

ENSIGN

Directional

Well Name: Box M C27-33D

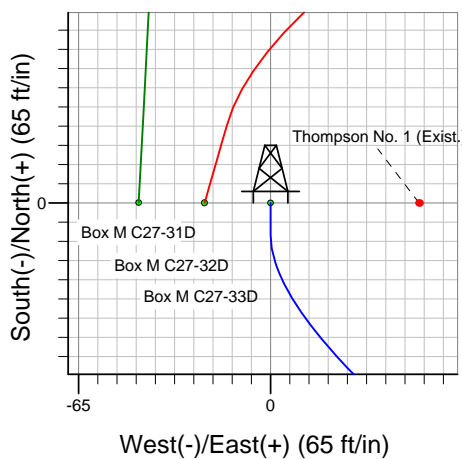
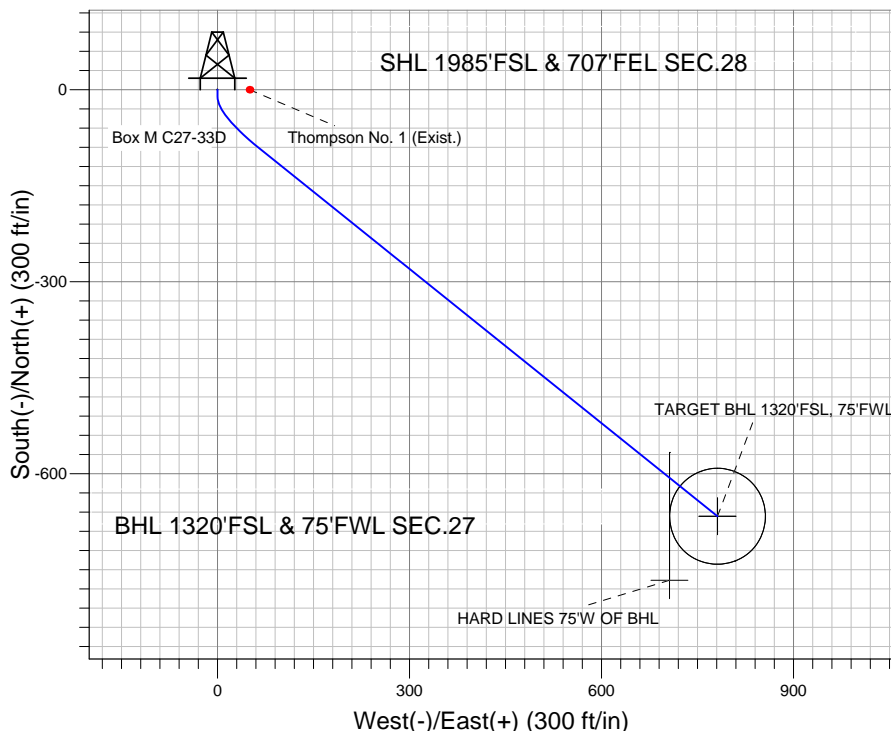
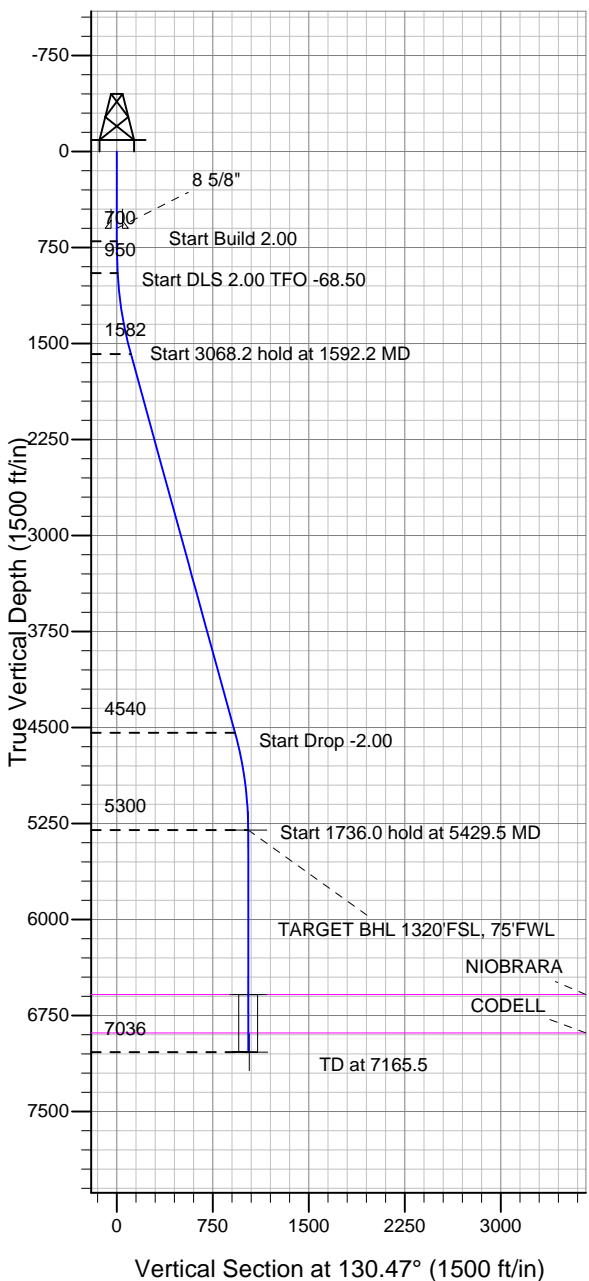
Surface Location: Box M C27-31D Pad Sec.28-T4N-R64W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 4723.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1346872.70	3265317.81	40.281660	-104.549010	

Original Well Elev WELL @ 4736.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



Box M C27-31D Pad Sec.28-T4N-R64W
 Box M C27-33D
 Noble Box M C27-33D Plan #1 (5-25-11)
 8:07, May 26 2011



Azimuths to True North
 Magnetic North: 8.70°

Magnetic Field
 Strength: 53121.1nT
 Dip Angle: 67.00°
 Date: 5/25/2011
 Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1320'FSL, 75'FWL	5300.0	-666.6	781.2	40.279830	-104.546210	Point
TARGET CIRCLE 1320'FNL & 75'FWL	6586.0	-666.6	781.2	40.279830	-104.546210	Circle (Radius: 75.0)
HARD LINES 75'W OF BHL	7036.0	-766.6	706.2	40.279556	-104.546479	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	700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.0	
3	950.0	5.00	180.00	949.7	-10.9	0.0	2.00	180.00	7.1	
4	1592.2	15.38	128.78	1581.8	-92.6	66.7	2.00	-68.50	110.8	
5	4660.3	15.38	128.78	4540.0	-602.3	701.2	0.00	0.00	924.4	
6	5429.5	0.00	0.00	5300.0	-666.6	781.2	2.00	180.00	1027.0	TARGET BHL 1320'FSL, 75'FWL
7	7165.5	0.00	0.00	7036.0	-666.6	781.2	0.00	0.00	1027.0	