

BONANZA CREEK ENERGY INC.

WELD COUNTY, COLORADO (NAD 83)

NE NE SEC. 32 T5N R61W 6th P.M.

STATE PRONGHORN U-32-31 MRLNB

JOB # 2009-423

03 February, 2015

Survey: FINAL SURVEYS

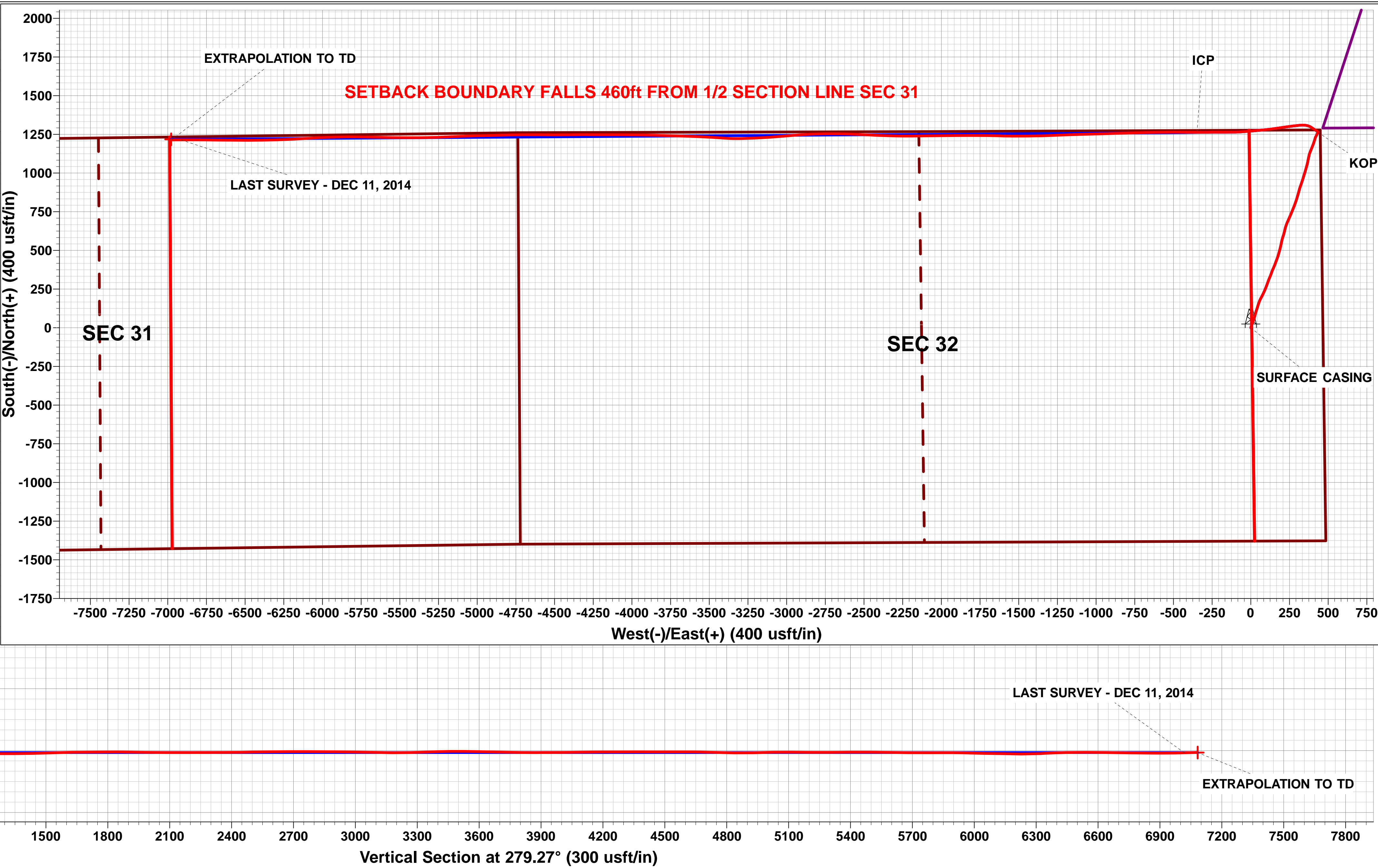
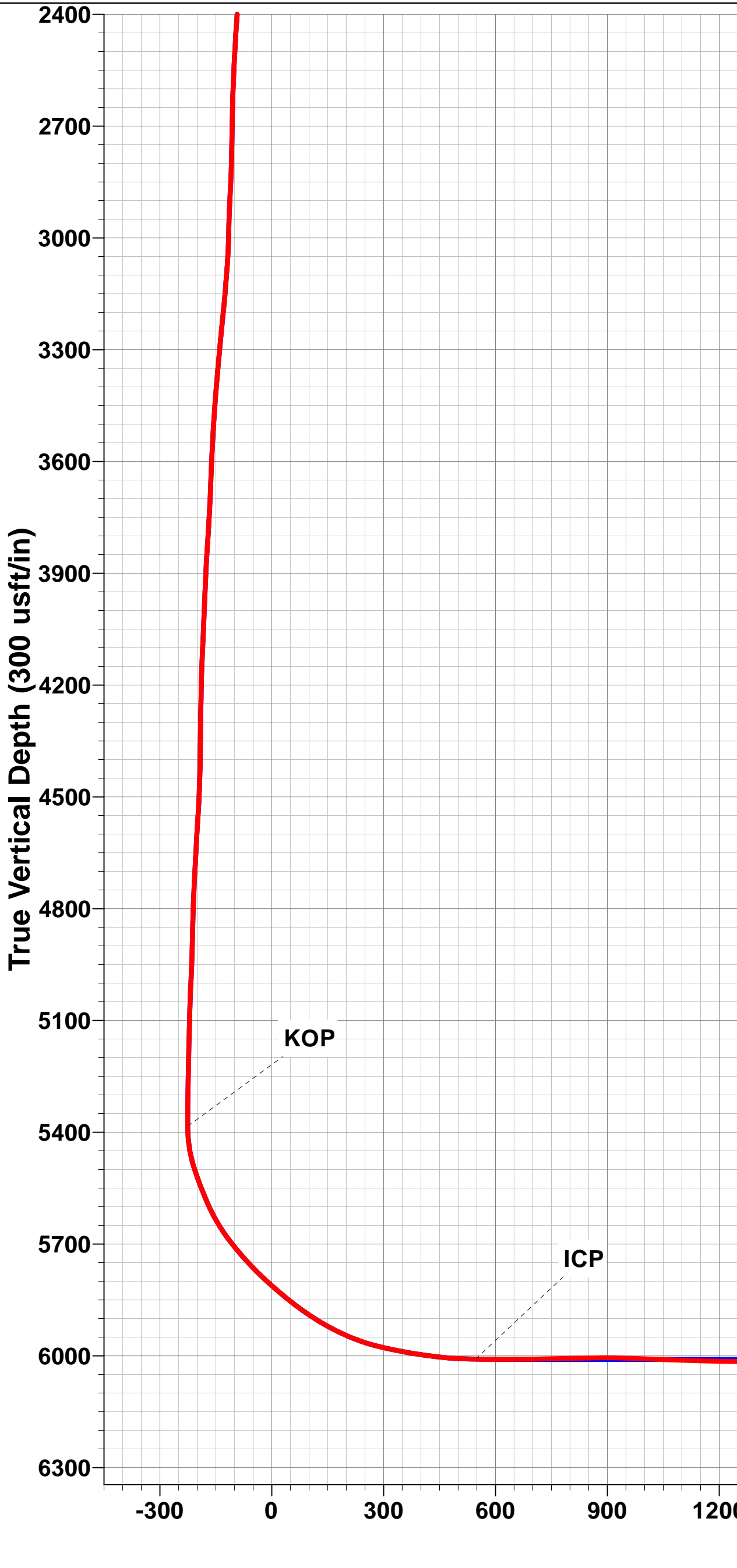
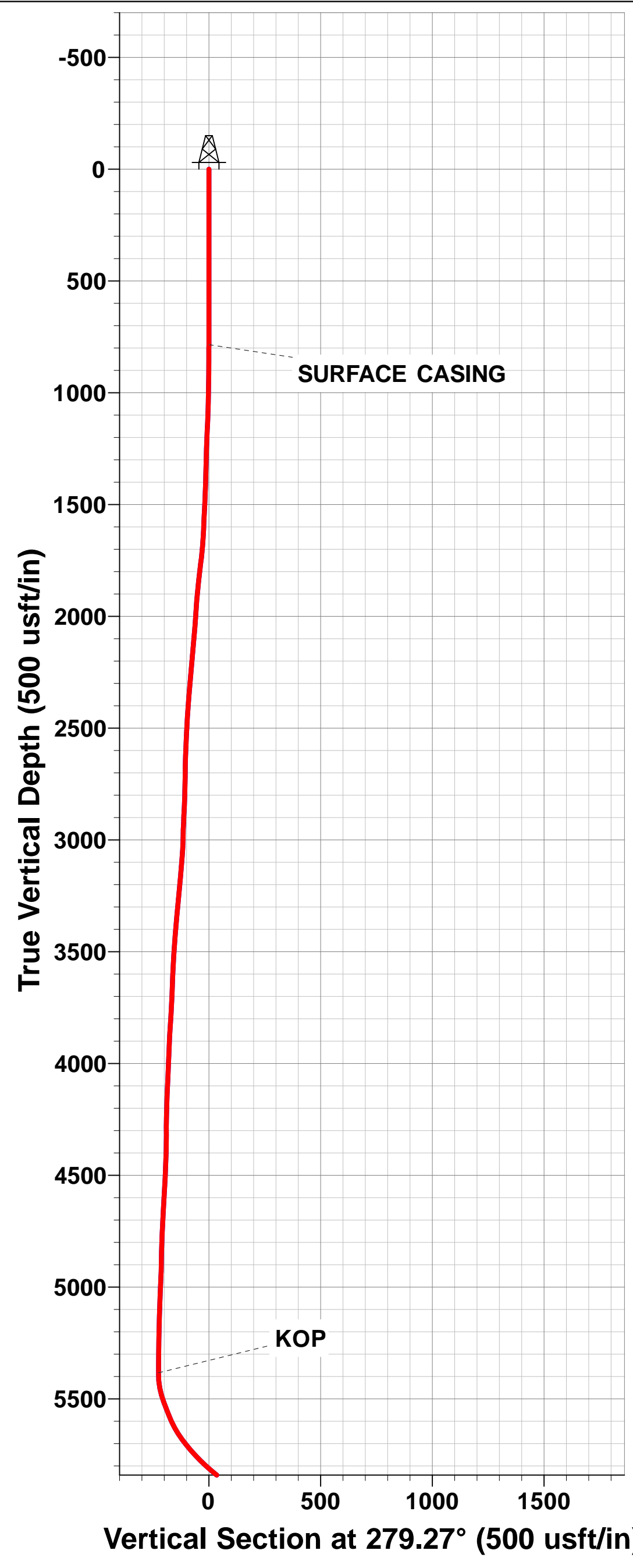
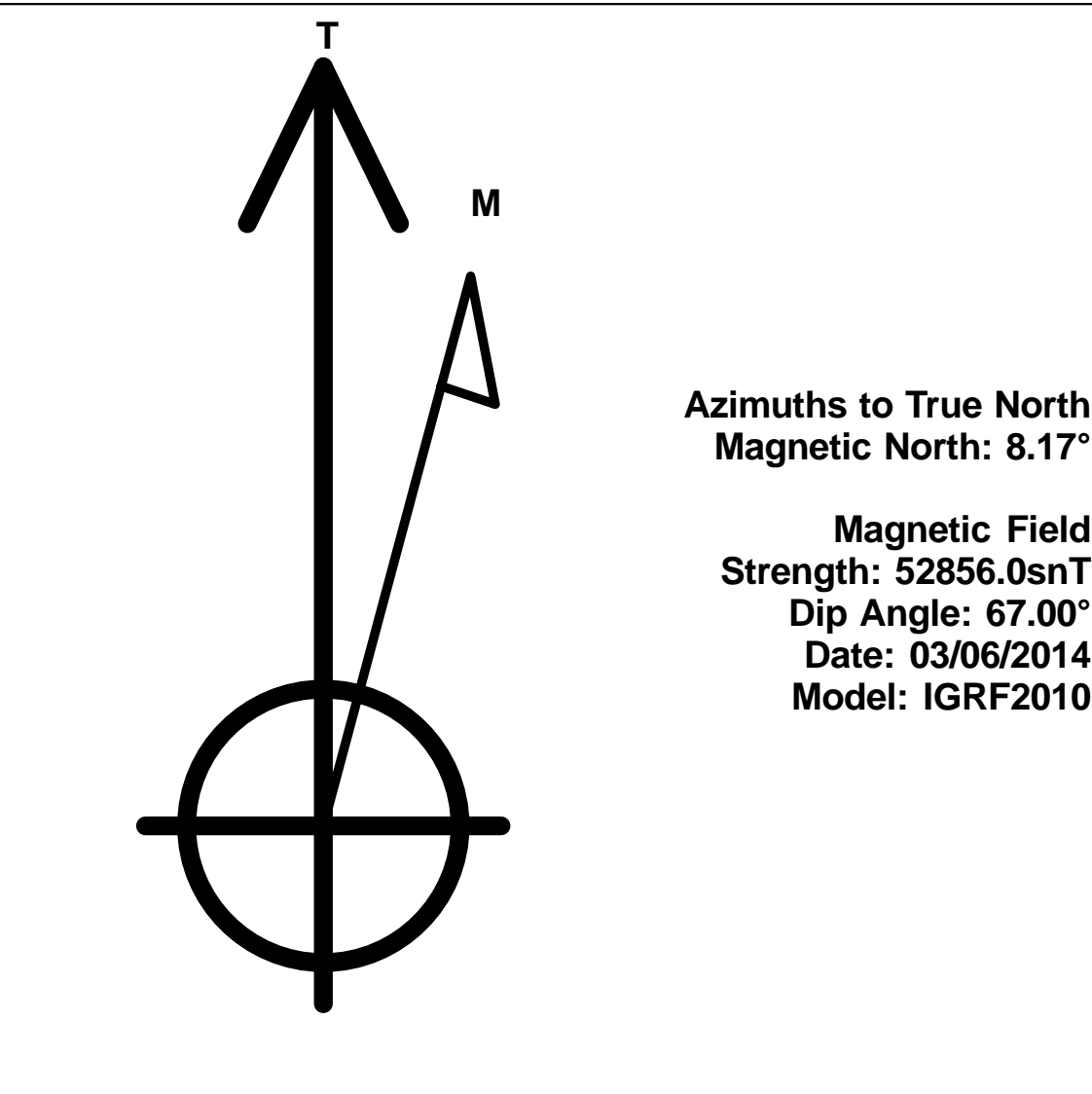
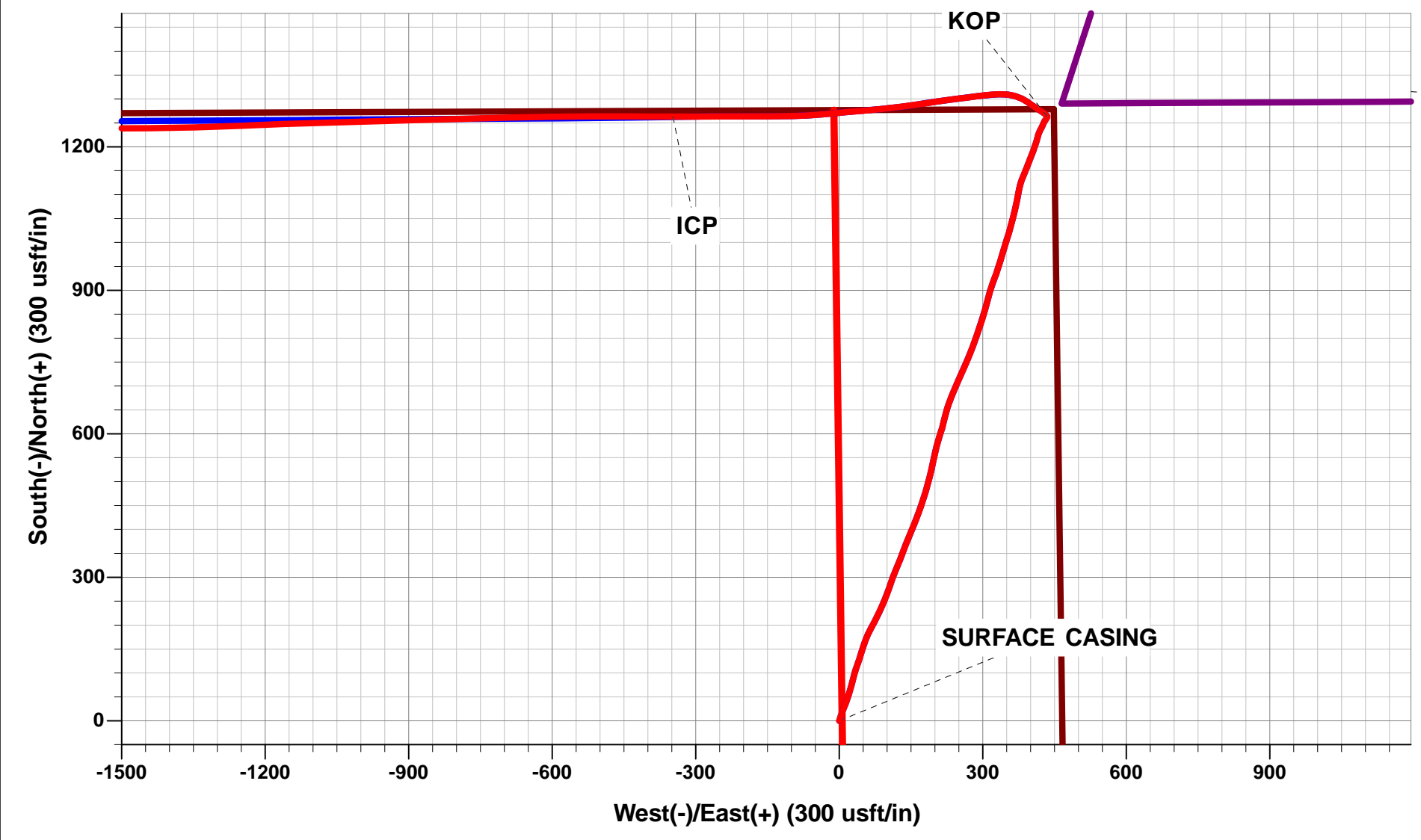




Project: WELD COUNTY, COLORADO (NAD 83)
Site: NE NE SEC. 32 T5N R61W 6th P.M.
Well: STATE PRONGHORN U-32-31 MRLNB
Wellbore: JOB # 2009-423
Design: FINAL SURVEYS

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Dep	Annotation	
500.0	500.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE	
785.0	785.0	0.00	0.00	0.0	0.0	0.0	0.0	SURFACE CASING	
5384.0	5600.0	2.45	1.60	1263.6	434.8	-225.5	1340.5	KOP	
6009.1	6712.0	88.80	270.01	1262.9	-347.6	546.6	2139.2	ICP	
6011.2	13282.0	91.70	269.50	1214.2	-6913.4	7018.7	8708.2	LAST SURVEY - DEC 11, 2014	
6009.3	13345.0	91.70	269.50	1213.7	-6976.4	7080.8	8771.1	EXTRAPOLATION TO TD	

WELLBORE TARGET DETAILS (LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
BHL (P3) - STATE PRONGHORN U-32-31 MRLNB	6010.0	1217.6	-6977.7	40.364399	-104.250229	Point



Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well STATE PRONGHORN U-32-31 MRLNB
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB-EST @ 4581.0usft (Original Well Elev)
Site:	NE NE SEC. 32 T5N R61W 6th P.M.	MD Reference:	KB-EST @ 4581.0usft (Original Well Elev)
Well:	STATE PRONGHORN U-32-31 MRLNB	North Reference:	True
Wellbore:	JOB # 2009-423	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	NE NE SEC. 32 T5N R61W 6th P.M.				
Site Position:		Northing:	1,376,924.91 usft	Latitude:	40.361050
From:	Lat/Long	Easting:	3,355,259.04 usft	Longitude:	-104.225120
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft	Grid Convergence:	0.82 °

Well	STATE PRONGHORN U-32-31 MRLNB					
Well Position	+N/-S	0.0 usft	Northing:	1,376,928.27 usft	Latitude:	40.361060
	+E/-W	0.0 usft	Easting:	3,355,239.49 usft	Longitude:	-104.225190
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	4,564.0 usft

Wellbore	JOB # 2009-423				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	03/06/2014	8.17	67.00	52,856

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	279.27	

Survey Program	Date	03/02/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
785.0	13,345.0	FINAL SURVEYS (JOB # 2009-423)	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	4,581.0	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE										
500.0	0.00	0.00	500.0	4,081.0	0.0	0.0	0.0	0.00	0.00	0.00
SURFACE CASING										
785.0	0.00	0.00	785.0	3,796.0	0.0	0.0	0.0	0.00	0.00	0.00
823.0	1.20	20.00	823.0	3,758.0	0.4	0.1	-0.1	3.16	3.16	0.00
854.0	1.40	26.80	854.0	3,727.0	1.0	0.4	-0.2	0.81	0.65	21.94
948.0	5.40	15.80	947.8	3,633.2	6.3	2.1	-1.1	4.29	4.26	-11.70
1,043.0	7.60	19.10	1,042.2	3,538.8	16.5	5.4	-2.7	2.35	2.32	3.47
1,136.0	10.90	23.90	1,134.0	3,447.0	30.4	11.0	-5.9	3.64	3.55	5.16
1,229.0	13.50	18.50	1,224.9	3,356.1	48.7	18.0	-9.9	3.05	2.80	-5.81
1,322.0	12.40	14.90	1,315.5	3,265.5	68.7	24.0	-12.6	1.47	-1.18	-3.87

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well STATE PRONGHORN U-32-31 MRLNB
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB-EST @ 4581.0usft (Original Well Elev)
Site:	NE NE SEC. 32 T5N R61W 6th P.M.	MD Reference:	KB-EST @ 4581.0usft (Original Well Elev)
Well:	STATE PRONGHORN U-32-31 MRLNB	North Reference:	True
Wellbore:	JOB # 2009-423	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)
1,415.0	16.10	14.10	1,405.6	3,175.4	90.8	29.7	-14.7	3.98	3.98	-0.86
1,507.0	17.50	20.30	1,493.7	3,087.3	116.2	37.6	-18.4	2.47	1.52	6.74
1,599.0	16.90	15.70	1,581.6	2,999.4	142.0	46.0	-22.6	1.62	-0.65	-5.00
1,693.0	18.80	21.20	1,671.1	2,909.9	169.3	55.2	-27.2	2.70	2.02	5.85
1,785.0	21.90	28.90	1,757.3	2,823.7	198.2	68.9	-36.1	4.45	3.37	8.37
1,878.0	21.60	24.60	1,843.7	2,737.3	228.9	84.4	-46.4	1.74	-0.32	-4.62
1,970.0	20.90	21.90	1,929.5	2,651.5	259.5	97.6	-54.5	1.31	-0.76	-2.93
2,062.0	20.10	18.10	2,015.6	2,565.4	289.8	108.6	-60.5	1.69	-0.87	-4.13
2,155.0	22.10	23.60	2,102.4	2,478.6	321.0	120.6	-67.3	3.02	2.15	5.91
2,248.0	21.90	19.20	2,188.6	2,392.4	353.4	133.3	-74.6	1.78	-0.22	-4.73
2,341.0	21.70	24.20	2,275.0	2,306.0	385.5	146.0	-82.0	2.01	-0.22	5.38
2,434.0	21.30	21.10	2,361.5	2,219.5	416.9	159.2	-89.9	1.30	-0.43	-3.33
2,527.0	20.70	19.00	2,448.4	2,132.6	448.2	170.6	-96.1	1.03	-0.65	-2.26
2,619.0	20.10	16.50	2,534.6	2,046.4	478.8	180.4	-100.9	1.15	-0.65	-2.72
2,714.0	19.60	14.70	2,623.9	1,957.1	509.8	189.1	-104.4	0.83	-0.53	-1.89
2,809.0	18.40	10.70	2,713.8	1,867.2	540.0	195.9	-106.3	1.86	-1.26	-4.21
2,905.0	19.20	14.50	2,804.6	1,776.4	570.2	202.6	-108.1	1.52	0.83	3.96
3,000.0	20.50	17.80	2,894.0	1,687.0	601.1	211.6	-112.0	1.81	1.37	3.47
3,095.0	19.30	12.70	2,983.3	1,597.7	632.3	220.2	-115.4	2.22	-1.26	-5.37
3,189.0	20.30	19.00	3,071.8	1,509.2	662.9	228.9	-119.1	2.51	1.06	6.70
3,287.0	20.80	24.40	3,163.6	1,417.4	694.8	241.6	-126.5	2.00	0.51	5.51
3,383.0	21.10	23.80	3,253.2	1,327.8	726.1	255.6	-135.3	0.38	0.31	-0.62
3,478.0	21.90	22.40	3,341.6	1,239.4	758.1	269.3	-143.6	1.00	0.84	-1.47
3,573.0	21.80	20.50	3,429.8	1,151.2	791.0	282.2	-151.1	0.75	-0.11	-2.00
3,668.0	21.20	17.80	3,518.2	1,062.8	823.9	293.7	-157.1	1.22	-0.63	-2.84
3,763.0	20.40	16.50	3,607.0	974.0	856.2	303.6	-161.7	0.97	-0.84	-1.37
3,860.0	19.60	14.40	3,698.1	882.9	888.1	312.5	-165.3	1.11	-0.82	-2.16
3,954.0	20.10	20.70	3,786.6	794.4	918.5	322.1	-169.9	2.34	0.53	6.70
4,049.0	19.10	18.10	3,876.1	704.9	948.6	332.7	-175.5	1.40	-1.05	-2.74
4,144.0	18.30	15.40	3,966.0	615.0	977.7	341.5	-179.5	1.24	-0.84	-2.84
4,239.0	18.40	18.40	4,056.2	524.8	1,006.3	350.2	-183.4	1.00	0.11	3.16
4,334.0	17.70	15.40	4,146.5	434.5	1,034.5	358.7	-187.4	1.22	-0.74	-3.16
4,429.0	16.40	13.40	4,237.4	343.6	1,061.4	365.7	-189.9	1.50	-1.37	-2.11
4,523.0	15.30	11.20	4,327.8	253.2	1,086.5	371.2	-191.2	1.33	-1.17	-2.34
4,620.0	14.90	10.90	4,421.4	159.6	1,111.3	376.0	-192.0	0.42	-0.41	-0.31
4,715.0	15.60	22.90	4,513.1	67.9	1,135.1	383.3	-195.4	3.40	0.74	12.63
4,811.0	15.30	21.40	4,605.6	-24.6	1,158.8	392.9	-201.1	0.52	-0.31	-1.56
4,905.0	14.60	20.90	4,696.5	-115.5	1,181.4	401.7	-206.1	0.76	-0.74	-0.53
5,001.0	12.50	19.10	4,789.8	-208.8	1,202.5	409.4	-210.3	2.23	-2.19	-1.87
5,097.0	10.80	13.70	4,883.8	-302.8	1,221.1	414.9	-212.8	2.10	-1.77	-5.62
5,192.0	8.40	30.60	4,977.5	-396.5	1,235.7	420.6	-216.0	3.87	-2.53	17.79
5,286.0	7.40	20.50	5,070.6	-489.6	1,247.3	426.2	-219.7	1.82	-1.06	-10.74
5,381.0	3.00	40.10	5,165.2	-584.2	1,254.9	429.9	-222.1	4.93	-4.63	20.63
5,476.0	2.60	29.90	5,260.1	-679.1	1,258.7	432.6	-224.2	0.67	-0.42	-10.74
5,540.0	2.60	24.60	5,324.0	-743.0	1,261.2	433.9	-225.0	0.38	0.00	-8.28
5,573.0	2.40	25.30	5,357.0	-776.0	1,262.5	434.5	-225.4	0.61	-0.61	2.12
KOP										
5,600.0	2.45	1.60	5,384.0	-803.0	1,263.6	434.8	-225.5	3.69	0.18	-87.78
5,605.0	2.50	357.50	5,389.0	-808.0	1,263.9	434.8	-225.5	3.69	1.05	-81.97
5,636.0	5.90	313.20	5,419.9	-838.9	1,265.6	433.6	-224.0	14.40	10.97	-142.90
5,669.0	12.70	310.50	5,452.4	-871.4	1,269.1	429.6	-219.5	20.64	20.61	-8.18
5,701.0	17.50	304.30	5,483.3	-902.3	1,274.1	423.0	-212.1	15.81	15.00	-19.37
5,733.0	21.00	300.00	5,513.5	-932.5	1,279.7	414.0	-202.4	11.79	10.94	-13.44

Survey Report



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5,765.0	23.40	307.30	5,543.1	-962.1	1,286.4	404.0	-191.4	11.41	7.50	22.81
5,797.0	24.20	304.30	5,572.4	-991.4	1,294.0	393.5	-179.9	4.53	2.50	-9.37
5,828.0	25.50	296.40	5,600.6	-1,019.6	1,300.5	382.3	-167.7	11.49	4.19	-25.48
5,860.0	28.60	286.70	5,629.1	-1,048.1	1,305.8	368.8	-153.6	16.82	9.69	-30.31
5,892.0	32.30	277.30	5,656.7	-1,075.7	1,309.1	352.9	-137.4	18.82	11.56	-29.37
5,923.0	37.10	268.60	5,682.2	-1,101.2	1,309.9	335.4	-119.9	22.22	15.48	-28.06
5,954.0	40.00	264.90	5,706.4	-1,125.4	1,308.8	316.1	-101.1	11.95	9.35	-11.94
5,986.0	41.80	263.60	5,730.6	-1,149.6	1,306.7	295.2	-80.8	6.22	5.62	-4.06
6,018.0	44.60	263.00	5,753.9	-1,172.9	1,304.1	273.5	-59.8	8.84	8.75	-1.87
6,049.0	46.00	262.50	5,775.7	-1,194.7	1,301.4	251.6	-38.7	4.66	4.52	-1.61
6,080.0	48.00	262.00	5,796.9	-1,215.9	1,298.3	229.2	-17.0	6.56	6.45	-1.61
6,111.0	51.20	261.80	5,817.0	-1,236.0	1,295.0	205.8	5.6	10.33	10.32	-0.65
6,143.0	52.10	261.60	5,836.8	-1,255.8	1,291.4	181.0	29.5	2.85	2.81	-0.62
6,174.0	52.70	261.10	5,855.7	-1,274.7	1,287.7	156.7	52.8	2.32	1.94	-1.61
6,205.0	54.60	262.20	5,874.1	-1,293.1	1,284.0	132.0	76.6	6.76	6.13	3.55
6,237.0	58.20	264.20	5,891.8	-1,310.8	1,280.9	105.5	102.2	12.40	11.25	6.25
6,269.0	59.50	264.70	5,908.4	-1,327.4	1,278.2	78.3	128.7	4.28	4.06	1.56
6,300.0	62.00	264.80	5,923.5	-1,342.5	1,275.8	51.3	154.9	8.07	8.06	0.32
6,331.0	65.00	265.00	5,937.3	-1,356.3	1,273.3	23.7	181.8	9.69	9.68	0.65
6,363.0	68.50	264.90	5,950.0	-1,369.0	1,270.7	-5.6	210.3	10.94	10.94	-0.31
6,395.0	71.00	264.80	5,961.0	-1,380.0	1,268.0	-35.5	239.3	7.82	7.81	-0.31
6,426.0	74.60	266.20	5,970.2	-1,389.2	1,265.7	-65.0	268.1	12.39	11.61	4.52
6,459.0	77.40	268.90	5,978.2	-1,397.2	1,264.3	-97.0	299.4	11.62	8.48	8.18
6,491.0	78.60	269.90	5,984.8	-1,403.8	1,264.0	-128.3	330.3	4.84	3.75	3.12
6,523.0	79.90	269.80	5,990.8	-1,409.8	1,263.9	-159.7	361.3	4.07	4.06	-0.31
6,554.0	81.80	270.00	5,995.7	-1,414.7	1,263.9	-190.3	391.5	6.16	6.13	0.65
6,587.0	82.60	270.00	6,000.2	-1,419.2	1,263.9	-223.0	423.7	2.42	2.42	0.00
6,618.0	83.60	269.80	6,003.9	-1,422.9	1,263.8	-253.8	454.1	3.29	3.23	-0.65
6,650.0	86.10	269.20	6,006.8	-1,425.8	1,263.5	-285.7	485.5	8.03	7.81	-1.87
6,667.0	87.70	269.10	6,007.7	-1,426.7	1,263.3	-302.6	502.2	9.43	9.41	-0.59
ICP										
6,712.0	88.80	270.01	6,009.1	-1,428.1	1,262.9	-347.6	546.6	3.17	2.45	2.02
6,761.0	90.00	271.00	6,009.6	-1,428.6	1,263.4	-396.6	595.0	3.17	2.45	2.02
6,857.0	90.60	269.60	6,009.1	-1,428.1	1,263.9	-492.6	689.8	1.59	0.62	-1.46
6,952.0	91.70	269.20	6,007.2	-1,426.2	1,262.9	-587.6	783.4	1.23	1.16	-0.42
7,046.0	90.50	268.90	6,005.4	-1,424.4	1,261.3	-681.5	875.9	1.32	-1.28	-0.32
7,141.0	87.50	268.20	6,007.1	-1,426.1	1,258.9	-776.5	969.2	3.24	-3.16	-0.74
7,236.0	88.00	268.60	6,010.8	-1,429.8	1,256.3	-871.4	1,062.4	0.67	0.53	0.42
7,331.0	88.50	268.10	6,013.7	-1,432.7	1,253.5	-966.3	1,155.6	0.74	0.53	-0.53
7,428.0	89.50	268.50	6,015.4	-1,434.4	1,250.7	-1,063.2	1,250.9	1.11	1.03	0.41
7,522.0	90.30	268.10	6,015.6	-1,434.6	1,247.9	-1,157.2	1,343.1	0.95	0.85	-0.43
7,617.0	91.40	267.40	6,014.1	-1,433.1	1,244.1	-1,252.1	1,436.2	1.37	1.16	-0.74
7,712.0	91.80	268.40	6,011.5	-1,430.5	1,240.7	-1,347.0	1,529.3	1.13	0.42	1.05
7,808.0	91.30	269.50	6,008.9	-1,427.9	1,238.9	-1,442.9	1,623.7	1.26	-0.52	1.15
7,902.0	89.90	270.20	6,007.9	-1,426.9	1,238.7	-1,536.9	1,716.4	1.67	-1.49	0.74
7,994.0	90.80	272.00	6,007.3	-1,426.3	1,240.4	-1,628.9	1,807.5	2.19	0.98	1.96
8,087.0	88.80	270.30	6,007.7	-1,426.7	1,242.3	-1,721.9	1,899.6	2.82	-2.15	-1.83
8,180.0	89.20	270.00	6,009.3	-1,428.3	1,242.5	-1,814.9	1,991.4	0.54	0.43	-0.32
8,273.0	89.80	269.70	6,010.1	-1,429.1	1,242.3	-1,907.9	2,083.1	0.72	0.65	-0.32
8,366.0	90.10	269.20	6,010.2	-1,429.2	1,241.4	-2,000.9	2,174.7	0.63	0.32	-0.54
8,459.0	90.40	269.40	6,009.8	-1,428.8	1,240.3	-2,093.9	2,266.3	0.39	0.32	0.22
8,552.0	90.00	269.10	6,009.5	-1,428.5	1,239.0	-2,186.8	2,357.9	0.54	-0.43	-0.32
8,645.0	90.80	271.20	6,008.8	-1,427.8	1,239.3	-2,279.8	2,449.7	2.42	0.86	2.26

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well STATE PRONGHORN U-32-31 MRLNB
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB-EST @ 4581.0usft (Original Well Elev)
Site:	NE NE SEC. 32 T5N R61W 6th P.M.	MD Reference:	KB-EST @ 4581.0usft (Original Well Elev)
Well:	STATE PRONGHORN U-32-31 MRLNB	North Reference:	True
Wellbore:	JOB # 2009-423	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)
8,737.0	91.90	271.90	6,006.6	-1,425.6	1,241.8	-2,371.8	2,540.9	1.42	1.20	0.76
8,830.0	89.80	273.10	6,005.3	-1,424.3	1,245.8	-2,464.7	2,633.2	2.60	-2.26	1.29
8,922.0	90.00	272.50	6,005.4	-1,424.4	1,250.3	-2,556.6	2,724.6	0.69	0.22	-0.65
9,014.0	89.70	271.20	6,005.7	-1,424.7	1,253.3	-2,648.5	2,815.8	1.45	-0.33	-1.41
9,108.0	89.50	269.50	6,006.3	-1,425.3	1,253.9	-2,742.5	2,908.7	1.82	-0.21	-1.81
9,201.0	89.20	267.50	6,007.4	-1,426.4	1,251.4	-2,835.5	3,000.1	2.17	-0.32	-2.15
9,292.0	88.80	265.50	6,009.0	-1,428.0	1,245.9	-2,926.3	3,088.8	2.24	-0.44	-2.20
9,384.0	88.90	265.10	6,010.8	-1,429.8	1,238.3	-3,017.9	3,178.0	0.45	0.11	-0.43
9,478.0	92.00	266.10	6,010.1	-1,429.1	1,231.1	-3,111.7	3,269.4	3.47	3.30	1.06
9,571.0	91.60	267.30	6,007.1	-1,426.1	1,225.8	-3,204.4	3,360.1	1.36	-0.43	1.29
9,664.0	91.30	268.80	6,004.8	-1,423.8	1,222.6	-3,297.4	3,451.3	1.64	-0.32	1.61
9,757.0	89.40	273.80	6,004.2	-1,423.2	1,224.7	-3,390.3	3,543.3	5.75	-2.04	5.38
9,849.0	88.30	273.50	6,006.1	-1,425.1	1,230.6	-3,482.1	3,634.9	1.24	-1.20	-0.33
9,942.0	88.70	272.30	6,008.5	-1,427.5	1,235.3	-3,574.9	3,727.3	1.36	0.43	-1.29
10,035.0	89.70	271.60	6,009.8	-1,428.8	1,238.4	-3,667.9	3,819.5	1.31	1.08	-0.75
10,128.0	90.20	272.00	6,009.9	-1,428.9	1,241.4	-3,760.8	3,911.7	0.69	0.54	0.43
10,220.0	90.30	271.30	6,009.5	-1,428.5	1,244.0	-3,852.8	4,002.9	0.77	0.11	-0.76
10,312.0	91.30	271.00	6,008.2	-1,427.2	1,245.9	-3,944.8	4,094.0	1.13	1.09	-0.33
10,404.0	89.70	270.40	6,007.4	-1,426.4	1,247.0	-4,036.8	4,184.9	1.86	-1.74	-0.65
10,497.0	90.70	270.00	6,007.1	-1,426.1	1,247.3	-4,129.7	4,276.8	1.16	1.08	-0.43
10,588.0	90.00	270.30	6,006.5	-1,425.5	1,247.6	-4,220.7	4,366.6	0.84	-0.77	0.33
10,683.0	89.50	269.90	6,006.9	-1,425.9	1,247.7	-4,315.7	4,460.4	0.67	-0.53	-0.42
10,779.0	90.60	269.10	6,006.8	-1,425.8	1,246.9	-4,411.7	4,555.0	1.42	1.15	-0.83
10,875.0	89.20	270.70	6,007.0	-1,426.0	1,246.7	-4,507.7	4,649.7	2.21	-1.46	1.67
10,970.0	88.40	270.30	6,009.0	-1,428.0	1,247.5	-4,602.7	4,743.6	0.94	-0.84	-0.42
11,064.0	88.30	269.50	6,011.7	-1,430.7	1,247.4	-4,696.7	4,836.3	0.86	-0.11	-0.85
11,159.0	92.20	268.60	6,011.3	-1,430.3	1,245.8	-4,791.6	4,929.8	4.21	4.11	-0.95
11,254.0	91.00	268.50	6,008.6	-1,427.6	1,243.4	-4,886.6	5,023.1	1.27	-1.26	-0.11
11,349.0	89.40	268.90	6,008.3	-1,427.3	1,241.2	-4,981.5	5,116.4	1.74	-1.68	0.42
11,446.0	89.60	267.70	6,009.2	-1,428.2	1,238.4	-5,078.5	5,211.7	1.25	0.21	-1.24
11,542.0	90.50	267.10	6,009.1	-1,428.1	1,234.0	-5,174.4	5,305.6	1.13	0.94	-0.62
11,638.0	90.60	268.50	6,008.2	-1,427.2	1,230.3	-5,270.3	5,399.7	1.46	0.10	1.46
11,732.0	89.40	269.50	6,008.2	-1,427.2	1,228.7	-5,364.3	5,492.2	1.66	-1.28	1.06
11,827.0	89.30	270.20	6,009.2	-1,428.2	1,228.4	-5,459.3	5,585.9	0.74	-0.11	0.74
11,921.0	89.10	270.90	6,010.5	-1,429.5	1,229.3	-5,553.3	5,678.8	0.77	-0.21	0.74
12,017.0	90.50	271.40	6,010.9	-1,429.9	1,231.3	-5,649.2	5,773.8	1.55	1.46	0.52
12,112.0	89.90	271.30	6,010.5	-1,429.5	1,233.5	-5,744.2	5,867.9	0.64	-0.63	-0.11
12,201.0	88.30	268.90	6,011.9	-1,430.9	1,233.7	-5,833.2	5,955.8	3.24	-1.80	-2.70
12,294.0	88.90	268.70	6,014.2	-1,433.2	1,231.7	-5,926.2	6,047.2	0.68	0.65	-0.22
12,387.0	89.40	267.70	6,015.6	-1,434.6	1,228.8	-6,019.1	6,138.4	1.20	0.54	-1.08
12,479.0	88.70	265.70	6,017.1	-1,436.1	1,223.5	-6,110.9	6,228.2	2.30	-0.76	-2.17
12,572.0	93.70	267.30	6,015.2	-1,434.2	1,217.8	-6,203.7	6,318.9	5.64	5.38	1.72
12,664.0	91.80	268.30	6,010.8	-1,429.8	1,214.3	-6,295.5	6,408.9	2.33	-2.07	1.09
12,757.0	90.00	268.90	6,009.3	-1,428.3	1,212.0	-6,388.5	6,500.3	2.04	-1.94	0.65
12,849.0	89.40	270.30	6,009.8	-1,428.8	1,211.4	-6,480.5	6,591.0	1.66	-0.65	1.52
12,941.0	89.80	270.40	6,010.4	-1,429.4	1,211.9	-6,572.5	6,681.9	0.45	0.43	0.11
13,037.0	88.60	270.60	6,011.8	-1,430.8	1,212.8	-6,668.4	6,776.7	1.27	-1.25	0.21
13,130.0	89.30	270.60	6,013.5	-1,432.5	1,213.8	-6,761.4	6,868.7	0.75	0.75	0.00
13,193.0	91.00	270.40	6,013.3	-1,432.3	1,214.3	-6,824.4	6,930.9	2.72	2.70	-0.32
LAST SURVEY - DEC 11, 2014										
13,282.0	91.70	269.50	6,011.2	-1,430.2	1,214.2	-6,913.4	7,018.7	1.28	0.79	-1.01
EXTRAPOLATION TO TD										
13,345.0	91.70	269.50	6,009.3	-1,428.3	1,213.7	-6,976.4	7,080.8	0.00	0.00	0.00

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well STATE PRONGHORN U-32-31 MRLNB
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB-EST @ 4581.0usft (Original Well Elev)
Site:	NE NE SEC. 32 T5N R61W 6th P.M.	MD Reference:	KB-EST @ 4581.0usft (Original Well Elev)
Well:	STATE PRONGHORN U-32-31 MRLNB	North Reference:	True
Wellbore:	JOB # 2009-423	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)		
BHL (P3) - STATE PR	0.00	0.00	6,010.0	1,217.6	-6,977.7	1,378,045.39	3,348,245.29	40.364399	-104.250229
- survey misses target center by 4.2usft at 13345.0usft MD (6009.3 TVD, 1213.7 N, -6976.4 E)									
- Point									
KOP - STATE PRONG	0.00	0.00	5,507.7	1,271.6	435.2	1,378,205.91	3,355,656.35	40.364550	-104.223628
- survey misses target center by 19.4usft at 5720.2usft MD (5501.5 TVD, 1277.4 N, 417.8 E)									
- Point									
7" ICP *NEW* - STAT	0.00	0.00	6,011.0	1,267.4	-138.8	1,378,193.45	3,355,082.50	40.364539	-104.225688
- survey misses target center by 23.9usft at 6506.2usft MD (5987.8 TVD, 1264.0 N, -143.2 E)									
- Point									
BHL (P2) - STATE PR	0.00	0.00	6,040.0	1,214.3	-7,437.7	1,378,035.45	3,347,785.45	40.364390	-104.251880
- survey misses target center by 462.3usft at 13345.0usft MD (6009.3 TVD, 1213.7 N, -6976.4 E)									
- Point									
KOP (P2) - STATE PR	0.00	0.00	5,536.7	1,271.6	435.2	1,378,205.91	3,355,656.35	40.364550	-104.223628
- survey misses target center by 29.6usft at 5746.1usft MD (5525.7 TVD, 1282.2 N, 409.9 E)									
- Point									
BHL - STATE PRONG	0.00	0.00	6,011.0	1,214.3	-7,437.7	1,378,035.45	3,347,785.45	40.364390	-104.251880
- survey misses target center by 461.3usft at 13345.0usft MD (6009.3 TVD, 1213.7 N, -6976.4 E)									
- Point									
7" ICP (P2) *NEW* - S	0.00	0.00	6,040.0	1,267.4	-138.8	1,378,193.45	3,355,082.50	40.364539	-104.225688
- survey misses target center by 52.3usft at 6511.6usft MD (5988.8 TVD, 1264.0 N, -148.5 E)									
- Point									

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
500.0	500.0	0.0	0.0	START NUDGE
785.0	785.0	0.0	0.0	SURFACE CASING
5,600.0	5,384.0	1,263.6	434.8	KOP
6,712.0	6,009.1	1,262.9	-347.6	ICP
13,282.0	6,011.2	1,214.2	-6,913.4	LAST SURVEY - DEC 11, 2014
13,345.0	6,009.3	1,213.7	-6,976.4	EXTRAPOLATION TO TD

Checked By: _____ Approved By: _____ Date: _____