

BONANZA CREEK ENERGY

Location: COLORADO

Field: WELD COUNTY (NAD83/TRUE)

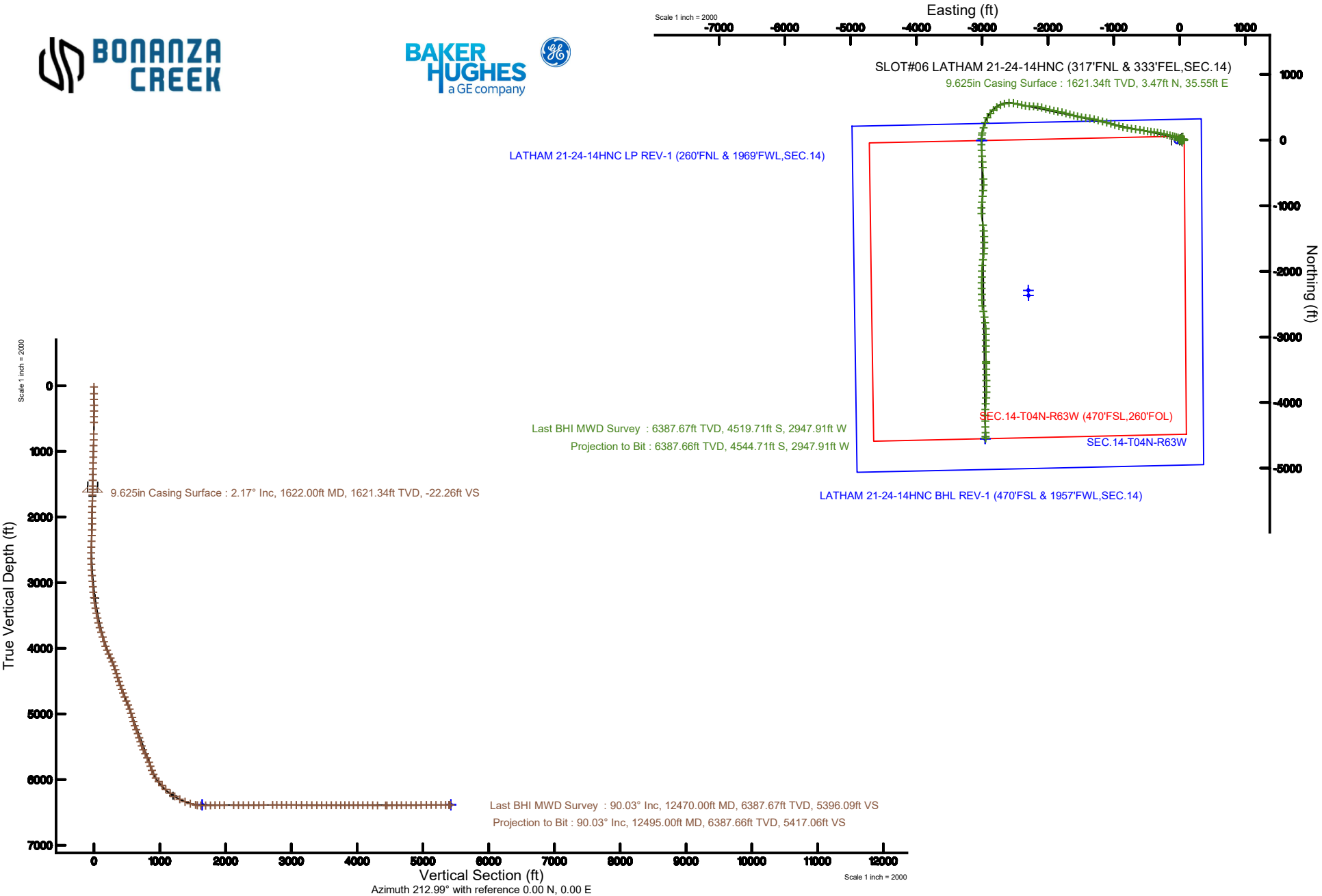
Facility: SEC.14-T04N-R63W

Slot: SLOT#06 LATHAM 21-24-14HNC (317°FNL & 333°FEL,SEC.14)

Well: LATHAM 21-24-14HNC

Wellbore: LATHAM 21-24-14HNC PWB
05-123-49908-00

Plot reference wellpath is LATHAM 21-24-14HNC (REV-D.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#06 LATHAM 21-24-14HNC (317°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 21-24-14HNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#06 LATHAM 21-24-14HNC (317'FNL & 333'FEL, SEC.14)
Area	COLORADO	Well	LATHAM 21-24-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 21-24-14HNC AWP
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 2:09:56 PM
Convergence at slot	0.71° East	Database/Source file	WellArchitectDB/LATHAM_21-24-14HNC_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-126.29	-152.50	3307538.18	1361013.06	40°19'08.873"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#06 LATHAM 21-24-14HNC (317'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	212.99°

Actual Wellpath Report

LATHAM 21-24-14HNC AWP

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**BAKER
HUGHES**

REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#06 LATHAM 21-24-14HNC (317'FNL & 333'FEL, SEC.14)
Area	COLORADO	Well	LATHAM 21-24-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 21-24-14HNC AWP
Facility	SEC.14-T04N-R63W		

WELLPATH DATA (143 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	295.190	0.00	0.00	0.00	0.00	40°19'08.873"N	104°23'49.423"W	0.00	
17.00	0.000	295.190	17.00	0.00	0.00	0.00	40°19'08.873"N	104°23'49.423"W	0.00	
121.00	0.500	295.190	121.00	0.06	0.19	-0.41	40°19'08.875"N	104°23'49.428"W	0.48	
209.00	0.670	237.700	208.99	0.58	0.08	-1.19	40°19'08.874"N	104°23'49.438"W	0.66	
297.00	0.760	270.170	296.99	1.36	-0.19	-2.21	40°19'08.871"N	104°23'49.451"W	0.46	
384.00	0.660	68.270	383.99	1.27	0.00	-2.32	40°19'08.873"N	104°23'49.453"W	1.60	
472.00	0.500	89.450	471.98	0.64	0.19	-1.47	40°19'08.875"N	104°23'49.442"W	0.30	
558.00	1.040	71.900	557.97	-0.17	0.43	-0.35	40°19'08.877"N	104°23'49.427"W	0.68	
736.00	1.740	87.970	735.92	-2.98	1.03	3.89	40°19'08.883"N	104°23'49.373"W	0.45	
824.00	1.470	88.460	823.89	-4.39	1.11	6.35	40°19'08.884"N	104°23'49.341"W	0.31	
912.00	2.380	80.400	911.84	-6.26	1.44	9.28	40°19'08.887"N	104°23'49.303"W	1.08	
1001.00	2.200	78.900	1000.76	-8.70	2.08	12.78	40°19'08.894"N	104°23'49.258"W	0.21	
1088.00	2.270	75.310	1087.70	-11.14	2.84	16.08	40°19'08.901"N	104°23'49.215"W	0.18	
1177.00	2.110	89.050	1176.63	-13.35	3.31	19.43	40°19'08.906"N	104°23'49.172"W	0.62	
1267.00	2.190	88.630	1266.57	-15.25	3.38	22.80	40°19'08.906"N	104°23'49.128"W	0.09	
1354.00	2.100	89.560	1353.51	-17.07	3.43	26.06	40°19'08.907"N	104°23'49.086"W	0.11	
1442.00	1.910	89.020	1441.46	-18.77	3.47	29.14	40°19'08.907"N	104°23'49.047"W	0.22	
1529.00	2.240	86.130	1528.40	-20.60	3.61	32.28	40°19'08.909"N	104°23'49.006"W	0.40	
1578.00	1.840	92.360	1577.37	-21.58	3.64	34.02	40°19'08.909"N	104°23'48.984"W	0.93	
1667.00	2.530	105.710	1666.30	-22.89	3.05	37.34	40°19'08.903"N	104°23'48.941"W	0.96	
1755.00	3.130	86.210	1754.20	-24.90	2.68	41.61	40°19'08.900"N	104°23'48.886"W	1.28	
1842.00	2.670	69.910	1841.09	-27.95	3.54	45.88	40°19'08.908"N	104°23'48.830"W	1.08	
1931.00	2.420	112.440	1930.01	-29.95	3.53	49.57	40°19'08.908"N	104°23'48.783"W	2.09	
2019.00	3.190	147.200	2017.91	-29.28	0.77	52.61	40°19'08.881"N	104°23'48.744"W	2.08	
2107.00	3.850	123.610	2105.74	-28.25	-2.93	56.40	40°19'08.844"N	104°23'48.695"W	1.79	
2196.00	3.070	96.570	2194.59	-29.28	-4.86	61.25	40°19'08.825"N	104°23'48.632"W	2.01	
2284.00	3.720	60.460	2282.44	-32.86	-3.72	66.08	40°19'08.836"N	104°23'48.570"W	2.49	
2372.00	3.660	21.300	2370.27	-38.14	0.31	69.58	40°19'08.876"N	104°23'48.524"W	2.81	
2460.00	3.030	335.210	2458.14	-42.13	5.04	69.63	40°19'08.923"N	104°23'48.524"W	3.05	
2548.00	3.700	311.840	2545.99	-43.81	9.04	66.54	40°19'08.962"N	104°23'48.564"W	1.72	

Actual Wellpath Report

LATHAM 21-24-14HNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#06 LATHAM 21-24-14HNC (317'FNL & 333'FEL,SEC.14)
Area	COLORADO	Well	LATHAM 21-24-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 21-24-14HNC AWB
Facility	SEC.14-T04N-R63W		

WELLPATH DATA (143 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2636.00	4.210	291.420	2633.78	-43.60	12.12	61.41	40°19'08.993"N	104°23'48.630"W	1.69	
2723.00	5.720	284.440	2720.46	-41.58	14.36	54.24	40°19'09.015"N	104°23'48.723"W	1.87	
2811.00	10.100	282.340	2807.60	-37.46	17.11	42.45	40°19'09.042"N	104°23'48.875"W	4.99	
2899.00	13.450	283.230	2893.73	-31.28	21.10	24.95	40°19'09.082"N	104°23'49.101"W	3.81	
2986.00	17.320	286.840	2977.60	-24.26	27.17	2.69	40°19'09.141"N	104°23'49.388"W	4.58	
3074.00	17.340	286.820	3061.61	-16.96	34.76	-22.40	40°19'09.216"N	104°23'49.712"W	0.02	
3162.00	18.340	286.850	3145.38	-9.46	42.57	-48.20	40°19'09.294"N	104°23'50.045"W	1.14	
3250.00	19.350	287.550	3228.66	-1.74	50.98	-75.35	40°19'09.377"N	104°23'50.396"W	1.18	
3337.00	24.510	283.850	3309.34	8.02	59.65	-106.64	40°19'09.462"N	104°23'50.800"W	6.14	
3425.00	29.160	282.040	3387.84	21.68	68.50	-145.35	40°19'09.550"N	104°23'51.299"W	5.36	
3514.00	32.060	284.610	3464.43	36.88	78.98	-189.43	40°19'09.653"N	104°23'51.868"W	3.57	
3603.00	33.430	285.730	3539.29	51.60	91.59	-235.88	40°19'09.778"N	104°23'52.468"W	1.68	
3692.00	34.530	282.860	3613.10	67.55	103.85	-284.08	40°19'09.899"N	104°23'53.090"W	2.19	
3780.00	35.450	279.020	3685.20	86.50	113.40	-333.60	40°19'09.994"N	104°23'53.730"W	2.71	
3869.00	35.250	275.220	3757.80	108.95	119.78	-384.68	40°19'10.057"N	104°23'54.389"W	2.48	
3956.00	34.760	278.150	3829.07	131.07	125.58	-434.23	40°19'10.114"N	104°23'55.029"W	2.01	
4044.00	37.210	279.370	3900.27	152.26	133.47	-485.33	40°19'10.192"N	104°23'55.688"W	2.90	
4133.00	42.440	280.690	3968.60	174.45	143.43	-541.43	40°19'10.290"N	104°23'56.413"W	5.95	
4221.00	47.550	280.490	4030.81	198.16	154.86	-602.57	40°19'10.403"N	104°23'57.202"W	5.81	
4308.00	47.980	277.130	4089.30	224.53	164.72	-666.21	40°19'10.501"N	104°23'58.024"W	2.90	
4396.00	47.810	277.580	4148.30	252.78	173.07	-730.96	40°19'10.583"N	104°23'58.859"W	0.43	
4484.00	48.090	280.360	4207.25	279.36	183.26	-795.49	40°19'10.684"N	104°23'59.693"W	2.37	
4573.00	47.710	282.940	4266.92	303.39	196.59	-860.16	40°19'10.816"N	104°24'00.527"W	2.19	
4660.00	45.770	285.260	4326.54	323.91	212.00	-921.60	40°19'10.968"N	104°24'01.321"W	2.96	
4749.00	46.920	287.570	4387.98	342.26	230.21	-983.35	40°19'11.148"N	104°24'02.118"W	2.28	
4837.00	47.610	286.970	4447.70	359.77	249.40	-1045.08	40°19'11.337"N	104°24'02.915"W	0.93	
4926.00	48.150	285.150	4507.40	378.99	267.65	-1108.51	40°19'11.518"N	104°24'03.734"W	1.63	
5013.00	47.840	283.150	4565.62	399.86	283.46	-1171.19	40°19'11.674"N	104°24'04.543"W	1.74	
5102.00	47.940	285.230	4625.30	421.13	299.64	-1235.19	40°19'11.834"N	104°24'05.369"W	1.74	
5189.00	48.590	282.920	4683.22	442.17	315.42	-1298.16	40°19'11.990"N	104°24'06.182"W	2.12	

Actual Wellpath Report

LATHAM 21-24-14HNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#06 LATHAM 21-24-14HNC (317'FNL & 333'FEL,SEC.14)
Area	COLORADO	Well	LATHAM 21-24-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 21-24-14HNC AWB
Facility	SEC.14-T04N-R63W		

WELLPATH DATA (143 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5277.00	47.370	279.180	4742.14	466.57	327.97	-1362.30	40°19'12.114"N	104°24'07.010"W	3.45	
5365.00	46.270	277.780	4802.36	493.17	337.44	-1425.76	40°19'12.207"N	104°24'07.830"W	1.71	
5454.00	45.660	280.410	4864.22	519.09	347.54	-1488.93	40°19'12.307"N	104°24'08.645"W	2.23	
5540.00	44.360	282.550	4925.03	541.39	359.63	-1548.53	40°19'12.426"N	104°24'09.415"W	2.32	
5628.00	43.350	283.780	4988.48	562.07	373.51	-1607.90	40°19'12.563"N	104°24'10.181"W	1.50	
5717.00	42.670	285.520	5053.57	581.17	388.86	-1666.63	40°19'12.715"N	104°24'10.939"W	1.54	
5805.00	45.180	286.980	5116.94	598.73	405.96	-1725.22	40°19'12.884"N	104°24'11.696"W	3.08	
5893.00	46.050	282.760	5178.51	618.29	422.07	-1785.98	40°19'13.043"N	104°24'12.480"W	3.57	
5981.00	45.910	280.540	5239.67	641.31	434.85	-1847.95	40°19'13.169"N	104°24'13.280"W	1.82	
6070.00	45.550	281.780	5301.79	665.01	447.18	-1910.47	40°19'13.291"N	104°24'14.087"W	1.08	
6158.00	45.840	284.340	5363.27	686.46	461.42	-1971.81	40°19'13.432"N	104°24'14.879"W	2.11	
6245.00	46.030	286.000	5423.77	705.59	477.77	-2032.14	40°19'13.593"N	104°24'15.658"W	1.39	
6334.00	46.060	284.840	5485.55	724.92	494.81	-2093.90	40°19'13.762"N	104°24'16.455"W	0.94	
6422.00	46.170	277.740	5546.59	748.34	507.21	-2156.02	40°19'13.884"N	104°24'17.257"W	5.81	
6510.00	45.540	271.680	5607.91	778.21	512.41	-2218.90	40°19'13.935"N	104°24'18.069"W	4.99	
6598.00	43.260	273.770	5670.78	809.25	515.31	-2280.39	40°19'13.964"N	104°24'18.863"W	3.08	
6687.00	42.660	278.200	5735.93	836.79	521.62	-2340.68	40°19'14.026"N	104°24'19.641"W	3.46	
6774.00	45.130	284.380	5798.65	858.99	533.49	-2399.75	40°19'14.144"N	104°24'20.404"W	5.68	
6861.00	47.000	282.850	5859.01	879.78	548.22	-2460.64	40°19'14.289"N	104°24'21.190"W	2.49	
6950.00	48.270	280.490	5918.99	903.70	561.50	-2525.03	40°19'14.420"N	104°24'22.022"W	2.42	
7039.00	51.500	265.300	5976.52	937.82	564.71	-2592.65	40°19'14.452"N	104°24'22.894"W	13.53	
7127.00	50.540	256.910	6031.94	983.39	554.18	-2660.13	40°19'14.348"N	104°24'23.766"W	7.49	
7214.00	46.620	244.430	6089.61	1034.68	532.87	-2721.52	40°19'14.137"N	104°24'24.558"W	11.65	
7302.00	47.540	235.490	6149.60	1092.02	500.65	-2777.18	40°19'13.819"N	104°24'25.277"W	7.51	
7391.00	52.060	223.710	6207.15	1157.00	456.56	-2828.62	40°19'13.383"N	104°24'25.941"W	11.30	
7478.00	58.190	218.950	6256.89	1227.57	402.94	-2875.62	40°19'12.853"N	104°24'26.548"W	8.35	
7567.00	62.380	211.270	6301.05	1304.71	339.74	-2919.93	40°19'12.228"N	104°24'27.119"W	8.85	
7655.00	67.460	198.050	6338.47	1383.28	267.46	-2952.90	40°19'11.514"N	104°24'27.545"W	14.77	
7744.00	73.330	197.070	6368.32	1464.06	187.56	-2978.17	40°19'10.725"N	104°24'27.871"W	6.68	
7831.00	80.550	191.480	6387.99	1544.23	105.50	-2998.99	40°19'09.914"N	104°24'28.140"W	10.39	

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Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 21-24-14HNC AWB
Facility	SEC.14-T04N-R63W		

WELLPATH DATA (143 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7861.00	83.310	187.050	6392.20	1571.41	76.20	-3003.77	40°19'09.624"N	104°24'28.201"W	17.27	
7919.00	89.420	183.350	6395.88	1622.58	18.59	-3009.00	40°19'09.055"N	104°24'28.269"W	12.31	
8008.00	90.980	179.520	6395.57	1698.41	-70.36	-3011.23	40°19'08.176"N	104°24'28.297"W	4.65	
8096.00	92.060	176.320	6393.23	1770.40	-158.26	-3008.04	40°19'07.307"N	104°24'28.256"W	3.84	
8185.00	90.280	175.580	6391.41	1841.43	-247.02	-3001.75	40°19'06.430"N	104°24'28.175"W	2.17	
8271.00	89.970	176.150	6391.23	1910.00	-332.79	-2995.55	40°19'05.583"N	104°24'28.095"W	0.75	
8359.00	90.550	177.270	6390.83	1980.94	-420.64	-2990.50	40°19'04.715"N	104°24'28.029"W	1.43	
8534.00	90.030	176.130	6389.94	2122.00	-595.35	-2980.43	40°19'02.988"N	104°24'27.899"W	0.72	
8623.00	89.850	181.580	6390.03	2195.65	-684.30	-2978.65	40°19'02.109"N	104°24'27.876"W	6.13	
8710.00	89.630	184.670	6390.43	2271.09	-771.15	-2983.39	40°19'01.251"N	104°24'27.937"W	3.56	
8798.00	90.060	186.880	6390.67	2349.34	-858.70	-2992.25	40°19'00.386"N	104°24'28.051"W	2.56	
8887.00	90.180	187.570	6390.48	2429.50	-946.99	-3003.44	40°18'59.513"N	104°24'28.196"W	0.79	
8974.00	90.550	181.620	6389.93	2506.00	-1033.67	-3010.41	40°18'58.657"N	104°24'28.285"W	6.85	
9062.00	90.950	176.710	6388.77	2579.08	-1121.63	-3009.13	40°18'57.787"N	104°24'28.269"W	5.60	
9238.00	90.550	169.720	6386.47	2714.26	-1296.27	-2988.35	40°18'56.062"N	104°24'28.000"W	3.98	
9326.00	89.690	174.080	6386.28	2780.57	-1383.37	-2975.95	40°18'55.201"N	104°24'27.840"W	5.05	
9414.00	89.940	177.670	6386.57	2850.73	-1471.13	-2969.62	40°18'54.334"N	104°24'27.758"W	4.09	
9503.00	89.750	179.250	6386.81	2924.06	-1560.10	-2967.23	40°18'53.455"N	104°24'27.727"W	1.79	
9590.00	88.890	182.320	6387.84	2997.66	-1647.07	-2968.42	40°18'52.595"N	104°24'27.742"W	3.66	
9679.00	89.690	186.950	6388.94	3075.96	-1735.75	-2975.61	40°18'51.719"N	104°24'27.835"W	5.28	
9767.00	90.000	188.870	6389.18	3155.66	-1822.91	-2987.72	40°18'50.858"N	104°24'27.991"W	2.21	
9855.00	89.970	185.120	6389.20	3234.75	-1910.24	-2998.44	40°18'49.995"N	104°24'28.129"W	4.26	
9943.00	89.660	180.800	6389.49	3310.92	-1998.10	-3002.98	40°18'49.126"N	104°24'28.188"W	4.92	
10032.00	89.350	181.990	6390.26	3386.73	-2087.06	-3005.15	40°18'48.247"N	104°24'28.216"W	1.38	
10120.00	89.850	182.090	6390.87	3462.20	-2175.01	-3008.28	40°18'47.378"N	104°24'28.256"W	0.58	
10207.00	89.630	176.750	6391.27	3534.66	-2261.97	-3007.40	40°18'46.519"N	104°24'28.245"W	6.14	
10295.00	89.910	179.750	6391.62	3606.97	-2349.92	-3004.71	40°18'45.650"N	104°24'28.210"W	3.42	
10384.00	90.770	179.670	6391.09	3681.38	-2438.91	-3004.26	40°18'44.770"N	104°24'28.204"W	0.97	
10472.00	90.340	170.480	6390.24	3750.73	-2526.49	-2996.71	40°18'43.905"N	104°24'28.106"W	10.45	
10559.00	90.250	168.150	6389.79	3813.65	-2611.98	-2980.58	40°18'43.060"N	104°24'27.898"W	2.68	

Actual Wellpath Report

LATHAM 21-24-14HNC AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#06 LATHAM 21-24-14HNC (317'FNL & 333'FEL,SEC.14)
Area	COLORADO	Well	LATHAM 21-24-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 21-24-14HNC AWB
Facility	SEC.14-T04N-R63W		

WELLPATH DATA (143 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10648.00	89.600	171.330	6389.91	3878.48	-2699.54	-2964.73	40°18'42.195"N	104°24'27.693"W	3.65	
10735.00	89.480	173.630	6390.61	3944.62	-2785.78	-2953.35	40°18'41.343"N	104°24'27.546"W	2.65	
10824.00	89.850	176.230	6391.13	4014.69	-2874.43	-2945.48	40°18'40.467"N	104°24'27.444"W	2.95	
10912.00	89.690	181.460	6391.48	4087.50	-2962.38	-2943.71	40°18'39.598"N	104°24'27.421"W	5.95	
11000.00	90.400	179.620	6391.41	4161.76	-3050.37	-2944.54	40°18'38.728"N	104°24'27.432"W	2.24	
11089.00	88.950	180.330	6391.91	4236.39	-3139.36	-2944.50	40°18'37.849"N	104°24'27.431"W	1.81	
11177.00	89.850	178.560	6392.84	4309.73	-3227.35	-2943.65	40°18'36.979"N	104°24'27.420"W	2.26	
11329.00	89.970	178.390	6393.08	4434.98	-3379.30	-2939.60	40°18'35.478"N	104°24'27.368"W	0.14	
11351.00	90.370	179.440	6393.01	4453.20	-3401.29	-2939.19	40°18'35.260"N	104°24'27.362"W	5.11	
11441.00	90.710	180.380	6392.16	4528.62	-3491.29	-2939.05	40°18'34.371"N	104°24'27.360"W	1.11	
11529.00	90.400	177.900	6391.31	4601.69	-3579.27	-2937.73	40°18'33.502"N	104°24'27.343"W	2.84	
11616.00	90.280	179.440	6390.79	4673.55	-3666.24	-2935.71	40°18'32.642"N	104°24'27.317"W	1.78	
11704.00	90.680	179.810	6390.06	4747.05	-3754.23	-2935.13	40°18'31.773"N	104°24'27.309"W	0.62	
11791.00	89.970	180.710	6389.56	4820.23	-3841.23	-2935.53	40°18'30.913"N	104°24'27.314"W	1.32	
11879.00	90.030	183.740	6389.56	4895.84	-3929.15	-2938.94	40°18'30.044"N	104°24'27.358"W	3.44	
11968.00	90.770	184.970	6388.94	4973.96	-4017.89	-2945.70	40°18'29.167"N	104°24'27.445"W	1.61	
12057.00	90.430	181.100	6388.01	5051.05	-4106.74	-2950.41	40°18'28.289"N	104°24'27.506"W	4.36	
12145.00	89.690	179.960	6387.92	5125.31	-4194.74	-2951.22	40°18'27.420"N	104°24'27.516"W	1.54	
12233.00	89.600	179.870	6388.46	5199.05	-4282.74	-2951.09	40°18'26.550"N	104°24'27.515"W	0.14	
12323.00	90.830	179.190	6388.12	5274.14	-4372.73	-2950.36	40°18'25.661"N	104°24'27.505"W	1.56	
12410.00	89.850	178.580	6387.61	5346.17	-4459.71	-2948.66	40°18'24.801"N	104°24'27.483"W	1.33	
12470.00	90.030	179.990	6387.67	5396.09	-4519.71	-2947.91	40°18'24.208"N	104°24'27.473"W	2.37	Last BHI MWD Survey
12495.00	90.030	179.990	6387.66	5417.06	-4544.71	-2947.91	40°18'23.961"N	104°24'27.473"W	0.00	Projection to Bit

Actual Wellpath Report

LATHAM 21-24-14HNC AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#06 LATHAM 21-24-14HNC (317'FNL & 333'FEL,SEC.14)
Area	COLORADO	Well	LATHAM 21-24-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 21-24-14HNC AWB
Facility	SEC.14-T04N-R63W		

HOLE & CASING SECTIONS

- Ref Wellbore: LATHAM 21-24-14HNC AWB Ref Wellpath: LATHAM 21-24-14HNC 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	1622.00	1605.00	17.00	1621.34	0.00	0.00	3.47	35.55

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
LATHAM 21-24-14HNC BHL PLAT (470'FSL & 1957'FWL,SEC.14)	6380.90	-4550.63	-2953.59	3304641.54	1356426.26	40°18'23.903"N	104°24'27.546"W	point
LATHAM 21-24-14HNC LP PLAT (260'FNL & 1969'FWL,SEC.14)	6380.90	-6.95	-3007.37	3304531.26	1360968.71	40°19'08.802"N	104°24'28.248"W	point
LATHAM 21-24-14HNC BHL REV-1 (470'FSL & 1957'FWL,SEC.14)	6388.00	-4550.62	-2953.56	3304641.58	1356426.26	40°18'23.903"N	104°24'27.546"W	point
LATHAM 21-24-14HNC LP REV-1 (260'FNL & 1969'FWL,SEC.14)	6388.00	-7.00	-3007.39	3304531.24	1360968.66	40°19'08.802"N	104°24'28.248"W	point
SEC.14-T04N-R63W (470'FSL,260'FOL)	16619.90	-2289.93	-2297.17	3305269.76	1358694.84	40°18'46.243"N	104°24'19.076"W	polygon
SEC.14-T04N-R63W	16620.90	-2368.91	-2295.99	3305271.94	1358615.89	40°18'45.463"N	104°24'19.061"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: LATHAM 21-24-14HNC AWB Ref Wellpath: LATHAM 21-24-14HNC AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1578.00	BHI NaviTrak (Rotating)	BHI NAVITRAK MWD 13.5" (ROTATING)<121-1578>	LATHAM 21-24-14HNC AWB
1578.00	12470.00	BHI AutoTrak Curve (Short)	BHI ATC 8.5" (SHORT)<1667-12470>	LATHAM 21-24-14HNC AWB
12470.00	12495.00	Blind Drilling (std)	Projection to bit	LATHAM 21-24-14HNC AWB

Actual Wellpath Report

LATHAM 21-24-14HNC AWP

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Area	COLORADO	Well	LATHAM 21-24-14HNC
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	LATHAM 21-24-14HNC AWB
Facility	SEC.14-T04N-R63W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
12470.00	90.030	179.990	6387.67	Last BHI MWD Survey
12495.00	90.030	179.990	6387.66	Projection to Bit