

Location:	COLORADO	Slot:	SLOT#01 PRONGHORN A-E-18HNB (428'FNL & 1385'FWL, SEC.18)
Field:	WELD COUNTY	Well:	PRONGHORN A-E-18HNB
Facility:	SEC.18-T05N-R61W	Wellbore:	PRONGHORN A-E-18HNB PWB

<b>Plot reference wellpath is PRONGHORN A-E-18HNB PWP (REV-A.0)</b>	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (17KB) (RKB)	* = Wellpath was transformed from a different geoidic datum
Measured depths are referenced to RIG (17KB) (RKB)	North Reference: True north
RIG (17KB) (RKB) to Mean Sea Level: 4582 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOTR01 PRONGHORN A-E-18HNB (42BFWL, SEC.18): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingnjamm on 2018-02-08
	Database: Denver

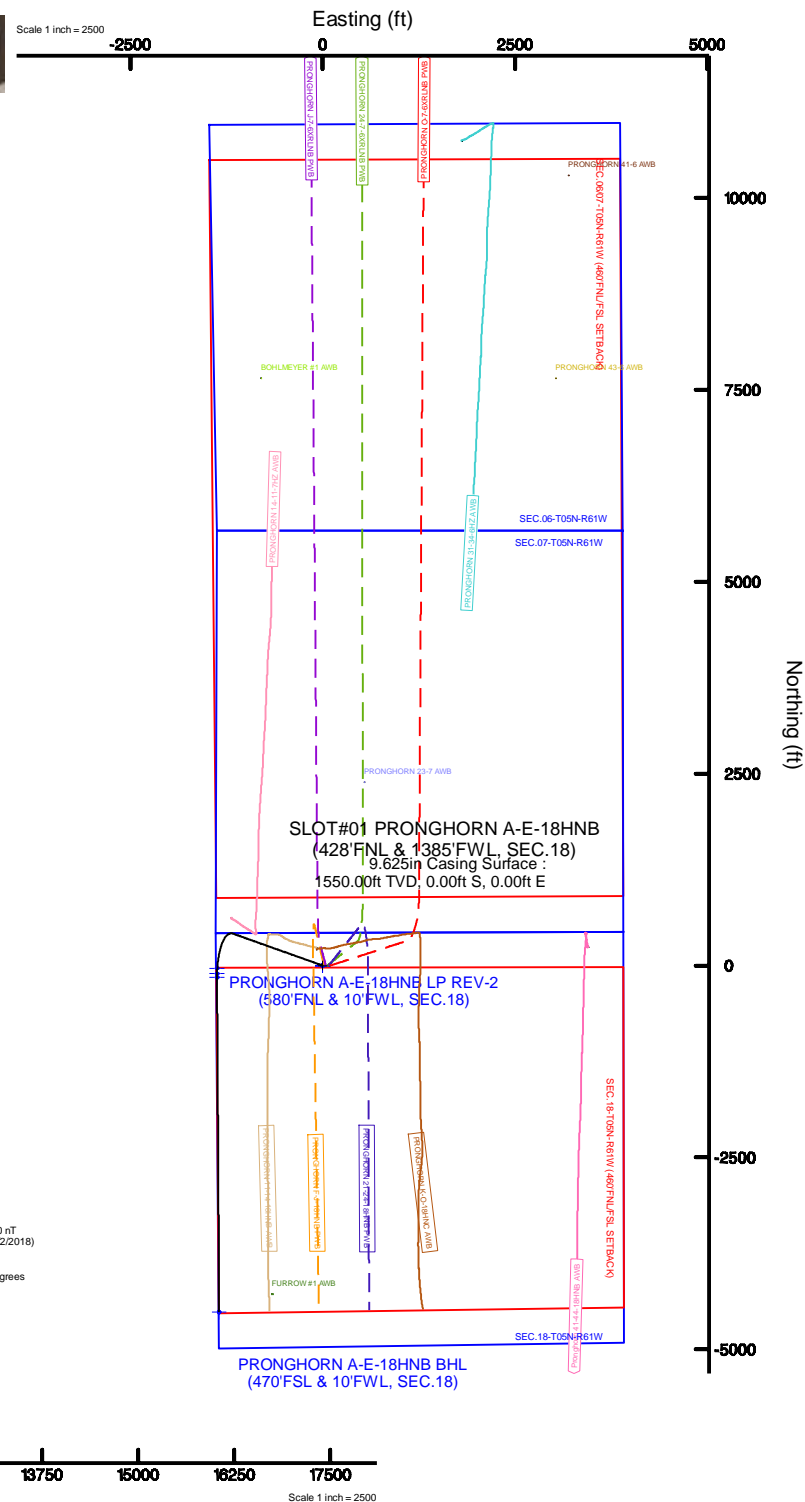
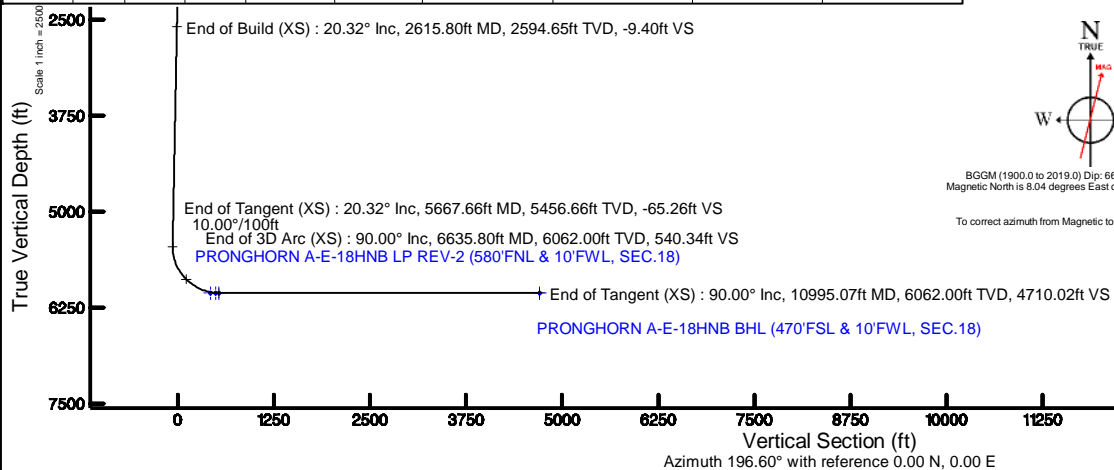
Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC. 19-T05N-R61W				3346203.650	1393657.633	40°24'26.388"N	104°15'24.372"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SLOT#01 PRONGHORN A-E-18HNB (428FWL & 1385FWL, SEC.18)	0.00	-41.77	3346161.882	1393657.047	40°24'26.388"N	104°15'24.912"W	
RIG (17KB) (RKB) to Mud line (N Slot: SLOT#01 PRONGHORN A-E-18HNB (428FWL & 1385FWL, SEC.18))						4582r	
Mean Sea Level to Mud line (N Slot: SLOT#01 PRONGHORN A-E-18HNB (428FWL & 1385FWL, SEC.18))						0ft	
RIG (17KB) (RKB) to Mean Sea Level						4582r	

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	289.619	17.00	0.00	0.00	0.00	0.00
End of Tangent	1600.00	0.000	289.619	1600.00	0.00	0.00	0.00	0.00
End of Build (XS)	2615.80	20.316	289.619	2594.65	59.84	-167.87	2.00	-9.40
End of Tangent (XS)	5667.66	20.316	289.619	5456.66	415.62	-1165.95	0.00	-65.26
End of 3D Arc (XS)	6635.80	90.000	179.637	6062.00	-154.61	-1372.97	10.00	540.34
End of Tangent (XS)	10995.07	90.000	179.637	6062.00	-4513.79	-1345.36	0.00	4710.02

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 Surface	17.00	1550.00	1533.00	17.00	1550.00	0.00	0.00	0.00	0.00	PRONGHORN A-E-18HNB PWB
8.5in Open Hole	1550.00	10995.07	9445.07	1550.00	N/A	0.00	0.00	N/A	N/A	PRONGHORN A-E-18HNB PWB

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1550.00	BHI NavTrak	Custom BHI NavTrak (Standard Rotating+Axial Core) (Rockies 0.03Gr model)		PRONGHORN A-E-19HNS PWB
1550.00	10995.07	BHI AutoTrak Curve	Custom BHI AutoTrak Curve (Axial Core, Short spacing) (Rockies 0.03Gr model)		PRONGHORN A-E-19HNS PWB

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
10995.07	90.000	179.637	6062.00	-4513.79	-1345.36	3344879.98	1389125.03	40°23'41.784"N	104°15'42.300"W





# Planned Wellpath Report

PRONGHORN A-E-18HNB PWP (REV-A.0)

Page 1 of 8



## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 PRONGHORN A-E-18HNB (428'FNL & 1385'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN A-E-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN A-E-18HNB PWB
Facility	SEC.18-T05N-R61W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Ingmjmr
Scale	0.999961	Report Generated	2/8/2018 at 10:00:35 AM
Convergence at slot	0.81° East	Database/Source file	Denver/PRONGHORN_A-E-18HNB_PWP__REV-A.0_.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	-41.77	3346161.88	1393657.05	40°24'26.388"N	104°15'24.912"W
Facility Reference Pt			3346203.65	1393657.63	40°24'26.388"N	104°15'24.372"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'KB) (RKB) to Facility Vertical Datum	4582.00ft
Horizontal Reference Pt	Slot	RIG (17'KB) (RKB) to Mean Sea Level	4582.00ft
Vertical Reference Pt	RIG (17'KB) (RKB)	RIG (17'KB) (RKB) to Mud Line at Slot (SLOT#01 PRONGHORN A-E-18HNB (428'FNL & 1385'FWL, SEC.18))	4582.00ft
MD Reference Pt	RIG (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	196.60°



# Planned Wellpath Report

PRONGHORN A-E-18HNB PWP (REV-A.0)

Page 2 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 PRONGHORN A-E-18HNB (428'FNL & 1385'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN A-E-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN A-E-18HNB PWB
Facility	SEC.18-T05N-R61W		

WELLPATH DATA (116 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	289.619	0.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
17.00	0.000	289.619	17.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	Tie On
117.00†	0.000	289.619	117.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
217.00†	0.000	289.619	217.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
317.00†	0.000	289.619	317.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
417.00†	0.000	289.619	417.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
517.00†	0.000	289.619	517.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
617.00†	0.000	289.619	617.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
717.00†	0.000	289.619	717.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
817.00†	0.000	289.619	817.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
917.00†	0.000	289.619	917.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
1017.00†	0.000	289.619	1017.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
1117.00†	0.000	289.619	1117.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
1217.00†	0.000	289.619	1217.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
1317.00†	0.000	289.619	1317.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
1417.00†	0.000	289.619	1417.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
1517.00†	0.000	289.619	1517.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	
1600.00	0.000	289.619	1600.00	0.00	0.00	0.00	40°24'26.388"N	104°15'24.912"W	0.00	End of Tangent
1617.00†	0.340	289.619	1617.00	0.00	0.02	-0.05	40°24'26.388"N	104°15'24.913"W	2.00	
1717.00†	2.340	289.619	1716.97	-0.13	0.80	-2.25	40°24'26.396"N	104°15'24.941"W	2.00	
1817.00†	4.340	289.619	1816.79	-0.43	2.76	-7.74	40°24'26.415"N	104°15'25.012"W	2.00	
1917.00†	6.340	289.619	1916.35	-0.92	5.88	-16.50	40°24'26.446"N	104°15'25.125"W	2.00	
2017.00†	8.340	289.619	2015.53	-1.60	10.17	-28.54	40°24'26.489"N	104°15'25.281"W	2.00	
2117.00†	10.340	289.619	2114.20	-2.45	15.62	-43.82	40°24'26.542"N	104°15'25.478"W	2.00	
2217.00†	12.340	289.619	2212.24	-3.49	22.22	-62.34	40°24'26.608"N	104°15'25.718"W	2.00	
2317.00†	14.340	289.619	2309.54	-4.71	29.97	-84.08	40°24'26.684"N	104°15'25.999"W	2.00	
2417.00†	16.340	289.619	2405.97	-6.10	38.85	-108.99	40°24'26.772"N	104°15'26.321"W	2.00	
2517.00†	18.340	289.619	2501.42	-7.67	48.86	-137.07	40°24'26.871"N	104°15'26.684"W	2.00	
2615.80	20.316	289.619	2594.65	-9.40	59.84	-167.87	40°24'26.979"N	104°15'27.082"W	2.00	End of Build (XS)
2617.00†	20.316	289.619	2595.77	-9.42	59.98	-168.26	40°24'26.981"N	104°15'27.087"W	0.00	



# Planned Wellpath Report

PRONGHORN A-E-18HNB PWP (REV-A.0)

Page 3 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 PRONGHORN A-E-18HNB (428'FNL & 1385'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN A-E-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN A-E-18HNB PWB
Facility	SEC.18-T05N-R61W		

## WELLPATH DATA (116 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2717.00†	20.316	289.619	2689.55	-11.25	71.64	-200.96	40°24'27.096"N	104°15'27.510"W	0.00	
2817.00†	20.316	289.619	2783.33	-13.08	83.29	-233.67	40°24'27.211"N	104°15'27.933"W	0.00	
2917.00†	20.316	289.619	2877.11	-14.91	94.95	-266.37	40°24'27.326"N	104°15'28.355"W	0.00	
3017.00†	20.316	289.619	2970.89	-16.74	106.61	-299.08	40°24'27.441"N	104°15'28.778"W	0.00	
3117.00†	20.316	289.619	3064.67	-18.57	118.27	-331.78	40°24'27.557"N	104°15'29.201"W	0.00	
3217.00†	20.316	289.619	3158.45	-20.40	129.93	-364.48	40°24'27.672"N	104°15'29.624"W	0.00	
3317.00†	20.316	289.619	3252.23	-22.23	141.58	-397.19	40°24'27.787"N	104°15'30.046"W	0.00	
3417.00†	20.316	289.619	3346.01	-24.06	153.24	-429.89	40°24'27.902"N	104°15'30.469"W	0.00	
3517.00†	20.316	289.619	3439.79	-25.89	164.90	-462.60	40°24'28.017"N	104°15'30.892"W	0.00	
3617.00†	20.316	289.619	3533.56	-27.72	176.56	-495.30	40°24'28.133"N	104°15'31.315"W	0.00	
3717.00†	20.316	289.619	3627.34	-29.56	188.22	-528.01	40°24'28.248"N	104°15'31.737"W	0.00	
3817.00†	20.316	289.619	3721.12	-31.39	199.87	-560.71	40°24'28.363"N	104°15'32.160"W	0.00	
3917.00†	20.316	289.619	3814.90	-33.22	211.53	-593.41	40°24'28.478"N	104°15'32.583"W	0.00	
4017.00†	20.316	289.619	3908.68	-35.05	223.19	-626.12	40°24'28.593"N	104°15'33.006"W	0.00	
4117.00†	20.316	289.619	4002.46	-36.88	234.85	-658.82	40°24'28.709"N	104°15'33.429"W	0.00	
4217.00†	20.316	289.619	4096.24	-38.71	246.50	-691.53	40°24'28.824"N	104°15'33.851"W	0.00	
4317.00†	20.316	289.619	4190.02	-40.54	258.16	-724.23	40°24'28.939"N	104°15'34.274"W	0.00	
4417.00†	20.316	289.619	4283.80	-42.37	269.82	-756.93	40°24'29.054"N	104°15'34.697"W	0.00	
4517.00†	20.316	289.619	4377.58	-44.20	281.48	-789.64	40°24'29.169"N	104°15'35.120"W	0.00	
4617.00†	20.316	289.619	4471.36	-46.03	293.14	-822.34	40°24'29.285"N	104°15'35.542"W	0.00	
4717.00†	20.316	289.619	4565.14	-47.86	304.79	-855.05	40°24'29.400"N	104°15'35.965"W	0.00	
4817.00†	20.316	289.619	4658.91	-49.69	316.45	-887.75	40°24'29.515"N	104°15'36.388"W	0.00	
4917.00†	20.316	289.619	4752.69	-51.52	328.11	-920.46	40°24'29.630"N	104°15'36.811"W	0.00	
5017.00†	20.316	289.619	4846.47	-53.35	339.77	-953.16	40°24'29.745"N	104°15'37.233"W	0.00	
5117.00†	20.316	289.619	4940.25	-55.18	351.43	-985.86	40°24'29.860"N	104°15'37.656"W	0.00	
5217.00†	20.316	289.619	5034.03	-57.01	363.08	-1018.57	40°24'29.976"N	104°15'38.079"W	0.00	
5317.00†	20.316	289.619	5127.81	-58.85	374.74	-1051.27	40°24'30.091"N	104°15'38.502"W	0.00	
5417.00†	20.316	289.619	5221.59	-60.68	386.40	-1083.98	40°24'30.206"N	104°15'38.925"W	0.00	
5517.00†	20.316	289.619	5315.37	-62.51	398.06	-1116.68	40°24'30.321"N	104°15'39.347"W	0.00	
5617.00†	20.316	289.619	5409.15	-64.34	409.72	-1149.39	40°24'30.436"N	104°15'39.770"W	0.00	



# Planned Wellpath Report

## PRONGHORN A-E-18HNB PWP (REV-A.0)

Page 4 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 PRONGHORN A-E-18HNB (428'FNL & 1385'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN A-E-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN A-E-18HNB PWB
Facility	SEC.18-T05N-R61W		

### WELLPATH DATA (116 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5667.66	20.316	289.619	5456.66	-65.26	415.62	-1165.95	40°24'30.495"N	104°15'39.984"W	0.00	End of Tangent (XS)
5717.00†	19.273	275.342	5503.11	-64.13	419.26	-1182.14	40°24'30.531"N	104°15'40.193"W	10.00	
5817.00†	20.773	246.169	5597.29	-49.37	413.61	-1214.88	40°24'30.475"N	104°15'40.617"W	10.00	
5917.00†	26.152	224.758	5689.16	-18.36	390.74	-1246.69	40°24'30.249"N	104°15'41.028"W	10.00	
6017.00†	33.594	211.226	5775.91	27.95	351.34	-1276.63	40°24'29.859"N	104°15'41.415"W	10.00	
6117.00†	42.010	202.361	5854.91	88.17	296.59	-1303.77	40°24'29.318"N	104°15'41.766"W	10.00	
6217.00†	50.913	196.055	5923.76	160.45	228.18	-1327.29	40°24'28.642"N	104°15'42.070"W	10.00	
6317.00†	60.078	191.189	5980.37	242.61	148.17	-1346.49	40°24'27.852"N	104°15'42.318"W	10.00	
6417.00†	69.392	187.155	6023.02	332.15	58.99	-1360.76	40°24'26.971"N	104°15'42.502"W	10.00	
6517.00†	78.788	183.592	6050.41	426.34	-36.64	-1369.68	40°24'26.026"N	104°15'42.618"W	10.00	
6617.00†	88.224	180.255	6061.71	522.33	-135.81	-1372.99	40°24'25.046"N	104°15'42.660"W	10.00	
6635.80	90.000	179.637	6062.00†	540.34	-154.61	-1372.97	40°24'24.860"N	104°15'42.660"W	10.00	End of 3D Arc (XS)
6717.00†	90.000	179.637	6062.00	618.01	-235.81	-1372.46	40°24'24.057"N	104°15'42.653"W	0.00	
6817.00†	90.000	179.637	6062.00	713.66	-335.81	-1371.82	40°24'23.069"N	104°15'42.645"W	0.00	
6917.00†	90.000	179.637	6062.00	809.31	-435.80	-1371.19	40°24'22.081"N	104°15'42.637"W	0.00	
7017.00†	90.000	179.637	6062.00	904.96	-535.80	-1370.56	40°24'21.093"N	104°15'42.628"W	0.00	
7117.00†	90.000	179.637	6062.00	1000.61	-635.80	-1369.92	40°24'20.105"N	104°15'42.620"W	0.00	
7217.00†	90.000	179.637	6062.00	1096.26	-735.80	-1369.29	40°24'19.117"N	104°15'42.612"W	0.00	
7317.00†	90.000	179.637	6062.00	1191.91	-835.80	-1368.66	40°24'18.129"N	104°15'42.604"W	0.00	
7417.00†	90.000	179.637	6062.00	1287.57	-935.79	-1368.02	40°24'17.140"N	104°15'42.595"W	0.00	
7517.00†	90.000	179.637	6062.00	1383.22	-1035.79	-1367.39	40°24'16.152"N	104°15'42.587"W	0.00	
7617.00†	90.000	179.637	6062.00	1478.87	-1135.79	-1366.76	40°24'15.164"N	104°15'42.579"W	0.00	
7717.00†	90.000	179.637	6062.00	1574.52	-1235.79	-1366.12	40°24'14.176"N	104°15'42.571"W	0.00	
7817.00†	90.000	179.637	6062.00	1670.17	-1335.79	-1365.49	40°24'13.188"N	104°15'42.562"W	0.00	
7917.00†	90.000	179.637	6062.00	1765.82	-1435.78	-1364.86	40°24'12.200"N	104°15'42.554"W	0.00	
8017.00†	90.000	179.637	6062.00	1861.47	-1535.78	-1364.22	40°24'11.212"N	104°15'42.546"W	0.00	
8117.00†	90.000	179.637	6062.00	1957.12	-1635.78	-1363.59	40°24'10.223"N	104°15'42.538"W	0.00	
8217.00†	90.000	179.637	6062.00	2052.77	-1735.78	-1362.96	40°24'09.235"N	104°15'42.529"W	0.00	
8317.00†	90.000	179.637	6062.00	2148.42	-1835.78	-1362.32	40°24'08.247"N	104°15'42.521"W	0.00	
8417.00†	90.000	179.637	6062.00	2244.07	-1935.77	-1361.69	40°24'07.259"N	104°15'42.513"W	0.00	



# Planned Wellpath Report

PRONGHORN A-E-18HNB PWP (REV-A.0)

Page 5 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 PRONGHORN A-E-18HNB (428'FNL & 1385'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN A-E-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN A-E-18HNB PWB
Facility	SEC.18-T05N-R61W		

## WELLPATH DATA (116 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	179.637	6062.00	2339.73	-2035.77	-1361.06	40°24'06.271"N	104°15'42.505"W	0.00	
8617.00†	90.000	179.637	6062.00	2435.38	-2135.77	-1360.42	40°24'05.283"N	104°15'42.496"W	0.00	
8717.00†	90.000	179.637	6062.00	2531.03	-2235.77	-1359.79	40°24'04.295"N	104°15'42.488"W	0.00	
8817.00†	90.000	179.637	6062.00	2626.68	-2335.77	-1359.16	40°24'03.306"N	104°15'42.480"W	0.00	
8917.00†	90.000	179.637	6062.00	2722.33	-2435.76	-1358.52	40°24'02.318"N	104°15'42.472"W	0.00	
9017.00†	90.000	179.637	6062.00	2817.98	-2535.76	-1357.89	40°24'01.330"N	104°15'42.463"W	0.00	
9117.00†	90.000	179.637	6062.00	2913.63	-2635.76	-1357.26	40°24'00.342"N	104°15'42.455"W	0.00	
9217.00†	90.000	179.637	6062.00	3009.28	-2735.76	-1356.62	40°23'59.354"N	104°15'42.447"W	0.00	
9317.00†	90.000	179.637	6062.00	3104.93	-2835.76	-1355.99	40°23'58.366"N	104°15'42.439"W	0.00	
9417.00†	90.000	179.637	6062.00	3200.58	-2935.75	-1355.36	40°23'57.378"N	104°15'42.430"W	0.00	
9517.00†	90.000	179.637	6062.00	3296.23	-3035.75	-1354.72	40°23'56.389"N	104°15'42.422"W	0.00	
9617.00†	90.000	179.637	6062.00	3391.89	-3135.75	-1354.09	40°23'55.401"N	104°15'42.414"W	0.00	
9717.00†	90.000	179.637	6062.00	3487.54	-3235.75	-1353.46	40°23'54.413"N	104°15'42.406"W	0.00	
9817.00†	90.000	179.637	6062.00	3583.19	-3335.75	-1352.82	40°23'53.425"N	104°15'42.397"W	0.00	
9917.00†	90.000	179.637	6062.00	3678.84	-3435.74	-1352.19	40°23'52.437"N	104°15'42.389"W	0.00	
10017.00†	90.000	179.637	6062.00	3774.49	-3535.74	-1351.56	40°23'51.449"N	104°15'42.381"W	0.00	
10117.00†	90.000	179.637	6062.00	3870.14	-3635.74	-1350.92	40°23'50.461"N	104°15'42.372"W	0.00	
10217.00†	90.000	179.637	6062.00	3965.79	-3735.74	-1350.29	40°23'49.472"N	104°15'42.364"W	0.00	
10317.00†	90.000	179.637	6062.00	4061.44	-3835.74	-1349.66	40°23'48.484"N	104°15'42.356"W	0.00	
10417.00†	90.000	179.637	6062.00	4157.09	-3935.73	-1349.02	40°23'47.496"N	104°15'42.348"W	0.00	
10517.00†	90.000	179.637	6062.00	4252.74	-4035.73	-1348.39	40°23'46.508"N	104°15'42.339"W	0.00	
10617.00†	90.000	179.637	6062.00	4348.40	-4135.73	-1347.76	40°23'45.520"N	104°15'42.331"W	0.00	
10717.00†	90.000	179.637	6062.00	4444.05	-4235.73	-1347.12	40°23'44.532"N	104°15'42.323"W	0.00	
10817.00†	90.000	179.637	6062.00	4539.70	-4335.73	-1346.49	40°23'43.544"N	104°15'42.315"W	0.00	
10917.00†	90.000	179.637	6062.00	4635.35	-4435.72	-1345.86	40°23'42.555"N	104°15'42.306"W	0.00	
10995.07	90.000	179.637	6062.00 <sup>2</sup>	4710.02	-4513.79	-1345.36	40°23'41.784"N	104°15'42.300"W	0.00	End of Tangent (XS)





# Planned Wellpath Report

PRONGHORN A-E-18HNB PWP (REV-A.0)

Page 6 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 PRONGHORN A-E-18HNB (428'FNL & 1385'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN A-E-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN A-E-18HNB PWB
Facility	SEC.18-T05N-R61W		

HOLE & CASING SECTIONS - Ref Wellbore: PRONGHORN A-E-18HNB PWB      Ref Wellpath: PRONGHORN A-E-18HNB PWP (REV-A.0)									
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 Surface	17.00	1550.00	1533.00	17.00	1550.00	0.00	0.00	0.00	0.00
8.5in Open Hole	1550.00	10995.07	9445.07	1550.00	N/A	0.00	0.00	N/A	N/A

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.06-T05N-R61W		0.00	0.00	0.00	3346161.88	1393657.05	40°24'26.388"N	104°15'24.912"W	polygon
SEC.07-T05N-R61W		0.00	0.00	0.00	3346161.88	1393657.05	40°24'26.388"N	104°15'24.912"W	polygon
SEC.18-T05N-R61W		0.00	0.00	0.00	3346161.88	1393657.05	40°24'26.388"N	104°15'24.912"W	polygon
2) PRONGHORN A-E-18HNB BHL (470'FSL & 10'FWL, SEC.18)	10995.07	6062.00	-4513.79	-1345.36	3344879.98	1389125.03	40°23'41.784"N	104°15'42.300"W	point
PRONGHORN A-E-18HNB LP (531'FNL & 10'FWL, SEC.18)		6062.00	-105.61	-1372.97	3344790.58	1393532.20	40°24'25.344"N	104°15'42.660"W	point
PRONGHORN A-E-18HNB LP REV-1 (460'FNL & 10'FWL, SEC.18)		6062.00	-34.61	-1372.97	3344789.59	1393603.19	40°24'26.046"N	104°15'42.660"W	point
1) PRONGHORN A-E-18HNB LP REV-2 (580'FNL & 10'FWL, SEC.18)	6635.80	6062.00	-154.61	-1372.97	3344791.27	1393483.21	40°24'24.860"N	104°15'42.660"W	point
SEC.06/07-T05N-R61W (460'FNL/FSL SETBACK)		6200.00	0.00	0.00	3346161.88	1393657.05	40°24'26.388"N	104°15'24.912"W	polygon
SEC.18-T05N-R61W (460'FNL/FSL SETBACK)		6200.00	0.00	0.00	3346161.88	1393657.05	40°24'26.388"N	104°15'24.912"W	polygon



# Planned Wellpath Report

PRONGHORN A-E-18HNB PWP (REV-A.0)

Page 7 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 PRONGHORN A-E-18HNB (428'FNL & 1385'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN A-E-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN A-E-18HNB PWB
Facility	SEC.18-T05N-R61W		

SURVEY PROGRAM - Ref Wellbore: PRONGHORN A-E-18HNB PWB    Ref Wellpath: PRONGHORN A-E-18HNB PWP (REV-A.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1550.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		PRONGHORN A-E-18HNB PWB
1550.00	10995.07	Custom BHI AutoTrak Curve (Axial Corr, Short spacing) (Rockies 0.03Gt model)		PRONGHORN A-E-18HNB PWB





# Planned Wellpath Report

PRONGHORN A-E-18HNB PWP (REV-A.0)

Page 8 of 8



REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#01 PRONGHORN A-E-18HNB (428'FNL & 1385'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN A-E-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN A-E-18HNB PWB
Facility	SEC.18-T05N-R61W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	289.619	17.00	Tie On
1600.00	0.000	289.619	1600.00	End of Tangent
2615.80	20.316	289.619	2594.65	End of Build (XS)
5667.66	20.316	289.619	5456.66	End of Tangent (XS)
6635.80	90.000	179.637	6062.00	End of 3D Arc (XS)
10995.07	90.000	179.637	6062.00	End of Tangent (XS)