

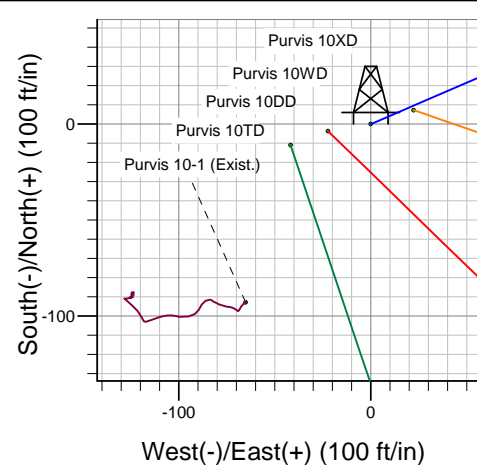
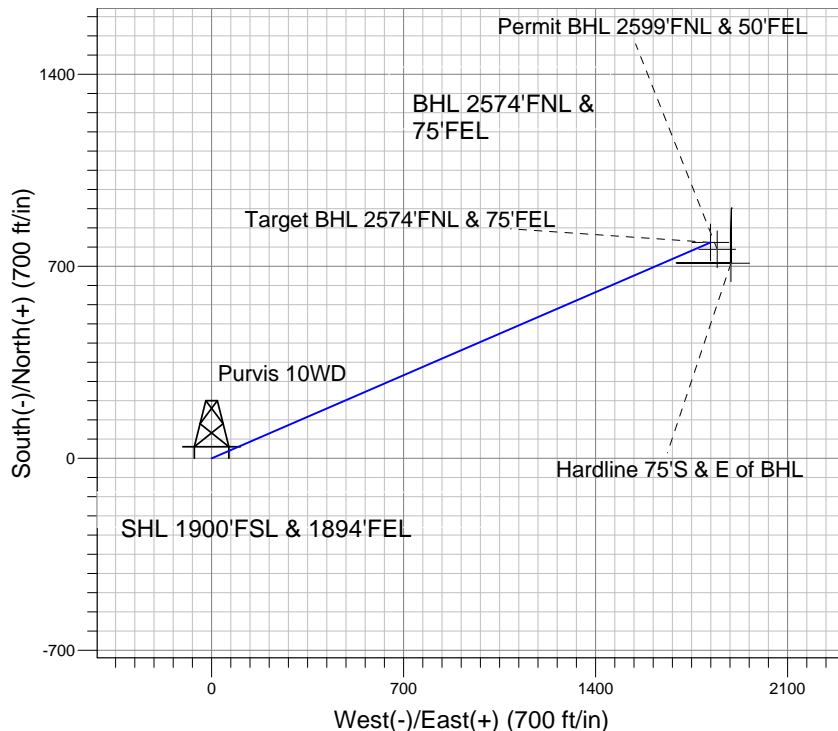
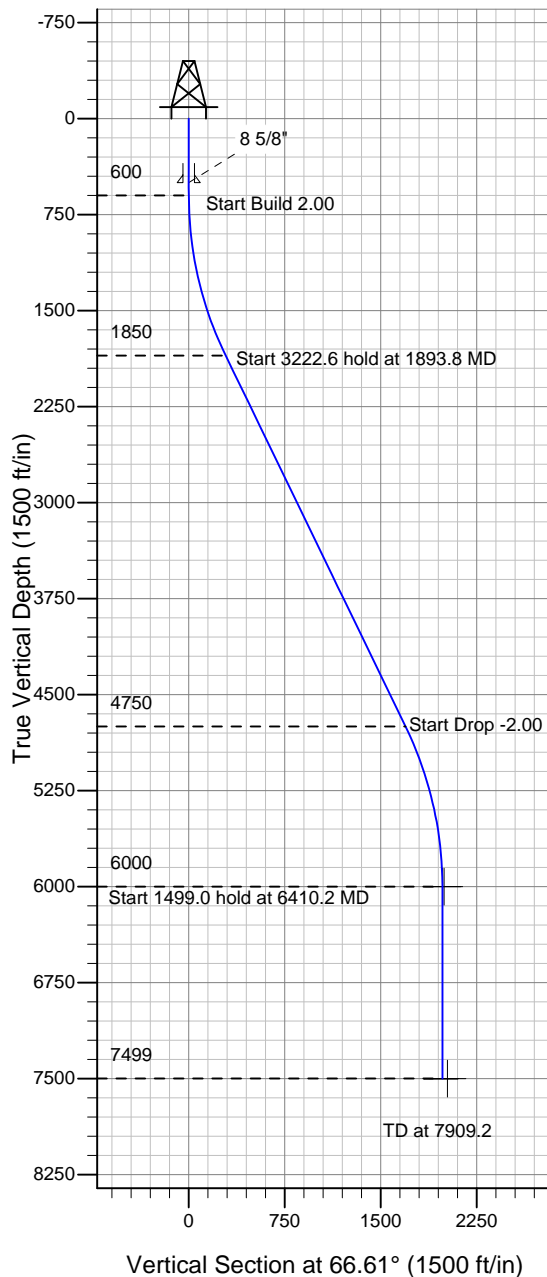
ENSIGN

Directional

Well Name: Purvis 10WD

Surface Location: Purvis 10TD Pad Sec. 10-T4N-R67W
 North American Datum 1983 , US State Plane 1983 Colorado Northern Zone
 Ground Elevation: 4793.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1361758.79 3174411.33 40° 19' 29.064 N 104° 52' 28.056 W
 Original Well ElevWELL @ 4806.0ft (Original Well Elev)

PETROLEUM DEVELOPMENT CORP Weld County CO



Purvis 10WD
 Plan#1 (7-14-10)
 15:29, July 16 2010



Azimuths to True North
 Magnetic North: 9.07°
 Magnetic Field
 Strength: 53253.1nT
 Dip Angle: 67.03°
 Date: 12/31/2009
 Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Permit BHL 2599'FNL & 50'FEL	6000.0	761.5	1843.0	40° 19' 36.588 N	104° 52' 4.260 W	Point
Target BHL 2574'FNL & 75'FEL	6000.0	786.5	1818.0	40° 19' 36.835 N	104° 52' 4.583 W	Point
Hardline 75'S & E of BHL	7500.0	711.5	1893.0	40° 19' 36.094 N	104° 52' 3.615 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	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1893.8	25.88	66.61	1850.3	114.0	263.6	2.00	66.61	287.2	
4	5116.4	25.88	66.61	4749.7	672.5	1554.4	0.00	0.00	1693.6	
5	56410.2	0.00	0.00	6000.0	786.5	1818.0	2.00	180.00	1980.9	Target BHL 2574'FNL & 75'FEL
6	67909.2	0.00	0.00	7499.0	786.5	1818.0	0.00	0.00	1980.9	