

ENSIGN

Directional

Well Name: Gutterson State D28-21D

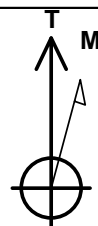
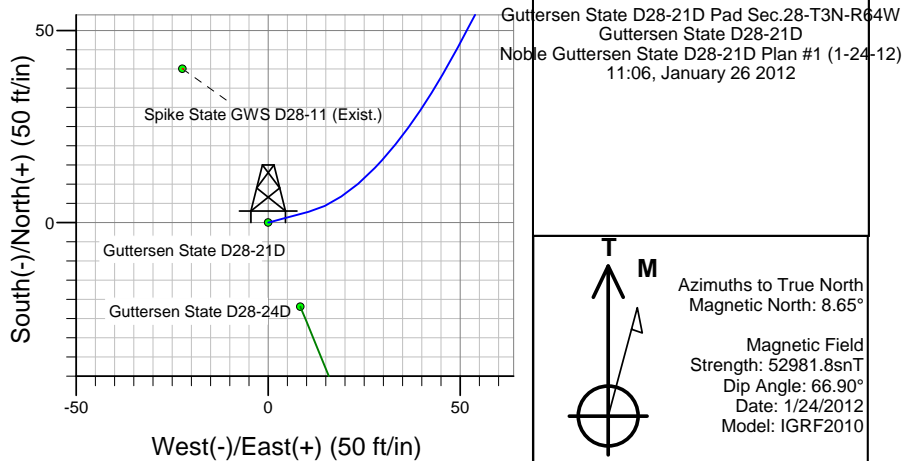
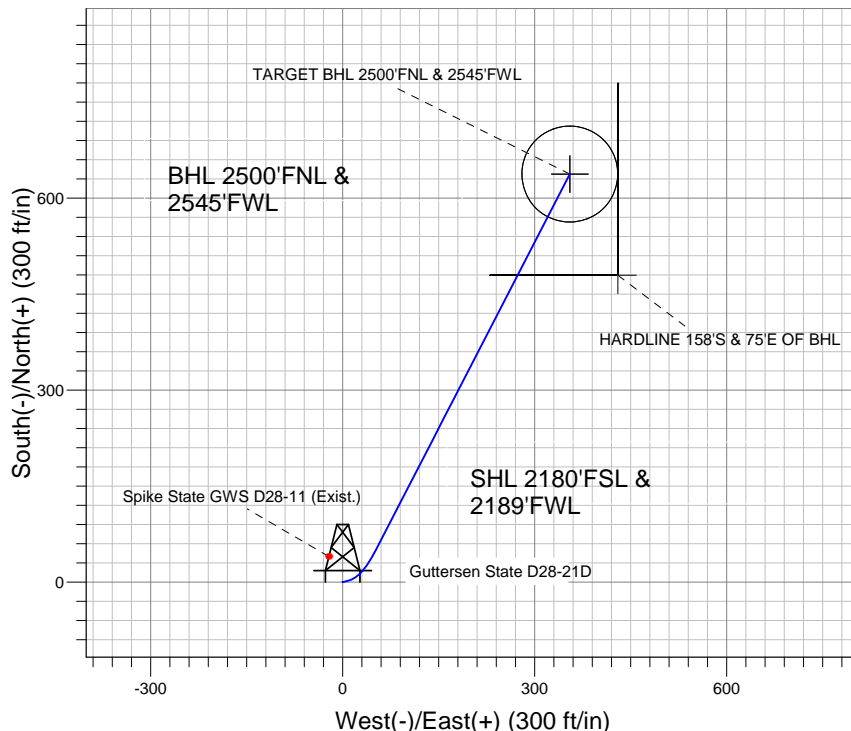
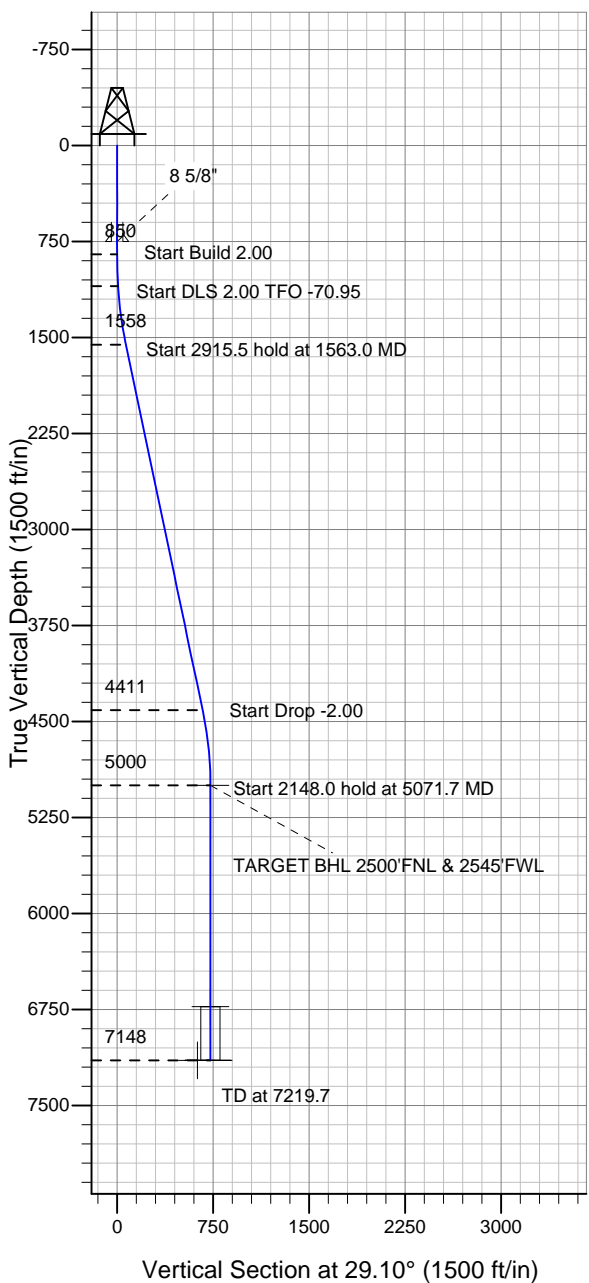
Surface Location: Gutterson State D28-21D Pad Sec.28-T3N-R64W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4800.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1315304.55	3263172.79	40.195070	-104.557900	

Original Well Elev WELL @ 4813.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



Azimuths to True North
Magnetic North: 8.65°

Magnetic Field
Strength: 52981.8snT
Dip Angle: 66.90°
Date: 1/24/2012
Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2500'FNL & 2545'FWL	5000.0	637.5	354.8	40.196820	-104.556630	Point
TARGET CIRCLE 2500'FNL & 2545'FWL	6728.0	637.5	354.8	40.196820	-104.556630	Circle (Radius: 75.0)
HARDLINE 158°S & 75°E OF BHL	7148.0	479.5	429.8	40.196386	-104.556361	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	850.0	0.00	0.00	850.0	0.0	0.0	0.00	0.00	0.0	
3	1100.0	5.00	75.00	1099.7	2.8	10.5	2.00	75.00	7.6	
4	1563.0	11.86	27.29	1557.8	50.4	51.9	2.00	-70.95	69.3	
5	4478.4	11.86	27.29	4411.0	583.1	326.7	0.00	0.00	668.4	
6	5071.7	0.00	0.00	5000.0	637.5	354.8	2.00	180.00	729.6	TARGET BHL 2500'FNL & 2545'FWL
7	7219.7	0.00	0.00	7148.0	637.5	354.8	0.00	0.00	729.6	