

# **BONANZA CREEK ENERGY INC.**

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

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

**STATE PRONGHORN X-D-29HNC**

**JOB # 2015-007-25**

**15 April, 2015**

**Survey: FINAL SURVEYS**





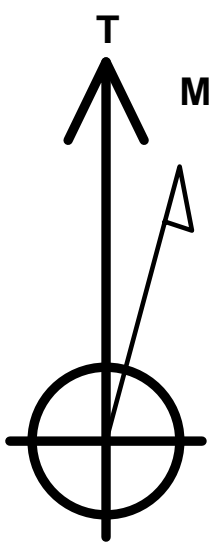
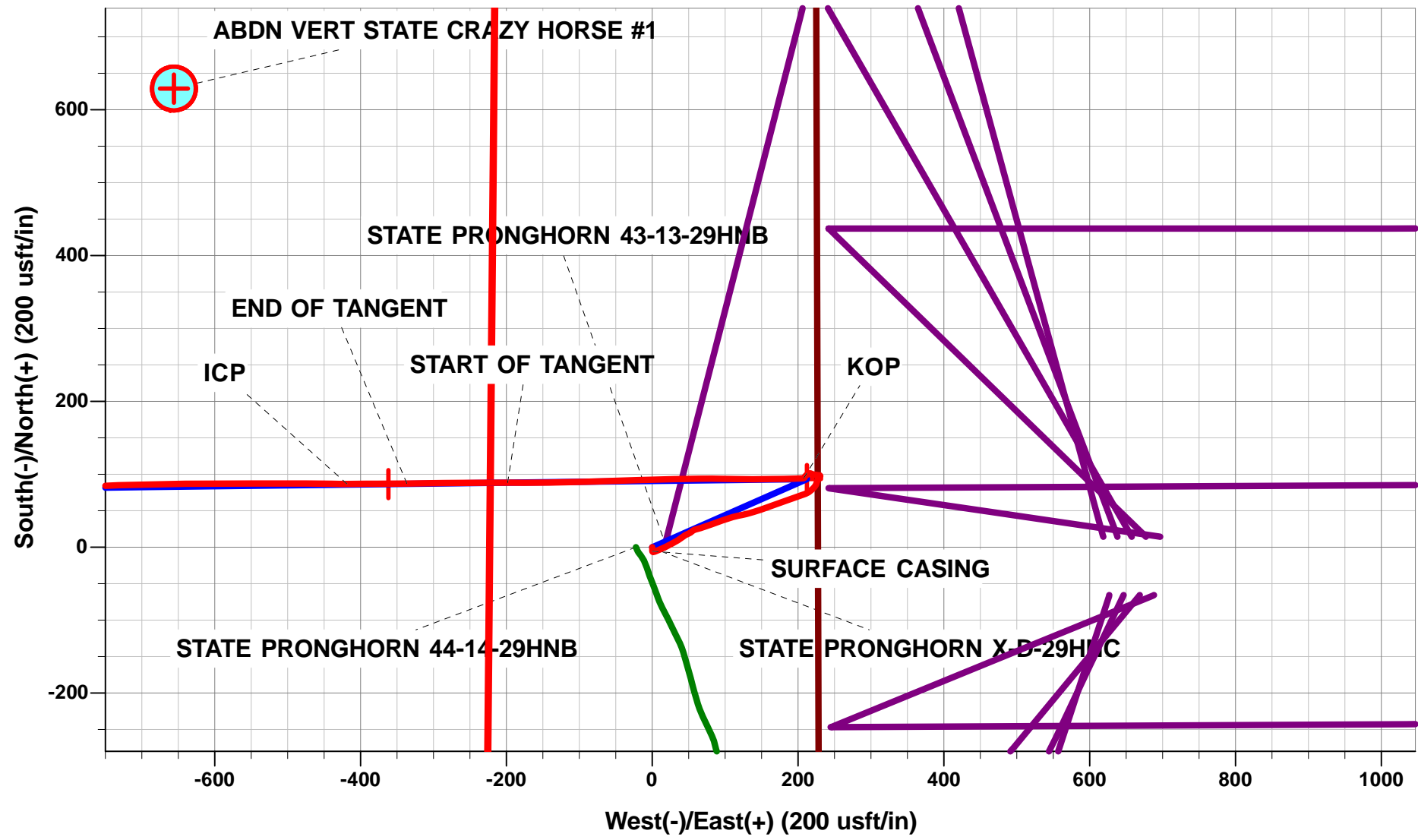
Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SE SE SEC. 29 T5N R61W 6th P.M.  
Well: STATE PRONGHORN X-D-29HNC  
Wellbore: JOB # 2015-007-25  
Design: FINAL SURVEYS

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation
780.0	780.0	0.79	176.40	-5.4	0.3	-0.4	5.4	SURFACE CASING
5587.3	5600.0	1.69	254.33	94.9	207.9	-207.1	292.9	KOP
6073.4	6277.0	74.48	269.87	88.7	-198.2	198.9	699.0	START OF TANGENT
6109.6	6420.0	76.84	269.32	87.5	-336.5	337.2	837.4	END OF TANGENT
6121.7	6503.0	84.95	270.14	87.0	-418.6	419.3	919.5	ICP
6127.6	10549.0	87.70	267.70	43.7	-4461.9	4462.1	4964.5	LAST SURVEY - FEB 16, 2015
6130.1	10612.0	87.70	267.70	41.2	-4524.8	4525.0	5027.4	EXTRAPOLATION TO TD

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
7" ICP *NEW* - STATE PRONGHORN X-D-29HNC (P2)	6115.0	86.7	-361.7	40.368208	-104.225708
BHL - STATE PRONGHORN X-D-29HNC (P2)	6115.0	36.9	-4528.1	40.368070	-104.240660
KOP - STATE PRONGHORN X-D-29HNC (P2)	5611.7	93.6	212.3	40.368227	-104.223648



Azimuths to True North  
Magnetic North: 8.08°

Magnetic Field  
Strength: 52788.5snT  
Dip Angle: 66.98°  
Date: 02/02/2015  
Model: IGRF2010

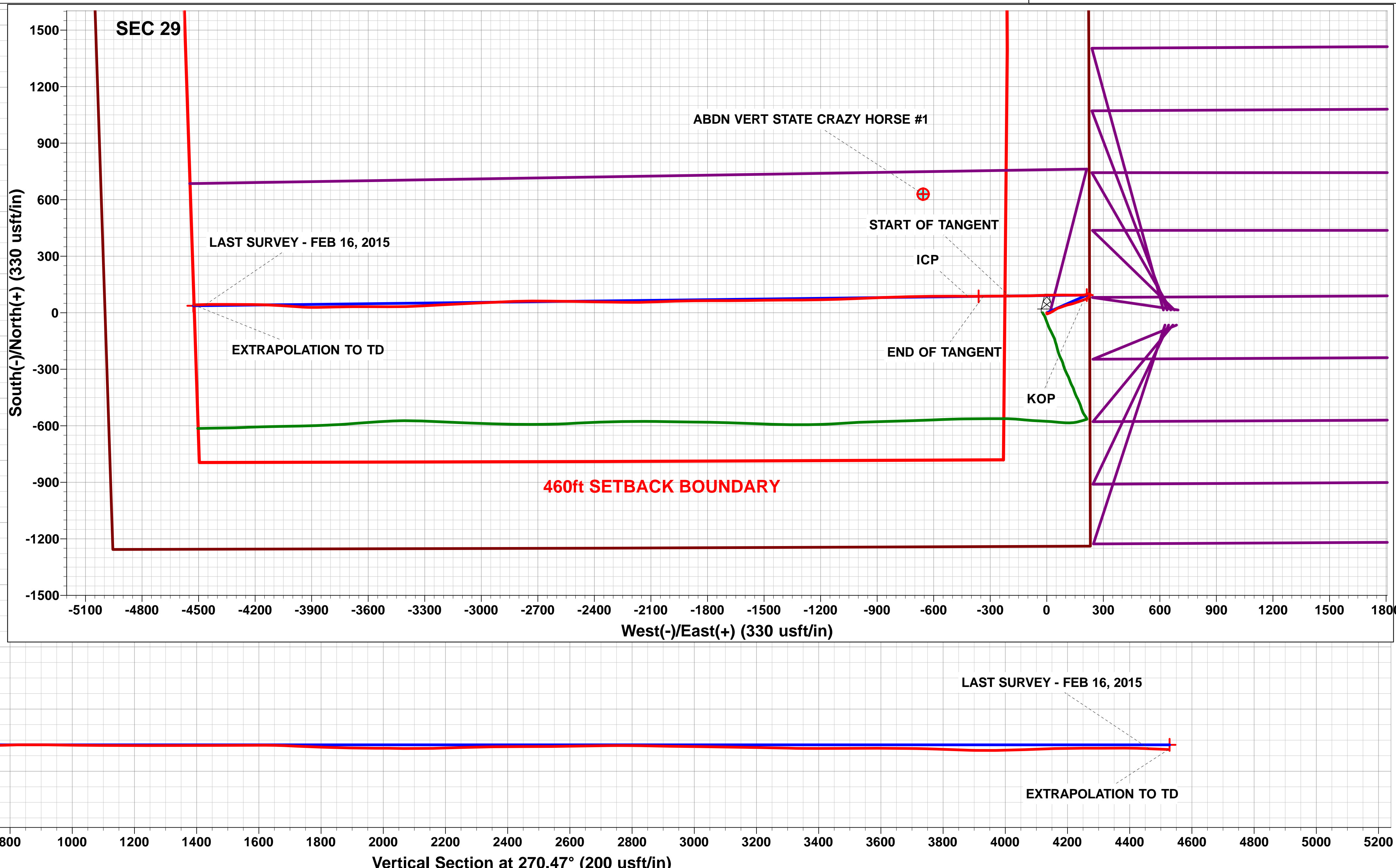
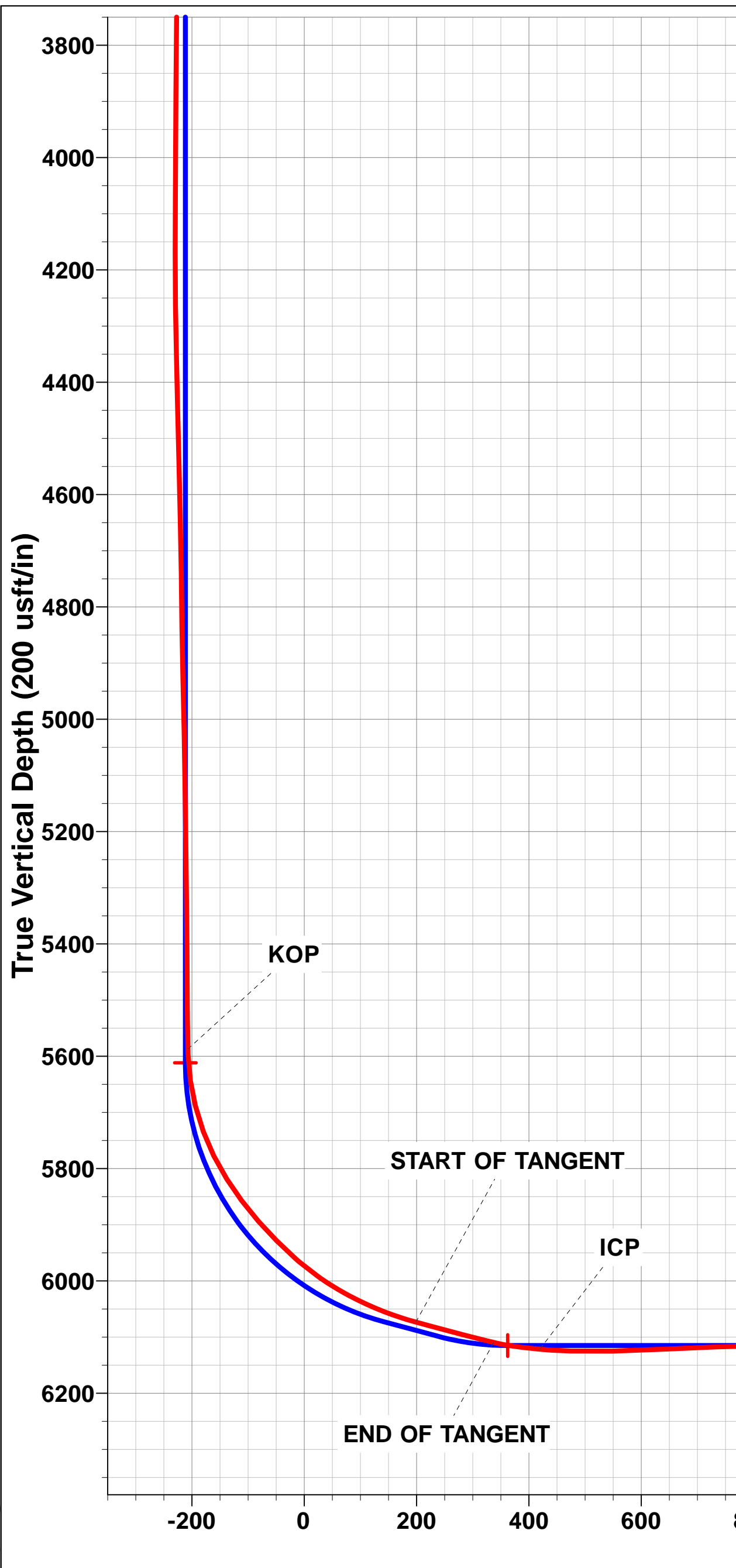
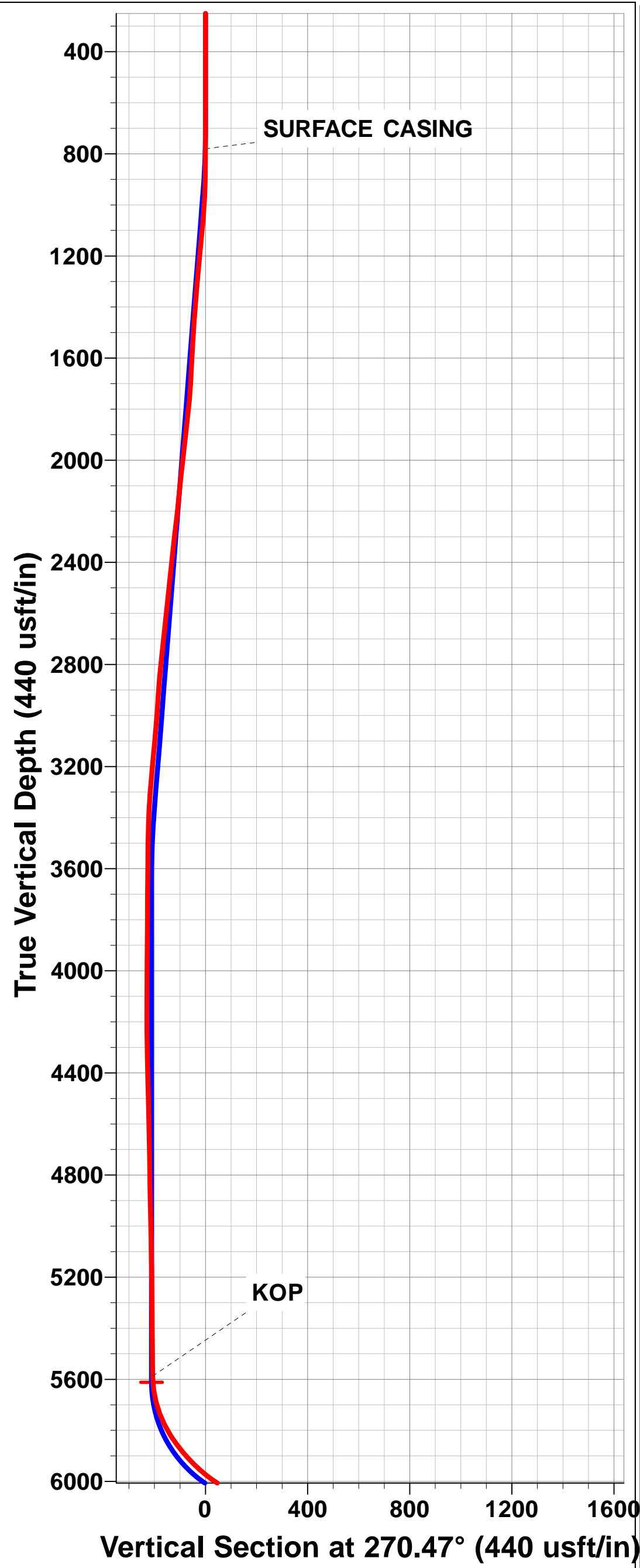
AS DRILLED LOCAL COORDINATES

SHL: 1241ft FSL & 229ft FEL of Sec 29

7" ICP: 1330ft FSL & 648ft FEL of Sec 29

TOP OF PRODUCTION: 1330ft FSL & 720ft FEL of Sec 29

BHL: 1298.3ft FSL & 473ft FWL of Sec 29



## Survey Report



<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>Local Co-ordinate Reference:</b>	Well STATE PRONGHORN X-D-29HNC
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KB-EST @ 4619.0usft (Original Well Elev)
<b>Site:</b>	SE SE SEC. 29 T5N R61W 6th P.M.	<b>MD Reference:</b>	KB-EST @ 4619.0usft (Original Well Elev)
<b>Well:</b>	STATE PRONGHORN X-D-29HNC	<b>North Reference:</b>	True
<b>Wellbore:</b>	JOB # 2015-007-25	<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:	1.10000 ft	Grid Convergence:	0.82 °

Well	STATE PRONGHORN X-D-29HNC					
Well Position	+N/-S	0.0 usft	Northing:	1,379,448.40 usft	Latitude:	40.367970
	+E/-W	0.0 usft	Easting:	3,355,420.62 usft	Longitude:	-104.224410
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	4,602.0 usft

<b>Wellbore</b>	JOB # 2015-007-25				
<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	270.47	

<b>Survey Program</b>	<b>Date</b>	17/02/2015			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
787.0	10,612.0	FINAL SURVEYS (JOB # 2015-007-25)	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	4,619.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>SURFACE CASING</b>										
780.0	0.79	176.40	780.0	3,839.0	-5.4	0.3	-0.4	0.10	0.10	0.00
787.0	0.80	176.40	787.0	3,832.0	-5.5	0.3	-0.4	0.10	0.10	0.00
878.0	0.90	114.80	878.0	3,741.0	-6.4	1.0	-1.1	0.96	0.11	-67.69
969.0	2.80	66.30	968.9	3,650.1	-5.8	3.7	-3.8	2.53	2.09	-53.30
1,062.0	5.80	67.30	1,061.6	3,557.4	-3.1	10.1	-10.2	3.23	3.23	1.08
1,155.0	6.10	64.60	1,154.1	3,464.9	0.8	18.9	-18.9	0.44	0.32	-2.90
1,245.0	5.90	61.70	1,243.7	3,375.3	5.1	27.3	-27.3	0.40	-0.22	-3.22
1,337.0	5.70	57.90	1,335.2	3,283.8	9.8	35.4	-35.3	0.47	-0.22	-4.13
1,428.0	4.80	52.30	1,425.8	3,193.2	14.5	42.2	-42.1	1.14	-0.99	-6.15
1,521.0	4.70	67.80	1,518.5	3,100.5	18.3	48.8	-48.7	1.38	-0.11	16.67
1,613.0	3.10	45.80	1,610.3	3,008.7	21.5	54.1	-53.9	2.35	-1.74	-23.91

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<b>Site:</b>	SE SE SEC. 29 T5N R61W 6th P.M.	<b>MD Reference:</b>	KB-EST @ 4619.0usft (Original Well Elev)
<b>Well:</b>	STATE PRONGHORN X-D-29HNC	<b>North Reference:</b>	True
<b>Wellbore:</b>	JOB # 2015-007-25	<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)
1,706.0	4.00	72.00	1,703.1	2,915.9	24.2	59.0	-58.8	1.97	0.97	28.17
1,797.0	6.00	73.30	1,793.7	2,825.3	26.6	66.5	-66.3	2.20	2.20	1.43
1,890.0	7.20	70.80	1,886.1	2,732.9	29.9	76.7	-76.5	1.33	1.29	-2.69
1,987.0	6.90	69.70	1,982.4	2,636.6	33.9	87.9	-87.6	0.34	-0.31	-1.13
2,083.0	6.20	72.20	2,077.8	2,541.2	37.5	98.3	-97.9	0.79	-0.73	2.60
2,178.0	5.80	70.70	2,172.2	2,446.8	40.6	107.7	-107.3	0.45	-0.42	-1.58
2,273.0	7.30	78.80	2,266.6	2,352.4	43.4	118.1	-117.8	1.85	1.58	8.53
2,368.0	6.20	76.40	2,361.0	2,258.0	45.8	129.0	-128.6	1.20	-1.16	-2.53
2,464.0	6.20	73.00	2,456.4	2,162.6	48.5	139.0	-138.6	0.38	0.00	-3.54
2,560.0	6.50	71.50	2,551.8	2,067.2	51.7	149.1	-148.7	0.36	0.31	-1.56
2,656.0	6.10	72.00	2,647.2	1,971.8	55.0	159.1	-158.7	0.42	-0.42	0.52
2,751.0	6.90	68.40	2,741.6	1,877.4	58.7	169.2	-168.8	0.94	0.84	-3.79
2,847.0	5.70	70.00	2,837.0	1,782.0	62.5	179.1	-178.6	1.26	-1.25	1.67
2,942.0	4.00	70.10	2,931.7	1,687.3	65.2	186.6	-186.1	1.79	-1.79	0.11
3,039.0	5.00	73.20	3,028.4	1,590.6	67.6	193.9	-193.3	1.06	1.03	3.20
3,134.0	5.10	71.00	3,123.0	1,496.0	70.1	201.8	-201.2	0.23	0.11	-2.32
3,230.0	6.00	66.30	3,218.6	1,400.4	73.6	210.4	-209.8	1.05	0.94	-4.90
3,325.0	5.40	48.80	3,313.1	1,305.9	78.5	218.4	-217.7	1.93	-0.63	-18.42
3,420.0	3.90	34.20	3,407.8	1,211.2	84.1	223.5	-222.8	2.00	-1.58	-15.37
3,515.0	3.30	12.60	3,502.6	1,116.4	89.5	226.0	-225.2	1.55	-0.63	-22.74
3,611.0	0.50	58.20	3,598.6	1,020.4	92.4	226.9	-226.1	3.10	-2.92	47.50
3,706.0	0.50	49.40	3,693.6	925.4	92.9	227.6	-226.8	0.08	0.00	-9.26
3,801.0	0.60	43.70	3,788.6	830.4	93.5	228.2	-227.5	0.12	0.11	-6.00
3,897.0	0.70	43.00	3,884.6	734.4	94.3	229.0	-228.2	0.10	0.10	-0.73
3,991.0	0.70	36.30	3,978.5	640.5	95.2	229.7	-228.9	0.09	0.00	-7.13
4,086.0	0.80	8.00	4,073.5	545.5	96.3	230.1	-229.4	0.40	0.11	-29.79
4,181.0	1.00	14.90	4,168.5	450.5	97.7	230.5	-229.7	0.24	0.21	7.26
4,276.0	1.00	283.90	4,263.5	355.5	98.7	229.9	-229.1	1.50	0.00	-95.79
4,371.0	1.20	268.70	4,358.5	260.5	98.9	228.1	-227.3	0.37	0.21	-16.00
4,467.0	1.30	279.80	4,454.5	164.5	99.1	226.0	-225.2	0.27	0.10	11.56
4,562.0	1.40	280.50	4,549.4	69.6	99.5	223.8	-223.0	0.11	0.11	0.74
4,657.0	1.40	280.10	4,644.4	-25.4	99.9	221.5	-220.7	0.01	0.00	-0.42
4,753.0	0.80	294.50	4,740.4	-121.4	100.4	219.7	-218.9	0.68	-0.62	15.00
4,848.0	0.80	294.40	4,835.4	-216.4	100.9	218.5	-217.7	0.00	0.00	-0.11
4,943.0	1.50	284.00	4,930.4	-311.4	101.5	216.7	-215.9	0.77	0.74	-10.95
5,038.0	1.50	234.50	5,025.3	-406.3	101.1	214.5	-213.7	1.32	0.00	-52.11
5,133.0	0.80	237.00	5,120.3	-501.3	100.0	212.9	-212.1	0.74	-0.74	2.63
5,227.0	0.90	246.90	5,214.3	-595.3	99.4	211.7	-210.9	0.19	0.11	10.53
5,323.0	1.30	210.70	5,310.3	-691.3	98.1	210.5	-209.6	0.81	0.42	-37.71
5,418.0	0.80	209.40	5,405.3	-786.3	96.6	209.6	-208.8	0.53	-0.53	-1.37
5,513.0	0.70	211.10	5,500.3	-881.3	95.5	208.9	-208.2	0.11	-0.11	1.79
5,548.0	0.40	215.10	5,535.3	-916.3	95.3	208.8	-208.0	0.86	-0.86	11.43
<b>KOP</b>										
<b>5,600.0</b>	<b>1.69</b>	<b>254.33</b>	<b>5,587.3</b>	<b>-968.3</b>	<b>94.9</b>	<b>207.9</b>	<b>-207.1</b>	<b>2.69</b>	<b>2.48</b>	<b>75.43</b>
5,608.0	1.90	255.50	5,595.3	-976.3	94.8	207.7	-206.9	2.69	2.65	14.67
5,656.0	8.10	266.50	5,643.1	-1,024.1	94.4	203.5	-202.8	13.01	12.92	22.92
5,702.0	14.00	268.90	5,688.2	-1,069.2	94.1	194.7	-194.0	12.86	12.83	5.22
5,750.0	20.50	269.10	5,734.0	-1,115.0	93.9	180.5	-179.7	13.54	13.54	0.42
5,797.0	26.40	269.30	5,777.1	-1,158.1	93.6	161.8	-161.0	12.55	12.55	0.43
5,845.0	32.10	269.50	5,819.0	-1,200.0	93.4	138.4	-137.6	11.88	11.87	0.42
5,891.0	37.00	271.70	5,856.8	-1,237.8	93.7	112.3	-111.5	10.99	10.65	4.78
5,939.0	41.40	270.20	5,894.0	-1,275.0	94.2	82.0	-81.2	9.38	9.17	-3.12
5,986.0	44.60	268.80	5,928.4	-1,309.4	93.9	49.9	-49.2	7.10	6.81	-2.98

## Survey Report



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<b>Wellbore:</b>	JOB # 2015-007-25	<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)
6,034.0	48.70	268.90	5,961.3	-1,342.3	93.2	15.0	-14.3	8.54	8.54	0.21
6,082.0	54.50	267.90	5,991.1	-1,372.1	92.1	-22.6	23.3	12.19	12.08	-2.08
6,130.0	60.00	268.10	6,017.1	-1,398.1	90.7	-62.9	63.6	11.46	11.46	0.42
6,177.0	64.80	268.70	6,038.9	-1,419.9	89.6	-104.5	105.2	10.28	10.21	1.28
6,225.0	69.50	269.60	6,057.5	-1,438.5	88.9	-148.7	149.4	9.94	9.79	1.87
6,272.0	74.40	269.90	6,072.1	-1,453.1	88.7	-193.4	194.1	10.44	10.43	0.64
<b>START OF TANGENT</b>										
6,277.0	74.48	269.87	6,073.4	-1,454.4	88.7	-198.2	198.9	1.77	1.67	-0.63
6,320.0	75.20	269.60	6,084.6	-1,465.6	88.5	-239.7	240.4	1.77	1.67	-0.62
6,368.0	75.20	269.40	6,096.9	-1,477.9	88.1	-286.1	286.8	0.40	0.00	-0.42
6,416.0	76.30	269.30	6,108.7	-1,489.7	87.6	-332.6	333.3	2.30	2.29	-0.21
<b>END OF TANGENT</b>										
6,420.0	76.84	269.32	6,109.6	-1,490.6	87.5	-336.5	337.2	13.56	13.56	0.45
6,461.0	82.40	269.50	6,117.0	-1,498.0	87.1	-376.8	377.5	13.56	13.56	0.44
<b>ICP</b>										
6,503.0	84.95	270.14	6,121.7	-1,502.7	87.0	-418.6	419.3	6.26	6.08	1.52
6,540.0	87.20	270.70	6,124.2	-1,505.2	87.3	-455.5	456.2	6.26	6.08	1.51
6,633.0	91.70	269.70	6,125.1	-1,506.1	87.6	-548.5	549.2	4.96	4.84	-1.08
6,725.0	92.80	269.70	6,121.5	-1,502.5	87.1	-640.4	641.1	1.20	1.20	0.00
6,817.0	92.20	267.80	6,117.5	-1,498.5	85.1	-732.3	732.9	2.16	-0.65	-2.07
6,909.0	90.70	268.30	6,115.1	-1,496.1	82.0	-824.2	824.8	1.72	-1.63	0.54
7,002.0	89.30	267.80	6,115.1	-1,496.1	78.8	-917.1	917.7	1.60	-1.51	-0.54
7,098.0	89.30	267.60	6,116.3	-1,497.3	74.9	-1,013.0	1,013.6	0.21	0.00	-0.21
7,193.0	90.10	267.90	6,116.8	-1,497.8	71.2	-1,108.0	1,108.5	0.90	0.84	0.32
7,289.0	89.30	269.30	6,117.3	-1,498.3	68.9	-1,203.9	1,204.5	1.68	-0.83	1.46
7,384.0	90.50	269.30	6,117.5	-1,498.5	67.7	-1,298.9	1,299.4	1.26	1.26	0.00
7,480.0	90.20	270.10	6,116.9	-1,497.9	67.2	-1,394.9	1,395.4	0.89	-0.31	0.83
7,576.0	89.80	268.70	6,116.9	-1,497.9	66.2	-1,490.9	1,491.4	1.52	-0.42	-1.46
7,672.0	90.70	269.40	6,116.5	-1,497.5	64.6	-1,586.9	1,587.4	1.19	0.94	0.73
7,767.0	88.00	269.80	6,117.5	-1,498.5	63.9	-1,681.9	1,682.3	2.87	-2.84	0.42
7,863.0	87.30	270.30	6,121.5	-1,502.5	64.0	-1,777.8	1,778.3	0.90	-0.73	0.52
7,958.0	88.80	268.90	6,124.7	-1,505.7	63.4	-1,872.7	1,873.2	2.16	1.58	-1.47
8,054.0	89.90	268.70	6,125.8	-1,506.8	61.4	-1,968.7	1,969.1	1.16	1.15	-0.21
8,150.0	88.70	267.30	6,127.0	-1,508.0	58.0	-2,064.6	2,065.0	1.92	-1.25	-1.46
8,245.0	92.00	269.30	6,126.4	-1,507.4	55.2	-2,159.6	2,160.0	4.06	3.47	2.11
8,340.0	91.60	271.00	6,123.4	-1,504.4	55.4	-2,254.5	2,254.9	1.84	-0.42	1.79
8,436.0	90.80	270.90	6,121.4	-1,502.4	57.0	-2,350.5	2,350.9	0.84	-0.83	-0.10
8,531.0	90.10	271.10	6,120.7	-1,501.7	58.7	-2,445.5	2,445.9	0.77	-0.74	0.21
8,626.0	90.30	270.80	6,120.3	-1,501.3	60.3	-2,540.5	2,540.9	0.38	0.21	-0.32
8,722.0	91.30	270.70	6,119.0	-1,500.0	61.5	-2,636.4	2,636.9	1.05	1.04	-0.10
8,817.0	90.50	269.90	6,117.5	-1,498.5	62.0	-2,731.4	2,731.8	1.19	-0.84	-0.84
8,913.0	89.00	267.70	6,117.9	-1,498.9	60.0	-2,827.4	2,827.8	2.77	-1.56	-2.29
9,009.0	88.90	267.20	6,119.7	-1,500.7	55.7	-2,923.3	2,923.6	0.53	-0.10	-0.52
9,104.0	89.60	267.50	6,120.9	-1,501.9	51.3	-3,018.2	3,018.5	0.80	0.74	0.32
9,200.0	88.80	266.90	6,122.2	-1,503.2	46.7	-3,114.0	3,114.3	1.04	-0.83	-0.62
9,295.0	89.20	267.50	6,123.9	-1,504.9	42.0	-3,208.9	3,209.2	0.76	0.42	0.63
9,390.0	88.60	266.10	6,125.7	-1,506.7	36.7	-3,303.8	3,303.9	1.60	-0.63	-1.47
9,486.0	90.30	268.90	6,126.7	-1,507.7	32.5	-3,399.6	3,399.8	3.41	1.77	2.92
9,581.0	90.20	270.10	6,126.2	-1,507.2	31.7	-3,494.6	3,494.8	1.27	-0.11	1.26
9,676.0	89.90	270.30	6,126.2	-1,507.2	32.0	-3,589.6	3,589.8	0.38	-0.32	0.21
9,769.0	89.50	269.70	6,126.6	-1,507.6	32.0	-3,682.6	3,682.8	0.78	-0.43	-0.65
9,864.0	88.10	268.20	6,128.6	-1,509.6	30.3	-3,777.6	3,777.7	2.16	-1.47	-1.58
9,959.0	87.80	269.50	6,132.0	-1,513.0	28.4	-3,872.5	3,872.6	1.40	-0.32	1.37



# Survey Report



<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>Local Co-ordinate Reference:</b>	Well STATE PRONGHORN X-D-29HNC
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KB-EST @ 4619.0usft (Original Well Elev)
<b>Site:</b>	SE SE SEC. 29 T5N R61W 6th P.M.	<b>MD Reference:</b>	KB-EST @ 4619.0usft (Original Well Elev)
<b>Well:</b>	STATE PRONGHORN X-D-29HNC	<b>North Reference:</b>	True
<b>Wellbore:</b>	JOB # 2015-007-25	<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)
10,054.0	90.90	273.60	6,133.1	-1,514.1	31.0	-3,967.4	3,967.6	5.41	3.26	4.32
10,150.0	92.30	274.30	6,130.4	-1,511.4	37.6	-4,063.2	4,063.3	1.63	1.46	0.73
10,245.0	91.70	271.40	6,127.1	-1,508.1	42.3	-4,158.0	4,158.2	3.12	-0.63	-3.05
10,340.0	89.70	270.00	6,126.0	-1,507.0	43.4	-4,253.0	4,253.2	2.57	-2.11	-1.47
10,434.0	90.70	271.00	6,125.6	-1,506.6	44.3	-4,347.0	4,347.2	1.50	1.06	1.06
10,529.0	87.90	269.00	6,126.8	-1,507.8	44.3	-4,441.9	4,442.1	3.62	-2.95	-2.11
<b>LAST SURVEY - FEB 16, 2015</b>										
10,549.0	87.70	267.70	6,127.6	-1,508.6	43.7	-4,461.9	4,462.1	6.57	-1.00	-6.50
<b>EXTRAPOLATION TO TD</b>										
10,612.0	87.70	267.70	6,130.1	-1,511.1	41.2	-4,524.8	4,525.0	0.00	0.00	0.00

# Survey Report



<b>Company:</b>	BONANZA CREEK ENERGY INC.	<b>Local Co-ordinate Reference:</b>	Well STATE PRONGHORN X-D-29HNC
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KB-EST @ 4619.0usft (Original Well Elev)
<b>Site:</b>	SE SE SEC. 29 T5N R61W 6th P.M.	<b>MD Reference:</b>	KB-EST @ 4619.0usft (Original Well Elev)
<b>Well:</b>	STATE PRONGHORN X-D-29HNC	<b>North Reference:</b>	True
<b>Wellbore:</b>	JOB # 2015-007-25	<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
KOP - STATE PRONGHORN	- survey misses target center by 5.6usft at 5624.0usft MD (5611.2 TVD, 94.7 N, 206.9 E)	0.00	0.00	5,611.7	93.6	212.3	1,379,545.05	3,355,631.55	40.368227 -104.223648
- Point									
7" ICP *NEW* - STATE PRONGHORN	- survey misses target center by 0.6usft at 6445.7usft MD (6114.7 TVD, 87.3 N, -361.7 E)	0.00	0.00	6,115.0	86.7	-361.7	1,379,529.89	3,355,057.74	40.368208 -104.225708
- Point									
ABDN VERT STATE PRONGHORN	- survey misses target center by 1048.3usft at 6702.5usft MD (6122.5 TVD, 87.2 N, -617.9 E)	0.00	0.00	7,019.0	629.2	-655.9	1,380,068.05	3,354,755.73	40.369697 -104.226764
- Circle (radius 30.0)									
BHL - STATE PRONGHORN	- survey misses target center by 16.0usft at 10612.0usft MD (6130.1 TVD, 41.2 N, -4524.8 E)	0.00	0.00	6,115.0	36.9	-4,528.1	1,379,420.12	3,350,892.63	40.368070 -104.240660
- Point									
7" ICP *NEW* - STATE PRONGHORN	- survey misses target center by 21.0usft at 6449.5usft MD (6115.4 TVD, 87.2 N, -365.5 E)	0.00	0.00	6,136.0	86.7	-361.7	1,379,529.89	3,355,057.74	40.368208 -104.225708
- Point									
KOP - STATE PRONGHORN	- survey misses target center by 7.4usft at 5644.9usft MD (5632.1 TVD, 94.5 N, 205.0 E)	0.00	0.00	5,632.7	93.6	212.3	1,379,545.05	3,355,631.55	40.368227 -104.223648
- Point									
BHL - STATE PRONGHORN	- survey misses target center by 8.0usft at 10612.0usft MD (6130.1 TVD, 41.2 N, -4524.8 E)	0.00	0.00	6,136.0	36.9	-4,528.1	1,379,420.12	3,350,892.63	40.368070 -104.240660
- Point									

Survey Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S	+E/-W	
		(usft)	(usft)	
780.0	780.0	-5.4	0.3	SURFACE CASING
5,600.0	5,587.3	94.9	207.9	KOP
6,277.0	6,073.4	88.7	-198.2	START OF TANGENT
6,420.0	6,109.6	87.5	-336.5	END OF TANGENT
6,503.0	6,121.7	87.0	-418.6	ICP
10,549.0	6,127.6	43.7	-4,461.9	LAST SURVEY - FEB 16, 2015
10,612.0	6,130.1	41.2	-4,524.8	EXTRAPOLATION TO TD

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