

BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#03 LATHAM U41-A11-14HNC (234°FNL & 180°FEL, SEC.14)
Field: WELD COUNTY Well: LATHAM U41-A11-14HNC
Facility: SEC.14-T4N-R63W Wellbore: LATHAM U41-A11-14HNC PWB

Plot reference wellpath is LATHAM U41-A11-14HNC (REV-B.0) PWP

True vertical depths are referenced to RIG (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to RIG (RKB)	North Reference: True north
RIG (RKB) to Mean Sea Level: 4621 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#03 LATHAM U41-A11-14HNC (234°FNL & 180°FEL, SEC.14)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: guenaler on 3/25/2014

Location Information

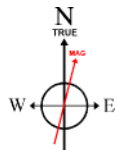
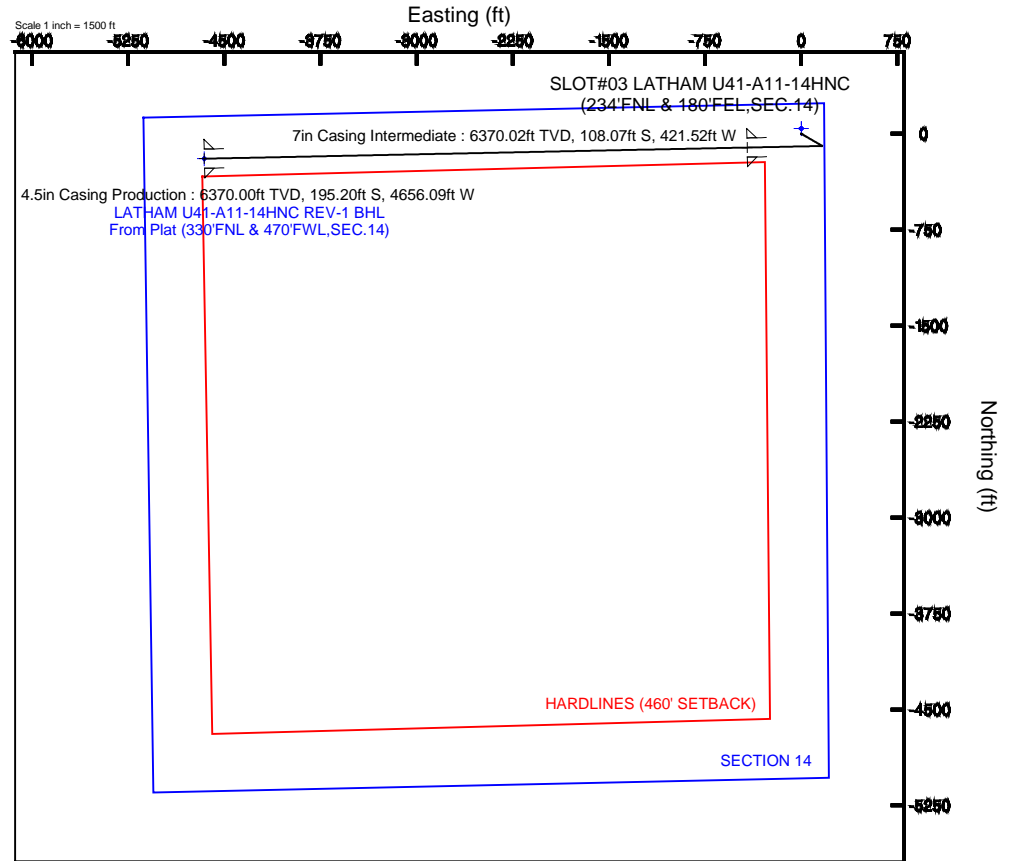
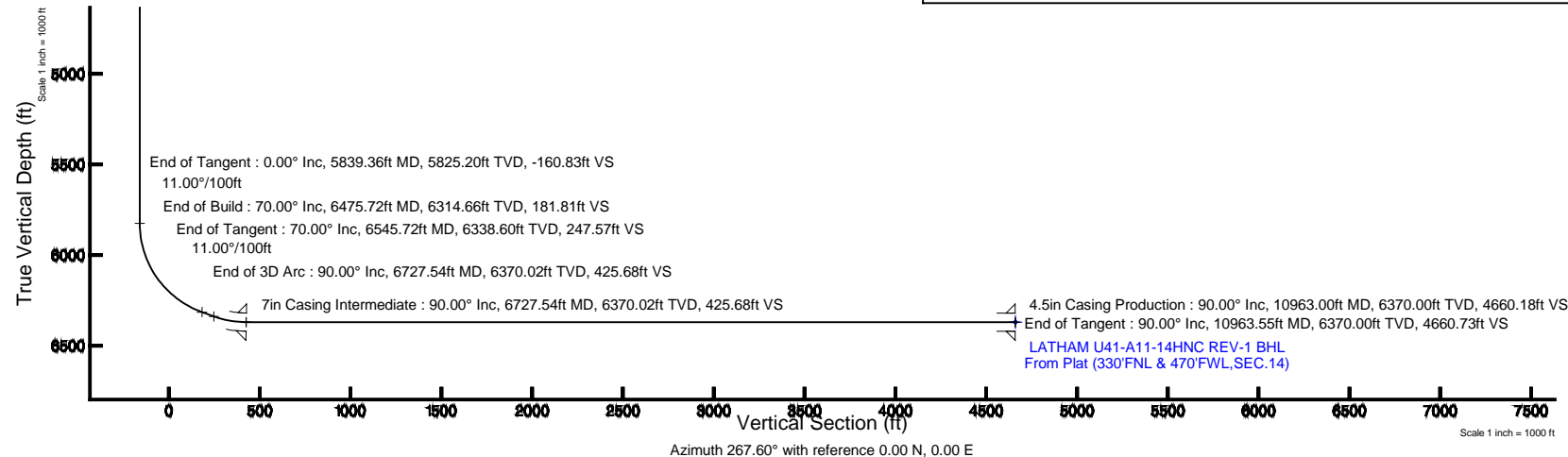
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.14-T4N-R63W	3307689.092	1361141.238	40°19'10.121"N	104°23'47.454"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
SLOT#03 LATHAM U41-A11-14HNC (234°FNL & 180°FEL, SEC.14)	-40.07	-0.54	3307689.048	1361101.163
RIG (RKB) to Mud line (At Slot: SLOT#03 LATHAM U41-A11-14HNC (234°FNL & 180°FEL, SEC.14))				4621ft
Mean Sea Level to Mud line (At Slot: SLOT#03 LATHAM U41-A11-14HNC (234°FNL & 180°FEL, SEC.14))				0ft
RIG (RKB) to Mean Sea Level				4621ft

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	120.192	17.00	0.00	0.00	0.00	0.00
End of Tangent	1400.00	0.000	120.192	1400.00	0.00	0.00	0.00	0.00
End of Build	1900.00	10.000	120.192	1897.47	-21.89	37.62	2.00	-36.67
End of Tangent	2498.05	10.000	120.192	2486.43	-74.11	127.38	0.00	-124.17
End of Drop	2998.05	0.000	268.821	2983.89	-96.00	165.00	2.00	-160.83
End of Tangent	5839.36	0.000	268.821	5825.20	-96.00	165.00	0.00	-160.83
End of Build	6475.72	70.000	268.821	6314.66	-103.05	-177.65	11.00	181.81
End of Tangent	6545.72	70.000	268.821	6338.60	-104.41	-243.41	0.00	247.57
End of 3D Arc	6727.54	90.000	268.821	6370.02	-108.07	-421.53	11.00	425.68
End of Tangent	10963.55	90.000	268.821	6370.00	-195.21	-4656.64	0.00	4660.73

Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	10963.55	NaviTrak	NaviTrak (Standard)		LATHAM U41-A11-14HNC PWB



BGGM (1945.0 to 2015.0) Dip: 66.94° Field: 52753.8 nT
Magnetic North is 8.33 degrees East of True North (at 3/25/2014)

To correct azimuth from Magnetic to True add 8.33 degrees



Planned Wellpath Report

LATHAM U41-A11-14HNC (REV-B.0) PWP

Page 1 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#03 LATHAM U41-A11-14HNC (234'FNL & 180'FEL,SEC.14)
Area	COLORADO	Well	LATHAM U41-A11-14HNC
Field	WELD COUNTY	Wellbore	LATHAM U41-A11-14HNC PWB
Facility	SEC.14-T4N-R63W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Guenaler
Scale	0.999958	Report Generated	3/25/2014 at 5:19:55 PM
Convergence at slot	n/a	Database/Source file	WA_Denver/LATHAM_U41-A11-14HNC_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-40.07	-0.54	3307689.05	1361101.16	40°19'09.725"N	104°23'47.461"W
Facility Reference Pt			3307689.09	1361141.24	40°19'10.121"N	104°23'47.454"W
Field Reference Pt			3327718.19	1377782.99	40°21'52.020"N	104°19'26.040"W

WELLPATH DATUM

Calculation method	Minimum curvature	RIG (RKB) to Facility Vertical Datum	4621.00ft
Horizontal Reference Pt	Slot	RIG (RKB) to Mean Sea Level	4621.00ft
Vertical Reference Pt	RIG (RKB)	RIG (RKB) to Mud Line at Slot (SLOT#03 LATHAM U41-A11-14HNC (234'FNL & 180'FEL,SEC.14))	4621.00ft
MD Reference Pt	RIG (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	267.60°



Planned Wellpath Report

LATHAM U41-A11-14HNC (REV-B.0) PWP

Page 2 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#03 LATHAM U41-A11-14HNC (234'FNL & 180'FEL,SEC.14)
Area	COLORADO	Well	LATHAM U41-A11-14HNC
Field	WELD COUNTY	Wellbore	LATHAM U41-A11-14HNC PWB
Facility	SEC.14-T4N-R63W		

WELLPATH DATA (120 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	120.192	0.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	
17.00	0.000	120.192	17.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	Tie On
117.00†	0.000	120.192	117.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	
217.00†	0.000	120.192	217.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	
317.00†	0.000	120.192	317.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	
417.00†	0.000	120.192	417.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	
517.00†	0.000	120.192	517.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	
617.00†	0.000	120.192	617.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	
717.00†	0.000	120.192	717.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	
817.00†	0.000	120.192	817.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	
917.00†	0.000	120.192	917.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	
1017.00†	0.000	120.192	1017.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	
1117.00†	0.000	120.192	1117.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	
1217.00†	0.000	120.192	1217.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	
1317.00†	0.000	120.192	1317.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	
1400.00	0.000	120.192	1400.00	0.00	0.00	0.00	40°19'09.725"N	104°23'47.461"W	0.00	End of Tangent
1417.00†	0.340	120.192	1417.00	-0.04	-0.03	0.04	40°19'09.725"N	104°23'47.460"W	2.00	
1517.00†	2.340	120.192	1516.97	-2.01	-1.20	2.06	40°19'09.713"N	104°23'47.434"W	2.00	
1617.00†	4.340	120.192	1616.79	-6.92	-4.13	7.10	40°19'09.684"N	104°23'47.369"W	2.00	
1717.00†	6.340	120.192	1716.35	-14.76	-8.81	15.14	40°19'09.638"N	104°23'47.265"W	2.00	
1817.00†	8.340	120.192	1815.53	-25.53	-15.24	26.19	40°19'09.574"N	104°23'47.123"W	2.00	
1900.00	10.000	120.192	1897.47	-36.67	-21.89	37.62	40°19'09.509"N	104°23'46.975"W	2.00	End of Build
1917.00†	10.000	120.192	1914.21	-39.16	-23.37	40.17	40°19'09.494"N	104°23'46.942"W	0.00	
2017.00†	10.000	120.192	2012.69	-53.79	-32.10	55.18	40°19'09.408"N	104°23'46.749"W	0.00	
2117.00†	10.000	120.192	2111.17	-68.42	-40.84	70.19	40°19'09.321"N	104°23'46.555"W	0.00	
2217.00†	10.000	120.192	2209.65	-83.05	-49.57	85.20	40°19'09.235"N	104°23'46.361"W	0.00	
2317.00†	10.000	120.192	2308.13	-97.68	-58.30	100.21	40°19'09.149"N	104°23'46.167"W	0.00	
2417.00†	10.000	120.192	2406.61	-112.31	-67.04	115.22	40°19'09.063"N	104°23'45.974"W	0.00	
2498.05	10.000	120.192	2486.43	-124.17	-74.11	127.38	40°19'08.993"N	104°23'45.817"W	0.00	End of Tangent
2517.00†	9.621	120.192	2505.10	-126.89	-75.74	130.17	40°19'08.977"N	104°23'45.780"W	2.00	



Planned Wellpath Report

LATHAM U41-A11-14HNC (REV-B.0) PWP

Page 3 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#03 LATHAM U41-A11-14HNC (234'FNL & 180'FEL,SEC.14)
Area	COLORADO	Well	LATHAM U41-A11-14HNC
Field	WELD COUNTY	Wellbore	LATHAM U41-A11-14HNC PWB
Facility	SEC.14-T4N-R63W		

WELLPATH DATA (120 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2617.00†	7.621	120.192	2603.97	-139.51	-83.27	143.13	40°19'08.902"N	104°23'45.613"W	2.00	
2717.00†	5.621	120.192	2703.30	-149.23	-89.07	153.09	40°19'08.845"N	104°23'45.485"W	2.00	
2817.00†	3.621	120.192	2802.97	-156.02	-93.12	160.06	40°19'08.805"N	104°23'45.395"W	2.00	
2917.00†	1.621	120.192	2902.86	-159.87	-95.42	164.01	40°19'08.782"N	104°23'45.344"W	2.00	
2998.05	0.000	268.821	2983.89	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	2.00	End of Drop
3017.00†	0.000	268.821	3002.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
3117.00†	0.000	268.821	3102.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
3217.00†	0.000	268.821	3202.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
3317.00†	0.000	268.821	3302.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
3417.00†	0.000	268.821	3402.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
3517.00†	0.000	268.821	3502.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
3617.00†	0.000	268.821	3602.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
3717.00†	0.000	268.821	3702.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
3817.00†	0.000	268.821	3802.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
3917.00†	0.000	268.821	3902.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
4017.00†	0.000	268.821	4002.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
4117.00†	0.000	268.821	4102.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
4217.00†	0.000	268.821	4202.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
4317.00†	0.000	268.821	4302.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
4417.00†	0.000	268.821	4402.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
4517.00†	0.000	268.821	4502.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
4617.00†	0.000	268.821	4602.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
4717.00†	0.000	268.821	4702.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
4817.00†	0.000	268.821	4802.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
4917.00†	0.000	268.821	4902.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
5017.00†	0.000	268.821	5002.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
5117.00†	0.000	268.821	5102.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
5217.00†	0.000	268.821	5202.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
5317.00†	0.000	268.821	5302.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
5417.00†	0.000	268.821	5402.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	



Planned Wellpath Report

LATHAM U41-A11-14HNC (REV-B.0) PWP

Page 4 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#03 LATHAM U41-A11-14HNC (234'FNL & 180'FEL,SEC.14)
Area	COLORADO	Well	LATHAM U41-A11-14HNC
Field	WELD COUNTY	Wellbore	LATHAM U41-A11-14HNC PWB
Facility	SEC.14-T4N-R63W		

WELLPATH DATA (120 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5517.00†	0.000	268.821	5502.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
5617.00†	0.000	268.821	5602.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
5717.00†	0.000	268.821	5702.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
5817.00†	0.000	268.821	5802.85	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	
5839.36	0.000	268.821	5825.20	-160.83	-96.00	165.00	40°19'08.776"N	104°23'45.331"W	0.00	End of Tangent
5917.00†	8.541	268.821	5902.56	-155.06	-96.12	159.23	40°19'08.775"N	104°23'45.405"W	11.00	
6017.00†	19.541	268.821	5999.42	-130.84	-96.62	135.01	40°19'08.770"N	104°23'45.718"W	11.00	
6117.00†	30.541	268.821	6089.88	-88.59	-97.49	92.75	40°19'08.762"N	104°23'46.264"W	11.00	
6217.00†	41.541	268.821	6170.62	-29.86	-98.70	34.02	40°19'08.750"N	104°23'47.022"W	11.00	
6317.00†	52.541	268.821	6238.66	43.20	-100.20	-39.03	40°19'08.735"N	104°23'47.965"W	11.00	
6417.00†	63.541	268.821	6291.51	127.89	-101.94	-123.73	40°19'08.718"N	104°23'49.058"W	11.00	
6475.72	70.000	268.821	6314.66	181.81	-103.05	-177.65	40°19'08.707"N	104°23'49.754"W	11.00	End of Build
6517.00†	70.000	268.821	6328.78	220.59	-103.85	-216.43	40°19'08.699"N	104°23'50.255"W	0.00	
6545.72	70.000	268.821	6338.60	247.57	-104.41	-243.41	40°19'08.693"N	104°23'50.603"W	0.00	End of Tangent
6617.00†	77.841	268.821	6358.33	315.99	-105.81	-311.84	40°19'08.679"N	104°23'51.487"W	11.00	
6717.00†	88.841	268.821	6369.91	415.14	-107.85	-410.99	40°19'08.659"N	104°23'52.767"W	11.00	
6727.54	90.000	268.821	6370.02	425.68	-108.07	-421.53	40°19'08.657"N	104°23'52.903"W	11.00	End of 3D Arc
6817.00†	90.000	268.821	6370.02	515.12	-109.91	-510.97	40°19'08.639"N	104°23'54.058"W	0.00	
6917.00†	90.000	268.821	6370.02	615.10	-111.97	-610.94	40°19'08.618"N	104°23'55.348"W	0.00	
7017.00†	90.000	268.821	6370.01	715.08	-114.03	-710.92	40°19'08.598"N	104°23'56.639"W	0.00	
7117.00†	90.000	268.821	6370.01	815.05	-116.08	-810.90	40°19'08.578"N	104°23'57.930"W	0.00	
7217.00†	90.000	268.821	6370.01	915.03	-118.14	-910.88	40°19'08.557"N	104°23'59.220"W	0.00	
7317.00†	90.000	268.821	6370.01	1015.01	-120.20	-1010.86	40°19'08.537"N	104°24'00.511"W	0.00	
7417.00†	90.000	268.821	6370.01	1114.98	-122.25	-1110.84	40°19'08.517"N	104°24'01.802"W	0.00	
7517.00†	90.000	268.821	6370.01	1214.96	-124.31	-1210.82	40°19'08.496"N	104°24'03.093"W	0.00	
7617.00†	90.000	268.821	6370.01	1314.94	-126.37	-1310.80	40°19'08.476"N	104°24'04.383"W	0.00	
7717.00†	90.000	268.821	6370.01	1414.92	-128.43	-1410.77	40°19'08.456"N	104°24'05.674"W	0.00	
7817.00†	90.000	268.821	6370.01	1514.89	-130.48	-1510.75	40°19'08.435"N	104°24'06.965"W	0.00	
7917.00†	90.000	268.821	6370.01	1614.87	-132.54	-1610.73	40°19'08.415"N	104°24'08.255"W	0.00	
8017.00†	90.000	268.821	6370.01	1714.85	-134.60	-1710.71	40°19'08.394"N	104°24'09.546"W	0.00	



Planned Wellpath Report

LATHAM U41-A11-14HNC (REV-B.0) PWP

Page 5 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#03 LATHAM U41-A11-14HNC (234'FNL & 180'FEL,SEC.14)
Area	COLORADO	Well	LATHAM U41-A11-14HNC
Field	WELD COUNTY	Wellbore	LATHAM U41-A11-14HNC PWB
Facility	SEC.14-T4N-R63W		

WELLPATH DATA (120 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8117.00†	90.000	268.821	6370.01	1814.83	-136.65	-1810.69	40°19'08.374"N	104°24'10.837"W	0.00	
8217.00†	90.000	268.821	6370.01	1914.80	-138.71	-1910.67	40°19'08.354"N	104°24'12.128"W	0.00	
8317.00†	90.000	268.821	6370.01	2014.78	-140.77	-2010.65	40°19'08.333"N	104°24'13.418"W	0.00	
8417.00†	90.000	268.821	6370.01	2114.76	-142.83	-2110.63	40°19'08.313"N	104°24'14.709"W	0.00	
8517.00†	90.000	268.821	6370.01	2214.73	-144.88	-2210.61	40°19'08.292"N	104°24'16.000"W	0.00	
8617.00†	90.000	268.821	6370.01	2314.71	-146.94	-2310.58	40°19'08.272"N	104°24'17.290"W	0.00	
8717.00†	90.000	268.821	6370.01	2414.69	-149.00	-2410.56	40°19'08.251"N	104°24'18.581"W	0.00	
8817.00†	90.000	268.821	6370.01	2514.67	-151.06	-2510.54	40°19'08.231"N	104°24'19.872"W	0.00	
8917.00†	90.000	268.821	6370.01	2614.64	-153.11	-2610.52	40°19'08.211"N	104°24'21.163"W	0.00	
9017.00†	90.000	268.821	6370.01	2714.62	-155.17	-2710.50	40°19'08.190"N	104°24'22.453"W	0.00	
9117.00†	90.000	268.821	6370.01	2814.60	-157.23	-2810.48	40°19'08.170"N	104°24'23.744"W	0.00	
9217.00†	90.000	268.821	6370.01	2914.58	-159.28	-2910.46	40°19'08.149"N	104°24'25.035"W	0.00	
9317.00†	90.000	268.821	6370.01	3014.55	-161.34	-3010.44	40°19'08.129"N	104°24'26.325"W	0.00	
9417.00†	90.000	268.821	6370.01	3114.53	-163.40	-3110.42	40°19'08.108"N	104°24'27.616"W	0.00	
9517.00†	90.000	268.821	6370.01	3214.51	-165.46	-3210.39	40°19'08.088"N	104°24'28.907"W	0.00	
9617.00†	90.000	268.821	6370.01	3314.48	-167.51	-3310.37	40°19'08.067"N	104°24'30.198"W	0.00	
9717.00†	90.000	268.821	6370.00	3414.46	-169.57	-3410.35	40°19'08.047"N	104°24'31.488"W	0.00	
9817.00†	90.000	268.821	6370.00	3514.44	-171.63	-3510.33	40°19'08.027"N	104°24'32.779"W	0.00	
9917.00†	90.000	268.821	6370.00	3614.42	-173.68	-3610.31	40°19'08.006"N	104°24'34.070"W	0.00	
10017.00†	90.000	268.821	6370.00	3714.39	-175.74	-3710.29	40°19'07.986"N	104°24'35.360"W	0.00	
10117.00†	90.000	268.821	6370.00	3814.37	-177.80	-3810.27	40°19'07.965"N	104°24'36.651"W	0.00	
10217.00†	90.000	268.821	6370.00	3914.35	-179.86	-3910.25	40°19'07.945"N	104°24'37.942"W	0.00	
10317.00†	90.000	268.821	6370.00	4014.32	-181.91	-4010.22	40°19'07.924"N	104°24'39.233"W	0.00	
10417.00†	90.000	268.821	6370.00	4114.30	-183.97	-4110.20	40°19'07.904"N	104°24'40.523"W	0.00	
10517.00†	90.000	268.821	6370.00	4214.28	-186.03	-4210.18	40°19'07.883"N	104°24'41.814"W	0.00	
10617.00†	90.000	268.821	6370.00	4314.26	-188.09	-4310.16	40°19'07.863"N	104°24'43.105"W	0.00	
10717.00†	90.000	268.821	6370.00	4414.23	-190.14	-4410.14	40°19'07.842"N	104°24'44.395"W	0.00	
10817.00†	90.000	268.821	6370.00	4514.21	-192.20	-4510.12	40°19'07.822"N	104°24'45.686"W	0.00	
10917.00†	90.000	268.821	6370.00	4614.19	-194.26	-4610.10	40°19'07.801"N	104°24'46.977"W	0.00	
10963.55	90.000	268.821	6370.00 ¹	4660.73	-195.21	-4656.64	40°19'07.792"N	104°24'47.578"W	0.00	End of Tangent



Planned Wellpath Report

LATHAM U41-A11-14HNC (REV-B.0) PWP

Page 6 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#03 LATHAM U41-A11-14HNC (234'FNL & 180'FEL,SEC.14)
Area	COLORADO	Well	LATHAM U41-A11-14HNC
Field	WELD COUNTY	Wellbore	LATHAM U41-A11-14HNC PWB
Facility	SEC.14-T4N-R63W		

HOLE & CASING SECTIONS - Ref Wellbore: LATHAM U41-A11-14HNC PWB Ref Wellpath: LATHAM U41-A11-14HNC (REV-B.0) PWP									
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]
7in Casing Intermediate	17.00	6727.54	6710.54	17.00	6370.02	0.00	0.00	-108.07	-421.52
4.5in Casing Production	17.00	10963.00	10946.00	17.00	6370.00	0.00	0.00	-195.20	-4656.09

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
LATHAM SECTION 14		0.00	40.05	0.54	3307689.09	1361141.22	40°19'10.121"N	104°23'47.454"W	polygon
LATHAM 41-11-14HNB REV-1 BHL From Plat (660'FNL & 470'FWL,SEC.14)		6326.00	-525.28	-4651.68	3303044.47	1360518.07	40°19'04.530"N	104°24'47.513"W	point
LATHAM U-A-14HNB HARDLINES (460' SETBACK)		6326.00	40.05	0.54	3307689.09	1361141.22	40°19'10.121"N	104°23'47.454"W	polygon
1) LATHAM U41-A11-14HNC REV-1 BHL From Plat (330'FNL & 470'FWL,SEC.14)	10963.55	6370.00	-195.21	-4656.64	3303035.41	1360848.03	40°19'07.792"N	104°24'47.578"W	point

SURVEY PROGRAM - Ref Wellbore: LATHAM U41-A11-14HNC PWB Ref Wellpath: LATHAM U41-A11-14HNC (REV-B.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	10963.55	NaviTrak (Standard)		LATHAM U41-A11-14HNC PWB



Planned Wellpath Report
LATHAM U41-A11-14HNC (REV-B.0) PWP
Page 7 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#03 LATHAM U41-A11-14HNC (234'FNL & 180'FEL,SEC.14)
Area	COLORADO	Well	LATHAM U41-A11-14HNC
Field	WELD COUNTY	Wellbore	LATHAM U41-A11-14HNC PWB
Facility	SEC.14-T4N-R63W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	120.192	17.00	Tie On
1400.00	0.000	120.192	1400.00	End of Tangent
1900.00	10.000	120.192	1897.47	End of Build
2498.05	10.000	120.192	2486.43	End of Tangent
2998.05	0.000	268.821	2983.89	End of Drop
5839.36	0.000	268.821	5825.20	End of Tangent
6475.72	70.000	268.821	6314.66	End of Build
6545.72	70.000	268.821	6338.60	End of Tangent
6727.54	90.000	268.821	6370.02	End of 3D Arc
10963.55	90.000	268.821	6370.00	End of Tangent