

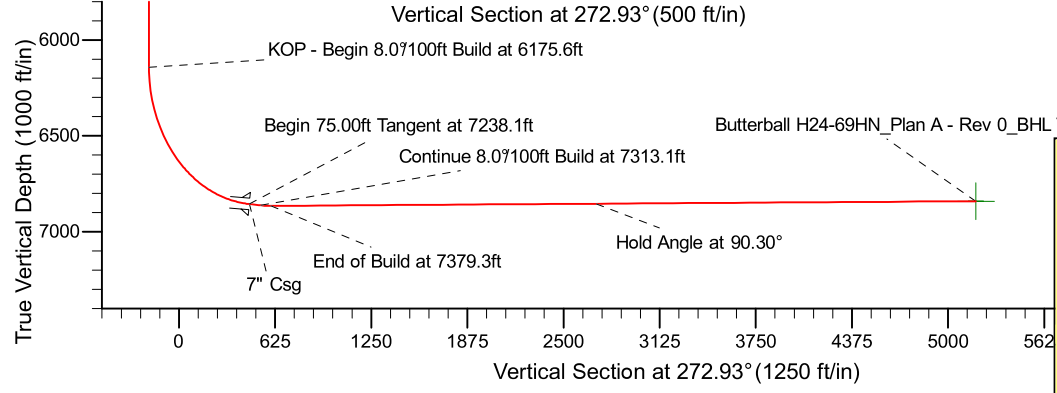
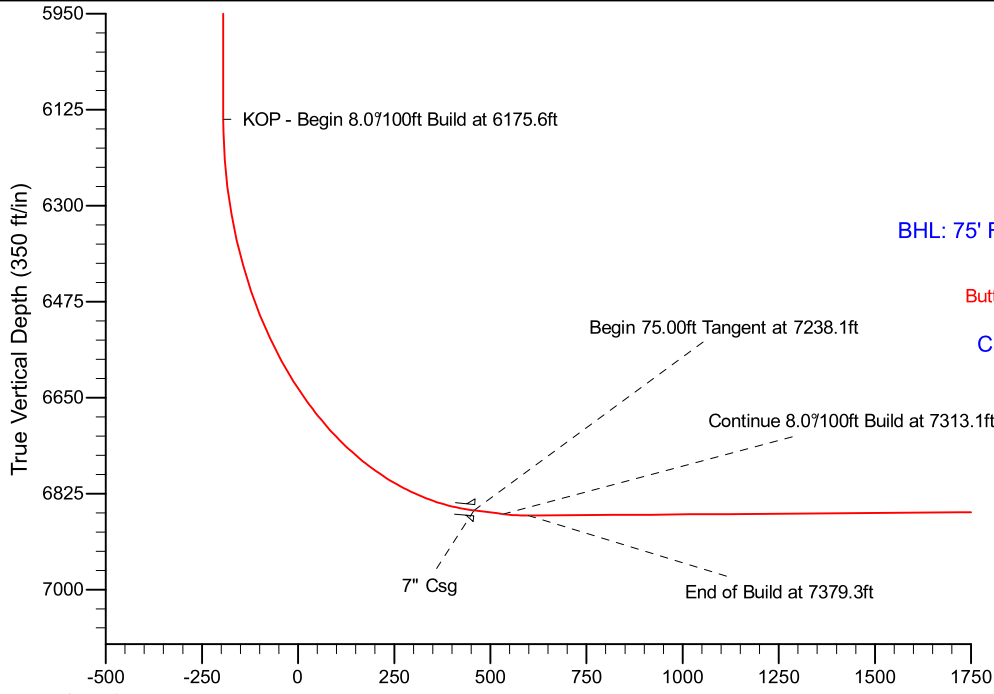
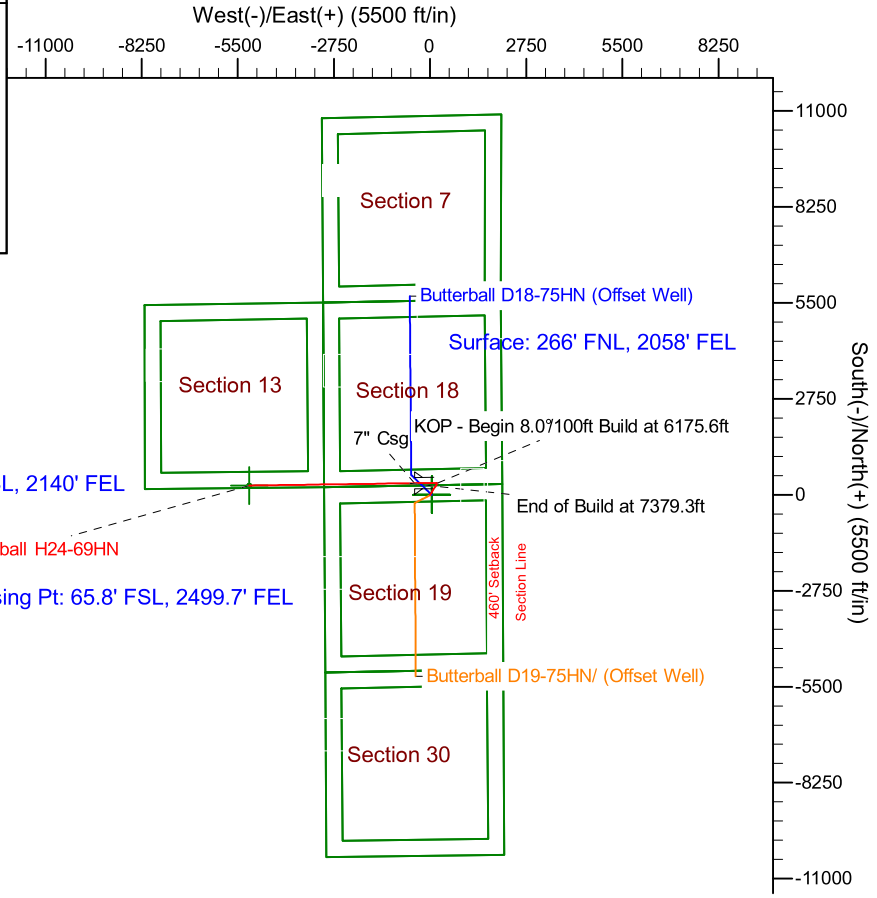
Project: Weld County, CO (NAD 83)
 Site: Sec. 19, T3N, R64W
 Well: Butterball H24-69HN
 Wellbore: Plan A - Rev 0 (PERMITTING PLAN ONLY)
 Design: Plan A - Rev 0 Proposal

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	1440.0	0.00	0.00	1440.0	0.0	0.0	0.00	0.00	0.0	
3	1840.0	10.00	31.87	1838.0	29.6	18.4	2.50	31.87	-16.9	
4	3751.1	10.00	31.87	3720.0	311.4	193.6	0.00	0.00	-177.5	
5	4151.1	0.00	0.00	4118.0	341.0	212.0	2.50	180.00	-194.3	
6	6175.6	0.00	0.00	6142.5	341.0	212.0	0.00	0.00	-194.3	
7	7238.1	85.00	269.19	6856.0	331.8	-441.7	8.00	269.19	458.1	
8	7313.1	85.00	269.19	6862.5	330.7	-516.4	0.00	0.00	532.6	
9	7379.3	90.30	269.19	6865.2	329.8	-582.6	8.00	0.00	598.7	
10	11972.4	90.30	269.18	6841.0	264.5	-5175.1	0.00	-62.33	5181.8	Butterball H24-69HN_Plan A - Rev 0_BHL Tgt



Magnetic Model: IGRF2010
 Date: 3/21/2011
 Declination: 8.20°
 Inclination / Dip: 66.94°
 Field Strength: 53079

Grid North is 0.59° East of True North (Grid Convergence)
 Magnetic North is 8.79° East of True North (Magnetic Declination)
 Magnetic North is 8.20° East of Grid North (Magnetic Convergence)
 To convert a True Direction to a Grid Direction, Subtract 0.59°
 To convert a Magnetic Direction to a True Direction, Add 8.79° East
 To convert a Magnetic Direction to a Grid Direction, Add 8.20°

WELL DETAILS: Butterball H24-69HN (NAD83 Geodetic System)			
Ground Level:	4774.0	Latitude	40° 13' 2.208 N
Northing	403341.44	Easting	991704.63
Longitude		104° 35' 30.516 W	
Plan: Plan A - Rev 0 Proposal (Butterball H24-69HN/Plan A - Rev 0 (PERMITTING PLAN ONLY))			
Created By:	Jose Patino	Date:	18:20, March 22 2011
Checked:	_____	Date:	_____
Reviewed:	_____	Date:	_____
Approved:	_____	Date:	_____