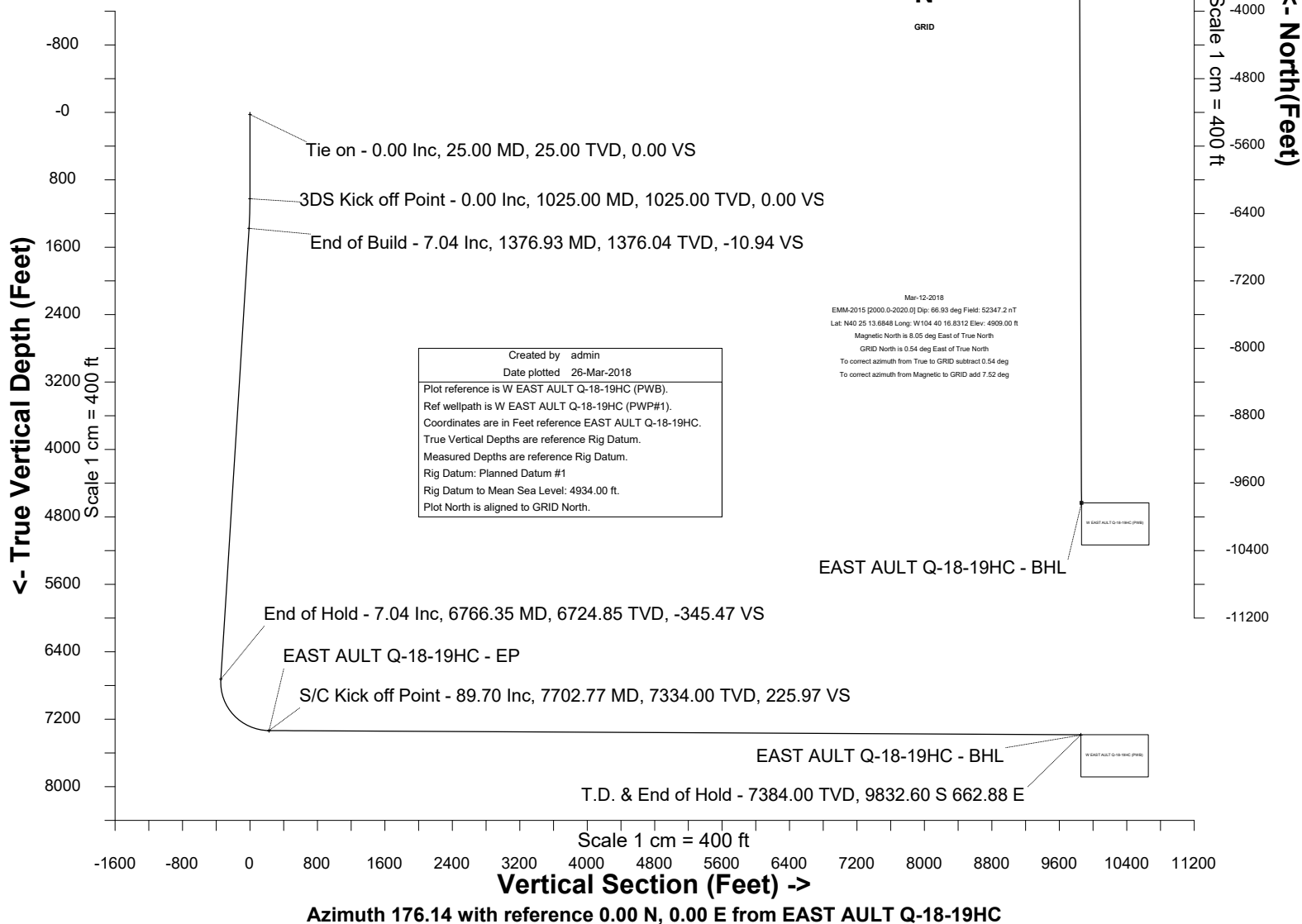


# BAYSWATER E & P, LLC

Location	Weld County, CO	Slot	EAST AULT Q-18-19HC
Field	WATTENBERG	Well	W EAST AULT Q-18-19HC
Installation	East Ault Pad	Wellbore	W EAST AULT Q-18-19HC (PWB)

## WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	25.00	0.00	0.00	25.00	S 0.00	W 0.00		0.00
KOP	1025.00	0.00	55.71	1025.00	S 0.00	W 0.00	0.00	0.00
End of Build	1376.93	7.04	55.71	1376.04	N 12.16	E 17.84	2.00	-10.94
End of Hold	6766.35	7.04	55.71	6724.85	N 384.24	E 563.45	0.00	-345.47
Target EAST A...C - EP	7702.77	89.70	179.79	7334.00	S 184.18	E 627.50	10.00	225.97
T.D. & Target EAS...BHL	17351.38	89.70	179.79	7384.00	S 9832.60	E 662.88	0.00	9854.92





SYSDRILL  
Well Design Combined Report  
Wellbore: W EAST AULT Q-18-19HC (PWB)



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
EAST AULT Q-18-19HC	40.58167500	-104.70460900	1455736.2948	3220928.0049	58643.83N	9789.19W	0.00

Declination		
Date	Source	Time
Mar-12-2018	EMM-2015 [2000.0-2020.0]	20:03

Installation Details						
Name	Installation Position (Latitude)	Installation Position (Longitude)	Northing	Easting	Coord System Name	North Alignment
East Ault Pad	40.42046800	-104.67134200	1397094.8569	3230716.7970	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Summary Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
25.00	0.00	0.000	25.00	0.00N	0.00E		0.00	1455736.29	3220928.00
1025.00	0.00	55.710	1025.00	0.00N	0.00E	==>	0.00	1455736.29	3220928.00
1376.93	7.04	55.710	1376.04	12.16N	17.84E	2.00	-10.94	1455748.46	3220945.84
6766.35	7.04	55.710	6724.85	384.24N	563.45E	==>	-345.47	1456120.52	3221491.44
7702.77	89.70	179.790	7334.00	184.18S	627.50E	10.00	225.97	1455552.12	3221555.49
17351.38	89.70	179.790	7384.00	9832.60S	662.88E	==>	9854.92	1445903.97	3221590.87

Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
0.00	0.00	0.000	0.00	0.00N	0.00E		0.00	Rig Datum
25.00	0.00	0.000	25.00	0.00N	0.00E	==>	0.00	Slot Datum
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	
1000.00	0.00	0.000	1000.00	0.00N	0.00E	==>	0.00	
1100.00	1.50	55.710	1099.99	0.55N	0.81E	2.00	-0.50	
1200.00	3.50	55.710	1199.89	3.01N	4.41E	2.00	-2.71	
1300.00	5.50	55.710	1299.58	7.43N	10.90E	2.00	-6.68	
1400.00	7.04	55.710	1398.94	13.76N	20.17E	==>	-12.37	
1500.00	7.04	55.710	1498.19	20.66N	30.30E	==>	-18.58	
1600.00	7.04	55.710	1597.43	27.56N	40.42E	==>	-24.78	
1700.00	7.04	55.710	1696.68	34.47N	50.54E	==>	-30.99	
1800.00	7.04	55.710	1795.93	41.37N	60.67E	==>	-37.20	
1900.00	7.04	55.710	1895.17	48.28N	70.79E	==>	-43.40	
2000.00	7.04	55.710	1994.42	55.18N	80.92E	==>	-49.61	
2100.00	7.04	55.710	2093.67	62.08N	91.04E	==>	-55.82	
2200.00	7.04	55.710	2192.91	68.99N	101.16E	==>	-62.03	
2300.00	7.04	55.710	2292.16	75.89N	111.29E	==>	-68.23	
2400.00	7.04	55.710	2391.41	82.79N	121.41E	==>	-74.44	
2500.00	7.04	55.710	2490.65	89.70N	131.53E	==>	-80.65	
2600.00	7.04	55.710	2589.90	96.60N	141.66E	==>	-86.85	
2700.00	7.04	55.710	2689.14	103.51N	151.78E	==>	-93.06	
2800.00	7.04	55.710	2788.39	110.41N	161.91E	==>	-99.27	
2900.00	7.04	55.710	2887.64	117.31N	172.03E	==>	-105.48	
3000.00	7.04	55.710	2986.88	124.22N	182.15E	==>	-111.68	

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 4934.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 176.140 degrees  
Bottom hole distance is 9854.92 Feet on azimuth 176.14 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Microsoft  
Date Printed: 26-Mar-2018



SYS DRILL  
Well Design Combined Report  
Wellbore: W EAST AULT Q-18-19HC (PWB)



Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
3100.00	7.04	55.710	3086.13	131.12N	192.28E	==>	-117.89	
3200.00	7.04	55.710	3185.38	138.02N	202.40E	==>	-124.10	
3300.00	7.04	55.710	3284.62	144.93N	212.52E	==>	-130.30	
3400.00	7.04	55.710	3383.87	151.83N	222.65E	==>	-136.51	
3500.00	7.04	55.710	3483.12	158.74N	232.77E	==>	-142.72	
3600.00	7.04	55.710	3582.36	165.64N	242.90E	==>	-148.93	
3700.00	7.04	55.710	3681.61	172.54N	253.02E	==>	-155.13	
3800.00	7.04	55.710	3780.86	179.45N	263.14E	==>	-161.34	
3900.00	7.04	55.710	3880.10	186.35N	273.27E	==>	-167.55	
4000.00	7.04	55.710	3979.35	193.25N	283.39E	==>	-173.75	
4100.00	7.04	55.710	4078.59	200.16N	293.51E	==>	-179.96	
4200.00	7.04	55.710	4177.84	207.06N	303.64E	==>	-186.17	
4300.00	7.04	55.710	4277.09	213.97N	313.76E	==>	-192.38	
4400.00	7.04	55.710	4376.33	220.87N	323.89E	==>	-198.58	
4500.00	7.04	55.710	4475.58	227.77N	334.01E	==>	-204.79	
4600.00	7.04	55.710	4574.83	234.68N	344.13E	==>	-211.00	
4700.00	7.04	55.710	4674.07	241.58N	354.26E	==>	-217.20	
4800.00	7.04	55.710	4773.32	248.48N	364.38E	==>	-223.41	
4900.00	7.04	55.710	4872.57	255.39N	374.50E	==>	-229.62	
5000.00	7.04	55.710	4971.81	262.29N	384.63E	==>	-235.83	
5100.00	7.04	55.710	5071.06	269.20N	394.75E	==>	-242.03	
5200.00	7.04	55.710	5170.30	276.10N	404.88E	==>	-248.24	
5300.00	7.04	55.710	5269.55	283.00N	415.00E	==>	-254.45	
5400.00	7.04	55.710	5368.80	289.91N	425.12E	==>	-260.66	
5500.00	7.04	55.710	5468.04	296.81N	435.25E	==>	-266.86	
5600.00	7.04	55.710	5567.29	303.71N	445.37E	==>	-273.07	
5700.00	7.04	55.710	5666.54	310.62N	455.49E	==>	-279.28	
5800.00	7.04	55.710	5765.78	317.52N	465.62E	==>	-285.48	
5900.00	7.04	55.710	5865.03	324.43N	475.74E	==>	-291.69	
6000.00	7.04	55.710	5964.28	331.33N	485.87E	==>	-297.90	
6100.00	7.04	55.710	6063.52	338.23N	495.99E	==>	-304.11	
6200.00	7.04	55.710	6162.77	345.14N	506.11E	==>	-310.31	
6300.00	7.04	55.710	6262.02	352.04N	516.24E	==>	-316.52	
6400.00	7.04	55.710	6361.26	358.95N	526.36E	==>	-322.73	
6500.00	7.04	55.710	6460.51	365.85N	536.48E	==>	-328.93	
6600.00	7.04	55.710	6559.75	372.75N	546.61E	==>	-335.14	
6700.00	7.04	55.710	6659.00	379.66N	556.73E	==>	-341.35	
6800.00	5.86	84.180	6758.30	385.57N	566.86E	10.00	-346.57	
6900.00	11.07	148.330	6857.35	377.90N	577.01E	10.00	-338.23	
7000.00	20.25	163.730	6953.58	353.05N	586.93E	10.00	-312.77	
7100.00	29.95	169.600	7044.04	311.78N	596.31E	10.00	-270.97	
7200.00	39.78	172.770	7126.00	255.35N	604.86E	10.00	-214.09	
7300.00	49.68	174.840	7196.95	185.47N	612.33E	10.00	-143.86	
7400.00	59.60	176.380	7254.76	104.25N	618.50E	10.00	-62.41	
7500.00	69.54	177.630	7297.65	14.18N	623.16E	10.00	27.77	
7600.00	79.48	178.730	7324.33	82.02S	626.19E	10.00	123.95	
7700.00	89.43	179.760	7333.98	181.41S	627.49E	10.00	223.21	
7800.00	89.70	179.790	7334.50	281.41S	627.86E	==>	323.01	
7900.00	89.70	179.790	7335.02	381.41S	628.23E	==>	422.80	
8000.00	89.70	179.790	7335.54	481.41S	628.59E	==>	522.60	
8100.00	89.70	179.790	7336.06	581.41S	628.96E	==>	622.39	
8200.00	89.70	179.790	7336.58	681.40S	629.33E	==>	722.19	
8300.00	89.70	179.790	7337.09	781.40S	629.69E	==>	821.99	
8400.00	89.70	179.790	7337.61	881.40S	630.06E	==>	921.78	
8500.00	89.70	179.790	7338.13	981.40S	630.43E	==>	1021.58	
8600.00	89.70	179.790	7338.65	1081.40S	630.79E	==>	1121.38	
8700.00	89.70	179.790	7339.17	1181.39S	631.16E	==>	1221.17	
8800.00	89.70	179.790	7339.69	1281.39S	631.53E	==>	1320.97	
8900.00	89.70	179.790	7340.20	1381.39S	631.89E	==>	1420.76	

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Vertical Section is from 0.00N 0.00E on azimuth 176.140 degrees  
Bottom hole distance is 9854.92 Feet on azimuth 176.14 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Microsoft  
Date Printed: 26-Mar-2018



SYS DRILL  
Well Design Combined Report  
Wellbore: W EAST AULT Q-18-19HC (PWB)



Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
9000.00	89.70	179.790	7340.72	1481.39S	632.26E	==>	1520.56	
9100.00	89.70	179.790	7341.24	1581.39S	632.63E	==>	1620.36	
9200.00	89.70	179.790	7341.76	1681.38S	632.99E	==>	1720.15	
9300.00	89.70	179.790	7342.28	1781.38S	633.36E	==>	1819.95	
9400.00	89.70	179.790	7342.80	1881.38S	633.73E	==>	1919.75	
9500.00	89.70	179.790	7343.31	1981.38S	634.09E	==>	2019.54	
9600.00	89.70	179.790	7343.83	2081.38S	634.46E	==>	2119.34	
9700.00	89.70	179.790	7344.35	2181.37S	634.83E	==>	2219.13	
9800.00	89.70	179.790	7344.87	2281.37S	635.19E	==>	2318.93	
9900.00	89.70	179.790	7345.39	2381.37S	635.56E	==>	2418.73	
10000.00	89.70	179.790	7345.90	2481.37S	635.93E	==>	2518.52	
10100.00	89.70	179.790	7346.42	2581.37S	636.29E	==>	2618.32	
10200.00	89.70	179.790	7346.94	2681.36S	636.66E	==>	2718.11	
10300.00	89.70	179.790	7347.46	2781.36S	637.03E	==>	2817.91	
10400.00	89.70	179.790	7347.98	2881.36S	637.39E	==>	2917.71	
10500.00	89.70	179.790	7348.50	2981.36S	637.76E	==>	3017.50	
10600.00	89.70	179.790	7349.01	3081.35S	638.13E	==>	3117.30	
10700.00	89.70	179.790	7349.53	3181.35S	638.49E	==>	3217.10	
10800.00	89.70	179.790	7350.05	3281.35S	638.86E	==>	3316.89	
10900.00	89.70	179.790	7350.57	3381.35S	639.23E	==>	3416.69	
11000.00	89.70	179.790	7351.09	3481.35S	639.59E	==>	3516.48	
11100.00	89.70	179.790	7351.60	3581.34S	639.96E	==>	3616.28	
11200.00	89.70	179.790	7352.12	3681.34S	640.33E	==>	3716.08	
11300.00	89.70	179.790	7352.64	3781.34S	640.69E	==>	3815.87	
11400.00	89.70	179.790	7353.16	3881.34S	641.06E	==>	3915.67	
11500.00	89.70	179.790	7353.68	3981.34S	641.43E	==>	4015.46	
11600.00	89.70	179.790	7354.20	4081.33S	641.79E	==>	4115.26	
11700.00	89.70	179.790	7354.71	4181.33S	642.16E	==>	4215.06	
11800.00	89.70	179.790	7355.23	4281.33S	642.53E	==>	4314.85	
11900.00	89.70	179.790	7355.75	4381.33S	642.89E	==>	4414.65	
12000.00	89.70	179.790	7356.27	4481.33S	643.26E	==>	4514.45	
12100.00	89.70	179.790	7356.79	4581.32S	643.63E	==>	4614.24	
12200.00	89.70	179.790	7357.31	4681.32S	643.99E	==>	4714.04	
12300.00	89.70	179.790	7357.82	4781.32S	644.36E	==>	4813.83	
12400.00	89.70	179.790	7358.34	4881.32S	644.73E	==>	4913.63	
12500.00	89.70	179.790	7358.86	4981.32S	645.09E	==>	5013.43	
12600.00	89.70	179.790	7359.38	5081.31S	645.46E	==>	5113.22	
12700.00	89.70	179.790	7359.90	5181.31S	645.83E	==>	5213.02	
12800.00	89.70	179.790	7360.41	5281.31S	646.19E	==>	5312.82	
12900.00	89.70	179.790	7360.93	5381.31S	646.56E	==>	5412.61	
13000.00	89.70	179.790	7361.45	5481.31S	646.93E	==>	5512.41	
13100.00	89.70	179.790	7361.97	5581.30S	647.29E	==>	5612.20	
13200.00	89.70	179.790	7362.49	5681.30S	647.66E	==>	5712.00	
13300.00	89.70	179.790	7363.01	5781.30S	648.03E	==>	5811.80	
13400.00	89.70	179.790	7363.52	5881.30S	648.39E	==>	5911.59	
13500.00	89.70	179.790	7364.04	5981.30S	648.76E	==>	6011.39	
13600.00	89.70	179.790	7364.56	6081.29S	649.13E	==>	6111.18	
13700.00	89.70	179.790	7365.08	6181.29S	649.49E	==>	6210.98	
13800.00	89.70	179.790	7365.60	6281.29S	649.86E	==>	6310.78	
13900.00	89.70	179.790	7366.11	6381.29S	650.23E	==>	6410.57	
14000.00	89.70	179.790	7366.63	6481.29S	650.59E	==>	6510.37	
14100.00	89.70	179.790	7367.15	6581.28S	650.96E	==>	6610.17	
14200.00	89.70	179.790	7367.67	6681.28S	651.33E	==>	6709.96	
14300.00	89.70	179.790	7368.19	6781.28S	651.69E	==>	6809.76	
14400.00	89.70	179.790	7368.71	6881.28S	652.06E	==>	6909.55	
14500.00	89.70	179.790	7369.22	6981.28S	652.43E	==>	7009.35	
14600.00	89.70	179.790	7369.74	7081.27S	652.79E	==>	7109.15	
14700.00	89.70	179.790	7370.26	7181.27S	653.16E	==>	7208.94	
14800.00	89.70	179.790	7370.78	7281.27S	653.53E	==>	7308.74	

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Vertical Section is from 0.00N 0.00E on azimuth 176.140 degrees  
Bottom hole distance is 9854.92 Feet on azimuth 176.14 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Microsoft  
Date Printed: 26-Mar-2018



SYS DRILL  
Well Design Combined Report  
Wellbore: W EAST AULT Q-18-19HC (PWB)



Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
14900.00	89.70	179.790	7371.30	7381.27S	653.89E	==>	7408.53	
15000.00	89.70	179.790	7371.81	7481.27S	654.26E	==>	7508.33	
15100.00	89.70	179.790	7372.33	7581.26S	654.63E	==>	7608.13	
15200.00	89.70	179.790	7372.85	7681.26S	654.99E	==>	7707.92	
15300.00	89.70	179.790	7373.37	7781.26S	655.36E	==>	7807.72	
15400.00	89.70	179.790	7373.89	7881.26S	655.73E	==>	7907.52	
15500.00	89.70	179.790	7374.41	7981.26S	656.09E	==>	8007.31	
15600.00	89.70	179.790	7374.92	8081.25S	656.46E	==>	8107.11	
15700.00	89.70	179.790	7375.44	8181.25S	656.83E	==>	8206.90	
15800.00	89.70	179.790	7375.96	8281.25S	657.19E	==>	8306.70	
15900.00	89.70	179.790	7376.48	8381.25S	657.56E	==>	8406.50	
16000.00	89.70	179.790	7377.00	8481.25S	657.93E	==>	8506.29	
16100.00	89.70	179.790	7377.52	8581.24S	658.29E	==>	8606.09	
16200.00	89.70	179.790	7378.03	8681.24S	658.66E	==>	8705.89	
16300.00	89.70	179.790	7378.55	8781.24S	659.03E	==>	8805.68	
16400.00	89.70	179.790	7379.07	8881.24S	659.39E	==>	8905.48	
16500.00	89.70	179.790	7379.59	8981.24S	659.76E	==>	9005.27	
16600.00	89.70	179.790	7380.11	9081.23S	660.13E	==>	9105.07	
16700.00	89.70	179.790	7380.62	9181.23S	660.49E	==>	9204.87	
16800.00	89.70	179.790	7381.14	9281.23S	660.86E	==>	9304.66	
16900.00	89.70	179.790	7381.66	9381.23S	661.23E	==>	9404.46	
17000.00	89.70	179.790	7382.18	9481.23S	661.59E	==>	9504.25	
17100.00	89.70	179.790	7382.70	9581.22S	661.96E	==>	9604.05	
17200.00	89.70	179.790	7383.22	9681.22S	662.33E	==>	9703.85	
17300.00	89.70	179.790	7383.73	9781.22S	662.69E	==>	9803.64	
17351.38	89.70	179.790	7384.00	9832.60S	662.88E	==>	9854.92	

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 4934.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 176.140 degrees  
Bottom hole distance is 9854.92 Feet on azimuth 176.14 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Microsoft  
Date Printed: 26-Mar-2018



SYSDRILL  
Well Design Combined Report  
Wellbore: W EAST AULT Q-18-19HC (PWB)



Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
EAST AULT Q-18-19HC - BHL	9832.60S	662.88E	7384.00	40.55467100	-104.70254100	1445903.97	3221590.87
EAST AULT Q-18-19HC - EP	184.18S	627.50E	7334.00	40.58115400	-104.70235600	1455552.12	3221555.49

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
620300	Planned	1500.00	1498.19	WdW Rate Gyro	Standard
620299	Planned	17351.38	7384.00	ISCWSA MWD	Rev 4 + SAG + FLT

Notes