

BAYSWATER E & P, LLC

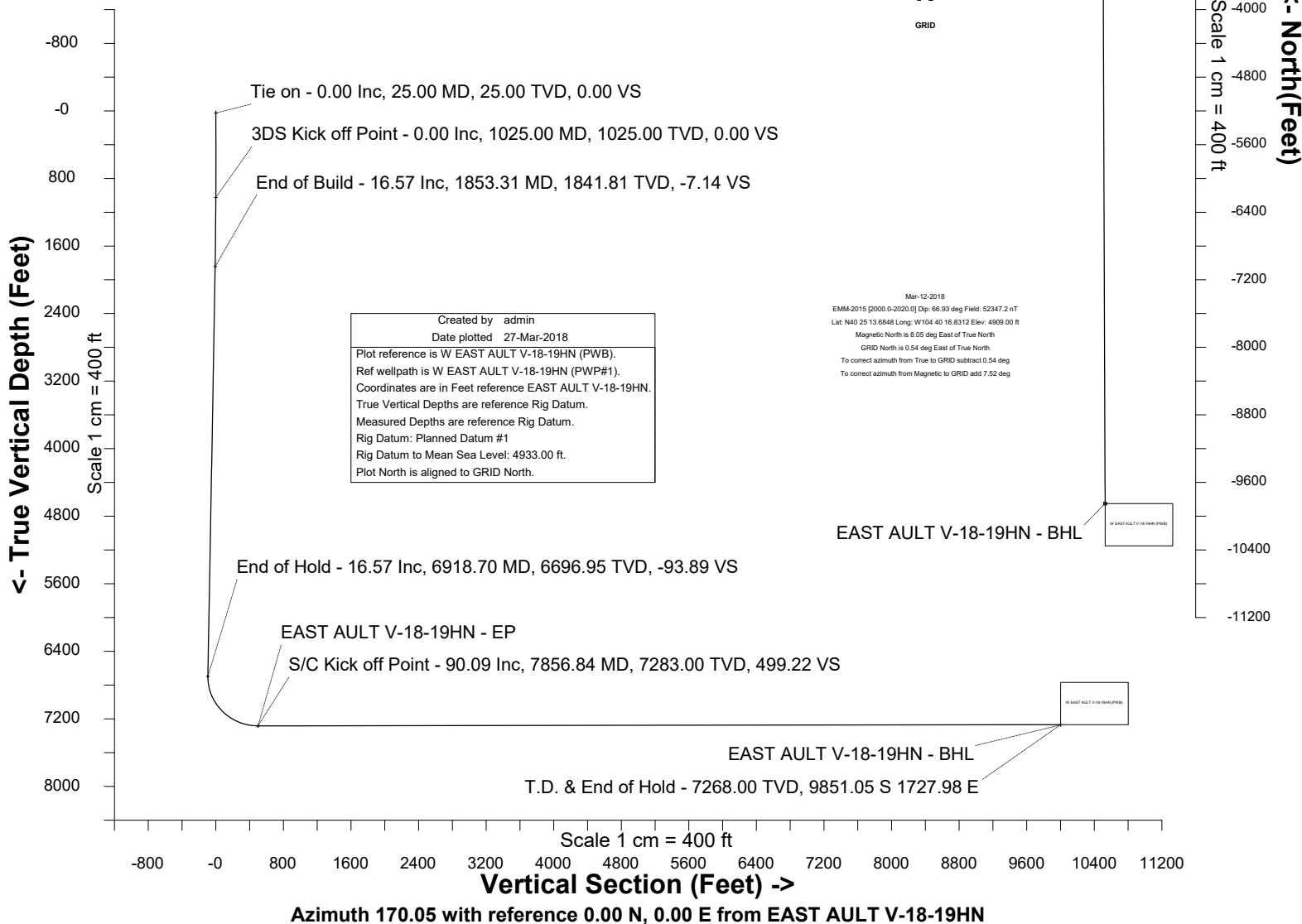
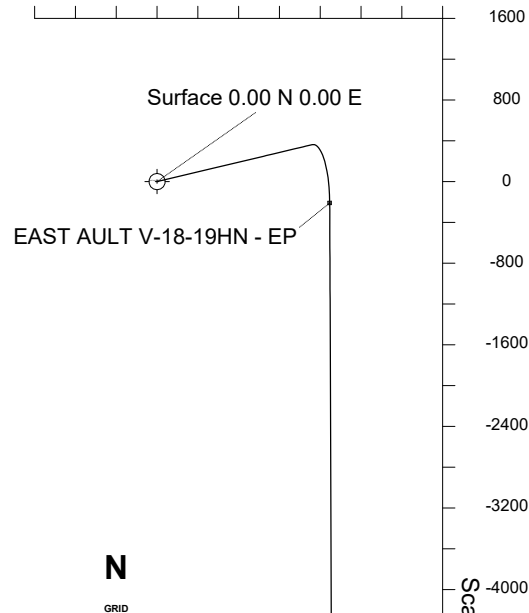
Location	Weld County, CO	Slot	EAST AULT V-18-19HN
Field	WATTENBERG	Well	W EAST AULT V-18-19HN
Installation	East Ault Pad	Wellbore	W EAST AULT V-18-19HN (PWB)

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	76.61	1025.00	S 0.00	W 0.00	0.00	0.00
End of Build	1853.31	16.57	76.61	1841.81	N 27.54	E 115.68	2.00	-7.14
End of Hold	6918.70	16.57	76.61	6696.95	N 362.06	E 1520.66	0.00	-93.89
Target EAST A...N - EP	7856.84	90.09	179.79	7283.00	S 209.91	E 1692.76	10.00	499.22
T.D. & Target EAS...BHL	17498.05	90.09	179.79	7268.00	S 9851.05	E 1727.98	0.00	10001.45

East (Feet) ->

-800 0 800 1600 2400
Scale 1 cm = 400 ft





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



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
EAST AULT V-18-19HN	40.58167000	-104.70428600	1455735.2782	3221017.7354	58642.81N	9699.46W	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	1455735.28	3221017.74
1025.00	0.00	76.610	1025.00	0.00N	0.00E	==>	0.00	1455735.28	3221017.74
1853.31	16.57	76.610	1841.81	27.54N	115.68E	2.00	-7.14	1455762.82	3221133.41
6918.70	16.57	76.610	6696.95	362.06N	1520.66E	==>	-93.89	1456097.33	3222538.35
7856.84	90.09	179.790	7283.00	209.91S	1692.76E	10.00	499.22	1455525.37	3222710.45
17498.05	90.09	179.790	7268.00	9851.05S	1727.98E	==>	10001.45	1445884.51	3222745.66

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	76.610	1099.99	0.23N	0.95E	2.00	-0.06	
1200.00	3.50	76.610	1199.89	1.24N	5.20E	2.00	-0.32	
1300.00	5.50	76.610	1299.58	3.05N	12.83E	2.00	-0.79	
1400.00	7.50	76.610	1398.93	5.68N	23.84E	2.00	-1.47	
1500.00	9.50	76.610	1497.83	9.10N	38.22E	2.00	-2.36	
1600.00	11.50	76.610	1596.15	13.32N	55.95E	2.00	-3.45	
1700.00	13.50	76.610	1693.77	18.33N	77.00E	2.00	-4.75	
1800.00	15.50	76.610	1790.58	24.13N	101.36E	2.00	-6.26	
1900.00	16.57	76.610	1886.57	30.63N	128.63E	==>	-7.94	
2000.00	16.57	76.610	1982.42	37.23N	156.37E	==>	-9.65	
2100.00	16.57	76.610	2078.27	43.83N	184.10E	==>	-11.37	
2200.00	16.57	76.610	2174.12	50.44N	211.84E	==>	-13.08	
2300.00	16.57	76.610	2269.97	57.04N	239.58E	==>	-14.79	
2400.00	16.57	76.610	2365.81	63.65N	267.32E	==>	-16.50	
2500.00	16.57	76.610	2461.66	70.25N	295.05E	==>	-18.22	
2600.00	16.57	76.610	2557.51	76.85N	322.79E	==>	-19.93	
2700.00	16.57	76.610	2653.36	83.46N	350.53E	==>	-21.64	
2800.00	16.57	76.610	2749.21	90.06N	378.26E	==>	-23.36	
2900.00	16.57	76.610	2845.06	96.67N	406.00E	==>	-25.07	
3000.00	16.57	76.610	2940.91	103.27N	433.74E	==>	-26.78	

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 4933.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 170.050 degrees
Bottom hole distance is 10001.45 Feet on azimuth 170.05 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Microsoft
Date Printed: 27-Mar-2018



SYSDRILL
Well Design Combined Report
Wellbore: W EAST AULT V-18-19HN (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	16.57	76.610	3036.76	109.88N	461.47E	==>	-28.49	
3200.00	16.57	76.610	3132.61	116.48N	489.21E	==>	-30.21	
3300.00	16.57	76.610	3228.46	123.08N	516.95E	==>	-31.92	
3400.00	16.57	76.610	3324.31	129.69N	544.68E	==>	-33.63	
3500.00	16.57	76.610	3420.16	136.29N	572.42E	==>	-35.34	
3600.00	16.57	76.610	3516.00	142.90N	600.16E	==>	-37.06	
3700.00	16.57	76.610	3611.85	149.50N	627.89E	==>	-38.77	
3800.00	16.57	76.610	3707.70	156.10N	655.63E	==>	-40.48	
3900.00	16.57	76.610	3803.55	162.71N	683.37E	==>	-42.19	
4000.00	16.57	76.610	3899.40	169.31N	711.11E	==>	-43.91	
4100.00	16.57	76.610	3995.25	175.92N	738.84E	==>	-45.62	
4200.00	16.57	76.610	4091.10	182.52N	766.58E	==>	-47.33	
4300.00	16.57	76.610	4186.95	189.12N	794.32E	==>	-49.04	
4400.00	16.57	76.610	4282.80	195.73N	822.05E	==>	-50.76	
4500.00	16.57	76.610	4378.65	202.33N	849.79E	==>	-52.47	
4600.00	16.57	76.610	4474.50	208.94N	877.53E	==>	-54.18	
4700.00	16.57	76.610	4570.34	215.54N	905.26E	==>	-55.89	
4800.00	16.57	76.610	4666.19	222.14N	933.00E	==>	-57.61	
4900.00	16.57	76.610	4762.04	228.75N	960.74E	==>	-59.32	
5000.00	16.57	76.610	4857.89	235.35N	988.47E	==>	-61.03	
5100.00	16.57	76.610	4953.74	241.96N	1016.21E	==>	-62.74	
5200.00	16.57	76.610	5049.59	248.56N	1043.95E	==>	-64.46	
5300.00	16.57	76.610	5145.44	255.16N	1071.68E	==>	-66.17	
5400.00	16.57	76.610	5241.29	261.77N	1099.42E	==>	-67.88	
5500.00	16.57	76.610	5337.14	268.37N	1127.16E	==>	-69.59	
5600.00	16.57	76.610	5432.99	274.98N	1154.89E	==>	-71.31	
5700.00	16.57	76.610	5528.84	281.58N	1182.63E	==>	-73.02	
5800.00	16.57	76.610	5624.68	288.18N	1210.37E	==>	-74.73	
5900.00	16.57	76.610	5720.53	294.79N	1238.11E	==>	-76.44	
6000.00	16.57	76.610	5816.38	301.39N	1265.84E	==>	-78.16	
6100.00	16.57	76.610	5912.23	308.00N	1293.58E	==>	-79.87	
6200.00	16.57	76.610	6008.08	314.60N	1321.32E	==>	-81.58	
6300.00	16.57	76.610	6103.93	321.20N	1349.05E	==>	-83.29	
6400.00	16.57	76.610	6199.78	327.81N	1376.79E	==>	-85.01	
6500.00	16.57	76.610	6295.63	334.41N	1404.53E	==>	-86.72	
6600.00	16.57	76.610	6391.48	341.02N	1432.26E	==>	-88.43	
6700.00	16.57	76.610	6487.33	347.62N	1460.00E	==>	-90.15	
6800.00	16.57	76.610	6583.18	354.22N	1487.74E	==>	-91.86	
6900.00	16.57	76.610	6679.03	360.83N	1515.47E	==>	-93.57	
7000.00	16.73	105.250	6774.97	361.67N	1543.26E	10.00	-89.60	
7100.00	21.52	132.490	6869.61	345.45N	1570.74E	10.00	-68.88	
7200.00	28.99	148.250	6960.09	312.37N	1597.09E	10.00	-31.74	
7300.00	37.58	157.660	7043.66	263.43N	1621.49E	10.00	20.68	
7400.00	46.67	163.910	7117.78	200.12N	1643.22E	10.00	86.80	
7500.00	56.01	168.500	7180.19	124.35N	1661.61E	10.00	164.60	
7600.00	65.49	172.180	7229.01	38.44N	1676.11E	10.00	251.73	
7700.00	75.04	175.330	7262.75	55.02S	1686.26E	10.00	345.53	
7800.00	84.63	178.200	7280.38	153.17S	1691.77E	10.00	443.15	
7900.00	90.09	179.790	7282.93	253.07S	1692.92E	==>	541.76	
8000.00	90.09	179.790	7282.78	353.07S	1693.29E	==>	640.32	
8100.00	90.09	179.790	7282.62	453.07S	1693.65E	==>	738.88	
8200.00	90.09	179.790	7282.47	553.07S	1694.02E	==>	837.43	
8300.00	90.09	179.790	7282.31	653.07S	1694.38E	==>	935.99	
8400.00	90.09	179.790	7282.15	753.07S	1694.75E	==>	1034.55	
8500.00	90.09	179.790	7282.00	853.07S	1695.11E	==>	1133.11	
8600.00	90.09	179.790	7281.84	953.07S	1695.48E	==>	1231.67	
8700.00	90.09	179.790	7281.69	1053.07S	1695.84E	==>	1330.23	
8800.00	90.09	179.790	7281.53	1153.07S	1696.21E	==>	1428.78	
8900.00	90.09	179.790	7281.38	1253.07S	1696.57E	==>	1527.34	

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 4933.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 170.050 degrees
Bottom hole distance is 10001.45 Feet on azimuth 170.05 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Microsoft
Date Printed: 27-Mar-2018



SYSDRILL
Well Design Combined Report
Wellbore: W EAST AULT V-18-19HN (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	90.09	179.790	7281.22	1353.06S	1696.94E	==>	1625.90	
9100.00	90.09	179.790	7281.07	1453.06S	1697.31E	==>	1724.46	
9200.00	90.09	179.790	7280.91	1553.06S	1697.67E	==>	1823.02	
9300.00	90.09	179.790	7280.75	1653.06S	1698.04E	==>	1921.58	
9400.00	90.09	179.790	7280.60	1753.06S	1698.40E	==>	2020.14	
9500.00	90.09	179.790	7280.44	1853.06S	1698.77E	==>	2118.69	
9600.00	90.09	179.790	7280.29	1953.06S	1699.13E	==>	2217.25	
9700.00	90.09	179.790	7280.13	2053.06S	1699.50E	==>	2315.81	
9800.00	90.09	179.790	7279.98	2153.06S	1699.86E	==>	2414.37	
9900.00	90.09	179.790	7279.82	2253.06S	1700.23E	==>	2512.93	
10000.00	90.09	179.790	7279.67	2353.06S	1700.59E	==>	2611.49	
10100.00	90.09	179.790	7279.51	2453.06S	1700.96E	==>	2710.05	
10200.00	90.09	179.790	7279.35	2553.06S	1701.32E	==>	2808.60	
10300.00	90.09	179.790	7279.20	2653.05S	1701.69E	==>	2907.16	
10400.00	90.09	179.790	7279.04	2753.05S	1702.05E	==>	3005.72	
10500.00	90.09	179.790	7278.89	2853.05S	1702.42E	==>	3104.28	
10600.00	90.09	179.790	7278.73	2953.05S	1702.78E	==>	3202.84	
10700.00	90.09	179.790	7278.58	3053.05S	1703.15E	==>	3301.40	
10800.00	90.09	179.790	7278.42	3153.05S	1703.51E	==>	3399.95	
10900.00	90.09	179.790	7278.27	3253.05S	1703.88E	==>	3498.51	
11000.00	90.09	179.790	7278.11	3353.05S	1704.24E	==>	3597.07	
11100.00	90.09	179.790	7277.95	3453.05S	1704.61E	==>	3695.63	
11200.00	90.09	179.790	7277.80	3553.05S	1704.97E	==>	3794.19	
11300.00	90.09	179.790	7277.64	3653.05S	1705.34E	==>	3892.75	
11400.00	90.09	179.790	7277.49	3753.05S	1705.71E	==>	3991.31	
11500.00	90.09	179.790	7277.33	3853.05S	1706.07E	==>	4089.86	
11600.00	90.09	179.790	7277.18	3953.04S	1706.44E	==>	4188.42	
11700.00	90.09	179.790	7277.02	4053.04S	1706.80E	==>	4286.98	
11800.00	90.09	179.790	7276.87	4153.04S	1707.17E	==>	4385.54	
11900.00	90.09	179.790	7276.71	4253.04S	1707.53E	==>	4484.10	
12000.00	90.09	179.790	7276.55	4353.04S	1707.90E	==>	4582.66	
12100.00	90.09	179.790	7276.40	4453.04S	1708.26E	==>	4681.22	
12200.00	90.09	179.790	7276.24	4553.04S	1708.63E	==>	4779.77	
12300.00	90.09	179.790	7276.09	4653.04S	1708.99E	==>	4878.33	
12400.00	90.09	179.790	7275.93	4753.04S	1709.36E	==>	4976.89	
12500.00	90.09	179.790	7275.78	4853.04S	1709.72E	==>	5075.45	
12600.00	90.09	179.790	7275.62	4953.04S	1710.09E	==>	5174.01	
12700.00	90.09	179.790	7275.46	5053.04S	1710.45E	==>	5272.57	
12800.00	90.09	179.790	7275.31	5153.03S	1710.82E	==>	5371.12	
12900.00	90.09	179.790	7275.15	5253.03S	1711.18E	==>	5469.68	
13000.00	90.09	179.790	7275.00	5353.03S	1711.55E	==>	5568.24	
13100.00	90.09	179.790	7274.84	5453.03S	1711.91E	==>	5666.80	
13200.00	90.09	179.790	7274.69	5553.03S	1712.28E	==>	5765.36	
13300.00	90.09	179.790	7274.53	5653.03S	1712.64E	==>	5863.92	
13400.00	90.09	179.790	7274.38	5753.03S	1713.01E	==>	5962.48	
13500.00	90.09	179.790	7274.22	5853.03S	1713.37E	==>	6061.03	
13600.00	90.09	179.790	7274.06	5953.03S	1713.74E	==>	6159.59	
13700.00	90.09	179.790	7273.91	6053.03S	1714.11E	==>	6258.15	
13800.00	90.09	179.790	7273.75	6153.03S	1714.47E	==>	6356.71	
13900.00	90.09	179.790	7273.60	6253.03S	1714.84E	==>	6455.27	
14000.00	90.09	179.790	7273.44	6353.03S	1715.20E	==>	6553.83	
14100.00	90.09	179.790	7273.29	6453.02S	1715.57E	==>	6652.39	
14200.00	90.09	179.790	7273.13	6553.02S	1715.93E	==>	6750.94	
14300.00	90.09	179.790	7272.98	6653.02S	1716.30E	==>	6849.50	
14400.00	90.09	179.790	7272.82	6753.02S	1716.66E	==>	6948.06	
14500.00	90.09	179.790	7272.66	6853.02S	1717.03E	==>	7046.62	
14600.00	90.09	179.790	7272.51	6953.02S	1717.39E	==>	7145.18	
14700.00	90.09	179.790	7272.35	7053.02S	1717.76E	==>	7243.74	
14800.00	90.09	179.790	7272.20	7153.02S	1718.12E	==>	7342.29	

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Vertical Section is from 0.00N 0.00E on azimuth 170.050 degrees
Bottom hole distance is 10001.45 Feet on azimuth 170.05 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Microsoft
Date Printed: 27-Mar-2018



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Well Design Combined Report
Wellbore: W EAST AULT V-18-19HN (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	90.09	179.790	7272.04	7253.02S	1718.49E	==>	7440.85	
15000.00	90.09	179.790	7271.89	7353.02S	1718.85E	==>	7539.41	
15100.00	90.09	179.790	7271.73	7453.02S	1719.22E	==>	7637.97	
15200.00	90.09	179.790	7271.58	7553.02S	1719.58E	==>	7736.53	
15300.00	90.09	179.790	7271.42	7653.02S	1719.95E	==>	7835.09	
15400.00	90.09	179.790	7271.26	7753.01S	1720.31E	==>	7933.65	
15500.00	90.09	179.790	7271.11	7853.01S	1720.68E	==>	8032.20	
15600.00	90.09	179.790	7270.95	7953.01S	1721.04E	==>	8130.76	
15700.00	90.09	179.790	7270.80	8053.01S	1721.41E	==>	8229.32	
15800.00	90.09	179.790	7270.64	8153.01S	1721.77E	==>	8327.88	
15900.00	90.09	179.790	7270.49	8253.01S	1722.14E	==>	8426.44	
16000.00	90.09	179.790	7270.33	8353.01S	1722.51E	==>	8525.00	
16100.00	90.09	179.790	7270.18	8453.01S	1722.87E	==>	8623.56	
16200.00	90.09	179.790	7270.02	8553.01S	1723.24E	==>	8722.11	
16300.00	90.09	179.790	7269.86	8653.01S	1723.60E	==>	8820.67	
16400.00	90.09	179.790	7269.71	8753.01S	1723.97E	==>	8919.23	
16500.00	90.09	179.790	7269.55	8853.01S	1724.33E	==>	9017.79	
16600.00	90.09	179.790	7269.40	8953.00S	1724.70E	==>	9116.35	
16700.00	90.09	179.790	7269.24	9053.00S	1725.06E	==>	9214.91	
16800.00	90.09	179.790	7269.09	9153.00S	1725.43E	==>	9313.46	
16900.00	90.09	179.790	7268.93	9253.00S	1725.79E	==>	9412.02	
17000.00	90.09	179.790	7268.77	9353.00S	1726.16E	==>	9510.58	
17100.00	90.09	179.790	7268.62	9453.00S	1726.52E	==>	9609.14	
17200.00	90.09	179.790	7268.46	9553.00S	1726.89E	==>	9707.70	
17300.00	90.09	179.790	7268.31	9653.00S	1727.25E	==>	9806.26	
17400.00	90.09	179.790	7268.15	9753.00S	1727.62E	==>	9904.82	
17498.05	90.09	179.790	7268.00	9851.05S	1727.98E	==>	10001.45	

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 4933.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 170.050 degrees
Bottom hole distance is 10001.45 Feet on azimuth 170.05 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Microsoft
Date Printed: 27-Mar-2018



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



Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
EAST AULT V-18-19HN - BHL	9851.05S	1727.98E	7268.00	40.55458900	-104.69838600	1445884.51	3222745.66
EAST AULT V-18-19HN - EP	209.91S	1692.76E	7283.00	40.58105200	-104.69819900	1455525.37	3222710.45

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
620352	Planned	1500.00	1497.83	WdW Rate Gyro	Standard
620351	Planned	17498.05	7268.00	ISCWSA MWD	Rev 4 + SAG + FLT

Notes



SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: W EAST AULT V-18-19HN (PWB)



Ellipse separations are reported ONLY if BOTH wells have uncertainty data
Only Depth and Magnetic Reference Field error terms are correlated across tie points
Scan limit is calculated on CENTRE to CENTRE distance
Summary data uses Closest Approach clearance calculation for all minima
Hole size/Casings ARE included
Hole size/Casings are NOT subtracted from Centre-Centre distance
Confidence limit of 95.00% / 2.80 SD.

Wellbore		
Name	Created	Last Revised
W EAST AULT V-18-19HN (PWB)	Mar-12-2018	Mar-26-2018

Well		
Name	Government ID	Last Revised
W EAST AULT V-18-19HN		Mar-12-2018

Slot						
Name	Latitude	Longitude	Grid Northing	Grid Easting	North	East
EAST AULT V-18-19HN	40.58167000	-104.70428600	1455735.2782	3221017.7354	58642.81N	9699.46W

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

Clearance Summary							
Offset WellName	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
W Mapelli #2	147.11	16134.80	16134.80	-75.47	16117.52	0.66	16117.52
W Mapelli #1	1530.22	17308.05	17308.05	1279.28	17315.03	6.10	17331.43

