

# BONANZA CREEK ENERGY

Location: COLORADO

Field: WELD COUNTY (NAD83/TRUE)

Facility: SEC.14-T04N-R63W

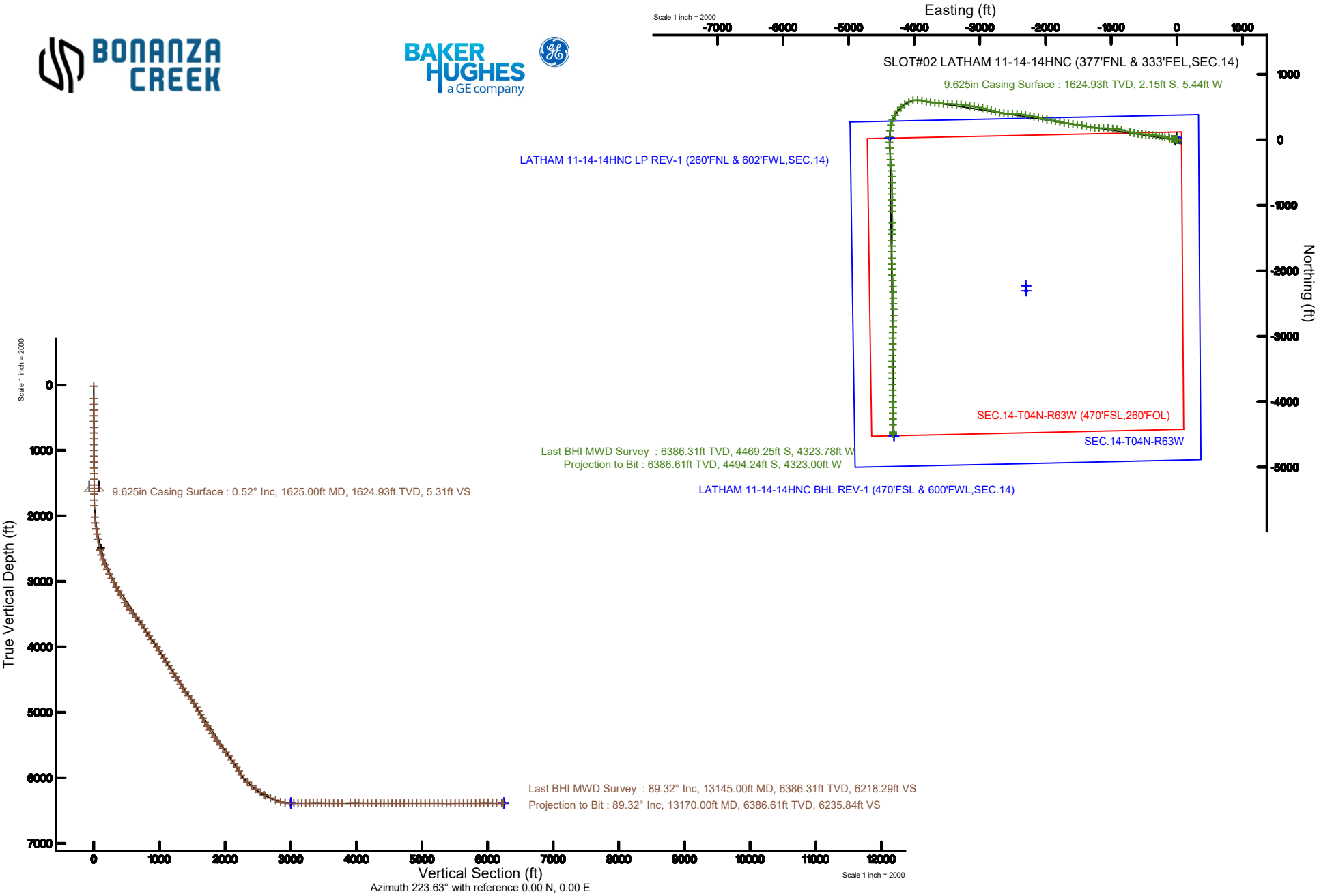
Slot: SLOT#02 LATHAM 11-14-14HNC (377°FNL & 333°FEL,SEC.14)

Well: LATHAM 11-14-14HNC

Wellbore: LATHAM 11-14-14HNC PWB

05-123-49904

Plot reference wellpath is LATHAM 11-14-14HNC (REV-C.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to AKITA 519 (4603.9'GL+17'KB@4620.9') (RKB)	North Reference: True north
Measured depths are referenced to AKITA 519 (4603.9'GL+17'KB@4620.9') (RKB)	Scale: True distance
AKITA 519 (4603.9'GL+17'KB@4620.9') (RKB) to Mean Sea Level: 4620.9 feet	Depths are in feet
Mean Sea Level to Ground level (At Slot: SLOT#02 LATHAM 11-14-14HNC (377°FNL & 333°FEL,SEC.14)): 0 feet	Created by: doddanna on 2019-07-25
Coordinates are in feet referenced to Slot	Database: WellArchitectDB



# Actual Wellpath Report

LATHAM 11-14-14HNC AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#02 LATHAM 11-14-14HNC (377'FNL & 333'FEL, SEC.14)
Area	COLORADO	Well	LATHAM 11-14-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 11-14-14HNC AWB
Facility	SEC.14-T04N-R63W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Doddanna
Scale	0.999958	Report Generated	7/25/2019 at 1:40:33 PM
Convergence at slot	0.71° East	Database/Source file	WellArchitectDB/LATHAM_11-14-14HNC_AWP.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-186.25	-152.50	3307538.93	1360953.11	40°19'08.281"N	104°23'49.423"W
Facility Reference Pt			3307689.09	1361141.24	40°19'10.121"N	104°23'47.454"W
Field Reference Pt			3224525.77	1254425.87	40°01'44.400"N	104°41'53.556"W

## WELLPATH DATUM

Calculation method	Minimum curvature	AKITA 519 (4603.9'GL+17'KB@4620.9') (RKB) to Facility Vertical Datum	4620.90ft
Horizontal Reference Pt	Slot	AKITA 519 (4603.9'GL+17'KB@4620.9') (RKB) to Mean Sea Level	4620.90ft
Vertical Reference Pt	AKITA 519 (4603.9'GL+17'KB@4620.9') (RKB)	AKITA 519 (4603.9'GL+17'KB@4620.9') (RKB) to Ground Level at Slot (SLOT#02 LATHAM 11-14-14HNC (377'FNL & 333'FEL, SEC.14))	4620.90ft
MD Reference Pt	AKITA 519 (4603.9'GL+17'KB@4620.9') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	223.63°

# Actual Wellpath Report

LATHAM 11-14-14HNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
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Area	COLORADO	Well	LATHAM 11-14-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 11-14-14HNC AWP
Facility	SEC.14-T04N-R63W		

WELLPATH DATA (147 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	320.650	0.00	0.00	0.00	0.00	40°19'08.280"N	104°23'49.423"W	0.00	
17.00	0.000	320.650	17.00	0.00	0.00	0.00	40°19'08.280"N	104°23'49.423"W	0.00	
209.00	1.090	320.650	208.99	-0.22	1.41	-1.16	40°19'08.294"N	104°23'49.438"W	0.57	
297.00	0.620	287.580	296.98	-0.12	2.20	-2.14	40°19'08.302"N	104°23'49.450"W	0.75	
384.00	0.690	300.640	383.97	0.21	2.61	-3.04	40°19'08.306"N	104°23'49.462"W	0.19	
472.00	0.460	295.920	471.97	0.43	3.04	-3.82	40°19'08.311"N	104°23'49.472"W	0.27	
558.00	0.710	239.620	557.96	1.05	2.92	-4.59	40°19'08.309"N	104°23'49.482"W	0.69	
647.00	0.200	266.120	646.96	1.70	2.63	-5.22	40°19'08.306"N	104°23'49.490"W	0.61	
736.00	0.130	259.520	735.96	1.89	2.60	-5.47	40°19'08.306"N	104°23'49.493"W	0.08	
824.00	0.280	248.850	823.96	2.17	2.50	-5.77	40°19'08.305"N	104°23'49.497"W	0.18	
912.00	0.740	258.750	911.96	2.83	2.32	-6.53	40°19'08.303"N	104°23'49.507"W	0.53	
1001.00	0.740	170.650	1000.95	3.64	1.64	-7.00	40°19'08.297"N	104°23'49.513"W	1.16	
1088.00	0.260	132.170	1087.95	3.98	0.95	-6.76	40°19'08.290"N	104°23'49.510"W	0.64	
1177.00	0.850	147.670	1176.94	4.13	0.26	-6.26	40°19'08.283"N	104°23'49.504"W	0.68	
1267.00	0.250	174.810	1266.94	4.42	-0.50	-5.88	40°19'08.276"N	104°23'49.499"W	0.71	
1354.00	0.330	159.450	1353.94	4.66	-0.93	-5.78	40°19'08.271"N	104°23'49.497"W	0.13	
1442.00	0.490	113.660	1441.94	4.64	-1.32	-5.34	40°19'08.268"N	104°23'49.492"W	0.40	
1529.00	0.220	187.500	1528.94	4.65	-1.63	-5.02	40°19'08.264"N	104°23'49.488"W	0.55	
1581.00	0.460	221.320	1580.93	4.94	-1.89	-5.18	40°19'08.262"N	104°23'49.490"W	0.58	
1670.00	0.580	231.090	1669.93	5.74	-2.44	-5.76	40°19'08.256"N	104°23'49.497"W	0.17	
1758.00	1.470	299.990	1757.92	6.45	-2.15	-7.09	40°19'08.259"N	104°23'49.514"W	1.56	
1845.00	3.950	313.740	1844.81	6.71	0.48	-10.22	40°19'08.285"N	104°23'49.555"W	2.93	
2021.00	8.900	279.830	2019.71	14.28	7.00	-28.03	40°19'08.350"N	104°23'49.785"W	3.43	
2110.00	10.190	269.500	2107.48	23.59	8.11	-42.69	40°19'08.361"N	104°23'49.974"W	2.40	
2198.00	12.470	267.740	2193.76	35.83	7.66	-59.97	40°19'08.356"N	104°23'50.197"W	2.62	
2286.00	18.710	283.470	2278.52	49.77	10.58	-83.22	40°19'08.385"N	104°23'50.497"W	8.50	
2375.00	22.850	295.420	2361.75	62.35	21.33	-112.73	40°19'08.491"N	104°23'50.878"W	6.64	
2551.00	26.720	284.790	2521.58	92.15	46.12	-181.92	40°19'08.736"N	104°23'51.771"W	3.35	
2639.00	29.810	277.520	2599.11	114.59	54.04	-222.75	40°19'08.815"N	104°23'52.299"W	5.25	
2725.00	33.130	274.980	2672.45	141.88	58.88	-267.37	40°19'08.862"N	104°23'52.875"W	4.16	

# Actual Wellpath Report

LATHAM 11-14-14HNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#02 LATHAM 11-14-14HNC (377'FNL & 333'FEL,SEC.14)
Area	COLORADO	Well	LATHAM 11-14-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 11-14-14HNC AWP
Facility	SEC.14-T04N-R63W		

## WELLPATH DATA (147 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2814.00	34.800	276.490	2746.26	172.41	63.86	-316.84	40°19'08.912"N	104°23'53.513"W	2.10	
2902.00	36.080	275.670	2817.96	203.51	69.26	-367.58	40°19'08.965"N	104°23'54.168"W	1.55	
2989.00	37.710	274.540	2887.53	236.05	73.90	-419.60	40°19'09.011"N	104°23'54.840"W	2.03	
3076.00	40.020	274.900	2955.27	270.34	78.39	-474.00	40°19'09.055"N	104°23'55.542"W	2.67	
3164.00	41.830	276.290	3021.76	305.84	84.03	-531.36	40°19'09.111"N	104°23'56.283"W	2.30	
3252.00	43.910	278.120	3086.25	341.37	91.55	-590.75	40°19'09.185"N	104°23'57.049"W	2.75	
3340.00	45.130	280.470	3149.00	376.16	101.53	-651.63	40°19'09.284"N	104°23'57.835"W	2.33	
3428.00	48.070	285.020	3209.47	408.91	115.69	-713.94	40°19'09.424"N	104°23'58.640"W	5.03	
3605.00	50.060	284.580	3325.44	473.40	149.84	-843.22	40°19'09.761"N	104°24'00.309"W	1.14	
3694.00	50.020	277.060	3382.65	510.32	162.63	-910.13	40°19'09.887"N	104°24'01.173"W	6.47	
3783.00	51.440	275.040	3438.98	552.35	169.88	-978.64	40°19'09.959"N	104°24'02.057"W	2.37	
3871.00	51.360	272.720	3493.89	596.32	174.53	-1047.25	40°19'10.005"N	104°24'02.943"W	2.06	
3959.00	50.370	271.320	3549.43	641.64	176.94	-1115.46	40°19'10.029"N	104°24'03.823"W	1.67	
4047.00	49.850	270.280	3605.87	687.54	177.89	-1182.97	40°19'10.038"N	104°24'04.695"W	1.08	
4135.00	49.570	274.700	3662.79	731.69	180.80	-1250.01	40°19'10.067"N	104°24'05.560"W	3.84	
4223.00	48.680	280.490	3720.41	770.83	189.56	-1315.91	40°19'10.153"N	104°24'06.411"W	5.08	
4311.00	49.890	283.800	3777.82	805.64	203.61	-1381.10	40°19'10.292"N	104°24'07.253"W	3.16	
4399.00	51.060	281.960	3833.82	840.35	218.73	-1447.26	40°19'10.441"N	104°24'08.107"W	2.09	
4487.00	51.460	277.730	3888.91	878.52	230.45	-1514.87	40°19'10.557"N	104°24'08.980"W	3.78	
4576.00	50.750	275.700	3944.79	920.11	238.56	-1583.65	40°19'10.637"N	104°24'09.868"W	1.95	
4663.00	49.620	276.760	4000.50	960.71	245.80	-1650.08	40°19'10.709"N	104°24'10.725"W	1.60	
4752.00	48.980	280.800	4058.55	999.26	256.09	-1716.74	40°19'10.811"N	104°24'11.586"W	3.52	
4839.00	49.770	284.110	4115.21	1033.43	270.34	-1781.20	40°19'10.951"N	104°24'12.418"W	3.03	
4929.00	50.080	281.300	4173.15	1068.82	285.48	-1848.37	40°19'11.101"N	104°24'13.285"W	2.41	
5016.00	49.820	279.790	4229.14	1105.17	297.66	-1913.84	40°19'11.221"N	104°24'14.131"W	1.36	
5104.00	49.100	281.170	4286.34	1141.75	309.82	-1979.60	40°19'11.341"N	104°24'14.980"W	1.45	
5192.00	48.920	283.500	4344.06	1176.25	324.01	-2044.48	40°19'11.481"N	104°24'15.817"W	2.01	
5280.00	49.050	282.060	4401.81	1210.30	338.70	-2109.23	40°19'11.627"N	104°24'16.653"W	1.24	
5369.00	49.170	280.980	4460.08	1246.07	352.13	-2175.15	40°19'11.759"N	104°24'17.504"W	0.93	
5455.00	49.010	279.720	4516.40	1281.73	363.81	-2239.09	40°19'11.875"N	104°24'18.330"W	1.12	

# Actual Wellpath Report

LATHAM 11-14-14HNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#02 LATHAM 11-14-14HNC (377'FNL & 333'FEL, SEC.14)
Area	COLORADO	Well	LATHAM 11-14-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 11-14-14HNC AWB
Facility	SEC.14-T04N-R63W		

## WELLPATH DATA (147 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5542.00	48.800	280.180	4573.58	1318.10	375.14	-2303.67	40°19'11.986"N	104°24'19.163"W	0.47	
5631.00	49.170	279.250	4631.99	1355.57	386.47	-2369.86	40°19'12.098"N	104°24'20.018"W	0.89	
5719.00	49.640	273.770	4689.28	1395.88	394.03	-2436.20	40°19'12.173"N	104°24'20.874"W	4.76	
5808.00	49.760	269.760	4746.85	1441.16	396.12	-2504.02	40°19'12.194"N	104°24'21.750"W	3.44	
5896.00	48.990	270.650	4804.15	1487.08	396.35	-2570.81	40°19'12.196"N	104°24'22.612"W	1.16	
5984.00	47.980	277.750	4862.52	1528.91	401.14	-2636.45	40°19'12.243"N	104°24'23.460"W	6.15	
6073.00	48.740	282.660	4921.68	1565.51	412.93	-2701.87	40°19'12.360"N	104°24'24.304"W	4.21	
6160.00	48.420	285.500	4979.24	1597.69	428.80	-2765.13	40°19'12.516"N	104°24'25.121"W	2.48	
6248.00	48.920	287.260	5037.36	1627.94	447.44	-2828.53	40°19'12.700"N	104°24'25.939"W	1.61	
6336.00	49.120	285.060	5095.07	1658.59	465.92	-2892.33	40°19'12.883"N	104°24'26.763"W	1.90	
6424.00	48.690	281.570	5152.92	1692.05	481.20	-2956.85	40°19'13.034"N	104°24'27.596"W	3.03	
6513.00	48.970	279.880	5211.52	1728.45	493.66	-3022.67	40°19'13.157"N	104°24'28.446"W	1.46	
6602.00	48.940	279.150	5269.96	1766.10	504.76	-3088.87	40°19'13.266"N	104°24'29.301"W	0.62	
6688.00	49.420	278.710	5326.17	1803.15	514.86	-3153.16	40°19'13.366"N	104°24'30.131"W	0.68	
6776.00	50.190	279.790	5382.97	1841.10	525.67	-3219.50	40°19'13.473"N	104°24'30.987"W	1.28	
6865.00	50.290	275.990	5439.90	1881.06	535.05	-3287.25	40°19'13.566"N	104°24'31.862"W	3.28	
6953.00	50.220	273.100	5496.18	1923.71	540.42	-3354.69	40°19'13.619"N	104°24'32.732"W	2.53	
7041.00	50.220	272.410	5552.48	1967.97	543.67	-3422.23	40°19'13.651"N	104°24'33.604"W	0.60	
7129.00	49.340	272.750	5609.31	2012.10	546.69	-3489.36	40°19'13.680"N	104°24'34.471"W	1.04	
7217.00	48.960	273.960	5666.87	2055.14	550.58	-3555.81	40°19'13.719"N	104°24'35.329"W	1.13	
7306.00	48.840	275.490	5725.37	2097.26	556.11	-3622.64	40°19'13.773"N	104°24'36.192"W	1.30	
7393.00	48.980	276.380	5782.55	2137.35	562.89	-3687.86	40°19'13.840"N	104°24'37.034"W	0.79	
7481.00	48.440	277.380	5840.62	2176.92	570.80	-3753.51	40°19'13.918"N	104°24'37.881"W	1.05	
7568.00	47.580	282.970	5898.85	2212.56	582.20	-3817.11	40°19'14.031"N	104°24'38.702"W	4.88	
7657.00	49.160	283.150	5957.97	2246.39	597.23	-3881.91	40°19'14.179"N	104°24'39.539"W	1.78	
7744.00	52.230	271.790	6013.19	2286.11	605.81	-3948.47	40°19'14.264"N	104°24'40.398"W	10.69	
7833.00	52.380	257.090	6067.79	2339.17	599.01	-4018.22	40°19'14.197"N	104°24'41.299"W	13.06	
7921.00	52.910	243.860	6121.34	2401.35	575.70	-4083.89	40°19'13.966"N	104°24'42.147"W	11.96	
8010.00	55.150	234.960	6173.68	2470.57	539.04	-4145.74	40°19'13.604"N	104°24'42.945"W	8.47	
8098.00	56.310	227.880	6223.27	2542.55	493.71	-4202.51	40°19'13.156"N	104°24'43.678"W	6.78	

# Actual Wellpath Report

LATHAM 11-14-14HNC AWP

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Operator	BONANZA CREEK ENERGY	Slot	SLOT#02 LATHAM 11-14-14HNC (377'FNL & 333'FEL,SEC.14)
Area	COLORADO	Well	LATHAM 11-14-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 11-14-14HNC AWB
Facility	SEC.14-T04N-R63W		

## WELLPATH DATA (147 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8185.00	59.370	216.200	6269.69	2615.96	439.08	-4251.60	40°19'12.616"N	104°24'44.312"W	11.89	
8273.00	66.040	210.460	6310.05	2692.79	373.75	-4294.42	40°19'11.970"N	104°24'44.864"W	9.54	
8359.00	71.500	203.780	6341.21	2769.54	302.44	-4330.85	40°19'11.265"N	104°24'45.334"W	9.63	
8447.00	75.690	191.750	6366.14	2845.28	222.21	-4356.45	40°19'10.473"N	104°24'45.665"W	13.95	
8536.00	82.630	184.070	6382.89	2916.10	135.74	-4368.40	40°19'09.618"N	104°24'45.819"W	11.51	
8623.00	89.750	184.860	6388.67	2983.36	49.26	-4375.15	40°19'08.763"N	104°24'45.906"W	8.23	
8711.00	90.280	179.660	6388.65	3049.37	-38.65	-4378.62	40°19'07.895"N	104°24'45.950"W	5.94	
8800.00	90.120	173.990	6388.34	3110.27	-127.47	-4373.70	40°19'07.017"N	104°24'45.887"W	6.37	
8888.00	89.450	176.510	6388.67	3168.71	-215.16	-4366.41	40°19'06.151"N	104°24'45.792"W	2.96	
8976.00	90.770	176.730	6388.50	3228.70	-303.01	-4361.22	40°19'05.282"N	104°24'45.725"W	1.52	
9064.00	91.690	174.950	6386.61	3287.81	-390.75	-4354.84	40°19'04.415"N	104°24'45.642"W	2.28	
9152.00	90.220	174.640	6385.14	3345.72	-478.37	-4346.86	40°19'03.550"N	104°24'45.539"W	1.71	
9239.00	89.750	177.080	6385.17	3404.18	-565.14	-4340.58	40°19'02.692"N	104°24'45.458"W	2.86	
9328.00	89.690	181.180	6385.60	3467.65	-654.11	-4339.23	40°19'01.813"N	104°24'45.440"W	4.61	
9416.00	89.910	177.390	6385.91	3530.56	-742.08	-4338.13	40°19'00.944"N	104°24'45.426"W	4.31	
9504.00	89.750	177.520	6386.17	3591.50	-830.00	-4334.22	40°19'00.075"N	104°24'45.375"W	0.23	
9593.00	89.480	182.260	6386.77	3655.78	-918.97	-4334.05	40°18'59.196"N	104°24'45.373"W	5.33	
9680.00	90.400	181.350	6386.86	3720.60	-1005.92	-4336.79	40°18'58.336"N	104°24'45.408"W	1.49	
9768.00	89.940	177.700	6386.60	3783.78	-1093.91	-4336.06	40°18'57.467"N	104°24'45.398"W	4.18	
9945.00	90.860	179.410	6385.36	3908.76	-1270.84	-4331.60	40°18'55.719"N	104°24'45.340"W	1.10	
10050.00	89.850	181.900	6384.71	3985.57	-1375.82	-4332.80	40°18'54.681"N	104°24'45.356"W	2.56	
10120.00	88.890	182.590	6385.48	4038.08	-1445.76	-4335.54	40°18'53.990"N	104°24'45.391"W	1.69	
10208.00	89.380	181.860	6386.81	4104.07	-1533.68	-4338.96	40°18'53.121"N	104°24'45.435"W	1.00	
10297.00	90.220	181.330	6387.12	4170.17	-1622.65	-4341.43	40°18'52.242"N	104°24'45.467"W	1.12	
10385.00	90.370	178.730	6386.67	4233.89	-1710.64	-4341.48	40°18'51.373"N	104°24'45.467"W	2.96	
10484.00	89.780	180.470	6386.54	4305.06	-1809.63	-4340.79	40°18'50.394"N	104°24'45.458"W	1.86	
10575.00	89.510	177.930	6387.10	4370.04	-1900.61	-4339.52	40°18'49.495"N	104°24'45.441"W	2.81	
10649.00	89.600	179.710	6387.68	4422.53	-1974.59	-4337.99	40°18'48.764"N	104°24'45.421"W	2.41	
10742.00	90.550	175.600	6387.55	4487.14	-2067.49	-4334.19	40°18'47.846"N	104°24'45.372"W	4.54	
10825.00	89.420	176.280	6387.58	4543.01	-2150.28	-4328.31	40°18'47.028"N	104°24'45.296"W	1.59	

# Actual Wellpath Report

LATHAM 11-14-14HNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#02 LATHAM 11-14-14HNC (377'FNL & 333'FEL, SEC.14)
Area	COLORADO	Well	LATHAM 11-14-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 11-14-14HNC AWB
Facility	SEC.14-T04N-R63W		

## WELLPATH DATA (147 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10915.00	89.690	179.280	6388.27	4605.69	-2240.20	-4324.83	40°18'46.140"N	104°24'45.251"W	3.35	
11004.00	89.660	177.630	6388.78	4668.42	-2329.17	-4322.43	40°18'45.260"N	104°24'45.220"W	1.85	
11092.00	90.220	180.680	6388.87	4731.20	-2417.14	-4321.13	40°18'44.391"N	104°24'45.203"W	3.52	
11178.00	90.490	177.560	6388.34	4792.52	-2503.12	-4319.81	40°18'43.541"N	104°24'45.185"W	3.64	
11266.00	90.030	177.630	6387.94	4853.61	-2591.04	-4316.12	40°18'42.673"N	104°24'45.138"W	0.53	
11355.00	89.540	182.070	6388.27	4917.85	-2680.02	-4315.88	40°18'41.793"N	104°24'45.134"W	5.02	
11444.00	89.910	181.360	6388.70	4984.07	-2768.98	-4318.55	40°18'40.914"N	104°24'45.169"W	0.90	
11531.00	90.030	183.930	6388.75	5049.74	-2855.88	-4322.56	40°18'40.056"N	104°24'45.220"W	2.96	
11619.00	90.920	182.590	6388.02	5116.77	-2943.73	-4327.57	40°18'39.187"N	104°24'45.285"W	1.83	
11706.00	90.550	181.390	6386.90	5181.78	-3030.67	-4330.59	40°18'38.328"N	104°24'45.323"W	1.44	
11794.00	89.750	177.820	6386.67	5245.04	-3118.65	-4329.98	40°18'37.459"N	104°24'45.315"W	4.16	
11883.00	88.680	180.990	6387.89	5308.80	-3207.63	-4329.06	40°18'36.580"N	104°24'45.303"W	3.76	
11972.00	89.630	183.410	6389.20	5375.52	-3296.54	-4332.47	40°18'35.701"N	104°24'45.347"W	2.92	
12059.00	90.620	179.700	6389.01	5440.08	-3383.49	-4334.83	40°18'34.842"N	104°24'45.377"W	4.41	
12148.00	89.630	179.830	6388.82	5504.24	-3472.49	-4334.47	40°18'33.962"N	104°24'45.372"W	1.12	
12238.00	91.230	179.650	6388.14	5569.09	-3562.49	-4334.06	40°18'33.073"N	104°24'45.367"W	1.79	
12325.00	90.220	179.830	6387.04	5631.78	-3649.48	-4333.66	40°18'32.213"N	104°24'45.362"W	1.18	
12412.00	90.060	177.470	6386.83	5693.32	-3736.45	-4331.61	40°18'31.354"N	104°24'45.335"W	2.72	
12501.00	89.140	179.170	6387.45	5755.90	-3825.40	-4329.01	40°18'30.475"N	104°24'45.301"W	2.17	
12588.00	91.200	180.700	6387.19	5818.79	-3912.39	-4328.91	40°18'29.615"N	104°24'45.300"W	2.95	
12676.00	90.520	177.200	6385.87	5881.35	-4000.35	-4327.29	40°18'28.746"N	104°24'45.279"W	4.05	
12764.00	90.030	178.840	6385.45	5942.90	-4088.30	-4324.25	40°18'27.877"N	104°24'45.239"W	1.95	
12852.00	89.940	181.960	6385.47	6007.01	-4176.28	-4324.87	40°18'27.008"N	104°24'45.247"W	3.55	
12942.00	89.820	179.420	6385.66	6072.88	-4266.27	-4325.95	40°18'26.118"N	104°24'45.261"W	2.83	
13032.00	90.090	180.020	6385.73	6137.72	-4356.27	-4325.51	40°18'25.229"N	104°24'45.255"W	0.73	
13145.00	89.320	178.220	6386.31	6218.29	-4469.25	-4323.78	40°18'24.113"N	104°24'45.232"W	1.73	Last BHI MWD Survey
13170.00	89.320	178.220	6386.61	6235.84	-4494.24	-4323.00	40°18'23.866"N	104°24'45.222"W	0.00	Projection to Bit



# Actual Wellpath Report

LATHAM 11-14-14HNC AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#02 LATHAM 11-14-14HNC (377'FNL & 333'FEL,SEC.14)
Area	COLORADO	Well	LATHAM 11-14-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 11-14-14HNC AWB
Facility	SEC.14-T04N-R63W		

## HOLE & CASING SECTIONS

- Ref Wellbore: LATHAM 11-14-14HNC AWB      Ref Wellpath: LATHAM 11-14-14HNC 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	17.00	1625.00	1608.00	17.00	1624.93	0.00	0.00	-2.15	-5.44

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
LATHAM 11-14-14HNC BHL PLAT (470'FSL & 600'FWL,SEC.14)	6380.90	-4520.74	-4310.00	3303285.67	1356379.31	40°18'23.604"N	104°24'45.054"W	point
LATHAM 11-14-14HNC LP PLAT (260'FNL & 602'FWL,SEC.14)	6380.90	23.92	-4373.79	3303165.37	1360922.63	40°19'08.513"N	104°24'45.888"W	point
LATHAM 11-14-14HNC BHL REV-1 (470'FSL & 600'FWL,SEC.14)	6390.00	-4520.72	-4309.98	3303285.70	1356379.34	40°18'23.604"N	104°24'45.054"W	point
LATHAM 11-14-14HNC LP REV-1 (260'FNL & 602'FWL,SEC.14)	6390.00	23.91	-4373.78	3303165.38	1360922.63	40°19'08.513"N	104°24'45.888"W	point
SEC.14-T04N-R63W (470'FSL,260'FOL)	16619.90	-2229.97	-2297.17	3305269.76	1358694.84	40°18'46.243"N	104°24'19.076"W	polygon
SEC.14-T04N-R63W	16620.90	-2308.95	-2295.99	3305271.94	1358615.89	40°18'45.463"N	104°24'19.061"W	polygon

## WELLPATH COMPOSITION - Ref Wellbore: LATHAM 11-14-14HNC AWB      Ref Wellpath: LATHAM 11-14-14HNC AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1581.00	BHI NaviTrak (Rotating)	BHI NAVITRAK MWD 13.5" (ROTATING)<209-1581>	LATHAM 11-14-14HNC AWB
1581.00	13145.00	BHI AutoTrak Curve (Short)	BHI ATC 8.5" (SHORT)<1670-13145>	LATHAM 11-14-14HNC AWB
13145.00	13170.00	Blind Drilling (std)	Projection to bit	LATHAM 11-14-14HNC AWB



# Actual Wellpath Report

LATHAM 11-14-14HNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#02 LATHAM 11-14-14HNC (377'FNL & 333'FEL,SEC.14)
Area	COLORADO	Well	LATHAM 11-14-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 11-14-14HNC AWB
Facility	SEC.14-T04N-R63W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13145.00	89.320	178.220	6386.31	Last BHI MWD Survey
13170.00	89.320	178.220	6386.61	Projection to Bit