



Actual Wellpath Report

PRONGHORN 13-43-9HNB ST AWP

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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 ST AWB
Facility	SEC.09-T5N-R61W	Sidetrack from	PRONGHORN 13-43-9HNB AWB at 7683.00 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	10/25/2014 at 12:55:56 PM
Convergence at slot	n/a	Database/Source file	WA_Denver/PRONGHORN_13-43-9HNB_ST_AWB.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			3335925.10	1457282.25	40°34'56.460"N	104°17'26.016"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°



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Area	COLORADO	Well	PRONGHORN 13-43-9HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 13-43-9HNB ST AWP
Facility	SEC.09-T5N-R61W	Sidetrack from	PRONGHORN 13-43-9HNB AWP at 7683.00 MD

WELLPATH DATA (44 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
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	Tie on to OWB
7720.00	88.740	96.420	6100.62	1627.82	750.84	1552.66	40°24'50.403"N	104°13'02.043"W	5.44	
7750.00	86.970	98.940	6101.74	1656.88	746.84	1582.36	40°24'50.363"N	104°13'01.659"W	10.26	
7775.00	87.410	100.220	6102.97	1680.87	742.68	1606.98	40°24'50.322"N	104°13'01.341"W	5.41	
7870.00	88.180	98.410	6106.62	1772.20	727.32	1700.66	40°24'50.170"N	104°13'00.130"W	2.07	
7964.00	88.710	98.340	6109.17	1863.01	713.63	1793.62	40°24'50.035"N	104°12'58.928"W	0.57	
8059.00	89.970	100.990	6110.27	1954.23	697.68	1887.26	40°24'49.878"N	104°12'57.718"W	3.09	
8154.00	90.490	100.760	6109.88	2044.89	679.76	1980.55	40°24'49.700"N	104°12'56.511"W	0.60	
8248.00	89.970	99.430	6109.51	2134.96	663.28	2073.09	40°24'49.537"N	104°12'55.315"W	1.52	
8343.00	89.630	97.910	6109.84	2226.64	648.96	2167.00	40°24'49.396"N	104°12'54.101"W	1.64	
8437.00	90.810	98.490	6109.48	2317.55	635.56	2260.04	40°24'49.263"N	104°12'52.898"W	1.40	
8533.00	88.940	96.180	6109.69	2410.75	623.30	2355.24	40°24'49.142"N	104°12'51.667"W	3.10	
8627.00	89.170	95.150	6111.24	2502.62	614.03	2448.77	40°24'49.050"N	104°12'50.458"W	1.12	
8672.00	89.500	95.530	6111.76	2546.66	609.84	2493.57	40°24'49.009"N	104°12'49.879"W	1.12	
8723.00	90.430	95.620	6111.79	2596.53	604.88	2544.33	40°24'48.960"N	104°12'49.223"W	1.83	
8768.00	91.890	96.850	6110.88	2640.41	600.00	2589.05	40°24'48.912"N	104°12'48.645"W	4.24	
8818.00	92.430	96.710	6109.00	2689.03	594.10	2638.67	40°24'48.853"N	104°12'48.003"W	1.12	
8863.00	91.910	96.120	6107.29	2732.86	589.07	2683.35	40°24'48.804"N	104°12'47.426"W	1.75	
8913.00	91.230	95.720	6105.92	2781.67	583.92	2733.07	40°24'48.753"N	104°12'46.783"W	1.58	
8958.00	91.270	95.660	6104.94	2825.64	579.46	2777.83	40°24'48.708"N	104°12'46.204"W	0.16	
9009.00	91.420	95.360	6103.74	2875.51	574.56	2828.58	40°24'48.660"N	104°12'45.548"W	0.66	
9053.00	91.200	95.150	6102.74	2918.57	570.53	2872.39	40°24'48.620"N	104°12'44.982"W	0.69	
9103.00	90.740	95.360	6101.89	2967.51	565.96	2922.17	40°24'48.575"N	104°12'44.338"W	1.01	
9198.00	91.580	96.390	6099.97	3060.28	556.23	3016.65	40°24'48.479"N	104°12'43.117"W	1.40	
9293.00	91.450	96.650	6097.46	3152.80	545.45	3111.00	40°24'48.372"N	104°12'41.897"W	0.31	
9387.00	89.750	96.170	6096.47	3244.41	534.96	3204.40	40°24'48.268"N	104°12'40.690"W	1.88	
9483.00	88.650	95.610	6097.81	3338.16	525.11	3299.89	40°24'48.171"N	104°12'39.455"W	1.29	
9578.00	87.800	96.090	6100.75	3430.91	515.43	3394.35	40°24'48.075"N	104°12'38.234"W	1.03	
9673.00	86.840	95.540	6105.20	3523.61	505.81	3488.75	40°24'47.980"N	104°12'37.014"W	1.16	
9768.00	87.130	95.440	6110.19	3616.41	496.74	3583.19	40°24'47.890"N	104°12'35.793"W	0.32	



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Area	COLORADO	Well	PRONGHORN 13-43-9HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 13-43-9HNB ST AWP
Facility	SEC.09-T5N-R61W	Sidetrack from	PRONGHORN 13-43-9HNB AWP at 7683.00 MD

WELLPATH DATA (44 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
9862.00	89.200	94.280	6113.20	3708.51	488.78	3676.79	40°24'47.811"N	104°12'34.583"W	2.52	
9957.00	92.030	92.110	6112.18	3802.13	483.49	3771.62	40°24'47.759"N	104°12'33.357"W	3.75	
10052.00	92.300	92.020	6108.59	3895.99	480.06	3866.49	40°24'47.725"N	104°12'32.130"W	0.30	
10147.00	89.720	90.450	6106.92	3990.10	478.02	3961.45	40°24'47.704"N	104°12'30.903"W	3.18	
10242.00	88.800	90.040	6108.15	4084.43	477.61	4056.44	40°24'47.700"N	104°12'29.675"W	1.06	
10336.00	87.960	89.550	6110.80	4177.82	477.95	4150.40	40°24'47.703"N	104°12'28.460"W	1.03	
10381.00	88.490	89.290	6112.20	4222.56	478.40	4195.37	40°24'47.708"N	104°12'27.879"W	1.31	
10431.00	90.500	87.680	6112.64	4272.37	479.72	4245.35	40°24'47.721"N	104°12'27.233"W	5.15	
10476.00	91.080	86.300	6112.02	4317.28	482.09	4290.28	40°24'47.744"N	104°12'26.652"W	3.33	
10526.00	90.550	86.710	6111.31	4367.20	485.14	4340.18	40°24'47.774"N	104°12'26.007"W	1.34	
10621.00	89.350	86.280	6111.39	4462.07	490.94	4435.00	40°24'47.831"N	104°12'24.781"W	1.34	
10716.00	88.060	85.780	6113.54	4556.95	497.52	4529.75	40°24'47.896"N	104°12'23.556"W	1.46	
10745.00	87.920	85.440	6114.55	4585.91	499.74	4558.65	40°24'47.918"N	104°12'23.182"W	1.27	Last BHI Survey
10822.00	87.920	85.440	6117.35	4662.81	505.85	4635.35	40°24'47.978"N	104°12'22.191"W	0.00	Projection to Bit



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Area	COLORADO	Well	PRONGHORN 13-43-9HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 13-43-9HNB ST AWB
Facility	SEC.09-T5N-R61W	Sidetrack from	PRONGHORN 13-43-9HNB AWB at 7683.00 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
PRONGHORN 13-43-9HNB BHL REV-4 (1862'FSL & 470'FEL,SEC.09)		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

WELLPATH COMPOSITION - Ref Wellbore: PRONGHORN 13-43-9HNB ST AWB Ref Wellpath: PRONGHORN 13-43-9HNB ST AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	6494.00	NaviTrak (Standard)	BHI/Navitrak MWD 8.75" Hole <17'-6494'>	PRONGHORN 13-43-9HNB AWB
6494.00	7683.00	NaviTrak (Standard)	BHI/Navitrak MWD 6.125" Hole <6646'-10742'>	PRONGHORN 13-43-9HNB AWB
7683.00	10745.00	NaviTrak (Standard)	BHI/Navitrak MWD 6.125" Hole <7720'-10745'>	PRONGHORN 13-43-9HNB ST AWB
10745.00	10822.00	Blind Drilling (std)	Projection to bit	PRONGHORN 13-43-9HNB ST AWB



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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 ST AWB
Facility	SEC.09-T5N-R61W	Sidetrack from	PRONGHORN 13-43-9HNB AWB at 7683.00 MD

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
547.00	1.280	14.870	546.96	Tie on Point
7683.00	89.880	94.760	6100.17	Tie on to OWB
10745.00	87.920	85.440	6114.55	Last BHI Survey
10822.00	87.920	85.440	6117.35	Projection to Bit