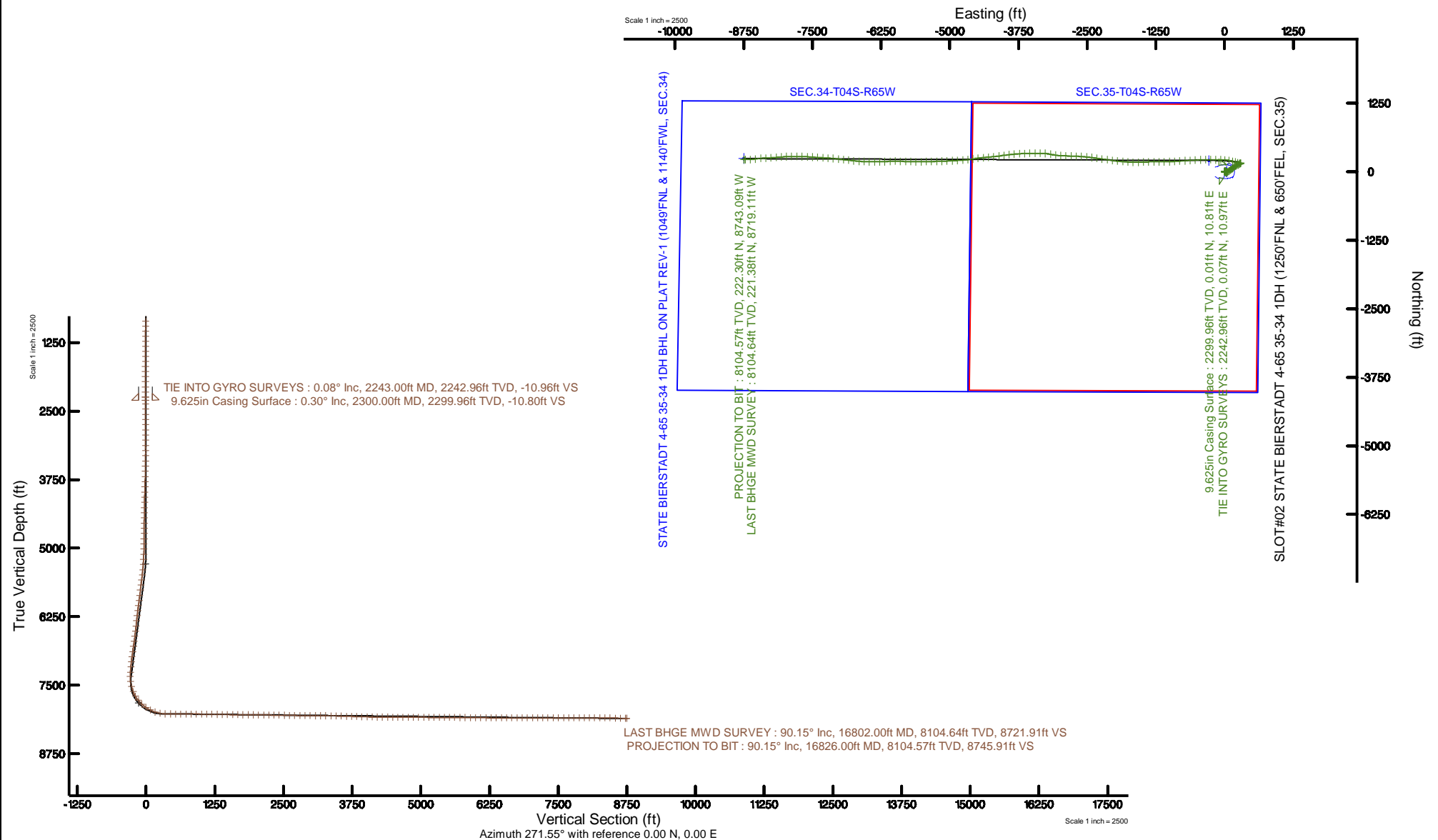


Burlington Resources

Location: COLORADO Slot: SLOT#02 STATE BIERSTADT 4-65 35-34 1DH (1250'FNL & 650'FEL, SEC.35)
Field: ARAPAHOE COUNTY (NAD83/TN) Well: STATE BIERSTADT 4-65 35-34 1DH
Facility: SEC.35-T04S-R65W Wellbore: STATE BIERSTADT 4-65 35-34 1DH PWB

Plot reference wellpath is STATE BIERSTADT 4-65 35-34 1DH (REV-A,0) PWP	Grid System: NAD83 / Lambert Colorado SP, Central Zone (502), US feet
True vertical depths are referenced to H&P 448 (24KB) (RKB)	North Reference: True north
Measured depths are referenced to H&P 448 (24KB) (RKB)	Scale: True distance
H&P 448 (24KB) (RKB) to Mean Sea Level: 5896.3 feet	Depths are in feet
Mean Sea Level to Mud line (At Slot: SLOT#02 STATE BIERSTADT 4-65 35-34 1DH (1250'FNL & 650'FEL, SEC.35)): 0 feet	Created by: bensjacj on 2017-08-30
Coordinates are in feet referenced to Slot	Database: WA_DEN_Demer_Deln

BURLINGTON RESOURCES



REFERENCE WELLPATH IDENTIFICATION			
Operator	Burlington Resources	Slot	SLOT#02 STATE BIERSTADT 4-65 35-34 1DH (1250'FNL & 650'FEL, SEC.35)
Area	COLORADO	Well	STATE BIERSTADT 4-65 35-34 1DH
Field	ARAPAHOE COUNTY (NAD83/TN)	Wellbore	STATE BIERSTADT 4-65 35-34 1DH AWB
Facility	SEC.35-T04S-R65W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Central Zone (502), US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Bensjacj
Scale	0.999984	Report Generated	08/30/2017 at 11:06 AM
Convergence at slot	0.55° East	Database/Source file	WA_DEN_Denver_Defn/STATE_BIERSTADT_4-65_35-34_1DH_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	-39.88	3246447.56	1667886.62	39°39'49.990"N	104°37'28.530"W
Facility Reference Pt			3246487.44	1667887.01	39°39'49.990"N	104°37'28.020"W
Field Reference Pt			3256721.09	1679994.75	39°41'48.650"N	104°35'15.610"W

WELLPATH DATUM			
Calculation method	Minimum curvature	H&P 448 (24'KB) (RKB) to Facility Vertical Datum	5896.30ft
Horizontal Reference Pt	Slot	H&P 448 (24'KB) (RKB) to Mean Sea Level	5896.30ft
Vertical Reference Pt	H&P 448 (24'KB) (RKB)	H&P 448 (24'KB) (RKB) to Mud Line at Slot (SLOT#02 STATE BIERSTADT 4-65 35-34 1DH (1250'FNL & 650'FEL, SEC.35))	5896.30ft
MD Reference Pt	H&P 448 (24'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	271.55°

REFERENCE WELLPATH IDENTIFICATION			
Operator	Burlington Resources	Slot	SLOT#02 STATE BIERSTADT 4-65 35-34 1DH (1250'FNL & 650'FEL, SEC.35)
Area	COLORADO	Well	STATE BIERSTADT 4-65 35-34 1DH
Field	ARAPAHOE COUNTY (NAD83/TN)	Wellbore	STATE BIERSTADT 4-65 35-34 1DH AWB
Facility	SEC.35-T04S-R65W		

WELLPATH DATA (157 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2243.00	0.080	297.000	2242.96	-10.96	0.07	10.97	0.02	TIE INTO GYRO SURVEYS
2307.00	0.330	235.540	2306.96	-10.77	-0.01	10.78	0.47	
2370.00	0.360	217.530	2369.95	-10.51	-0.27	10.51	0.18	
2464.00	0.310	211.320	2463.95	-10.21	-0.73	10.19	0.07	
2559.00	0.370	223.850	2558.95	-9.88	-1.17	9.85	0.10	
2653.00	0.340	208.870	2652.95	-9.54	-1.63	9.50	0.10	
2748.00	0.370	208.470	2747.95	-9.27	-2.15	9.22	0.03	
2843.00	0.510	211.420	2842.94	-8.93	-2.78	8.85	0.15	
2937.00	0.530	207.370	2936.94	-8.53	-3.52	8.44	0.04	
3031.00	0.560	209.300	3030.94	-8.12	-4.31	8.01	0.04	
3126.00	0.620	219.340	3125.93	-7.59	-5.11	7.46	0.13	
3220.00	0.610	221.190	3219.93	-6.96	-5.88	6.81	0.02	
3315.00	1.270	112.270	3314.92	-7.62	-6.66	7.45	1.66	
3409.00	1.300	111.150	3408.89	-9.60	-7.44	9.41	0.04	
3504.00	1.160	115.630	3503.87	-11.50	-8.24	11.28	0.18	
3598.00	1.090	125.920	3597.85	-13.10	-9.18	12.86	0.23	
3693.00	0.820	120.500	3692.84	-14.44	-10.05	14.18	0.30	
3788.00	2.080	61.590	3787.81	-16.53	-9.58	16.28	1.89	
3882.00	1.900	75.880	3881.76	-19.51	-8.39	19.29	0.56	
3976.00	1.620	78.670	3975.71	-22.31	-7.75	22.10	0.31	
4071.00	1.440	76.520	4070.68	-24.77	-7.20	24.58	0.20	
4165.00	1.170	85.820	4164.65	-26.86	-6.86	26.69	0.36	
4260.00	0.990	90.810	4259.64	-28.65	-6.80	28.48	0.21	
4354.00	0.920	96.820	4353.62	-30.21	-6.90	30.04	0.13	
4448.00	0.850	109.860	4447.61	-31.63	-7.23	31.44	0.23	
4543.00	0.670	128.040	4542.60	-32.74	-7.81	32.54	0.31	
4637.00	0.620	132.980	4636.60	-33.57	-8.49	33.35	0.08	
4732.00	0.880	132.960	4731.59	-34.50	-9.34	34.26	0.27	
4826.00	0.910	132.030	4825.58	-35.61	-10.33	35.34	0.04	
4921.00	1.020	130.890	4920.56	-36.84	-11.39	36.54	0.12	
5016.00	0.700	123.960	5015.55	-37.98	-12.27	37.66	0.35	
5110.00	2.330	86.130	5109.52	-40.37	-12.46	40.04	1.94	
5205.00	3.390	75.170	5204.40	-44.98	-11.61	44.69	1.25	
5299.00	4.720	66.210	5298.16	-51.15	-9.34	50.91	1.56	
5394.00	6.030	58.040	5392.75	-58.84	-5.12	58.72	1.59	
5488.00	8.370	56.600	5486.00	-68.56	1.26	68.62	2.50	
5582.00	9.000	52.440	5578.92	-79.88	9.51	80.16	0.95	
5677.00	9.250	51.950	5672.72	-91.52	18.74	92.07	0.28	
5771.00	8.490	53.350	5765.59	-102.80	27.54	103.58	0.84	
5866.00	9.340	54.990	5859.45	-114.50	36.15	115.52	0.93	
5960.00	8.180	55.480	5952.35	-126.03	44.32	127.28	1.24	
6055.00	8.440	56.200	6046.35	-137.18	52.02	138.64	0.29	
6149.00	10.250	50.320	6139.10	-149.10	61.20	150.81	2.17	
6243.00	9.880	47.840	6231.65	-161.22	71.96	163.23	0.61	
6338.00	8.690	45.700	6325.41	-172.11	82.44	174.41	1.30	

REFERENCE WELLPATH IDENTIFICATION			
Operator	Burlington Resources	Slot	SLOT#02 STATE BIERSTADT 4-65 35-34 1DH (1250'FNL & 650'FEL, SEC.35)
Area	COLORADO	Well	STATE BIERSTADT 4-65 35-34 1DH
Field	ARAPAHOE COUNTY (NAD83/TN)	Wellbore	STATE BIERSTADT 4-65 35-34 1DH AWB
Facility	SEC.35-T04S-R65W		

WELLPATH DATA (157 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
6432.00	7.800	47.380	6418.44	-181.63	91.72	184.18	0.98	
6527.00	8.610	57.990	6512.47	-192.18	99.85	194.96	1.80	
6621.00	7.200	63.330	6605.57	-203.23	106.23	206.19	1.69	
6716.00	8.670	64.120	6699.66	-214.83	112.03	217.95	1.55	
6810.00	8.300	70.990	6792.63	-227.48	117.33	230.74	1.15	
6905.00	9.310	65.290	6886.52	-240.79	122.77	244.21	1.40	
6999.00	8.440	65.960	6979.39	-253.83	128.76	257.41	0.93	
7093.00	8.540	54.880	7072.37	-265.65	135.59	269.42	1.74	
7188.00	7.180	53.990	7166.47	-276.01	143.14	279.99	1.44	
7282.00	5.910	53.200	7259.86	-284.46	149.49	288.62	1.35	
7362.00	3.260	43.470	7339.59	-289.21	153.61	293.49	3.44	
7456.00	8.610	258.670	7433.30	-284.12	154.17	288.41	12.16	
7551.00	15.440	279.890	7526.20	-264.65	154.94	268.95	8.45	
7645.00	22.180	287.380	7615.14	-235.16	162.40	239.65	7.60	
7740.00	32.160	284.280	7699.56	-193.14	174.03	197.93	10.61	
7834.00	40.300	285.350	7775.32	-139.12	188.27	144.28	8.69	
7928.00	46.580	282.450	7843.55	-76.01	203.69	81.56	7.01	
8023.00	55.900	272.480	7903.05	-2.52	212.87	8.30	12.76	
8117.00	63.340	269.400	7950.56	78.49	214.11	-72.71	8.40	
8212.00	69.140	271.300	7988.82	165.38	214.68	-159.62	6.37	
8306.00	80.410	270.360	8013.47	255.92	215.97	-250.16	12.03	
8401.00	89.350	269.640	8021.94	350.41	215.96	-344.69	9.44	
8495.00	89.480	268.390	8022.90	444.31	214.35	-438.67	1.34	
8589.00	89.720	266.730	8023.56	538.08	210.35	-532.57	1.78	
8683.00	89.420	266.230	8024.26	631.71	204.57	-626.39	0.62	
8778.00	90.250	266.250	8024.53	726.30	198.34	-721.19	0.87	
8872.00	89.290	265.990	8024.91	819.88	191.98	-814.97	1.06	
8967.00	89.410	266.700	8025.99	914.48	185.93	-909.77	0.76	
9061.00	89.380	268.410	8026.98	1008.24	181.92	-1003.68	1.82	
9156.00	89.420	269.460	8027.98	1103.13	180.15	-1098.65	1.11	
9250.00	89.110	269.800	8029.18	1197.07	179.55	-1192.64	0.49	
9344.00	88.950	269.510	8030.77	1291.01	178.98	-1286.63	0.35	
9439.00	88.890	268.390	8032.56	1385.89	177.24	-1381.59	1.18	
9533.00	88.950	267.730	8034.34	1479.70	174.06	-1475.52	0.70	
9628.00	89.200	269.500	8035.87	1574.56	171.76	-1570.48	1.88	
9722.00	88.980	271.010	8037.36	1668.52	172.18	-1664.46	1.62	
9817.00	89.290	273.630	8038.80	1763.49	176.03	-1759.37	2.78	
9911.00	89.780	274.540	8039.56	1857.40	182.72	-1853.12	1.10	
10006.00	90.180	276.340	8039.59	1952.17	191.73	-1947.69	1.94	
10101.00	89.140	277.260	8040.16	2046.77	202.98	-2042.02	1.46	
10195.00	89.170	278.680	8041.54	2140.17	216.01	-2135.10	1.51	
10289.00	89.170	277.890	8042.91	2233.51	229.55	-2228.11	0.84	
10384.00	89.170	278.280	8044.28	2327.88	242.91	-2322.15	0.41	
10478.00	89.140	277.660	8045.67	2421.28	255.94	-2415.23	0.66	
10573.00	89.050	275.780	8047.17	2515.88	267.06	-2509.57	1.98	

REFERENCE WELLPATH IDENTIFICATION			
Operator	Burlington Resources	Slot	SLOT#02 STATE BIERSTADT 4-65 35-34 1DH (1250'FNL & 650'FEL, SEC.35)
Area	COLORADO	Well	STATE BIERSTADT 4-65 35-34 1DH
Field	ARAPAHOE COUNTY (NAD83/TN)	Wellbore	STATE BIERSTADT 4-65 35-34 1DH AWB
Facility	SEC.35-T04S-R65W		

WELLPATH DATA (157 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
10667.00	89.050	273.240	8048.73	2609.74	274.45	-2603.25	2.70	
10762.00	88.550	273.050	8050.72	2704.68	279.66	-2698.09	0.56	
10856.00	88.650	271.840	8053.01	2798.64	283.67	-2791.97	1.29	
10951.00	89.850	271.110	8054.26	2893.63	286.11	-2886.93	1.48	
11045.00	89.380	273.310	8054.89	2987.61	289.74	-2980.85	2.39	
11140.00	89.750	278.520	8055.61	3082.30	299.52	-3075.31	5.50	
11234.00	89.780	282.400	8056.00	3175.15	316.59	-3167.73	4.13	
11329.00	90.220	274.990	8056.00	3269.35	330.94	-3261.58	7.81	
11423.00	88.460	270.130	8057.08	3363.29	335.13	-3355.44	5.50	
11518.00	88.340	269.540	8059.73	3458.21	334.86	-3450.41	0.63	
11612.00	88.370	268.850	8062.43	3552.10	333.54	-3544.36	0.73	
11706.00	88.370	267.500	8065.10	3645.89	330.55	-3638.27	1.44	
11800.00	88.280	266.480	8067.85	3739.55	325.61	-3732.10	1.09	
11895.00	88.280	264.510	8070.70	3833.97	318.16	-3826.76	2.07	
11989.00	88.430	263.740	8073.40	3927.15	308.54	-3920.22	0.83	
12084.00	88.370	262.010	8076.05	4021.02	296.76	-4014.45	1.82	
12178.00	88.210	261.710	8078.86	4113.64	283.46	-4107.46	0.36	
12273.00	89.780	264.440	8080.53	4207.57	272.01	-4201.74	3.31	
12368.00	89.780	265.530	8080.89	4301.95	263.70	-4296.38	1.15	
12462.00	89.720	264.100	8081.30	4395.29	255.21	-4389.99	1.52	
12557.00	89.690	262.900	8081.79	4489.35	244.45	-4484.38	1.26	
12651.00	89.660	261.180	8082.32	4582.06	231.44	-4577.46	1.83	
12746.00	89.660	263.560	8082.89	4675.83	218.82	-4671.61	2.51	
12840.00	89.750	265.410	8083.37	4769.11	209.79	-4765.17	1.97	
12935.00	89.750	266.140	8083.79	4863.63	202.79	-4859.91	0.77	
13029.00	89.630	267.550	8084.29	4957.30	197.62	-4953.77	1.51	
13124.00	89.820	267.480	8084.75	5052.07	193.50	-5048.68	0.21	
13218.00	89.720	268.320	8085.13	5145.88	190.06	-5142.61	0.90	
13313.00	89.690	267.210	8085.62	5240.66	186.35	-5237.54	1.17	
13407.00	89.230	269.690	8086.50	5334.52	183.81	-5331.49	2.68	
13501.00	89.660	269.450	8087.41	5428.45	183.10	-5425.48	0.52	
13596.00	89.820	267.390	8087.84	5523.31	180.48	-5520.44	2.17	
13690.00	89.780	271.590	8088.17	5617.22	179.65	-5614.42	4.47	
13785.00	89.600	272.200	8088.69	5712.22	182.79	-5709.36	0.67	
13879.00	89.630	270.340	8089.32	5806.21	184.87	-5803.33	1.98	
13974.00	89.690	272.800	8089.88	5901.20	187.47	-5898.29	2.59	
14068.00	89.600	271.000	8090.47	5995.20	190.59	-5992.23	1.92	
14163.00	89.540	265.700	8091.18	6090.01	187.86	-6087.16	5.58	
14257.00	88.400	266.190	8092.87	6183.54	181.21	-6180.90	1.32	
14352.00	89.690	269.370	8094.45	6278.31	177.53	-6275.81	3.61	
14446.00	90.000	270.410	8094.71	6372.27	177.35	-6369.80	1.15	
14541.00	89.970	271.630	8094.73	6467.26	179.04	-6464.79	1.28	
14635.00	90.090	272.780	8094.68	6561.26	182.66	-6558.72	1.23	
14729.00	89.940	274.440	8094.66	6655.19	188.58	-6652.53	1.77	
14824.00	89.970	275.680	8094.73	6750.01	196.96	-6747.15	1.31	

REFERENCE WELLPATH IDENTIFICATION			
Operator	Burlington Resources	Slot	SLOT#02 STATE BIERSTADT 4-65 35-34 1DH (1250'FNL & 650'FEL, SEC.35)
Area	COLORADO	Well	STATE BIERSTADT 4-65 35-34 1DH
Field	ARAPAHOE COUNTY (NAD83/TN)	Wellbore	STATE BIERSTADT 4-65 35-34 1DH AWB
Facility	SEC.35-T04S-R65W		

WELLPATH DATA (157 stations)								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
14919.00	89.940	277.130	8094.81	6844.67	207.55	-6841.56	1.53	
15013.00	89.780	276.370	8095.04	6938.28	218.60	-6934.91	0.83	
15107.00	90.520	276.800	8094.79	7031.92	229.38	-7028.28	0.91	
15202.00	90.090	275.020	8094.28	7126.64	239.16	-7122.77	1.93	
15296.00	90.090	273.190	8094.14	7220.54	245.89	-7216.53	1.95	
15390.00	89.850	273.560	8094.19	7314.49	251.43	-7310.36	0.47	
15485.00	90.090	274.130	8094.24	7409.42	257.80	-7405.15	0.65	
15579.00	89.970	273.770	8094.19	7503.33	264.27	-7498.93	0.40	
15674.00	89.880	272.540	8094.31	7598.30	269.50	-7593.78	1.30	
15768.00	90.120	271.810	8094.31	7692.29	273.07	-7687.71	0.82	
15863.00	89.970	270.900	8094.24	7787.29	275.31	-7782.69	0.97	
15958.00	90.060	270.000	8094.21	7882.27	276.06	-7877.68	0.95	
16052.00	90.090	266.770	8094.09	7976.11	273.41	-7971.63	3.44	
16146.00	89.820	265.680	8094.16	8069.71	267.22	-8065.43	1.19	
16240.00	89.970	265.410	8094.33	8163.19	259.92	-8159.14	0.33	
16335.00	89.630	265.090	8094.67	8257.61	252.05	-8253.81	0.49	
16429.00	89.880	268.670	8095.07	8351.29	246.94	-8347.66	3.82	
16524.00	88.620	263.590	8096.31	8445.82	240.53	-8442.40	5.51	
16618.00	87.820	261.960	8099.23	8538.67	228.71	-8535.61	1.93	
16713.00	87.690	268.500	8102.96	8632.97	220.82	-8630.15	6.88	
16802.00	90.150	272.210	8104.64	8721.91	221.38	-8719.11	5.00	LAST BHGE MWD SURVEY
16826.00	90.150	272.210	8104.57	8745.91	222.30	-8743.09	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: STATE BIERSTADT 4-65 35-34 1DH AWB Ref Wellpath: STATE BIERSTADT 4-65 35-34 1DH 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]
9.625in Casing Surface	24.00	2300.00	2276.00	24.00	2299.96	0.00	0.00	0.01	10.81
8.5in Open Hole	2300.00	16826.00	14526.00	2299.96	8104.57	0.01	10.81	222.30	-8743.09

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.34-T04S-R65W	0.00	0.00	39.88	3246487.44	1667887.01	39°39'49.990"N	104°37'28.020"W	polygon
SEC.35-T04S-R65W	0.00	0.00	39.88	3246487.44	1667887.01	39°39'49.990"N	104°37'28.020"W	polygon
STATE BIERSTADT 4-65 35-34 1DH BPI ON PLAT REV-1 (1049'FNL & 935'FEL, SEC.35)	8021.00	203.38	-282.31	3246163.30	1668087.27	39°39'52.000"N	104°37'32.140"W	point
STATE BIERSTADT 4-65 35-34 1DH BHL ON PLAT REV-1 (1049'FNL & 1140'FWL, SEC.34)	8107.00	237.26	-8750.10	3237695.73	1668039.55	39°39'52.320"N	104°39'20.420"W	point

REFERENCE WELLPATH IDENTIFICATION			
Operator	Burlington Resources	Slot	SLOT#02 STATE BIERSTADT 4-65 35-34 1DH (1250'FNL & 650'FEL, SEC.35)
Area	COLORADO	Well	STATE BIERSTADT 4-65 35-34 1DH
Field	ARAPAHOE COUNTY (NAD83/TN)	Wellbore	STATE BIERSTADT 4-65 35-34 1DH AWB
Facility	SEC.35-T04S-R65W		

WELLPATH COMPOSITION - Ref Wellbore: STATE BIERSTADT 4-65 35-34 1DH AWB Ref Wellpath: STATE BIERSTADT 4-65 35-34 1DH AWP			
Start MD	End MD	Positional Uncertainty Model	Log Name/Comment
[ft]	[ft]		Wellbore
24.00	2243.00	BHI Generic gyro - continuous (Standard)	GYRO SURFACE SURVEYS <24 - 2243>
2243.00	7282.00	Custom BHI OnTrak (IFR1, Standard Rotating+Axial Corr) (Rockies 0.03Gt model)	BHGE ONTRAK (IFR1, STANDARD, AXIAL CORR) <2243 - 7282>
7282.00	16802.00	Custom BHI AutoTrak Curve (IFR1, Short) (Rockies 0.03Gt model)	BHGE AUTOTRAK (IFR1, SHORT) <7282 -16802>
16802.00	16826.00	Blind Drilling (std)	Projection to bit

REFERENCE WELLPATH IDENTIFICATION			
Operator	Burlington Resources	Slot	SLOT#02 STATE BIERSTADT 4-65 35-34 1DH (1250'FNL & 650'FEL, SEC.35)
Area	COLORADO	Well	STATE BIERSTADT 4-65 35-34 1DH
Field	ARAPAHOE COUNTY (NAD83/TN)	Wellbore	STATE BIERSTADT 4-65 35-34 1DH AWB
Facility	SEC.35-T04S-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
2243.00	0.080	297.000	2242.96	TIE INTO GYRO SURVEYS
16802.00	90.150	272.210	8104.64	LAST BHGE MWD SURVEY
16826.00	90.150	272.210	8104.57	PROJECTION TO BIT