

BONANZA CREEK ENERGY OPERATING

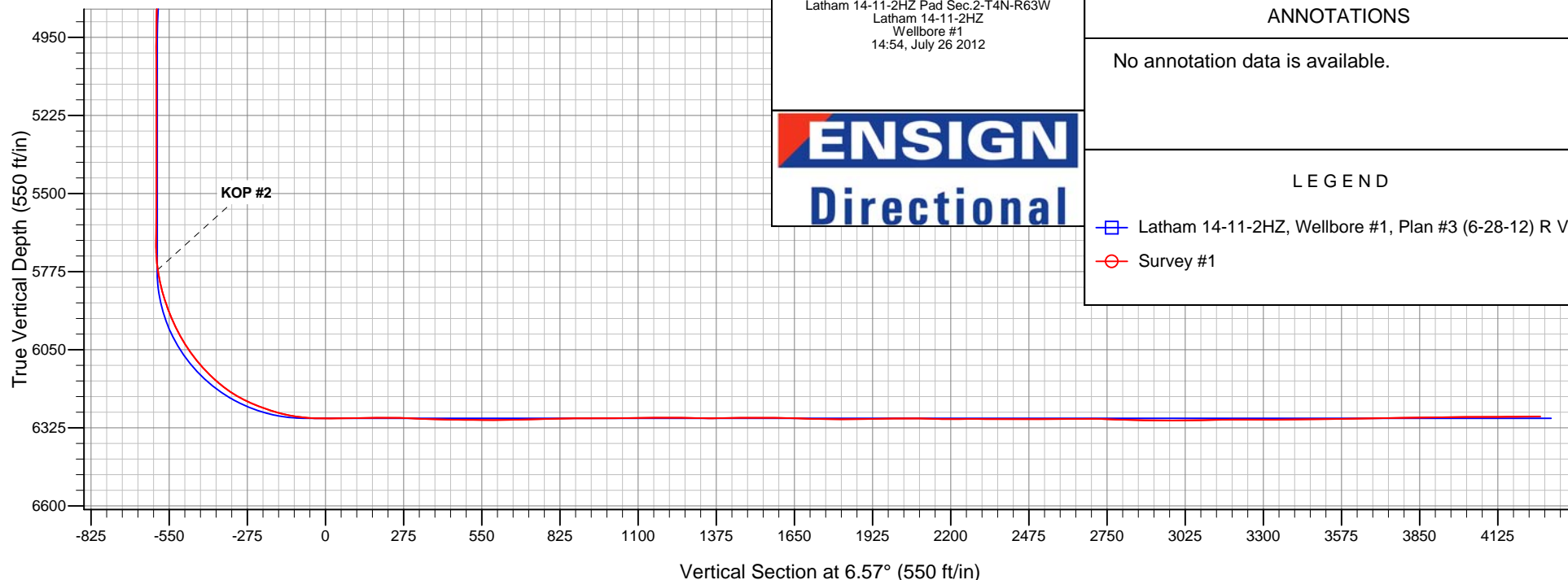
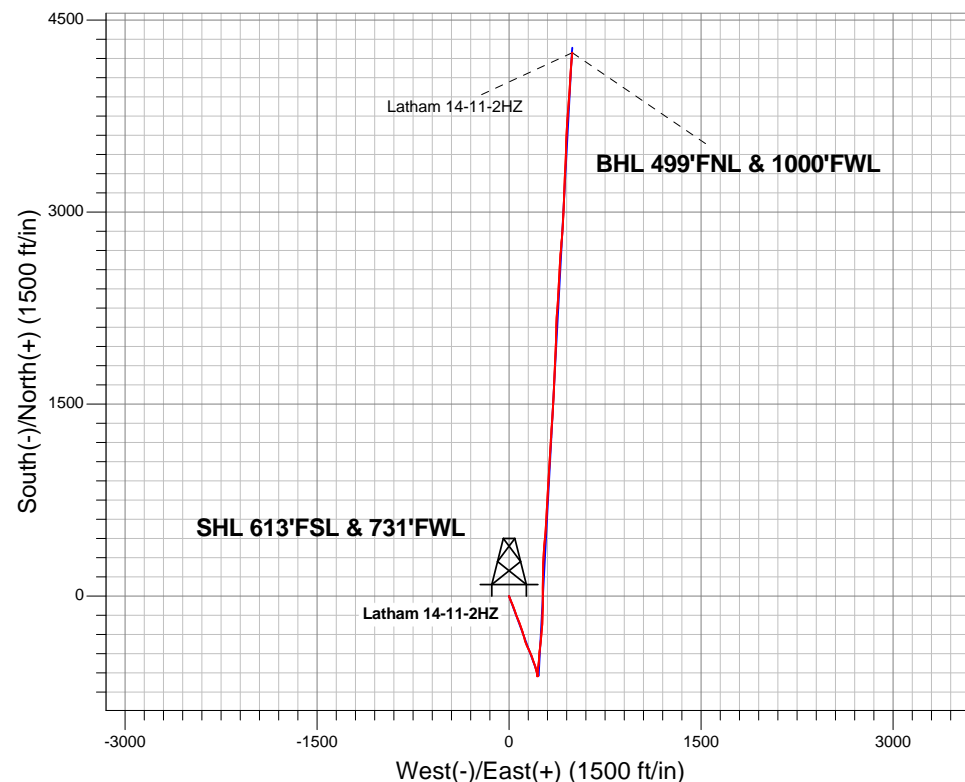
Well Name: Latham 14-11-2HZ

Surface Location: Latham 14-11-2HZ Pad Sec.2-T4N-R63W
North American Datum 1983 , US State Plane 1983 Colorado Northern Zone
Ground Elevation: 4539.0
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.0 0.0 1367028.05 3303162.07 40.335790 -104.412490
Original Well Elev WELL @ 4554.0ft (Original Well Elev)

FINAL SURVEY

Projected Bottom Hole Location
10968' MD 6285' TVD 4245' N & 493' E of SHL

90.40 degree Incl @ 5.00 degree AZM





BONANZA CREEK ENERGY OPERATING

SEC.2-T4N-R63W

Latham 14-11-2HZ Pad Sec.2-T4N-R63W

Latham 14-11-2HZ

Wellbore #1

Survey: Survey #1

Standard Survey Report

26 July, 2012

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Latham 14-11-2HZ
Project:	SEC.2-T4N-R63W	TVD Reference:	WELL @ 4554.0ft (Original Well Elev)
Site:	Latham 14-11-2HZ Pad Sec.2-T4N-R63W	MD Reference:	WELL @ 4554.0ft (Original Well Elev)
Well:	Latham 14-11-2HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.2-T4N-R63W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	Latham 14-11-2HZ Pad Sec.2-T4N-R63W				
Site Position:		Northing:	1,367,028.03ft	Latitude:	40.335790
From:	Lat/Long	Easting:	3,303,159.28ft	Longitude:	-104.412500
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.70 °

Well	Latham 14-11-2HZ					
Well Position	+N/-S	0.0 ft	Northing:	1,367,028.05 ft	Latitude:	40.335790
	+E/-W	0.0 ft	Easting:	3,303,162.07 ft	Longitude:	-104.412490
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,539.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/25/2012	8.53	67.02	53,029

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	6.57	

Survey Program		Date	7/26/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
122.0	10,968.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

Survey										
	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	HARDLINE BHL 460°FNL									
	0.9	0.01	158.90	0.9	0.0	0.0	0.0	0.74	0.74	0.00
	HARDLINE SHL 460°FSL									
	122.0	0.90	158.90	122.0	-0.9	0.3	-0.8	0.74	0.74	0.00
	210.0	2.10	159.90	210.0	-3.1	1.1	-2.9	1.36	1.36	1.14
	303.0	4.70	158.50	302.8	-8.2	3.1	-7.8	2.80	2.80	-1.51
	396.0	6.20	160.40	395.4	-16.5	6.2	-15.7	1.62	1.61	2.04
	487.0	8.10	159.60	485.7	-27.1	10.1	-25.8	2.09	2.09	-0.88
	581.0	9.00	156.90	578.6	-40.1	15.3	-38.1	1.05	0.96	-2.87
	674.0	9.10	154.10	670.5	-53.4	21.4	-50.6	0.49	0.11	-3.01
	736.0	9.10	156.60	731.7	-62.3	25.4	-59.0	0.64	0.00	4.03
	823.0	9.80	158.30	817.5	-75.5	30.9	-71.5	0.87	0.80	1.95

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Site:	Latham 14-11-2HZ Pad Sec.2-T4N-R63W	MD Reference:	WELL @ 4554.0ft (Original Well Elev)
Well:	Latham 14-11-2HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
948.0	9.90	161.30	940.7	-95.6	38.3	-90.5	0.42	0.08	2.40	
1,072.0	9.40	162.90	1,062.9	-115.3	44.7	-109.5	0.46	-0.40	1.29	
1,196.0	9.20	163.20	1,185.3	-134.5	50.5	-127.8	0.17	-0.16	0.24	
1,317.0	8.50	154.30	1,304.8	-151.8	57.2	-144.3	1.27	-0.58	-7.36	
1,439.0	7.90	156.20	1,425.6	-167.6	64.5	-159.1	0.54	-0.49	1.56	
1,562.0	9.10	159.90	1,547.2	-184.5	71.3	-175.1	1.07	0.98	3.01	
1,684.0	8.50	156.40	1,667.8	-201.8	78.2	-191.5	0.66	-0.49	-2.87	
1,807.0	8.10	162.90	1,789.5	-218.4	84.4	-207.3	0.83	-0.33	5.28	
1,929.0	7.90	160.90	1,910.3	-234.6	89.6	-222.8	0.28	-0.16	-1.64	
2,052.0	7.00	159.50	2,032.3	-249.6	95.0	-237.1	0.75	-0.73	-1.14	
2,175.0	7.10	160.80	2,154.4	-263.8	100.2	-250.6	0.15	0.08	1.06	
2,297.0	8.00	165.30	2,275.3	-279.1	104.8	-265.3	0.88	0.74	3.69	
2,420.0	7.60	159.20	2,397.2	-295.0	109.8	-280.5	0.75	-0.33	-4.96	
2,543.0	8.90	163.40	2,518.9	-311.7	115.5	-296.4	1.16	1.06	3.41	
2,666.0	9.10	166.20	2,640.4	-330.3	120.5	-314.3	0.39	0.16	2.28	
2,791.0	8.10	163.90	2,764.0	-348.3	125.3	-331.7	0.85	-0.80	-1.84	
2,915.0	8.80	157.40	2,886.6	-365.5	131.4	-348.1	0.95	0.56	-5.24	
3,040.0	8.60	160.60	3,010.2	-383.1	138.1	-364.8	0.42	-0.16	2.56	
3,165.0	8.70	150.20	3,133.8	-400.1	145.9	-380.8	1.25	0.08	-8.32	
3,288.0	8.50	155.00	3,255.4	-416.5	154.4	-396.1	0.61	-0.16	3.90	
3,413.0	8.90	157.10	3,378.9	-433.7	162.1	-412.3	0.41	0.32	1.68	
3,537.0	9.10	156.20	3,501.4	-451.5	169.8	-429.2	0.20	0.16	-0.73	
3,663.0	8.90	158.00	3,625.9	-469.7	177.4	-446.3	0.27	-0.16	1.43	
3,788.0	8.70	162.50	3,749.4	-487.7	183.9	-463.4	0.57	-0.16	3.60	
3,913.0	8.60	161.10	3,873.0	-505.5	189.8	-480.5	0.19	-0.08	-1.12	
4,035.0	8.70	162.20	3,993.6	-523.0	195.5	-497.1	0.16	0.08	0.90	
4,161.0	9.50	160.20	4,118.0	-541.8	202.0	-515.1	0.68	0.63	-1.59	
4,284.0	8.30	165.70	4,239.5	-560.0	207.6	-532.5	1.19	-0.98	4.47	
4,409.0	8.20	168.70	4,363.2	-577.4	211.6	-549.4	0.35	-0.08	2.40	
4,534.0	8.30	161.10	4,486.9	-594.7	216.3	-566.1	0.88	0.08	-6.08	
4,659.0	5.70	157.10	4,611.0	-609.0	221.6	-579.6	2.11	-2.08	-3.20	
4,784.0	3.80	159.50	4,735.6	-618.6	225.5	-588.7	1.53	-1.52	1.92	
4,907.0	1.60	176.00	4,858.4	-624.1	227.0	-594.0	1.88	-1.79	13.41	
5,032.0	0.50	311.20	4,983.4	-625.5	226.7	-595.4	1.59	-0.88	108.16	
5,157.0	0.50	278.20	5,108.4	-625.1	225.8	-595.1	0.23	0.00	-26.40	
5,282.0	0.60	289.10	5,233.4	-624.8	224.6	-595.0	0.12	0.08	8.72	
5,407.0	0.90	268.10	5,358.4	-624.6	223.0	-595.0	0.32	0.24	-16.80	
5,532.0	0.90	263.90	5,483.4	-624.7	221.1	-595.3	0.05	0.00	-3.36	
5,689.0	0.60	258.70	5,640.4	-625.0	219.0	-595.9	0.20	-0.19	-3.31	
5,726.0	0.50	242.30	5,677.4	-625.1	218.7	-596.0	0.50	-0.27	-44.32	
5,757.0	1.90	1.50	5,708.4	-624.7	218.6	-595.6	7.06	4.52	384.52	
5,789.0	5.40	8.20	5,740.3	-622.7	218.8	-593.5	11.00	10.94	20.94	
5,820.0	8.70	10.60	5,771.0	-618.9	219.5	-589.7	10.69	10.65	7.74	
5,851.0	11.40	11.30	5,801.6	-613.6	220.5	-584.3	8.72	8.71	2.26	
5,883.0	14.10	10.50	5,832.8	-606.7	221.8	-577.3	8.46	8.44	-2.50	
5,914.0	16.90	7.10	5,862.6	-598.5	223.1	-569.0	9.49	9.03	-10.97	
5,945.0	19.30	5.50	5,892.1	-588.9	224.1	-559.4	7.91	7.74	-5.16	
5,977.0	21.50	5.00	5,922.1	-577.8	225.1	-548.2	6.90	6.88	-1.56	
6,008.0	24.20	4.50	5,950.7	-565.8	226.1	-536.2	8.73	8.71	-1.61	
6,039.0	26.60	7.10	5,978.7	-552.6	227.5	-522.9	8.54	7.74	8.39	
6,071.0	29.50	6.40	6,006.9	-537.6	229.2	-507.9	9.12	9.06	-2.19	
6,102.0	32.00	6.60	6,033.5	-521.9	231.0	-492.0	8.07	8.06	0.65	
6,133.0	35.30	6.60	6,059.3	-504.8	233.0	-474.9	10.65	10.65	0.00	
6,164.0	38.60	4.50	6,084.1	-486.3	234.8	-456.2	11.40	10.65	-6.77	

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Site:	Latham 14-11-2HZ Pad Sec.2-T4N-R63W	MD Reference:	WELL @ 4554.0ft (Original Well Elev)
Well:	Latham 14-11-2HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
6,195.0	42.00	3.40	6,107.8	-466.3	236.2	-436.2	11.20	10.97	-3.55	
6,226.0	44.80	4.00	6,130.3	-445.0	237.5	-414.9	9.13	9.03	1.94	
6,255.0	47.30	5.00	6,150.4	-424.2	239.2	-394.1	8.97	8.62	3.45	
6,287.0	50.20	6.80	6,171.5	-400.3	241.7	-370.0	10.00	9.06	5.63	
6,318.0	54.00	7.80	6,190.5	-376.0	244.8	-345.6	12.52	12.26	3.23	
6,349.0	58.10	7.50	6,207.8	-350.5	248.2	-319.9	13.25	13.23	-0.97	
6,381.0	62.70	5.90	6,223.7	-322.9	251.4	-292.0	15.02	14.38	-5.00	
6,412.0	67.10	4.80	6,236.8	-295.0	254.1	-264.0	14.55	14.19	-3.55	
6,444.0	68.50	4.00	6,248.9	-265.4	256.3	-234.4	4.95	4.38	-2.50	
6,475.0	71.30	2.40	6,259.5	-236.4	257.9	-205.3	10.25	9.03	-5.16	
6,505.0	73.60	2.40	6,268.6	-207.8	259.1	-176.8	7.67	7.67	0.00	
6,536.0	76.50	2.20	6,276.6	-177.9	260.3	-146.9	9.38	9.35	-0.65	
6,568.0	80.60	2.00	6,282.9	-146.5	261.5	-115.7	12.83	12.81	-0.63	
6,573.4	81.03	2.07	6,283.8	-141.2	261.7	-110.4	8.17	8.06	1.30	
T1 460'FSL, 1000'FWL										
6,599.0	83.10	2.40	6,287.3	-115.9	262.7	-85.1	8.17	8.06	1.29	
6,631.0	86.40	2.00	6,290.3	-84.0	263.9	-53.3	10.39	10.31	-1.25	
6,662.0	89.70	0.60	6,291.3	-53.1	264.6	-22.5	11.56	10.65	-4.52	
6,693.0	90.40	0.40	6,291.3	-22.1	264.9	8.4	2.35	2.26	-0.65	
6,725.0	89.50	359.70	6,291.3	9.9	264.9	40.2	3.56	-2.81	-2.19	
6,771.0	90.70	359.90	6,291.2	55.9	264.7	85.8	2.64	2.61	0.43	
6,802.0	91.70	0.40	6,290.6	86.9	264.8	116.6	3.61	3.23	1.61	
6,831.0	91.10	359.90	6,289.9	115.9	264.9	145.4	2.69	-2.07	-1.72	
6,862.0	90.80	359.90	6,289.4	146.9	264.8	176.2	0.97	-0.97	0.00	
6,894.0	89.50	0.80	6,289.3	178.9	265.0	208.0	4.94	-4.06	2.81	
6,925.0	88.60	2.00	6,289.8	209.9	265.8	238.9	4.84	-2.90	3.87	
6,956.0	88.70	1.50	6,290.5	240.9	266.7	269.8	1.64	0.32	-1.61	
6,988.0	87.90	1.50	6,291.5	272.8	267.6	301.7	2.50	-2.50	0.00	
7,019.0	87.30	2.90	6,292.8	303.8	268.8	332.5	4.91	-1.94	4.52	
7,051.0	87.80	4.30	6,294.1	335.7	270.8	364.5	4.64	1.56	4.38	
7,082.0	88.50	5.50	6,295.1	366.6	273.4	395.4	4.48	2.26	3.87	
7,113.0	89.00	5.40	6,295.8	397.4	276.4	426.4	1.64	1.61	-0.32	
7,144.0	89.10	4.70	6,296.3	428.3	279.1	457.4	2.28	0.32	-2.26	
7,176.0	89.30	4.50	6,296.8	460.2	281.7	489.4	0.88	0.63	-0.63	
7,207.0	89.70	4.10	6,297.0	491.1	284.0	520.4	1.82	1.29	-1.29	
7,238.0	89.80	4.00	6,297.2	522.0	286.2	551.3	0.46	0.32	-0.32	
7,270.0	90.20	3.60	6,297.2	553.9	288.3	583.3	1.77	1.25	-1.25	
7,301.0	90.50	3.30	6,297.0	584.9	290.2	614.2	1.37	0.97	-0.97	
7,331.0	90.70	2.60	6,296.7	614.8	291.7	644.2	2.43	0.67	-2.33	
7,362.0	90.60	2.90	6,296.3	645.8	293.2	675.1	1.02	-0.32	0.97	
7,394.0	91.50	3.10	6,295.7	677.8	294.9	707.0	2.88	2.81	0.63	
7,425.0	91.70	4.10	6,294.9	708.7	296.8	738.0	3.29	0.65	3.23	
7,456.0	92.00	4.30	6,293.9	739.6	299.1	768.9	1.16	0.97	0.65	
7,487.0	92.00	4.00	6,292.8	770.5	301.3	799.9	0.97	0.00	-0.97	
7,519.0	90.80	3.60	6,292.0	802.4	303.4	831.9	3.95	-3.75	-1.25	
7,550.0	91.00	3.40	6,291.5	833.3	305.3	862.8	0.91	0.65	-0.65	
7,581.0	90.00	2.00	6,291.3	864.3	306.8	893.7	5.55	-3.23	-4.52	
7,612.0	90.00	2.00	6,291.3	895.3	307.9	924.6	0.00	0.00	0.00	
7,644.0	90.00	2.60	6,291.3	927.3	309.2	956.5	1.88	0.00	1.88	
7,675.0	90.70	4.00	6,291.1	958.2	310.9	987.5	5.05	2.26	4.52	
7,706.0	90.50	3.10	6,290.7	989.2	312.9	1,018.4	2.97	-0.65	-2.90	
7,738.0	90.90	4.30	6,290.3	1,021.1	314.9	1,050.4	3.95	1.25	3.75	
7,769.0	90.20	4.00	6,290.0	1,052.0	317.2	1,081.4	2.46	-2.26	-0.97	
7,800.0	90.90	3.60	6,289.8	1,082.9	319.2	1,112.3	2.60	2.26	-1.29	

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Well:	Latham 14-11-2HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
7,832.0	90.00	3.40	6,289.5	1,114.9	321.2	1,144.3	2.88	-2.81	-0.63	
7,863.0	90.70	4.00	6,289.3	1,145.8	323.2	1,175.3	2.97	2.26	1.94	
7,894.0	90.00	2.40	6,289.1	1,176.8	324.9	1,206.2	5.63	-2.26	-5.16	
7,925.0	89.00	3.40	6,289.4	1,207.7	326.5	1,237.1	4.56	-3.23	3.23	
7,956.0	89.30	2.40	6,289.9	1,238.7	328.0	1,268.1	3.37	0.97	-3.23	
7,988.0	89.10	4.00	6,290.3	1,270.6	329.8	1,300.0	5.04	-0.63	5.00	
8,019.0	89.00	3.80	6,290.8	1,301.5	331.9	1,331.0	0.72	-0.32	-0.65	
8,051.0	90.00	4.10	6,291.1	1,333.5	334.1	1,362.9	3.26	3.13	0.94	
8,082.0	91.50	3.40	6,290.7	1,364.4	336.2	1,393.9	5.34	4.84	-2.26	
8,113.0	91.00	4.10	6,290.0	1,395.3	338.2	1,424.8	2.77	-1.61	2.26	
8,145.0	90.20	2.70	6,289.7	1,427.3	340.1	1,456.8	5.04	-2.50	-4.38	
8,176.0	89.90	3.60	6,289.6	1,458.2	341.8	1,487.7	3.06	-0.97	2.90	
8,207.0	90.70	3.10	6,289.5	1,489.2	343.6	1,518.7	3.04	2.58	-1.61	
8,239.0	90.20	3.80	6,289.2	1,521.1	345.5	1,550.6	2.69	-1.56	2.19	
8,270.0	89.10	3.60	6,289.4	1,552.0	347.5	1,581.6	3.61	-3.55	-0.65	
8,301.0	87.90	3.40	6,290.2	1,583.0	349.4	1,612.5	3.92	-3.87	-0.65	
8,332.0	88.10	2.70	6,291.3	1,613.9	351.1	1,643.5	2.35	0.65	-2.26	
8,361.0	88.50	2.60	6,292.2	1,642.9	352.4	1,672.4	1.42	1.38	-0.34	
8,392.0	88.90	2.60	6,292.9	1,673.8	353.8	1,703.3	1.29	1.29	0.00	
8,423.0	89.20	2.20	6,293.4	1,704.8	355.1	1,734.2	1.61	0.97	-1.29	
8,454.0	89.10	1.90	6,293.9	1,735.8	356.2	1,765.1	1.02	-0.32	-0.97	
8,485.0	89.30	1.50	6,294.3	1,766.7	357.1	1,796.0	1.44	0.65	-1.29	
8,517.0	90.10	2.70	6,294.5	1,798.7	358.3	1,827.9	4.51	2.50	3.75	
8,548.0	90.30	2.60	6,294.3	1,829.7	359.8	1,858.8	0.72	0.65	-0.32	
8,578.0	91.20	2.40	6,294.0	1,859.7	361.1	1,888.8	3.07	3.00	-0.67	
8,609.0	91.30	2.00	6,293.3	1,890.6	362.3	1,919.7	1.33	0.32	-1.29	
8,640.0	90.70	2.00	6,292.7	1,921.6	363.3	1,950.5	1.94	-1.94	0.00	
8,671.0	91.00	2.90	6,292.3	1,952.6	364.7	1,981.5	3.06	0.97	2.90	
8,702.0	90.30	1.10	6,291.9	1,983.5	365.7	2,012.4	6.23	-2.26	-5.81	
8,733.0	89.70	2.00	6,291.9	2,014.5	366.6	2,043.2	3.49	-1.94	2.90	
8,765.0	89.90	1.90	6,292.0	2,046.5	367.7	2,075.1	0.70	0.63	-0.31	
8,796.0	88.70	1.30	6,292.4	2,077.5	368.5	2,106.0	4.33	-3.87	-1.94	
8,827.0	88.50	1.50	6,293.2	2,108.5	369.3	2,136.9	0.91	-0.65	0.65	
8,859.0	89.20	2.40	6,293.8	2,140.5	370.4	2,168.8	3.56	2.19	2.81	
8,890.0	90.00	4.00	6,294.0	2,171.4	372.1	2,199.7	5.77	2.58	5.16	
8,921.0	90.50	3.30	6,293.9	2,202.3	374.1	2,230.7	2.77	1.61	-2.26	
8,952.0	90.20	4.50	6,293.7	2,233.3	376.2	2,261.6	3.99	-0.97	3.87	
8,982.0	90.00	4.00	6,293.7	2,263.2	378.4	2,291.6	1.80	-0.67	-1.67	
9,013.0	89.60	4.30	6,293.8	2,294.1	380.7	2,322.6	1.61	-1.29	0.97	
9,044.0	89.80	3.80	6,293.9	2,325.0	382.8	2,353.6	1.74	0.65	-1.61	
9,075.0	90.10	2.70	6,294.0	2,356.0	384.6	2,384.5	3.68	0.97	-3.55	
9,107.0	89.70	4.30	6,294.0	2,387.9	386.6	2,416.5	5.15	-1.25	5.00	
9,138.0	89.80	2.90	6,294.1	2,418.9	388.5	2,447.4	4.53	0.32	-4.52	
9,169.0	90.20	3.40	6,294.1	2,449.8	390.2	2,478.4	2.07	1.29	1.61	
9,201.0	90.40	2.60	6,294.0	2,481.8	391.9	2,510.3	2.58	0.63	-2.50	
9,232.0	89.70	2.90	6,293.9	2,512.7	393.4	2,541.2	2.46	-2.26	0.97	
9,264.0	90.00	2.90	6,294.0	2,544.7	395.0	2,573.2	0.94	0.94	0.00	
9,295.0	90.50	2.40	6,293.9	2,575.7	396.4	2,604.1	2.28	1.61	-1.61	
9,326.0	91.10	3.10	6,293.5	2,606.6	397.9	2,635.0	2.97	1.94	2.26	
9,357.0	90.70	4.00	6,293.0	2,637.5	399.8	2,666.0	3.18	-1.29	2.90	
9,389.0	89.50	4.80	6,292.9	2,669.5	402.3	2,697.9	4.51	-3.75	2.50	
9,420.0	88.00	5.20	6,293.6	2,700.3	405.0	2,728.9	5.01	-4.84	1.29	
9,451.0	88.00	4.50	6,294.7	2,731.2	407.6	2,759.9	2.26	0.00	-2.26	
9,482.0	88.00	4.10	6,295.8	2,762.1	409.9	2,790.9	1.29	0.00	-1.29	

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Latham 14-11-2HZ
Project:	SEC.2-T4N-R63W	TVD Reference:	WELL @ 4554.0ft (Original Well Elev)
Site:	Latham 14-11-2HZ Pad Sec.2-T4N-R63W	MD Reference:	WELL @ 4554.0ft (Original Well Elev)
Well:	Latham 14-11-2HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,513.0	88.10	4.70	6,296.8	2,793.0	412.3	2,821.8	1.96	0.32	1.94
9,545.0	88.80	3.40	6,297.7	2,824.9	414.6	2,853.8	4.61	2.19	-4.06
9,575.0	89.20	3.40	6,298.2	2,854.8	416.3	2,883.7	1.33	1.33	0.00
9,605.0	89.60	4.50	6,298.5	2,884.8	418.4	2,913.7	3.90	1.33	3.67
9,637.0	89.80	4.10	6,298.7	2,916.7	420.8	2,945.7	1.40	0.63	-1.25
9,668.0	89.90	2.90	6,298.8	2,947.6	422.7	2,976.6	3.88	0.32	-3.87
9,699.0	90.20	3.80	6,298.7	2,978.6	424.5	3,007.6	3.06	0.97	2.90
9,730.0	90.70	2.60	6,298.5	3,009.5	426.2	3,038.5	4.19	1.61	-3.87
9,762.0	90.90	2.70	6,298.1	3,041.5	427.7	3,070.4	0.70	0.63	0.31
9,793.0	91.40	2.40	6,297.4	3,072.4	429.1	3,101.3	1.88	1.61	-0.97
9,824.0	91.50	2.40	6,296.6	3,103.4	430.4	3,132.3	0.32	0.32	0.00
9,856.0	90.90	1.10	6,296.0	3,135.4	431.4	3,164.1	4.47	-1.88	-4.06
9,886.0	90.00	2.70	6,295.7	3,165.4	432.4	3,194.0	6.12	-3.00	5.33
9,918.0	90.00	2.00	6,295.7	3,197.3	433.7	3,225.9	2.19	0.00	-2.19
9,949.0	89.40	1.30	6,295.9	3,228.3	434.6	3,256.8	2.97	-1.94	-2.26
9,981.0	89.30	1.00	6,296.3	3,260.3	435.2	3,288.7	0.99	-0.31	-0.94
10,012.0	90.40	2.40	6,296.3	3,291.3	436.1	3,319.6	5.74	3.55	4.52
10,043.0	91.30	2.60	6,295.9	3,322.3	437.5	3,350.5	2.97	2.90	0.65
10,075.0	90.70	2.60	6,295.3	3,354.2	438.9	3,382.4	1.88	-1.88	0.00
10,106.0	90.00	2.90	6,295.1	3,385.2	440.4	3,413.3	2.46	-2.26	0.97
10,137.0	90.00	2.90	6,295.1	3,416.1	442.0	3,444.3	0.00	0.00	0.00
10,169.0	90.50	2.70	6,295.0	3,448.1	443.6	3,476.2	1.68	1.56	-0.63
10,200.0	90.70	2.70	6,294.7	3,479.1	445.0	3,507.1	0.65	0.65	0.00
10,230.0	90.80	2.20	6,294.3	3,509.0	446.3	3,537.1	1.70	0.33	-1.67
10,261.0	91.30	1.00	6,293.7	3,540.0	447.2	3,567.9	4.19	1.61	-3.87
10,292.0	91.70	0.60	6,292.9	3,571.0	447.6	3,598.8	1.82	1.29	-1.29
10,323.0	91.50	1.70	6,292.0	3,602.0	448.2	3,629.6	3.61	-0.65	3.55
10,355.0	90.80	2.90	6,291.4	3,634.0	449.5	3,661.5	4.34	-2.19	3.75
10,386.0	90.50	4.70	6,291.0	3,664.9	451.6	3,692.5	5.89	-0.97	5.81
10,417.0	90.80	4.80	6,290.7	3,695.8	454.1	3,723.5	1.02	0.97	0.32
10,448.0	90.60	4.30	6,290.3	3,726.7	456.6	3,754.4	1.74	-0.65	-1.61
10,479.0	90.70	5.20	6,290.0	3,757.6	459.2	3,785.4	2.92	0.32	2.90
10,511.0	90.70	4.00	6,289.6	3,789.5	461.7	3,817.4	3.75	0.00	-3.75
10,542.0	91.10	3.60	6,289.1	3,820.4	463.8	3,848.4	1.82	1.29	-1.29
10,573.0	91.40	4.00	6,288.4	3,851.3	465.8	3,879.3	1.61	0.97	1.29
10,605.0	91.70	3.30	6,287.5	3,883.2	467.9	3,911.3	2.38	0.94	-2.19
10,635.0	91.10	3.30	6,286.8	3,913.2	469.6	3,941.2	2.00	-2.00	0.00
10,667.0	90.30	4.00	6,286.4	3,945.1	471.6	3,973.2	3.32	-2.50	2.19
10,698.0	90.20	4.30	6,286.3	3,976.0	473.9	4,004.1	1.02	-0.32	0.97
10,729.0	89.70	3.60	6,286.3	4,007.0	476.0	4,035.1	2.77	-1.61	-2.26
10,761.0	90.00	3.80	6,286.4	4,038.9	478.1	4,067.1	1.13	0.94	0.63
10,791.0	90.10	4.50	6,286.4	4,068.8	480.2	4,097.0	2.36	0.33	2.33
10,822.0	90.40	3.40	6,286.2	4,099.7	482.4	4,128.0	3.68	0.97	-3.55
10,853.0	90.80	3.60	6,285.9	4,130.7	484.3	4,159.0	1.44	1.29	0.65
10,883.0	90.70	4.00	6,285.5	4,160.6	486.3	4,188.9	1.37	-0.33	1.33
10,915.0	90.40	5.00	6,285.2	4,192.5	488.8	4,220.9	3.26	-0.94	3.13
10,968.0	90.40	5.00	6,284.8	4,245.3	493.4	4,273.9	0.00	0.00	0.00
BHL 460'FNL, 1000'FWL									

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Latham 14-11-2HZ
Project:	SEC.2-T4N-R63W	TVD Reference:	WELL @ 4554.0ft (Original Well Elev)
Site:	Latham 14-11-2HZ Pad Sec.2-T4N-R63W	MD Reference:	WELL @ 4554.0ft (Original Well Elev)
Well:	Latham 14-11-2HZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Checked By: _____	Approved By: _____	Date: _____
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