

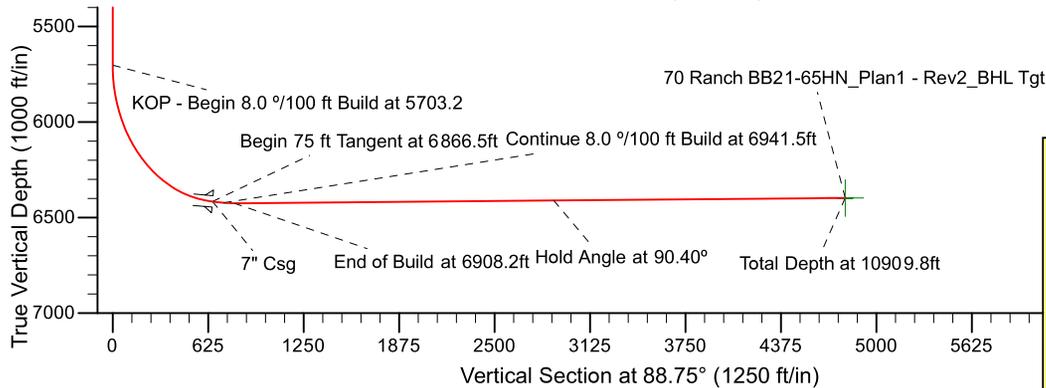
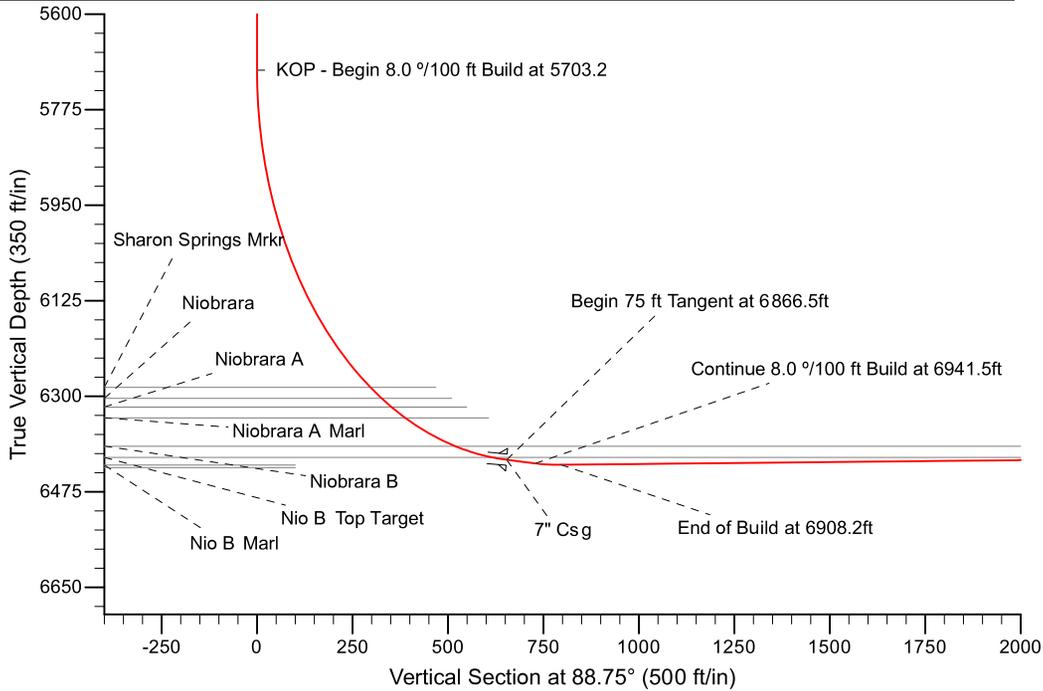
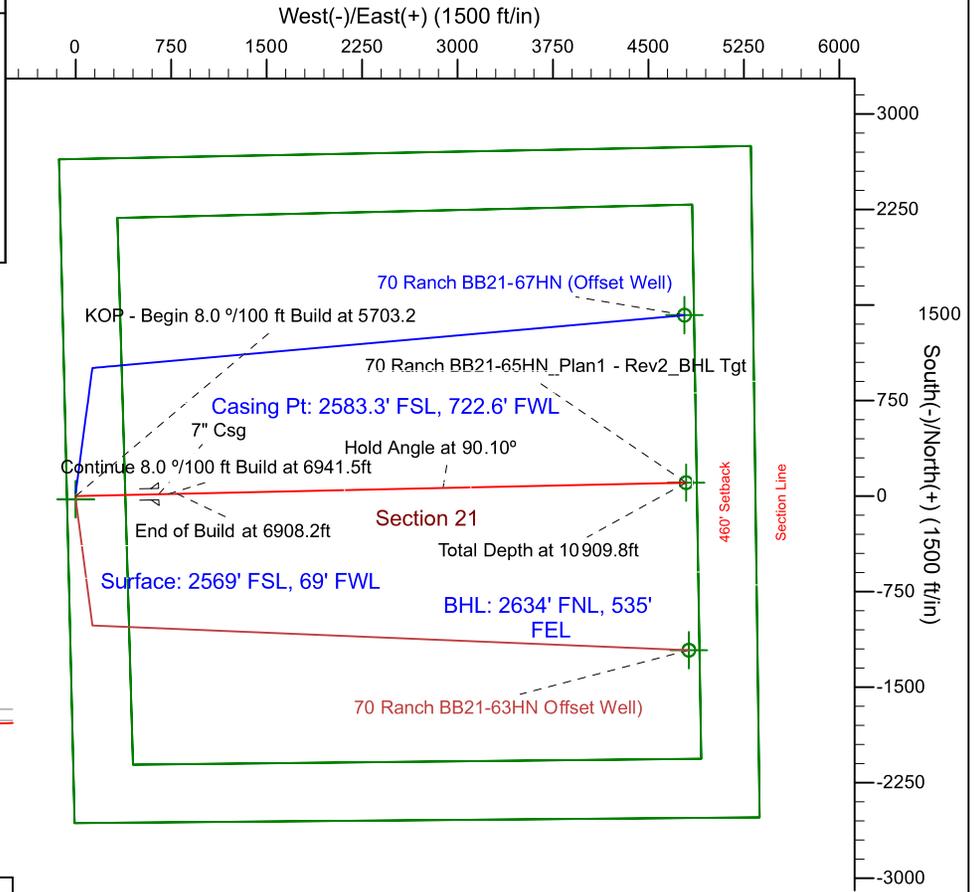
Project: Weld County, CO (NAD 83)
 Site: Sec. 21, T 5N, R63W
 Well: 70 Ranch BB21-65HN
 Wellbore: Plan A - Rev 0 (PERMITTING PLAN ONLY)
 Design: Plan A - Rev 0 Proposal

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	
2	5703.2	0.00	0.00	5703.2	0.0	0.0	0.00	0.00	0.0	
3	6765.7	85.00	88.75	6416.7	14.3	653.6	8.00	88.75	653.8	
4	6840.7	85.00	88.75	6423.2	15.9	728.3	0.00	0.00	728.5	
5	6908.2	90.40	88.75	6425.9	17.4	795.7	8.00	0.00	795.9	
6	10909.8	90.40	88.75	6398.0	104.6	4796.3	0.00	0.00	4797.5	70 Ranch BB21-65HN_Plan1 - Rev2_BHL Tgt



Magnetic Model: IGRF2010

Date: 3/28/2011

Declination: 8.04°

Inclination / Dip: 67.10°

Field Strength: 5.3181

Grid North is 0.68° East of True North (Grid Convergence)
 Magnetic North is 8.72° East of True North (Magnetic Declination)
 Magnetic North is 8.04° East of Grid North (Magnetic Convergence)
 To convert a True Direction to a Grid Direction, Subtract 0.68°
 To convert a Magnetic Direction to a True Direction, Add 8.72° East
 To convert a Magnetic Direction to a Grid Direction, Add 8.04°

WELL DETAILS: 70 Ranch BB21-65HN (NAD83 Geodetic System)			
Ground Level: 4612.0			
Northing	Easting	Latitude	Longitude
422073.81	1003528.89	40° 23' 5.280 N	104° 27' 1.080 W
Plan: Plan A - Rev 0 Proposal (70 Ranch BB21-65HN/Plan A - Rev 0 (PERMITTING PLAN ONLY))			
Created By: Jose Patino		Date: 18:58, March 28 2011	