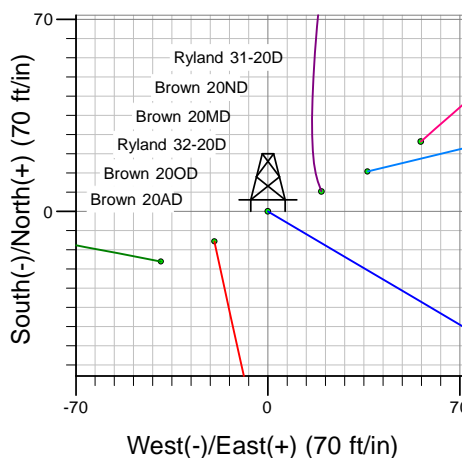
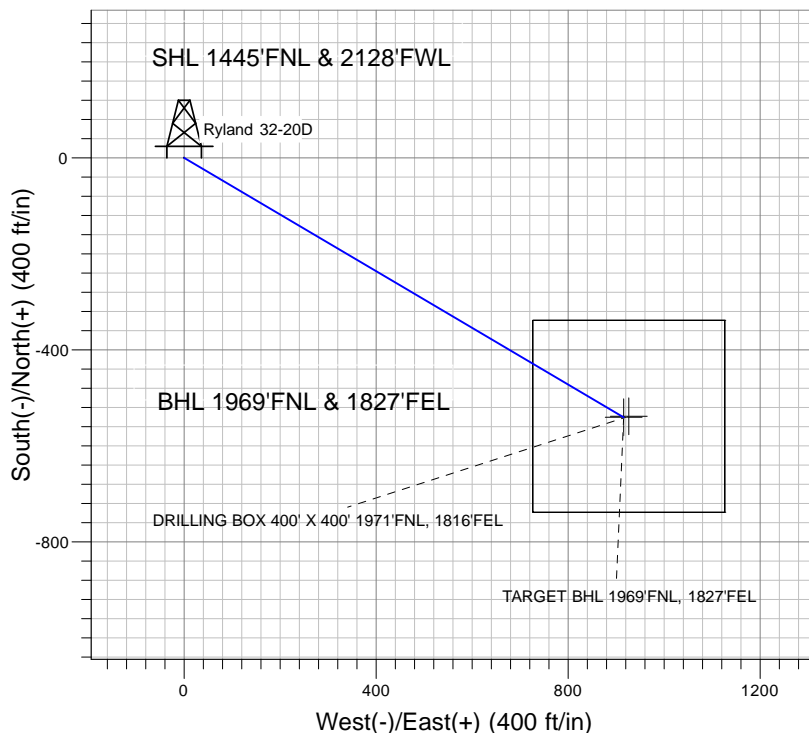
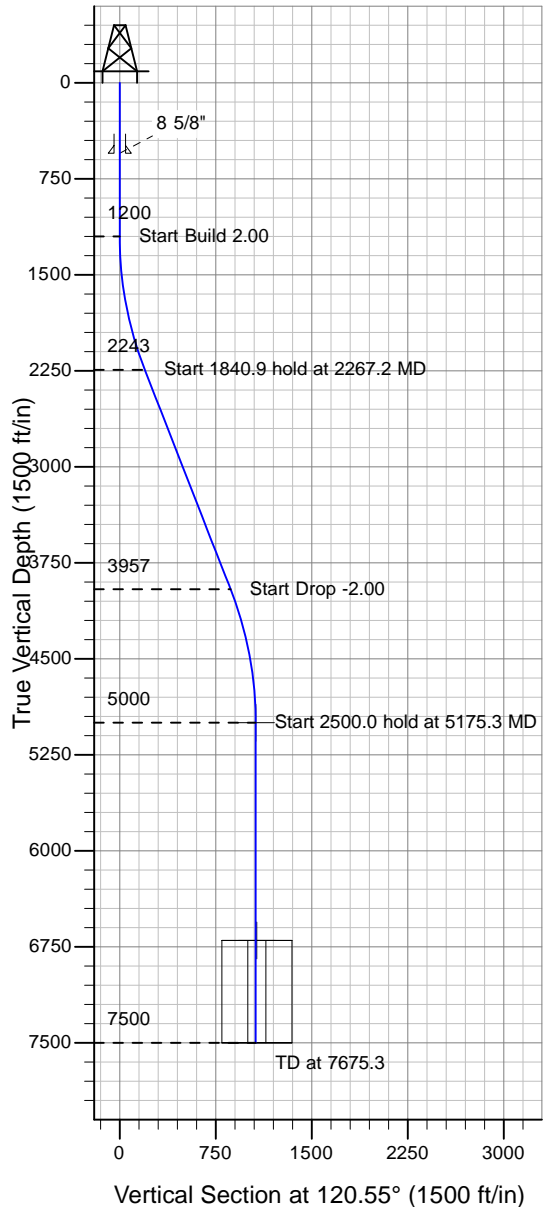


Well Name: Ryland 32-20D

Surface Location: Brown/Ryland Pad Sec.20-T4N-R67W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4900.0

+N/-S+E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1353338.86 3163054.51 40° 18' 6.624 N 104° 54' 55.404 W
 Original Well Elev WELL @ 4913.0ft (Original Well Elev)

PETROLEUM DEVELOPMENT CORP Weld County CO



Brown/Ryland Pad Sec.20-T4N-R67W
 Ryland 32-20D
 Plan #1 (1-6-10)
 16:38, January 07 2010



Azimuths to True North
 Magnetic North: 9.09°
 Magnetic Field
 Strength: 53235.7nT
 Dip Angle: 67.00°
 Date: 12/31/2009
 Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1969'FNL, 1827'FEL	5000.0	-540.3	915.4	40° 18' 1.284 N	104° 54' 43.589 W	Point
DRILLING BOX 400' X 400' 1971'FNL, 1816'FEL	6700.0	-538.3	926.4	40° 18' 1.304 N	104° 54' 43.448 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	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	2267.2	21.34	120.55	2242.7	-99.9	169.2	2.00	120.55	196.5	
4	4108.1	21.34	120.55	3957.3	-440.4	746.2	0.00	0.00	866.5	
5	5175.3	0.00	0.00	5000.0	-540.3	915.4	2.00	180.00	1063.0	TARGET BHL 1969'FNL, 1827'FEL
6	7675.3	0.00	0.00	7500.0	-540.3	915.4	0.00	0.00	1063.0	