

ENSIGN

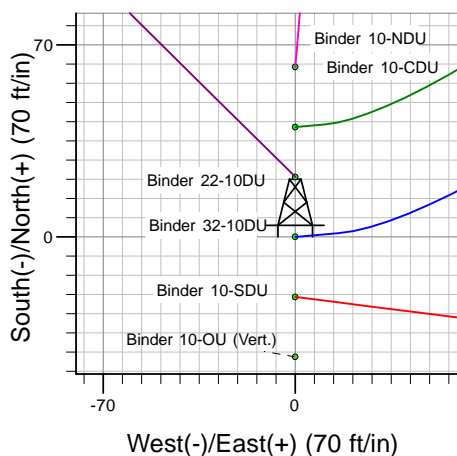
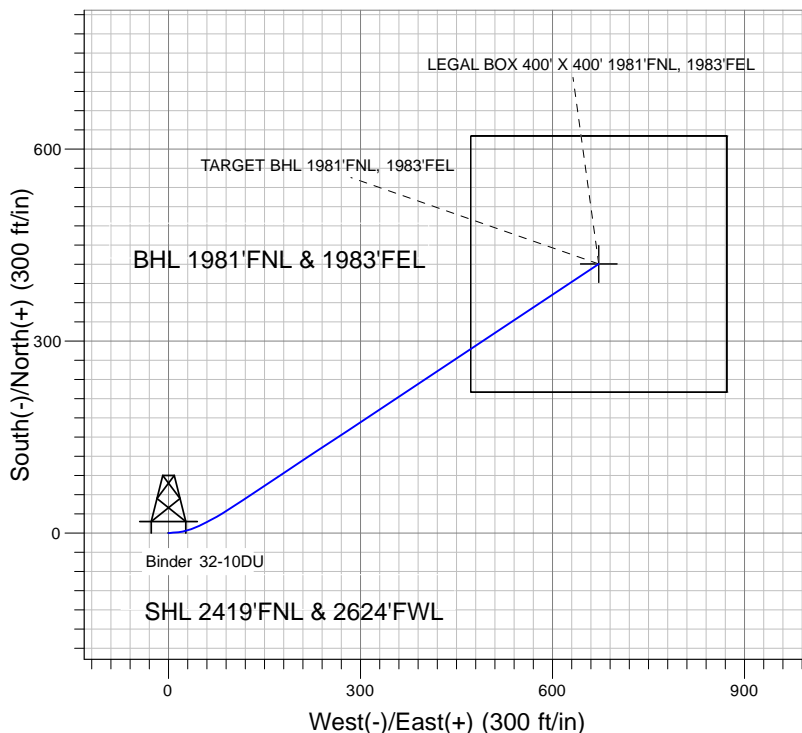
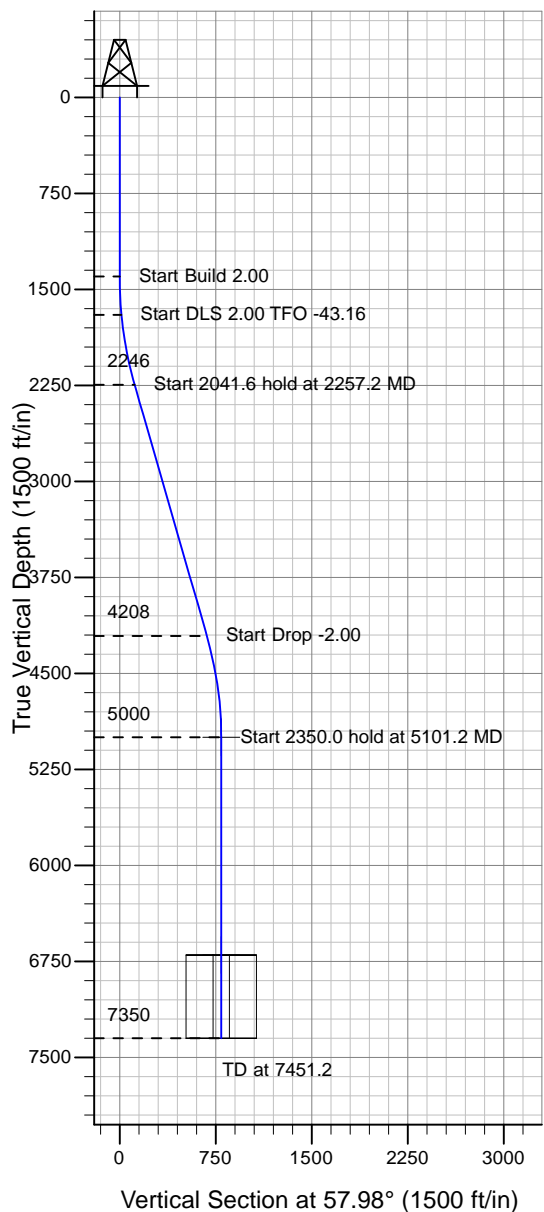
Directional

Well Name: Binder 32-10DU

Surface Location: Binder 10-NDU Pad Sec.10-T4N-R67W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4780.0

+N/-S+E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1362751.57 3173643.16 40° 19' 38.928 N 104° 52' 37.884 W
 Original Well Elev WELL @ 4793.0ft (Original Well Elev)

PETROLEUM DEVELOPMENT CORP Weld County CO



Binder 10-NDU Pad Sec.10-T4N-R67W
 Binder 32-10DU
 Plan #1 (10-21-09)
 13:58, October 22 2009



Azimuths to True North
 Magnetic North: 9.10°

Magnetic Field
 Strength: 53274.4snT
 Dip Angle: 67.04°
 Date: 10/21/2009
 Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1981'FNL, 1983'FEL	5000.0	420.5	672.4	40° 19' 43.083 N	104° 52' 29.203 W	Point
LEGAL BOX 400' X 400' 1981'FNL, 1983'FEL	6700.0	420.5	672.4	40° 19' 43.083 N	104° 52' 29.202 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	1400.0	0.00	0.00	1400.0	0.0	0.0	0.00	0.00	0.0	
3	1700.0	6.00	85.00	1699.5	1.4	15.6	2.00	85.00	14.0	
4	2257.2	16.05	56.43	2246.0	46.6	109.1	2.00	-43.16	117.2	
5	4298.8	16.05	56.43	4208.1	358.7	579.3	0.00	0.00	681.4	
6	5101.2	0.00	0.00	5000.0	420.5	672.4	2.00	180.00	793.0	TARGET BHL 1981'FNL, 1983'FEL
7	7451.2	0.00	0.00	7350.0	420.5	672.4	0.00	0.00	793.0	