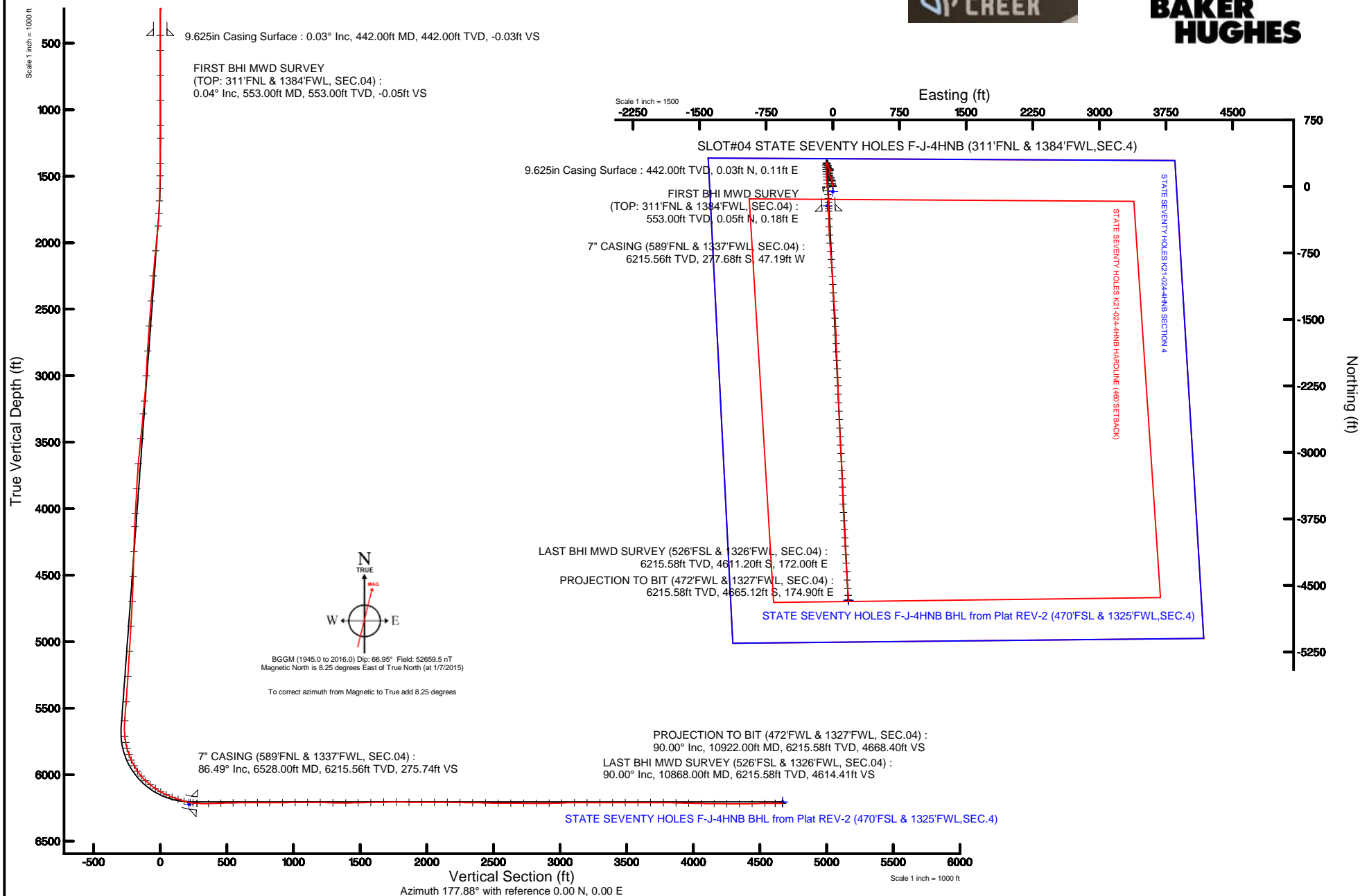


# BONANZA CREEK OIL COMPANY

Location: COLORADO Slot: SLOT#04 STATE SEVENTY HOLES F-J-4HNB (311'FNL & 1384'FWL, SEC.4)  
Field: WELD COUNTY Well: STATE SEVENTY HOLES F-J-4HNB  
Facility: SEC.04-T4N-R62W Wellbore: STATE SEVENTY HOLES F-J-4HNB PWB

Plot reference wellpath is STATE SEVENTY HOLES F-J-4HNB (REV-C.0) PWP

True vertical depths are referenced to FRONTIER 4 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to FRONTIER 4 (RKB)	North Reference: True north
FRONTIER 4 (RKB) to Mean Sea Level: 4573 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#04 STATE SEVENTY HOLES F-J-4HNB (311'FNL & 1384'FWL, SEC.4)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingnjmr on 3/27/2015





# Actual Wellpath Report

STATE SEVENTY HOLES F-J-4HNB AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#04 STATE SEVENTY HOLES F-J-4HNB (311'FNL & 1384'FWL,SEC.4)
Area	COLORADO	Well	STATE SEVENTY HOLES F-J-4HNB
Field	WELD COUNTY	Wellbore	STATE SEVENTY HOLES F-J-4HNB AWB
Facility	SEC.04-T4N-R62W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.1.1
North Reference	True	User	Ingmjmr
Scale	0.999958	Report Generated	3/27/2015 at 2:44:11 PM
Convergence at slot	0.75° East	Database/Source file	Denver/STATE_SEVENTY_HOLES_F-J-4HNB_AWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	58.29	0.00	3324450.10	1371775.86	40°20'53.088"N	104°20'09.276"W
Facility Reference Pt			3324450.87	1371717.58	40°20'52.512"N	104°20'09.276"W
Field Reference Pt			3335925.10	1457282.25	40°34'56.460"N	104°17'26.016"W

## WELLPATH DATUM

Calculation method	Minimum curvature	FRONTIER 4 (RKB) to Facility Vertical Datum	4573.00ft
Horizontal Reference Pt	Slot	FRONTIER 4 (RKB) to Mean Sea Level	4573.00ft
Vertical Reference Pt	FRONTIER 4 (RKB)	FRONTIER 4 (RKB) to Mud Line at Slot (SLOT#04 STATE SEVENTY HOLES F-J-4HNB (311'FNL & 1384'FWL,SEC.4))	4573.00ft
MD Reference Pt	FRONTIER 4 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	177.88°



# Actual Wellpath Report

## STATE SEVENTY HOLES F-J-4HNB AWP

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### REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#04 STATE SEVENTY HOLES F-J-4HNB (311'FNL & 1384'FWL,SEC.4)
Area	COLORADO	Well	STATE SEVENTY HOLES F-J-4HNB
Field	WELD COUNTY	Wellbore	STATE SEVENTY HOLES F-J-4HNB AWB
Facility	SEC.04-T4N-R62W		

### WELLPATH DATA (100 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	73.640	0.00	0.00	0.00	0.00	0.00	
22.00	0.000	73.640	22.00	0.00	0.00	0.00	0.00	
553.00	0.040	73.640	553.00	-0.05	0.05	0.18	0.01	FIRST BHI MWD SURVEY (TOP: 311'FNL & 1384'FWL, SEC.04)
741.00	0.390	150.080	741.00	0.50	-0.48	0.56	0.20	
930.00	0.320	157.100	929.99	1.57	-1.53	1.09	0.04	
1119.00	0.500	149.270	1118.99	2.78	-2.72	1.71	0.10	
1214.00	1.050	326.470	1213.99	2.41	-2.35	1.44	1.63	
1402.00	0.700	0.640	1401.96	-0.21	0.23	0.51	0.33	
1497.00	0.590	359.160	1496.96	-1.28	1.30	0.50	0.12	
1592.00	1.240	355.920	1591.95	-2.80	2.81	0.42	0.69	
1686.00	2.020	340.190	1685.91	-5.39	5.39	-0.21	0.95	
1781.00	3.120	339.940	1780.81	-9.45	9.39	-1.66	1.16	
1875.00	5.520	352.150	1874.54	-16.38	16.27	-3.16	2.72	
2063.00	5.790	350.780	2061.62	-34.79	34.59	-5.91	0.16	
2252.00	4.810	355.340	2249.81	-52.16	51.90	-8.08	0.56	
2440.00	4.740	344.990	2437.17	-67.61	67.26	-10.74	0.46	
2629.00	4.330	343.180	2625.57	-82.12	81.63	-14.82	0.23	
2818.00	3.610	339.960	2814.12	-94.69	94.05	-18.93	0.40	
3006.00	3.940	317.730	3001.72	-105.26	104.39	-25.30	0.79	
3196.00	5.880	331.470	3191.02	-118.96	117.77	-34.34	1.19	
3291.00	5.300	352.640	3285.58	-127.69	126.40	-37.23	2.24	
3479.00	6.020	352.580	3472.66	-146.16	144.79	-39.61	0.38	
3668.00	4.900	13.200	3660.82	-163.81	162.48	-39.05	1.19	
3856.00	3.340	26.960	3848.33	-176.34	175.18	-34.73	0.98	
4046.00	3.550	24.880	4037.99	-186.42	185.45	-29.75	0.13	
4141.00	2.600	335.050	4132.87	-191.03	190.07	-29.42	2.87	
4329.00	1.920	321.070	4320.72	-197.48	196.39	-33.20	0.46	
4517.00	3.800	292.220	4508.49	-202.57	201.19	-40.94	1.23	
4706.00	3.890	315.900	4697.07	-209.92	208.17	-51.20	0.84	
4894.00	3.410	13.140	4884.75	-220.06	218.19	-54.37	1.87	



# Actual Wellpath Report

## STATE SEVENTY HOLES F-J-4HNB AWP

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### REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#04 STATE SEVENTY HOLES F-J-4HNB (311'FNL & 1384'FWL,SEC.4)
Area	COLORADO	Well	STATE SEVENTY HOLES F-J-4HNB
Field	WELD COUNTY	Wellbore	STATE SEVENTY HOLES F-J-4HNB AWB
Facility	SEC.04-T4N-R62W		

### WELLPATH DATA (100 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5083.00	3.490	4.870	5073.41	-231.19	229.40	-52.61	0.27	
5272.00	3.640	341.570	5262.05	-242.66	240.82	-54.01	0.77	
5462.00	4.940	328.690	5451.52	-255.59	253.54	-60.17	0.85	
5605.00	5.230	324.280	5593.96	-266.39	264.09	-67.18	0.34	
5722.00	4.980	200.700	5710.73	-266.15	263.67	-72.10	7.69	
5769.00	11.780	190.620	5757.21	-259.59	257.03	-73.70	14.75	
5816.00	16.060	190.330	5802.81	-248.55	245.92	-75.75	9.11	
5863.00	19.300	182.110	5847.60	-234.45	231.75	-77.21	8.69	
5910.00	24.860	178.430	5891.13	-216.81	214.10	-77.22	12.18	
5957.00	29.800	177.000	5932.87	-195.24	192.55	-76.34	10.60	
6005.00	33.290	178.140	5973.78	-170.14	167.46	-75.29	7.38	
6052.00	40.050	176.640	6011.45	-142.09	139.44	-73.98	14.51	
6099.00	46.820	175.370	6045.56	-109.81	107.23	-71.71	14.52	
6146.00	51.940	174.950	6076.15	-74.19	71.69	-68.69	10.91	
6194.00	56.250	175.460	6104.29	-35.36	32.96	-65.45	9.02	
6241.00	60.220	175.420	6129.03	4.56	-6.87	-62.27	8.45	
6288.00	65.420	173.870	6150.49	46.28	-48.48	-58.36	11.45	
6335.00	69.150	176.190	6168.64	89.57	-91.66	-54.62	9.15	
6383.00	70.820	177.220	6185.07	134.66	-136.68	-52.03	4.02	
6430.00	72.850	177.960	6199.72	179.32	-181.30	-50.15	4.57	
6477.00	80.410	178.330	6210.58	225.01	-226.97	-48.67	16.10	
6498.00	84.810	178.190	6213.28	245.83	-247.78	-48.04	20.96	
6528.00†	86.489	178.545	6215.56	275.74	-277.68	-47.19	5.72	7" CASING (589'FNL & 1337'FWL, SEC.04)
6615.00	91.360	179.570	6217.19	362.68	-364.62	-45.76	5.72	
6707.00	92.090	177.470	6214.42	454.63	-456.54	-43.39	2.42	
6799.00	91.170	176.410	6211.80	546.57	-548.37	-38.48	1.53	
6891.00	89.450	175.840	6211.31	638.53	-640.16	-32.26	1.97	
6983.00	90.340	175.360	6211.48	730.45	-731.89	-25.20	1.10	
7074.00	90.060	175.650	6211.16	821.37	-822.61	-18.07	0.44	
7170.00	90.680	176.250	6210.54	917.32	-918.36	-11.29	0.90	



# Actual Wellpath Report

STATE SEVENTY HOLES F-J-4HNB AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#04 STATE SEVENTY HOLES F-J-4HNB (311'FNL & 1384'FWL,SEC.4)
Area	COLORADO	Well	STATE SEVENTY HOLES F-J-4HNB
Field	WELD COUNTY	Wellbore	STATE SEVENTY HOLES F-J-4HNB AWB
Facility	SEC.04-T4N-R62W		

## WELLPATH DATA (100 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
7266.00	90.430	176.820	6209.61	1013.28	-1014.18	-5.49	0.65	
7359.00	89.690	176.320	6209.51	1106.26	-1107.01	0.08	0.96	
7454.00	89.970	176.400	6209.79	1201.22	-1201.82	6.11	0.31	
7549.00	87.880	176.020	6211.58	1296.16	-1296.59	12.39	2.24	
7645.00	90.960	175.980	6212.55	1392.09	-1392.34	19.08	3.21	
7739.00	90.770	176.260	6211.13	1486.04	-1486.12	25.44	0.36	
7834.00	91.880	177.400	6208.93	1580.99	-1580.94	30.69	1.67	
7929.00	90.550	177.930	6206.92	1675.97	-1675.84	34.56	1.51	
8024.00	90.370	177.560	6206.15	1770.97	-1770.76	38.30	0.43	
8120.00	88.580	177.410	6207.03	1866.96	-1866.66	42.51	1.87	
8216.00	90.370	178.010	6207.91	1962.95	-1962.58	46.35	1.97	
8311.00	89.660	177.230	6207.89	2057.95	-2057.49	50.29	1.11	
8407.00	89.820	178.110	6208.32	2153.94	-2153.41	54.20	0.93	
8503.00	88.740	178.000	6209.53	2249.93	-2249.35	57.45	1.13	
8598.00	89.850	178.130	6210.70	2344.92	-2344.29	60.66	1.18	
8693.00	88.120	177.010	6212.38	2439.90	-2439.18	64.69	2.17	
8789.00	89.200	177.310	6214.63	2535.87	-2535.03	69.44	1.17	
8884.00	90.370	178.070	6214.98	2630.86	-2629.95	73.27	1.47	
8980.00	89.290	177.520	6215.27	2726.86	-2725.88	76.97	1.26	
9076.00	90.090	177.350	6215.79	2822.86	-2821.78	81.26	0.85	
9171.00	90.550	176.700	6215.26	2917.84	-2916.65	86.19	0.84	
9267.00	92.310	176.490	6212.86	3013.79	-3012.45	91.89	1.85	
9361.00	90.590	177.660	6210.48	3107.74	-3106.29	96.69	2.21	
9457.00	89.260	177.470	6210.61	3203.74	-3202.20	100.76	1.40	
9552.00	90.340	177.830	6210.94	3298.73	-3297.12	104.66	1.20	
9647.00	90.310	178.050	6210.40	3393.73	-3392.06	108.07	0.23	
9743.00	89.820	177.920	6210.29	3489.73	-3488.00	111.45	0.53	
9838.00	90.090	177.840	6210.37	3584.73	-3582.93	114.96	0.30	
9933.00	90.060	175.900	6210.24	3679.71	-3677.79	120.15	2.04	
10028.00	89.940	177.710	6210.24	3774.69	-3772.63	125.45	1.91	



# Actual Wellpath Report

## STATE SEVENTY HOLES F-J-4HNB AWP

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### REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#04 STATE SEVENTY HOLES F-J-4HNB (311'FNL & 1384'FWL,SEC.4)
Area	COLORADO	Well	STATE SEVENTY HOLES F-J-4HNB
Field	WELD COUNTY	Wellbore	STATE SEVENTY HOLES F-J-4HNB AWB
Facility	SEC.04-T4N-R62W		

### WELLPATH DATA (100 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
10124.00	88.210	177.250	6211.79	3870.67	-3868.53	129.67	1.86	
10218.00	88.580	177.070	6214.42	3964.63	-3962.37	134.32	0.44	
10314.00	88.950	177.070	6216.49	4060.60	-4058.22	139.23	0.39	
10410.00	89.540	176.810	6217.76	4156.58	-4154.08	144.35	0.67	
10505.00	89.570	176.460	6218.50	4251.55	-4248.91	149.93	0.37	
10600.00	89.690	176.070	6219.11	4346.51	-4343.71	156.12	0.43	
10695.00	91.600	176.770	6218.04	4441.47	-4438.51	162.05	2.14	
10791.00	90.740	176.560	6216.08	4537.43	-4534.33	167.63	0.92	
10868.00	90.000	176.930	6215.58	4614.41	-4611.20	172.00	1.07	LAST BHI MWD SURVEY (526'FSL & 1326'FWL, SEC.04)
10922.00	90.000	176.930	6215.58	4668.40	-4665.12	174.90	0.00	PROJECTION TO BIT (472'FWL & 1327'FWL, SEC.04)

### HOLE & CASING SECTIONS -

Ref Wellbore: STATE SEVENTY HOLES F-J-4HNB AWB      Ref Wellpath: STATE SEVENTY HOLES F-J-4HNB AWP

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	22.00	442.00	420.00	22.00	442.00	0.00	0.00	0.03	0.11
8.75in Open Hole	442.00	6540.00	6098.00	442.00	6216.22	0.03	0.11	-289.66	-46.90
7in Casing Intermediate	22.00	6528.00	6506.00	22.00	6215.56	0.00	0.00	-277.68	-47.19
6in Open Hole	6540.00	10922.00	4382.00	6216.22	6215.58	-289.66	-46.90	-4665.12	174.90



# Actual Wellpath Report

STATE SEVENTY HOLES F-J-4HNB AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#04 STATE SEVENTY HOLES F-J-4HNB (311'FNL & 1384'FWL,SEC.4)
Area	COLORADO	Well	STATE SEVENTY HOLES F-J-4HNB
Field	WELD COUNTY	Wellbore	STATE SEVENTY HOLES F-J-4HNB AWB
Facility	SEC.04-T4N-R62W		

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
STATE SEVENTY HOLES K21-024-4HNB SECTION 4	-1.00	-58.29	0.00	3324450.86	1371717.58	40°20'52.512"N	104°20'09.276"W	polygon
STATE SEVENTY HOLES F-J-4HNB BHL from Plat REV-2 (470'FSL & 1325'FWL,SEC.4)	6204.00	-4666.79	175.64	3324686.97	1367111.98	40°20'06.972"N	104°20'07.008"W	point
STATE SEVENTY HOLES F-J-4HNB BHL from Plat (470'FSL & 1325'FWL,SEC.4)	6209.00	-4666.79	175.64	3324686.97	1367111.98	40°20'06.972"N	104°20'07.008"W	point
STATE SEVENTY HOLES K21-024-4HNB HARDLINE (460'SETBACK)	6221.00	-58.29	0.00	3324450.86	1371717.58	40°20'52.512"N	104°20'09.276"W	polygon
STATE SEVENTY HOLES F-J-4HNB TARGET	6222.00	-218.59	-61.32	3324391.65	1371556.50	40°20'50.928"N	104°20'10.068"W	point

## WELLPATH COMPOSITION -

Ref Wellbore: STATE SEVENTY HOLES F-J-4HNB AWB      Ref Wellpath: STATE SEVENTY HOLES F-J-4HNB AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
22.00	6498.00	NaviTrak (MagCorr)	BHI/Navitrak MagCorr MWD 8.75" Hole <553'-6498'>	STATE SEVENTY HOLES F-J-4HNB AWB
6498.00	10868.00	NaviTrak (MagCorr)	BHI/Navitrak MWD 6.125" Hole <6615'-10868'>	STATE SEVENTY HOLES F-J-4HNB AWB
10868.00	10922.00	Blind Drilling (std)	Projection to bit	STATE SEVENTY HOLES F-J-4HNB AWB



# Actual Wellpath Report

STATE SEVENTY HOLES F-J-4HNB AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	BONANZA CREEK OIL COMPANY	Slot	SLOT#04 STATE SEVENTY HOLES F-J-4HNB (311'FNL & 1384'FWL,SEC.4)
Area	COLORADO	Well	STATE SEVENTY HOLES F-J-4HNB
Field	WELD COUNTY	Wellbore	STATE SEVENTY HOLES F-J-4HNB AWB
Facility	SEC.04-T4N-R62W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
553.00	0.040	73.640	553.00	FIRST BHI MWD SURVEY (TOP: 311'FNL & 1384'FWL, SEC.04)
6528.00	86.489	178.545	6215.56	7" CASING (589'FNL & 1337'FWL, SEC.04)
10868.00	90.000	176.930	6215.58	LAST BHI MWD SURVEY (526'FSL & 1326'FWL, SEC.04)
10922.00	90.000	176.930	6215.58	PROJECTION TO BIT (472'FWL & 1327'FWL, SEC.04)