

# ENSIGN

## Directional

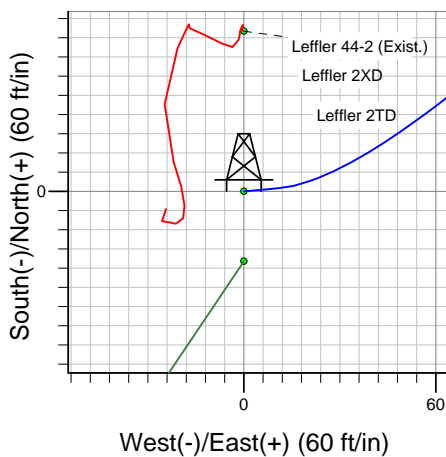
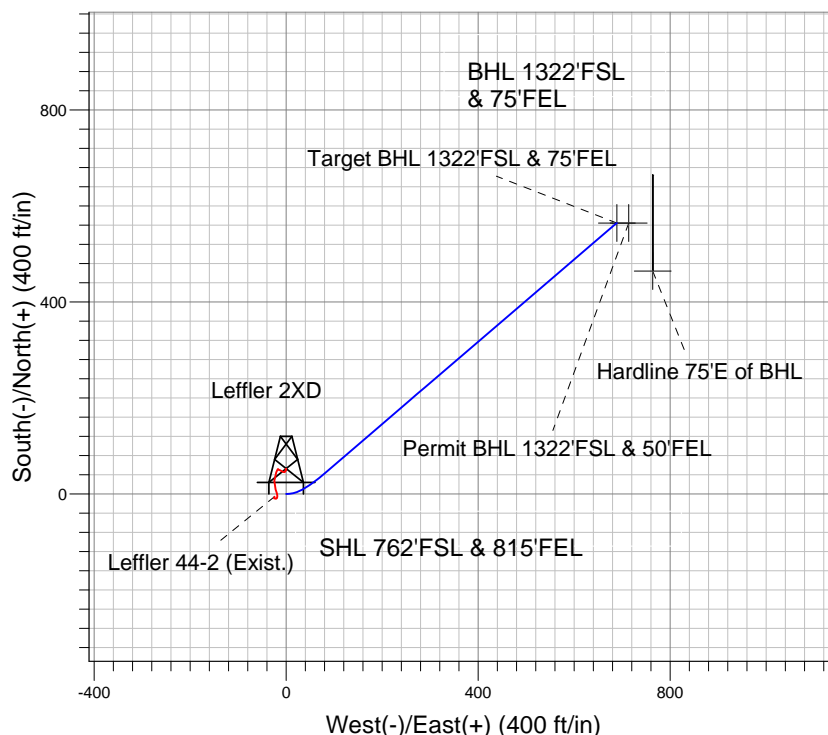
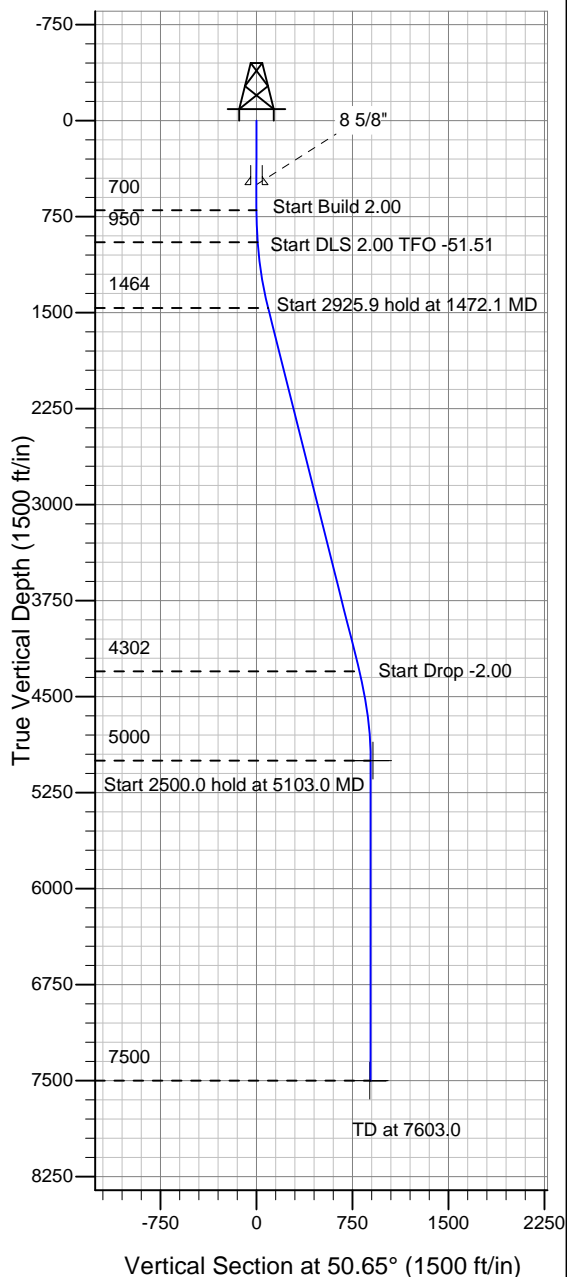
Well Name: **Leffler 2XD**

Surface Location: Leffler 2XD Pad Sec.2-T6N-R66W  
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4835.0

+N/-S +E/-W Northing Easting Latitude Longitude Slot  
0.0 0.0 1430363.42 3211854.20 40° 30' 44.100 N 104° 44' 17.016 W  
Original Well Elev WELL @ 4848.0ft (Original Well Elev)

### PETROLEUM DEVELOPMENT CORP Weld County CO



Leffler 2XD  
Plan#1 (7-1-10)  
12:27, July 06 2010



Azimuths to True North  
Magnetic North: 8.99°  
Magnetic Field  
Strength: 53294.0snT  
Dip Angle: 67.18°  
Date: 7/1/2010  
Model: IGRF2010

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

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Permit BHL 1322'FSL & 50'FEL	5000.0	564.6	713.7	40° 30' 49.679 N	104° 44' 7.776 W	Point
Target BHL 1322'FSL & 75'FEL	5000.0	564.6	688.7	40° 30' 49.679 N	104° 44' 8.099 W	Point
Hardline 75'E of BHL	7500.0	464.6	763.7	40° 30' 48.691 N	104° 44' 7.128 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	950.0	5.00	85.00	949.7	1.0	10.9	2.00	85.00	9.0	
4	1472.1	14.10	49.39	1464.3	44.4	82.0	2.00	-51.51	91.6	
5	4398.0	14.10	49.39	4302.1	508.4	623.2	0.00	0.00	804.3	
6	5103.0	0.00	0.00	5000.0	564.6	688.7	2.00	180.00	890.6	Target BHL 1322'FSL & 75'FEL
7	7603.0	0.00	0.00	7500.0	564.6	688.7	0.00	0.00	890.6	