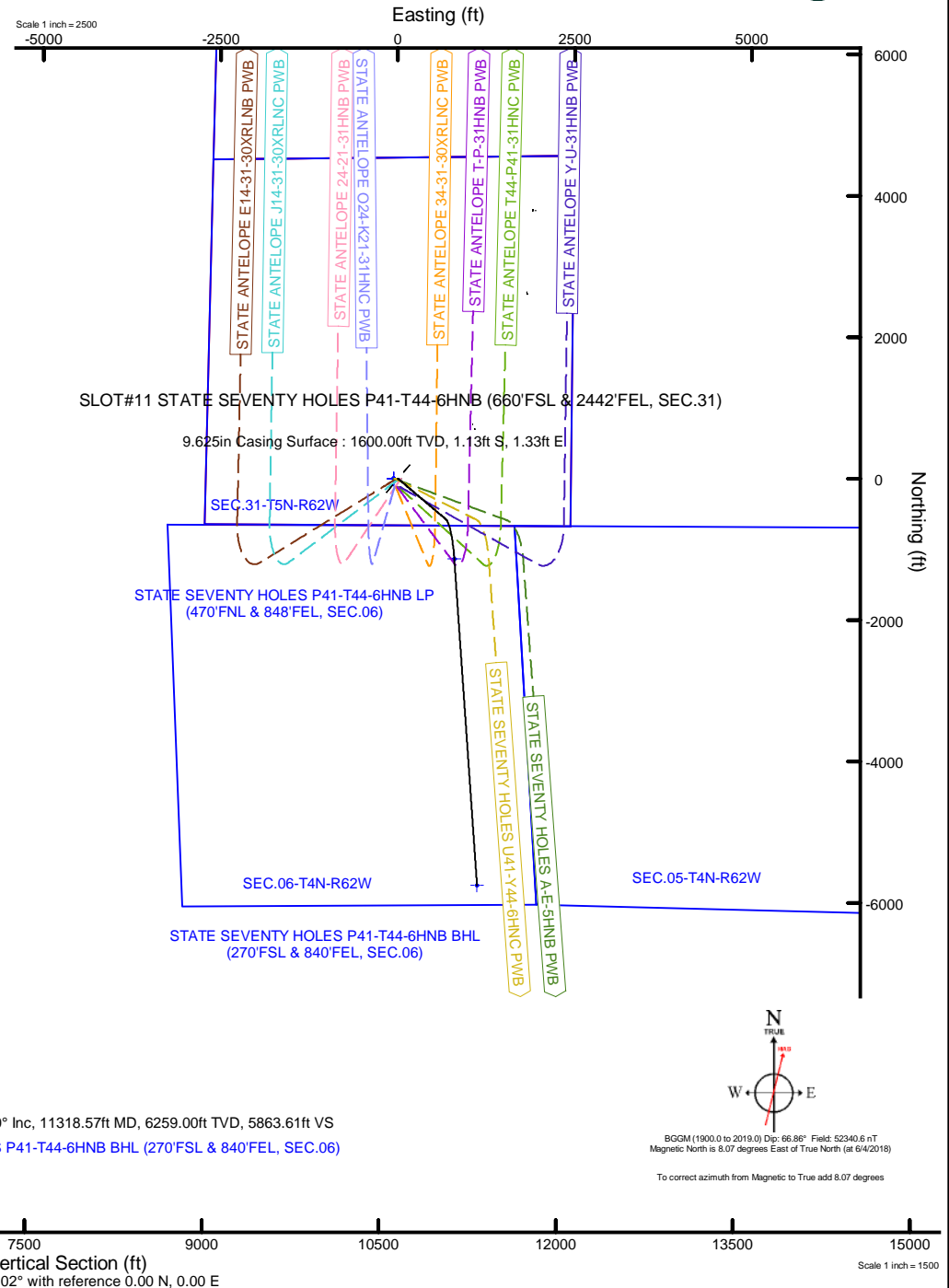


BONANZA CREEK ENERGY											
Location: COLORADO		Slot: SLOT#11 STATE SEVENTY HOLES P41-T44-6HNB (660FSL & 2442FEL, SEC.31)									
Field: WELD COUNTY (NAD83/TRUE)		Well: STATE SEVENTY HOLES P41-T44-6HNB									
Facility: SEC.31-T05N-R62W		Wellbore: STATE SEVENTY HOLES P41-T44-6HNB PWB									
Plot reference wellpath is STATE SEVENTY HOLES P41-T44-6HNB PWP (REV-D.0)						Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet					
True vertical depths are referenced to RIG (17) (RXB)						North Reference: True north					
Reference wellpath measured depths are referenced to RIG (17) (RXB)						Scale: True distance					
RIG (17) (RXB) to Mean Sea Level: 4569 feet						Coordinates are in feet referenced to Slot					
Mean Sea Level to Ground level (At Slot: SLOT#11 STATE SEVENTY HOLES P41-T44-6HNB (660FSL & 2442FEL, SEC.31)): 0 feet						Depths are in feet					
Offset wellpath MDs are referenced to each path's default MD datum						Created by: robaleo01 on 2020-02-03; Database: WellArchitectDB3					
Location Information											
Facility Name						Grid East (US ft)	Grid North (US ft)	Latitude	Longitude		
SEC.31-T05N-R62W						3317947.515	1376496.776	40°21'40.5720"N	104°21'32.4720"W		
Slot		Local N (ft)	Local E (ft)			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude		
SLOT#11 STATE SEVENTY HOLES P41-T44-6HNB (660FSL & 2442FEL, SEC.31)		-3788.01	-1905.92			3316000.576	1372684.717	40°21'3.1392"N	104°21'57.0888"W		
RIG (17) (RXB) to Ground level (At Slot: SLOT#11 STATE SEVENTY HOLES P41-T44-6HNB (660FSL & 2442FEL, SEC.31))								4569ft			
Mean Sea Level to Ground level (At Slot: SLOT#11 STATE SEVENTY HOLES P41-T44-6HNB (660FSL & 2442FEL, SEC.31))								0ft			
RIG (17) (RXB) to Mean Sea Level								4569ft			
Survey Program											
Start MD (ft)	End MD (ft)	Tool		Model		Log Name/Comment		Wellbore			
17.00	1600.02	BH NavTrak (superseded model)		BHI NavTrak (Rotating+Axial Cor)				STATE SEVENTY HOLES P41-T44-6HNB PWB			
1600.02	11321.98	BH AutoTrak Curve (superseded model)		BH AutoTrak Curve (Short)				STATE SEVENTY HOLES P41-T44-6HNB PWB			
Targets											
Name		MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude		
SEC.06-T4N-R62W		N/A	0.00	0.73	-59.93	3316030.65	1372684.68	40°21'3.1464"N	104°21'57.8628"W		
SEC.30-T5N-R62W		N/A	0.00	0.73	-59.93	3316030.65	1372684.68	40°21'3.1464"N	104°21'57.8628"W		
SEC.31-T5N-R62W		N/A	0.00	0.73	-59.93	3316030.65	1372684.68	40°21'3.1464"N	104°21'57.8628"W		
SEC.05-T4N-R62W		N/A	16.00	0.73	-59.93	3316030.65	1372684.68	40°21'3.1464"N	104°21'57.8628"W		
STATE SEVENTY HOLES P41-T44-6HNB BHL (270FSL & 840FEL, SEC.06)		11318.57	6259.00	-5756.31	1116.57	3317280.62	1366943.40	40°20'6.2566"N	104°21'42.6706"W		
STATE SEVENTY HOLES P41-T44-6HNB LP (470FNL & 848FEL, SEC.06)		6688.49	6259.00	-1137.35	795.96	3316900.98	1371557.69	40°20'51.9001"N	104°21'46.8086"W		





Planned Wellpath Report

STATE SEVENTY HOLES P41-T44-6HNB PWP (REV-D.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE SEVENTY HOLES P41-T44-6HNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE SEVENTY HOLES P41-T44-6HNB PWB
Slot	SLOT#11 STATE SEVENTY HOLES P41-T44-6HNB (660'FSL & 2442'FEL, SEC.31)		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 6.0
North Reference	True	User	Robiale01
Scale	0.999958	Report Generated	2/3/2020 at 11:28:13 AM
Convergence at slot	0.73° East	Database	WellArchitectDB3

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-3788.01	-1905.92	3316090.58	1372684.72	40°21'3.1392"N	104°21'57.0888"W
Facility Reference Pt			3317947.52	1376496.78	40°21'40.5720"N	104°21'32.4720"W
Field Reference Pt			3224525.77	1254425.87	40°01'44.4000"N	104°41'53.5560"W

WELLPATH DATUM			
Calculation method	Minimum curvature	RIG (17") (RKB) to Facility Vertical Datum	4569.00ft
Horizontal Reference Pt	Slot	RIG (17") (RKB) to Mean Sea Level	4569.00ft
Vertical Reference Pt	RIG (17") (RKB)	RIG (17") (RKB) to Ground Level at Slot (SLOT#11 STATE SEVENTY HOLES P41-T44-6HNB (660'FSL & 2442'FEL, SEC.31))	4569.00ft
MD Reference Pt	RIG (17") (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	169.02°



Planned Wellpath Report

STATE SEVENTY HOLES P41-T44-6HNB PWP (REV-D.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE SEVENTY HOLES P41-T44-6HNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE SEVENTY HOLES P41-T44-6HNB PWB
Slot	SLOT#11 STATE SEVENTY HOLES P41-T44-6HNB (660'FSL & 2442'FEL, SEC.31)		

WELLPATH DATA (120 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	130.367	0.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
17.00	0.000	130.367	17.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	Tie On
117.00†	0.000	130.367	117.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
217.00†	0.000	130.367	217.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
317.00†	0.000	130.367	317.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
417.00†	0.000	130.367	417.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
517.00†	0.000	130.367	517.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
617.00†	0.000	130.367	617.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
717.00†	0.000	130.367	717.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
817.00†	0.000	130.367	817.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
917.00†	0.000	130.367	917.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
1017.00†	0.000	130.367	1017.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
1117.00†	0.000	130.367	1117.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
1217.00†	0.000	130.367	1217.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
1317.00†	0.000	130.367	1317.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
1417.00†	0.000	130.367	1417.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	
1500.00	0.000	130.367	1500.00	0.00	0.00	0.00	40°21'3.1392"N	104°21'57.0888"W	0.00	End of Tangent
1517.00†	0.340	130.367	1517.00	0.04	-0.03	0.04	40°21'3.1389"N	104°21'57.0883"W	2.00	
1617.00†	2.340	130.367	1616.97	1.87	-1.55	1.82	40°21'3.1239"N	104°21'57.0653"W	2.00	
1717.00†	4.340	130.367	1716.79	6.41	-5.32	6.26	40°21'3.0866"N	104°21'57.0080"W	2.00	
1817.00†	6.340	130.367	1816.35	13.68	-11.35	13.35	40°21'3.0271"N	104°21'56.9164"W	2.00	
1917.00†	8.340	130.367	1915.53	23.66	-19.62	23.08	40°21'2.9453"N	104°21'56.7907"W	2.00	
2017.00†	10.340	130.367	2014.20	36.33	-30.13	35.45	40°21'2.8414"N	104°21'56.6310"W	2.00	
2117.00†	12.340	130.367	2112.24	51.69	-42.87	50.43	40°21'2.7156"N	104°21'56.4375"W	2.00	
2134.63	12.693	130.367	2129.45	54.67	-45.34	53.34	40°21'2.6911"N	104°21'56.3999"W	2.00	End of Build
2217.00†	12.693	130.367	2209.81	68.80	-57.06	67.13	40°21'2.5753"N	104°21'56.2218"W	0.00	
2317.00†	12.693	130.367	2307.37	85.96	-71.30	83.87	40°21'2.4347"N	104°21'56.0055"W	0.00	
2417.00†	12.693	130.367	2404.92	103.12	-85.53	100.61	40°21'2.2941"N	104°21'55.7893"W	0.00	
2517.00†	12.693	130.367	2502.48	120.28	-99.76	117.35	40°21'2.1534"N	104°21'55.5731"W	0.00	
2617.00†	12.693	130.367	2600.03	137.44	-113.99	134.09	40°21'2.0128"N	104°21'55.3569"W	0.00	



Planned Wellpath Report

STATE SEVENTY HOLES P41-T44-6HNB PWP (REV-D.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE SEVENTY HOLES P41-T44-6HNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE SEVENTY HOLES P41-T44-6HNB PWB
Slot	SLOT#11 STATE SEVENTY HOLES P41-T44-6HNB (660'FSL & 2442'FEL, SEC.31)		

WELLPATH DATA (120 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2717.00†	12.693	130.367	2697.59	154.59	-128.22	150.83	40°21'1.8722"N	104°21'55.1407"W	0.00	
2817.00†	12.693	130.367	2795.15	171.75	-142.45	167.57	40°21'1.7315"N	104°21'54.9244"W	0.00	
2917.00†	12.693	130.367	2892.70	188.91	-156.68	184.31	40°21'1.5909"N	104°21'54.7082"W	0.00	
3017.00†	12.693	130.367	2990.26	206.07	-170.91	201.06	40°21'1.4503"N	104°21'54.4920"W	0.00	
3117.00†	12.693	130.367	3087.82	223.23	-185.14	217.80	40°21'1.3097"N	104°21'54.2758"W	0.00	
3217.00†	12.693	130.367	3185.37	240.39	-199.37	234.54	40°21'1.1690"N	104°21'54.0596"W	0.00	
3317.00†	12.693	130.367	3282.93	257.55	-213.60	251.28	40°21'1.0284"N	104°21'53.8433"W	0.00	
3417.00†	12.693	130.367	3380.48	274.70	-227.84	268.02	40°21'0.8878"N	104°21'53.6271"W	0.00	
3517.00†	12.693	130.367	3478.04	291.86	-242.07	284.76	40°21'0.7472"N	104°21'53.4109"W	0.00	
3617.00†	12.693	130.367	3575.60	309.02	-256.30	301.50	40°21'0.6065"N	104°21'53.1947"W	0.00	
3717.00†	12.693	130.367	3673.15	326.18	-270.53	318.24	40°21'0.4659"N	104°21'52.9785"W	0.00	
3817.00†	12.693	130.367	3770.71	343.34	-284.76	334.98	40°21'0.3253"N	104°21'52.7622"W	0.00	
3917.00†	12.693	130.367	3868.27	360.50	-298.99	351.72	40°21'0.1846"N	104°21'52.5460"W	0.00	
4017.00†	12.693	130.367	3965.82	377.65	-313.22	368.46	40°21'0.0440"N	104°21'52.3298"W	0.00	
4117.00†	12.693	130.367	4063.38	394.81	-327.45	385.20	40°20'59.9034"N	104°21'52.1136"W	0.00	
4217.00†	12.693	130.367	4160.93	411.97	-341.68	401.94	40°20'59.7628"N	104°21'51.8974"W	0.00	
4317.00†	12.693	130.367	4258.49	429.13	-355.91	418.69	40°20'59.6221"N	104°21'51.6811"W	0.00	
4417.00†	12.693	130.367	4356.05	446.29	-370.14	435.43	40°20'59.4815"N	104°21'51.4649"W	0.00	
4517.00†	12.693	130.367	4453.60	463.45	-384.38	452.17	40°20'59.3409"N	104°21'51.2487"W	0.00	
4617.00†	12.693	130.367	4551.16	480.60	-398.61	468.91	40°20'59.2002"N	104°21'51.0325"W	0.00	
4717.00†	12.693	130.367	4648.72	497.76	-412.84	485.65	40°20'59.0596"N	104°21'50.8163"W	0.00	
4817.00†	12.693	130.367	4746.27	514.92	-427.07	502.39	40°20'58.9190"N	104°21'50.6001"W	0.00	
4917.00†	12.693	130.367	4843.83	532.08	-441.30	519.13	40°20'58.7784"N	104°21'50.3838"W	0.00	
5017.00†	12.693	130.367	4941.38	549.24	-455.53	535.87	40°20'58.6377"N	104°21'50.1676"W	0.00	
5117.00†	12.693	130.367	5038.94	566.40	-469.76	552.61	40°20'58.4971"N	104°21'49.9514"W	0.00	
5217.00†	12.693	130.367	5136.50	583.55	-483.99	569.35	40°20'58.3565"N	104°21'49.7352"W	0.00	
5317.00†	12.693	130.367	5234.05	600.71	-498.22	586.09	40°20'58.2158"N	104°21'49.5190"W	0.00	
5417.00†	12.693	130.367	5331.61	617.87	-512.45	602.83	40°20'58.0752"N	104°21'49.3028"W	0.00	
5517.00†	12.693	130.367	5429.17	635.03	-526.68	619.58	40°20'57.9346"N	104°21'49.0865"W	0.00	
5617.00†	12.693	130.367	5526.72	652.19	-540.92	636.32	40°20'57.7939"N	104°21'48.8703"W	0.00	



Planned Wellpath Report

STATE SEVENTY HOLES P41-T44-6HNB PWP (REV-D.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE SEVENTY HOLES P41-T44-6HNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE SEVENTY HOLES P41-T44-6HNB PWB
Slot	SLOT#11 STATE SEVENTY HOLES P41-T44-6HNB (660'FSL & 2442'FEL, SEC.31)		

WELLPATH DATA (120 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5717.00†	12.693	130.367	5624.28	669.35	-555.15	653.06	40°20'57.6533"N	104°21'48.6541"W	0.00	
5817.00†	12.693	130.367	5721.83	686.50	-569.38	669.80	40°20'57.5127"N	104°21'48.4379"W	0.00	
5876.83	12.693	130.367	5780.20	696.77	-577.89	679.81	40°20'57.4285"N	104°21'48.3085"W	0.00	End of Tangent
5917.00†	15.731	141.147	5819.15	705.03	-584.99	686.60	40°20'57.3584"N	104°21'48.2210"W	10.00	
6017.00†	24.524	155.353	5913.00	737.26	-614.49	703.80	40°20'57.0669"N	104°21'47.9988"W	10.00	
6117.00†	33.963	162.193	6000.18	785.29	-660.06	721.04	40°20'56.6165"N	104°21'47.7761"W	10.00	
6217.00†	43.631	166.301	6078.04	847.64	-720.33	737.79	40°20'56.0210"N	104°21'47.5597"W	10.00	
6317.00†	53.401	169.159	6144.21	922.44	-793.46	753.55	40°20'55.2983"N	104°21'47.3562"W	10.00	
6417.00†	63.224	171.367	6196.68	1007.39	-877.23	767.84	40°20'54.4705"N	104°21'47.1717"W	10.00	
6517.00†	73.076	173.220	6233.85	1099.94	-969.10	780.22	40°20'53.5627"N	104°21'47.0119"W	10.00	
6617.00†	82.942	174.887	6254.60	1197.25	-1066.27	790.32	40°20'52.6025"N	104°21'46.8815"W	10.00	
6688.49	90.000	176.029	6259.00†	1268.11	-1137.35	795.96	40°20'51.9001"N	104°21'46.8086"W	10.00	End of 3D Arc
6717.00†	90.000	176.029	6259.00	1296.41	-1165.79	797.94	40°20'51.6190"N	104°21'46.7832"W	0.00	
6817.00†	90.000	176.029	6259.00	1395.66	-1265.55	804.86	40°20'50.6332"N	104°21'46.6938"W	0.00	
6917.00†	90.000	176.029	6259.00	1494.91	-1365.31	811.78	40°20'49.6474"N	104°21'46.6044"W	0.00	
7017.00†	90.000	176.029	6259.00	1594.17	-1465.07	818.71	40°20'48.6616"N	104°21'46.5150"W	0.00	
7117.00†	90.000	176.029	6259.00	1693.42	-1564.83	825.63	40°20'47.6758"N	104°21'46.4256"W	0.00	
7217.00†	90.000	176.029	6259.00	1792.67	-1664.59	832.56	40°20'46.6900"N	104°21'46.3362"W	0.00	
7317.00†	90.000	176.029	6259.00	1891.93	-1764.35	839.48	40°20'45.7042"N	104°21'46.2468"W	0.00	
7417.00†	90.000	176.029	6259.00	1991.18	-1864.11	846.41	40°20'44.7184"N	104°21'46.1574"W	0.00	
7517.00†	90.000	176.029	6259.00	2090.43	-1963.87	853.33	40°20'43.7326"N	104°21'46.0681"W	0.00	
7617.00†	90.000	176.029	6259.00	2189.69	-2063.63	860.26	40°20'42.7468"N	104°21'45.9787"W	0.00	
7717.00†	90.000	176.029	6259.00	2288.94	-2163.39	867.18	40°20'41.7610"N	104°21'45.8893"W	0.00	
7817.00†	90.000	176.029	6259.00	2388.19	-2263.15	874.10	40°20'40.7752"N	104°21'45.7999"W	0.00	
7917.00†	90.000	176.029	6259.00	2487.44	-2362.91	881.03	40°20'39.7894"N	104°21'45.7105"W	0.00	
8017.00†	90.000	176.029	6259.00	2586.70	-2462.67	887.95	40°20'38.8036"N	104°21'45.6211"W	0.00	
8117.00†	90.000	176.029	6259.00	2685.95	-2562.43	894.88	40°20'37.8178"N	104°21'45.5318"W	0.00	
8217.00†	90.000	176.029	6259.00	2785.20	-2662.19	901.80	40°20'36.8320"N	104°21'45.4424"W	0.00	
8317.00†	90.000	176.029	6259.00	2884.46	-2761.95	908.73	40°20'35.8462"N	104°21'45.3530"W	0.00	
8417.00†	90.000	176.029	6259.00	2983.71	-2861.71	915.65	40°20'34.8604"N	104°21'45.2636"W	0.00	



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STATE SEVENTY HOLES P41-T44-6HNB PWP (REV-D.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE SEVENTY HOLES P41-T44-6HNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE SEVENTY HOLES P41-T44-6HNB PWB
Slot	SLOT#11 STATE SEVENTY HOLES P41-T44-6HNB (660'FSL & 2442'FEL, SEC.31)		

WELLPATH DATA (120 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	176.029	6259.00	3082.96	-2961.47	922.58	40°20'33.8746"N	104°21'45.1742"W	0.00	
8617.00†	90.000	176.029	6259.00	3182.22	-3061.23	929.50	40°20'32.8888"N	104°21'45.0849"W	0.00	
8717.00†	90.000	176.029	6259.00	3281.47	-3160.99	936.43	40°20'31.9030"N	104°21'44.9955"W	0.00	
8817.00†	90.000	176.029	6259.00	3380.72	-3260.75	943.35	40°20'30.9172"N	104°21'44.9061"W	0.00	
8917.00†	90.000	176.029	6259.00	3479.98	-3360.51	950.27	40°20'29.9313"N	104°21'44.8167"W	0.00	
9017.00†	90.000	176.029	6259.00	3579.23	-3460.27	957.20	40°20'28.9455"N	104°21'44.7274"W	0.00	
9117.00†	90.000	176.029	6259.00	3678.48	-3560.03	964.12	40°20'27.9597"N	104°21'44.6380"W	0.00	
9217.00†	90.000	176.029	6259.00	3777.74	-3659.79	971.05	40°20'26.9739"N	104°21'44.5486"W	0.00	
9317.00†	90.000	176.029	6259.00	3876.99	-3759.55	977.97	40°20'25.9881"N	104°21'44.4592"W	0.00	
9417.00†	90.000	176.029	6259.00	3976.24	-3859.31	984.90	40°20'25.0023"N	104°21'44.3699"W	0.00	
9517.00†	90.000	176.029	6259.00	4075.49	-3959.07	991.82	40°20'24.0165"N	104°21'44.2805"W	0.00	
9617.00†	90.000	176.029	6259.00	4174.75	-4058.83	998.75	40°20'23.0307"N	104°21'44.1911"W	0.00	
9717.00†	90.000	176.029	6259.00	4274.00	-4158.59	1005.67	40°20'22.0449"N	104°21'44.1018"W	0.00	
9817.00†	90.000	176.029	6259.00	4373.25	-4258.35	1012.59	40°20'21.0591"N	104°21'44.0124"W	0.00	
9917.00†	90.000	176.029	6259.00	4472.51	-4358.11	1019.52	40°20'20.0733"N	104°21'43.9230"W	0.00	
10017.00†	90.000	176.029	6259.00	4571.76	-4457.87	1026.44	40°20'19.0875"N	104°21'43.8337"W	0.00	
10117.00†	90.000	176.029	6259.00	4671.01	-4557.63	1033.37	40°20'18.1017"N	104°21'43.7443"W	0.00	
10217.00†	90.000	176.029	6259.00	4770.27	-4657.39	1040.29	40°20'17.1159"N	104°21'43.6549"W	0.00	
10317.00†	90.000	176.029	6259.00	4869.52	-4757.15	1047.22	40°20'16.1301"N	104°21'43.5656"W	0.00	
10417.00†	90.000	176.029	6259.00	4968.77	-4856.91	1054.14	40°20'15.1443"N	104°21'43.4762"W	0.00	
10517.00†	90.000	176.029	6259.00	5068.03	-4956.67	1061.07	40°20'14.1585"N	104°21'43.3868"W	0.00	
10617.00†	90.000	176.029	6259.00	5167.28	-5056.43	1067.99	40°20'13.1727"N	104°21'43.2975"W	0.00	
10717.00†	90.000	176.029	6259.00	5266.53	-5156.19	1074.91	40°20'12.1868"N	104°21'43.2081"W	0.00	
10817.00†	90.000	176.029	6259.00	5365.79	-5255.95	1081.84	40°20'11.2010"N	104°21'43.1187"W	0.00	
10917.00†	90.000	176.029	6259.00	5465.04	-5355.71	1088.76	40°20'10.2152"N	104°21'43.0294"W	0.00	
11017.00†	90.000	176.029	6259.00	5564.29	-5455.47	1095.69	40°20'9.2294"N	104°21'42.9400"W	0.00	
11117.00†	90.000	176.029	6259.00	5663.55	-5555.23	1102.61	40°20'8.2436"N	104°21'42.8507"W	0.00	
11217.00†	90.000	176.029	6259.00	5762.80	-5654.99	1109.54	40°20'7.2578"N	104°21'42.7613"W	0.00	
11317.00†	90.000	176.029	6259.00	5862.05	-5754.75	1116.46	40°20'6.2720"N	104°21'42.6720"W	0.00	
11318.57	90.000	176.029	6259.00 ²	5863.61	-5756.31	1116.57	40°20'6.2566"N	104°21'42.6706"W	0.00	End of Tangent

HOLE & CASING SECTIONS - Ref Wellbore: STATE SEVENTY HOLES P41-T44-6HNB PWB Ref Wellpath: STATE SEVENTY HOLES P41-T44-6HNB PWP (REV-D.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	1600.02	1583.02	17.00	1600.00	0.00	0.00	-1.13	1.33
8.5in Open Hole	1600.02	11318.57	9718.55	1600.00	6259.00	-1.13	1.33	-5756.31	1116.57

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.06-T4N-R62W	N/A	0.00	0.73	-59.93	3316030.65	1372684.68	40°21'3.1464"N	104°21'57.8628"W	polygon
	2D Polygon: dimensions not calculated								
SEC.30-T5N-R62W	N/A	0.00	0.73	-59.93	3316030.65	1372684.68	40°21'3.1464"N	104°21'57.8628"W	polygon
	2D Polygon: dimensions not calculated								
SEC.31-T5N-R62W	N/A	0.00	0.73	-59.93	3316030.65	1372684.68	40°21'3.1464"N	104°21'57.8628"W	polygon

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
	2D Polygon: dimensions not calculated								
SEC.05-T4N-R62W	N/A	16.00	0.73	-59.93	3316030.65	1372684.68	40°21'3.1464"N	104°21'57.8628"W	polygon
	2D Polygon: dimensions not calculated								
2) STATE SEVENTY HOLES P41-T44-6HNB BHL (270'FSL & 840'FEL, SEC.06)	11318.57	6259.00	-5756.31	1116.57	3317280.62	1366943.40	40°20'6.2566"N	104°21'42.6706"W	point
1) STATE SEVENTY HOLES P41-T44-6HNB LP (470'FNL & 848'FEL, SEC.06)	6688.49	6259.00	-1137.35	795.96	3316900.98	1371557.69	40°20'51.9001"N	104°21'46.8086"W	point



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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE SEVENTY HOLES P41-T44-6HNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE SEVENTY HOLES P41-T44-6HNB PWB
Slot	SLOT#11 STATE SEVENTY HOLES P41-T44-6HNB (660'FSL & 2442'FEL, SEC.31)		

SURVEY PROGRAM - Ref Wellbore: STATE SEVENTY HOLES P41-T44-6HNB PWB Ref Wellpath: STATE SEVENTY HOLES P41-T44-6HNB PWP (REV-D.0)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1600.02	BHI NaviTrak (Rotating+Axial Corr)		STATE SEVENTY HOLES P41-T44-6HNB PWB
1600.02	11321.98	BH AutoTrak Curve (Short)		STATE SEVENTY HOLES P41-T44-6HNB PWB



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STATE SEVENTY HOLES P41-T44-6HNB PWP (REV-D.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BONANZA CREEK ENERGY	Well	STATE SEVENTY HOLES P41-T44-6HNB
Field	WELD COUNTY (NAD83/TRUE)	API/Legal	
Facility	SEC.31-T05N-R62W	Wellbore	STATE SEVENTY HOLES P41-T44-6HNB PWB
Slot	SLOT#11 STATE SEVENTY HOLES P41-T44-6HNB (660'FSL & 2442'FEL, SEC.31)		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	130.367	17.00	Tie On
1500.00	0.000	130.367	1500.00	End of Tangent
2134.63	12.693	130.367	2129.45	End of Build
5876.83	12.693	130.367	5780.20	End of Tangent
6688.49	90.000	176.029	6259.00	End of 3D Arc
11318.57	90.000	176.029	6259.00	End of Tangent