

ENSIGN

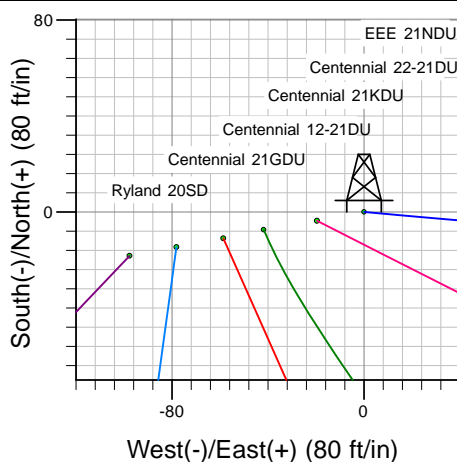
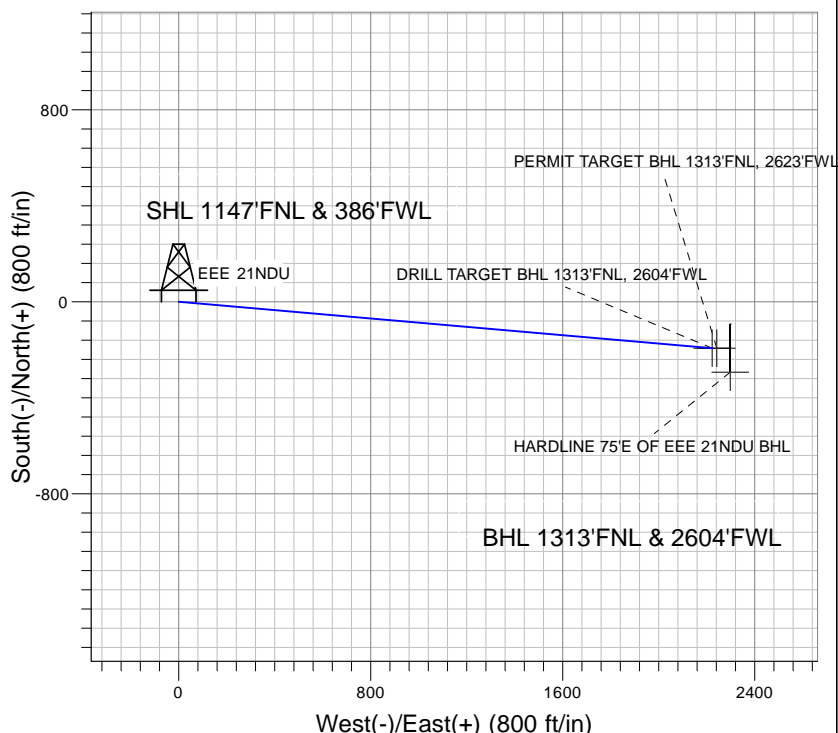
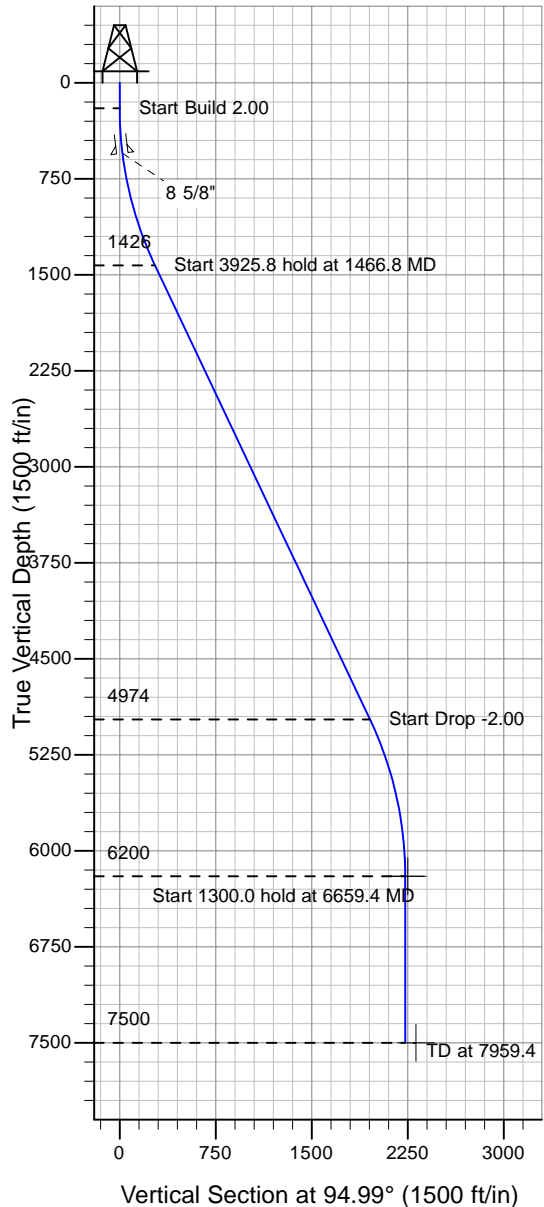
Directional

Well Name: EEE 21NDU

Surface Location: EEE/Ryland 20SD Pad Sec.21-T4N-R67W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4922.0

+N/-S+E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1353603.57 3166154.32 40° 18' 9.036 N 104° 54' 15.372 W
 Original Well Elev WELL @ 4935.0ft (Original Well Elev)

PETROLEUM DEVELOPMENT CORP Weld County CO



EEE/Ryland 20SD Pad Sec.21-T4N-R67W
 EEE 21NDU
 Plan #1 (3-8-10)
 14:23, March 18 2010



Azimuths to True North
 Magnetic North: 9.09°

Magnetic Field
 Strength: 53237.1nT
 Dip Angle: 67.01°
 Date: 12/31/2009
 Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
DRILL TARGET BHL 1313'FNL, 2604'FWL	6200.0	-194.1	2222.6	40° 18' 7.117 N	104° 53' 46.686 W	Point
PERMIT TARGET BHL 1313'FNL, 2623'FWL	6200.0	-194.1	2241.6	40° 18' 7.116 N	104° 53' 46.440 W	Point
HARDLINE 75'E OF EEE 21NDU BHL	7500.0	-294.1	2297.6	40° 18' 6.129 N	104° 53' 45.718 W	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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1466.8	25.34	94.99	1425.9	-24.0	274.5	2.00	94.99	275.6	
4	5392.6	25.34	94.99	4974.1	-170.1	1948.1	0.00	0.00	1955.5	
5	6659.4	0.00	0.00	6200.0	-194.1	2222.6	2.00	180.00	2231.1	DRILL TARGET BHL 1313'FNL, 2604'FWL
6	7959.4	0.00	0.00	7500.0	-194.1	2222.6	0.00	0.00	2231.1	