

ENSIGN

Directional

Well Name: Kerbs USX A15-12D

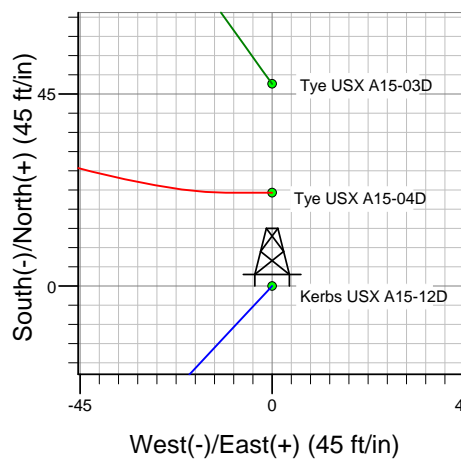
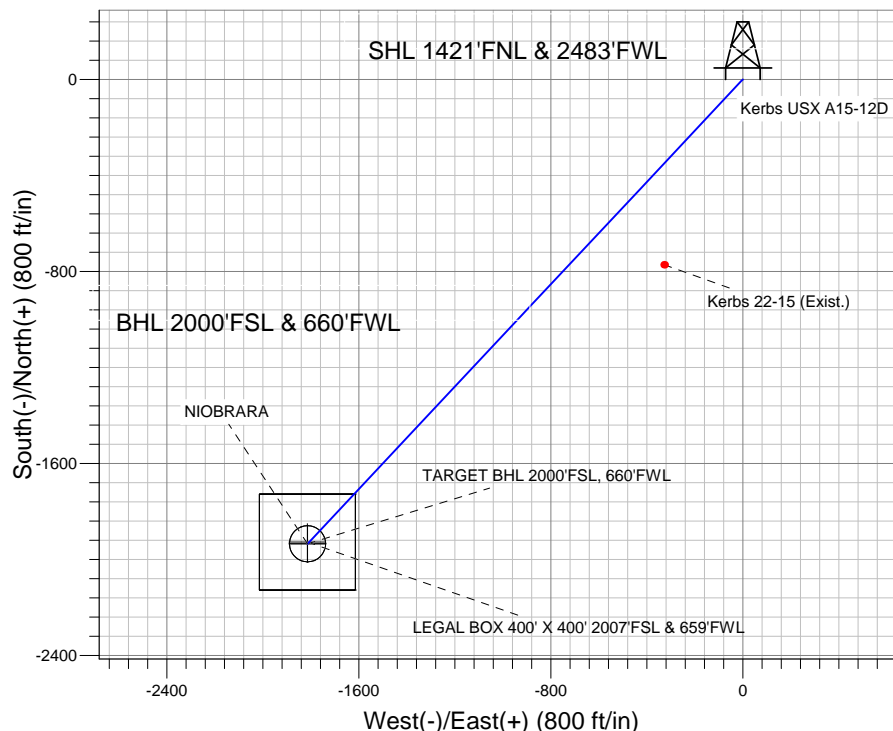
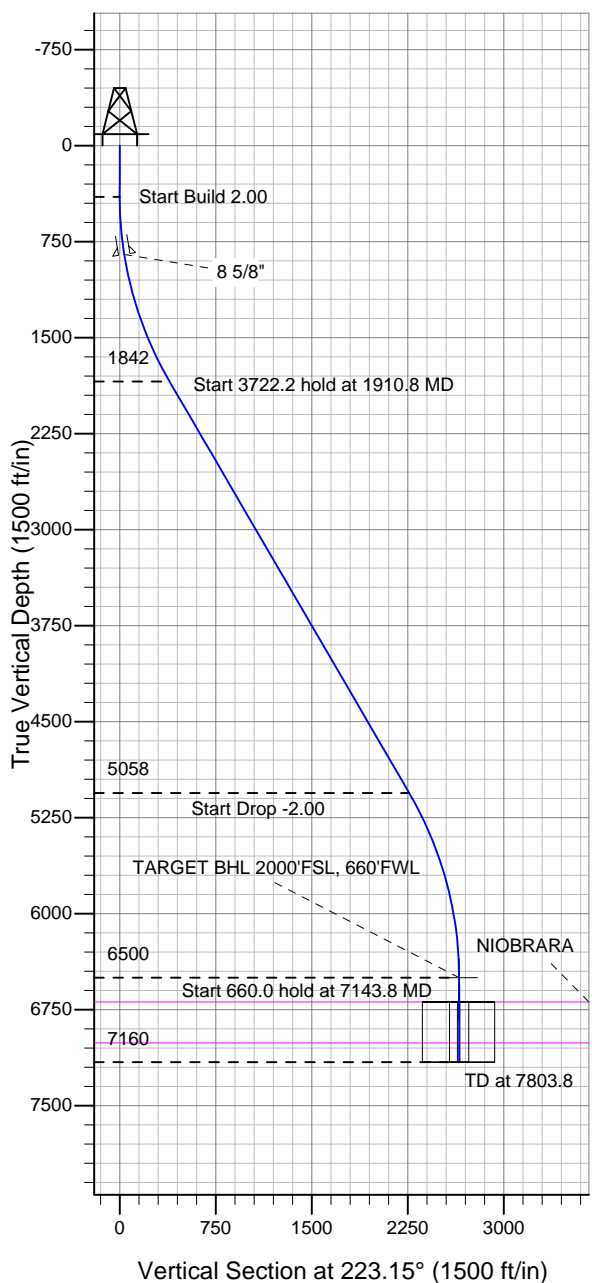
Surface Location: Tye and Kerbs Pad Sec.15-T6N-R64W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 4797.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1422623.85	3267893.36	40.489510	-104.536830	

Original Well Elev WELL @ 4810.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



Tye and Kerbs Pad Sec.15-T6N-R64W
Kerbs USX A15-12D
Noble Kerbs USX A15-12D Plan #1 (6-01-11)
12:03, June 07 2011



Azimuths to True North
Magnetic North: 8.75°

Magnetic Field
Strength: 53205.3snT
Dip Angle: 67.16°
Date: 6/7/2011
Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2000'FSL, 660'FWL	6500.0	-1934.4	-1813.7	40.484200	-104.543350	Point
LEGAL BOX 400' X 400' 2007'FSL & 659'FWL	6690.0	-1927.5	-1814.7	40.484219	-104.543354	Rectangle (Sides: L400.0 W400.0)
TARGET CIRCLE 2000'FSL & 660'FWL	6690.0	-1934.4	-1813.7	40.484200	-104.543350	Circle (Radius: 75.0)

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	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	1910.8	30.22	223.15	1841.7	-283.9	-266.2	2.00	223.15	389.2	
4	5633.0	30.22	223.15	5058.3	-1650.5	-1547.5	0.00	0.00	2262.5	
5	7143.8	0.00	0.00	6500.0	-1934.4	-1813.7	2.00	180.00	2651.7	TARGET BHL 2000'FSL, 660'FWL
6	7803.8	0.00	0.00	7160.0	-1934.4	-1813.7	0.00	0.00	2651.7	