

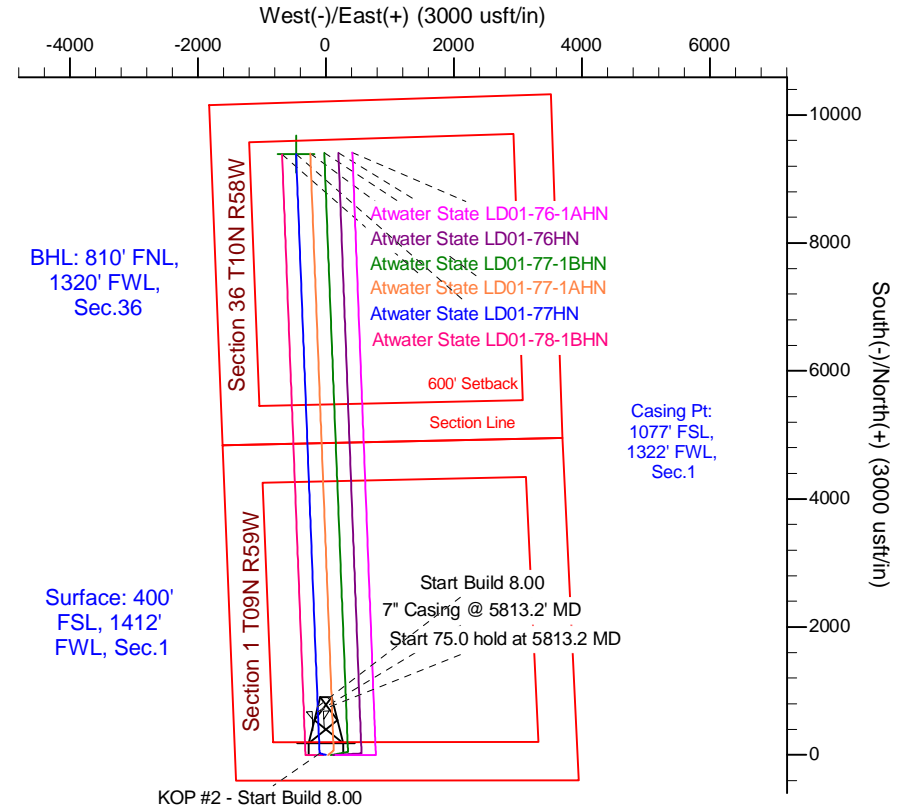
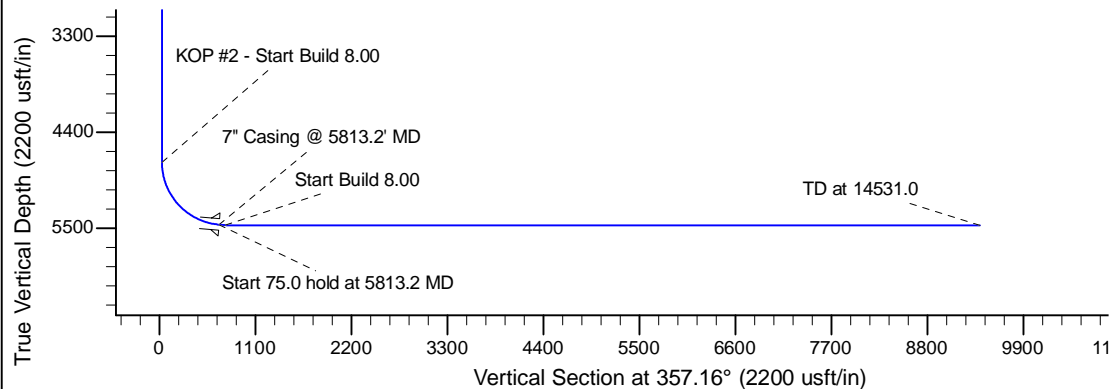
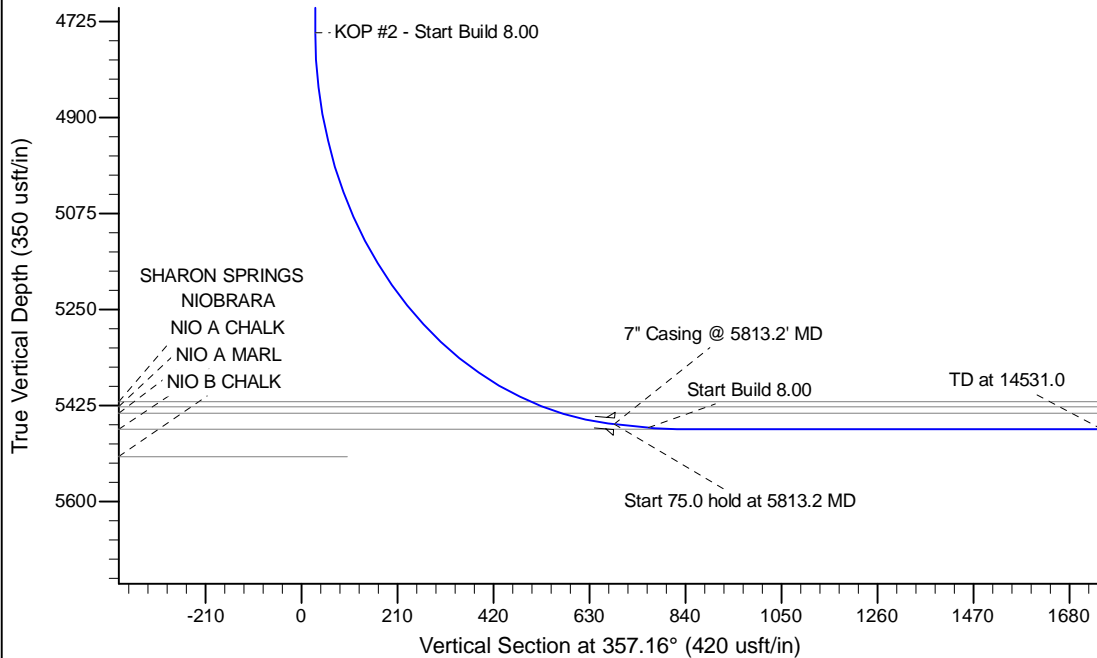
Project: Wattenberg Field  
 Site: LD (Sec.1-T09N-R58W) Weld County, CO  
 Well: Atwater State LD01-77HN  
 Wellbore: Original Drilling  
 Design: APD - Rev 0

# 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	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1800.0	0.00	0.00	1800.0	0.0	0.0	0.00	0.00	0.0	
3	2150.0	7.00	284.04	2149.1	5.2	-20.7	2.00	284.04	6.2	
4	2645.5	7.00	284.04	2640.9	19.8	-79.3	0.00	0.00	23.7	
5	2995.4	0.00	0.00	2990.0	25.0	-100.0	2.00	180.00	29.9	
6	4750.7	0.00	0.00	4745.3	25.0	-100.0	0.00	0.00	29.9	
7	5813.2	85.00	357.76	5458.7	678.3	-125.6	8.00	357.76	683.7	
8	5888.2	85.00	357.76	5465.3	752.9	-128.5	0.00	0.00	758.4	
9	5950.7	90.00	357.76	5468.0	815.3	-130.9	8.00	0.00	820.8	
10	14531.0	90.00	357.76	5468.0	9389.1	-466.3	0.00	0.00	9400.7	Atwater State LD01-77HN BHL 810'FNL, 1320'FWL



**T G M**

Azimuths to Grid North  
 True North: -1.09°  
 Magnetic North: 6.86°

Magnetic Field  
 Strength: 53164.0snT  
 Dip Angle: 67.42°  
 Date: 2/18/2014  
 Model: IGRF200510

WELL DETAILS: Atwater State LD01-77HN					
Ground Level: 4648.0					
	Northing	Easting	Latitude	Longitude	
0.0	0.0	1529385.52	3466240.77	40.774400	-103.816550

Plan: APD - Rev 0 (Atwater State LD01-77HN/Original Drilling)	
Created By: Shailey Jewell	Date: 13:00, February 18 2014
Checked: _____	Date: _____
Reviewed: _____	Date: _____
Approved: _____	Date: _____