

# ENSIGN

## Directional

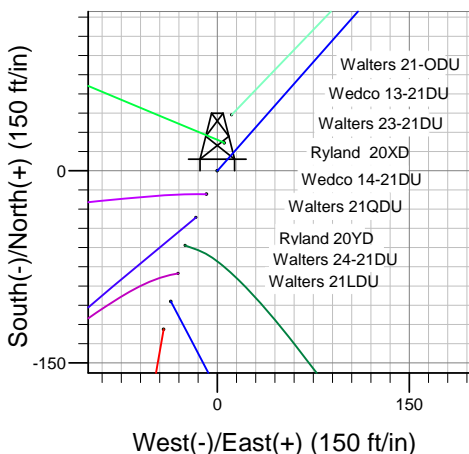
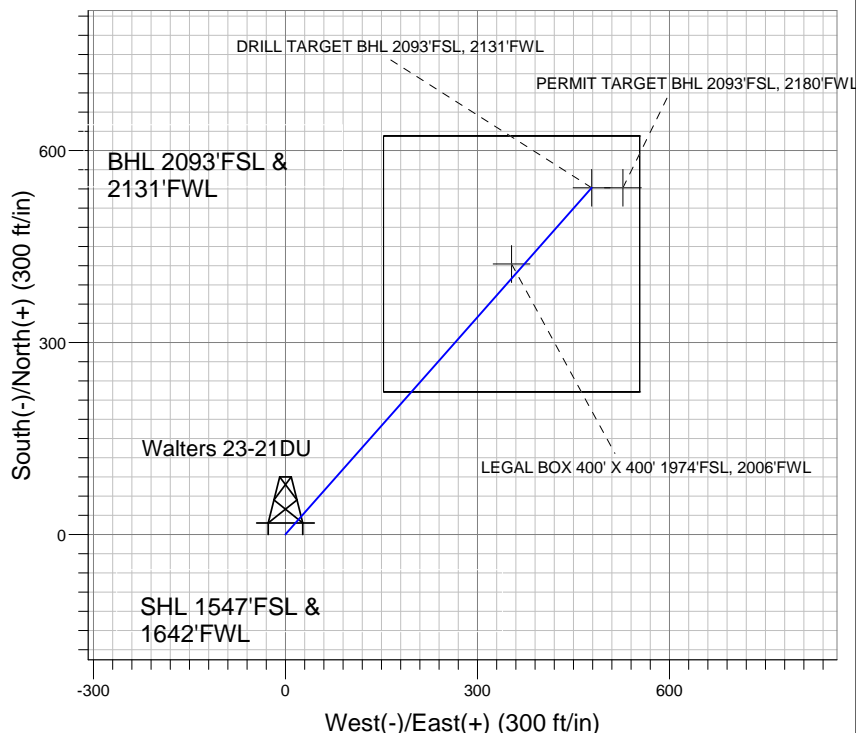
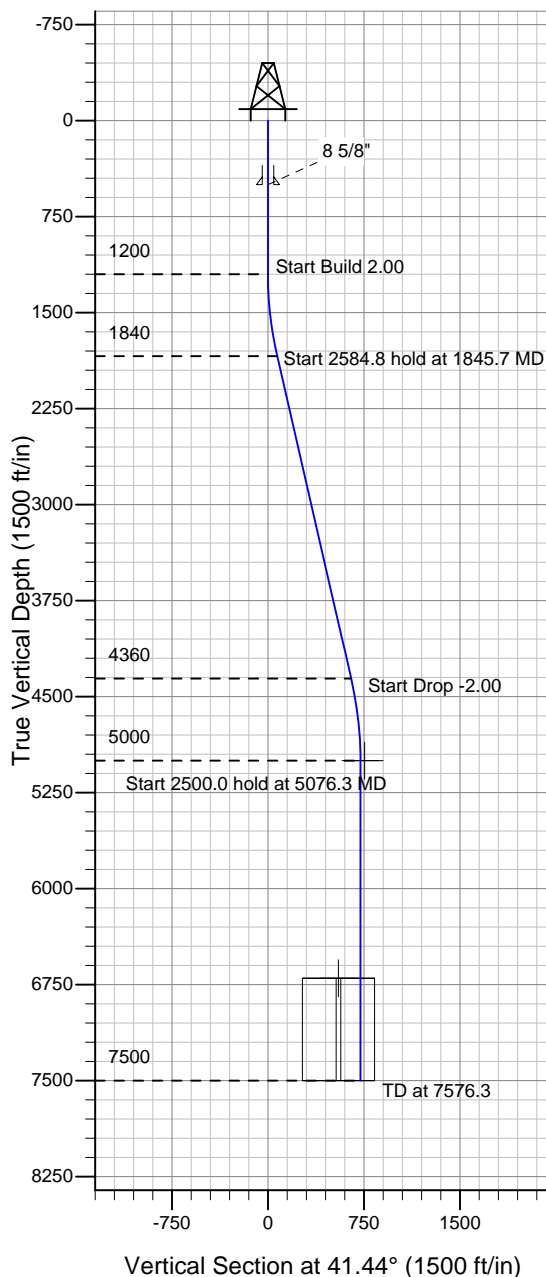
Well Name: **Walters 23-21DU**

Surface Location: Walters/Wedco/Ryland Pad Sec.21-T4N-R67W  
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4940.0

+N/-S +E/-W Northing Easting Latitude Longitude Slot  
0.0 0.0 1351015.07 3167479.97 40° 17' 43.368 N 104° 53' 58.488 W  
Original Well Elev WELL @ 4953.0ft (Original Well Elev)

### PETROLEUM DEVELOPMENT CORP Weld County CO



Walters 23-21DU  
Plan #1 (6-4-10)  
11:11, June 08 2010



Azimuths to True North  
Magnetic North: 9.09°  
Magnetic Field  
Strength: 53233.7snT  
Dip Angle: 67.00°  
Date: 12/31/2009  
Model: IGRF200510

#### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
DRILL TARGET BHL 2093'FSL, 2131'FWL	5000.0	541.7	478.3	40° 17' 48.721 N	104° 53' 52.315 W	Point
PERMIT TARGET BHL 2093'FSL, 2180'FWL	5000.0	541.7	527.3	40° 17' 48.721 N	104° 53' 51.682 W	Point
LEGAL BOX 400' X 400' 1974'FSL, 2006'FWL	6700.0	422.7	353.3	40° 17' 47.545 N	104° 53' 53.928 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	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	1845.7	12.91	41.44	1840.3	54.3	48.0	2.00	41.44	72.5	
4	4430.6	12.91	41.44	4359.7	487.4	430.3	0.00	0.00	650.2	
5	5076.3	0.00	0.00	5000.0	541.7	478.3	2.00	180.00	722.6	DRILL TARGET BHL 2093'FSL, 2131'FWL
6	7576.3	0.00	0.00	7500.0	541.7	478.3	0.00	0.00	722.6	