

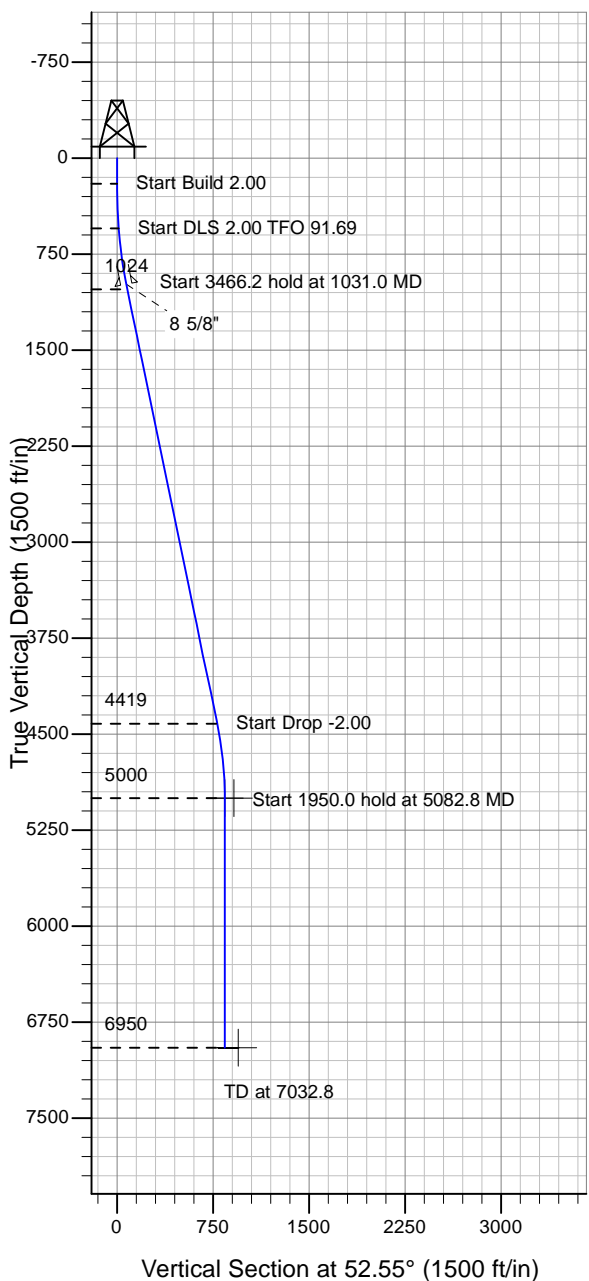
ENSIGN

Directional

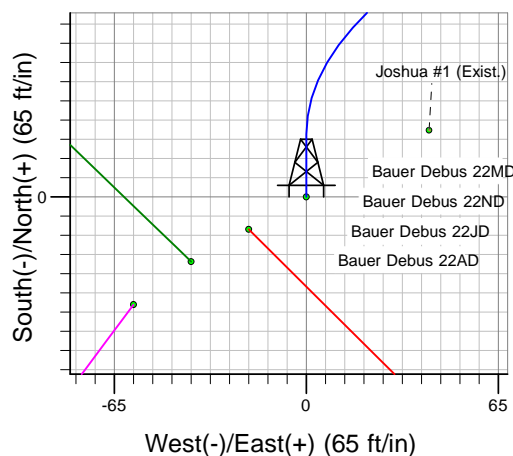
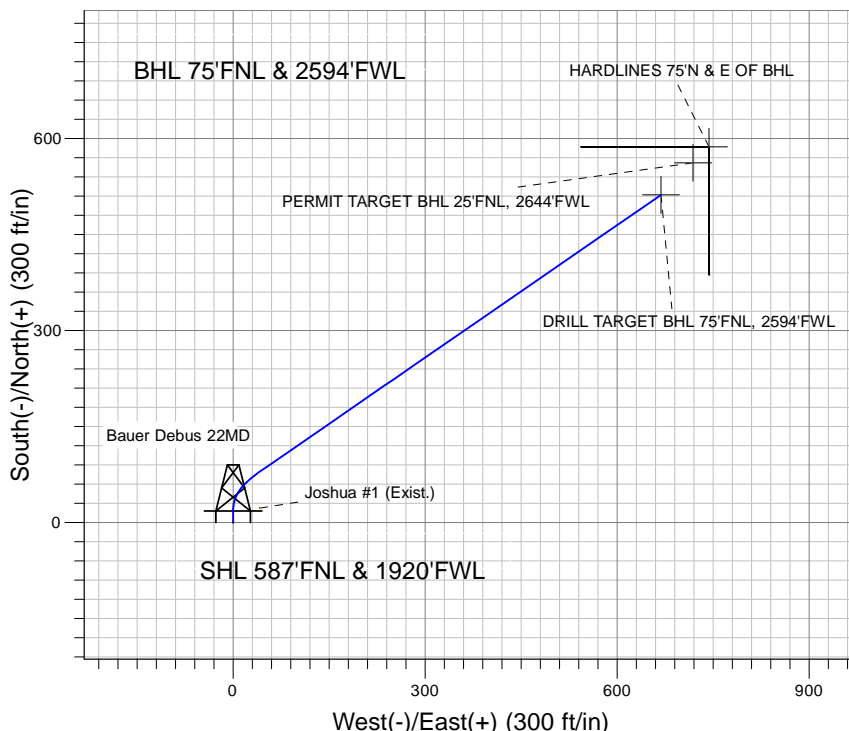
Well Name: Bauer Debus 22MD

Surface Location: Bauer Debus 22AD Pad Sec.22-T5N-R64W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4575.0

+N/-S+E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1386551.38 3267803.27 40° 23' 25.800 N 104° 32' 18.816 W
 Original Well Elev WELL @ 4588.0ft (Original Well Elev)



PETROLEUM DEVELOPMENT CORP Weld County CO



Bauer Debus 22AD Pad Sec.22-T5N-R64W
 Bauer Debus 22MD
 Plan #1 (5-15-10)
 17:11, May 17 2010



Azimuths to True North
 Magnetic North: 8.89°

Magnetic Field
 Strength: 53267.1snT
 Dip Angle: 67.12°
 Date: 5/17/2010
 Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
DRILL TARGET BHL 75'FNL, 2594'FWL	5000.0	511.9	668.4	40° 23' 30.858 N	104° 32' 10.178 W	Point
PERMIT TARGET BHL 25'FNL, 2644'FWL	5000.0	561.9	718.4	40° 23' 31.352 N	104° 32' 9.532 W	Point
HARDLINES 75'N & E OF BHL	6950.0	586.9	743.4	40° 23' 31.599 N	104° 32' 9.208 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	550.0	7.00	0.00	549.1	21.4	0.0	2.00	0.00	13.0	
4	1031.0	11.71	55.40	1024.5	78.5	40.3	2.00	91.69	79.7	
5	4497.3	11.71	55.40	4418.6	478.0	619.3	0.00	0.00	782.4	
6	5082.8	0.00	0.00	5000.0	511.9	668.4	2.00	180.00	841.9	DRILL TARGET BHL 75'FNL, 2594'FWL
7	7032.8	0.00	0.00	6950.0	511.9	668.4	0.00	0.00	841.9	