

# BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#20 LATHAM K-1-12XRLNC (288°FSL & 731°FEL, SEC.36)  
Field: WELD COUNTY Well: LATHAM K-1-12XRLNC  
Facility: SEC.36-T5N-R63W Wellbore: LATHAM K-1-12XRLNC PWB

Plot reference wellpath is LATHAM K-1-12XRLNC PWP (REV-A.0)

True vertical depths are referenced to RIG (17) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to RIG (17) (RKB)	North Reference: True north
RIG (17) (RKB) to Mean Sea Level: 4570 feet	Scale: True distance
Mean Sea Level to Ground level (At Slot: SLOT#20 LATHAM K-1-12XRLNC (288°FSL & 731°FEL, SEC.36)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robale01 on 2018-10-10
	Database: WA DENVER

## Location Information

Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.36-T5N-R63W				3308733.906	1376726.042	40°21'43.992"N	104°23'31.452"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SLOT#20 LATHAM K-1-12XRLNC (288°FSL & 731°FEL, SEC.36)	-4498.55	3853.42	3312643.060	1372276.175	40°20'59.538"N	104°22'41.682"W	
RIG (17) (RKB) to Ground level (At Slot: SLOT#20 LATHAM K-1-12XRLNC (288°FSL & 731°FEL, SEC.36))						4570ft	
Mean Sea Level to Ground level (At Slot: SLOT#20 LATHAM K-1-12XRLNC (288°FSL & 731°FEL, SEC.36))						0ft	
RIG (17) (RKB) to Mean Sea Level						4570ft	

## Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1550.00	BHI NavTrak	BHI NavTrak (Axial Corr, Rotating, SAG)		LATHAM K-1-12XRLNC PWB
1550.00	17601.62	BHI AutoTrak Curve	BHI AutoTrak Curve (Axial Corr, Short spacing)		LATHAM K-1-12XRLNC PWB

## Hole and Casing Sections

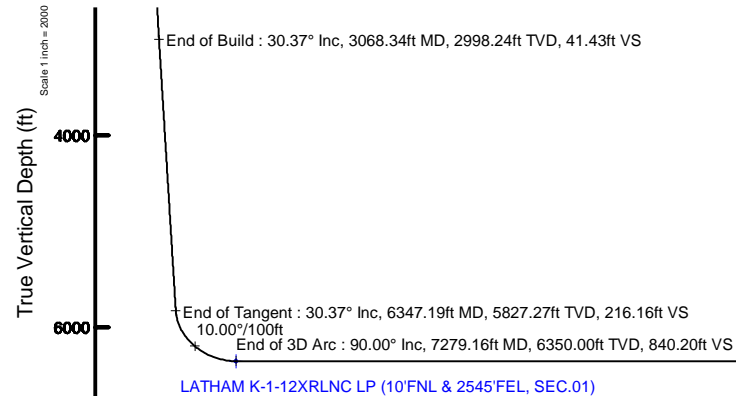
Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (ft)	End Local E (ft)	Wellbore
9.625in Casing Surface	17.00	1550.00	1533.00	17.00	1550.00	0.00	0.00	0.00	0.00	LATHAM K-1-12XRLNC PWB
8.5in Open Hole	1550.00	17601.00	16051.00	1550.00	6350.00	0.00	0.00	-10613.85	-2575.53	LATHAM K-1-12XRLNC PWB

## Well Profile Data

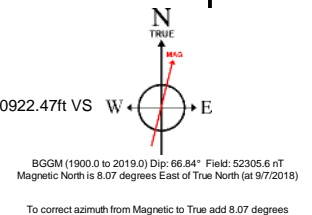
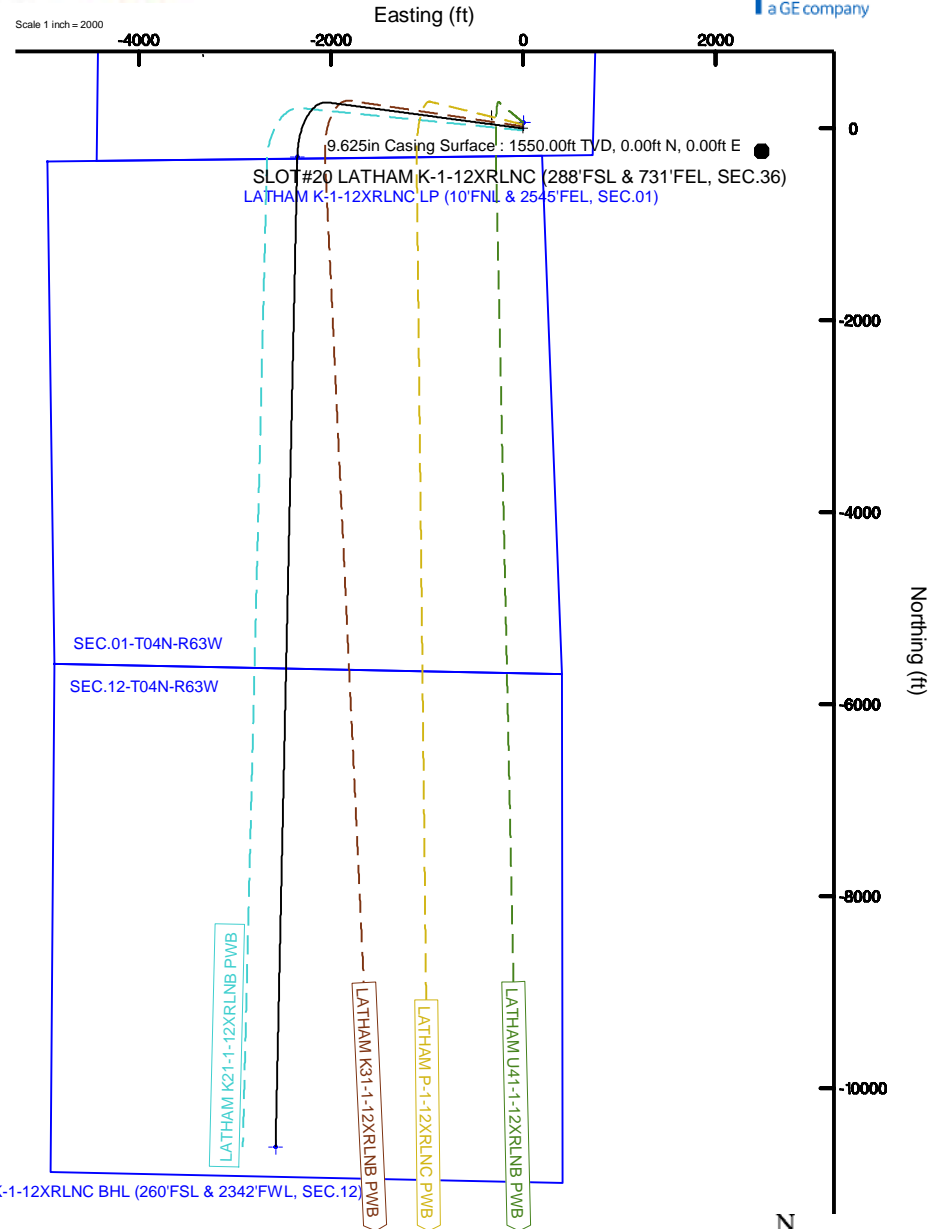
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	277.588	17.00	0.00	0.00	0.00	0.00
End of Tangent	1550.00	0.000	277.588	1550.00	0.00	0.00	0.00	0.00
End of Build	3068.34	30.367	277.588	2998.24	51.90	-389.59	2.00	41.43
End of Tangent	6347.19	30.367	277.588	5827.27	270.77	-2032.64	0.00	216.16
End of 3D Arc	7279.16	90.000	181.255	6350.00	-294.49	-2349.50	10.00	840.20
End of Tangent	17601.62	90.000	181.255	6350.00	-10614.47	-2575.54	0.00	10922.47

## Bottom Hole Location

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
17601.62	90.00	181.255	6350.00	-10614.47	-2575.54	3310202.10	1361630.44	40°19'14.645"N	104°23'14.933"W



Scale 1 inch = 2000





# Planned Wellpath Report

LATHAM K-1-12XRLNC PWP (REV-A.0)

Page 1 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#20 LATHAM K-1-12XRLNC (288'FSL & 731'FEL, SEC.36)
Area	COLORADO	Well	LATHAM K-1-12XRLNC
Field	WELD COUNTY	Wellbore	LATHAM K-1-12XRLNC PWB
Facility	SEC.36-T5N-R63W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Robiale01
Scale	0.999958	Report Generated	10/10/2018 at 10:31:31 AM
Convergence at slot	0.72° East	Database/Source file	WA DENVER/LATHAM_K-1-12XRLNC_PWP_REV-A.0_.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-4498.55	3853.42	3312643.06	1372276.18	40°20'59.536"N	104°22'41.682"W
Facility Reference Pt			3308733.91	1376726.04	40°21'43.992"N	104°23'31.452"W
Field Reference Pt			3224525.77	1254425.87	40°01'44.400"N	104°41'53.556"W

## WELLPATH DATUM

Calculation method	Minimum curvature	RIG (17') (RKB) to Facility Vertical Datum	4570.00ft
Horizontal Reference Pt	Slot	RIG (17') (RKB) to Mean Sea Level	4570.00ft
Vertical Reference Pt	RIG (17') (RKB)	RIG (17') (RKB) to Ground Level at Slot (SLOT#20 LATHAM K-1-12XRLNC (288'FSL & 731'FEL, SEC.36))	4570.00ft
MD Reference Pt	RIG (17') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	193.64°



# Planned Wellpath Report

LATHAM K-1-12XRLNC PWP (REV-A.0)

Page 2 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#20 LATHAM K-1-12XRLNC (288'FSL & 731'FEL, SEC.36)
Area	COLORADO	Well	LATHAM K-1-12XRLNC
Field	WELD COUNTY	Wellbore	LATHAM K-1-12XRLNC PWB
Facility	SEC.36-T5N-R63W		

WELLPATH DATA (182 stations) † = interpolated/extrapolated station									
MD [ft]	Inclination [°]		Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000		277.588	0.00	0.00	0.00	0.00	0.00	
17.00	0.000		277.588	17.00	0.00	0.00	0.00	0.00	Tie On
117.00†	0.000		277.588	117.00	0.00	0.00	0.00	0.00	
217.00†	0.000		277.588	217.00	0.00	0.00	0.00	0.00	
317.00†	0.000		277.588	317.00	0.00	0.00	0.00	0.00	
417.00†	0.000		277.588	417.00	0.00	0.00	0.00	0.00	
517.00†	0.000		277.588	517.00	0.00	0.00	0.00	0.00	
617.00†	0.000		277.588	617.00	0.00	0.00	0.00	0.00	
717.00†	0.000		277.588	717.00	0.00	0.00	0.00	0.00	
817.00†	0.000		277.588	817.00	0.00	0.00	0.00	0.00	
917.00†	0.000		277.588	917.00	0.00	0.00	0.00	0.00	
1017.00†	0.000		277.588	1017.00	0.00	0.00	0.00	0.00	
1117.00†	0.000		277.588	1117.00	0.00	0.00	0.00	0.00	
1217.00†	0.000		277.588	1217.00	0.00	0.00	0.00	0.00	
1317.00†	0.000		277.588	1317.00	0.00	0.00	0.00	0.00	
1417.00†	0.000		277.588	1417.00	0.00	0.00	0.00	0.00	
1517.00†	0.000		277.588	1517.00	0.00	0.00	0.00	0.00	
1550.00	0.000		277.588	1550.00	0.00	0.00	0.00	0.00	End of Tangent
1617.00†	1.340		277.588	1616.99	0.08	0.10	-0.78	2.00	
1717.00†	3.340		277.588	1716.91	0.51	0.64	-4.82	2.00	
1817.00†	5.340		277.588	1816.61	1.31	1.64	-12.32	2.00	
1917.00†	7.340		277.588	1916.00	2.47	3.10	-23.27	2.00	
2017.00†	9.340		277.588	2014.93	4.00	5.02	-37.65	2.00	
2117.00†	11.340		277.588	2113.31	5.90	7.39	-55.44	2.00	
2217.00†	13.340		277.588	2210.99	8.15	10.21	-76.62	2.00	
2317.00†	15.340		277.588	2307.87	10.76	13.48	-101.17	2.00	
2417.00†	17.340		277.588	2403.83	13.72	17.19	-129.06	2.00	
2517.00†	19.340		277.588	2498.74	17.04	21.35	-160.24	2.00	
2617.00†	21.340		277.588	2592.50	20.71	25.94	-194.70	2.00	
2717.00†	23.340		277.588	2684.99	24.71	30.96	-232.37	2.00	
2817.00†	25.340		277.588	2776.10	29.06	36.40	-273.22	2.00	
2917.00†	27.340		277.588	2865.71	33.73	42.26	-317.20	2.00	
3017.00†	29.340		277.588	2953.72	38.74	48.52	-364.26	2.00	
3068.34	30.367		277.588	2998.24	41.43	51.90	-389.59	2.00	End of Build

WELLPATH DATA (182 stations) † = interpolated/extrapolated station									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments	
3117.00†	30.367	277.588	3040.23	44.02	55.15	-413.97	0.00		
3217.00†	30.367	277.588	3126.51	49.35	61.82	-464.08	0.00		
3317.00†	30.367	277.588	3212.79	54.68	68.50	-514.19	0.00		
3417.00†	30.367	277.588	3299.07	60.01	75.17	-564.30	0.00		
3517.00†	30.367	277.588	3385.36	65.34	81.85	-614.41	0.00		
3617.00†	30.367	277.588	3471.64	70.67	88.52	-664.52	0.00		
3717.00†	30.367	277.588	3557.92	76.00	95.20	-714.64	0.00		
3817.00†	30.367	277.588	3644.20	81.33	101.87	-764.75	0.00		
3917.00†	30.367	277.588	3730.48	86.66	108.55	-814.86	0.00		
4017.00†	30.367	277.588	3816.76	91.99	115.22	-864.97	0.00		
4117.00†	30.367	277.588	3903.04	97.31	121.90	-915.08	0.00		



# Planned Wellpath Report

LATHAM K-1-12XRLNC PWP (REV-A.0)

Page 3 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#20 LATHAM K-1-12XRLNC (288'FSL & 731'FEL, SEC.36)
Area	COLORADO	Well	LATHAM K-1-12XRLNC
Field	WELD COUNTY	Wellbore	LATHAM K-1-12XRLNC PWB
Facility	SEC.36-T5N-R63W		

WELLPATH DATA (182 stations) † = interpolated/extrapolated station									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments	
4217.00†	30.367	277.588	3989.32	102.64	128.58	-965.19	0.00		
4317.00†	30.367	277.588	4075.60	107.97	135.25	-1015.30	0.00		
4417.00†	30.367	277.588	4161.88	113.30	141.93	-1065.41	0.00		
4517.00†	30.367	277.588	4248.16	118.63	148.60	-1115.52	0.00		
4617.00†	30.367	277.588	4334.44	123.96	155.28	-1165.63	0.00		
4717.00†	30.367	277.588	4420.72	129.29	161.95	-1215.74	0.00		
4817.00†	30.367	277.588	4507.01	134.62	168.63	-1265.85	0.00		
4917.00†	30.367	277.588	4593.29	139.95	175.30	-1315.96	0.00		
5017.00†	30.367	277.588	4679.57	145.28	181.98	-1366.07	0.00		
5117.00†	30.367	277.588	4765.85	150.60	188.65	-1416.18	0.00		
5217.00†	30.367	277.588	4852.13	155.93	195.33	-1466.29	0.00		
5317.00†	30.367	277.588	4938.41	161.26	202.00	-1516.40	0.00		
5417.00†	30.367	277.588	5024.69	166.59	208.68	-1566.52	0.00		
5517.00†	30.367	277.588	5110.97	171.92	215.36	-1616.63	0.00		
5617.00†	30.367	277.588	5197.25	177.25	222.03	-1666.74	0.00		
5717.00†	30.367	277.588	5283.53	182.58	228.71	-1716.85	0.00		
5817.00†	30.367	277.588	5369.81	187.91	235.38	-1766.96	0.00		
5917.00†	30.367	277.588	5456.09	193.24	242.06	-1817.07	0.00		
6017.00†	30.367	277.588	5542.37	198.57	248.73	-1867.18	0.00		
6117.00†	30.367	277.588	5628.65	203.90	255.41	-1917.29	0.00		
6217.00†	30.367	277.588	5714.94	209.22	262.08	-1967.40	0.00		
6317.00†	30.367	277.588	5801.22	214.55	268.76	-2017.51	0.00		
6347.19	30.367	277.588	5827.27	216.16	270.77	-2032.64	0.00	End of Tangent	
6417.00†	30.428	263.767	5887.55	224.04	271.19	-2067.75	10.00		
6517.00†	32.937	245.265	5972.85	249.59	257.03	-2117.74	10.00		
6617.00†	37.743	230.044	6054.56	291.21	225.92	-2166.01	10.00		
6717.00†	44.091	218.204	6130.20	347.62	178.80	-2211.11	10.00		
6817.00†	51.400	208.957	6197.47	417.13	117.12	-2251.64	10.00		
6917.00†	59.298	201.485	6254.34	497.61	42.73	-2286.40	10.00		
7017.00†	67.558	195.172	6299.07	586.62	-42.09	-2314.31	10.00		
7117.00†	76.035	189.581	6330.30	681.46	-134.77	-2334.53	10.00		
7217.00†	84.631	184.392	6347.09	779.24	-232.50	-2346.45	10.00		
7279.16	90.000	181.255	6350.00 <sup>†</sup>	840.20	-294.49	-2349.50	10.00	End of 3D Arc	
7317.00†	90.000	181.255	6350.00	877.16	-332.32	-2350.33	0.00		

WELLPATH DATA (182 stations) † = interpolated/extrapolated station									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments	
7417.00†	90.000	181.255	6350.00	974.84	-432.30	-2352.52	0.00		
7517.00†	90.000	181.255	6350.00	1072.51	-532.27	-2354.71	0.00		
7617.00†	90.000	181.255	6350.00	1170.18	-632.25	-2356.90	0.00		
7717.00†	90.000	181.255	6350.00	1267.85	-732.22	-2359.09	0.00		
7817.00†	90.000	181.255	6350.00	1365.53	-832.20	-2361.28	0.00		
7917.00†	90.000	181.255	6350.00	1463.20	-932.18	-2363.47	0.00		
8017.00†	90.000	181.255	6350.00	1560.87	-1032.15	-2365.66	0.00		
8117.00†	90.000	181.255	6350.00	1658.55	-1132.13	-2367.85	0.00		
8217.00†	90.000	181.255	6350.00	1756.22	-1232.10	-2370.04	0.00		
8317.00†	90.000	181.255	6350.00	1853.89	-1332.08	-2372.23	0.00		
8417.00†	90.000	181.255	6350.00	1951.57	-1432.06	-2374.42	0.00		



# Planned Wellpath Report

LATHAM K-1-12XRLNC PWP (REV-A.0)

Page 4 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#20 LATHAM K-1-12XRLNC (288'FSL & 731'FEL, SEC.36)
Area	COLORADO	Well	LATHAM K-1-12XRLNC
Field	WELD COUNTY	Wellbore	LATHAM K-1-12XRLNC PWB
Facility	SEC.36-T5N-R63W		

WELLPATH DATA (182 stations) † = interpolated/extrapolated station									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments	
8517.00†	90.000	181.255	6350.00	2049.24	-1532.03	-2376.61	0.00		
8617.00†	90.000	181.255	6350.00	2146.91	-1632.01	-2378.80	0.00		
8717.00†	90.000	181.255	6350.00	2244.59	-1731.98	-2380.99	0.00		
8817.00†	90.000	181.255	6350.00	2342.26	-1831.96	-2383.18	0.00		
8917.00†	90.000	181.255	6350.00	2439.93	-1931.94	-2385.37	0.00		
9017.00†	90.000	181.255	6350.00	2537.61	-2031.91	-2387.56	0.00		
9117.00†	90.000	181.255	6350.00	2635.28	-2131.89	-2389.75	0.00		
9217.00†	90.000	181.255	6350.00	2732.95	-2231.86	-2391.94	0.00		
9317.00†	90.000	181.255	6350.00	2830.63	-2331.84	-2394.13	0.00		
9417.00†	90.000	181.255	6350.00	2928.30	-2431.82	-2396.32	0.00		
9517.00†	90.000	181.255	6350.00	3025.97	-2531.79	-2398.51	0.00		
9617.00†	90.000	181.255	6350.00	3123.64	-2631.77	-2400.70	0.00		
9717.00†	90.000	181.255	6350.00	3221.32	-2731.74	-2402.89	0.00		
9817.00†	90.000	181.255	6350.00	3318.99	-2831.72	-2405.08	0.00		
9917.00†	90.000	181.255	6350.00	3416.66	-2931.70	-2407.27	0.00		
10017.00†	90.000	181.255	6350.00	3514.34	-3031.67	-2409.46	0.00		
10117.00†	90.000	181.255	6350.00	3612.01	-3131.65	-2411.65	0.00		
10217.00†	90.000	181.255	6350.00	3709.68	-3231.62	-2413.83	0.00		
10317.00†	90.000	181.255	6350.00	3807.36	-3331.60	-2416.02	0.00		
10417.00†	90.000	181.255	6350.00	3905.03	-3431.58	-2418.21	0.00		
10517.00†	90.000	181.255	6350.00	4002.70	-3531.55	-2420.40	0.00		
10617.00†	90.000	181.255	6350.00	4100.38	-3631.53	-2422.59	0.00		
10717.00†	90.000	181.255	6350.00	4198.05	-3731.50	-2424.78	0.00		
10817.00†	90.000	181.255	6350.00	4295.72	-3831.48	-2426.97	0.00		
10917.00†	90.000	181.255	6350.00	4393.40	-3931.46	-2429.16	0.00		
11017.00†	90.000	181.255	6350.00	4491.07	-4031.43	-2431.35	0.00		
11117.00†	90.000	181.255	6350.00	4588.74	-4131.41	-2433.54	0.00		
11217.00†	90.000	181.255	6350.00	4686.42	-4231.38	-2435.73	0.00		
11317.00†	90.000	181.255	6350.00	4784.09	-4331.36	-2437.92	0.00		
11417.00†	90.000	181.255	6350.00	4881.76	-4431.34	-2440.11	0.00		
11517.00†	90.000	181.255	6350.00	4979.43	-4531.31	-2442.30	0.00		
11617.00†	90.000	181.255	6350.00	5077.11	-4631.29	-2444.49	0.00		
11717.00†	90.000	181.255	6350.00	5174.78	-4731.26	-2446.68	0.00		
11817.00†	90.000	181.255	6350.00	5272.45	-4831.24	-2448.87	0.00		

WELLPATH DATA (182 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
11917.00†	90.000	181.255	6350.00	5370.13	-4931.22	-2451.06	0.00	
12017.00†	90.000	181.255	6350.00	5467.80	-5031.19	-2453.25	0.00	
12117.00†	90.000	181.255	6350.00	5565.47	-5131.17	-2455.44	0.00	
12217.00†	90.000	181.255	6350.00	5663.15	-5231.15	-2457.63	0.00	
12317.00†	90.000	181.255	6350.00	5760.82	-5331.12	-2459.82	0.00	
12417.00†	90.000	181.255	6350.00	5858.49	-5431.10	-2462.01	0.00	
12517.00†	90.000	181.255	6350.00	5956.17	-5531.07	-2464.20	0.00	
12617.00†	90.000	181.255	6350.00	6053.84	-5631.05	-2466.39	0.00	
12717.00†	90.000	181.255	6350.00	6151.51	-5731.03	-2468.58	0.00	
12817.00†	90.000	181.255	6350.00	6249.19	-5831.00	-2470.77	0.00	
12917.00†	90.000	181.255	6350.00	6346.86	-5930.98	-2472.96	0.00	





# Planned Wellpath Report

LATHAM K-1-12XRLNC PWP (REV-A.0)

Page 5 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#20 LATHAM K-1-12XRLNC (288'FSL & 731'FEL, SEC.36)
Area	COLORADO	Well	LATHAM K-1-12XRLNC
Field	WELD COUNTY	Wellbore	LATHAM K-1-12XRLNC PWB
Facility	SEC.36-T5N-R63W		

## WELLPATH DATA (182 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
13017.00†	90.000	181.255	6350.00	6444.53	-6030.95	-2475.15	0.00	
13117.00†	90.000	181.255	6350.00	6542.21	-6130.93	-2477.34	0.00	
13217.00†	90.000	181.255	6350.00	6639.88	-6230.91	-2479.53	0.00	
13317.00†	90.000	181.255	6350.00	6737.55	-6330.88	-2481.72	0.00	
13417.00†	90.000	181.255	6350.00	6835.23	-6430.86	-2483.91	0.00	
13517.00†	90.000	181.255	6350.00	6932.90	-6530.83	-2486.10	0.00	
13617.00†	90.000	181.255	6350.00	7030.57	-6630.81	-2488.29	0.00	
13717.00†	90.000	181.255	6350.00	7128.24	-6730.79	-2490.48	0.00	
13817.00†	90.000	181.255	6350.00	7225.92	-6830.76	-2492.67	0.00	
13917.00†	90.000	181.255	6350.00	7323.59	-6930.74	-2494.86	0.00	
14017.00†	90.000	181.255	6350.00	7421.26	-7030.71	-2497.05	0.00	
14117.00†	90.000	181.255	6350.00	7518.94	-7130.69	-2499.24	0.00	
14217.00†	90.000	181.255	6350.00	7616.61	-7230.67	-2501.43	0.00	
14317.00†	90.000	181.255	6350.00	7714.28	-7330.64	-2503.62	0.00	
14417.00†	90.000	181.255	6350.00	7811.96	-7430.62	-2505.81	0.00	
14517.00†	90.000	181.255	6350.00	7909.63	-7530.59	-2508.00	0.00	
14617.00†	90.000	181.255	6350.00	8007.30	-7630.57	-2510.19	0.00	
14717.00†	90.000	181.255	6350.00	8104.98	-7730.55	-2512.38	0.00	
14817.00†	90.000	181.255	6350.00	8202.65	-7830.52	-2514.57	0.00	
14917.00†	90.000	181.255	6350.00	8300.32	-7930.50	-2516.75	0.00	
15017.00†	90.000	181.255	6350.00	8398.00	-8030.47	-2518.94	0.00	
15117.00†	90.000	181.255	6350.00	8495.67	-8130.45	-2521.13	0.00	
15217.00†	90.000	181.255	6350.00	8593.34	-8230.43	-2523.32	0.00	
15317.00†	90.000	181.255	6350.00	8691.02	-8330.40	-2525.51	0.00	
15417.00†	90.000	181.255	6350.00	8788.69	-8430.38	-2527.70	0.00	
15517.00†	90.000	181.255	6350.00	8886.36	-8530.35	-2529.89	0.00	
15617.00†	90.000	181.255	6350.00	8984.03	-8630.33	-2532.08	0.00	
15717.00†	90.000	181.255	6350.00	9081.71	-8730.31	-2534.27	0.00	
15817.00†	90.000	181.255	6350.00	9179.38	-8830.28	-2536.46	0.00	
15917.00†	90.000	181.255	6350.00	9277.05	-8930.26	-2538.65	0.00	
16017.00†	90.000	181.255	6350.00	9374.73	-9030.23	-2540.84	0.00	
16117.00†	90.000	181.255	6350.00	9472.40	-9130.21	-2543.03	0.00	
16217.00†	90.000	181.255	6350.00	9570.07	-9230.19	-2545.22	0.00	
16317.00†	90.000	181.255	6350.00	9667.75	-9330.16	-2547.41	0.00	

WELLPATH DATA (182 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
16417.00†	90.000	181.255	6350.00	9765.42	-9430.14	-2549.60	0.00	
16517.00†	90.000	181.255	6350.00	9863.09	-9530.11	-2551.79	0.00	
16617.00†	90.000	181.255	6350.00	9960.77	-9630.09	-2553.98	0.00	
16717.00†	90.000	181.255	6350.00	10058.44	-9730.07	-2556.17	0.00	
16817.00†	90.000	181.255	6350.00	10156.11	-9830.04	-2558.36	0.00	
16917.00†	90.000	181.255	6350.00	10253.79	-9930.02	-2560.55	0.00	
17017.00†	90.000	181.255	6350.00	10351.46	-10029.99	-2562.74	0.00	
17117.00†	90.000	181.255	6350.00	10449.13	-10129.97	-2564.93	0.00	
17217.00†	90.000	181.255	6350.00	10546.81	-10229.95	-2567.12	0.00	
17317.00†	90.000	181.255	6350.00	10644.48	-10329.92	-2569.31	0.00	
17417.00†	90.000	181.255	6350.00	10742.15	-10429.90	-2571.50	0.00	



# Planned Wellpath Report

LATHAM K-1-12XRLNC PWP (REV-A.0)

Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#20 LATHAM K-1-12XRLNC (288'FSL & 731'FEL, SEC.36)
Area	COLORADO	Well	LATHAM K-1-12XRLNC
Field	WELD COUNTY	Wellbore	LATHAM K-1-12XRLNC PWB
Facility	SEC.36-T5N-R63W		

WELLPATH DATA (182 stations) † = interpolated/extrapolated station									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments	
17517.00†	90.000	181.255	6350.00	10839.82	-10529.87	-2573.69	0.00		
17601.62	90.000	181.255	6350.00 <sup>2</sup>	10922.47	-10614.47	-2575.54	0.00	End of Tangent	

HOLE & CASING SECTIONS - Ref Wellbore: LATHAM K-1-12XRLNC PWB Ref Wellpath: LATHAM K-1-12XRLNC PWP (REV-A.0)									
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	1550.00	1533.00	17.00	1550.00	0.00	0.00	0.00	0.00
8.5in Open Hole	1550.00	17601.00	16051.00	1550.00	6350.00	0.00	0.00	-10613.85	-2575.53

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.01-T04N-R63W		0.00	60.11	0.56	3312642.86	1372336.29	40°21'00.130"N	104°22'41.675"W	polygon
SEC.12-T04N-R63W		0.00	60.11	0.56	3312642.86	1372336.29	40°21'00.130"N	104°22'41.675"W	polygon
SEC.36-T5N-R63W		3.00	5383.98	-6914.60	3305661.21	1377572.03	40°21'52.729"N	104°24'11.009"W	polygon
2) LATHAM K-1-12XRLNC BHL (260'FSL & 2342'FWL, SEC.12)	17601.62	6350.00	-10614.47	-2575.54	3310202.10	1361630.44	40°19'14.645"N	104°23'14.933"W	point
1) LATHAM K-1-12XRLNC LP (10'FNL & 2545'FEL, SEC.01)									
	7279.16	6350.00	-294.49	-2349.50	3310297.57	1371952.00	40°20'56.624"N	104°23'12.027"W	point

SURVEY PROGRAM - Ref Wellbore: LATHAM K-1-12XRLNC PWB Ref Wellpath: LATHAM K-1-12XRLNC PWP (REV-A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1550.00	BHI NaviTrak (Axial Corr, Rotating, SAG)		LATHAM K-1-12XRLNC PWB
1550.00	17601.62	BHI AutoTrak Curve (Axial Corr, Short spacing)		LATHAM K-1-12XRLNC PWB