

ENSIGN

Directional

Well Name: Megan State H15-33D

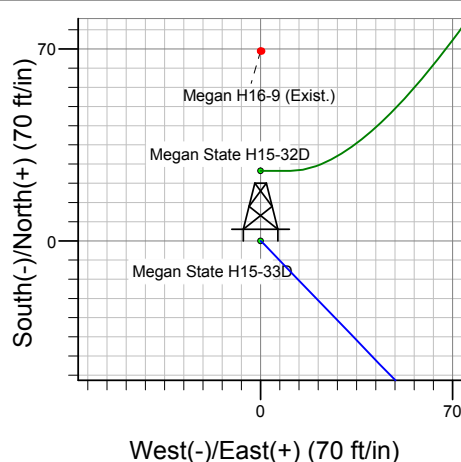
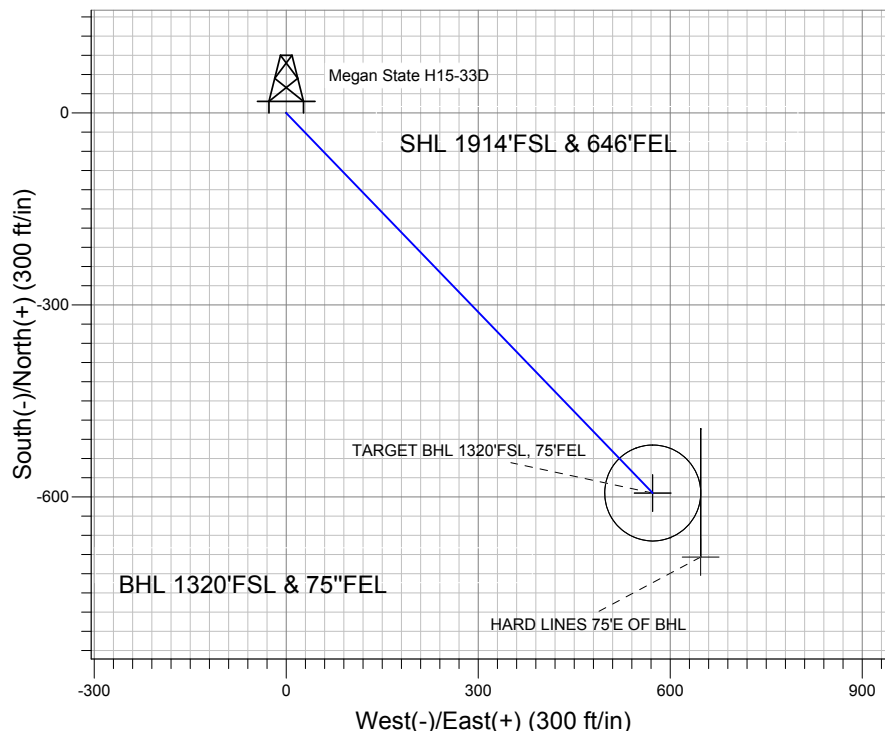
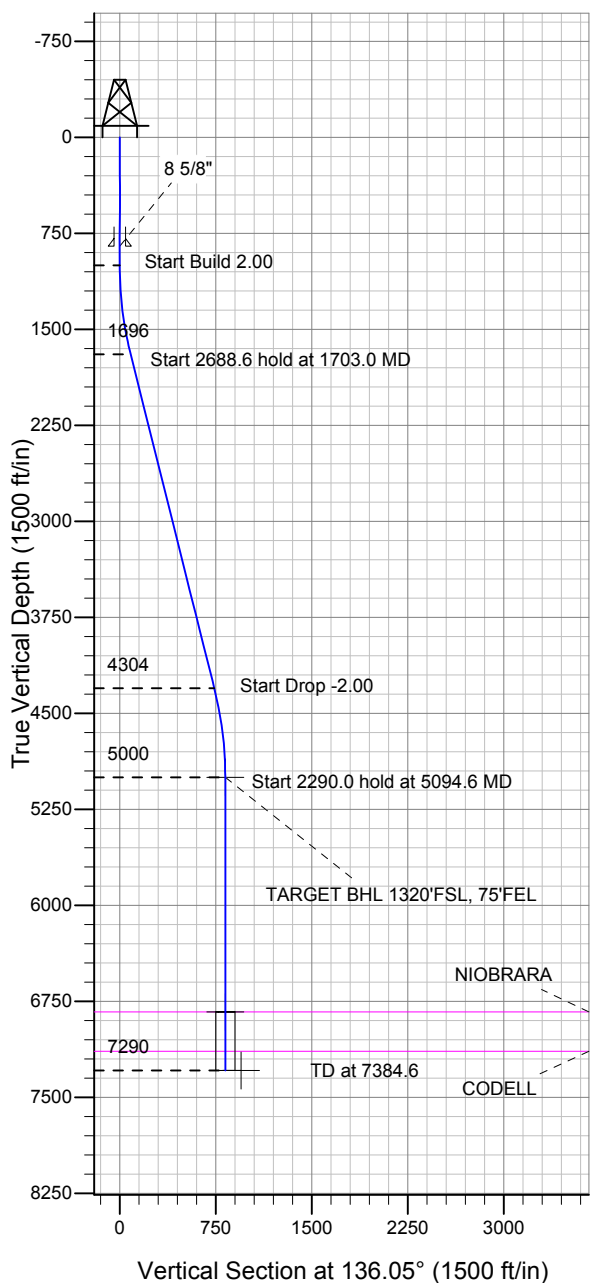
Surface Location: Megan State H15-33D Pad Sec.16-T3N-R65W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 4818.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1325340.47	3234082.66	40.223420	-104.661690	

Original Well Elev WELL @ 4831.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



Megan State H15-33D Pad Sec.16-T3N-R65W
 Megan State H15-33D
 Noble Megan State H15-33D Plan #1 (10-18-11)
 11:33, October 20 2011



Azimuths to True North
 Magnetic North: 8.75°

Magnetic Field
 Strength: 53013.7snT
 Dip Angle: 66.91°
 Date: 10/18/2011
 Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1320'FSL, 75'FEL	5000.0	-593.8	572.5	40.221790	-104.659640	Point
TARGET CIRCLE 1320'FSL, 75'FEL	6833.0	-593.8	572.5	40.221790	-104.659640	Circle (Radius: 75.0)
HARD LINES 75'E OF BHL	7290.0	-693.8	647.5	40.221515	-104.659371	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	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1703.0	14.06	136.05	1696.0	-61.8	59.6	2.00	136.05	85.8	
4	4391.6	14.06	136.05	4304.0	-532.0	512.9	0.00	0.00	739.0	
5	5094.6	0.00	0.00	5000.0	-593.8	572.5	2.00	180.00	824.8	TARGET BHL 1320'FSL, 75'FEL
6	7384.6	0.00	0.00	7290.0	-593.8	572.5	0.00	0.00	824.8	