

BONANZA CREEK ENERGY OPERATING

Well Name: **State Antelope U-Y-32HNB**

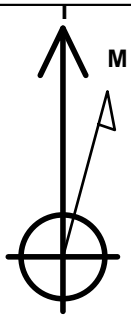
Surface Location: Antelope P-T-32 Pad Sec.32-T5N-R62W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4570.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1376793.79	3322592.24	40.361920	-104.342340	
RKB - 13' WELL @ 4583.0ft (RKB - 13')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
BHL 470'FSL, 10'FEL	6253.0	-4258.7	1114.9	Point
LANDING PT 531'FNL, 10'FEL	6253.0	18.2	1128.6	Point



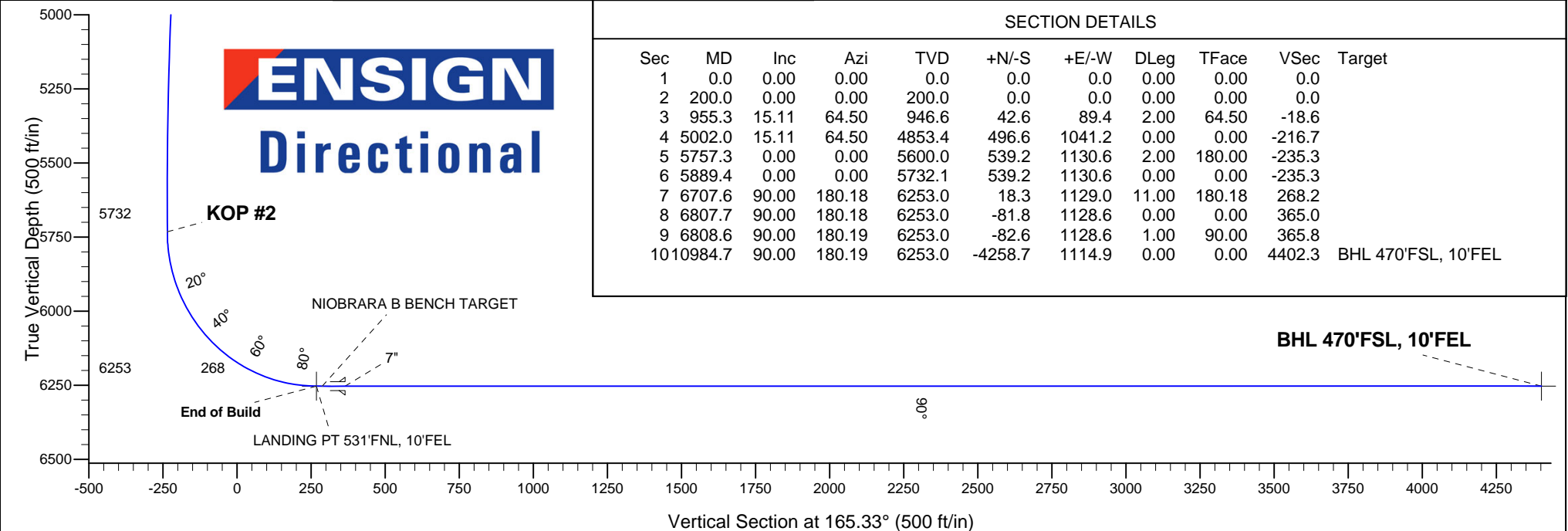
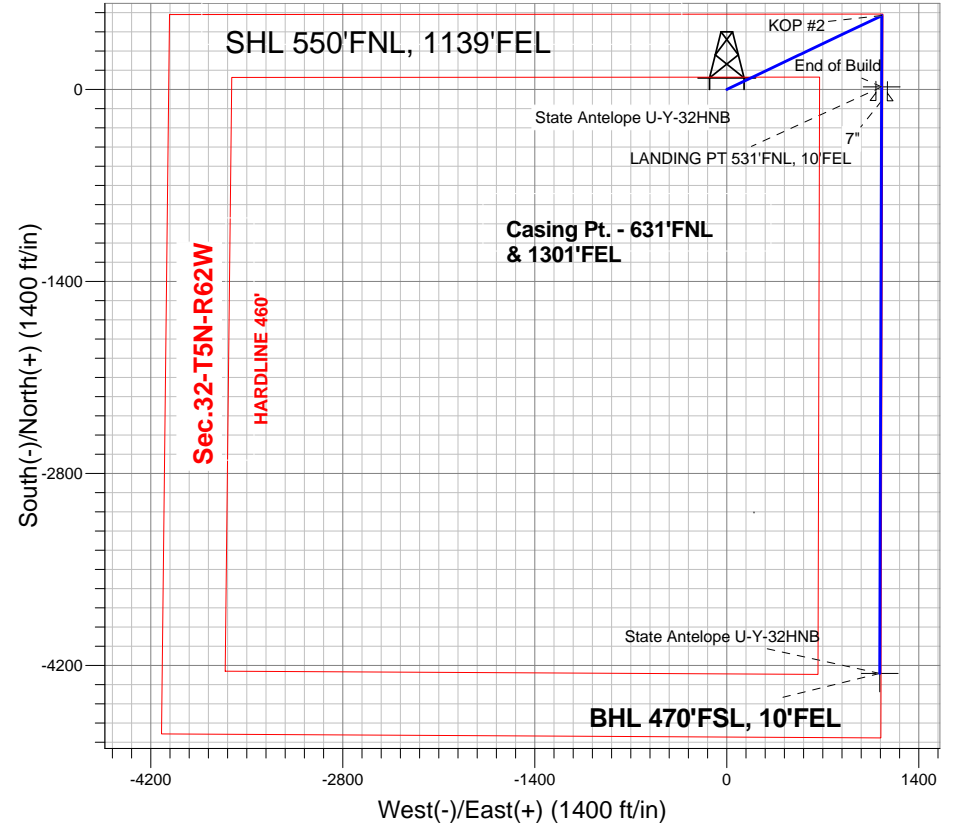
Azimuths to True North
Magnetic North: 8.40°

Magnetic Field
Strength: 52978.2nT
Dip Angle: 67.03°
Date: 2/27/2013
Model: IGRF2010

ANNOTATIONS

TVD	MD	Annotation
200.0	200.0	KOP #1
5732.1	5889.4	KOP #2
6253.0	6707.6	End of Build

Antelope P-T-32 Pad Sec.32-T5N-R62W
State Antelope U-Y-32HNB
Plan #2 (2-27-13)





Directional

BONANZA CREEK ENERGY OPERATING

SEC.32-T5N-R62W

Antelope P-T-32 Pad Sec.32-T5N-R62W

State Antelope U-Y-32HNB

Wellbore #1

Plan: Plan #2 (2-27-13)

Standard Planning Report

27 February, 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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
955.3	15.11	64.50	946.6	42.6	89.4	2.00	2.00	0.00	64.50	
5,002.0	15.11	64.50	4,853.4	496.6	1,041.2	0.00	0.00	0.00	0.00	
5,757.3	0.00	0.00	5,600.0	539.2	1,130.6	2.00	-2.00	0.00	180.00	
5,889.4	0.00	0.00	5,732.1	539.2	1,130.6	0.00	0.00	0.00	0.00	
6,707.6	90.00	180.18	6,253.0	18.3	1,129.0	11.00	11.00	0.00	180.18	
6,807.7	90.00	180.18	6,253.0	-81.8	1,128.6	0.00	0.00	0.00	0.00	
6,808.6	90.00	180.19	6,253.0	-82.6	1,128.6	1.00	0.00	1.00	90.00	
10,984.7	90.00	180.19	6,253.0	-4,258.7	1,114.9	0.00	0.00	0.00	0.00	BHL 470'FSL, 10'FSL

Database:	Landmark	Local Co-ordinate Reference:	Well State Antelope U-Y-32HNB
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4583.0ft (RKB - 13')
Project:	SEC.32-T5N-R62W	MD Reference:	WELL @ 4583.0ft (RKB - 13')
Site:	Antelope P-T-32 Pad Sec.32-T5N-R62W	North Reference:	True
Well:	State Antelope U-Y-32HNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (2-27-13)		

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
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	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
KOP #1									
240.0	0.80	64.50	240.0	0.1	0.3	-0.1	2.00	2.00	0.00
280.0	1.60	64.50	280.0	0.5	1.0	-0.2	2.00	2.00	0.00
320.0	2.40	64.50	320.0	1.1	2.3	-0.5	2.00	2.00	0.00
360.0	3.20	64.50	359.9	1.9	4.0	-0.8	2.00	2.00	0.00
400.0	4.00	64.50	399.8	3.0	6.3	-1.3	2.00	2.00	0.00
440.0	4.80	64.50	439.7	4.3	9.1	-1.9	2.00	2.00	0.00
480.0	5.60	64.50	479.6	5.9	12.3	-2.6	2.00	2.00	0.00
520.0	6.40	64.50	519.3	7.7	16.1	-3.4	2.00	2.00	0.00
560.0	7.20	64.50	559.1	9.7	20.4	-4.2	2.00	2.00	0.00
600.0	8.00	64.50	598.7	12.0	25.2	-5.2	2.00	2.00	0.00
640.0	8.80	64.50	638.3	14.5	30.4	-6.3	2.00	2.00	0.00
680.0	9.60	64.50	677.8	17.3	36.2	-7.5	2.00	2.00	0.00
720.0	10.40	64.50	717.1	20.3	42.5	-8.8	2.00	2.00	0.00
760.0	11.20	64.50	756.4	23.5	49.2	-10.2	2.00	2.00	0.00
800.0	12.00	64.50	795.6	26.9	56.5	-11.8	2.00	2.00	0.00
840.0	12.80	64.50	834.7	30.6	64.3	-13.4	2.00	2.00	0.00
880.0	13.60	64.50	873.6	34.6	72.5	-15.1	2.00	2.00	0.00
920.0	14.40	64.50	912.4	38.7	81.2	-16.9	2.00	2.00	0.00
955.3	15.11	64.50	946.6	42.6	89.4	-18.6	2.00	2.00	0.00
960.0	15.11	64.50	951.1	43.1	90.5	-18.8	0.00	0.00	0.00
1,000.0	15.11	64.50	989.7	47.6	99.9	-20.8	0.00	0.00	0.00
1,040.0	15.11	64.50	1,028.4	52.1	109.3	-22.7	0.00	0.00	0.00
1,080.0	15.11	64.50	1,067.0	56.6	118.7	-24.7	0.00	0.00	0.00
1,120.0	15.11	64.50	1,105.6	61.1	128.1	-26.7	0.00	0.00	0.00
1,160.0	15.11	64.50	1,144.2	65.6	137.5	-28.6	0.00	0.00	0.00
1,200.0	15.11	64.50	1,182.8	70.1	146.9	-30.6	0.00	0.00	0.00
1,240.0	15.11	64.50	1,221.4	74.6	156.3	-32.5	0.00	0.00	0.00
1,280.0	15.11	64.50	1,260.1	79.0	165.7	-34.5	0.00	0.00	0.00
1,320.0	15.11	64.50	1,298.7	83.5	175.1	-36.4	0.00	0.00	0.00
1,360.0	15.11	64.50	1,337.3	88.0	184.5	-38.4	0.00	0.00	0.00
1,400.0	15.11	64.50	1,375.9	92.5	194.0	-40.4	0.00	0.00	0.00
1,440.0	15.11	64.50	1,414.5	97.0	203.4	-42.3	0.00	0.00	0.00
1,480.0	15.11	64.50	1,453.1	101.5	212.8	-44.3	0.00	0.00	0.00
1,520.0	15.11	64.50	1,491.8	106.0	222.2	-46.2	0.00	0.00	0.00
1,560.0	15.11	64.50	1,530.4	110.5	231.6	-48.2	0.00	0.00	0.00
1,600.0	15.11	64.50	1,569.0	114.9	241.0	-50.2	0.00	0.00	0.00
1,640.0	15.11	64.50	1,607.6	119.4	250.4	-52.1	0.00	0.00	0.00
1,680.0	15.11	64.50	1,646.2	123.9	259.8	-54.1	0.00	0.00	0.00
1,720.0	15.11	64.50	1,684.9	128.4	269.2	-56.0	0.00	0.00	0.00
1,760.0	15.11	64.50	1,723.5	132.9	278.6	-58.0	0.00	0.00	0.00
1,800.0	15.11	64.50	1,762.1	137.4	288.0	-59.9	0.00	0.00	0.00
1,840.0	15.11	64.50	1,800.7	141.9	297.5	-61.9	0.00	0.00	0.00
1,880.0	15.11	64.50	1,839.3	146.3	306.9	-63.9	0.00	0.00	0.00
1,920.0	15.11	64.50	1,877.9	150.8	316.3	-65.8	0.00	0.00	0.00
1,960.0	15.11	64.50	1,916.6	155.3	325.7	-67.8	0.00	0.00	0.00
2,000.0	15.11	64.50	1,955.2	159.8	335.1	-69.7	0.00	0.00	0.00
2,040.0	15.11	64.50	1,993.8	164.3	344.5	-71.7	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well State Antelope U-Y-32HNB
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4583.0ft (RKB - 13')
Project:	SEC.32-T5N-R62W	MD Reference:	WELL @ 4583.0ft (RKB - 13')
Site:	Antelope P-T-32 Pad Sec.32-T5N-R62W	North Reference:	True
Well:	State Antelope U-Y-32HNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (2-27-13)		

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)
2,080.0	15.11	64.50	2,032.4	168.8	353.9	-73.7	0.00	0.00	0.00
2,120.0	15.11	64.50	2,071.0	173.3	363.3	-75.6	0.00	0.00	0.00
2,160.0	15.11	64.50	2,109.7	177.8	372.7	-77.6	0.00	0.00	0.00
2,200.0	15.11	64.50	2,148.3	182.2	382.1	-79.5	0.00	0.00	0.00
2,240.0	15.11	64.50	2,186.9	186.7	391.6	-81.5	0.00	0.00	0.00
2,280.0	15.11	64.50	2,225.5	191.2	401.0	-83.4	0.00	0.00	0.00
2,320.0	15.11	64.50	2,264.1	195.7	410.4	-85.4	0.00	0.00	0.00
2,360.0	15.11	64.50	2,302.7	200.2	419.8	-87.4	0.00	0.00	0.00
2,400.0	15.11	64.50	2,341.4	204.7	429.2	-89.3	0.00	0.00	0.00
2,440.0	15.11	64.50	2,380.0	209.2	438.6	-91.3	0.00	0.00	0.00
2,480.0	15.11	64.50	2,418.6	213.7	448.0	-93.2	0.00	0.00	0.00
2,520.0	15.11	64.50	2,457.2	218.1	457.4	-95.2	0.00	0.00	0.00
2,560.0	15.11	64.50	2,495.8	222.6	466.8	-97.2	0.00	0.00	0.00
2,600.0	15.11	64.50	2,534.4	227.1	476.2	-99.1	0.00	0.00	0.00
2,640.0	15.11	64.50	2,573.1	231.6	485.6	-101.1	0.00	0.00	0.00
2,680.0	15.11	64.50	2,611.7	236.1	495.1	-103.0	0.00	0.00	0.00
2,720.0	15.11	64.50	2,650.3	240.6	504.5	-105.0	0.00	0.00	0.00
2,760.0	15.11	64.50	2,688.9	245.1	513.9	-106.9	0.00	0.00	0.00
2,800.0	15.11	64.50	2,727.5	249.6	523.3	-108.9	0.00	0.00	0.00
2,840.0	15.11	64.50	2,766.2	254.0	532.7	-110.9	0.00	0.00	0.00
2,880.0	15.11	64.50	2,804.8	258.5	542.1	-112.8	0.00	0.00	0.00
2,920.0	15.11	64.50	2,843.4	263.0	551.5	-114.8	0.00	0.00	0.00
2,960.0	15.11	64.50	2,882.0	267.5	560.9	-116.7	0.00	0.00	0.00
3,000.0	15.11	64.50	2,920.6	272.0	570.3	-118.7	0.00	0.00	0.00
3,040.0	15.11	64.50	2,959.2	276.5	579.7	-120.6	0.00	0.00	0.00
3,080.0	15.11	64.50	2,997.9	281.0	589.1	-122.6	0.00	0.00	0.00
3,120.0	15.11	64.50	3,036.5	285.5	598.6	-124.6	0.00	0.00	0.00
3,160.0	15.11	64.50	3,075.1	289.9	608.0	-126.5	0.00	0.00	0.00
3,200.0	15.11	64.50	3,113.7	294.4	617.4	-128.5	0.00	0.00	0.00
3,240.0	15.11	64.50	3,152.3	298.9	626.8	-130.4	0.00	0.00	0.00
3,280.0	15.11	64.50	3,190.9	303.4	636.2	-132.4	0.00	0.00	0.00
3,320.0	15.11	64.50	3,229.6	307.9	645.6	-134.4	0.00	0.00	0.00
3,360.0	15.11	64.50	3,268.2	312.4	655.0	-136.3	0.00	0.00	0.00
3,400.0	15.11	64.50	3,306.8	316.9	664.4	-138.3	0.00	0.00	0.00
3,440.0	15.11	64.50	3,345.4	321.4	673.8	-140.2	0.00	0.00	0.00
3,480.0	15.11	64.50	3,384.0	325.8	683.2	-142.2	0.00	0.00	0.00
3,520.0	15.11	64.50	3,422.7	330.3	692.6	-144.1	0.00	0.00	0.00
3,560.0	15.11	64.50	3,461.3	334.8	702.1	-146.1	0.00	0.00	0.00
3,600.0	15.11	64.50	3,499.9	339.3	711.5	-148.1	0.00	0.00	0.00
3,640.0	15.11	64.50	3,538.5	343.8	720.9	-150.0	0.00	0.00	0.00
3,680.0	15.11	64.50	3,577.1	348.3	730.3	-152.0	0.00	0.00	0.00
3,720.0	15.11	64.50	3,615.7	352.8	739.7	-153.9	0.00	0.00	0.00
3,760.0	15.11	64.50	3,654.4	357.3	749.1	-155.9	0.00	0.00	0.00
3,800.0	15.11	64.50	3,693.0	361.7	758.5	-157.9	0.00	0.00	0.00
3,840.0	15.11	64.50	3,731.6	366.2	767.9	-159.8	0.00	0.00	0.00
3,880.0	15.11	64.50	3,770.2	370.7	777.3	-161.8	0.00	0.00	0.00
3,920.0	15.11	64.50	3,808.8	375.2	786.7	-163.7	0.00	0.00	0.00
3,960.0	15.11	64.50	3,847.4	379.7	796.1	-165.7	0.00	0.00	0.00
4,000.0	15.11	64.50	3,886.1	384.2	805.6	-167.6	0.00	0.00	0.00
4,040.0	15.11	64.50	3,924.7	388.7	815.0	-169.6	0.00	0.00	0.00
4,080.0	15.11	64.50	3,963.3	393.2	824.4	-171.6	0.00	0.00	0.00
4,120.0	15.11	64.50	4,001.9	397.6	833.8	-173.5	0.00	0.00	0.00
4,160.0	15.11	64.50	4,040.5	402.1	843.2	-175.5	0.00	0.00	0.00
4,200.0	15.11	64.50	4,079.2	406.6	852.6	-177.4	0.00	0.00	0.00

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Well:	State Antelope U-Y-32HNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (2-27-13)		

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)
4,240.0	15.11	64.50	4,117.8	411.1	862.0	-179.4	0.00	0.00	0.00
4,280.0	15.11	64.50	4,156.4	415.6	871.4	-181.4	0.00	0.00	0.00
4,320.0	15.11	64.50	4,195.0	420.1	880.8	-183.3	0.00	0.00	0.00
4,360.0	15.11	64.50	4,233.6	424.6	890.2	-185.3	0.00	0.00	0.00
4,400.0	15.11	64.50	4,272.2	429.1	899.6	-187.2	0.00	0.00	0.00
4,440.0	15.11	64.50	4,310.9	433.5	909.1	-189.2	0.00	0.00	0.00
4,480.0	15.11	64.50	4,349.5	438.0	918.5	-191.1	0.00	0.00	0.00
4,520.0	15.11	64.50	4,388.1	442.5	927.9	-193.1	0.00	0.00	0.00
4,560.0	15.11	64.50	4,426.7	447.0	937.3	-195.1	0.00	0.00	0.00
4,600.0	15.11	64.50	4,465.3	451.5	946.7	-197.0	0.00	0.00	0.00
4,640.0	15.11	64.50	4,504.0	456.0	956.1	-199.0	0.00	0.00	0.00
4,680.0	15.11	64.50	4,542.6	460.5	965.5	-200.9	0.00	0.00	0.00
4,720.0	15.11	64.50	4,581.2	465.0	974.9	-202.9	0.00	0.00	0.00
4,760.0	15.11	64.50	4,619.8	469.4	984.3	-204.8	0.00	0.00	0.00
4,800.0	15.11	64.50	4,658.4	473.9	993.7	-206.8	0.00	0.00	0.00
4,840.0	15.11	64.50	4,697.0	478.4	1,003.1	-208.8	0.00	0.00	0.00
4,880.0	15.11	64.50	4,735.7	482.9	1,012.6	-210.7	0.00	0.00	0.00
4,920.0	15.11	64.50	4,774.3	487.4	1,022.0	-212.7	0.00	0.00	0.00
4,960.0	15.11	64.50	4,812.9	491.9	1,031.4	-214.6	0.00	0.00	0.00
5,000.0	15.11	64.50	4,851.5	496.4	1,040.8	-216.6	0.00	0.00	0.00
5,002.0	15.11	64.50	4,853.4	496.6	1,041.2	-216.7	0.00	0.00	0.00
5,040.0	14.35	64.50	4,890.2	500.7	1,050.0	-218.5	2.00	-2.00	0.00
5,080.0	13.55	64.50	4,929.0	504.9	1,058.7	-220.3	2.00	-2.00	0.00
5,120.0	12.75	64.50	4,968.0	508.8	1,066.9	-222.0	2.00	-2.00	0.00
5,160.0	11.95	64.50	5,007.0	512.5	1,074.6	-223.6	2.00	-2.00	0.00
5,200.0	11.15	64.50	5,046.2	515.9	1,081.8	-225.1	2.00	-2.00	0.00
5,240.0	10.35	64.50	5,085.5	519.2	1,088.6	-226.5	2.00	-2.00	0.00
5,280.0	9.55	64.50	5,124.9	522.1	1,094.8	-227.8	2.00	-2.00	0.00
5,320.0	8.75	64.50	5,164.4	524.9	1,100.5	-229.0	2.00	-2.00	0.00
5,360.0	7.95	64.50	5,204.0	527.4	1,105.8	-230.1	2.00	-2.00	0.00
5,400.0	7.15	64.50	5,243.6	529.6	1,110.5	-231.1	2.00	-2.00	0.00
5,440.0	6.35	64.50	5,283.4	531.6	1,114.8	-232.0	2.00	-2.00	0.00
5,480.0	5.55	64.50	5,323.2	533.4	1,118.5	-232.8	2.00	-2.00	0.00
5,520.0	4.75	64.50	5,363.0	535.0	1,121.7	-233.4	2.00	-2.00	0.00
5,560.0	3.95	64.50	5,402.9	536.3	1,124.5	-234.0	2.00	-2.00	0.00
5,600.0	3.15	64.50	5,442.8	537.3	1,126.7	-234.5	2.00	-2.00	0.00
5,640.0	2.35	64.50	5,482.8	538.2	1,128.4	-234.8	2.00	-2.00	0.00
5,680.0	1.55	64.50	5,522.7	538.8	1,129.7	-235.1	2.00	-2.00	0.00
5,720.0	0.75	64.50	5,562.7	539.1	1,130.4	-235.2	2.00	-2.00	0.00
5,757.3	0.00	0.00	5,600.0	539.2	1,130.6	-235.3	2.00	-2.00	0.00
5,760.0	0.00	0.00	5,602.7	539.2	1,130.6	-235.3	0.00	0.00	0.00
5,800.0	0.00	0.00	5,642.7	539.2	1,130.6	-235.3	0.00	0.00	0.00
5,840.0	0.00	0.00	5,682.7	539.2	1,130.6	-235.3	0.00	0.00	0.00
5,880.0	0.00	0.00	5,722.7	539.2	1,130.6	-235.3	0.00	0.00	0.00
5,889.4	0.00	0.00	5,732.1	539.2	1,130.6	-235.3	0.00	0.00	0.00
KOP #2									
5,920.0	3.37	180.18	5,762.7	538.3	1,130.6	-234.4	11.00	11.00	0.00
5,960.0	7.77	180.18	5,802.5	534.4	1,130.6	-230.7	11.00	11.00	0.00
6,000.0	12.17	180.18	5,841.9	527.5	1,130.6	-224.0	11.00	11.00	0.00
6,040.0	16.57	180.18	5,880.6	517.6	1,130.5	-214.4	11.00	11.00	0.00
6,080.0	20.97	180.18	5,918.5	504.7	1,130.5	-202.0	11.00	11.00	0.00
6,120.0	25.37	180.18	5,955.3	489.0	1,130.4	-186.8	11.00	11.00	0.00
6,160.0	29.77	180.18	5,990.7	470.5	1,130.4	-168.9	11.00	11.00	0.00
6,200.0	34.17	180.18	6,024.6	449.3	1,130.3	-148.4	11.00	11.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well State Antelope U-Y-32HNB
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4583.0ft (RKB - 13')
Project:	SEC.32-T5N-R62W	MD Reference:	WELL @ 4583.0ft (RKB - 13')
Site:	Antelope P-T-32 Pad Sec.32-T5N-R62W	North Reference:	True
Well:	State Antelope U-Y-32HNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (2-27-13)		

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)	
6,240.0	38.57	180.18	6,056.8	425.6	1,130.2	-125.5	11.00	11.00	0.00	
6,280.0	42.97	180.18	6,087.1	399.5	1,130.2	-100.2	11.00	11.00	0.00	
6,320.0	47.37	180.18	6,115.3	371.1	1,130.1	-72.8	11.00	11.00	0.00	
6,360.0	51.77	180.18	6,141.3	340.7	1,130.0	-43.4	11.00	11.00	0.00	
6,400.0	56.17	180.18	6,164.8	308.4	1,129.9	-12.1	11.00	11.00	0.00	
6,440.0	60.57	180.18	6,185.8	274.3	1,129.8	20.8	11.00	11.00	0.00	
6,480.0	64.97	180.18	6,204.1	238.7	1,129.7	55.1	11.00	11.00	0.00	
6,520.0	69.37	180.18	6,219.6	201.9	1,129.5	90.8	11.00	11.00	0.00	
6,560.0	73.77	180.18	6,232.2	164.0	1,129.4	127.4	11.00	11.00	0.00	
6,600.0	78.17	180.18	6,241.9	125.2	1,129.3	164.9	11.00	11.00	0.00	
6,640.0	82.57	180.18	6,248.6	85.7	1,129.2	203.0	11.00	11.00	0.00	
6,680.0	86.97	180.18	6,252.3	45.9	1,129.0	241.5	11.00	11.00	0.00	
6,707.6	90.00	180.18	6,253.0	18.3	1,129.0	268.2	11.00	11.00	0.00	
End of Build										
6,720.0	90.00	180.18	6,253.0	5.9	1,128.9	280.2	0.00	0.00	0.00	
6,760.0	90.00	180.18	6,253.0	-34.1	1,128.8	318.8	0.00	0.00	0.00	
6,800.0	90.00	180.18	6,253.0	-74.1	1,128.7	357.5	0.00	0.00	0.00	
6,807.7	90.00	180.18	6,253.0	-81.8	1,128.6	365.0	0.00	0.00	0.00	
7"										
6,808.6	90.00	180.19	6,253.0	-82.6	1,128.6	365.8	0.98	0.00	0.98	
6,840.0	90.00	180.19	6,253.0	-114.1	1,128.5	396.2	0.00	0.00	0.00	
6,880.0	90.00	180.19	6,253.0	-154.1	1,128.4	434.8	0.00	0.00	0.00	
6,920.0	90.00	180.19	6,253.0	-194.1	1,128.3	473.5	0.00	0.00	0.00	
6,960.0	90.00	180.19	6,253.0	-234.1	1,128.1	512.2	0.00	0.00	0.00	
7,000.0	90.00	180.19	6,253.0	-274.1	1,128.0	550.8	0.00	0.00	0.00	
7,040.0	90.00	180.19	6,253.0	-314.1	1,127.9	589.5	0.00	0.00	0.00	
7,080.0	90.00	180.19	6,253.0	-354.1	1,127.8	628.1	0.00	0.00	0.00	
7,120.0	90.00	180.19	6,253.0	-394.1	1,127.6	666.8	0.00	0.00	0.00	
7,160.0	90.00	180.19	6,253.0	-434.1	1,127.5	705.5	0.00	0.00	0.00	
7,200.0	90.00	180.19	6,253.0	-474.1	1,127.4	744.1	0.00	0.00	0.00	
7,240.0	90.00	180.19	6,253.0	-514.1	1,127.2	782.8	0.00	0.00	0.00	
7,280.0	90.00	180.19	6,253.0	-554.1	1,127.1	821.5	0.00	0.00	0.00	
7,320.0	90.00	180.19	6,253.0	-594.1	1,127.0	860.1	0.00	0.00	0.00	
7,360.0	90.00	180.19	6,253.0	-634.1	1,126.8	898.8	0.00	0.00	0.00	
7,400.0	90.00	180.19	6,253.0	-674.1	1,126.7	937.4	0.00	0.00	0.00	
7,440.0	90.00	180.19	6,253.0	-714.1	1,126.6	976.1	0.00	0.00	0.00	
7,480.0	90.00	180.19	6,253.0	-754.1	1,126.4	1,014.8	0.00	0.00	0.00	
7,520.0	90.00	180.19	6,253.0	-794.1	1,126.3	1,053.4	0.00	0.00	0.00	
7,560.0	90.00	180.19	6,253.0	-834.1	1,126.2	1,092.1	0.00	0.00	0.00	
7,600.0	90.00	180.19	6,253.0	-874.1	1,126.0	1,130.8	0.00	0.00	0.00	
7,640.0	90.00	180.19	6,253.0	-914.1	1,125.9	1,169.4	0.00	0.00	0.00	
7,680.0	90.00	180.19	6,253.0	-954.1	1,125.8	1,208.1	0.00	0.00	0.00	
7,720.0	90.00	180.19	6,253.0	-994.1	1,125.6	1,246.7	0.00	0.00	0.00	
7,760.0	90.00	180.19	6,253.0	-1,034.1	1,125.5	1,285.4	0.00	0.00	0.00	
7,800.0	90.00	180.19	6,253.0	-1,074.1	1,125.4	1,324.1	0.00	0.00	0.00	
7,840.0	90.00	180.19	6,253.0	-1,114.1	1,125.3	1,362.7	0.00	0.00	0.00	
7,880.0	90.00	180.19	6,253.0	-1,154.1	1,125.1	1,401.4	0.00	0.00	0.00	
7,920.0	90.00	180.19	6,253.0	-1,194.1	1,125.0	1,440.1	0.00	0.00	0.00	
7,960.0	90.00	180.19	6,253.0	-1,234.1	1,124.9	1,478.7	0.00	0.00	0.00	
8,000.0	90.00	180.19	6,253.0	-1,274.1	1,124.7	1,517.4	0.00	0.00	0.00	
8,040.0	90.00	180.19	6,253.0	-1,314.1	1,124.6	1,556.0	0.00	0.00	0.00	
8,080.0	90.00	180.19	6,253.0	-1,354.1	1,124.5	1,594.7	0.00	0.00	0.00	
8,120.0	90.00	180.19	6,253.0	-1,394.1	1,124.3	1,633.4	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well State Antelope U-Y-32HNB
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4583.0ft (RKB - 13')
Project:	SEC.32-T5N-R62W	MD Reference:	WELL @ 4583.0ft (RKB - 13')
Site:	Antelope P-T-32 Pad Sec.32-T5N-R62W	North Reference:	True
Well:	State Antelope U-Y-32HNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (2-27-13)		

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)
8,160.0	90.00	180.19	6,253.0	-1,434.1	1,124.2	1,672.0	0.00	0.00	0.00
8,200.0	90.00	180.19	6,253.0	-1,474.1	1,124.1	1,710.7	0.00	0.00	0.00
8,240.0	90.00	180.19	6,253.0	-1,514.1	1,123.9	1,749.4	0.00	0.00	0.00
8,280.0	90.00	180.19	6,253.0	-1,554.1	1,123.8	1,788.0	0.00	0.00	0.00
8,320.0	90.00	180.19	6,253.0	-1,594.1	1,123.7	1,826.7	0.00	0.00	0.00
8,360.0	90.00	180.19	6,253.0	-1,634.1	1,123.5	1,865.3	0.00	0.00	0.00
8,400.0	90.00	180.19	6,253.0	-1,674.1	1,123.4	1,904.0	0.00	0.00	0.00
8,440.0	90.00	180.19	6,253.0	-1,714.1	1,123.3	1,942.7	0.00	0.00	0.00
8,480.0	90.00	180.19	6,253.0	-1,754.1	1,123.1	1,981.3	0.00	0.00	0.00
8,520.0	90.00	180.19	6,253.0	-1,794.1	1,123.0	2,020.0	0.00	0.00	0.00
8,560.0	90.00	180.19	6,253.0	-1,834.1	1,122.9	2,058.7	0.00	0.00	0.00
8,600.0	90.00	180.19	6,253.0	-1,874.1	1,122.8	2,097.3	0.00	0.00	0.00
8,640.0	90.00	180.19	6,253.0	-1,914.1	1,122.6	2,136.0	0.00	0.00	0.00
8,680.0	90.00	180.19	6,253.0	-1,954.1	1,122.5	2,174.6	0.00	0.00	0.00
8,720.0	90.00	180.19	6,253.0	-1,994.1	1,122.4	2,213.3	0.00	0.00	0.00
8,760.0	90.00	180.19	6,253.0	-2,034.1	1,122.2	2,252.0	0.00	0.00	0.00
8,800.0	90.00	180.19	6,253.0	-2,074.1	1,122.1	2,290.6	0.00	0.00	0.00
8,840.0	90.00	180.19	6,253.0	-2,114.1	1,122.0	2,329.3	0.00	0.00	0.00
8,880.0	90.00	180.19	6,253.0	-2,154.1	1,121.8	2,368.0	0.00	0.00	0.00
8,920.0	90.00	180.19	6,253.0	-2,194.1	1,121.7	2,406.6	0.00	0.00	0.00
8,960.0	90.00	180.19	6,253.0	-2,234.1	1,121.6	2,445.3	0.00	0.00	0.00
9,000.0	90.00	180.19	6,253.0	-2,274.1	1,121.4	2,483.9	0.00	0.00	0.00
9,040.0	90.00	180.19	6,253.0	-2,314.1	1,121.3	2,522.6	0.00	0.00	0.00
9,080.0	90.00	180.19	6,253.0	-2,354.1	1,121.2	2,561.3	0.00	0.00	0.00
9,120.0	90.00	180.19	6,253.0	-2,394.1	1,121.0	2,599.9	0.00	0.00	0.00
9,160.0	90.00	180.19	6,253.0	-2,434.1	1,120.9	2,638.6	0.00	0.00	0.00
9,200.0	90.00	180.19	6,253.0	-2,474.1	1,120.8	2,677.3	0.00	0.00	0.00
9,240.0	90.00	180.19	6,253.0	-2,514.1	1,120.6	2,715.9	0.00	0.00	0.00
9,280.0	90.00	180.19	6,253.0	-2,554.1	1,120.5	2,754.6	0.00	0.00	0.00
9,320.0	90.00	180.19	6,253.0	-2,594.1	1,120.4	2,793.2	0.00	0.00	0.00
9,360.0	90.00	180.19	6,253.0	-2,634.1	1,120.3	2,831.9	0.00	0.00	0.00
9,400.0	90.00	180.19	6,253.0	-2,674.1	1,120.1	2,870.6	0.00	0.00	0.00
9,440.0	90.00	180.19	6,253.0	-2,714.1	1,120.0	2,909.2	0.00	0.00	0.00
9,480.0	90.00	180.19	6,253.0	-2,754.1	1,119.9	2,947.9	0.00	0.00	0.00
9,520.0	90.00	180.19	6,253.0	-2,794.1	1,119.7	2,986.6	0.00	0.00	0.00
9,560.0	90.00	180.19	6,253.0	-2,834.1	1,119.6	3,025.2	0.00	0.00	0.00
9,600.0	90.00	180.19	6,253.0	-2,874.1	1,119.5	3,063.9	0.00	0.00	0.00
9,640.0	90.00	180.19	6,253.0	-2,914.1	1,119.3	3,102.5	0.00	0.00	0.00
9,680.0	90.00	180.19	6,253.0	-2,954.1	1,119.2	3,141.2	0.00	0.00	0.00
9,720.0	90.00	180.19	6,253.0	-2,994.1	1,119.1	3,179.9	0.00	0.00	0.00
9,760.0	90.00	180.19	6,253.0	-3,034.1	1,118.9	3,218.5	0.00	0.00	0.00
9,800.0	90.00	180.19	6,253.0	-3,074.1	1,118.8	3,257.2	0.00	0.00	0.00
9,840.0	90.00	180.19	6,253.0	-3,114.1	1,118.7	3,295.9	0.00	0.00	0.00
9,880.0	90.00	180.19	6,253.0	-3,154.1	1,118.5	3,334.5	0.00	0.00	0.00
9,920.0	90.00	180.19	6,253.0	-3,194.1	1,118.4	3,373.2	0.00	0.00	0.00
9,960.0	90.00	180.19	6,253.0	-3,234.1	1,118.3	3,411.8	0.00	0.00	0.00
10,000.0	90.00	180.19	6,253.0	-3,274.1	1,118.1	3,450.5	0.00	0.00	0.00
10,040.0	90.00	180.19	6,253.0	-3,314.1	1,118.0	3,489.2	0.00	0.00	0.00
10,080.0	90.00	180.19	6,253.0	-3,354.1	1,117.9	3,527.8	0.00	0.00	0.00
10,120.0	90.00	180.19	6,253.0	-3,394.1	1,117.8	3,566.5	0.00	0.00	0.00
10,160.0	90.00	180.19	6,253.0	-3,434.1	1,117.6	3,605.2	0.00	0.00	0.00
10,200.0	90.00	180.19	6,253.0	-3,474.1	1,117.5	3,643.8	0.00	0.00	0.00
10,240.0	90.00	180.19	6,253.0	-3,514.1	1,117.4	3,682.5	0.00	0.00	0.00
10,280.0	90.00	180.19	6,253.0	-3,554.1	1,117.2	3,721.1	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well State Antelope U-Y-32HNB
Company:	BONANZA CREEK ENERGY OPERATING	TVD Reference:	WELL @ 4583.0ft (RKB - 13')
Project:	SEC.32-T5N-R62W	MD Reference:	WELL @ 4583.0ft (RKB - 13')
Site:	Antelope P-T-32 Pad Sec.32-T5N-R62W	North Reference:	True
Well:	State Antelope U-Y-32HNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (2-27-13)		

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)	
10,320.0	90.00	180.19	6,253.0	-3,594.1	1,117.1	3,759.8	0.00	0.00	0.00	
10,360.0	90.00	180.19	6,253.0	-3,634.1	1,117.0	3,798.5	0.00	0.00	0.00	
10,400.0	90.00	180.19	6,253.0	-3,674.1	1,116.8	3,837.1	0.00	0.00	0.00	
10,440.0	90.00	180.19	6,253.0	-3,714.1	1,116.7	3,875.8	0.00	0.00	0.00	
10,480.0	90.00	180.19	6,253.0	-3,754.1	1,116.6	3,914.5	0.00	0.00	0.00	
10,520.0	90.00	180.19	6,253.0	-3,794.1	1,116.4	3,953.1	0.00	0.00	0.00	
10,560.0	90.00	180.19	6,253.0	-3,834.1	1,116.3	3,991.8	0.00	0.00	0.00	
10,600.0	90.00	180.19	6,253.0	-3,874.1	1,116.2	4,030.4	0.00	0.00	0.00	
10,640.0	90.00	180.19	6,253.0	-3,914.1	1,116.0	4,069.1	0.00	0.00	0.00	
10,680.0	90.00	180.19	6,253.0	-3,954.1	1,115.9	4,107.8	0.00	0.00	0.00	
10,720.0	90.00	180.19	6,253.0	-3,994.1	1,115.8	4,146.4	0.00	0.00	0.00	
10,760.0	90.00	180.19	6,253.0	-4,034.1	1,115.6	4,185.1	0.00	0.00	0.00	
10,800.0	90.00	180.19	6,253.0	-4,074.1	1,115.5	4,223.8	0.00	0.00	0.00	
10,840.0	90.00	180.19	6,253.0	-4,114.1	1,115.4	4,262.4	0.00	0.00	0.00	
10,880.0	90.00	180.19	6,253.0	-4,154.1	1,115.3	4,301.1	0.00	0.00	0.00	
10,920.0	90.00	180.19	6,253.0	-4,194.1	1,115.1	4,339.7	0.00	0.00	0.00	
10,960.0	90.00	180.19	6,253.0	-4,234.1	1,115.0	4,378.4	0.00	0.00	0.00	
10,984.7	90.00	180.19	6,253.0	-4,258.7	1,114.9	4,402.3	0.00	0.00	0.00	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
6,807.7	6,253.0	7"	7	8-3/4	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	0.0	0.0	KOP #1	
5,889.4	5,732.1	539.2	1,130.6	KOP #2	
6,707.6	6,253.0	18.3	1,129.0	End of Build	



Directional

BONANZA CREEK ENERGY OPERATING

SEC.32-T5N-R62W

Antelope P-T-32 Pad Sec.32-T5N-R62W

State Antelope U-Y-32HNB

Wellbore #1

Plan #2 (2-27-13)

Anticollision Report

27 February, 2013

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well State Antelope U-Y-32HNB
Project:	SEC.32-T5N-R62W	TVD Reference:	WELL @ 4583.0ft (RKB - 13')
Reference Site:	Antelope P-T-32 Pad Sec.32-T5N-R62W	MD Reference:	WELL @ 4583.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	State Antelope U-Y-32HNB	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 #2 (2-27-13)	Offset TVD Reference:	Offset Datum

Reference	Plan #2 (2-27-13)		
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 10,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 2/27/2013			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	10,984.7	Plan #2 (2-27-13) (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						
Antelope P-T-32 Pad Sec.32-T5N-R62W						
State Antelope P-T-32HNB - Wellbore #1 - Plan #2 (2-26	200.0	199.0	21.9	21.2	32.531	CC, ES
State Antelope P-T-32HNB - Wellbore #1 - Plan #2 (2-26	10,984.7	10,895.6	1,290.8	1,120.7	7.589	SF

Offset Design Antelope P-T-32 Pad Sec.32-T5N-R62W - State Antelope P-T-32HNB - Wellbore #1 - Plan #2 (2-26-13)												
Survey Program: 0-MWD												
Reference												
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)	Distance Between Centres (ft)	Distance 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	99.0	99.0	0.1	0.1	-180.00	-21.9	0.0	21.9	21.6	0.22	97.757
200.0	200.0	199.0	199.0	0.3	0.3	-180.00	-21.9	0.0	21.9	21.2	0.67	32.531 CC, ES
300.0	300.0	299.0	299.0	0.6	0.6	119.47	-21.9	0.0	22.7	21.6	1.12	20.273
400.0	399.8	398.8	398.8	0.8	0.8	129.64	-21.9	0.0	25.7	24.1	1.57	16.303
500.0	499.5	498.5	498.5	1.0	1.0	141.68	-21.9	0.0	31.9	29.9	2.04	15.636
600.0	598.7	597.7	597.7	1.3	1.2	151.88	-21.9	0.0	42.2	39.7	2.51	16.783
700.0	697.5	696.5	696.5	1.7	1.5	159.27	-21.9	0.0	56.5	53.5	2.98	18.939
800.0	795.6	794.6	794.6	2.0	1.7	164.35	-21.9	0.0	74.7	71.2	3.45	21.644
900.0	893.1	892.1	892.1	2.5	1.9	167.86	-21.9	0.0	96.5	92.6	3.92	24.650
1,000.0	989.7	988.7	988.7	3.0	2.1	170.34	-21.9	0.0	121.7	117.3	4.39	27.742
1,100.0	1,086.3	1,085.3	1,085.3	3.5	2.3	172.04	-21.9	0.0	147.4	142.6	4.86	30.334
1,200.0	1,182.8	1,181.8	1,181.8	4.0	2.5	173.23	-21.9	0.0	173.3	168.0	5.34	32.452
1,300.0	1,279.4	1,279.8	1,279.8	4.5	2.8	174.44	-20.8	-0.3	198.9	193.1	5.82	34.171
1,400.0	1,375.9	1,378.2	1,378.1	5.1	3.0	176.23	-16.5	-1.5	223.8	217.5	6.30	35.536
1,500.0	1,472.5	1,476.5	1,476.1	5.6	3.2	178.43	-9.0	-3.6	248.3	241.5	6.78	36.605
1,600.0	1,569.0	1,574.5	1,573.4	6.2	3.4	-179.05	1.6	-6.7	272.4	265.1	7.28	37.409
1,700.0	1,665.5	1,671.9	1,669.7	6.7	3.7	-176.31	15.4	-10.6	296.6	288.8	7.81	37.961
1,800.0	1,762.1	1,768.0	1,764.5	7.3	4.0	-173.57	31.4	-15.1	321.2	312.8	8.38	38.316
1,900.0	1,858.6	1,863.9	1,858.8	7.8	4.3	-171.19	47.5	-19.7	346.4	337.4	8.98	38.553
2,000.0	1,955.2	1,959.7	1,953.2	8.3	4.5	-169.13	63.5	-24.3	372.0	362.4	9.61	38.709
2,100.0	2,051.7	2,055.5	2,047.5	8.9	4.9	-167.33	79.6	-28.8	398.1	387.9	10.26	38.811
2,200.0	2,148.3	2,151.3	2,141.9	9.4	5.2	-165.76	95.6	-33.4	424.5	413.6	10.92	38.873
2,300.0	2,244.8	2,247.2	2,236.3	10.0	5.5	-164.37	111.7	-38.0	451.2	439.6	11.60	38.908
2,400.0	2,341.4	2,343.0	2,330.6	10.5	5.8	-163.13	127.7	-42.5	478.1	465.8	12.28	38.925

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 State Antelope U-Y-32HNB
Project:	SEC.32-T5N-R62W	TVD Reference:	WELL @ 4583.0ft (RKB - 13')
Reference Site:	Antelope P-T-32 Pad Sec.32-T5N-R62W	MD Reference:	WELL @ 4583.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	State Antelope U-Y-32HNB	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 #2 (2-27-13)	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		
2,500.0	2,437.9	2,438.8	2,425.0	11.1	6.2	-162.02	143.8	-47.1	505.1	492.1	12.98	38.930		
2,600.0	2,534.4	2,534.6	2,519.4	11.6	6.5	-161.03	159.8	-51.7	532.4	518.7	13.68	38.926		
2,700.0	2,631.0	2,630.5	2,613.7	12.2	6.9	-160.13	175.9	-56.2	559.7	545.3	14.38	38.917		
2,800.0	2,727.5	2,726.3	2,708.1	12.7	7.2	-159.31	192.0	-60.8	587.2	572.1	15.09	38.904		
2,900.0	2,824.1	2,822.1	2,802.4	13.3	7.6	-158.57	208.0	-65.4	614.8	599.0	15.81	38.890		
3,000.0	2,920.6	2,918.0	2,896.8	13.8	7.9	-157.89	224.1	-69.9	642.4	625.9	16.53	38.875		
3,100.0	3,017.2	3,013.8	2,991.2	14.4	8.3	-157.27	240.1	-74.5	670.2	652.9	17.25	38.859		
3,200.0	3,113.7	3,109.6	3,085.5	14.9	8.6	-156.69	256.2	-79.1	698.0	680.0	17.97	38.843		
3,300.0	3,210.3	3,205.4	3,179.9	15.5	9.0	-156.16	272.2	-83.6	725.9	707.2	18.69	38.828		
3,400.0	3,306.8	3,301.3	3,274.3	16.0	9.3	-155.67	288.3	-88.2	753.8	734.4	19.42	38.813		
3,500.0	3,403.3	3,397.1	3,368.6	16.6	9.7	-155.22	304.3	-92.7	781.8	761.6	20.15	38.799		
3,600.0	3,499.9	3,492.9	3,463.0	17.1	10.1	-154.79	320.4	-97.3	809.8	788.9	20.88	38.785		
3,700.0	3,596.4	3,588.8	3,557.3	17.7	10.4	-154.39	336.5	-101.9	837.8	816.2	21.61	38.772		
3,800.0	3,693.0	3,684.6	3,651.7	18.2	10.8	-154.02	352.5	-106.4	865.9	843.6	22.34	38.760		
3,900.0	3,789.5	3,780.4	3,746.1	18.8	11.2	-153.68	368.6	-111.0	894.1	871.0	23.07	38.748		
4,000.0	3,886.1	3,876.2	3,840.4	19.3	11.5	-153.35	384.6	-115.6	922.2	898.4	23.81	38.737		
4,100.0	3,982.6	3,972.1	3,934.8	19.9	11.9	-153.04	400.7	-120.1	950.4	925.8	24.54	38.727		
4,200.0	4,079.2	4,067.9	4,029.2	20.4	12.3	-152.75	416.7	-124.7	978.6	953.3	25.28	38.717		
4,300.0	4,175.7	4,163.7	4,123.5	21.0	12.6	-152.48	432.8	-129.3	1,006.8	980.8	26.01	38.708		
4,400.0	4,272.2	4,259.5	4,217.9	21.5	13.0	-152.22	448.8	-133.8	1,035.0	1,008.3	26.75	38.699		
4,500.0	4,368.8	4,355.4	4,312.2	22.1	13.4	-151.98	464.9	-138.4	1,063.3	1,035.8	27.48	38.691		
4,600.0	4,465.3	4,451.2	4,406.6	22.6	13.7	-151.74	481.0	-143.0	1,091.6	1,063.4	28.22	38.683		
4,700.0	4,561.9	4,547.0	4,501.0	23.2	14.1	-151.52	497.0	-147.5	1,119.9	1,090.9	28.95	38.676		
4,800.0	4,658.4	4,656.4	4,609.0	23.7	14.4	-151.39	513.4	-152.2	1,147.6	1,118.0	29.65	38.707		
4,900.0	4,755.0	4,766.6	4,718.4	24.3	14.7	-151.46	525.8	-155.7	1,174.2	1,143.9	30.26	38.801		
5,000.0	4,851.5	4,877.2	4,828.7	24.8	15.0	-151.73	534.2	-158.1	1,199.7	1,168.9	30.81	38.938		
5,100.0	4,948.5	4,988.4	4,939.8	25.3	15.1	-152.36	538.5	-159.3	1,222.6	1,191.3	31.33	39.026		
5,200.0	5,046.2	5,093.8	5,045.2	25.7	15.3	-152.99	539.1	-159.5	1,241.5	1,209.8	31.73	39.123		
5,300.0	5,144.7	5,192.3	5,143.7	26.0	15.4	-153.50	539.1	-159.5	1,257.3	1,225.2	32.12	39.149		
5,400.0	5,243.6	5,291.3	5,242.6	26.3	15.6	-153.90	539.1	-159.5	1,270.1	1,237.6	32.47	39.116		
5,500.0	5,343.1	5,390.7	5,342.1	26.5	15.8	-154.19	539.1	-159.5	1,279.7	1,246.9	32.79	39.027		
5,600.0	5,442.8	5,490.4	5,441.8	26.7	15.9	-154.39	539.1	-159.5	1,286.2	1,253.1	33.08	38.881		
5,700.0	5,542.7	5,590.3	5,541.7	26.8	16.1	-154.49	539.1	-159.5	1,289.6	1,256.2	33.34	38.680		
5,800.0	5,642.7	5,690.3	5,641.7	26.9	16.3	-90.00	539.1	-159.5	1,290.1	1,256.5	33.58	38.422		
5,900.0	5,742.7	5,790.3	5,741.7	27.0	16.4	89.82	539.1	-159.5	1,290.1	1,256.2	33.91	38.040		
5,974.1	5,816.5	5,864.1	5,815.4	27.0	16.5	89.98	536.0	-159.5	1,290.1	1,256.1	34.04	37.899		
6,000.0	5,841.9	5,890.0	5,841.0	27.0	16.5	90.04	532.5	-159.5	1,290.1	1,256.0	34.06	37.876		
6,100.0	5,937.0	5,990.5	5,938.1	26.9	16.4	90.27	507.1	-159.6	1,290.1	1,256.2	33.87	38.090		
6,200.0	6,024.6	6,092.0	6,029.3	26.7	16.2	90.49	463.0	-159.8	1,290.2	1,256.8	33.40	38.628		
6,300.0	6,101.5	6,194.5	6,111.0	26.5	15.8	90.70	401.4	-160.0	1,290.2	1,257.5	32.75	39.394		
6,400.0	6,164.8	6,297.9	6,179.7	26.2	15.5	90.88	324.2	-160.2	1,290.3	1,258.2	32.07	40.235		
6,500.0	6,212.2	6,402.1	6,232.1	26.0	15.2	91.02	234.4	-160.5	1,290.4	1,258.9	31.52	40.938		
6,600.0	6,241.9	6,507.0	6,265.7	25.7	15.0	91.13	135.2	-160.9	1,290.4	1,259.2	31.27	41.273		
6,700.0	6,252.9	6,612.3	6,278.8	25.6	15.0	91.19	30.9	-161.2	1,290.5	1,259.1	31.41	41.085		
6,800.0	6,253.0	6,712.9	6,279.0	25.5	15.3	91.20	-69.7	-161.6	1,290.5	1,258.5	32.00	40.329		
6,900.0	6,253.0	6,812.9	6,279.0	25.6	15.8	91.20	-169.7	-161.9	1,290.5	1,257.6	32.93	39.185		
7,000.0	6,253.0	6,912.9	6,279.0	25.8	16.6	91.20	-269.7	-162.2	1,290.5	1,256.2	34.34	37.577		
7,100.0	6,253.0	7,012.9	6,279.0	26.2	17.5	91.20	-369.7	-162.6	1,290.6	1,254.4	36.11	35.741		
7,200.0	6,253.0	7,112.9	6,279.0	26.7	18.6	91.20	-469.7	-162.9	1,290.6	1,252.4	38.18	33.804		
7,300.0	6,253.0	7,212.9	6,279.0	27.3	19.8	91.20	-569.7	-163.2	1,290.6	1,250.1	40.51	31.861		
7,400.0	6,253.0	7,312.9	6,279.0	28.1	21.2	91.20	-669.7	-163.6	1,290.6	1,247.5	43.05	29.977		
7,500.0	6,253.0	7,412.9	6,279.0	29.1	22.6	91.20	-769.7	-163.9	1,290.6	1,244.8	45.78	28.193		

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

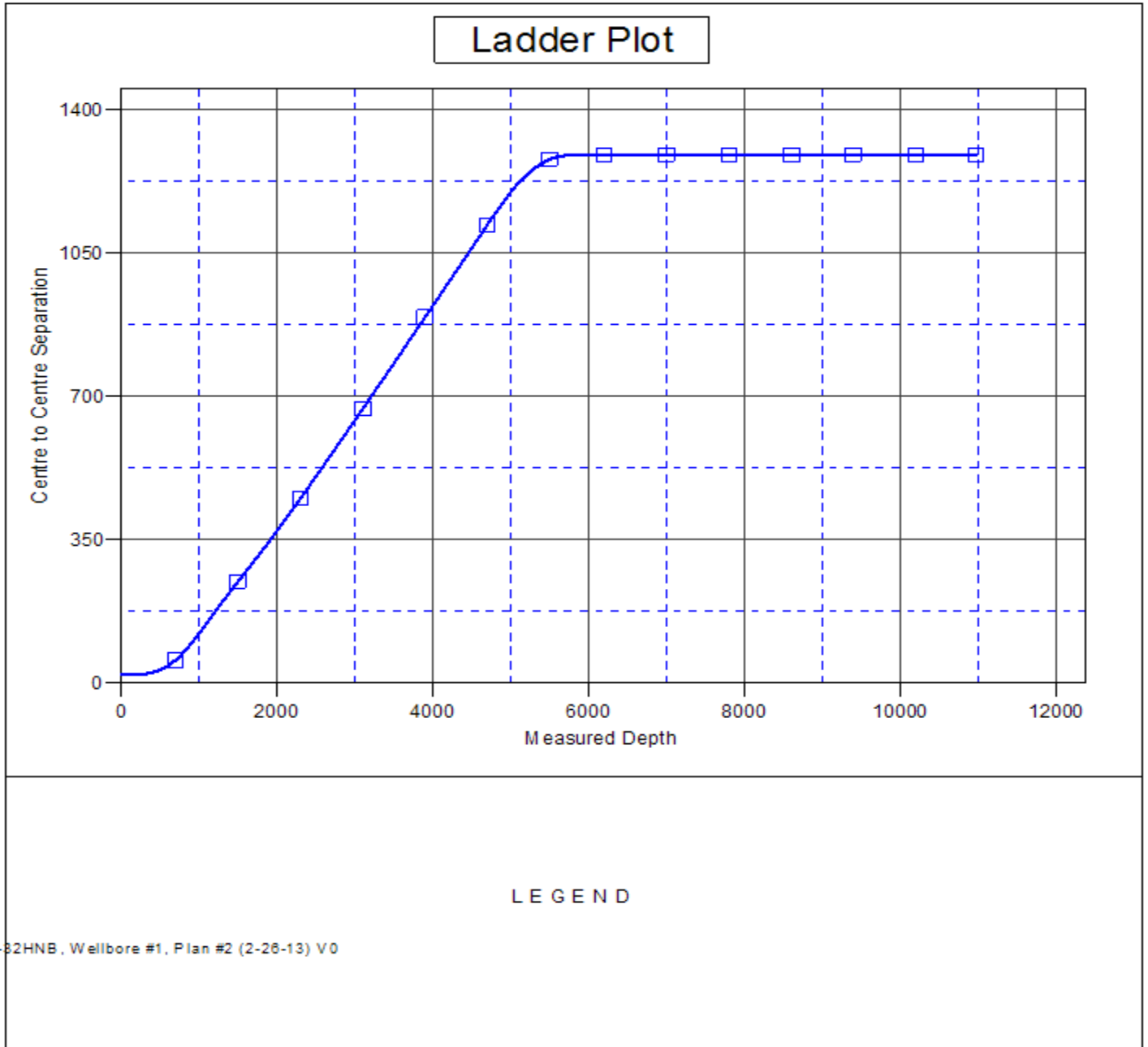
Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well State Antelope U-Y-32HNB
Project:	SEC.32-T5N-R62W	TVD Reference:	WELL @ 4583.0ft (RKB - 13')
Reference Site:	Antelope P-T-32 Pad Sec.32-T5N-R62W	MD Reference:	WELL @ 4583.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	State Antelope U-Y-32HNB	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 #2 (2-27-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Antelope P-T-32 Pad Sec.32-T5N-R62W - State Antelope P-T-32HNB - Wellbore #1 - Plan #2 (2-26-13)												Offset Well Error:	0.0 ft
Survey Program: 0-MWD													
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
7,600.0	6,253.0	7,512.9	6,279.0	30.1	24.0	91.20	-869.7	-164.3	1,290.6	1,241.9	48.65	26.526	
7,700.0	6,253.0	7,612.9	6,279.0	31.3	25.6	91.20	-969.7	-164.6	1,290.6	1,239.0	51.65	24.985	
7,800.0	6,253.0	7,712.9	6,279.0	32.5	27.2	91.20	-1,069.7	-164.9	1,290.6	1,235.9	54.76	23.568	
7,900.0	6,253.0	7,812.9	6,279.0	33.8	28.8	91.20	-1,169.7	-165.3	1,290.6	1,232.7	57.95	22.269	
8,000.0	6,253.0	7,912.9	6,279.0	35.2	30.5	91.20	-1,269.7	-165.6	1,290.6	1,229.4	61.22	21.081	
8,100.0	6,253.0	8,012.9	6,279.0	36.6	32.1	91.20	-1,369.7	-166.0	1,290.6	1,226.1	64.55	19.993	
8,200.0	6,253.0	8,112.9	6,279.0	38.1	33.9	91.20	-1,469.7	-166.3	1,290.7	1,222.7	67.94	18.997	
8,300.0	6,253.0	8,212.9	6,279.0	39.6	35.6	91.20	-1,569.7	-166.6	1,290.7	1,219.3	71.37	18.084	
8,400.0	6,253.0	8,312.9	6,279.0	41.2	37.3	91.20	-1,669.7	-167.0	1,290.7	1,215.8	74.84	17.246	
8,500.0	6,253.0	8,412.9	6,279.0	42.8	39.1	91.20	-1,769.7	-167.3	1,290.7	1,212.3	78.34	16.475	
8,600.0	6,253.0	8,512.9	6,279.0	44.4	40.9	91.20	-1,869.7	-167.6	1,290.7	1,208.8	81.88	15.763	
8,700.0	6,253.0	8,612.9	6,279.0	46.0	42.7	91.20	-1,969.7	-168.0	1,290.7	1,205.3	85.44	15.107	
8,800.0	6,253.0	8,712.9	6,279.0	47.7	44.5	91.20	-2,069.7	-168.3	1,290.7	1,201.7	89.02	14.499	
8,900.0	6,253.0	8,812.9	6,279.0	49.4	46.3	91.20	-2,169.7	-168.7	1,290.7	1,198.1	92.63	13.934	
9,000.0	6,253.0	8,912.9	6,279.0	51.1	48.1	91.20	-2,269.7	-169.0	1,290.7	1,194.5	96.25	13.410	
9,100.0	6,253.0	9,012.9	6,279.0	52.8	49.9	91.20	-2,369.7	-169.3	1,290.7	1,190.8	99.89	12.922	
9,200.0	6,253.0	9,112.9	6,279.0	54.5	51.8	91.20	-2,469.7	-169.7	1,290.7	1,187.2	103.54	12.466	
9,300.0	6,253.0	9,212.9	6,279.0	56.2	53.6	91.20	-2,569.7	-170.0	1,290.8	1,183.5	107.21	12.040	
9,400.0	6,253.0	9,312.9	6,279.0	58.0	55.5	91.20	-2,669.7	-170.4	1,290.8	1,179.9	110.89	11.640	
9,500.0	6,253.0	9,412.9	6,279.0	59.8	57.3	91.20	-2,769.7	-170.7	1,290.8	1,176.2	114.58	11.266	
9,600.0	6,253.0	9,512.9	6,279.0	61.5	59.2	91.20	-2,869.7	-171.0	1,290.8	1,172.5	118.27	10.913	
9,700.0	6,253.0	9,612.9	6,279.0	63.3	61.0	91.20	-2,969.7	-171.4	1,290.8	1,168.8	121.98	10.582	
9,800.0	6,253.0	9,712.9	6,279.0	65.1	62.9	91.20	-3,069.7	-171.7	1,290.8	1,165.1	125.70	10.269	
9,900.0	6,253.0	9,812.9	6,279.0	66.9	64.8	91.20	-3,169.7	-172.0	1,290.8	1,161.4	129.42	9.974	
10,000.0	6,253.0	9,912.9	6,279.0	68.7	66.6	91.20	-3,269.7	-172.4	1,290.8	1,157.7	133.15	9.695	
10,100.0	6,253.0	10,012.9	6,279.0	70.5	68.5	91.20	-3,369.7	-172.7	1,290.8	1,153.9	136.88	9.430	
10,200.0	6,253.0	10,112.9	6,279.0	72.3	70.4	91.20	-3,469.7	-173.1	1,290.8	1,150.2	140.62	9.179	
10,300.0	6,253.0	10,212.9	6,279.0	74.1	72.3	91.20	-3,569.7	-173.4	1,290.8	1,146.5	144.37	8.941	
10,400.0	6,253.0	10,312.9	6,279.0	76.0	74.1	91.20	-3,669.7	-173.7	1,290.9	1,142.7	148.12	8.715	
10,500.0	6,253.0	10,412.9	6,279.0	77.8	76.0	91.20	-3,769.7	-174.1	1,290.9	1,139.0	151.87	8.500	
10,600.0	6,253.0	10,512.9	6,279.0	79.6	77.9	91.20	-3,869.7	-174.4	1,290.9	1,135.2	155.63	8.294	
10,700.0	6,253.0	10,612.9	6,279.0	81.5	79.8	91.20	-3,969.7	-174.7	1,290.9	1,131.5	159.40	8.099	
10,800.0	6,253.0	10,712.9	6,279.0	83.3	81.7	91.20	-4,069.7	-175.1	1,290.9	1,127.7	163.16	7.912	
10,900.0	6,253.0	10,814.3	6,279.0	85.1	83.6	91.20	-4,171.1	-175.4	1,290.9	1,123.9	166.96	7.732	
10,968.9	6,253.0	10,883.2	6,279.0	86.4	84.9	91.20	-4,239.9	-175.6	1,290.8	1,121.3	169.56	7.613	
10,984.7	6,253.0	10,895.6	6,279.0	86.7	85.1	91.20	-4,252.4	-175.6	1,290.8	1,120.7	170.09	7.589 SF	

Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well State Antelope U-Y-32HNB
Project:	SEC.32-T5N-R62W	TVD Reference:	WELL @ 4583.0ft (RKB - 13')
Reference Site:	Antelope P-T-32 Pad Sec.32-T5N-R62W	MD Reference:	WELL @ 4583.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	State Antelope U-Y-32HNB	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 #2 (2-27-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4583.0ft (RKB - 13')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: State Antelope U-Y-32HNB
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.75°



Company:	BONANZA CREEK ENERGY OPERATING	Local Co-ordinate Reference:	Well State Antelope U-Y-32HNB
Project:	SEC.32-T5N-R62W	TVD Reference:	WELL @ 4583.0ft (RKB - 13')
Reference Site:	Antelope P-T-32 Pad Sec.32-T5N-R62W	MD Reference:	WELL @ 4583.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	State Antelope U-Y-32HNB	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 #2 (2-27-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4583.0ft (RKB - 13')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: State Antelope U-Y-32HNB
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.75°

