

Bayswater Exploration & Production, LLC

Well Name: **Ward P-20-19HN**

Surface Location: Ward 20-M Pad Sec. 20-T6N-R66W

North American Datum 1983 , US State Plane 1983, Colorado Northern Zone

Ground Elevation: 4728.0

+N/-S+E/-W Northing Easting Latitude Longitude Slot

0.0 0.0 1413912.213196665.46 40.467439 -104.793156

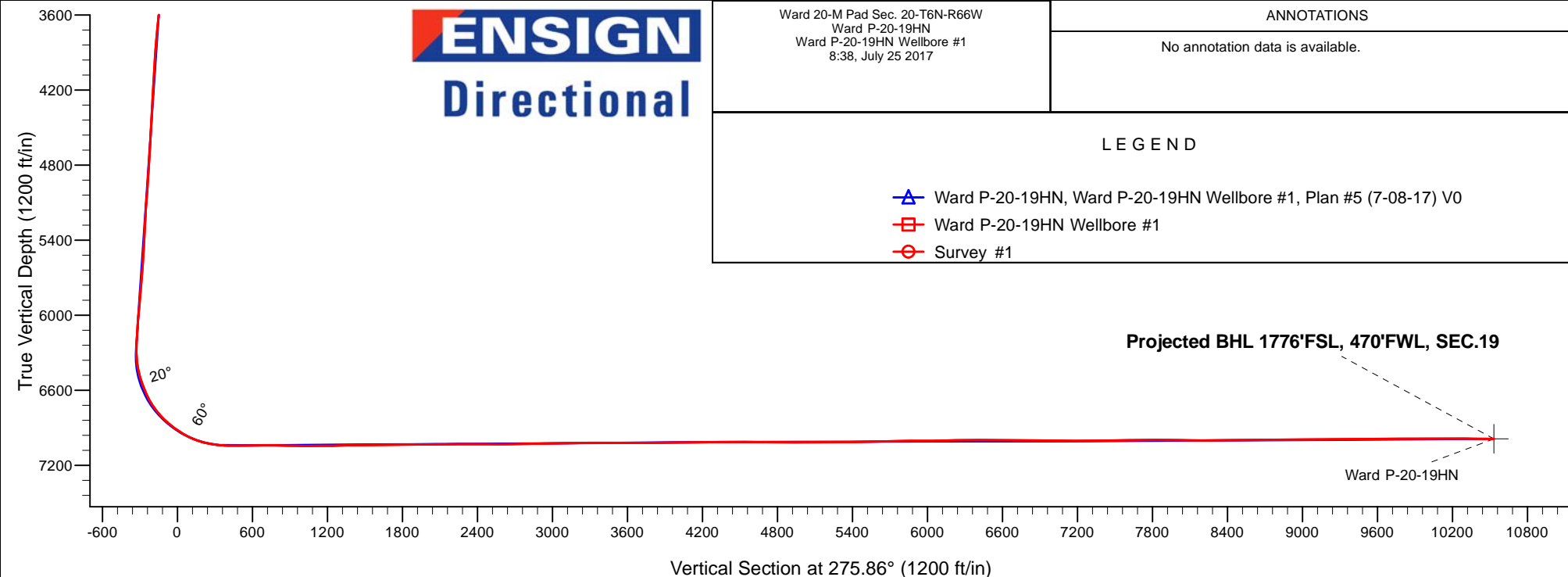
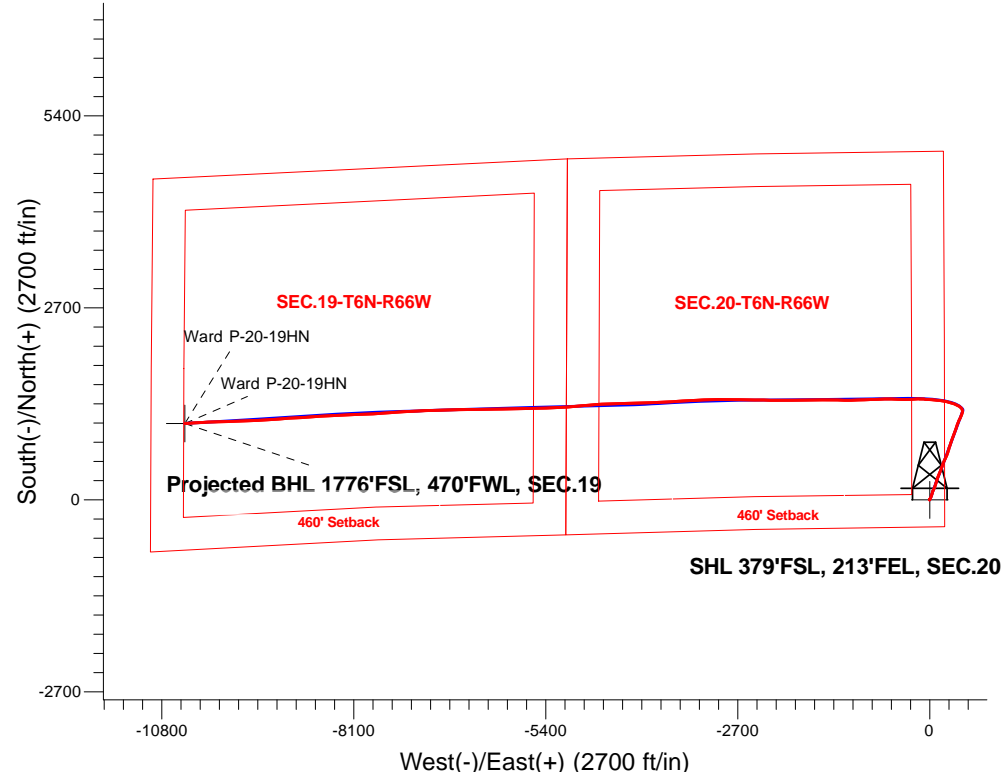
RKB - 25' WELL @ 4753.0ft (RKB - 25')

FINAL SURVEY

Projected Bottom Hole Location

17,865'MD 6989'TVD 1075'N & 10476'W of SHL

89.3 degree Incl @ 266.8 degree AZM





Bayswater Exploration & Production, LLC

SEC.20-T6N-R66W

Ward 20-M Pad Sec. 20-T6N-R66W

Ward P-20-19HN

Ward P-20-19HN Wellbore #1

Survey: Survey #1

Standard Survey Report

25 July, 2017



BAYSWATER
EXPLORATION & PRODUCTION, LLC

Company:	Bayswater Exploration & Production, LLC	Local Co-ordinate Reference:	Well Ward P-20-19HN
Project:	SEC.20-T6N-R66W	TVD Reference:	WELL @ 4753.0ft (RKB - 25')
Site:	Ward 20-M Pad Sec. 20-T6N-R66W	MD Reference:	WELL @ 4753.0ft (RKB - 25')
Well:	Ward P-20-19HN	North Reference:	True
Wellbore:	Ward P-20-19HN Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Ward P-20-19HN Wellbore #1	Database:	US_EDM

Project	SEC.20-T6N-R66W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site		Ward 20-M Pad Sec. 20-T6N-R66W						
Site Position:		Northing:	1,413,957.04	usft	Latitude:	40.467562		
From:	Lat/Long	Easting:	3,196,665.10	usft	Longitude:	-104.793156		
Position Uncertainty:	0.0	ft	Slot Radius:	13-3/16	"	Grid Convergence:	0.46	°

Well	Ward P-20-19HN					
Well Position	+N/-S	0.0 ft	Northing:	1,413,912.21 usft	Latitude:	40.467439
	+E/-W	0.0 ft	Easting:	3,196,665.46 usft	Longitude:	-104.793156
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	4,728.0 ft

Wellbore	Ward P-20-19HN Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/3/2017	8.07	66.89	52,527

Design	Ward P-20-19HN Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	275.86	

Survey Program	Date	7/25/2017			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
210.0	17,865.0	Survey #1 (Ward P-20-19HN Wellbore #1)	MWD	MWD - Standard	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	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	
210.0	1.30	305.70	210.0	1.4	-1.9	2.1	0.62	0.62	0.00	
304.0	0.40	257.30	304.0	1.9	-3.1	3.3	1.15	-0.96	-51.49	
399.0	0.50	220.60	399.0	1.6	-3.7	3.9	0.31	0.11	-38.63	
494.0	0.50	226.20	494.0	1.0	-4.3	4.4	0.05	0.00	5.89	
589.0	0.30	226.60	589.0	0.5	-4.8	4.8	0.21	-0.21	0.42	
683.0	0.50	223.20	683.0	0.0	-5.2	5.2	0.21	0.21	-3.62	
778.0	0.70	88.80	778.0	-0.3	-4.9	4.9	1.17	0.21	-141.47	
873.0	1.80	35.50	872.9	1.0	-3.5	3.6	1.57	1.16	-56.11	
968.0	3.00	23.70	967.9	4.5	-1.6	2.1	1.36	1.26	-12.42	

Company:	Bayswater Exploration & Production, LLC	Local Co-ordinate Reference:	Well Ward P-20-19HN
Project:	SEC.20-T6N-R66W	TVD Reference:	WELL @ 4753.0ft (RKB - 25')
Site:	Ward 20-M Pad Sec. 20-T6N-R66W	MD Reference:	WELL @ 4753.0ft (RKB - 25')
Well:	Ward P-20-19HN	North Reference:	True
Wellbore:	Ward P-20-19HN Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Ward P-20-19HN Wellbore #1	Database:	US_EDM

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
1,063.0	4.50	22.10	1,062.6	10.2	0.8	0.3	1.58	1.58	-1.68	
1,157.0	6.20	26.70	1,156.2	18.1	4.5	-2.6	1.86	1.81	4.89	
1,252.0	7.60	25.30	1,250.5	28.4	9.4	-6.5	1.48	1.47	-1.47	
1,347.0	9.00	20.60	1,344.5	41.0	14.7	-10.5	1.64	1.47	-4.95	
1,442.0	9.60	20.90	1,438.3	55.4	20.2	-14.4	0.63	0.63	0.32	
1,495.0	9.80	18.80	1,490.5	63.8	23.2	-16.6	0.77	0.38	-3.96	
1,570.0	10.30	17.00	1,564.4	76.2	27.2	-19.3	0.79	0.67	-2.40	
1,664.0	9.70	15.50	1,657.0	91.9	31.8	-22.3	0.70	-0.64	-1.60	
1,757.0	11.80	22.50	1,748.3	108.2	37.5	-26.3	2.65	2.26	7.53	
1,850.0	11.80	14.40	1,839.4	126.2	43.5	-30.4	1.78	0.00	-8.71	
1,944.0	12.30	23.70	1,931.3	144.7	50.0	-34.9	2.13	0.53	9.89	
2,037.0	13.80	24.60	2,021.9	163.9	58.6	-41.5	1.63	1.61	0.97	
2,131.0	14.80	25.10	2,113.0	184.9	68.3	-49.1	1.07	1.06	0.53	
2,224.0	15.50	17.90	2,202.8	207.5	77.2	-55.6	2.16	0.75	-7.74	
2,318.0	14.50	15.10	2,293.6	230.8	84.1	-60.1	1.31	-1.06	-2.98	
2,411.0	16.20	18.60	2,383.2	254.4	91.3	-64.8	2.08	1.83	3.76	
2,505.0	15.00	16.00	2,473.8	278.5	98.8	-69.9	1.48	-1.28	-2.77	
2,598.0	16.20	21.30	2,563.4	302.2	106.8	-75.4	2.00	1.29	5.70	
2,692.0	16.40	19.30	2,653.6	326.9	116.0	-82.0	0.63	0.21	-2.13	
2,785.0	17.10	22.10	2,742.6	352.0	125.5	-88.9	1.15	0.75	3.01	
2,878.0	15.60	19.80	2,831.9	376.4	134.9	-95.7	1.76	-1.61	-2.47	
2,972.0	15.60	24.20	2,922.4	399.8	144.3	-102.7	1.26	0.00	4.68	
3,065.0	14.90	21.60	3,012.1	422.3	153.8	-109.9	1.05	-0.75	-2.80	
3,159.0	13.50	17.40	3,103.3	444.1	161.6	-115.4	1.85	-1.49	-4.47	
3,252.0	14.20	20.40	3,193.6	465.1	168.8	-120.4	1.08	0.75	3.23	
3,346.0	14.50	19.50	3,284.6	487.0	176.7	-126.1	0.40	0.32	-0.96	
3,441.0	14.70	19.70	3,376.6	509.6	184.8	-131.8	0.22	0.21	0.21	
3,534.0	14.30	26.00	3,466.6	531.0	193.8	-138.6	1.75	-0.43	6.77	
3,628.0	16.50	24.10	3,557.2	553.6	204.3	-146.7	2.40	2.34	-2.02	
3,722.0	16.50	24.60	3,647.4	577.9	215.3	-155.2	0.15	0.00	0.53	
3,817.0	16.50	23.20	3,738.4	602.6	226.3	-163.5	0.42	0.00	-1.47	
3,912.0	16.60	22.50	3,829.5	627.5	236.8	-171.5	0.23	0.11	-0.74	
4,007.0	16.40	21.40	3,920.6	652.6	246.9	-178.9	0.39	-0.21	-1.16	
4,102.0	14.90	19.10	4,012.1	676.6	255.8	-185.3	1.71	-1.58	-2.42	
4,198.0	16.40	15.80	4,104.5	701.3	263.5	-190.5	1.82	1.56	-3.44	
4,292.0	15.70	13.90	4,194.8	726.4	270.2	-194.6	0.93	-0.74	-2.02	
4,387.0	14.90	19.30	4,286.5	750.4	277.3	-199.2	1.72	-0.84	5.68	
4,481.0	14.50	16.90	4,377.4	773.1	284.7	-204.3	0.78	-0.43	-2.55	
4,577.0	13.10	14.90	4,470.6	795.1	291.0	-208.3	1.54	-1.46	-2.08	
4,671.0	12.70	22.80	4,562.3	814.9	297.7	-212.9	1.92	-0.43	8.40	
4,766.0	13.80	21.10	4,654.7	835.1	305.9	-219.0	1.23	1.16	-1.79	
4,861.0	15.00	22.00	4,746.8	857.1	314.5	-225.4	1.28	1.26	0.95	
4,956.0	14.20	19.30	4,838.7	879.5	323.0	-231.5	1.11	-0.84	-2.84	
5,050.0	15.80	20.90	4,929.5	902.3	331.4	-237.5	1.76	1.70	1.70	

Company:	Bayswater Exploration & Production, LLC	Local Co-ordinate Reference:	Well Ward P-20-19HN
Project:	SEC.20-T6N-R66W	TVD Reference:	WELL @ 4753.0ft (RKB - 25')
Site:	Ward 20-M Pad Sec. 20-T6N-R66W	MD Reference:	WELL @ 4753.0ft (RKB - 25')
Well:	Ward P-20-19HN	North Reference:	True
Wellbore:	Ward P-20-19HN Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Ward P-20-19HN Wellbore #1	Database:	US_EDM

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,145.0	14.10	18.30	5,021.3	925.4	339.6	-243.3	1.92	-1.79	-2.74
5,240.0	15.20	22.50	5,113.2	947.9	348.0	-249.4	1.61	1.16	4.42
5,335.0	13.90	18.60	5,205.1	970.2	356.4	-255.5	1.71	-1.37	-4.11
5,429.0	14.90	18.30	5,296.2	992.4	363.8	-260.6	1.07	1.06	-0.32
5,524.0	15.60	15.50	5,387.8	1,016.3	371.1	-265.3	1.07	0.74	-2.95
5,619.0	15.40	20.40	5,479.4	1,040.4	378.9	-270.6	1.39	-0.21	5.16
5,714.0	14.00	17.70	5,571.3	1,063.2	386.8	-276.2	1.64	-1.47	-2.84
5,809.0	14.20	24.10	5,663.4	1,084.8	395.0	-282.2	1.65	0.21	6.74
5,927.0	14.70	24.60	5,777.7	1,111.6	407.2	-291.5	0.44	0.42	0.42
6,022.0	15.50	28.60	5,869.4	1,133.7	418.3	-300.3	1.38	0.84	4.21
6,117.0	13.90	24.80	5,961.3	1,155.2	429.1	-308.9	1.97	-1.68	-4.00
6,211.0	14.60	23.90	6,052.4	1,176.3	438.7	-316.2	0.78	0.74	-0.96
6,306.0	14.80	16.20	6,144.3	1,198.9	446.9	-322.1	2.07	0.21	-8.11
6,401.0	16.80	16.50	6,235.7	1,223.7	454.2	-326.8	2.11	2.11	0.32
6,448.0	15.70	12.50	6,280.8	1,236.4	457.5	-328.8	3.34	-2.34	-8.51
6,496.0	17.60	353.30	6,326.8	1,250.0	458.1	-328.0	12.06	3.96	-40.00
6,543.0	19.10	342.60	6,371.5	1,264.4	454.9	-323.4	7.83	3.19	-22.77
6,591.0	18.30	334.30	6,416.9	1,278.7	449.3	-316.4	5.78	-1.67	-17.29
6,638.0	19.40	321.50	6,461.4	1,291.5	441.2	-307.0	9.09	2.34	-27.23
6,685.0	20.10	312.00	6,505.7	1,303.0	430.4	-295.1	6.98	1.49	-20.21
6,732.0	21.70	303.70	6,549.6	1,313.2	417.1	-280.8	7.15	3.40	-17.66
6,780.0	23.80	297.80	6,593.9	1,322.6	401.2	-264.0	6.46	4.38	-12.29
6,827.0	26.10	296.40	6,636.5	1,331.7	383.5	-245.5	5.05	4.89	-2.98
6,875.0	29.50	293.00	6,678.9	1,341.0	363.2	-224.3	7.81	7.08	-7.08
6,922.0	34.60	290.40	6,718.8	1,350.2	340.0	-200.4	11.24	10.85	-5.53
6,970.0	37.30	289.10	6,757.6	1,359.7	313.5	-173.0	5.85	5.63	-2.71
7,017.0	41.30	286.30	6,794.0	1,368.7	285.1	-143.9	9.31	8.51	-5.96
7,064.0	46.30	282.10	6,827.9	1,376.6	253.6	-111.7	12.30	10.64	-8.94
7,160.0	52.10	280.70	6,890.6	1,390.9	182.4	-39.4	6.14	6.04	-1.46
7,255.0	58.60	276.10	6,944.6	1,402.2	105.1	38.6	7.91	6.84	-4.84
7,350.0	66.90	274.40	6,988.1	1,409.9	21.1	123.0	8.88	8.74	-1.79
7,444.0	76.20	273.50	7,017.8	1,416.0	-67.7	212.0	9.94	9.89	-0.96
7,539.0	82.30	270.70	7,035.5	1,419.4	-161.0	305.1	7.04	6.42	-2.95
7,634.0	88.50	265.80	7,043.1	1,416.5	-255.5	398.9	8.31	6.53	-5.16
7,729.0	91.30	270.90	7,043.3	1,413.8	-350.5	493.0	6.12	2.95	5.37
7,824.0	90.10	270.70	7,042.1	1,415.1	-445.4	587.6	1.28	-1.26	-0.21
7,918.0	91.10	271.60	7,041.1	1,417.0	-539.4	681.3	1.43	1.06	0.96
8,013.0	88.90	268.60	7,041.1	1,417.1	-634.4	775.8	3.92	-2.32	-3.16
8,108.0	89.10	268.60	7,042.8	1,414.8	-729.3	870.0	0.21	0.21	0.00
8,203.0	88.50	267.20	7,044.8	1,411.3	-824.3	964.1	1.60	-0.63	-1.47
8,297.0	90.60	268.90	7,045.5	1,408.1	-918.2	1,057.2	2.87	2.23	1.81
8,392.0	90.10	267.00	7,044.9	1,404.7	-1,013.1	1,151.3	2.07	-0.53	-2.00
8,487.0	91.00	270.00	7,044.0	1,402.2	-1,108.1	1,245.5	3.30	0.95	3.16

Company:	Bayswater Exploration & Production, LLC	Local Co-ordinate Reference:	Well Ward P-20-19HN
Project:	SEC.20-T6N-R66W	TVD Reference:	WELL @ 4753.0ft (RKB - 25')
Site:	Ward 20-M Pad Sec. 20-T6N-R66W	MD Reference:	WELL @ 4753.0ft (RKB - 25')
Well:	Ward P-20-19HN	North Reference:	True
Wellbore:	Ward P-20-19HN Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Ward P-20-19HN Wellbore #1	Database:	US_EDM

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,581.0	92.20	270.50	7,041.4	1,402.7	-1,202.0	1,339.0	1.38	1.28	0.53	
8,676.0	90.10	270.30	7,039.5	1,403.3	-1,297.0	1,433.5	2.22	-2.21	-0.21	
8,771.0	91.00	270.50	7,038.6	1,404.0	-1,392.0	1,528.1	0.97	0.95	0.21	
8,865.0	90.90	270.30	7,037.0	1,404.6	-1,486.0	1,621.7	0.24	-0.11	-0.21	
8,960.0	90.40	270.20	7,036.0	1,405.1	-1,581.0	1,716.2	0.54	-0.53	-0.11	
9,055.0	90.40	269.60	7,035.3	1,404.9	-1,676.0	1,810.7	0.63	0.00	-0.63	
9,149.0	90.20	269.60	7,034.8	1,404.2	-1,770.0	1,904.1	0.21	-0.21	0.00	
9,244.0	90.70	268.80	7,034.1	1,402.9	-1,865.0	1,998.5	0.99	0.53	-0.84	
9,339.0	91.00	269.50	7,032.6	1,401.5	-1,959.9	2,092.8	0.80	0.32	0.74	
9,434.0	90.30	270.90	7,031.6	1,401.8	-2,054.9	2,187.4	1.65	-0.74	1.47	
9,528.0	90.20	269.80	7,031.2	1,402.4	-2,148.9	2,280.9	1.18	-0.11	-1.17	
9,623.0	90.00	270.70	7,031.0	1,402.8	-2,243.9	2,375.5	0.97	-0.21	0.95	
9,718.0	89.40	270.20	7,031.5	1,403.6	-2,338.9	2,470.0	0.82	-0.63	-0.53	
9,813.0	89.30	270.50	7,032.6	1,404.1	-2,433.9	2,564.6	0.33	-0.11	0.32	
9,908.0	91.50	271.90	7,031.9	1,406.1	-2,528.9	2,659.3	2.74	2.32	1.47	
10,001.0	91.00	270.50	7,029.9	1,408.1	-2,621.8	2,751.9	1.60	-0.54	-1.51	
10,096.0	91.20	271.40	7,028.1	1,409.7	-2,716.8	2,846.6	0.97	0.21	0.95	
10,191.0	90.70	271.40	7,026.5	1,412.0	-2,811.8	2,941.3	0.53	-0.53	0.00	
10,286.0	91.80	270.50	7,024.4	1,413.6	-2,906.7	3,035.9	1.50	1.16	-0.95	
10,381.0	91.10	268.90	7,022.0	1,413.1	-3,001.7	3,130.3	1.84	-0.74	-1.68	
10,476.0	89.90	267.30	7,021.2	1,409.9	-3,096.6	3,224.4	2.11	-1.26	-1.68	
10,571.0	90.00	267.20	7,021.3	1,405.3	-3,191.5	3,318.4	0.15	0.11	-0.11	
10,665.0	89.70	267.90	7,021.5	1,401.3	-3,285.4	3,411.4	0.81	-0.32	0.74	
10,760.0	90.70	267.20	7,021.2	1,397.3	-3,380.3	3,505.4	1.28	1.05	-0.74	
10,855.0	90.00	266.50	7,020.6	1,392.0	-3,475.2	3,599.2	1.04	-0.74	-0.74	
10,950.0	90.10	266.80	7,020.5	1,386.5	-3,570.0	3,693.0	0.33	0.11	0.32	
11,044.0	90.50	267.00	7,020.0	1,381.4	-3,663.9	3,785.8	0.48	0.43	0.21	
11,139.0	90.00	266.10	7,019.6	1,375.7	-3,758.7	3,879.6	1.08	-0.53	-0.95	
11,234.0	90.80	267.50	7,018.9	1,370.4	-3,853.6	3,973.4	1.70	0.84	1.47	
11,329.0	90.70	267.70	7,017.7	1,366.4	-3,948.5	4,067.4	0.24	-0.11	0.21	
11,424.0	91.40	268.80	7,016.0	1,363.5	-4,043.4	4,161.5	1.37	0.74	1.16	
11,518.0	89.90	267.00	7,014.9	1,360.1	-4,137.3	4,254.6	2.49	-1.60	-1.91	
11,613.0	90.50	268.10	7,014.6	1,356.0	-4,232.2	4,348.6	1.32	0.63	1.16	
11,712.0	90.70	270.30	7,013.5	1,354.6	-4,331.2	4,446.9	2.23	0.20	2.22	
11,807.0	89.00	269.30	7,013.8	1,354.3	-4,426.2	4,541.4	2.08	-1.79	-1.05	
11,902.0	89.90	267.70	7,014.7	1,351.8	-4,521.2	4,635.6	1.93	0.95	-1.68	
11,997.0	88.80	266.80	7,015.8	1,347.3	-4,616.1	4,729.5	1.50	-1.16	-0.95	
12,092.0	89.50	265.40	7,017.2	1,340.8	-4,710.8	4,823.1	1.65	0.74	-1.47	
12,187.0	90.00	264.50	7,017.6	1,332.4	-4,805.5	4,916.4	1.08	0.53	-0.95	
12,281.0	90.20	264.40	7,017.4	1,323.3	-4,899.0	5,008.5	0.24	0.21	-0.11	
12,376.0	90.30	264.70	7,017.0	1,314.3	-4,993.6	5,101.7	0.33	0.11	0.32	
12,471.0	89.80	265.80	7,016.9	1,306.4	-5,088.3	5,195.1	1.27	-0.53	1.16	
12,565.0	90.90	266.50	7,016.3	1,300.1	-5,182.0	5,287.7	1.39	1.17	0.74	

Company:	Bayswater Exploration & Production, LLC	Local Co-ordinate Reference:	Well Ward P-20-19HN
Project:	SEC.20-T6N-R66W	TVD Reference:	WELL @ 4753.0ft (RKB - 25')
Site:	Ward 20-M Pad Sec. 20-T6N-R66W	MD Reference:	WELL @ 4753.0ft (RKB - 25')
Well:	Ward P-20-19HN	North Reference:	True
Wellbore:	Ward P-20-19HN Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Ward P-20-19HN Wellbore #1	Database:	US_EDM

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,661.0	91.20	267.00	7,014.6	1,294.7	-5,277.9	5,382.5	0.61	0.31	0.52
12,755.0	91.20	268.60	7,012.6	1,291.1	-5,371.8	5,475.5	1.70	0.00	1.70
12,850.0	91.30	269.50	7,010.5	1,289.5	-5,466.7	5,569.9	0.95	0.11	0.95
12,945.0	91.60	268.90	7,008.1	1,288.2	-5,561.7	5,664.2	0.71	0.32	-0.63
13,040.0	90.60	269.30	7,006.3	1,286.7	-5,656.7	5,758.5	1.13	-1.05	0.42
13,135.0	90.40	268.90	7,005.5	1,285.2	-5,751.7	5,852.8	0.47	-0.21	-0.42
13,229.0	90.10	269.10	7,005.1	1,283.6	-5,845.6	5,946.2	0.38	-0.32	0.21
13,324.0	90.40	267.50	7,004.7	1,280.7	-5,940.6	6,040.3	1.71	0.32	-1.68
13,419.0	91.50	268.20	7,003.1	1,277.2	-6,035.5	6,134.4	1.37	1.16	0.74
13,513.0	91.40	268.40	7,000.7	1,274.4	-6,129.4	6,227.5	0.24	-0.11	0.21
13,608.0	90.00	269.30	6,999.5	1,272.5	-6,224.4	6,321.8	1.75	-1.47	0.95
13,703.0	90.10	269.50	6,999.5	1,271.5	-6,319.4	6,416.2	0.24	0.11	0.21
13,798.0	90.70	269.60	6,998.8	1,270.7	-6,414.4	6,510.6	0.64	0.63	0.11
13,893.0	88.90	269.60	6,999.1	1,270.1	-6,509.4	6,605.1	1.89	-1.89	0.00
13,988.0	89.60	269.10	7,000.4	1,269.0	-6,604.4	6,699.4	0.91	0.74	-0.53
14,082.0	89.60	268.60	7,001.0	1,267.1	-6,698.4	6,792.7	0.53	0.00	-0.53
14,177.0	89.80	268.80	7,001.5	1,265.0	-6,793.3	6,887.0	0.30	0.21	0.21
14,272.0	89.30	268.40	7,002.3	1,262.6	-6,888.3	6,981.2	0.67	-0.53	-0.42
14,367.0	89.30	267.70	7,003.4	1,259.4	-6,983.2	7,075.3	0.74	0.00	-0.74
14,461.0	89.40	267.70	7,004.5	1,255.6	-7,077.2	7,168.4	0.11	0.11	0.00
14,556.0	90.40	267.70	7,004.7	1,251.8	-7,172.1	7,262.4	1.05	1.05	0.00
14,651.0	91.00	267.90	7,003.5	1,248.2	-7,267.0	7,356.5	0.67	0.63	0.21
14,744.0	90.60	266.30	7,002.2	1,243.5	-7,359.9	7,448.4	1.77	-0.43	-1.72
14,838.0	90.90	265.80	7,001.0	1,237.0	-7,453.6	7,541.0	0.62	0.32	-0.53
14,933.0	90.90	265.80	6,999.5	1,230.0	-7,548.4	7,634.5	0.00	0.00	0.00
15,028.0	90.80	265.60	6,998.1	1,222.9	-7,643.1	7,728.0	0.24	-0.11	-0.21
15,122.0	90.20	265.90	6,997.3	1,216.0	-7,736.8	7,820.6	0.71	-0.64	0.32
15,217.0	89.40	267.00	6,997.6	1,210.1	-7,831.6	7,914.3	1.43	-0.84	1.16
15,312.0	89.30	267.20	6,998.7	1,205.3	-7,926.5	8,008.2	0.24	-0.11	0.21
15,406.0	89.30	268.20	6,999.8	1,201.5	-8,020.4	8,101.2	1.06	0.00	1.06
15,501.0	89.40	268.40	7,000.9	1,198.7	-8,115.4	8,195.4	0.24	0.11	0.21
15,596.0	90.60	267.90	7,000.9	1,195.6	-8,210.3	8,289.5	1.37	1.26	-0.53
15,647.0	90.90	267.70	7,000.2	1,193.7	-8,261.3	8,340.0	0.71	0.59	-0.39
15,742.0	90.40	267.00	6,999.1	1,189.3	-8,356.2	8,433.9	0.91	-0.53	-0.74
15,837.0	90.40	266.80	6,998.5	1,184.1	-8,451.0	8,527.8	0.21	0.00	-0.21
15,931.0	90.30	265.80	6,997.9	1,178.1	-8,544.8	8,620.5	1.07	-0.11	-1.06
16,026.0	90.40	265.60	6,997.3	1,170.9	-8,639.6	8,714.0	0.24	0.11	-0.21
16,121.0	90.40	265.10	6,996.7	1,163.2	-8,734.3	8,807.4	0.53	0.00	-0.53
16,216.0	91.80	268.60	6,994.8	1,158.0	-8,829.1	8,901.2	3.97	1.47	3.68
16,310.0	90.50	266.60	6,993.0	1,154.1	-8,923.0	8,994.2	2.54	-1.38	-2.13
16,405.0	90.40	265.90	6,992.2	1,147.9	-9,017.8	9,087.8	0.74	-0.11	-0.74
16,500.0	90.40	265.10	6,991.5	1,140.4	-9,112.5	9,181.3	0.84	0.00	-0.84
16,595.0	90.30	265.20	6,991.0	1,132.4	-9,207.1	9,274.6	0.15	-0.11	0.11
16,690.0	90.20	267.50	6,990.6	1,126.3	-9,301.9	9,368.3	2.42	-0.11	2.42

Company:	Bayswater Exploration & Production, LLC	Local Co-ordinate Reference:	Well Ward P-20-19HN
Project:	SEC.20-T6N-R66W	TVD Reference:	WELL @ 4753.0ft (RKB - 25')
Site:	Ward 20-M Pad Sec. 20-T6N-R66W	MD Reference:	WELL @ 4753.0ft (RKB - 25')
Well:	Ward P-20-19HN	North Reference:	True
Wellbore:	Ward P-20-19HN Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Ward P-20-19HN Wellbore #1	Database:	US_EDM

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
16,784.0	90.30	267.50	6,990.1	1,122.2	-9,395.8	9,461.3	0.11	0.11	0.00	
16,879.0	90.20	266.60	6,989.7	1,117.3	-9,490.7	9,555.2	0.95	-0.11	-0.95	
16,974.0	90.20	267.50	6,989.4	1,112.5	-9,585.6	9,649.1	0.95	0.00	0.95	
17,069.0	90.30	267.50	6,989.0	1,108.3	-9,680.5	9,743.1	0.11	0.11	0.00	
17,164.0	90.30	267.70	6,988.5	1,104.3	-9,775.4	9,837.1	0.21	0.00	0.21	
17,259.0	90.40	268.80	6,987.9	1,101.4	-9,870.4	9,931.2	1.16	0.11	1.16	
17,354.0	90.50	269.30	6,987.2	1,099.9	-9,965.3	10,025.6	0.54	0.11	0.53	
17,448.0	90.50	269.10	6,986.3	1,098.5	-10,059.3	10,118.9	0.21	0.00	-0.21	
17,543.0	89.90	266.60	6,986.0	1,095.0	-10,154.3	10,213.0	2.71	-0.63	-2.63	
17,638.0	89.30	266.30	6,986.7	1,089.1	-10,249.1	10,306.7	0.71	-0.63	-0.32	
17,733.0	89.30	266.60	6,987.8	1,083.2	-10,343.9	10,400.4	0.32	0.00	0.32	
17,828.0	89.40	266.30	6,988.9	1,077.3	-10,438.7	10,494.1	0.33	0.11	-0.32	
17,843.0	89.30	266.80	6,989.1	1,076.4	-10,453.7	10,508.9	3.40	-0.67	3.33	
17,865.0	89.30	266.80	6,989.3	1,075.2	-10,475.6	10,530.7	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
SHL 379'FSL, 213'FEL, :	0.00	0.00	1.0	0.0	0.0	1,413,912.23	3,196,665.46	40.467439	-104.793156	
- survey hits target center										
- Point										
BHL 1776'FSL, 470'FWL	0.00	0.00	6,988.0	1,075.5	-10,476.0	1,414,904.15	3,186,181.63	40.470385	-104.830808	
- survey misses target center by 1.4ft at 17865.0ft MD (6989.3 TVD, 1075.2 N, -10475.6 E)										
- Point										

Checked By: _____ Approved By: _____ Date: _____