

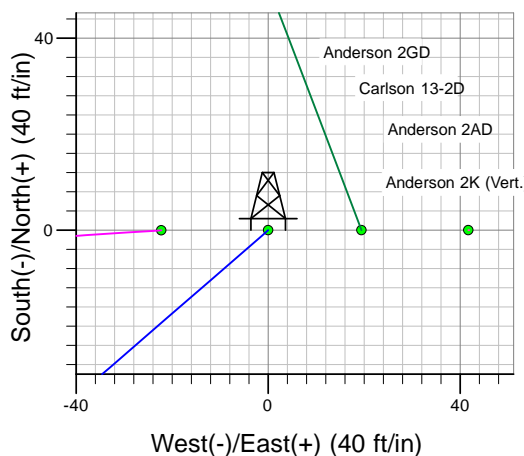
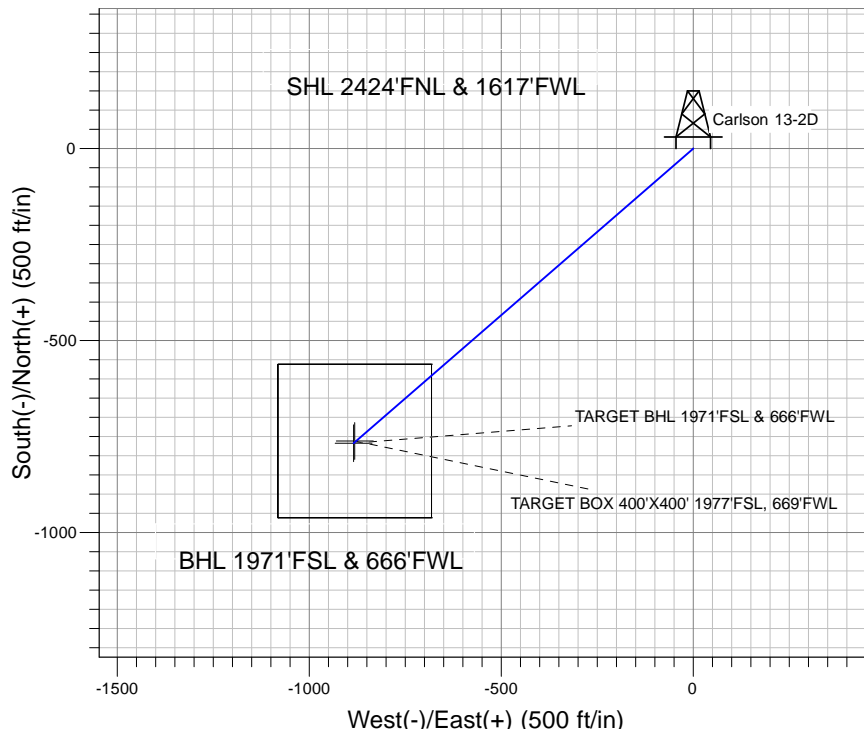
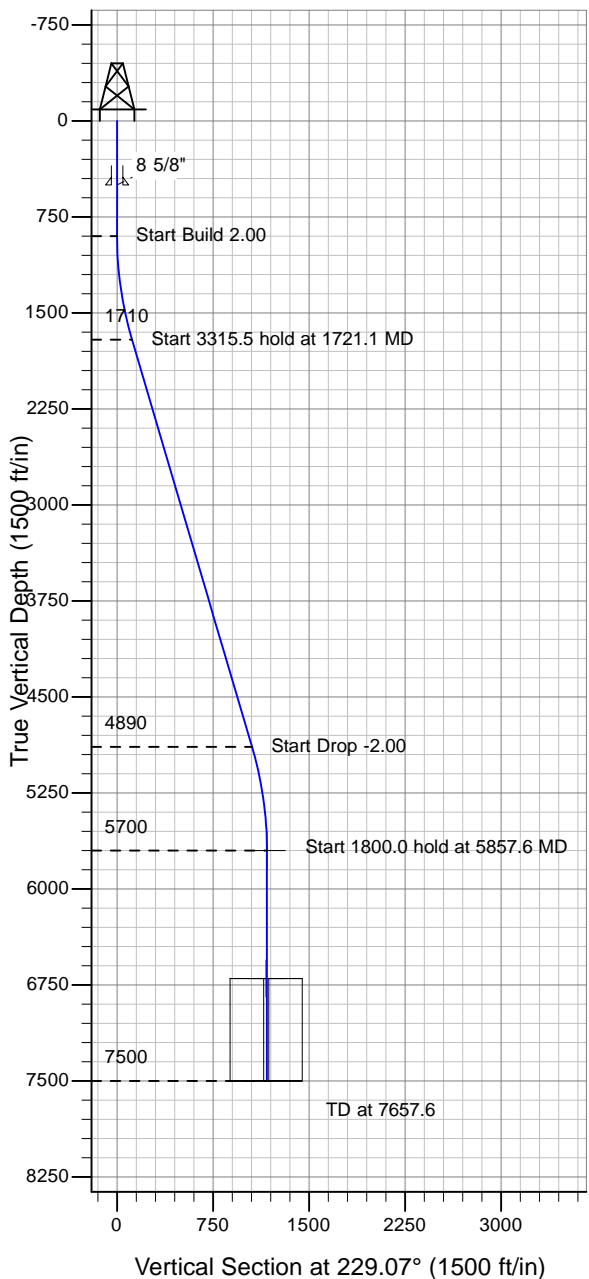
# ENSIGN

## Directional

### Well Name: Carlson 13-2D

Surface Location: Anderson 2GD Pad Sec.2-T6N-R66W  
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone  
 Ground Elevation: 4875.0  
 +N/-S+E/-W Northing Easting Latitude Longitude Slot  
 0.0 0.0 1432293.40 3208756.96 40° 31' 3.432 N 104° 44' 56.904 W  
 Original Well Elev WELL @ 4888.0ft (Original Well Elev)

### PETROLEUM DEVELOPMENT CORP Weld County CO



Anderson 2GD Pad Sec.2-T6N-R66W  
 Carlson 13-2D  
 Plan #2 (8-23-10)  
 14:38, August 23 2010



Azimuths to True North  
 Magnetic North: 8.98°

Magnetic Field  
 Strength: 53280.0nT  
 Dip Angle: 67.18°  
 Date: 8/23/2010  
 Model: IGRF2010

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1971'FSL & 666'FWL	5700.0	-767.2	-884.6	40° 30' 55.850 N	104° 45' 8.358 W	Point
TARGET BOX 400'X400' 1977'FSL, 669'FWL	6700.0	-761.2	-881.6	40° 30' 55.910 N	104° 45' 8.319 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	900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.0	
3	1721.1	16.42	229.07	1709.9	-76.6	-88.3	2.00	229.07	116.9	
4	5036.6	16.42	229.07	4890.1	-690.7	-796.4	0.00	0.00	1054.1	
5	5857.6	0.00	0.00	5700.0	-767.2	-884.6	2.00	180.00	1171.0	TARGET BHL 1971'FSL & 666'FWL
6	7657.6	0.00	0.00	7500.0	-767.2	-884.6	0.00	0.00	1171.0	