

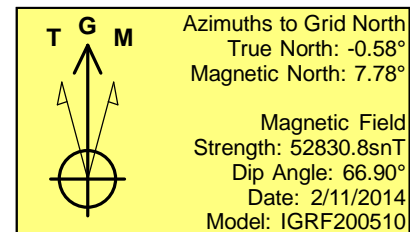
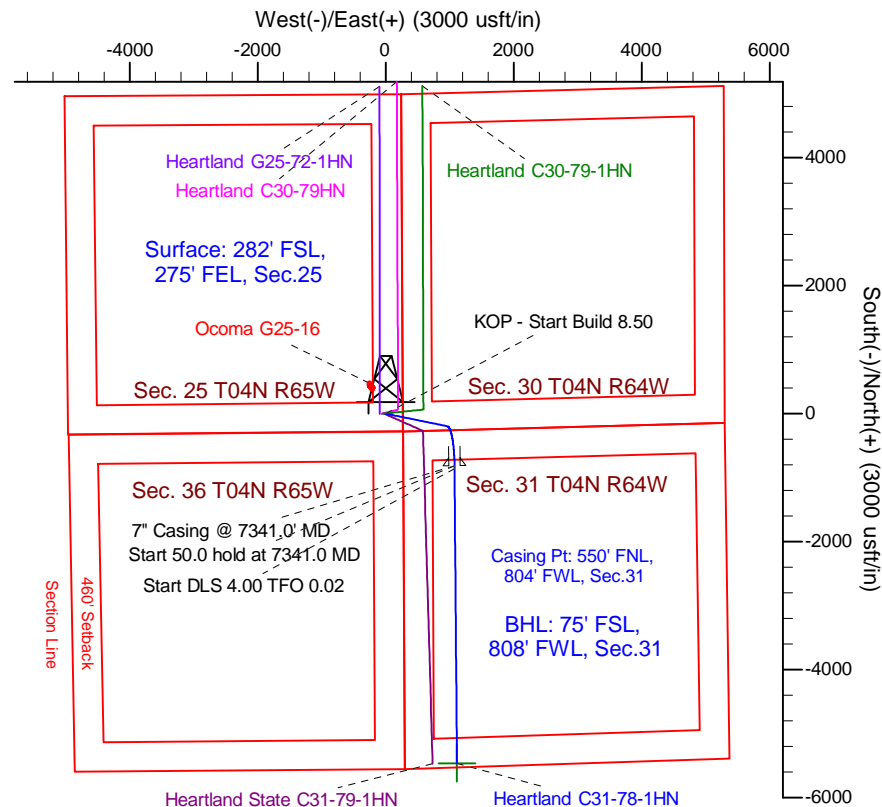
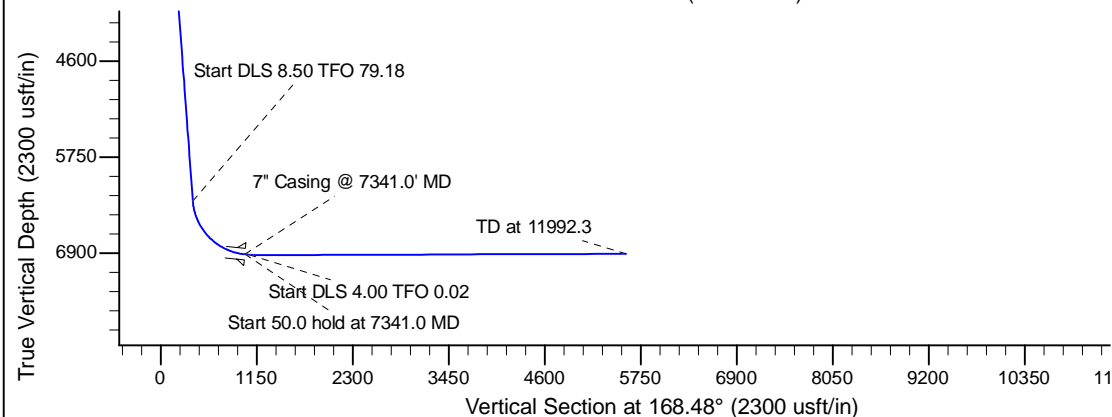
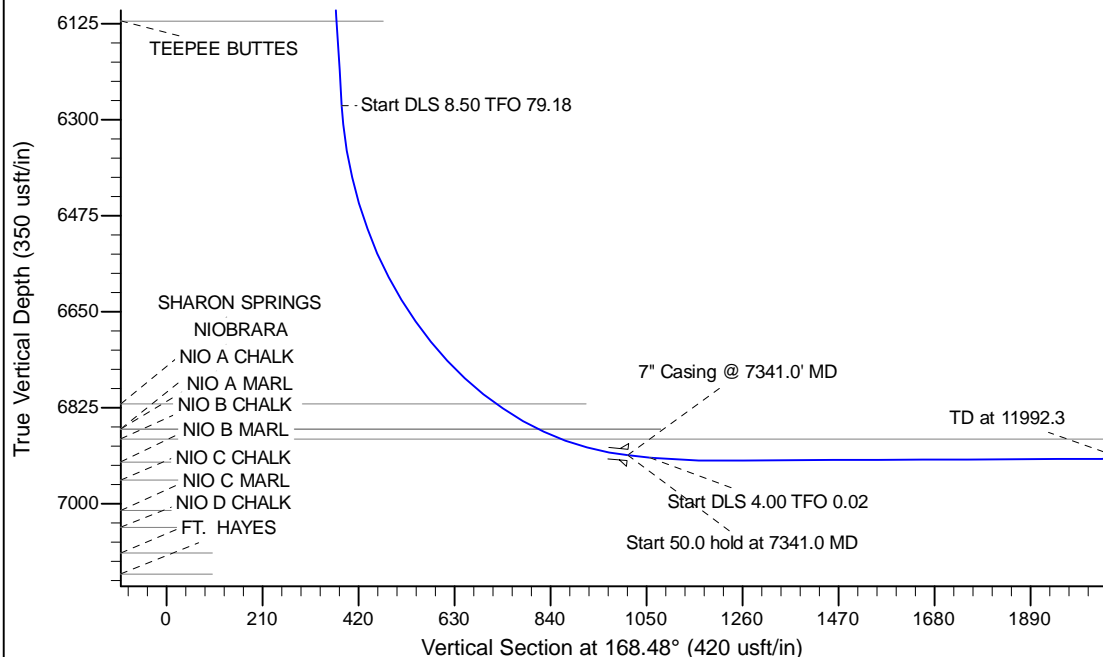
Project: Wattenberg Field
 Site: G (Sec.25-T04N-R65W) Weld County, CO
 Well: Heartland C31-78-1HN
 Wellbore: Wellbore #1
 Design: APD - Rev 0

Northern Region Drilling - Working

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	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1125.5	10.67	101.47	1124.8	-2.3	11.4	8.50	101.47	4.6	
4	6365.8	10.67	101.47	6274.5	-195.2	962.2	0.00	0.00	383.4	
5	7341.0	85.00	179.53	6911.3	-810.0	1075.0	8.50	79.18	1008.4	
6	7391.0	85.00	179.53	6915.7	-859.8	1075.4	0.00	0.00	1057.3	
7	7391.1	85.00	179.53	6915.7	-859.9	1075.4	0.00	0.00	1057.3	
8	7521.1	90.20	179.53	6921.1	-989.7	1076.5	4.00	0.02	1184.8	
9	11992.3	90.20	179.53	6905.5	-5460.8	1113.0	0.00	0.00	5573.1	Heartland C31-78-1HN BHL 75'FSL, 808'FWL



WELL DETAILS: Heartland C31-78-1HN					
Ground Level: 4846.0					
0.0	0.0	1344919.02	3250184.50	40.276730	-104.603320
Plan: APD - Rev 0 (Heartland C31-78-1HN/Wellbore #1)					
Created By: Shailey Jewell			Date: 9:31, February 12 2014		

OK to submit with 2A as per Noble Drilling
 2/12/2014 10:46