

BONANZA CREEK ENERGY

Location: COLORADO Slot: SLOT#02 STATE PRONGHORN FEDERAL 13-43-30HNB (2240'FSL & 596'FWL,SEC.30)
 Field: WELD COUNTY (NAD83/TRUE) Well: STATE PRONGHORN FEDERAL 13-43-30HNB
 Facility: SEC.30-T05N-R61W Wellbore: STATE PRONGHORN FEDERAL 13-43-30HNB PWB

Plot reference wellpath is STATE PRONGHORN FEDERAL 13-43-30HNB (REV-D.0) PWP		Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (17) (4525.6'GL+17KB@4542.6') (RKB)		North Reference: True north
Measured depths are referenced to RIG (17) (4525.6'GL+17KB@4542.6') (RKB)		Scale: True distance
RIG (17) (4525.6'GL+17KB@4542.6') (RKB) to Mean Sea Level: 4542.6 feet		Depths are in feet
Mean Sea Level to Ground level (At Slot: SLOT#02 STATE PRONGHORN FEDERAL 13-43-30HNB (2240'FSL & 596'FWL,SEC.30)): 0 feet		Created by: hanisab 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		334525.263	1380255.726	40°22'13.987"N	104°15'34.272"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#02 STATE PRONGHORN FEDERAL 13-43-30HNB (2240'FSL & 596'FWL,SEC.30)	-22.12	11.62	334503.146	1380228.574	40°22'13.774"N	104°15'34.123"W
RIG (17) (4525.6'GL+17KB@4542.6') (RKB) to Ground level (At Slot: SLOT#02 STATE PRONGHORN FEDERAL 13-43-30HNB (2240'FSL & 596'FWL,SEC.30))						
4542.6 ft						
Mean Sea Level to Ground level (At Slot: SLOT#02 STATE PRONGHORN FEDERAL 13-43-30HNB (2240'FSL & 596'FWL,SEC.30))						
0 ft						
RIG (17) (4525.6'GL+17KB@4542.6') (RKB) to Mean Sea Level						
4542.6 ft						

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)		STATE PRONGHORN FEDERAL 13-43-30HNB PWB
1600.00	11273.60	BHI AutoTrak Curve	BHI AutoTrak Curve (Short)		STATE PRONGHORN FEDERAL 13-43-30HNB PWB

Hole and Casing Sections

Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (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	STATE PRONGHORN FEDERAL 13-43-30HNB PWB
8.5in Open Hole	1600.00	11273.60	9673.60	1600.00	6002.60	0.00	-106.26	4489.13		STATE PRONGHORN FEDERAL 13-43-30HNB PWB

Well Profile Data

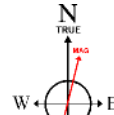
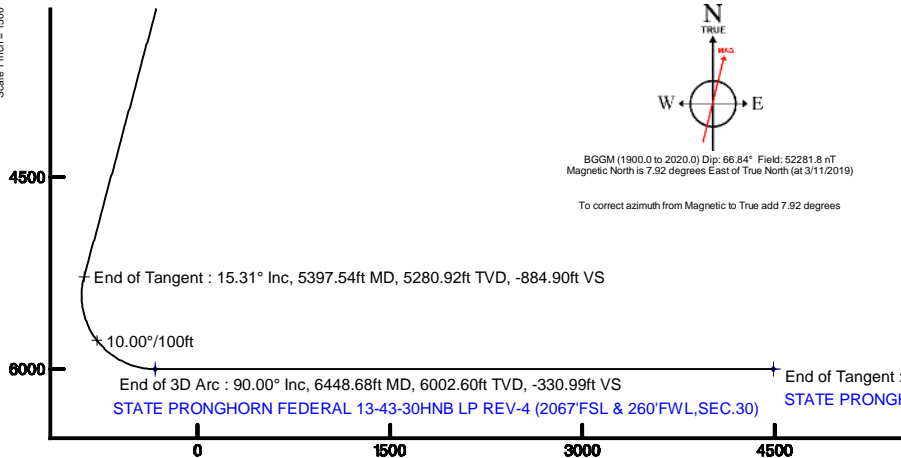
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	260.163	17.00	0.00	0.00	0.00	0.00
End of Tangent	1600.00	0.000	260.163	1600.00	0.00	0.00	0.00	0.00
End of Build	2365.31	15.306	260.163	2356.24	-17.36	-100.12	2.00	-99.69
End of Tangent	5397.54	15.306	260.163	5280.92	-154.12	-888.80	0.00	-884.90
End of 3D Arc	6448.68	90.000	89.161	6002.60	-176.91	-335.27	10.00	-330.99
End of Tangent	11273.60	90.000	89.161	6002.60	-106.26	4489.13	0.00	4490.39

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
11273.60	90.000	89.161	6002.60	-106.26	4489.13	3350127.18	1380185.32	40°22'12.720"N	104°14'36.124"W

True Vertical Depth (ft)

Scale 1 inch = 500

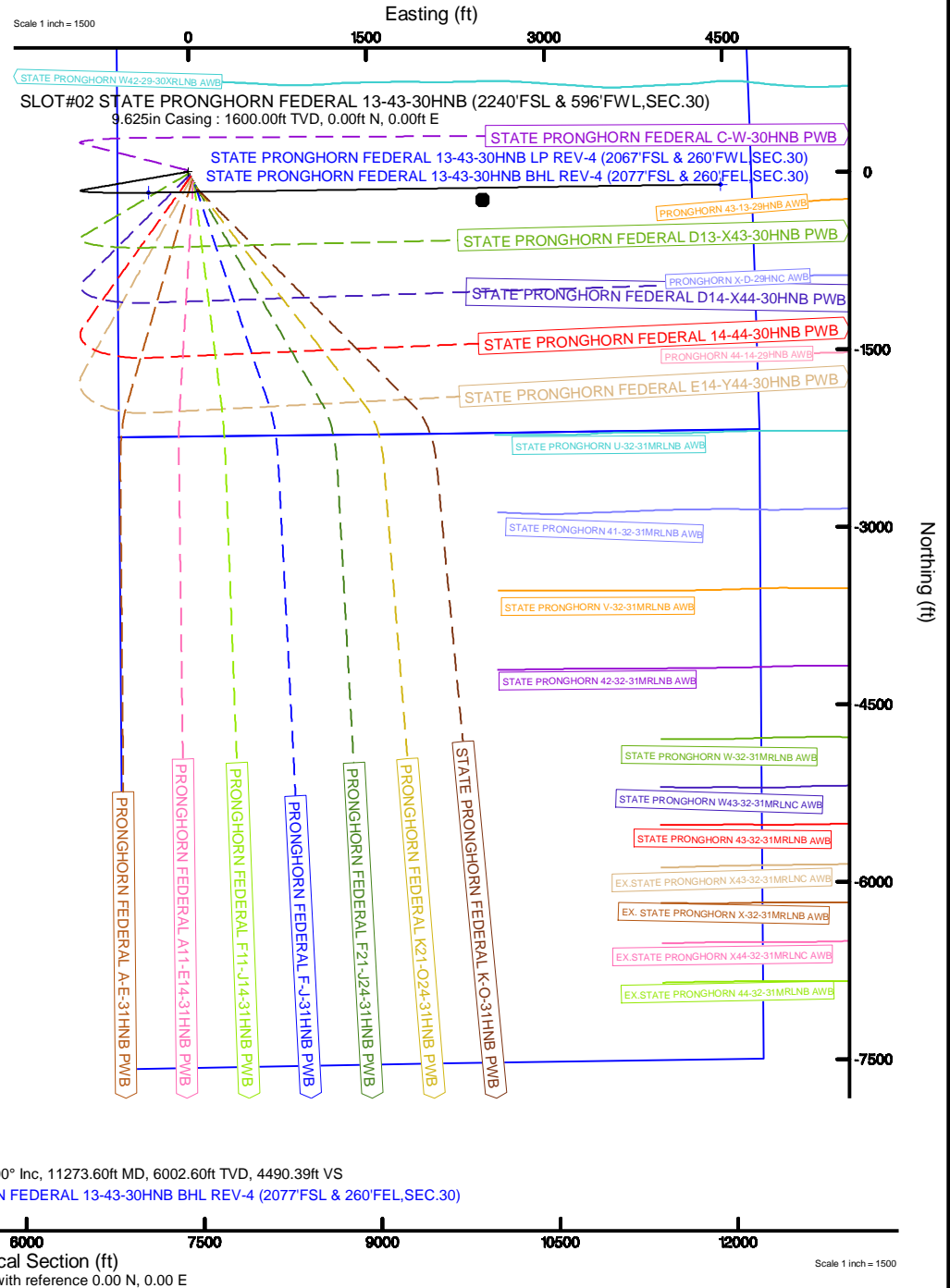


BGGM (1900.0 to 2020.0) Dip: 66.84° Field: 52281.8 nT
 Magnetic North is 7.92 degrees East of True North (at 3/11/2019)

To correct azimuth from Magnetic to True add 7.92 degrees

Vertical Section (ft)

Azimuth 91.36° with reference 0.00 N, 0.00 E





Planned Wellpath Report

STATE PRONGHORN FEDERAL 13-43-30HNB (REV-D.0) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#02 STATE PRONGHORN FEDERAL 13-43-30HNB (2240'FSL & 596'FWL,SEC.30)
Area	COLORADO	Well	STATE PRONGHORN FEDERAL 13-43-30HNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	STATE PRONGHORN FEDERAL 13-43-30HNB 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 12:50:28 PM
Convergence at slot	0.80° East	Database/Source file	Denver/STATE PRONGHORN FEDERAL 13-43-30HNB (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	-22.12	11.62	3345637.19	1380228.77	40°22'13.774"N	104°15'34.123"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') (4525.6'GL+17'KB@4542.6') (RKB) to Facility Vertical Datum	4542.60ft
Horizontal Reference Pt	Slot	RIG (17') (4525.6'GL+17'KB@4542.6') (RKB) to Mean Sea Level	4542.60ft
Vertical Reference Pt	RIG (17') (4525.6'GL+17'KB@4542.6') (RKB)	RIG (17') (4525.6'GL+17'KB@4542.6') (RKB) to Ground Level at Slot (SLOT#02 STATE PRONGHORN FEDERAL 13-43-30HNB (2240'FSL & 596'FWL,SEC.30))	4542.60ft
MD Reference Pt	RIG (17') (4525.6'GL+17'KB@4542.6') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	91.36°



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
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Area	COLORADO	Well	STATE PRONGHORN FEDERAL 13-43-30HNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	STATE PRONGHORN FEDERAL 13-43-30HNB PWB
Facility	SEC.30-T05N-R61W		

WELLPATH DATA (119 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	260.163	0.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
17.00	0.000	260.163	17.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	Tie On
117.00†	0.000	260.163	117.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
217.00†	0.000	260.163	217.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
317.00†	0.000	260.163	317.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
417.00†	0.000	260.163	417.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
517.00†	0.000	260.163	517.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
617.00†	0.000	260.163	617.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
717.00†	0.000	260.163	717.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
817.00†	0.000	260.163	817.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
917.00†	0.000	260.163	917.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
1017.00†	0.000	260.163	1017.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
1117.00†	0.000	260.163	1117.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
1217.00†	0.000	260.163	1217.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
1317.00†	0.000	260.163	1317.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
1417.00†	0.000	260.163	1417.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
1517.00†	0.000	260.163	1517.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	
1600.00	0.000	260.163	1600.00	0.00	0.00	0.00	40°22'13.774"N	104°15'34.123"W	0.00	End of Tangent
1617.00†	0.340	260.163	1617.00	-0.05	-0.01	-0.05	40°22'13.774"N	104°15'34.123"W	2.00	
1717.00†	2.340	260.163	1716.97	-2.34	-0.41	-2.35	40°22'13.770"N	104°15'34.153"W	2.00	
1817.00†	4.340	260.163	1816.79	-8.06	-1.40	-8.09	40°22'13.761"N	104°15'34.227"W	2.00	
1917.00†	6.340	260.163	1916.35	-17.19	-2.99	-17.26	40°22'13.745"N	104°15'34.346"W	2.00	
2017.00†	8.340	260.163	2015.53	-29.72	-5.18	-29.85	40°22'13.723"N	104°15'34.508"W	2.00	
2117.00†	10.340	260.163	2114.20	-45.64	-7.95	-45.84	40°22'13.696"N	104°15'34.715"W	2.00	
2217.00†	12.340	260.163	2212.24	-64.93	-11.31	-65.21	40°22'13.663"N	104°15'34.965"W	2.00	
2317.00†	14.340	260.163	2309.54	-87.56	-15.25	-87.95	40°22'13.624"N	104°15'35.259"W	2.00	
2365.31	15.306	260.163	2356.24	-99.69	-17.36	-100.12	40°22'13.603"N	104°15'35.416"W	2.00	End of Build
2417.00†	15.306	260.163	2406.10	-113.07	-19.69	-113.57	40°22'13.580"N	104°15'35.590"W	0.00	
2517.00†	15.306	260.163	2502.55	-138.97	-24.20	-139.58	40°22'13.535"N	104°15'35.926"W	0.00	
2617.00†	15.306	260.163	2599.00	-164.86	-28.71	-165.59	40°22'13.491"N	104°15'36.262"W	0.00	



Planned Wellpath Report

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Area	COLORADO	Well	STATE PRONGHORN FEDERAL 13-43-30HNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	STATE PRONGHORN FEDERAL 13-43-30HNB PWB
Facility	SEC.30-T05N-R61W		

WELLPATH DATA (119 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2717.00†	15.306	260.163	2695.45	-190.76	-33.22	-191.60	40°22'13.446"N	104°15'36.598"W	0.00	
2817.00†	15.306	260.163	2791.91	-216.65	-37.73	-217.61	40°22'13.402"N	104°15'36.934"W	0.00	
2917.00†	15.306	260.163	2888.36	-242.55	-42.24	-243.62	40°22'13.357"N	104°15'37.270"W	0.00	
3017.00†	15.306	260.163	2984.81	-268.44	-46.75	-269.63	40°22'13.312"N	104°15'37.606"W	0.00	
3117.00†	15.306	260.163	3081.27	-294.34	-51.26	-295.64	40°22'13.268"N	104°15'37.942"W	0.00	
3217.00†	15.306	260.163	3177.72	-320.24	-55.77	-321.65	40°22'13.223"N	104°15'38.278"W	0.00	
3317.00†	15.306	260.163	3274.17	-346.13	-60.28	-347.66	40°22'13.179"N	104°15'38.614"W	0.00	
3417.00†	15.306	260.163	3370.62	-372.03	-64.79	-373.67	40°22'13.134"N	104°15'38.950"W	0.00	
3517.00†	15.306	260.163	3467.08	-397.92	-69.30	-399.67	40°22'13.090"N	104°15'39.286"W	0.00	
3617.00†	15.306	260.163	3563.53	-423.82	-73.81	-425.68	40°22'13.045"N	104°15'39.622"W	0.00	
3717.00†	15.306	260.163	3659.98	-449.71	-78.32	-451.69	40°22'13.000"N	104°15'39.958"W	0.00	
3817.00†	15.306	260.163	3756.44	-475.61	-82.83	-477.70	40°22'12.956"N	104°15'40.294"W	0.00	
3917.00†	15.306	260.163	3852.89	-501.51	-87.34	-503.71	40°22'12.911"N	104°15'40.630"W	0.00	
4017.00†	15.306	260.163	3949.34	-527.40	-91.85	-529.72	40°22'12.867"N	104°15'40.966"W	0.00	
4117.00†	15.306	260.163	4045.79	-553.30	-96.36	-555.73	40°22'12.822"N	104°15'41.302"W	0.00	
4217.00†	15.306	260.163	4142.25	-579.19	-100.87	-581.74	40°22'12.778"N	104°15'41.639"W	0.00	
4317.00†	15.306	260.163	4238.70	-605.09	-105.38	-607.75	40°22'12.733"N	104°15'41.975"W	0.00	
4417.00†	15.306	260.163	4335.15	-630.98	-109.89	-633.76	40°22'12.688"N	104°15'42.311"W	0.00	
4517.00†	15.306	260.163	4431.61	-656.88	-114.40	-659.77	40°22'12.644"N	104°15'42.647"W	0.00	
4617.00†	15.306	260.163	4528.06	-682.78	-118.91	-685.78	40°22'12.599"N	104°15'42.983"W	0.00	
4717.00†	15.306	260.163	4624.51	-708.67	-123.42	-711.79	40°22'12.555"N	104°15'43.319"W	0.00	
4817.00†	15.306	260.163	4720.96	-734.57	-127.93	-737.80	40°22'12.510"N	104°15'43.655"W	0.00	
4917.00†	15.306	260.163	4817.42	-760.46	-132.44	-763.81	40°22'12.466"N	104°15'43.991"W	0.00	
5017.00†	15.306	260.163	4913.87	-786.36	-136.95	-789.82	40°22'12.421"N	104°15'44.327"W	0.00	
5117.00†	15.306	260.163	5010.32	-812.25	-141.46	-815.83	40°22'12.376"N	104°15'44.663"W	0.00	
5217.00†	15.306	260.163	5106.78	-838.15	-145.97	-841.84	40°22'12.332"N	104°15'44.999"W	0.00	
5317.00†	15.306	260.163	5203.23	-864.05	-150.48	-867.85	40°22'12.287"N	104°15'45.335"W	0.00	
5397.54	15.306	260.163	5280.92	-884.90	-154.12	-888.80	40°22'12.251"N	104°15'45.606"W	0.00	End of Tangent
5417.00†	13.390	258.802	5299.76	-889.62	-154.99	-893.54	40°22'12.243"N	104°15'45.667"W	10.00	
5517.00†	4.005	231.467	5398.53	-903.64	-159.43	-907.67	40°22'12.199"N	104°15'45.849"W	10.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
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Area	COLORADO	Well	STATE PRONGHORN FEDERAL 13-43-30HNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	STATE PRONGHORN FEDERAL 13-43-30HNB PWB
Facility	SEC.30-T05N-R61W		

WELLPATH DATA (119 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5617.00†	7.257	108.805	5498.26	-900.28	-163.65	-904.41	40°22'12.157"N	104°15'45.807"W	10.00	
5717.00†	17.005	97.207	5595.93	-879.66	-167.53	-883.87	40°22'12.119"N	104°15'45.542"W	10.00	
5817.00†	26.936	93.994	5688.55	-842.39	-170.95	-846.68	40°22'12.085"N	104°15'45.061"W	10.00	
5917.00†	36.902	92.429	5773.33	-789.62	-173.81	-793.95	40°22'12.057"N	104°15'44.380"W	10.00	
6017.00†	46.881	91.458	5847.67	-722.93	-176.01	-727.30	40°22'12.035"N	104°15'43.519"W	10.00	
6117.00†	56.866	90.762	5909.33	-644.37	-177.50	-648.75	40°22'12.020"N	104°15'42.504"W	10.00	
6217.00†	66.855	90.210	5956.44	-556.31	-178.23	-560.69	40°22'12.013"N	104°15'41.366"W	10.00	
6317.00†	76.844	89.734	5987.55	-461.44	-178.17	-465.78	40°22'12.014"N	104°15'40.140"W	10.00	
6417.00†	86.835	89.297	6001.73	-362.63	-177.33	-366.93	40°22'12.022"N	104°15'38.863"W	10.00	
6448.68	90.000	89.161	6002.60 [†]	-330.99	-176.91	-335.27	40°22'12.026"N	104°15'38.454"W	10.00	End of 3D Arc
6517.00†	90.000	89.161	6002.60	-262.71	-175.91	-266.95	40°22'12.036"N	104°15'37.572"W	0.00	
6617.00†	90.000	89.161	6002.60	-162.79	-174.44	-166.96	40°22'12.051"N	104°15'36.280"W	0.00	
6717.00†	90.000	89.161	6002.60	-62.86	-172.98	-66.97	40°22'12.065"N	104°15'34.988"W	0.00	
6817.00†	90.000	89.161	6002.60	37.07	-171.51	33.02	40°22'12.080"N	104°15'33.696"W	0.00	
6917.00†	90.000	89.161	6002.60	136.99	-170.05	133.01	40°22'12.094"N	104°15'32.404"W	0.00	
7017.00†	90.000	89.161	6002.60	236.92	-168.59	232.99	40°22'12.109"N	104°15'31.112"W	0.00	
7117.00†	90.000	89.161	6002.60	336.85	-167.12	332.98	40°22'12.123"N	104°15'29.821"W	0.00	
7217.00†	90.000	89.161	6002.60	436.77	-165.66	432.97	40°22'12.137"N	104°15'28.529"W	0.00	
7317.00†	90.000	89.161	6002.60	536.70	-164.19	532.96	40°22'12.152"N	104°15'27.237"W	0.00	
7417.00†	90.000	89.161	6002.60	636.63	-162.73	632.95	40°22'12.166"N	104°15'25.945"W	0.00	
7517.00†	90.000	89.161	6002.60	736.55	-161.26	732.94	40°22'12.181"N	104°15'24.653"W	0.00	
7617.00†	90.000	89.161	6002.60	836.48	-159.80	832.93	40°22'12.195"N	104°15'23.361"W	0.00	
7717.00†	90.000	89.161	6002.60	936.41	-158.34	932.92	40°22'12.210"N	104°15'22.070"W	0.00	
7817.00†	90.000	89.161	6002.60	1036.33	-156.87	1032.91	40°22'12.224"N	104°15'20.778"W	0.00	
7917.00†	90.000	89.161	6002.60	1136.26	-155.41	1132.90	40°22'12.238"N	104°15'19.486"W	0.00	
8017.00†	90.000	89.161	6002.60	1236.19	-153.94	1232.89	40°22'12.253"N	104°15'18.194"W	0.00	
8117.00†	90.000	89.161	6002.60	1336.11	-152.48	1332.88	40°22'12.267"N	104°15'16.902"W	0.00	
8217.00†	90.000	89.161	6002.60	1436.04	-151.02	1432.87	40°22'12.282"N	104°15'15.610"W	0.00	
8317.00†	90.000	89.161	6002.60	1535.97	-149.55	1532.86	40°22'12.296"N	104°15'14.319"W	0.00	
8417.00†	90.000	89.161	6002.60	1635.89	-148.09	1632.84	40°22'12.311"N	104°15'13.027"W	0.00	



Planned Wellpath Report

STATE PRONGHORN FEDERAL 13-43-30HNB (REV-D.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#02 STATE PRONGHORN FEDERAL 13-43-30HNB (2240'FSL & 596'FWL, SEC.30)
Area	COLORADO	Well	STATE PRONGHORN FEDERAL 13-43-30HNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	STATE PRONGHORN FEDERAL 13-43-30HNB PWB
Facility	SEC.30-T05N-R61W		

WELLPATH DATA (119 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	89.161	6002.60	1735.82	-146.62	1732.83	40°22'12.325"N	104°15'11.735"W	0.00	
8617.00†	90.000	89.161	6002.60	1835.75	-145.16	1832.82	40°22'12.339"N	104°15'10.443"W	0.00	
8717.00†	90.000	89.161	6002.60	1935.67	-143.69	1932.81	40°22'12.354"N	104°15'09.151"W	0.00	
8817.00†	90.000	89.161	6002.60	2035.60	-142.23	2032.80	40°22'12.368"N	104°15'07.859"W	0.00	
8917.00†	90.000	89.161	6002.60	2135.53	-140.77	2132.79	40°22'12.383"N	104°15'06.568"W	0.00	
9017.00†	90.000	89.161	6002.60	2235.45	-139.30	2232.78	40°22'12.397"N	104°15'05.276"W	0.00	
9117.00†	90.000	89.161	6002.60	2335.38	-137.84	2332.77	40°22'12.411"N	104°15'03.984"W	0.00	
9217.00†	90.000	89.161	6002.60	2435.31	-136.37	2432.76	40°22'12.426"N	104°15'02.692"W	0.00	
9317.00†	90.000	89.161	6002.60	2535.23	-134.91	2532.75	40°22'12.440"N	104°15'01.400"W	0.00	
9417.00†	90.000	89.161	6002.60	2635.16	-133.45	2632.74	40°22'12.454"N	104°15'00.109"W	0.00	
9517.00†	90.000	89.161	6002.60	2735.08	-131.98	2732.73	40°22'12.469"N	104°14'58.817"W	0.00	
9617.00†	90.000	89.161	6002.60	2835.01	-130.52	2832.72	40°22'12.483"N	104°14'57.525"W	0.00	
9717.00†	90.000	89.161	6002.60	2934.94	-129.05	2932.71	40°22'12.497"N	104°14'56.233"W	0.00	
9817.00†	90.000	89.161	6002.60	3034.86	-127.59	3032.69	40°22'12.512"N	104°14'54.941"W	0.00	
9917.00†	90.000	89.161	6002.60	3134.79	-126.12	3132.68	40°22'12.526"N	104°14'53.649"W	0.00	
10017.00†	90.000	89.161	6002.60	3234.72	-124.66	3232.67	40°22'12.540"N	104°14'52.358"W	0.00	
10117.00†	90.000	89.161	6002.60	3334.64	-123.20	3332.66	40°22'12.555"N	104°14'51.066"W	0.00	
10217.00†	90.000	89.161	6002.60	3434.57	-121.73	3432.65	40°22'12.569"N	104°14'49.774"W	0.00	
10317.00†	90.000	89.161	6002.60	3534.50	-120.27	3532.64	40°22'12.583"N	104°14'48.482"W	0.00	
10417.00†	90.000	89.161	6002.60	3634.42	-118.80	3632.63	40°22'12.598"N	104°14'47.190"W	0.00	
10517.00†	90.000	89.161	6002.60	3734.35	-117.34	3732.62	40°22'12.612"N	104°14'45.898"W	0.00	
10617.00†	90.000	89.161	6002.60	3834.28	-115.88	3832.61	40°22'12.626"N	104°14'44.607"W	0.00	
10717.00†	90.000	89.161	6002.60	3934.20	-114.41	3932.60	40°22'12.641"N	104°14'43.315"W	0.00	
10817.00†	90.000	89.161	6002.60	4034.13	-112.95	4032.59	40°22'12.655"N	104°14'42.023"W	0.00	
10917.00†	90.000	89.161	6002.60	4134.06	-111.48	4132.58	40°22'12.669"N	104°14'40.731"W	0.00	
11017.00†	90.000	89.161	6002.60	4233.98	-110.02	4232.57	40°22'12.684"N	104°14'39.439"W	0.00	
11117.00†	90.000	89.161	6002.60	4333.91	-108.56	4332.56	40°22'12.698"N	104°14'38.147"W	0.00	
11217.00†	90.000	89.161	6002.60	4433.84	-107.09	4432.54	40°22'12.712"N	104°14'36.856"W	0.00	
11273.60	90.000	89.161	6002.60 ²	4490.39	-106.26	4489.13	40°22'12.720"N	104°14'36.124"W	0.00	End of Tangent

HOLE & CASING SECTIONS									
- Ref Wellbore: STATE PRONGHORN FEDERAL 13-43-30HNB PWB Ref Wellpath: STATE PRONGHORN FEDERAL 13-43-30HNB (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	11273.60	9673.60	1600.00	6002.60	0.00	0.00	-106.26	4489.13

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
2) STATE PRONGHORN FEDERAL 13-43-30HNB BHL REV-4 (2077'FSL & 260'FEL,SEC.30)	11273.60	6002.60	-106.26	4489.13	3350127.18	1380185.32	40°22'12.720"N	104°14'36.124"W	point
1) STATE PRONGHORN FEDERAL 13-43-30HNB LP REV-4 (2067'FSL & 260'FWL,SEC.30)	6448.68	6002.60	-176.91	-335.27	3345304.44	1380047.20	40°22'12.026"N	104°15'38.454"W	point
SEC.30-T05N-R61W		11998.60	1834.58	10539.19	3356149.23	1382210.53	40°22'31.881"N	104°13'17.949"W	polygon
SEC.31-T05N-R61W		11998.60	-3405.61	9276.90	3354960.43	1376953.41	40°21'40.104"N	104°13'34.284"W	polygon

SURVEY PROGRAM -				
Ref Wellbore: STATE PRONGHORN FEDERAL 13-43-30HNB PWB Ref Wellpath: STATE PRONGHORN FEDERAL 13-43-30HNB (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)		STATE PRONGHORN FEDERAL 13-43-30HNB PWB
1600.00	11273.60	BHI AutoTrak Curve (Short)		STATE PRONGHORN FEDERAL 13-43-30HNB PWB



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STATE PRONGHORN FEDERAL 13-43-30HNB (REV-D.0) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Slot	SLOT#02 STATE PRONGHORN FEDERAL 13-43-30HNB (2240'FSL & 596'FWL,SEC.30)
Area	COLORADO	Well	STATE PRONGHORN FEDERAL 13-43-30HNB
Field	WELD COUNTY (NAD83/TRUE)	Wellbore	STATE PRONGHORN FEDERAL 13-43-30HNB PWB
Facility	SEC.30-T05N-R61W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	260.163	17.00	Tie On
1600.00	0.000	260.163	1600.00	End of Tangent
2365.31	15.306	260.163	2356.24	End of Build
5397.54	15.306	260.163	5280.92	End of Tangent
6448.68	90.000	89.161	6002.60	End of 3D Arc
11273.60	90.000	89.161	6002.60	End of Tangent