

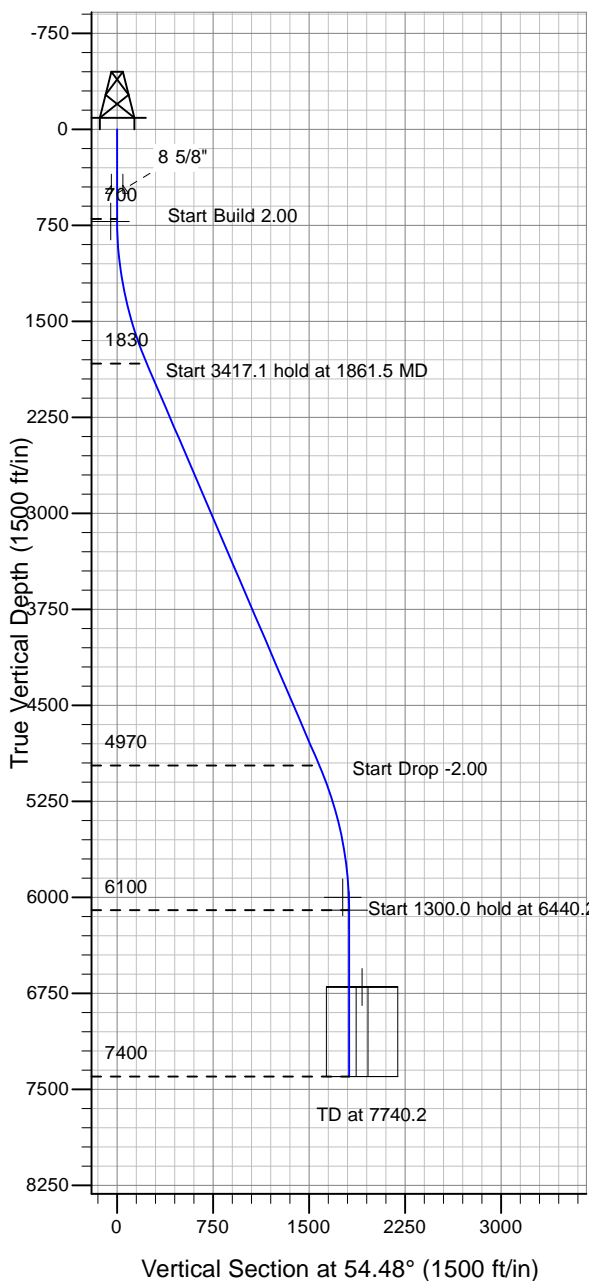
# ENSIGN

## Directional

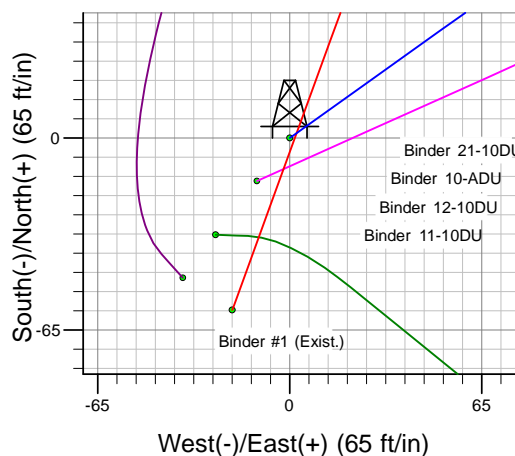
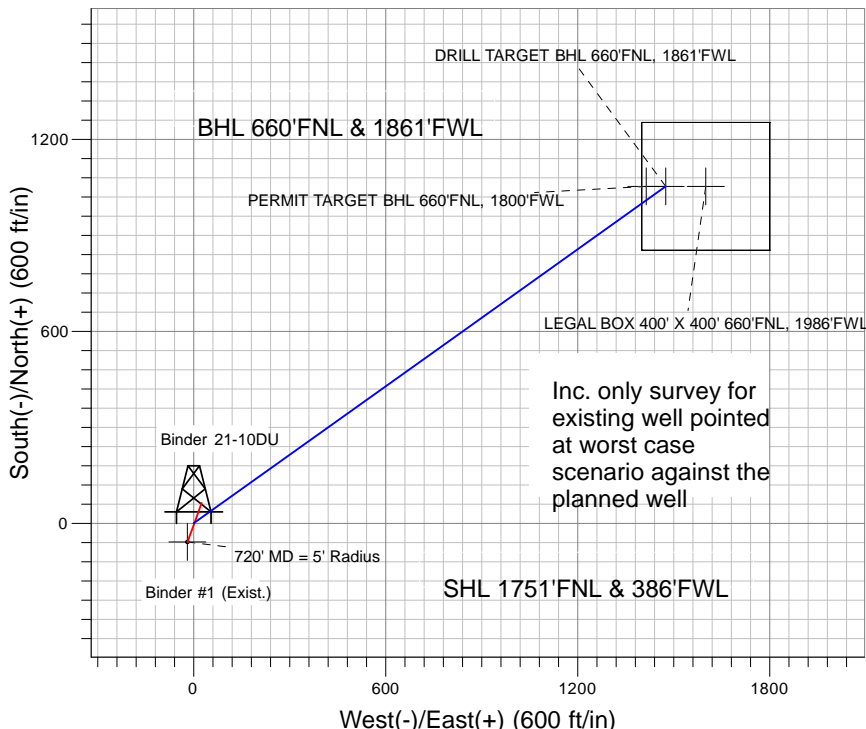
### Well Name: Binder 21-10DU

Surface Location: Binder 12-10DU Pad Sec.10-T4N-R67W  
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone  
 Ground Elevation: 4760.0

+N/-S+E/-W Northing Easting Latitude Longitude Slot  
 0.0 0.0 1363449.87 3171388.28 40° 19' 45.984 N 104° 53' 6.936 W  
 Original Well Elev WELL @ 4773.0ft (Original Well Elev)



### PETROLEUM DEVELOPMENT CORP Weld County CO



Binder 12-10DU Pad Sec.10-T4N-R67W  
 Binder 21-10DU  
 Plan #1 (10-04-10)  
 16:50, October 05 2010



Azimuths to True North  
 Magnetic North: 9.02°

Magnetic Field  
 Strength: 53154.9snT  
 Dip Angle: 67.00°  
 Date: 10/5/2010  
 Model: IGRF2010

### WELLBORE TARGET DETAILS (LAT/LONG)

| Name                                    | TVD    | +N/-S  | +E/-W  | Latitude         | Longitude         | Shape                            |
|-----------------------------------------|--------|--------|--------|------------------|-------------------|----------------------------------|
| 720' MD = 5' Radius                     | 720.0  | -58.3  | -19.5  | 40° 19' 45.408 N | 104° 53' 7.188 W  | Circle (Radius: 5.0)             |
| PERMIT TARGET BHL 660'FNL, 1800'FWL     | 6000.0 | 1052.9 | 1414.1 | 40° 19' 56.388 N | 104° 52' 48.677 W | Point                            |
| DRILL TARGET BHL 660'FNL, 1861'FWL      | 6100.0 | 1052.9 | 1475.1 | 40° 19' 56.388 N | 104° 52' 47.889 W | Point                            |
| LEGAL BOX 400' X 400' 660'FNL, 1986'FWL | 6700.0 | 1052.9 | 1600.1 | 40° 19' 56.388 N | 104° 52' 46.275 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   | 700.0  | 0.00  | 0.00  | 700.0  | 0.0    | 0.0    | 0.00 | 0.00   | 0.0    |                                    |
| 3   | 1861.5 | 23.23 | 54.48 | 1830.0 | 134.9  | 189.0  | 2.00 | 54.48  | 232.3  |                                    |
| 4   | 5278.6 | 23.23 | 54.48 | 4970.0 | 918.0  | 1286.1 | 0.00 | 0.00   | 1580.1 |                                    |
| 5   | 6440.2 | 0.00  | 0.00  | 6100.0 | 1052.9 | 1475.1 | 2.00 | 180.00 | 1812.3 | DRILL TARGET BHL 660'FNL, 1861'FWL |
| 6   | 7740.2 | 0.00  | 0.00  | 7400.0 | 1052.9 | 1475.1 | 0.00 | 0.00   | 1812.3 |                                    |