

ENSIGN

Directional

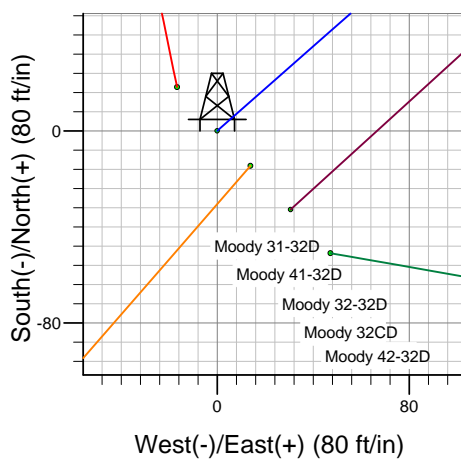
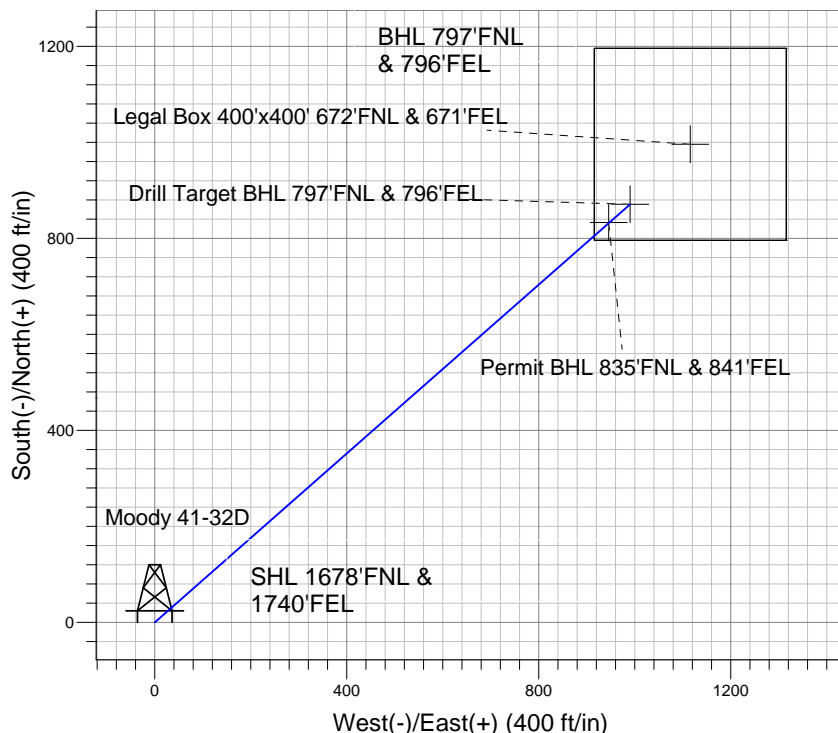
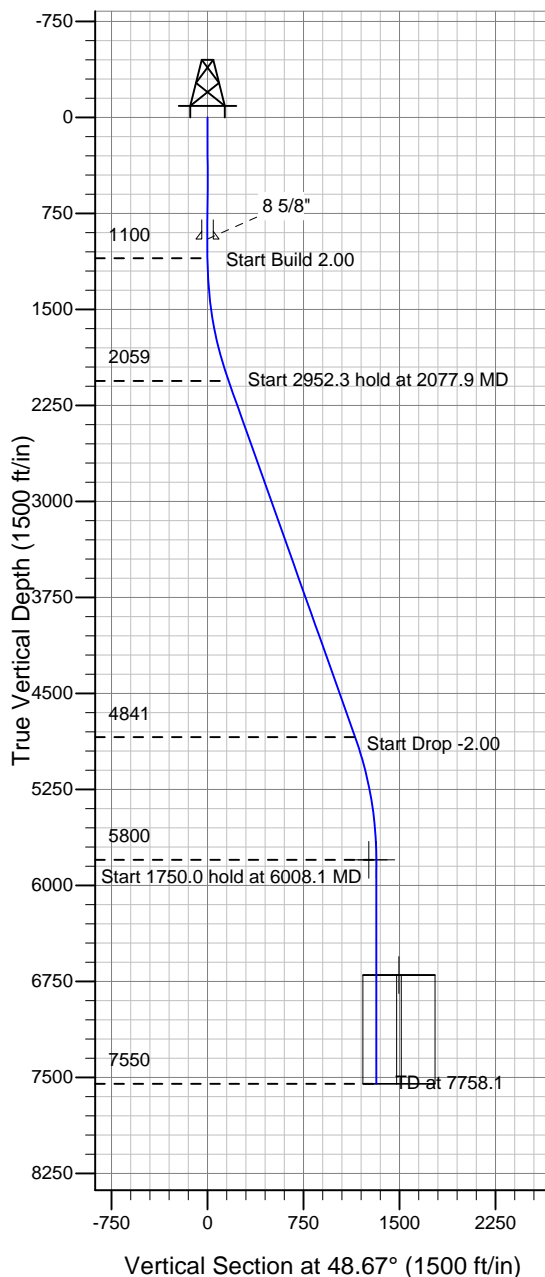
Well Name: Moody 41-32D

Surface Location: Moody 31-32D Pad Sec.32-T7N-R66W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4890.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1438072.52	3194631.60	40° 32' 1.680 N	104° 47' 59.208 W	
Original Well Elev WELL @ 4903.0ft (Original Well Elev)						

PETROLEUM DEVELOPMENT CORP Weld County CO



Moody 41-32D
Plan#1 (7-26-10)
12:48, August 16 2010



Azimuths to True North
Magnetic North: 9.05°
Magnetic Field
Strength: 53369.8snT
Dip Angle: 67.21°
Date: 12/31/2009
Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Drill Target BHL 797'FNL & 796'FEL	5800.0	871.0	990.4	40° 32' 10.286 N	104° 47' 46.381 W	Point
Permit BHL 835'FNL & 841'FEL	5800.0	833.0	945.4	40° 32' 9.911 N	104° 47' 46.964 W	Point
Legal Box 400'x400' 672'FNL & 671'FEL	6700.0	996.0	1115.4	40° 32' 11.522 N	104° 47' 44.762 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	1100.0	0.00	0.00	1100.0	0.0	0.0	0.00	0.00	0.0	
3	2077.9	19.56	48.67	2059.0	109.2	124.1	2.00	48.67	165.3	
4	5030.2	19.56	48.67	4841.0	761.8	866.3	0.00	0.00	1153.6	
5	6008.1	0.00	0.00	5800.0	871.0	990.4	2.00	180.00	1318.9	Drill Target BHL 797'FNL & 796'FEL
6	7758.1	0.00	0.00	7550.0	871.0	990.4	0.00	0.00	1318.9	