

BONANZA CREEK ENERGY OPERATING

Well Name: **Antelope F-J-18HZ**

Surface Location: Antelope F-18 Pad Sec.18-T5N-R62W
North American Datum 1983, US State Plane 1983, Colorado Northern Zone

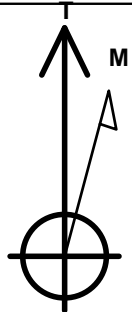
Ground Elevation: 4614.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1392397.36	3314358.98	40.405040	-104.371170	

Original Well Elev WELL @ 4626.0ft (Original Well Elev)

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
HARDLINE BHL 460'FSL (2)	1.0	-4302.5	1057.4	Polygon
HARDLINE SHL 460'FNL (2)	1.0	125.0	0.0	Polygon
BHL 460'FSL, 1750'FWL	6333.0	-4302.5	657.4	Point
T1 460'FNL, 1650'FWL	6333.0	123.9	467.9	Point



Azimuths to True North
Magnetic North: 8.52°

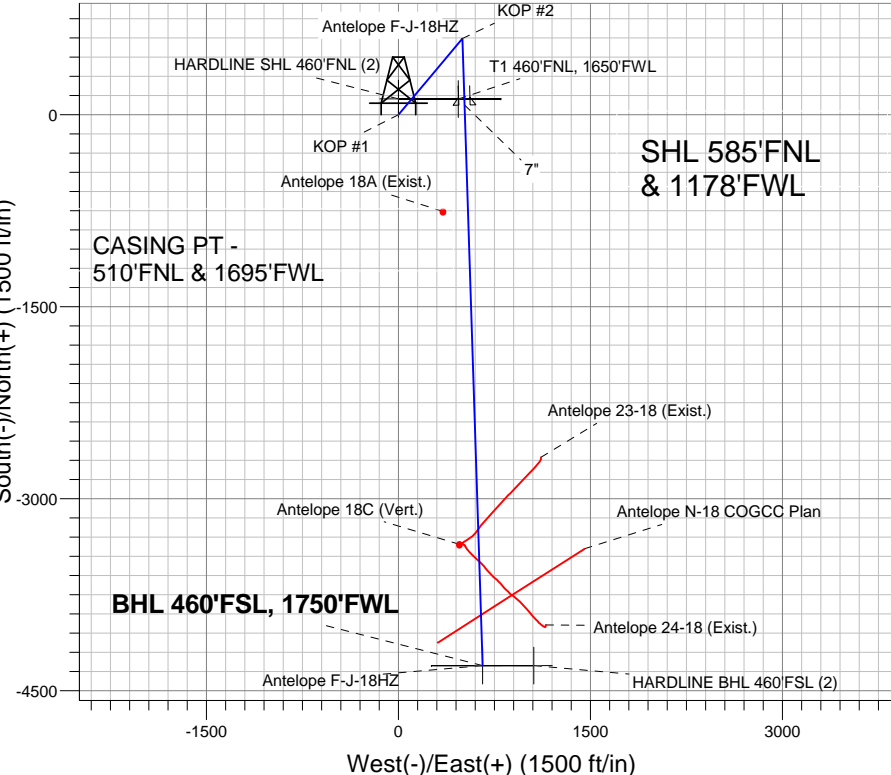
Magnetic Field
Strength: 53071.8nT
Dip Angle: 67.08°
Date: 6/15/2012
Model: IGRF2010

Antelope F-18 Pad Sec.18-T5N-R62W
Antelope F-J-18HZ
Plan #1 (6-11-12)
9:53, June 20 2012

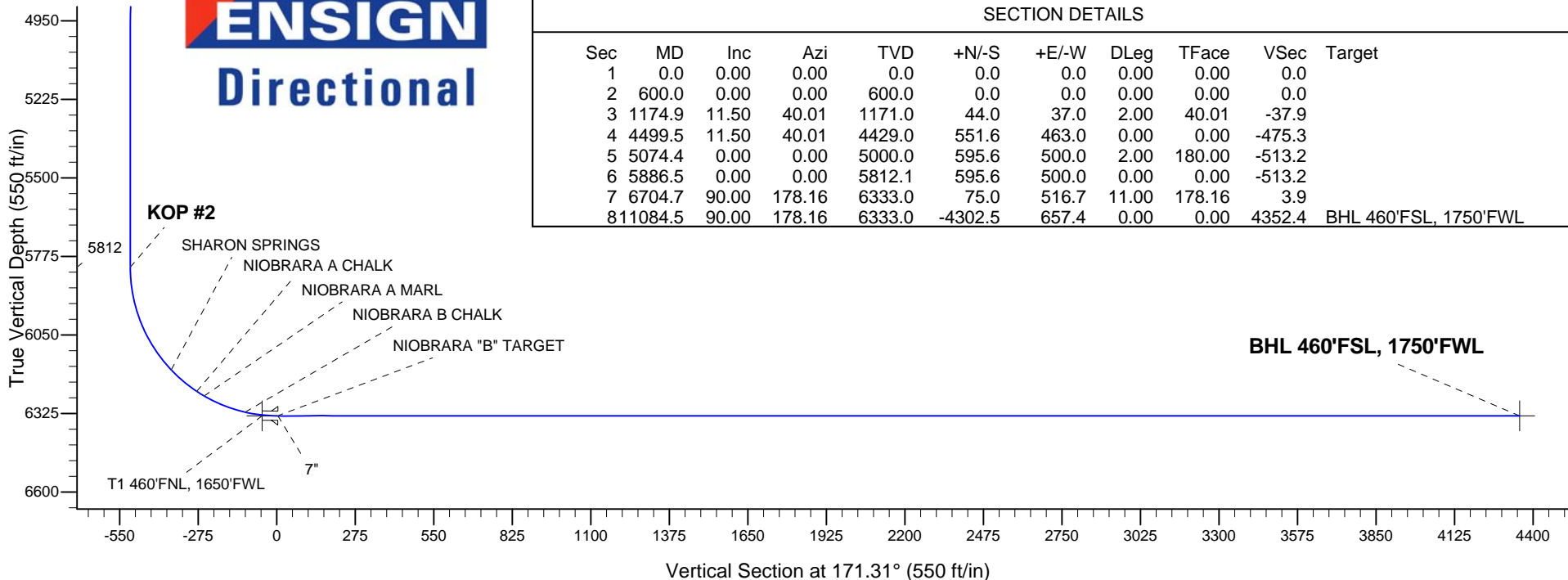
ANNOTATIONS

TVD	MD	Annotation
600.0	600.0	KOP #1
5812.1	5886.5	KOP #2

South(-)/North(+) (1500 ft/in)



ENSIGN
Directional



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	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1174.9	11.50	40.01	1171.0	44.0	37.0	2.00	40.01	-37.9	
4	4499.5	11.50	40.01	4429.0	551.6	463.0	0.00	0.00	-475.3	
5	5074.4	0.00	0.00	5000.0	595.6	500.0	2.00	180.00	-513.2	
6	5886.5	0.00	0.00	5812.1	595.6	500.0	0.00	0.00	-513.2	
7	6704.7	90.00	178.16	6333.0	75.0	516.7	11.00	178.16	3.9	
8	811084.5	90.00	178.16	6333.0	-4302.5	657.4	0.00	0.00	4352.4	BHL 460'FSL, 1750'FWL



BONANZA CREEK ENERGY OPERATING

SEC.18-T5N-R62W

Antelope F-18 Pad Sec.18-T5N-R62W

Antelope F-J-18HZ

Wellbore #1

Plan: Plan #1 (6-11-12)

Standard Planning Report

20 June, 2012

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	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,174.9	11.50	40.01	1,171.0	44.0	37.0	2.00	2.00	0.00	40.01	
4,499.5	11.50	40.01	4,429.0	551.6	463.0	0.00	0.00	0.00	0.00	
5,074.4	0.00	0.00	5,000.0	595.6	500.0	2.00	-2.00	0.00	180.00	
5,886.5	0.00	0.00	5,812.1	595.6	500.0	0.00	0.00	0.00	0.00	
6,704.7	90.00	178.16	6,333.0	75.0	516.7	11.00	11.00	0.00	178.16	
11,084.5	90.00	178.16	6,333.0	-4,302.5	657.4	0.00	0.00	0.00	0.00	BHL 460'FSL, 1750

Database:	Landmark	Local Co-ordinate Reference:	Well Antelope F-J-18HZ
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4626.0ft (Original Well Elev)
Project:	SEC.18-T5N-R62W	MD Reference:	WELL @ 4626.0ft (Original Well Elev)
Site:	Antelope F-18 Pad Sec.18-T5N-R62W	North Reference:	True
Well:	Antelope F-J-18HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (6-11-12)		

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
HARDLINE SHL 460'FNL (2) - HARDLINE BHL 460'FSL (2)									
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
KOP #1									
700.0	2.00	40.01	700.0	1.3	1.1	-1.2	2.00	2.00	0.00
800.0	4.00	40.01	799.8	5.3	4.5	-4.6	2.00	2.00	0.00
900.0	6.00	40.01	899.5	12.0	10.1	-10.4	2.00	2.00	0.00
1,000.0	8.00	40.01	998.7	21.4	17.9	-18.4	2.00	2.00	0.00
1,100.0	10.00	40.01	1,097.5	33.3	28.0	-28.7	2.00	2.00	0.00
1,174.9	11.50	40.01	1,171.0	44.0	37.0	-37.9	2.00	2.00	0.00
1,200.0	11.50	40.01	1,195.6	47.9	40.2	-41.2	0.00	0.00	0.00
1,300.0	11.50	40.01	1,293.6	63.1	53.0	-54.4	0.00	0.00	0.00
1,400.0	11.50	40.01	1,391.6	78.4	65.8	-67.6	0.00	0.00	0.00
1,500.0	11.50	40.01	1,489.6	93.7	78.6	-80.7	0.00	0.00	0.00
1,600.0	11.50	40.01	1,587.6	108.9	91.4	-93.9	0.00	0.00	0.00
1,700.0	11.50	40.01	1,685.6	124.2	104.3	-107.0	0.00	0.00	0.00
1,800.0	11.50	40.01	1,783.6	139.5	117.1	-120.2	0.00	0.00	0.00
1,900.0	11.50	40.01	1,881.6	154.7	129.9	-133.3	0.00	0.00	0.00
2,000.0	11.50	40.01	1,979.6	170.0	142.7	-146.5	0.00	0.00	0.00
2,100.0	11.50	40.01	2,077.6	185.3	155.5	-159.6	0.00	0.00	0.00
2,200.0	11.50	40.01	2,175.6	200.5	168.3	-172.8	0.00	0.00	0.00
2,300.0	11.50	40.01	2,273.6	215.8	181.2	-186.0	0.00	0.00	0.00
2,400.0	11.50	40.01	2,371.6	231.1	194.0	-199.1	0.00	0.00	0.00
2,500.0	11.50	40.01	2,469.6	246.3	206.8	-212.3	0.00	0.00	0.00
2,600.0	11.50	40.01	2,567.6	261.6	219.6	-225.4	0.00	0.00	0.00
2,700.0	11.50	40.01	2,665.5	276.9	232.4	-238.6	0.00	0.00	0.00
2,800.0	11.50	40.01	2,763.5	292.1	245.2	-251.7	0.00	0.00	0.00
2,900.0	11.50	40.01	2,861.5	307.4	258.0	-264.9	0.00	0.00	0.00
3,000.0	11.50	40.01	2,959.5	322.7	270.9	-278.0	0.00	0.00	0.00
3,100.0	11.50	40.01	3,057.5	337.9	283.7	-291.2	0.00	0.00	0.00
3,200.0	11.50	40.01	3,155.5	353.2	296.5	-304.4	0.00	0.00	0.00
3,300.0	11.50	40.01	3,253.5	368.4	309.3	-317.5	0.00	0.00	0.00
3,400.0	11.50	40.01	3,351.5	383.7	322.1	-330.7	0.00	0.00	0.00
3,409.7	11.50	40.01	3,361.0	385.2	323.4	-331.9	0.00	0.00	0.00
PARKMAN									
3,500.0	11.50	40.01	3,449.5	399.0	334.9	-343.8	0.00	0.00	0.00
3,600.0	11.50	40.01	3,547.5	414.2	347.8	-357.0	0.00	0.00	0.00
3,700.0	11.50	40.01	3,645.5	429.5	360.6	-370.1	0.00	0.00	0.00
3,800.0	11.50	40.01	3,743.5	444.8	373.4	-383.3	0.00	0.00	0.00
3,900.0	11.50	40.01	3,841.5	460.0	386.2	-396.4	0.00	0.00	0.00
4,000.0	11.50	40.01	3,939.5	475.3	399.0	-409.6	0.00	0.00	0.00
4,100.0	11.50	40.01	4,037.5	490.6	411.8	-422.7	0.00	0.00	0.00
4,184.2	11.50	40.01	4,120.0	503.4	422.6	-433.8	0.00	0.00	0.00
SUSSEX									
4,200.0	11.50	40.01	4,135.4	505.8	424.7	-435.9	0.00	0.00	0.00
4,300.0	11.50	40.01	4,233.4	521.1	437.5	-449.1	0.00	0.00	0.00
4,400.0	11.50	40.01	4,331.4	536.4	450.3	-462.2	0.00	0.00	0.00
4,499.5	11.50	40.01	4,429.0	551.6	463.0	-475.3	0.00	0.00	0.00

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Site:	Antelope F-18 Pad Sec.18-T5N-R62W	North Reference:	True
Well:	Antelope F-J-18HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (6-11-12)		

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)
4,500.0	11.49	40.01	4,429.4	551.6	463.1	-475.4	2.00	-2.00	0.00
4,600.0	9.49	40.01	4,527.8	565.6	474.8	-487.4	2.00	-2.00	0.00
4,700.0	7.49	40.01	4,626.7	576.9	484.3	-497.1	2.00	-2.00	0.00
4,800.0	5.49	40.01	4,726.0	585.5	491.6	-504.6	2.00	-2.00	0.00
4,900.0	3.49	40.01	4,825.7	591.5	496.6	-509.7	2.00	-2.00	0.00
5,000.0	1.49	40.01	4,925.6	594.9	499.4	-512.6	2.00	-2.00	0.00
5,074.4	0.00	0.00	5,000.0	595.6	500.0	-513.2	2.00	-2.00	0.00
5,100.0	0.00	0.00	5,025.6	595.6	500.0	-513.2	0.00	0.00	0.00
5,200.0	0.00	0.00	5,125.6	595.6	500.0	-513.2	0.00	0.00	0.00
5,300.0	0.00	0.00	5,225.6	595.6	500.0	-513.2	0.00	0.00	0.00
5,400.0	0.00	0.00	5,325.6	595.6	500.0	-513.2	0.00	0.00	0.00
5,500.0	0.00	0.00	5,425.6	595.6	500.0	-513.2	0.00	0.00	0.00
5,600.0	0.00	0.00	5,525.6	595.6	500.0	-513.2	0.00	0.00	0.00
5,700.0	0.00	0.00	5,625.6	595.6	500.0	-513.2	0.00	0.00	0.00
5,800.0	0.00	0.00	5,725.6	595.6	500.0	-513.2	0.00	0.00	0.00
5,886.5	0.00	0.00	5,812.1	595.6	500.0	-513.2	0.00	0.00	0.00
KOP #2									
5,900.0	1.48	178.16	5,825.6	595.4	500.0	-513.1	10.97	10.97	0.00
6,000.0	12.48	178.16	5,924.7	583.3	500.4	-501.0	11.00	11.00	0.00
6,100.0	23.48	178.16	6,019.7	552.5	501.4	-470.4	11.00	11.00	0.00
6,200.0	34.48	178.16	6,107.0	504.1	502.9	-422.4	11.00	11.00	0.00
6,283.8	43.70	178.16	6,172.0	451.4	504.6	-370.0	11.00	11.00	0.00
SHARON SPRINGS									
6,300.0	45.48	178.16	6,183.5	440.0	505.0	-358.7	11.00	11.00	0.00
6,400.0	56.48	178.16	6,246.4	362.5	507.5	-281.7	11.00	11.00	0.00
6,401.1	56.60	178.16	6,247.0	361.5	507.5	-280.7	11.00	11.00	0.00
NIOBRARA A CHALK									
6,431.6	59.95	178.16	6,263.0	335.7	508.4	-255.0	11.00	11.00	0.00
NIOBRARA A MARL									
6,500.0	67.48	178.16	6,293.3	274.4	510.3	-194.2	11.00	11.00	0.00
6,588.1	77.17	178.16	6,320.0	190.6	513.0	-110.9	11.00	11.00	0.00
NIOBRARA B CHALK									
6,600.0	78.48	178.16	6,322.5	179.0	513.4	-99.4	11.00	11.00	0.00
6,654.5	84.47	178.16	6,330.6	125.1	515.1	-45.9	11.00	11.00	0.00
T1 460°FNL, 1650°FWL									
6,700.0	89.48	178.16	6,333.0	79.7	516.6	-0.8	11.00	11.00	0.00
6,704.7	90.00	178.16	6,333.0	75.0	516.7	3.9	11.00	11.00	0.00
7"									
6,800.0	90.00	178.16	6,333.0	-20.2	519.8	98.5	0.00	0.00	0.00
6,900.0	90.00	178.16	6,333.0	-120.2	523.0	197.8	0.00	0.00	0.00
7,000.0	90.00	178.16	6,333.0	-220.1	526.2	297.1	0.00	0.00	0.00
7,100.0	90.00	178.16	6,333.0	-320.1	529.4	396.4	0.00	0.00	0.00
7,200.0	90.00	178.16	6,333.0	-420.0	532.6	495.7	0.00	0.00	0.00
7,300.0	90.00	178.16	6,333.0	-520.0	535.8	594.9	0.00	0.00	0.00
7,400.0	90.00	178.16	6,333.0	-619.9	539.1	694.2	0.00	0.00	0.00
7,500.0	90.00	178.16	6,333.0	-719.9	542.3	793.5	0.00	0.00	0.00
7,600.0	90.00	178.16	6,333.0	-819.8	545.5	892.8	0.00	0.00	0.00
7,700.0	90.00	178.16	6,333.0	-919.8	548.7	992.1	0.00	0.00	0.00
7,800.0	90.00	178.16	6,333.0	-1,019.7	551.9	1,091.4	0.00	0.00	0.00
7,900.0	90.00	178.16	6,333.0	-1,119.7	555.1	1,190.7	0.00	0.00	0.00
8,000.0	90.00	178.16	6,333.0	-1,219.6	558.3	1,289.9	0.00	0.00	0.00
8,100.0	90.00	178.16	6,333.0	-1,319.6	561.5	1,389.2	0.00	0.00	0.00
8,200.0	90.00	178.16	6,333.0	-1,419.5	564.7	1,488.5	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Antelope F-J-18HZ
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Project:	SEC.18-T5N-R62W	MD Reference:	WELL @ 4626.0ft (Original Well Elev)
Site:	Antelope F-18 Pad Sec.18-T5N-R62W	North Reference:	True
Well:	Antelope F-J-18HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (6-11-12)		

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)
8,300.0	90.00	178.16	6,333.0	-1,519.5	568.0	1,587.8	0.00	0.00	0.00
8,400.0	90.00	178.16	6,333.0	-1,619.4	571.2	1,687.1	0.00	0.00	0.00
8,500.0	90.00	178.16	6,333.0	-1,719.4	574.4	1,786.4	0.00	0.00	0.00
8,600.0	90.00	178.16	6,333.0	-1,819.3	577.6	1,885.7	0.00	0.00	0.00
8,700.0	90.00	178.16	6,333.0	-1,919.2	580.8	1,985.0	0.00	0.00	0.00
8,800.0	90.00	178.16	6,333.0	-2,019.2	584.0	2,084.2	0.00	0.00	0.00
8,900.0	90.00	178.16	6,333.0	-2,119.1	587.2	2,183.5	0.00	0.00	0.00
9,000.0	90.00	178.16	6,333.0	-2,219.1	590.4	2,282.8	0.00	0.00	0.00
9,100.0	90.00	178.16	6,333.0	-2,319.0	593.6	2,382.1	0.00	0.00	0.00
9,200.0	90.00	178.16	6,333.0	-2,419.0	596.9	2,481.4	0.00	0.00	0.00
9,300.0	90.00	178.16	6,333.0	-2,518.9	600.1	2,580.7	0.00	0.00	0.00
9,400.0	90.00	178.16	6,333.0	-2,618.9	603.3	2,680.0	0.00	0.00	0.00
9,500.0	90.00	178.16	6,333.0	-2,718.8	606.5	2,779.2	0.00	0.00	0.00
9,600.0	90.00	178.16	6,333.0	-2,818.8	609.7	2,878.5	0.00	0.00	0.00
9,700.0	90.00	178.16	6,333.0	-2,918.7	612.9	2,977.8	0.00	0.00	0.00
9,800.0	90.00	178.16	6,333.0	-3,018.7	616.1	3,077.1	0.00	0.00	0.00
9,900.0	90.00	178.16	6,333.0	-3,118.6	619.3	3,176.4	0.00	0.00	0.00
10,000.0	90.00	178.16	6,333.0	-3,218.6	622.6	3,275.7	0.00	0.00	0.00
10,100.0	90.00	178.16	6,333.0	-3,318.5	625.8	3,375.0	0.00	0.00	0.00
10,200.0	90.00	178.16	6,333.0	-3,418.5	629.0	3,474.3	0.00	0.00	0.00
10,300.0	90.00	178.16	6,333.0	-3,518.4	632.2	3,573.5	0.00	0.00	0.00
10,400.0	90.00	178.16	6,333.0	-3,618.4	635.4	3,672.8	0.00	0.00	0.00
10,500.0	90.00	178.16	6,333.0	-3,718.3	638.6	3,772.1	0.00	0.00	0.00
10,600.0	90.00	178.16	6,333.0	-3,818.3	641.8	3,871.4	0.00	0.00	0.00
10,700.0	90.00	178.16	6,333.0	-3,918.2	645.0	3,970.7	0.00	0.00	0.00
10,800.0	90.00	178.16	6,333.0	-4,018.2	648.2	4,070.0	0.00	0.00	0.00
10,900.0	90.00	178.16	6,333.0	-4,118.1	651.5	4,169.3	0.00	0.00	0.00
11,000.0	90.00	178.16	6,333.0	-4,218.1	654.7	4,268.6	0.00	0.00	0.00
11,084.5	90.00	178.16	6,333.0	-4,302.5	657.4	4,352.4	0.00	0.00	0.00
BHL 460'FSL, 1750'FWL									

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
BHL 460'FSL, 1750'FWL - hit/miss target - Shape - Point	0.00	0.00	6,333.0	-4,302.5	657.4	1,388,103.75	3,315,071.05	40.393230	-104.368810
HARDLINE SHL 460'F - plan misses target center by 125.0ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E) - Polygon	0.00	0.00	1.0	125.0	0.0	1,392,522.35	3,314,357.39	40.405383	-104.371170
Point 1			1.0	0.0	0.0	1,392,522.35	3,314,357.39		
Point 2			1.0	0.0	800.0	1,392,532.53	3,315,157.29		
T1 460'FNL, 1650'FWL - plan misses target center by 47.3ft at 6654.5ft MD (6330.6 TVD, 125.1 N, 515.1 E) - Point	0.00	0.00	6,333.0	123.9	467.9	1,392,527.18	3,314,825.23	40.405380	-104.369490
HARDLINE BHL 460'F - plan misses target center by 4430.5ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E) - Polygon	0.00	0.00	1.0	-4,302.5	1,057.4	1,388,108.85	3,315,471.02	40.393230	-104.367374
Point 1			1.0	0.0	0.0	1,388,108.85	3,315,471.02		
Point 2			1.0	0.0	-800.0	1,388,098.67	3,314,671.12		

Database:	Landmark	Local Co-ordinate Reference:	Well Antelope F-J-18HZ
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4626.0ft (Original Well Elev)
Project:	SEC.18-T5N-R62W	MD Reference:	WELL @ 4626.0ft (Original Well Elev)
Site:	Antelope F-18 Pad Sec.18-T5N-R62W	North Reference:	True
Well:	Antelope F-J-18HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (6-11-12)		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
6,704.7	6,333.0	7"	7	7-1/2	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,409.7	3,361.0	PARKMAN		0.00		
4,184.2	4,120.0	SUSSEX		0.00		
6,283.8	6,172.0	SHARON SPRINGS		0.00		
6,401.1	6,247.0	NIOBRARA A CHALK		0.00		
6,431.6	6,263.0	NIOBRARA A MARL		0.00		
6,588.1	6,320.0	NIOBRARA B CHALK		0.00		
	6,334.0	NIOBRARA "B" TARGET		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
600.0	600.0	0.0	0.0	KOP #1	
5,886.5	5,812.1	595.6	500.0	KOP #2	



BONANZA CREEK ENERGY OPERATING

SEC.18-T5N-R62W

Antelope F-18 Pad Sec.18-T5N-R62W

Antelope F-J-18HZ

Wellbore #1

Plan #1 (6-11-12)

Anticollision Report

20 June, 2012

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Antelope F-J-18HZ
Project:	SEC.18-T5N-R62W	TVD Reference:	WELL @ 4626.0ft (Original Well Elev)
Reference Site:	Antelope F-18 Pad Sec.18-T5N-R62W	MD Reference:	WELL @ 4626.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-J-18HZ	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 (6-11-12)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 6349-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		
1,000.0	998.7	983.7	983.7	2.2	19.7	116.70	-754.1	348.1	842.9	821.0	21.80	38.656		
1,100.0	1,097.5	1,082.5	1,082.5	2.5	21.6	117.50	-754.1	348.1	850.0	826.0	24.03	35.378		
1,174.9	1,171.0	1,156.0	1,156.0	2.7	23.1	118.20	-754.1	348.1	856.7	831.0	25.70	33.338		
1,200.0	1,195.6	1,180.6	1,180.6	2.8	23.6	118.49	-754.1	348.1	859.1	832.8	26.27	32.706		
1,300.0	1,293.6	1,278.6	1,278.6	3.2	25.6	119.63	-754.1	348.1	868.9	840.4	28.54	30.441		
1,400.0	1,391.6	1,376.6	1,376.6	3.5	27.5	120.74	-754.1	348.1	879.1	848.3	30.83	28.514		
1,500.0	1,489.6	1,474.6	1,474.6	3.9	29.5	121.83	-754.1	348.1	889.6	856.5	33.12	26.859		
1,600.0	1,587.6	1,572.6	1,572.6	4.3	31.5	122.89	-754.1	348.1	900.4	865.0	35.41	25.427		
1,700.0	1,685.6	1,670.6	1,670.6	4.7	33.4	123.93	-754.1	348.1	911.5	873.8	37.70	24.176		
1,800.0	1,783.6	1,768.6	1,768.6	5.1	35.4	124.94	-754.1	348.1	923.0	883.0	39.99	23.078		
1,900.0	1,881.6	1,866.6	1,866.6	5.6	37.3	125.93	-754.1	348.1	934.7	892.4	42.28	22.107		
2,000.0	1,979.6	1,964.6	1,964.6	6.0	39.3	126.89	-754.1	348.1	946.7	902.1	44.57	21.242		
2,100.0	2,077.6	2,062.6	2,062.6	6.4	41.3	127.84	-754.1	348.1	958.9	912.1	46.85	20.470		
2,200.0	2,175.6	2,160.6	2,160.6	6.8	43.2	128.75	-754.1	348.1	971.4	922.3	49.12	19.776		
2,300.0	2,273.6	2,258.6	2,258.6	7.2	45.2	129.65	-754.1	348.1	984.2	932.8	51.40	19.149		
2,400.0	2,371.6	2,356.6	2,356.6	7.7	47.1	130.52	-754.1	348.1	997.2	943.5	53.66	18.581		
6,550.0	6,310.2	6,295.2	6,295.2	17.5	125.9	34.34	-754.1	348.1	995.1	908.7	86.32	11.527		
6,600.0	6,322.5	6,307.5	6,307.5	17.3	126.2	46.50	-754.1	348.1	947.6	843.7	103.92	9.119		
6,650.0	6,330.1	6,315.1	6,315.1	17.2	126.3	64.74	-754.1	348.1	899.3	771.6	127.70	7.042		
6,704.7	6,333.0	6,318.0	6,318.0	17.0	126.4	90.00	-754.1	348.1	846.1	704.4	141.69	5.971		
6,800.0	6,333.0	6,318.0	6,318.0	16.8	126.4	90.00	-754.1	348.1	753.7	611.7	141.95	5.309		
6,900.0	6,333.0	6,318.0	6,318.0	16.9	126.4	90.00	-754.1	348.1	657.6	515.2	142.46	4.616		
7,000.0	6,333.0	6,318.0	6,318.0	17.5	126.4	90.00	-754.1	348.1	562.9	419.7	143.17	3.932		
7,100.0	6,333.0	6,318.0	6,318.0	18.5	126.4	90.00	-754.1	348.1	470.4	326.3	144.06	3.265		
7,200.0	6,333.0	6,318.0	6,318.0	19.5	126.4	90.00	-754.1	348.1	381.7	236.5	145.12	2.630		
7,300.0	6,333.0	6,318.0	6,318.0	20.7	126.4	90.00	-754.1	348.1	300.1	153.8	146.30	2.051		
7,400.0	6,333.0	6,318.0	6,318.0	22.0	126.4	90.00	-754.1	348.1	233.4	85.8	147.60	1.581		
7,500.0	6,333.0	6,318.0	6,318.0	23.4	126.4	90.00	-754.1	348.1	197.1	48.1	148.98	1.323 Level 3		
7,528.0	6,333.0	6,318.0	6,318.0	23.8	126.4	90.00	-754.1	348.1	195.1	45.7	149.39	1.306 Level 3, CC, ES, SF		
7,600.0	6,333.0	6,318.0	6,318.0	24.9	126.4	90.00	-754.1	348.1	208.0	57.5	150.45	1.382 Level 3		
7,700.0	6,333.0	6,318.0	6,318.0	26.4	126.4	90.00	-754.1	348.1	260.1	108.1	151.97	1.712		
7,800.0	6,333.0	6,318.0	6,318.0	27.9	126.4	90.00	-754.1	348.1	334.8	181.2	153.55	2.180		
7,900.0	6,333.0	6,318.0	6,318.0	29.5	126.4	90.00	-754.1	348.1	420.1	264.9	155.17	2.707		
8,000.0	6,333.0	6,318.0	6,318.0	31.2	126.4	90.00	-754.1	348.1	510.7	353.9	156.83	3.257		
8,100.0	6,333.0	6,318.0	6,318.0	32.8	126.4	90.00	-754.1	348.1	604.4	445.9	158.51	3.813		
8,200.0	6,333.0	6,318.0	6,318.0	34.5	126.4	90.00	-754.1	348.1	699.8	539.5	160.23	4.367		
8,300.0	6,333.0	6,318.0	6,318.0	36.3	126.4	90.00	-754.1	348.1	796.3	634.3	161.97	4.916		
8,400.0	6,333.0	6,318.0	6,318.0	38.0	126.4	90.00	-754.1	348.1	893.6	729.8	163.72	5.458		
8,500.0	6,333.0	6,318.0	6,318.0	39.7	126.4	90.00	-754.1	348.1	991.4	825.9	165.50	5.990		

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Antelope F-J-18HZ
Project:	SEC.18-T5N-R62W	TVD Reference:	WELL @ 4626.0ft (Original Well Elev)
Reference Site:	Antelope F-18 Pad Sec.18-T5N-R62W	MD Reference:	WELL @ 4626.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-J-18HZ	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 (6-11-12)	Offset TVD Reference:	Offset Datum

Offset Design													Antelope (Existing Wells) Pad Sec.8-T5N-R62W - Antelope 18C (Vert.) - Wellbore #1 - Wellbore #1		Offset Site Error:		0.0 ft
Survey Program: 6850-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		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor					
							+N/-S (ft)	+E/-W (ft)									
9,200.0	6,333.0	6,318.0	6,318.0	52.4	126.4	90.00	-3,355.3	476.3	944.0	765.8	178.23	5.297					
9,300.0	6,333.0	6,318.0	6,318.0	54.2	126.4	90.00	-3,355.3	476.3	845.5	665.4	180.09	4.695					
9,400.0	6,333.0	6,318.0	6,318.0	56.0	126.4	90.00	-3,355.3	476.3	747.3	565.3	181.94	4.107					
9,500.0	6,333.0	6,318.0	6,318.0	57.9	126.4	90.00	-3,355.3	476.3	649.6	465.8	183.81	3.534					
9,600.0	6,333.0	6,318.0	6,318.0	59.7	126.4	90.00	-3,355.3	476.3	552.9	367.2	185.67	2.978					
9,700.0	6,333.0	6,318.0	6,318.0	61.6	126.4	90.00	-3,355.3	476.3	457.4	269.9	187.54	2.439					
9,800.0	6,333.0	6,318.0	6,318.0	63.5	126.4	90.00	-3,355.3	476.3	364.5	175.1	189.42	1.924					
9,900.0	6,333.0	6,318.0	6,318.0	65.3	126.4	90.00	-3,355.3	476.3	276.5	85.2	191.30	1.446	Level 3				
10,000.0	6,333.0	6,318.0	6,318.0	67.2	126.4	90.00	-3,355.3	476.3	200.2	7.0	193.18	1.036	Level 2				
10,100.0	6,333.0	6,318.0	6,318.0	69.1	126.4	90.00	-3,355.3	476.3	153.9	-41.1	195.06	0.789	Level 1				
10,132.0	6,333.0	6,318.0	6,318.0	69.7	126.4	90.00	-3,355.3	476.3	150.6	-45.1	195.67	0.769	Level 1, CC, ES, SF				
10,200.0	6,333.0	6,318.0	6,318.0	71.0	126.4	90.00	-3,355.3	476.3	165.2	-31.7	196.95	0.839	Level 1				
10,300.0	6,333.0	6,318.0	6,318.0	72.8	126.4	90.00	-3,355.3	476.3	225.6	26.8	198.84	1.135	Level 2				
10,400.0	6,333.0	6,318.0	6,318.0	74.7	126.4	90.00	-3,355.3	476.3	307.4	106.7	200.73	1.532					
10,500.0	6,333.0	6,318.0	6,318.0	76.6	126.4	90.00	-3,355.3	476.3	397.6	195.0	202.63	1.962					
10,600.0	6,333.0	6,318.0	6,318.0	78.5	126.4	90.00	-3,355.3	476.3	491.7	287.1	204.52	2.404					
10,700.0	6,333.0	6,318.0	6,318.0	80.4	126.4	90.00	-3,355.3	476.3	587.7	381.2	206.42	2.847					
10,800.0	6,333.0	6,318.0	6,318.0	82.3	126.4	90.00	-3,355.3	476.3	684.8	476.5	208.32	3.287					
10,900.0	6,333.0	6,318.0	6,318.0	84.2	126.4	90.00	-3,355.3	476.3	782.7	572.4	210.22	3.723					
11,000.0	6,333.0	6,318.0	6,318.0	86.1	126.4	90.00	-3,355.3	476.3	881.0	668.9	212.13	4.153					
11,084.5	6,333.0	6,318.0	6,318.0	87.7	126.4	90.00	-3,355.3	476.3	964.4	750.6	213.74	4.512					

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Antelope F-J-18HZ
Project:	SEC.18-T5N-R62W	TVD Reference:	WELL @ 4626.0ft (Original Well Elev)
Reference Site:	Antelope F-18 Pad Sec.18-T5N-R62W	MD Reference:	WELL @ 4626.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-J-18HZ	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 (6-11-12)	Offset TVD Reference:	Offset Datum

Offset Design Antelope (Existing Wells) Pad Sec.8-T5N-R62W - Antelope 23-18 (Exist.) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 437-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
8,700.0	6,333.0	6,421.5	6,328.3	43.3	20.8	-91.16	-2,678.5	1,113.6	927.6	867.1	60.55	15.320	
8,800.0	6,333.0	6,420.3	6,327.1	45.1	20.8	-91.03	-2,678.5	1,113.6	845.7	783.4	62.37	13.560	
8,900.0	6,333.0	6,419.1	6,325.9	46.9	20.8	-90.89	-2,678.5	1,113.6	768.2	704.0	64.20	11.966	
9,000.0	6,333.0	6,417.9	6,324.7	48.7	20.8	-90.75	-2,678.5	1,113.6	696.3	630.3	66.04	10.545	
9,100.0	6,333.0	6,416.7	6,323.5	50.5	20.8	-90.62	-2,678.6	1,113.6	632.2	564.3	67.88	9.313	
9,200.0	6,333.0	6,415.5	6,322.3	52.4	20.8	-90.48	-2,678.6	1,113.6	578.3	508.6	69.73	8.293	
9,300.0	6,333.0	6,414.2	6,321.0	54.2	20.8	-90.34	-2,678.6	1,113.6	537.8	466.2	71.59	7.512	
9,400.0	6,333.0	6,413.0	6,319.8	56.0	20.8	-90.21	-2,678.6	1,113.6	513.8	440.4	73.45	6.995	
9,476.1	6,333.0	6,412.1	6,318.9	57.5	20.8	-90.10	-2,678.6	1,113.6	508.2	433.3	74.87	6.787 CC, ES	
9,500.0	6,333.0	6,411.8	6,318.6	57.9	20.8	-90.07	-2,678.6	1,113.6	508.7	433.4	75.32	6.754 SF	
9,600.0	6,333.0	6,410.6	6,317.4	59.7	20.8	-89.93	-2,678.6	1,113.6	523.1	445.9	77.19	6.776	
9,700.0	6,333.0	6,409.4	6,316.2	61.6	20.8	-89.80	-2,678.6	1,113.6	555.3	476.2	79.07	7.023	
9,800.0	6,333.0	6,408.2	6,315.0	63.5	20.8	-89.66	-2,678.7	1,113.7	602.6	521.7	80.95	7.444	
9,900.0	6,333.0	6,407.0	6,313.8	65.3	20.8	-89.52	-2,678.7	1,113.7	661.8	578.9	82.83	7.989	
10,000.0	6,333.0	6,405.7	6,312.5	67.2	20.8	-89.38	-2,678.7	1,113.7	729.9	645.1	84.72	8.615	
10,100.0	6,333.0	6,404.5	6,311.3	69.1	20.8	-89.25	-2,678.7	1,113.7	804.6	718.0	86.60	9.291	
10,200.0	6,333.0	6,403.3	6,310.1	71.0	20.8	-89.11	-2,678.7	1,113.7	884.4	795.9	88.49	9.994	
10,300.0	6,333.0	6,402.1	6,308.9	72.8	20.8	-88.97	-2,678.7	1,113.7	968.0	877.6	90.38	10.710	

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Antelope F-J-18HZ
Project:	SEC.18-T5N-R62W	TVD Reference:	WELL @ 4626.0ft (Original Well Elev)
Reference Site:	Antelope F-18 Pad Sec.18-T5N-R62W	MD Reference:	WELL @ 4626.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-J-18HZ	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 (6-11-12)	Offset TVD Reference:	Offset Datum

Offset Design Antelope (Existing Wells) Pad Sec.8-T5N-R62W - Antelope 24-18 (Exist.) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 437-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
10,000.0	6,333.0	6,420.8	6,333.7	67.2	20.8	-91.79	-3,991.1	1,151.7	936.4	851.7	84.76	11.048	
10,100.0	6,333.0	6,418.5	6,331.4	69.1	20.8	-91.52	-3,991.1	1,151.7	853.9	767.2	86.67	9.852	
10,200.0	6,333.0	6,416.1	6,329.1	71.0	20.8	-91.26	-3,991.2	1,151.7	775.4	686.9	88.57	8.755	
10,300.0	6,333.0	6,413.8	6,326.7	72.8	20.8	-90.99	-3,991.2	1,151.6	702.5	612.0	90.48	7.764	
10,400.0	6,333.0	6,411.5	6,324.5	74.7	20.8	-90.73	-3,991.3	1,151.6	636.9	544.5	92.39	6.893	
10,500.0	6,333.0	6,409.3	6,322.2	76.6	20.8	-90.47	-3,991.3	1,151.6	581.1	486.9	94.30	6.163	
10,600.0	6,333.0	6,407.0	6,319.9	78.5	20.8	-90.22	-3,991.4	1,151.6	538.4	442.2	96.20	5.596	
10,700.0	6,333.0	6,404.7	6,317.6	80.4	20.8	-89.96	-3,991.4	1,151.6	511.8	413.7	98.11	5.217	
10,789.5	6,333.0	6,402.7	6,315.6	82.1	20.8	-89.73	-3,991.5	1,151.6	504.0	404.1	99.82	5.049 CC	
10,800.0	6,333.0	6,402.5	6,315.4	82.3	20.8	-89.71	-3,991.5	1,151.6	504.1	404.0	100.02	5.040 ES, SF	
10,900.0	6,333.0	6,400.3	6,313.2	84.2	20.8	-89.45	-3,991.5	1,151.6	515.9	414.0	101.93	5.062	
11,000.0	6,333.0	6,398.0	6,311.0	86.1	20.8	-89.20	-3,991.6	1,151.6	546.1	442.3	103.84	5.260	
11,084.5	6,333.0	6,396.2	6,309.1	87.7	20.8	-88.99	-3,991.6	1,151.6	583.9	478.5	105.45	5.537	

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Antelope F-J-18HZ
Project:	SEC.18-T5N-R62W	TVD Reference:	WELL @ 4626.0ft (Original Well Elev)
Reference Site:	Antelope F-18 Pad Sec.18-T5N-R62W	MD Reference:	WELL @ 4626.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-J-18HZ	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 (6-11-12)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Antelope D-18 Pad - Plans by another company - Antelope N-18 COGCC Plan - Wellbore #1 - Wellbore												Offset Well Error:	0.0 ft
Survey Program: 100-MWD													
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
9,700.0	6,333.0	6,498.4	6,312.0	61.6	29.5	-90.00	-3,391.2	1,453.4	964.2	882.5	81.70	11.802	
9,800.0	6,333.0	6,498.4	6,312.0	63.5	29.5	-90.00	-3,391.2	1,453.4	916.4	832.9	83.57	10.965	
9,900.0	6,333.0	6,498.4	6,312.0	65.3	29.5	-90.00	-3,391.2	1,453.4	877.5	792.0	85.45	10.269	
10,000.0	6,333.0	6,498.4	6,312.0	67.2	29.5	-90.00	-3,391.2	1,453.4	848.6	761.3	87.34	9.717	
10,100.0	6,333.0	6,498.4	6,312.0	69.1	29.5	-90.00	-3,391.2	1,453.4	830.9	741.6	89.22	9.312	
10,199.2	6,333.0	6,498.4	6,312.0	71.0	29.5	-90.00	-3,391.2	1,453.4	824.9	733.8	91.09	9.056 CC	
10,200.0	6,333.0	6,498.4	6,312.0	71.0	29.5	-90.00	-3,391.2	1,453.4	824.9	733.8	91.11	9.054 ES	
10,300.0	6,333.0	6,498.4	6,312.0	72.8	29.5	-90.00	-3,391.2	1,453.4	831.0	738.0	93.00	8.936 SF	
10,400.0	6,333.0	6,498.4	6,312.0	74.7	29.5	-90.00	-3,391.2	1,453.4	849.0	754.1	94.89	8.947	
10,500.0	6,333.0	6,498.4	6,312.0	76.6	29.5	-90.00	-3,391.2	1,453.4	878.0	781.3	96.78	9.072	
10,600.0	6,333.0	6,498.4	6,312.0	78.5	29.5	-90.00	-3,391.2	1,453.4	917.1	818.4	98.68	9.294	
10,700.0	6,333.0	6,498.4	6,312.0	80.4	29.5	-90.00	-3,391.2	1,453.4	965.0	864.4	100.58	9.595	

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Antelope F-J-18HZ
Project:	SEC.18-T5N-R62W	TVD Reference:	WELL @ 4626.0ft (Original Well Elev)
Reference Site:	Antelope F-18 Pad Sec.18-T5N-R62W	MD Reference:	WELL @ 4626.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-J-18HZ	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 (6-11-12)	Offset TVD Reference:	Offset Datum

Offset Design Antelope F-18 Pad Sec.18-T5N-R62W - Antelope 11-14-18HZ - Wellbore #1 - Plan #1 (6-12-12)													Offset Site Error:	0.0ft
Survey Program: 0-MWD													Offset Well Error:	0.0ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis 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	0.0	0.0	0.0	0.0	180.00	-40.1	0.0	40.1					
100.0	100.0	100.0	100.0	0.1	0.1	180.00	-40.1	0.0	40.1	39.8	0.22	178.294		
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-40.1	0.0	40.1	39.4	0.67	59.431		
300.0	300.0	300.0	300.0	0.6	0.6	180.00	-40.1	0.0	40.1	39.0	1.12	35.659		
400.0	400.0	400.0	400.0	0.8	0.8	180.00	-40.1	0.0	40.1	38.5	1.57	25.471		
500.0	500.0	500.0	500.0	1.0	1.0	180.00	-40.1	0.0	40.1	38.1	2.02	19.810		
600.0	600.0	600.0	600.0	1.2	1.2	180.00	-40.1	0.0	40.1	37.6	2.47	16.209 CC, ES		
700.0	700.0	700.0	700.0	1.5	1.5	141.52	-40.1	0.0	41.4	38.5	2.92	14.186		
800.0	799.8	799.8	799.8	1.7	1.7	145.56	-40.1	0.0	45.6	42.3	3.37	13.550		
900.0	899.5	899.5	899.5	1.9	1.9	150.82	-40.1	0.0	53.1	49.2	3.82	13.896		
1,000.0	998.7	998.7	998.7	2.2	2.1	156.05	-40.1	0.0	64.0	59.7	4.27	14.989		
1,100.0	1,097.5	1,097.5	1,097.5	2.5	2.4	160.58	-40.1	0.0	78.6	73.8	4.72	16.653		
1,174.9	1,171.0	1,171.0	1,171.0	2.7	2.5	163.40	-40.1	0.0	91.9	86.8	5.05	18.187		
1,200.0	1,195.6	1,195.6	1,195.6	2.8	2.6	164.24	-40.1	0.0	96.7	91.5	5.17	18.716		
1,300.0	1,293.6	1,293.6	1,293.6	3.2	2.8	166.91	-40.1	0.0	116.0	110.4	5.62	20.627		
1,400.0	1,391.6	1,391.6	1,391.6	3.5	3.0	168.82	-40.1	0.0	135.5	129.4	6.09	22.268		
1,500.0	1,489.6	1,489.6	1,489.6	3.9	3.2	170.25	-40.1	0.0	155.1	148.6	6.55	23.686		
1,600.0	1,587.6	1,587.6	1,587.6	4.3	3.5	171.35	-40.1	0.0	174.8	167.8	7.02	24.918		
1,700.0	1,685.6	1,685.6	1,685.6	4.7	3.7	172.24	-40.1	0.0	194.6	187.1	7.48	25.996		
1,800.0	1,783.6	1,783.6	1,783.6	5.1	3.9	172.96	-40.1	0.0	214.3	206.4	7.95	26.947		
1,900.0	1,881.6	1,881.6	1,881.6	5.6	4.1	173.55	-40.1	0.0	234.1	225.7	8.42	27.791		
2,000.0	1,979.6	1,979.6	1,979.6	6.0	4.3	174.06	-40.1	0.0	254.0	245.1	8.90	28.544		
2,100.0	2,077.6	2,077.6	2,077.6	6.4	4.6	174.49	-40.1	0.0	273.8	264.4	9.37	29.220		
2,200.0	2,175.6	2,175.6	2,175.6	6.8	4.8	174.86	-40.1	0.0	293.6	283.8	9.84	29.829		
2,300.0	2,273.6	2,273.6	2,273.6	7.2	5.0	175.19	-40.1	0.0	313.5	303.2	10.32	30.381		
2,400.0	2,371.6	2,371.6	2,371.6	7.7	5.2	175.48	-40.1	0.0	333.4	322.6	10.79	30.884		
2,500.0	2,469.6	2,469.6	2,469.6	8.1	5.4	175.73	-40.1	0.0	353.2	342.0	11.27	31.343		
2,600.0	2,567.6	2,567.6	2,567.6	8.5	5.7	175.96	-40.1	0.0	373.1	361.4	11.75	31.764		
2,700.0	2,665.5	2,665.5	2,665.5	8.9	5.9	176.16	-40.1	0.0	393.0	380.8	12.22	32.152		
2,800.0	2,763.5	2,763.5	2,763.5	9.4	6.1	176.35	-40.1	0.0	412.9	400.2	12.70	32.509		
2,900.0	2,861.5	2,867.2	2,867.2	9.8	6.3	176.61	-39.3	-0.3	432.4	419.2	13.19	32.784		
3,000.0	2,959.5	2,974.8	2,974.7	10.2	6.6	177.26	-35.0	-1.7	450.0	436.3	13.68	32.892		
3,100.0	3,057.5	3,082.8	3,082.3	10.7	6.8	178.28	-26.9	-4.6	465.6	451.4	14.17	32.852		
3,200.0	3,155.5	3,190.8	3,189.5	11.1	7.1	179.65	-14.9	-8.7	479.4	464.7	14.67	32.676		
3,300.0	3,253.5	3,298.4	3,295.9	11.5	7.3	-178.67	0.8	-14.2	491.5	476.3	15.18	32.372		
3,400.0	3,351.5	3,396.7	3,392.7	11.9	7.6	-177.03	16.8	-19.7	503.1	487.4	15.70	32.056		
3,500.0	3,449.5	3,495.0	3,489.5	12.4	7.8	-175.46	32.9	-25.3	515.2	498.9	16.23	31.749		
3,600.0	3,547.5	3,593.3	3,586.3	12.8	8.1	-173.96	48.9	-30.8	527.5	510.8	16.77	31.452		
3,700.0	3,645.5	3,691.5	3,683.1	13.2	8.4	-172.53	65.0	-36.4	540.3	522.9	17.34	31.165		
3,800.0	3,743.5	3,789.8	3,779.9	13.7	8.7	-171.17	81.0	-41.9	553.3	535.4	17.91	30.887		
3,900.0	3,841.5	3,888.1	3,876.7	14.1	9.0	-169.86	97.1	-47.5	566.6	548.1	18.51	30.619		
4,000.0	3,939.5	3,986.4	3,973.5	14.5	9.3	-168.62	113.1	-53.1	580.3	561.2	19.11	30.360		
4,100.0	4,037.5	4,084.7	4,070.4	15.0	9.6	-167.44	129.2	-58.6	594.2	574.4	19.73	30.112		
4,200.0	4,135.4	4,183.0	4,167.2	15.4	9.9	-166.31	145.2	-64.2	608.3	587.9	20.36	29.873		
4,300.0	4,233.4	4,281.3	4,264.0	15.8	10.2	-165.23	161.3	-69.7	622.6	601.6	21.00	29.645		
4,400.0	4,331.4	4,379.6	4,360.8	16.3	10.5	-164.19	177.3	-75.3	637.2	615.5	21.65	29.427		
4,499.5	4,429.0	4,477.4	4,457.1	16.7	10.8	-163.21	193.3	-80.8	651.9	629.6	22.31	29.219		
4,600.0	4,527.8	4,576.3	4,554.6	17.1	11.2	-162.30	209.4	-86.4	665.2	642.2	23.00	28.920		
4,700.0	4,626.7	4,675.0	4,651.8	17.3	11.5	-161.32	225.6	-92.0	675.4	651.8	23.65	28.559		
4,800.0	4,726.0	4,773.9	4,749.2	17.6	11.8	-160.26	241.7	-97.6	682.5	658.3	24.28	28.114		
4,900.0	4,825.7	4,872.8	4,846.6	17.8	12.2	-159.10	257.9	-103.2	686.7	661.8	24.89	27.592		
5,000.0	4,925.6	4,971.5	4,943.9	18.0	12.5	-157.84	274.0	-108.8	687.9	662.4	25.48	27.000		

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

Antelope F-18 Pad Sec.18-T5N-R62W - Antelope 11-14-18HZ - Wellbore #1 - Plan #1 (6-12-12)													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		
5,074.4	5,000.0	5,044.9	5,016.1	18.0	12.8	-116.80	286.0	-112.9	686.9	660.8	26.07	26.350		
5,100.0	5,025.6	5,070.1	5,041.0	18.1	12.9	-116.44	290.1	-114.4	686.3	660.1	26.23	26.165		
5,200.0	5,125.6	5,168.6	5,138.0	18.2	13.2	-115.03	306.2	-119.9	684.3	657.4	26.88	25.458		
5,300.0	5,225.6	5,267.1	5,235.0	18.3	13.6	-113.61	322.2	-125.5	682.7	655.1	27.53	24.797		
5,400.0	5,325.6	5,365.6	5,332.0	18.5	13.9	-112.18	338.3	-131.1	681.5	653.3	28.18	24.181		
5,500.0	5,425.6	5,464.1	5,429.0	18.6	14.3	-110.75	354.4	-136.6	680.8	652.0	28.84	23.606		
5,600.0	5,525.6	5,562.6	5,526.0	18.7	14.6	-109.32	370.4	-142.2	680.5	651.0	29.48	23.080		
5,616.2	5,541.8	5,578.6	5,541.8	18.8	14.7	-109.10	372.9	-143.0	680.5	650.9	29.58	23.003		
5,700.0	5,625.6	5,661.6	5,624.0	18.9	14.9	-108.09	384.3	-147.0	680.6	650.6	30.04	22.654		
5,800.0	5,725.6	5,761.6	5,723.3	19.0	15.1	-107.13	395.1	-150.7	680.9	650.4	30.54	22.294		
5,886.5	5,812.1	5,848.7	5,810.1	19.2	15.3	-106.53	401.8	-153.0	681.2	650.3	30.93	22.023		
5,900.0	5,825.6	5,862.3	5,823.6	19.2	15.4	75.40	402.6	-153.3	681.2	650.4	30.82	22.102		
5,950.0	5,875.4	5,912.5	5,873.8	19.2	15.5	76.00	405.1	-154.2	680.4	649.4	30.99	21.959		
6,000.0	5,924.7	5,962.2	5,923.4	19.2	15.5	77.04	406.8	-154.8	678.5	647.4	31.14	21.791		
6,050.0	5,972.9	6,011.1	5,972.3	19.1	15.6	78.48	407.6	-155.1	675.7	644.4	31.29	21.594		
6,100.0	6,019.7	6,053.4	6,014.6	19.1	15.7	80.07	407.4	-155.1	672.3	640.9	31.41	21.405		
6,150.0	6,064.5	6,088.2	6,049.3	19.0	15.7	81.46	404.2	-155.0	669.3	637.8	31.44	21.287		
6,200.0	6,107.0	6,125.0	6,085.3	18.8	15.7	82.82	396.9	-154.7	666.7	635.3	31.41	21.224		
6,250.0	6,146.8	6,162.8	6,121.3	18.6	15.7	84.12	385.3	-154.3	664.7	633.4	31.32	21.220		
6,300.0	6,183.5	6,202.7	6,157.6	18.5	15.6	85.36	368.8	-153.8	663.1	631.9	31.18	21.269		
6,350.0	6,216.8	6,244.6	6,193.3	18.3	15.5	86.52	346.9	-153.0	662.0	631.0	30.98	21.368		
6,400.0	6,246.4	6,288.4	6,227.3	18.1	15.4	87.58	319.4	-152.1	661.3	630.5	30.75	21.507		
6,450.0	6,271.9	6,334.1	6,258.7	17.9	15.2	88.49	286.2	-151.0	660.8	630.3	30.49	21.670		
6,500.0	6,293.3	6,381.6	6,286.2	17.7	15.1	89.25	247.6	-149.7	660.6	630.3	30.25	21.840		
6,550.0	6,310.2	6,430.4	6,308.5	17.5	14.9	89.81	204.2	-148.2	660.4	630.4	30.03	21.992		
6,600.0	6,322.5	6,480.3	6,324.5	17.3	14.8	90.16	157.0	-146.6	660.3	630.5	29.87	22.104		
6,650.0	6,330.1	6,530.7	6,333.3	17.2	14.7	90.27	107.5	-144.9	660.2	630.4	29.80	22.155		
6,704.7	6,333.0	6,586.7	6,334.0	17.0	14.6	90.09	52.6	-143.0	660.1	630.3	29.84	22.126		
6,800.0	6,333.0	6,682.0	6,334.0	16.8	14.7	90.09	-42.6	-139.8	660.0	629.7	30.26	21.812		
6,900.0	6,333.0	6,782.0	6,334.0	16.9	15.0	90.09	-142.6	-136.4	659.8	628.6	31.15	21.181		
7,000.0	6,333.0	6,882.0	6,334.0	17.5	15.7	90.09	-242.5	-133.0	659.6	627.1	32.48	20.306		
7,100.0	6,333.0	6,982.0	6,334.0	18.5	16.5	90.09	-342.5	-129.6	659.4	625.2	34.20	19.279		
7,200.0	6,333.0	7,082.0	6,334.0	19.5	17.5	90.09	-442.4	-126.2	659.2	623.0	36.26	18.182		
7,300.0	6,333.0	7,182.0	6,334.0	20.7	18.7	90.09	-542.4	-122.8	659.0	620.4	38.59	17.077		
7,400.0	6,333.0	7,282.0	6,334.0	22.0	20.0	90.09	-642.3	-119.4	658.9	617.7	41.16	16.008		
7,500.0	6,333.0	7,382.0	6,334.0	23.4	21.3	90.09	-742.2	-116.0	658.7	614.8	43.92	14.998		
7,600.0	6,333.0	7,482.0	6,334.0	24.9	22.8	90.09	-842.2	-112.6	658.5	611.7	46.83	14.060		
7,700.0	6,333.0	7,582.0	6,334.0	26.4	24.3	90.09	-942.1	-109.2	658.3	608.4	49.88	13.198		
7,800.0	6,333.0	7,682.0	6,334.0	27.9	25.9	90.09	-1,042.1	-105.8	658.1	605.1	53.03	12.409		
7,900.0	6,333.0	7,782.0	6,334.0	29.5	27.5	90.09	-1,142.0	-102.4	657.9	601.7	56.28	11.691		
8,000.0	6,333.0	7,882.0	6,334.0	31.2	29.2	90.09	-1,241.9	-99.0	657.7	598.2	59.60	11.037		
8,100.0	6,333.0	7,982.0	6,334.0	32.8	30.9	90.09	-1,341.9	-95.6	657.6	594.6	62.98	10.441		
8,200.0	6,333.0	8,082.0	6,334.0	34.5	32.6	90.09	-1,441.8	-92.3	657.4	591.0	66.41	9.898		
8,300.0	6,333.0	8,182.0	6,334.0	36.3	34.3	90.09	-1,541.8	-88.9	657.2	587.3	69.89	9.403		
8,400.0	6,333.0	8,282.0	6,334.0	38.0	36.1	90.09	-1,641.7	-85.5	657.0	583.6	73.41	8.949		
8,500.0	6,333.0	8,382.0	6,334.0	39.7	37.9	90.09	-1,741.7	-82.1	656.8	579.9	76.97	8.534		
8,600.0	6,333.0	8,482.0	6,334.0	41.5	39.7	90.09	-1,841.6	-78.7	656.6	576.1	80.55	8.152		
8,700.0	6,333.0	8,582.0	6,334.0	43.3	41.5	90.09	-1,941.5	-75.3	656.5	572.3	84.16	7.800		
8,800.0	6,333.0	8,682.0	6,334.0	45.1	43.3	90.09	-2,041.5	-71.9	656.3	568.5	87.79	7.476		
8,900.0	6,333.0	8,782.0	6,334.0	46.9	45.1	90.09	-2,141.4	-68.5	656.1	564.6	91.44	7.175		
9,000.0	6,333.0	8,882.0	6,334.0	48.7	46.9	90.09	-2,241.4	-65.1	655.9	560.8	95.10	6.897		
9,100.0	6,333.0	8,982.0	6,334.0	50.5	48.8	90.09	-2,341.3	-61.7	655.7	556.9	98.79	6.638		

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Antelope F-J-18HZ
Project:	SEC.18-T5N-R62W	TVD Reference:	WELL @ 4626.0ft (Original Well Elev)
Reference Site:	Antelope F-18 Pad Sec.18-T5N-R62W	MD Reference:	WELL @ 4626.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-J-18HZ	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 (6-11-12)	Offset TVD Reference:	Offset Datum

Offset Design Antelope F-18 Pad Sec.18-T5N-R62W - Antelope 11-14-18HZ - Wellbore #1 - Plan #1 (6-12-12)												Offset Site Error:	0.0 ft
Survey Program: 0-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
9,200.0	6,333.0	9,082.0	6,334.0	52.4	50.6	90.09	-2,441.3	-58.3	655.5	553.0	102.48	6.396	
9,300.0	6,333.0	9,182.0	6,334.0	54.2	52.5	90.09	-2,541.2	-54.9	655.3	549.2	106.19	6.171	
9,400.0	6,333.0	9,282.0	6,334.0	56.0	54.4	90.09	-2,641.1	-51.5	655.2	545.3	109.91	5.961	
9,500.0	6,333.0	9,382.0	6,334.0	57.9	56.2	90.09	-2,741.1	-48.1	655.0	541.3	113.64	5.764	
9,600.0	6,333.0	9,482.0	6,334.0	59.7	58.1	90.09	-2,841.0	-44.7	654.8	537.4	117.38	5.578	
9,700.0	6,333.0	9,582.0	6,334.0	61.6	60.0	90.09	-2,941.0	-41.3	654.6	533.5	121.13	5.404	
9,800.0	6,333.0	9,682.0	6,334.0	63.5	61.8	90.09	-3,040.9	-37.9	654.4	529.5	124.88	5.240	
9,900.0	6,333.0	9,782.0	6,334.0	65.3	63.7	90.09	-3,140.8	-34.5	654.2	525.6	128.64	5.086	
10,000.0	6,333.0	9,882.0	6,334.0	67.2	65.6	90.09	-3,240.8	-31.1	654.1	521.6	132.41	4.940	
10,100.0	6,333.0	9,982.0	6,334.0	69.1	67.5	90.09	-3,340.7	-27.7	653.9	517.7	136.18	4.801	
10,200.0	6,333.0	10,082.0	6,334.0	71.0	69.4	90.09	-3,440.7	-24.3	653.7	513.7	139.96	4.670	
10,300.0	6,333.0	10,182.0	6,334.0	72.8	71.3	90.09	-3,540.6	-20.9	653.5	509.8	143.75	4.546	
10,400.0	6,333.0	10,282.0	6,334.0	74.7	73.2	90.09	-3,640.6	-17.5	653.3	505.8	147.54	4.428	
10,500.0	6,333.0	10,382.0	6,334.0	76.6	75.1	90.09	-3,740.5	-14.1	653.1	501.8	151.33	4.316	
10,600.0	6,333.0	10,482.0	6,334.0	78.5	77.0	90.09	-3,840.4	-10.7	652.9	497.8	155.12	4.209	
10,700.0	6,333.0	10,582.0	6,334.0	80.4	78.9	90.09	-3,940.4	-7.4	652.8	493.8	158.92	4.107	
10,800.0	6,333.0	10,682.0	6,334.0	82.3	80.8	90.09	-4,040.3	-4.0	652.6	489.8	162.73	4.010	
10,900.0	6,333.0	10,782.0	6,334.0	84.2	82.7	90.09	-4,140.3	-0.6	652.4	485.9	166.53	3.918	
11,000.0	6,333.0	10,882.0	6,334.0	86.1	84.6	90.09	-4,240.2	2.8	652.2	481.9	170.34	3.829	
11,066.5	6,333.0	10,948.5	6,334.0	87.3	85.9	90.09	-4,306.7	5.1	652.1	479.2	172.87	3.772	
11,084.5	6,333.0	10,962.6	6,334.0	87.7	86.1	90.09	-4,320.7	5.6	652.1	478.6	173.49	3.759 SF	

Antelope F-18 Pad Sec.18-T5N-R62W - Antelope A-E-18HZ - Wellbore #1 - Plan #1 (6-11-12)												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	180.00	-21.9	0.0	21.9				
100.0	100.0	100.0	100.0	0.1	0.1	180.00	-21.9	0.0	21.9	21.6	0.22	97.251	
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-21.9	0.0	21.9	21.2	0.67	32.417	
300.0	300.0	300.0	300.0	0.6	0.6	180.00	-21.9	0.0	21.9	20.7	1.12	19.450	
400.0	400.0	400.0	400.0	0.8	0.8	180.00	-21.9	0.0	21.9	20.3	1.57	13.893	
500.0	500.0	500.0	500.0	1.0	1.0	180.00	-21.9	0.0	21.9	19.8	2.02	10.806	
600.0	600.0	600.0	600.0	1.2	1.2	180.00	-21.9	0.0	21.9	19.4	2.47	8.841 CC, ES	
700.0	700.0	700.0	700.0	1.5	1.5	142.74	-21.9	0.0	23.2	20.3	2.92	7.952 SF	
800.0	799.8	799.8	799.8	1.7	1.7	149.29	-21.9	0.0	27.6	24.2	3.37	8.186	
900.0	899.5	899.9	899.9	1.9	1.9	159.11	-20.7	-1.3	34.7	30.8	3.81	9.090	
1,000.0	998.7	999.4	999.3	2.2	2.1	170.83	-17.2	-5.2	45.0	40.7	4.25	10.586	
1,100.0	1,097.5	1,098.0	1,097.5	2.5	2.4	-178.61	-11.6	-11.6	59.8	55.1	4.70	12.742	
1,174.9	1,171.0	1,171.0	1,170.0	2.7	2.5	-172.13	-5.9	-17.9	74.2	69.2	5.05	14.709	
1,200.0	1,195.6	1,195.4	1,194.1	2.8	2.6	-170.24	-3.8	-20.4	79.6	74.4	5.17	15.397	
1,300.0	1,293.6	1,291.7	1,289.3	3.2	2.9	-163.59	6.1	-31.5	102.0	96.3	5.69	17.933	
1,400.0	1,391.6	1,386.9	1,382.8	3.5	3.2	-157.98	17.9	-44.8	126.3	120.1	6.25	20.205	
1,500.0	1,489.6	1,480.9	1,474.5	3.9	3.5	-153.10	31.6	-60.2	152.8	145.9	6.86	22.258	
1,600.0	1,587.6	1,574.0	1,564.6	4.3	3.9	-148.82	47.1	-77.6	181.5	173.9	7.52	24.136	
1,700.0	1,685.6	1,668.8	1,656.2	4.7	4.3	-145.41	63.5	-96.0	211.4	203.2	8.20	25.771	
1,800.0	1,783.6	1,763.5	1,747.7	5.1	4.8	-142.84	79.9	-114.5	241.8	232.9	8.89	27.183	
1,900.0	1,881.6	1,858.3	1,839.2	5.6	5.3	-140.85	96.3	-132.9	272.5	262.9	9.60	28.397	
2,000.0	1,979.6	1,953.1	1,930.7	6.0	5.7	-139.25	112.6	-151.3	303.5	293.2	10.31	29.453	
2,100.0	2,077.6	2,047.9	2,022.2	6.4	6.2	-137.96	129.0	-169.7	334.7	323.7	11.02	30.373	
2,200.0	2,175.6	2,142.6	2,113.7	6.8	6.7	-136.88	145.4	-188.1	366.0	354.2	11.74	31.179	
2,300.0	2,273.6	2,237.4	2,205.2	7.2	7.2	-135.97	161.7	-206.6	397.4	384.9	12.46	31.891	
2,400.0	2,371.6	2,332.2	2,296.7	7.7	7.7	-135.19	178.1	-225.0	428.9	415.7	13.19	32.523	
2,500.0	2,469.6	2,426.9	2,388.2	8.1	8.2	-134.52	194.5	-243.4	460.4	446.5	13.91	33.088	
2,600.0	2,567.6	2,521.7	2,479.7	8.5	8.7	-133.94	210.9	-261.8	492.0	477.3	14.64	33.594	
2,700.0	2,665.5	2,616.5	2,571.2	8.9	9.2	-133.43	227.2	-280.2	523.6	508.2	15.38	34.050	
2,800.0	2,763.5	2,711.2	2,662.8	9.4	9.7	-132.97	243.6	-298.6	555.3	539.2	16.11	34.464	
2,900.0	2,861.5	2,806.0	2,754.3	9.8	10.2	-132.57	260.0	-317.1	587.0	570.1	16.85	34.840	
3,000.0	2,959.5	2,900.8	2,845.8	10.2	10.7	-132.20	276.3	-335.5	618.7	601.1	17.58	35.183	
3,100.0	3,057.5	2,995.5	2,937.3	10.7	11.2	-131.87	292.7	-353.9	650.4	632.1	18.32	35.498	
3,200.0	3,155.5	3,090.3	3,028.8	11.1	11.7	-131.57	309.1	-372.3	682.1	663.1	19.06	35.787	
3,300.0	3,253.5	3,185.1	3,120.3	11.5	12.2	-131.30	325.5	-390.7	713.9	694.1	19.80	36.054	
3,400.0	3,351.5	3,279.8	3,211.8	11.9	12.8	-131.05	341.8	-409.2	745.7	725.1	20.54	36.300	
3,500.0	3,449.5	3,374.6	3,303.3	12.4	13.3	-130.83	358.2	-427.6	777.5	756.2	21.28	36.529	
3,600.0	3,547.5	3,469.4	3,394.8	12.8	13.8	-130.62	374.6	-446.0	809.3	787.2	22.03	36.742	
3,700.0	3,645.5	3,564.2	3,486.3	13.2	14.3	-130.42	390.9	-464.4	841.1	818.3	22.77	36.940	
3,800.0	3,743.5	3,658.9	3,577.8	13.7	14.8	-130.24	407.3	-482.8	872.9	849.4	23.51	37.125	
3,900.0	3,841.5	3,753.7	3,669.3	14.1	15.3	-130.07	423.7	-501.3	904.7	880.5	24.26	37.298	
4,000.0	3,939.5	3,848.5	3,760.9	14.5	15.8	-129.92	440.1	-519.7	936.6	911.6	25.00	37.461	
4,100.0	4,037.5	3,943.2	3,852.4	15.0	16.4	-129.77	456.4	-538.1	968.4	942.6	25.75	37.613	

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Antelope F-J-18HZ
Project:	SEC.18-T5N-R62W	TVD Reference:	WELL @ 4626.0ft (Original Well Elev)
Reference Site:	Antelope F-18 Pad Sec.18-T5N-R62W	MD Reference:	WELL @ 4626.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-J-18HZ	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 (6-11-12)	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						
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	0.0	0.0	0.0	0.0	0.00	18.2	0.0	18.2	18.2	0.00	N/A	
100.0	100.0	100.0	100.0	0.1	0.1	0.00	18.2	0.0	18.2	18.0	0.22	81.061	
200.0	200.0	200.0	200.0	0.3	0.3	0.00	18.2	0.0	18.2	17.5	0.67	27.020 CC, ES	
300.0	300.0	299.7	299.7	0.6	0.6	4.69	19.0	1.6	19.0	17.9	1.12	17.043	
400.0	400.0	399.1	399.0	0.8	0.8	16.31	21.3	6.2	22.2	20.6	1.57	14.135	
500.0	500.0	498.1	497.5	1.0	1.0	29.10	25.0	13.9	28.7	26.7	2.04	14.065	
600.0	600.0	596.3	595.1	1.2	1.3	39.15	30.2	24.6	39.3	36.7	2.54	15.447	
700.0	700.0	693.9	691.5	1.5	1.6	6.17	36.8	38.2	52.0	49.1	2.96	17.547	
800.0	799.8	791.0	786.8	1.7	2.0	11.59	44.9	54.6	65.1	61.7	3.42	19.048	
900.0	899.5	887.5	880.9	1.9	2.4	16.14	54.2	73.8	78.6	74.7	3.88	20.276	
1,000.0	998.7	983.5	973.7	2.2	2.9	20.15	64.9	95.7	92.6	88.2	4.35	21.293	
1,100.0	1,097.5	1,081.2	1,067.6	2.5	3.4	23.86	76.9	120.2	106.3	101.5	4.84	21.964	
1,174.9	1,171.0	1,155.3	1,138.7	2.7	3.8	26.57	86.0	139.0	115.0	109.7	5.23	21.987	
1,200.0	1,195.6	1,180.3	1,162.6	2.8	4.0	27.49	89.1	145.3	117.6	112.3	5.37	21.916	
1,300.0	1,293.6	1,279.4	1,257.8	3.2	4.5	30.76	101.3	170.4	128.5	122.6	5.95	21.617	
1,400.0	1,391.6	1,378.6	1,352.9	3.5	5.1	33.51	113.6	195.4	139.8	133.2	6.56	21.308	
1,500.0	1,489.6	1,477.7	1,448.1	3.9	5.7	35.85	125.8	220.5	151.3	144.1	7.21	20.993	
1,600.0	1,587.6	1,576.9	1,543.2	4.3	6.2	37.86	138.0	245.6	163.0	155.2	7.88	20.688	
1,700.0	1,685.6	1,676.1	1,638.4	4.7	6.8	39.59	150.3	270.7	174.9	166.4	8.58	20.398	
1,800.0	1,783.6	1,775.2	1,733.6	5.1	7.4	41.11	162.5	295.8	187.0	177.7	9.29	20.126	
1,900.0	1,881.6	1,874.4	1,828.7	5.6	8.0	42.44	174.7	320.8	199.1	189.1	10.02	19.872	
2,000.0	1,979.6	1,973.5	1,923.9	6.0	8.6	43.61	187.0	345.9	211.4	200.6	10.76	19.639	
2,100.0	2,077.6	2,072.7	2,019.0	6.4	9.1	44.66	199.2	371.0	223.7	212.2	11.52	19.424	
2,200.0	2,175.6	2,171.9	2,114.2	6.8	9.7	45.60	211.5	396.1	236.1	223.8	12.28	19.226	
2,300.0	2,273.6	2,271.0	2,209.3	7.2	10.3	46.44	223.7	421.1	248.6	235.5	13.05	19.045	
2,400.0	2,371.6	2,370.2	2,304.5	7.7	10.9	47.21	235.9	446.2	261.1	247.2	13.83	18.879	
2,500.0	2,469.6	2,469.3	2,399.6	8.1	11.5	47.90	248.2	471.3	273.6	259.0	14.61	18.727	
2,600.0	2,567.6	2,568.5	2,494.8	8.5	12.1	48.53	260.4	496.4	286.2	270.8	15.40	18.586	
2,700.0	2,665.5	2,667.6	2,589.9	8.9	12.6	49.11	272.6	521.5	298.8	282.6	16.19	18.456	
2,800.0	2,763.5	2,766.8	2,685.1	9.4	13.2	49.65	284.9	546.5	311.4	294.5	16.98	18.337	
2,900.0	2,861.5	2,866.0	2,780.2	9.8	13.8	50.14	297.1	571.6	324.1	306.3	17.78	18.226	
3,000.0	2,959.5	2,965.1	2,875.4	10.2	14.4	50.59	309.3	596.7	336.8	318.2	18.58	18.123	
3,100.0	3,057.5	3,064.3	2,970.5	10.7	15.0	51.01	321.6	621.8	349.5	330.1	19.39	18.028	
3,200.0	3,155.5	3,163.4	3,065.7	11.1	15.6	51.41	333.8	646.8	362.2	342.0	20.19	17.939	
3,300.0	3,253.5	3,262.6	3,160.8	11.5	16.1	51.77	346.0	671.9	374.9	353.9	21.00	17.856	
3,400.0	3,351.5	3,361.8	3,256.0	11.9	16.7	52.11	358.3	697.0	387.7	365.9	21.81	17.779	
3,500.0	3,449.5	3,460.9	3,351.1	12.4	17.3	52.43	370.5	722.1	400.4	377.8	22.62	17.707	
3,600.0	3,547.5	3,560.1	3,446.3	12.8	17.9	52.73	382.7	747.2	413.2	389.8	23.43	17.639	
3,700.0	3,645.5	3,659.2	3,541.4	13.2	18.5	53.01	395.0	772.2	426.0	401.8	24.24	17.575	
3,800.0	3,743.5	3,758.4	3,636.6	13.7	19.1	53.28	407.2	797.3	438.8	413.7	25.05	17.515	
3,900.0	3,841.5	3,857.5	3,731.7	14.1	19.7	53.53	419.4	822.4	451.6	425.7	25.87	17.458	
4,000.0	3,939.5	3,956.7	3,826.9	14.5	20.2	53.77	431.7	847.5	464.4	437.7	26.68	17.405	
4,100.0	4,037.5	4,055.9	3,922.0	15.0	20.8	53.99	443.9	872.5	477.2	449.7	27.50	17.354	
4,200.0	4,135.4	4,155.0	4,017.2	15.4	21.4	54.20	456.2	897.6	490.1	461.7	28.32	17.307	
4,300.0	4,233.4	4,254.2	4,112.3	15.8	22.0	54.40	468.4	922.7	502.9	473.8	29.13	17.261	
4,400.0	4,331.4	4,353.3	4,207.5	16.3	22.6	54.60	480.6	947.8	515.7	485.8	29.95	17.218	
4,499.5	4,429.0	4,452.0	4,302.2	16.7	23.2	54.78	492.8	972.7	528.5	497.7	30.77	17.178	
4,600.0	4,527.8	4,551.5	4,397.7	17.1	23.8	55.03	505.1	997.9	542.4	510.9	31.52	17.209	
4,700.0	4,626.7	4,650.2	4,492.4	17.3	24.3	55.01	517.3	1,022.9	558.2	526.1	32.12	17.379	
4,800.0	4,726.0	4,748.5	4,586.7	17.6	24.9	54.76	529.4	1,047.7	576.1	543.5	32.62	17.662	
4,900.0	4,825.7	4,846.1	4,680.4	17.8	25.5	54.30	541.4	1,072.4	596.0	563.0	33.01	18.055	
5,000.0	4,925.6	4,962.4	4,792.4	18.0	26.0	53.53	555.0	1,100.2	616.7	583.5	33.27	18.538	

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 Antelope F-J-18HZ
Project:	SEC.18-T5N-R62W	TVD Reference:	WELL @ 4626.0ft (Original Well Elev)
Reference Site:	Antelope F-18 Pad Sec.18-T5N-R62W	MD Reference:	WELL @ 4626.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-J-18HZ	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 (6-11-12)	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	
5,074.4	5,000.0	5,052.1	4,879.7	18.0	26.4	92.91	564.1	1,118.9	631.3	597.3	33.95	18.592	
5,100.0	5,025.6	5,083.2	4,910.1	18.1	26.5	92.62	567.0	1,124.8	636.1	602.1	33.99	18.716	
5,200.0	5,125.6	5,205.9	5,030.6	18.2	26.9	91.66	576.9	1,145.2	652.4	618.3	34.14	19.110	
5,300.0	5,225.6	5,330.4	5,153.8	18.3	27.2	90.94	584.7	1,161.1	665.1	630.8	34.34	19.369	
5,400.0	5,325.6	5,456.2	5,279.0	18.5	27.5	90.46	590.2	1,172.3	674.0	639.4	34.57	19.494	
5,500.0	5,425.6	5,582.8	5,405.5	18.6	27.7	90.20	593.2	1,178.6	678.9	644.1	34.84	19.485	
5,600.0	5,525.6	5,703.0	5,525.6	18.7	27.8	90.14	593.9	1,180.0	680.0	644.9	35.13	19.354	
5,700.0	5,625.6	5,803.0	5,625.6	18.9	27.9	90.14	593.9	1,180.0	680.0	644.6	35.42	19.198	
5,800.0	5,725.6	5,903.0	5,725.6	19.0	28.0	90.14	593.9	1,180.0	680.0	644.3	35.71	19.042	
5,886.5	5,812.1	5,989.5	5,812.1	19.2	28.1	90.14	593.9	1,180.0	680.0	644.0	35.96	18.908	
5,900.0	5,825.6	6,002.7	5,825.3	19.2	28.1	-88.03	593.9	1,180.0	680.0	644.5	35.45	19.180	
5,950.0	5,875.4	6,050.0	5,872.5	19.2	28.1	-88.10	591.2	1,180.1	680.0	644.5	35.51	19.149	
5,952.2	5,877.6	6,052.9	5,875.4	19.2	28.1	-88.10	590.9	1,180.1	680.0	644.5	35.51	19.150	
6,000.0	5,924.7	6,098.9	5,920.9	19.2	28.1	-88.18	583.9	1,180.3	679.9	644.4	35.47	19.170	
6,050.0	5,972.9	6,147.2	5,967.7	19.1	28.1	-88.28	572.3	1,180.6	679.8	644.5	35.34	19.240	
6,100.0	6,019.7	6,195.5	6,013.3	19.1	28.1	-88.40	556.4	1,181.1	679.7	644.6	35.12	19.355	
6,150.0	6,064.5	6,244.0	6,057.4	19.0	28.0	-88.53	536.3	1,181.7	679.6	644.8	34.83	19.511	
6,200.0	6,107.0	6,292.6	6,099.5	18.8	27.9	-88.68	512.0	1,182.4	679.5	645.0	34.49	19.701	
6,250.0	6,146.8	6,341.3	6,139.3	18.6	27.8	-88.83	483.9	1,183.2	679.4	645.3	34.11	19.918	
6,300.0	6,183.5	6,390.2	6,176.4	18.5	27.7	-89.00	452.1	1,184.1	679.2	645.5	33.70	20.154	
6,350.0	6,216.8	6,439.3	6,210.5	18.3	27.6	-89.18	416.8	1,185.1	679.1	645.8	33.30	20.396	
6,400.0	6,246.4	6,488.6	6,241.2	18.1	27.4	-89.36	378.4	1,186.2	678.9	646.0	32.91	20.633	
6,450.0	6,271.9	6,538.0	6,268.2	17.9	27.3	-89.55	337.0	1,187.4	678.8	646.2	32.55	20.851	
6,500.0	6,293.3	6,587.7	6,291.3	17.7	27.2	-89.75	293.1	1,188.7	678.6	646.4	32.26	21.037	
6,550.0	6,310.2	6,637.5	6,310.2	17.5	27.1	-89.94	247.0	1,190.0	678.5	646.4	32.04	21.178	
6,600.0	6,322.5	6,687.6	6,324.6	17.3	26.9	-90.14	199.1	1,191.4	678.3	646.4	31.90	21.263	
6,650.0	6,330.1	6,737.8	6,334.3	17.2	26.9	-90.34	149.8	1,192.8	678.2	646.3	31.86	21.283	
6,704.7	6,333.0	6,793.1	6,339.6	17.0	26.8	-90.55	94.9	1,194.4	678.0	646.1	31.94	21.230	
6,800.0	6,333.0	6,888.6	6,340.0	16.8	26.7	-90.59	-0.7	1,197.2	677.7	645.3	32.41	20.908	
6,900.0	6,333.0	6,988.6	6,340.0	16.9	26.8	-90.59	-100.6	1,200.1	677.4	644.1	33.33	20.322	
7,000.0	6,333.0	7,088.6	6,340.0	17.5	27.0	-90.59	-200.6	1,203.0	677.1	642.4	34.68	19.524	
7,100.0	6,333.0	7,188.6	6,340.0	18.5	27.3	-90.59	-300.5	1,205.9	676.7	640.4	36.38	18.602	
7,200.0	6,333.0	7,288.6	6,340.0	19.5	27.8	-90.59	-400.5	1,208.7	676.4	638.0	38.40	17.616	
7,300.0	6,333.0	7,388.6	6,340.0	20.7	28.4	-90.59	-500.4	1,211.6	676.1	635.4	40.68	16.619	
7,400.0	6,333.0	7,488.6	6,340.0	22.0	29.1	-90.59	-600.4	1,214.5	675.8	632.6	43.19	15.646	
7,500.0	6,333.0	7,588.6	6,340.0	23.4	30.0	-90.59	-700.4	1,217.4	675.5	629.6	45.89	14.718	
7,600.0	6,333.0	7,688.6	6,340.0	24.9	31.0	-90.59	-800.3	1,220.3	675.1	626.4	48.75	13.849	
7,700.0	6,333.0	7,788.6	6,340.0	26.4	32.1	-90.59	-900.3	1,223.2	674.8	623.1	51.74	13.043	
7,800.0	6,333.0	7,888.6	6,340.0	27.9	33.3	-90.59	-1,000.2	1,226.1	674.5	619.7	54.84	12.300	
7,900.0	6,333.0	7,988.6	6,340.0	29.5	34.6	-90.59	-1,100.2	1,229.0	674.2	616.1	58.03	11.618	
8,000.0	6,333.0	8,088.6	6,340.0	31.2	35.9	-90.60	-1,200.1	1,231.9	673.8	612.6	61.30	10.994	
8,100.0	6,333.0	8,188.6	6,340.0	32.8	37.3	-90.60	-1,300.1	1,234.7	673.5	608.9	64.63	10.421	
8,200.0	6,333.0	8,288.6	6,340.0	34.5	38.8	-90.60	-1,400.1	1,237.6	673.2	605.2	68.02	9.897	
8,300.0	6,333.0	8,388.6	6,340.0	36.3	40.3	-90.60	-1,500.0	1,240.5	672.9	601.4	71.46	9.416	
8,400.0	6,333.0	8,488.6	6,340.0	38.0	41.8	-90.60	-1,600.0	1,243.4	672.6	597.6	74.94	8.974	
8,500.0	6,333.0	8,588.6	6,340.0	39.7	43.4	-90.60	-1,699.9	1,246.3	672.2	593.8	78.46	8.568	
8,600.0	6,333.0	8,688.6	6,340.0	41.5	45.0	-90.60	-1,799.9	1,249.2	671.9	589.9	82.01	8.193	
8,700.0	6,333.0	8,788.6	6,340.0	43.3	46.6	-90.60	-1,899.8	1,252.1	671.6	586.0	85.58	7.847	
8,800.0	6,333.0	8,888.6	6,340.0	45.1	48.3	-90.60	-1,999.8	1,255.0	671.3	582.1	89.18	7.527	
8,900.0	6,333.0	8,988.6	6,340.0	46.9	49.9	-90.60	-2,099.8	1,257.9	670.9	578.1	92.81	7.229	
9,000.0	6,333.0	9,088.6	6,340.0	48.7	51.6	-90.60	-2,199.7	1,260.7	670.6	574.2	96.45	6.953	
9,100.0	6,333.0	9,188.6	6,340.0	50.5	53.3	-90.60	-2,299.7	1,263.6	670.3	570.2	100.11	6.696	

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

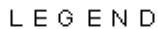
Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well Antelope F-J-18HZ
Project:	SEC.18-T5N-R62W	TVD Reference:	WELL @ 4626.0ft (Original Well Elev)
Reference Site:	Antelope F-18 Pad Sec.18-T5N-R62W	MD Reference:	WELL @ 4626.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Antelope F-J-18HZ	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 (6-11-12)	Offset TVD Reference:	Offset Datum






Offset Design Antelope F-18 Pad Sec.18-T5N-R62W - Antelope K-O-18HZ - Wellbore #1 - Plan #1 (6-11-12)												Offset Site Error:	0.0 ft
Survey Program: 0-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
9,200.0	6,333.0	9,288.6	6,340.0	52.4	55.1	-90.60	-2,399.6	1,266.5	670.0	566.2	103.78	6.456	
9,300.0	6,333.0	9,388.6	6,340.0	54.2	56.8	-90.60	-2,499.6	1,269.4	669.7	562.2	107.47	6.231	
9,400.0	6,333.0	9,488.6	6,340.0	56.0	58.6	-90.60	-2,599.6	1,272.3	669.3	558.2	111.17	6.021	
9,500.0	6,333.0	9,588.6	6,340.0	57.9	60.3	-90.60	-2,699.5	1,275.2	669.0	554.1	114.88	5.824	
9,600.0	6,333.0	9,688.6	6,340.0	59.7	62.1	-90.60	-2,799.5	1,278.1	668.7	550.1	118.60	5.638	
9,700.0	6,333.0	9,788.6	6,340.0	61.6	63.9	-90.60	-2,899.4	1,281.0	668.4	546.0	122.33	5.464	
9,800.0	6,333.0	9,888.6	6,340.0	63.5	65.7	-90.60	-2,999.4	1,283.9	668.0	542.0	126.06	5.299	
9,900.0	6,333.0	9,988.6	6,340.0	65.3	67.5	-90.60	-3,099.3	1,286.7	667.7	537.9	129.81	5.144	
10,000.0	6,333.0	10,088.6	6,340.0	67.2	69.3	-90.60	-3,199.3	1,289.6	667.4	533.8	133.56	4.997	
10,100.0	6,333.0	10,188.6	6,340.0	69.1	71.1	-90.60	-3,299.3	1,292.5	667.1	529.8	137.32	4.858	
10,200.0	6,333.0	10,288.6	6,340.0	71.0	72.9	-90.60	-3,399.2	1,295.4	666.8	525.7	141.09	4.726	
10,300.0	6,333.0	10,388.6	6,340.0	72.8	74.7	-90.60	-3,499.2	1,298.3	666.4	521.6	144.86	4.601	
10,400.0	6,333.0	10,488.6	6,340.0	74.7	76.5	-90.60	-3,599.1	1,301.2	666.1	517.5	148.63	4.482	
10,500.0	6,333.0	10,588.6	6,340.0	76.6	78.4	-90.60	-3,699.1	1,304.1	665.8	513.4	152.41	4.368	
10,600.0	6,333.0	10,688.6	6,340.0	78.5	80.2	-90.60	-3,799.0	1,307.0	665.5	509.3	156.19	4.261	
10,700.0	6,333.0	10,788.6	6,340.0	80.4	82.0	-90.60	-3,899.0	1,309.9	665.1	505.2	159.98	4.158	
10,800.0	6,333.0	10,888.6	6,340.0	82.3	83.9	-90.60	-3,999.0	1,312.7	664.8	501.0	163.77	4.059	
10,900.0	6,333.0	10,988.6	6,340.0	84.2	85.7	-90.60	-4,098.9	1,315.6	664.5	496.9	167.57	3.966	
11,000.0	6,333.0	11,088.6	6,340.0	86.1	87.6	-90.60	-4,198.9	1,318.5	664.2	492.8	171.37	3.876	
11,084.5	6,333.0	11,173.1	6,340.0	87.7	89.2	-90.60	-4,283.3	1,321.0	663.9	489.3	174.58	3.803 SF	

Reference Depths are relative to WELL @ 4626.0ft (Original Well Elev)Coordinates are relative to: Antelope F-J-18HZ
Offset Depths are relative to Offset DatumCoordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 °Grid Convergence at Surface is: 0.73°



Reference Depths are relative to WELL @ 4626.0ft (Original Well Elev) Coordinates are relative to: Antelope F-J-18HZ
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 ° Grid Convergence at Surface is: 0.73°



:C (Vert.), Wellbore #1, Wellbore #1 V0	 Antelope 11-14-18HZ, Wellbore #1, Plan #1 (6-12-12) V0	 Antelope 24-18 (Exist.), Wellbore #1, Wellbore #1 V0
:A (Exist.), Wellbore #1, Wellbore #1 V0	 Antelope K-0-18HZ, Wellbore #1, Plan #1 (6-11-12) V0	 Antelope N-18 COGCC Plan, Wellbore #1, Wellbore #1 V0
:E 18HZ, Wellbore #1, Plan #1 (6-11-12) V0	 Antelope 23-18 (Exist.), Wellbore #1, Wellbore #1 V0	