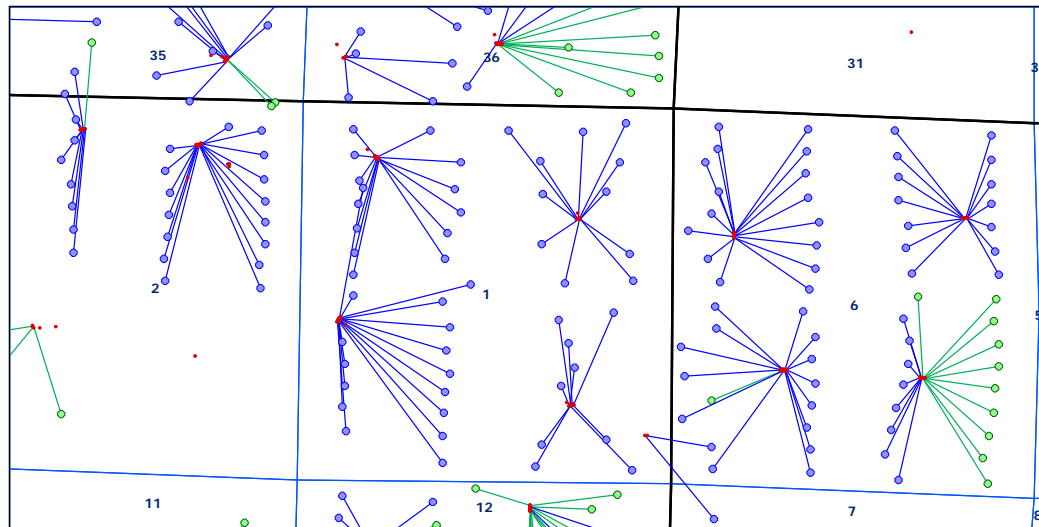


## DIRECTIONAL WELLS, ACTUAL AND PLANNED



**Map Tips:** API Number, Well Name

**Viewable Scale:** Between 1:1 and 1:500,000

**Data Provider:** COGCC

**Layer Date:** Updated Daily

**Digitized Scale:** 1:24,000

**Internet Links:** <http://cogcc.state.co.us> → MAPS

Two directional well map layers are available to view: DIRECTIONAL-ACTUAL and DIRECTIONAL-PLANNED. These map layers show the approximate bottom-hole (BH) locations of deviated or horizontal wells. A straight line connects the surface well spot and BH well spot for each well. The API Number and Well Name are displayed by moving the cursor over the BH well spot or over the line connecting the surface spot to the BH spot. The well Scout Card opens by DOUBLE CLICKING on the BH spot.

The directional map layers are created using data supplied in the directional surveys. The BH X-Y offsets are entered into the COGIS database and BH latitudes and longitudes (lat-longs) are calculated using the surface lat-longs and the X-Y offsets. The BH locations and connecting lines are then mapped using an automated GIS program. The planned directional data are mapped soon after the APD is approved. An actual BH location replaces a planned BH location once the completion forms are approved and the actual directional survey has been received. The detailed directional surveys can be viewed by clicking on DOC at the top of a well scout card.

As of February 2010, there are approximately 1800 directional surveys, statewide that have not been entered into the COGIS database; therefore some of the BH locations are missing from the map. The COGCC staff is currently working on the backlog. GIS Shapefile downloads are not available at this time; however, they will be available in May 2010.