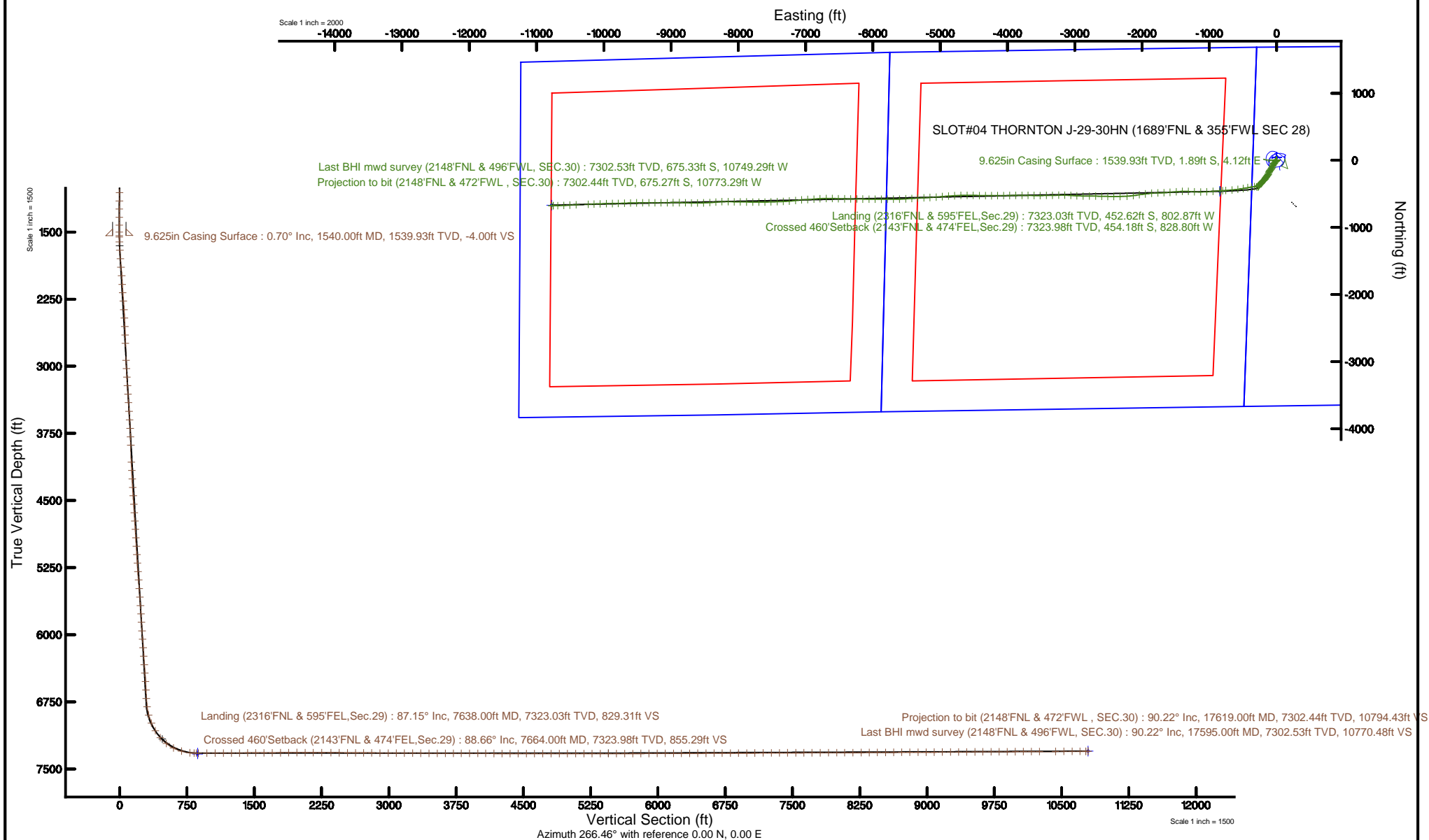


BAYSWATER E & P LLC

Location: COLORADO Slot: SLOT#04 THORNTON J-29-30HN (1689'FNL & 355'FWL SEC 28)
Field: WELD COUNTY (NAD83/TRUE NORTH) Well: THORNTON J-29-30HN
Facility: SEC.28-T07N-R66W Wellbore: THORNTON J-29-30HN PWB



Plot reference wellpath is THORNTON J-29-30HN REV-D.0 PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to XTREME 18 (17) (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to XTREME 18 (17) (RKB)	North Reference: True north
XTREME 18 (17) (RKB) to Mean Sea Level: 4923 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#04 THORNTON J-29-30HN (1689'FNL & 355'FWL SEC 28)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookdann on 2017-01-17
	Database: WA_DEN_Denver_Defn



Actual Wellpath Report

THORNTON J-29-30HN AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BAYSWATER E & P LLC	Slot	SLOT#04 THORNTON J-29-30HN (1689'FNL & 355'FWL SEC 28)
Area	COLORADO	Well	THORNTON J-29-30HN
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	THORNTON J-29-30HN AWB
Facility	SEC.28-T07N-R66W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Cookdanm
Scale	0.999970	Report Generated	1/17/17 at 2:33:47 PM
Convergence at slot	0.46° East	Database/Source file	WA_DEN_Denver_Defn/THORNTON_J-29-30HN_AWP.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-44.73	-1.70	3196880.52	1443446.31	40°32'54.604"N	104°47'29.526"W
Facility Reference Pt			3196881.86	1443491.05	40°32'55.046"N	104°47'29.504"W
Field Reference Pt			3174587.00	1430859.75	40°30'51.890"N	104°52'19.470"W

WELLPATH DATUM

Calculation method	Minimum curvature	XTREME 18 (17') (RKB) to Facility Vertical Datum	4923.00ft
Horizontal Reference Pt	Slot	XTREME 18 (17') (RKB) to Mean Sea Level	4923.00ft
Vertical Reference Pt	XTREME 18 (17') (RKB)	XTREME 18 (17') (RKB) to Mud Line at Slot (SLOT#04 THORNTON J-29-30HN (1689'FNL & 355'FWL SEC 28))	4923.00ft
MD Reference Pt	XTREME 18 (17') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	266.46°

Actual Wellpath Report

THORNTON J-29-30HN AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BAYSWATER E & P LLC	Slot	SLOT#04 THORNTON J-29-30HN (1689'FNL & 355'FWL SEC 28)
Area	COLORADO	Well	THORNTON J-29-30HN
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	THORNTON J-29-30HN AWB
Facility	SEC.28-T07N-R66W		

WELLPATH DATA (193 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	52.350	0.00	0.00	0.00	0.00	0.00	
17.00	0.000	52.350	17.00	0.00	0.00	0.00	0.00	
145.00	0.960	52.350	144.99	-0.89	0.66	0.85	0.75	
236.00	0.400	36.320	235.99	-1.72	1.38	1.64	0.64	
329.00	0.620	23.570	328.98	-2.16	2.10	2.03	0.26	
421.00	0.160	265.780	420.98	-2.26	2.55	2.11	0.77	
513.00	0.400	236.090	512.98	-1.85	2.36	1.71	0.30	
605.00	0.440	229.710	604.98	-1.29	1.95	1.17	0.07	
696.00	0.250	229.830	695.98	-0.85	1.60	0.76	0.21	
788.00	0.400	322.730	787.98	-0.51	1.72	0.41	0.52	
879.00	0.180	298.360	878.97	-0.22	2.04	0.09	0.27	
971.00	0.850	98.770	970.97	-0.76	2.01	0.64	1.11	
1062.00	0.970	95.440	1061.96	-2.18	1.83	2.07	0.14	
1154.00	0.660	147.190	1153.95	-3.21	1.31	3.13	0.83	
1244.00	0.500	133.730	1243.95	-3.73	0.61	3.70	0.23	
1335.00	0.550	152.160	1334.94	-4.18	-0.06	4.19	0.19	
1424.00	0.440	146.950	1423.94	-4.52	-0.72	4.58	0.13	
1500.00	0.860	212.760	1499.94	-4.33	-1.44	4.43	1.04	
1556.00	0.630	217.370	1555.93	-3.88	-2.04	4.01	0.42	
1610.00	1.780	234.690	1609.92	-2.97	-2.76	3.15	2.21	
1705.00	4.950	225.290	1704.74	1.37	-6.50	-0.97	3.38	
1800.00	4.880	221.200	1799.39	7.30	-12.42	-6.55	0.38	
1894.00	5.430	240.090	1893.02	14.10	-17.65	-13.03	1.89	
1991.00	5.430	228.620	1989.59	21.84	-22.97	-20.46	1.12	
2087.00	5.540	209.130	2085.16	27.93	-30.02	-26.12	1.93	
2182.00	5.650	218.570	2179.71	33.54	-37.69	-31.27	0.97	
2275.00	5.600	226.440	2272.26	40.08	-44.39	-37.41	0.83	
2371.00	5.680	216.000	2367.80	46.70	-51.46	-43.60	1.07	
2465.00	5.830	204.800	2461.33	51.92	-59.56	-48.34	1.20	
2560.00	5.850	202.670	2555.83	56.35	-68.41	-52.23	0.23	

Actual Wellpath Report

THORNTON J-29-30HN AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BAYSWATER E & P LLC	Slot	SLOT#04 THORNTON J-29-30HN (1689'FNL & 355'FWL SEC 28)
Area	COLORADO	Well	THORNTON J-29-30HN
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	THORNTON J-29-30HN AWB
Facility	SEC.28-T07N-R66W		

WELLPATH DATA (193 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2655.00	5.810	198.890	2650.34	60.33	-77.43	-55.65	0.41	
2749.00	5.450	196.140	2743.89	63.65	-86.21	-58.43	0.48	
2939.00	5.670	204.490	2933.00	71.10	-103.42	-64.83	0.44	
3034.00	5.420	207.640	3027.55	75.63	-111.67	-68.86	0.41	
3129.00	5.460	213.360	3122.13	80.66	-119.42	-73.42	0.57	
3224.00	5.400	219.590	3216.70	86.43	-126.64	-78.76	0.62	
3320.00	5.410	215.890	3312.27	92.40	-133.79	-84.29	0.36	
3416.00	5.310	216.780	3407.85	98.15	-141.01	-89.60	0.14	
3512.00	5.500	220.850	3503.43	104.24	-148.05	-95.27	0.45	
3608.00	5.380	221.850	3599.00	110.66	-154.88	-101.28	0.16	
3703.00	5.530	213.080	3693.57	116.56	-162.03	-106.75	0.89	
3798.00	5.420	195.680	3788.14	120.77	-170.19	-110.46	1.74	
3893.00	5.300	197.210	3882.73	123.80	-178.70	-112.97	0.20	
4082.00	5.700	201.140	4070.86	130.82	-195.79	-118.94	0.29	
4176.00	6.010	203.710	4164.37	135.02	-204.65	-122.60	0.43	
4271.00	5.630	208.370	4258.88	139.76	-213.31	-126.82	0.64	
4366.00	5.710	216.070	4353.41	145.24	-221.23	-131.81	0.80	
4460.00	5.480	218.450	4446.96	151.22	-228.52	-137.36	0.35	
4555.00	5.740	217.160	4541.51	157.35	-235.86	-143.05	0.30	
4650.00	5.850	214.450	4636.02	163.43	-243.64	-148.66	0.31	
4745.00	5.550	214.540	4730.55	169.25	-251.42	-154.00	0.32	
4838.00	5.560	217.450	4823.12	174.98	-258.70	-159.29	0.30	
4933.00	5.520	214.840	4917.67	180.83	-266.10	-164.70	0.27	
5028.00	5.460	212.210	5012.24	186.31	-273.67	-169.72	0.27	
5122.00	5.430	212.130	5105.81	191.52	-281.22	-174.47	0.03	
5217.00	5.740	217.070	5200.36	197.23	-288.82	-179.72	0.60	
5311.00	5.220	228.210	5293.94	203.65	-295.42	-185.74	1.26	
5406.00	5.480	239.040	5388.53	211.07	-300.64	-192.86	1.10	
5502.00	5.300	226.540	5484.10	218.54	-306.04	-200.01	1.23	
5598.00	5.400	219.530	5579.69	225.03	-312.58	-206.10	0.69	

Actual Wellpath Report

THORNTON J-29-30HN AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BAYSWATER E & P LLC	Slot	SLOT#04 THORNTON J-29-30HN (1689'FNL & 355'FWL SEC 28)
Area	COLORADO	Well	THORNTON J-29-30HN
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	THORNTON J-29-30HN AWB
Facility	SEC.28-T07N-R66W		

WELLPATH DATA (193 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5693.00	5.340	219.650	5674.27	231.10	-319.43	-211.76	0.06	
5787.00	5.290	216.270	5767.87	236.87	-326.29	-217.12	0.34	
5881.00	5.130	219.120	5861.48	242.50	-333.04	-222.33	0.32	
5977.00	5.270	222.520	5957.08	248.58	-339.62	-228.02	0.35	
6071.00	5.170	226.420	6050.69	254.93	-345.73	-234.01	0.39	
6166.00	5.360	226.690	6145.29	261.62	-351.72	-240.34	0.20	
6262.00	5.210	215.320	6240.89	267.80	-358.35	-246.12	1.10	
6356.00	5.430	220.740	6334.48	273.58	-365.20	-251.49	0.58	
6451.00	5.720	228.610	6429.03	280.46	-371.74	-257.98	0.86	
6546.00	5.450	213.780	6523.59	286.93	-378.62	-264.04	1.54	
6641.00	5.190	208.030	6618.18	291.92	-386.16	-268.56	0.62	
6736.00	5.390	208.630	6712.78	296.55	-393.87	-272.72	0.22	
6830.00	6.600	264.750	6806.33	304.30	-398.25	-280.22	6.10	
6925.00	16.010	285.750	6899.42	322.17	-395.18	-298.31	10.65	
7020.00	23.590	265.480	6988.84	353.62	-393.12	-329.96	10.66	
7115.00	30.500	261.790	7073.41	396.71	-398.06	-372.82	7.48	
7210.00	41.330	258.890	7150.24	452.01	-407.58	-427.63	11.54	
7305.00	52.130	260.120	7215.26	520.57	-420.10	-495.55	11.41	
7400.00	63.130	262.590	7266.05	600.37	-432.03	-574.76	11.78	
7495.00	73.400	264.930	7301.18	688.40	-441.55	-662.37	11.05	
7590.00	84.360	265.570	7319.48	781.45	-449.24	-755.13	11.56	
7638.00†	87.149	266.345	7323.03	829.31	-452.62	-802.87	6.03	Landing (2316'FNL & 595'FEL,Sec.29)
7664.00†	88.660	266.763	7323.98	855.29	-454.18	-828.80	6.03	Crossed 460'Setback (2143'FNL & 474'FEL,Sec.29)
7685.00	89.880	267.100	7324.25	876.29	-455.30	-849.77	6.03	
7781.00	90.250	265.020	7324.14	972.28	-461.90	-945.54	2.20	
7872.00	90.220	266.660	7323.77	1063.27	-468.50	-1036.30	1.80	
7964.00	90.250	270.040	7323.39	1155.21	-471.15	-1128.24	3.67	
8056.00	89.230	273.120	7323.81	1246.83	-468.61	-1220.20	3.53	
8146.00	91.480	273.630	7323.25	1336.17	-463.32	-1310.03	2.56	
8236.00	90.680	267.480	7321.55	1425.88	-462.45	-1399.97	6.89	

Actual Wellpath Report

THORNTON J-29-30HN AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BAYSWATER E & P LLC	Slot	SLOT#04 THORNTON J-29-30HN (1689'FNL & 355'FWL SEC 28)
Area	COLORADO	Well	THORNTON J-29-30HN
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	THORNTON J-29-30HN AWP
Facility	SEC.28-T07N-R66W		

WELLPATH DATA (193 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8327.00	90.220	264.690	7320.84	1516.86	-468.66	-1490.74	3.11	
8419.00	90.150	264.850	7320.54	1608.82	-477.04	-1582.36	0.19	
8511.00	90.310	267.570	7320.17	1700.81	-483.12	-1674.15	2.96	
8602.00	90.550	269.250	7319.49	1791.75	-485.65	-1765.11	1.86	
8694.00	91.420	265.110	7317.91	1883.71	-490.17	-1856.96	4.60	
8786.00	89.390	261.780	7317.26	1975.56	-500.67	-1948.34	4.24	
8878.00	89.820	262.560	7317.89	2067.30	-513.21	-2039.48	0.97	
8969.00	89.750	262.420	7318.23	2158.08	-525.10	-2129.70	0.17	
9062.00	89.780	266.410	7318.61	2251.01	-534.15	-2222.24	4.29	
9166.00	89.850	270.010	7318.95	2354.94	-537.40	-2326.17	3.46	
9258.00	89.480	269.830	7319.49	2446.77	-537.53	-2418.17	0.45	
9350.00	89.570	270.710	7320.25	2538.56	-537.09	-2510.16	0.96	
9440.00	90.060	271.410	7320.54	2628.27	-535.43	-2600.15	0.95	
9530.00	89.570	271.220	7320.83	2717.95	-533.36	-2690.12	0.58	
9622.00	89.390	270.110	7321.67	2809.69	-532.29	-2782.11	1.22	
9714.00	89.540	271.030	7322.52	2901.45	-531.38	-2874.10	1.01	
9807.00	89.570	272.720	7323.25	2994.03	-528.34	-2967.04	1.82	
9897.00	89.690	273.820	7323.83	3083.39	-523.20	-3056.89	1.23	
9987.00	90.150	271.150	7323.95	3172.88	-519.30	-3146.80	3.01	
10079.00	89.780	268.450	7324.01	3264.72	-519.62	-3238.79	2.96	
10171.00	89.660	269.090	7324.46	3356.64	-521.60	-3330.77	0.71	
10263.00	89.600	268.920	7325.05	3448.55	-523.19	-3422.75	0.20	
10354.00	89.780	269.370	7325.55	3539.45	-524.55	-3513.74	0.53	
10444.00	89.780	270.990	7325.89	3629.25	-524.27	-3603.74	1.80	
10534.00	90.280	270.880	7325.84	3718.98	-522.80	-3693.73	0.57	
10624.00	90.000	270.050	7325.62	3808.76	-522.07	-3783.72	0.97	
10716.00	89.970	269.270	7325.65	3900.61	-522.62	-3875.72	0.85	
10807.00	89.540	268.860	7326.04	3991.52	-524.10	-3966.71	0.65	
10896.00	89.750	269.220	7326.59	4080.42	-525.59	-4055.69	0.47	
10988.00	89.600	269.500	7327.11	4172.30	-526.62	-4147.68	0.35	

Actual Wellpath Report

THORNTON J-29-30HN AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BAYSWATER E & P LLC	Slot	SLOT#04 THORNTON J-29-30HN (1689'FNL & 355'FWL SEC 28)
Area	COLORADO	Well	THORNTON J-29-30HN
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	THORNTON J-29-30HN AWB
Facility	SEC.28-T07N-R66W		

WELLPATH DATA (193 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
11078.00	89.570	270.140	7327.76	4262.15	-526.90	-4237.68	0.71	
11168.00	89.540	270.480	7328.46	4351.94	-526.42	-4327.68	0.38	
11258.00	89.880	271.620	7328.92	4441.65	-524.77	-4417.66	1.32	
11350.00	90.400	271.430	7328.69	4533.29	-522.32	-4509.63	0.60	
11441.00	90.220	269.670	7328.20	4624.05	-521.44	-4600.62	1.94	
11533.00	89.880	268.160	7328.12	4715.96	-523.19	-4692.60	1.68	
11625.00	89.850	266.640	7328.34	4807.95	-527.36	-4784.50	1.65	
11717.00	90.000	265.850	7328.46	4899.95	-533.39	-4876.30	0.87	
11809.00	89.910	265.200	7328.53	4991.93	-540.56	-4968.02	0.71	
11901.00	89.880	265.820	7328.70	5083.92	-547.77	-5059.74	0.67	
11992.00	89.910	266.920	7328.87	5174.92	-553.53	-5150.55	1.21	
12083.00	89.940	267.240	7328.98	5265.91	-558.16	-5241.43	0.35	
12175.00	90.030	267.220	7329.01	5357.90	-562.61	-5333.33	0.10	
12265.00	90.030	265.930	7328.96	5447.90	-567.99	-5423.16	1.43	
12355.00	90.310	266.440	7328.69	5537.90	-573.97	-5512.96	0.65	
12447.00	90.220	268.730	7328.27	5629.88	-577.85	-5604.88	2.49	
12538.00	90.340	269.500	7327.82	5720.78	-579.26	-5695.86	0.86	
12628.00	90.280	269.670	7327.34	5810.64	-579.91	-5785.86	0.20	
12717.00	90.430	269.800	7326.79	5899.49	-580.32	-5874.86	0.22	
12809.00	90.250	270.550	7326.24	5991.30	-580.04	-5966.85	0.84	
12900.00	90.150	270.970	7325.92	6082.04	-578.83	-6057.84	0.47	
12992.00	90.280	271.130	7325.58	6173.74	-577.14	-6149.83	0.22	
13081.00	90.250	270.870	7325.17	6262.46	-575.59	-6238.81	0.29	
13173.00	89.970	270.230	7324.99	6354.23	-574.71	-6330.81	0.76	
13263.00	90.090	270.940	7324.94	6443.99	-573.79	-6420.80	0.80	
13355.00	90.340	271.820	7324.60	6535.65	-571.57	-6512.78	0.99	
13446.00	90.150	270.770	7324.21	6626.33	-569.52	-6603.75	1.17	
13536.00	90.650	269.680	7323.58	6716.13	-569.16	-6693.75	1.33	
13629.00	90.120	266.820	7322.95	6809.07	-572.00	-6786.69	3.13	
13719.00	90.060	265.570	7322.81	6899.07	-577.98	-6876.49	1.39	

Actual Wellpath Report

THORNTON J-29-30HN AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BAYSWATER E & P LLC	Slot	SLOT#04 THORNTON J-29-30HN (1689'FNL & 355'FWL SEC 28)
Area	COLORADO	Well	THORNTON J-29-30HN
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	THORNTON J-29-30HN AWP
Facility	SEC.28-T07N-R66W		

WELLPATH DATA (193 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
13811.00	90.220	266.570	7322.59	6991.06	-584.28	-6968.27	1.10	
13901.00	90.370	266.370	7322.12	7081.06	-589.82	-7058.10	0.28	
13993.00	90.800	263.350	7321.18	7173.01	-598.06	-7149.71	3.32	
14085.00	90.150	265.110	7320.42	7264.93	-607.31	-7241.24	2.04	
14176.00	90.180	267.600	7320.16	7355.93	-613.10	-7332.05	2.74	
14266.00	90.150	267.920	7319.90	7445.90	-616.61	-7421.98	0.36	
14358.00	90.030	268.430	7319.76	7537.86	-619.54	-7513.93	0.57	
14448.00	90.180	269.550	7319.59	7627.77	-621.13	-7603.92	1.26	
14538.00	89.970	269.610	7319.47	7717.64	-621.79	-7693.91	0.24	
14630.00	90.120	270.690	7319.40	7809.44	-621.55	-7785.91	1.19	
14722.00	90.150	270.590	7319.18	7901.20	-620.52	-7877.91	0.11	
14814.00	90.250	270.390	7318.86	7992.97	-619.74	-7969.90	0.24	
14904.00	90.340	272.080	7318.40	8082.65	-617.80	-8059.88	1.88	
14995.00	90.370	271.030	7317.84	8173.29	-615.33	-8150.84	1.15	
15087.00	90.250	267.440	7317.34	8265.17	-616.55	-8242.82	3.90	
15179.00	90.340	264.570	7316.86	8357.15	-622.96	-8334.58	3.12	
15269.00	90.250	266.450	7316.40	8447.13	-630.01	-8424.30	2.09	
15361.00	90.550	268.800	7315.76	8539.11	-633.82	-8516.21	2.58	
15451.00	90.800	269.420	7314.70	8629.00	-635.22	-8606.20	0.74	
15541.00	90.650	270.970	7313.56	8718.80	-634.91	-8696.18	1.73	
15631.00	90.220	271.690	7312.88	8808.47	-632.82	-8786.16	0.93	
15722.00	90.000	271.130	7312.70	8899.13	-630.58	-8877.13	0.66	
15814.00	90.120	269.380	7312.60	8990.93	-630.17	-8969.12	1.91	
15903.00	90.310	269.220	7312.27	9079.82	-631.26	-9058.12	0.28	
15994.00	90.580	270.080	7311.56	9170.67	-631.82	-9149.11	0.99	
16085.00	90.150	269.660	7310.98	9261.51	-632.02	-9240.11	0.66	
16175.00	90.370	269.600	7310.58	9351.37	-632.61	-9330.11	0.25	
16267.00	90.280	269.670	7310.05	9443.22	-633.19	-9422.10	0.12	
16359.00	90.520	269.330	7309.41	9535.09	-633.99	-9514.10	0.45	
16447.00	90.400	268.130	7308.71	9623.02	-635.94	-9602.07	1.37	

Actual Wellpath Report

THORNTON J-29-30HN AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BAYSWATER E & P LLC	Slot	SLOT#04 THORNTON J-29-30HN (1689'FNL & 355'FWL SEC 28)
Area	COLORADO	Well	THORNTON J-29-30HN
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	THORNTON J-29-30HN AWB
Facility	SEC.28-T07N-R66W		

WELLPATH DATA (193 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
16538.00	90.180	268.100	7308.24	9713.98	-638.94	-9693.02	0.24	
16629.00	90.340	268.570	7307.83	9804.93	-641.58	-9783.98	0.55	
16718.00	90.150	268.820	7307.45	9893.86	-643.61	-9872.96	0.35	
16808.00	90.340	268.540	7307.07	9983.79	-645.68	-9962.93	0.38	
16899.00	90.150	268.120	7306.68	10074.74	-648.33	-10053.89	0.51	
16989.00	90.340	267.830	7306.29	10164.71	-651.51	-10143.84	0.39	
17078.00	90.370	268.170	7305.74	10253.68	-654.62	-10232.78	0.38	
17258.00	90.310	267.270	7304.67	10433.63	-661.78	-10412.63	0.50	
17349.00	90.490	266.260	7304.04	10524.62	-666.92	-10503.48	1.13	
17441.00	90.310	267.590	7303.40	10616.61	-671.85	-10595.35	1.46	
17529.00	90.370	268.720	7302.87	10704.57	-674.68	-10683.30	1.29	
17595.00	90.220	270.150	7302.53	10770.48	-675.33	-10749.29	2.18	Last BHI mwd survey (2148'FNL & 496'FWL, SEC.30)
17619.00	90.220	270.150	7302.44	10794.43	-675.27	-10773.29	0.00	Projection to bit (2148'FNL & 472'FWL, SEC.30)

HOLE & CASING SECTIONS - Ref Wellbore: THORNTON J-29-30HN AWB Ref Wellpath: THORNTON J-29-30HN AWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.5in Open Hole	97.00	1552.00	1455.00	97.00	1551.93	0.26	0.33	-2.01	4.04
9.625in Casing Surface	17.00	1540.00	1523.00	17.00	1539.93	0.00	0.00	-1.89	4.12
8.5in Open Hole	1552.00	17619.00	16067.00	1551.93	7302.44	-2.01	4.04	-675.27	-10773.29

Actual Wellpath Report

THORNTON J-29-30HN AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BAYSWATER E & P LLC	Slot	SLOT#04 THORNTON J-29-30HN (1689'FNL & 355'FWL SEC 28)
Area	COLORADO	Well	THORNTON J-29-30HN
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	THORNTON J-29-30HN AWB
Facility	SEC.28-T07N-R66W		

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.28-T07N-R66W	-7.00	44.73	1.70	3196881.86	1443491.05	40°32'55.046"N	104°47'29.504"W	polygon
SEC.29-T07N-R66W	-7.00	44.73	1.70	3196881.86	1443491.05	40°32'55.046"N	104°47'29.504"W	polygon
SEC.30-T07N-R66W	-7.00	44.73	1.70	3196881.86	1443491.05	40°32'55.046"N	104°47'29.504"W	polygon
THORNTON J-29-30HN BHL REV-1 ON PLAT (2140'FNL & 470'FEL SEC.30)	7301.00	-667.31	-10774.83	3186111.71	1442692.97	40°32'47.987"N	104°49'49.098"W	point
THORNTON J-29-30HN LP REV-2 ON PLAT (2140'FNL & 470'FEL SEC.29)	7323.00	-461.26	-842.08	3196042.18	1442978.36	40°32'50.046"N	104°47'40.434"W	point
THORNTON J-29-30HN LP REV-1 ON PLAT (2140'FNL & 470'FEL SEC.29)	7333.00	-461.26	-842.08	3196042.18	1442978.36	40°32'50.046"N	104°47'40.434"W	point
SEC.29-T07N-R66W 460' SETBACKS	7338.00	44.73	1.70	3196881.86	1443491.05	40°32'55.046"N	104°47'29.504"W	polygon
SEC.30-T07N-R66W 460' SETBACKS	7338.00	44.73	1.70	3196881.86	1443491.05	40°32'55.046"N	104°47'29.504"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: THORNTON J-29-30HN AWB Ref Wellpath: THORNTON J-29-30HN AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1500.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)	BHI MWD/NAVITRAK (STD) 13.5" HOLE <145-1500>	THORNTON J-29-30HN AWB
1500.00	17595.00	BHI AutoTrak Curve (Standard)	BHI ATC SHORT, ROCKIES GT <1556-17595>	THORNTON J-29-30HN AWB
17595.00	17619.00	Blind Drilling (std)	Projection to bit	THORNTON J-29-30HN AWB

Actual Wellpath Report

THORNTON J-29-30HN AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BAYSWATER E & P LLC	Slot	SLOT#04 THORNTON J-29-30HN (1689'FNL & 355'FWL SEC 28)
Area	COLORADO	Well	THORNTON J-29-30HN
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	THORNTON J-29-30HN AWB
Facility	SEC.28-T07N-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
7638.00	87.149	266.345	7323.03	Landing (2316'FNL & 595'FEL, Sec.29)
7664.00	88.660	266.763	7323.98	Crossed 460'Setback (2143'FNL & 474'FEL, Sec.29)
17595.00	90.220	270.150	7302.53	Last BHI mwd survey (2148'FNL & 496'FWL, SEC.30)
17619.00	90.220	270.150	7302.44	Projection to bit (2148'FNL & 472'FWL , SEC.30)