

ENSIGN

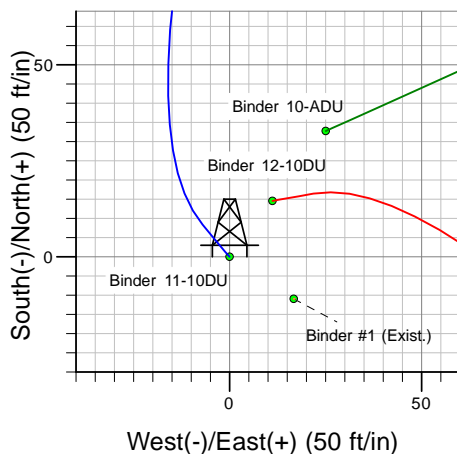
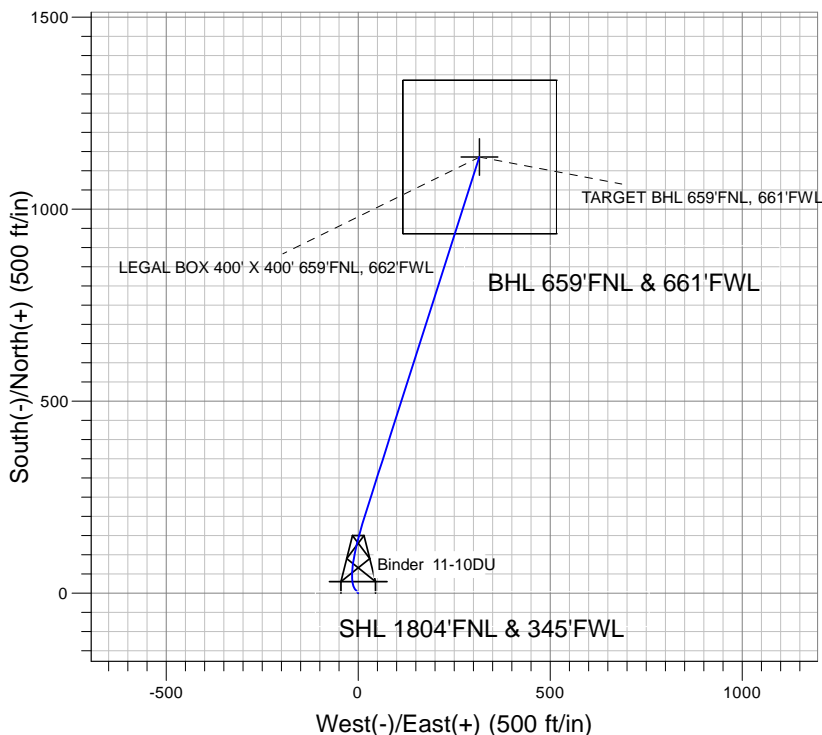
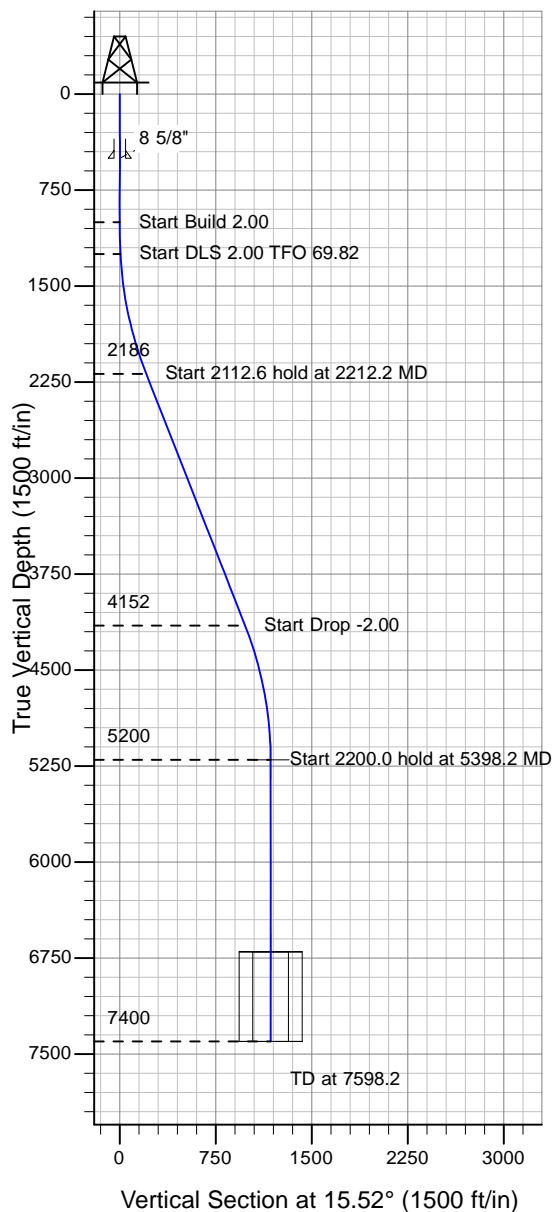
Directional

Well Name: Binder 11-10DU

Surface Location: Binder 12-10DU Pad Sec.10-T4N-R67W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4760.0

+N/-S+E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1363402.26 3171352.37 40° 19' 45.516 N 104° 53' 7.404 W
 Original Well Elev WELL @ 4773.0ft (Original Well Elev)

PETROLEUM DEVELOPMENT CORP Weld County CO



Binder 12-10DU Pad Sec.10-T4N-R67W
 Binder 11-10DU
 Plan #1 (11-20-09)
 15:56, December 02 2009



Azimuths to True North
 Magnetic North: 9.10°
 Magnetic Field
 Strength: 53266.1snT
 Dip Angle: 67.03°
 Date: 11/20/2009
 Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 659'FNL, 661'FWL	5200.0	1136.0	315.4	40° 19' 56.742 N	104° 53' 3.331 W	Point
LEGAL BOX 400' X 400' 659'FNL, 662'FWL	6700.0	1136.0	316.4	40° 19' 56.742 N	104° 53' 3.318 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	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1250.0	5.00	320.00	1249.7	8.4	-7.0	2.00	320.00	6.2	
4	2212.2	21.47	17.70	2185.5	210.1	19.8	2.00	69.82	207.8	
5	4324.8	21.47	17.70	4151.5	946.7	255.0	0.00	0.00	980.4	
6	5398.2	0.00	0.00	5200.0	1136.0	315.4	2.00	180.00	1179.0	TARGET BHL 659'FNL, 661'FWL
7	7598.2	0.00	0.00	7400.0	1136.0	315.4	0.00	0.00	1179.0	