

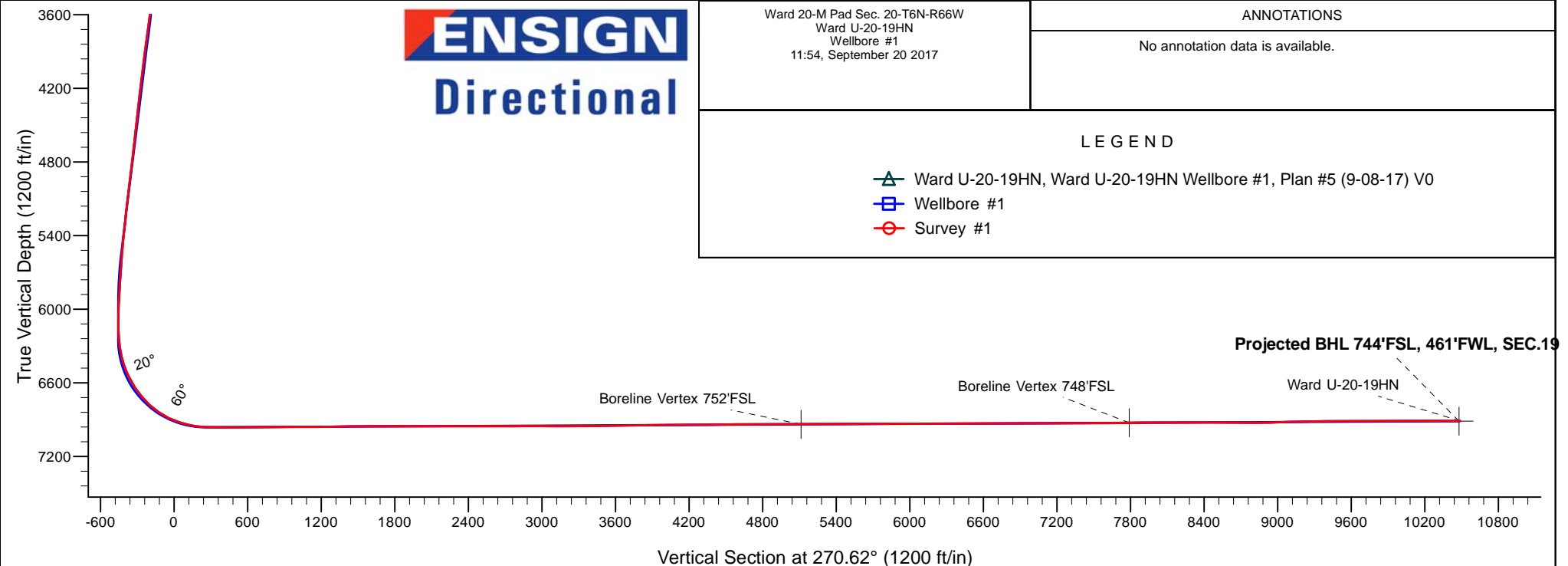
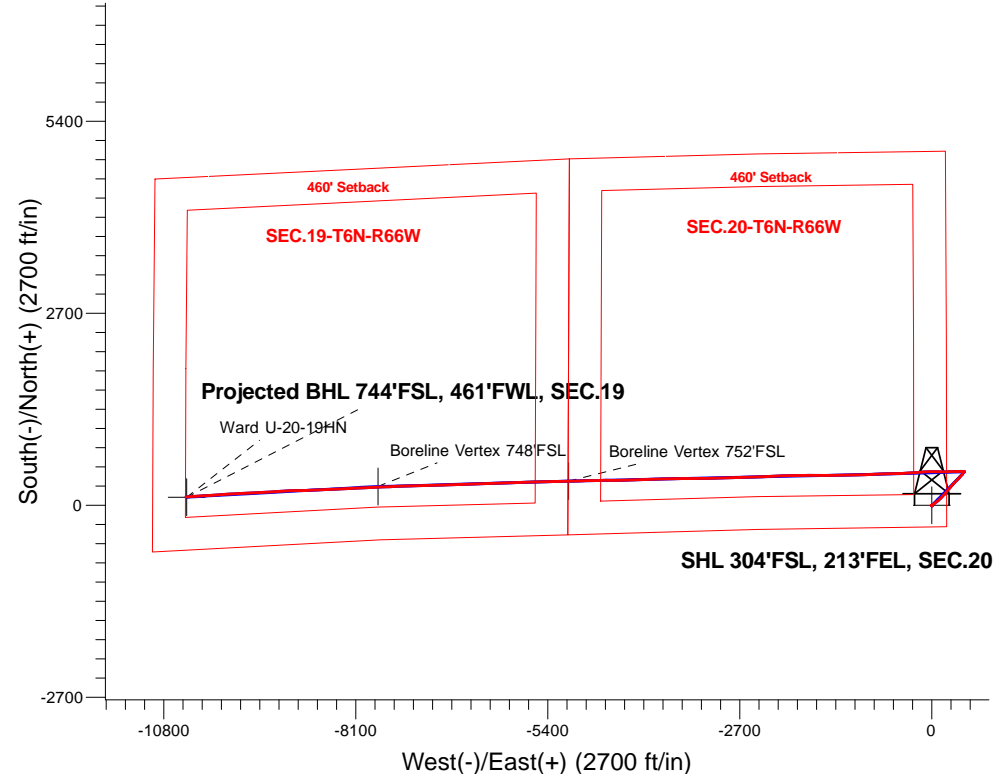
Bayswater Exploration & Production, LLC

Well Name: **Ward U-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 1413837.173196666.05 40.467233 -104.793156
RKB - 25' WELL @ 4753.0ft (RKB - 25')

FINAL SURVEY

Projected Bottom Hole Location
17,652'MD 6912'TVD 117'N & 10489'W of SHL
89.3 degree Incl @ 266.10 degree AZM





Bayswater Exploration & Production, LLC

SEC.20-T6N-R66W

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

Ward U-20-19HN

Ward U-20-19HN Wellbore #1

Survey: Survey #1

Standard Survey Report

20 September, 2017



BAYSWATER
EXPLORATION & PRODUCTION, LLC

Company:	Bayswater Exploration & Production, LLC	Local Co-ordinate Reference:	Well Ward U-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 U-20-19HN	North Reference:	True
Wellbore:	Ward U-20-19HN Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	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 U-20-19HN					
Well Position	+N/-S	0.0 ft	Northing:	1,413,837.17 usft	Latitude:	40.467233
	+E/-W	0.0 ft	Easting:	3,196,666.06 usft	Longitude:	-104.793156
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	4,728.0 ft

Wellbore	Ward U-20-19HN Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/8/2017	8.04	66.88	52,508

Design	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	270.62	

Survey Program	Date	9/20/2017			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
146.0	17,652.0	Survey #1 (Ward U-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	
146.0	1.50	284.40	146.0	0.5	-1.9	1.9	1.03	1.03	0.00	
241.0	1.00	264.40	241.0	0.7	-3.9	3.9	0.69	-0.53	-21.05	
336.0	0.10	128.70	336.0	0.6	-4.6	4.6	1.13	-0.95	-142.84	
430.0	0.30	127.40	430.0	0.4	-4.4	4.4	0.21	0.21	-1.38	
525.0	0.40	99.50	525.0	0.2	-3.9	3.9	0.20	0.11	-29.37	
620.0	1.10	112.50	619.9	-0.2	-2.7	2.7	0.75	0.74	13.68	
715.0	2.00	112.80	714.9	-1.2	-0.3	0.3	0.95	0.95	0.32	
809.0	0.40	132.40	808.9	-2.1	1.4	-1.5	1.73	-1.70	20.85	
904.0	0.60	128.10	903.9	-2.6	2.1	-2.1	0.21	0.21	-4.53	

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Site:	Ward 20-M Pad Sec. 20-T6N-R66W	MD Reference:	WELL @ 4753.0ft (RKB - 25')
Well:	Ward U-20-19HN	North Reference:	True
Wellbore:	Ward U-20-19HN Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	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)
999.0	0.40	141.80	998.9	-3.2	2.7	-2.7	0.24	-0.21	14.42
1,094.0	0.50	185.60	1,093.9	-3.9	2.8	-2.9	0.37	0.11	46.11
1,189.0	1.00	201.30	1,188.9	-5.0	2.5	-2.5	0.56	0.53	16.53
1,283.0	1.20	212.70	1,282.9	-6.6	1.7	-1.7	0.31	0.21	12.13
1,378.0	0.30	90.50	1,377.8	-7.5	1.4	-1.5	1.46	-0.95	-128.63
1,473.0	0.30	44.80	1,472.8	-7.3	1.8	-1.9	0.25	0.00	-48.11
1,495.0	0.40	35.90	1,494.8	-7.2	1.9	-2.0	0.52	0.45	-40.45
1,573.0	0.90	8.70	1,572.8	-6.4	2.1	-2.2	0.74	0.64	-34.87
1,668.0	1.10	12.10	1,667.8	-4.7	2.4	-2.5	0.22	0.21	3.58
1,762.0	1.60	43.20	1,761.8	-2.9	3.5	-3.6	0.92	0.53	33.09
1,857.0	1.70	30.20	1,856.8	-0.7	5.1	-5.2	0.41	0.11	-13.68
1,952.0	3.70	48.50	1,951.6	2.5	8.2	-8.1	2.27	2.11	19.26
2,046.0	4.10	45.10	2,045.4	6.9	12.8	-12.7	0.49	0.43	-3.62
2,140.0	5.10	52.30	2,139.1	11.8	18.5	-18.4	1.23	1.06	7.66
2,235.0	6.00	50.60	2,233.7	17.6	25.7	-25.5	0.96	0.95	-1.79
2,329.0	7.50	48.10	2,327.0	24.8	34.0	-33.8	1.63	1.60	-2.66
2,424.0	9.50	53.00	2,421.0	33.6	44.9	-44.5	2.24	2.11	5.16
2,518.0	10.70	55.90	2,513.5	43.2	58.3	-57.9	1.39	1.28	3.09
2,614.0	11.00	54.10	2,607.8	53.6	73.1	-72.5	0.47	0.31	-1.88
2,708.0	11.70	48.50	2,700.0	65.2	87.5	-86.8	1.39	0.74	-5.96
2,802.0	10.60	47.90	2,792.2	77.3	101.1	-100.2	1.18	-1.17	-0.64
2,897.0	10.40	45.70	2,885.6	89.1	113.7	-112.7	0.47	-0.21	-2.32
2,991.0	10.30	44.60	2,978.1	101.0	125.7	-124.6	0.24	-0.11	-1.17
3,086.0	9.80	43.70	3,071.6	112.9	137.2	-136.0	0.55	-0.53	-0.95
3,180.0	9.10	40.20	3,164.3	124.4	147.6	-146.2	0.96	-0.74	-3.72
3,275.0	8.90	42.80	3,258.2	135.5	157.4	-155.9	0.48	-0.21	2.74
3,369.0	10.50	45.70	3,350.8	146.8	168.5	-166.9	1.78	1.70	3.09
3,464.0	10.00	43.90	3,444.3	158.8	180.4	-178.6	0.62	-0.53	-1.89
3,558.0	9.40	42.00	3,537.0	170.4	191.2	-189.3	0.72	-0.64	-2.02
3,652.0	11.70	39.70	3,629.4	183.4	202.4	-200.4	2.49	2.45	-2.45
3,747.0	12.00	37.00	3,722.3	198.7	214.5	-212.3	0.66	0.32	-2.84
3,842.0	12.20	35.60	3,815.2	214.8	226.3	-223.9	0.37	0.21	-1.47
3,936.0	11.90	43.40	3,907.2	229.9	238.7	-236.2	1.76	-0.32	8.30
4,031.0	11.20	43.00	4,000.2	243.8	251.7	-249.1	0.74	-0.74	-0.42
4,126.0	10.60	42.30	4,093.5	257.0	263.9	-261.1	0.65	-0.63	-0.74
4,220.0	10.50	42.00	4,185.9	269.7	275.5	-272.5	0.12	-0.11	-0.32
4,315.0	10.30	41.80	4,279.4	282.5	286.9	-283.8	0.21	-0.21	-0.21
4,409.0	10.10	41.10	4,371.9	295.0	297.9	-294.7	0.25	-0.21	-0.74
4,504.0	9.50	39.70	4,465.5	307.3	308.4	-305.1	0.68	-0.63	-1.47
4,599.0	8.60	38.60	4,559.3	318.9	317.9	-314.4	0.96	-0.95	-1.16
4,694.0	9.70	47.60	4,653.1	329.8	328.2	-324.6	1.90	1.16	9.47
4,789.0	9.20	44.30	4,746.8	340.6	339.4	-335.7	0.78	-0.53	-3.47
4,884.0	10.20	46.40	4,840.5	351.9	350.8	-347.0	1.12	1.05	2.21
4,979.0	9.80	45.70	4,934.0	363.3	362.7	-358.7	0.44	-0.42	-0.74

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Site:	Ward 20-M Pad Sec. 20-T6N-R66W	MD Reference:	WELL @ 4753.0ft (RKB - 25')
Well:	Ward U-20-19HN	North Reference:	True
Wellbore:	Ward U-20-19HN Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	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)
5,074.0	9.10	44.10	5,027.7	374.4	373.7	-369.6	0.79	-0.74	-1.68
5,169.0	10.10	42.00	5,121.4	386.0	384.5	-380.3	1.12	1.05	-2.21
5,264.0	9.20	38.60	5,215.1	398.1	394.8	-390.5	1.12	-0.95	-3.58
5,358.0	10.10	43.40	5,307.7	409.9	405.2	-400.7	1.28	0.96	5.11
5,453.0	9.10	40.70	5,401.4	421.7	415.8	-411.2	1.15	-1.05	-2.84
5,547.0	8.30	39.00	5,494.3	432.6	424.9	-420.2	0.89	-0.85	-1.81
5,646.0	7.40	35.50	5,592.4	443.3	433.1	-428.3	1.03	-0.91	-3.54
5,741.0	6.50	33.40	5,686.7	452.8	439.6	-434.7	0.98	-0.95	-2.21
5,835.0	5.60	41.10	5,780.2	460.7	445.6	-440.5	1.29	-0.96	8.19
5,929.0	4.90	52.50	5,873.8	466.6	451.8	-446.7	1.33	-0.74	12.13
6,054.0	2.20	36.00	5,998.5	471.8	457.4	-452.3	2.29	-2.16	-13.20
6,147.0	0.40	266.80	6,091.5	473.2	458.1	-453.0	2.66	-1.94	-138.93
6,242.0	0.40	310.40	6,186.5	473.4	457.6	-452.4	0.31	0.00	45.89
6,337.0	6.20	274.30	6,281.3	474.0	452.2	-447.0	6.19	6.11	-38.00
6,432.0	14.30	277.90	6,374.7	476.0	435.4	-430.2	8.55	8.53	3.79
6,526.0	19.50	266.30	6,464.7	476.6	408.2	-403.0	6.57	5.53	-12.34
6,621.0	25.40	270.80	6,552.4	475.9	372.0	-366.8	6.46	6.21	4.74
6,716.0	32.60	270.00	6,635.5	476.2	326.0	-320.8	7.59	7.58	-0.84
6,810.0	40.10	266.10	6,711.1	474.1	270.4	-265.2	8.35	7.98	-4.15
6,905.0	46.80	268.00	6,780.1	470.8	205.2	-200.0	7.18	7.05	2.00
7,000.0	55.70	271.40	6,839.5	470.6	131.2	-126.1	9.77	9.37	3.58
7,095.0	64.40	271.20	6,886.9	472.4	49.0	-43.8	9.16	9.16	-0.21
7,190.0	72.10	267.70	6,922.0	471.5	-39.2	44.3	8.80	8.11	-3.68
7,284.0	78.30	266.30	6,946.0	466.7	-129.9	135.0	6.75	6.60	-1.49
7,379.0	85.60	265.20	6,959.3	459.8	-223.6	228.6	7.77	7.68	-1.16
7,474.0	90.10	267.50	6,962.9	453.7	-318.3	323.3	5.32	4.74	2.42
7,569.0	89.70	267.10	6,963.1	449.2	-413.2	418.1	0.60	-0.42	-0.42
7,663.0	90.30	268.20	6,963.1	445.4	-507.2	512.0	1.33	0.64	1.17
7,758.0	90.20	267.80	6,962.6	442.1	-602.1	606.9	0.43	-0.11	-0.42
7,853.0	90.50	268.50	6,962.1	439.0	-697.0	701.8	0.80	0.32	0.74
7,947.0	90.60	268.00	6,961.2	436.1	-791.0	795.7	0.54	0.11	-0.53
8,042.0	90.50	267.50	6,960.3	432.4	-885.9	890.6	0.54	-0.11	-0.53
8,136.0	90.30	267.30	6,959.6	428.1	-979.8	984.4	0.30	-0.21	-0.21
8,231.0	90.10	269.30	6,959.3	425.3	-1,074.8	1,079.3	2.12	-0.21	2.11
8,326.0	90.10	268.20	6,959.1	423.2	-1,169.8	1,174.3	1.16	0.00	-1.16
8,421.0	90.60	269.40	6,958.5	421.3	-1,264.7	1,269.2	1.37	0.53	1.26
8,515.0	90.90	270.00	6,957.3	420.8	-1,358.7	1,363.2	0.71	0.32	0.64
8,610.0	90.70	269.80	6,956.0	420.6	-1,453.7	1,458.2	0.30	-0.21	-0.21
8,705.0	90.70	269.60	6,954.8	420.1	-1,548.7	1,553.2	0.21	0.00	-0.21
8,799.0	90.40	270.30	6,953.9	420.0	-1,642.7	1,647.2	0.81	-0.32	0.74
8,894.0	90.00	269.60	6,953.6	419.9	-1,737.7	1,742.1	0.85	-0.42	-0.74
8,989.0	90.00	269.40	6,953.6	419.1	-1,832.7	1,837.1	0.21	0.00	-0.21
9,083.0	89.50	268.90	6,954.0	417.7	-1,926.7	1,931.1	0.75	-0.53	-0.53

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Design:	Wellbore #1	Database:	US_EDM

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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)
9,178.0	89.20	269.10	6,955.1	416.1	-2,021.7	2,026.1	0.38	-0.32	0.21
9,273.0	90.60	267.70	6,955.2	413.4	-2,116.6	2,121.0	2.08	1.47	-1.47
9,368.0	90.40	266.30	6,954.4	408.4	-2,211.5	2,215.8	1.49	-0.21	-1.47
9,463.0	90.60	268.50	6,953.6	404.1	-2,306.4	2,310.6	2.33	0.21	2.32
9,557.0	90.20	267.80	6,952.9	401.1	-2,400.3	2,404.5	0.86	-0.43	-0.74
9,652.0	89.80	267.30	6,952.9	397.0	-2,495.2	2,499.4	0.67	-0.42	-0.53
9,746.0	90.30	268.90	6,952.8	393.9	-2,589.2	2,593.3	1.78	0.53	1.70
9,841.0	89.40	268.50	6,953.1	391.8	-2,684.2	2,688.2	1.04	-0.95	-0.42
9,936.0	90.70	268.70	6,953.0	389.4	-2,779.1	2,783.2	1.38	1.37	0.21
10,031.0	90.20	268.50	6,952.2	387.1	-2,874.1	2,878.1	0.57	-0.53	-0.21
10,126.0	89.90	268.20	6,952.2	384.4	-2,969.0	2,973.0	0.45	-0.32	-0.32
10,221.0	89.20	267.30	6,952.9	380.6	-3,064.0	3,067.9	1.20	-0.74	-0.95
10,315.0	90.20	269.40	6,953.4	377.9	-3,157.9	3,161.8	2.47	1.06	2.23
10,410.0	90.00	269.60	6,953.2	377.1	-3,252.9	3,256.8	0.30	-0.21	0.21
10,505.0	90.50	269.30	6,952.8	376.2	-3,347.9	3,351.8	0.61	0.53	-0.32
10,599.0	90.20	269.10	6,952.2	374.9	-3,441.9	3,445.8	0.38	-0.32	-0.21
10,694.0	92.80	269.40	6,949.8	373.6	-3,536.9	3,540.7	2.75	2.74	0.32
10,789.0	90.60	269.40	6,946.9	372.7	-3,631.8	3,635.6	2.32	-2.32	0.00
10,884.0	90.30	269.10	6,946.2	371.4	-3,726.8	3,730.6	0.45	-0.32	-0.32
10,978.0	89.60	268.50	6,946.3	369.4	-3,820.8	3,824.6	0.98	-0.74	-0.64
11,073.0	90.70	268.50	6,946.0	367.0	-3,915.7	3,919.5	1.16	1.16	0.00
11,168.0	90.70	267.80	6,944.9	363.9	-4,010.7	4,014.4	0.74	0.00	-0.74
11,263.0	90.70	267.80	6,943.7	360.2	-4,105.6	4,109.3	0.00	0.00	0.00
11,358.0	90.10	267.10	6,943.0	356.0	-4,200.5	4,204.1	0.97	-0.63	-0.74
11,453.0	90.80	268.90	6,942.3	352.7	-4,295.4	4,299.0	2.03	0.74	1.89
11,547.0	90.40	268.00	6,941.3	350.2	-4,389.4	4,392.9	1.05	-0.43	-0.96
11,642.0	90.70	270.80	6,940.4	349.2	-4,484.4	4,487.9	2.96	0.32	2.95
11,737.0	91.00	270.10	6,939.0	349.9	-4,579.4	4,582.9	0.80	0.32	-0.74
11,832.0	90.70	268.50	6,937.6	348.7	-4,674.3	4,677.9	1.71	-0.32	-1.68
11,927.0	90.30	268.00	6,936.8	345.8	-4,769.3	4,772.8	0.67	-0.42	-0.53
12,021.0	90.10	270.00	6,936.4	344.2	-4,863.3	4,866.7	2.14	-0.21	2.13
12,116.0	89.80	268.40	6,936.5	342.9	-4,958.3	4,961.7	1.71	-0.32	-1.68
12,211.0	89.80	268.00	6,936.8	339.9	-5,053.2	5,056.6	0.42	0.00	-0.42
12,306.0	90.20	267.50	6,936.8	336.2	-5,148.1	5,151.5	0.67	0.42	-0.53
12,401.0	89.90	269.60	6,936.8	333.8	-5,243.1	5,246.4	2.23	-0.32	2.21
12,496.0	90.30	269.40	6,936.6	332.9	-5,338.1	5,341.4	0.47	0.42	-0.21
12,590.0	90.00	268.90	6,936.3	331.5	-5,432.1	5,435.4	0.62	-0.32	-0.53
12,685.0	90.20	268.70	6,936.2	329.5	-5,527.1	5,530.3	0.30	0.21	-0.21
12,780.0	90.40	268.50	6,935.7	327.2	-5,622.0	5,625.3	0.30	0.21	-0.21
12,875.0	90.60	268.40	6,934.9	324.7	-5,717.0	5,720.2	0.24	0.21	-0.11
12,969.0	90.00	268.50	6,934.4	322.1	-5,811.0	5,814.1	0.65	-0.64	0.11
13,064.0	90.00	268.00	6,934.4	319.2	-5,905.9	5,909.0	0.53	0.00	-0.53
13,159.0	90.70	267.80	6,933.8	315.7	-6,000.9	6,003.9	0.77	0.74	-0.21

Company:	Bayswater Exploration & Production, LLC	Local Co-ordinate Reference:	Well Ward U-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 U-20-19HN	North Reference:	True
Wellbore:	Ward U-20-19HN Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	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)
13,253.0	90.30	266.80	6,933.0	311.3	-6,094.7	6,097.8	1.15	-0.43	-1.06
13,348.0	90.60	266.80	6,932.2	306.0	-6,189.6	6,192.5	0.32	0.32	0.00
13,443.0	90.50	268.50	6,931.3	302.1	-6,284.5	6,287.4	1.79	-0.11	1.79
13,538.0	89.70	267.50	6,931.1	298.8	-6,379.4	6,382.3	1.35	-0.84	-1.05
13,633.0	90.40	269.80	6,931.1	296.6	-6,474.4	6,477.2	2.53	0.74	2.42
13,728.0	90.00	268.90	6,930.7	295.5	-6,569.4	6,572.2	1.04	-0.42	-0.95
13,823.0	89.70	268.00	6,931.0	292.9	-6,664.4	6,667.2	1.00	-0.32	-0.95
13,917.0	89.10	267.50	6,932.0	289.2	-6,758.3	6,761.0	0.83	-0.64	-0.53
14,012.0	90.10	268.70	6,932.6	286.1	-6,853.2	6,855.9	1.64	1.05	1.26
14,107.0	90.30	268.90	6,932.3	284.1	-6,948.2	6,950.9	0.30	0.21	0.21
14,202.0	90.40	268.50	6,931.7	281.9	-7,043.2	7,045.8	0.43	0.11	-0.42
14,296.0	90.70	267.70	6,930.8	278.8	-7,137.1	7,139.7	0.91	0.32	-0.85
14,391.0	90.70	267.00	6,929.6	274.4	-7,232.0	7,234.6	0.74	0.00	-0.74
14,486.0	89.90	268.90	6,929.1	271.0	-7,327.0	7,329.5	2.17	-0.84	2.00
14,581.0	90.30	268.70	6,929.0	269.0	-7,421.9	7,424.4	0.47	0.42	-0.21
14,675.0	90.00	267.50	6,928.7	265.9	-7,515.9	7,518.3	1.32	-0.32	-1.28
14,770.0	90.50	267.80	6,928.3	262.0	-7,610.8	7,613.2	0.61	0.53	0.32
14,865.0	90.70	267.10	6,927.3	257.8	-7,705.7	7,708.0	0.77	0.21	-0.74
14,960.0	91.10	267.00	6,925.8	252.9	-7,800.6	7,802.8	0.43	0.42	-0.11
15,054.0	90.00	268.20	6,924.9	249.0	-7,894.5	7,896.7	1.73	-1.17	1.28
15,149.0	90.10	267.70	6,924.8	245.6	-7,989.4	7,991.6	0.54	0.11	-0.53
15,244.0	90.30	267.30	6,924.5	241.4	-8,084.3	8,086.5	0.47	0.21	-0.42
15,338.0	90.70	267.30	6,923.7	237.0	-8,178.2	8,180.3	0.43	0.43	0.00
15,433.0	91.00	266.80	6,922.3	232.1	-8,273.1	8,275.1	0.61	0.32	-0.53
15,528.0	89.10	267.30	6,922.2	227.2	-8,367.9	8,369.9	2.07	-2.00	0.53
15,623.0	89.90	267.80	6,923.0	223.2	-8,462.8	8,464.8	0.99	0.84	0.53
15,717.0	89.20	266.60	6,923.8	218.6	-8,556.7	8,558.6	1.48	-0.74	-1.28
15,809.0	88.80	267.30	6,925.4	213.7	-8,648.6	8,650.4	0.88	-0.43	0.76
15,904.0	90.50	268.70	6,926.0	210.4	-8,743.5	8,745.3	2.32	1.79	1.47
15,999.0	89.80	269.10	6,925.7	208.5	-8,838.5	8,840.2	0.85	-0.74	0.42
16,094.0	91.80	269.30	6,924.4	207.2	-8,933.5	8,935.2	2.12	2.11	0.21
16,189.0	92.90	267.30	6,920.5	204.4	-9,028.4	9,030.0	2.40	1.16	-2.11
16,283.0	91.50	266.30	6,916.9	199.1	-9,122.1	9,123.8	1.83	-1.49	-1.06
16,378.0	90.30	265.90	6,915.4	192.7	-9,216.9	9,218.4	1.33	-1.26	-0.42
16,473.0	90.50	266.30	6,914.7	186.2	-9,311.7	9,313.1	0.47	0.21	0.42
16,568.0	90.70	268.20	6,913.7	181.7	-9,406.6	9,408.0	2.01	0.21	2.00
16,663.0	90.30	266.60	6,912.9	177.4	-9,501.5	9,502.8	1.74	-0.42	-1.68
16,757.0	90.10	267.10	6,912.6	172.2	-9,595.3	9,596.6	0.57	-0.21	0.53
16,852.0	89.80	267.50	6,912.7	167.7	-9,690.2	9,691.5	0.53	-0.32	0.42
16,947.0	91.80	266.10	6,911.3	162.4	-9,785.0	9,786.2	2.57	2.11	-1.47
17,042.0	89.30	266.80	6,910.4	156.5	-9,879.8	9,881.0	2.73	-2.63	0.74
17,137.0	90.70	265.40	6,910.4	150.1	-9,974.6	9,975.7	2.08	1.47	-1.47
17,232.0	90.20	266.30	6,909.7	143.2	-10,069.4	10,070.3	1.08	-0.53	0.95
17,326.0	89.70	266.10	6,909.7	137.0	-10,163.2	10,164.0	0.57	-0.53	-0.21

Company:	Bayswater Exploration & Production, LLC	Local Co-ordinate Reference:	Well Ward U-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 U-20-19HN	North Reference:	True
Wellbore:	Ward U-20-19HN Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	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)	
17,421.0	90.00	267.10	6,910.0	131.3	-10,258.0	10,258.8	1.10	0.32	1.05	
17,516.0	89.70	266.30	6,910.2	125.9	-10,352.8	10,353.6	0.90	-0.32	-0.84	
17,597.0	89.30	266.10	6,911.0	120.5	-10,433.6	10,434.3	0.55	-0.49	-0.25	
17,652.0	89.30	266.10	6,911.6	116.8	-10,488.5	10,489.2	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
SHL 304'FSL, 213'FEL, : - hit/miss target - Shape - Point	0.00	0.00	1.0	0.0	0.0	1,413,837.19	3,196,666.06	40.467233		-104.793156
BHL 741'FSL, 470'FWL, - survey misses target center by 3.9ft at 17643.5ft MD (6911.5 TVD, 117.3 N, -10480.0 E) - Point	0.00	0.00	6,913.0	113.7	-10,479.8	1,413,867.35	3,186,186.12	40.467539		-104.830820
Boreline Vertex 748'FSL - survey misses target center by 9.5ft at 14945.5ft MD (6926.1 TVD, 253.7 N, -7786.1 E) - Point	0.00	0.00	6,926.0	263.2	-7,786.6	1,414,038.28	3,188,877.91	40.467952		-104.821141
Boreline Vertex 752'FSL - survey misses target center by 2.8ft at 12267.4ft MD (6936.9 TVD, 337.8 N, -5109.5 E) - Point	0.00	0.00	6,939.0	339.7	-5,109.6	1,414,136.14	3,191,554.09	40.468164		-104.811520

Checked By: _____ Approved By: _____ Date: _____