

# BONANZA CREEK ENERGY OPERATING

Well Name: **PRONGHORN 41-11-9HZ**

Surface Location: PRONGHORN 41-11-9HZ

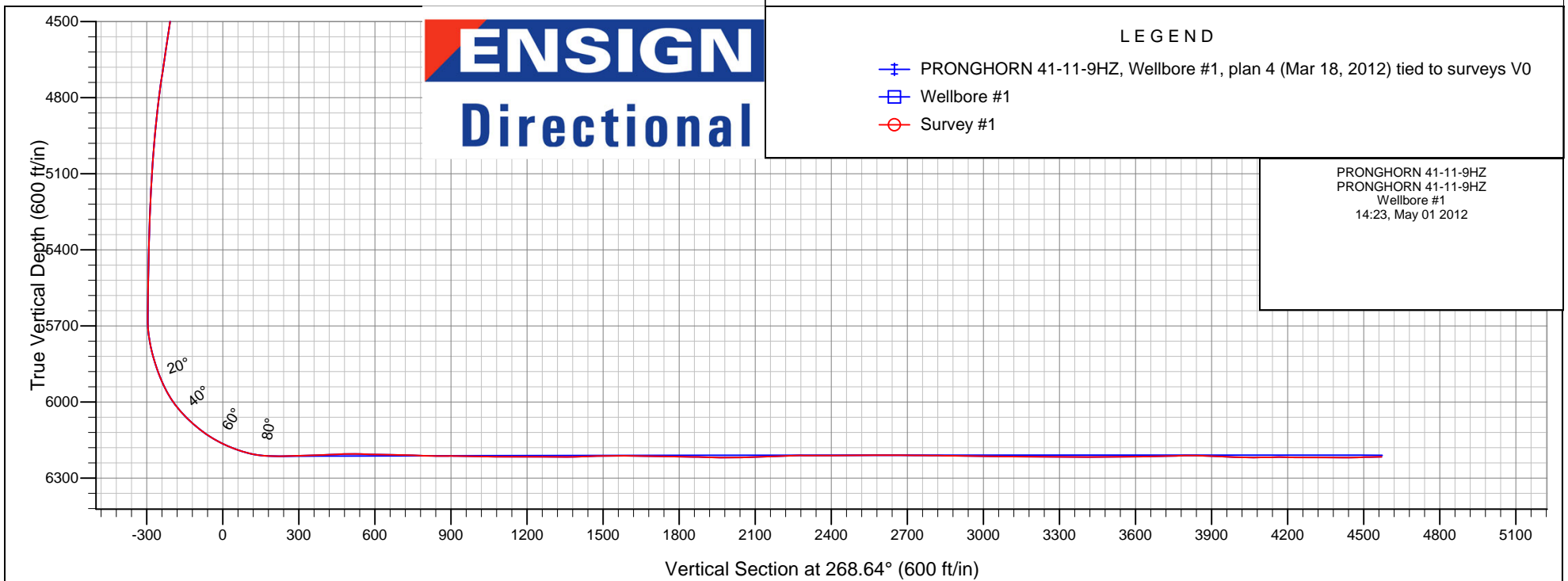
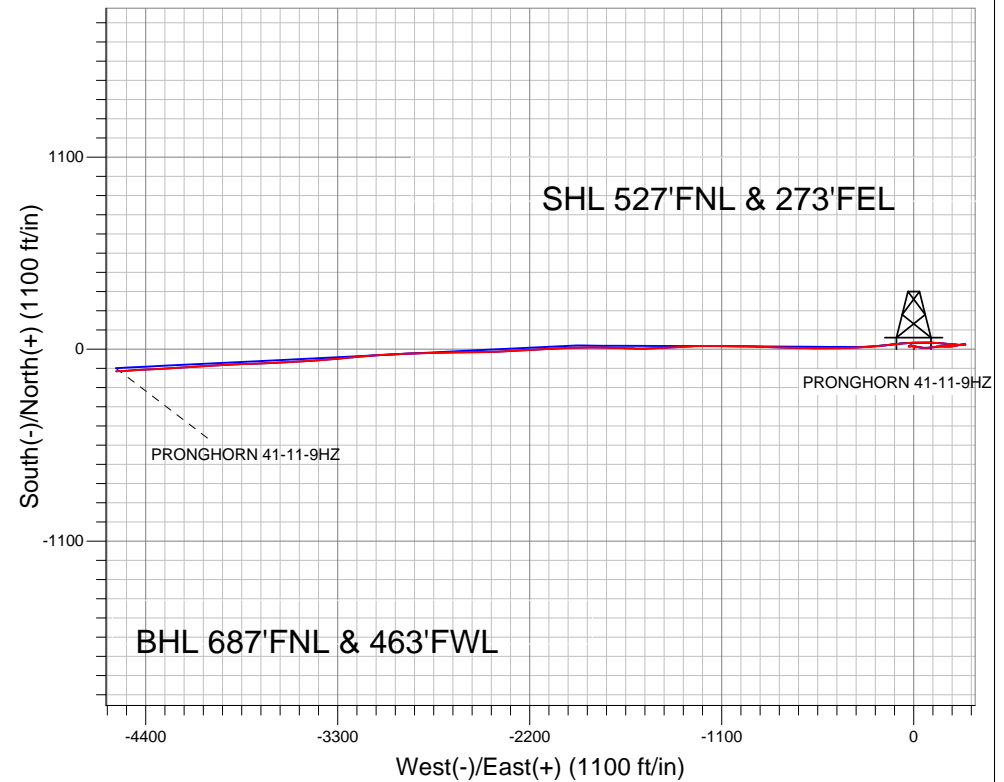
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4682.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1399037.60	3360373.68	40.421540	-104.205610	
KB ENSIGN RIG 12 - 12' RKB @ 4694.0ft (KB ENSIGN RIG 12 - 12')						

## FINAL SURVEY

Projected Bottom Hole Location  
10885' MD 6216' TVD 126'S & 4569'W of  
SHL  
91.5 degree Incl @ 266.3 degree AZM





**Directional**

# **BONANZA CREEK ENERGY OPERATING**

**SEC.9-T5N-R61W**

**PRONGHORN 41-11-9HZ**

**PRONGHORN 41-11-9HZ**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**01 May, 2012**



<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well PRONGHORN 41-11-9HZ
<b>Project:</b>	SEC.9-T5N-R61W	<b>TVD Reference:</b>	RKB @ 4694.0ft (KB ENSIGN RIG 12 - 12')
<b>Site:</b>	PRONGHORN 41-11-9HZ	<b>MD Reference:</b>	RKB @ 4694.0ft (KB ENSIGN RIG 12 - 12')
<b>Well:</b>	PRONGHORN 41-11-9HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,723.0	1.90	265.50	1,722.7	17.6	-15.3	14.9	0.24	0.16	-5.48
1,848.0	2.10	254.90	1,847.6	16.8	-19.6	19.1	0.34	0.16	-8.48
1,973.0	1.50	264.20	1,972.5	16.1	-23.4	23.0	0.53	-0.48	7.44
2,097.0	1.80	277.60	2,096.5	16.2	-26.9	26.5	0.39	0.24	10.81
2,223.0	0.30	15.70	2,222.4	16.8	-28.8	28.4	1.48	-1.19	77.86
2,348.0	0.20	74.20	2,347.4	17.1	-28.5	28.1	0.21	-0.08	46.80
2,473.0	0.20	52.80	2,472.4	17.3	-28.1	27.7	0.06	0.00	-17.12
2,598.0	0.40	54.20	2,597.4	17.7	-27.6	27.2	0.16	0.16	1.12
2,722.0	0.90	54.90	2,721.4	18.5	-26.5	26.0	0.40	0.40	0.56
2,847.0	2.20	65.80	2,846.4	20.1	-23.5	23.0	1.06	1.04	8.72
2,939.0	2.00	73.50	2,938.3	21.3	-20.3	19.8	0.38	-0.22	8.37
3,033.0	3.00	93.20	3,032.2	21.6	-16.3	15.8	1.39	1.06	20.96
3,126.0	4.20	107.20	3,125.0	20.4	-10.6	10.1	1.59	1.29	15.05
3,219.0	6.20	105.30	3,217.7	18.1	-2.5	2.1	2.16	2.15	-2.04
3,313.0	7.70	102.20	3,311.0	15.4	8.6	-8.9	1.64	1.60	-3.30
3,407.0	9.00	100.70	3,404.0	12.7	21.9	-22.2	1.40	1.38	-1.60
3,500.0	10.40	98.60	3,495.6	10.1	37.4	-37.6	1.55	1.51	-2.26
3,593.0	10.70	93.00	3,587.1	8.4	54.3	-54.5	1.15	0.32	-6.02
3,687.0	10.70	89.50	3,679.4	8.0	71.7	-71.9	0.69	0.00	-3.72
3,781.0	10.00	83.90	3,771.9	9.0	88.6	-88.8	1.30	-0.74	-5.96
3,875.0	9.90	82.50	3,864.5	10.9	104.7	-104.9	0.28	-0.11	-1.49
3,969.0	8.90	83.20	3,957.2	12.8	119.9	-120.2	1.07	-1.06	0.74
4,063.0	8.80	85.30	4,050.1	14.3	134.3	-134.6	0.36	-0.11	2.23
4,156.0	10.10	85.60	4,141.8	15.5	149.6	-149.9	1.40	1.40	0.32
4,250.0	9.70	88.30	4,234.4	16.4	165.7	-166.0	0.65	-0.43	2.87
4,344.0	9.50	95.10	4,327.1	15.9	181.3	-181.7	1.22	-0.21	7.23
4,437.0	8.20	90.70	4,419.0	15.1	195.6	-195.9	1.58	-1.40	-4.73
4,531.0	8.30	85.10	4,512.1	15.6	209.1	-209.4	0.86	0.11	-5.96
4,624.0	8.60	81.20	4,604.0	17.3	222.6	-223.0	0.70	0.32	-4.19
4,718.0	8.80	78.80	4,697.0	19.7	236.6	-237.0	0.44	0.21	-2.55
4,812.0	7.50	80.20	4,790.0	22.2	249.7	-250.2	1.40	-1.38	1.49
4,906.0	6.20	80.00	4,883.3	24.1	260.8	-261.3	1.38	-1.38	-0.21
4,999.0	4.80	80.90	4,975.9	25.6	269.6	-270.1	1.51	-1.51	0.97
5,093.0	3.70	81.40	5,069.7	26.7	276.4	-277.0	1.17	-1.17	0.53
5,186.0	3.20	78.60	5,162.5	27.6	282.0	-282.5	0.57	-0.54	-3.01
5,279.0	2.30	85.10	5,255.4	28.3	286.4	-286.9	1.02	-0.97	6.99
5,372.0	1.70	87.00	5,348.3	28.5	289.6	-290.2	0.65	-0.65	2.04
5,466.0	1.10	85.60	5,442.3	28.7	291.9	-292.5	0.64	-0.64	-1.49
5,558.0	1.10	124.50	5,534.3	28.2	293.5	-294.1	0.80	0.00	42.28
5,621.0	1.00	147.50	5,597.3	27.4	294.3	-294.9	0.68	-0.16	36.51
5,650.0	1.00	120.30	5,626.3	27.1	294.6	-295.2	1.62	0.00	-93.79
5,681.0	1.10	137.30	5,657.3	26.7	295.1	-295.6	1.05	0.32	54.84
5,711.0	1.50	231.90	5,687.2	26.3	295.0	-295.5	6.43	1.33	315.33
5,742.0	5.00	261.60	5,718.2	25.8	293.3	-293.8	12.16	11.29	95.81
5,772.0	9.00	265.50	5,748.0	25.5	289.7	-290.2	13.42	13.33	13.00
5,803.0	11.30	265.50	5,778.5	25.0	284.2	-284.7	7.42	7.42	0.00
5,835.0	14.60	269.80	5,809.7	24.8	277.1	-277.6	10.74	10.31	13.44
5,865.0	16.50	271.10	5,838.6	24.8	269.0	-269.5	6.44	6.33	4.33
5,896.0	19.40	271.30	5,868.0	25.0	259.5	-260.0	9.36	9.35	0.65
5,927.0	22.00	274.40	5,897.0	25.6	248.5	-249.1	9.10	8.39	10.00
5,958.0	24.40	275.50	5,925.5	26.7	236.4	-236.9	7.87	7.74	3.55
5,990.0	27.50	276.70	5,954.3	28.2	222.5	-223.1	9.83	9.69	3.75
6,021.0	31.70	274.60	5,981.3	29.7	207.2	-207.9	13.95	13.55	-6.77
6,052.0	36.50	274.80	6,006.9	31.1	189.9	-190.6	15.49	15.48	0.65

<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well PRONGHORN 41-11-9HZ
<b>Project:</b>	SEC.9-T5N-R61W	<b>TVD Reference:</b>	RKB @ 4694.0ft (KB ENSIGN RIG 12 - 12')
<b>Site:</b>	PRONGHORN 41-11-9HZ	<b>MD Reference:</b>	RKB @ 4694.0ft (KB ENSIGN RIG 12 - 12')
<b>Well:</b>	PRONGHORN 41-11-9HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
6,083.0	40.90	273.90	6,031.1	32.5	170.6	-171.3	14.31	14.19	-2.90	
6,115.0	44.20	275.10	6,054.7	34.2	149.0	-149.8	10.62	10.31	3.75	
6,146.0	47.00	273.70	6,076.4	35.9	126.9	-127.8	9.59	9.03	-4.52	
6,178.0	50.50	272.70	6,097.5	37.3	102.9	-103.8	11.19	10.94	-3.13	
6,208.0	52.70	270.40	6,116.1	37.9	79.4	-80.3	9.48	7.33	-7.67	
6,240.0	57.20	269.00	6,134.5	37.8	53.2	-54.1	14.51	14.06	-4.38	
6,269.0	60.80	269.00	6,149.4	37.3	28.4	-29.3	12.41	12.41	0.00	
6,301.0	64.20	269.10	6,164.2	36.9	0.0	-0.9	10.63	10.63	0.31	
6,332.0	67.20	266.90	6,176.9	35.9	-28.2	27.4	11.64	9.68	-7.10	
6,363.0	70.40	265.50	6,188.1	33.9	-57.1	56.2	11.15	10.32	-4.52	
6,395.0	74.00	264.20	6,197.9	31.2	-87.4	86.6	11.90	11.25	-4.06	
6,425.0	77.80	264.00	6,205.2	28.2	-116.3	115.6	12.68	12.67	-0.67	
6,456.0	82.90	264.00	6,210.4	25.0	-146.7	146.1	16.45	16.45	0.00	
6,492.6	87.73	264.00	6,213.4	21.2	-182.9	182.4	13.21	13.21	0.00	
Target 1 460'FNL & 460'FEL										
6,509.0	89.90	264.00	6,213.8	19.5	-199.3	198.8	13.21	13.21	0.00	
6,513.0	90.30	266.00	6,213.7	19.1	-203.3	202.8	50.99	10.00	50.00	
6,544.0	90.30	265.60	6,213.6	16.9	-234.2	233.7	1.29	0.00	-1.29	
6,575.0	90.70	265.30	6,213.3	14.4	-265.1	264.7	1.61	1.29	-0.97	
6,607.0	91.50	266.00	6,212.7	12.0	-297.0	296.6	3.32	2.50	2.19	
6,638.0	92.20	266.70	6,211.7	10.0	-327.9	327.6	3.19	2.26	2.26	
6,669.0	92.50	267.20	6,210.4	8.4	-358.9	358.5	1.88	0.97	1.61	
6,700.0	92.70	267.60	6,209.0	7.0	-389.8	389.5	1.44	0.65	1.29	
6,732.0	92.30	268.30	6,207.6	5.8	-421.7	421.5	2.52	-1.25	2.19	
6,763.0	92.20	269.00	6,206.4	5.1	-452.7	452.5	2.28	-0.32	2.26	
6,794.0	91.30	269.70	6,205.5	4.7	-483.7	483.4	3.68	-2.90	2.26	
6,826.0	89.90	271.10	6,205.1	5.0	-515.7	515.4	6.19	-4.38	4.38	
6,857.0	88.00	271.10	6,205.7	5.6	-546.7	546.4	6.13	-6.13	0.00	
6,889.0	88.40	270.90	6,206.7	6.1	-578.6	578.3	1.40	1.25	-0.63	
6,920.0	88.90	270.90	6,207.4	6.6	-609.6	609.3	1.61	1.61	0.00	
6,952.0	89.50	271.30	6,207.9	7.2	-641.6	641.3	2.25	1.88	1.25	
6,983.0	88.80	272.10	6,208.3	8.1	-672.6	672.2	3.43	-2.26	2.58	
7,014.0	88.70	271.80	6,209.0	9.2	-703.6	703.2	1.02	-0.32	-0.97	
7,045.0	88.20	271.80	6,209.9	10.2	-734.6	734.1	1.61	-1.61	0.00	
7,077.0	87.80	271.30	6,211.0	11.0	-766.5	766.0	2.00	-1.25	-1.56	
7,108.0	88.20	271.40	6,212.0	11.8	-797.5	797.0	1.33	1.29	0.32	
7,138.0	88.60	271.30	6,212.9	12.5	-827.5	826.9	1.37	1.33	-0.33	
7,169.0	90.10	271.80	6,213.2	13.3	-858.5	857.9	5.10	4.84	1.61	
7,201.0	90.70	272.00	6,213.0	14.4	-890.4	889.9	1.98	1.88	0.63	
7,232.0	88.70	271.40	6,213.2	15.3	-921.4	920.8	6.74	-6.45	-1.94	
7,263.0	88.70	271.10	6,213.9	16.0	-952.4	951.8	0.97	0.00	-0.97	
7,295.0	88.10	270.70	6,214.8	16.5	-984.4	983.7	2.25	-1.88	-1.25	
7,326.0	89.30	271.70	6,215.5	17.1	-1,015.4	1,014.7	5.04	3.87	3.23	
7,357.0	89.70	271.10	6,215.7	17.9	-1,046.4	1,045.6	2.33	1.29	-1.94	
7,388.0	90.20	270.50	6,215.8	18.3	-1,077.4	1,076.6	2.52	1.61	-1.94	
7,419.0	90.00	270.50	6,215.7	18.6	-1,108.4	1,107.6	0.65	-0.65	0.00	
7,451.0	89.80	270.00	6,215.8	18.7	-1,140.4	1,139.6	1.68	-0.63	-1.56	
7,482.0	89.50	269.70	6,216.0	18.6	-1,171.4	1,170.6	1.37	-0.97	-0.97	
7,514.0	89.90	269.10	6,216.1	18.3	-1,203.4	1,202.6	2.25	1.25	-1.88	
7,545.0	90.30	269.30	6,216.1	17.9	-1,234.4	1,233.6	1.44	1.29	0.65	
7,576.0	88.90	267.40	6,216.3	17.0	-1,265.3	1,264.6	7.61	-4.52	-6.13	
7,608.0	89.30	266.90	6,216.8	15.4	-1,297.3	1,296.6	2.00	1.25	-1.56	
7,639.0	90.20	266.90	6,216.9	13.7	-1,328.3	1,327.6	2.90	2.90	0.00	
7,670.0	90.90	267.00	6,216.6	12.1	-1,359.2	1,358.5	2.28	2.26	0.32	

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<b>Well:</b>	PRONGHORN 41-11-9HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,701.0	91.20	266.90	6,216.1	10.4	-1,390.2	1,389.5	1.02	0.97	-0.32
7,733.0	91.50	266.90	6,215.3	8.7	-1,422.1	1,421.5	0.94	0.94	0.00
7,763.0	91.30	267.60	6,214.6	7.2	-1,452.1	1,451.5	2.43	-0.67	2.33
7,794.0	91.70	267.20	6,213.8	5.8	-1,483.0	1,482.5	1.82	1.29	-1.29
7,826.0	91.20	268.30	6,213.0	4.6	-1,515.0	1,514.4	3.77	-1.56	3.44
7,857.0	90.80	269.50	6,212.4	4.0	-1,546.0	1,545.4	4.08	-1.29	3.87
7,887.0	90.20	270.20	6,212.2	3.9	-1,576.0	1,575.4	3.07	-2.00	2.33
7,918.0	89.60	271.30	6,212.2	4.3	-1,607.0	1,606.4	4.04	-1.94	3.55
7,949.0	89.20	272.00	6,212.5	5.2	-1,638.0	1,637.4	2.60	-1.29	2.26
7,981.0	89.20	272.10	6,213.0	6.3	-1,669.9	1,669.3	0.31	0.00	0.31
8,011.0	88.50	271.60	6,213.6	7.3	-1,699.9	1,699.2	2.87	-2.33	-1.67
8,043.0	88.70	271.40	6,214.4	8.2	-1,731.9	1,731.2	0.88	0.63	-0.63
8,074.0	87.70	270.20	6,215.3	8.6	-1,762.9	1,762.2	5.04	-3.23	-3.87
8,105.0	88.20	270.90	6,216.4	8.9	-1,793.8	1,793.1	2.77	1.61	2.26
8,136.0	90.00	271.60	6,216.9	9.6	-1,824.8	1,824.1	6.23	5.81	2.26
8,168.0	89.90	271.40	6,217.0	10.4	-1,856.8	1,856.0	0.70	-0.31	-0.63
8,199.0	88.60	269.30	6,217.4	10.6	-1,887.8	1,887.0	7.97	-4.19	-6.77
8,230.0	88.70	268.80	6,218.1	10.1	-1,918.8	1,918.0	1.64	0.32	-1.61
8,262.0	88.90	267.20	6,218.8	9.0	-1,950.8	1,950.0	5.04	0.63	-5.00
8,293.0	89.80	267.60	6,219.1	7.6	-1,981.7	1,981.0	3.18	2.90	1.29
8,324.0	91.10	267.90	6,218.9	6.3	-2,012.7	2,012.0	4.30	4.19	0.97
8,356.0	90.40	267.40	6,218.5	5.0	-2,044.7	2,044.0	2.69	-2.19	-1.56
8,387.0	90.60	266.90	6,218.2	3.5	-2,075.6	2,075.0	1.74	0.65	-1.61
8,418.0	91.90	266.50	6,217.5	1.7	-2,106.6	2,105.9	4.39	4.19	-1.29
8,450.0	92.50	266.20	6,216.3	-0.3	-2,138.5	2,137.9	2.10	1.88	-0.94
8,481.0	93.00	266.00	6,214.8	-2.4	-2,169.4	2,168.8	1.74	1.61	-0.65
8,512.0	92.90	266.90	6,213.2	-4.4	-2,200.3	2,199.8	2.92	-0.32	2.90
8,543.0	91.80	267.20	6,211.9	-6.0	-2,231.2	2,230.7	3.68	-3.55	0.97
8,574.0	90.80	267.40	6,211.2	-7.4	-2,262.2	2,261.7	3.29	-3.23	0.65
8,606.0	89.10	266.90	6,211.3	-9.0	-2,294.1	2,293.7	5.54	-5.31	-1.56
8,637.0	89.80	267.00	6,211.6	-10.7	-2,325.1	2,324.7	2.28	2.26	0.32
8,668.0	90.20	267.20	6,211.6	-12.2	-2,356.1	2,355.7	1.44	1.29	0.65
8,700.0	90.70	267.40	6,211.3	-13.7	-2,388.0	2,387.7	1.68	1.56	0.63
8,730.0	89.90	267.90	6,211.1	-15.0	-2,418.0	2,417.7	3.14	-2.67	1.67
8,762.0	90.10	267.70	6,211.1	-16.2	-2,450.0	2,449.7	0.88	0.63	-0.63
8,793.0	90.30	269.30	6,211.0	-17.0	-2,481.0	2,480.7	5.20	0.65	5.16
8,824.0	90.90	269.30	6,210.7	-17.4	-2,511.9	2,511.7	1.94	1.94	0.00
8,855.0	91.80	269.70	6,210.0	-17.7	-2,542.9	2,542.6	3.18	2.90	1.29
8,886.0	90.10	269.30	6,209.5	-17.9	-2,573.9	2,573.6	5.63	-5.48	-1.29
8,918.0	89.50	269.50	6,209.6	-18.3	-2,605.9	2,605.6	1.98	-1.88	0.63
8,948.0	89.00	269.00	6,210.0	-18.6	-2,635.9	2,635.6	2.36	-1.67	-1.67
8,979.0	89.30	269.50	6,210.4	-19.1	-2,666.9	2,666.6	1.88	0.97	1.61
9,011.0	90.00	269.80	6,210.6	-19.3	-2,698.9	2,698.6	2.38	2.19	0.94
9,042.0	89.50	270.20	6,210.8	-19.3	-2,729.9	2,729.6	2.07	-1.61	1.29
9,074.0	89.40	268.60	6,211.1	-19.6	-2,761.9	2,761.6	5.01	-0.31	-5.00
9,105.0	89.60	268.30	6,211.3	-20.4	-2,792.9	2,792.6	1.16	0.65	-0.97
9,136.0	89.30	268.10	6,211.6	-21.4	-2,823.9	2,823.6	1.16	-0.97	-0.65
9,168.0	89.40	267.20	6,212.0	-22.7	-2,855.9	2,855.6	2.83	0.31	-2.81
9,199.0	89.40	266.90	6,212.3	-24.3	-2,886.8	2,886.6	0.97	0.00	-0.97
9,230.0	89.80	267.20	6,212.5	-25.9	-2,917.8	2,917.6	1.61	1.29	0.97
9,261.0	89.80	267.20	6,212.7	-27.4	-2,948.7	2,948.5	0.00	0.00	0.00
9,292.0	88.90	266.90	6,213.0	-29.0	-2,979.7	2,979.5	3.06	-2.90	-0.97
9,323.0	88.70	266.70	6,213.7	-30.7	-3,010.6	3,010.5	0.91	-0.65	-0.65
9,354.0	88.90	266.30	6,214.3	-32.6	-3,041.6	3,041.5	1.44	0.65	-1.29

<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well PRONGHORN 41-11-9HZ
<b>Project:</b>	SEC.9-T5N-R61W	<b>TVD Reference:</b>	RKB @ 4694.0ft (KB ENSIGN RIG 12 - 12')
<b>Site:</b>	PRONGHORN 41-11-9HZ	<b>MD Reference:</b>	RKB @ 4694.0ft (KB ENSIGN RIG 12 - 12')
<b>Well:</b>	PRONGHORN 41-11-9HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

## Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,385.0	88.50	265.80	6,215.0	-34.8	-3,072.5	3,072.4	2.07	-1.29	-1.61
9,417.0	89.20	266.20	6,215.6	-37.0	-3,104.4	3,104.4	2.52	2.19	1.25
9,448.0	90.40	266.70	6,215.8	-38.9	-3,135.3	3,135.4	4.19	3.87	1.61
9,479.0	89.60	265.50	6,215.8	-41.0	-3,166.3	3,166.3	4.65	-2.58	-3.87
9,511.0	89.00	264.20	6,216.1	-43.9	-3,198.1	3,198.3	4.47	-1.88	-4.06
9,542.0	90.00	265.50	6,216.4	-46.7	-3,229.0	3,229.2	5.29	3.23	4.19
9,573.0	90.00	265.50	6,216.4	-49.1	-3,259.9	3,260.2	0.00	0.00	0.00
9,605.0	89.00	263.70	6,216.7	-52.1	-3,291.8	3,292.1	6.43	-3.13	-5.63
9,636.0	89.20	263.70	6,217.2	-55.5	-3,322.6	3,323.0	0.65	0.65	0.00
9,667.0	90.60	264.00	6,217.2	-58.8	-3,353.4	3,353.8	4.62	4.52	0.97
9,698.0	89.70	265.10	6,217.2	-61.8	-3,384.3	3,384.8	4.58	-2.90	3.55
9,730.0	89.50	264.90	6,217.4	-64.6	-3,416.1	3,416.7	0.88	-0.63	-0.63
9,761.0	90.20	266.20	6,217.5	-67.0	-3,447.0	3,447.7	4.76	2.26	4.19
9,793.0	90.30	266.70	6,217.3	-69.0	-3,479.0	3,479.6	1.59	0.31	1.56
9,824.0	91.00	267.90	6,217.0	-70.4	-3,509.9	3,510.6	4.48	2.26	3.87
9,856.0	90.80	267.60	6,216.5	-71.7	-3,541.9	3,542.6	1.13	-0.63	-0.94
9,887.0	90.90	267.40	6,216.0	-73.0	-3,572.9	3,573.6	0.72	0.32	-0.65
9,918.0	91.40	267.70	6,215.4	-74.4	-3,603.8	3,604.6	1.88	1.61	0.97
9,949.0	90.20	266.50	6,215.0	-75.9	-3,634.8	3,635.6	5.47	-3.87	-3.87
9,980.0	90.70	266.30	6,214.7	-77.9	-3,665.7	3,666.6	1.74	1.61	-0.65
10,012.0	91.80	267.00	6,214.0	-79.7	-3,697.7	3,698.5	4.07	3.44	2.19
10,043.0	91.20	268.30	6,213.2	-81.0	-3,728.6	3,729.5	4.62	-1.94	4.19
10,074.0	91.40	268.30	6,212.5	-81.9	-3,759.6	3,760.5	0.65	0.65	0.00
10,106.0	92.00	268.30	6,211.5	-82.9	-3,791.6	3,792.5	1.88	1.88	0.00
10,137.0	89.80	268.10	6,211.1	-83.9	-3,822.6	3,823.5	7.13	-7.10	-0.65
10,168.0	88.10	268.30	6,211.6	-84.8	-3,853.5	3,854.5	5.52	-5.48	0.65
10,198.0	87.00	267.00	6,212.9	-86.1	-3,883.5	3,884.4	5.67	-3.67	-4.33
10,230.0	86.70	267.70	6,214.7	-87.5	-3,915.4	3,916.4	2.38	-0.94	2.19
10,261.0	87.70	267.00	6,216.2	-89.0	-3,946.3	3,947.3	3.94	3.23	-2.26
10,293.0	88.10	266.70	6,217.4	-90.7	-3,978.3	3,979.3	1.56	1.25	-0.94
10,324.0	89.30	266.20	6,218.1	-92.6	-4,009.2	4,010.3	4.19	3.87	-1.61
10,355.0	89.60	265.50	6,218.4	-94.9	-4,040.1	4,041.2	2.46	0.97	-2.26
10,387.0	89.90	265.60	6,218.5	-97.4	-4,072.0	4,073.2	0.99	0.94	0.31
10,418.0	90.70	265.60	6,218.3	-99.7	-4,102.9	4,104.1	2.58	2.58	0.00
10,449.0	90.70	266.90	6,218.0	-101.8	-4,133.9	4,135.1	4.19	0.00	4.19
10,480.0	90.00	267.40	6,217.8	-103.3	-4,164.8	4,166.1	2.77	-2.26	1.61
10,510.0	88.70	265.80	6,218.1	-105.1	-4,194.8	4,196.1	6.87	-4.33	-5.33
10,541.0	89.70	266.30	6,218.5	-107.2	-4,225.7	4,227.0	3.61	3.23	1.61
10,572.0	90.80	268.30	6,218.4	-108.7	-4,256.7	4,258.0	7.36	3.55	6.45
10,603.0	89.40	267.20	6,218.3	-109.9	-4,287.6	4,289.0	5.74	-4.52	-3.55
10,635.0	88.60	266.00	6,218.9	-111.8	-4,319.6	4,321.0	4.51	-2.50	-3.75
10,666.0	89.80	266.90	6,219.3	-113.7	-4,350.5	4,352.0	4.84	3.87	2.90
10,697.0	90.00	266.90	6,219.4	-115.4	-4,381.5	4,383.0	0.65	0.65	0.00
10,729.0	90.00	266.70	6,219.4	-117.2	-4,413.4	4,414.9	0.63	0.00	-0.63
10,760.0	90.70	266.70	6,219.2	-119.0	-4,444.4	4,445.9	2.26	2.26	0.00
10,791.0	91.50	266.90	6,218.6	-120.7	-4,475.3	4,476.9	2.66	2.58	0.65
10,822.0	91.50	266.70	6,217.8	-122.4	-4,506.2	4,507.9	0.64	0.00	-0.65
10,840.0	91.50	266.30	6,217.3	-123.5	-4,524.2	4,525.9	2.22	0.00	-2.22
10,885.0	91.50	266.30	6,216.1	-126.4	-4,569.1	4,570.8	0.00	0.00	0.00

BHL 670'FNL & 460'FWL

<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well PRONGHORN 41-11-9HZ
<b>Project:</b>	SEC.9-T5N-R61W	<b>TVD Reference:</b>	RKB @ 4694.0ft (KB ENSIGN RIG 12 - 12')
<b>Site:</b>	PRONGHORN 41-11-9HZ	<b>MD Reference:</b>	RKB @ 4694.0ft (KB ENSIGN RIG 12 - 12')
<b>Well:</b>	PRONGHORN 41-11-9HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_