

Project: Weld County Colorado (NAD 83)  
Site: Sec. 4, T8N, R60W  
Well: Badger Federal LF03-64HN  
Wellbore: Plan A - Rev 0 (PERMITTING PLAN ONLY)  
Design: Plan A - Rev 0 Proposal

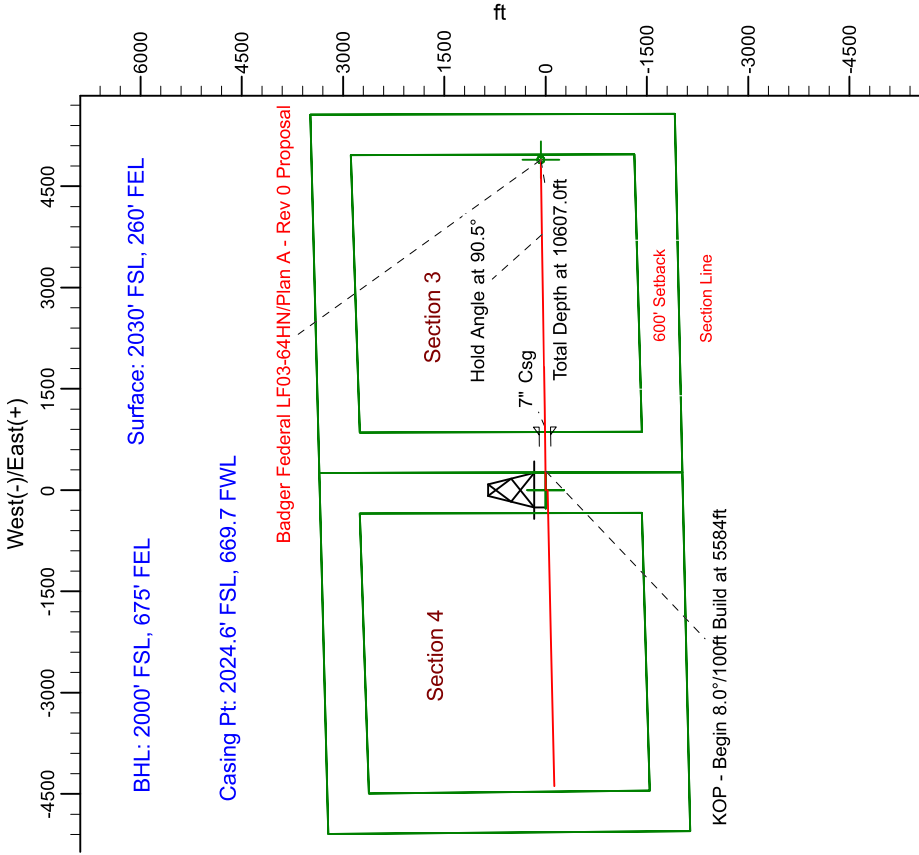
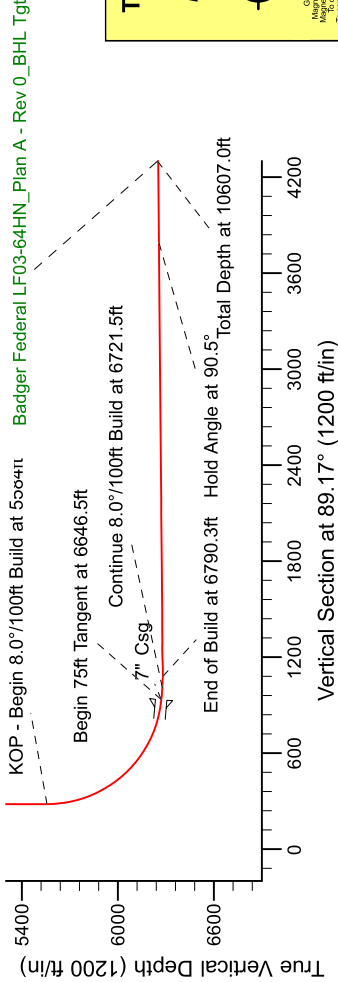
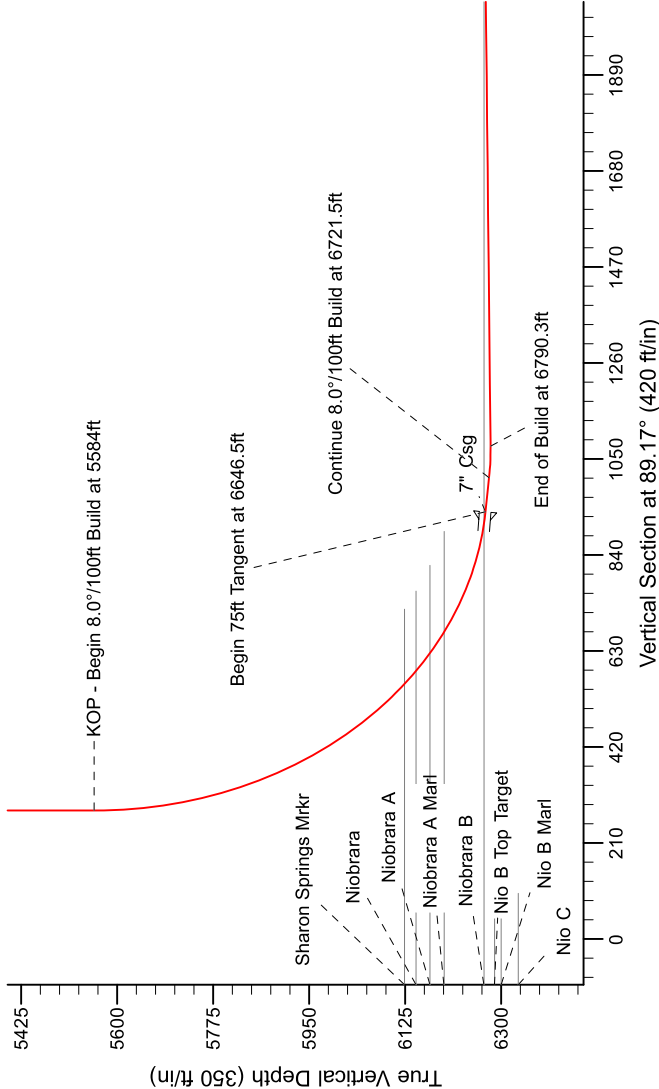
Noble Energy



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	0.0
2	2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0	0.0
3	2979.9	12.00	90.00	2976.4	0.0	0.0	2.50	90.00	50.0	0.0
4	3850.1	12.00	90.00	3827.6	0.0	50.1	2.50	90.00	230.9	0.0
5	4330.0	0.00	0.00	4304.0	0.0	281.0	2.50	180.00	281.0	0.0
6	5584.0	0.00	0.00	5558.0	0.0	281.0	0.00	0.00	281.0	0.0
7	6646.5	85.00	89.11	6271.5	10.2	934.7	8.00	89.11	934.7	0.0
8	6721.5	85.00	89.11	6278.0	11.3	1009.4	0.00	0.00	1009.5	0.0
9	6790.3	90.50	89.11	6280.7	12.4	1078.1	8.00	0.00	1078.1	0.0
10	100607.0	90.50	89.12	6247.3	71.2	4894.3	0.00	76.01	4894.8	0.0

Badger Federal LF03-64HN\_Plan A - Rev 0\_BHL Tgt



WELL DETAILS: Badger Federal LF03-64HN(NAD83 Geodetic System)			
Ground Level:	4912.0	Latitude	Longitude
0.0	0.0	456361.18	40° 41' 23.136 N 104° 5' 13.056 W
Plan: Plan A - Rev 0 Proposal (Badger Federal LF03-64HN/Plan A - Rev 0 (PERMITTING PLAN ONLY))			
Created By: Erasmo Mendoza		Date: 18:31, July 18 2011	

**T G M**

Magnetic Model: IGRF2005.0  
Date: 7/18/2011  
Dip Angle: 67.40°  
Field Strength: 53963.4  
True North: 0.91°  
Magnetic North: 7.55°

Grid North is 0.91° East of True North (Grid Convergence).  
Magnetic North is 7.55° East of True North (Magnetic Deviation).  
To convert True North to Grid North, add 0.91°.  
To convert True North to Magnetic North, add 7.55°.  
To convert a Magnetic Direction to a Grid Direction, Add 7.55°.