

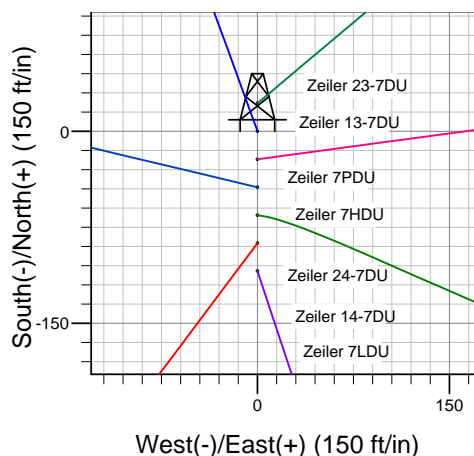
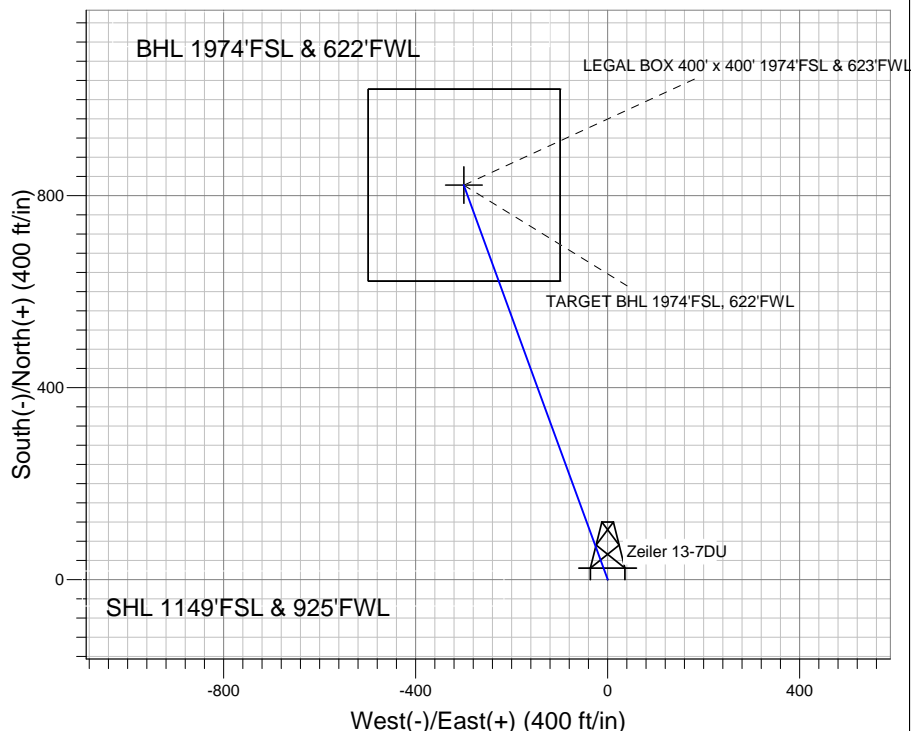
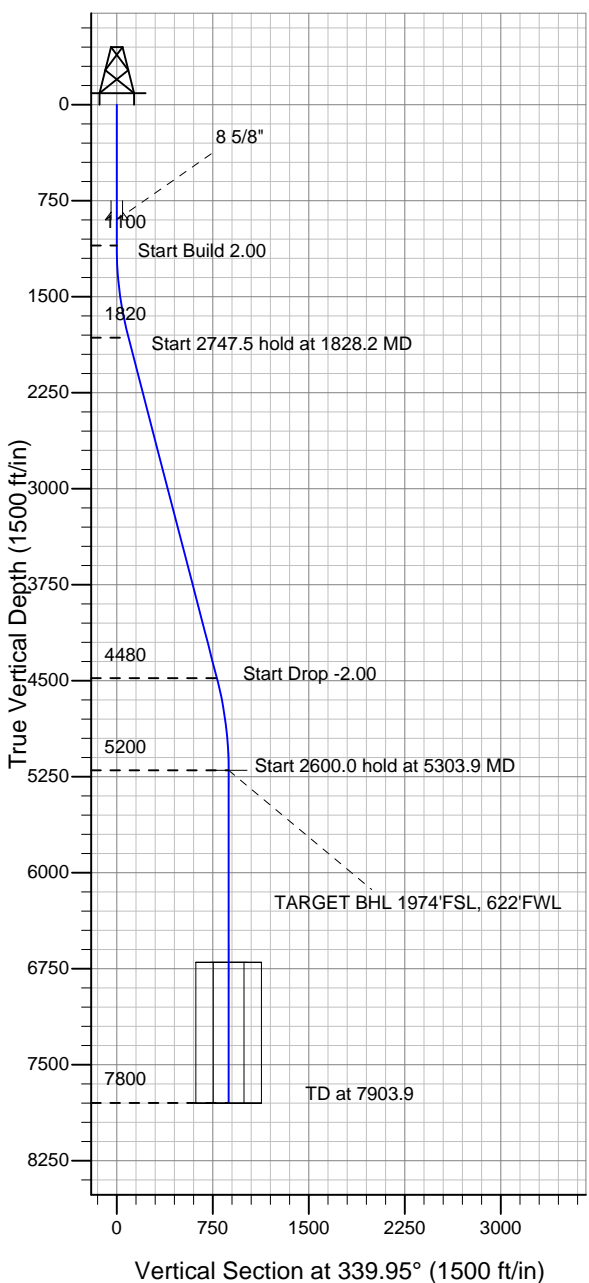
ENSIGN

Directional

Well Name: Zeiler 13-7DU

Surface Location: Zeiler 23-7DU Pad Sec.7-T5N-R67W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone
 Ground Elevation: 4960.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1392733.72 3155607.35 40° 24' 36.396 N 104° 56' 28.320 W
 Original Well Elev WELL @ 4973.0ft (Original Well Elev)

PETROLEUM DEVELOPMENT CORP Weld County CO



Zeiler 23-7DU Pad Sec.7-T5N-R67W
 Zeiler 13-7DU
 Plan #1 (2-08-11)
 13:22, February 14 2011



Azimuths to True North
 Magnetic North: 8.96°
 Magnetic Field
 Strength: 53173.5snT
 Dip Angle: 67.05°
 Date: 2/14/2011
 Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1974'FSL, 622'FWL	5200.0	822.0	-300.0	40° 24' 44.518 N	104° 56' 32.198 W	Point
LEGAL BOX 400' x 400' 1974'FSL & 623'FWL	6700.0	822.0	-299.0	40° 24' 44.519 N	104° 56' 32.185 W	Rectangle (Sides: L400.0 W400.0)

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	1100.0	0.00	0.00	1100.0	0.0	0.0	0.00	0.00	0.0	
3	1828.2	14.56	339.95	1820.4	86.5	-31.6	2.00	339.95	92.1	
4	4575.7	14.56	339.95	4479.6	735.5	-268.4	0.00	0.00	782.9	
5	5303.9	0.00	0.00	5200.0	822.0	-300.0	2.00	180.00	875.0	TARGET BHL 1974'FSL, 622'FWL
6	7903.9	0.00	0.00	7800.0	822.0	-300.0	0.00	0.00	875.0	