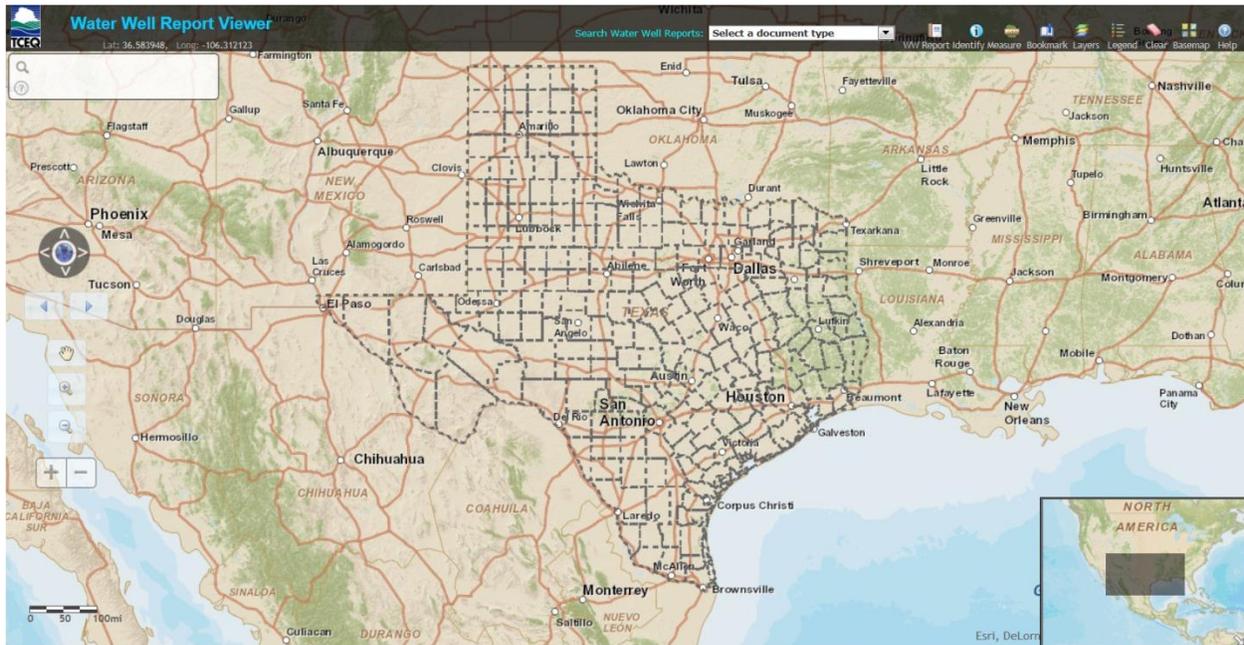


# Water Well Report Viewer – User Guide



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

## Software requirement:

The Water Well Report Viewer has been tested and works fine in the following Web browsers:

- Microsoft Internet Explorer: Version 9 and above
- Mozilla Firefox: Version 21.0 and above
- Google Chrome: Version 30 and above

Please update your Web browsers to the newer version if some tools in the viewer do not work well for you.

The OAS/Information Resources Division (IRD)/Enterprise Support Section (ESS)/GIS Team created and maintains this application.

**Date Updated:** January 27, 2014

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## Navigation Tools

The viewer will open to a full view of the state of Texas.

Basic navigation tools are provided on the left side of the screen.



**Pan (Direction) Tool:** Click on the arrows to move the map display in the desired direction.

Click on the **Full Extent** (globe) symbol to return to the full view of the state of Texas.



**Previous Tool:** Click on this button to go back to the previous map view.



**Next Tool:** Click on this button to return to the view you created before you click on the “Previous” tool.



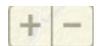
**Pan Tool:** This tool allows you to pan over the map by dragging the display in any direction with the mouse. To use this tool, move the cursor to any desired location, hold down the left mouse button, and drag the display in any direction. (When you open the map viewer, the cursor defaults to this function.)



**Zoom In (Select) Tool:** This tool allows you to zoom in on the map to a more detailed view of a selected area. The area displayed is based on the outer boundary of the box that you draw.



**Zoom Out (Select) Tool:** This tool allows you to zoom out from the area displayed on the map. The area displayed is based on the extent of the box you draw.

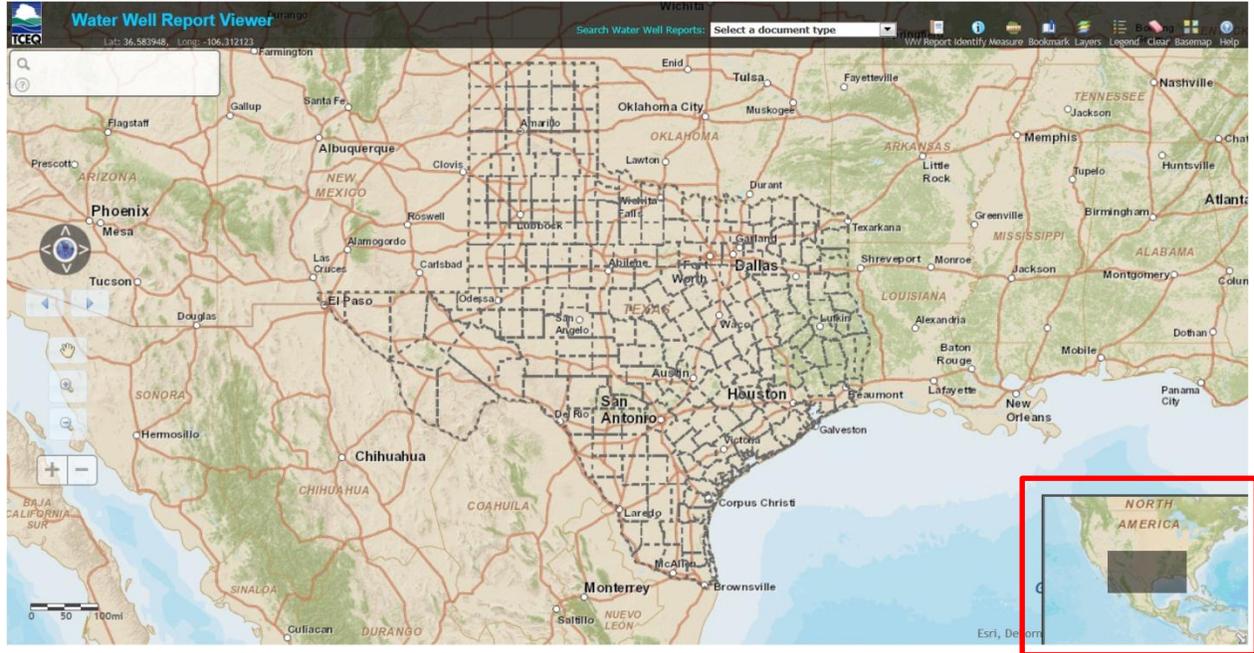


**Zoom (Fixed) Tools:** Clicking on the plus (+) sign causes the entire view to zoom in for a fixed distance. Clicking on the minus (-) sign causes the entire view to zoom out for a fixed distance. Unlike the **Zoom In/Out (Select) Tools**, you cannot specify the area you wish to zoom in and out of.



## Map Extent Window

The Map Extent window is located in the lower right hand corner of the display. It displays a larger geographic area than the viewer display. The grey rectangle in the window corresponds to the area represented in the viewer display.



To change the area shown in the viewer display, click on the grey rectangle and drag it to the area of interest.

You can make the Map Extent Window appear or disappear by toggling on the arrow in the lower right hand corner of the window.

## Toolbar



The toolbar at the top of the display offers multiple tools.

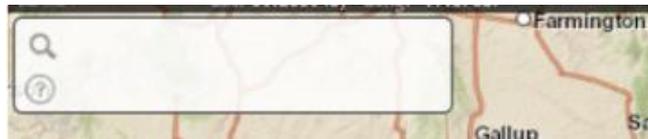
### Latitude-Longitude Coordinates

On the left side of the tool bar, the geographic coordinates for the location of the cursor are continuously displayed in decimal degrees.



### Search Tool

Located directly beneath the Latitude-Longitude Coordinates display, the Search tool allows you to zoom to a specific location.



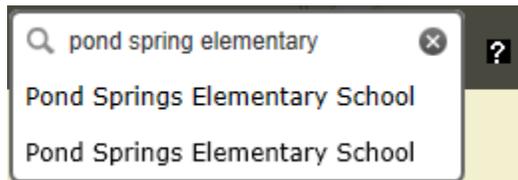
Clicking on the question mark (?) in the search tool window opens the **How to use this Search tool?** Window; the contents are displayed below:

#### How to use this Search tool?

You can search a location by typing in one of following criteria in the search box (not case-sensitive).

The dropdown list will be auto-completed when you type. [See examples in blue:](#)

- Search by **County Name:** [Travis county](#)
- Search by **City Name:** [Austin](#)
- Search by **Address:** [1111 6th St W, Austin, TX, 78703](#)
- Search by **Intersection:** [McNeil Dr & Parmer ln](#)
- Search by **Latitude/longitude:** [-97.2, 30.4](#)
- Search by **POI (Point Of Interest: school, park, mall, hospital, etc.):** [pond springs elementary](#)



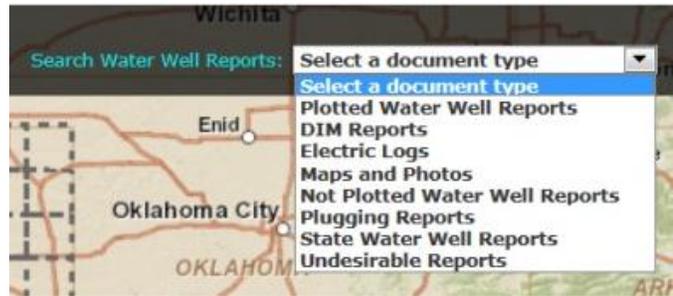
After you enter the search criteria, click on the magnifying glass in the left side of the window to execute the search.

When complete, click on the **X** in the right side of the window to clear the search.

## Search Water Well Reports

In the center of the tool bar, the Search Water Well Reports feature allows you to specify the type of water well report you wish to search for.

When you click on the drop-down arrow in the **Select a document type** window, you will have the options listed below.



- **Plotted Water Well Reports.** These are water well reports that include drillers' logs. The majority of water well records are contained within this category.
- **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: <http://wiid.twdb.texas.gov/> )
- **Undesirable Reports.** These are reports of undesirable water.

Of these reports:

- Plotted Water Well Reports are searchable by either [Grid #](#) or [County Name](#).
- All other reports are searchable by [County Name](#) only.

Examples of how to search these types of reports are provided in the following pages.



- The second space 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.

<b>78</b> 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 space 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 therefore a dropdown menu that allows you to choose 1 through 9. Note that Grid **5** is shaded.
- Ensure that the box for **Grid #:** is checked (it is the default), and click on the Find Well button. If the box for **County:** is checked, you must uncheck it.

<b>28</b> 1	2	3
4	5	6
7	8	9

In the following example, we will use the viewer to select Grid Number **12 32 2**.



When we click on the Find Well button, the following window opens. Note that while the Water Well ID (**WWD ID**) is provided, you cannot link to it.

#### Plotted Water Well

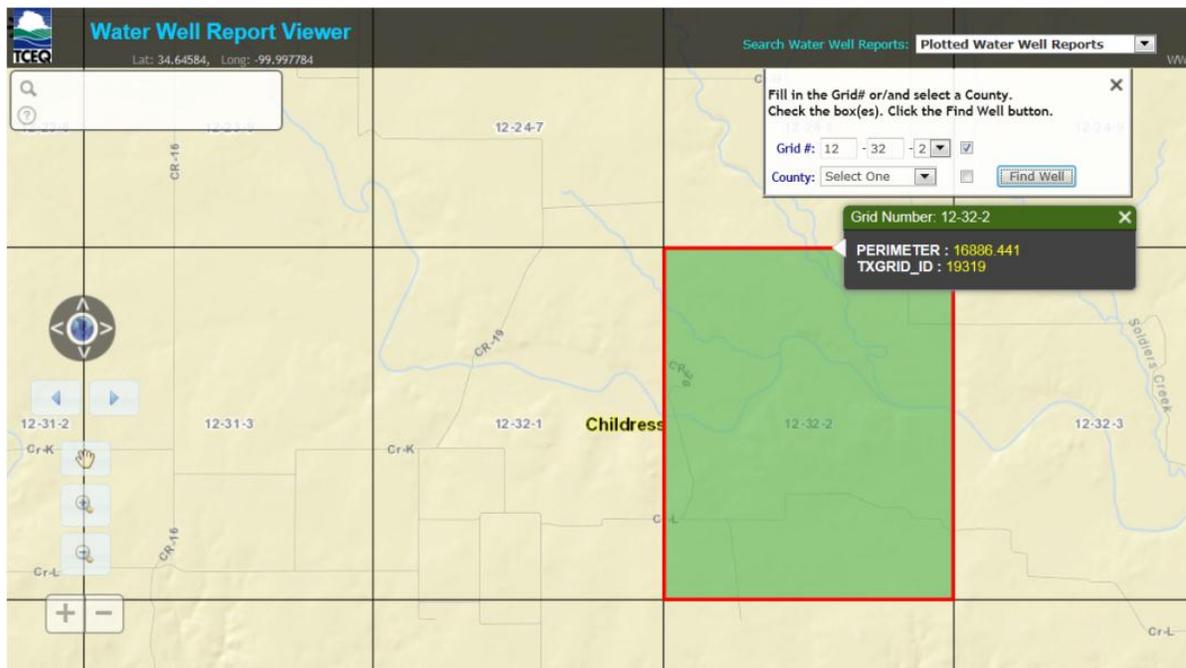
Total record count: 1

No	Grid Num	County	WWD ID	Report Box Type
1	<a href="#">12-32-2</a>	CHILDRESS	746469	Reports and Standard Size Maps

Close Me

Clicking on the **Grid Num** link [12-32-2](#) will open the report for that grid.

If you return to the main viewer screen, Grid Number 12-32-2 is displayed, as shown below:



To conduct a search by **County**:

- Select **Plotted Water Well Reports** in the **Search Water Well Reports** dropdown menu.
- Select **Childress** from the **County** dropdown. (The box for County must be checked. If the box for **Grid #:** is checked, you must uncheck it.)



When you click on the Find Well button, the following window appears:

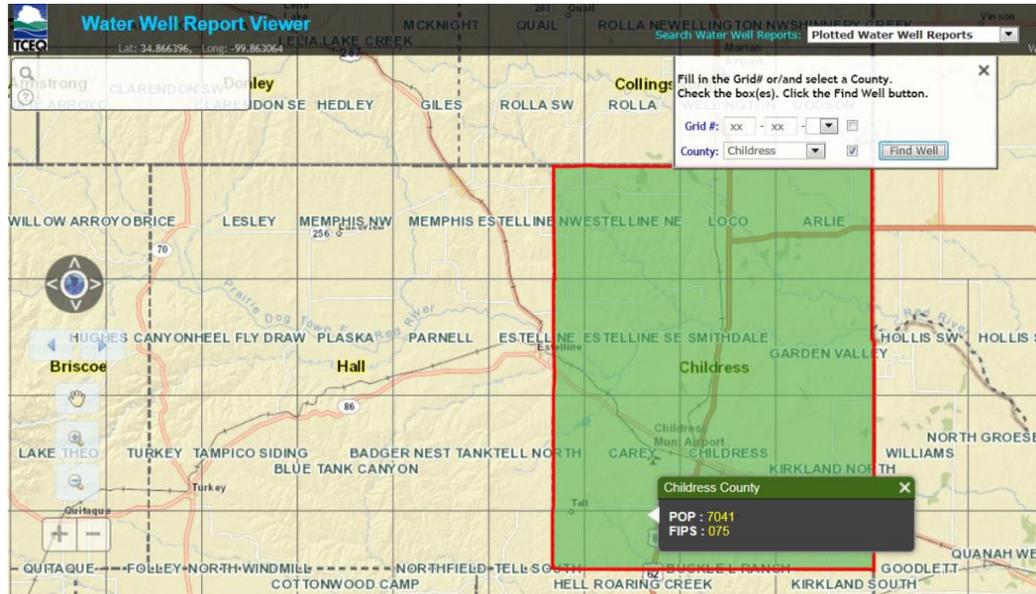
### Plotted Water Well

Total record count: 70

No	Grid Num	County	WWD ID	Report Box Type
1	12-21-3	CHILDRESS	746433	Reports and Standard Size Maps
2	12-21-9	CHILDRESS	746434	Reports and Standard Size Maps
3	12-22-1	CHILDRESS	746435	Reports and Standard Size Maps
4	12-22-2	CHILDRESS	746436	Reports and Standard Size Maps
5	12-22-4	CHILDRESS	746437	Reports and Standard Size Maps
6	12-22-7	CHILDRESS	797217	Reports and Standard Size Maps
7	12-22-9	CHILDRESS	746438	Reports and Standard Size Maps
8	12-23-1	CHILDRESS	746439	Reports and Standard Size Maps
9	12-23-2	CHILDRESS	746440	Reports and Standard Size Maps

When you click on the link for a **Grid Num**, the report for that grid will appear in a new window.

If you return to the main viewer screen, Childress County is displayed, as shown below:



All other reports are searchable by **County Name** only.

An example of how to search for one of these types of reports is provided in the following pages.

### Electric Logs

To conduct a search by **County Name**:

- Select **Electric Logs** in the **Search Water Well Reports** dropdown menu.
- Enter Bexar in the space provided.



When you click on the Find Well button, the following window appears.

### Electric Logs

in **BEXAR COUNTY**  
Total record count: **530**

No	County	WWD ID	Report Box Type
1	BEXAR	<a href="#">1040651</a>	Reports and Standard Size Maps
2	BEXAR	<a href="#">1040651</a>	Reports and Standard Size Maps
3	BEXAR	<a href="#">1040651</a>	Reports and Standard Size Maps
4	BEXAR	<a href="#">1040651</a>	Reports and Standard Size Maps
5	BEXAR	<a href="#">1040651</a>	Reports and Standard Size Maps
6	BEXAR	<a href="#">1040651</a>	Reports and Standard Size Maps
7	BEXAR	<a href="#">1040651</a>	Reports and Standard Size Maps
8	BEXAR	<a href="#">1040651</a>	Reports and Standard Size Maps
9	BEXAR	<a href="#">1040651</a>	Reports and Standard Size Maps

When you click on the link for a **WWD ID**, the report for that well will appear in a new window.

## Functional Tools

Multiple functional tools are provided on the right side of the tool bar.

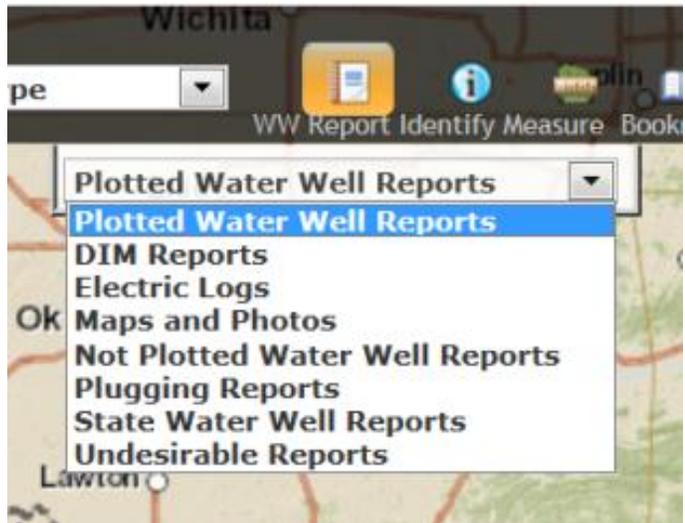


### WW Report

This tool allows you to select the type of report you wish to view.

Options include:

- Plotted Water Well Reports
- DIM (Dewatering, Injection, or Monitoring) Reports
- Electric Logs
- Maps and Photos
- Not Plotted Water Well Reports
- Plugging Reports
- State Water Well Reports
- Undesirable Reports



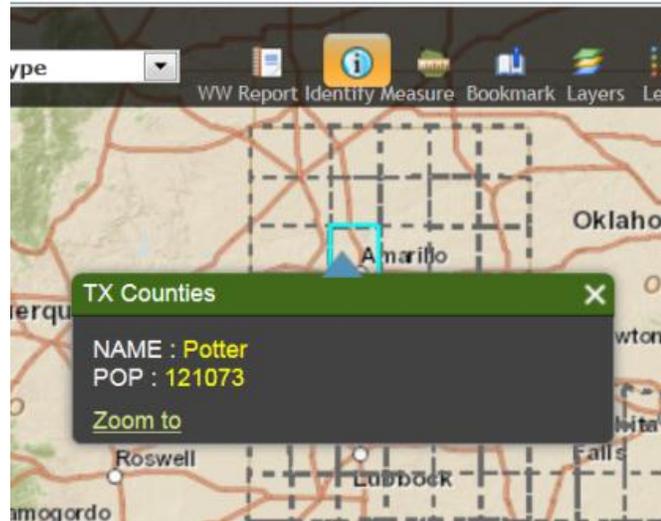
Some useful features when viewing **Plotted Water Well Reports**:

- If you select the **WW Report** tool, specify **Plotted Water Well Reports**, and then click on the map viewer, you will bring up all reports for the 2.5 minute grid in which you clicked. (The more closely you are zoomed in, the more precisely you can select the 2.5 minute grid that you want.)
- If you place the cursor on the boundary between two 2.5 minute grids, and do a left mouse click, you will bring up the Water Well Reports for both grids.
- If you place the cursor on the intersection between four 2.5 minute grids, and do a left mouse click, you will bring up the Water Well Reports for all four grids.

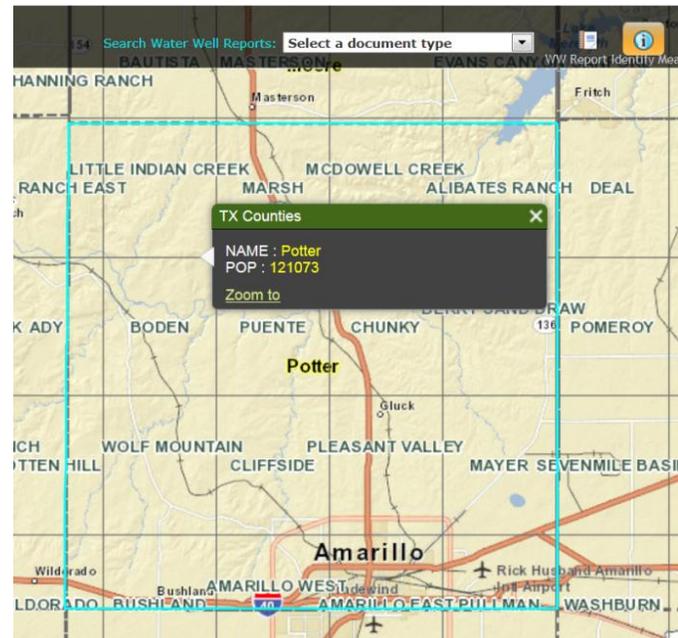
## Identify

This tool allows you to identify visible features on the map. Click on the tool, and then click on the feature you wish to identify. The feature you select will be outlined in light blue, and a pop-up window will appear describing the feature.

In the example to the right, the selected feature is Potter County. The pop-up window displays county name and population.



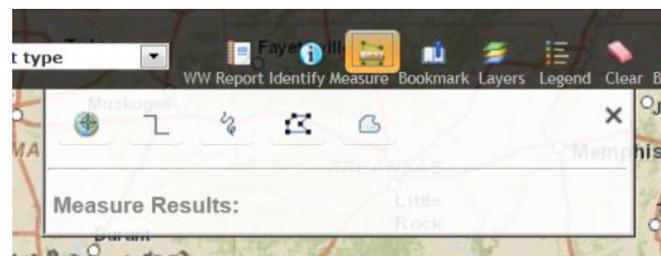
If you click on the [Zoom to](#) link, the viewer will zoom to Potter County.



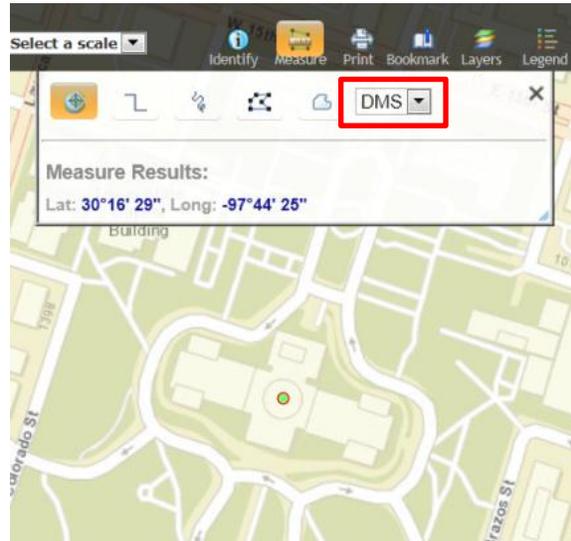
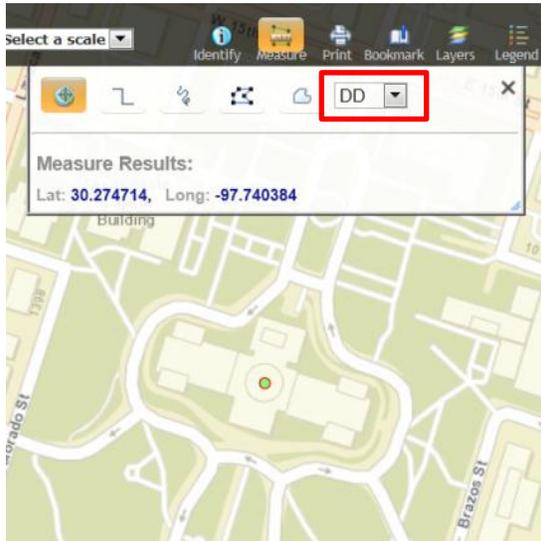
## Measure

This tool allows you to obtain latitude-longitude coordinates of point locations or measure distances in the display screen.

Clicking the measure tool displays a window with multiple options for measurement:



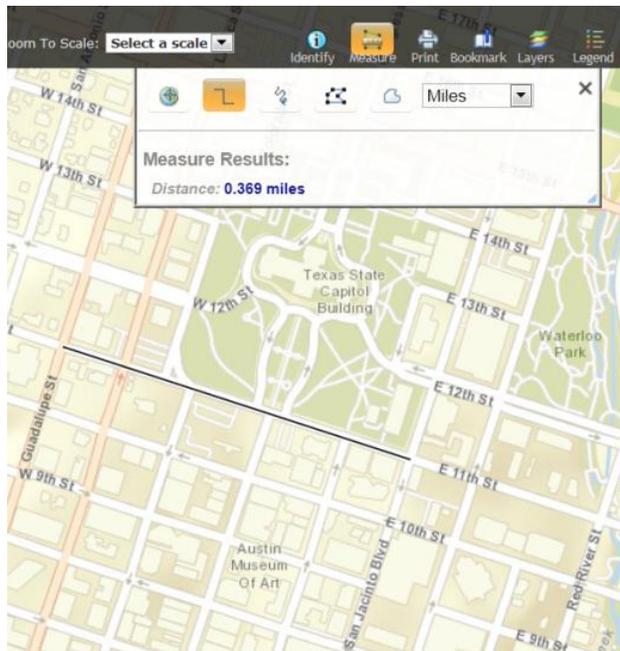
 **Location.** This tool allows you to obtain latitude-longitude coordinates for point locations. You may choose to display latitude-longitude coordinates in decimal degrees (DD) or as degrees-minutes-seconds (DMS).



 **Measure Distances.** Use this tool to measure linear distances between point locations.

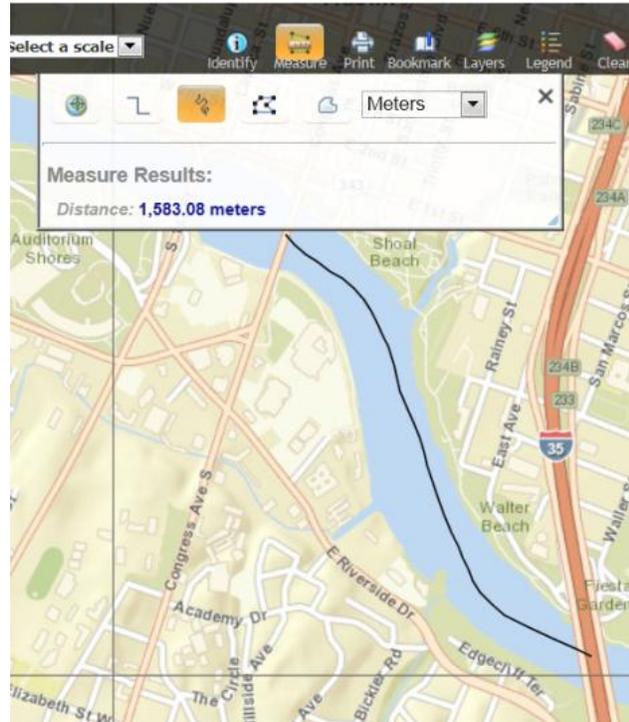
In the example to the right, the distance between Guadalupe Street and San Jacinto Boulevard on 11<sup>th</sup> Street in Austin is 0.369 miles. (You can also measure distances in yards, feet, kilometers, and meters.)

You can measure the distances of multiple connected straight lines. Make a single click at individual points, and do a double click when you're done.



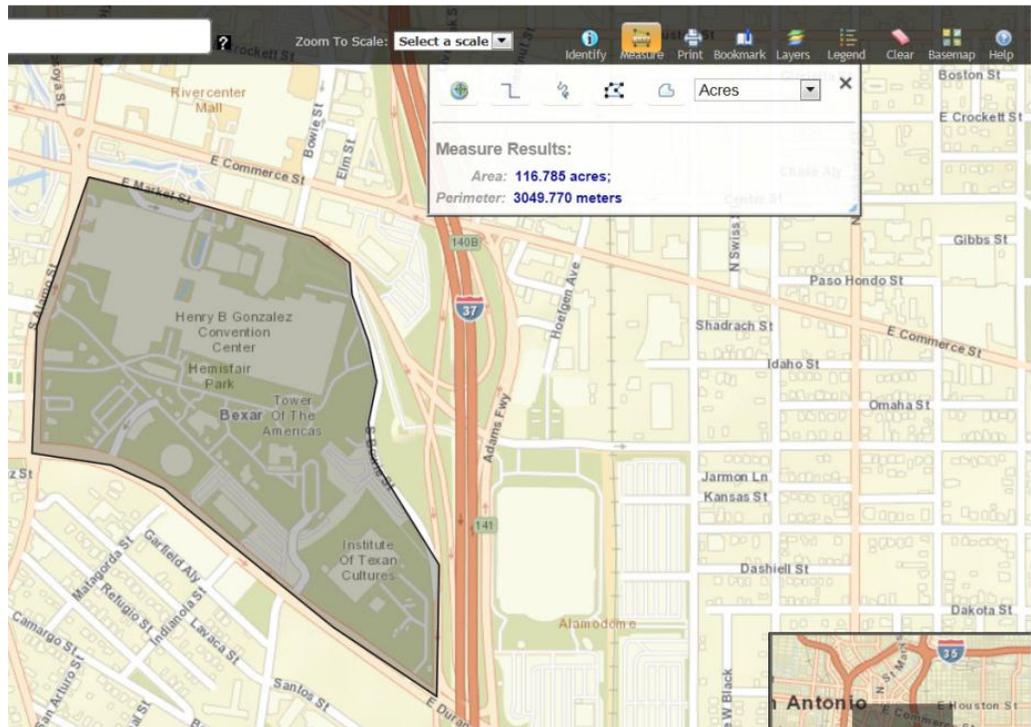
 **Freehand.** Use this tool to measure distances between two points that do not fall on a straight line.

In the example to the right, the distance between South Congress Avenue and Interstate Highway 35 on Lady Bird Lake in Austin is 1,583.08 meters.



 **Measure an Area.** Use this tool to measure the total area of a polygon (in acres, or square miles, yards, feet, kilometers, or meters).

In the example below, Hemisfair Park in San Antonio has a total area of 116.785 acres and a perimeter of 3049.770 meters.



 **Measure an Area (Freehand).** Use this tool to measure the total area of a freehand-drawn polygon (in acres, or square miles, yards, feet, kilometers, or meters).

Note: This tool can only be used to obtain measurements for simple polygons; if you attempt to draw a polygon with too many points, it will not provide a measurement of its area.

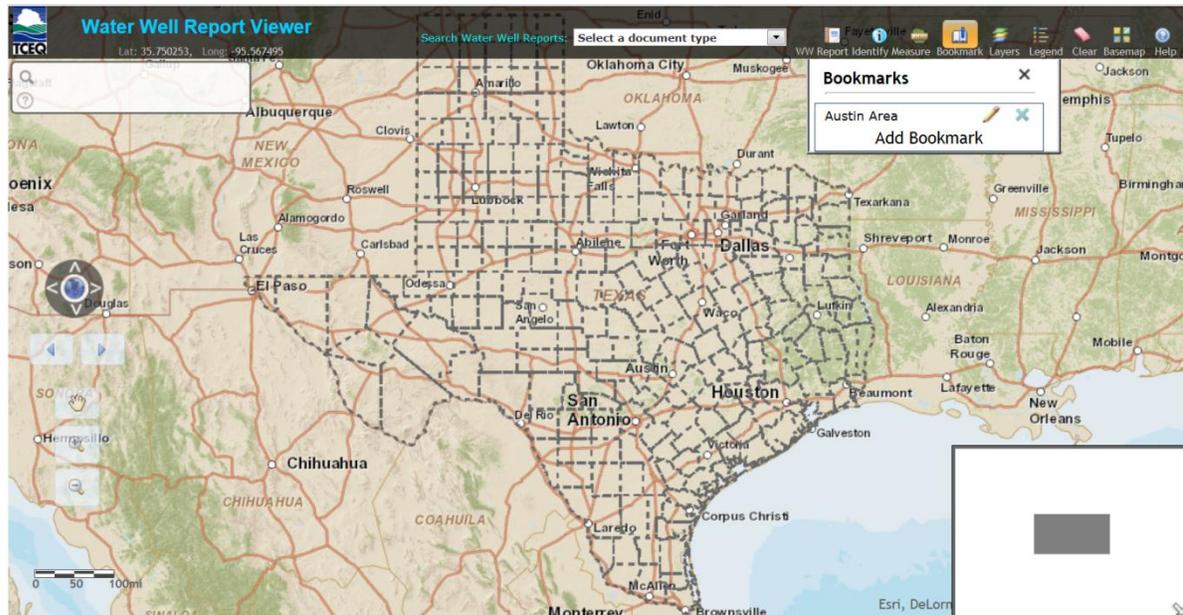
## **Bookmark**

This tool allows you to create bookmarks for specific areas. A bookmark for the Austin area is already in place.

To create a bookmark, zoom to the area of interest and click on the **Add Bookmark** command. Enter the name of the area and hit Enter.

To edit a bookmark, click on the pencil icon and make the desired changes.

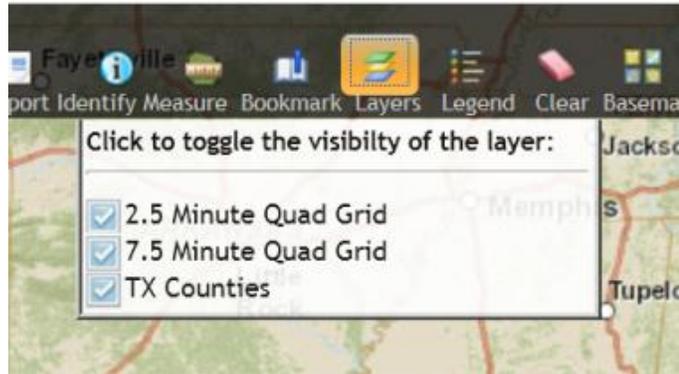
To remove a bookmark, click on the blue X.



## Layers

This tool allows you to choose the layers that the viewer will display. Clicking on the box to the left of the layer name will toggle the layer on or off.

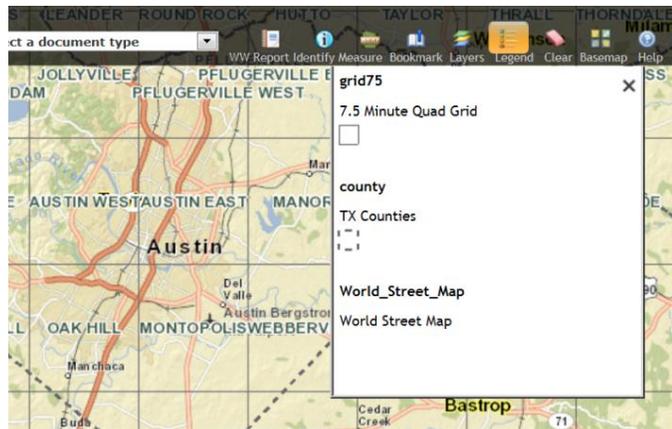
The 2.5 and 7.5 Minute Quad Grids will display as you zoom in closer to the area you select.



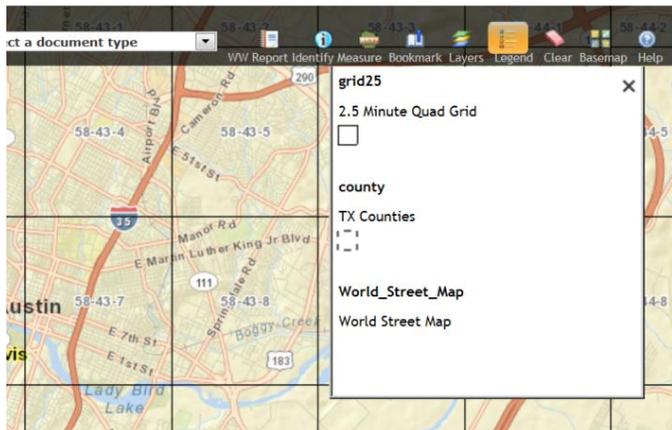
## Legend

This tool displays the legend for the layers being displayed.

In the example to the right, the 7.5 Minute Quad Grid is visible.



As you zoom in, the 2.5 Minute Quad Grid appears.



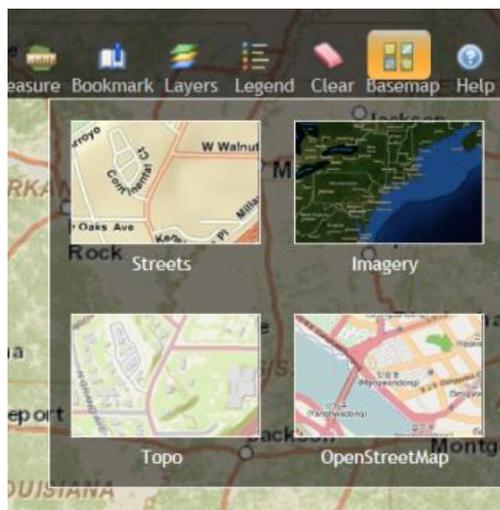
## Clear

Most commonly used with the **Measure** tool, clicking on this tool removes all lines and polygons you have drawn on the viewer screen.

## **Basemap**

Clicking on this tool brings up a window that allows you to choose from six different basemap layers:

- Streets
- Imagery
- USGS Topographic Maps
- OpenStreetMap



## **Help**

Clicking on this link brings up a PDF version of this User Guide.

## Viewing Reports

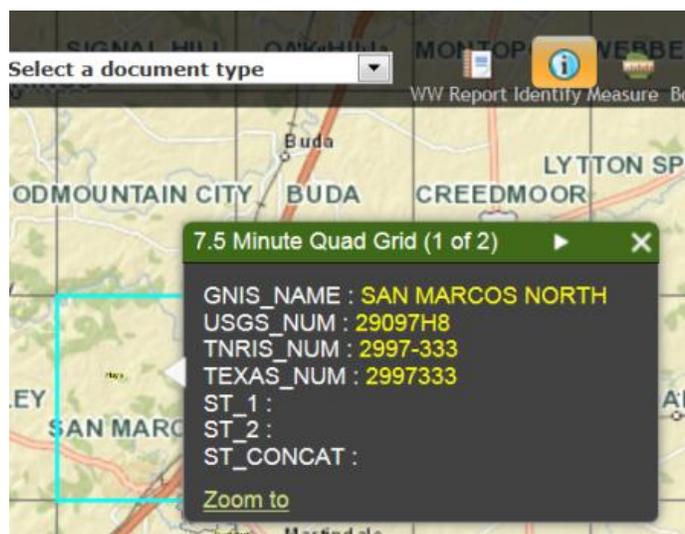
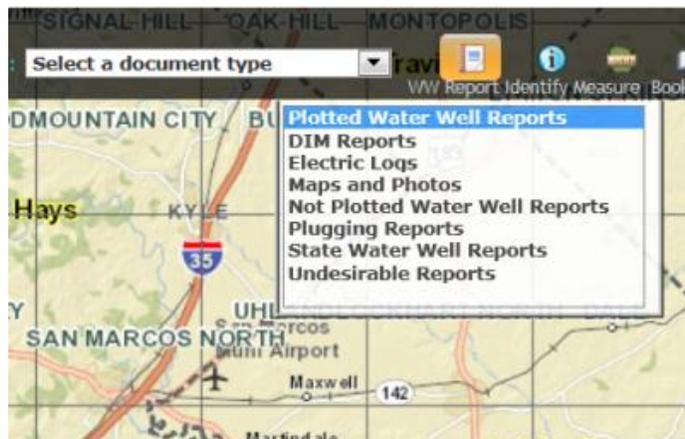
To view a water well report:

- Use the Navigation tools to display your area of interest. (Reports are displayed by county, so be sure of the county in which your area of interest is located.)
- Use the  **WW Report** tool to select the type of report you wish to display.
- Using the mouse cursor, click on your area of interest. A separate window will open displaying all of the reports (of the type you selected) for the selected county.
- Keep in mind:
  - Plotted Water Well Reports are searchable by either [Grid #](#) or [County Name](#). (Note that Plotted Water Well Reports are displayed by 2.5 Minute Grid only, not by 7.5 Minute Grids.)
  - All other reports are searchable by [County Name](#) only.

In the example to the right, we wish to view all **Plotted Water Well Reports** in the center 2.5 Minute Quad Grid (Grid Number **5**) of the **San Marcos North** 7.5 Minute Quad Grid.

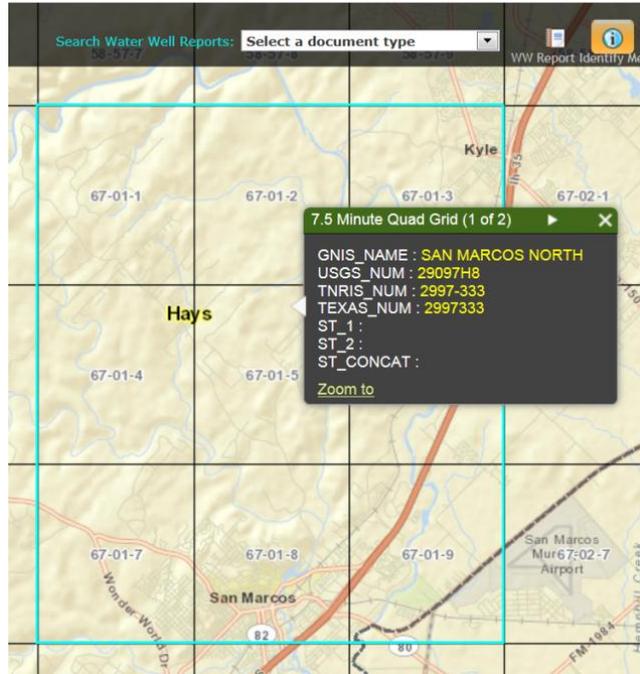
To do this, we have zoomed in to the area surrounding San Marcos close enough for the viewer to display 7.5 Minute Quad Grids.

To further define the **San Marcos North** 7.5 Minute Quad Grid, we can use the **Identify** tool to highlight this Grid. Click on the **Identify** tool, and then click on the **San Marcos North** 7.5 Minute Quad Grid. The Grid will be highlighted in cyan, and a pop-up window will appear displaying the Quad information.



If you click on the [Zoom to](#) link, the viewer will zoom to the **San Marcos North 7.5 Minute Quad Grid**.

You can delete the pop-up window by clicking on the X in its upper right-hand corner.



To view the reports, select **Plotted Water Well Reports** using the **WW Report** tool.

Then do a left mouse click in the center 2.5 Minute Quad Grid (Grid Number **67 01 5**) **San Marcos 7.5 Minute Quad Grid**.

The following window appears.

### Water Well Reports

Plotted Water Wells  
Total record count: 4

No	Grid Num	County	WWD ID	Report Box Type
1	<a href="#">67-01-5</a>	HAYS	851098	Reports and Standard Size Maps
2	<a href="#">67-01-5</a>	HAYS	851349	Reports and Standard Size Maps
3	<a href="#">67-01-5</a>	HAYS	851353	Reports and Standard Size Maps
4	<a href="#">67-01-5</a>	HAYS	851367	Reports and Standard Size Maps

[Close Me](#)

When you click on the link for a **Grid Num**, the report for that grid will appear in a new window.

## 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: <http://www.tgpc.state.tx.us/WaterWells.php>
  - The **Well Basics** section of this web page has a paragraph describing Statewide Water Well Databases, and also has a link to the Water Well Report Viewer itself.
- **TGPC: What Are the Statewide Water Well Databases?**
  - Web page:  
[http://www.tgpc.state.tx.us/subcommittees/POE/FAQs/StatewideWaterWellDatabases\\_FAQ.pdf](http://www.tgpc.state.tx.us/subcommittees/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.