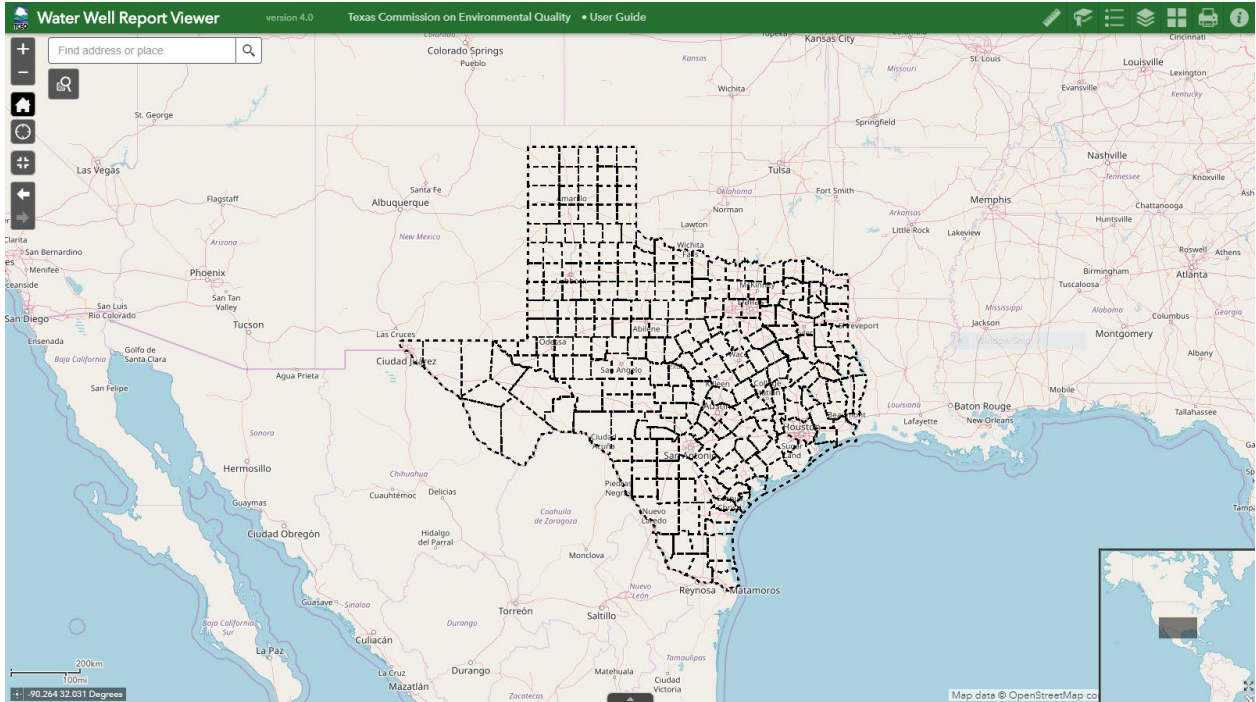


Water Well Report Viewer User Guide



The **Water Well Report Viewer** allows users to locate and review copies of over 800,000 historical reports for water wells drilled in Texas.

Texas Commission on Environmental Quality



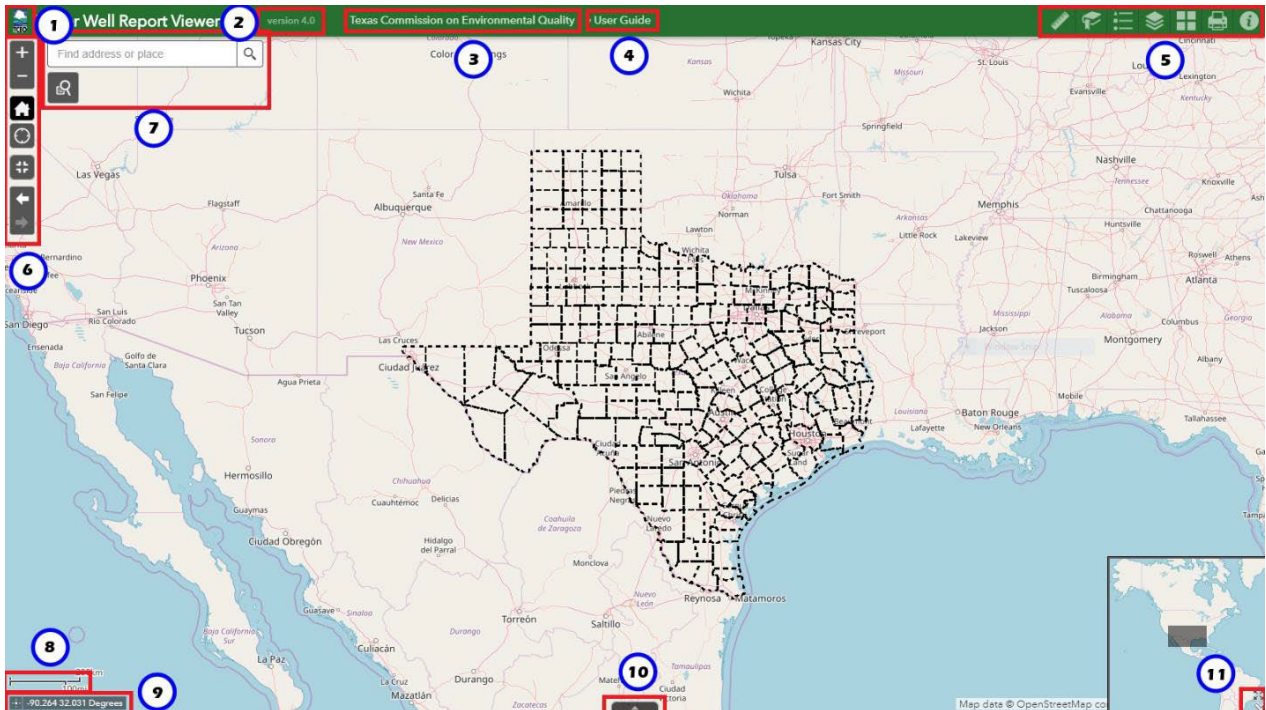
Water Availability Division

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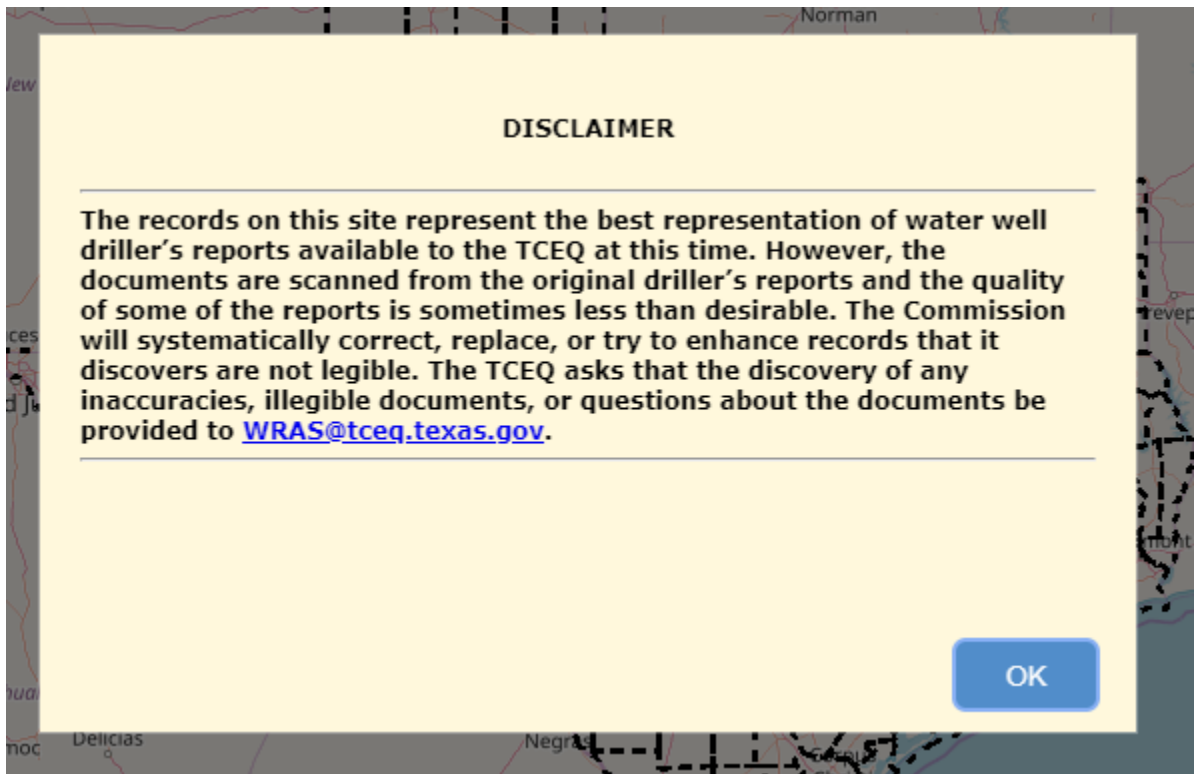
Main Screen Overview

The image below provides an overview of the tools and information available in this viewer.



1. TCEQ logo (link to TCEQ home page)
2. Application version number
3. TCEQ Name (link to TCEQ home page)
4. User Guide (link to this user guide)
5. [Header toolbar](#)
6. [Map toolset](#)
7. [Search and query tools](#)
8. Map scale
9. [Map coordinates](#)
10. [Attribute table](#)
11. [Map overlay](#)

Disclaimer



The disclaimer pop-up displays whenever the viewer is first started. This reminds the user of the possibility that the documents presented in this application may not be of the highest quality, and provides an email address to report any document problems encountered during the session.

Viewing Reports

The viewer has eight different report type available for viewing. They are:

- **Plotted Water Well Reports.** These are water well reports that include drillers' logs. Most water well records are contained within this category.
- **Plotted Water Well Reports Legacy Map(s).** These are digitized, linen county highway maps with hand-drawn water well locations from the 1970s through the 1980s.
- **DIM (Dewatering, Injection, or Monitoring) Reports.** These are dewatering, injection, and monitoring well reports.
- **Electric Logs.** These are geophysical logs.
- **Maps and Photos.** These are miscellaneous maps and photographs.
- **Not Plotted Water Well Reports.** These are water well reports without a Grid Number.
- **Plugging Reports.** These are reports for water wells that have been plugged.
- **State Water Well Reports.** These are water well reports that have Texas Water Development Board (TWDB)-assigned State Well Identification Numbers and are available in the TWDB Water Information Integration and Dissemination (WIID) Online System (Web Page: <https://www3.twdb.texas.gov/apps/WaterDataInteractive/GroundWaterDataViewer>)
- **Undesirable Reports.** These are reports of undesirable water.

Of these reports:

- Plotted Water Well Reports are searchable by either the 2.5 min grid number or county.
- All other reports are searchable by county only.
- No reports are searchable by the 7.5 min grid number.

You view reports by selecting a geographic area of interest, a county or a 2.5 min grid, and then choosing a report type available for that area. You'll be presented with a list of available reports of that type and for that area. At that point you can choose individual reports from the list to view.

To select the geographic area you may either use the map directly or issue a query with the query widget.

To use the map, navigate to the area of interest and left click on it. This will display a pop-up with information about the area, including a list of report types available for that

area. Click on the report type you want to see and the viewer will show a list of all reports of that type for the selected geographic area.

Alternatively you can left-click on the query widget to enter a county name or grid number. The viewer zooms to the selected area and displays a pop-up listing the report types available for that area. Click on the report type you want to see and the viewer will show a list of all reports of that type for the selected geographic area. The query widget is described in detail later in this document. The application displays a list of reports which match the report type you select, as in the example below for DIMS reports for Bastrop county. Click on an individual report link in the list to display that report.

DIMS Reports

in BASTROP
Total record count: 2

No	County	WWD ID	Report Box Type
1	BASTROP	481957	Reports and Standard Size Maps
2	BASTROP	481957	Reports and Standard Size Maps

Close Me

Interpreting Well Reports

The following links provide invaluable guidance on how to interpret a Water Well Report.

- **Texas Groundwater Protection Committee (TGPC) --> Water Wells.**
 - Web page: <https://tgpc.texas.gov/water-wells>
 - The **Well Basics** section of this web page has a paragraph describing Statewide Water Well Databases and has a link to the Water Well Report Viewer itself.
- **TGPC: What Are the Statewide Water Well Databases?**
 - Web page: https://www.tgpc.texas.gov/POE/FAQs/StatewideWaterWellDatabases_FAQ.pdf
 - This document contains a good list of the different types of water wells and the types of information you can find in the Water Well Report.

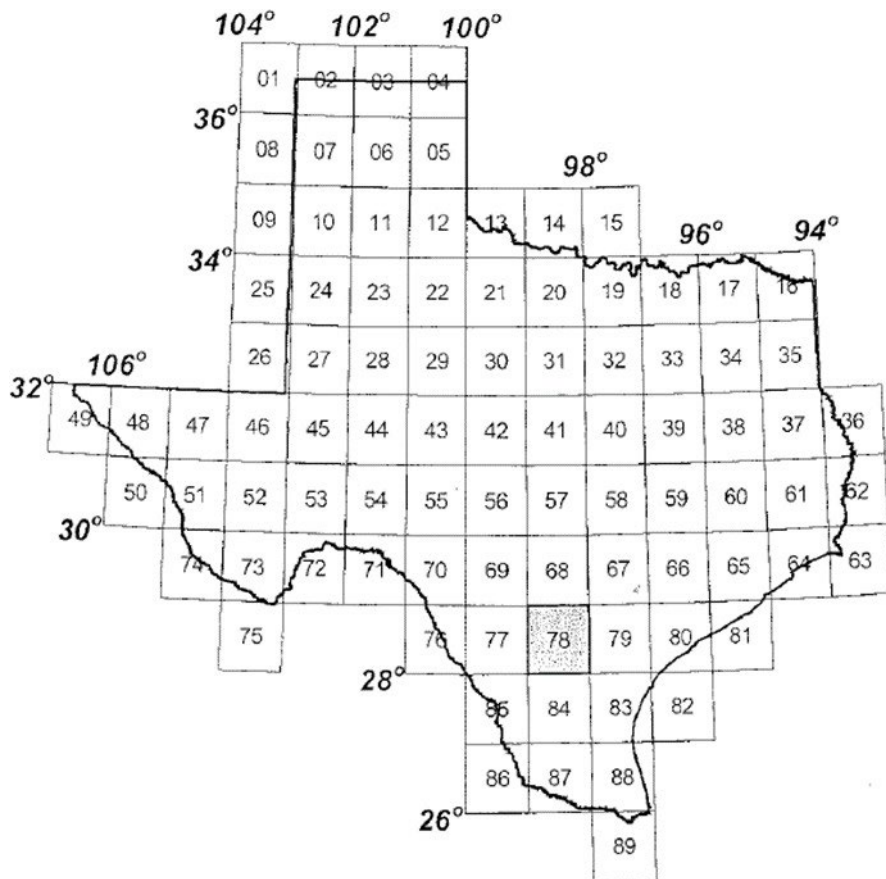
Grid Numbers

The 2.5 minute grid numbers consist of a three-part number. The three components of a grid number are described below. The example demonstrates the grid number for grid

78 28 5.

The first component number represents the number for a **1 degree by 1 degree (1° x 1°)** map grid. There are 89 such grids for Texas, numbered 1-89.

Note that Grid **78** is shaded.



The second component number represents a **7.5 minute by 7.5 minute (7.5' x 7.5')** map grid. One degree contains eight 7.5 minute grids. A *1 degree by 1 degree map grid* therefore contains 64 *7.5 minute by 7.5 minute grids*; these grids are numbered left to right from top to bottom as shown below. Note that Grid **28** is shaded.

78

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64

The third component number represents a **2.5 minute by 2.5 minute (2.5' x 2.5')** map grid. A *7.5 minute by 7.5 minute grid* contains nine *2.5 minute by 2.5 minute grids*. The third space is restricted to numbers 1 through 9. Note that Grid **5** is shaded.

28

1	2	3
4	5	6
7	8	9

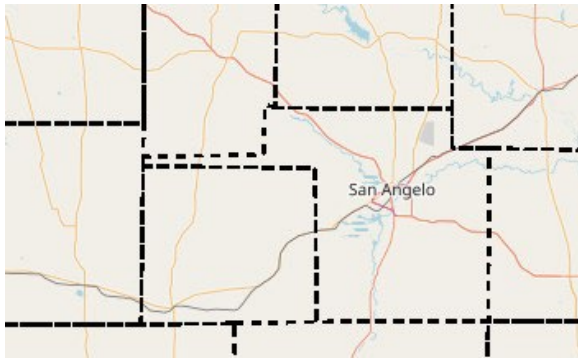
Navigating Around the Map

The map consists of multiple layers. Texas counties and the 2.5 minute grid are displayed by default, but all layers may be turned on or off as needed. See the [Layer List](#) widget description for more detail.

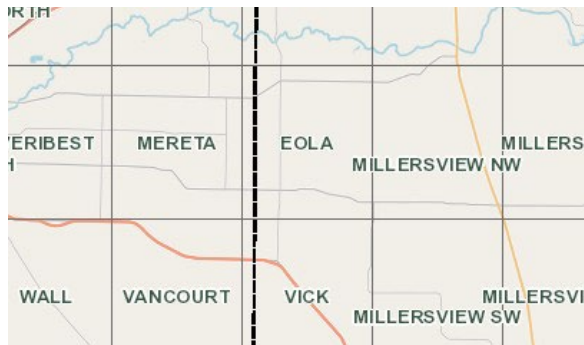
As you zoom in to the map with the mouse wheel you will automatically cross into the next lower layer, or vice versa if you zoom out.

Left clicking on the map pops up a dialog based on the layer you're displaying at the time of the click. These pop-ups allow you to search for various reports available for the geographic area you've clicked. These are described in detail later.

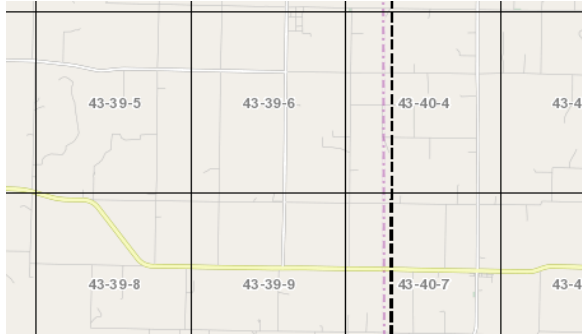
County layer



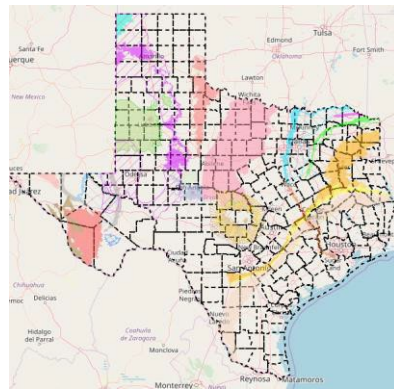
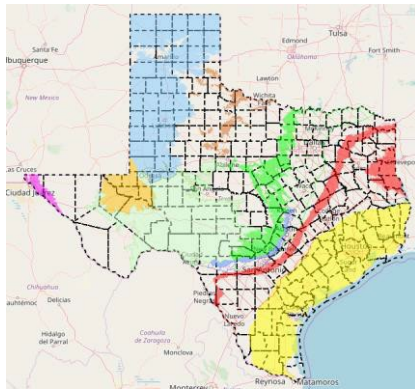
7.5 minute grid layer



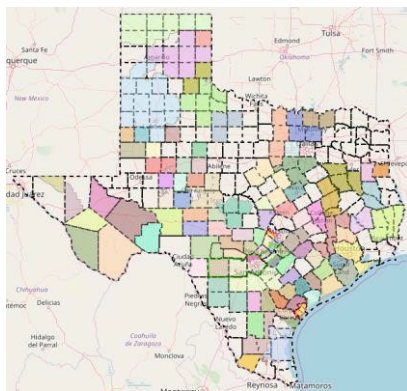
2.5 minute grid layer



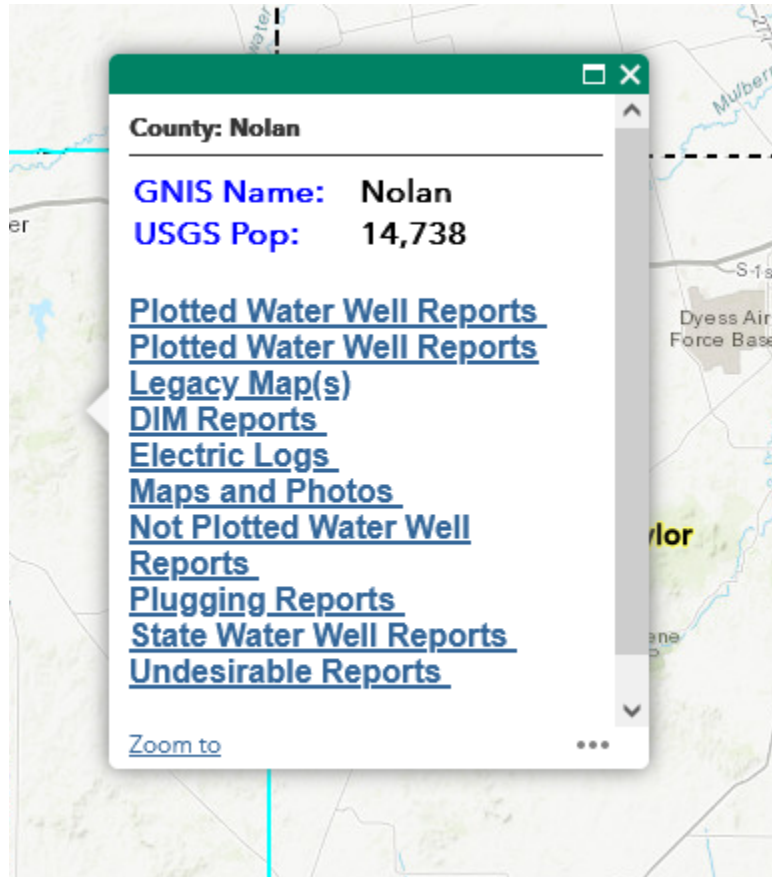
Major Aquifer layer and Minor Aquifer Layer



Groundwater Conservation Districts layer



Select a county – left click on any county to display information about the county as well as a list of report types which are available for it.



Report type list – click on one of report type links to search for all reports of this type for this county.

Zoom to – click here to get a closer view of the location.

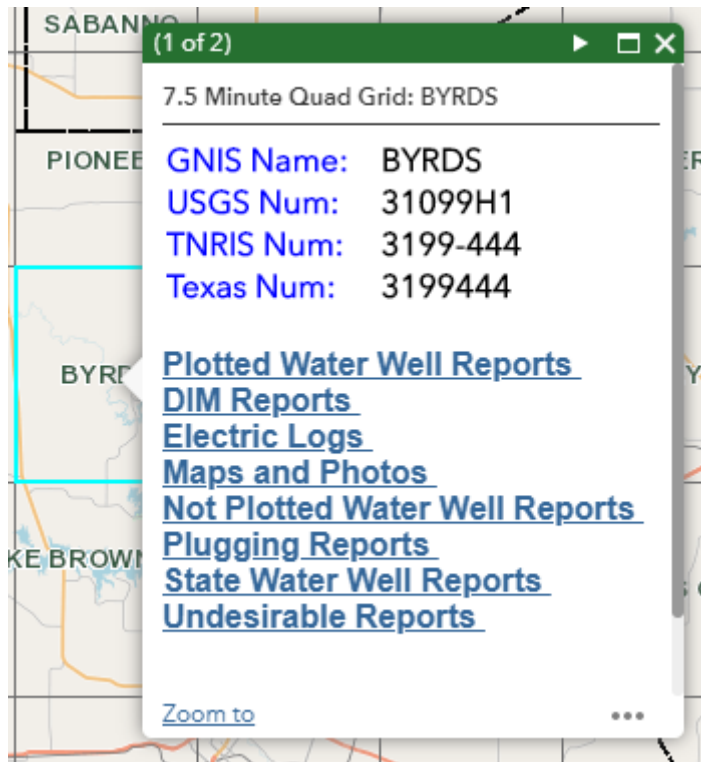
... - displays the following menu

Pan to – centers map on this item

Add a marker – adds a map marker at the item location

View in Attribute Table – see [Attribute Table](#)

Select 7.5 minute grid - left click on any 7.5 minute grid to display information about the grid. Note that there are no reports available for the 7.5 minute grid.



The right arrow in the header allows navigation to the county pop-up corresponding to the county in which this grid lies. If the grid is in multiple counties, the pop-ups for each county will be available using the right arrow.

Report type list – click on one of report type links to search for all reports of this type for all counties which contain this grid.

Zoom to – click here to get a closer view of the location.

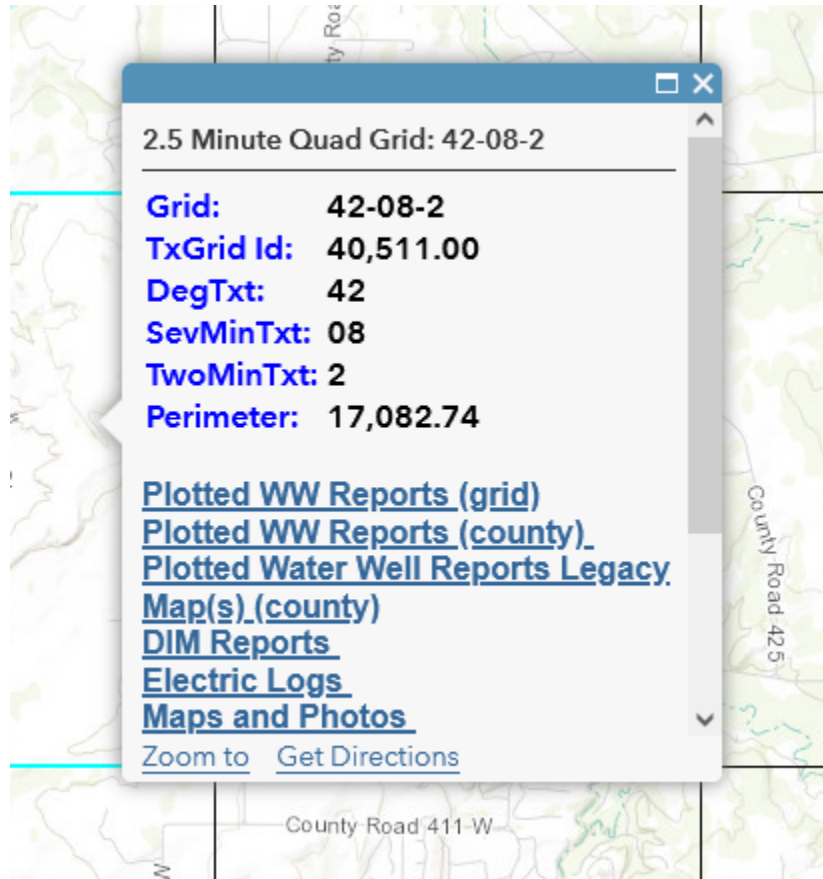
... - displays the following menu

Pan to – centers map on this item

Add a marker – adds a map marker at the item location

View in Attribute Table – see [Attribute Table](#)

Select 2.5 minute grid - left click on any 2.5 minute grid to display information about the grid as well as a list of report types which are available for it.



The right arrow in the header allows navigation to the county pop-up corresponding to the county in which this grid lies. If the grid is in multiple counties, the pop-ups for each county will be available using the right arrow.

Report type list – click on one of report type links to search for all reports of this type for this grid. The “Plotted WW Reports (grid)” returns plotted reports for this specific grid. The “Plotted WW Reports (county)” returns plotted reports for all counties in which this grid resides. All other reports return the specified report type for all counties which contain this grid.

Zoom to – click here to get a closer view of the location.

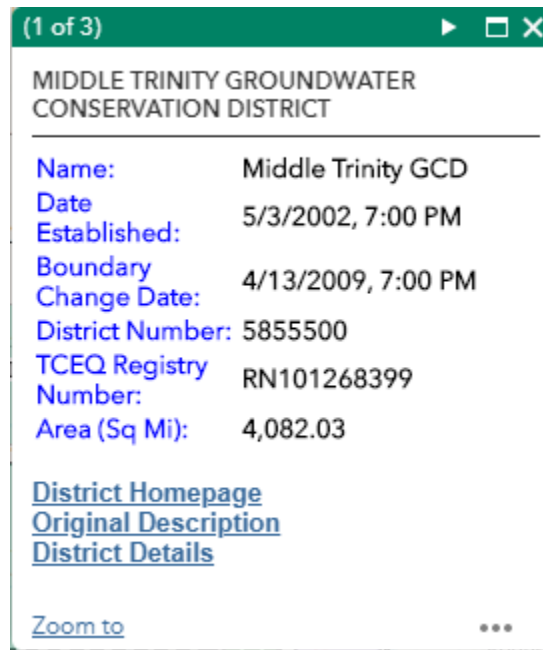
... - displays the following menu

Pan to — centers map on this item

Add a marker — adds a map marker at the item location

View in Attribute Table — see [Attribute Table](#)

Select Groundwater Conservation District – left click on any district to display information about that district.



The right arrow in the header allows navigation to the county pop-up corresponding to the county in which you clicked. If the click is in multiple counties (on a border), the pop-ups for each county will be available using the right arrow.

District Homepage – opens the home web page of the district.

Original Description – opens a Texas Legislature web page which describes the origin of the district.

District Details – opens the TCEQ web page with district details.

Zoom to – click here to get a closer view of the location.

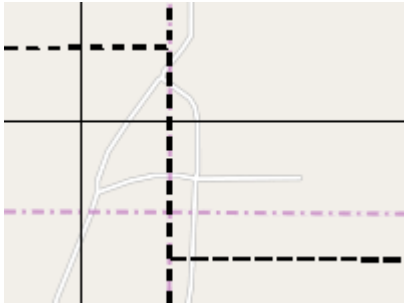
... - displays the following menu

Pan to – centers map on this item

Add a marker – adds a map marker at the item location

View in Attribute Table – see [Attribute Table](#)


Boundary Lines





Occasionally boundary lines appear on the map which don't align (see above examples) and may appear confusing. The thicker, darker lines are the official TxDOT boundaries which the TCEQ relies on as definitive. The lighter lines are drawn on the basemap by their vendors and are not considered definitive.


Header Toolbar





 **Measure** - enables the user to measure point, linear, and area features on the map. There are three different ways to measure features on the map:

 **Area** – Click this button, choose a unit of measure from the drop-down list, then single-click the first point of your polygon on the map. Continue to single-click until you have finished measuring your area feature. Double-click to end. Results will appear in the Measure window.

 **Distance** - Click this button, choose a unit of measure from the drop-down list, then single-click the first point of your line on the map. Continue to single-click until you have finished measuring your linear feature. Double-click to end. Results will appear in the Measure window.

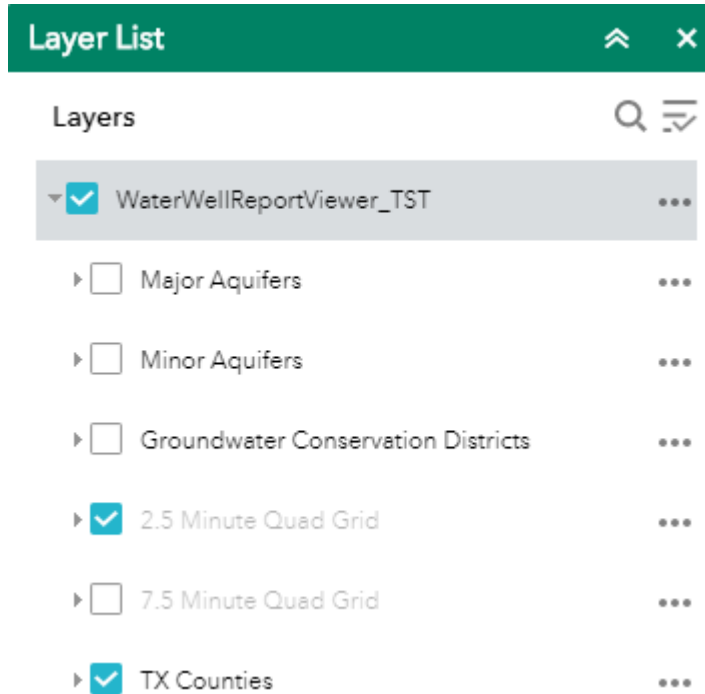
 **Location** – Click this button, choose a unit of measure from the drop-down list, then click a point on the map then move the mouse across the map. Result will display the coordinates for both the green indicator and cursor.

 **Bookmark** – display saved spatial bookmarks or add new ones.

 **Legend** – shows the symbology for the current layers in the map extent.



Layer List – shows a list of map layers and symbols, and allows the user to turn them on or off. This map has multiple layers. The layers displaying Texas counties and the 2.5 minute grids are on by default, but each may be turned on or off as needed.



Basemap – click to select the background in the map viewer. The aerial imagery basemap is the default. There are 12 different maps to choose from. Note: Some basemaps (such as Open Streetmap) are not visible when zoomed in too close.



Print – print the map or a portion of the map.



About – displays information about the Water Well Report Viewer app.

Map Toolset



Zoom In – Click this button once or multiple times to zoom in at fixed increments.



Zoom Out – Click this button once or multiple times to zoom out at fixed increments.



Home – Click once to return to the default extent.



My Location – allow the network to detect your location and zoom to it. Only supported on secure web pages (HTTPS).




Full Screen – toggles full screen mode



Next Extent – go to the map's previous or next extent.



Coordinate Indicator – this displays the coordinates in decimal degrees of the current mouse position over the map.

You can also click the  tool, then click anywhere on the map to set a marker and obtain the coordinates of a given point.



Map Overlay – toggles a small map overlay which you may drag to change the displayed map area.

Search and Query Tools



Search

Type in an address or place into the bar to search for a location. As you type, you will be presented with similar matches. If you see your desired location appear, simply click on it and the map will zoom to that location. Or you can complete typing in the location and then press Enter on the keyboard or click the magnifying glass. You can click the X on the bar to clear out the search bar.

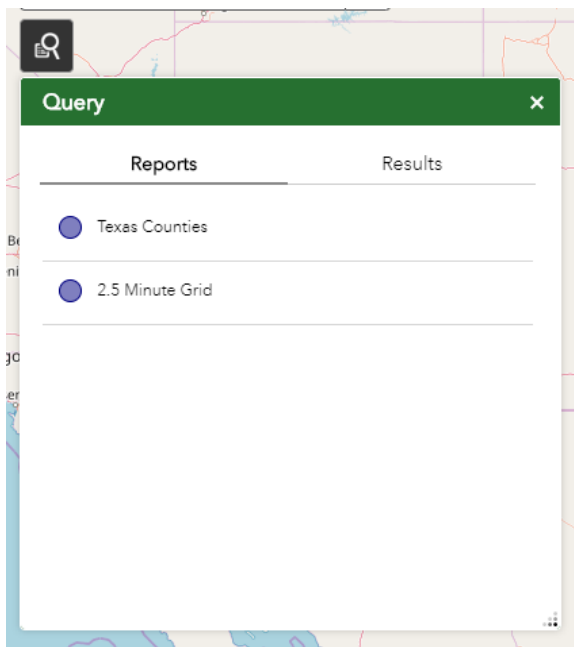
The following are some examples:

- Addresses: 100 Congress Ave, Austin, TX
- Place Names: Zilker Park
- Counties: Travis County
- Cities: Austin
- Coordinates: 30.274598, -97.740374
- Intersections: Parmer Ln and Lamar Blvd



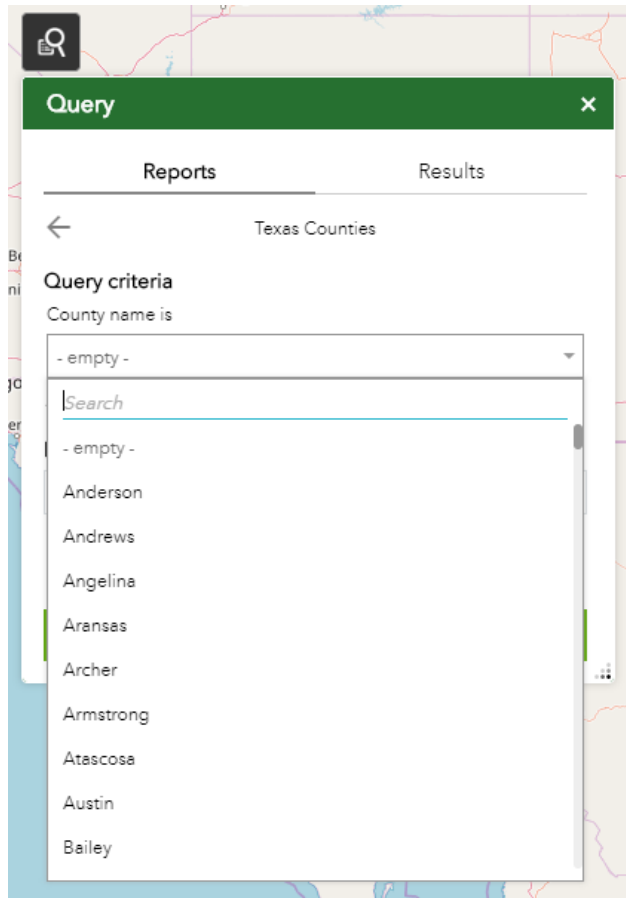
Query

Query is used to select and execute predefined queries. Two queries are defined, search by county name or search by 2.5 minute grid number.

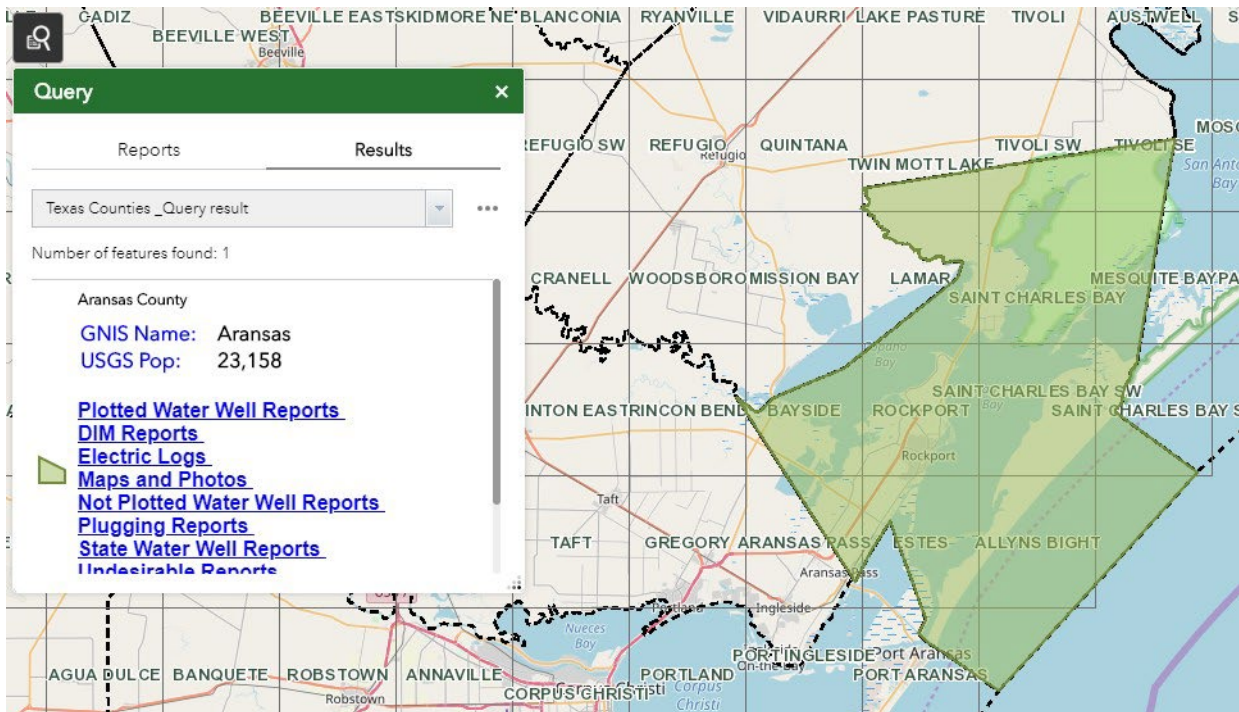


Query by Texas County

Click on the dropdown button to choose from the list of counties, then hit the Apply button to execute the query.



The map will zoom to the matching county and you'll be presented with the county information dialog.



Query by 2.5 Minute Grid Number

Enter a valid grid number, then hit the Apply button.

Grid numbers are in the format xx-yy-z where

- xx = number between 1 and 89
- yy = number between 1 and 64
- z = number between 1 and 9

Query

Reports Results

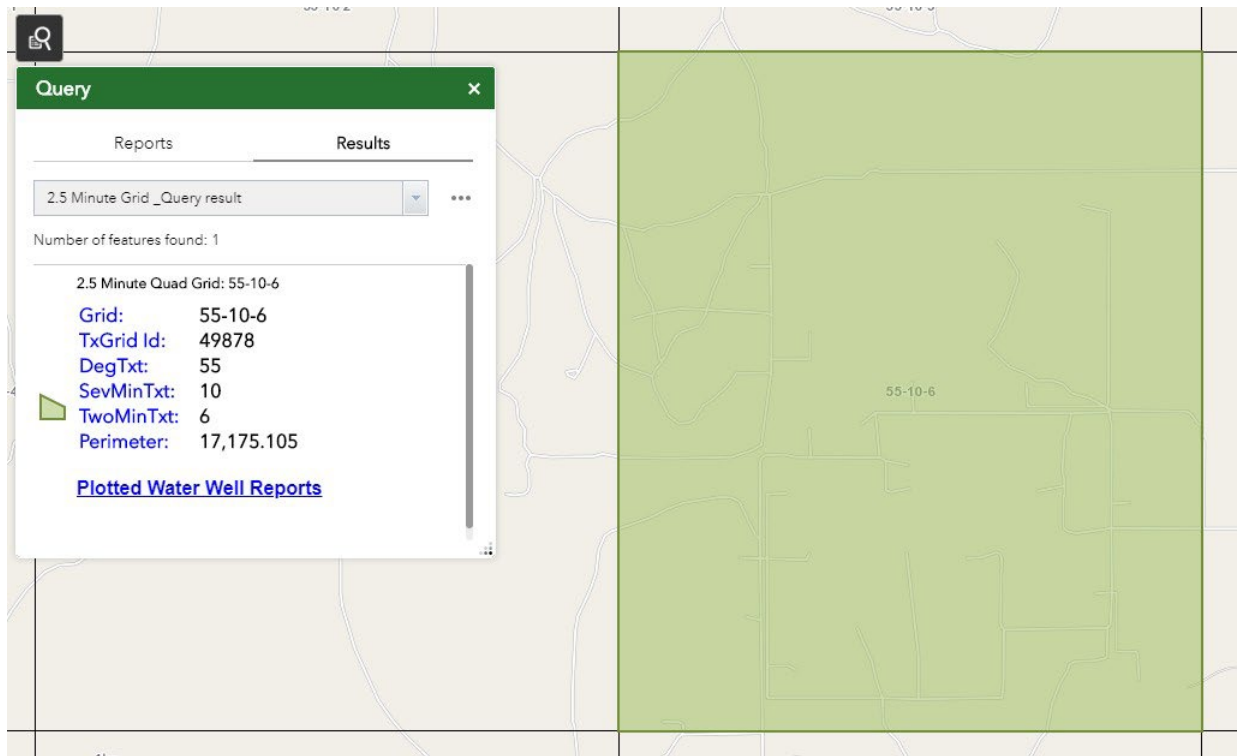
← 2.5 Minute Grid

Query criteria
2.5 min grid number is
55-10-6
format 12-34-9

Result layer name
2.5 Minute Grid_Query result

Apply

If a valid grid number is entered the map will zoom to the matching grid and the grid's information pop-up will be shown.



Attribute Table

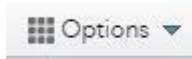


Display Table – The attribute table button shows or hides the attribute table. Each tab in the table shows the data from the corresponding map layer. This table contains information about the data on the map and is arranged so that each row represents an item and each column represents an attribute and location of a map item.

NAME	POP
Fisher	3,974
Floyd	6,446
Foard	1,336
Fort Bend	585,375

248 features 0 selected

If you double-click on an item in the attribute table the map will zoom to that location and display the item information pop-up.



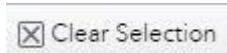
Options – use the Options drop down menu to filter attributes, show and hide columns, or to export the table to an Excel spreadsheet.



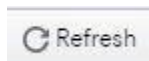
Filter by Map Extent – click this button to only show the attribute information for items in the current map extent.



Zoom To – after selecting a unique row in the table, click this button to zoom to its location.



Clear Selection – click this button to clear out your previous selections and show all items.



Refresh – click this button to reload the attribute table.



Column List – choose which columns appear in the table.