

BONANZA CREEK ENERGY INC.

WELD COUNTY, COLORADO (NAD 83)

NW NE SEC. 12 T5N R61W 6th P.M.

PRONGHORN K-O-12HNC

JOB #: 2009-358

04 August, 2014

Survey: FINAL SURVEYS





Project: WELD COUNTY, COLORADO (NAD 83)
 Site: NW NE SEC. 12 T5N R61W 6th P.M.
 Well: PRONGHORN K-O-12HNC
 Wellbore: JOB #: 2009-358
 Design: FINAL SURVEYS

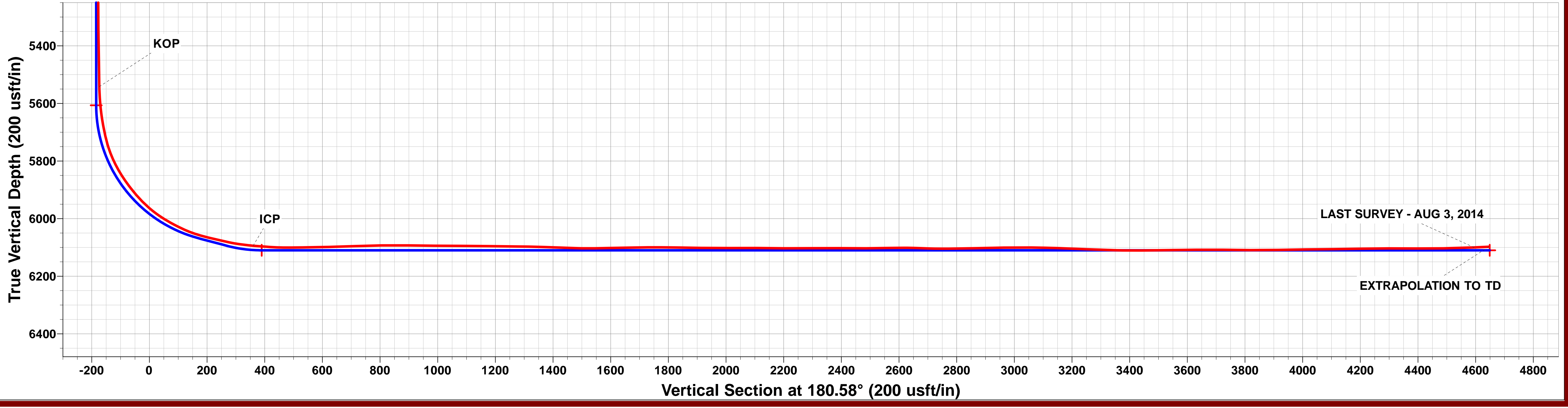
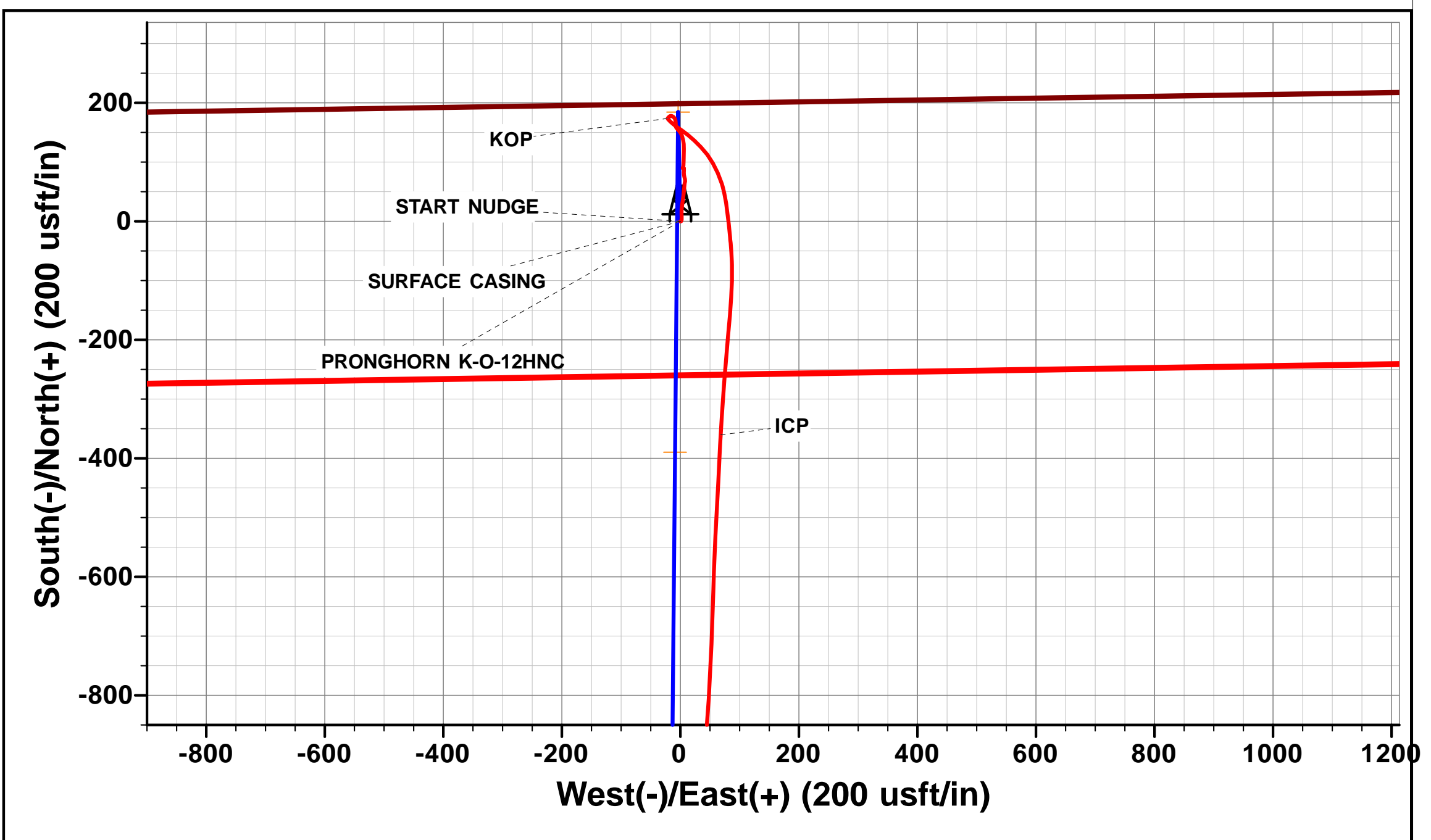
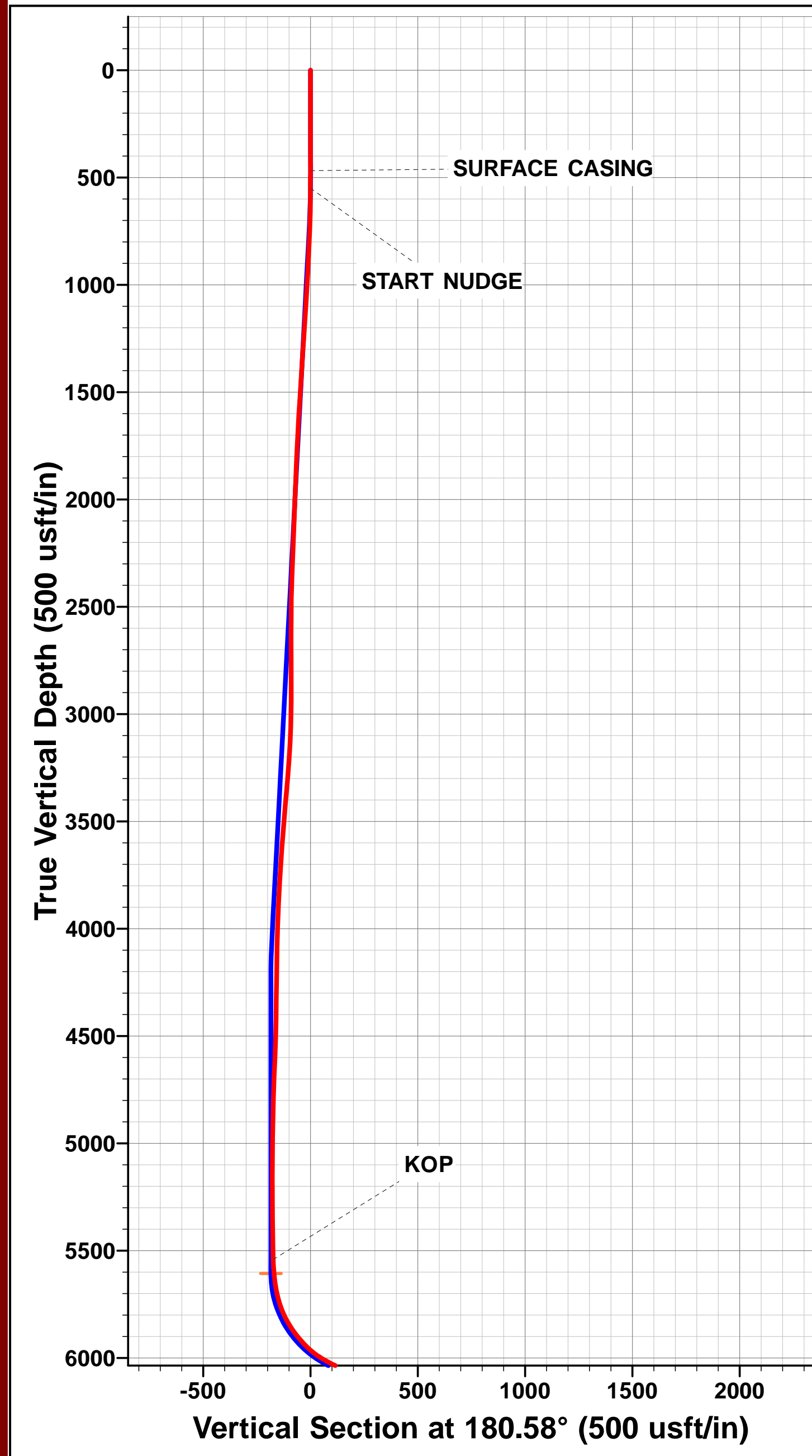
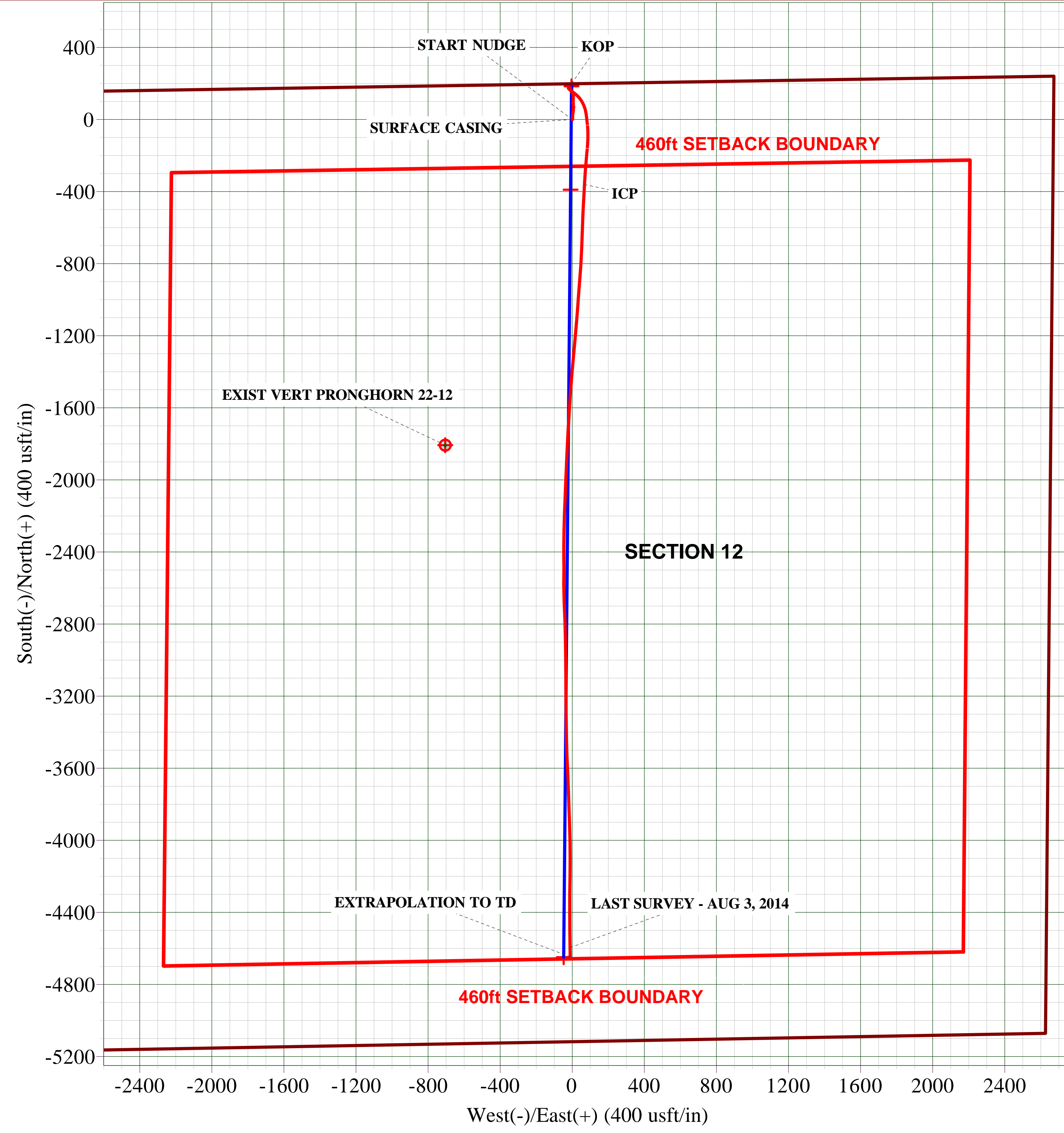
ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Dep	Annotation
468.0	468.0	0.00	0.00	0.0	0.0	0.0	0.0	SURFACE CASING
550.0	550.0	0.68	86.40	0.1	0.7	-0.1	0.7	START NUDGE
5541.9	5547.0	1.42	187.26	173.9	-21.4	-173.7	201.5	KOP
6094.2	6422.0	84.88	183.24	-360.3	67.9	359.6	773.9	ICP
6100.0	10662.0	92.40	178.60	-4595.1	-12.1	4595.0	5013.0	LAST SURVEY - AUG 3, 2014
6097.9	10713.0	92.40	178.60	-4646.0	-10.9	4645.9	5063.9	EXTRAPOLATION TO TD

PROPOSED LOCAL COORDINATES:
 SHL: 200ft FNL & 2681ft FWL Sec 12
 7" ICP *NEW*: 589ft FNL & 2677ft FWL Sec 12
 BHL: 470ft FSL & 2679ft FWL Sec 12

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
KOP - PRONGHORN K-O-12HNC	5606.7	184.5	-3.7	40.423296	-104.156203	Point
7" ICP - PRONGHORN K-O-12HNC *NEW*	6110.0	-389.5	-8.9	40.421721	-104.156222	Point
BHL - PRONGHORN K-O-12HNC	6110.0	-4648.6	-47.3	40.410030	-104.156360	Point



Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well PRONGHORN K-O-12HNC
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB-EST @ 4658.0usft (Original Well Elev)
Site:	NW NE SEC. 12 T5N R61W 6th P.M.	MD Reference:	KB-EST @ 4658.0usft (Original Well Elev)
Well:	PRONGHORN K-O-12HNC	North Reference:	True
Wellbore:	JOB #: 2009-358	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

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

Site NW NE SEC. 12 T5N R61W 6th P.M.			
Site Position:		Northing:	1,399,697.60 usft
From:	Lat/Long	Easting:	3,374,124.86 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.422790
		Longitude:	-104.156190
		Grid Convergence:	0.87 °

Well PRONGHORN K-O-12HNC			
Well Position	+N-S	0.0 usft	Northing: 1,399,697.60 usft
	+E-W	0.0 usft	Easting: 3,374,124.86 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	40.422790
		Longitude:	-104.156190
		Ground Level:	4,641.0 usft

Wellbore JOB #: 2009-358					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	03/07/2014	8.12	67.06	52,886

Design FINAL SURVEYS				
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)
	0.0	0.0	0.0	180.58

Survey Program		Date 04/08/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
480.0	10,713.0	FINAL SURVEYS (JOB #: 2009-358)	MWD	MWD - Standard

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)
0.0	0.00	0.00	0.0	4,658.0	0.0	0.0	0.0	0.00	0.00	0.00
SURFACE CASING										
468.0	0.00	0.00	468.0	4,190.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	4,178.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.60	78.90	500.0	4,158.0	0.0	0.1	0.0	3.00	3.00	0.00
START NUDGE										
550.0	0.68	86.40	550.0	4,108.0	0.1	0.7	-0.1	0.23	0.15	15.01
564.0	0.70	88.20	564.0	4,094.0	0.1	0.8	-0.1	0.23	0.17	12.83
659.0	1.10	22.50	659.0	3,999.0	1.0	1.8	-1.0	1.09	0.42	-69.16
754.0	2.10	4.40	753.9	3,904.1	3.5	2.2	-3.6	1.17	1.05	-19.05
849.0	3.00	356.30	848.9	3,809.1	7.8	2.2	-7.8	1.02	0.95	-8.53
945.0	3.20	359.20	944.7	3,713.3	12.9	2.0	-13.0	0.26	0.21	3.02

Survey Report



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Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB-EST @ 4658.0usft (Original Well Elev)
Site:	NW NE SEC. 12 T5N R61W 6th P.M.	MD Reference:	KB-EST @ 4658.0usft (Original Well Elev)
Well:	PRONGHORN K-O-12HNC	North Reference:	True
Wellbore:	JOB #: 2009-358	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	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)
1,040.0	3.30	2.00	1,039.6	3,618.4	18.3	2.1	-18.3	0.20	0.11	2.95
1,136.0	3.40	6.40	1,135.4	3,522.6	23.9	2.5	-23.9	0.29	0.10	4.58
1,231.0	3.80	9.20	1,230.2	3,427.8	29.8	3.3	-29.9	0.46	0.42	2.95
1,326.0	3.90	7.90	1,325.0	3,333.0	36.1	4.2	-36.2	0.14	0.11	-1.37
1,421.0	3.70	7.10	1,419.8	3,238.2	42.4	5.1	-42.4	0.22	-0.21	-0.84
1,516.0	3.40	6.10	1,514.6	3,143.4	48.2	5.7	-48.3	0.32	-0.32	-1.05
1,611.0	3.40	4.60	1,609.4	3,048.6	53.8	6.3	-53.9	0.09	0.00	-1.58
1,706.0	3.00	3.60	1,704.3	2,953.7	59.1	6.7	-59.2	0.43	-0.42	-1.05
1,801.0	3.00	10.00	1,799.2	2,858.8	64.0	7.2	-64.1	0.35	0.00	6.74
1,895.0	1.90	15.10	1,893.1	2,764.9	68.0	8.1	-68.0	1.19	-1.17	5.43
1,990.0	2.50	340.60	1,988.0	2,670.0	71.4	7.8	-71.5	1.50	0.63	-36.32
2,084.0	2.40	345.90	2,081.9	2,576.1	75.3	6.6	-75.3	0.26	-0.11	5.64
2,178.0	2.10	355.10	2,175.8	2,482.2	78.9	6.0	-79.0	0.50	-0.32	9.79
2,272.0	2.30	1.50	2,269.8	2,388.2	82.5	5.9	-82.6	0.34	0.21	6.81
2,367.0	2.20	2.80	2,364.7	2,293.3	86.2	6.0	-86.3	0.12	-0.11	1.37
2,462.0	1.10	358.60	2,459.7	2,198.3	89.0	6.1	-89.0	1.16	-1.16	-4.42
2,557.0	0.30	271.20	2,554.7	2,103.3	89.9	5.8	-89.9	1.19	-0.84	-92.00
2,653.0	0.40	284.50	2,650.7	2,007.3	90.0	5.3	-90.0	0.13	0.10	13.85
2,748.0	0.70	101.10	2,745.7	1,912.3	89.9	5.5	-90.0	1.16	0.32	185.89
2,844.0	1.40	281.70	2,841.6	1,816.4	90.1	4.9	-90.1	2.19	0.73	-186.87
2,939.0	0.50	129.03	2,936.6	1,721.4	90.0	4.1	-90.1	1.96	-0.95	-160.71
3,033.0	1.40	12.90	3,030.6	1,627.4	90.9	4.7	-91.0	1.79	0.96	-123.54
3,130.0	3.00	7.60	3,127.6	1,530.4	94.6	5.3	-94.6	1.66	1.65	-5.46
3,222.0	4.10	358.40	3,219.4	1,438.6	100.3	5.5	-100.3	1.34	1.20	-10.00
3,315.0	4.40	359.50	3,312.1	1,345.9	107.1	5.4	-107.2	0.33	0.32	1.18
3,407.0	4.90	3.50	3,403.8	1,254.2	114.6	5.6	-114.6	0.65	0.54	4.35
3,498.0	5.30	2.10	3,494.5	1,163.5	122.7	6.0	-122.7	0.46	0.44	-1.54
3,591.0	4.40	354.00	3,587.1	1,070.9	130.5	5.8	-130.6	1.21	-0.97	-8.71
3,683.0	4.00	347.20	3,678.9	979.1	137.2	4.7	-137.2	0.69	-0.43	-7.39
3,775.0	3.60	343.00	3,770.7	887.3	143.0	3.2	-143.1	0.53	-0.43	-4.57
3,868.0	2.90	330.90	3,863.5	794.5	147.9	1.2	-147.9	1.05	-0.75	-13.01
3,960.0	2.40	322.50	3,955.4	702.6	151.5	-1.1	-151.4	0.69	-0.54	-9.13
4,053.0	2.00	316.90	4,048.4	609.6	154.2	-3.4	-154.1	0.49	-0.43	-6.02
4,146.0	1.30	315.60	4,141.3	516.7	156.1	-5.3	-156.1	0.75	-0.75	-1.40
4,239.0	1.50	328.70	4,234.3	423.7	157.9	-6.7	-157.8	0.40	0.22	14.09
4,333.0	0.70	328.70	4,328.3	329.7	159.5	-7.6	-159.4	0.85	-0.85	0.00
4,426.0	0.70	5.90	4,421.3	236.7	160.5	-7.8	-160.4	0.48	0.00	40.00
4,517.0	1.60	2.20	4,512.2	145.8	162.3	-7.7	-162.2	0.99	0.99	-4.07
4,610.0	2.50	359.70	4,605.2	52.8	165.7	-7.7	-165.6	0.97	0.97	-2.69
4,703.0	2.50	350.10	4,698.1	-40.1	169.7	-8.0	-169.6	0.45	0.00	-10.32
4,794.0	1.70	338.90	4,789.0	-131.0	172.9	-8.9	-172.8	0.98	-0.88	-12.31
4,887.0	1.30	313.20	4,882.0	-224.0	174.9	-10.1	-174.8	0.83	-0.43	-27.63
4,979.0	1.60	304.40	4,974.0	-316.0	176.3	-12.0	-176.2	0.41	0.33	-9.57
5,071.0	1.30	302.10	5,065.9	-407.9	177.6	-13.9	-177.5	0.33	-0.33	-2.50
5,162.0	1.00	261.30	5,156.9	-498.9	178.1	-15.6	-177.9	0.93	-0.33	-44.84
5,255.0	1.00	259.20	5,249.9	-591.9	177.8	-17.2	-177.6	0.04	0.00	-2.26
5,348.0	1.00	221.30	5,342.9	-684.9	177.0	-18.5	-176.8	0.70	0.00	-40.75
5,440.0	1.20	223.40	5,434.9	-776.9	175.7	-19.7	-175.5	0.22	0.22	2.28
5,501.0	1.50	229.50	5,495.9	-837.9	174.7	-20.7	-174.5	0.54	0.49	10.00
5,538.0	1.30	216.20	5,532.9	-874.9	174.1	-21.3	-173.9	1.03	-0.54	-35.95
KOP										
5,547.0	1.42	187.26	5,541.9	-883.9	173.9	-21.4	-173.7	7.64	1.29	-321.54
5,569.0	2.60	151.00	5,563.8	-905.8	173.2	-21.2	-173.0	7.64	5.38	-164.83

Survey Report



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Wellbore:	JOB #: 2009-358	Survey Calculation Method:	Minimum Curvature
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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)
5,599.0	6.20	136.70	5,593.8	-935.8	171.4	-19.8	-171.2	12.45	12.00	-47.67
5,630.0	10.10	133.60	5,624.4	-966.4	168.3	-16.7	-168.1	12.66	12.58	-10.00
5,660.0	14.30	129.30	5,653.7	-995.7	164.1	-11.9	-164.0	14.31	14.00	-14.33
5,691.0	18.00	124.90	5,683.5	-1,025.5	159.0	-5.0	-158.9	12.56	11.94	-14.19
5,722.0	21.50	125.60	5,712.7	-1,054.7	152.9	3.6	-153.0	11.32	11.29	2.26
5,753.0	24.80	129.30	5,741.2	-1,083.2	145.5	13.2	-145.6	11.63	10.65	11.94
5,784.0	28.80	132.80	5,768.9	-1,110.9	136.3	23.7	-136.5	13.87	12.90	11.29
5,814.0	32.40	136.50	5,794.7	-1,136.7	125.6	34.6	-125.9	13.54	12.00	12.33
5,845.0	34.00	143.10	5,820.6	-1,162.6	112.6	45.5	-113.1	12.74	5.16	21.29
5,876.0	35.50	150.20	5,846.1	-1,188.1	97.9	55.2	-98.4	13.91	4.84	22.90
5,906.0	37.40	156.50	5,870.2	-1,212.2	81.9	63.1	-82.6	13.99	6.33	21.00
5,937.0	39.40	162.60	5,894.6	-1,236.6	63.9	69.8	-64.6	13.81	6.45	19.68
5,967.0	41.20	168.70	5,917.4	-1,259.4	45.1	74.6	-45.9	14.45	6.00	20.33
5,998.0	44.60	171.80	5,940.1	-1,282.1	24.3	78.2	-25.1	12.91	10.97	10.00
6,028.0	48.80	173.70	5,960.7	-1,302.7	2.7	80.9	-3.5	14.74	14.00	6.33
6,059.0	53.20	174.30	5,980.2	-1,322.2	-21.3	83.4	20.4	14.27	14.19	1.94
6,090.0	57.50	175.60	5,997.8	-1,339.8	-46.7	85.7	45.8	14.29	13.87	4.19
6,121.0	61.00	178.30	6,013.7	-1,355.7	-73.3	87.1	72.4	13.54	11.29	8.71
6,152.0	63.40	181.60	6,028.2	-1,370.2	-100.7	87.1	99.8	12.19	7.74	10.65
6,183.0	66.80	183.70	6,041.2	-1,383.2	-128.8	85.8	127.9	12.57	10.97	6.77
6,214.0	71.20	184.90	6,052.3	-1,394.3	-157.6	83.6	156.8	14.65	14.19	3.87
6,245.0	75.30	185.10	6,061.2	-1,403.2	-187.2	81.0	186.3	13.24	13.23	0.65
6,275.0	76.60	185.10	6,068.5	-1,410.5	-216.2	78.4	215.4	4.33	4.33	0.00
6,306.0	77.10	184.40	6,075.6	-1,417.6	-246.3	75.9	245.5	2.73	1.61	-2.26
6,337.0	78.10	184.20	6,082.2	-1,424.2	-276.4	73.7	275.7	3.29	3.23	-0.65
6,367.0	80.90	184.00	6,087.7	-1,429.7	-305.9	71.6	305.1	9.36	9.33	-0.67
6,389.0	83.10	184.10	6,090.8	-1,432.8	-327.6	70.0	326.9	10.01	10.00	0.45
ICP										
6,422.0	84.88	183.24	6,094.2	-1,436.2	-360.3	67.9	359.6	5.99	5.40	-2.60
6,439.0	85.80	182.80	6,095.6	-1,437.6	-377.3	67.0	376.6	5.99	5.40	-2.59
6,470.0	86.00	183.00	6,097.8	-1,439.8	-408.1	65.5	407.5	0.91	0.65	0.65
6,500.0	86.90	182.40	6,099.7	-1,441.7	-438.1	64.1	437.4	3.60	3.00	-2.00
6,531.0	89.80	183.60	6,100.6	-1,442.6	-469.0	62.4	468.3	10.12	9.35	3.87
6,562.0	90.50	182.70	6,100.5	-1,442.5	-499.9	60.7	499.3	3.68	2.26	-2.90
6,593.0	90.60	182.40	6,100.2	-1,442.2	-530.9	59.4	530.3	1.02	0.32	-0.97
6,684.0	91.50	182.10	6,098.5	-1,440.5	-621.8	55.8	621.2	1.04	0.99	-0.33
6,776.0	92.10	182.10	6,095.6	-1,437.6	-713.7	52.4	713.2	0.65	0.65	0.00
6,869.0	90.90	183.50	6,093.2	-1,435.2	-806.6	47.9	806.0	1.98	-1.29	1.51
6,962.0	89.10	184.90	6,093.2	-1,435.2	-899.3	41.1	898.9	2.45	-1.94	1.51
7,053.0	89.40	184.00	6,094.4	-1,436.4	-990.0	34.0	989.6	1.04	0.33	-0.99
7,146.0	89.90	184.00	6,095.0	-1,437.0	-1,082.8	27.5	1,082.5	0.54	0.54	0.00
7,239.0	89.10	185.30	6,095.8	-1,437.8	-1,175.5	20.0	1,175.2	1.64	-0.86	1.40
7,332.0	89.60	185.60	6,096.8	-1,438.8	-1,268.1	11.1	1,267.9	0.63	0.54	0.32
7,424.0	88.40	185.00	6,098.4	-1,440.4	-1,359.7	2.6	1,359.6	1.46	-1.30	-0.65
7,517.0	87.60	184.30	6,101.7	-1,443.7	-1,452.3	-4.9	1,452.3	1.14	-0.86	-0.75
7,610.0	90.60	183.60	6,103.1	-1,445.1	-1,545.1	-11.3	1,545.1	3.31	3.23	-0.75
7,703.0	91.60	183.80	6,101.3	-1,443.3	-1,637.8	-17.3	1,637.9	1.10	1.08	0.22
7,795.0	90.30	183.40	6,099.8	-1,441.8	-1,729.6	-23.1	1,729.8	1.48	-1.41	-0.43
7,888.0	89.10	182.40	6,100.3	-1,442.3	-1,822.5	-27.8	1,822.7	1.68	-1.29	-1.08
7,980.0	88.80	182.80	6,102.0	-1,444.0	-1,914.4	-31.9	1,914.6	0.54	-0.33	0.43
8,076.0	90.80	182.30	6,102.3	-1,444.3	-2,010.3	-36.2	2,010.6	2.15	2.08	-0.52
8,172.0	89.50	182.10	6,102.1	-1,444.1	-2,106.2	-39.9	2,106.5	1.37	-1.35	-0.21
8,268.0	89.30	182.10	6,103.1	-1,445.1	-2,202.2	-43.4	2,202.5	0.21	-0.21	0.00

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well PRONGHORN K-O-12HNC
Project:	WELD COUNTY, COLORADO (NAD)	TVD Reference:	KB-EST @ 4658.0usft (Original Well Elev)
Site:	NW NE SEC. 12 T5N R61W 6th P.M.	MD Reference:	KB-EST @ 4658.0usft (Original Well Elev)
Well:	PRONGHORN K-O-12HNC	North Reference:	True
Wellbore:	JOB #: 2009-358	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	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)
8,364.0	90.90	180.90	6,102.9	-1,444.9	-2,298.1	-45.9	2,298.5	2.08	1.67	-1.25
8,457.0	89.40	179.70	6,102.7	-1,444.7	-2,391.1	-46.4	2,391.5	2.07	-1.61	-1.29
8,551.0	90.10	180.10	6,103.1	-1,445.1	-2,485.1	-46.3	2,485.5	0.86	0.74	0.43
8,647.0	91.30	180.70	6,101.9	-1,443.9	-2,581.1	-46.9	2,581.5	1.40	1.25	0.62
8,743.7	87.60	176.70	6,102.8	-1,444.8	-2,677.7	-44.7	2,678.0	5.63	-3.83	-4.14
8,838.0	90.30	178.30	6,104.6	-1,446.6	-2,771.9	-40.6	2,772.2	3.33	2.86	1.70
8,935.0	91.70	178.60	6,102.9	-1,444.9	-2,868.9	-38.0	2,869.1	1.48	1.44	0.31
9,029.0	90.70	179.50	6,100.9	-1,442.9	-2,962.8	-36.4	2,963.1	1.43	-1.06	0.96
9,125.0	89.70	179.70	6,100.6	-1,442.6	-3,058.8	-35.8	3,059.0	1.06	-1.04	0.21
9,221.0	87.80	179.50	6,102.7	-1,444.7	-3,154.8	-35.1	3,155.0	1.99	-1.98	-0.21
9,317.0	87.70	179.50	6,106.4	-1,448.4	-3,250.7	-34.3	3,250.9	0.10	-0.10	0.00
9,412.0	88.30	179.50	6,109.8	-1,451.8	-3,345.7	-33.4	3,345.8	0.63	0.63	0.00
9,507.0	90.60	178.70	6,110.7	-1,452.7	-3,440.6	-31.9	3,440.8	2.56	2.42	-0.84
9,601.0	90.80	177.60	6,109.5	-1,451.5	-3,534.6	-28.9	3,534.7	1.19	0.21	-1.17
9,696.0	90.60	177.10	6,108.4	-1,450.4	-3,629.5	-24.5	3,629.5	0.57	-0.21	-0.53
9,792.0	89.40	178.70	6,108.4	-1,450.4	-3,725.4	-21.0	3,725.4	2.08	-1.25	1.67
9,886.0	89.30	177.80	6,109.4	-1,451.4	-3,819.4	-18.1	3,819.3	0.96	-0.11	-0.96
9,983.0	91.30	178.00	6,108.9	-1,450.9	-3,916.3	-14.6	3,916.2	2.07	2.06	0.21
10,078.0	90.90	179.20	6,107.1	-1,449.1	-4,011.2	-12.3	4,011.1	1.33	-0.42	1.26
10,173.0	90.30	179.90	6,106.1	-1,448.1	-4,106.2	-11.5	4,106.1	0.97	-0.63	0.74
10,269.0	91.40	181.10	6,104.7	-1,446.7	-4,202.2	-12.3	4,202.1	1.70	1.15	1.25
10,365.0	90.10	180.80	6,103.4	-1,445.4	-4,298.2	-13.9	4,298.1	1.39	-1.35	-0.31
10,460.0	89.40	179.20	6,103.8	-1,445.8	-4,393.2	-13.9	4,393.1	1.84	-0.74	-1.68
10,555.0	91.20	180.00	6,103.3	-1,445.3	-4,488.2	-13.3	4,488.1	2.07	1.89	0.84
10,651.0	92.20	178.90	6,100.5	-1,442.5	-4,584.1	-12.4	4,584.0	1.55	1.04	-1.15
LAST SURVEY - AUG 3, 2014										
10,662.0	92.40	178.60	6,100.0	-1,442.0	-4,595.1	-12.1	4,595.0	3.28	1.82	-2.73
EXTRAPOLATION TO TD										
10,713.0	92.40	178.60	6,097.9	-1,439.9	-4,646.0	-10.9	4,645.9	0.00	0.00	0.00

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well PRONGHORN K-O-12HNC
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB-EST @ 4658.0usft (Original Well Elev)
Site:	NW NE SEC. 12 T5N R61W 6th P.M.	MD Reference:	KB-EST @ 4658.0usft (Original Well Elev)
Well:	PRONGHORN K-O-12HNC	North Reference:	True
Wellbore:	JOB #: 2009-358	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

Targets										
Target Name	- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
	- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
KOP - PRONGHORN		0.00	0.00	5,606.7	184.5	-3.7	1,399,882.02	3,374,118.37	40.423296	-104.156203
	- survey misses target center by 20.7usft at 5612.1usft MD (5606.8 TVD, 170.3 N, -18.7 E)									
	- Point									
BHL - PRONGHORN		0.00	0.00	6,110.0	-4,648.6	-47.3	1,395,048.97	3,374,147.97	40.410030	-104.156360
	- survey misses target center by 38.5usft at 10713.0usft MD (6097.9 TVD, -4646.0 N, -10.9 E)									
	- Point									
7" ICP - PRONGHOR		0.00	0.00	6,110.0	-389.5	-8.9	1,399,308.03	3,374,121.87	40.421721	-104.156222
	- survey misses target center by 76.4usft at 6456.1usft MD (6096.8 TVD, -394.2 N, 66.2 E)									
	- Point									
EXIST VERT PRONG		0.00	0.00	6,789.0	-1,807.0	-704.5	1,397,880.22	3,373,447.88	40.417830	-104.158720
	- survey misses target center by 965.3usft at 7915.8usft MD (6100.8 TVD, -1850.3 N, -29.0 E)									
	- Circle (radius 30.0)									

Survey Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N/-S	+E/-W		
		(usft)	(usft)		
468.0	468.0	0.0	0.0	SURFACE CASING	
550.0	550.0	0.1	0.7	START NUDGE	
5,547.0	5,541.9	173.9	-21.4	KOP	
6,422.0	6,094.2	-360.3	67.9	ICP	
10,662.0	6,100.0	-4,595.1	-12.1	LAST SURVEY - AUG 3, 2014	
10,713.0	6,097.9	-4,646.0	-10.9	EXTRAPOLATION TO TD	

Checked By: _____ Approved By: _____ Date: _____