

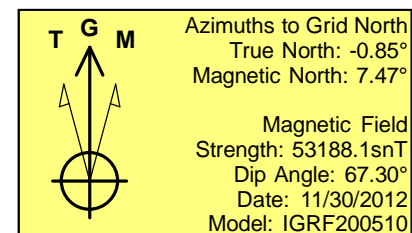
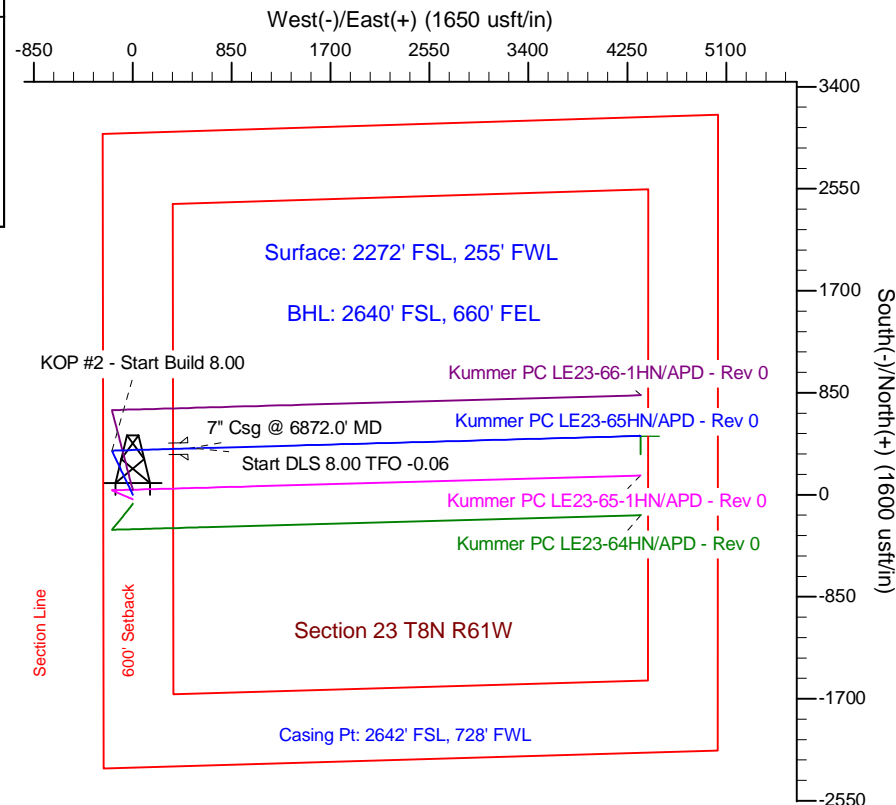
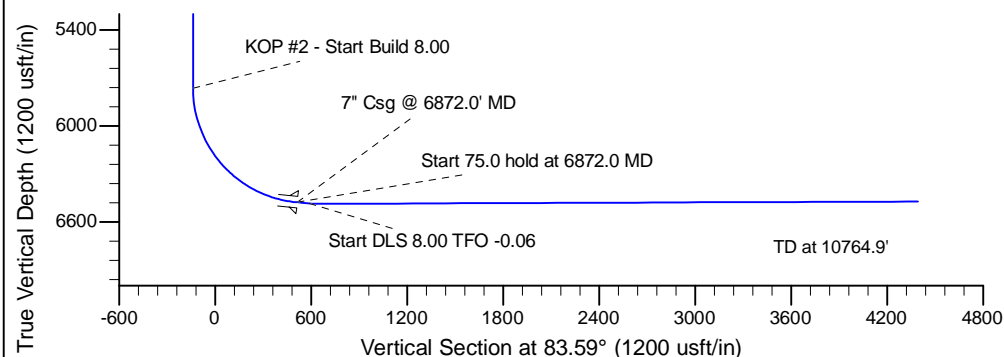
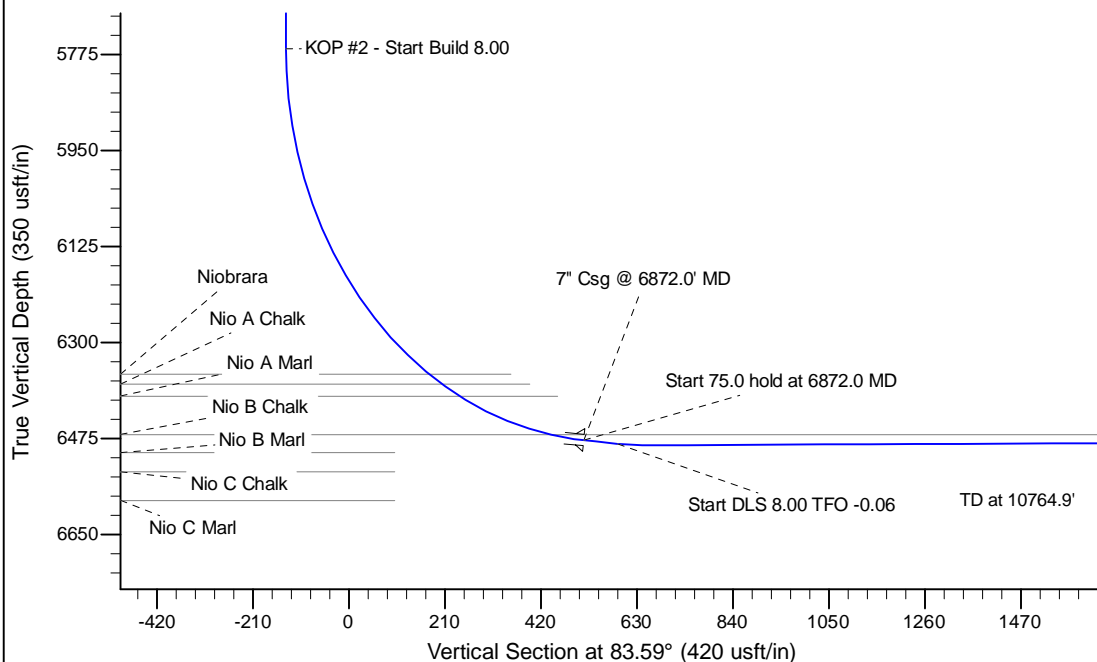
Project: Wattenberg Field  
 Site: LE (Sec.23-T08N-R61W) Weld County, CO  
 Well: Kummer PC LE23-65HN  
 Wellbore: Original Drilling  
 Design: APD - Rev 0

# 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	1800.0	0.00	0.00	1800.0	0.0	0.0	0.00	0.00	0.0	
3	2359.9	14.00	333.94	2354.4	61.1	-29.9	2.50	333.94	-22.9	
4	3490.8	14.00	333.94	3451.6	306.9	-150.1	0.00	0.00	-114.9	
5	4050.7	0.00	0.00	4006.0	368.0	-180.0	2.50	180.00	-137.8	
6	5809.5	0.00	0.00	5764.8	368.0	-180.0	0.00	0.00	-137.8	
7	6872.0	85.00	88.46	6478.3	385.6	473.5	8.00	88.46	513.6	
8	6947.0	85.00	88.46	6484.8	387.6	548.2	0.00	0.00	588.1	
9	7012.3	90.22	88.45	6487.5	389.3	613.4	8.00	-0.06	653.0	
10	10764.9	90.22	88.45	6473.1	490.5	4364.6	0.00	0.00	4392.1	Kummer PC LE23-65HN BHL 2640'FSL, 660'FEL



WELL DETAILS: Kummer PC LE23-65HN			
Ground Level:	4982.0	Latitude	
Northing	Easting	Longitude	
1481027.05	3365897.96	40.646347	-104.181392
Plan: APD - Rev 0 (Kummer PC LE23-65HN/Original Drilling)			
Created By: Carrie Willers		Date: 14:47, December 05 2012	
OK to submit with 2A as per Noble Drilling 12/5/12 3:11			