

# **BONANZA CREEK ENERGY INC.**

**WELD COUNTY, COLORADO (NAD 83)**

**SE SE SEC. 29 T5N R61W 6th P.M.**

**STATE PRONGHORN 43-13-29HNB**

**JOB #: 2015-008-25**

**15 April, 2015**

**Survey: FINAL SURVEYS**

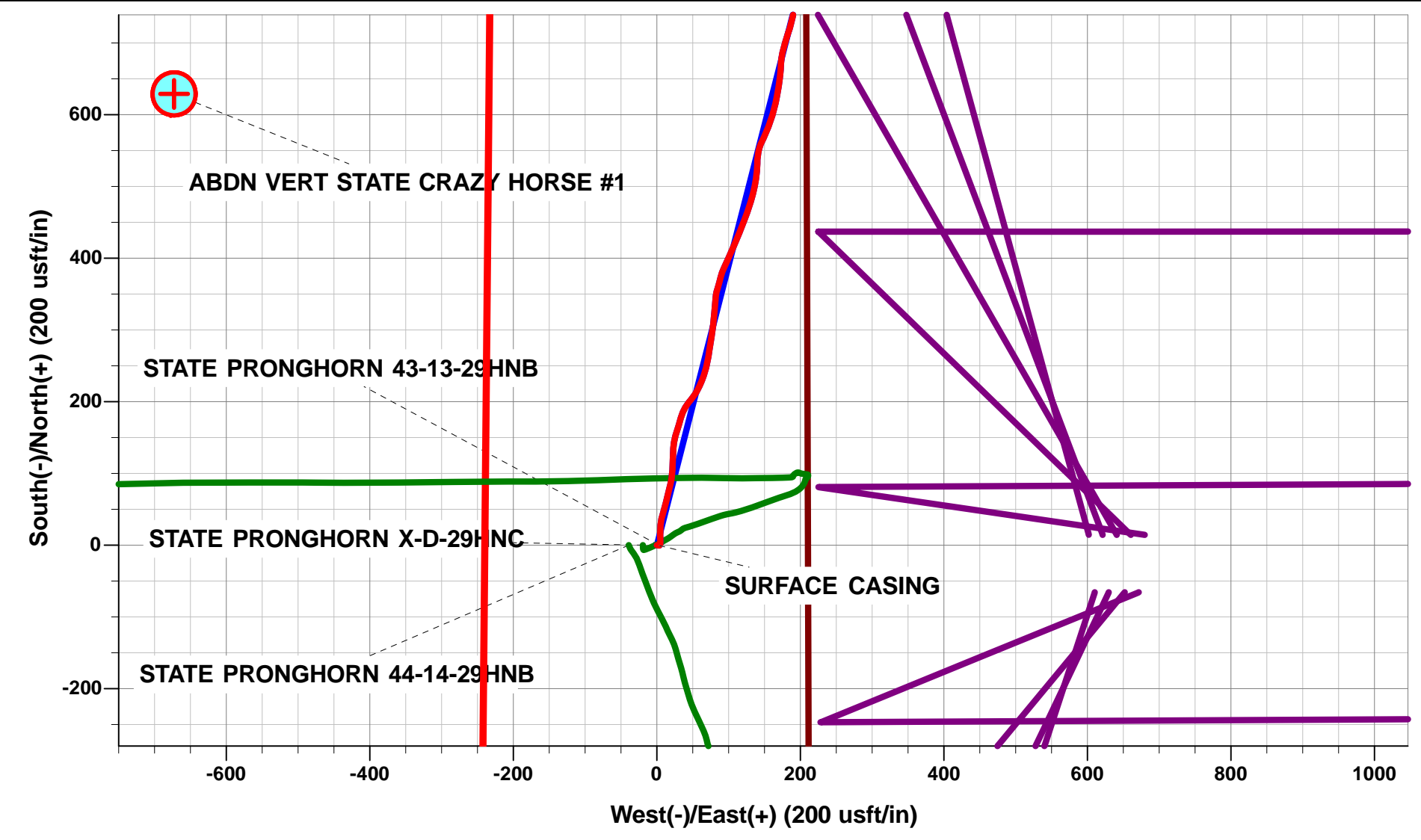




Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SE SE SEC. 29 T5N R61W 6th P.M.  
Well: STATE PRONGHORN 43-13-29HNB  
Wellbore: JOB #: 2015-008-25  
Design: FINAL SURVEYS

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation	
781.0	781.0	0.49	95.20	-0.3	3.3	-3.3	3.4	SURFACE CASING	
5527.6	5600.0	2.32	293.83	763.8	190.2	-74.7	801.2	KOP	
6010.6	6286.0	73.59	265.66	780.0	-231.0	344.3	1227.1	START OF TANGENT	
6036.2	6381.0	75.31	266.32	773.8	-322.3	433.6	1318.6	END OF TANGENT	
6050.5	6492.0	88.28	267.68	767.4	-431.9	541.0	1428.4	ICP	
6053.7	10566.0	91.30	265.40	674.3	-4503.7	4553.9	5501.8	LAST SURVEY - FEB 23, 2015	
6052.2	10629.0	91.30	265.40	669.3	-4566.5	4615.3	5564.8	EXTRAPOLATION TO TD	

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
7" ICP *NEW* - STATE PRONGHORN 43-13-29HNB (P2)	6048.0	753.2	-378.5	40.370037	-104.225708
BHL - STATE PRONGHORN 43-13-29HNB (P2)	6048.0	685.3	-4564.2	40.369850	-104.240730
KOP - STATE PRONGHORN 43-13-29HNB (P2)	5544.7	762.5	195.5	40.370063	-104.223648



Azimuths to True North  
Magnetic North: 8.08°

Magnetic Field  
Strength: 52788.6snT  
Dip Angle: 66.98°  
Date: 02/02/2015  
Model: IGRF2010

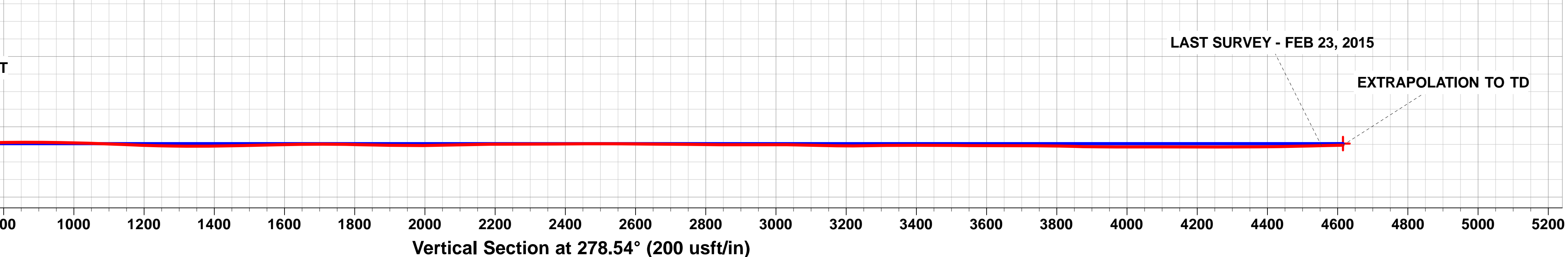
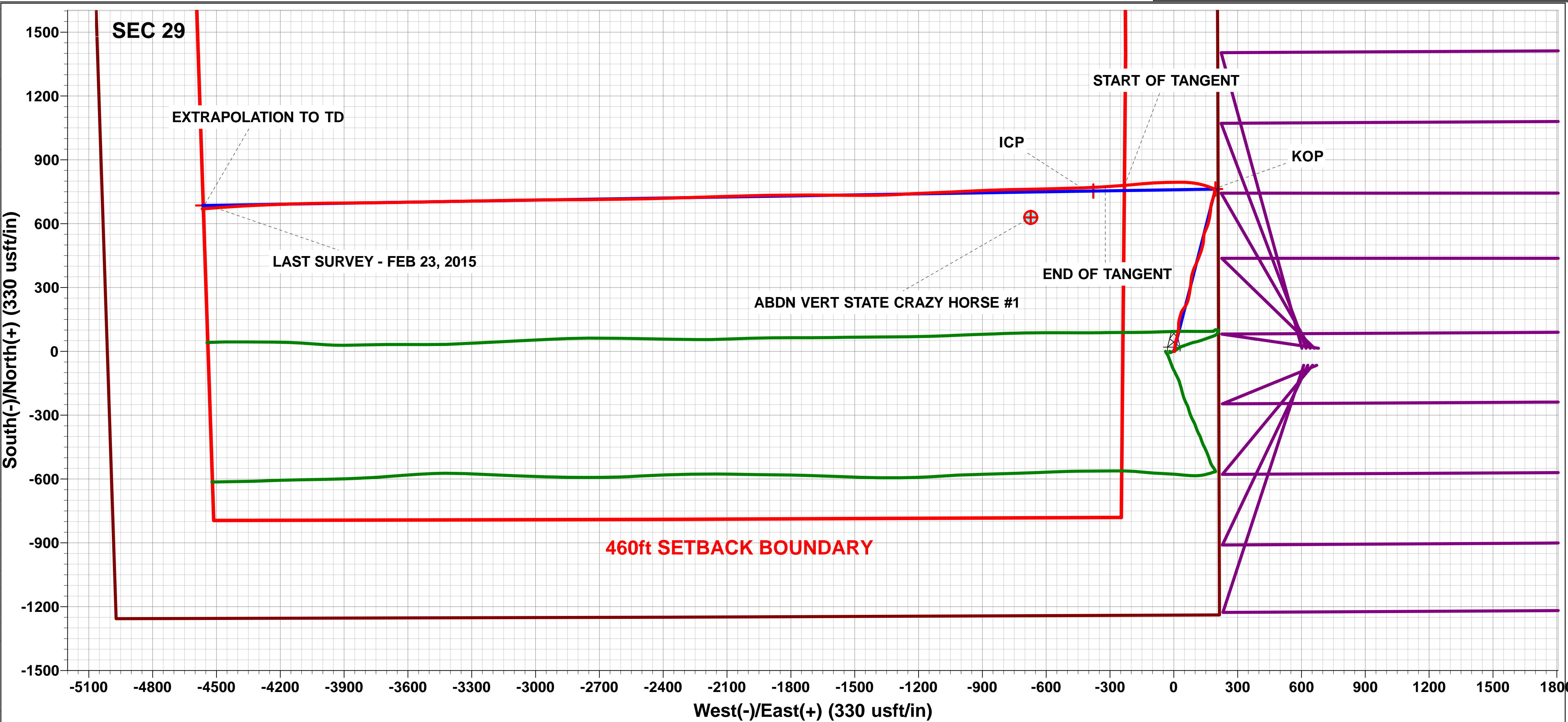
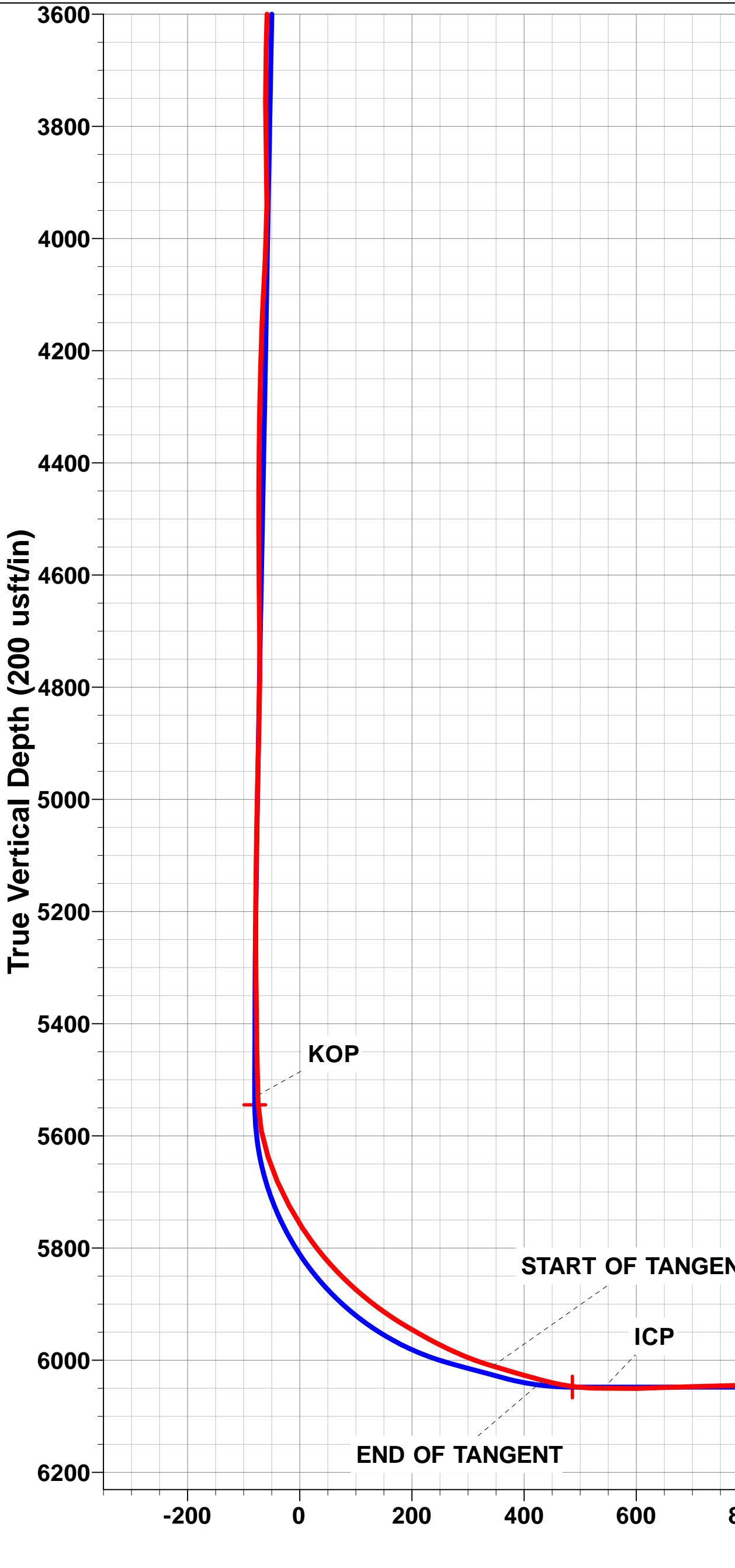
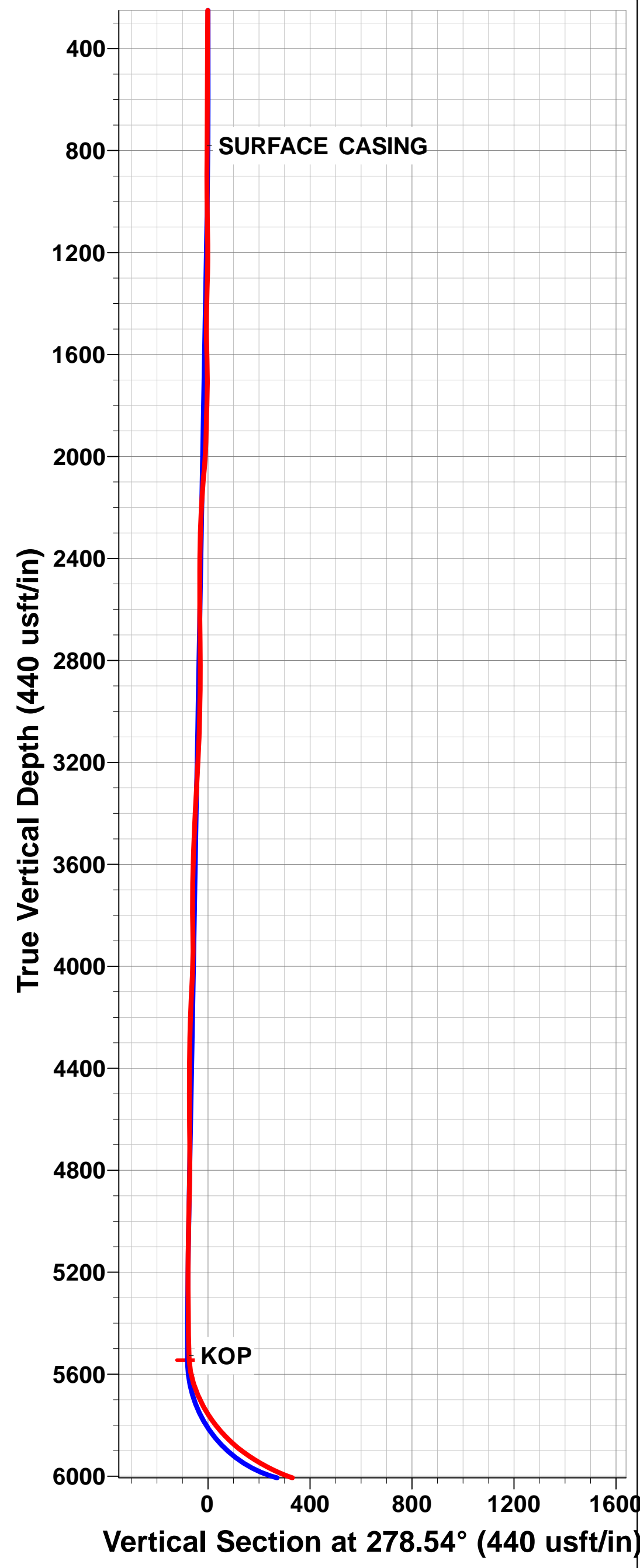
AS DRILLED LOCAL COORDINATES

SHL: 1241ft FSL & 210ft FEL of Sec 29

7" ICP: 2011ft FSL & 641ft FEL of Sec 29

TOP OF PRODUCTION: 2009ft FSL & 693ft FEL of Sec 29

BHL: 1926ft FSL & 467.7ft FWL of Sec 29



# Survey Report



<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>Local Co-ordinate Reference:</b>	Well STATE PRONGHORN 43-13-29HNB
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KB @ 4618.0usft (CADE 25)
<b>Site:</b>	SE SE SEC. 29 T5N R61W 6th P.M.	<b>MD Reference:</b>	KB @ 4618.0usft (CADE 25)
<b>Well:</b>	STATE PRONGHORN 43-13-29HNB	<b>North Reference:</b>	True
<b>Wellbore:</b>	JOB #: 2015-008-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL SURVEYS	<b>Database:</b>	EDM 5000.1 Single User Db

<b>Project</b>	WELD COUNTY, COLORADO (NAD 83)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site	SE SE SEC. 29 T5N R61W 6th P.M.				
Site Position:		Northing:	1,379,448.09 usft	Latitude:	40.367970
From:	Lat/Long	Easting:	3,355,398.33 usft	Longitude:	-104.224490
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft	Grid Convergence:	0.82 °

Well	STATE PRONGHORN 43-13-29HNB					
Well Position	+N/-S	0.0 usft	Northing:	1,379,448.63 usft	Latitude:	40.367970
	+E/-W	0.0 usft	Easting:	3,355,437.33 usft	Longitude:	-104.224350
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	4,601.0 usft

<b>Wellbore</b>	JOB #: 2015-008-25				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	02/02/2015	8.08	66.98	52,789

<b>Design</b>	FINAL SURVEYS				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	278.54	

<b>Survey Program</b>	<b>Date</b>	15/04/2015			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
803.0	10,629.0	FINAL SURVEYS (JOB #: 2015-008-25)	MWD	MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>Subsea Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>
0.0	0.00	0.00	0.0	4,618.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>SURFACE CASING</b>										
781.0	0.49	95.20	781.0	3,837.0	-0.3	3.3	-3.3	0.06	0.06	0.00
803.0	0.50	95.20	803.0	3,815.0	-0.3	3.5	-3.5	0.06	0.06	0.00
894.0	1.90	23.50	894.0	3,724.0	1.0	4.5	-4.3	1.99	1.54	-78.79
985.0	4.20	356.20	984.8	3,633.2	5.7	4.9	-4.0	2.92	2.53	-30.00
1,078.0	6.40	359.60	1,077.4	3,540.6	14.3	4.6	-2.4	2.39	2.37	3.66
1,171.0	8.50	4.00	1,169.6	3,448.4	26.4	5.0	-1.1	2.34	2.26	4.73
1,262.0	10.40	14.80	1,259.4	3,358.6	41.0	7.6	-1.4	2.85	2.09	11.87
1,354.0	13.90	15.60	1,349.3	3,268.7	59.7	12.7	-3.7	3.81	3.80	0.87
1,446.0	13.60	12.30	1,438.7	3,179.3	80.9	18.0	-5.8	0.91	-0.33	-3.59
1,538.0	13.40	6.20	1,528.2	3,089.8	102.1	21.4	-6.0	1.56	-0.22	-6.63
1,630.0	13.20	359.30	1,617.7	3,000.3	123.2	22.5	-3.9	1.74	-0.22	-7.50

# Survey Report



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<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KB @ 4618.0usft (CADE 25)
<b>Site:</b>	SE SE SEC. 29 T5N R61W 6th P.M.	<b>MD Reference:</b>	KB @ 4618.0usft (CADE 25)
<b>Well:</b>	STATE PRONGHORN 43-13-29HNB	<b>North Reference:</b>	True
<b>Wellbore:</b>	JOB #: 2015-008-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL SURVEYS	<b>Database:</b>	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,723.0	12.00	9.70	1,708.5	2,909.5	143.3	24.0	-2.4	2.75	-1.29	11.18
1,815.0	11.60	19.10	1,798.5	2,819.5	161.5	28.6	-4.3	2.13	-0.43	10.22
1,908.0	9.40	14.70	1,890.0	2,728.0	177.7	33.6	-6.8	2.52	-2.37	-4.73
2,003.0	8.00	30.80	1,983.9	2,634.1	190.9	38.9	-10.2	2.94	-1.47	16.95
2,097.0	10.10	39.60	2,076.7	2,541.3	202.8	47.6	-16.9	2.67	2.23	9.36
2,191.0	10.90	28.30	2,169.2	2,448.8	217.0	57.0	-24.2	2.35	0.85	-12.02
2,287.0	11.90	19.10	2,263.3	2,354.7	234.4	64.6	-29.0	2.16	1.04	-9.58
2,382.0	11.10	12.20	2,356.4	2,261.6	252.6	69.7	-31.4	1.67	-0.84	-7.26
2,477.0	11.70	8.90	2,449.5	2,168.5	271.0	73.1	-32.1	0.93	0.63	-3.47
2,572.0	11.30	9.10	2,542.6	2,075.4	289.7	76.1	-32.2	0.42	-0.42	0.21
2,666.0	10.50	6.50	2,634.9	1,983.1	307.3	78.5	-32.0	1.00	-0.85	-2.77
2,761.0	10.20	5.90	2,728.3	1,889.7	324.3	80.4	-31.3	0.34	-0.32	-0.63
2,856.0	10.90	3.50	2,821.7	1,796.3	341.6	81.8	-30.1	0.87	0.74	-2.53
2,952.0	9.90	17.60	2,916.2	1,701.8	358.5	84.8	-30.6	2.84	-1.04	14.69
3,047.0	8.60	13.50	3,009.9	1,608.1	373.2	88.9	-32.5	1.53	-1.37	-4.32
3,142.0	9.10	24.60	3,103.8	1,514.2	387.0	93.7	-35.2	1.87	0.53	11.68
3,237.0	10.80	24.50	3,197.4	1,420.6	401.9	100.6	-39.8	1.79	1.79	-0.11
3,333.0	11.20	23.40	3,291.6	1,326.4	418.7	108.0	-44.6	0.47	0.42	-1.15
3,427.0	11.40	22.30	3,383.8	1,234.2	435.6	115.1	-49.2	0.31	0.21	-1.17
3,522.0	12.10	20.60	3,476.8	1,141.2	453.6	122.2	-53.5	0.82	0.74	-1.79
3,618.0	12.20	17.80	3,570.7	1,047.3	472.7	128.8	-57.2	0.62	0.10	-2.92
3,713.0	11.90	14.30	3,663.6	954.4	491.8	134.3	-59.8	0.83	-0.32	-3.68
3,807.0	11.30	9.10	3,755.6	862.4	510.2	138.2	-60.9	1.28	-0.64	-5.53
3,901.0	11.10	0.50	3,847.9	770.1	528.4	139.7	-59.7	1.79	-0.21	-9.15
3,996.0	10.80	9.20	3,941.1	676.9	546.3	141.2	-58.5	1.77	-0.32	9.16
4,091.0	10.90	25.60	4,034.5	583.5	563.2	146.5	-61.3	3.24	0.11	17.26
4,187.0	10.60	23.20	4,128.8	489.2	579.5	153.9	-66.2	0.56	-0.31	-2.50
4,282.0	10.10	16.90	4,222.2	395.8	595.5	159.8	-69.6	1.30	-0.53	-6.63
4,377.0	9.10	14.00	4,315.9	302.1	610.8	164.0	-71.5	1.17	-1.05	-3.05
4,473.0	8.80	11.10	4,410.7	207.3	625.3	167.3	-72.6	0.56	-0.31	-3.02
4,567.0	8.50	8.30	4,503.7	114.3	639.3	169.7	-72.9	0.55	-0.32	-2.98
4,662.0	10.20	7.00	4,597.4	20.6	654.6	171.7	-72.6	1.80	1.79	-1.37
4,757.0	9.60	1.80	4,691.0	-73.0	670.8	173.0	-71.4	1.13	-0.63	-5.47
4,853.0	9.30	13.60	4,785.7	-167.7	686.4	175.1	-71.2	2.04	-0.31	12.29
4,949.0	8.70	15.90	4,880.5	-262.5	700.9	178.9	-72.8	0.73	-0.62	2.40
5,044.0	8.40	19.50	4,974.5	-356.5	714.4	183.1	-75.0	0.65	-0.32	3.79
5,138.0	6.90	13.90	5,067.6	-449.6	726.3	186.8	-76.9	1.78	-1.60	-5.96
5,233.0	7.30	13.10	5,161.9	-543.9	737.7	189.5	-77.9	0.43	0.42	-0.84
5,329.0	6.20	9.10	5,257.2	-639.2	748.8	191.7	-78.4	1.25	-1.15	-4.17
5,424.0	4.70	353.30	5,351.8	-733.8	757.7	192.1	-77.5	2.22	-1.58	-16.63
5,520.0	1.00	3.40	5,447.7	-829.7	762.5	191.7	-76.3	3.87	-3.85	10.52
<b>KOP</b>										
5,600.0	2.32	293.83	5,527.6	-909.6	763.8	190.2	-74.7	2.73	1.66	-86.96
5,615.0	2.70	290.10	5,542.6	-924.6	764.1	189.6	-74.1	2.73	2.51	-24.89
5,663.0	11.00	286.00	5,590.2	-972.2	765.7	184.2	-68.4	17.31	17.29	-8.54
5,711.0	18.00	293.50	5,636.7	-1,018.7	769.9	172.9	-56.7	15.07	14.58	15.62
5,759.0	23.90	287.80	5,681.5	-1,063.5	775.9	156.9	-39.9	12.99	12.29	-11.87
5,807.0	28.70	286.00	5,724.5	-1,106.5	782.0	136.5	-18.9	10.14	10.00	-3.75
5,855.0	33.50	281.10	5,765.6	-1,147.6	787.8	112.4	5.8	11.30	10.00	-10.21
5,901.0	38.10	276.10	5,802.9	-1,184.9	791.7	85.8	32.7	11.84	10.00	-10.87
5,949.0	43.90	273.80	5,839.1	-1,221.1	794.4	54.5	64.1	12.48	12.08	-4.79
5,996.0	48.10	268.60	5,871.8	-1,253.8	795.0	20.7	97.6	11.96	8.94	-11.06
6,044.0	53.50	268.10	5,902.1	-1,284.1	794.0	-16.5	134.2	11.28	11.25	-1.04

## Survey Report



<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>Local Co-ordinate Reference:</b>	Well STATE PRONGHORN 43-13-29HNB
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KB @ 4618.0usft (CADE 25)
<b>Site:</b>	SE SE SEC. 29 T5N R61W 6th P.M.	<b>MD Reference:</b>	KB @ 4618.0usft (CADE 25)
<b>Well:</b>	STATE PRONGHORN 43-13-29HNB	<b>North Reference:</b>	True
<b>Wellbore:</b>	JOB #: 2015-008-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL SURVEYS	<b>Database:</b>	EDM 5000.1 Single User Db

## Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,091.0	58.20	268.00	5,928.5	-1,310.5	792.6	-55.3	172.4	10.00	10.00	-0.21
6,139.0	60.80	267.70	5,952.8	-1,334.8	791.1	-96.7	213.0	5.44	5.42	-0.62
6,186.0	64.20	264.60	5,974.5	-1,356.5	788.3	-138.2	253.8	9.30	7.23	-6.60
6,234.0	68.40	264.60	5,993.8	-1,375.8	784.1	-182.0	296.4	8.75	8.75	0.00
6,281.0	73.50	265.60	6,009.2	-1,391.2	780.4	-226.2	339.6	11.04	10.85	2.13
<b>START OF TANGENT</b>										
<b>6,286.0</b>	<b>73.59</b>	<b>265.66</b>	<b>6,010.6</b>	<b>-1,392.6</b>	<b>780.0</b>	<b>-231.0</b>	<b>344.3</b>	<b>2.23</b>	<b>1.87</b>	<b>1.26</b>
6,329.0	74.40	266.20	6,022.4	-1,404.4	777.1	-272.2	384.6	2.23	1.88	1.25
6,377.0	74.80	266.30	6,035.2	-1,417.2	774.0	-318.4	429.8	0.86	0.83	0.21
<b>END OF TANGENT</b>										
<b>6,381.0</b>	<b>75.31</b>	<b>266.32</b>	<b>6,036.2</b>	<b>-1,418.2</b>	<b>773.8</b>	<b>-322.3</b>	<b>433.6</b>	<b>12.71</b>	<b>12.71</b>	<b>0.43</b>
6,425.0	80.90	266.50	6,045.3	-1,427.3	771.1	-365.2	475.7	12.71	12.71	0.42
6,451.0	85.60	266.50	6,048.3	-1,430.3	769.5	-391.0	500.9	18.08	18.08	0.00
<b>ICP</b>										
<b>6,492.0</b>	<b>88.28</b>	<b>267.68</b>	<b>6,050.5</b>	<b>-1,432.5</b>	<b>767.4</b>	<b>-431.9</b>	<b>541.0</b>	<b>7.14</b>	<b>6.53</b>	<b>2.88</b>
6,552.0	92.20	269.40	6,050.3	-1,432.3	765.9	-491.8	600.1	7.14	6.54	2.87
6,645.0	91.50	268.10	6,047.3	-1,429.3	763.9	-584.8	691.7	1.59	-0.75	-1.40
6,737.0	91.10	269.20	6,045.2	-1,427.2	761.7	-676.7	782.3	1.27	-0.43	1.20
6,829.0	90.00	268.80	6,044.3	-1,426.3	760.1	-768.7	873.0	1.27	-1.20	-0.43
6,921.0	89.10	267.60	6,045.0	-1,427.0	757.2	-860.6	963.5	1.63	-0.98	-1.30
7,014.0	88.10	267.30	6,047.3	-1,429.3	753.1	-953.5	1,054.8	1.12	-1.08	-0.32
7,109.0	87.60	267.60	6,050.9	-1,432.9	748.9	-1,048.4	1,147.9	0.61	-0.53	0.32
7,204.0	88.60	267.20	6,054.0	-1,436.0	744.5	-1,143.2	1,241.1	1.13	1.05	-0.42
7,300.0	89.90	267.50	6,055.3	-1,437.3	740.1	-1,239.1	1,335.3	1.39	1.35	0.31
7,395.0	91.10	267.10	6,054.4	-1,436.4	735.6	-1,334.0	1,428.4	1.33	1.26	-0.42
7,491.0	91.50	269.50	6,052.3	-1,434.3	732.8	-1,429.9	1,522.9	2.53	0.42	2.50
7,586.0	90.90	270.80	6,050.3	-1,432.3	733.0	-1,524.9	1,616.8	1.51	-0.63	1.37
7,682.0	89.70	270.70	6,049.8	-1,431.8	734.3	-1,620.9	1,711.9	1.25	-1.25	-0.10
7,778.0	89.00	269.60	6,050.9	-1,432.9	734.5	-1,716.9	1,806.9	1.36	-0.73	-1.15
7,873.0	88.80	269.70	6,052.7	-1,434.7	734.0	-1,811.9	1,900.8	0.24	-0.21	0.11
7,969.0	90.50	268.90	6,053.3	-1,435.3	732.8	-1,907.8	1,995.5	1.96	1.77	-0.83
8,065.0	91.60	268.50	6,051.5	-1,433.5	730.6	-2,003.8	2,090.1	1.22	1.15	-0.42
8,161.0	90.60	268.50	6,049.7	-1,431.7	728.1	-2,099.7	2,184.6	1.04	-1.04	0.00
8,256.0	89.80	268.40	6,049.3	-1,431.3	725.5	-2,194.7	2,278.1	0.85	-0.84	-0.11
8,352.0	90.50	268.00	6,049.1	-1,431.1	722.5	-2,290.7	2,372.6	0.84	0.73	-0.42
8,447.0	90.40	268.00	6,048.3	-1,430.3	719.2	-2,385.6	2,465.9	0.11	-0.11	0.00
8,542.0	89.30	269.00	6,048.6	-1,430.6	716.7	-2,480.6	2,559.5	1.56	-1.16	1.05
8,637.0	89.90	269.10	6,049.3	-1,431.3	715.1	-2,575.5	2,653.2	0.64	0.63	0.11
8,733.0	89.20	269.20	6,050.0	-1,432.0	713.7	-2,671.5	2,747.9	0.74	-0.73	0.10
8,828.0	89.40	269.40	6,051.2	-1,433.2	712.5	-2,766.5	2,841.7	0.30	0.21	0.21
8,924.0	90.80	270.40	6,051.0	-1,433.0	712.4	-2,862.5	2,936.6	1.79	1.46	1.04
9,019.0	89.10	269.20	6,051.1	-1,433.1	712.1	-2,957.5	3,030.5	2.19	-1.79	-1.26
9,115.0	88.40	268.90	6,053.2	-1,435.2	710.5	-3,053.5	3,125.1	0.79	-0.73	-0.31
9,211.0	90.30	269.00	6,054.3	-1,436.3	708.7	-3,149.4	3,219.8	1.98	1.98	0.10
9,306.0	91.10	269.10	6,053.1	-1,435.1	707.1	-3,244.4	3,313.5	0.85	0.84	0.11
9,402.0	89.50	268.90	6,052.6	-1,434.6	705.5	-3,340.4	3,408.1	1.68	-1.67	-0.21
9,498.0	89.90	268.90	6,053.1	-1,435.1	703.6	-3,436.4	3,502.8	0.42	0.42	0.00
9,592.0	89.40	268.80	6,053.7	-1,435.7	701.7	-3,530.4	3,595.4	0.54	-0.53	-0.11
9,687.0	90.40	269.30	6,053.8	-1,435.8	700.1	-3,625.3	3,689.1	1.18	1.05	0.53
9,780.0	88.80	269.30	6,054.5	-1,436.5	699.0	-3,718.3	3,780.9	1.72	-1.72	0.00
9,875.0	88.80	269.20	6,056.5	-1,438.5	697.8	-3,813.3	3,874.6	0.11	0.00	-0.11
9,970.0	90.30	269.90	6,057.2	-1,439.2	697.0	-3,908.3	3,968.5	1.74	1.58	0.74
10,065.0	89.70	268.90	6,057.2	-1,439.2	696.0	-4,003.3	4,062.3	1.23	-0.63	-1.05



# Survey Report



<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>Local Co-ordinate Reference:</b>	Well STATE PRONGHORN 43-13-29HNB
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KB @ 4618.0usft (CADE 25)
<b>Site:</b>	SE SE SEC. 29 T5N R61W 6th P.M.	<b>MD Reference:</b>	KB @ 4618.0usft (CADE 25)
<b>Well:</b>	STATE PRONGHORN 43-13-29HNB	<b>North Reference:</b>	True
<b>Wellbore:</b>	JOB #: 2015-008-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL SURVEYS	<b>Database:</b>	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,160.0	90.10	268.60	6,057.4	-1,439.4	694.0	-4,098.3	4,155.9	0.53	0.42	-0.32
10,256.0	90.00	267.70	6,057.3	-1,439.3	690.9	-4,194.2	4,250.3	0.94	-0.10	-0.94
10,350.0	90.00	267.60	6,057.3	-1,439.3	687.0	-4,288.1	4,342.6	0.11	0.00	-0.11
10,445.0	91.20	267.00	6,056.3	-1,438.3	682.5	-4,383.0	4,435.8	1.41	1.26	-0.63
10,539.0	91.30	265.60	6,054.3	-1,436.3	676.5	-4,476.8	4,527.6	1.49	0.11	-1.49
<b>LAST SURVEY - FEB 23, 2015</b>										
10,566.0	91.30	265.40	6,053.7	-1,435.7	674.3	-4,503.7	4,553.9	0.74	0.00	-0.74
<b>EXTRAPOLATION TO TD</b>										
10,629.0	91.30	265.40	6,052.2	-1,434.2	669.3	-4,566.5	4,615.3	0.00	0.00	0.00

## Survey Report



<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>Local Co-ordinate Reference:</b>	Well STATE PRONGHORN 43-13-29HNB
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KB @ 4618.0usft (CADE 25)
<b>Site:</b>	SE SE SEC. 29 T5N R61W 6th P.M.	<b>MD Reference:</b>	KB @ 4618.0usft (CADE 25)
<b>Well:</b>	STATE PRONGHORN 43-13-29HNB	<b>North Reference:</b>	True
<b>Wellbore:</b>	JOB #: 2015-008-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL SURVEYS	<b>Database:</b>	EDM 5000.1 Single User Db

Targets									
Target Name	- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	
- Shape		(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	Latitude Longitude
7" ICP *NEW* - STAT		0.00	0.00	6,053.0	753.2	-378.5	1,380,196.29	3,355,048.04	40.370037 -104.225708
- survey misses target center by 18.0usft at 6440.2usft MD (6047.3 TVD, 770.2 N, -380.2 E)									
- Point									
BHL - STATE PRONGHORN		0.00	0.00	6,048.0	685.3	-4,564.2	1,380,068.22	3,350,863.92	40.369850 -104.240730
- survey misses target center by 16.4usft at 10625.5usft MD (6052.3 TVD, 669.6 N, -4563.0 E)									
- Point									
ABDN VERT STATE PRONGHORN		0.00	0.00	7,018.0	629.2	-672.7	1,380,068.05	3,354,755.73	40.369697 -104.226764
- survey misses target center by 981.6usft at 6714.0usft MD (6045.7 TVD, 762.1 N, -653.7 E)									
- Circle (radius 30.0)									
KOP - STATE PRONGHORN		0.00	0.00	5,544.7	762.5	195.5	1,380,213.85	3,355,621.82	40.370063 -104.223648
- survey misses target center by 6.2usft at 5616.3usft MD (5544.0 TVD, 764.1 N, 189.6 E)									
- Point									
7" ICP *NEW* - STAT		0.00	0.00	6,048.0	753.2	-378.5	1,380,196.29	3,355,048.04	40.370037 -104.225708
- survey misses target center by 17.0usft at 6439.6usft MD (6047.3 TVD, 770.2 N, -379.6 E)									
- Point									
BHL - STATE PRONGHORN		0.00	0.00	6,053.0	685.3	-4,564.2	1,380,068.22	3,350,863.92	40.369850 -104.240730
- survey misses target center by 15.8usft at 10625.4usft MD (6052.3 TVD, 669.6 N, -4562.9 E)									
- Point									
KOP - STATE PRONGHORN		0.00	0.00	5,549.7	762.5	195.5	1,380,213.85	3,355,621.82	40.370063 -104.223648
- survey misses target center by 6.5usft at 5621.3usft MD (5548.9 TVD, 764.2 N, 189.3 E)									
- Point									

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
781.0	781.0	-0.3	3.3	SURFACE CASING
5,600.0	5,527.6	763.8	190.2	KOP
6,286.0	6,010.6	780.0	-231.0	START OF TANGENT
6,381.0	6,036.2	773.8	-322.3	END OF TANGENT
6,492.0	6,050.5	767.4	-431.9	ICP
10,566.0	6,053.7	674.3	-4,503.7	LAST SURVEY - FEB 23, 2015
10,629.0	6,052.2	669.3	-4,566.5	EXTRAPOLATION TO TD

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