

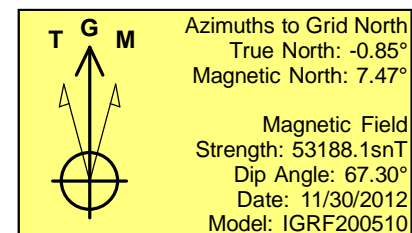
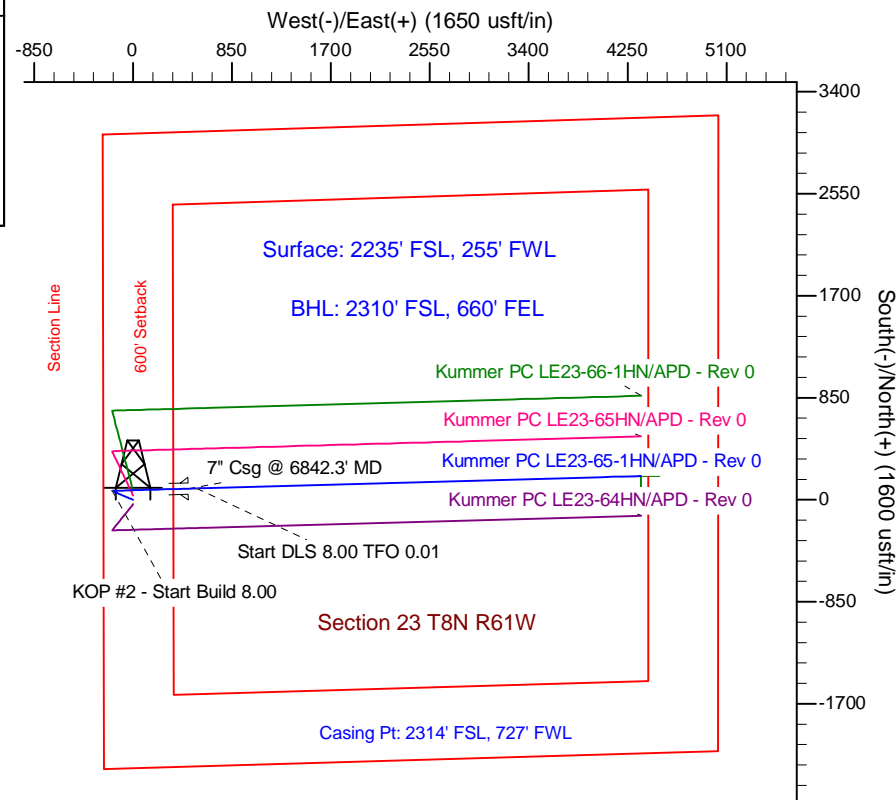
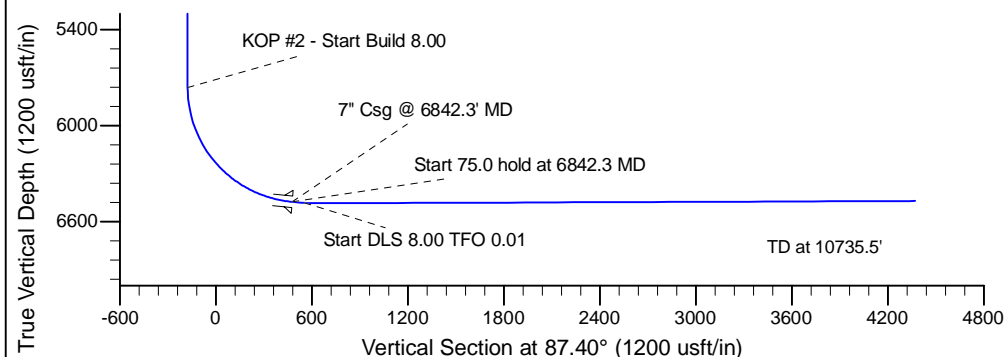
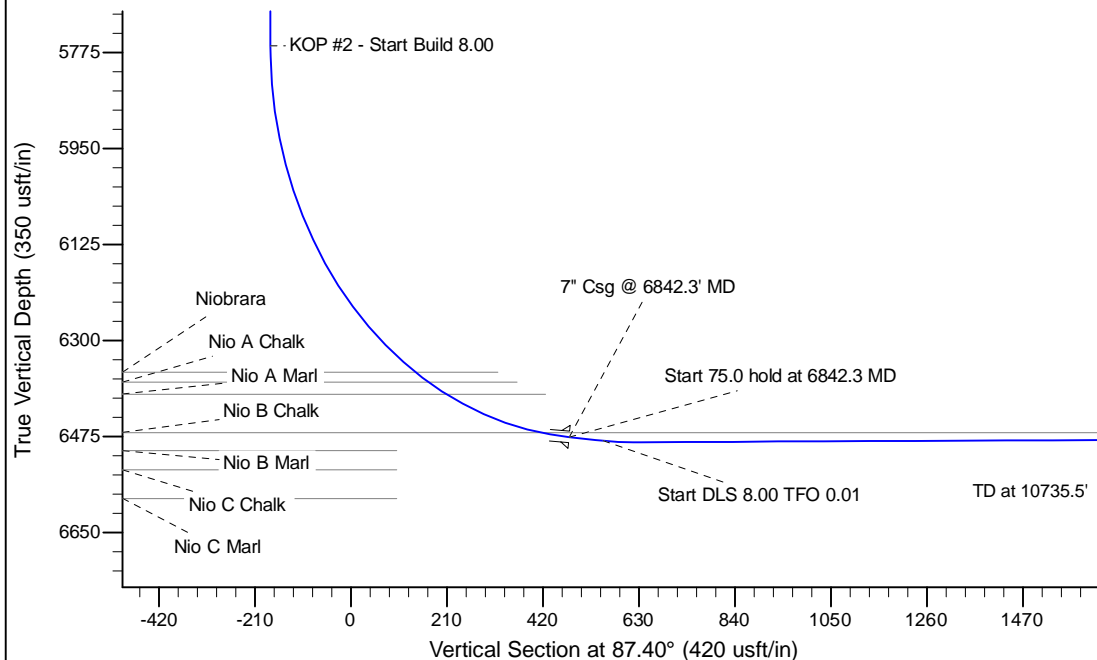
Project: Wattenberg Field
 Site: LE (Sec.23-T08N-R61W) Weld County, CO
 Well: Kummer PC LE23-65-1HN
 Wellbore: Original Drilling
 Design: APD - Rev 0

Northern Region Drilling

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: Colorado Northern Zone
 System Datum: Mean Sea Level

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0	
3	2980.2	12.00	292.62	2976.7	19.3	-46.3	2.50	292.62	-45.3	
4	3435.8	12.00	292.62	3422.3	55.7	-133.7	0.00	0.00	-131.1	
5	3916.0	0.00	0.00	3899.0	75.0	-180.0	2.50	180.00	-176.4	
6	5779.8	0.00	0.00	5762.8	75.0	-180.0	0.00	0.00	-176.4	
7	6842.3	85.00	88.45	6476.3	92.7	473.5	8.00	88.45	477.2	
8	6917.3	85.00	88.45	6482.8	94.7	548.2	0.00	0.00	552.0	
9	6982.5	90.22	88.45	6485.6	96.5	613.4	8.00	0.01	617.1	
10	10735.5	90.22	88.45	6471.2	197.9	4364.9	0.00	0.00	4369.4	Kummer PC LE23-65-1HN BHL 2310'FSL, 660'FEL



WELL DETAILS: Kummer PC LE23-65-1HN			
Ground Level: 4982.0		Latitude 40.646244	
Northing 1480989.52	Easting 3365897.96	Longitude -104.181394	
Plan: APD - Rev 0 (Kummer PC LE23-65-1HN/Original Drilling)			
Created By: Carrie Willers		Date: 13:54, December 05 2012	
OK to submit with 2A as per Noble Drilling 12/5/12 3:13			