

# BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#18 LATHAM P-1-12XRLNC (328'FSL & 732'FEL, SEC.36)  
Field: WELD COUNTY Well: LATHAM P-1-12XRLNC  
Facility: SEC.36-T5N-R63W Wellbore: LATHAM P-1-12XRLNC PWB

Plot reference wellpath is LATHAM P-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#18 LATHAM P-1-12XRLNC (328'FSL & 732'FEL, SEC.36)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: nobiale01 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#18 LATHAM P-1-12XRLNC (328'FSL & 732'FEL, SEC.36)	-4458.48	3853.69	3312642.832	1372316.248	40°20'59.932"N	104°22'41.678"W	
RIG (17) (RKB) to Ground level (At Slot: SLOT#18 LATHAM P-1-12XRLNC (328'FSL & 732'FEL, SEC.36))						4570ft	
Mean Sea Level to Ground level (At Slot: SLOT#18 LATHAM P-1-12XRLNC (328'FSL & 732'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	BH NavTrak	BH NavTrak (Axial Corr, Rotating, SAG)		LATHAM P-1-12XRLNC PWB
1550.00	17256.10	BH AutoTrak Curve	BH AutoTrak Curve (Axial Corr, Short spacing)		LATHAM P-1-12XRLNC PWB

## Hole and Casing Sections

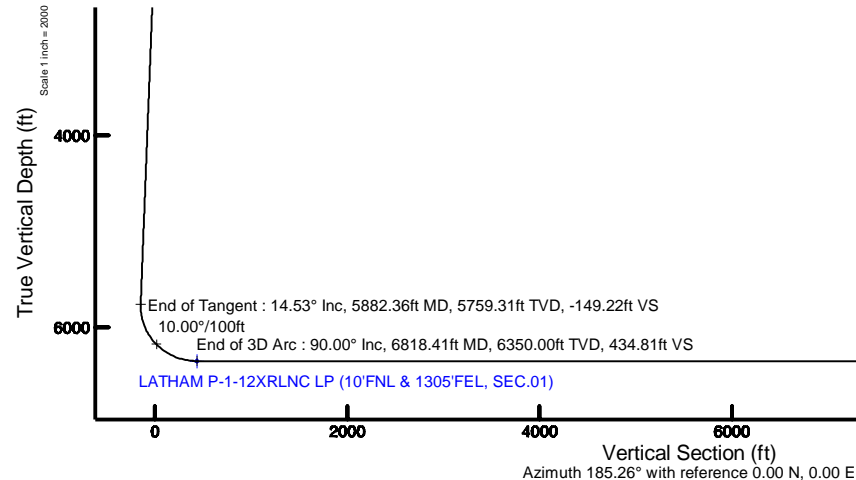
Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (ft)	End Local E (ft)	Wellbore
9.625in Casing Surface	17.00	1550.00	1533.00	17.00	1550.00	0.00	0.00	0.00	0.00	LATHAM P-1-12XRLNC PWB
8.5in Open Hole	1550.00	17256.00	15706.00	1550.00	6350.00	0.00	0.00	-10771.50	-991.76	LATHAM P-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	283.876	17.00	0.00	0.00	0.00	0.00
End of Tangent	1550.00	0.000	283.876	1550.00	0.00	0.00	0.00	0.00
End of Build	2276.35	14.527	283.876	2268.59	21.96	-88.91	2.00	-13.72
End of Tangent	5882.36	14.527	283.876	5759.31	238.89	-967.03	0.00	-149.22
End of 3D Arc	6818.41	90.000	179.358	6350.00	-334.56	-1108.78	10.00	434.81
End of Tangent	17256.10	90.000	179.358	6350.00	-10771.60	-991.76	0.00	10817.16

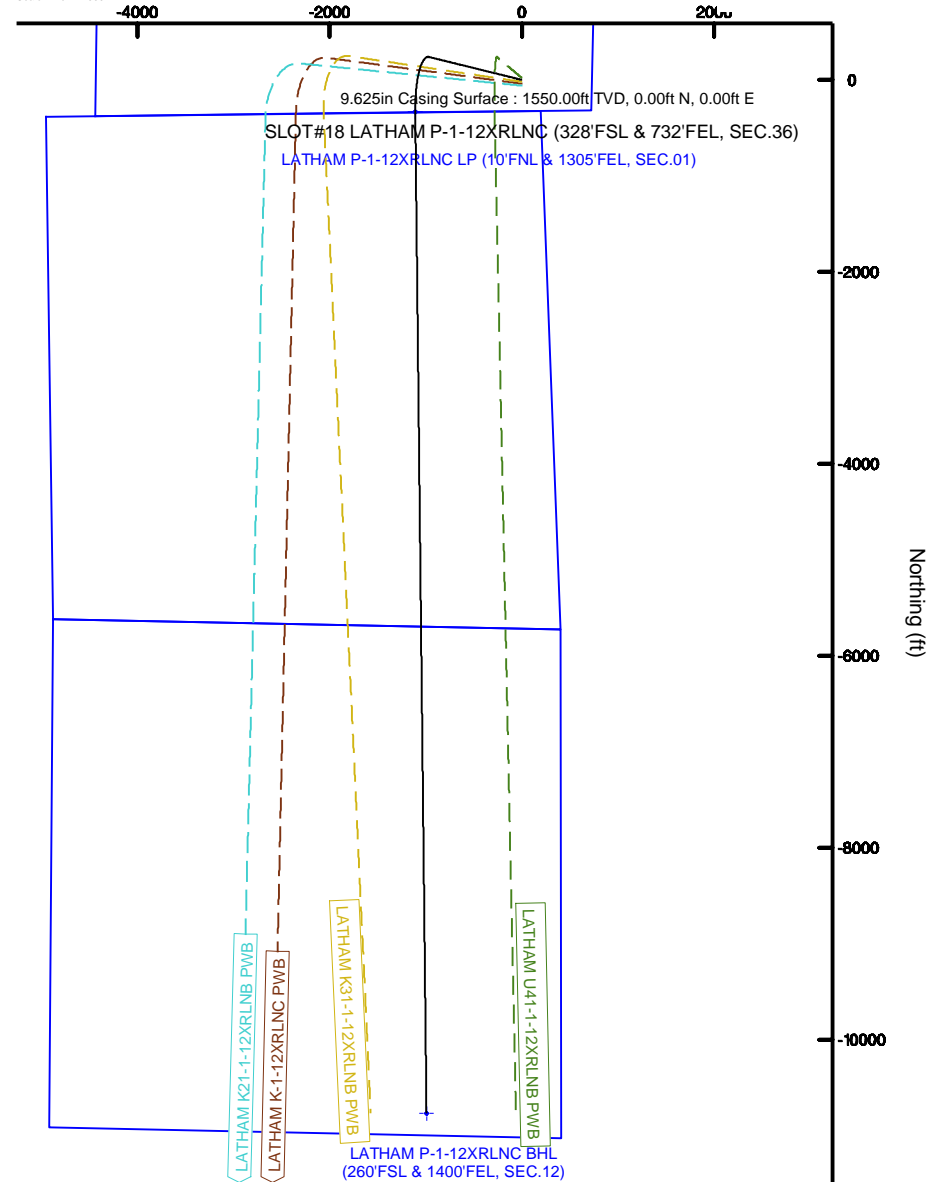
## Bottom Hole Location

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
17256.10	90.000	179.358	6350.00	-10771.60	-991.76	3311787.45	1361533.43	40°19'13.489"N	104°22'54.482"W



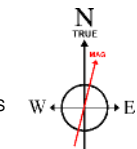
Scale 1 inch = 2000

Easting (ft)



End of Tangent : 90.00° Inc, 17256.10ft MD, 6350.00ft TVD, 10817.16ft VS

LATHAM P-1-12XRLNC BHL (260°FSL & 1400°FEL, SEC.12)



BGGM (1900.0 to 2019.0) Dip: 66.84° Field: 52305.6 nT  
Magnetic North is 8.07 degrees East of True North (at 9/7/2018)

To correct azimuth from Magnetic to True add 8.07 degrees



# Planned Wellpath Report

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

Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#18 LATHAM P-1-12XRLNC (328'FSL & 732'FEL, SEC.36)
Area	COLORADO	Well	LATHAM P-1-12XRLNC
Field	WELD COUNTY	Wellbore	LATHAM P-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 10:12:30 AM
Convergence at slot	0.72° East	Database/Source file	WA DENVER/LATHAM_P-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	-4458.48	3853.69	3312642.83	1372316.25	40°20'59.932"N	104°22'41.678"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#18 LATHAM P-1-12XRLNC (328'FSL & 732'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	185.26°



# Planned Wellpath Report

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

Page 2 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#18 LATHAM P-1-12XRLNC (328'FSL & 732'FEL, SEC.36)
Area	COLORADO	Well	LATHAM P-1-12XRLNC
Field	WELD COUNTY	Wellbore	LATHAM P-1-12XRLNC PWB
Facility	SEC.36-T5N-R63W		

## WELLPATH DATA (179 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	283.876	0.00	0.00	0.00	0.00	0.00	
17.00	0.000	283.876	17.00	0.00	0.00	0.00	0.00	Tie On
117.00†	0.000	283.876	117.00	0.00	0.00	0.00	0.00	
217.00†	0.000	283.876	217.00	0.00	0.00	0.00	0.00	
317.00†	0.000	283.876	317.00	0.00	0.00	0.00	0.00	
417.00†	0.000	283.876	417.00	0.00	0.00	0.00	0.00	
517.00†	0.000	283.876	517.00	0.00	0.00	0.00	0.00	
617.00†	0.000	283.876	617.00	0.00	0.00	0.00	0.00	
717.00†	0.000	283.876	717.00	0.00	0.00	0.00	0.00	
817.00†	0.000	283.876	817.00	0.00	0.00	0.00	0.00	
917.00†	0.000	283.876	917.00	0.00	0.00	0.00	0.00	
1017.00†	0.000	283.876	1017.00	0.00	0.00	0.00	0.00	
1117.00†	0.000	283.876	1117.00	0.00	0.00	0.00	0.00	
1217.00†	0.000	283.876	1217.00	0.00	0.00	0.00	0.00	
1317.00†	0.000	283.876	1317.00	0.00	0.00	0.00	0.00	
1417.00†	0.000	283.876	1417.00	0.00	0.00	0.00	0.00	
1517.00†	0.000	283.876	1517.00	0.00	0.00	0.00	0.00	
1550.00	0.000	283.876	1550.00	0.00	0.00	0.00	0.00	End of Tangent
1617.00†	1.340	283.876	1616.99	-0.12	0.19	-0.76	2.00	
1717.00†	3.340	283.876	1716.91	-0.73	1.17	-4.72	2.00	
1817.00†	5.340	283.876	1816.61	-1.86	2.98	-12.07	2.00	
1917.00†	7.340	283.876	1916.00	-3.52	5.63	-22.79	2.00	
2017.00†	9.340	283.876	2014.93	-5.69	9.11	-36.87	2.00	
2117.00†	11.340	283.876	2113.31	-8.38	13.41	-54.30	2.00	
2217.00†	13.340	283.876	2210.99	-11.58	18.54	-75.04	2.00	
2276.35	14.527	283.876	2268.59	-13.72	21.96	-88.91	2.00	End of Build
2317.00†	14.527	283.876	2307.94	-15.25	24.41	-98.81	0.00	
2417.00†	14.527	283.876	2404.75	-19.01	30.43	-123.17	0.00	
2517.00†	14.527	283.876	2501.55	-22.76	36.44	-147.52	0.00	
2617.00†	14.527	283.876	2598.35	-26.52	42.46	-171.87	0.00	
2717.00†	14.527	283.876	2695.16	-30.28	48.47	-196.22	0.00	
2817.00†	14.527	283.876	2791.96	-34.04	54.49	-220.57	0.00	
2917.00†	14.527	283.876	2888.76	-37.79	60.50	-244.92	0.00	
3017.00†	14.527	283.876	2985.56	-41.55	66.52	-269.27	0.00	

WELLPATH DATA (179 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
3117.00†	14.527	283.876	3082.37	-45.31	72.53	-293.63	0.00	
3217.00†	14.527	283.876	3179.17	-49.07	78.55	-317.98	0.00	
3317.00†	14.527	283.876	3275.97	-52.82	84.57	-342.33	0.00	
3417.00†	14.527	283.876	3372.78	-56.58	90.58	-366.68	0.00	
3517.00†	14.527	283.876	3469.58	-60.34	96.60	-391.03	0.00	
3617.00†	14.527	283.876	3566.38	-64.10	102.61	-415.38	0.00	
3717.00†	14.527	283.876	3663.19	-67.85	108.63	-439.74	0.00	
3817.00†	14.527	283.876	3759.99	-71.61	114.64	-464.09	0.00	
3917.00†	14.527	283.876	3856.79	-75.37	120.66	-488.44	0.00	
4017.00†	14.527	283.876	3953.59	-79.13	126.67	-512.79	0.00	
4117.00†	14.527	283.876	4050.40	-82.88	132.69	-537.14	0.00	



# Planned Wellpath Report

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

Page 3 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#18 LATHAM P-1-12XRLNC (328'FSL & 732'FEL, SEC.36)
Area	COLORADO	Well	LATHAM P-1-12XRLNC
Field	WELD COUNTY	Wellbore	LATHAM P-1-12XRLNC PWB
Facility	SEC.36-T5N-R63W		

## WELLPATH DATA (179 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4217.00†	14.527	283.876	4147.20	-86.64	138.71	-561.49	0.00	
4317.00†	14.527	283.876	4244.00	-90.40	144.72	-585.84	0.00	
4417.00†	14.527	283.876	4340.81	-94.16	150.74	-610.20	0.00	
4517.00†	14.527	283.876	4437.61	-97.91	156.75	-634.55	0.00	
4617.00†	14.527	283.876	4534.41	-101.67	162.77	-658.90	0.00	
4717.00†	14.527	283.876	4631.21	-105.43	168.78	-683.25	0.00	
4817.00†	14.527	283.876	4728.02	-109.19	174.80	-707.60	0.00	
4917.00†	14.527	283.876	4824.82	-112.94	180.81	-731.95	0.00	
5017.00†	14.527	283.876	4921.62	-116.70	186.83	-756.30	0.00	
5117.00†	14.527	283.876	5018.43	-120.46	192.85	-780.66	0.00	
5217.00†	14.527	283.876	5115.23	-124.22	198.86	-805.01	0.00	
5317.00†	14.527	283.876	5212.03	-127.97	204.88	-829.36	0.00	
5417.00†	14.527	283.876	5308.84	-131.73	210.89	-853.71	0.00	
5517.00†	14.527	283.876	5405.64	-135.49	216.91	-878.06	0.00	
5617.00†	14.527	283.876	5502.44	-139.25	222.92	-902.41	0.00	
5717.00†	14.527	283.876	5599.24	-143.01	228.94	-926.76	0.00	
5817.00†	14.527	283.876	5696.05	-146.76	234.95	-951.12	0.00	
5882.36	14.527	283.876	5759.31	-149.22	238.89	-967.03	0.00	End of Tangent
5917.00†	14.082	269.936	5792.89	-149.48	239.92	-975.47	10.00	
6017.00†	17.133	233.819	5889.42	-138.57	231.19	-999.58	10.00	
6117.00†	24.179	213.323	5983.05	-110.68	205.32	-1022.78	10.00	
6217.00†	32.734	202.326	6070.95	-66.65	163.09	-1044.36	10.00	
6317.00†	41.879	195.604	6150.44	-7.82	105.79	-1063.66	10.00	
6417.00†	51.296	190.953	6219.10	64.03	35.15	-1080.09	10.00	
6517.00†	60.854	187.399	6274.86	146.70	-46.67	-1093.16	10.00	
6617.00†	70.489	184.457	6316.02	237.70	-137.19	-1102.47	10.00	
6717.00†	80.167	181.849	6341.32	334.24	-233.67	-1107.73	10.00	
6817.00†	89.863	179.392	6350.00	433.41	-333.16	-1108.80	10.00	
6818.41	90.000	179.358	6350.00 <sup>†</sup>	434.81	-334.56	-1108.78	10.00	End of 3D Arc
6917.00†	90.000	179.358	6350.00	532.88	-433.15	-1107.68	0.00	
7017.00†	90.000	179.358	6350.00	632.35	-533.14	-1106.55	0.00	
7117.00†	90.000	179.358	6350.00	731.82	-633.14	-1105.43	0.00	
7217.00†	90.000	179.358	6350.00	831.29	-733.13	-1104.31	0.00	
7317.00†	90.000	179.358	6350.00	930.76	-833.12	-1103.19	0.00	

WELLPATH DATA (179 stations) † = interpolated/extrapolated station									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments	
7417.00†	90.000	179.358	6350.00	1030.23	-933.12	-1102.07	0.00		
7517.00†	90.000	179.358	6350.00	1129.70	-1033.11	-1100.95	0.00		
7617.00†	90.000	179.358	6350.00	1229.17	-1133.10	-1099.83	0.00		
7717.00†	90.000	179.358	6350.00	1328.64	-1233.10	-1098.71	0.00		
7817.00†	90.000	179.358	6350.00	1428.11	-1333.09	-1097.59	0.00		
7917.00†	90.000	179.358	6350.00	1527.58	-1433.09	-1096.46	0.00		
8017.00†	90.000	179.358	6350.00	1627.05	-1533.08	-1095.34	0.00		
8117.00†	90.000	179.358	6350.00	1726.52	-1633.07	-1094.22	0.00		
8217.00†	90.000	179.358	6350.00	1825.99	-1733.07	-1093.10	0.00		
8317.00†	90.000	179.358	6350.00	1925.46	-1833.06	-1091.98	0.00		
8417.00†	90.000	179.358	6350.00	2024.93	-1933.05	-1090.86	0.00		



# Planned Wellpath Report

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

Page 4 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#18 LATHAM P-1-12XRLNC (328'FSL & 732'FEL, SEC.36)
Area	COLORADO	Well	LATHAM P-1-12XRLNC
Field	WELD COUNTY	Wellbore	LATHAM P-1-12XRLNC PWB
Facility	SEC.36-T5N-R63W		

WELLPATH DATA (179 stations) † = interpolated/extrapolated station									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments	
8517.00†	90.000	179.358	6350.00	2124.40	-2033.05	-1089.74	0.00		
8617.00†	90.000	179.358	6350.00	2223.87	-2133.04	-1088.62	0.00		
8717.00†	90.000	179.358	6350.00	2323.34	-2233.04	-1087.50	0.00		
8817.00†	90.000	179.358	6350.00	2422.81	-2333.03	-1086.37	0.00		
8917.00†	90.000	179.358	6350.00	2522.28	-2433.02	-1085.25	0.00		
9017.00†	90.000	179.358	6350.00	2621.75	-2533.02	-1084.13	0.00		
9117.00†	90.000	179.358	6350.00	2721.22	-2633.01	-1083.01	0.00		
9217.00†	90.000	179.358	6350.00	2820.69	-2733.00	-1081.89	0.00		
9317.00†	90.000	179.358	6350.00	2920.16	-2833.00	-1080.77	0.00		
9417.00†	90.000	179.358	6350.00	3019.62	-2932.99	-1079.65	0.00		
9517.00†	90.000	179.358	6350.00	3119.09	-3032.99	-1078.53	0.00		
9617.00†	90.000	179.358	6350.00	3218.56	-3132.98	-1077.41	0.00		
9717.00†	90.000	179.358	6350.00	3318.03	-3232.97	-1076.28	0.00		
9817.00†	90.000	179.358	6350.00	3417.50	-3332.97	-1075.16	0.00		
9917.00†	90.000	179.358	6350.00	3516.97	-3432.96	-1074.04	0.00		
10017.00†	90.000	179.358	6350.00	3616.44	-3532.95	-1072.92	0.00		
10117.00†	90.000	179.358	6350.00	3715.91	-3632.95	-1071.80	0.00		
10217.00†	90.000	179.358	6350.00	3815.38	-3732.94	-1070.68	0.00		
10317.00†	90.000	179.358	6350.00	3914.85	-3832.94	-1069.56	0.00		
10417.00†	90.000	179.358	6350.00	4014.32	-3932.93	-1068.44	0.00		
10517.00†	90.000	179.358	6350.00	4113.79	-4032.92	-1067.32	0.00		
10617.00†	90.000	179.358	6350.00	4213.26	-4132.92	-1066.19	0.00		
10717.00†	90.000	179.358	6350.00	4312.73	-4232.91	-1065.07	0.00		
10817.00†	90.000	179.358	6350.00	4412.20	-4332.90	-1063.95	0.00		
10917.00†	90.000	179.358	6350.00	4511.67	-4432.90	-1062.83	0.00		
11017.00†	90.000	179.358	6350.00	4611.14	-4532.89	-1061.71	0.00		
11117.00†	90.000	179.358	6350.00	4710.61	-4632.88	-1060.59	0.00		
11217.00†	90.000	179.358	6350.00	4810.08	-4732.88	-1059.47	0.00		
11317.00†	90.000	179.358	6350.00	4909.55	-4832.87	-1058.35	0.00		
11417.00†	90.000	179.358	6350.00	5009.02	-4932.87	-1057.23	0.00		
11517.00†	90.000	179.358	6350.00	5108.49	-5032.86	-1056.10	0.00		
11617.00†	90.000	179.358	6350.00	5207.96	-5132.85	-1054.98	0.00		
11717.00†	90.000	179.358	6350.00	5307.43	-5232.85	-1053.86	0.00		
11817.00†	90.000	179.358	6350.00	5406.90	-5332.84	-1052.74	0.00		

WELLPATH DATA (179 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
11917.00†	90.000	179.358	6350.00	5506.37	-5432.83	-1051.62	0.00	
12017.00†	90.000	179.358	6350.00	5605.84	-5532.83	-1050.50	0.00	
12117.00†	90.000	179.358	6350.00	5705.31	-5632.82	-1049.38	0.00	
12217.00†	90.000	179.358	6350.00	5804.78	-5732.82	-1048.26	0.00	
12317.00†	90.000	179.358	6350.00	5904.25	-5832.81	-1047.13	0.00	
12417.00†	90.000	179.358	6350.00	6003.72	-5932.80	-1046.01	0.00	
12517.00†	90.000	179.358	6350.00	6103.19	-6032.80	-1044.89	0.00	
12617.00†	90.000	179.358	6350.00	6202.66	-6132.79	-1043.77	0.00	
12717.00†	90.000	179.358	6350.00	6302.13	-6232.78	-1042.65	0.00	
12817.00†	90.000	179.358	6350.00	6401.60	-6332.78	-1041.53	0.00	
12917.00†	90.000	179.358	6350.00	6501.07	-6432.77	-1040.41	0.00	





# Planned Wellpath Report

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

Page 5 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#18 LATHAM P-1-12XRLNC (328'FSL & 732'FEL, SEC.36)
Area	COLORADO	Well	LATHAM P-1-12XRLNC
Field	WELD COUNTY	Wellbore	LATHAM P-1-12XRLNC PWB
Facility	SEC.36-T5N-R63W		

WELLPATH DATA (179 stations) † = interpolated/extrapolated station									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments	
13017.00†	90.000	179.358	6350.00	6600.54	-6532.77	-1039.29	0.00		
13117.00†	90.000	179.358	6350.00	6700.01	-6632.76	-1038.17	0.00		
13217.00†	90.000	179.358	6350.00	6799.48	-6732.75	-1037.04	0.00		
13317.00†	90.000	179.358	6350.00	6898.95	-6832.75	-1035.92	0.00		
13417.00†	90.000	179.358	6350.00	6998.42	-6932.74	-1034.80	0.00		
13517.00†	90.000	179.358	6350.00	7097.89	-7032.73	-1033.68	0.00		
13617.00†	90.000	179.358	6350.00	7197.36	-7132.73	-1032.56	0.00		
13717.00†	90.000	179.358	6350.00	7296.82	-7232.72	-1031.44	0.00		
13817.00†	90.000	179.358	6350.00	7396.29	-7332.72	-1030.32	0.00		
13917.00†	90.000	179.358	6350.00	7495.76	-7432.71	-1029.20	0.00		
14017.00†	90.000	179.358	6350.00	7595.23	-7532.70	-1028.08	0.00		
14117.00†	90.000	179.358	6350.00	7694.70	-7632.70	-1026.95	0.00		
14217.00†	90.000	179.358	6350.00	7794.17	-7732.69	-1025.83	0.00		
14317.00†	90.000	179.358	6350.00	7893.64	-7832.68	-1024.71	0.00		
14417.00†	90.000	179.358	6350.00	7993.11	-7932.68	-1023.59	0.00		
14517.00†	90.000	179.358	6350.00	8092.58	-8032.67	-1022.47	0.00		
14617.00†	90.000	179.358	6350.00	8192.05	-8132.66	-1021.35	0.00		
14717.00†	90.000	179.358	6350.00	8291.52	-8232.66	-1020.23	0.00		
14817.00†	90.000	179.358	6350.00	8390.99	-8332.65	-1019.11	0.00		
14917.00†	90.000	179.358	6350.00	8490.46	-8432.65	-1017.99	0.00		
15017.00†	90.000	179.358	6350.00	8589.93	-8532.64	-1016.86	0.00		
15117.00†	90.000	179.358	6350.00	8689.40	-8632.63	-1015.74	0.00		
15217.00†	90.000	179.358	6350.00	8788.87	-8732.63	-1014.62	0.00		
15317.00†	90.000	179.358	6350.00	8888.34	-8832.62	-1013.50	0.00		
15417.00†	90.000	179.358	6350.00	8987.81	-8932.61	-1012.38	0.00		
15517.00†	90.000	179.358	6350.00	9087.28	-9032.61	-1011.26	0.00		
15617.00†	90.000	179.358	6350.00	9186.75	-9132.60	-1010.14	0.00		
15717.00†	90.000	179.358	6350.00	9286.22	-9232.60	-1009.02	0.00		
15817.00†	90.000	179.358	6350.00	9385.69	-9332.59	-1007.90	0.00		
15917.00†	90.000	179.358	6350.00	9485.16	-9432.58	-1006.77	0.00		
16017.00†	90.000	179.358	6350.00	9584.63	-9532.58	-1005.65	0.00		
16117.00†	90.000	179.358	6350.00	9684.10	-9632.57	-1004.53	0.00		
16217.00†	90.000	179.358	6350.00	9783.57	-9732.56	-1003.41	0.00		
16317.00†	90.000	179.358	6350.00	9883.04	-9832.56	-1002.29	0.00		

WELLPATH DATA (179 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
16417.00†	90.000	179.358	6350.00	9982.51	-9932.55	-1001.17	0.00	
16517.00†	90.000	179.358	6350.00	10081.98	-10032.55	-1000.05	0.00	
16617.00†	90.000	179.358	6350.00	10181.45	-10132.54	-998.93	0.00	
16717.00†	90.000	179.358	6350.00	10280.92	-10232.53	-997.81	0.00	
16817.00†	90.000	179.358	6350.00	10380.39	-10332.53	-996.68	0.00	
16917.00†	90.000	179.358	6350.00	10479.86	-10432.52	-995.56	0.00	
17017.00†	90.000	179.358	6350.00	10579.33	-10532.51	-994.44	0.00	
17117.00†	90.000	179.358	6350.00	10678.80	-10632.51	-993.32	0.00	
17217.00†	90.000	179.358	6350.00	10778.27	-10732.50	-992.20	0.00	
17256.10	90.000	179.358	6350.00 <sup>2</sup>	10817.16	-10771.60	-991.76	0.00	End of Tangent



# Planned Wellpath Report

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

Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#18 LATHAM P-1-12XRLNC (328'FSL & 732'FEL, SEC.36)
Area	COLORADO	Well	LATHAM P-1-12XRLNC
Field	WELD COUNTY	Wellbore	LATHAM P-1-12XRLNC PWB
Facility	SEC.36-T5N-R63W		

HOLE & CASING SECTIONS - Ref Wellbore: LATHAM P-1-12XRLNC PWB Ref Wellpath: LATHAM P-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	17256.00	15706.00	1550.00	6350.00	0.00	0.00	-10771.50	-991.76

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	20.04	0.28	3312642.86	1372336.29	40°21'00.130"N	104°22'41.675"W	polygon
SEC.12-T04N-R63W		0.00	20.04	0.28	3312642.86	1372336.29	40°21'00.130"N	104°22'41.675"W	polygon
SEC.36-T5N-R63W		3.00	5343.91	-6914.88	3305661.21	1377572.03	40°21'52.729"N	104°24'11.009"W	polygon
2) LATHAM P-1-12XRLNC BHL (260'FSL & 1400'FEL, SEC.12)	17256.10	6350.00	-10771.60	-991.76	3311787.45	1361533.43	40°19'13.489"N	104°22'54.482"W	point
1) LATHAM P-1-12XRLNC LP (10'FNL & 1305'FEL, SEC.01)	6818.41	6350.00	-334.56	-1108.78	3311538.42	1371967.70	40°20'56.625"N	104°22'55.999"W	point

SURVEY PROGRAM - Ref Wellbore: LATHAM P-1-12XRLNC PWB Ref Wellpath: LATHAM P-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 P-1-12XRLNC PWB
1550.00	17256.10	BHI AutoTrak Curve (Axial Corr, Short spacing)		LATHAM P-1-12XRLNC PWB