

BONANZA CREEK ENERGY OPERATING

Well Name: **Park O-K-4HC**

Surface Location: Park T-4 Pad Sec.4-T4N-R63W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4615.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1366672.98	3296140.71	40.335049	-104.437690	

RKB - 13' WELL @ 4628.0ft (RKB - 13')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 440'FSL & 1076'FEL	1.0	0.0	0.0	Point
BHL 470'FNL & 2460'FEL	6557.0	4504.0	-1224.5	Point
T1 531'FSL & 2425'FEL	6557.0	83.5	-1347.1	Point



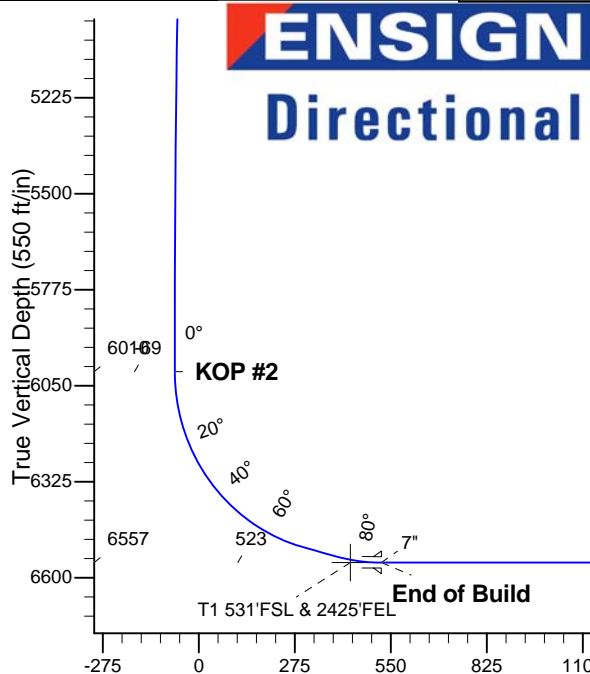
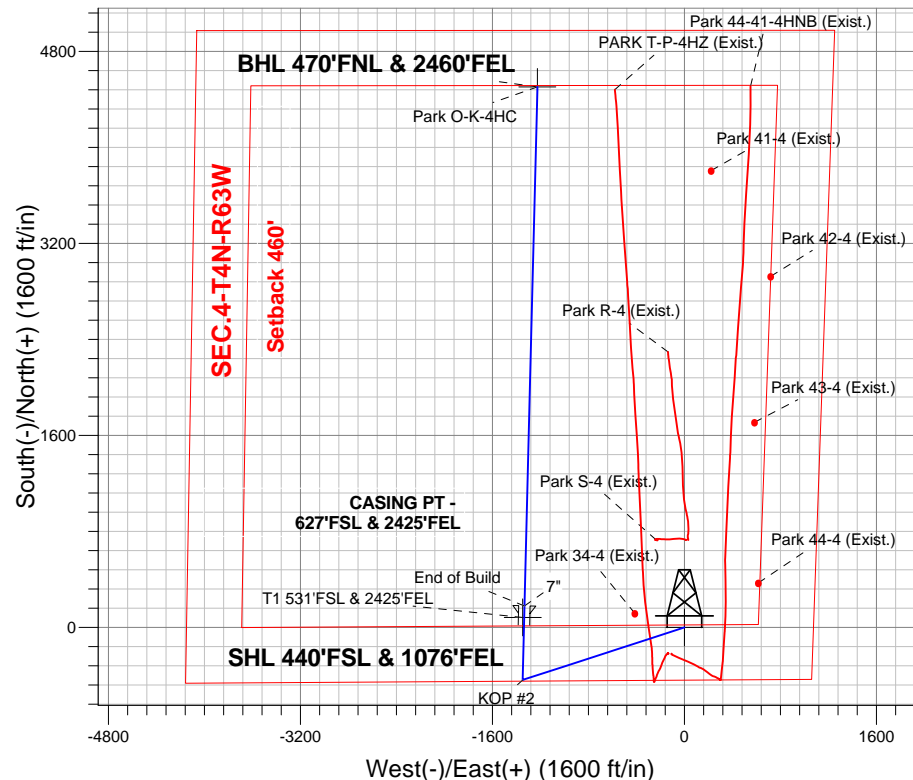
Azimuths to True North
Magnetic North: 8.36°

Magnetic Field
Strength: 52882.9nT
Dip Angle: 66.97°
Date: 10/30/2013
Model: IGRF2010

Park T-4 Pad Sec.4-T4N-R63W
Park O-K-4HC
Plan #1 (10-30-13)
10:53, October 31 2013

ANNOTATIONS

TVD	MD	Annotation
1600.0	1600.0	KOP #1
6010.2	6284.5	KOP #2
6557.0	7202.7	End of Build



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1600.0	0.00	0.00	1600.0	0.0	0.0	0.00	0.00	0.0	
3	2854.5	25.09	252.01	2814.8	-83.5	-257.1	2.00	252.01	-13.1	
4	4919.8	25.09	252.01	4685.2	-354.0	-1090.0	0.00	0.00	-55.6	
5	6174.3	0.00	0.00	5900.0	-437.5	-1347.1	2.00	180.00	-68.8	
6	6284.5	0.00	0.00	6010.2	-437.5	-1347.1	0.00	0.00	-68.8	
7	6966.3	75.00	1.42	6513.4	-51.6	-1337.5	11.00	1.42	301.1	
8	7066.3	75.00	1.42	6539.3	45.0	-1335.1	0.00	0.00	393.7	
9	7202.7	90.00	1.42	6557.0	179.8	-1331.8	11.00	0.00	522.9	
10	11528.3	90.00	1.42	6557.0	4504.0	-1224.5	0.00	0.00	4667.5	BHL 470'FNL & 2460'FEL

BHL 470'FNL & 2460'FEL

Vertical Section at 344.79° (550 ft/in)



BONANZA CREEK ENERGY OPERATING

SEC.4-T4N-R63W

Park T-4 Pad Sec.4-T4N-R63W

Park O-K-4HC

Wellbore #1

Plan: Plan #1 (10-30-13)

Standard Planning Report

31 October, 2013

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,854.5	25.09	252.01	2,814.8	-83.5	-257.1	2.00	2.00	0.00	252.01	
4,919.8	25.09	252.01	4,685.2	-354.0	-1,090.0	0.00	0.00	0.00	0.00	
6,174.3	0.00	0.00	5,900.0	-437.5	-1,347.1	2.00	-2.00	0.00	180.00	
6,284.5	0.00	0.00	6,010.2	-437.5	-1,347.1	0.00	0.00	0.00	0.00	
6,966.3	75.00	1.42	6,513.4	-51.6	-1,337.5	11.00	11.00	0.00	1.42	
7,066.3	75.00	1.42	6,539.3	45.0	-1,335.1	0.00	0.00	0.00	0.00	
7,202.7	90.00	1.42	6,557.0	179.8	-1,331.8	11.00	11.00	0.00	0.00	
11,528.3	90.00	1.42	6,557.0	4,504.0	-1,224.5	0.00	0.00	0.00	0.00	BHL 470°FNL & 246°

Database:	Landmark	Local Co-ordinate Reference:	Well Park O-K-4HC
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4628.0ft (RKB - 13')
Project:	SEC.4-T4N-R63W	MD Reference:	WELL @ 4628.0ft (RKB - 13')
Site:	Park T-4 Pad Sec.4-T4N-R63W	North Reference:	True
Well:	Park O-K-4HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-30-13)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 440'FSL & 1076'FEL									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP #1									
1,700.0	2.00	252.01	1,700.0	-0.5	-1.7	-0.1	2.00	2.00	0.00
1,800.0	4.00	252.01	1,799.8	-2.2	-6.6	-0.3	2.00	2.00	0.00
1,900.0	6.00	252.01	1,899.5	-4.8	-14.9	-0.8	2.00	2.00	0.00
2,000.0	8.00	252.01	1,998.7	-8.6	-26.5	-1.4	2.00	2.00	0.00
2,100.0	10.00	252.01	2,097.5	-13.4	-41.4	-2.1	2.00	2.00	0.00
2,200.0	12.00	252.01	2,195.6	-19.3	-59.5	-3.0	2.00	2.00	0.00
2,300.0	14.00	252.01	2,293.1	-26.3	-80.9	-4.1	2.00	2.00	0.00
2,400.0	16.00	252.01	2,389.6	-34.3	-105.5	-5.4	2.00	2.00	0.00
2,500.0	18.00	252.01	2,485.3	-43.3	-133.4	-6.8	2.00	2.00	0.00
2,600.0	20.00	252.01	2,579.8	-53.4	-164.3	-8.4	2.00	2.00	0.00
2,700.0	22.00	252.01	2,673.2	-64.4	-198.4	-10.1	2.00	2.00	0.00
2,800.0	24.00	252.01	2,765.2	-76.5	-235.6	-12.0	2.00	2.00	0.00
2,854.5	25.09	252.01	2,814.8	-83.5	-257.1	-13.1	2.00	2.00	0.00
2,900.0	25.09	252.01	2,856.0	-89.5	-275.4	-14.1	0.00	0.00	0.00
3,000.0	25.09	252.01	2,946.6	-102.6	-315.8	-16.1	0.00	0.00	0.00
3,100.0	25.09	252.01	3,037.1	-115.7	-356.1	-18.2	0.00	0.00	0.00
3,200.0	25.09	252.01	3,127.7	-128.7	-396.4	-20.2	0.00	0.00	0.00
3,300.0	25.09	252.01	3,218.3	-141.8	-436.8	-22.3	0.00	0.00	0.00
3,400.0	25.09	252.01	3,308.8	-154.9	-477.1	-24.4	0.00	0.00	0.00
3,500.0	25.09	252.01	3,399.4	-168.0	-517.4	-26.4	0.00	0.00	0.00
3,600.0	25.09	252.01	3,490.0	-181.1	-557.7	-28.5	0.00	0.00	0.00
3,700.0	25.09	252.01	3,580.5	-194.2	-598.1	-30.5	0.00	0.00	0.00
3,800.0	25.09	252.01	3,671.1	-207.3	-638.4	-32.6	0.00	0.00	0.00
3,900.0	25.09	252.01	3,761.6	-220.4	-678.7	-34.6	0.00	0.00	0.00
4,000.0	25.09	252.01	3,852.2	-233.5	-719.1	-36.7	0.00	0.00	0.00
4,100.0	25.09	252.01	3,942.8	-246.6	-759.4	-38.8	0.00	0.00	0.00
4,200.0	25.09	252.01	4,033.3	-259.7	-799.7	-40.8	0.00	0.00	0.00
4,300.0	25.09	252.01	4,123.9	-272.8	-840.1	-42.9	0.00	0.00	0.00
4,400.0	25.09	252.01	4,214.5	-285.9	-880.4	-44.9	0.00	0.00	0.00
4,500.0	25.09	252.01	4,305.0	-299.0	-920.7	-47.0	0.00	0.00	0.00
4,600.0	25.09	252.01	4,395.6	-312.1	-961.0	-49.1	0.00	0.00	0.00
4,700.0	25.09	252.01	4,486.2	-325.2	-1,001.4	-51.1	0.00	0.00	0.00
4,800.0	25.09	252.01	4,576.7	-338.3	-1,041.7	-53.2	0.00	0.00	0.00
4,900.0	25.09	252.01	4,667.3	-351.4	-1,082.0	-55.2	0.00	0.00	0.00

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Site:	Park T-4 Pad Sec.4-T4N-R63W	North Reference:	True
Well:	Park O-K-4HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-30-13)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,919.8	25.09	252.01	4,685.2	-354.0	-1,090.0	-55.6	0.00	0.00	0.00	
5,000.0	23.49	252.01	4,758.3	-364.2	-1,121.4	-57.2	2.00	-2.00	0.00	
5,100.0	21.49	252.01	4,850.7	-376.0	-1,157.8	-59.1	2.00	-2.00	0.00	
5,200.0	19.49	252.01	4,944.4	-386.8	-1,191.0	-60.8	2.00	-2.00	0.00	
5,300.0	17.49	252.01	5,039.2	-396.6	-1,221.2	-62.3	2.00	-2.00	0.00	
5,400.0	15.49	252.01	5,135.1	-405.4	-1,248.2	-63.7	2.00	-2.00	0.00	
5,500.0	13.49	252.01	5,231.9	-413.1	-1,272.0	-64.9	2.00	-2.00	0.00	
5,600.0	11.49	252.01	5,329.6	-419.8	-1,292.5	-66.0	2.00	-2.00	0.00	
5,700.0	9.49	252.01	5,427.9	-425.4	-1,309.8	-66.9	2.00	-2.00	0.00	
5,800.0	7.49	252.01	5,526.8	-430.0	-1,323.9	-67.6	2.00	-2.00	0.00	
5,900.0	5.49	252.01	5,626.1	-433.4	-1,334.6	-68.1	2.00	-2.00	0.00	
6,000.0	3.49	252.01	5,725.8	-435.9	-1,342.1	-68.5	2.00	-2.00	0.00	
6,100.0	1.49	252.01	5,825.7	-437.2	-1,346.2	-68.7	2.00	-2.00	0.00	
6,174.3	0.00	0.00	5,900.0	-437.5	-1,347.1	-68.8	2.00	-2.00	0.00	
6,200.0	0.00	0.00	5,925.7	-437.5	-1,347.1	-68.8	0.00	0.00	0.00	
6,284.5	0.00	0.00	6,010.2	-437.5	-1,347.1	-68.8	0.00	0.00	0.00	
KOP #2										
6,300.0	1.70	1.42	6,025.7	-437.3	-1,347.1	-68.5	10.98	10.98	0.00	
6,400.0	12.70	1.42	6,124.8	-424.8	-1,346.8	-56.6	11.00	11.00	0.00	
6,500.0	23.70	1.42	6,219.6	-393.6	-1,346.0	-26.7	11.00	11.00	0.00	
6,600.0	34.70	1.42	6,306.8	-344.9	-1,344.8	20.0	11.00	11.00	0.00	
6,700.0	45.70	1.42	6,383.0	-280.5	-1,343.2	81.8	11.00	11.00	0.00	
6,800.0	56.70	1.42	6,445.6	-202.7	-1,341.3	156.3	11.00	11.00	0.00	
6,900.0	67.70	1.42	6,492.2	-114.4	-1,339.1	240.9	11.00	11.00	0.00	
6,966.3	75.00	1.42	6,513.4	-51.6	-1,337.5	301.1	11.00	11.00	0.00	
7,000.0	75.00	1.42	6,522.1	-19.1	-1,336.7	332.3	0.00	0.00	0.00	
7,066.3	75.00	1.42	6,539.3	45.0	-1,335.1	393.7	0.00	0.00	0.00	
7,100.0	78.70	1.42	6,546.9	77.8	-1,334.3	425.1	11.00	11.00	0.00	
7,106.4	79.41	1.42	6,548.1	84.0	-1,334.2	431.1	11.00	11.00	0.00	
T1 531'FSL & 2425'FEL										
7,200.0	89.70	1.42	6,557.0	177.1	-1,331.9	520.3	11.00	11.00	0.00	
7,202.7	90.00	1.42	6,557.0	179.8	-1,331.8	522.9	11.00	11.00	0.00	
End of Build - 7"										
7,300.0	90.00	1.42	6,557.0	277.0	-1,329.4	616.1	0.00	0.00	0.00	
7,400.0	90.00	1.42	6,557.0	377.0	-1,326.9	711.9	0.00	0.00	0.00	
7,500.0	90.00	1.42	6,557.0	477.0	-1,324.4	807.7	0.00	0.00	0.00	
7,600.0	90.00	1.42	6,557.0	576.9	-1,321.9	903.5	0.00	0.00	0.00	
7,700.0	90.00	1.42	6,557.0	676.9	-1,319.5	999.4	0.00	0.00	0.00	
7,800.0	90.00	1.42	6,557.0	776.9	-1,317.0	1,095.2	0.00	0.00	0.00	
7,900.0	90.00	1.42	6,557.0	876.8	-1,314.5	1,191.0	0.00	0.00	0.00	
8,000.0	90.00	1.42	6,557.0	976.8	-1,312.0	1,286.8	0.00	0.00	0.00	
8,100.0	90.00	1.42	6,557.0	1,076.8	-1,309.5	1,382.6	0.00	0.00	0.00	
8,200.0	90.00	1.42	6,557.0	1,176.8	-1,307.0	1,478.4	0.00	0.00	0.00	
8,300.0	90.00	1.42	6,557.0	1,276.7	-1,304.6	1,574.3	0.00	0.00	0.00	
8,400.0	90.00	1.42	6,557.0	1,376.7	-1,302.1	1,670.1	0.00	0.00	0.00	
8,500.0	90.00	1.42	6,557.0	1,476.7	-1,299.6	1,765.9	0.00	0.00	0.00	
8,600.0	90.00	1.42	6,557.0	1,576.6	-1,297.1	1,861.7	0.00	0.00	0.00	
8,700.0	90.00	1.42	6,557.0	1,676.6	-1,294.6	1,957.5	0.00	0.00	0.00	
8,800.0	90.00	1.42	6,557.0	1,776.6	-1,292.2	2,053.3	0.00	0.00	0.00	
8,900.0	90.00	1.42	6,557.0	1,876.5	-1,289.7	2,149.2	0.00	0.00	0.00	
9,000.0	90.00	1.42	6,557.0	1,976.5	-1,287.2	2,245.0	0.00	0.00	0.00	
9,100.0	90.00	1.42	6,557.0	2,076.5	-1,284.7	2,340.8	0.00	0.00	0.00	
9,200.0	90.00	1.42	6,557.0	2,176.4	-1,282.2	2,436.6	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well Park O-K-4HC
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4628.0ft (RKB - 13')
Project:	SEC.4-T4N-R63W	MD Reference:	WELL @ 4628.0ft (RKB - 13')
Site:	Park T-4 Pad Sec.4-T4N-R63W	North Reference:	True
Well:	Park O-K-4HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-30-13)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,300.0	90.00	1.42	6,557.0	2,276.4	-1,279.8	2,532.4	0.00	0.00	0.00	
9,400.0	90.00	1.42	6,557.0	2,376.4	-1,277.3	2,628.2	0.00	0.00	0.00	
9,500.0	90.00	1.42	6,557.0	2,476.4	-1,274.8	2,724.1	0.00	0.00	0.00	
9,600.0	90.00	1.42	6,557.0	2,576.3	-1,272.3	2,819.9	0.00	0.00	0.00	
9,700.0	90.00	1.42	6,557.0	2,676.3	-1,269.8	2,915.7	0.00	0.00	0.00	
9,800.0	90.00	1.42	6,557.0	2,776.3	-1,267.4	3,011.5	0.00	0.00	0.00	
9,900.0	90.00	1.42	6,557.0	2,876.2	-1,264.9	3,107.3	0.00	0.00	0.00	
10,000.0	90.00	1.42	6,557.0	2,976.2	-1,262.4	3,203.1	0.00	0.00	0.00	
10,100.0	90.00	1.42	6,557.0	3,076.2	-1,259.9	3,299.0	0.00	0.00	0.00	
10,200.0	90.00	1.42	6,557.0	3,176.1	-1,257.4	3,394.8	0.00	0.00	0.00	
10,300.0	90.00	1.42	6,557.0	3,276.1	-1,255.0	3,490.6	0.00	0.00	0.00	
10,400.0	90.00	1.42	6,557.0	3,376.1	-1,252.5	3,586.4	0.00	0.00	0.00	
10,500.0	90.00	1.42	6,557.0	3,476.0	-1,250.0	3,682.2	0.00	0.00	0.00	
10,600.0	90.00	1.42	6,557.0	3,576.0	-1,247.5	3,778.0	0.00	0.00	0.00	
10,700.0	90.00	1.42	6,557.0	3,676.0	-1,245.0	3,873.9	0.00	0.00	0.00	
10,800.0	90.00	1.42	6,557.0	3,776.0	-1,242.6	3,969.7	0.00	0.00	0.00	
10,900.0	90.00	1.42	6,557.0	3,875.9	-1,240.1	4,065.5	0.00	0.00	0.00	
11,000.0	90.00	1.42	6,557.0	3,975.9	-1,237.6	4,161.3	0.00	0.00	0.00	
11,100.0	90.00	1.42	6,557.0	4,075.9	-1,235.1	4,257.1	0.00	0.00	0.00	
11,200.0	90.00	1.42	6,557.0	4,175.8	-1,232.6	4,352.9	0.00	0.00	0.00	
11,300.0	90.00	1.42	6,557.0	4,275.8	-1,230.2	4,448.8	0.00	0.00	0.00	
11,400.0	90.00	1.42	6,557.0	4,375.8	-1,227.7	4,544.6	0.00	0.00	0.00	
11,500.0	90.00	1.42	6,557.0	4,475.7	-1,225.2	4,640.4	0.00	0.00	0.00	
11,528.3	90.00	1.42	6,557.0	4,504.0	-1,224.5	4,667.5	0.00	0.00	0.00	
BHL 470°FNL & 2460°FEL										

Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude		Longitude
BHL 470°FNL & 2460'	0.00	0.00	6,557.0	4,504.0	-1,224.5	1,371,161.77	3,294,862.40	40.347412		-104.442083
- hit/miss target										
- Shape										
- Point										
SHL 440°FSL & 1076'I	0.00	0.00	1.0	0.0	0.0	1,366,672.99	3,296,140.71	40.335049		-104.437690
- plan hits target center										
- Point										
T1 531°FSL & 2425'FE	0.00	0.00	6,557.0	83.5	-1,347.1	1,366,740.30	3,294,792.76	40.335278		-104.442522
- plan misses target center by 15.7ft at 7106.4ft MD (6548.1 TVD, 84.0 N, -1334.2 E)										
- Point										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (")	Hole Diameter (")
7,202.7	6,557.0	7"		7	7-1/2

Database:	Landmark	Local Co-ordinate Reference:	Well Park O-K-4HC
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4628.0ft (RKB - 13')
Project:	SEC.4-T4N-R63W	MD Reference:	WELL @ 4628.0ft (RKB - 13')
Site:	Park T-4 Pad Sec.4-T4N-R63W	North Reference:	True
Well:	Park O-K-4HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-30-13)		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
1,600.0	1,600.0	0.0	0.0	KOP #1	
6,284.5	6,010.2	-437.5	-1,347.1	KOP #2	
7,202.7	6,557.0	179.8	-1,331.8	End of Build	



BONANZA CREEK ENERGY OPERATING

SEC.4-T4N-R63W

Park T-4 Pad Sec.4-T4N-R63W

Park O-K-4HC

Wellbore #1

Plan #1 (10-30-13)

Anticollision Report

31 October, 2013

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Park O-K-4HC
Project:	SEC.4-T4N-R63W	TVD Reference:	WELL @ 4628.0ft (RKB - 13')
Reference Site:	Park T-4 Pad Sec.4-T4N-R63W	MD Reference:	WELL @ 4628.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Park O-K-4HC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-30-13)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (10-30-13)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	10/30/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,528.3	Plan #1 (10-30-13) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Park T-4 Pad Sec.4-T4N-R63W						
Park 34-4 (Exist.) - Wellbore #1 - Wellbore #1	3,057.3	3,007.5	238.7	168.8	3.417	CC
Park 34-4 (Exist.) - Wellbore #1 - Wellbore #1	3,100.0	3,046.1	239.4	168.4	3.375	ES
Park 34-4 (Exist.) - Wellbore #1 - Wellbore #1	3,200.0	3,136.7	246.2	173.1	3.367	SF
Park 41-4 (Exist.) - Wellbore #1 - Wellbore #1						Out of range
Park 42-4 (Exist.) - Wellbore #1 - Wellbore #1						Out of range
Park 43-4 (Exist.) - Wellbore #1 - Wellbore #1						Out of range
Park 44-4 (Exist.) - Wellbore #1 - Wellbore #1	1,600.0	1,574.0	719.7	684.7	20.584	CC
Park 44-4 (Exist.) - Wellbore #1 - Wellbore #1	1,700.0	1,674.0	721.4	684.2	19.419	ES
Park 44-4 (Exist.) - Wellbore #1 - Wellbore #1	2,400.0	2,363.6	828.2	777.6	16.388	SF
Park 44-41-4HNB (Exist.) - Wellbore #1 - Wellbore #1	0.0	9.9	242.6	242.6	10,000.000	CC
Park 44-41-4HNB (Exist.) - Wellbore #1 - Wellbore #1	922.8	932.8	246.3	242.5	65.693	ES
Park 44-41-4HNB (Exist.) - Wellbore #1 - Wellbore #1	2,400.0	2,381.9	275.3	264.7	25.870	SF
Park T-P-4HC - Wellbore #1 - Plan #1 (10-30-13)	1,600.0	1,600.0	20.1	13.1	2.881	CC, ES, SF
PARK T-P-4HZ PAD SEC.4-T4N-R63W						
Park R-4 (Exist.) - Wellbore #1 - Wellbore #1	800.0	783.0	729.6	727.0	284.367	CC, ES
Park R-4 (Exist.) - Wellbore #1 - Wellbore #1	2,000.0	1,632.0	969.5	962.2	133.168	SF
Park S-4 (Exist.) - Wellbore #1 - Wellbore #1	100.0	82.7	729.2	729.0	3,548.413	CC
Park S-4 (Exist.) - Wellbore #1 - Wellbore #1	800.0	780.6	730.5	727.9	285.070	ES
Park S-4 (Exist.) - Wellbore #1 - Wellbore #1	3,700.0	3,578.0	989.7	968.7	47.091	SF
PARK T-P-4HZ (Exist.) - Wellbore #1 - Wellbore #1	2,667.3	2,655.5	159.7	148.0	13.705	CC, ES
PARK T-P-4HZ (Exist.) - Wellbore #1 - Wellbore #1	11,528.3	11,120.0	668.3	499.1	3.950	SF

Offset Design													Park T-4 Pad Sec.4-T4N-R63W - Park 34-4 (Exist.) - Wellbore #1 - Wellbore #1		Offset Site Error:		0.0 ft	
Survey Program:													6700-UNKNOWN		Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning				
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Minimum	Separation						
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation	Factor						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)							
	0.0	0.0	9.0	9.0	0.0	0.2	-74.18	116.9	-412.6	428.9	428.7	0.18	2,379.912					
	100.0	100.0	109.0	109.0	0.1	2.2	-74.18	116.9	-412.6	428.9	426.6	2.29	187.064					
	200.0	200.0	209.0	209.0	0.3	4.2	-74.18	116.9	-412.6	428.9	424.3	4.52	94.936					
	300.0	300.0	309.0	309.0	0.6	6.2	-74.18	116.9	-412.6	428.9	422.1	6.74	63.609					
	400.0	400.0	409.0	409.0	0.8	8.2	-74.18	116.9	-412.6	428.9	419.9	8.97	47.827					
	500.0	500.0	509.0	509.0	1.0	10.2	-74.18	116.9	-412.6	428.9	417.7	11.19	38.320					

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Park O-K-4HC
Project:	SEC.4-T4N-R63W	TVD Reference:	WELL @ 4628.0ft (RKB - 13')
Reference Site:	Park T-4 Pad Sec.4-T4N-R63W	MD Reference:	WELL @ 4628.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Park O-K-4HC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-30-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 6700-UNKNOWN													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
600.0	600.0	609.0	609.0	1.2	12.2	-74.18	116.9	-412.6	428.9	415.4	13.42	31.965		
700.0	700.0	709.0	709.0	1.5	14.2	-74.18	116.9	-412.6	428.9	413.2	15.64	27.419		
800.0	800.0	809.0	809.0	1.7	16.2	-74.18	116.9	-412.6	428.9	411.0	17.87	24.004		
900.0	900.0	909.0	909.0	1.9	18.2	-74.18	116.9	-412.6	428.9	408.8	20.09	21.346		
1,000.0	1,000.0	1,009.0	1,009.0	2.1	20.2	-74.18	116.9	-412.6	428.9	406.5	22.32	19.218		
1,100.0	1,100.0	1,109.0	1,109.0	2.4	22.2	-74.18	116.9	-412.6	428.9	404.3	24.54	17.476		
1,200.0	1,200.0	1,209.0	1,209.0	2.6	24.2	-74.18	116.9	-412.6	428.9	402.1	26.76	16.023		
1,300.0	1,300.0	1,309.0	1,309.0	2.8	26.2	-74.18	116.9	-412.6	428.9	399.9	28.99	14.793		
1,400.0	1,400.0	1,409.0	1,409.0	3.0	28.2	-74.18	116.9	-412.6	428.9	397.6	31.21	13.739		
1,500.0	1,500.0	1,509.0	1,509.0	3.3	30.2	-74.18	116.9	-412.6	428.9	395.4	33.44	12.825		
1,600.0	1,600.0	1,609.0	1,609.0	3.5	32.2	-74.18	116.9	-412.6	428.9	393.2	35.66	12.025		
1,700.0	1,700.0	1,709.0	1,709.0	3.7	34.2	33.96	116.9	-412.6	427.4	389.6	37.85	11.291		
1,800.0	1,799.8	1,808.8	1,808.8	3.9	36.2	34.41	116.9	-412.6	423.1	383.1	39.99	10.579		
1,900.0	1,899.5	1,908.5	1,908.5	4.1	38.2	35.17	116.9	-412.6	415.9	373.8	42.10	9.880		
2,000.0	1,998.7	2,007.7	2,007.7	4.3	40.2	36.27	116.9	-412.6	406.0	361.8	44.16	9.193		
2,100.0	2,097.5	2,106.5	2,106.5	4.6	42.1	37.77	116.9	-412.6	393.4	347.2	46.20	8.516		
2,200.0	2,195.6	2,204.6	2,204.6	4.8	44.1	39.72	116.9	-412.6	378.5	330.2	48.23	7.847		
2,300.0	2,293.1	2,302.1	2,302.1	5.2	46.0	42.21	116.9	-412.6	361.3	311.0	50.26	7.188		
2,400.0	2,389.6	2,398.6	2,398.6	5.5	48.0	45.34	116.9	-412.6	342.3	289.9	52.34	6.540		
2,500.0	2,485.3	2,494.3	2,494.3	6.0	49.9	49.27	116.9	-412.6	322.0	267.5	54.52	5.906		
2,600.0	2,579.8	2,588.8	2,588.8	6.5	51.8	54.15	116.9	-412.6	301.1	244.2	56.86	5.295		
2,700.0	2,673.2	2,682.2	2,682.2	7.1	53.6	60.15	116.9	-412.6	280.7	221.2	59.44	4.722		
2,800.0	2,765.2	2,774.2	2,774.2	7.7	55.5	67.42	116.9	-412.6	262.2	199.9	62.29	4.210		
2,900.0	2,856.0	2,865.0	2,865.0	8.5	57.3	75.80	116.9	-412.6	247.8	182.5	65.34	3.793		
3,000.0	2,946.6	2,955.6	2,955.6	9.2	59.1	84.73	116.9	-412.6	239.9	171.6	68.29	3.513		
3,057.3	2,998.5	3,007.5	3,007.5	9.7	60.1	90.00	116.9	-412.6	238.7	168.8	69.85	3.417 CC		
3,100.0	3,037.1	3,046.1	3,046.1	10.0	60.9	93.93	116.9	-412.6	239.4	168.4	70.92	3.375 ES		
3,200.0	3,127.7	3,136.7	3,136.7	10.9	62.7	102.93	116.9	-412.6	246.2	173.1	73.14	3.367 SF		
3,300.0	3,218.3	3,227.3	3,227.3	11.7	64.5	111.33	116.9	-412.6	259.9	185.0	74.96	3.467		
3,400.0	3,308.8	3,317.8	3,317.8	12.5	66.4	118.87	116.9	-412.6	279.4	202.9	76.50	3.653		
3,500.0	3,399.4	3,408.4	3,408.4	13.4	68.2	125.46	116.9	-412.6	303.7	225.8	77.87	3.899		
3,600.0	3,490.0	3,499.0	3,499.0	14.3	70.0	131.13	116.9	-412.6	331.5	252.4	79.19	4.187		
3,700.0	3,580.5	3,589.5	3,589.5	15.1	71.8	135.96	116.9	-412.6	362.3	281.8	80.51	4.500		
3,800.0	3,671.1	3,680.1	3,680.1	16.0	73.6	140.08	116.9	-412.6	395.2	313.3	81.88	4.826		
3,900.0	3,761.6	3,770.6	3,770.6	16.9	75.4	143.59	116.9	-412.6	429.7	346.4	83.30	5.158		
4,000.0	3,852.2	3,861.2	3,861.2	17.8	77.2	146.60	116.9	-412.6	465.6	380.8	84.79	5.491		
4,100.0	3,942.8	3,951.8	3,951.8	18.7	79.0	149.20	116.9	-412.6	502.4	416.1	86.34	5.819		
4,200.0	4,033.3	4,042.3	4,042.3	19.5	80.8	151.46	116.9	-412.6	540.1	452.2	87.94	6.142		
4,300.0	4,123.9	4,132.9	4,132.9	20.4	82.7	153.43	116.9	-412.6	578.5	488.9	89.59	6.457		
4,400.0	4,214.5	4,223.5	4,223.5	21.3	84.5	155.16	116.9	-412.6	617.3	526.1	91.28	6.763		
4,500.0	4,305.0	4,314.0	4,314.0	22.2	86.3	156.69	116.9	-412.6	656.7	563.6	93.01	7.060		
4,600.0	4,395.6	4,404.6	4,404.6	23.1	88.1	158.06	116.9	-412.6	696.3	601.6	94.77	7.348		
4,700.0	4,486.2	4,495.2	4,495.2	24.0	89.9	159.28	116.9	-412.6	736.3	639.8	96.55	7.626		
4,800.0	4,576.7	4,585.7	4,585.7	24.9	91.7	160.37	116.9	-412.6	776.5	678.2	98.36	7.895		
4,900.0	4,667.3	4,676.3	4,676.3	25.8	93.5	161.36	116.9	-412.6	817.0	716.8	100.19	8.155		
5,000.0	4,758.3	4,767.3	4,767.3	26.6	95.3	162.45	116.9	-412.6	856.7	753.7	102.99	8.318		
5,100.0	4,850.7	4,859.7	4,859.7	27.3	97.2	163.41	116.9	-412.6	893.5	787.4	106.02	8.427		
5,200.0	4,944.4	4,953.4	4,953.4	27.9	99.1	164.22	116.9	-412.6	927.2	818.2	109.06	8.502		
5,300.0	5,039.2	5,048.2	5,048.2	28.4	101.0	164.90	116.9	-412.6	957.9	845.8	112.06	8.548		
5,400.0	5,135.1	5,144.1	5,144.1	28.9	102.9	165.48	116.9	-412.6	985.4	870.4	115.02	8.567		
6,800.0	6,445.6	6,454.6	6,454.6	30.6	129.1	78.45	116.9	-412.6	982.1	839.2	142.89	6.873		
6,900.0	6,492.2	6,501.2	6,501.2	30.4	130.0	84.02	116.9	-412.6	954.9	809.1	145.77	6.551		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Park O-K-4HC
Project:	SEC.4-T4N-R63W	TVD Reference:	WELL @ 4628.0ft (RKB - 13')
Reference Site:	Park T-4 Pad Sec.4-T4N-R63W	MD Reference:	WELL @ 4628.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Park O-K-4HC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-30-13)	Offset TVD Reference:	Offset Datum

Offset Design Park T-4 Pad Sec.4-T4N-R63W - Park 34-4 (Exist.) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 6700-UNKNOWN												Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,000.0	6,522.1	6,531.1	6,531.1	30.2	130.6	87.44	116.9	-412.6	934.1	786.8	147.27	6.343	
7,100.0	6,546.9	6,555.9	6,555.9	30.1	131.1	89.24	116.9	-412.6	922.5	774.3	148.22	6.224	
7,162.7	6,555.5	6,564.5	6,564.5	30.1	131.3	90.00	116.9	-412.6	920.5	771.8	148.68	6.191	
7,200.0	6,557.0	6,566.0	6,566.0	30.1	131.3	90.01	116.9	-412.6	921.2	772.4	148.83	6.190	
7,300.0	6,557.0	6,566.0	6,566.0	30.2	131.3	90.00	116.9	-412.6	930.6	781.3	149.34	6.232	
7,400.0	6,557.0	6,566.0	6,566.0	30.3	131.3	90.00	116.9	-412.6	950.6	800.5	150.04	6.336	
7,500.0	6,557.0	6,566.0	6,566.0	30.6	131.3	90.00	116.9	-412.6	980.3	829.4	150.89	6.497	

Park T-4 Pad Sec.4-T4N-R63W - Park 44-4 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 6700-UNKNOWN													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	58.88	372.0	616.1	720.2					
100.0	100.0	74.0	74.0	0.1	1.5	58.88	372.0	616.1	719.7	718.1	1.59	451.902		
200.0	200.0	174.0	174.0	0.3	3.5	58.88	372.0	616.1	719.7	715.9	3.82	188.532		
300.0	300.0	274.0	274.0	0.6	5.5	58.88	372.0	616.1	719.7	713.6	6.04	119.112		
400.0	400.0	374.0	374.0	0.8	7.5	58.88	372.0	616.1	719.7	711.4	8.27	87.057		
500.0	500.0	474.0	474.0	1.0	9.5	58.88	372.0	616.1	719.7	709.2	10.49	68.597		
600.0	600.0	574.0	574.0	1.2	11.5	58.88	372.0	616.1	719.7	707.0	12.72	56.595		
700.0	700.0	674.0	674.0	1.5	13.5	58.88	372.0	616.1	719.7	704.7	14.94	48.168		
800.0	800.0	774.0	774.0	1.7	15.5	58.88	372.0	616.1	719.7	702.5	17.17	41.926		
900.0	900.0	874.0	874.0	1.9	17.5	58.88	372.0	616.1	719.7	700.3	19.39	37.115		
1,000.0	1,000.0	974.0	974.0	2.1	19.5	58.88	372.0	616.1	719.7	698.1	21.62	33.295		
1,100.0	1,100.0	1,074.0	1,074.0	2.4	21.5	58.88	372.0	616.1	719.7	695.9	23.84	30.188		
1,200.0	1,200.0	1,174.0	1,174.0	2.6	23.5	58.88	372.0	616.1	719.7	693.6	26.06	27.611		
1,300.0	1,300.0	1,274.0	1,274.0	2.8	25.5	58.88	372.0	616.1	719.7	691.4	28.29	25.440		
1,400.0	1,400.0	1,374.0	1,374.0	3.0	27.5	58.88	372.0	616.1	719.7	689.2	30.51	23.585		
1,500.0	1,500.0	1,474.0	1,474.0	3.3	29.5	58.88	372.0	616.1	719.7	687.0	32.74	21.982		
1,600.0	1,600.0	1,574.0	1,574.0	3.5	31.5	58.88	372.0	616.1	719.7	684.7	34.96	20.584	CC	
1,700.0	1,700.0	1,674.0	1,674.0	3.7	33.5	166.90	372.0	616.1	721.4	684.2	37.15	19.419	ES	
1,800.0	1,799.8	1,773.8	1,773.8	3.9	35.5	166.97	372.0	616.1	726.5	687.2	39.27	18.500		
1,900.0	1,899.5	1,873.5	1,873.5	4.1	37.5	167.08	372.0	616.1	735.0	693.6	41.33	17.782		
2,000.0	1,998.7	1,972.7	1,972.7	4.3	39.5	167.24	372.0	616.1	746.9	703.5	43.34	17.235		
2,100.0	2,097.5	2,071.5	2,071.5	4.6	41.4	167.43	372.0	616.1	762.1	716.9	45.26	16.838		
2,200.0	2,195.6	2,169.6	2,169.6	4.8	43.4	167.65	372.0	616.1	780.8	733.7	47.11	16.573		
2,300.0	2,293.1	2,267.1	2,267.1	5.2	45.3	167.90	372.0	616.1	802.8	753.9	48.87	16.427		
2,400.0	2,389.6	2,363.6	2,363.6	5.5	47.3	168.17	372.0	616.1	828.2	777.6	50.53	16.388	SF	
2,500.0	2,485.3	2,459.3	2,459.3	6.0	49.2	168.45	372.0	616.1	856.8	804.7	52.09	16.448		
2,600.0	2,579.8	2,553.8	2,553.8	6.5	51.1	168.74	372.0	616.1	888.8	835.3	53.54	16.600		
2,700.0	2,673.2	2,647.2	2,647.2	7.1	52.9	169.03	372.0	616.1	924.1	869.2	54.88	16.838		
2,800.0	2,765.2	2,739.2	2,739.2	7.7	54.8	169.32	372.0	616.1	962.5	906.4	56.09	17.160		

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Park O-K-4HC
Project:	SEC.4-T4N-R63W	TVD Reference:	WELL @ 4628.0ft (RKB - 13')
Reference Site:	Park T-4 Pad Sec.4-T4N-R63W	MD Reference:	WELL @ 4628.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Park O-K-4HC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-30-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 167-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	9.9	9.9	0.0	0.0	-154.11	-218.2	-105.9	242.6	242.6	0.01	N/A CC	
100.0	100.0	108.9	108.9	0.1	0.1	-154.12	-218.5	-106.0	242.8	242.6	0.24	1,032.269	
200.0	200.0	208.2	208.2	0.3	0.3	-154.15	-219.1	-106.2	243.5	242.8	0.62	394.484	
300.0	300.0	307.8	307.8	0.6	0.5	-154.16	-219.8	-106.5	244.3	243.2	1.06	229.620	
400.0	400.0	407.5	407.4	0.8	0.7	-154.15	-220.7	-106.9	245.2	243.7	1.51	162.360	
500.0	500.0	508.2	508.2	1.0	0.9	-154.12	-221.4	-107.4	246.1	244.2	1.94	126.880	
600.0	600.0	609.0	609.0	1.2	1.1	-154.08	-221.9	-107.8	246.7	244.3	2.37	104.127	
700.0	700.0	709.9	709.9	1.5	1.3	-154.03	-222.0	-108.1	246.9	244.1	2.79	88.359	
800.0	800.0	811.1	811.1	1.7	1.5	-154.02	-221.8	-108.1	246.7	243.5	3.22	76.618	
900.0	900.0	910.5	910.5	1.9	1.7	-153.95	-221.3	-108.2	246.3	242.7	3.65	67.467	
922.8	922.8	932.8	932.8	2.0	1.8	-153.95	-221.3	-108.1	246.3	242.5	3.75	65.693 ES	
1,000.0	1,000.0	1,007.6	1,007.6	2.1	1.9	-153.92	-221.6	-108.4	246.7	242.6	4.08	60.429	
1,100.0	1,100.0	1,108.5	1,108.5	2.4	2.2	-154.21	-222.8	-107.6	247.4	242.9	4.52	54.739	
1,200.0	1,200.0	1,208.6	1,208.4	2.6	2.4	-155.13	-225.1	-104.4	248.1	243.2	4.95	50.085	
1,300.0	1,300.0	1,309.4	1,309.0	2.8	2.6	-156.77	-228.4	-98.0	248.5	243.1	5.40	46.058	
1,400.0	1,400.0	1,408.0	1,407.1	3.0	2.8	-159.17	-232.9	-88.6	249.2	243.4	5.84	42.700	
1,500.0	1,500.0	1,508.3	1,506.7	3.3	3.1	-161.92	-238.2	-77.7	250.6	244.3	6.28	39.910	
1,600.0	1,600.0	1,606.9	1,604.4	3.5	3.3	-164.67	-243.3	-66.7	252.3	245.6	6.72	37.573	
1,700.0	1,700.0	1,705.8	1,702.6	3.7	3.6	-59.69	-248.6	-55.7	253.9	246.7	7.25	35.020	
1,800.0	1,799.8	1,804.8	1,800.9	3.9	3.8	-63.27	-253.8	-45.0	254.7	247.0	7.69	33.114	
1,900.0	1,899.5	1,904.2	1,899.6	4.1	4.1	-67.57	-258.7	-34.2	254.8	246.6	8.14	31.299	
1,947.9	1,947.1	1,951.4	1,946.4	4.2	4.2	-69.88	-260.9	-28.9	254.7	246.4	8.36	30.471	
2,000.0	1,998.7	2,002.9	1,997.6	4.3	4.4	-72.56	-263.1	-23.3	254.8	246.2	8.60	29.631	
2,100.0	2,097.5	2,101.5	2,095.6	4.6	4.6	-78.22	-266.9	-12.5	255.3	246.3	9.08	28.131	
2,200.0	2,195.6	2,194.6	2,187.9	4.8	4.9	-84.27	-270.3	-1.7	258.1	248.6	9.57	26.964	
2,300.0	2,293.1	2,290.5	2,283.1	5.2	5.1	-90.82	-274.4	9.0	264.7	254.6	10.10	26.206	
2,400.0	2,389.6	2,381.9	2,373.9	5.5	5.4	-97.18	-278.5	18.9	275.3	264.7	10.64	25.870 SF	
2,500.0	2,485.3	2,471.5	2,462.9	6.0	5.7	-103.30	-283.6	28.5	291.5	280.3	11.21	26.017	
2,600.0	2,579.8	2,562.7	2,553.4	6.5	5.9	-109.22	-289.2	38.0	312.8	301.1	11.78	26.551	
2,700.0	2,673.2	2,645.4	2,635.3	7.1	6.2	-114.38	-294.3	48.1	340.4	328.1	12.37	27.531	
2,800.0	2,765.2	2,729.8	2,718.8	7.7	6.4	-119.37	-299.6	59.8	374.4	361.4	12.96	28.894	
2,900.0	2,856.0	2,813.5	2,801.4	8.5	6.7	-124.15	-304.6	71.9	413.7	400.1	13.54	30.545	
3,000.0	2,946.6	2,897.4	2,884.2	9.2	7.0	-128.54	-310.1	84.0	456.2	442.1	14.12	32.316	
3,100.0	3,037.1	2,980.9	2,966.7	10.0	7.3	-132.15	-316.3	95.9	501.1	486.4	14.69	34.111	
3,200.0	3,127.7	3,077.1	3,061.8	10.9	7.6	-135.58	-323.5	108.5	546.5	531.3	15.25	35.844	
3,300.0	3,218.3	3,171.7	3,155.5	11.7	7.9	-138.46	-329.7	119.3	591.4	575.6	15.80	37.439	
3,400.0	3,308.8	3,260.2	3,243.4	12.5	8.1	-140.84	-334.7	128.9	636.5	620.2	16.35	38.936	
3,500.0	3,399.4	3,345.9	3,328.5	13.4	8.4	-142.89	-339.0	138.2	682.4	665.5	16.90	40.381	
3,600.0	3,490.0	3,429.6	3,411.5	14.3	8.6	-144.68	-343.0	147.5	729.0	711.5	17.45	41.778	
3,700.0	3,580.5	3,510.4	3,491.7	15.1	8.9	-146.18	-347.4	156.9	776.6	758.6	18.01	43.131	
3,800.0	3,671.1	3,595.2	3,575.6	16.0	9.1	-147.47	-353.5	166.7	825.0	806.5	18.58	44.398	
3,900.0	3,761.6	3,681.9	3,661.5	16.9	9.4	-148.59	-360.5	176.7	873.8	854.6	19.17	45.579	
4,000.0	3,852.2	3,769.3	3,748.1	17.8	9.7	-149.58	-367.9	186.5	922.6	902.8	19.77	46.674	
4,100.0	3,942.8	3,856.3	3,834.1	18.7	9.9	-150.42	-375.9	196.2	971.6	951.2	20.37	47.695	

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Park O-K-4HC
Project:	SEC.4-T4N-R63W	TVD Reference:	WELL @ 4628.0ft (RKB - 13')
Reference Site:	Park T-4 Pad Sec.4-T4N-R63W	MD Reference:	WELL @ 4628.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Park O-K-4HC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-30-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.01	0.0	20.1	20.1					
100.0	100.0	100.0	100.0	0.1	0.1	90.01	0.0	20.1	20.1	19.8	0.22	89.306		
200.0	200.0	200.0	200.0	0.3	0.3	90.01	0.0	20.1	20.1	19.4	0.67	29.769		
300.0	300.0	300.0	300.0	0.6	0.6	90.01	0.0	20.1	20.1	18.9	1.12	17.861		
400.0	400.0	400.0	400.0	0.8	0.8	90.01	0.0	20.1	20.1	18.5	1.57	12.758		
500.0	500.0	500.0	500.0	1.0	1.0	90.01	0.0	20.1	20.1	18.0	2.02	9.923		
600.0	600.0	600.0	600.0	1.2	1.2	90.01	0.0	20.1	20.1	17.6	2.47	8.119		
700.0	700.0	700.0	700.0	1.5	1.5	90.01	0.0	20.1	20.1	17.2	2.92	6.870		
800.0	800.0	800.0	800.0	1.7	1.7	90.01	0.0	20.1	20.1	16.7	3.37	5.954		
900.0	900.0	900.0	900.0	1.9	1.9	90.01	0.0	20.1	20.1	16.3	3.82	5.253		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	90.01	0.0	20.1	20.1	15.8	4.27	4.700		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	90.01	0.0	20.1	20.1	15.4	4.72	4.253		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	90.01	0.0	20.1	20.1	14.9	5.17	3.883		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	90.01	0.0	20.1	20.1	14.5	5.62	3.572		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	90.01	0.0	20.1	20.1	14.0	6.07	3.308		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	90.01	0.0	20.1	20.1	13.6	6.52	3.080		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	90.01	0.0	20.1	20.1	13.1	6.97	2.881 CC, ES, SF		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	-163.41	0.0	20.1	21.7	14.3	7.40	2.939		
1,800.0	1,799.8	1,799.8	1,799.8	3.9	3.9	-166.58	0.0	20.1	26.8	19.0	7.80	3.435		
1,900.0	1,899.5	1,899.5	1,899.5	4.1	4.2	-169.83	0.0	20.1	35.3	27.1	8.20	4.309		
2,000.0	1,998.7	1,998.7	1,998.7	4.3	4.4	-172.40	0.0	20.1	47.4	38.8	8.59	5.513		
2,100.0	2,097.5	2,097.5	2,097.5	4.6	4.6	-174.25	0.0	20.1	62.9	53.9	8.98	7.006		
2,200.0	2,195.6	2,195.6	2,195.6	4.8	4.8	-175.56	0.0	20.1	81.9	72.6	9.36	8.753		
2,300.0	2,293.1	2,293.1	2,293.1	5.2	5.0	-176.49	0.0	20.1	104.4	94.6	9.73	10.725		
2,400.0	2,389.6	2,389.6	2,389.6	5.5	5.3	-177.16	0.0	20.1	130.2	120.1	10.10	12.896		
2,500.0	2,485.3	2,485.3	2,485.3	6.0	5.5	-177.66	0.0	20.1	159.4	149.0	10.46	15.247		
2,600.0	2,579.8	2,579.8	2,579.8	6.5	5.7	-178.03	0.0	20.1	192.0	181.1	10.81	17.760		
2,700.0	2,673.2	2,676.0	2,676.0	7.1	5.9	-178.08	-1.0	19.9	227.3	216.2	11.14	20.407		
2,800.0	2,765.2	2,772.6	2,772.5	7.7	6.1	-177.49	-5.1	19.0	264.5	253.1	11.45	23.108		
2,900.0	2,856.0	2,869.0	2,868.6	8.5	6.2	-176.48	-12.4	17.5	303.2	291.4	11.82	25.657		
3,000.0	2,946.6	2,966.1	2,965.1	9.2	6.4	-175.19	-22.9	15.4	341.1	328.8	12.29	27.760		
3,100.0	3,037.1	3,062.3	3,060.4	10.0	6.6	-173.72	-36.4	12.6	377.9	365.1	12.79	29.549		
3,200.0	3,127.7	3,155.0	3,152.0	10.9	6.8	-172.45	-50.1	9.8	414.5	401.2	13.32	31.125		
3,300.0	3,218.3	3,247.7	3,243.6	11.7	7.0	-171.38	-63.9	7.0	451.3	437.4	13.87	32.537		
3,400.0	3,308.8	3,340.4	3,335.2	12.5	7.2	-170.47	-77.6	4.2	488.2	473.7	14.44	33.799		
3,500.0	3,399.4	3,433.1	3,426.8	13.4	7.4	-169.69	-91.4	1.4	525.1	510.1	15.04	34.924		
3,600.0	3,490.0	3,525.8	3,518.5	14.3	7.6	-169.01	-105.1	-1.4	562.2	546.5	15.65	35.929		
3,700.0	3,580.5	3,618.5	3,610.1	15.1	7.9	-168.41	-118.9	-4.3	599.3	583.0	16.27	36.827		
3,800.0	3,671.1	3,711.2	3,701.7	16.0	8.1	-167.89	-132.6	-7.1	636.5	619.6	16.91	37.631		
3,900.0	3,761.6	3,803.9	3,793.3	16.9	8.4	-167.42	-146.4	-9.9	673.7	656.1	17.57	38.351		
4,000.0	3,852.2	3,896.5	3,884.9	17.8	8.6	-167.00	-160.1	-12.7	710.9	692.7	18.23	38.997		
4,100.0	3,942.8	3,989.2	3,976.6	18.7	8.9	-166.62	-173.9	-15.5	748.2	729.3	18.90	39.577		
4,200.0	4,033.3	4,081.9	4,068.2	19.5	9.2	-166.28	-187.7	-18.3	785.5	765.9	19.59	40.101		
4,300.0	4,123.9	4,174.6	4,159.8	20.4	9.5	-165.97	-201.4	-21.2	822.8	802.5	20.28	40.573		
4,400.0	4,214.5	4,267.3	4,251.4	21.3	9.7	-165.69	-215.2	-24.0	860.1	839.1	20.98	41.001		
4,500.0	4,305.0	4,360.0	4,343.0	22.2	10.0	-165.43	-228.9	-26.8	897.5	875.8	21.68	41.389		
4,600.0	4,395.6	4,452.7	4,434.6	23.1	10.3	-165.19	-242.7	-29.6	934.8	912.4	22.40	41.742		
4,700.0	4,486.2	4,545.4	4,526.3	24.0	10.6	-164.97	-256.4	-32.4	972.2	949.1	23.11	42.063		

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Park O-K-4HC
Project:	SEC.4-T4N-R63W	TVD Reference:	WELL @ 4628.0ft (RKB - 13')
Reference Site:	Park T-4 Pad Sec.4-T4N-R63W	MD Reference:	WELL @ 4628.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Park O-K-4HC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-30-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:		0.0 ft
PARK T-P-4HZ PAD SEC.4-T4N-R63W - Park R-4 (Exist.) - Wellbore #1 - Wellbore #1												Offset Well Error:		0.0 ft
Survey Program: 783-MWD														
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation		Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	2.41	729.0	30.7	729.8					
100.0	100.0	83.0	83.0	0.1	0.1	2.41	729.0	30.7	729.6	729.4	0.21	3,544.642		
200.0	200.0	183.0	183.0	0.3	0.2	2.41	729.0	30.7	729.6	729.1	0.54	1,343.781		
300.0	300.0	283.0	283.0	0.6	0.3	2.42	729.0	30.8	729.6	728.7	0.88	829.030		
400.0	400.0	383.1	383.1	0.8	0.4	2.43	728.9	31.0	729.6	728.4	1.22	599.413		
500.0	500.0	483.1	483.1	1.0	0.5	2.45	728.9	31.2	729.6	728.0	1.55	469.399		
600.0	600.0	583.1	583.1	1.2	0.7	2.47	728.9	31.4	729.6	727.7	1.89	385.730		
700.0	700.0	683.1	683.1	1.5	0.8	2.49	728.9	31.7	729.6	727.3	2.23	327.374		
799.6	799.6	782.8	782.8	1.7	0.9	2.52	728.9	32.0	729.6	727.0	2.56	284.485		
800.0	800.0	783.0	783.0	1.7	0.9	2.52	728.9	32.0	729.6	727.0	2.57	284.367 CC, ES		
900.0	900.0	860.3	860.3	1.9	1.0	2.52	730.0	32.1	731.1	728.2	2.95	247.670		
1,000.0	1,000.0	934.4	934.3	2.1	1.2	2.49	733.6	31.8	735.9	732.6	3.33	220.960		
1,100.0	1,100.0	1,008.3	1,007.9	2.4	1.4	2.39	739.9	30.9	744.3	740.6	3.72	200.218		
1,200.0	1,200.0	1,084.1	1,083.1	2.6	1.5	2.26	748.8	29.6	756.0	751.9	4.12	183.319		
1,300.0	1,300.0	1,161.0	1,159.3	2.8	1.8	2.20	759.9	29.2	770.5	766.0	4.55	169.245		
1,400.0	1,400.0	1,239.4	1,236.5	3.0	2.0	2.26	773.3	30.6	787.7	782.7	5.02	156.944		
1,500.0	1,500.0	1,306.9	1,302.6	3.3	2.2	2.39	787.0	32.9	808.0	802.6	5.48	147.393		
1,600.0	1,600.0	1,374.1	1,367.7	3.5	2.5	2.45	803.2	34.4	832.3	826.3	5.97	139.418		
1,700.0	1,700.0	1,443.0	1,434.0	3.7	2.8	109.93	822.0	34.5	860.1	854.0	6.12	140.468		
1,800.0	1,799.8	1,509.3	1,497.2	3.9	3.2	109.41	842.2	33.7	892.2	885.7	6.50	137.258		
1,900.0	1,899.5	1,570.4	1,554.7	4.1	3.5	108.88	862.8	32.5	928.7	921.8	6.88	134.994		
2,000.0	1,998.7	1,632.0	1,611.8	4.3	3.9	108.31	885.7	30.4	969.5	962.2	7.28	133.168 SF		

Offset Design PARK T-P-4HZ PAD SEC.4-T4N-R63W - Park S-4 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error: 0.0 ft	
Survey Program: 783-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	1.31	729.0	16.7	729.4					
100.0	100.0	82.7	82.7	0.1	0.1	1.31	729.0	16.7	729.2	729.0	0.21	3,548.413 CC		
200.0	200.0	182.4	182.4	0.3	0.2	1.31	729.1	16.7	729.2	728.7	0.54	1,344.955		
300.0	300.0	282.1	282.1	0.6	0.3	1.31	729.2	16.7	729.3	728.5	0.88	829.821		
400.0	400.0	381.8	381.8	0.8	0.4	1.31	729.3	16.6	729.5	728.3	1.22	600.090		
500.0	500.0	481.5	481.5	1.0	0.5	1.30	729.5	16.6	729.7	728.1	1.55	470.047		
600.0	600.0	581.2	581.2	1.2	0.7	1.30	729.7	16.5	729.9	728.0	1.89	386.384		
700.0	700.0	680.9	680.9	1.5	0.8	1.29	730.0	16.5	730.2	727.9	2.23	328.054		
800.0	800.0	780.6	780.6	1.7	0.9	1.28	730.3	16.4	730.5	727.9	2.56	285.070 ES		
900.0	900.0	875.1	875.1	1.9	1.1	1.14	730.8	14.5	731.0	728.0	2.99	244.303		
1,000.0	1,000.0	963.1	962.7	2.1	1.3	0.61	732.7	7.8	733.0	729.6	3.42	214.429		
1,100.0	1,100.0	1,060.4	1,059.4	2.4	1.5	-0.26	735.7	-3.3	736.1	732.2	3.87	190.017		
1,200.0	1,200.0	1,167.6	1,165.6	2.6	1.8	-1.38	738.6	-17.7	739.0	734.7	4.34	170.442		
1,300.0	1,300.0	1,274.9	1,271.6	2.8	2.2	-2.63	739.9	-34.0	740.8	736.0	4.79	154.705		
1,400.0	1,400.0	1,375.8	1,371.4	3.0	2.4	-3.77	740.6	-48.8	742.3	737.1	5.22	142.325		
1,500.0	1,500.0	1,487.1	1,481.5	3.3	2.8	-5.04	740.6	-65.2	743.4	737.8	5.68	130.995		
1,600.0	1,600.0	1,592.2	1,585.2	3.5	3.1	-6.34	738.7	-82.1	743.2	737.1	6.13	121.176		
1,654.5	1,654.5	1,647.9	1,640.2	3.6	3.3	101.01	737.5	-90.8	743.2	736.3	6.87	108.124		
1,700.0	1,700.0	1,694.4	1,686.1	3.7	3.5	100.53	736.4	-98.2	743.2	736.1	7.12	104.369		
1,800.0	1,799.8	1,792.0	1,782.5	3.9	3.8	99.71	733.9	-113.5	743.8	736.1	7.64	97.375		
1,900.0	1,899.5	1,872.5	1,862.1	4.1	4.0	99.25	733.1	-125.6	746.5	738.4	8.10	92.196		
2,000.0	1,998.7	1,974.9	1,963.4	4.3	4.4	98.99	733.8	-140.4	751.3	742.7	8.64	86.942		
2,100.0	2,097.5	2,074.0	2,061.6	4.6	4.7	99.05	734.2	-153.9	756.3	747.1	9.19	82.261		
2,200.0	2,195.6	2,175.6	2,162.4	4.8	5.0	99.44	734.7	-166.7	761.8	752.0	9.78	77.917		
2,300.0	2,293.1	2,276.3	2,262.4	5.2	5.3	100.15	735.1	-178.3	767.7	757.3	10.39	73.874		
2,400.0	2,389.6	2,371.2	2,356.7	5.5	5.5	101.07	735.7	-188.6	774.6	763.6	11.03	70.231		
2,500.0	2,485.3	2,467.8	2,452.9	6.0	5.8	102.28	736.7	-198.0	782.8	771.1	11.72	66.811		
2,600.0	2,579.8	2,563.9	2,548.5	6.5	6.1	103.70	738.1	-207.0	792.8	780.3	12.45	63.662		
2,700.0	2,673.2	2,674.9	2,659.1	7.1	6.3	105.68	738.2	-215.7	802.8	789.6	13.26	60.529		
2,800.0	2,765.2	2,767.7	2,751.7	7.7	6.6	107.49	737.8	-222.3	814.5	800.4	14.08	57.852		
2,900.0	2,856.0	2,862.4	2,846.2	8.5	6.8	109.57	737.5	-228.9	828.3	813.4	14.94	55.444		
3,000.0	2,946.6	2,956.9	2,940.6	9.2	7.0	111.90	736.7	-233.1	843.4	827.6	15.79	53.408		
3,100.0	3,037.1	3,046.4	3,030.0	10.0	7.2	114.08	736.0	-236.4	860.1	843.5	16.62	51.762		
3,200.0	3,127.7	3,138.9	3,122.5	10.9	7.3	116.29	735.3	-239.3	878.3	860.9	17.43	50.404		
3,300.0	3,218.3	3,232.2	3,215.8	11.7	7.5	118.47	734.4	-241.8	897.8	879.6	18.21	49.301		
3,400.0	3,308.8	3,328.5	3,312.0	12.5	7.7	120.64	733.2	-244.1	918.4	899.4	18.97	48.418		
3,500.0	3,399.4	3,419.5	3,403.0	13.4	7.9	122.74	730.8	-244.4	939.7	920.0	19.68	47.757		
3,600.0	3,490.0	3,493.0	3,476.5	14.3	8.0	124.41	729.7	-243.6	963.5	943.2	20.36	47.324		
3,700.0	3,580.5	3,578.0	3,561.5	15.1	8.1	126.26	729.4	-242.5	989.7	968.7	21.02	47.091 SF		

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Park O-K-4HC
Project:	SEC.4-T4N-R63W	TVD Reference:	WELL @ 4628.0ft (RKB - 13')
Reference Site:	Park T-4 Pad Sec.4-T4N-R63W	MD Reference:	WELL @ 4628.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Park O-K-4HC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-30-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 760-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	12.0	12.0	0.0	0.0	-149.02	-218.2	-131.0	254.5	254.5	0.01	N/A	
100.0	100.0	112.0	112.0	0.1	0.1	-149.00	-218.2	-131.1	254.5	254.3	0.24	1,067.092	
200.0	200.0	212.0	212.0	0.3	0.2	-148.97	-218.1	-131.2	254.5	254.0	0.58	442.096	
300.0	300.0	312.0	312.0	0.6	0.4	-148.92	-218.0	-131.4	254.5	253.6	0.91	278.803	
400.0	400.0	412.0	412.0	0.8	0.5	-148.84	-217.8	-131.7	254.5	253.3	1.25	203.602	
500.0	500.0	512.0	512.0	1.0	0.6	-148.75	-217.6	-132.1	254.6	253.0	1.59	160.352	
600.0	600.0	612.0	612.0	1.2	0.7	-148.63	-217.3	-132.5	254.6	252.6	1.92	132.260	
700.0	700.0	712.0	712.0	1.5	0.8	-148.49	-217.0	-133.0	254.6	252.3	2.26	112.544	
800.0	800.0	811.7	811.7	1.7	1.0	-148.34	-216.7	-133.6	254.6	251.9	2.65	96.015	
900.0	900.0	911.3	911.3	1.9	1.2	-148.18	-216.5	-134.3	254.8	251.7	3.09	82.459	
1,000.0	1,000.0	1,010.8	1,010.8	2.1	1.4	-148.01	-216.4	-135.2	255.2	251.6	3.53	72.325	
1,100.0	1,100.0	1,111.0	1,111.0	2.4	1.6	-147.87	-216.4	-136.0	255.6	251.7	3.95	64.720	
1,200.0	1,200.0	1,211.1	1,211.1	2.6	1.8	-147.75	-216.5	-136.6	256.0	251.6	4.37	58.564	
1,300.0	1,300.0	1,312.2	1,312.2	2.8	2.0	-147.71	-216.5	-136.8	256.1	251.3	4.79	53.468	
1,400.0	1,400.0	1,413.0	1,413.0	3.0	2.2	-147.80	-216.5	-136.3	255.9	250.7	5.21	49.069	
1,500.0	1,500.0	1,513.6	1,513.5	3.3	2.4	-147.92	-216.4	-135.6	255.4	249.7	5.64	45.254	
1,600.0	1,600.0	1,613.8	1,613.8	3.5	2.6	-148.07	-216.1	-134.7	254.7	248.6	6.07	41.940	
1,700.0	1,700.0	1,712.9	1,712.9	3.7	2.8	-40.41	-215.8	-134.2	252.8	246.3	6.49	38.970	
1,800.0	1,799.8	1,812.1	1,812.1	3.9	3.0	-41.16	-215.5	-134.4	248.6	241.7	6.88	36.115	
1,900.0	1,899.5	1,911.3	1,911.3	4.1	3.2	-42.50	-215.2	-134.7	242.1	234.8	7.29	33.233	
2,000.0	1,998.7	2,010.5	2,010.5	4.3	3.4	-44.57	-215.2	-135.1	233.4	225.7	7.69	30.331	
2,100.0	2,097.5	2,109.7	2,109.6	4.6	3.6	-47.50	-215.1	-135.2	222.4	214.3	8.12	27.398	
2,200.0	2,195.6	2,208.4	2,208.4	4.8	3.8	-51.47	-214.9	-135.3	209.7	201.1	8.58	24.454	
2,300.0	2,293.1	2,306.6	2,306.6	5.2	4.0	-56.69	-214.2	-135.5	195.7	186.6	9.08	21.544	
2,400.0	2,389.6	2,403.1	2,403.0	5.5	4.2	-63.45	-213.3	-135.8	181.6	171.9	9.67	18.788	
2,500.0	2,485.3	2,498.2	2,498.2	6.0	4.4	-72.14	-212.7	-135.8	169.4	159.1	10.34	16.377	
2,600.0	2,579.8	2,592.6	2,592.5	6.5	4.6	-82.78	-212.3	-135.7	161.4	150.3	11.11	14.530	
2,667.3	2,642.8	2,655.5	2,655.5	6.9	4.8	-90.74	-212.0	-135.8	159.7	148.0	11.65	13.705 CC, ES	
2,700.0	2,673.2	2,686.0	2,686.0	7.1	4.8	-94.75	-211.8	-135.8	160.1	148.2	11.90	13.461	
2,800.0	2,765.2	2,777.9	2,777.9	7.7	5.0	-106.97	-211.5	-136.1	167.7	155.1	12.59	13.314	
2,900.0	2,856.0	2,867.8	2,867.8	8.5	5.2	-118.26	-211.5	-136.4	185.0	171.9	13.14	14.075	
3,000.0	2,946.6	2,957.7	2,957.6	9.2	5.4	-127.45	-213.0	-137.0	210.1	196.6	13.59	15.467	
3,100.0	3,037.1	3,053.1	3,053.0	10.0	5.6	-134.73	-215.7	-139.0	239.1	225.1	13.98	17.097	
3,200.0	3,127.7	3,147.0	3,146.7	10.9	5.8	-140.09	-219.0	-142.6	269.5	255.1	14.39	18.729	
3,300.0	3,218.3	3,241.2	3,240.8	11.7	6.0	-144.15	-223.4	-147.0	301.2	286.4	14.82	20.330	
3,400.0	3,308.8	3,336.6	3,335.7	12.5	6.2	-146.86	-231.1	-152.9	333.3	318.0	15.32	21.758	
3,500.0	3,399.4	3,426.1	3,424.4	13.4	6.4	-148.51	-241.0	-158.7	366.3	350.4	15.88	23.062	
3,600.0	3,490.0	3,521.3	3,518.6	14.3	6.7	-149.69	-253.5	-164.7	400.0	383.5	16.50	24.250	
3,700.0	3,580.5	3,615.9	3,612.1	15.1	6.9	-150.57	-266.6	-171.3	433.3	416.2	17.13	25.295	
3,800.0	3,671.1	3,706.9	3,702.1	16.0	7.1	-151.36	-278.8	-177.2	467.1	449.3	17.76	26.304	
3,900.0	3,761.6	3,795.8	3,790.0	16.9	7.3	-152.05	-290.6	-182.2	501.7	483.4	18.38	27.291	
4,000.0	3,852.2	3,887.3	3,880.5	17.8	7.6	-152.65	-303.2	-186.7	537.2	518.1	19.03	28.229	
4,100.0	3,942.8	3,980.3	3,972.6	18.7	7.8	-153.19	-315.9	-191.1	572.7	553.1	19.68	29.105	
4,200.0	4,033.3	4,074.0	4,065.2	19.5	8.1	-153.69	-328.4	-195.6	608.4	588.0	20.33	29.927	
4,300.0	4,123.9	4,180.9	4,171.0	20.4	8.3	-154.17	-343.0	-201.9	643.0	622.0	21.02	30.589	
4,400.0	4,214.5	4,275.3	4,264.3	21.3	8.6	-154.54	-357.7	-208.6	676.5	654.8	21.70	31.179	
4,500.0	4,305.0	4,366.5	4,354.6	22.2	8.9	-154.96	-366.9	-214.7	710.3	688.0	22.35	31.776	
4,600.0	4,395.6	4,456.2	4,443.4	23.1	9.1	-155.30	-378.5	-220.3	744.6	721.6	23.02	32.347	
4,700.0	4,486.2	4,541.3	4,527.6	24.0	9.4	-155.59	-389.5	-224.8	779.7	756.1	23.68	32.927	
4,800.0	4,576.7	4,634.7	4,620.2	24.9	9.6	-155.92	-401.3	-229.2	815.6	791.2	24.35	33.490	
4,900.0	4,667.3	4,731.0	4,715.5	25.8	9.9	-156.21	-413.6	-234.0	851.0	826.0	25.04	33.993	
5,000.0	4,758.3	4,818.0	4,801.8	26.6	10.1	-156.70	-424.2	-238.5	885.5	859.8	25.70	34.453	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

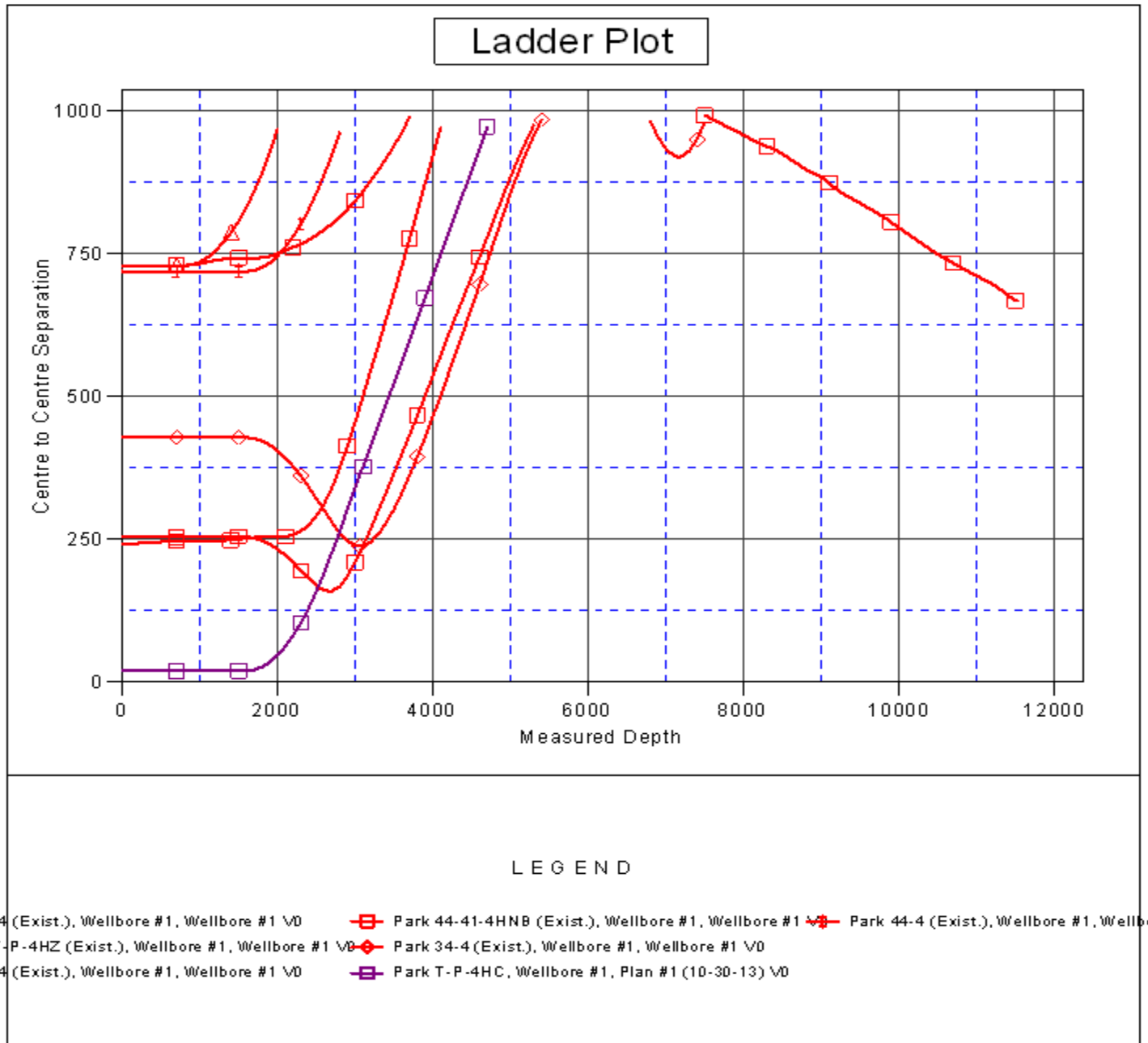
Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Park O-K-4HC
Project:	SEC.4-T4N-R63W	TVD Reference:	WELL @ 4628.0ft (RKB - 13')
Reference Site:	Park T-4 Pad Sec.4-T4N-R63W	MD Reference:	WELL @ 4628.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Park O-K-4HC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-30-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 760-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.0	4,850.7	4,907.6	4,890.8	27.3	10.4	-157.23	-433.5	-242.4	917.6	891.3	26.29	34.900		
5,200.0	4,944.4	4,994.5	4,977.4	27.9	10.6	-157.77	-440.4	-245.0	947.8	920.9	26.83	35.331		
5,300.0	5,039.2	5,083.3	5,066.1	28.4	10.8	-158.29	-445.9	-247.0	975.6	948.2	27.32	35.711		
7,500.0	6,557.0	7,152.5	6,394.0	30.6	19.6	79.82	522.6	-348.0	993.0	955.9	37.13	26.742		
7,600.0	6,557.0	7,248.0	6,395.3	31.0	20.8	79.83	617.9	-351.9	986.3	947.0	39.29	25.103		
7,700.0	6,557.0	7,351.2	6,398.4	31.5	22.3	79.95	720.9	-356.1	979.3	937.4	41.90	23.372		
7,800.0	6,557.0	7,448.0	6,398.6	32.2	23.7	79.89	817.6	-360.3	972.5	928.0	44.56	21.827		
7,900.0	6,557.0	7,547.4	6,398.5	32.9	25.2	79.81	917.0	-364.4	966.1	918.8	47.33	20.413		
8,000.0	6,557.0	7,660.6	6,397.7	33.8	26.9	79.67	1,030.0	-370.4	958.5	908.1	50.39	19.021		
8,100.0	6,557.0	7,751.8	6,396.5	34.8	28.4	79.52	1,121.1	-375.4	951.0	897.7	53.29	17.845		
8,200.0	6,557.0	7,837.0	6,395.7	35.9	29.8	79.41	1,206.2	-378.8	944.7	888.7	56.07	16.849		
8,300.0	6,557.0	7,937.4	6,396.5	37.1	31.4	79.39	1,306.5	-382.2	938.8	879.6	59.20	15.858		
8,400.0	6,557.0	8,042.7	6,395.9	38.3	33.1	79.30	1,411.8	-385.0	933.9	871.5	62.46	14.952		
8,500.0	6,557.0	8,178.0	6,398.6	39.6	35.3	79.34	1,546.9	-392.4	925.7	859.4	66.31	13.962		
8,600.0	6,557.0	8,269.7	6,398.7	41.0	36.9	79.24	1,638.3	-398.9	916.3	846.8	69.48	13.187		
8,700.0	6,557.0	8,369.7	6,398.9	42.4	38.6	79.15	1,738.1	-405.4	907.5	834.7	72.76	12.473		
8,800.0	6,557.0	8,459.0	6,398.4	43.9	40.1	79.02	1,827.2	-411.4	898.6	822.6	75.94	11.833		
8,900.0	6,557.0	8,542.8	6,397.6	45.4	41.6	78.89	1,910.9	-415.8	891.2	812.2	79.00	11.281		
9,000.0	6,557.0	8,674.3	6,397.3	46.9	43.8	78.76	2,042.2	-421.2	885.3	802.5	82.88	10.683		
9,100.0	6,557.0	8,785.8	6,398.9	48.4	45.7	78.71	2,153.4	-430.2	874.7	788.2	86.49	10.114		
9,200.0	6,557.0	8,881.2	6,398.9	50.0	47.4	78.57	2,248.4	-438.7	863.5	773.7	89.87	9.609		
9,300.0	6,557.0	8,956.0	6,398.8	51.7	48.7	78.47	2,323.0	-444.0	854.2	761.3	92.86	9.199		
9,400.0	6,557.0	9,046.3	6,398.9	53.3	50.3	78.39	2,413.2	-448.3	847.1	750.9	96.16	8.809		
9,500.0	6,557.0	9,155.9	6,398.7	54.9	52.3	78.25	2,522.6	-454.1	839.4	739.7	99.78	8.413		
9,600.0	6,557.0	9,254.6	6,396.6	56.6	54.0	78.00	2,621.2	-460.3	831.3	728.2	103.19	8.056		
9,700.0	6,557.0	9,356.6	6,395.7	58.3	55.8	77.82	2,722.9	-466.0	823.7	717.0	106.63	7.724		
9,800.0	6,557.0	9,462.6	6,395.1	60.0	57.7	77.64	2,828.8	-472.5	815.4	705.2	110.18	7.400		
9,900.0	6,557.0	9,568.3	6,397.9	61.7	59.5	77.68	2,934.2	-479.4	806.0	692.2	113.80	7.082		
10,000.0	6,557.0	9,666.6	6,398.2	63.4	61.3	77.56	3,032.3	-486.6	796.4	679.0	117.31	6.788		
10,100.0	6,557.0	9,773.1	6,395.8	65.2	63.2	77.21	3,138.4	-495.1	786.7	665.9	120.82	6.511		
10,200.0	6,557.0	9,867.1	6,395.2	66.9	64.9	77.02	3,232.1	-501.8	777.4	653.3	124.15	6.262		
10,300.0	6,557.0	9,960.2	6,395.2	68.7	66.5	76.87	3,325.0	-508.2	768.3	640.8	127.50	6.026		
10,400.0	6,557.0	10,066.7	6,396.7	70.4	68.4	76.81	3,431.2	-515.5	758.9	627.8	131.14	5.787		
10,500.0	6,557.0	10,156.2	6,396.2	72.2	70.1	76.62	3,520.5	-521.8	749.7	615.3	134.46	5.576		
10,600.0	6,557.0	10,248.7	6,395.6	74.0	71.7	76.46	3,612.8	-526.4	742.5	604.8	137.77	5.390		
10,700.0	6,557.0	10,354.8	6,397.6	75.8	73.6	76.45	3,718.7	-532.4	734.2	592.7	141.44	5.191		
10,800.0	6,557.0	10,447.8	6,398.7	77.6	75.3	76.40	3,811.6	-537.3	726.5	581.6	144.85	5.015		
10,900.0	6,557.0	10,544.8	6,398.5	79.4	77.0	76.25	3,908.5	-542.0	719.4	571.1	148.30	4.851		
11,000.0	6,557.0	10,643.0	6,397.8	81.2	78.8	76.05	4,006.6	-547.4	711.8	560.1	151.69	4.692		
11,100.0	6,557.0	10,748.9	6,397.9	83.0	80.6	75.91	4,112.3	-552.1	705.1	549.8	155.27	4.541		
11,200.0	6,557.0	10,849.6	6,397.8	84.8	82.4	75.76	4,212.9	-556.8	698.2	539.4	158.75	4.398		
11,300.0	6,557.0	10,964.2	6,398.9	86.6	84.5	75.63	4,327.3	-564.5	689.0	526.5	162.48	4.240		
11,400.0	6,557.0	11,074.9	6,399.5	88.4	86.5	75.42	4,437.5	-574.1	678.0	511.9	166.13	4.081		
11,500.0	6,557.0	11,120.0	6,399.2	90.2	87.4	75.28	4,482.4	-578.5	668.7	500.0	168.67	3.964		
11,522.7	6,557.0	11,120.0	6,399.2	90.7	87.4	75.28	4,482.4	-578.5	668.3	499.2	169.09	3.952		
11,528.3	6,557.0	11,120.0	6,399.2	90.8	87.4	75.28	4,482.4	-578.5	668.3	499.1	169.19	3.950 SF		

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Park O-K-4HC
Project:	SEC.4-T4N-R63W	TVD Reference:	WELL @ 4628.0ft (RKB - 13')
Reference Site:	Park T-4 Pad Sec.4-T4N-R63W	MD Reference:	WELL @ 4628.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Park O-K-4HC	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (10-30-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4628.0ft (RKB - 13')
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: Park O-K-4HC
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.69°



Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Park O-K-4HC
Project:	SEC.4-T4N-R63W	TVD Reference:	WELL @ 4628.0ft (RKB - 13')
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