

Location:	COLORADO	Slot:	SLOT#05 PRONGHORN 21-24-18HNB (428'FNL & 1465'FWL, SEC.18)
Field:	WELD COUNTY	Well:	PRONGHORN 21-24-18HNB
Facility:	SEC.18-T05N-R61W	Wellbore:	PRONGHORN 21-24-18HNB PWB

Location:	COLORADO	Slot:	SLOT#05 PRONGHORN 21-24-18HNB (428'FNL & 1465'FWL, SEC.18)
Field:	WELD COUNTY	Well:	PRONGHORN 21-24-18HNB
Facility:	SEC.18-T05N-R61W	Wellbore:	PRONGHORN 21-24-18HNB PWB

True vertical depths are referenced to RIG (17KB) (RKB)	* = Welpath was transformed from a different geodetic 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: SLOTRIG PRONGHORN 21-24-19#B (428FWL & 1465FWL, SEC.18)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingnjamr on 2018-02-08
	Database: Denver

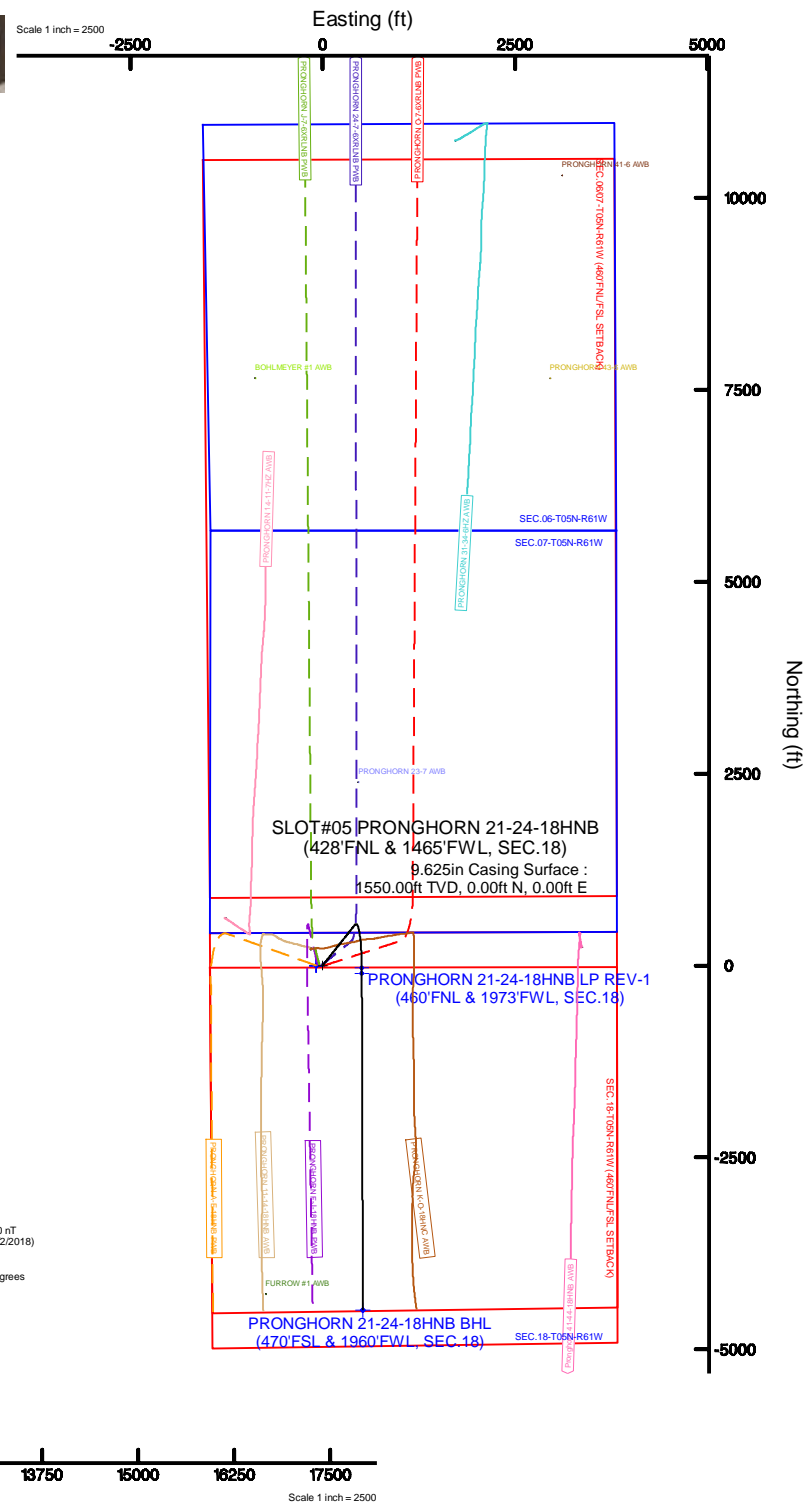
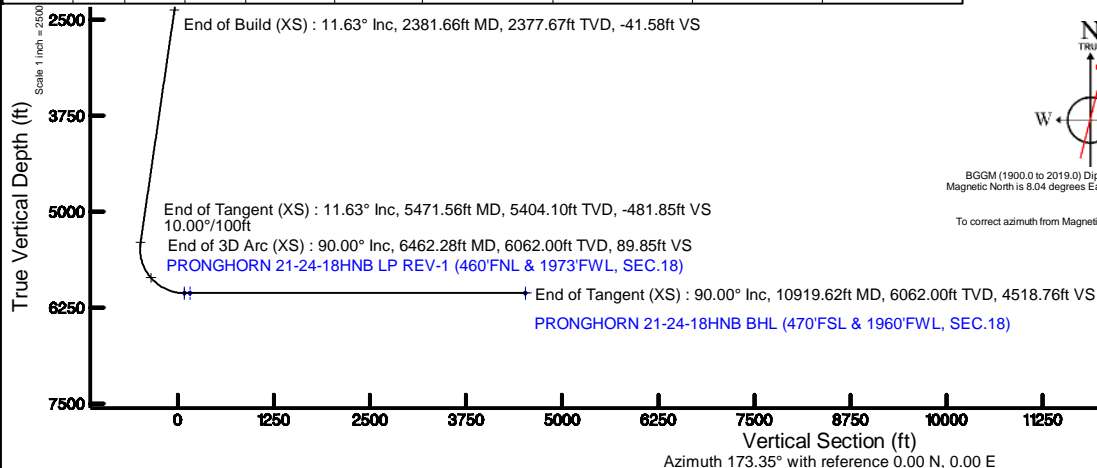
Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC 19-T06N-R61W				3346203.650	1393657.633	40°24'26.388"N	104°15'24.372"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SLOT#05 PRONGHORN 21-24-18HNB (4287NL & 1465FWL, SEC. 18)	0.00	38.99	3346242.633	1393658.180	40°24'26.388"N	104°15'23.868"W	
RIG (17KB) (RKB) to Mud line (N Slot: SLOT#05 PRONGHORN 21-24-18HNB (4287NL & 1465FWL, SEC. 18))						458.2ft	
Mean Sea Level to Mud line (N Slot: SLOT#05 PRONGHORN 21-24-18HNB (4287NL & 1465FWL, SEC. 18))						0ft	
RIG (17KB) (RKB) to Mean Sea Level						458.2ft	

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	17.00	0.000	38.385	17.00	0.00	0.00	0.00	0.00
End of Tangent	1800.00	0.000	38.385	1800.00	0.00	0.00	0.00	0.00
End of Build (XS)	2381.66	11.633	38.385	2377.67	46.13	36.54	2.00	-41.58
End of Tangent (XS)	5471.56	11.633	38.385	5404.10	534.52	423.43	0.00	-481.85
End of 3D Arc (XS)	6462.28	90.000	179.820	6062.00	-31.00	509.64	10.00	89.85
End of Tangent (XS)	10919.62	90.000	179.820	6062.00	-4488.32	523.66	0.00	4518.76

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 21-24-18HNB PWB
8.5in Open Hole	1550.00	10919.62	9369.62	1550.00	N/A	0.00	0.00	N/A	N/A	PRONGHORN 21-24-18HNB 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 Corr) (Rockies 0.03Gf model)		PRONGHORN 21-24-18HNS PWB
1550.00	10919.62	BHI AutoTrak Curve	Custom BHI AutoTrak Curve (Axial Corr, Short spacing) (Rockies 0.03Gf model)		PRONGHORN 21-24-18HNS PWB

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
10919.62	90.00	179.820	6062.00	-4488.32	523.66	3346829.15	1389177.83	40°23'42.036"N	104°15'17.100"W





# Planned Wellpath Report

## PRONGHORN 21-24-18HNB PWP (REV-A.0)

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### REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 PRONGHORN 21-24-18HNB (428'FNL & 1465'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN 21-24-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 21-24-18HNB 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 10:01:38 AM
Convergence at slot	0.81° East	Database/Source file	Denver/PRONGHORN_21-24-18HNB_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	38.99	3346242.63	1393658.18	40°24'26.388"N	104°15'23.868"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#05 PRONGHORN 21-24-18HNB (428'FNL & 1465'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	173.35°



# Planned Wellpath Report

## PRONGHORN 21-24-18HNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 PRONGHORN 21-24-18HNB (428'FNL & 1465'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN 21-24-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 21-24-18HNB 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	38.385	0.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
17.00	0.000	38.385	17.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	Tie On
117.00†	0.000	38.385	117.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
217.00†	0.000	38.385	217.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
317.00†	0.000	38.385	317.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
417.00†	0.000	38.385	417.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
517.00†	0.000	38.385	517.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
617.00†	0.000	38.385	617.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
717.00†	0.000	38.385	717.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
817.00†	0.000	38.385	817.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
917.00†	0.000	38.385	917.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
1017.00†	0.000	38.385	1017.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
1117.00†	0.000	38.385	1117.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
1217.00†	0.000	38.385	1217.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
1317.00†	0.000	38.385	1317.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
1417.00†	0.000	38.385	1417.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
1517.00†	0.000	38.385	1517.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
1617.00†	0.000	38.385	1617.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
1717.00†	0.000	38.385	1717.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	
1800.00	0.000	38.385	1800.00	0.00	0.00	0.00	40°24'26.388"N	104°15'23.868"W	0.00	End of Tangent
1817.00†	0.340	38.385	1817.00	-0.04	0.04	0.03	40°24'26.388"N	104°15'23.868"W	2.00	
1917.00†	2.340	38.385	1916.97	-1.69	1.87	1.48	40°24'26.407"N	104°15'23.849"W	2.00	
2017.00†	4.340	38.385	2016.79	-5.80	6.44	5.10	40°24'26.452"N	104°15'23.802"W	2.00	
2117.00†	6.340	38.385	2116.35	-12.38	13.73	10.88	40°24'26.524"N	104°15'23.727"W	2.00	
2217.00†	8.340	38.385	2215.53	-21.41	23.75	18.81	40°24'26.623"N	104°15'23.625"W	2.00	
2317.00†	10.340	38.385	2314.20	-32.87	36.47	28.89	40°24'26.748"N	104°15'23.495"W	2.00	
2381.66	11.633	38.385	2377.67	-41.58	46.13	36.54	40°24'26.844"N	104°15'23.396"W	2.00	End of Build (XS)
2417.00†	11.633	38.385	2412.29	-46.62	51.71	40.97	40°24'26.899"N	104°15'23.338"W	0.00	
2517.00†	11.633	38.385	2510.23	-60.87	67.52	53.49	40°24'27.055"N	104°15'23.177"W	0.00	
2617.00†	11.633	38.385	2608.18	-75.11	83.33	66.01	40°24'27.211"N	104°15'23.015"W	0.00	



# Planned Wellpath Report

## PRONGHORN 21-24-18HNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 PRONGHORN 21-24-18HNB (428'FNL & 1465'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN 21-24-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 21-24-18HNB 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†	11.633	38.385	2706.12	-89.36	99.13	78.53	40°24'27.368"N	104°15'22.853"W	0.00	
2817.00†	11.633	38.385	2804.07	-103.61	114.94	91.05	40°24'27.524"N	104°15'22.691"W	0.00	
2917.00†	11.633	38.385	2902.02	-117.86	130.74	103.57	40°24'27.680"N	104°15'22.529"W	0.00	
3017.00†	11.633	38.385	2999.96	-132.11	146.55	116.09	40°24'27.836"N	104°15'22.367"W	0.00	
3117.00†	11.633	38.385	3097.91	-146.36	162.36	128.61	40°24'27.992"N	104°15'22.205"W	0.00	
3217.00†	11.633	38.385	3195.85	-160.61	178.16	141.13	40°24'28.149"N	104°15'22.044"W	0.00	
3317.00†	11.633	38.385	3293.80	-174.86	193.97	153.65	40°24'28.305"N	104°15'21.882"W	0.00	
3417.00†	11.633	38.385	3391.74	-189.10	209.77	166.18	40°24'28.461"N	104°15'21.720"W	0.00	
3517.00†	11.633	38.385	3489.69	-203.35	225.58	178.70	40°24'28.617"N	104°15'21.558"W	0.00	
3617.00†	11.633	38.385	3587.64	-217.60	241.39	191.22	40°24'28.773"N	104°15'21.396"W	0.00	
3717.00†	11.633	38.385	3685.58	-231.85	257.19	203.74	40°24'28.929"N	104°15'21.234"W	0.00	
3817.00†	11.633	38.385	3783.53	-246.10	273.00	216.26	40°24'29.086"N	104°15'21.072"W	0.00	
3917.00†	11.633	38.385	3881.47	-260.35	288.81	228.78	40°24'29.242"N	104°15'20.911"W	0.00	
4017.00†	11.633	38.385	3979.42	-274.60	304.61	241.30	40°24'29.398"N	104°15'20.749"W	0.00	
4117.00†	11.633	38.385	4077.37	-288.84	320.42	253.82	40°24'29.554"N	104°15'20.587"W	0.00	
4217.00†	11.633	38.385	4175.31	-303.09	336.22	266.34	40°24'29.710"N	104°15'20.425"W	0.00	
4317.00†	11.633	38.385	4273.26	-317.34	352.03	278.86	40°24'29.867"N	104°15'20.263"W	0.00	
4417.00†	11.633	38.385	4371.20	-331.59	367.84	291.39	40°24'30.023"N	104°15'20.101"W	0.00	
4517.00†	11.633	38.385	4469.15	-345.84	383.64	303.91	40°24'30.179"N	104°15'19.939"W	0.00	
4617.00†	11.633	38.385	4567.09	-360.09	399.45	316.43	40°24'30.335"N	104°15'19.778"W	0.00	
4717.00†	11.633	38.385	4665.04	-374.34	415.25	328.95	40°24'30.491"N	104°15'19.616"W	0.00	
4817.00†	11.633	38.385	4762.99	-388.58	431.06	341.47	40°24'30.648"N	104°15'19.454"W	0.00	
4917.00†	11.633	38.385	4860.93	-402.83	446.87	353.99	40°24'30.804"N	104°15'19.292"W	0.00	
5017.00†	11.633	38.385	4958.88	-417.08	462.67	366.51	40°24'30.960"N	104°15'19.130"W	0.00	
5117.00†	11.633	38.385	5056.82	-431.33	478.48	379.03	40°24'31.116"N	104°15'18.968"W	0.00	
5217.00†	11.633	38.385	5154.77	-445.58	494.28	391.55	40°24'31.272"N	104°15'18.806"W	0.00	
5317.00†	11.633	38.385	5252.72	-459.83	510.09	404.07	40°24'31.428"N	104°15'18.645"W	0.00	
5417.00†	11.633	38.385	5350.66	-474.08	525.90	416.60	40°24'31.585"N	104°15'18.483"W	0.00	
5471.56	11.633	38.385	5404.10	-481.85	534.52	423.43	40°24'31.670"N	104°15'18.394"W	0.00	End of Tangent (XS)
5517.00†	8.595	57.936	5448.84	-486.55	539.92	429.15	40°24'31.723"N	104°15'18.320"W	10.00	



# Planned Wellpath Report

## PRONGHORN 21-24-18HNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 PRONGHORN 21-24-18HNB (428'FNL & 1465'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN 21-24-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 21-24-18HNB 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
5617.00†	9.125	126.784	5547.90	-484.30	539.13	441.87	40°24'31.715"N	104°15'18.156"W	10.00	
5717.00†	17.076	155.123	5645.31	-464.85	521.02	454.43	40°24'31.536"N	104°15'17.994"W	10.00	
5817.00†	26.434	164.859	5738.11	-428.80	486.13	466.45	40°24'31.192"N	104°15'17.838"W	10.00	
5917.00†	36.121	169.691	5823.49	-377.24	435.51	477.56	40°24'30.692"N	104°15'17.695"W	10.00	
6017.00†	45.929	172.683	5898.85	-311.73	370.72	487.44	40°24'30.051"N	104°15'17.567"W	10.00	
6117.00†	55.792	174.815	5961.90	-234.28	293.71	495.77	40°24'29.290"N	104°15'17.459"W	10.00	
6217.00†	65.685	176.495	6010.72	-147.22	206.83	502.31	40°24'28.432"N	104°15'17.375"W	10.00	
6317.00†	75.593	177.930	6043.83	-53.22	112.71	506.86	40°24'27.502"N	104°15'17.316"W	10.00	
6417.00†	85.509	179.242	6060.23	44.89	14.23	509.27	40°24'26.529"N	104°15'17.285"W	10.00	
6462.28	90.000	179.820	6062.00†	89.85	-31.00	509.64	40°24'26.082"N	104°15'17.280"W	10.00	End of 3D Arc (XS)
6517.00†	90.000	179.820	6062.00	144.23	-85.73	509.81	40°24'25.541"N	104°15'17.278"W	0.00	
6617.00†	90.000	179.820	6062.00	243.59	-185.73	510.13	40°24'24.553"N	104°15'17.274"W	0.00	
6717.00†	90.000	179.820	6062.00	342.95	-285.72	510.44	40°24'23.565"N	104°15'17.270"W	0.00	
6817.00†	90.000	179.820	6062.00	442.31	-385.72	510.76	40°24'22.576"N	104°15'17.266"W	0.00	
6917.00†	90.000	179.820	6062.00	541.68	-485.72	511.07	40°24'21.588"N	104°15'17.262"W	0.00	
7017.00†	90.000	179.820	6062.00	641.04	-585.72	511.39	40°24'20.600"N	104°15'17.258"W	0.00	
7117.00†	90.000	179.820	6062.00	740.40	-685.72	511.70	40°24'19.612"N	104°15'17.254"W	0.00	
7217.00†	90.000	179.820	6062.00	839.76	-785.72	512.02	40°24'18.624"N	104°15'17.250"W	0.00	
7317.00†	90.000	179.820	6062.00	939.13	-885.72	512.33	40°24'17.636"N	104°15'17.245"W	0.00	
7417.00†	90.000	179.820	6062.00	1038.49	-985.72	512.64	40°24'16.647"N	104°15'17.241"W	0.00	
7517.00†	90.000	179.820	6062.00	1137.85	-1085.72	512.96	40°24'15.659"N	104°15'17.237"W	0.00	
7617.00†	90.000	179.820	6062.00	1237.21	-1185.72	513.27	40°24'14.671"N	104°15'17.233"W	0.00	
7717.00†	90.000	179.820	6062.00	1336.57	-1285.72	513.59	40°24'13.683"N	104°15'17.229"W	0.00	
7817.00†	90.000	179.820	6062.00	1435.94	-1385.72	513.90	40°24'12.695"N	104°15'17.225"W	0.00	
7917.00†	90.000	179.820	6062.00	1535.30	-1485.72	514.22	40°24'11.707"N	104°15'17.221"W	0.00	
8017.00†	90.000	179.820	6062.00	1634.66	-1585.72	514.53	40°24'10.718"N	104°15'17.217"W	0.00	
8117.00†	90.000	179.820	6062.00	1734.02	-1685.72	514.85	40°24'09.730"N	104°15'17.213"W	0.00	
8217.00†	90.000	179.820	6062.00	1833.39	-1785.72	515.16	40°24'08.742"N	104°15'17.209"W	0.00	
8317.00†	90.000	179.820	6062.00	1932.75	-1885.72	515.47	40°24'07.754"N	104°15'17.205"W	0.00	
8417.00†	90.000	179.820	6062.00	2032.11	-1985.72	515.79	40°24'06.766"N	104°15'17.201"W	0.00	



# Planned Wellpath Report

## PRONGHORN 21-24-18HNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 PRONGHORN 21-24-18HNB (428'FNL & 1465'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN 21-24-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 21-24-18HNB 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	179.820	6062.00	2131.47	-2085.72	516.10	40°24'05.778"N	104°15'17.197"W	0.00	
8617.00†	90.000	179.820	6062.00	2230.83	-2185.72	516.42	40°24'04.790"N	104°15'17.193"W	0.00	
8717.00†	90.000	179.820	6062.00	2330.20	-2285.71	516.73	40°24'03.801"N	104°15'17.189"W	0.00	
8817.00†	90.000	179.820	6062.00	2429.56	-2385.71	517.05	40°24'02.813"N	104°15'17.185"W	0.00	
8917.00†	90.000	179.820	6062.00	2528.92	-2485.71	517.36	40°24'01.825"N	104°15'17.181"W	0.00	
9017.00†	90.000	179.820	6062.00	2628.28	-2585.71	517.68	40°24'00.837"N	104°15'17.177"W	0.00	
9117.00†	90.000	179.820	6062.00	2727.65	-2685.71	517.99	40°23'59.849"N	104°15'17.173"W	0.00	
9217.00†	90.000	179.820	6062.00	2827.01	-2785.71	518.31	40°23'58.861"N	104°15'17.169"W	0.00	
9317.00†	90.000	179.820	6062.00	2926.37	-2885.71	518.62	40°23'57.872"N	104°15'17.165"W	0.00	
9417.00†	90.000	179.820	6062.00	3025.73	-2985.71	518.93	40°23'56.884"N	104°15'17.161"W	0.00	
9517.00†	90.000	179.820	6062.00	3125.09	-3085.71	519.25	40°23'55.896"N	104°15'17.157"W	0.00	
9617.00†	90.000	179.820	6062.00	3224.46	-3185.71	519.56	40°23'54.908"N	104°15'17.153"W	0.00	
9717.00†	90.000	179.820	6062.00	3323.82	-3285.71	519.88	40°23'53.920"N	104°15'17.149"W	0.00	
9817.00†	90.000	179.820	6062.00	3423.18	-3385.71	520.19	40°23'52.932"N	104°15'17.145"W	0.00	
9917.00†	90.000	179.820	6062.00	3522.54	-3485.71	520.51	40°23'51.943"N	104°15'17.140"W	0.00	
10017.00†	90.000	179.820	6062.00	3621.91	-3585.71	520.82	40°23'50.955"N	104°15'17.136"W	0.00	
10117.00†	90.000	179.820	6062.00	3721.27	-3685.71	521.14	40°23'49.967"N	104°15'17.132"W	0.00	
10217.00†	90.000	179.820	6062.00	3820.63	-3785.71	521.45	40°23'48.979"N	104°15'17.128"W	0.00	
10317.00†	90.000	179.820	6062.00	3919.99	-3885.71	521.76	40°23'47.991"N	104°15'17.124"W	0.00	
10417.00†	90.000	179.820	6062.00	4019.35	-3985.71	522.08	40°23'47.003"N	104°15'17.120"W	0.00	
10517.00†	90.000	179.820	6062.00	4118.72	-4085.71	522.39	40°23'46.014"N	104°15'17.116"W	0.00	
10617.00†	90.000	179.820	6062.00	4218.08	-4185.71	522.71	40°23'45.026"N	104°15'17.112"W	0.00	
10717.00†	90.000	179.820	6062.00	4317.44	-4285.70	523.02	40°23'44.038"N	104°15'17.108"W	0.00	
10817.00†	90.000	179.820	6062.00	4416.80	-4385.70	523.34	40°23'43.050"N	104°15'17.104"W	0.00	
10917.00†	90.000	179.820	6062.00	4516.17	-4485.70	523.65	40°23'42.062"N	104°15'17.100"W	0.00	
10919.62	90.000	179.820	6062.00 <sup>2</sup>	4518.76	-4488.32	523.66	40°23'42.036"N	104°15'17.100"W	0.00	End of Tangent (XS)





# Planned Wellpath Report

## PRONGHORN 21-24-18HNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 PRONGHORN 21-24-18HNB (428'FNL & 1465'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN 21-24-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 21-24-18HNB PWB
Facility	SEC.18-T05N-R61W		

HOLE & CASING SECTIONS - Ref Wellbore: PRONGHORN 21-24-18HNB PWB      Ref Wellpath: PRONGHORN 21-24-18HNB 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	10919.62	9369.62	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	-80.76	3346161.88	1393657.05	40°24'26.388"N	104°15'24.912"W	polygon
SEC.07-T05N-R61W		0.00	0.00	-80.76	3346161.88	1393657.05	40°24'26.388"N	104°15'24.912"W	polygon
SEC.18-T05N-R61W		0.00	0.00	-80.76	3346161.88	1393657.05	40°24'26.388"N	104°15'24.912"W	polygon
2) PRONGHORN 21-24-18HNB BHL (470'FSL & 1960'FWL, SEC.18)	10919.62	6062.00	-4488.32	523.66	3346829.15	1389177.83	40°23'42.036"N	104°15'17.100"W	point
PRONGHORN 21-24-18HNB LP (531'FNL & 1973'FWL, SEC.18)		6062.00	-102.00	509.64	3346753.63	1393563.34	40°24'25.380"N	104°15'17.280"W	point
1) PRONGHORN 21-24-18HNB LP REV-1 (460'FNL & 1973'FWL, SEC.18)	6462.28	6062.00	-31.00	509.64	3346752.64	1393634.33	40°24'26.082"N	104°15'17.280"W	point
SEC.06/07-T05N-R61W (460'FNL/FSL SETBACK)		6200.00	0.00	-80.76	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	-80.76	3346161.88	1393657.05	40°24'26.388"N	104°15'24.912"W	polygon



# Planned Wellpath Report

## PRONGHORN 21-24-18HNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 PRONGHORN 21-24-18HNB (428'FNL & 1465'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN 21-24-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 21-24-18HNB PWB
Facility	SEC.18-T05N-R61W		

SURVEY PROGRAM - Ref Wellbore: PRONGHORN 21-24-18HNB PWB    Ref Wellpath: PRONGHORN 21-24-18HNB 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 21-24-18HNB PWB
1550.00	10919.62	Custom BHI AutoTrak Curve (Axial Corr, Short spacing) (Rockies 0.03Gt model)		PRONGHORN 21-24-18HNB PWB





# Planned Wellpath Report

PRONGHORN 21-24-18HNB PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#05 PRONGHORN 21-24-18HNB (428'FNL & 1465'FWL, SEC.18)
Area	COLORADO	Well	PRONGHORN 21-24-18HNB
Field	WELD COUNTY	Wellbore	PRONGHORN 21-24-18HNB PWB
Facility	SEC.18-T05N-R61W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	38.385	17.00	Tie On
1800.00	0.000	38.385	1800.00	End of Tangent
2381.66	11.633	38.385	2377.67	End of Build (XS)
5471.56	11.633	38.385	5404.10	End of Tangent (XS)
6462.28	90.000	179.820	6062.00	End of 3D Arc (XS)
10919.62	90.000	179.820	6062.00	End of Tangent (XS)