

ENSIGN

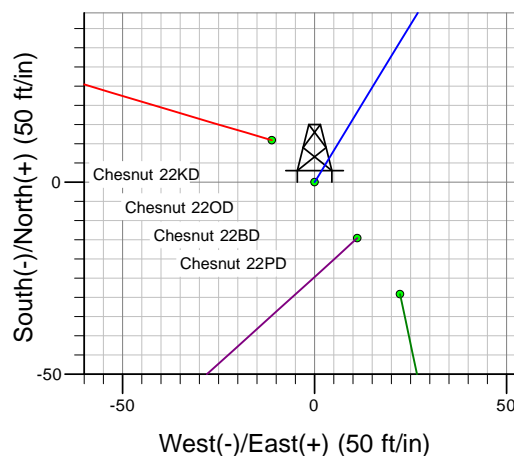
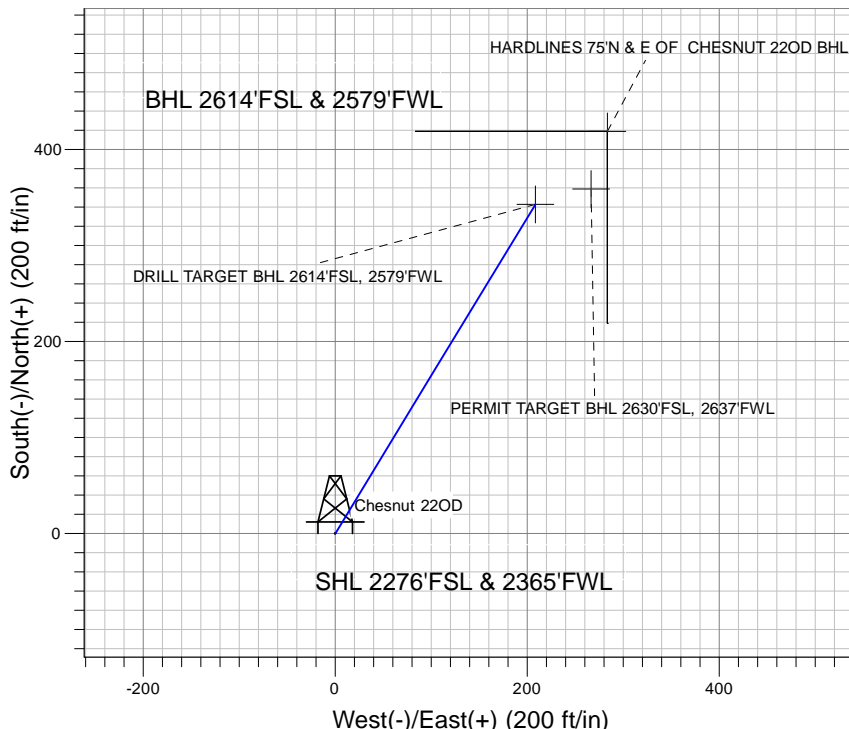
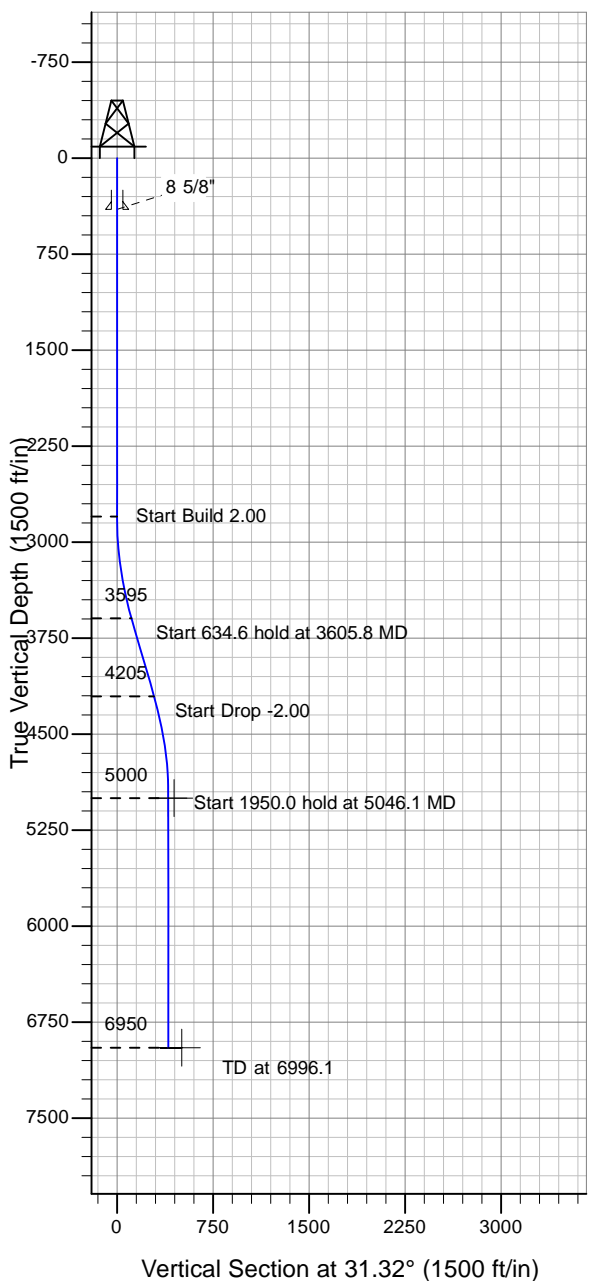
Directional

Well Name: Chesnut 22OD

Surface Location: Chesnut 22KD Pad Sec.22-T5N-R64W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4600.0

+N/-S+E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1384115.85 3268300.50 40° 23' 1.680 N 104° 32' 12.732 W
 Original Well Elev WELL @ 4613.0ft (Original Well Elev)

PETROLEUM DEVELOPMENT CORP Weld County CO



Chesnut 22KD Pad Sec.22-T5N-R64W
 Chesnut 22OD
 Plan #1 (5-24-10)
 14:47, May 24 2010



Azimuths to True North
 Magnetic North: 8.88°

Magnetic Field
 Strength: 53261.5nT
 Dip Angle: 67.11°
 Date: 5/24/2010
 Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

| Name | TVD | +N/-S | +E/-W | Latitude | Longitude | Shape |
|--|--------|-------|-------|-----------------|-------------------|---------|
| DRILL TARGET BHL 2614'FSL, 2579'FWL | 5000.0 | 342.8 | 208.6 | 40° 23' 5.067 N | 104° 32' 10.036 W | Point |
| PERMIT TARGET BHL 2630'FSL, 2637'FWL | 5000.0 | 358.8 | 266.6 | 40° 23' 5.225 N | 104° 32' 9.286 W | Point |
| HARDLINES 75°N & E OF CHESNUT 22OD BHL | 6950.0 | 418.8 | 283.6 | 40° 23' 5.818 N | 104° 32' 9.067 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 | 2800.0 | 0.00 | 0.00 | 2800.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 3605.8 | 16.12 | 31.32 | 3595.2 | 96.2 | 58.5 | 2.00 | 31.32 | 112.6 | |
| 4 | 4240.3 | 16.12 | 31.32 | 4204.8 | 246.6 | 150.1 | 0.00 | 0.00 | 288.7 | |
| 5 | 5046.1 | 0.00 | 0.00 | 5000.0 | 342.8 | 208.6 | 2.00 | 180.00 | 401.3 | DRILL TARGET BHL 2614'FSL, 2579'FWL |
| 6 | 6996.1 | 0.00 | 0.00 | 6950.0 | 342.8 | 208.6 | 0.00 | 0.00 | 401.3 | |