

Project: Wattenberg Field
Site: LD (SEC.36-T09N-R58W) Weld County, CO
Well: Cook State LD36-78HN
Wellbore: Original Drilling
Design: APD - Rev 0

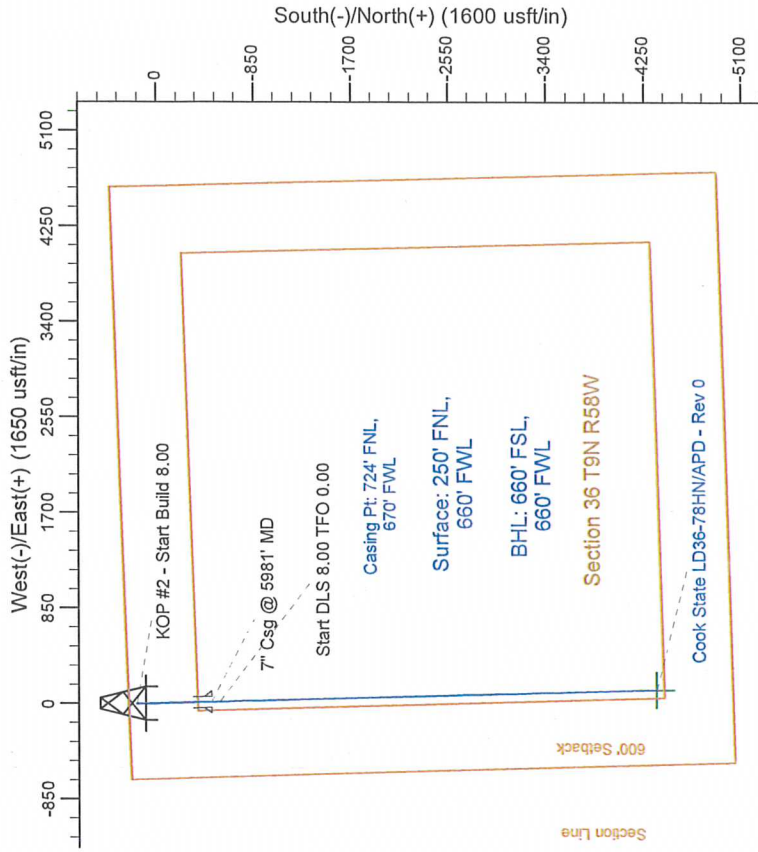
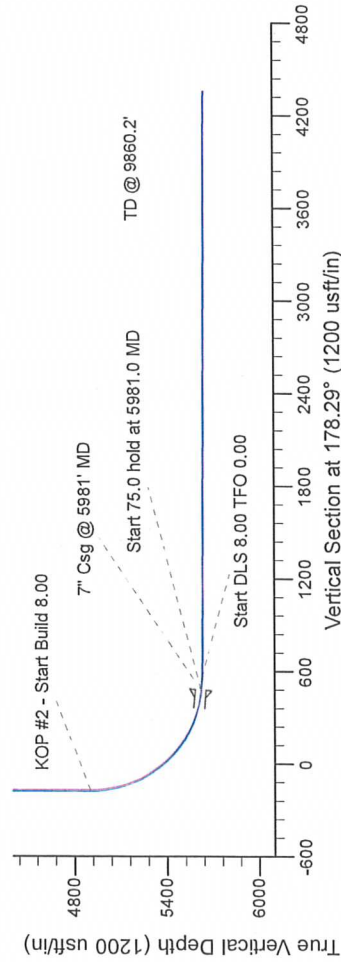
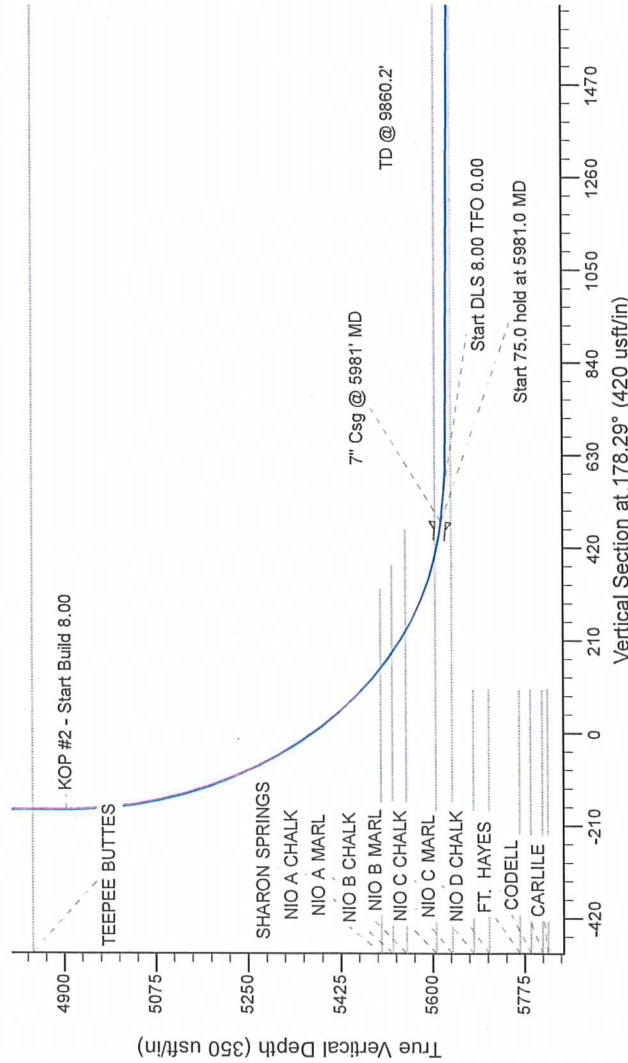
Northern Region Drilling

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	0.0
2	2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0	0.0
3	3101.3	12.03	0.00	3096.9	62.9	0.0	0.00	0.00	-62.8	0.0
4	3337.7	12.03	0.00	3328.1	112.1	0.0	0.00	0.00	-112.1	0.0
5	3939.0	0.00	0.00	3925.0	175.0	0.0	0.00	0.00	-174.9	0.0
6	4918.5	0.00	0.00	4904.5	175.0	0.0	0.00	0.00	-174.9	0.0
7	5981.0	85.00	178.36	5618.0	-478.5	18.7	8.00	178.36	478.9	0.0
8	6056.0	85.00	178.36	5624.5	-553.2	20.8	8.00	0.00	553.6	0.0
9	6114.8	85.70	178.36	5627.2	-611.8	22.5	8.00	0.00	612.2	0.0
10	9860.2	85.70	178.36	5646.8	-4355.7	125.7	0.00	0.00	4357.6	0.0

Cook State LD36-78HN BHL 660'FSL & 660'FWL



T G M

Azimuths to Grid North
True North: -1.09°
Magnetic North: 7.01°

Magnetic Field
Strength: 53241.0snT
Dip Angle: 67.41°
Date: 2/4/2013
Model: IGRF200510

WELL DETAILS: Cook State LD36-78HN		
North	Ground Level: 4744.0	Longitude
1507524.15	Easting 40.714420	-103.818970
Plan: APD - Rev 0 (Cook State LD36-78HN/Original Drilling)		
Created By: Carrie Willers	Date: 11/35, February 04 2013	
Checked:	Date:	
Reviewed:	Date:	
Approved:	Date:	