

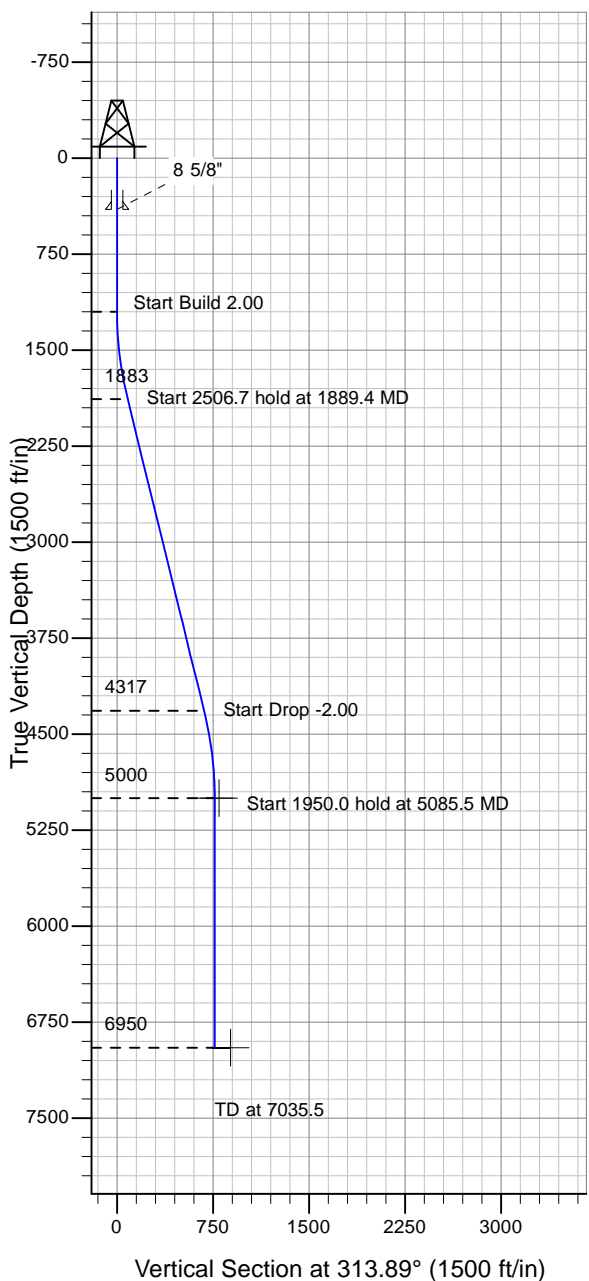
ENSIGN

Directional

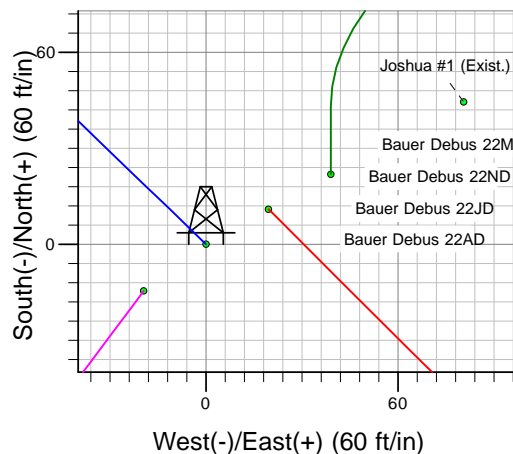
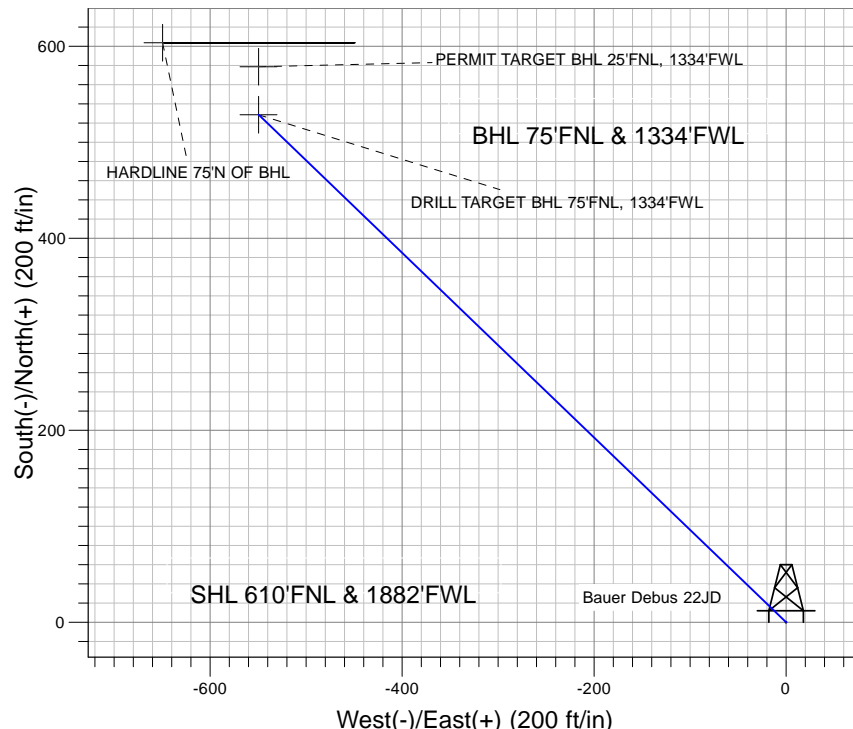
Well Name: Bauer Debus 22JD

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 1386529.10 3267764.52 40° 23' 25.584 N 104° 32' 19.320 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 22JD
 Plan #1 (5-15-10)
 17:28, May 17 2010



Azimuths to True North
 Magnetic North: 8.89°

Magnetic Field
 Strength: 53267.0snT
 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, 1334'FWL	5000.0	528.7	-549.5	40° 23' 30.808 N	104° 32' 26.422 W	Point
PERMIT TARGET BHL 25'FNL, 1334'FWL	5000.0	578.7	-549.5	40° 23' 31.302 N	104° 32' 26.422 W	Point
HARDLINE 75'N OF BHL	6950.0	603.7	-649.5	40° 23' 31.549 N	104° 32' 27.714 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	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	1889.4	13.79	313.89	1882.8	57.2	-59.5	2.00	313.89	82.6	
4	4396.1	13.79	313.89	4317.2	471.5	-490.0	0.00	0.00	680.0	
5	5085.5	0.00	0.00	5000.0	528.7	-549.5	2.00	180.00	762.5	DRILL TARGET BHL 75'FNL, 1334'FWL
6	7035.5	0.00	0.00	6950.0	528.7	-549.5	0.00	0.00	762.5	