

ENSIGN

Directional

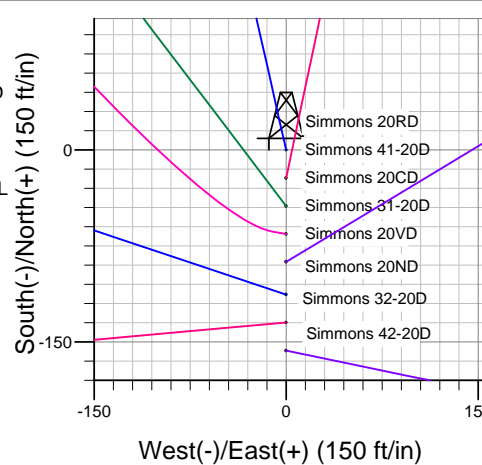
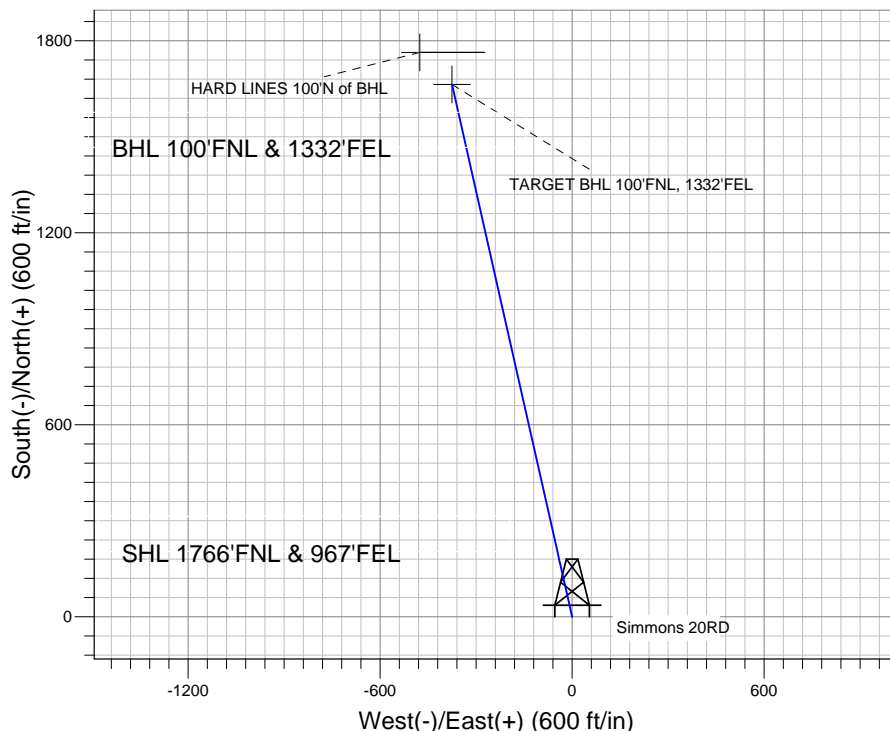
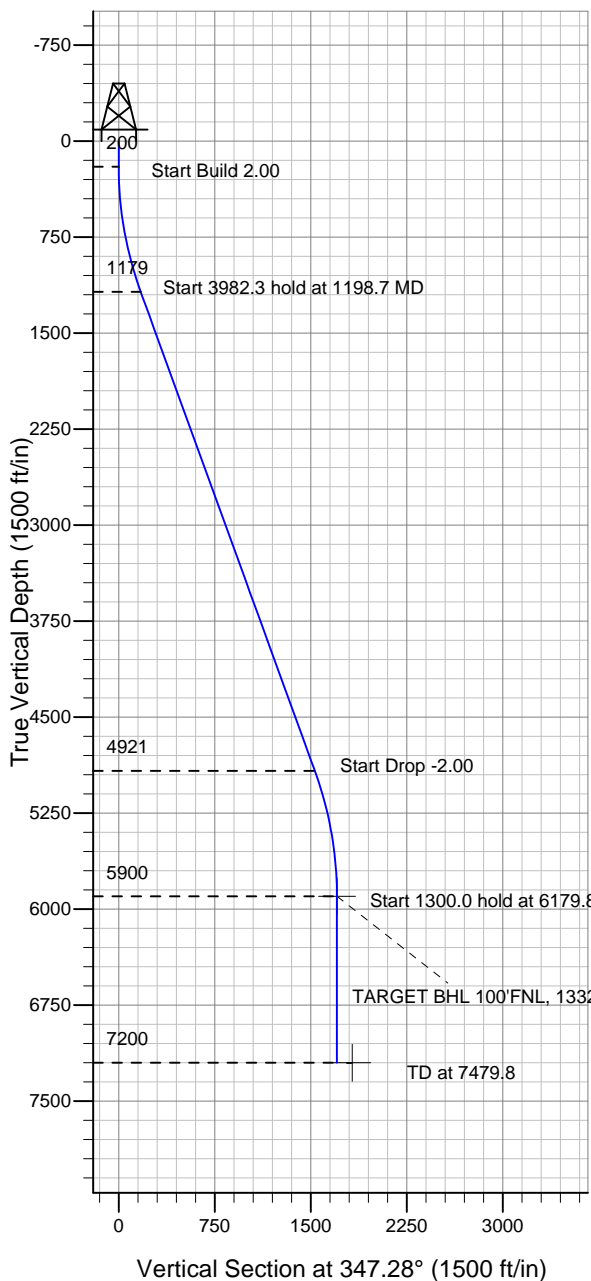
Well Name: Simmons 20RD

Surface Location: Simmons 42-20D Pad Sec.20-T6N-R64W
 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 1416844.56 3259267.23 40° 28' 26.040 N 104° 34' 5.016 W
 Original Well Elev WELL @ 4773.0ft (Original Well Elev)

PETROLEUM DEVELOPMENT CORP Weld County CO



Simmons 42-20D Pad Sec.20-T6N-R64W
 Simmons 20RD
 Plan #1 (1-06-11)
 9:45, January 18 2011



Azimuths to True North
 Magnetic North: 8.82°

Magnetic Field
 Strength: 53234.7snT
 Dip Angle: 67.16°
 Date: 1/18/2011
 Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 100'FNL, 1332'FEL	5900.0	1663.2	-375.4	40° 28' 42.474 N	104° 34' 9.874 W	Point
HARD LINES 100'N of BHL	7200.0	1763.2	-475.4	40° 28' 43.463 N	104° 34' 11.168 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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1198.7	19.97	347.28	1178.6	168.1	-37.9	2.00	347.28	172.3	
4	5181.1	19.97	347.28	4921.4	1495.1	-337.5	0.00	0.00	1532.7	
5	6179.8	0.00	0.00	5900.0	1663.2	-375.4	2.00	180.00	1705.0	TARGET BHL 100'FNL, 1332'FEL
6	7479.8	0.00	0.00	7200.0	1663.2	-375.4	0.00	0.00	1705.0	