

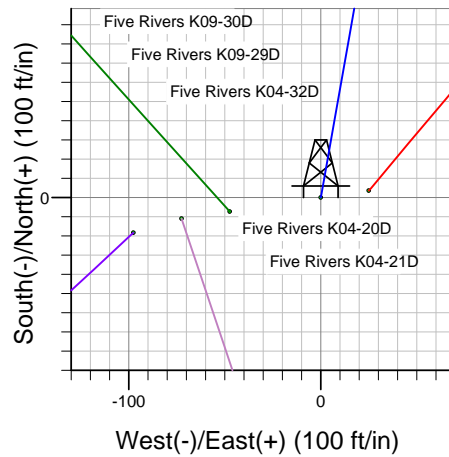
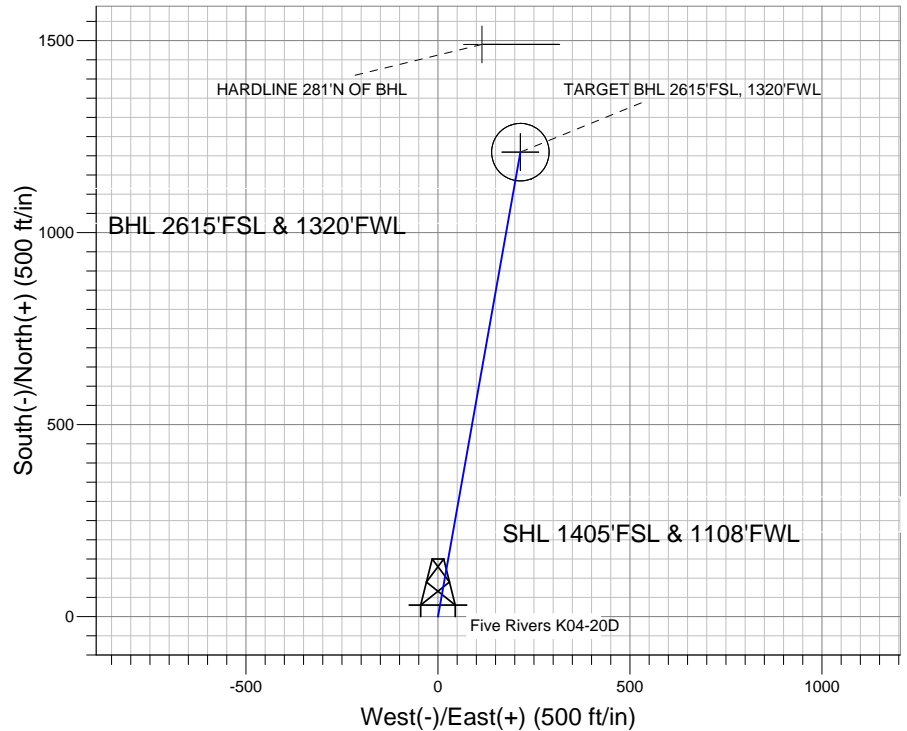
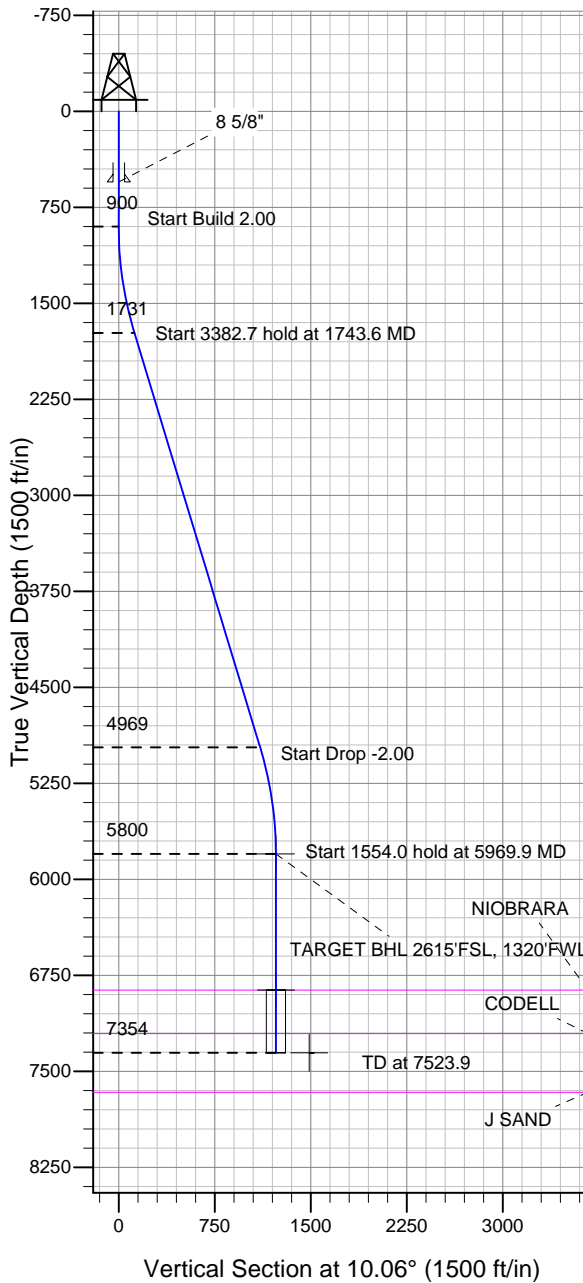
ENSIGN

Directional

Well Name: Five Rivers K04-20D

Surface Location: Five Rivers K04-20D Pad Sec.4-T4N-R66W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone
 Ground Elevation: 4691.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1366571.02 3198078.76 40° 20' 14.856 N 104° 47' 21.984 W
 Original Well Elev WELL @ 4704.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



Five Rivers K04-20D Pad Sec.4-T4N-R66W
 Five Rivers K04-20D
 Noble Five Rivers K04-20D Plan #2 (4-19-11)
 15:42, April 19 2011



Azimuths to True North
 Magnetic North: 8.89°

Magnetic Field
 Strength: 53113.5nT
 Dip Angle: 67.00°
 Date: 4/19/2011
 Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2615'FSL, 1320'FWL	5800.0	1209.5	214.6	40° 20' 26.808 N	104° 47' 19.212 W	Point
TARGET CIRCLE 2615'FSL, 1320'FWL	6864.0	1209.5	214.6	40° 20' 26.808 N	104° 47' 19.212 W	Circle (Radius: 75.0)
HARDLINE 281'N OF BHL	7354.0	1490.5	114.6	40° 20' 29.585 N	104° 47' 20.504 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	900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.0	
3	1743.6	16.87	10.06	1731.5	121.4	21.5	2.00	10.06	123.3	
4	5126.3	16.87	10.06	4968.5	1088.1	193.1	0.00	0.00	1105.1	
5	5969.9	0.00	0.00	5800.0	1209.5	214.6	2.00	180.00	1228.4	TARGET BHL 2615'FSL, 1320'FWL
6	7523.9	0.00	0.00	7354.0	1209.5	214.6	0.00	0.00	1228.4	