.00	0.00	
11,100.00	91.72	269.07	7,364.96	-881.95	-3,043.54	3,113.58	0.00	0.00	0.00	
11,200.00	91.72	269.07	7,361.96	-883.58	-3,143.49	3,213.23	0.00	0.00	0.00	
11,300.00	91.72	269.07	7,358.96	-885.20	-3,243.43	3,312.87	0.00	0.00	0.00	
11,400.00	91.72	269.07	7,355.96	-886.83	-3,343.37	3,412.51	0.00	0.00	0.00	
11,500.00	91.72	269.07	7,352.97	-888.45	-3,443.31	3,512.16	0.00	0.00	0.00	
11,600.00	91.72	269.07	7,349.97	-890.07	-3,543.25	3,611.80	0.00	0.00	0.00	
11,700.00	91.72	269.07	7,346.97	-891.70	-3,643.19	3,711.44	0.00	0.00	0.00	
11,800.00	91.72	269.07	7,343.97	-893.32	-3,743.14	3,811.09	0.00	0.00	0.00	
11,900.00	91.72	269.07	7,340.97	-894.95	-3,843.08	3,910.73	0.00	0.00	0.00	
12,000.00	91.72	269.07	7,337.98	-896.57	-3,943.02	4,010.38	0.00	0.00	0.00	
12,100.00	91.72	269.07	7,334.98	-898.19	-4,042.96	4,110.02	0.00	0.00	0.00	
12,200.00	91.72	269.07	7,331.98	-899.82	-4,142.90	4,209.66	0.00	0.00	0.00	
12,300.00	91.72	269.07	7,328.98	-901.44	-4,242.85	4,309.31	0.00	0.00	0.00	
12,400.00	91.72	269.07	7,325.99	-903.07	-4,342.79	4,408.95	0.00	0.00	0.00	
12,500.00	91.72	269.07	7,322.99	-904.69	-4,442.73	4,508.60	0.00	0.00	0.00	
12,600.00	91.72	269.07	7,319.99	-906.32	-4,542.67	4,608.24	0.00	0.00	0.00	
12,700.00	91.72	269.07	7,316.99	-907.94	-4,642.61	4,707.88	0.00	0.00	0.00	
12,800.00	91.72	269.07	7,313.99	-909.56	-4,742.55	4,807.53	0.00	0.00	0.00	
12,900.00	91.72	269.07	7,311.00	-911.19	-4,842.50	4,907.17	0.00	0.00	0.00	
13,000.00	91.72	269.07	7,308.00	-912.81	-4,942.44	5,006.82	0.00	0.00	0.00	
13,100.00	91.72	269.07	7,305.00	-914.44	-5,042.38	5,106.46	0.00	0.00	0.00	
13,200.00	91.72	269.07	7,302.00	-916.06	-5,142.32	5,206.10	0.00	0.00	0.00	
13,300.00	91.72	269.07	7,299.00	-917.68	-5,242.26	5,305.75	0.00	0.00	0.00	
13,400.00	91.72	269.07	7,296.01	-919.31	-5,342.21	5,405.39	0.00	0.00	0.00	
13,500.00	91.72	269.07	7,293.01	-920.93	-5,442.15	5,505.04	0.00	0.00	0.00	
13,600.00	91.72	269.07	7,290.01	-922.56	-5,542.09	5,604.68	0.00	0.00	0.00	
13,700.00	91.72	269.07	7,287.01	-924.18	-5,642.03	5,704.32	0.00	0.00	0.00	
13,800.00	91.72	269.07	7,284.01	-925.80	-5,741.97	5,803.97	0.00	0.00	0.00	
13,900.00	91.72	269.07	7,281.02	-927.43	-5,841.92	5,903.61	0.00	0.00	0.00	
14,000.00	91.72	269.07	7,278.02	-929.05	-5,941.86	6,003.25	0.00	0.00	0.00	
14,100.00	91.72	269.07	7,275.02	-930.68	-6,041.80	6,102.90	0.00	0.00	0.00	
14,200.00	91.72	269.07	7,272.02	-932.30	-6,141.74	6,202.54	0.00	0.00	0.00	
14,300.00	91.72	269.07	7,269.03	-933.92	-6,241.68	6,302.19	0.00	0.00	0.00	
14,400.00	91.72	269.07	7,266.03	-935.55	-6,341.62	6,401.83	0.00	0.00	0.00	
14,500.00	91.72	269.07	7,263.03	-937.17	-6,441.57	6,501.47	0.00	0.00	0.00	
14,600.00	91.72	269.07	7,260.03	-938.80	-6,541.51	6,601.12	0.00	0.00	0.00	
14,700.00	91.72	269.07	7,257.03	-940.42	-6,641.45	6,700.76	0.00	0.00	0.00	
14,800.00	91.72	269.07	7,254.04	-942.05	-6,741.39	6,800.41	0.00	0.00	0.00	
14,900.00	91.72	269.07	7,251.04	-943.67	-6,841.33	6,900.05	0.00	0.00	0.00	
15,000.00	91.72	269.07	7,248.04	-945.29	-6,941.28	6,999.69	0.00	0.00	0.00	
15,100.00	91.72	269.07	7,245.04	-946.92	-7,041.22	7,099.34	0.00	0.00	0.00	
15,200.00	91.72	269.07	7,242.04	-948.54	-7,141.16	7,198.98	0.00	0.00	0.00	
15,300.00	91.72	269.07	7,239.05	-950.17	-7,241.10	7,298.63	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well OPAL 5
Company:	BAYSWATER EXPLORATION & PRODUCTION	TVD Reference:	KBE 23' @ 5143.00usft
Project:	WELD COUNTY	MD Reference:	KBE 23' @ 5143.00usft
Site:	SEC 6-T7N-R66W	North Reference:	True
Well:	OPAL 5	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
15,400.00	91.72	269.07	7,236.05	-951.79	-7,341.04	7,398.27	0.00	0.00	0.00	
15,500.00	91.72	269.07	7,233.05	-953.41	-7,440.99	7,497.91	0.00	0.00	0.00	
15,600.00	91.72	269.07	7,230.05	-955.04	-7,540.93	7,597.56	0.00	0.00	0.00	
15,700.00	91.72	269.07	7,227.06	-956.66	-7,640.87	7,697.20	0.00	0.00	0.00	
15,800.00	91.72	269.07	7,224.06	-958.29	-7,740.81	7,796.84	0.00	0.00	0.00	
15,900.00	91.72	269.07	7,221.06	-959.91	-7,840.75	7,896.49	0.00	0.00	0.00	
16,000.00	91.72	269.07	7,218.06	-961.53	-7,940.69	7,996.13	0.00	0.00	0.00	
16,100.00	91.72	269.07	7,215.06	-963.16	-8,040.64	8,095.78	0.00	0.00	0.00	
16,200.00	91.72	269.07	7,212.07	-964.78	-8,140.58	8,195.42	0.00	0.00	0.00	
16,300.00	91.72	269.07	7,209.07	-966.41	-8,240.52	8,295.06	0.00	0.00	0.00	
16,400.00	91.72	269.07	7,206.07	-968.03	-8,340.46	8,394.71	0.00	0.00	0.00	
16,500.00	91.72	269.07	7,203.07	-969.66	-8,440.40	8,494.35	0.00	0.00	0.00	
16,600.00	91.72	269.07	7,200.07	-971.28	-8,540.35	8,594.00	0.00	0.00	0.00	
16,700.00	91.72	269.07	7,197.08	-972.90	-8,640.29	8,693.64	0.00	0.00	0.00	
16,800.00	91.72	269.07	7,194.08	-974.53	-8,740.23	8,793.28	0.00	0.00	0.00	
16,900.00	91.72	269.07	7,191.08	-976.15	-8,840.17	8,892.93	0.00	0.00	0.00	
17,000.00	91.72	269.07	7,188.08	-977.78	-8,940.11	8,992.57	0.00	0.00	0.00	
17,100.00	91.72	269.07	7,185.09	-979.40	-9,040.05	9,092.22	0.00	0.00	0.00	
17,200.00	91.72	269.07	7,182.09	-981.02	-9,140.00	9,191.86	0.00	0.00	0.00	
17,300.00	91.72	269.07	7,179.09	-982.65	-9,239.94	9,291.50	0.00	0.00	0.00	
17,400.00	91.72	269.07	7,176.09	-984.27	-9,339.88	9,391.15	0.00	0.00	0.00	
17,500.00	91.72	269.07	7,173.09	-985.90	-9,439.82	9,490.79	0.00	0.00	0.00	
17,600.00	91.72	269.07	7,170.10	-987.52	-9,539.76	9,590.44	0.00	0.00	0.00	
17,700.00	91.72	269.07	7,167.10	-989.14	-9,639.71	9,690.08	0.00	0.00	0.00	
17,800.00	91.72	269.07	7,164.10	-990.77	-9,739.65	9,789.72	0.00	0.00	0.00	
17,900.00	91.72	269.07	7,161.10	-992.39	-9,839.59	9,889.37	0.00	0.00	0.00	
18,000.00	91.72	269.07	7,158.10	-994.02	-9,939.53	9,989.01	0.00	0.00	0.00	
18,100.00	91.72	269.07	7,155.11	-995.64	-10,039.47	10,088.65	0.00	0.00	0.00	
18,200.00	91.72	269.07	7,152.11	-997.27	-10,139.42	10,188.30	0.00	0.00	0.00	
18,300.00	91.72	269.07	7,149.11	-998.89	-10,239.36	10,287.94	0.00	0.00	0.00	
18,400.00	91.72	269.07	7,146.11	-1,000.51	-10,339.30	10,387.59	0.00	0.00	0.00	
18,500.00	91.72	269.07	7,143.11	-1,002.14	-10,439.24	10,487.23	0.00	0.00	0.00	
18,570.54	91.72	269.07	7,141.00	-1,003.28	-10,509.74	10,557.52	0.00	0.00	0.00	
TD at 18570.54										

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									
PBHL-OPAL 5	0.00	0.00	7,141.00	-1,003.28	-10,509.74	1,461,891.81	3,180,451.06	40.599476°N	104.850167°W
- plan hits target center									
- Point									
LP-OPAL 5	0.00	0.00	7,461.00	-829.92	158.29	1,462,147.89	3,191,117.16	40.599958°N	104.811751°W
- plan hits target center									
- Point									

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well OPAL 5
Company:	BAYSWATER EXPLORATION & PRODUCTION	TVD Reference:	KBE 23' @ 5143.00usft
Project:	WELD COUNTY	MD Reference:	KBE 23' @ 5143.00usft
Site:	SEC 6-T7N-R66W	North Reference:	True
Well:	OPAL 5	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
300.00	300.00	0.00	0.00	Start Build 2.00
773.96	771.80	-27.64	27.68	Start 6139.47 hold at 773.96 MD
6,913.43	6,827.44	-742.07	743.17	Start DLS 10.00 TFO 133.51
7,896.31	7,461.00	-829.92	158.29	Start 10674.24 hold at 7896.31 MD
18,570.54	7,141.00	-1,003.28	-10,509.74	TD at 18570.54