

NOBLE ENERGY INC WELD COUNTY CO

Well Name: **MARK ALTER C16-79HN**

Surface Location: MARK ALTER C16-79HN PAD 9-4N-64W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4702.0

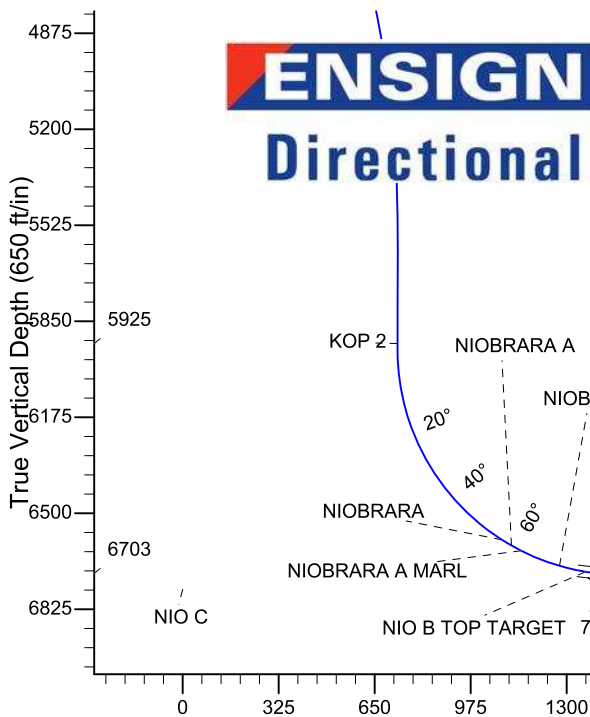
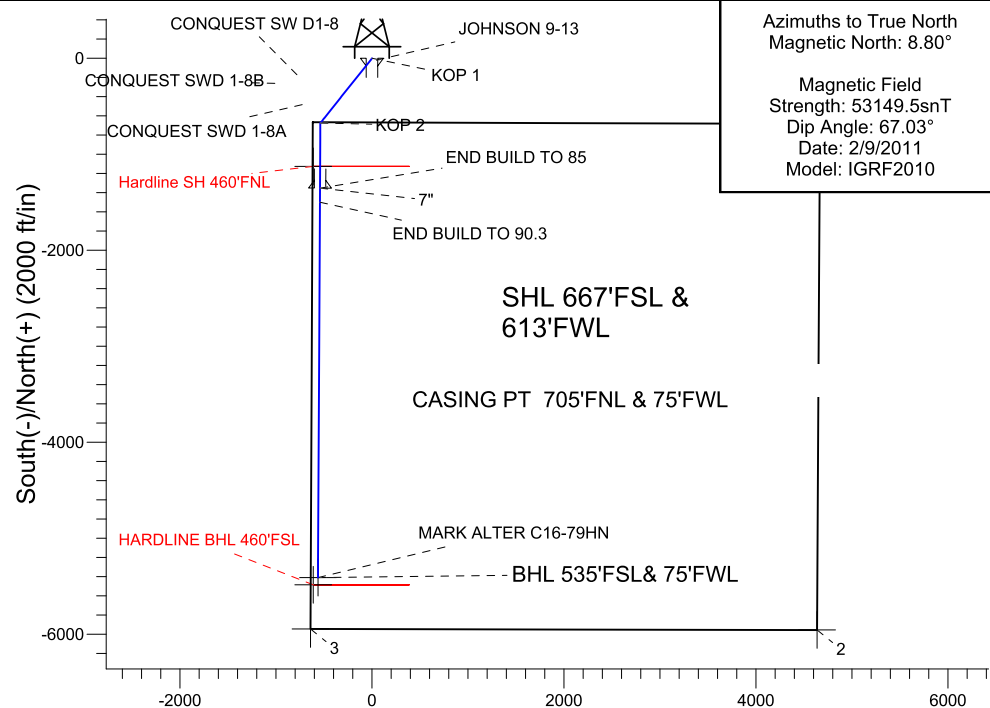
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1361344.11	3261303.34	40.321500	-104.562850	

RKB ENSIGN 134 13' RKB @ 4715.0ft (RKB ENSIGN 134 13')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
HARDLINE BHL 460'FSL	1.0	-5485.0	-613.0	Polygon
Hardline SH 460'FNL	1.0	-1127.0	-613.0	Polygon
BHL 535'FSL& 75'FWL	6693.5	-5409.9	-563.4	Point

MARK ALTER C16-79HN PAD 9-4N-64W
MARK ALTER C16-79HN
PLAN 1 (FEB 9,2011)
11:50, February 11 2011



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	1510.8	12.22	218.56	1506.2	-50.7	-40.4	2.00	218.56	54.6	
4	4976.9	12.22	218.56	4893.8	-624.3	-497.6	0.00	0.00	672.5	
5	5587.7	0.00	0.00	5500.0	-675.0	-538.0	2.00	180.00	727.1	
6	6032.0	0.00	0.00	5944.3	-675.0	-538.0	0.00	0.00	727.1	
7	7165.4	85.00	180.30	6705.4	-1372.4	-541.6	7.50	180.30	1421.1	
8	7240.4	85.00	180.30	6711.9	-1447.1	-542.0	0.00	0.00	1495.4	
9	7311.2	90.31	180.31	6714.8	-1517.8	-542.4	7.50	0.12	1565.8	
10	1203.5	90.31	180.31	6693.5	-5409.9	-563.4	0.00	0.00	5439.2	BHL 535'FSL& 75'FWL

ANNOTATIONS

TVD	MD	Annotation
900.0	900.0	KOP 1
5944.3	6013.0	KOP 2
6705.3	7146.0	END BUILD TO 85
6714.8	7292.0	END BUILD TO 90.3

OK to submit with 2A as per Noble Drilling - 2/16/2011 09:20