

# ENSIGN

## Directional

### Well Name: Guttersen State D28-28D

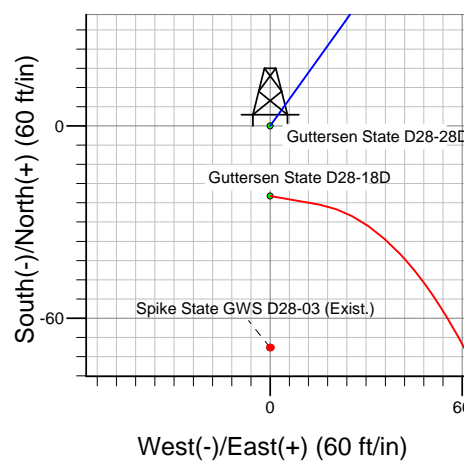
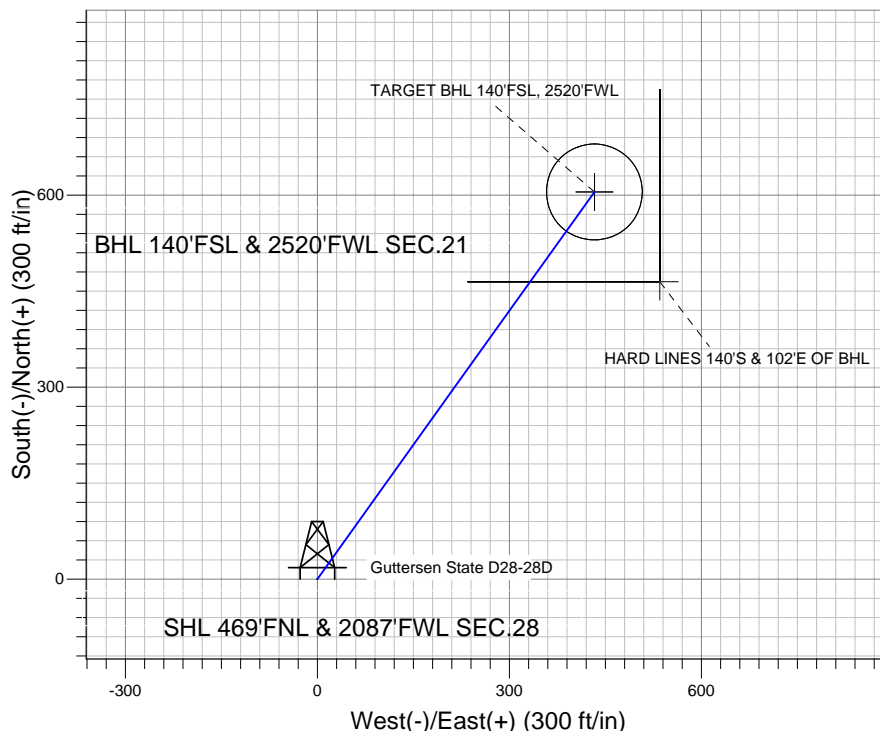
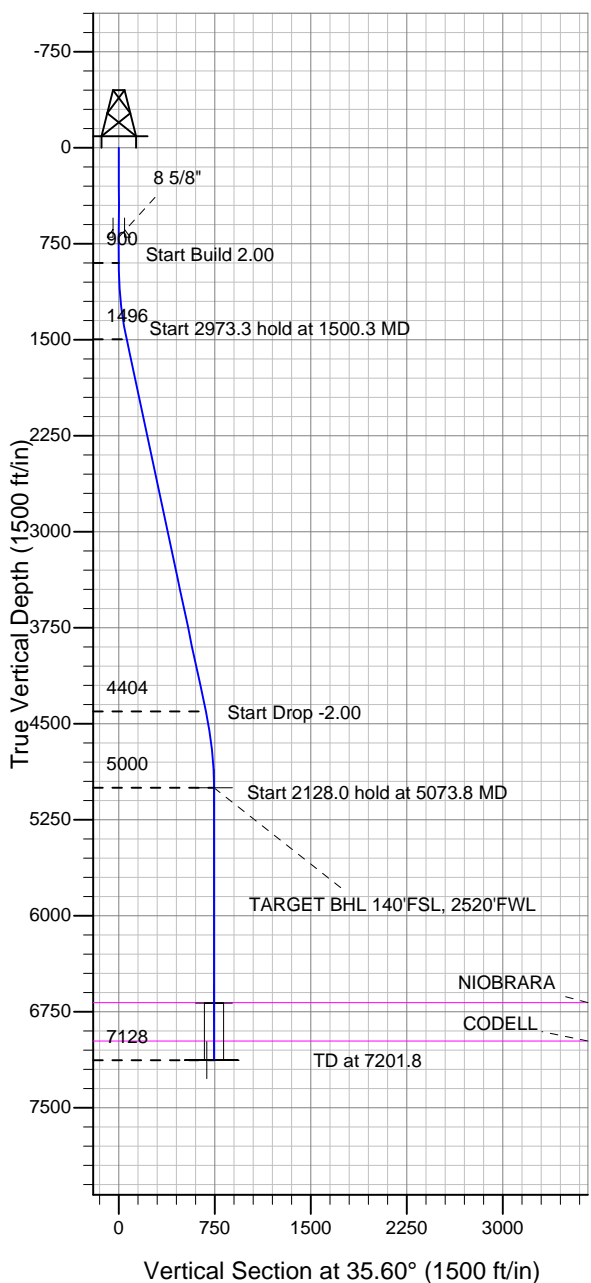
Surface Location: Guttersen State D28-28D Pad Sec.28-T3N-R64W  
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 4790.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1317977.20	3263046.63	40.202410	-104.558250	

Original Well Elev WELL @ 4803.0ft (Original Well Elev)

## NOBLE ENERGY INC WELD COUNTY CO



Guttersen State D28-28D Pad Sec.28-T3N-R64W  
 Guttersen State D28-28D  
 Noble Guttersen State D28-28D Plan #1 (10-11-11)  
 13:04, October 11 2011



Azimuths to True North  
 Magnetic North: 8.69°

Magnetic Field  
 Strength: 53016.0snT  
 Dip Angle: 66.91°  
 Date: 10/11/2011  
 Model: IGRF2010

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 140'FSL, 2520'FWL	5000.0	604.7	433.0	40.204070	-104.556700	Point
TARGET CIRCLE 140'FSL, 2520'FWL	6683.0	604.7	433.0	40.204070	-104.556700	Circle (Radius: 75.0)
HARD LINES 140'S & 102'E OF BHL	7128.0	464.7	535.0	40.203686	-104.556335	Polygon

### 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	900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.0	
3	1500.3	12.01	35.60	1495.9	50.9	36.5	2.00	35.60	62.7	
4	4473.5	12.01	35.60	4404.1	553.8	396.5	0.00	0.00	681.1	
5	5073.8	0.00	0.00	5000.0	604.7	433.0	2.00	180.00	743.8	TARGET BHL 140'FSL, 2520'FWL
6	7201.8	0.00	0.00	7128.0	604.7	433.0	0.00	0.00	743.8	