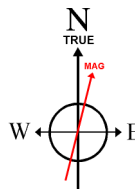


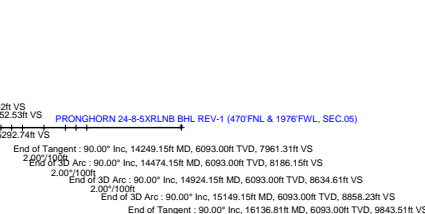
AKITA 519

Plot reference wellpath is PRONGHORN 24-8-5XRLNB (REV-F.0) PWF

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	10401.00	90.090	1.030	6092.76	4091.38	661.39	2.62	4124.54
PROJ	10470.00	90.090	3.557	6092.65	4160.32	664.15	3.66	4193.51
End of 3D Arc	10495.00	88.051	2.606	6093.06	4185.28	665.50	9.00	4218.51
End of Tangent	10520.00	88.051	2.606	6093.91	4210.24	666.63	0.00	4243.49
End of 3D Arc	10781.67	90.000	355.000	6098.37	4471.61	661.16	3.00	4504.02
End of Tangent	10956.67	90.000	355.000	6098.37	4645.94	645.91	0.00	4677.07
End of 3D Arc	11322.23	90.843	2.263	6095.67	5011.14	637.19	2.00	5041.02
End of Tangent	11433.78	90.843	2.263	6094.03	5122.59	641.59	0.00	5152.53
End of 3D Arc	11574.15	90.000	359.585	6093.00	5262.93	643.85	2.00	5292.74
End of Tangent	14249.15	90.000	359.585	6093.00	7937.86	624.46	0.00	7961.31
End of 3D Arc	14474.15	90.000	4.085	6093.00	8162.69	631.67	2.00	8186.15
End of 3D Arc	14924.15	90.000	355.085	6093.00	8612.21	628.41	2.00	8634.61
End of 3D Arc	15149.15	90.000	359.585	6093.00	8836.91	617.95	2.00	8858.23
End of Tangent	16136.81	90.000	359.585	6093.00	9824.54	610.79	2.00	9843.51



To correct azimuth from Magnetic to True add 7.96 degrees



Scale 1 inch = 500

[illegible]

Approval			
Author: <input type="text"/> Supervisor: <input type="text"/>			
Reviewed by:	<input type="text"/>	Reviewed by:	<input type="text"/>
Checked:	<input type="text"/>	Checked:	<input type="text"/>
Date:	<input type="text"/>	Date:	<input type="text"/>
Declaration: I declare that the above information is true and correct to the best of my knowledge and belief.			
Reviewed by:	<input type="text"/>	Reviewed by:	<input type="text"/>
Date:	<input type="text"/>	Date:	<input type="text"/>



Planned Wellpath Report

PRONGHORN 24-8-5XRLNB (REV-F.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 PRONGHORN 24-8-5XRLNB (247'FSL & 1332'FWL, SEC.08)
Area	COLORADO	Well	PRONGHORN 24-8-5XRLNB
Field	WELD COUNTY	Wellbore	PRONGHORN 24-8-5XRLNB ST01 PWB
Facility	SEC.08-T05N-R61W	Sidetrack from	PRONGHORN 24-8-5XRLNB AWP at 10401.00 MD

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Bushjamh
Scale	0.999961	Report Generated	12/4/2018 at 4:37:24 PM
Convergence at slot	0.82° East	Database/Source file	Denver/PRONGHORN_24-8-5XRLNB_REV-F.0_PWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-4322.89	-2037.72	3351393.48	1394410.02	40°24'33.098"N	104°14'17.150"W
Facility Reference Pt			3353369.04	1398761.46	40°25'15.816"N	104°13'50.808"W
Field Reference Pt			3224525.77	1254425.87	40°01'44.400"N	104°41'53.556"W

WELLPATH DATUM			
Calculation method	Minimum curvature	AKITA 519 (4608'GL+17'KB@4625') (RKB) to Facility Vertical Datum	4625.00ft
Horizontal Reference Pt	Slot	AKITA 519 (4608'GL+17'KB@4625') (RKB) to Mean Sea Level	4625.00ft
Vertical Reference Pt	AKITA 519 (4608'GL+17'KB@4625') (RKB)	AKITA 519 (4608'GL+17'KB@4625') (RKB) to Ground Level at Slot (SLOT#08 PRONGHORN 24-8-5XRLNB (247'FSL & 1332'FWL, SEC.08))	4625.00ft
MD Reference Pt	AKITA 519 (4608'GL+17'KB@4625') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	3.56°



Planned Wellpath Report

PRONGHORN 24-8-5XRLNB (REV-F.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 PRONGHORN 24-8-5XRLNB (247'FSL & 1332'FWL, SEC.08)
Area	COLORADO	Well	PRONGHORN 24-8-5XRLNB
Field	WELD COUNTY	Wellbore	PRONGHORN 24-8-5XRLNB ST01 PWB
Facility	SEC.08-T05N-R61W	Sidetrack from	PRONGHORN 24-8-5XRLNB AWP at 10401.00 MD

WELLPATH DATA (187 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	86.300	0.00	0.00	0.00	0.00	40°24'33.098"N	104°14'17.150"W	0.00	
17.00	0.000	86.300	17.00	0.00	0.00	0.00	40°24'33.098"N	104°14'17.150"W	0.00	
124.00	0.420	86.300	124.00	0.05	0.03	0.39	40°24'33.098"N	104°14'17.145"W	0.39	
211.00	0.330	89.310	211.00	0.11	0.05	0.96	40°24'33.098"N	104°14'17.137"W	0.11	
297.00	0.220	131.200	297.00	0.03	-0.06	1.33	40°24'33.097"N	104°14'17.133"W	0.26	
385.00	0.330	135.190	385.00	-0.25	-0.35	1.64	40°24'33.095"N	104°14'17.129"W	0.13	
473.00	0.440	126.470	472.99	-0.60	-0.73	2.09	40°24'33.091"N	104°14'17.123"W	0.14	
562.00	0.500	117.270	561.99	-0.94	-1.11	2.71	40°24'33.087"N	104°14'17.115"W	0.11	
650.00	0.520	81.840	649.99	-1.01	-1.23	3.44	40°24'33.086"N	104°14'17.105"W	0.35	
738.00	0.320	135.890	737.98	-1.10	-1.35	4.01	40°24'33.085"N	104°14'17.098"W	0.48	
825.00	0.350	115.060	824.98	-1.36	-1.64	4.42	40°24'33.082"N	104°14'17.093"W	0.14	
914.00	0.220	136.870	913.98	-1.58	-1.88	4.78	40°24'33.079"N	104°14'17.088"W	0.19	
1002.00	0.440	59.270	1001.98	-1.50	-1.83	5.19	40°24'33.080"N	104°14'17.083"W	0.51	
1091.00	0.490	44.010	1090.98	-1.02	-1.38	5.75	40°24'33.084"N	104°14'17.076"W	0.15	
1179.00	0.130	242.210	1178.98	-0.78	-1.15	5.92	40°24'33.087"N	104°14'17.073"W	0.70	
1267.00	0.290	281.970	1266.98	-0.80	-1.15	5.61	40°24'33.087"N	104°14'17.077"W	0.24	
1355.00	0.490	271.770	1354.97	-0.78	-1.10	5.02	40°24'33.087"N	104°14'17.085"W	0.24	
1444.00	0.310	264.290	1443.97	-0.83	-1.11	4.40	40°24'33.087"N	104°14'17.093"W	0.21	
1560.00	0.790	347.460	1559.97	-0.12	-0.36	3.91	40°24'33.094"N	104°14'17.099"W	0.70	
1686.00	0.860	174.830	1685.96	-0.22	-0.45	3.81	40°24'33.094"N	104°14'17.101"W	1.31	
1774.00	0.750	7.940	1773.96	-0.29	-0.54	3.95	40°24'33.093"N	104°14'17.099"W	1.82	
1862.00	0.390	171.220	1861.96	-0.01	-0.27	4.08	40°24'33.095"N	104°14'17.097"W	1.28	
1950.00	0.740	7.070	1949.96	0.26	0.00	4.19	40°24'33.098"N	104°14'17.096"W	1.27	
2037.00	0.130	182.030	2036.95	0.72	0.46	4.26	40°24'33.103"N	104°14'17.095"W	1.00	
2125.00	2.150	153.780	2124.93	-0.81	-1.12	4.98	40°24'33.087"N	104°14'17.085"W	2.31	
2213.00	4.240	151.950	2212.79	-5.01	-5.47	7.24	40°24'33.044"N	104°14'17.056"W	2.38	
2302.00	6.580	148.130	2301.39	-11.97	-12.71	11.48	40°24'32.972"N	104°14'17.001"W	2.66	
2391.00	8.740	139.610	2389.59	-21.00	-22.19	18.56	40°24'32.879"N	104°14'16.910"W	2.74	
2479.00	11.070	133.680	2476.28	-31.25	-33.12	29.00	40°24'32.771"N	104°14'16.775"W	2.89	
2566.00	11.050	130.610	2561.66	-41.66	-44.31	41.37	40°24'32.660"N	104°14'16.615"W	0.68	



Planned Wellpath Report

PRONGHORN 24-8-5XRLNB (REV-F.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 PRONGHORN 24-8-5XRLNB (247'FSL & 1332'FWL, SEC.08)
Area	COLORADO	Well	PRONGHORN 24-8-5XRLNB
Field	WELD COUNTY	Wellbore	PRONGHORN 24-8-5XRLNB ST01 PWB
Facility	SEC.08-T05N-R61W	Sidetrack from	PRONGHORN 24-8-5XRLNB AWP at 10401.00 MD

WELLPATH DATA (187 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2654.00	11.180	128.570	2648.01	-51.64	-55.12	54.44	40°24'32.553"N	104°14'16.446"W	0.47	
2743.00	11.170	125.950	2735.32	-61.21	-65.56	68.17	40°24'32.450"N	104°14'16.269"W	0.57	
2832.00	11.070	124.990	2822.65	-70.28	-75.52	82.15	40°24'32.352"N	104°14'16.088"W	0.24	
2920.00	11.060	124.700	2909.02	-79.05	-85.17	96.01	40°24'32.256"N	104°14'15.909"W	0.06	
3008.00	11.020	129.710	2995.39	-88.38	-95.35	109.42	40°24'32.156"N	104°14'15.735"W	1.09	
3097.00	11.020	131.560	3082.75	-98.63	-106.43	122.33	40°24'32.046"N	104°14'15.569"W	0.40	
3184.00	11.160	127.710	3168.13	-108.48	-117.10	135.21	40°24'31.941"N	104°14'15.402"W	0.87	
3273.00	11.130	117.900	3255.46	-116.86	-126.38	149.62	40°24'31.849"N	104°14'15.216"W	2.13	
3360.00	11.020	108.160	3340.84	-122.42	-132.91	164.94	40°24'31.785"N	104°14'15.018"W	2.15	
3447.00	11.130	106.170	3426.22	-126.34	-137.84	180.91	40°24'31.736"N	104°14'14.811"W	0.46	
3536.00	11.090	96.100	3513.56	-128.60	-141.14	197.67	40°24'31.703"N	104°14'14.595"W	2.18	
3624.00	11.040	98.480	3599.93	-129.70	-143.28	214.42	40°24'31.682"N	104°14'14.378"W	0.52	
3713.00	11.090	107.860	3687.28	-132.55	-147.16	230.99	40°24'31.644"N	104°14'14.164"W	2.02	
3800.00	11.320	117.970	3772.63	-138.14	-153.73	246.50	40°24'31.579"N	104°14'13.963"W	2.27	
3888.00	11.510	130.580	3858.90	-147.00	-163.50	260.80	40°24'31.482"N	104°14'13.779"W	2.84	
3977.00	11.540	140.520	3946.12	-158.85	-176.15	273.21	40°24'31.357"N	104°14'13.618"W	2.23	
4065.00	11.720	144.170	4032.31	-172.20	-190.19	284.03	40°24'31.219"N	104°14'13.478"W	0.86	
4154.00	11.550	148.230	4119.49	-186.45	-205.09	294.02	40°24'31.071"N	104°14'13.349"W	0.94	
4242.00	11.550	149.690	4205.70	-200.95	-220.19	303.10	40°24'30.922"N	104°14'13.232"W	0.33	
4330.00	11.710	146.090	4291.90	-215.36	-235.20	312.53	40°24'30.774"N	104°14'13.110"W	0.84	
4419.00	11.590	133.950	4379.08	-228.32	-248.90	324.01	40°24'30.638"N	104°14'12.961"W	2.75	
4507.00	11.480	126.190	4465.31	-238.77	-260.21	337.44	40°24'30.527"N	104°14'12.788"W	1.77	
4595.00	11.560	129.490	4551.53	-248.67	-270.99	351.31	40°24'30.420"N	104°14'12.609"W	0.75	
4682.00	11.530	132.070	4636.77	-259.20	-282.36	364.49	40°24'30.308"N	104°14'12.438"W	0.59	
4770.00	11.290	131.590	4723.04	-269.98	-293.97	377.46	40°24'30.193"N	104°14'12.270"W	0.29	
4859.00	11.500	143.310	4810.29	-282.12	-306.87	389.28	40°24'30.066"N	104°14'12.118"W	2.61	
5037.00	11.420	137.800	4984.75	-307.96	-334.15	411.72	40°24'29.796"N	104°14'11.828"W	0.62	
5124.00	11.460	127.760	5070.03	-318.83	-345.83	424.34	40°24'29.681"N	104°14'11.664"W	2.29	
5213.00	11.570	117.320	5157.25	-327.40	-355.34	439.26	40°24'29.587"N	104°14'11.472"W	2.34	
5301.00	11.590	111.420	5243.46	-333.66	-362.62	455.33	40°24'29.515"N	104°14'11.264"W	1.35	



Planned Wellpath Report

PRONGHORN 24-8-5XRLNB (REV-F.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 PRONGHORN 24-8-5XRLNB (247'FSL & 1332'FWL, SEC.08)
Area	COLORADO	Well	PRONGHORN 24-8-5XRLNB
Field	WELD COUNTY	Wellbore	PRONGHORN 24-8-5XRLNB ST01 PWB
Facility	SEC.08-T05N-R61W	Sidetrack from	PRONGHORN 24-8-5XRLNB AWP at 10401.00 MD

WELLPATH DATA (187 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5388.00	11.590	104.930	5328.69	-338.07	-368.06	471.91	40°24'29.461"N	104°14'11.049"W	1.50	
5477.00	11.590	107.730	5415.88	-342.02	-373.09	489.07	40°24'29.411"N	104°14'10.828"W	0.63	
5566.00	10.630	111.010	5503.21	-346.67	-378.75	505.25	40°24'29.355"N	104°14'10.619"W	1.29	
5654.00	14.370	63.220	5589.32	-343.58	-376.74	522.62	40°24'29.375"N	104°14'10.394"W	12.08	
5742.00	21.340	42.120	5673.12	-325.51	-359.90	543.16	40°24'29.542"N	104°14'10.129"W	10.69	
5830.00	28.820	28.380	5752.83	-293.66	-329.29	564.02	40°24'29.844"N	104°14'09.859"W	10.72	
5917.00	36.510	22.600	5826.03	-250.09	-286.88	583.97	40°24'30.263"N	104°14'09.601"W	9.53	
6003.00	42.880	22.440	5892.17	-198.17	-236.16	604.99	40°24'30.764"N	104°14'09.329"W	7.41	
6091.00	50.880	20.470	5952.28	-137.08	-176.41	628.40	40°24'31.355"N	104°14'09.027"W	9.24	
6179.00	57.140	11.480	6004.03	-67.65	-108.05	647.74	40°24'32.030"N	104°14'08.777"W	10.90	
6268.00	66.980	4.900	6045.72	10.58	-30.35	658.71	40°24'32.798"N	104°14'08.635"W	12.83	
6356.00	76.230	3.140	6073.46	93.99	52.86	664.53	40°24'33.620"N	104°14'08.559"W	10.68	
6444.00	84.200	0.970	6088.41	180.60	139.44	667.61	40°24'34.476"N	104°14'08.520"W	9.38	
6532.00	90.000	359.570	6092.86	268.30	227.29	668.03	40°24'35.344"N	104°14'08.514"W	6.78	
6620.00	89.970	1.910	6092.88	356.19	315.28	669.16	40°24'36.213"N	104°14'08.499"W	2.66	
6708.00	89.910	2.000	6092.97	444.16	403.23	672.16	40°24'37.082"N	104°14'08.461"W	0.12	
6797.00	89.880	1.930	6093.14	533.12	492.17	675.22	40°24'37.961"N	104°14'08.421"W	0.09	
6885.00	89.780	0.840	6093.40	621.06	580.15	677.34	40°24'38.831"N	104°14'08.394"W	1.24	
6973.00	89.850	0.040	6093.68	708.93	668.14	678.02	40°24'39.700"N	104°14'08.385"W	0.91	
7062.00	89.940	358.830	6093.84	797.69	757.14	677.14	40°24'40.580"N	104°14'08.396"W	1.36	
7150.00	89.940	359.310	6093.94	885.42	845.13	675.71	40°24'41.449"N	104°14'08.415"W	0.55	
7238.00	89.910	356.880	6094.05	973.02	933.07	672.79	40°24'42.318"N	104°14'08.452"W	2.76	
7325.00	90.180	358.620	6093.98	1059.57	1020.00	669.37	40°24'43.177"N	104°14'08.496"W	2.02	
7413.00	89.880	0.070	6093.94	1147.33	1107.99	668.37	40°24'44.047"N	104°14'08.509"W	1.68	
7502.00	90.220	1.260	6093.86	1236.21	1196.98	669.40	40°24'44.926"N	104°14'08.496"W	1.39	
7590.00	90.090	4.390	6093.62	1324.19	1284.87	673.74	40°24'45.794"N	104°14'08.440"W	3.56	
7676.00	90.250	3.300	6093.37	1410.19	1370.67	679.50	40°24'46.642"N	104°14'08.365"W	1.28	
7763.00	90.120	3.130	6093.09	1497.19	1457.53	684.38	40°24'47.501"N	104°14'08.302"W	0.25	
7851.00	89.880	358.020	6093.09	1585.04	1545.50	685.26	40°24'48.370"N	104°14'08.291"W	5.81	
7941.00	89.820	353.560	6093.32	1674.19	1635.23	678.66	40°24'49.257"N	104°14'08.376"W	4.96	



Planned Wellpath Report

PRONGHORN 24-8-5XRLNB (REV-F.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 PRONGHORN 24-8-5XRLNB (247'FSL & 1332'FWL, SEC.08)
Area	COLORADO	Well	PRONGHORN 24-8-5XRLNB
Field	WELD COUNTY	Wellbore	PRONGHORN 24-8-5XRLNB ST01 PWB
Facility	SEC.08-T05N-R61W	Sidetrack from	PRONGHORN 24-8-5XRLNB AWP at 10401.00 MD

WELLPATH DATA (187 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8030.00	89.880	353.740	6093.55	1761.87	1723.69	668.82	40°24'50.131"N	104°14'08.503"W	0.21	
8116.00	89.910	355.020	6093.71	1846.76	1809.27	660.39	40°24'50.976"N	104°14'08.612"W	1.49	
8204.00	90.120	359.440	6093.69	1934.20	1897.15	656.14	40°24'51.845"N	104°14'08.667"W	5.03	
8290.00	90.030	359.170	6093.58	2019.97	1983.14	655.10	40°24'52.695"N	104°14'08.681"W	0.33	
8378.00	90.120	358.980	6093.46	2107.70	2071.13	653.68	40°24'53.564"N	104°14'08.699"W	0.24	
8466.00	90.000	357.110	6093.37	2195.29	2159.07	650.68	40°24'54.433"N	104°14'08.738"W	2.13	
8640.00	90.060	352.540	6093.28	2367.22	2332.32	634.99	40°24'56.145"N	104°14'08.941"W	2.63	
8728.00	90.060	357.330	6093.19	2454.20	2419.95	627.22	40°24'57.011"N	104°14'09.041"W	5.44	
8817.00	90.120	0.590	6093.05	2542.91	2508.92	625.60	40°24'57.890"N	104°14'09.062"W	3.66	
8906.00	90.120	3.100	6092.86	2631.86	2597.87	628.47	40°24'58.769"N	104°14'09.025"W	2.82	
8993.00	89.910	4.660	6092.84	2718.86	2684.67	634.36	40°24'59.627"N	104°14'08.949"W	1.81	
9082.00	90.120	4.900	6092.81	2807.83	2773.36	641.77	40°25'00.503"N	104°14'08.853"W	0.36	
9169.00	90.060	5.500	6092.68	2894.80	2860.00	649.66	40°25'01.359"N	104°14'08.751"W	0.69	
9257.00	89.970	4.560	6092.65	2982.77	2947.66	657.37	40°25'02.226"N	104°14'08.651"W	1.07	
9346.00	90.150	359.540	6092.56	3071.71	3036.57	660.56	40°25'03.104"N	104°14'08.610"W	5.64	
9433.00	90.000	358.430	6092.45	3158.43	3123.56	659.01	40°25'03.964"N	104°14'08.630"W	1.29	
9519.00	90.000	359.050	6092.45	3244.13	3209.54	657.12	40°25'04.813"N	104°14'08.654"W	0.72	
9607.00	89.880	0.100	6092.54	3331.91	3297.53	656.47	40°25'05.683"N	104°14'08.662"W	1.20	
9695.00	89.880	1.140	6092.72	3419.80	3385.53	657.42	40°25'06.552"N	104°14'08.650"W	1.18	
9783.00	90.120	2.390	6092.72	3507.75	3473.48	660.13	40°25'07.422"N	104°14'08.615"W	1.45	
9870.00	90.000	1.640	6092.63	3594.72	3560.43	663.19	40°25'08.281"N	104°14'08.575"W	0.87	
9958.00	89.750	0.520	6092.82	3682.63	3648.41	664.85	40°25'09.150"N	104°14'08.554"W	1.30	
10047.00	90.090	359.530	6092.95	3771.46	3737.41	664.89	40°25'10.030"N	104°14'08.553"W	1.18	
10135.00	89.910	359.360	6092.95	3859.24	3825.41	664.04	40°25'10.899"N	104°14'08.564"W	0.28	
10224.00	90.000	359.390	6093.02	3948.00	3914.40	663.07	40°25'11.778"N	104°14'08.577"W	0.11	
10312.00	90.120	358.700	6092.93	4035.73	4002.39	661.60	40°25'12.648"N	104°14'08.596"W	0.80	
10401.00	90.090	1.030	6092.76	4124.54	4091.38	661.39	40°25'13.527"N	104°14'08.599"W	2.62	Tie On
10470.00	90.090	3.557	6092.65	4193.51	4160.32	664.15	40°25'14.209"N	104°14'08.563"W	3.66	PROJ
10495.00	88.051	2.606	6093.06	4218.51	4185.28	665.50	40°25'14.455"N	104°14'08.546"W	9.00	End of 3D Arc
10501.00†	88.051	2.606	6093.26	4224.50	4191.27	665.77	40°25'14.514"N	104°14'08.542"W	0.00	



Planned Wellpath Report

PRONGHORN 24-8-5XRLNB (REV-F.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 PRONGHORN 24-8-5XRLNB (247'FSL & 1332'FWL, SEC.08)
Area	COLORADO	Well	PRONGHORN 24-8-5XRLNB
Field	WELD COUNTY	Wellbore	PRONGHORN 24-8-5XRLNB ST01 PWB
Facility	SEC.08-T05N-R61W	Sidetrack from	PRONGHORN 24-8-5XRLNB AWP at 10401.00 MD

WELLPATH DATA (187 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10520.00	88.051	2.606	6093.91	4243.49	4210.24	666.63	40°25'14.702"N	104°14'08.531"W	0.00	End of Tangent
10601.00†	88.652	0.250	6096.24	4324.39	4291.17	668.65	40°25'15.502"N	104°14'08.505"W	3.00	
10701.00†	89.398	357.344	6097.94	4424.02	4391.13	666.55	40°25'16.489"N	104°14'08.532"W	3.00	
10781.67	90.000	355.000	6098.37	4504.02	4471.61	661.16	40°25'17.285"N	104°14'08.601"W	3.00	End of 3D Arc
10801.00†	90.000	355.000	6098.37	4523.13	4490.87	659.48	40°25'17.475"N	104°14'08.623"W	0.00	
10901.00†	90.000	355.000	6098.37	4622.02	4590.48	650.76	40°25'18.459"N	104°14'08.736"W	0.00	
10956.67	90.000	355.000	6098.37	4677.07	4645.94	645.91	40°25'19.007"N	104°14'08.799"W	0.00	End of Tangent
11001.00†	90.102	355.881	6098.33	4720.95	4690.13	642.39	40°25'19.444"N	104°14'08.844"W	2.00	
11101.00†	90.334	357.867	6097.95	4820.27	4789.98	636.93	40°25'20.431"N	104°14'08.915"W	2.00	
11201.00†	90.564	359.854	6097.16	4919.93	4889.95	634.95	40°25'21.418"N	104°14'08.940"W	2.00	
11301.00†	90.794	1.841	6095.98	5019.80	4989.93	636.43	40°25'22.406"N	104°14'08.921"W	2.00	
11322.23	90.843	2.263	6095.67	5041.02	5011.14	637.19	40°25'22.616"N	104°14'08.911"W	2.00	End of 3D Arc
11401.00†	90.843	2.263	6094.52	5119.76	5089.84	640.30	40°25'23.394"N	104°14'08.871"W	0.00	
11433.78	90.843	2.263	6094.03	5152.53	5122.59	641.59	40°25'23.717"N	104°14'08.854"W	0.00	End of Tangent
11501.00†	90.439	0.980	6093.28	5219.71	5189.78	643.49	40°25'24.381"N	104°14'08.830"W	2.00	
11574.15	90.000	359.585	6093.00	5292.74	5262.93	643.85	40°25'25.104"N	104°14'08.825"W	2.00	End of 3D Arc
11601.00†	90.000	359.585	6093.00	5319.52	5289.77	643.66	40°25'25.369"N	104°14'08.827"W	0.00	
11701.00†	90.000	359.585	6093.00	5419.28	5389.77	642.93	40°25'26.358"N	104°14'08.837"W	0.00	
11801.00†	90.000	359.585	6093.00	5519.04	5489.77	642.21	40°25'27.346"N	104°14'08.846"W	0.00	
11901.00†	90.000	359.585	6093.00	5618.80	5589.77	641.48	40°25'28.334"N	104°14'08.855"W	0.00	
12001.00†	90.000	359.585	6093.00	5718.56	5689.76	640.76	40°25'29.322"N	104°14'08.865"W	0.00	
12101.00†	90.000	359.585	6093.00	5818.32	5789.76	640.03	40°25'30.310"N	104°14'08.874"W	0.00	
12201.00†	90.000	359.585	6093.00	5918.08	5889.76	639.31	40°25'31.298"N	104°14'08.884"W	0.00	
12301.00†	90.000	359.585	6093.00	6017.84	5989.76	638.58	40°25'32.286"N	104°14'08.893"W	0.00	
12401.00†	90.000	359.585	6093.00	6117.60	6089.75	637.86	40°25'33.274"N	104°14'08.902"W	0.00	
12501.00†	90.000	359.585	6093.00	6217.36	6189.75	637.13	40°25'34.263"N	104°14'08.912"W	0.00	
12601.00†	90.000	359.585	6093.00	6317.12	6289.75	636.41	40°25'35.251"N	104°14'08.921"W	0.00	
12701.00†	90.000	359.585	6093.00	6416.88	6389.75	635.68	40°25'36.239"N	104°14'08.930"W	0.00	
12801.00†	90.000	359.585	6093.00	6516.64	6489.74	634.96	40°25'37.227"N	104°14'08.940"W	0.00	
12901.00†	90.000	359.585	6093.00	6616.40	6589.74	634.24	40°25'38.215"N	104°14'08.949"W	0.00	



Planned Wellpath Report

PRONGHORN 24-8-5XRLNB (REV-F.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 PRONGHORN 24-8-5XRLNB (247'FSL & 1332'FWL, SEC.08)
Area	COLORADO	Well	PRONGHORN 24-8-5XRLNB
Field	WELD COUNTY	Wellbore	PRONGHORN 24-8-5XRLNB ST01 PWB
Facility	SEC.08-T05N-R61W	Sidetrack from	PRONGHORN 24-8-5XRLNB AWP at 10401.00 MD

WELLPATH DATA (187 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13001.00†	90.000	359.585	6093.00	6716.16	6689.74	633.51	40°25'39.203"N	104°14'08.958"W	0.00	
13101.00†	90.000	359.585	6093.00	6815.92	6789.74	632.79	40°25'40.191"N	104°14'08.968"W	0.00	
13201.00†	90.000	359.585	6093.00	6915.68	6889.73	632.06	40°25'41.180"N	104°14'08.977"W	0.00	
13301.00†	90.000	359.585	6093.00	7015.44	6989.73	631.34	40°25'42.168"N	104°14'08.986"W	0.00	
13401.00†	90.000	359.585	6093.00	7115.20	7089.73	630.61	40°25'43.156"N	104°14'08.996"W	0.00	
13501.00†	90.000	359.585	6093.00	7214.95	7189.72	629.89	40°25'44.144"N	104°14'09.005"W	0.00	
13601.00†	90.000	359.585	6093.00	7314.71	7289.72	629.16	40°25'45.132"N	104°14'09.014"W	0.00	
13701.00†	90.000	359.585	6093.00	7414.47	7389.72	628.44	40°25'46.120"N	104°14'09.024"W	0.00	
13801.00†	90.000	359.585	6093.00	7514.23	7489.72	627.71	40°25'47.108"N	104°14'09.033"W	0.00	
13901.00†	90.000	359.585	6093.00	7613.99	7589.71	626.99	40°25'48.096"N	104°14'09.042"W	0.00	
14001.00†	90.000	359.585	6093.00	7713.75	7689.71	626.26	40°25'49.085"N	104°14'09.052"W	0.00	
14101.00†	90.000	359.585	6093.00	7813.51	7789.71	625.54	40°25'50.073"N	104°14'09.061"W	0.00	
14201.00†	90.000	359.585	6093.00	7913.27	7889.71	624.81	40°25'51.061"N	104°14'09.070"W	0.00	
14249.15	90.000	359.585	6093.00 ²	7961.31	7937.86	624.46	40°25'51.537"N	104°14'09.075"W	0.00	End of Tangent
14301.00†	90.000	0.622	6093.00	8013.06	7989.70	624.56	40°25'52.049"N	104°14'09.074"W	2.00	
14401.00†	90.000	2.622	6093.00	8113.00	8089.66	627.39	40°25'53.037"N	104°14'09.037"W	2.00	
14474.15	90.000	4.085	6093.00	8186.15	8162.69	631.67	40°25'53.758"N	104°14'08.982"W	2.00	End of 3D Arc
14501.00†	90.000	3.548	6093.00	8213.00	8189.47	633.45	40°25'54.023"N	104°14'08.958"W	2.00	
14601.00†	90.000	1.548	6093.00	8312.98	8289.37	637.90	40°25'55.010"N	104°14'08.901"W	2.00	
14701.00†	90.000	359.548	6093.00	8412.83	8389.36	638.85	40°25'55.998"N	104°14'08.889"W	2.00	
14801.00†	90.000	357.548	6093.00	8512.45	8489.32	636.32	40°25'56.986"N	104°14'08.921"W	2.00	
14901.00†	90.000	355.548	6093.00	8611.69	8589.14	630.30	40°25'57.972"N	104°14'08.999"W	2.00	
14924.15	90.000	355.085	6093.00	8634.61	8612.21	628.41	40°25'58.200"N	104°14'09.024"W	2.00	End of 3D Arc
15001.00†	90.000	356.622	6093.00	8710.76	8688.85	622.85	40°25'58.958"N	104°14'09.095"W	2.00	
15101.00†	90.000	358.622	6093.00	8810.22	8788.76	618.70	40°25'59.945"N	104°14'09.149"W	2.00	
15149.15	90.000	359.585	6093.00	8858.23	8836.91	617.95	40°26'00.421"N	104°14'09.159"W	2.00	End of 3D Arc
15201.00†	90.000	359.585	6093.00	8909.95	8888.76	617.57	40°26'00.933"N	104°14'09.164"W	0.00	
15301.00†	90.000	359.585	6093.00	9009.71	8988.75	616.85	40°26'01.921"N	104°14'09.173"W	0.00	
15401.00†	90.000	359.585	6093.00	9109.47	9088.75	616.12	40°26'02.909"N	104°14'09.182"W	0.00	
15501.00†	90.000	359.585	6093.00	9209.23	9188.75	615.40	40°26'03.897"N	104°14'09.192"W	0.00	



Planned Wellpath Report

PRONGHORN 24-8-5XRLNB (REV-F.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 PRONGHORN 24-8-5XRLNB (247'FSL & 1332'FWL, SEC.08)
Area	COLORADO	Well	PRONGHORN 24-8-5XRLNB
Field	WELD COUNTY	Wellbore	PRONGHORN 24-8-5XRLNB ST01 PWB
Facility	SEC.08-T05N-R61W	Sidetrack from	PRONGHORN 24-8-5XRLNB AWP at 10401.00 MD

WELLPATH DATA (187 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
15601.00†	90.000	359.585	6093.00	9308.99	9288.74	614.67	40°26'04.886"N	104°14'09.201"W	0.00	
15701.00†	90.000	359.585	6093.00	9408.75	9388.74	613.95	40°26'05.874"N	104°14'09.210"W	0.00	
15801.00†	90.000	359.585	6093.00	9508.51	9488.74	613.22	40°26'06.862"N	104°14'09.220"W	0.00	
15901.00†	90.000	359.585	6093.00	9608.27	9588.74	612.50	40°26'07.850"N	104°14'09.229"W	0.00	
16001.00†	90.000	359.585	6093.00	9708.02	9688.73	611.77	40°26'08.838"N	104°14'09.238"W	0.00	
16101.00†	90.000	359.585	6093.00	9807.78	9788.73	611.05	40°26'09.826"N	104°14'09.248"W	0.00	
16136.81	90.000	359.585	6093.00 ²	9843.51	9824.54	610.79	40°26'10.180"N	104°14'09.251"W	0.00	End of Tangent

HOLE & CASING SECTIONS - Ref Wellbore: PRONGHORN 24-8-5XRLNB ST01 PWB Ref Wellpath: PRONGHORN 24-8-5XRLNB (REV-F.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]
8.5in Open Hole	10401.00	16136.81	5735.81	6092.76	6093.00	4091.38	661.39	9824.54	610.79

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
PRONGHORN 24-8-5XRLNB BHL (470'FNL & 1976'FWL, SEC.05)		6075.00	9824.53	610.78	3351864.37	1404241.85	40°26'10.180"N	104°14'09.251"W	point
PRONGHORN 24-8-5XRLNB LP (531'FSL & 2007'FWL, SEC.08)		6075.00	280.17	674.31	3352063.71	1394699.75	40°24'35.866"N	104°14'08.433"W	point
PRONGHORN 24-8-5XRLNB LP REV-1 (460'FSL & 2007'FWL, SEC.08)		6075.00	209.17	674.31	3352064.72	1394628.76	40°24'35.165"N	104°14'08.433"W	point
PRONGHORN 24-8-5XRLNB LP REV-2 (460'FSL & 1958'FWL, SEC.08)		6075.00	209.17	625.31	3352015.72	1394628.06	40°24'35.165"N	104°14'09.066"W	point
PRONGHORN 24-8-5XRLNB LP REV-3 (460'FSL & 2007'FWL, SEC.08)		6075.00	208.32	674.79	3352065.21	1394627.92	40°24'35.156"N	104°14'08.427"W	point
PRONGHORN 24-8-5XRLNB MID LATERAL (0'FNL & 1983'FWL, SEC.08)		6075.00	4984.55	645.87	3351968.32	1399403.05	40°25'22.353"N	104°14'08.799"W	point
2) PRONGHORN 24-8-5XRLNB BHL REV-1 (470'FNL & 1976'FWL, SEC.05)	16136.81	6093.00	9824.54	610.79	3351864.38	1404241.85	40°26'10.180"N	104°14'09.251"W	point

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
PRONGHORN 24-8-5XRLNB LP REV-4 (460'FSL & 2007'FWL,SEC.08)		6093.00	208.32	674.79	3352065.21	1394627.92	40°24'35.156"N	104°14'08.427"W	point
PRONGHORN 24-8-5XRLNB MID LATERAL REV-1 (0'FNL & 1983'FWL, SEC.08)		6093.00	4984.52	645.87	3351968.32	1399403.03	40°25'22.353"N	104°14'08.799"W	point
SEC.05/08-T05N-R61W (460'FNL/FSL) prj		11999.00	160.60	-57.72	3351333.48	1394569.78	40°24'34.685"N	104°14'17.896"W	polygon
SEC.17-T05N-R61W (460'FNL/FSL) prj		11999.00	160.60	-57.72	3351333.48	1394569.78	40°24'34.685"N	104°14'17.896"W	polygon
SEC.05-T05N-R61W prj		12000.00	160.60	-57.72	3351333.48	1394569.78	40°24'34.685"N	104°14'17.896"W	polygon

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.08-T05N-R61W prj		12000.00	160.60	-57.72	3351333.48	1394569.78	40°24'34.685"N	104°14'17.896"W	polygon
SEC.17-T05N-R61W prj		12000.00	160.60	-57.72	3351333.48	1394569.78	40°24'34.685"N	104°14'17.896"W	polygon



Planned Wellpath Report

PRONGHORN 24-8-5XRLNB (REV-F.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 PRONGHORN 24-8-5XRLNB (247'FSL & 1332'FWL, SEC.08)
Area	COLORADO	Well	PRONGHORN 24-8-5XRLNB
Field	WELD COUNTY	Wellbore	PRONGHORN 24-8-5XRLNB ST01 PWB
Facility	SEC.08-T05N-R61W	Sidetrack from	PRONGHORN 24-8-5XRLNB AWP at 10401.00 MD

SURVEY PROGRAM - Ref Wellbore: PRONGHORN 24-8-5XRLNB ST01 PWB Ref Wellpath: PRONGHORN 24-8-5XRLNB (REV-F.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1560.00	BHI NaviTrak (Rotating+Axial Corr)	BHI NAVITRAK (ROTATING+AXIAL CORR) <124-1560>	PRONGHORN 24-8-5XRLNB AWB
1560.00	10401.00	BHI AutoTrak Curve (Axial Corr, Short spacing)	BHI AUTOTRAK CURVE (AXIAL CORR, SHORT SPACING) <1686-11103>	PRONGHORN 24-8-5XRLNB AWB
10401.00	16136.81	BHI AutoTrak Curve (Axial Corr, Short spacing)		PRONGHORN 24-8-5XRLNB ST01 PWB



Planned Wellpath Report

PRONGHORN 24-8-5XRLNB (REV-F.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#08 PRONGHORN 24-8-5XRLNB (247'FSL & 1332'FWL, SEC.08)
Area	COLORADO	Well	PRONGHORN 24-8-5XRLNB
Field	WELD COUNTY	Wellbore	PRONGHORN 24-8-5XRLNB ST01 PWB
Facility	SEC.08-T05N-R61W	Sidetrack from	PRONGHORN 24-8-5XRLNB AWP at 10401.00 MD

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
10401.00	90.090	1.030	6092.76	Tie On
10470.00	90.090	3.557	6092.65	PROJ
10495.00	88.051	2.606	6093.06	End of 3D Arc
10520.00	88.051	2.606	6093.91	End of Tangent
10781.67	90.000	355.000	6098.37	End of 3D Arc
10956.67	90.000	355.000	6098.37	End of Tangent
11322.23	90.843	2.263	6095.67	End of 3D Arc
11433.78	90.843	2.263	6094.03	End of Tangent
11574.15	90.000	359.585	6093.00	End of 3D Arc
14249.15	90.000	359.585	6093.00	End of Tangent
14474.15	90.000	4.085	6093.00	End of 3D Arc
14924.15	90.000	355.085	6093.00	End of 3D Arc
15149.15	90.000	359.585	6093.00	End of 3D Arc
16136.81	90.000	359.585	6093.00	End of Tangent