

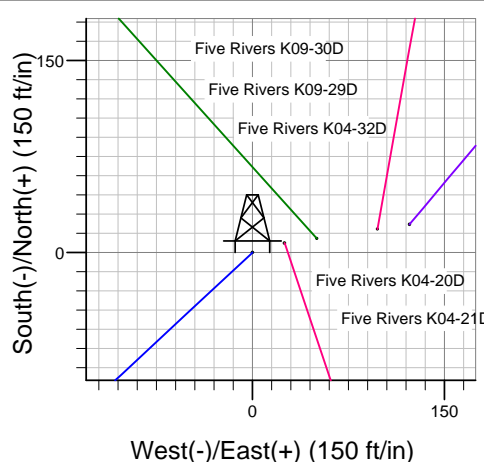
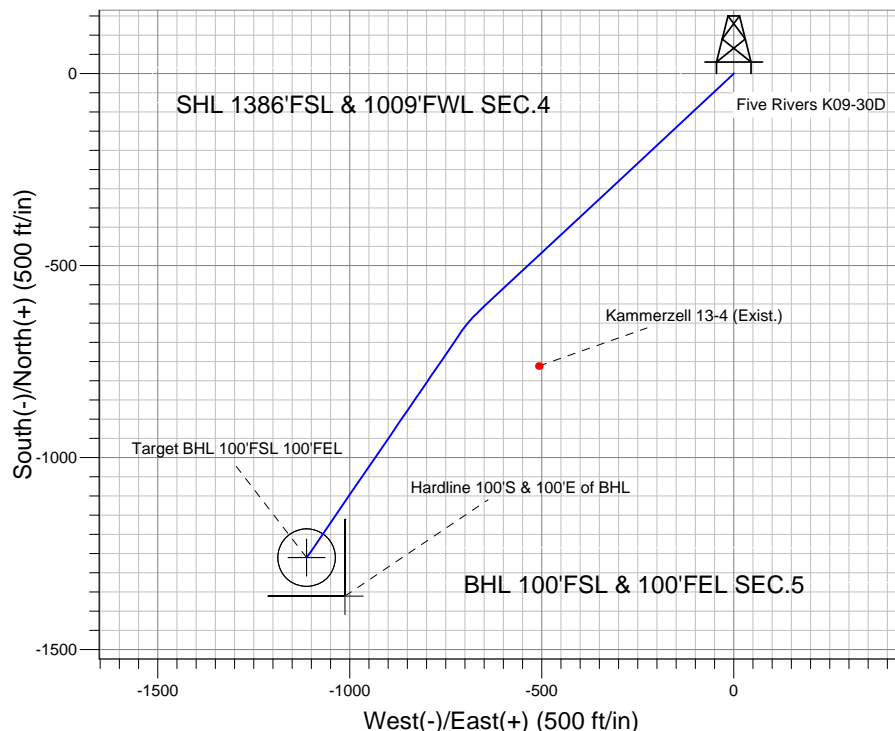
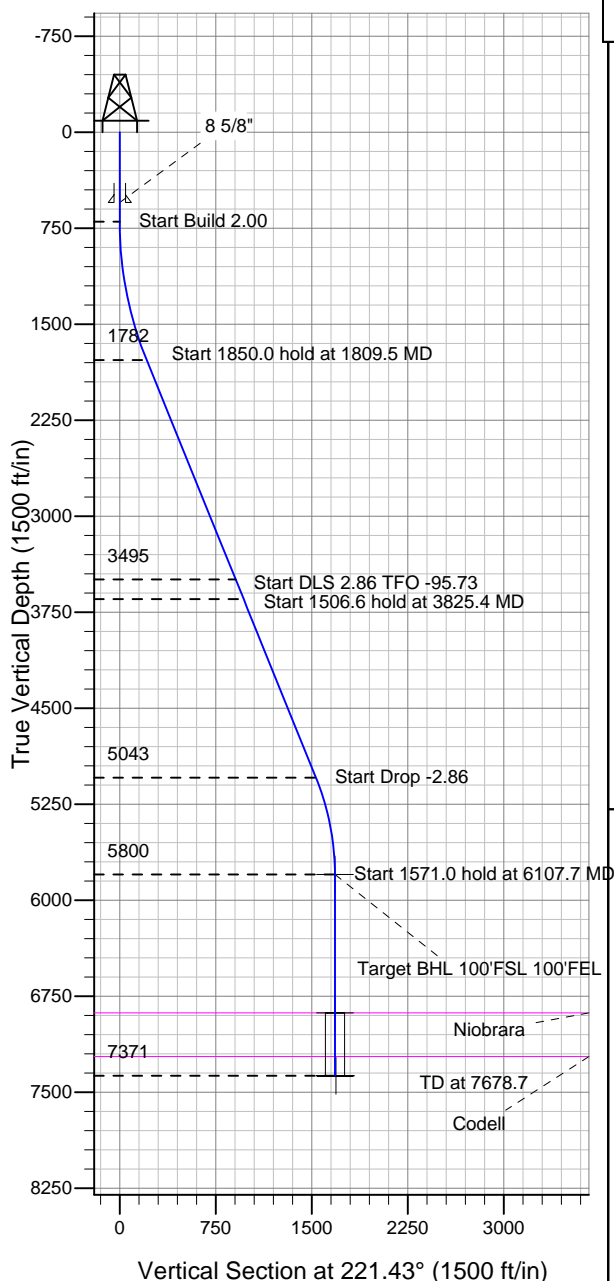
ENSIGN

Directional

Well Name: Five Rivers K09-30D

Surface Location: Five Rivers K04-20D Pad Sec.4-T4N-R66W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone
 Ground Elevation: 4693.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1366552.03 3197981.34 40° 20' 14.676 N 104° 47' 23.244 W
 Original Well Elev WELL @ 4706.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



Five Rivers K04-20D Pad Sec.4-T4N-R66W
 Five Rivers K09-30D
 Noble Five Rivers K09-30D Plan #1 (1-19-11)
 8:46, January 26 2011



Azimuths to True North
 Magnetic North: 8.92°

Magnetic Field
 Strength: 53137.4snT
 Dip Angle: 67.01°
 Date: 1/26/2011
 Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Target BHL 100'FSL 100'FEL	5800.0	-1260.5	-1112.4	40° 20' 2.220 N	104° 47' 37.608 W	Point
Target Circle 100'FSL 100'FEL	6881.0	-1260.5	-1112.4	40° 20' 2.220 N	104° 47' 37.608 W	Circle (Radius: 75.0)
Hardline 100'S & 100'E of BHL	7371.0	-1360.5	-1012.4	40° 20' 1.232 N	104° 47' 36.317 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	700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.0	
3	1809.5	22.19	227.00	1782.0	-144.7	-155.2	2.00	227.00	211.2	
4	3659.5	22.19	227.00	3495.0	-621.2	-666.2	0.00	0.00	906.6	
5	3825.4	22.20	214.41	3648.6	-668.5	-706.8	2.86	-95.73	968.9	
6	5331.9	22.20	214.41	5043.5	-1138.0	-1028.5	0.00	0.00	1533.8	
7	6107.7	0.00	0.00	5800.0	-1260.5	-1112.4	2.86	180.00	1681.1	Target BHL 100'FSL 100'FEL
8	7678.7	0.00	0.00	7371.0	-1260.5	-1112.4	0.00	0.00	1681.1	