

BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#17 LATHAM U41-1-12XRLNB (348'FSL & 732'FEL, SEC.36)
Field: WELD COUNTY Well: LATHAM U41-1-12XRLNB
Facility: SEC.36-T5N-R63W Wellbore: LATHAM U41-1-12XRLNB PWB

Plot reference wellpath is LATHAM U41-1-12XRLNB PWP (REV-A.0)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (17) (RKB)	North Reference: True north
Measured depths are referenced to RIG (17) (RKB)	Scale: True distance
RIG (17) (RKB) to Mean Sea Level: 4570 feet	Depths are in feet
Mean Sea Level to Ground level (At Slot: SLOT#17 LATHAM U41-1-12XRLNB (348'FSL & 732'FEL, SEC.36)): 0 feet	Created by: robale01 on 2018-10-10
Coordinates are in feet referenced to Slot	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#17 LATHAM U41-1-12XRLNB (348'FSL & 732'FEL, SEC.36)	-4438.44	3853.97		3312642.857	1372336.286	40°21'00.130"N	104°22'41.675"W
RIG (17) (RKB) to Ground level (At Slot: SLOT#17 LATHAM U41-1-12XRLNB (348'FSL & 732'FEL, SEC.36))						4570ft	
Mean Sea Level to Ground level (At Slot: SLOT#17 LATHAM U41-1-12XRLNB (348'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	BHI NavTrak	BHI NavTrak (Rotating+Axial Corr)		LATHAM U41-1-12XRLNB PWB
1550.00	17051.75	BHI AutoTrak Curve	BHI AutoTrak Curve (Axial Corr, Short spacing)		LATHAM U41-1-12XRLNB PWB

Hole and Casing Sections

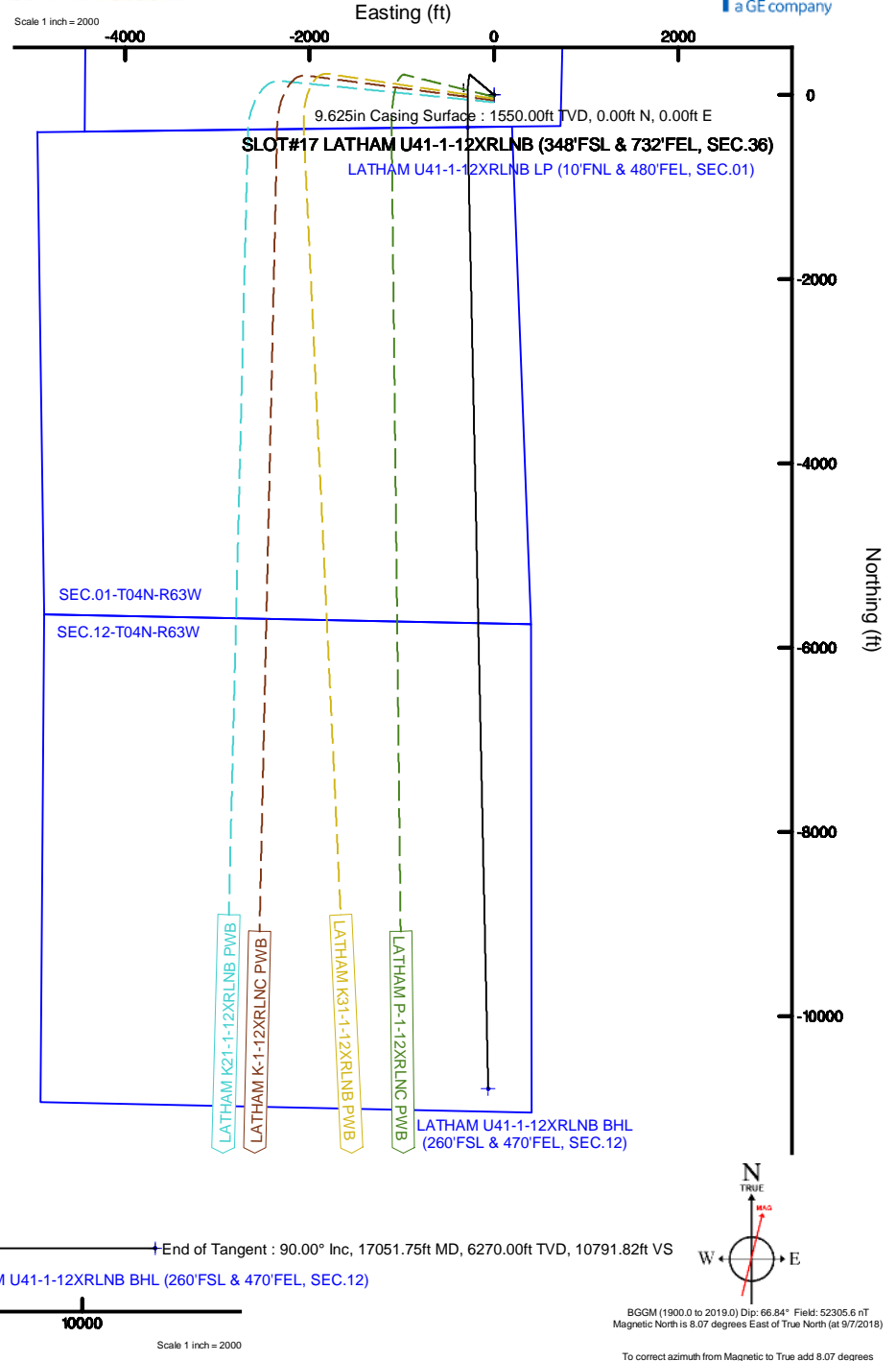
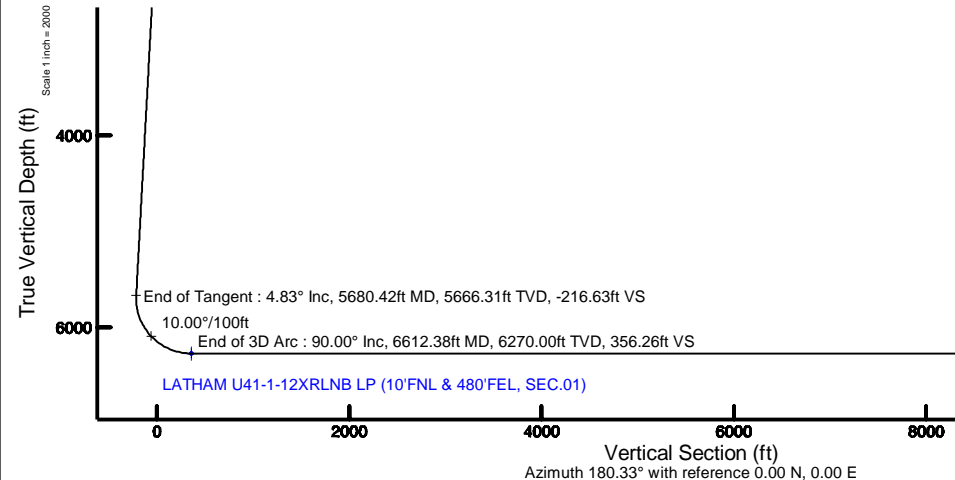
Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (ft)	End Local E (ft)	Wellbore
9.625in Casing Surface	17.00	1550.00	1533.00	17.00	1550.00	0.00	0.00	0.00	0.00	LATHAM U41-1-12XRLNB PWB
8.5in Open Hole	1550.00	17051.00	15501.00	1550.00	6270.00	0.00	0.00	-10790.89	-62.06	LATHAM U41-1-12XRLNB 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	310.215	17.00	0.00	0.00	0.00	0.00
End of Tangent	1550.00	0.000	310.215	1550.00	0.00	0.00	0.00	0.00
End of Build	1791.65	4.833	310.215	1791.36	6.58	-7.78	2.00	-6.53
End of Tangent	5680.42	4.833	310.215	5666.31	218.12	-257.97	0.00	-216.63
End of 3D Arc	6612.38	90.000	178.781	6270.00	-354.63	-284.06	10.00	356.26
End of Tangent	17051.75	90.000	178.781	6270.00	-10791.64	-62.04	0.00	10791.82

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
17051.75	90.000	178.781	6270.00	-10791.64	-62.04	3312717.33	1361545.20	40°19'13.489"N	104°22'42.476"W





Planned Wellpath Report

LATHAM U41-1-12XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#17 LATHAM U41-1-12XRLNB (348'FSL & 732'FEL, SEC.36)
Area	COLORADO	Well	LATHAM U41-1-12XRLNB
Field	WELD COUNTY	Wellbore	LATHAM U41-1-12XRLNB 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 9:43:36 AM
Convergence at slot	0.72° East	Database/Source file	WA DENVER/LATHAM_U41-1-12XRLNB_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	-4438.44	3853.97	3312642.86	1372336.29	40°21'00.130"N	104°22'41.675"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#17 LATHAM U41-1-12XRLNB (348'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	180.33°
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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#17 LATHAM U41-1-12XRLNB (348'FSL & 732'FEL, SEC.36)
Area	COLORADO	Well	LATHAM U41-1-12XRLNB
Field	WELD COUNTY	Wellbore	LATHAM U41-1-12XRLNB PWB
Facility	SEC.36-T5N-R63W		

WELLPATH DATA (177 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	310.215	0.00	0.00	0.00	0.00	0.00	
17.00	0.000	310.215	17.00	0.00	0.00	0.00	0.00	Tie On
117.00†	0.000	310.215	117.00	0.00	0.00	0.00	0.00	
217.00†	0.000	310.215	217.00	0.00	0.00	0.00	0.00	
317.00†	0.000	310.215	317.00	0.00	0.00	0.00	0.00	
417.00†	0.000	310.215	417.00	0.00	0.00	0.00	0.00	
517.00†	0.000	310.215	517.00	0.00	0.00	0.00	0.00	
617.00†	0.000	310.215	617.00	0.00	0.00	0.00	0.00	
717.00†	0.000	310.215	717.00	0.00	0.00	0.00	0.00	
817.00†	0.000	310.215	817.00	0.00	0.00	0.00	0.00	
917.00†	0.000	310.215	917.00	0.00	0.00	0.00	0.00	
1017.00†	0.000	310.215	1017.00	0.00	0.00	0.00	0.00	
1117.00†	0.000	310.215	1117.00	0.00	0.00	0.00	0.00	
1217.00†	0.000	310.215	1217.00	0.00	0.00	0.00	0.00	
1317.00†	0.000	310.215	1317.00	0.00	0.00	0.00	0.00	
1417.00†	0.000	310.215	1417.00	0.00	0.00	0.00	0.00	
1517.00†	0.000	310.215	1517.00	0.00	0.00	0.00	0.00	
1550.00	0.000	310.215	1550.00	0.00	0.00	0.00	0.00	End of Tangent
1617.00†	1.340	310.215	1616.99	-0.50	0.51	-0.60	2.00	
1717.00†	3.340	310.215	1716.91	-3.12	3.14	-3.72	2.00	
1791.65	4.833	310.215	1791.36	-6.53	6.58	-7.78	2.00	End of Build
1817.00†	4.833	310.215	1816.62	-7.90	7.96	-9.41	0.00	
1917.00†	4.833	310.215	1916.27	-13.30	13.40	-15.84	0.00	
2017.00†	4.833	310.215	2015.91	-18.71	18.84	-22.28	0.00	

WELLPATH DATA (177 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2117.00†	4.833	310.215	2115.56	-24.11	24.27	-28.71	0.00	
2217.00†	4.833	310.215	2215.20	-29.51	29.71	-35.14	0.00	
2317.00†	4.833	310.215	2314.85	-34.91	35.15	-41.58	0.00	
2417.00†	4.833	310.215	2414.49	-40.32	40.59	-48.01	0.00	
2517.00†	4.833	310.215	2514.13	-45.72	46.03	-54.44	0.00	
2617.00†	4.833	310.215	2613.78	-51.12	51.47	-60.88	0.00	
2717.00†	4.833	310.215	2713.42	-56.53	56.91	-67.31	0.00	
2817.00†	4.833	310.215	2813.07	-61.93	62.35	-73.75	0.00	
2917.00†	4.833	310.215	2912.71	-67.33	67.79	-80.18	0.00	
3017.00†	4.833	310.215	3012.36	-72.73	73.23	-86.61	0.00	
3117.00†	4.833	310.215	3112.00	-78.14	78.67	-93.05	0.00	
3217.00†	4.833	310.215	3211.65	-83.54	84.11	-99.48	0.00	
3317.00†	4.833	310.215	3311.29	-88.94	89.55	-105.91	0.00	
3417.00†	4.833	310.215	3410.93	-94.34	94.99	-112.35	0.00	
3517.00†	4.833	310.215	3510.58	-99.75	100.43	-118.78	0.00	
3617.00†	4.833	310.215	3610.22	-105.15	105.87	-125.21	0.00	
3717.00†	4.833	310.215	3709.87	-110.55	111.31	-131.65	0.00	
3817.00†	4.833	310.215	3809.51	-115.95	116.75	-138.08	0.00	
3917.00†	4.833	310.215	3909.16	-121.36	122.19	-144.52	0.00	
4017.00†	4.833	310.215	4008.80	-126.76	127.63	-150.95	0.00	
4117.00†	4.833	310.215	4108.45	-132.16	133.07	-157.38	0.00	



Planned Wellpath Report

LATHAM U41-1-12XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#17 LATHAM U41-1-12XRLNB (348'FSL & 732'FEL, SEC.36)
Area	COLORADO	Well	LATHAM U41-1-12XRLNB
Field	WELD COUNTY	Wellbore	LATHAM U41-1-12XRLNB PWB
Facility	SEC.36-T5N-R63W		

WELLPATH DATA (177 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
4217.00†	4.833	310.215	4208.09	-137.57	138.51	-163.82	0.00	
4317.00†	4.833	310.215	4307.73	-142.97	143.95	-170.25	0.00	
4417.00†	4.833	310.215	4407.38	-148.37	149.39	-176.68	0.00	
4517.00†	4.833	310.215	4507.02	-153.77	154.83	-183.12	0.00	
4617.00†	4.833	310.215	4606.67	-159.18	160.27	-189.55	0.00	
4717.00†	4.833	310.215	4706.31	-164.58	165.71	-195.98	0.00	
4817.00†	4.833	310.215	4805.96	-169.98	171.15	-202.42	0.00	
4917.00†	4.833	310.215	4905.60	-175.38	176.59	-208.85	0.00	
5017.00†	4.833	310.215	5005.25	-180.79	182.03	-215.28	0.00	
5117.00†	4.833	310.215	5104.89	-186.19	187.47	-221.72	0.00	
5217.00†	4.833	310.215	5204.53	-191.59	192.91	-228.15	0.00	
5317.00†	4.833	310.215	5304.18	-196.99	198.35	-234.59	0.00	
5417.00†	4.833	310.215	5403.82	-202.40	203.79	-241.02	0.00	
5517.00†	4.833	310.215	5503.47	-207.80	209.23	-247.45	0.00	
5617.00†	4.833	310.215	5603.11	-213.20	214.67	-253.89	0.00	
5680.42	4.833	310.215	5666.31	-216.63	218.12	-257.97	0.00	End of Tangent
5717.00†	3.656	261.523	5702.80	-217.44	218.94	-260.30	10.00	
5817.00†	11.066	197.694	5802.02	-207.77	209.30	-266.38	10.00	
5917.00†	20.767	188.404	5898.08	-180.99	182.55	-271.91	10.00	
6017.00†	30.656	184.921	5988.08	-137.91	139.50	-276.70	10.00	
6117.00†	40.596	183.023	6069.26	-79.85	81.47	-280.61	10.00	
6217.00†	50.556	181.771	6139.17	-8.57	10.20	-283.53	10.00	
6317.00†	60.527	180.834	6195.68	73.77	-72.13	-285.36	10.00	
6417.00†	70.502	180.067	6237.07	164.66	-163.02	-286.05	10.00	

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MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
6517.00†	80.481	179.390	6262.09	261.34	-259.70	-285.58	10.00	
6612.38	90.000	178.781	6270.00 [†]	356.26	-354.63	-284.06	10.00	End of 3D Arc
6617.00†	90.000	178.781	6270.00	360.88	-359.25	-283.96	0.00	
6717.00†	90.000	178.781	6270.00	460.84	-459.23	-281.84	0.00	
6817.00†	90.000	178.781	6270.00	560.80	-559.21	-279.71	0.00	
6917.00†	90.000	178.781	6270.00	660.77	-659.18	-277.58	0.00	
7017.00†	90.000	178.781	6270.00	760.73	-759.16	-275.45	0.00	
7117.00†	90.000	178.781	6270.00	860.69	-859.14	-273.33	0.00	
7217.00†	90.000	178.781	6270.00	960.66	-959.12	-271.20	0.00	
7317.00†	90.000	178.781	6270.00	1060.62	-1059.09	-269.07	0.00	
7417.00†	90.000	178.781	6270.00	1160.59	-1159.07	-266.95	0.00	
7517.00†	90.000	178.781	6270.00	1260.55	-1259.05	-264.82	0.00	
7617.00†	90.000	178.781	6270.00	1360.51	-1359.02	-262.69	0.00	
7717.00†	90.000	178.781	6270.00	1460.48	-1459.00	-260.57	0.00	
7817.00†	90.000	178.781	6270.00	1560.44	-1558.98	-258.44	0.00	
7917.00†	90.000	178.781	6270.00	1660.40	-1658.96	-256.31	0.00	
8017.00†	90.000	178.781	6270.00	1760.37	-1758.93	-254.19	0.00	
8117.00†	90.000	178.781	6270.00	1860.33	-1858.91	-252.06	0.00	
8217.00†	90.000	178.781	6270.00	1960.29	-1958.89	-249.93	0.00	
8317.00†	90.000	178.781	6270.00	2060.26	-2058.87	-247.81	0.00	
8417.00†	90.000	178.781	6270.00	2160.22	-2158.84	-245.68	0.00	



Planned Wellpath Report

LATHAM U41-1-12XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#17 LATHAM U41-1-12XRLNB (348'FSL & 732'FEL, SEC.36)
Area	COLORADO	Well	LATHAM U41-1-12XRLNB
Field	WELD COUNTY	Wellbore	LATHAM U41-1-12XRLNB PWB
Facility	SEC.36-T5N-R63W		

WELLPATH DATA (177 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8517.00†	90.000	178.781	6270.00	2260.18	-2258.82	-243.55	0.00	
8617.00†	90.000	178.781	6270.00	2360.15	-2358.80	-241.43	0.00	
8717.00†	90.000	178.781	6270.00	2460.11	-2458.78	-239.30	0.00	
8817.00†	90.000	178.781	6270.00	2560.07	-2558.75	-237.17	0.00	
8917.00†	90.000	178.781	6270.00	2660.04	-2658.73	-235.05	0.00	
9017.00†	90.000	178.781	6270.00	2760.00	-2758.71	-232.92	0.00	
9117.00†	90.000	178.781	6270.00	2859.96	-2858.69	-230.79	0.00	
9217.00†	90.000	178.781	6270.00	2959.93	-2958.66	-228.67	0.00	
9317.00†	90.000	178.781	6270.00	3059.89	-3058.64	-226.54	0.00	
9417.00†	90.000	178.781	6270.00	3159.86	-3158.62	-224.41	0.00	
9517.00†	90.000	178.781	6270.00	3259.82	-3258.59	-222.29	0.00	
9617.00†	90.000	178.781	6270.00	3359.78	-3358.57	-220.16	0.00	
9717.00†	90.000	178.781	6270.00	3459.75	-3458.55	-218.03	0.00	
9817.00†	90.000	178.781	6270.00	3559.71	-3558.53	-215.91	0.00	
9917.00†	90.000	178.781	6270.00	3659.67	-3658.50	-213.78	0.00	
10017.00†	90.000	178.781	6270.00	3759.64	-3758.48	-211.65	0.00	
10117.00†	90.000	178.781	6270.00	3859.60	-3858.46	-209.53	0.00	
10217.00†	90.000	178.781	6270.00	3959.56	-3958.44	-207.40	0.00	
10317.00†	90.000	178.781	6270.00	4059.53	-4058.41	-205.27	0.00	
10417.00†	90.000	178.781	6270.00	4159.49	-4158.39	-203.15	0.00	
10517.00†	90.000	178.781	6270.00	4259.45	-4258.37	-201.02	0.00	
10617.00†	90.000	178.781	6270.00	4359.42	-4358.35	-198.89	0.00	
10717.00†	90.000	178.781	6270.00	4459.38	-4458.32	-196.76	0.00	
10817.00†	90.000	178.781	6270.00	4559.34	-4558.30	-194.64	0.00	

WELLPATH DATA (177 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
10917.00†	90.000	178.781	6270.00	4659.31	-4658.28	-192.51	0.00	
11017.00†	90.000	178.781	6270.00	4759.27	-4758.26	-190.38	0.00	
11117.00†	90.000	178.781	6270.00	4859.23	-4858.23	-188.26	0.00	
11217.00†	90.000	178.781	6270.00	4959.20	-4958.21	-186.13	0.00	
11317.00†	90.000	178.781	6270.00	5059.16	-5058.19	-184.00	0.00	
11417.00†	90.000	178.781	6270.00	5159.13	-5158.17	-181.88	0.00	
11517.00†	90.000	178.781	6270.00	5259.09	-5258.14	-179.75	0.00	
11617.00†	90.000	178.781	6270.00	5359.05	-5358.12	-177.62	0.00	
11717.00†	90.000	178.781	6270.00	5459.02	-5458.10	-175.50	0.00	
11817.00†	90.000	178.781	6270.00	5558.98	-5558.07	-173.37	0.00	
11917.00†	90.000	178.781	6270.00	5658.94	-5658.05	-171.24	0.00	
12017.00†	90.000	178.781	6270.00	5758.91	-5758.03	-169.12	0.00	
12117.00†	90.000	178.781	6270.00	5858.87	-5858.01	-166.99	0.00	
12217.00†	90.000	178.781	6270.00	5958.83	-5957.98	-164.86	0.00	
12317.00†	90.000	178.781	6270.00	6058.80	-6057.96	-162.74	0.00	
12417.00†	90.000	178.781	6270.00	6158.76	-6157.94	-160.61	0.00	
12517.00†	90.000	178.781	6270.00	6258.72	-6257.92	-158.48	0.00	
12617.00†	90.000	178.781	6270.00	6358.69	-6357.89	-156.36	0.00	
12717.00†	90.000	178.781	6270.00	6458.65	-6457.87	-154.23	0.00	
12817.00†	90.000	178.781	6270.00	6558.61	-6557.85	-152.10	0.00	
12917.00†	90.000	178.781	6270.00	6658.58	-6657.83	-149.98	0.00	



Planned Wellpath Report

LATHAM U41-1-12XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#17 LATHAM U41-1-12XRLNB (348'FSL & 732'FEL, SEC.36)
Area	COLORADO	Well	LATHAM U41-1-12XRLNB
Field	WELD COUNTY	Wellbore	LATHAM U41-1-12XRLNB PWB
Facility	SEC.36-T5N-R63W		

WELLPATH DATA (177 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
13017.00†	90.000	178.781	6270.00	6758.54	-6757.80	-147.85	0.00	
13117.00†	90.000	178.781	6270.00	6858.50	-6857.78	-145.72	0.00	
13217.00†	90.000	178.781	6270.00	6958.47	-6957.76	-143.60	0.00	
13317.00†	90.000	178.781	6270.00	7058.43	-7057.74	-141.47	0.00	
13417.00†	90.000	178.781	6270.00	7158.40	-7157.71	-139.34	0.00	
13517.00†	90.000	178.781	6270.00	7258.36	-7257.69	-137.22	0.00	
13617.00†	90.000	178.781	6270.00	7358.32	-7357.67	-135.09	0.00	
13717.00†	90.000	178.781	6270.00	7458.29	-7457.64	-132.96	0.00	
13817.00†	90.000	178.781	6270.00	7558.25	-7557.62	-130.84	0.00	
13917.00†	90.000	178.781	6270.00	7658.21	-7657.60	-128.71	0.00	
14017.00†	90.000	178.781	6270.00	7758.18	-7757.58	-126.58	0.00	
14117.00†	90.000	178.781	6270.00	7858.14	-7857.55	-124.46	0.00	
14217.00†	90.000	178.781	6270.00	7958.10	-7957.53	-122.33	0.00	
14317.00†	90.000	178.781	6270.00	8058.07	-8057.51	-120.20	0.00	
14417.00†	90.000	178.781	6270.00	8158.03	-8157.49	-118.07	0.00	
14517.00†	90.000	178.781	6270.00	8257.99	-8257.46	-115.95	0.00	
14617.00†	90.000	178.781	6270.00	8357.96	-8357.44	-113.82	0.00	
14717.00†	90.000	178.781	6270.00	8457.92	-8457.42	-111.69	0.00	
14817.00†	90.000	178.781	6270.00	8557.88	-8557.40	-109.57	0.00	
14917.00†	90.000	178.781	6270.00	8657.85	-8657.37	-107.44	0.00	
15017.00†	90.000	178.781	6270.00	8757.81	-8757.35	-105.31	0.00	
15117.00†	90.000	178.781	6270.00	8857.78	-8857.33	-103.19	0.00	
15217.00†	90.000	178.781	6270.00	8957.74	-8957.31	-101.06	0.00	
15317.00†	90.000	178.781	6270.00	9057.70	-9057.28	-98.93	0.00	

WELLPATH DATA (177 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
15417.00†	90.000	178.781	6270.00	9157.67	-9157.26	-96.81	0.00	
15517.00†	90.000	178.781	6270.00	9257.63	-9257.24	-94.68	0.00	
15617.00†	90.000	178.781	6270.00	9357.59	-9357.22	-92.55	0.00	
15717.00†	90.000	178.781	6270.00	9457.56	-9457.19	-90.43	0.00	
15817.00†	90.000	178.781	6270.00	9557.52	-9557.17	-88.30	0.00	
15917.00†	90.000	178.781	6270.00	9657.48	-9657.15	-86.17	0.00	
16017.00†	90.000	178.781	6270.00	9757.45	-9757.12	-84.05	0.00	
16117.00†	90.000	178.781	6270.00	9857.41	-9857.10	-81.92	0.00	
16217.00†	90.000	178.781	6270.00	9957.37	-9957.08	-79.79	0.00	
16317.00†	90.000	178.781	6270.00	10057.34	-10057.06	-77.67	0.00	
16417.00†	90.000	178.781	6270.00	10157.30	-10157.03	-75.54	0.00	
16517.00†	90.000	178.781	6270.00	10257.26	-10257.01	-73.41	0.00	
16617.00†	90.000	178.781	6270.00	10357.23	-10356.99	-71.29	0.00	
16717.00†	90.000	178.781	6270.00	10457.19	-10456.97	-69.16	0.00	
16817.00†	90.000	178.781	6270.00	10557.15	-10556.94	-67.03	0.00	
16917.00†	90.000	178.781	6270.00	10657.12	-10656.92	-64.91	0.00	
17017.00†	90.000	178.781	6270.00	10757.08	-10756.90	-62.78	0.00	
17051.75	90.000	178.781	6270.00 ²	10791.82	-10791.64	-62.04	0.00	End of Tangent



Planned Wellpath Report

LATHAM U41-1-12XRLNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#17 LATHAM U41-1-12XRLNB (348'FSL & 732'FEL, SEC.36)
Area	COLORADO	Well	LATHAM U41-1-12XRLNB
Field	WELD COUNTY	Wellbore	LATHAM U41-1-12XRLNB PWB
Facility	SEC.36-T5N-R63W		

HOLE & CASING SECTIONS - Ref Wellbore: LATHAM U41-1-12XRLNB PWB Ref Wellpath: LATHAM U41-1-12XRLNB 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	17051.00	15501.00	1550.00	6270.00	0.00	0.00	-10790.89	-62.06

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	0.00	0.00	3312642.86	1372336.29	40°21'00.130"N	104°22'41.675"W	polygon
SEC.12-T04N-R63W		0.00	0.00	0.00	3312642.86	1372336.29	40°21'00.130"N	104°22'41.675"W	polygon
SEC.36-T5N-R63W		3.00	5323.87	-6915.16	3305661.21	1377572.03	40°21'52.729"N	104°24'11.009"W	polygon
2) LATHAM U41-1-12XRLNB BHL (260'FSL & 470'FEL, SEC.12)	17051.75	6270.00	-10791.64	-62.04	3312717.33	1361545.20	40°19'13.489"N	104°22'42.476"W	point
1) LATHAM U41-1-12XRLNB LP (10'FNL & 480'FEL, SEC.01)	6612.38	6270.00	-354.63	-284.06	3312363.32	1371978.10	40°20'56.625"N	104°22'45.344"W	point

SURVEY PROGRAM - Ref Wellbore: LATHAM U41-1-12XRLNB PWB Ref Wellpath: LATHAM U41-1-12XRLNB PWP (REV-A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1550.00	BHI NaviTrak (Rotating+Axial Corr)		LATHAM U41-1-12XRLNB PWB
1550.00	17051.75	BHI AutoTrak Curve (Axial Corr, Short spacing)		LATHAM U41-1-12XRLNB PWB