

# ENSIGN

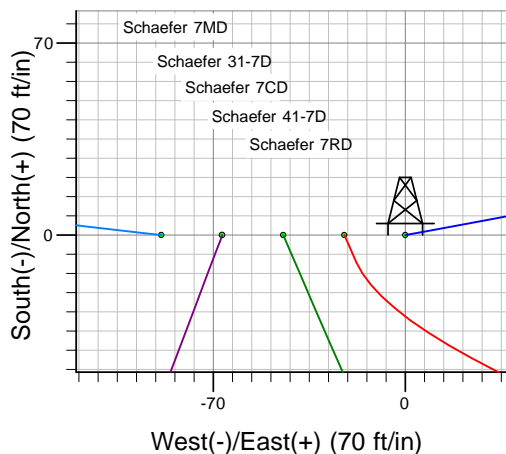
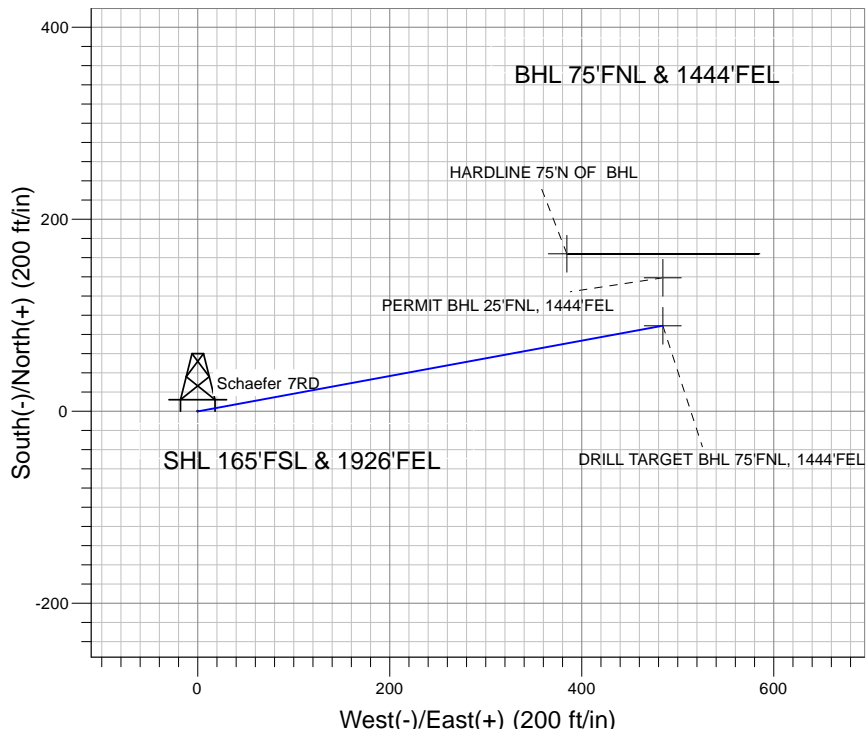
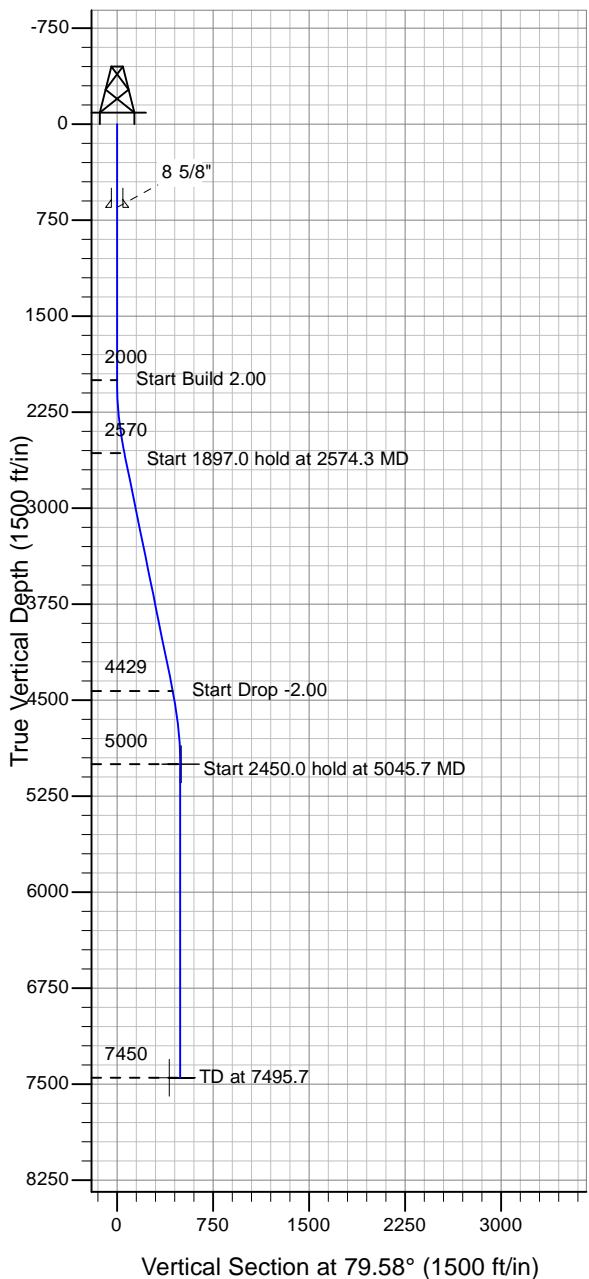
## Directional

### Well Name: Schaefer 7RD

Surface Location: Schaefer 7MD Pad Sec.7-T6N-R66W  
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone  
 Ground Elevation: 4880.0

+N/-S+E/-W Northing Easting Latitude Longitude Slot  
 0.0 0.0 1428909.78 3189470.63 40° 30' 31.536 N 104° 49' 6.960 W  
 Original Well Elev WELL @ 4893.0ft (Original Well Elev)

### PETROLEUM DEVELOPMENT CORP Weld County CO



Schaefer 7MD Pad Sec.7-T6N-R66W  
 Schaefer 7RD  
 Plan #1 (6-2-10)  
 17:56, June 03 2010



Azimuths to True North  
 Magnetic North: 9.04°

Magnetic Field  
 Strength: 53291.4snT  
 Dip Angle: 67.17°  
 Date: 6/2/2010  
 Model: IGRF2010

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
DRILL TARGET BHL 75'FNL, 1444'FEL	5000.0	89.1	484.4	40° 30' 32.416 N	104° 49' 0.689 W	Point
PERMIT BHL 25'FNL, 1444'FEL	5000.0	139.1	484.4	40° 30' 32.910 N	104° 49' 0.688 W	Point
HARDLINE 75'N OF BHL	7450.0	164.1	384.4	40° 30' 33.157 N	104° 49' 1.983 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	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0	
3	2574.3	11.49	79.58	2570.5	10.4	56.4	2.00	79.58	57.4	
4	4471.3	11.49	79.58	4429.5	78.7	428.0	0.00	0.00	435.1	
5	5045.7	0.00	0.00	5000.0	89.1	484.4	2.00	180.00	492.5	DRILL TARGET BHL 75'FNL, 1444'FEL
6	7495.7	0.00	0.00	7450.0	89.1	484.4	0.00	0.00	492.5	