

Project: Wattenberg Field  
Site: AE (Sec.25-T06N-R62W) Weld County, CO  
Well: Wells Ranch AE30-65HNC  
Wellbore: Original Drilling  
Design: APD - Rev 0

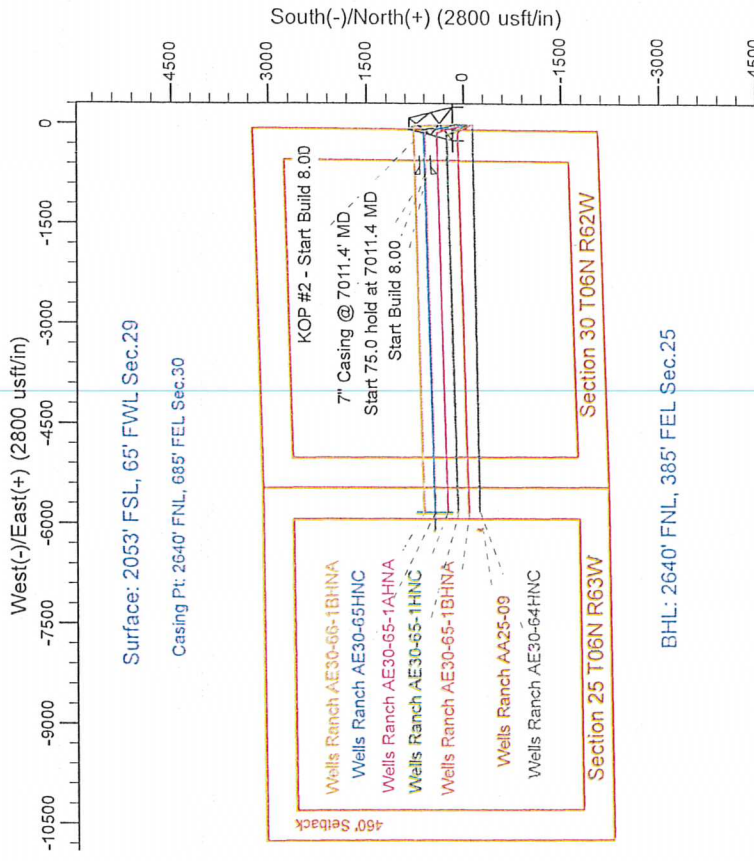
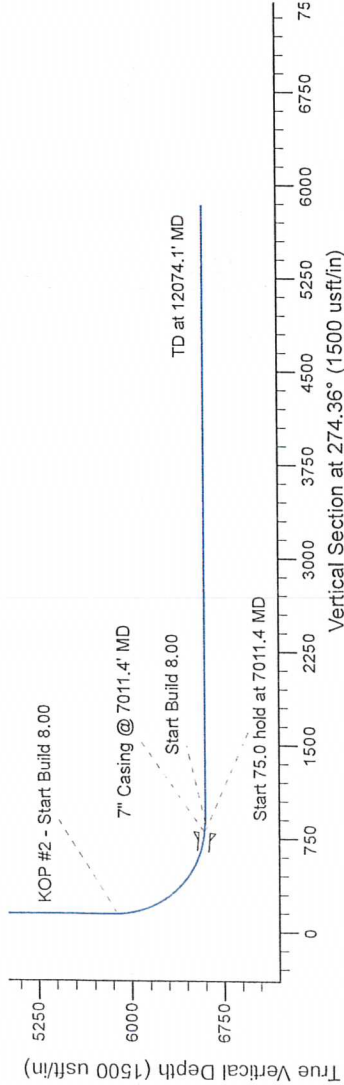
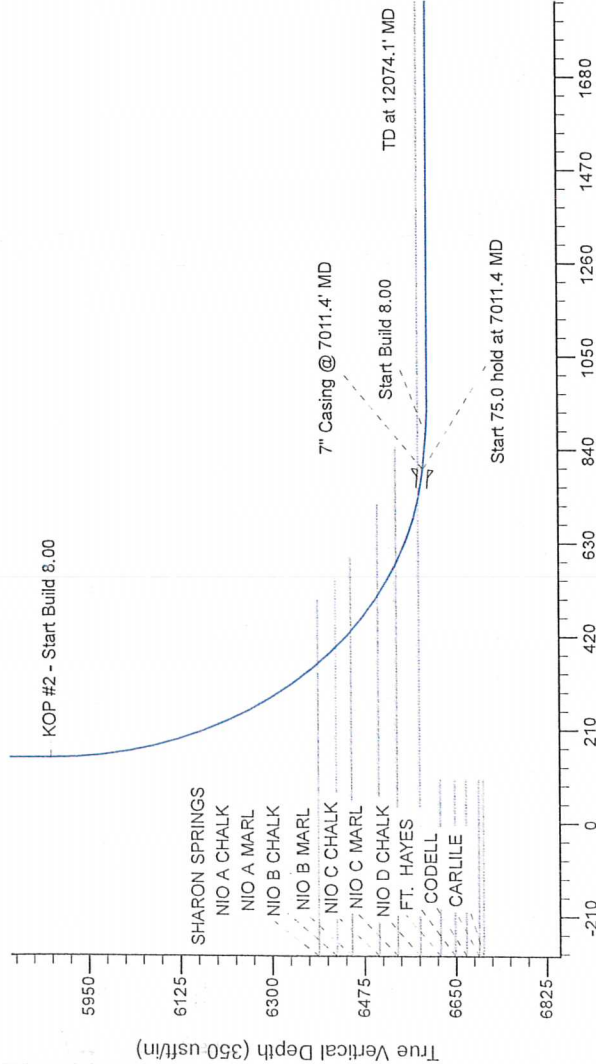
# Northern Region Drilling - Working

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	VSecl	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1200.1	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	3530.5	13.04	350.54	1843.5	96.8	-16.1	2.00	350.54	23.4	
4	4291.6	13.04	350.54	3476.5	503.2	-83.9	0.00	180.00	121.9	
5	5948.9	0.00	0.00	4220.0	600.0	-100.0	0.00	180.00	145.3	
6	7011.4	85.00	268.43	5877.3	600.0	-100.0	0.00	268.43	795.6	
7	7086.4	85.00	268.43	6590.7	582.1	-753.5	0.00	0.00	869.9	
8	7148.9	90.00	268.43	6597.3	590.0	-828.2	0.00	0.00	932.0	
9	12074.1	90.00	268.43	6600.0	578.3	-890.6	0.00	0.00	932.0	
10	12074.1	90.00	268.43	6600.0	443.1	-5814.0	0.00	0.00	5830.9	

Wells Ranch AE30-65HNC BHL 2640'FNL, 385'FEL



Surface: 2053' FSL, 65' FWL Sec.29

Casing Pt: 2640' FNL, 685' FEL Sec.30

BHL: 2640' FNL, 385' FEL Sec.25

**T G M**

Azimuths to Grid North  
True North: -0.74°  
Magnetic North: 7.59°

Magnetic Field  
Strength: 53020.1snT  
Dip Angle: 67.10°  
Date: 6/7/2013  
Model: IGRF200510

WELL DETAILS: Wells Ranch AE30-65HNC		
Ground Level: 4758.0	Longitude	
0.0	0.0	1411032.29
0.0	0.0	3318299.07
0.0	0.0	40.456050
0.0	0.0	-104.356160

Plan: APD - Rev 0 (Wells Ranch AE30-65HNC/Original Drilling)		
Created By: Shalley Jewell	Date:	13.11, September 20 2013
Checked:	Date:	
Reviewed:	Date:	
Approved:	Date:	