

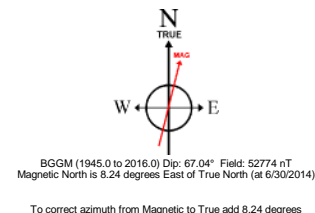
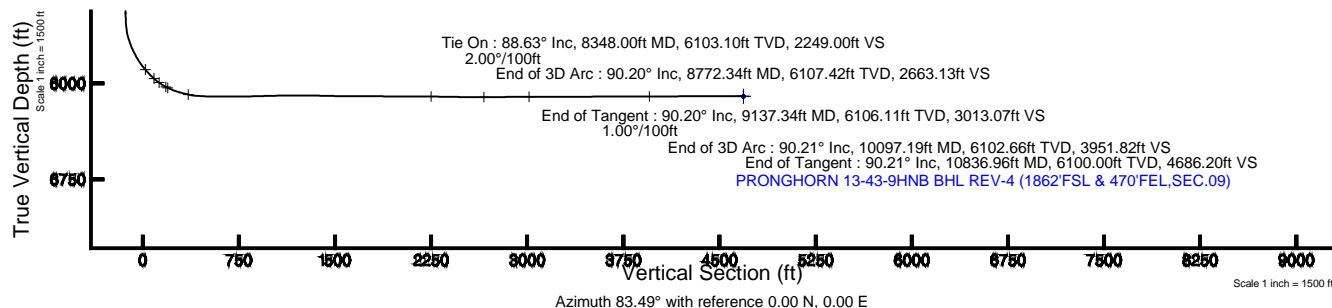
Location:	COLORADO	Slot:	SLOT#02 PRONGHORN 13-43-9HNB (1273'FSL & 240'FWL,SEC.9)
Field:	WELD COUNTY	Well:	PRONGHORN 13-43-9HNB
Facility:	SEC.09-T5N-R61W	Wellbore:	PRONGHORN 13-43-9HNB PWB

Plot reference wellpath is PRONGHORN 13-43-9HNB (REV-D.0) ST 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: 4654 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOTH02 PRONGHORN 13-43-9HNB (1273FSL & 240FWL SEC.9)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: gnuetner on 7/11/2014

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.09-TSN-R61W			3356616.206	1395470.987	40°24'42.984"N	104°13'22.368"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#02 PRONGHORN 13-43-9#NB (1273'FSL & 240'FWL,SEC.9)	0.00	19.49	3356635.696	1395471.268	40°24'42.984"N	104°13'22.116"W
RIG (RKB) to Mud line (At Slot: SLOT#02 PRONGHORN 13-43-9#NB (1273'FSL & 240'FWL,SEC.9))					4654ft	
Mean Sea Level to Mud line (At Slot: SLOT#02 PRONGHORN 13-43-9#NB (1273'FSL & 240'FWL,SEC.9))					0ft	
RIG (RKB) to Mean Sea Level					4654ft	

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	8348.00	88.630	91.660	6103.10	730.23	2180.23	0.00	2249.00
End of 3D Arc	8772.34	90.205	100.000	6107.42	687.17	2601.17	2.00	2663.13
End of Tangent	9137.34	90.205	100.000	6106.11	623.79	2961.42	0.00	3013.07
End of 3D Arc	10097.19	90.206	90.401	6102.66	536.88	3916.19	1.00	3951.82
End of Tangent	10836.96	90.206	90.401	6100.00	531.70	4655.94	0.00	4686.20

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	6494.00	NaviTrak	NaviTrak (Standard)		PRONGHORN 13-43-9HNB AWB
6494.00	8348.00	NaviTrak	NaviTrak (Standard)		PRONGHORN 13-43-9HNB AWB
8348.00	10836.96	NaviTrak	NaviTrak (Standard)		PRONGHORN 13-43-9HNB PWB





Planned Wellpath Report

PRONGHORN 13-43-9HNB (REV-D.0) ST PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 PRONGHORN 13-43-9HNB (1273'FSL & 240'FWL,SEC.9)
Area	COLORADO	Well	PRONGHORN 13-43-9HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 13-43-9HNB PWB
Facility	SEC.09-T5N-R61W	Sidetrack from	PRONGHORN 13-43-9HNB AWB at 8348.00 MD

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	0.999961	Report Generated	7/11/2014 at 10:51:10 AM
Convergence at slot	n/a	Database/Source file	WA_Denver/PRONGHORN_13-43-9HNB_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	19.49	3355635.70	1395471.27	40°24'42.984"N	104°13'22.116"W
Facility Reference Pt			3355616.21	1395470.99	40°24'42.984"N	104°13'22.368"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	4654.00ft
Horizontal Reference Pt	Slot	RIG (RKB) to Mean Sea Level	4654.00ft
Vertical Reference Pt	RIG (RKB)	RIG (RKB) to Mud Line at Slot (SLOT#02 PRONGHORN 13-43-9HNB (1273'FSL & 240'FWL,SEC.9))	4654.00ft
MD Reference Pt	RIG (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	83.49°



Planned Wellpath Report

PRONGHORN 13-43-9HNB (REV-D.0) ST PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 PRONGHORN 13-43-9HNB (1273'FSL & 240'FWL,SEC.9)
Area	COLORADO	Well	PRONGHORN 13-43-9HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 13-43-9HNB PWB
Facility	SEC.09-T5N-R61W	Sidetrack from	PRONGHORN 13-43-9HNB AWB at 8348.00 MD

WELLPATH DATA (117 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	14.870	0.00	0.00	0.00	0.00	40°24'42.984"N	104°13'22.116"W	0.00	
17.00	0.000	14.870	17.00	0.00	0.00	0.00	40°24'42.984"N	104°13'22.116"W	0.00	
547.00	1.280	14.870	546.96	2.16	5.72	1.52	40°24'43.041"N	104°13'22.096"W	0.24	
737.00	1.430	17.690	736.90	3.90	10.03	2.78	40°24'43.083"N	104°13'22.080"W	0.09	
927.00	1.620	16.760	926.84	5.94	14.86	4.28	40°24'43.131"N	104°13'22.061"W	0.10	
1118.00	1.760	12.790	1117.75	7.97	20.31	5.71	40°24'43.185"N	104°13'22.042"W	0.10	
1217.00	3.190	1.480	1216.66	8.86	24.54	6.11	40°24'43.227"N	104°13'22.037"W	1.52	
1308.00	4.730	351.240	1307.44	9.07	30.78	5.61	40°24'43.288"N	104°13'22.043"W	1.86	
1403.00	6.920	347.160	1401.94	8.28	40.24	3.74	40°24'43.382"N	104°13'22.068"W	2.34	
1498.00	8.150	335.600	1496.13	5.58	51.95	-0.31	40°24'43.497"N	104°13'22.120"W	2.05	
1594.00	8.330	328.140	1591.14	0.52	64.05	-6.80	40°24'43.617"N	104°13'22.204"W	1.13	
1688.00	9.250	327.510	1684.03	-5.71	76.21	-14.45	40°24'43.737"N	104°13'22.303"W	0.98	
1781.00	10.230	331.890	1775.69	-12.02	89.80	-22.35	40°24'43.871"N	104°13'22.405"W	1.32	
1875.00	10.480	336.180	1868.16	-17.64	104.98	-29.74	40°24'44.021"N	104°13'22.500"W	0.86	
1969.00	12.000	338.050	1960.36	-22.78	121.87	-36.85	40°24'44.188"N	104°13'22.592"W	1.66	
2065.00	14.050	343.150	2053.89	-27.53	142.28	-43.96	40°24'44.390"N	104°13'22.684"W	2.45	
2160.00	15.000	347.650	2145.85	-30.85	165.33	-49.93	40°24'44.618"N	104°13'22.761"W	1.55	
2255.00	16.300	348.710	2237.33	-33.21	190.41	-55.17	40°24'44.866"N	104°13'22.829"W	1.40	
2350.00	18.010	349.400	2328.10	-35.36	217.92	-60.48	40°24'45.137"N	104°13'22.898"W	1.81	
2445.00	16.720	348.160	2418.77	-37.68	245.73	-65.98	40°24'45.412"N	104°13'22.969"W	1.41	
2541.00	18.050	345.250	2510.38	-41.09	273.63	-72.61	40°24'45.688"N	104°13'23.055"W	1.65	
2636.00	17.010	344.810	2600.97	-45.29	301.28	-79.99	40°24'45.961"N	104°13'23.150"W	1.10	
2730.00	17.950	342.390	2690.63	-50.16	328.35	-87.98	40°24'46.229"N	104°13'23.253"W	1.26	
2825.00	16.460	342.290	2781.37	-55.59	355.13	-96.50	40°24'46.493"N	104°13'23.364"W	1.57	
2920.00	16.320	342.910	2872.51	-60.65	380.71	-104.52	40°24'46.746"N	104°13'23.467"W	0.24	
3016.00	15.150	344.650	2964.91	-65.05	405.70	-111.80	40°24'46.993"N	104°13'23.561"W	1.31	
3111.00	16.050	342.540	3056.41	-69.45	430.20	-119.03	40°24'47.235"N	104°13'23.655"W	1.12	
3206.00	17.640	341.510	3147.34	-74.93	456.38	-127.54	40°24'47.494"N	104°13'23.765"W	1.70	
3301.00	20.030	341.930	3237.24	-81.18	485.50	-137.15	40°24'47.782"N	104°13'23.889"W	2.52	
3323.11†	20.279	342.064	3258.00	-82.70	492.75	-139.50	40°24'47.853"N	104°13'23.919"W	1.15	Parkman



Planned Wellpath Report

PRONGHORN 13-43-9HNB (REV-D.0) ST PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 PRONGHORN 13-43-9HNB (1273'FSL & 240'FWL,SEC.9)
Area	COLORADO	Well	PRONGHORN 13-43-9HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 13-43-9HNB PWB
Facility	SEC.09-T5N-R61W	Sidetrack from	PRONGHORN 13-43-9HNB AWB at 8348.00 MD

WELLPATH DATA (117 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3395.00	21.090	342.480	3325.25	-87.63	516.93	-147.23	40°24'48.092"N	104°13'24.019"W	1.15	
3491.00	19.670	343.040	3415.24	-93.86	548.86	-157.15	40°24'48.408"N	104°13'24.148"W	1.49	
3586.00	18.330	343.690	3505.06	-99.30	578.49	-166.01	40°24'48.700"N	104°13'24.262"W	1.43	
3680.00	18.190	341.840	3594.33	-104.77	606.62	-174.73	40°24'48.978"N	104°13'24.375"W	0.63	
3775.00	17.880	341.740	3684.66	-110.74	634.56	-183.92	40°24'49.254"N	104°13'24.494"W	0.33	
3870.00	15.440	343.100	3775.67	-115.99	660.51	-192.17	40°24'49.511"N	104°13'24.600"W	2.60	
3966.00	14.910	341.870	3868.32	-120.78	684.47	-199.73	40°24'49.748"N	104°13'24.698"W	0.65	
4060.00	12.540	340.820	3959.63	-125.45	705.61	-206.84	40°24'49.957"N	104°13'24.790"W	2.54	
4155.00	10.760	345.430	4052.67	-128.95	723.93	-212.46	40°24'50.138"N	104°13'24.863"W	2.11	
4250.00	8.620	347.810	4146.31	-130.90	739.48	-216.20	40°24'50.291"N	104°13'24.911"W	2.29	
4346.00	6.490	349.820	4241.47	-131.96	751.85	-218.68	40°24'50.413"N	104°13'24.943"W	2.24	
4440.00	4.580	346.690	4335.03	-132.74	760.73	-220.48	40°24'50.501"N	104°13'24.966"W	2.06	
4535.00	3.260	335.840	4429.81	-134.01	766.89	-222.46	40°24'50.562"N	104°13'24.992"W	1.59	
4630.00	2.170	317.920	4524.70	-135.87	770.69	-224.77	40°24'50.600"N	104°13'25.022"W	1.44	
4725.00	0.570	311.130	4619.67	-137.24	772.33	-226.33	40°24'50.616"N	104°13'25.042"W	1.69	
4819.00	0.130	330.710	4713.67	-137.60	772.74	-226.73	40°24'50.620"N	104°13'25.047"W	0.48	
5010.00	0.370	14.520	4904.67	-137.46	773.52	-226.69	40°24'50.628"N	104°13'25.047"W	0.15	
5197.00	0.360	131.520	5091.67	-136.85	773.72	-226.09	40°24'50.630"N	104°13'25.039"W	0.33	
5382.00	1.190	138.960	5276.65	-135.37	771.88	-224.40	40°24'50.611"N	104°13'25.017"W	0.45	
5565.00	1.380	146.520	5459.60	-133.29	768.61	-221.93	40°24'50.579"N	104°13'24.985"W	0.14	
5659.00	4.450	96.550	5553.48	-129.23	767.25	-217.69	40°24'50.566"N	104°13'24.930"W	3.95	
5752.00	16.600	93.150	5644.74	-112.55	766.10	-200.77	40°24'50.554"N	104°13'24.712"W	13.08	
5799.00	21.110	98.740	5689.21	-97.76	764.45	-185.70	40°24'50.538"N	104°13'24.517"W	10.33	
5847.00	24.220	94.940	5733.50	-79.77	762.29	-167.34	40°24'50.517"N	104°13'24.279"W	7.16	
5940.00	32.690	90.090	5815.21	-36.04	760.60	-123.13	40°24'50.500"N	104°13'23.708"W	9.43	
6033.00	39.960	92.160	5890.09	18.51	759.43	-68.10	40°24'50.488"N	104°13'22.996"W	7.93	
6035.50†	40.171	92.146	5892.00	20.10	759.37	-66.49	40°24'50.488"N	104°13'22.976"W	8.44	Sharon Springs
6127.00	47.890	91.710	5957.73	82.96	757.25	-2.98	40°24'50.467"N	104°13'22.154"W	8.44	
6133.40†	48.571	91.578	5962.00	87.69	757.12	1.80	40°24'50.466"N	104°13'22.093"W	10.75	Sharon Springs "A"
6184.60†	54.023	90.615	5994.00	127.27	756.36	41.73	40°24'50.458"N	104°13'21.577"W	10.75	Sharon Springs "B"



Planned Wellpath Report

PRONGHORN 13-43-9HNB (REV-D.0) ST PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 PRONGHORN 13-43-9HNB (1273'FSL & 240'FWL,SEC.9)
Area	COLORADO	Well	PRONGHORN 13-43-9HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 13-43-9HNB PWB
Facility	SEC.09-T5N-R61W	Sidetrack from	PRONGHORN 13-43-9HNB AWB at 8348.00 MD

WELLPATH DATA (117 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
6219.00	57.690	90.040	6013.31	155.54	756.20	70.19	40°24'50.457"N	104°13'21.209"W	10.75	
6247.94†	61.269	89.260	6028.00	180.32	756.36	95.12	40°24'50.458"N	104°13'20.886"W	12.58	Niobrara "A" Chalk
6265.17†	63.402	88.821	6036.00	195.51	756.62	110.38	40°24'50.461"N	104°13'20.689"W	12.58	Niobrara "A" Marl
6313.00	69.330	87.680	6055.17	239.16	757.96	154.15	40°24'50.474"N	104°13'20.123"W	12.58	
6359.00	74.640	83.830	6069.39	282.84	761.22	197.75	40°24'50.506"N	104°13'19.559"W	14.02	
6405.00	75.220	82.540	6081.35	327.26	766.49	241.85	40°24'50.558"N	104°13'18.989"W	2.99	
6433.54†	77.844	83.609	6088.00	355.01	769.84	269.41	40°24'50.591"N	104°13'18.633"W	9.89	Niobrara "B" Chalk
6436.00	78.070	83.700	6088.51	357.42	770.10	271.79	40°24'50.594"N	104°13'18.602"W	9.89	
6456.00	80.510	84.520	6092.23	377.06	772.12	291.34	40°24'50.614"N	104°13'18.350"W	12.85	
6494.00	85.190	86.280	6096.96	414.74	775.14	328.91	40°24'50.644"N	104°13'17.864"W	13.14	
6646.00	90.120	86.830	6103.18	566.34	784.26	480.46	40°24'50.734"N	104°13'15.905"W	3.26	
6738.00	90.190	87.830	6102.93	658.13	788.55	572.36	40°24'50.776"N	104°13'14.716"W	1.09	
6831.00	90.030	88.910	6102.75	750.80	791.19	665.32	40°24'50.802"N	104°13'13.515"W	1.17	
6924.00	90.930	89.180	6101.97	843.35	792.74	758.31	40°24'50.817"N	104°13'12.313"W	1.01	
7019.00	91.790	90.250	6099.71	937.76	793.22	853.27	40°24'50.822"N	104°13'11.085"W	1.44	
7114.00	91.240	91.910	6097.20	1031.89	791.43	948.22	40°24'50.804"N	104°13'09.857"W	1.84	
7208.00	90.800	91.770	6095.53	1124.88	788.41	1042.16	40°24'50.775"N	104°13'08.643"W	0.49	
7303.00	90.150	93.370	6094.74	1218.68	784.15	1137.06	40°24'50.732"N	104°13'07.416"W	1.82	
7398.00	88.920	94.720	6095.51	1312.07	777.45	1231.81	40°24'50.666"N	104°13'06.191"W	1.92	
7493.00	88.700	94.820	6097.49	1405.21	769.55	1326.46	40°24'50.588"N	104°13'04.967"W	0.25	
7588.00	89.090	94.330	6099.32	1498.42	761.97	1421.14	40°24'50.513"N	104°13'03.743"W	0.66	
7683.00	89.880	94.760	6100.17	1591.65	754.45	1515.84	40°24'50.439"N	104°13'02.519"W	0.95	
7778.00	89.660	93.500	6100.55	1685.01	747.60	1610.59	40°24'50.371"N	104°13'01.294"W	1.35	
7873.00	89.850	93.200	6100.96	1778.61	742.05	1705.42	40°24'50.316"N	104°13'00.068"W	0.37	
7968.00	89.190	91.680	6101.75	1872.44	738.01	1800.33	40°24'50.276"N	104°12'58.841"W	1.74	
8063.00	89.810	91.020	6102.58	1966.54	735.77	1895.30	40°24'50.254"N	104°12'57.613"W	0.95	
8158.00	90.590	90.600	6102.25	2060.77	734.43	1990.29	40°24'50.241"N	104°12'56.385"W	0.93	
8253.00	89.880	91.400	6101.86	2154.95	732.77	2085.27	40°24'50.224"N	104°12'55.158"W	1.13	
8348.00	88.630	91.660	6103.10	2249.00	730.23	2180.23	40°24'50.199"N	104°12'53.930"W	0.00	Tie On
8448.00†	89.000	93.626	6105.17	2347.70	725.62	2280.10	40°24'50.153"N	104°12'52.639"W	2.00	



Planned Wellpath Report

PRONGHORN 13-43-9HNB (REV-D.0) ST PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 PRONGHORN 13-43-9HNB (1273'FSL & 240'FWL,SEC.9)
Area	COLORADO	Well	PRONGHORN 13-43-9HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 13-43-9HNB PWB
Facility	SEC.09-T5N-R61W	Sidetrack from	PRONGHORN 13-43-9HNB AWB at 8348.00 MD

WELLPATH DATA (117 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8548.00†	89.371	95.591	6106.59	2445.81	717.59	2379.76	40°24'50.074"N	104°12'51.350"W	2.00	
8648.00†	89.742	97.557	6107.36	2543.20	706.14	2479.09	40°24'49.961"N	104°12'50.066"W	2.00	
8748.00†	90.114	99.522	6107.49	2639.77	691.29	2577.98	40°24'49.814"N	104°12'48.788"W	2.00	
8772.34	90.205	100.000	6107.42	2663.13	687.17	2601.96	40°24'49.773"N	104°12'48.478"W	2.00	End of 3D Arc
8848.00†	90.205	100.000	6107.15	2735.67	674.03	2676.48	40°24'49.643"N	104°12'47.514"W	0.00	
8948.00†	90.205	100.000	6106.79	2831.54	656.66	2774.96	40°24'49.471"N	104°12'46.241"W	0.00	
9048.00†	90.205	100.000	6106.43	2927.42	639.30	2873.44	40°24'49.300"N	104°12'44.968"W	0.00	
9137.34	90.205	100.000	6106.11	3013.07	623.79	2961.42	40°24'49.146"N	104°12'43.831"W	0.00	End of Tangent
9148.00†	90.205	99.893	6106.07	3023.29	621.94	2971.92	40°24'49.128"N	104°12'43.695"W	1.00	
9248.00†	90.205	98.893	6105.72	3119.46	605.62	3070.58	40°24'48.967"N	104°12'42.420"W	1.00	
9348.00†	90.206	97.893	6105.36	3216.09	591.03	3169.50	40°24'48.822"N	104°12'41.141"W	1.00	
9448.00†	90.206	96.893	6105.00	3313.16	578.16	3268.67	40°24'48.695"N	104°12'39.859"W	1.00	
9548.00†	90.206	95.893	6104.64	3410.63	567.02	3368.05	40°24'48.585"N	104°12'38.574"W	1.00	
9648.00†	90.206	94.893	6104.28	3508.48	557.62	3467.60	40°24'48.492"N	104°12'37.287"W	1.00	
9748.00†	90.206	93.893	6103.92	3606.67	549.96	3567.31	40°24'48.416"N	104°12'35.998"W	1.00	
9848.00†	90.206	92.893	6103.56	3705.18	544.05	3667.13	40°24'48.357"N	104°12'34.708"W	1.00	
9948.00†	90.206	91.893	6103.20	3803.97	539.87	3767.04	40°24'48.316"N	104°12'33.416"W	1.00	
10048.00†	90.206	90.893	6102.84	3903.01	537.44	3867.01	40°24'48.292"N	104°12'32.124"W	1.00	
10097.19	90.206	90.401	6102.66	3951.82	536.88	3916.19	40°24'48.286"N	104°12'31.488"W	1.00	End of 3D Arc
10148.00†	90.206	90.401	6102.48	4002.26	536.53	3967.00	40°24'48.283"N	104°12'30.831"W	0.00	
10248.00†	90.206	90.401	6102.12	4101.53	535.83	4067.00	40°24'48.276"N	104°12'29.538"W	0.00	
10348.00†	90.206	90.401	6101.76	4200.80	535.13	4167.00	40°24'48.268"N	104°12'28.245"W	0.00	
10448.00†	90.206	90.401	6101.40	4300.08	534.42	4266.99	40°24'48.261"N	104°12'26.953"W	0.00	
10548.00†	90.206	90.401	6101.04	4399.35	533.72	4366.99	40°24'48.254"N	104°12'25.660"W	0.00	
10648.00†	90.206	90.401	6100.68	4498.62	533.02	4466.99	40°24'48.247"N	104°12'24.367"W	0.00	
10748.00†	90.206	90.401	6100.32	4597.89	532.32	4566.98	40°24'48.240"N	104°12'23.074"W	0.00	
10836.96	90.206	90.401	6100.00 ¹	4686.20	531.70	4655.94	40°24'48.234"N	104°12'21.924"W	0.00	End of Tangent



Planned Wellpath Report

PRONGHORN 13-43-9HNB (REV-D.0) ST PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 PRONGHORN 13-43-9HNB (1273'FSL & 240'FWL,SEC.9)
Area	COLORADO	Well	PRONGHORN 13-43-9HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 13-43-9HNB PWB
Facility	SEC.09-T5N-R61W	Sidetrack from	PRONGHORN 13-43-9HNB AWB at 8348.00 MD

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
PRONGHORN C-W-9HNB SECTION 9		0.00	0.00	-19.49	3355616.21	1395470.99	40°24'42.984"N	104°13'22.368"W	polygon
1) PRONGHORN 13-43-9HNB BHL REV-4 (1862'FSL & 470'FEL,SEC.09)	10836.96	6100.00	531.70	4655.94	3360283.30	1396069.95	40°24'48.234"N	104°12'21.924"W	point
PRONGHORN 13-43-9HNB BHL REV-3 (1862'FSL & 470'FEL,SEC.09)		6103.00	531.70	4655.94	3360283.30	1396069.95	40°24'48.234"N	104°12'21.924"W	point
PRONGHORN C-W-9HNB HARDLINES (460' SETBACK)		6118.00	0.00	-19.49	3355616.21	1395470.99	40°24'42.984"N	104°13'22.368"W	polygon
PRONGHORN 12-9 (200'R)		6850.00	2014.65	412.11	3356018.73	1397491.57	40°25'02.892"N	104°13'16.788"W	circle
PRONGHORN 31-9 (200'R)		6860.00	3337.30	3082.28	3358669.46	1398852.48	40°25'15.960"N	104°12'42.264"W	circle
PRONGHORN 41-9 (200'R)		6900.00	3348.43	4404.84	3359991.68	1398882.65	40°25'16.068"N	104°12'25.164"W	circle

SURVEY PROGRAM - Ref Wellbore: PRONGHORN 13-43-9HNB PWB Ref Wellpath: PRONGHORN 13-43-9HNB (REV-D.0) ST PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	6494.00	NaviTrak (Standard)		PRONGHORN 13-43-9HNB AWB
6494.00	8348.00	NaviTrak (Standard)		PRONGHORN 13-43-9HNB AWB
8348.00	10836.96	NaviTrak (Standard)		PRONGHORN 13-43-9HNB PWB



Planned Wellpath Report

PRONGHORN 13-43-9HNB (REV-D.0) ST PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#02 PRONGHORN 13-43-9HNB (1273'FSL & 240'FWL,SEC.9)
Area	COLORADO	Well	PRONGHORN 13-43-9HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 13-43-9HNB PWB
Facility	SEC.09-T5N-R61W	Sidetrack from	PRONGHORN 13-43-9HNB AWB at 8348.00 MD

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
3323.11	20.279	342.064	3258.00	Parkman
6035.50	40.171	92.146	5892.00	Sharon Springs
6133.40	48.571	91.578	5962.00	Sharon Springs "A"
6184.60	54.023	90.615	5994.00	Sharon Springs "B"
6247.94	61.269	89.260	6028.00	Niobrara "A" Chalk
6265.17	63.402	88.821	6036.00	Niobrara "A" Marl
6433.54	77.844	83.609	6088.00	Niobrara "B" Chalk

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
8348.00	88.630	91.660	6103.10	Tie On
8772.34	90.205	100.000	6107.42	End of 3D Arc
9137.34	90.205	100.000	6106.11	End of Tangent
10097.19	90.206	90.401	6102.66	End of 3D Arc
10836.96	90.206	90.401	6100.00	End of Tangent