

BONANZA CREEK ENERGY

Location: COLORADO Slot: SLOT#07 PRONGHORN FEDERAL A-E-31HNB (2173'FSL & 631'FWL,SEC.30)
Field: WELD COUNTY (NAD83/TRUE) Well: PRONGHORN FEDERAL A-E-31HNB
Facility: SEC.30-T05N-R61W Wellbore: PRONGHORN FEDERAL A-E-31HNB PWB

Plot reference wellpath is PRONGHORN FEDERAL A-E-31HNB (REV-D.0) PWP		Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (17) (4526.3GL+17KB@4543.3) (RKB)		North Reference: True north
Measured depths are referenced to RIG (17) (4526.3GL+17KB@4543.3) (RKB)		Scale: True distance
RIG (17) (4526.3GL+17KB@4543.3) (RKB) to Mean Sea Level: 4543.3 feet		Depths are in feet
Mean Sea Level to Ground level (At Slot: SLOT#07 PRONGHORN FEDERAL A-E-31HNB (2173'FSL & 631'FWL,SEC.30)): 0 feet		Created by: harrisab on 2019-07-29
Coordinates are in feet referenced to Slot		Database: WellArchitectDB

Location Information

Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.30 T05N R61W				3346255.263	1380250.726	40°22'13.993"N	104°15'34.273"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SLOT#07 PRONGHORN FEDERAL A-E-31HNB (2173FSL & 631FWL,SEC.30)	-88.46	46.53	3346673.026	1380162.931	40°22'13.119"N	104°15'33.672"W	
RIG (17) (4526.3GL+17KB@4543.3) (RKB) to Ground level (At Slot: SLOT#07 PRONGHORN FEDERAL A-E-31HNB (2173FSL & 631FWL,SEC.30))						4543.3ft	
Mean Sea Level to Ground level (At Slot: SLOT#07 PRONGHORN FEDERAL A-E-31HNB (2173FSL & 631FWL,SEC.30))						0ft	
RIG (17) (4526.3GL+17KB@4543.3) (RKB) to Mean Sea Level						4543.3ft	

Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1600.00	BHI NavTrak	BHI NavTrak (Rotating+Axial Corr)		PRONGHORN FEDERAL A-E-31HNB PWB
1600.00	11669.43	BHI AutoTrak Curve	BHI AutoTrak Curve (Short)		PRONGHORN FEDERAL A-E-31HNB PWB

Hole and Casing Sections

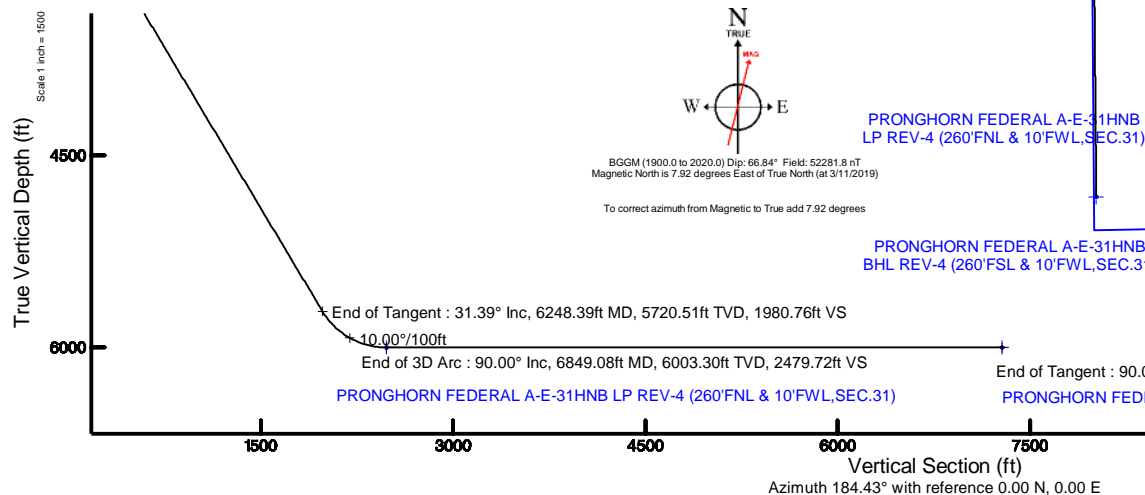
Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	End Local N (ft)	Start Local E (ft)	End Local E (ft)	Wellbore
9.625in Casing	17.00	1600.00	1583.00	17.00	1600.00	0.00	0.00	0.00	0.00	PRONGHORN FEDERAL A-E-31HNB PWB
8.5in Open Hole	1600.00	11669.43	10069.43	1600.00	6003.30	0.00	0.00	-7260.32	-561.97	PRONGHORN FEDERAL A-E-31HNB 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	196.128	17.00	0.00	0.00	0.00	0.00
End of Tangent	1600.00	0.000	196.128	1600.00	0.00	0.00	0.00	0.00
End of Build	3169.34	31.387	196.128	3092.02	-402.70	-116.45	2.00	410.49
End of Tangent	6248.39	31.387	196.128	5720.51	-1943.20	-561.91	0.00	1980.76
End of 3D Arc	6849.08	90.000	179.468	6003.30	-2440.18	-606.75	10.00	2479.72
End of Tangent	11669.43	90.000	179.468	6003.30	-7260.32	-561.97	0.00	7282.03

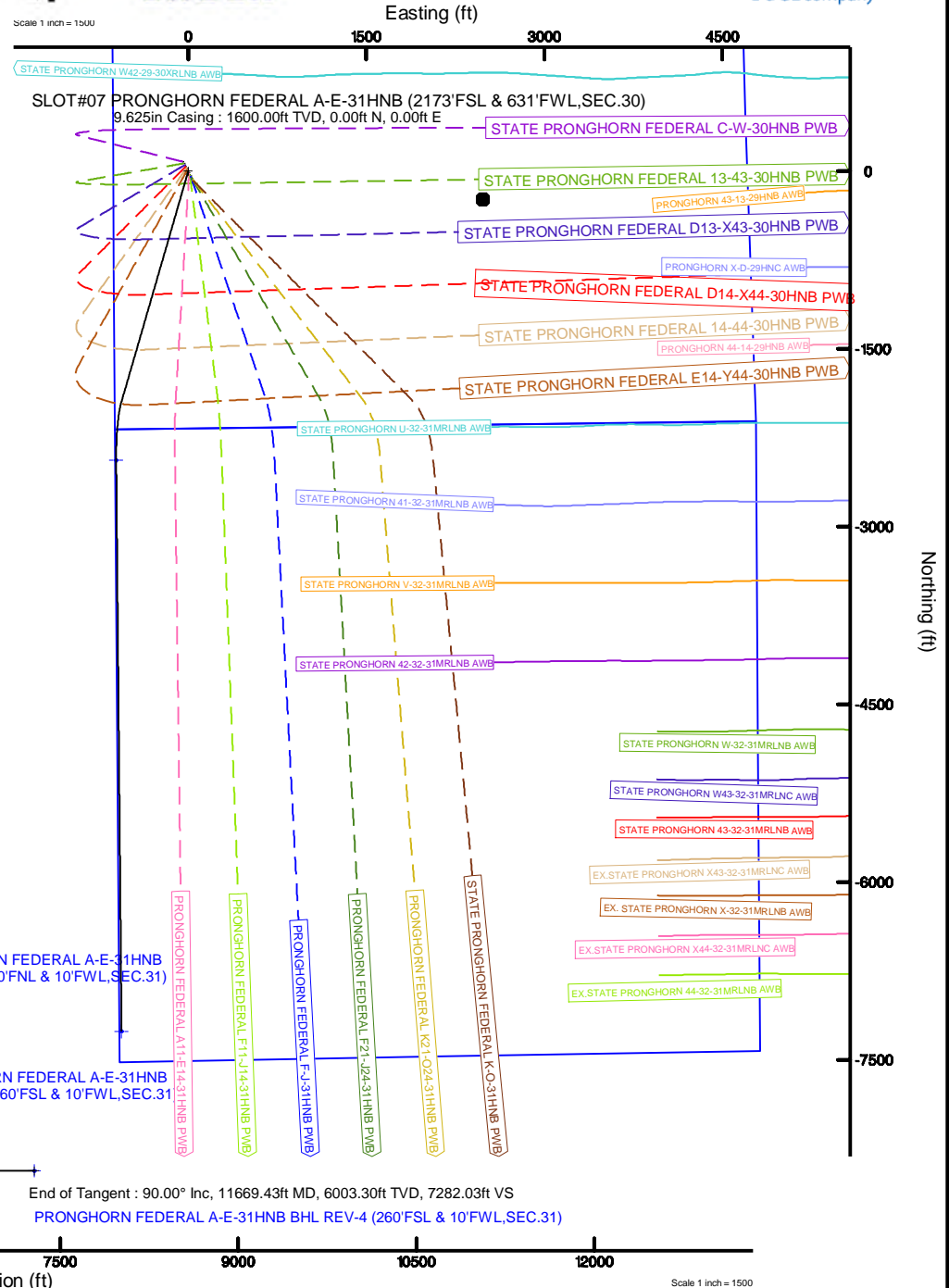
Bottom Hole Location

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
11669.43	90.000	179.468	6003.30	-7260.32	-561.97	3345212.71	1372895.77	40°21'01.374"N	104°15'40.930"W



BONANZA CREEK

BAKER HUGHES
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Planned Wellpath Report

PRONGHORN FEDERAL A-E-31HNB (REV-D.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#07 PRONGHORN FEDERAL A-E-31HNB (2173'FSL & 631'FWL,SEC.30)
Area	COLORADO	Well	PRONGHORN FEDERAL A-E-31HNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	PRONGHORN FEDERAL A-E-31HNB PWB
Facility	SEC.30-T05N-R61W		

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	0.999959	Report Generated	3/11/2019 at 12:55:13 PM
Convergence at slot	0.80° East	Database/Source file	Denver/PRONGHORN FEDERAL A-E-31HNB (REV-D.0) PWP PR.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-88.46	46.53	3345673.03	1380162.93	40°22'13.119"N	104°15'33.672"W
Facility Reference Pt			3345625.26	1380250.73	40°22'13.993"N	104°15'34.273"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') (4526.3'GL+17'KB@4543.3') (RKB) to Facility Vertical Datum	4543.30ft
Horizontal Reference Pt	Slot	RIG (17') (4526.3'GL+17'KB@4543.3') (RKB) to Mean Sea Level	4543.30ft
Vertical Reference Pt	RIG (17') (4526.3'GL+17'KB@4543.3') (RKB)	RIG (17') (4526.3'GL+17'KB@4543.3') (RKB) to Ground Level at Slot (SLOT#07 PRONGHORN FEDERAL A-E-31HNB (2173'FSL & 631'FWL,SEC.30))	4543.30ft
MD Reference Pt	RIG (17') (4526.3'GL+17'KB@4543.3') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	184.43°



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Area	COLORADO	Well	PRONGHORN FEDERAL A-E-31HNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	PRONGHORN FEDERAL A-E-31HNB PWB
Facility	SEC.30-T05N-R61W		

WELLPATH DATA (123 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	196.128	0.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
17.00	0.000	196.128	17.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	Tie On
117.00†	0.000	196.128	117.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
217.00†	0.000	196.128	217.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
317.00†	0.000	196.128	317.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
417.00†	0.000	196.128	417.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
517.00†	0.000	196.128	517.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
617.00†	0.000	196.128	617.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
717.00†	0.000	196.128	717.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
817.00†	0.000	196.128	817.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
917.00†	0.000	196.128	917.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
1017.00†	0.000	196.128	1017.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
1117.00†	0.000	196.128	1117.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
1217.00†	0.000	196.128	1217.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
1317.00†	0.000	196.128	1317.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
1417.00†	0.000	196.128	1417.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
1517.00†	0.000	196.128	1517.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	
1600.00	0.000	196.128	1600.00	0.00	0.00	0.00	40°22'13.119"N	104°15'33.672"W	0.00	End of Tangent
1617.00†	0.340	196.128	1617.00	0.05	-0.05	-0.01	40°22'13.118"N	104°15'33.672"W	2.00	
1717.00†	2.340	196.128	1716.97	2.34	-2.29	-0.66	40°22'13.096"N	104°15'33.680"W	2.00	
1817.00†	4.340	196.128	1816.79	8.04	-7.89	-2.28	40°22'13.041"N	104°15'33.701"W	2.00	
1917.00†	6.340	196.128	1916.35	17.16	-16.83	-4.87	40°22'12.953"N	104°15'33.734"W	2.00	
2017.00†	8.340	196.128	2015.53	29.67	-29.10	-8.42	40°22'12.831"N	104°15'33.780"W	2.00	
2117.00†	10.340	196.128	2114.20	45.56	-44.69	-12.92	40°22'12.677"N	104°15'33.838"W	2.00	
2217.00†	12.340	196.128	2212.24	64.81	-63.58	-18.39	40°22'12.491"N	104°15'33.909"W	2.00	
2317.00†	14.340	196.128	2309.54	87.40	-85.75	-24.79	40°22'12.272"N	104°15'33.992"W	2.00	
2417.00†	16.340	196.128	2405.97	113.31	-111.16	-32.14	40°22'12.020"N	104°15'34.087"W	2.00	
2517.00†	18.340	196.128	2501.42	142.49	-139.79	-40.42	40°22'11.738"N	104°15'34.194"W	2.00	
2617.00†	20.340	196.128	2595.77	174.92	-171.60	-49.62	40°22'11.423"N	104°15'34.313"W	2.00	
2717.00†	22.340	196.128	2688.91	210.55	-206.56	-59.73	40°22'11.078"N	104°15'34.443"W	2.00	



Planned Wellpath Report

PRONGHORN FEDERAL A-E-31HNB (REV-D.0) PWP

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Field	WELD COUNTY (NAD83/TRUE)	Wellbore	PRONGHORN FEDERAL A-E-31HNB PWB
Facility	SEC.30-T05N-R61W		

WELLPATH DATA (123 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2817.00†	24.340	196.128	2780.72	249.34	-244.61	-70.73	40°22'10.702"N	104°15'34.585"W	2.00	
2917.00†	26.340	196.128	2871.10	291.25	-285.73	-82.62	40°22'10.295"N	104°15'34.739"W	2.00	
3017.00†	28.340	196.128	2959.92	336.22	-329.84	-95.38	40°22'09.859"N	104°15'34.904"W	2.00	
3117.00†	30.340	196.128	3047.09	384.20	-376.91	-108.99	40°22'09.394"N	104°15'35.080"W	2.00	
3169.34	31.387	196.128	3092.02	410.49	-402.70	-116.45	40°22'09.139"N	104°15'35.176"W	2.00	End of Build
3217.00†	31.387	196.128	3132.71	434.80	-426.55	-123.34	40°22'08.904"N	104°15'35.265"W	0.00	
3317.00†	31.387	196.128	3218.07	485.79	-476.58	-137.81	40°22'08.409"N	104°15'35.452"W	0.00	
3417.00†	31.387	196.128	3303.44	536.79	-526.61	-152.28	40°22'07.915"N	104°15'35.639"W	0.00	
3517.00†	31.387	196.128	3388.81	587.79	-576.64	-166.75	40°22'07.421"N	104°15'35.826"W	0.00	
3617.00†	31.387	196.128	3474.17	638.79	-626.67	-181.21	40°22'06.926"N	104°15'36.013"W	0.00	
3717.00†	31.387	196.128	3559.54	689.79	-676.71	-195.68	40°22'06.432"N	104°15'36.200"W	0.00	
3817.00†	31.387	196.128	3644.91	740.79	-726.74	-210.15	40°22'05.937"N	104°15'36.386"W	0.00	
3917.00†	31.387	196.128	3730.28	791.79	-776.77	-224.61	40°22'05.443"N	104°15'36.573"W	0.00	
4017.00†	31.387	196.128	3815.64	842.79	-826.80	-239.08	40°22'04.949"N	104°15'36.760"W	0.00	
4117.00†	31.387	196.128	3901.01	893.78	-876.83	-253.55	40°22'04.454"N	104°15'36.947"W	0.00	
4217.00†	31.387	196.128	3986.38	944.78	-926.86	-268.02	40°22'03.960"N	104°15'37.134"W	0.00	
4317.00†	31.387	196.128	4071.74	995.78	-976.90	-282.48	40°22'03.465"N	104°15'37.321"W	0.00	
4417.00†	31.387	196.128	4157.11	1046.78	-1026.93	-296.95	40°22'02.971"N	104°15'37.508"W	0.00	
4517.00†	31.387	196.128	4242.48	1097.78	-1076.96	-311.42	40°22'02.477"N	104°15'37.695"W	0.00	
4617.00†	31.387	196.128	4327.85	1148.78	-1126.99	-325.89	40°22'01.982"N	104°15'37.882"W	0.00	
4717.00†	31.387	196.128	4413.21	1199.78	-1177.02	-340.35	40°22'01.488"N	104°15'38.069"W	0.00	
4817.00†	31.387	196.128	4498.58	1250.78	-1227.05	-354.82	40°22'00.994"N	104°15'38.255"W	0.00	
4917.00†	31.387	196.128	4583.95	1301.77	-1277.08	-369.29	40°22'00.499"N	104°15'38.442"W	0.00	
5017.00†	31.387	196.128	4669.31	1352.77	-1327.12	-383.76	40°22'00.005"N	104°15'38.629"W	0.00	
5117.00†	31.387	196.128	4754.68	1403.77	-1377.15	-398.22	40°21'59.510"N	104°15'38.816"W	0.00	
5217.00†	31.387	196.128	4840.05	1454.77	-1427.18	-412.69	40°21'59.016"N	104°15'39.003"W	0.00	
5317.00†	31.387	196.128	4925.41	1505.77	-1477.21	-427.16	40°21'58.522"N	104°15'39.190"W	0.00	
5417.00†	31.387	196.128	5010.78	1556.77	-1527.24	-441.63	40°21'58.027"N	104°15'39.377"W	0.00	
5517.00†	31.387	196.128	5096.15	1607.77	-1577.27	-456.09	40°21'57.533"N	104°15'39.564"W	0.00	
5617.00†	31.387	196.128	5181.52	1658.77	-1627.30	-470.56	40°21'57.038"N	104°15'39.751"W	0.00	



Planned Wellpath Report

PRONGHORN FEDERAL A-E-31HNB (REV-D.0) PWP

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Area	COLORADO	Well	PRONGHORN FEDERAL A-E-31HNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	PRONGHORN FEDERAL A-E-31HNB PWB
Facility	SEC.30-T05N-R61W		

WELLPATH DATA (123 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5717.00†	31.387	196.128	5266.88	1709.76	-1677.34	-485.03	40°21'56.544"N	104°15'39.938"W	0.00	
5817.00†	31.387	196.128	5352.25	1760.76	-1727.37	-499.49	40°21'56.050"N	104°15'40.124"W	0.00	
5917.00†	31.387	196.128	5437.62	1811.76	-1777.40	-513.96	40°21'55.555"N	104°15'40.311"W	0.00	
6017.00†	31.387	196.128	5522.98	1862.76	-1827.43	-528.43	40°21'55.061"N	104°15'40.498"W	0.00	
6117.00†	31.387	196.128	5608.35	1913.76	-1877.46	-542.90	40°21'54.566"N	104°15'40.685"W	0.00	
6217.00†	31.387	196.128	5693.72	1964.76	-1927.49	-557.36	40°21'54.072"N	104°15'40.872"W	0.00	
6248.39	31.387	196.128	5720.51	1980.76	-1943.20	-561.91	40°21'53.917"N	104°15'40.931"W	0.00	End of Tangent
6317.00†	37.923	192.441	5776.93	2019.19	-1981.00	-571.42	40°21'53.543"N	104°15'41.054"W	10.00	
6417.00†	47.592	188.661	5850.28	2086.60	-2047.67	-583.63	40°21'52.884"N	104°15'41.211"W	10.00	
6517.00†	57.351	185.902	5911.13	2165.71	-2126.24	-593.55	40°21'52.108"N	104°15'41.339"W	10.00	
6617.00†	67.159	183.693	5957.63	2254.09	-2214.33	-600.86	40°21'51.238"N	104°15'41.434"W	10.00	
6717.00†	76.993	181.783	5988.37	2349.07	-2309.24	-605.36	40°21'50.300"N	104°15'41.492"W	10.00	
6817.00†	86.840	180.021	6002.42	2447.77	-2408.11	-606.90	40°21'49.323"N	104°15'41.512"W	10.00	
6849.08	90.000	179.468	6003.30†	2479.72	-2440.18	-606.75	40°21'49.006"N	104°15'41.510"W	10.00	End of 3D Arc
6917.00†	90.000	179.468	6003.30	2547.39	-2508.09	-606.12	40°21'48.335"N	104°15'41.502"W	0.00	
7017.00†	90.000	179.468	6003.30	2647.02	-2608.09	-605.19	40°21'47.346"N	104°15'41.490"W	0.00	
7117.00†	90.000	179.468	6003.30	2746.64	-2708.08	-604.26	40°21'46.358"N	104°15'41.478"W	0.00	
7217.00†	90.000	179.468	6003.30	2846.27	-2808.08	-603.33	40°21'45.370"N	104°15'41.466"W	0.00	
7317.00†	90.000	179.468	6003.30	2945.89	-2908.08	-602.40	40°21'44.382"N	104°15'41.453"W	0.00	
7417.00†	90.000	179.468	6003.30	3045.52	-3008.07	-601.48	40°21'43.394"N	104°15'41.441"W	0.00	
7517.00†	90.000	179.468	6003.30	3145.14	-3108.07	-600.55	40°21'42.406"N	104°15'41.429"W	0.00	
7617.00†	90.000	179.468	6003.30	3244.77	-3208.06	-599.62	40°21'41.418"N	104°15'41.417"W	0.00	
7717.00†	90.000	179.468	6003.30	3344.40	-3308.06	-598.69	40°21'40.430"N	104°15'41.405"W	0.00	
7817.00†	90.000	179.468	6003.30	3444.02	-3408.05	-597.76	40°21'39.441"N	104°15'41.393"W	0.00	
7917.00†	90.000	179.468	6003.30	3543.65	-3508.05	-596.83	40°21'38.453"N	104°15'41.381"W	0.00	
8017.00†	90.000	179.468	6003.30	3643.27	-3608.05	-595.90	40°21'37.465"N	104°15'41.369"W	0.00	
8117.00†	90.000	179.468	6003.30	3742.90	-3708.04	-594.97	40°21'36.477"N	104°15'41.357"W	0.00	
8217.00†	90.000	179.468	6003.30	3842.52	-3808.04	-594.04	40°21'35.489"N	104°15'41.345"W	0.00	
8317.00†	90.000	179.468	6003.30	3942.15	-3908.03	-593.11	40°21'34.501"N	104°15'41.333"W	0.00	
8417.00†	90.000	179.468	6003.30	4041.78	-4008.03	-592.19	40°21'33.513"N	104°15'41.321"W	0.00	



Planned Wellpath Report

PRONGHORN FEDERAL A-E-31HNB (REV-D.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#07 PRONGHORN FEDERAL A-E-31HNB (2173'FSL & 631'FWL,SEC.30)
Area	COLORADO	Well	PRONGHORN FEDERAL A-E-31HNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	PRONGHORN FEDERAL A-E-31HNB PWB
Facility	SEC.30-T05N-R61W		

WELLPATH DATA (123 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8517.00†	90.000	179.468	6003.30	4141.40	-4108.02	-591.26	40°21'32.525"N	104°15'41.309"W	0.00	
8617.00†	90.000	179.468	6003.30	4241.03	-4208.02	-590.33	40°21'31.536"N	104°15'41.297"W	0.00	
8717.00†	90.000	179.468	6003.30	4340.65	-4308.02	-589.40	40°21'30.548"N	104°15'41.285"W	0.00	
8817.00†	90.000	179.468	6003.30	4440.28	-4408.01	-588.47	40°21'29.560"N	104°15'41.273"W	0.00	
8917.00†	90.000	179.468	6003.30	4539.90	-4508.01	-587.54	40°21'28.572"N	104°15'41.261"W	0.00	
9017.00†	90.000	179.468	6003.30	4639.53	-4608.00	-586.61	40°21'27.584"N	104°15'41.249"W	0.00	
9117.00†	90.000	179.468	6003.30	4739.16	-4708.00	-585.68	40°21'26.596"N	104°15'41.237"W	0.00	
9217.00†	90.000	179.468	6003.30	4838.78	-4807.99	-584.75	40°21'25.608"N	104°15'41.225"W	0.00	
9317.00†	90.000	179.468	6003.30	4938.41	-4907.99	-583.82	40°21'24.620"N	104°15'41.213"W	0.00	
9417.00†	90.000	179.468	6003.30	5038.03	-5007.99	-582.89	40°21'23.631"N	104°15'41.201"W	0.00	
9517.00†	90.000	179.468	6003.30	5137.66	-5107.98	-581.97	40°21'22.643"N	104°15'41.189"W	0.00	
9617.00†	90.000	179.468	6003.30	5237.29	-5207.98	-581.04	40°21'21.655"N	104°15'41.177"W	0.00	
9717.00†	90.000	179.468	6003.30	5336.91	-5307.97	-580.11	40°21'20.667"N	104°15'41.165"W	0.00	
9817.00†	90.000	179.468	6003.30	5436.54	-5407.97	-579.18	40°21'19.679"N	104°15'41.153"W	0.00	
9917.00†	90.000	179.468	6003.30	5536.16	-5507.96	-578.25	40°21'18.691"N	104°15'41.141"W	0.00	
10017.00†	90.000	179.468	6003.30	5635.79	-5607.96	-577.32	40°21'17.703"N	104°15'41.129"W	0.00	
10117.00†	90.000	179.468	6003.30	5735.41	-5707.96	-576.39	40°21'16.714"N	104°15'41.117"W	0.00	
10217.00†	90.000	179.468	6003.30	5835.04	-5807.95	-575.46	40°21'15.726"N	104°15'41.105"W	0.00	
10317.00†	90.000	179.468	6003.30	5934.67	-5907.95	-574.53	40°21'14.738"N	104°15'41.093"W	0.00	
10417.00†	90.000	179.468	6003.30	6034.29	-6007.94	-573.60	40°21'13.750"N	104°15'41.081"W	0.00	
10517.00†	90.000	179.468	6003.30	6133.92	-6107.94	-572.67	40°21'12.762"N	104°15'41.068"W	0.00	
10617.00†	90.000	179.468	6003.30	6233.54	-6207.93	-571.75	40°21'11.774"N	104°15'41.056"W	0.00	
10717.00†	90.000	179.468	6003.30	6333.17	-6307.93	-570.82	40°21'10.786"N	104°15'41.044"W	0.00	
10817.00†	90.000	179.468	6003.30	6432.79	-6407.93	-569.89	40°21'09.798"N	104°15'41.032"W	0.00	
10917.00†	90.000	179.468	6003.30	6532.42	-6507.92	-568.96	40°21'08.809"N	104°15'41.020"W	0.00	
11017.00†	90.000	179.468	6003.30	6632.05	-6607.92	-568.03	40°21'07.821"N	104°15'41.008"W	0.00	
11117.00†	90.000	179.468	6003.30	6731.67	-6707.91	-567.10	40°21'06.833"N	104°15'40.996"W	0.00	
11217.00†	90.000	179.468	6003.30	6831.30	-6807.91	-566.17	40°21'05.845"N	104°15'40.984"W	0.00	
11317.00†	90.000	179.468	6003.30	6930.92	-6907.90	-565.24	40°21'04.857"N	104°15'40.972"W	0.00	
11417.00†	90.000	179.468	6003.30	7030.55	-7007.90	-564.31	40°21'03.869"N	104°15'40.960"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK ENERGY	Slot	SLOT#07 PRONGHORN FEDERAL A-E-31HNB (2173'FSL & 631'FWL,SEC.30)
Area	COLORADO	Well	PRONGHORN FEDERAL A-E-31HNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	PRONGHORN FEDERAL A-E-31HNB PWB
Facility	SEC.30-T05N-R61W		

WELLPATH DATA (123 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11517.00†	90.000	179.468	6003.30	7130.18	-7107.89	-563.38	40°21'02.881"N	104°15'40.948"W	0.00	
11617.00†	90.000	179.468	6003.30	7229.80	-7207.89	-562.45	40°21'01.893"N	104°15'40.936"W	0.00	
11669.43	90.000	179.468	6003.30 ²	7282.03	-7260.32	-561.97	40°21'01.374"N	104°15'40.930"W	0.00	End of Tangent

HOLE & CASING SECTIONS

- Ref Wellbore: PRONGHORN FEDERAL A-E-31HNB PWB Ref Wellpath: PRONGHORN FEDERAL A-E-31HNB (REV-D.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]
9.625in Casing	17.00	1600.00	1583.00	17.00	1600.00	0.00	0.00	0.00	0.00
8.5in Open Hole	1600.00	11669.43	10069.43	1600.00	6003.30	0.00	0.00	-7260.32	-561.97

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
2) PRONGHORN FEDERAL A-E-31HNB BHL REV-4 (260'FSL & 10'FWL,SEC.31)	11669.43	6003.30	-7260.32	-561.97	3345212.71	1372895.77	40°21'01.374"N	104°15'40.930"W	point
1) PRONGHORN FEDERAL A-E-31HNB LP REV-4 (260'FNL & 10'FWL,SEC.31)	6849.08	6003.30	-2440.18	-606.75	3345100.50	1377714.61	40°21'49.006"N	104°15'41.510"W	point
SEC.30-T05N-R61W		11999.30	1900.91	10504.28	3356149.23	1382210.53	40°22'31.881"N	104°13'17.949"W	polygon
SEC.31-T05N-R61W		11999.30	-3339.28	9241.99	3354960.43	1376953.41	40°21'40.104"N	104°13'34.284"W	polygon



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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#07 PRONGHORN FEDERAL A-E-31HNB (2173'FSL & 631'FWL,SEC.30)
Area	COLORADO	Well	PRONGHORN FEDERAL A-E-31HNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	PRONGHORN FEDERAL A-E-31HNB PWB
Facility	SEC.30-T05N-R61W		

SURVEY PROGRAM - Ref Wellbore: PRONGHORN FEDERAL A-E-31HNB PWB Ref Wellpath: PRONGHORN FEDERAL A-E-31HNB (REV-D.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1600.00	BHI NaviTrak (Rotating+Axial Corr)		PRONGHORN FEDERAL A-E-31HNB PWB
1600.00	11669.43	BHI AutoTrak Curve (Short)		PRONGHORN FEDERAL A-E-31HNB PWB



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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#07 PRONGHORN FEDERAL A-E-31HNB (2173'FSL & 631'FWL,SEC.30)
Area	COLORADO	Well	PRONGHORN FEDERAL A-E-31HNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	PRONGHORN FEDERAL A-E-31HNB PWB
Facility	SEC.30-T05N-R61W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	196.128	17.00	Tie On
1600.00	0.000	196.128	1600.00	End of Tangent
3169.34	31.387	196.128	3092.02	End of Build
6248.39	31.387	196.128	5720.51	End of Tangent
6849.08	90.000	179.468	6003.30	End of 3D Arc
11669.43	90.000	179.468	6003.30	End of Tangent