

# ENSIGN

## Directional

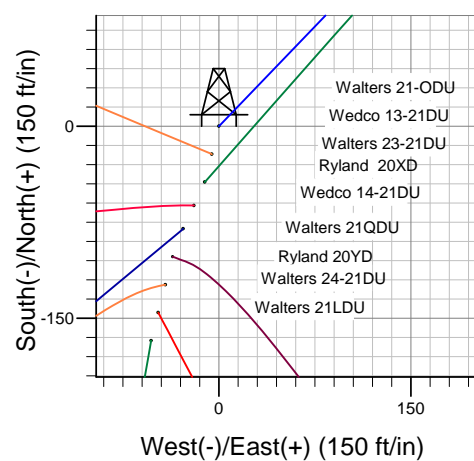
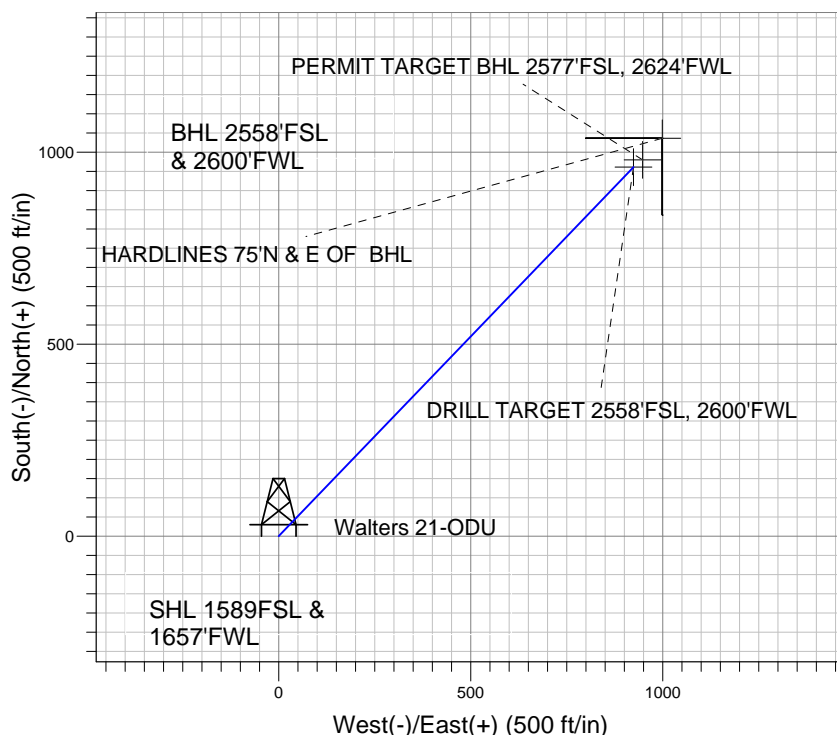
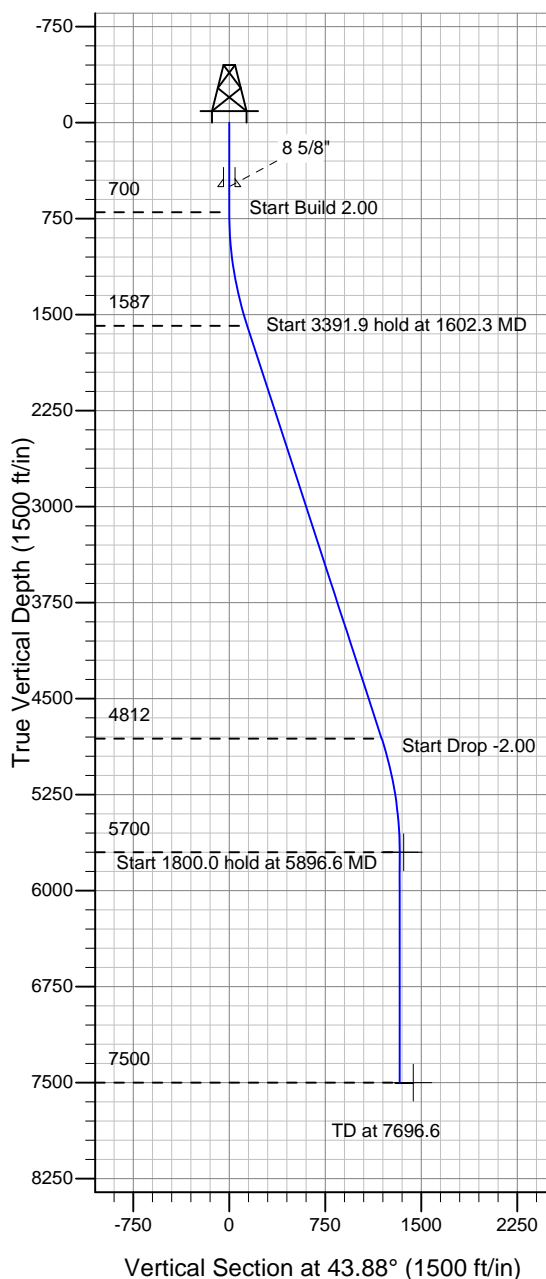
Well Name: **Walters 21-ODU**

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	1351058.85	3167490.83	40° 17' 43.800 N	104° 53' 58.344 W	
Original Well Elev WELL @ 4953.0ft (Original Well Elev)						

### PETROLEUM DEVELOPMENT CORP Weld County CO



Walters 21-ODU  
Plan #1 (6-4-10)  
8:18, June 09 2010



Azimuths to True North  
Magnetic North: 9.09°  
Magnetic Field  
Strength: 53233.8snT  
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 2558'FSL, 2600'FWL	5700.0	960.6	923.7	40° 17' 53.292 N	104° 53' 46.423 W	Point
PERMIT TARGET BHL 2577'FSL, 2624'FWL	5700.0	979.6	947.7	40° 17' 53.480 N	104° 53' 46.113 W	Point
HARDLINES 75°N & E OF BHL	7500.0	1035.6	998.7	40° 17' 54.033 N	104° 53' 45.455 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	700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.0	
3	1602.3	18.05	43.88	1587.5	101.6	97.7	2.00	43.88	140.9	
4	4994.2	18.05	43.88	4812.5	859.0	826.0	0.00	0.00	1191.7	
5	5896.6	0.00	0.00	5700.0	960.6	923.7	2.00	180.00	1332.7	DRILL TARGET 2558'FSL, 2600'FWL
6	7696.6	0.00	0.00	7500.0	960.6	923.7	0.00	0.00	1332.7	