

BONANZA CREEK ENERGY INC.

WELD COUNTY, COLORADO (NAD 83)

SE SE SEC. 4 T4N R63W 6th P.M.

PARK O-K-4HC

JOB # 2009-300

30 April, 2014

Survey: FINAL SURVEYS





Project: WELD COUNTY, COLORADO (NAD 83)
Site: SE SE SEC. 4 T4N R63W 6th P.M.
Well: PARK O-K-4HC
Wellbore: JOB # 2009-300
Design: FINAL SURVEYS

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation
834.0	834.0	0.66	24.40	5.0	-0.2	4.8	5.2	SURFACE CASING
1569.9	1570.0	1.00	217.07	9.3	4.5	7.8	16.1	START NUDGE
5962.0	6227.0	0.65	226.47	-447.4	-1316.7	-86.2	1417.6	KOP
6553.6	7205.0	89.20	357.80	185.8	-1316.9	524.8	2052.7	ICP
6544.2	11469.7	91.10	357.50	4447.2	-1245.0	4618.1	6316.9	LAST SURVEY - APR 8, 2014
6543.3	11517.7	91.10	357.50	4495.2	-1247.0	4664.9	6364.9	EXTRAPOLATION TO TD

PROPOSED LOCAL COORDINATES:

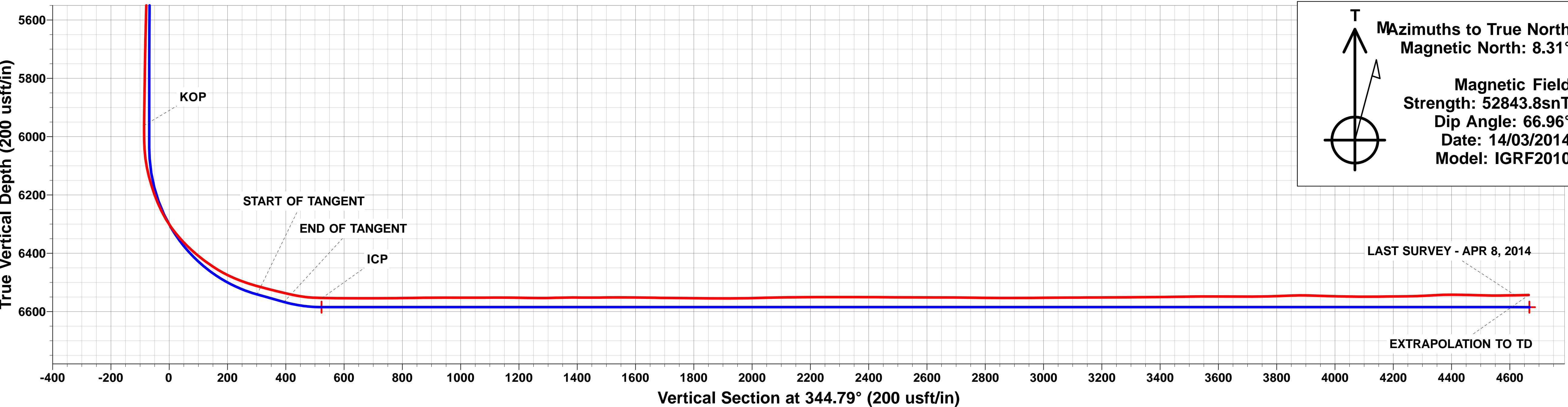
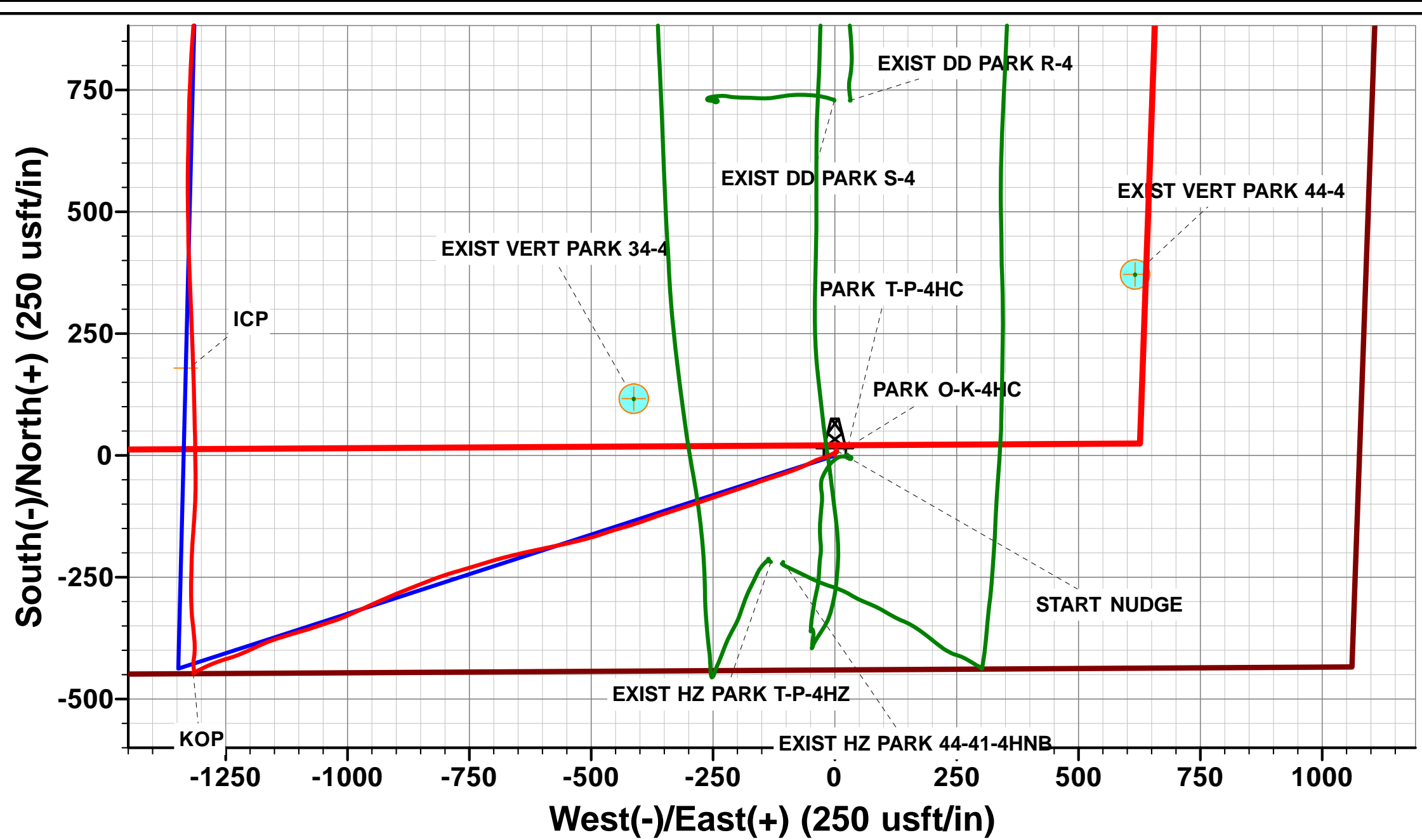
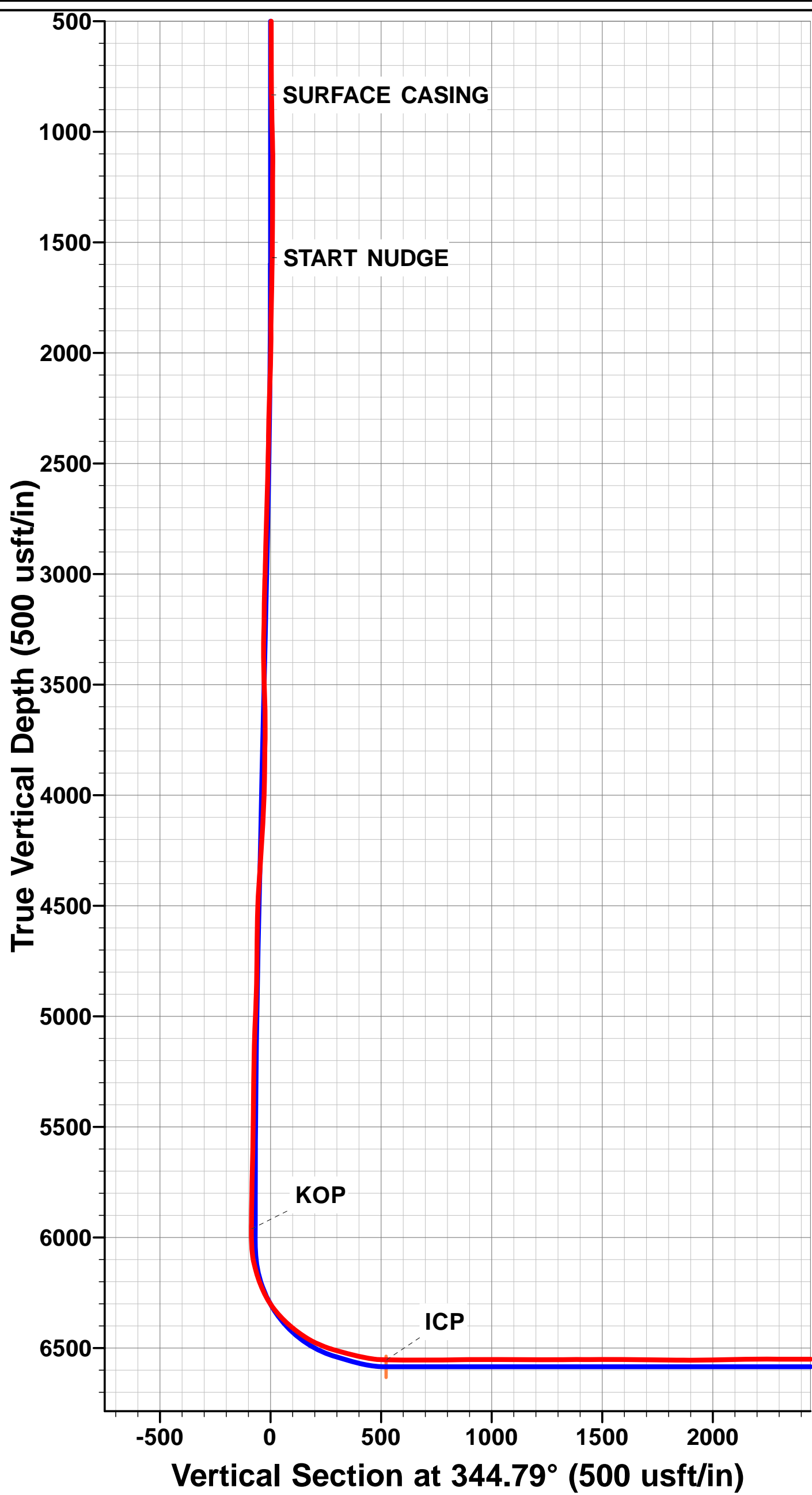
SHL: 440ft FSL & 1076ft FEL Sec 4

7" ICP: ft 531ft FSL & 2425ft FEL Sec 4

BHL: 470ft FNL & 2460ft FEL Sec 4

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
BHL - PARK O-K-4HC (P2)	6585.0	4503.6	-1224.5	40.347412	-104.442083	Point
ICP - PARK O-K-4HC *NEW* (P2)	6585.0	179.4	-1331.9	40.335542	-104.442467	Point



Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well PARK O-K-4HC
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB @ 4632.0usft (CADE 21)
Site:	SE SE SEC. 4 T4N R63W 6th P.M.	MD Reference:	KB @ 4632.0usft (CADE 21)
Well:	PARK O-K-4HC	North Reference:	True
Wellbore:	JOB # 2009-300	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	SE SE SEC. 4 T4N R63W 6th P.M.				
Site Position:		Northing:	1,366,673.23 usft	Latitude:	40.335049
From:	Lat/Long	Easting:	3,296,160.78 usft	Longitude:	-104.437618
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft	Grid Convergence:	0.69 °

Well	PARK O-K-4HC					
Well Position	+N-S	0.0 usft	Northing:	1,366,673.34 usft	Latitude:	40.335050
	+E-W	0.0 usft	Easting:	3,296,140.71 usft	Longitude:	-104.437690
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	4,615.0 usft

Wellbore	JOB # 2009-300				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	14/03/2014	8.31	66.96	52,844

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	344.79	

Survey Program	Date	08/04/2014			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
158.7	11,517.7	FINAL SURVEYS (JOB # 2009-300)	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	4,632.0	0.0	0.0	0.0	0.00	0.00	0.00
158.7	0.40	340.60	158.7	4,473.3	0.5	-0.2	0.6	0.25	0.25	0.00
358.7	0.60	345.20	358.7	4,273.3	2.2	-0.7	2.3	0.10	0.10	2.30
483.3	0.10	19.40	483.3	4,148.7	2.9	-0.8	3.0	0.42	-0.40	27.45
715.8	0.40	15.30	715.8	3,916.2	3.9	-0.5	3.9	0.13	0.13	-1.76
787.0	0.60	17.50	787.0	3,845.0	4.5	-0.4	4.4	0.28	0.28	3.09
SURFACE CASING										
834.0	0.66	24.40	834.0	3,798.0	5.0	-0.2	4.8	0.21	0.13	14.68
860.3	0.70	27.70	860.3	3,771.7	5.3	0.0	5.1	0.21	0.15	12.55
952.9	1.60	18.90	952.8	3,679.2	7.0	0.7	6.6	0.99	0.97	-9.50
1,044.3	2.10	15.90	1,044.2	3,587.8	9.8	1.5	9.1	0.56	0.55	-3.28
1,136.4	0.20	173.50	1,136.3	3,495.7	11.3	2.0	10.3	2.48	-2.06	171.06
1,229.0	0.30	145.20	1,228.9	3,403.1	10.9	2.2	10.0	0.17	0.11	-30.55

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well PARK O-K-4HC
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB @ 4632.0usft (CADE 21)
Site:	SE SE SEC. 4 T4N R63W 6th P.M.	MD Reference:	KB @ 4632.0usft (CADE 21)
Well:	PARK O-K-4HC	North Reference:	True
Wellbore:	JOB # 2009-300	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)
1,322.3	0.40	111.40	1,322.2	3,309.8	10.6	2.6	9.5	0.24	0.11	-36.23
1,415.3	0.70	105.00	1,415.2	3,216.8	10.3	3.5	9.0	0.33	0.32	-6.88
1,508.6	0.70	118.20	1,508.5	3,123.5	9.9	4.5	8.4	0.17	0.00	14.15
START NUDGE										
1,570.0	1.00	217.07	1,569.9	3,062.1	9.3	4.5	7.8	2.13	0.49	161.03
1,632.5	2.60	230.60	1,632.3	2,999.7	8.0	3.1	6.9	2.63	2.56	21.64
1,693.7	4.10	240.30	1,693.4	2,938.6	6.0	0.1	5.8	2.61	2.45	15.85
1,755.0	5.50	244.40	1,754.6	2,877.4	3.6	-4.4	4.7	2.35	2.28	6.68
1,816.4	6.20	243.00	1,815.6	2,816.4	0.9	-10.0	3.5	1.16	1.14	-2.28
1,877.7	6.90	245.80	1,876.5	2,755.5	-2.1	-16.4	2.2	1.26	1.14	4.57
1,939.5	8.10	254.40	1,937.8	2,694.2	-4.8	-23.9	1.6	2.65	1.94	13.91
2,003.9	9.20	251.80	2,001.4	2,630.6	-7.7	-33.2	1.3	1.81	1.71	-4.04
2,068.3	9.70	243.90	2,064.9	2,567.1	-11.7	-43.0	0.0	2.16	0.78	-12.27
2,132.0	10.80	243.10	2,127.7	2,504.3	-16.7	-53.1	-2.2	1.74	1.73	-1.25
2,195.2	11.60	247.20	2,189.7	2,442.3	-21.9	-64.2	-4.2	1.79	1.27	6.49
2,258.4	12.80	247.50	2,251.4	2,380.6	-27.0	-76.6	-6.0	1.90	1.90	0.48
2,323.1	14.80	249.90	2,314.3	2,317.7	-32.6	-91.0	-7.6	3.21	3.09	3.71
2,386.9	17.10	253.20	2,375.6	2,256.4	-38.1	-107.6	-8.5	3.87	3.61	5.17
2,450.6	18.40	250.60	2,436.3	2,195.7	-44.2	-126.0	-9.5	2.39	2.04	-4.08
2,515.4	19.50	251.10	2,497.5	2,134.5	-51.0	-145.9	-11.0	1.72	1.70	0.77
2,579.1	21.30	250.90	2,557.3	2,074.7	-58.3	-166.9	-12.5	2.83	2.82	-0.31
2,642.3	23.10	251.50	2,615.7	2,016.3	-66.0	-189.5	-13.9	2.87	2.85	0.95
2,705.5	25.10	251.50	2,673.4	1,958.6	-74.2	-214.0	-15.4	3.16	3.16	0.00
2,768.6	26.10	251.20	2,730.4	1,901.6	-82.9	-239.8	-17.1	1.60	1.58	-0.47
2,831.9	25.10	251.10	2,787.5	1,844.5	-91.7	-265.7	-18.8	1.58	-1.58	-0.16
2,928.7	25.60	252.10	2,874.9	1,757.1	-104.8	-305.0	-21.1	0.68	0.52	1.03
3,024.4	26.60	251.90	2,960.8	1,671.2	-117.8	-345.1	-23.1	1.05	1.05	-0.21
3,119.7	23.00	249.40	3,047.4	1,584.6	-131.0	-382.8	-26.0	3.93	-3.78	-2.62
3,214.3	22.90	254.10	3,134.5	1,497.5	-142.5	-417.8	-27.9	1.94	-0.11	4.97
3,309.3	22.80	252.60	3,222.0	1,410.0	-153.1	-453.1	-28.9	0.62	-0.11	-1.58
3,373.3	22.10	250.70	3,281.2	1,350.8	-160.8	-476.3	-30.2	1.58	-1.09	-2.97
3,436.6	23.30	253.90	3,339.6	1,292.4	-168.2	-499.6	-31.2	2.72	1.89	5.05
3,500.1	26.60	256.60	3,397.1	1,234.9	-175.0	-525.5	-31.0	5.50	5.20	4.26
3,564.3	29.60	257.40	3,453.8	1,178.2	-181.8	-555.0	-29.8	4.71	4.67	1.25
3,660.1	31.30	258.60	3,536.3	1,095.7	-191.9	-602.4	-27.1	1.88	1.77	1.25
3,755.1	30.20	256.60	3,618.0	1,014.0	-202.3	-649.9	-24.7	1.58	-1.16	-2.11
3,851.2	26.60	254.20	3,702.5	929.5	-213.7	-694.1	-24.1	3.93	-3.74	-2.50
3,946.1	25.30	252.70	3,787.9	844.1	-225.6	-733.9	-25.1	1.53	-1.37	-1.58
4,042.0	24.80	253.30	3,874.8	757.2	-237.4	-772.8	-26.4	0.58	-0.52	0.63
4,136.9	22.10	252.10	3,961.8	670.2	-248.6	-808.8	-27.7	2.89	-2.85	-1.26
4,200.5	21.60	249.20	4,020.8	611.2	-256.5	-831.1	-29.4	1.87	-0.79	-4.56
4,264.7	22.80	247.00	4,080.2	551.8	-265.5	-853.6	-32.3	2.27	1.87	-3.43
4,328.1	23.90	249.30	4,138.5	493.5	-274.9	-877.0	-35.1	2.25	1.73	3.62
4,392.0	24.90	247.50	4,196.6	435.4	-284.6	-901.5	-38.1	1.95	1.57	-2.82
4,487.0	24.60	245.80	4,282.9	349.1	-300.3	-938.0	-43.7	0.81	-0.32	-1.79
4,581.7	21.70	245.00	4,370.0	262.0	-315.8	-971.9	-49.8	3.08	-3.06	-0.84
4,677.4	22.40	246.90	4,458.7	173.3	-330.5	-1,004.7	-55.3	1.04	0.73	1.99
4,773.1	20.40	253.20	4,547.8	84.2	-342.4	-1,037.4	-58.3	3.18	-2.09	6.58
4,868.1	20.40	250.70	4,636.8	-4.8	-352.7	-1,068.9	-59.9	0.92	0.00	-2.63
4,963.3	22.40	254.70	4,725.5	-93.5	-363.0	-1,102.1	-61.1	2.60	2.10	4.20
5,058.3	20.70	252.20	4,813.8	-181.8	-372.9	-1,135.5	-61.9	2.03	-1.79	-2.63
5,152.5	16.40	248.40	4,903.1	-271.1	-382.9	-1,163.7	-64.1	4.74	-4.56	-4.03
5,215.5	15.00	246.70	4,963.8	-331.8	-389.4	-1,179.5	-66.3	2.34	-2.22	-2.70

Survey Report



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Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB @ 4632.0usft (CADE 21)
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Wellbore:	JOB # 2009-300	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)
5,310.4	13.60	243.60	5,055.8	-423.8	-399.2	-1,200.8	-70.2	1.68	-1.47	-3.26
5,406.6	12.80	248.40	5,149.4	-517.4	-408.1	-1,220.8	-73.5	1.41	-0.83	4.99
5,502.6	11.50	253.10	5,243.3	-611.3	-414.8	-1,239.9	-75.0	1.70	-1.35	4.90
5,566.0	9.60	254.20	5,305.6	-673.6	-418.1	-1,251.0	-75.2	3.01	-3.00	1.74
5,662.2	8.80	247.50	5,400.5	-768.5	-423.1	-1,265.5	-76.3	1.39	-0.83	-6.97
5,757.5	9.20	249.30	5,494.7	-862.7	-428.6	-1,279.4	-77.9	0.51	0.42	1.89
5,853.5	7.40	244.20	5,589.6	-957.6	-434.0	-1,292.1	-79.8	2.02	-1.88	-5.31
5,949.5	5.40	242.50	5,685.0	-1,053.0	-438.8	-1,301.7	-81.9	2.09	-2.08	-1.77
6,013.8	4.60	240.90	5,749.1	-1,117.1	-441.4	-1,306.6	-83.1	1.26	-1.24	-2.49
6,077.6	3.60	242.50	5,812.7	-1,180.7	-443.6	-1,310.6	-84.2	1.58	-1.57	2.51
6,141.5	2.90	238.10	5,876.6	-1,244.6	-445.4	-1,313.8	-85.1	1.16	-1.09	-6.88
6,182.3	2.80	235.80	5,917.3	-1,285.3	-446.5	-1,315.5	-85.7	0.37	-0.25	-5.64
6,214.0	1.70	233.00	5,949.0	-1,317.0	-447.2	-1,316.5	-86.1	3.49	-3.48	-8.85
KOP										
6,227.0	0.65	226.47	5,962.0	-1,330.0	-447.4	-1,316.7	-86.2	8.12	-8.07	-50.19
6,245.7	0.90	64.50	5,980.7	-1,348.7	-447.4	-1,316.7	-86.3	8.17	1.33	-864.30
6,278.1	2.70	43.80	6,013.0	-1,381.0	-446.7	-1,315.9	-85.8	5.83	5.57	-64.01
6,309.4	3.70	21.00	6,044.3	-1,412.3	-445.2	-1,315.0	-84.6	5.10	3.19	-72.75
6,341.2	7.40	354.30	6,076.0	-1,444.0	-442.2	-1,314.9	-81.8	13.90	11.64	-83.99
6,372.9	11.80	351.50	6,107.2	-1,475.2	-437.0	-1,315.5	-76.5	13.97	13.90	-8.84
6,404.4	14.90	358.30	6,137.8	-1,505.8	-429.8	-1,316.1	-69.4	11.02	9.85	21.60
6,436.2	18.10	4.70	6,168.3	-1,536.3	-420.8	-1,315.9	-60.8	11.54	10.05	20.10
6,467.8	21.40	9.50	6,198.0	-1,566.0	-410.2	-1,314.5	-50.9	11.63	10.45	15.19
6,499.6	24.00	1.70	6,227.4	-1,595.4	-398.0	-1,313.3	-39.5	12.49	8.18	-24.53
6,531.2	27.00	355.80	6,255.9	-1,623.9	-384.4	-1,313.7	-26.3	12.42	9.49	-18.66
6,563.4	31.00	354.10	6,284.1	-1,652.1	-368.9	-1,315.1	-10.9	12.69	12.43	-5.28
6,595.7	36.00	353.90	6,311.0	-1,679.0	-351.1	-1,316.9	6.7	15.46	15.46	-0.62
6,628.0	40.30	354.10	6,336.4	-1,704.4	-331.3	-1,319.0	26.4	13.34	13.33	0.62
6,660.1	43.70	358.50	6,360.3	-1,728.3	-309.9	-1,320.4	47.4	13.99	10.58	13.69
6,692.0	47.80	359.30	6,382.5	-1,750.5	-287.0	-1,320.8	69.6	12.98	12.85	2.51
6,723.5	50.90	0.70	6,403.1	-1,771.1	-263.1	-1,320.8	92.7	10.40	9.84	4.44
6,755.1	54.00	1.00	6,422.3	-1,790.3	-238.0	-1,320.4	116.7	9.84	9.81	0.95
6,787.5	56.70	2.20	6,440.7	-1,808.7	-211.4	-1,319.7	142.2	8.88	8.34	3.71
6,819.3	60.20	3.60	6,457.4	-1,825.4	-184.4	-1,318.3	168.0	11.63	11.01	4.40
6,851.7	64.30	3.80	6,472.4	-1,840.4	-155.8	-1,316.5	195.0	12.68	12.67	0.62
6,884.2	68.00	3.90	6,485.6	-1,853.6	-126.1	-1,314.5	223.2	11.37	11.37	0.31
6,915.6	70.90	2.90	6,496.6	-1,864.6	-96.8	-1,312.7	251.0	9.71	9.24	-3.19
6,946.8	73.40	0.40	6,506.2	-1,874.2	-67.1	-1,311.9	279.4	11.06	8.01	-8.01
6,978.8	75.30	359.40	6,514.8	-1,882.8	-36.3	-1,311.9	309.2	6.65	5.93	-3.12
7,011.1	76.00	359.40	6,522.8	-1,890.8	-5.0	-1,312.3	339.5	2.17	2.17	0.00
7,042.7	76.80	359.30	6,530.2	-1,898.2	25.8	-1,312.6	369.2	2.55	2.53	-0.32
7,074.6	77.30	358.20	6,537.4	-1,905.4	56.8	-1,313.3	399.4	3.71	1.57	-3.45
7,106.8	78.90	359.10	6,544.0	-1,912.0	88.3	-1,314.0	429.9	5.67	4.97	2.80
7,138.7	82.20	358.10	6,549.3	-1,917.3	119.7	-1,314.8	460.5	10.80	10.34	-3.13
7,160.0	85.60	358.50	6,551.5	-1,919.5	140.9	-1,315.4	481.1	16.06	15.95	1.88
7,183.3	87.46	358.14	6,552.9	-1,920.9	164.2	-1,316.1	503.7	8.13	7.98	-1.55
ICP										
7,205.0	89.20	357.80	6,553.6	-1,921.6	185.8	-1,316.9	524.8	8.17	8.02	-1.57
7,239.8	89.40	357.80	6,554.0	-1,922.0	220.6	-1,318.2	558.7	0.57	0.57	0.00
7,271.5	89.60	357.80	6,554.3	-1,922.3	252.3	-1,319.4	589.6	0.63	0.63	0.00
7,303.2	89.60	357.80	6,554.5	-1,922.5	284.0	-1,320.6	620.5	0.00	0.00	0.00
7,334.8	89.80	357.70	6,554.7	-1,922.7	315.5	-1,321.9	651.3	0.71	0.63	-0.32
7,367.2	90.30	357.50	6,554.6	-1,922.6	347.9	-1,323.2	682.9	1.66	1.54	-0.62

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well PARK O-K-4HC
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB @ 4632.0usft (CADE 21)
Site:	SE SE SEC. 4 T4N R63W 6th P.M.	MD Reference:	KB @ 4632.0usft (CADE 21)
Well:	PARK O-K-4HC	North Reference:	True
Wellbore:	JOB # 2009-300	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)
7,398.5	90.30	358.00	6,554.5	-1,922.5	379.2	-1,324.5	713.4	1.60	0.00	1.60
7,430.3	90.40	357.60	6,554.3	-1,922.3	411.0	-1,325.7	744.4	1.30	0.31	-1.26
7,462.7	90.30	359.00	6,554.1	-1,922.1	443.3	-1,326.6	775.9	4.34	-0.31	4.33
7,494.2	90.90	359.90	6,553.7	-1,921.7	474.8	-1,326.9	806.4	3.43	1.90	2.85
7,525.8	91.00	358.70	6,553.2	-1,921.2	506.5	-1,327.3	837.0	3.81	0.32	-3.79
7,557.9	90.80	359.40	6,552.7	-1,920.7	538.5	-1,327.9	868.0	2.27	-0.62	2.19
7,590.2	90.30	0.50	6,552.4	-1,920.4	570.8	-1,327.9	899.2	3.73	-1.55	3.40
7,622.6	89.80	1.00	6,552.4	-1,920.4	603.2	-1,327.5	930.3	2.19	-1.55	1.55
7,654.6	89.80	1.60	6,552.5	-1,920.5	635.2	-1,326.7	961.1	1.87	0.00	1.87
7,686.2	90.10	0.80	6,552.5	-1,920.5	666.8	-1,326.1	991.4	2.70	0.95	-2.53
7,718.8	90.20	1.60	6,552.4	-1,920.4	699.4	-1,325.4	1,022.6	2.48	0.31	2.46
7,750.4	90.10	1.60	6,552.3	-1,920.3	731.0	-1,324.5	1,052.9	0.32	-0.32	0.00
7,782.8	90.20	2.90	6,552.3	-1,920.3	763.3	-1,323.2	1,083.7	4.03	0.31	4.01
7,814.2	90.50	2.50	6,552.1	-1,920.1	794.7	-1,321.8	1,113.6	1.59	0.95	-1.27
7,846.6	89.70	3.00	6,552.0	-1,920.0	827.0	-1,320.2	1,144.5	2.91	-2.47	1.54
7,879.1	89.10	4.80	6,552.4	-1,920.4	859.5	-1,318.0	1,175.2	5.84	-1.85	5.54
7,910.4	89.10	4.00	6,552.8	-1,920.8	890.7	-1,315.6	1,204.7	2.55	0.00	-2.56
7,941.9	89.20	4.60	6,553.3	-1,921.3	922.1	-1,313.2	1,234.3	1.93	0.32	1.90
7,973.6	89.10	4.50	6,553.8	-1,921.8	953.7	-1,310.7	1,264.2	0.45	-0.32	-0.32
8,005.0	91.30	3.50	6,553.7	-1,921.7	985.0	-1,308.5	1,293.8	7.70	7.01	-3.18
8,036.8	91.30	2.30	6,553.0	-1,921.0	1,016.8	-1,306.9	1,324.1	3.77	0.00	-3.77
8,068.5	91.20	3.40	6,552.3	-1,920.3	1,048.5	-1,305.3	1,354.2	3.48	-0.32	3.47
8,100.9	89.80	3.00	6,552.0	-1,920.0	1,080.8	-1,303.5	1,384.9	4.50	-4.33	-1.24
8,132.5	89.70	3.00	6,552.1	-1,920.1	1,112.4	-1,301.9	1,415.0	0.32	-0.32	0.00
8,164.5	90.10	3.70	6,552.2	-1,920.2	1,144.3	-1,300.0	1,445.3	2.52	1.25	2.19
8,195.8	90.40	2.60	6,552.0	-1,920.0	1,175.5	-1,298.3	1,475.0	3.65	0.96	-3.52
8,227.2	90.60	2.30	6,551.8	-1,919.8	1,206.9	-1,297.0	1,504.9	1.15	0.64	-0.96
8,259.2	90.00	3.10	6,551.6	-1,919.6	1,238.9	-1,295.4	1,535.3	3.12	-1.87	2.50
8,290.8	89.80	2.20	6,551.6	-1,919.6	1,270.4	-1,294.0	1,565.4	2.92	-0.63	-2.85
8,322.4	89.50	2.10	6,551.8	-1,919.8	1,302.0	-1,292.8	1,595.6	1.00	-0.95	-0.32
8,354.1	89.30	3.00	6,552.2	-1,920.2	1,333.6	-1,291.4	1,625.7	2.91	-0.63	2.84
8,385.7	89.20	1.90	6,552.6	-1,920.6	1,365.2	-1,290.0	1,655.9	3.49	-0.32	-3.48
8,415.6	89.20	2.30	6,553.0	-1,921.0	1,395.1	-1,288.9	1,684.4	1.34	0.00	1.34
8,447.2	89.40	3.00	6,553.4	-1,921.4	1,426.7	-1,287.5	1,714.5	2.30	0.63	2.22
8,479.1	89.40	1.70	6,553.7	-1,921.7	1,458.5	-1,286.2	1,744.9	4.08	0.00	-4.08
8,510.6	89.50	2.80	6,554.0	-1,922.0	1,490.0	-1,284.9	1,775.0	3.51	0.32	3.49
8,543.0	89.50	3.00	6,554.3	-1,922.3	1,522.4	-1,283.3	1,805.7	0.62	0.00	0.62
8,575.5	89.40	1.50	6,554.6	-1,922.6	1,554.9	-1,282.0	1,836.8	4.62	-0.31	-4.61
8,607.7	89.60	2.60	6,554.9	-1,922.9	1,587.1	-1,280.9	1,867.5	3.47	0.62	3.42
8,639.3	89.90	2.50	6,555.0	-1,923.0	1,618.6	-1,279.5	1,897.6	1.00	0.95	-0.32
8,669.2	90.20	2.80	6,555.0	-1,923.0	1,648.5	-1,278.1	1,926.1	1.42	1.00	1.00
8,700.8	90.70	359.70	6,554.8	-1,922.8	1,680.0	-1,277.4	1,956.3	9.95	1.58	-9.82
8,733.0	91.20	1.10	6,554.2	-1,922.2	1,712.3	-1,277.2	1,987.4	4.61	1.55	4.34
8,764.0	91.30	359.90	6,553.6	-1,921.6	1,743.2	-1,276.9	2,017.2	3.89	0.32	-3.87
8,796.3	91.30	0.50	6,552.8	-1,920.8	1,775.5	-1,276.8	2,048.3	1.86	0.00	1.86
8,827.8	91.30	0.00	6,552.1	-1,920.1	1,807.0	-1,276.6	2,078.6	1.59	0.00	-1.59
8,860.1	90.90	359.50	6,551.5	-1,919.5	1,839.3	-1,276.8	2,109.9	1.98	-1.24	-1.55
8,892.2	90.90	359.10	6,551.0	-1,919.0	1,871.4	-1,277.2	2,140.9	1.25	0.00	-1.25
8,923.5	90.20	359.50	6,550.7	-1,918.7	1,902.7	-1,277.6	2,171.2	2.58	-2.24	1.28
8,955.8	90.00	358.90	6,550.6	-1,918.6	1,935.1	-1,278.0	2,202.6	1.95	-0.62	-1.85
8,987.6	90.00	357.90	6,550.6	-1,918.6	1,966.8	-1,278.9	2,233.5	3.14	0.00	-3.14
9,019.2	90.00	358.60	6,550.6	-1,918.6	1,998.4	-1,279.9	2,264.2	2.22	0.00	2.22
9,051.5	90.10	358.10	6,550.6	-1,918.6	2,030.7	-1,280.8	2,295.6	1.58	0.31	-1.55

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well PARK O-K-4HC
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB @ 4632.0usft (CADE 21)
Site:	SE SE SEC. 4 T4N R63W 6th P.M.	MD Reference:	KB @ 4632.0usft (CADE 21)
Well:	PARK O-K-4HC	North Reference:	True
Wellbore:	JOB # 2009-300	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)
9,083.1	90.00	358.80	6,550.6	-1,918.6	2,062.3	-1,281.7	2,326.3	2.23	-0.32	2.21
9,115.2	89.90	358.80	6,550.6	-1,918.6	2,094.3	-1,282.3	2,357.4	0.31	-0.31	0.00
9,147.2	89.80	358.70	6,550.7	-1,918.7	2,126.3	-1,283.0	2,388.5	0.44	-0.31	-0.31
9,179.2	89.80	0.00	6,550.8	-1,918.8	2,158.3	-1,283.4	2,419.4	4.06	0.00	4.06
9,211.5	89.90	0.10	6,550.9	-1,918.9	2,190.7	-1,283.4	2,450.6	0.44	0.31	0.31
9,243.2	89.50	1.50	6,551.0	-1,919.0	2,222.3	-1,282.9	2,481.0	4.60	-1.26	4.43
9,275.1	89.60	2.50	6,551.3	-1,919.3	2,254.2	-1,281.8	2,511.5	3.15	0.31	3.13
9,307.1	89.80	3.00	6,551.5	-1,919.5	2,286.2	-1,280.3	2,542.0	1.68	0.63	1.56
9,338.7	89.80	1.70	6,551.6	-1,919.6	2,317.7	-1,279.0	2,572.1	4.11	0.00	-4.11
9,370.1	89.80	3.00	6,551.7	-1,919.7	2,349.1	-1,277.7	2,602.1	4.14	0.00	4.14
9,402.5	89.80	2.50	6,551.8	-1,919.8	2,381.5	-1,276.1	2,632.9	1.54	0.00	-1.54
9,434.1	90.00	2.80	6,551.9	-1,919.9	2,413.1	-1,274.7	2,663.0	1.14	0.63	0.95
9,466.3	90.00	1.50	6,551.9	-1,919.9	2,445.2	-1,273.5	2,693.7	4.04	0.00	-4.04
9,498.2	89.10	1.10	6,552.1	-1,920.1	2,477.2	-1,272.7	2,724.3	3.08	-2.82	-1.25
9,530.2	89.40	1.90	6,552.5	-1,920.5	2,509.1	-1,271.9	2,754.9	2.68	0.94	2.51
9,561.8	89.30	1.50	6,552.9	-1,920.9	2,540.7	-1,271.0	2,785.2	1.30	-0.32	-1.26
9,594.2	89.40	2.30	6,553.2	-1,921.2	2,573.1	-1,269.9	2,816.1	2.49	0.31	2.47
9,626.0	89.80	1.70	6,553.5	-1,921.5	2,604.9	-1,268.8	2,846.5	2.27	1.26	-1.89
9,657.7	90.00	1.40	6,553.5	-1,921.5	2,636.5	-1,267.9	2,876.8	1.14	0.63	-0.95
9,689.0	90.10	1.60	6,553.5	-1,921.5	2,667.9	-1,267.1	2,906.8	0.71	0.32	0.64
9,720.7	90.30	1.70	6,553.4	-1,921.4	2,699.5	-1,266.2	2,937.1	0.71	0.63	0.32
9,752.3	90.50	1.90	6,553.2	-1,921.2	2,731.1	-1,265.2	2,967.4	0.89	0.63	0.63
9,783.9	90.70	2.00	6,552.8	-1,920.8	2,762.7	-1,264.1	2,997.6	0.71	0.63	0.32
9,816.3	90.30	3.30	6,552.6	-1,920.6	2,795.0	-1,262.6	3,028.4	4.20	-1.24	4.02
9,847.9	90.70	2.50	6,552.3	-1,920.3	2,826.6	-1,261.0	3,058.5	2.83	1.26	-2.53
9,879.6	90.00	2.30	6,552.1	-1,920.1	2,858.3	-1,259.7	3,088.6	2.30	-2.21	-0.63
9,911.1	90.20	2.50	6,552.0	-1,920.0	2,889.7	-1,258.4	3,118.7	0.90	0.63	0.63
9,942.7	90.20	2.40	6,551.9	-1,919.9	2,921.3	-1,257.0	3,148.8	0.32	0.00	-0.32
9,974.4	90.10	2.70	6,551.8	-1,919.8	2,953.0	-1,255.6	3,179.0	1.00	-0.32	0.95
10,006.6	90.30	3.30	6,551.7	-1,919.7	2,985.1	-1,253.9	3,209.6	1.96	0.62	1.86
10,038.2	90.50	2.40	6,551.5	-1,919.5	3,016.7	-1,252.4	3,239.6	2.92	0.63	-2.85
10,070.1	90.30	2.30	6,551.3	-1,919.3	3,048.6	-1,251.0	3,270.0	0.70	-0.63	-0.31
10,102.3	90.40	2.20	6,551.1	-1,919.1	3,080.8	-1,249.8	3,300.7	0.44	0.31	-0.31
10,134.0	90.60	3.40	6,550.8	-1,918.8	3,112.4	-1,248.2	3,330.9	3.84	0.63	3.79
10,165.6	90.70	3.30	6,550.4	-1,918.4	3,144.0	-1,246.4	3,360.8	0.45	0.32	-0.32
10,197.5	89.90	1.60	6,550.3	-1,918.3	3,175.8	-1,245.0	3,391.2	5.90	-2.51	-5.34
10,229.5	90.70	2.00	6,550.1	-1,918.1	3,207.8	-1,244.0	3,421.9	2.79	2.49	1.25
10,261.5	91.10	2.80	6,549.6	-1,917.6	3,239.8	-1,242.7	3,452.3	2.80	1.25	2.50
10,293.7	90.70	2.10	6,549.1	-1,917.1	3,271.9	-1,241.3	3,483.0	2.51	-1.24	-2.18
10,326.0	90.90	2.30	6,548.7	-1,916.7	3,304.2	-1,240.1	3,513.8	0.88	0.62	0.62
10,358.4	90.30	1.50	6,548.3	-1,916.3	3,336.6	-1,239.0	3,544.7	3.08	-1.85	-2.47
10,389.8	90.10	2.40	6,548.2	-1,916.2	3,368.0	-1,237.9	3,574.8	2.93	-0.64	2.86
10,422.2	89.40	2.70	6,548.3	-1,916.3	3,400.3	-1,236.5	3,605.6	2.35	-2.16	0.93
10,453.8	89.60	2.10	6,548.6	-1,916.6	3,431.9	-1,235.2	3,635.7	2.00	0.63	-1.90
10,485.4	89.40	2.40	6,548.9	-1,916.9	3,463.5	-1,233.9	3,665.9	1.14	-0.63	0.95
10,517.0	89.70	1.70	6,549.1	-1,917.1	3,495.0	-1,232.8	3,696.0	2.42	0.95	-2.22
10,548.6	91.30	1.60	6,548.9	-1,916.9	3,526.7	-1,231.9	3,726.3	5.06	5.05	-0.32
10,580.2	91.20	0.80	6,548.2	-1,916.2	3,558.2	-1,231.2	3,756.6	2.55	-0.32	-2.53
10,612.4	91.60	1.00	6,547.4	-1,915.4	3,590.4	-1,230.7	3,787.5	1.39	1.24	0.62
10,643.8	92.00	0.90	6,546.4	-1,914.4	3,621.8	-1,230.2	3,817.7	1.31	1.27	-0.32
10,675.7	92.10	0.30	6,545.3	-1,913.3	3,653.7	-1,229.9	3,848.3	1.91	0.31	-1.88
10,707.7	90.30	359.90	6,544.6	-1,912.6	3,685.6	-1,229.8	3,879.2	5.77	-5.63	-1.25
10,739.3	88.60	0.20	6,544.9	-1,912.9	3,717.3	-1,229.8	3,909.7	5.45	-5.37	0.95

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well PARK O-K-4HC
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB @ 4632.0usft (CADE 21)
Site:	SE SE SEC. 4 T4N R63W 6th P.M.	MD Reference:	KB @ 4632.0usft (CADE 21)
Well:	PARK O-K-4HC	North Reference:	True
Wellbore:	JOB # 2009-300	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)
10,771.8	88.00	359.30	6,545.9	-1,913.9	3,749.8	-1,229.9	3,941.1	3.33	-1.85	-2.77
10,803.3	88.00	0.70	6,547.0	-1,915.0	3,781.2	-1,229.9	3,971.4	4.44	0.00	4.45
10,835.0	88.80	358.70	6,547.8	-1,915.8	3,812.9	-1,230.1	4,002.0	6.80	2.53	-6.32
10,867.1	88.80	359.20	6,548.5	-1,916.5	3,845.0	-1,230.7	4,033.2	1.56	0.00	1.56
10,897.6	89.70	359.30	6,548.9	-1,916.9	3,875.5	-1,231.1	4,062.7	2.97	2.95	0.33
10,929.1	89.80	359.30	6,549.1	-1,917.1	3,907.0	-1,231.5	4,093.2	0.32	0.32	0.00
10,960.6	90.20	358.50	6,549.1	-1,917.1	3,938.5	-1,232.1	4,123.8	2.84	1.27	-2.54
10,992.2	90.90	357.90	6,548.8	-1,916.8	3,970.1	-1,233.1	4,154.5	2.92	2.22	-1.90
11,024.3	90.40	358.80	6,548.4	-1,916.4	4,002.2	-1,234.0	4,185.7	3.20	-1.56	2.80
11,056.5	90.30	357.10	6,548.2	-1,916.2	4,034.4	-1,235.1	4,217.1	5.29	-0.31	-5.28
11,088.4	91.00	358.70	6,547.8	-1,915.8	4,066.2	-1,236.3	4,248.1	5.48	2.20	5.02
11,119.8	91.70	358.40	6,547.1	-1,915.1	4,097.6	-1,237.1	4,278.6	2.42	2.23	-0.95
11,151.5	92.70	359.70	6,545.9	-1,913.9	4,129.2	-1,237.6	4,309.3	5.18	3.16	4.11
11,183.6	93.30	359.00	6,544.2	-1,912.2	4,161.3	-1,238.0	4,340.4	2.86	1.86	-2.17
11,215.3	92.00	358.90	6,542.7	-1,910.7	4,193.0	-1,238.6	4,371.0	4.12	-4.11	-0.32
11,246.7	89.80	359.50	6,542.2	-1,910.2	4,224.4	-1,239.0	4,401.5	7.25	-7.00	1.91
11,278.4	88.80	359.00	6,542.6	-1,910.6	4,256.0	-1,239.4	4,432.1	3.53	-3.16	-1.58
11,310.3	88.60	357.60	6,543.3	-1,911.3	4,287.9	-1,240.4	4,463.1	4.43	-0.63	-4.38
11,341.8	88.60	358.90	6,544.1	-1,912.1	4,319.5	-1,241.3	4,493.8	4.12	0.00	4.12
11,374.4	88.90	357.90	6,544.8	-1,912.8	4,352.0	-1,242.2	4,525.4	3.21	0.92	-3.07
11,406.0	90.30	359.10	6,545.0	-1,913.0	4,383.6	-1,243.1	4,556.2	5.83	4.43	3.80
11,437.7	90.80	358.30	6,544.7	-1,912.7	4,415.2	-1,243.8	4,586.9	2.98	1.58	-2.53
LAST SURVEY - APR 8, 2014										
11,469.7	91.10	357.50	6,544.2	-1,912.2	4,447.2	-1,245.0	4,618.1	2.67	0.94	-2.50
EXTRAPOLATION TO TD										
11,517.7	91.10	357.50	6,543.3	-1,911.3	4,495.2	-1,247.0	4,664.9	0.00	0.00	0.00

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well PARK O-K-4HC
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB @ 4632.0usft (CADE 21)
Site:	SE SE SEC. 4 T4N R63W 6th P.M.	MD Reference:	KB @ 4632.0usft (CADE 21)
Well:	PARK O-K-4HC	North Reference:	True
Wellbore:	JOB # 2009-300	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	
- Shape		(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	
EXIST VERT PARK 3		0.00	0.00	7,434.0	2,805.2	-783.3	1,369,468.82	3,295,323.89	
- survey misses target center by 1003.0usft at 9843.0usft MD (6552.3 TVD, 2821.7 N, -1261.2 E)									
- Circle (radius 30.0)									
EXIST VERT WETCC		0.00	0.00	7,204.0	4,444.6	-2,101.7	1,371,092.30	3,293,986.01	
- survey misses target center by 1081.4usft at 11469.7usft MD (6544.2 TVD, 4447.2 N, -1245.0 E)									
- Circle (radius 30.0)									
EXIST VERT PARK 3		0.00	0.00	7,202.0	116.6	-412.6	1,366,784.97	3,295,726.75	
- survey misses target center by 1113.0usft at 7160.0usft MD (6551.5 TVD, 140.9 N, -1315.4 E)									
- Circle (radius 30.0)									
EXIST VERT WETCC		0.00	0.00	7,212.0	1,085.7	-1,527.7	1,367,740.60	3,294,600.18	
- survey misses target center by 697.0usft at 8087.5usft MD (6552.0 TVD, 1067.4 N, -1304.3 E)									
- Circle (radius 30.0)									
EXIST VERT PARK 4		0.00	0.00	7,207.0	371.6	616.1	1,367,052.28	3,296,752.30	
- survey misses target center by 2045.5usft at 7318.2usft MD (6554.6 TVD, 298.9 N, -1321.2 E)									
- Circle (radius 30.0)									
EXIST VERT WETCC		0.00	0.00	7,442.0	11.0	-1,996.1	1,366,660.44	3,294,144.67	
- survey misses target center by 1128.1usft at 7145.6usft MD (6550.1 TVD, 126.6 N, -1315.0 E)									
- Circle (radius 30.0)									
EXIST VERT PARK 4		0.00	0.00	7,213.0	2,925.4	719.2	1,369,607.03	3,296,824.77	
- survey misses target center by 2081.6usft at 10038.2usft MD (6551.5 TVD, 3016.7 N, -1252.4 E)									
- Circle (radius 30.0)									
EXIST VERT WETCC		0.00	0.00	7,079.0	4,379.0	-1,042.5	1,371,039.36	3,295,045.88	
- survey misses target center by 570.3usft at 11399.9usft MD (6545.1 TVD, 4377.5 N, -1243.0 E)									
- Circle (radius 30.0)									
BHL - PARK O-K-4HC		0.00	0.00	6,561.0	4,503.6	-1,224.5	1,371,161.77	3,294,862.40	
- survey misses target center by 29.9usft at 11517.7usft MD (6543.3 TVD, 4495.2 N, -1247.0 E)									
- Point									
BHL - PARK O-K-4HC		0.00	0.00	6,585.0	4,503.6	-1,224.5	1,371,161.77	3,294,862.40	
- survey misses target center by 48.2usft at 11517.7usft MD (6543.3 TVD, 4495.2 N, -1247.0 E)									
- Point									
EXIST VERT PARK 4		0.00	0.00	7,193.0	1,708.6	585.4	1,368,388.77	3,296,705.59	
- survey misses target center by 1969.1usft at 8731.8usft MD (6554.3 TVD, 1711.0 N, -1277.2 E)									
- Circle (radius 30.0)									
EXIST VERT PARK 3		0.00	0.00	7,199.0	1,708.6	-624.4	1,368,374.28	3,295,495.87	
- survey misses target center by 917.5usft at 8723.2usft MD (6554.4 TVD, 1702.5 N, -1277.3 E)									
- Circle (radius 30.0)									
ICP - PARK O-K-4HC		0.00	0.00	6,561.0	179.4	-1,331.9	1,366,836.80	3,294,806.81	
- survey misses target center by 17.0usft at 7199.4usft MD (6553.5 TVD, 180.2 N, -1316.7 E)									
- Point									
EXIST VERT WETCC		0.00	0.00	6,718.0	3,654.0	-1,438.3	1,370,309.74	3,294,658.76	
- survey misses target center by 270.6usft at 10667.7usft MD (6545.6 TVD, 3645.7 N, -1229.9 E)									
- Circle (radius 30.0)									
ICP - PARK O-K-4HC		0.00	0.00	6,585.0	179.4	-1,331.9	1,366,836.80	3,294,806.81	
- survey misses target center by 35.0usft at 7200.1usft MD (6553.5 TVD, 180.9 N, -1316.7 E)									
- Point									
EXIST VERT PARK 4		0.00	0.00	7,172.0	3,807.0	223.0	1,370,482.60	3,296,318.07	
- survey misses target center by 1581.5usft at 10835.0usft MD (6547.8 TVD, 3812.9 N, -1230.1 E)									
- Circle (radius 30.0)									

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well PARK O-K-4HC
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB @ 4632.0usft (CADE 21)
Site:	SE SE SEC. 4 T4N R63W 6th P.M.	MD Reference:	KB @ 4632.0usft (CADE 21)
Well:	PARK O-K-4HC	North Reference:	True
Wellbore:	JOB # 2009-300	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
EXIST VERT PARK 3 - survey misses target center by 1003.0usft at 9843.0usft MD (6552.3 TVD, 2821.7 N, -1261.2 E) - Circle (radius 30.0)	0.00	0.00	7,434.0	2,805.2	-783.3	1,369,468.82	3,295,323.89	40.342750	-104.440500
EXIST VERT WETCC - survey misses target center by 1081.4usft at 11469.7usft MD (6544.2 TVD, 4447.2 N, -1245.0 E) - Circle (radius 30.0)	0.00	0.00	7,204.0	4,444.6	-2,101.7	1,371,092.30	3,293,986.01	40.347250	-104.445230
EXIST VERT PARK 3 - survey misses target center by 1113.0usft at 7160.0usft MD (6551.5 TVD, 140.9 N, -1315.4 E) - Circle (radius 30.0)	0.00	0.00	7,202.0	116.6	-412.6	1,366,784.97	3,295,726.75	40.335370	-104.439170
EXIST VERT WETCC - survey misses target center by 697.0usft at 8087.5usft MD (6552.0 TVD, 1067.4 N, -1304.3 E) - Circle (radius 30.0)	0.00	0.00	7,212.0	1,085.7	-1,527.7	1,367,740.60	3,294,600.18	40.338030	-104.443170
EXIST VERT PARK 4 - survey misses target center by 2045.5usft at 7318.2usft MD (6554.6 TVD, 298.9 N, -1321.2 E) - Circle (radius 30.0)	0.00	0.00	7,207.0	371.6	616.1	1,367,052.28	3,296,752.30	40.336070	-104.435480
EXIST VERT WETCC - survey misses target center by 1128.1usft at 7145.6usft MD (6550.1 TVD, 126.6 N, -1315.0 E) - Circle (radius 30.0)	0.00	0.00	7,442.0	11.0	-1,996.1	1,366,660.44	3,294,144.67	40.335080	-104.444850
EXIST VERT PARK 4 - survey misses target center by 2081.6usft at 10038.2usft MD (6551.5 TVD, 3016.7 N, -1252.4 E) - Circle (radius 30.0)	0.00	0.00	7,213.0	2,925.4	719.2	1,369,607.03	3,296,824.77	40.343080	-104.435110
EXIST VERT WETCC - survey misses target center by 570.3usft at 11399.9usft MD (6545.1 TVD, 4377.5 N, -1243.0 E) - Circle (radius 30.0)	0.00	0.00	7,079.0	4,379.0	-1,042.5	1,371,039.36	3,295,045.88	40.347070	-104.441430
BHL - PARK O-K-4HC - survey misses target center by 29.9usft at 11517.7usft MD (6543.3 TVD, 4495.2 N, -1247.0 E) - Point	0.00	0.00	6,561.0	4,503.6	-1,224.5	1,371,161.77	3,294,862.40	40.347412	-104.442083
BHL - PARK O-K-4HC - survey misses target center by 48.2usft at 11517.7usft MD (6543.3 TVD, 4495.2 N, -1247.0 E) - Point	0.00	0.00	6,585.0	4,503.6	-1,224.5	1,371,161.77	3,294,862.40	40.347412	-104.442083
EXIST VERT PARK 4 - survey misses target center by 1969.1usft at 8731.8usft MD (6554.3 TVD, 1711.0 N, -1277.2 E) - Circle (radius 30.0)	0.00	0.00	7,193.0	1,708.6	585.4	1,368,388.77	3,296,705.59	40.339740	-104.435590
EXIST VERT PARK 3 - survey misses target center by 917.5usft at 8723.2usft MD (6554.4 TVD, 1702.5 N, -1277.3 E) - Circle (radius 30.0)	0.00	0.00	7,199.0	1,708.6	-624.4	1,368,374.28	3,295,495.87	40.339740	-104.439930
ICP - PARK O-K-4HC - survey misses target center by 17.0usft at 7199.4usft MD (6553.5 TVD, 180.2 N, -1316.7 E) - Point	0.00	0.00	6,561.0	179.4	-1,331.9	1,366,836.80	3,294,806.81	40.335542	-104.442467
EXIST VERT WETCC - survey misses target center by 270.6usft at 10667.7usft MD (6545.6 TVD, 3645.7 N, -1229.9 E) - Circle (radius 30.0)	0.00	0.00	6,718.0	3,654.0	-1,438.3	1,370,309.74	3,294,658.76	40.345080	-104.442850
ICP - PARK O-K-4HC - survey misses target center by 35.0usft at 7200.1usft MD (6553.5 TVD, 180.9 N, -1316.7 E) - Point	0.00	0.00	6,585.0	179.4	-1,331.9	1,366,836.80	3,294,806.81	40.335542	-104.442467
EXIST VERT PARK 4 - survey misses target center by 1581.5usft at 10835.0usft MD (6547.8 TVD, 3812.9 N, -1230.1 E) - Circle (radius 30.0)	0.00	0.00	7,172.0	3,807.0	223.0	1,370,482.60	3,296,318.07	40.345500	-104.436890

Survey Annotations

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well PARK O-K-4HC
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB @ 4632.0usft (CADE 21)
Site:	SE SE SEC. 4 T4N R63W 6th P.M.	MD Reference:	KB @ 4632.0usft (CADE 21)
Well:	PARK O-K-4HC	North Reference:	True
Wellbore:	JOB # 2009-300	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	
- Shape		(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	
EXIST VERT PARK 3		0.00	0.00	7,434.0	2,805.2	-783.3	1,369,468.82	3,295,323.89	
- survey misses target center by 1003.0usft at 9843.0usft MD (6552.3 TVD, 2821.7 N, -1261.2 E)									
- Circle (radius 30.0)									
EXIST VERT WETCC		0.00	0.00	7,204.0	4,444.6	-2,101.7	1,371,092.30	3,293,986.01	
- survey misses target center by 1081.4usft at 11469.7usft MD (6544.2 TVD, 4447.2 N, -1245.0 E)									
- Circle (radius 30.0)									
EXIST VERT PARK 3		0.00	0.00	7,202.0	116.6	-412.6	1,366,784.97	3,295,726.75	
- survey misses target center by 1113.0usft at 7160.0usft MD (6551.5 TVD, 140.9 N, -1315.4 E)									
- Circle (radius 30.0)									
EXIST VERT WETCC		0.00	0.00	7,212.0	1,085.7	-1,527.7	1,367,740.60	3,294,600.18	
- survey misses target center by 697.0usft at 8087.5usft MD (6552.0 TVD, 1067.4 N, -1304.3 E)									
- Circle (radius 30.0)									
EXIST VERT PARK 4		0.00	0.00	7,207.0	371.6	616.1	1,367,052.28	3,296,752.30	
- survey misses target center by 2045.5usft at 7318.2usft MD (6554.6 TVD, 298.9 N, -1321.2 E)									
- Circle (radius 30.0)									
EXIST VERT WETCC		0.00	0.00	7,442.0	11.0	-1,996.1	1,366,660.44	3,294,144.67	
- survey misses target center by 1128.1usft at 7145.6usft MD (6550.1 TVD, 126.6 N, -1315.0 E)									
- Circle (radius 30.0)									
EXIST VERT PARK 4		0.00	0.00	7,213.0	2,925.4	719.2	1,369,607.03	3,296,824.77	
- survey misses target center by 2081.6usft at 10038.2usft MD (6551.5 TVD, 3016.7 N, -1252.4 E)									
- Circle (radius 30.0)									
EXIST VERT WETCC		0.00	0.00	7,079.0	4,379.0	-1,042.5	1,371,039.36	3,295,045.88	
- survey misses target center by 570.3usft at 11399.9usft MD (6545.1 TVD, 4377.5 N, -1243.0 E)									
- Circle (radius 30.0)									
BHL - PARK O-K-4HC		0.00	0.00	6,561.0	4,503.6	-1,224.5	1,371,161.77	3,294,862.40	
- survey misses target center by 29.9usft at 11517.7usft MD (6543.3 TVD, 4495.2 N, -1247.0 E)									
- Point									
BHL - PARK O-K-4HC		0.00	0.00	6,585.0	4,503.6	-1,224.5	1,371,161.77	3,294,862.40	
- survey misses target center by 48.2usft at 11517.7usft MD (6543.3 TVD, 4495.2 N, -1247.0 E)									
- Point									
EXIST VERT PARK 4		0.00	0.00	7,193.0	1,708.6	585.4	1,368,388.77	3,296,705.59	
- survey misses target center by 1969.1usft at 8731.8usft MD (6554.3 TVD, 1711.0 N, -1277.2 E)									
- Circle (radius 30.0)									
EXIST VERT PARK 3		0.00	0.00	7,199.0	1,708.6	-624.4	1,368,374.28	3,295,495.87	
- survey misses target center by 917.5usft at 8723.2usft MD (6554.4 TVD, 1702.5 N, -1277.3 E)									
- Circle (radius 30.0)									
ICP - PARK O-K-4HC		0.00	0.00	6,561.0	179.4	-1,331.9	1,366,836.80	3,294,806.81	
- survey misses target center by 17.0usft at 7199.4usft MD (6553.5 TVD, 180.2 N, -1316.7 E)									
- Point									
EXIST VERT WETCC		0.00	0.00	6,718.0	3,654.0	-1,438.3	1,370,309.74	3,294,658.76	
- survey misses target center by 270.6usft at 10667.7usft MD (6545.6 TVD, 3645.7 N, -1229.9 E)									
- Circle (radius 30.0)									
ICP - PARK O-K-4HC		0.00	0.00	6,585.0	179.4	-1,331.9	1,366,836.80	3,294,806.81	
- survey misses target center by 35.0usft at 7200.1usft MD (6553.5 TVD, 180.9 N, -1316.7 E)									
- Point									
EXIST VERT PARK 4		0.00	0.00	7,172.0	3,807.0	223.0	1,370,482.60	3,296,318.07	
- survey misses target center by 1581.5usft at 10835.0usft MD (6547.8 TVD, 3812.9 N, -1230.1 E)									
- Circle (radius 30.0)									

Measured Depth	Vertical Depth	Local Coordinates		
(usft)	(usft)	+N/-S	+E/-W	Comment
		(usft)	(usft)	

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well PARK O-K-4HC
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB @ 4632.0usft (CADE 21)
Site:	SE SE SEC. 4 T4N R63W 6th P.M.	MD Reference:	KB @ 4632.0usft (CADE 21)
Well:	PARK O-K-4HC	North Reference:	True
Wellbore:	JOB # 2009-300	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	
- Shape		(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	
EXIST VERT PARK 3		0.00	0.00	7,434.0	2,805.2	-783.3	1,369,468.82	3,295,323.89	
- survey misses target center by 1003.0usft at 9843.0usft MD (6552.3 TVD, 2821.7 N, -1261.2 E)									
- Circle (radius 30.0)									
EXIST VERT WETCC		0.00	0.00	7,204.0	4,444.6	-2,101.7	1,371,092.30	3,293,986.01	
- survey misses target center by 1081.4usft at 11469.7usft MD (6544.2 TVD, 4447.2 N, -1245.0 E)									
- Circle (radius 30.0)									
EXIST VERT PARK 3		0.00	0.00	7,202.0	116.6	-412.6	1,366,784.97	3,295,726.75	
- survey misses target center by 1113.0usft at 7160.0usft MD (6551.5 TVD, 140.9 N, -1315.4 E)									
- Circle (radius 30.0)									
EXIST VERT WETCC		0.00	0.00	7,212.0	1,085.7	-1,527.7	1,367,740.60	3,294,600.18	
- survey misses target center by 697.0usft at 8087.5usft MD (6552.0 TVD, 1067.4 N, -1304.3 E)									
- Circle (radius 30.0)									
EXIST VERT PARK 4		0.00	0.00	7,207.0	371.6	616.1	1,367,052.28	3,296,752.30	
- survey misses target center by 2045.5usft at 7318.2usft MD (6554.6 TVD, 298.9 N, -1321.2 E)									
- Circle (radius 30.0)									
EXIST VERT WETCC		0.00	0.00	7,442.0	11.0	-1,996.1	1,366,660.44	3,294,144.67	
- survey misses target center by 1128.1usft at 7145.6usft MD (6550.1 TVD, 126.6 N, -1315.0 E)									
- Circle (radius 30.0)									
EXIST VERT PARK 4		0.00	0.00	7,213.0	2,925.4	719.2	1,369,607.03	3,296,824.77	
- survey misses target center by 2081.6usft at 10038.2usft MD (6551.5 TVD, 3016.7 N, -1252.4 E)									
- Circle (radius 30.0)									
EXIST VERT WETCC		0.00	0.00	7,079.0	4,379.0	-1,042.5	1,371,039.36	3,295,045.88	
- survey misses target center by 570.3usft at 11399.9usft MD (6545.1 TVD, 4377.5 N, -1243.0 E)									
- Circle (radius 30.0)									
BHL - PARK O-K-4HC		0.00	0.00	6,561.0	4,503.6	-1,224.5	1,371,161.77	3,294,862.40	
- survey misses target center by 29.9usft at 11517.7usft MD (6543.3 TVD, 4495.2 N, -1247.0 E)									
- Point									
BHL - PARK O-K-4HC		0.00	0.00	6,585.0	4,503.6	-1,224.5	1,371,161.77	3,294,862.40	
- survey misses target center by 48.2usft at 11517.7usft MD (6543.3 TVD, 4495.2 N, -1247.0 E)									
- Point									
EXIST VERT PARK 4		0.00	0.00	7,193.0	1,708.6	585.4	1,368,388.77	3,296,705.59	
- survey misses target center by 1969.1usft at 8731.8usft MD (6554.3 TVD, 1711.0 N, -1277.2 E)									
- Circle (radius 30.0)									
EXIST VERT PARK 3		0.00	0.00	7,199.0	1,708.6	-624.4	1,368,374.28	3,295,495.87	
- survey misses target center by 917.5usft at 8723.2usft MD (6554.4 TVD, 1702.5 N, -1277.3 E)									
- Circle (radius 30.0)									
ICP - PARK O-K-4HC		0.00	0.00	6,561.0	179.4	-1,331.9	1,366,836.80	3,294,806.81	
- survey misses target center by 17.0usft at 7199.4usft MD (6553.5 TVD, 180.2 N, -1316.7 E)									
- Point									
EXIST VERT WETCC		0.00	0.00	6,718.0	3,654.0	-1,438.3	1,370,309.74	3,294,658.76	
- survey misses target center by 270.6usft at 10667.7usft MD (6545.6 TVD, 3645.7 N, -1229.9 E)									
- Circle (radius 30.0)									
ICP - PARK O-K-4HC		0.00	0.00	6,585.0	179.4	-1,331.9	1,366,836.80	3,294,806.81	
- survey misses target center by 35.0usft at 7200.1usft MD (6553.5 TVD, 180.9 N, -1316.7 E)									
- Point									
EXIST VERT PARK 4		0.00	0.00	7,172.0	3,807.0	223.0	1,370,482.60	3,296,318.07	
- survey misses target center by 1581.5usft at 10835.0usft MD (6547.8 TVD, 3812.9 N, -1230.1 E)									
- Circle (radius 30.0)									

834.0	834.0	5.0	-0.2	SURFACE CASING
1,570.0	1,569.9	9.3	4.5	START NUDGE
6,227.0	5,962.0	-447.4	-1,316.7	KOP

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well PARK O-K-4HC
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB @ 4632.0usft (CADE 21)
Site:	SE SE SEC. 4 T4N R63W 6th P.M.	MD Reference:	KB @ 4632.0usft (CADE 21)
Well:	PARK O-K-4HC	North Reference:	True
Wellbore:	JOB # 2009-300	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
EXIST VERT PARK 3 - survey misses target center by 1003.0usft at 9843.0usft MD (6552.3 TVD, 2821.7 N, -1261.2 E) - Circle (radius 30.0)	0.00	0.00	7,434.0	2,805.2	-783.3	1,369,468.82	3,295,323.89	40.342750	-104.440500
EXIST VERT WETCC - survey misses target center by 1081.4usft at 11469.7usft MD (6544.2 TVD, 4447.2 N, -1245.0 E) - Circle (radius 30.0)	0.00	0.00	7,204.0	4,444.6	-2,101.7	1,371,092.30	3,293,986.01	40.347250	-104.445230
EXIST VERT PARK 3 - survey misses target center by 1113.0usft at 7160.0usft MD (6551.5 TVD, 140.9 N, -1315.4 E) - Circle (radius 30.0)	0.00	0.00	7,202.0	116.6	-412.6	1,366,784.97	3,295,726.75	40.335370	-104.439170
EXIST VERT WETCC - survey misses target center by 697.0usft at 8087.5usft MD (6552.0 TVD, 1067.4 N, -1304.3 E) - Circle (radius 30.0)	0.00	0.00	7,212.0	1,085.7	-1,527.7	1,367,740.60	3,294,600.18	40.338030	-104.443170
EXIST VERT PARK 4 - survey misses target center by 2045.5usft at 7318.2usft MD (6554.6 TVD, 298.9 N, -1321.2 E) - Circle (radius 30.0)	0.00	0.00	7,207.0	371.6	616.1	1,367,052.28	3,296,752.30	40.336070	-104.435480
EXIST VERT WETCC - survey misses target center by 1128.1usft at 7145.6usft MD (6550.1 TVD, 126.6 N, -1315.0 E) - Circle (radius 30.0)	0.00	0.00	7,442.0	11.0	-1,996.1	1,366,660.44	3,294,144.67	40.335080	-104.444850
EXIST VERT PARK 4 - survey misses target center by 2081.6usft at 10038.2usft MD (6551.5 TVD, 3016.7 N, -1252.4 E) - Circle (radius 30.0)	0.00	0.00	7,213.0	2,925.4	719.2	1,369,607.03	3,296,824.77	40.343080	-104.435110
EXIST VERT WETCC - survey misses target center by 570.3usft at 11399.9usft MD (6545.1 TVD, 4377.5 N, -1243.0 E) - Circle (radius 30.0)	0.00	0.00	7,079.0	4,379.0	-1,042.5	1,371,039.36	3,295,045.88	40.347070	-104.441430
BHL - PARK O-K-4HC - survey misses target center by 29.9usft at 11517.7usft MD (6543.3 TVD, 4495.2 N, -1247.0 E) - Point	0.00	0.00	6,561.0	4,503.6	-1,224.5	1,371,161.77	3,294,862.40	40.347412	-104.442083
BHL - PARK O-K-4HC - survey misses target center by 48.2usft at 11517.7usft MD (6543.3 TVD, 4495.2 N, -1247.0 E) - Point	0.00	0.00	6,585.0	4,503.6	-1,224.5	1,371,161.77	3,294,862.40	40.347412	-104.442083
EXIST VERT PARK 4 - survey misses target center by 1969.1usft at 8731.8usft MD (6554.3 TVD, 1711.0 N, -1277.2 E) - Circle (radius 30.0)	0.00	0.00	7,193.0	1,708.6	585.4	1,368,388.77	3,296,705.59	40.339740	-104.435590
EXIST VERT PARK 3 - survey misses target center by 917.5usft at 8723.2usft MD (6554.4 TVD, 1702.5 N, -1277.3 E) - Circle (radius 30.0)	0.00	0.00	7,199.0	1,708.6	-624.4	1,368,374.28	3,295,495.87	40.339740	-104.439930
ICP - PARK O-K-4HC - survey misses target center by 17.0usft at 7199.4usft MD (6553.5 TVD, 180.2 N, -1316.7 E) - Point	0.00	0.00	6,561.0	179.4	-1,331.9	1,366,836.80	3,294,806.81	40.335542	-104.442467
EXIST VERT WETCC - survey misses target center by 270.6usft at 10667.7usft MD (6545.6 TVD, 3645.7 N, -1229.9 E) - Circle (radius 30.0)	0.00	0.00	6,718.0	3,654.0	-1,438.3	1,370,309.74	3,294,658.76	40.345080	-104.442850
ICP - PARK O-K-4HC - survey misses target center by 35.0usft at 7200.1usft MD (6553.5 TVD, 180.9 N, -1316.7 E) - Point	0.00	0.00	6,585.0	179.4	-1,331.9	1,366,836.80	3,294,806.81	40.335542	-104.442467
EXIST VERT PARK 4 - survey misses target center by 1581.5usft at 10835.0usft MD (6547.8 TVD, 3812.9 N, -1230.1 E) - Circle (radius 30.0)	0.00	0.00	7,172.0	3,807.0	223.0	1,370,482.60	3,296,318.07	40.345500	-104.436890

7,205.0	6,553.6	185.8	-1,316.9	ICP
11,469.7	6,544.2	4,447.2	-1,245.0	LAST SURVEY - APR 8, 2014
11,517.7	6,543.3	4,495.2	-1,247.0	EXTRAPOLATION TO TD

Survey Report



Company:	BONANZA CREEK ENERGY INC.	Local Co-ordinate Reference:	Well PARK O-K-4HC
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KB @ 4632.0usft (CADE 21)
Site:	SE SE SEC. 4 T4N R63W 6th P.M.	MD Reference:	KB @ 4632.0usft (CADE 21)
Well:	PARK O-K-4HC	North Reference:	True
Wellbore:	JOB # 2009-300	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

Checked By: _____ Approved By: _____ Date: _____