

# ENSIGN

## Directional

### Well Name: Wetco Farms I-4

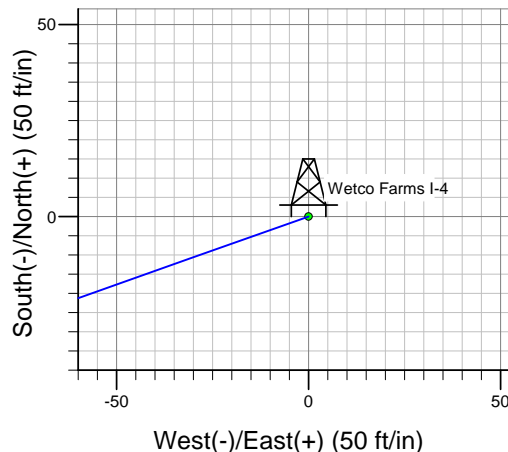
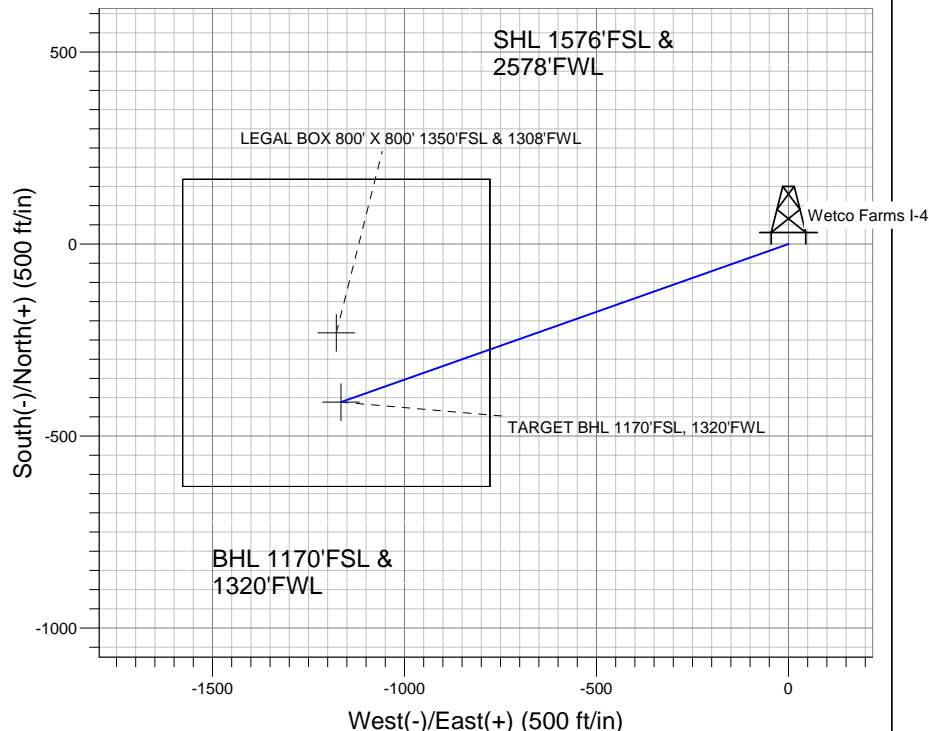
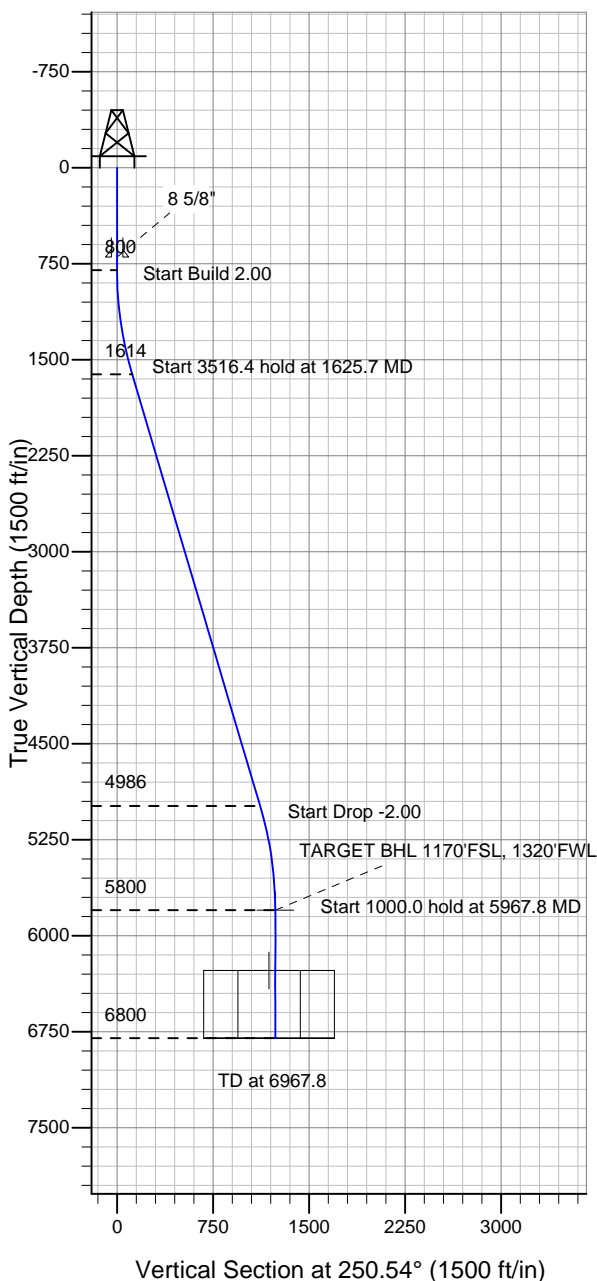
Surface Location: Wetco Farms I-4 Pad Sec.4-T4N-R63W  
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4606.0

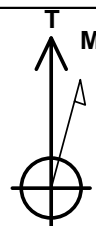
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1367780.41	3294577.40	40° 20' 17.304 N	104° 26' 35.700 W	

Original Well Elev WELL @ 4619.0ft (Original Well Elev)

## BONANZA CREEK ENERGY OPERATING



Wetco Farms I-4 Pad Sec.4-T4N-R63W  
Wetco Farms I-4  
Plan #1 (1-28-11)  
10:54, January 31 2011



Azimuths to True North  
Magnetic North: 8.74°

Magnetic Field  
Strength: 53175.3nT  
Dip Angle: 67.07°  
Date: 1/28/2011  
Model: IGRF2010

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1170'FSL, 1320'FWL	5800.0	-411.6	-1165.3	40° 20' 13.236 N	104° 26' 50.748 W	Point
LEGAL BOX 800' X 800' 1350'FSL & 1308'FWL	6271.0	-231.6	-1177.3	40° 20' 15.015 N	104° 26' 50.903 W	Rectangle (Sides: L800.0 W800.0)

### 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	800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.0	
3	1625.7	16.51	250.54	1614.3	-39.4	-111.4	2.00	250.54	118.2	
4	5142.1	16.51	250.54	4985.7	-372.3	-1053.9	0.00	0.00	1117.7	
5	5967.8	0.00	0.00	5800.0	-411.6	-1165.3	2.00	180.00	1235.9	TARGET BHL 1170'FSL, 1320'FWL
6	6967.8	0.00	0.00	6800.0	-411.6	-1165.3	0.00	0.00	1235.9	



**Directional**

# **BONANZA CREEK ENERGY OPERATING**

**SEC.4-T4N-R63W**

**Wetco Farms I-4 Pad Sec.4-T4N-R63W**

**Wetco Farms I-4**

**Wellbore #1**

**Plan: Plan #1 (1-28-11)**

## **Standard Planning Report**

**31 January, 2011**

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Wetco Farms I-4
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	WELL @ 4619.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T4N-R63W	<b>MD Reference:</b>	WELL @ 4619.0ft (Original Well Elev)
<b>Site:</b>	Wetco Farms I-4 Pad Sec.4-T4N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	Wetco Farms I-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (1-28-11)		

<b>Project</b>	SEC.4-T4N-R63W, Weld County, Colorado		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site		Wetco Farms I-4 Pad Sec.4-T4N-R63W			
Site Position:		Northing:	1,367,780.41 ft	Latitude:	40° 20' 17.304 N
From:	Lat/Long	Easting:	3,294,577.40ft	Longitude:	104° 26' 35.700 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.68 °

Well	Wetco Farms I-4					
Well Position	+N-S	0.0 ft	Northing:	1,367,780.41 ft	Latitude:	40° 20' 17.304 N
	+E-W	0.0 ft	Easting:	3,294,577.40 ft	Longitude:	104° 26' 35.700 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,606.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	1/28/2011	8.74	67.07	53,175

<b>Design</b>	Plan #1 (1-28-11)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	250.54

<b>Plan Sections</b>										
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	
800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,625.7	16.51	250.54	1,614.3	-39.4	-111.4	2.00	2.00	0.00	250.54	
5,142.1	16.51	250.54	4,985.7	-372.3	-1,053.9	0.00	0.00	0.00	0.00	
5,967.8	0.00	0.00	5,800.0	-411.6	-1,165.3	2.00	-2.00	0.00	180.00	TARGET BHL 117C
6,967.8	0.00	0.00	6,800.0	-411.6	-1,165.3	0.00	0.00	0.00	0.00	

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Wetco Farms I-4
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	WELL @ 4619.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T4N-R63W	<b>MD Reference:</b>	WELL @ 4619.0ft (Original Well Elev)
<b>Site:</b>	Wetco Farms I-4 Pad Sec.4-T4N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	Wetco Farms I-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (1-28-11)		

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
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	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
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	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
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	0.0	0.0	0.0	0.00	0.00	0.00
697.0	0.00	0.00	697.0	0.0	0.0	0.0	0.00	0.00	0.00
8 5/8"									
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
840.0	0.80	250.54	840.0	-0.1	-0.3	0.3	2.00	2.00	0.00
880.0	1.60	250.54	880.0	-0.4	-1.1	1.1	2.00	2.00	0.00
920.0	2.40	250.54	920.0	-0.8	-2.4	2.5	2.00	2.00	0.00
960.0	3.20	250.54	959.9	-1.5	-4.2	4.5	2.00	2.00	0.00
1,000.0	4.00	250.54	999.8	-2.3	-6.6	7.0	2.00	2.00	0.00
1,040.0	4.80	250.54	1,039.7	-3.3	-9.5	10.0	2.00	2.00	0.00
1,080.0	5.60	250.54	1,079.6	-4.6	-12.9	13.7	2.00	2.00	0.00
1,120.0	6.40	250.54	1,119.3	-5.9	-16.8	17.9	2.00	2.00	0.00
1,160.0	7.20	250.54	1,159.1	-7.5	-21.3	22.6	2.00	2.00	0.00
1,200.0	8.00	250.54	1,198.7	-9.3	-26.3	27.9	2.00	2.00	0.00
1,240.0	8.80	250.54	1,238.3	-11.2	-31.8	33.7	2.00	2.00	0.00
1,280.0	9.60	250.54	1,277.8	-13.4	-37.8	40.1	2.00	2.00	0.00
1,320.0	10.40	250.54	1,317.1	-15.7	-44.4	47.1	2.00	2.00	0.00
1,360.0	11.20	250.54	1,356.4	-18.2	-51.4	54.6	2.00	2.00	0.00
1,400.0	12.00	250.54	1,395.6	-20.9	-59.0	62.6	2.00	2.00	0.00
1,440.0	12.80	250.54	1,434.7	-23.7	-67.1	71.2	2.00	2.00	0.00
1,480.0	13.60	250.54	1,473.6	-26.8	-75.7	80.3	2.00	2.00	0.00
1,520.0	14.40	250.54	1,512.4	-30.0	-84.9	90.0	2.00	2.00	0.00
1,560.0	15.20	250.54	1,551.1	-33.4	-94.5	100.2	2.00	2.00	0.00
1,600.0	16.00	250.54	1,589.6	-37.0	-104.6	111.0	2.00	2.00	0.00
1,625.7	16.51	250.54	1,614.3	-39.4	-111.4	118.2	2.00	2.00	0.00
1,640.0	16.51	250.54	1,628.0	-40.7	-115.3	122.2	0.00	0.00	0.00
1,680.0	16.51	250.54	1,666.4	-44.5	-126.0	133.6	0.00	0.00	0.00
1,720.0	16.51	250.54	1,704.7	-48.3	-136.7	145.0	0.00	0.00	0.00
1,760.0	16.51	250.54	1,743.1	-52.1	-147.4	156.3	0.00	0.00	0.00
1,800.0	16.51	250.54	1,781.4	-55.9	-158.1	167.7	0.00	0.00	0.00
1,840.0	16.51	250.54	1,819.8	-59.6	-168.9	179.1	0.00	0.00	0.00
1,880.0	16.51	250.54	1,858.1	-63.4	-179.6	190.5	0.00	0.00	0.00
1,920.0	16.51	250.54	1,896.5	-67.2	-190.3	201.8	0.00	0.00	0.00
1,960.0	16.51	250.54	1,934.8	-71.0	-201.0	213.2	0.00	0.00	0.00
2,000.0	16.51	250.54	1,973.2	-74.8	-211.7	224.6	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Wetco Farms I-4
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	WELL @ 4619.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T4N-R63W	<b>MD Reference:</b>	WELL @ 4619.0ft (Original Well Elev)
<b>Site:</b>	Wetco Farms I-4 Pad Sec.4-T4N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	Wetco Farms I-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (1-28-11)		

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)
2,040.0	16.51	250.54	2,011.5	-78.6	-222.5	235.9	0.00	0.00	0.00
2,080.0	16.51	250.54	2,049.9	-82.4	-233.2	247.3	0.00	0.00	0.00
2,120.0	16.51	250.54	2,088.2	-86.2	-243.9	258.7	0.00	0.00	0.00
2,160.0	16.51	250.54	2,126.6	-89.9	-254.6	270.0	0.00	0.00	0.00
2,200.0	16.51	250.54	2,164.9	-93.7	-265.3	281.4	0.00	0.00	0.00
2,240.0	16.51	250.54	2,203.3	-97.5	-276.1	292.8	0.00	0.00	0.00
2,280.0	16.51	250.54	2,241.6	-101.3	-286.8	304.2	0.00	0.00	0.00
2,320.0	16.51	250.54	2,280.0	-105.1	-297.5	315.5	0.00	0.00	0.00
2,360.0	16.51	250.54	2,318.3	-108.9	-308.2	326.9	0.00	0.00	0.00
2,400.0	16.51	250.54	2,356.7	-112.7	-318.9	338.3	0.00	0.00	0.00
2,440.0	16.51	250.54	2,395.0	-116.5	-329.7	349.6	0.00	0.00	0.00
2,480.0	16.51	250.54	2,433.4	-120.2	-340.4	361.0	0.00	0.00	0.00
2,520.0	16.51	250.54	2,471.7	-124.0	-351.1	372.4	0.00	0.00	0.00
2,560.0	16.51	250.54	2,510.1	-127.8	-361.8	383.7	0.00	0.00	0.00
2,600.0	16.51	250.54	2,548.4	-131.6	-372.6	395.1	0.00	0.00	0.00
2,640.0	16.51	250.54	2,586.8	-135.4	-383.3	406.5	0.00	0.00	0.00
2,680.0	16.51	250.54	2,625.1	-139.2	-394.0	417.9	0.00	0.00	0.00
2,720.0	16.51	250.54	2,663.5	-143.0	-404.7	429.2	0.00	0.00	0.00
2,760.0	16.51	250.54	2,701.8	-146.7	-415.4	440.6	0.00	0.00	0.00
2,800.0	16.51	250.54	2,740.2	-150.5	-426.2	452.0	0.00	0.00	0.00
2,840.0	16.51	250.54	2,778.5	-154.3	-436.9	463.3	0.00	0.00	0.00
2,880.0	16.51	250.54	2,816.9	-158.1	-447.6	474.7	0.00	0.00	0.00
2,920.0	16.51	250.54	2,855.2	-161.9	-458.3	486.1	0.00	0.00	0.00
2,960.0	16.51	250.54	2,893.6	-165.7	-469.0	497.4	0.00	0.00	0.00
3,000.0	16.51	250.54	2,931.9	-169.5	-479.8	508.8	0.00	0.00	0.00
3,040.0	16.51	250.54	2,970.3	-173.3	-490.5	520.2	0.00	0.00	0.00
3,080.0	16.51	250.54	3,008.6	-177.0	-501.2	531.6	0.00	0.00	0.00
3,120.0	16.51	250.54	3,047.0	-180.8	-511.9	542.9	0.00	0.00	0.00
3,160.0	16.51	250.54	3,085.3	-184.6	-522.6	554.3	0.00	0.00	0.00
3,200.0	16.51	250.54	3,123.7	-188.4	-533.4	565.7	0.00	0.00	0.00
3,240.0	16.51	250.54	3,162.0	-192.2	-544.1	577.0	0.00	0.00	0.00
3,280.0	16.51	250.54	3,200.4	-196.0	-554.8	588.4	0.00	0.00	0.00
3,320.0	16.51	250.54	3,238.7	-199.8	-565.5	599.8	0.00	0.00	0.00
3,360.0	16.51	250.54	3,277.1	-203.6	-576.2	611.1	0.00	0.00	0.00
3,400.0	16.51	250.54	3,315.4	-207.3	-587.0	622.5	0.00	0.00	0.00
3,440.0	16.51	250.54	3,353.8	-211.1	-597.7	633.9	0.00	0.00	0.00
3,480.0	16.51	250.54	3,392.1	-214.9	-608.4	645.2	0.00	0.00	0.00
3,520.0	16.51	250.54	3,430.5	-218.7	-619.1	656.6	0.00	0.00	0.00
3,560.0	16.51	250.54	3,468.8	-222.5	-629.8	668.0	0.00	0.00	0.00
3,600.0	16.51	250.54	3,507.2	-226.3	-640.6	679.4	0.00	0.00	0.00
3,640.0	16.51	250.54	3,545.5	-230.1	-651.3	690.7	0.00	0.00	0.00
3,680.0	16.51	250.54	3,583.9	-233.8	-662.0	702.1	0.00	0.00	0.00
3,720.0	16.51	250.54	3,622.2	-237.6	-672.7	713.5	0.00	0.00	0.00
3,760.0	16.51	250.54	3,660.6	-241.4	-683.5	724.8	0.00	0.00	0.00
3,800.0	16.51	250.54	3,698.9	-245.2	-694.2	736.2	0.00	0.00	0.00
3,840.0	16.51	250.54	3,737.3	-249.0	-704.9	747.6	0.00	0.00	0.00
3,880.0	16.51	250.54	3,775.6	-252.8	-715.6	758.9	0.00	0.00	0.00
3,920.0	16.51	250.54	3,814.0	-256.6	-726.3	770.3	0.00	0.00	0.00
3,960.0	16.51	250.54	3,852.3	-260.4	-737.1	781.7	0.00	0.00	0.00
4,000.0	16.51	250.54	3,890.7	-264.1	-747.8	793.1	0.00	0.00	0.00
4,040.0	16.51	250.54	3,929.0	-267.9	-758.5	804.4	0.00	0.00	0.00
4,080.0	16.51	250.54	3,967.4	-271.7	-769.2	815.8	0.00	0.00	0.00
4,120.0	16.51	250.54	4,005.7	-275.5	-779.9	827.2	0.00	0.00	0.00
4,160.0	16.51	250.54	4,044.1	-279.3	-790.7	838.5	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Wetco Farms I-4
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	WELL @ 4619.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T4N-R63W	<b>MD Reference:</b>	WELL @ 4619.0ft (Original Well Elev)
<b>Site:</b>	Wetco Farms I-4 Pad Sec.4-T4N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	Wetco Farms I-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (1-28-11)		

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)
4,200.0	16.51	250.54	4,082.4	-283.1	-801.4	849.9	0.00	0.00	0.00
4,240.0	16.51	250.54	4,120.8	-286.9	-812.1	861.3	0.00	0.00	0.00
4,280.0	16.51	250.54	4,159.1	-290.7	-822.8	872.6	0.00	0.00	0.00
4,320.0	16.51	250.54	4,197.5	-294.4	-833.5	884.0	0.00	0.00	0.00
4,360.0	16.51	250.54	4,235.8	-298.2	-844.3	895.4	0.00	0.00	0.00
4,400.0	16.51	250.54	4,274.2	-302.0	-855.0	906.8	0.00	0.00	0.00
4,440.0	16.51	250.54	4,312.5	-305.8	-865.7	918.1	0.00	0.00	0.00
4,480.0	16.51	250.54	4,350.9	-309.6	-876.4	929.5	0.00	0.00	0.00
4,520.0	16.51	250.54	4,389.2	-313.4	-887.1	940.9	0.00	0.00	0.00
4,560.0	16.51	250.54	4,427.6	-317.2	-897.9	952.2	0.00	0.00	0.00
4,600.0	16.51	250.54	4,465.9	-320.9	-908.6	963.6	0.00	0.00	0.00
4,640.0	16.51	250.54	4,504.3	-324.7	-919.3	975.0	0.00	0.00	0.00
4,680.0	16.51	250.54	4,542.6	-328.5	-930.0	986.3	0.00	0.00	0.00
4,720.0	16.51	250.54	4,581.0	-332.3	-940.7	997.7	0.00	0.00	0.00
4,760.0	16.51	250.54	4,619.3	-336.1	-951.5	1,009.1	0.00	0.00	0.00
4,800.0	16.51	250.54	4,657.7	-339.9	-962.2	1,020.5	0.00	0.00	0.00
4,840.0	16.51	250.54	4,696.0	-343.7	-972.9	1,031.8	0.00	0.00	0.00
4,880.0	16.51	250.54	4,734.4	-347.5	-983.6	1,043.2	0.00	0.00	0.00
4,920.0	16.51	250.54	4,772.7	-351.2	-994.4	1,054.6	0.00	0.00	0.00
4,960.0	16.51	250.54	4,811.1	-355.0	-1,005.1	1,065.9	0.00	0.00	0.00
5,000.0	16.51	250.54	4,849.4	-358.8	-1,015.8	1,077.3	0.00	0.00	0.00
5,040.0	16.51	250.54	4,887.8	-362.6	-1,026.5	1,088.7	0.00	0.00	0.00
5,080.0	16.51	250.54	4,926.1	-366.4	-1,037.2	1,100.0	0.00	0.00	0.00
5,120.0	16.51	250.54	4,964.5	-370.2	-1,048.0	1,111.4	0.00	0.00	0.00
5,142.1	16.51	250.54	4,985.7	-372.3	-1,053.9	1,117.7	0.00	0.00	0.00
5,160.0	16.16	250.54	5,002.8	-373.9	-1,058.6	1,122.7	2.00	-2.00	0.00
5,200.0	15.36	250.54	5,041.3	-377.6	-1,068.9	1,133.6	2.00	-2.00	0.00
5,240.0	14.56	250.54	5,080.0	-381.0	-1,078.6	1,143.9	2.00	-2.00	0.00
5,280.0	13.76	250.54	5,118.8	-384.3	-1,087.8	1,153.7	2.00	-2.00	0.00
5,320.0	12.96	250.54	5,157.7	-387.3	-1,096.5	1,162.9	2.00	-2.00	0.00
5,360.0	12.16	250.54	5,196.7	-390.2	-1,104.7	1,171.6	2.00	-2.00	0.00
5,400.0	11.36	250.54	5,235.9	-393.0	-1,112.4	1,179.8	2.00	-2.00	0.00
5,440.0	10.56	250.54	5,275.2	-395.5	-1,119.6	1,187.4	2.00	-2.00	0.00
5,480.0	9.76	250.54	5,314.5	-397.8	-1,126.2	1,194.4	2.00	-2.00	0.00
5,520.0	8.96	250.54	5,354.0	-400.0	-1,132.4	1,200.9	2.00	-2.00	0.00
5,560.0	8.16	250.54	5,393.6	-402.0	-1,138.0	1,206.9	2.00	-2.00	0.00
5,600.0	7.36	250.54	5,433.2	-403.8	-1,143.1	1,212.3	2.00	-2.00	0.00
5,640.0	6.56	250.54	5,472.9	-405.4	-1,147.6	1,217.1	2.00	-2.00	0.00
5,680.0	5.76	250.54	5,512.7	-406.8	-1,151.7	1,221.4	2.00	-2.00	0.00
5,720.0	4.96	250.54	5,552.5	-408.1	-1,155.2	1,225.2	2.00	-2.00	0.00
5,760.0	4.16	250.54	5,592.4	-409.1	-1,158.2	1,228.3	2.00	-2.00	0.00
5,800.0	3.36	250.54	5,632.3	-410.0	-1,160.7	1,231.0	2.00	-2.00	0.00
5,840.0	2.56	250.54	5,672.2	-410.7	-1,162.6	1,233.0	2.00	-2.00	0.00
5,880.0	1.76	250.54	5,712.2	-411.2	-1,164.0	1,234.5	2.00	-2.00	0.00
5,920.0	0.96	250.54	5,752.2	-411.5	-1,164.9	1,235.5	2.00	-2.00	0.00
5,960.0	0.16	250.54	5,792.2	-411.6	-1,165.3	1,235.9	2.00	-2.00	0.00
5,967.8	0.00	0.00	5,800.0	-411.6	-1,165.3	1,235.9	2.00	-2.00	0.00
TARGET BHL 1170'FSL, 1320'FWL									
6,000.0	0.00	0.00	5,832.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,040.0	0.00	0.00	5,872.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,080.0	0.00	0.00	5,912.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,120.0	0.00	0.00	5,952.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,160.0	0.00	0.00	5,992.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,200.0	0.00	0.00	6,032.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Wetco Farms I-4
<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>TVD Reference:</b>	WELL @ 4619.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T4N-R63W	<b>MD Reference:</b>	WELL @ 4619.0ft (Original Well Elev)
<b>Site:</b>	Wetco Farms I-4 Pad Sec.4-T4N-R63W	<b>North Reference:</b>	True
<b>Well:</b>	Wetco Farms I-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (1-28-11)		

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	0.00	0.00	6,072.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,280.0	0.00	0.00	6,112.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,320.0	0.00	0.00	6,152.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,360.0	0.00	0.00	6,192.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,232.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,438.8	0.00	0.00	6,271.0	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
NIOBRARA - LEGAL BOX 800' X 800' 1350'FSL & 1308'FWL									
6,440.0	0.00	0.00	6,272.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,480.0	0.00	0.00	6,312.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,520.0	0.00	0.00	6,352.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,560.0	0.00	0.00	6,392.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,432.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,640.0	0.00	0.00	6,472.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,680.0	0.00	0.00	6,512.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,720.0	0.00	0.00	6,552.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,760.0	0.00	0.00	6,592.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,632.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,840.0	0.00	0.00	6,672.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,880.0	0.00	0.00	6,712.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,920.0	0.00	0.00	6,752.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,960.0	0.00	0.00	6,792.2	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00
6,967.8	0.00	0.00	6,800.0	-411.6	-1,165.3	1,235.9	0.00	0.00	0.00

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
TARGET BHL 1170'F:	0.00	0.00	5,800.0	-411.6	-1,165.3	1,367,354.93	3,293,417.14	40° 20' 13.236 N	104° 26' 50.748 W
- plan hits target center									
- Point									
LEGAL BOX 800' X 800'	0.00	0.00	6,271.0	-231.6	-1,177.3	1,367,534.80	3,293,403.00	40° 20' 15.015 N	104° 26' 50.903 W
- plan misses target center by 180.4ft at 6438.8ft MD (6271.0 TVD, -411.6 N, -1165.3 E)									
- Rectangle (sides W800.0 H800.0 D529.0)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
697.0	697.0	8 5/8"	8-5/8	12-1/4	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,438.8	6,271.0	NIOBRARA		0.00	