

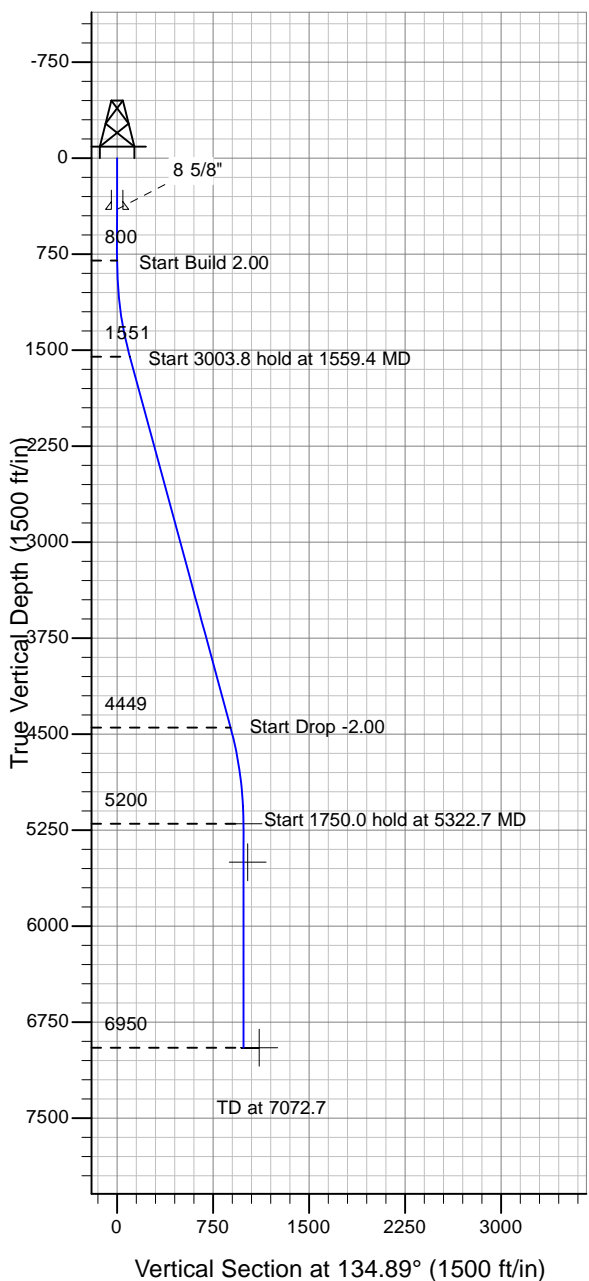
ENSIGN

Directional

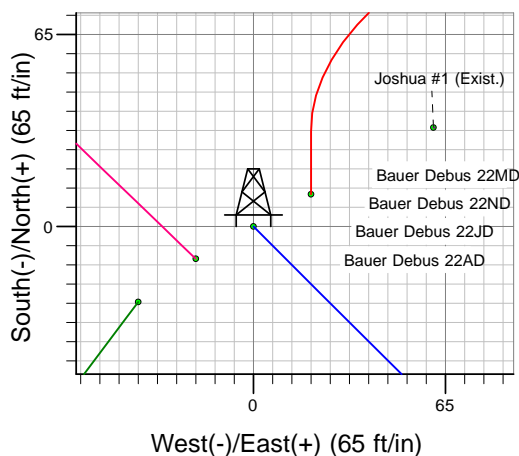
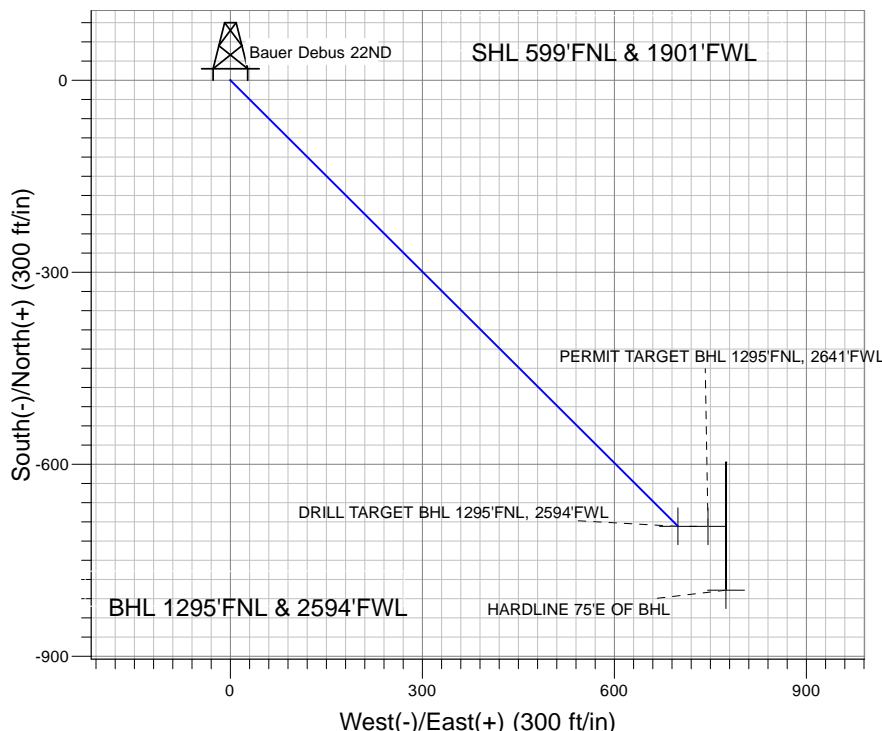
Well Name: Bauer Debus 22ND

Surface Location: Bauer Debus 22ND Pad Sec.22-T5N-R64W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4575.0

+N/-S+E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1386540.24 3267783.89 40° 23' 25.692 N 104° 32' 19.068 W
 Original Well Elev WELL @ 4588.0ft (Original Well Elev)



PETROLEUM DEVELOPMENT CORP Weld County CO



Bauer Debus 22ND Pad Sec.22-T5N-R64W



Azimuths to True North
 Magnetic North: 8.89°

Magnetic Field
 Strength: 53267.1snT
 Dip Angle: 67.12°
 Date: 5/17/2010
 Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

| Name | TVD | +N/-S | +E/-W | Latitude | Longitude | Shape |
|--------------------------------------|--------|--------|-------|------------------|-------------------|---------|
| DRILL TARGET BHL 1295'FNL, 2594'FWL | 5200.0 | -696.7 | 699.3 | 40° 23' 18.807 N | 104° 32' 10.031 W | Point |
| PERMIT TARGET BHL 1295'FNL, 2641'FWL | 5500.0 | -696.7 | 746.3 | 40° 23' 18.807 N | 104° 32' 9.423 W | Point |
| HARDLINE 75'E OF BHL | 6950.0 | -796.7 | 774.3 | 40° 23' 17.819 N | 104° 32' 9.062 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 | 800.0 | 0.00 | 0.00 | 800.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 1559.4 | 15.19 | 134.89 | 1550.6 | -70.6 | 70.9 | 2.00 | 134.89 | 100.1 | |
| 4 | 4563.2 | 15.19 | 134.89 | 4449.4 | -626.1 | 628.4 | 0.00 | 0.00 | 887.1 | |
| 5 | 5322.7 | 0.00 | 0.00 | 5200.0 | -696.7 | 699.3 | 2.00 | 180.00 | 987.1 | DRILL TARGET BHL 1295'FNL, 2594'FWL |
| 6 | 7072.7 | 0.00 | 0.00 | 6950.0 | -696.7 | 699.3 | 0.00 | 0.00 | 987.1 | |