

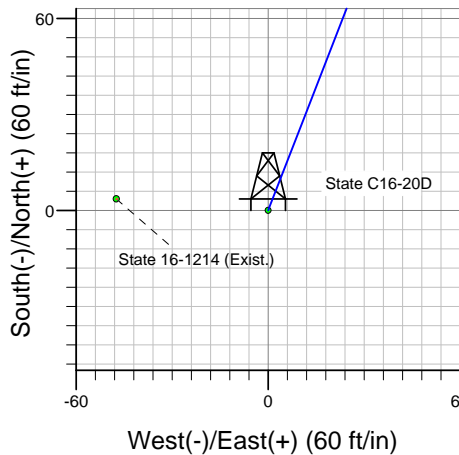
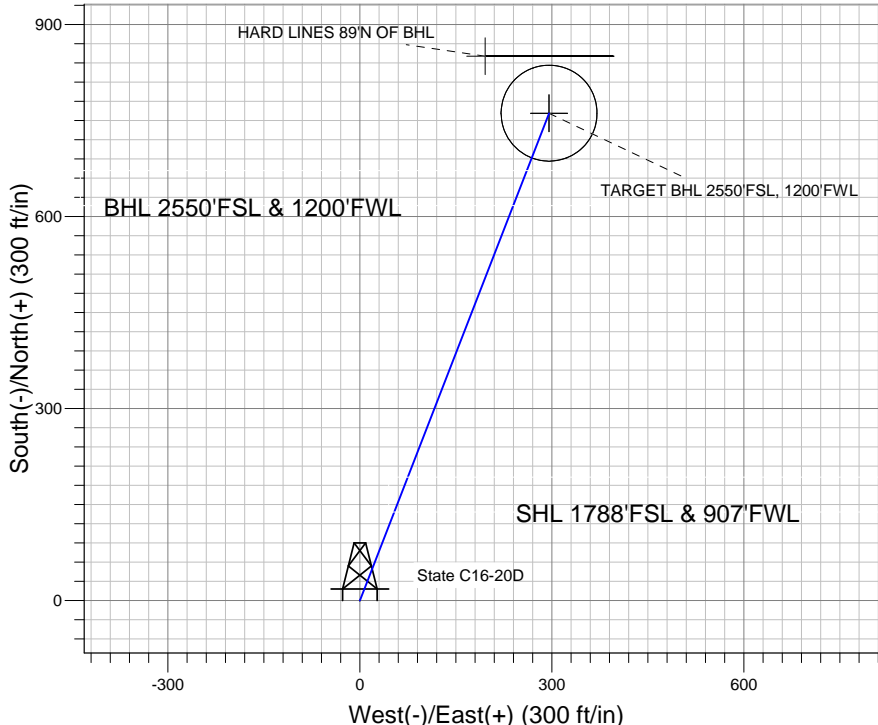
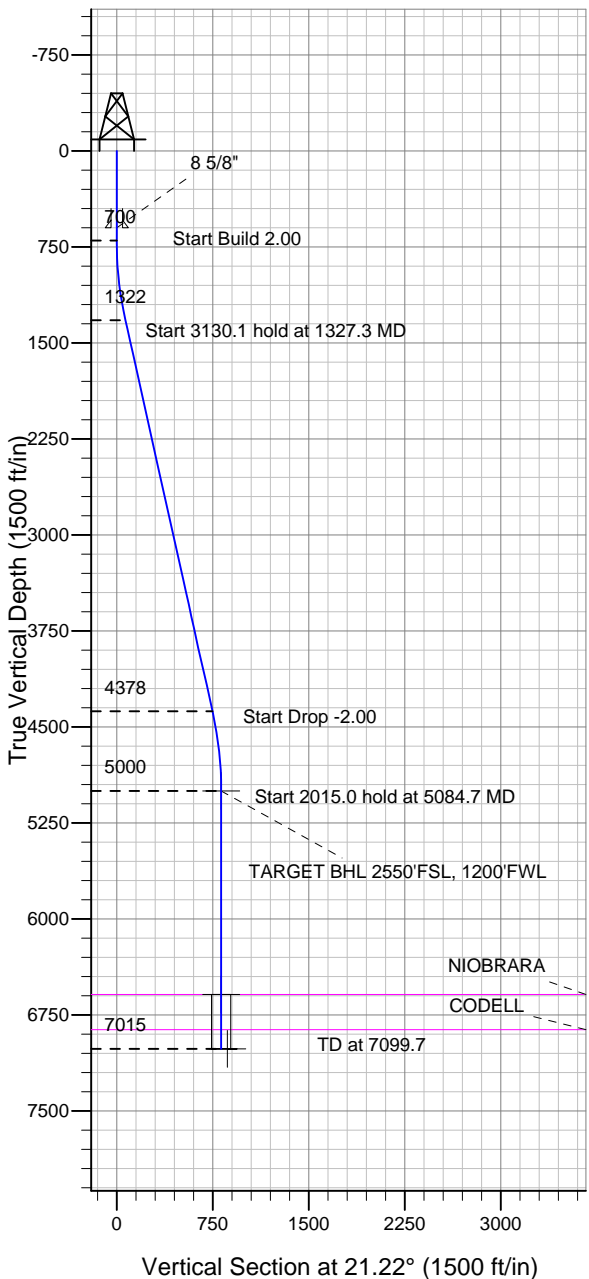
ENSIGN

Directional

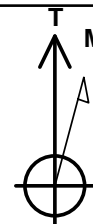
Well Name: State C16-20D

Surface Location: State C16-20D Pad Sec.16-T4N-R64W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone
 Ground Elevation: 4684.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1357187.06 3261623.38 40.310080 -104.561860
 Original Well Elev WELL @ 4697.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



State C16-20D Pad Sec.16-T4N-R64W
 State C16-20D
 Noble State C16-20D Plan #1 (7-13-11)
 9:42, July 18 2011



Azimuths to True North
 Magnetic North: 8.73°

Magnetic Field
 Strength: 53097.7snT
 Dip Angle: 67.01°
 Date: 7/18/2011
 Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2550'FSL, 1200'FWL	5000.0	761.4	295.6	40.312170	-104.560800	Point
TARGET CIRCLE 2550'FSL & 1200'FWL	6590.0	761.4	295.6	40.312170	-104.560800	Circle (Radius: 75.0)
HARD LINES 89°N OF BHL	7015.0	850.4	195.6	40.312414	-104.561159	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	1327.3	12.55	21.22	1322.3	63.8	24.8	2.00	21.22	68.4	
4	4457.4	12.55	21.22	4377.7	697.6	270.9	0.00	0.00	748.4	
5	5084.7	0.00	0.00	5000.0	761.4	295.6	2.00	180.00	816.8	TARGET BHL 2550'FSL, 1200'FWL
6	7099.7	0.00	0.00	7015.0	761.4	295.6	0.00	0.00	816.8	