



GIS New Viewer Tool

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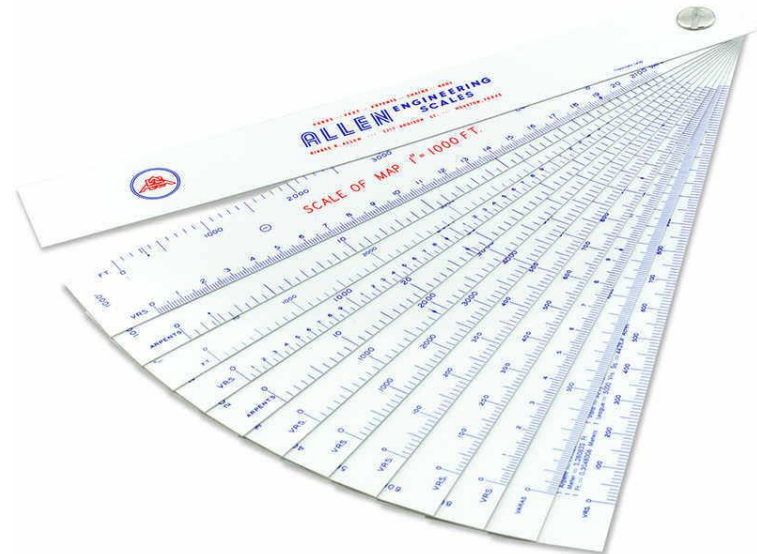
What We Do

- We maintain most of the map layers
 - Edit or add survey lines; relocate oil and gas wells
- We research and correct well locations
 - Well spot or API number discrepancies
 - Remove erroneous well spots
 - Establish new locations for misplaced well spots
 - Update API information for uncatalogued / historic wells
 - Requires a request and documentation to support request

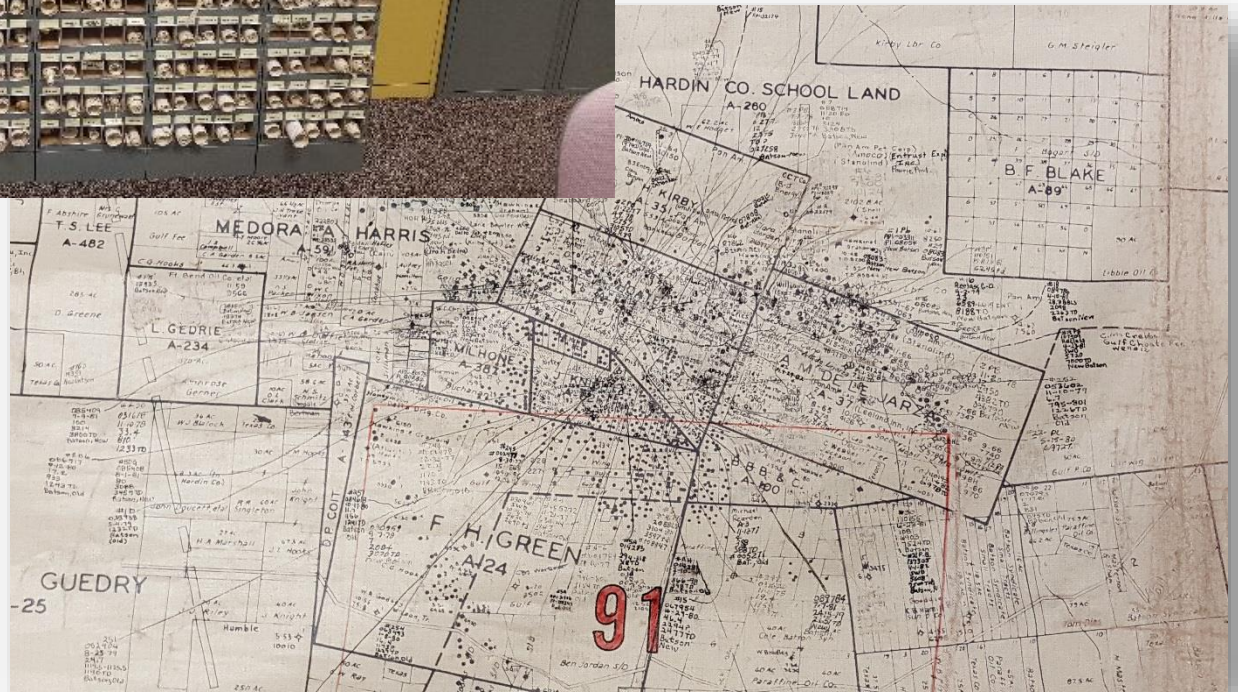
Before GIS (1 of 2)



- Cloth or linen maps
 - One or more maps for each county plus field maps
 - Typical scales
 - 1" = 2000'
 - 1" = 4000'
 - Hand posted wells
 - Problems?



Before GIS (2 of 2)



Accessing the Public GIS Viewer



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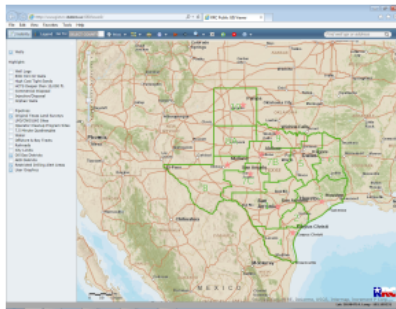
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Public GIS Viewer (Map)

The Public GIS Viewer allows users to view oil, gas and pipeline data in a map view.

NOTICE: If you experience an issue while using the survey and lease search features or the feature to identify wells in the Public GIS Viewer, clear your browser cache. If you are accessing the Public GIS Viewer using Internet Explorer, Google Chrome or Firefox; you can clear your browser cache by pressing Ctrl + F5. If you need further assistance, email RRC.mapping@rrc.texas.gov or call 512-463-6851.

Public GIS Viewer



Training Videos

The following training videos provide step-by-step instruction for new features of the Public GIS Viewer. The videos will open in a separate window, allowing you to toggle between the video and viewer. **Note: These videos do not contain audio.**

- [API# or Address Search](#)
- [Survey Search](#)
- [Locating Pipelines](#)
- [Viewing Coordinates](#)

[Launch Public GIS Viewer](#) ←

The Public GIS Viewer contains the combined functionality of the Legacy GIS Viewer and the newer appearance of the Enhanced GIS Viewer. In addition, the viewer has been improved with the addition of the following features and is updated nightly.

Important Disclaimer

A "data set" is any set of information electronically generated or stored by Railroad Commission of Texas (Commission) systems, including, but not limited to, the Commission's Geographic Information System, Online Research Query System, or Mainframe System.

The data sets contained in the Public GIS Viewers were generated from the Commission's Geographic Information System. These data sets are provided as a public service for informational purposes only. They are **not** intended to be used as an authoritative public record for any geographic location and have no legal force or effect. Organizations and individual users are responsible for verifying the accuracy, completeness, currency, and/or suitability of these data sets themselves.

The Commission specifically disclaims any and all warranties, representations, or endorsements, express or implied, with regard to these data sets, including, but not limited to, the warranties of merchantability, fitness for a particular purpose, or non-infringement of privately owned rights.

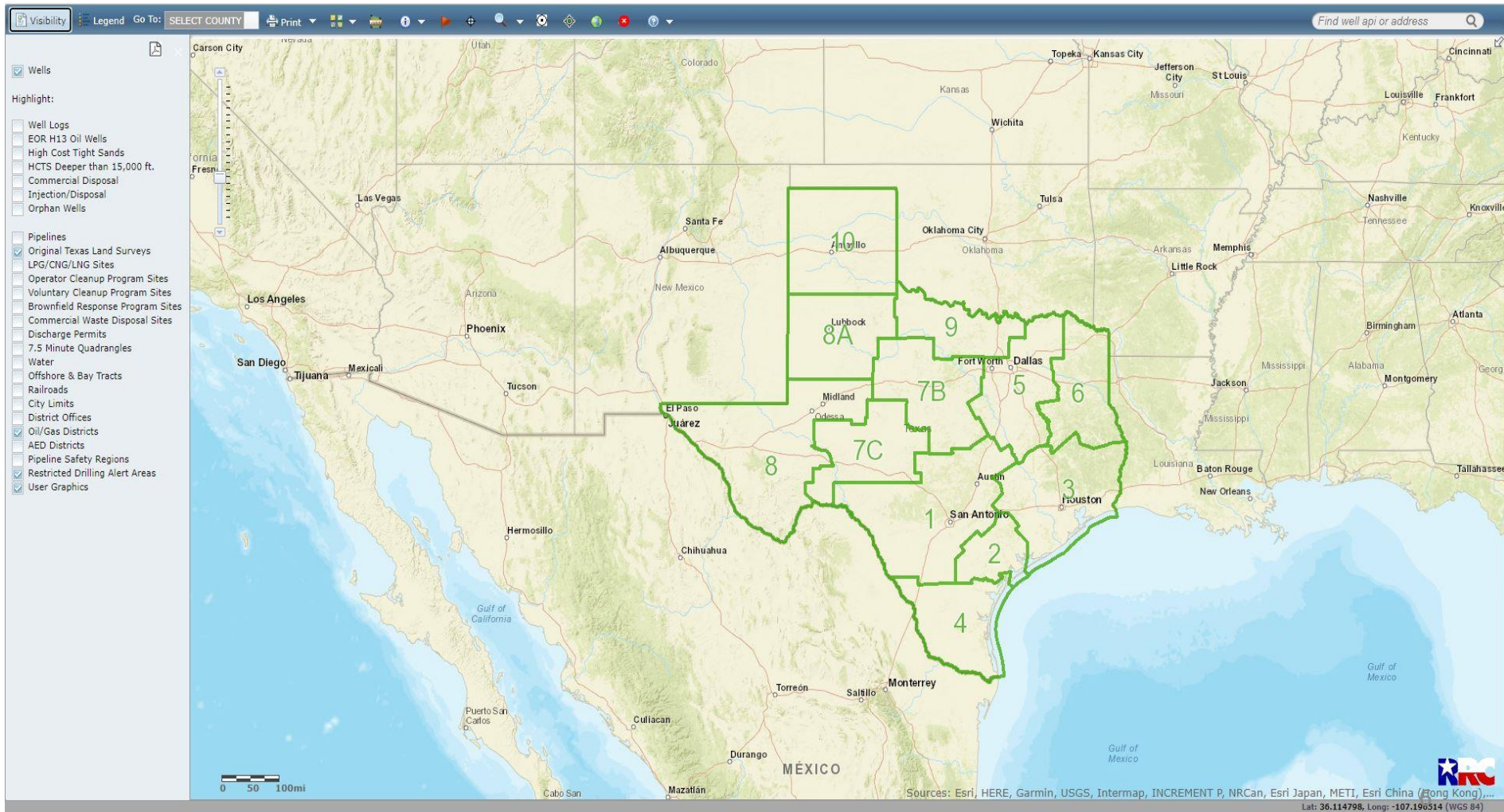
Note: GIS maps **may not** be used for pipeline location purposes in lieu of calling an official notification center prior to excavating. It is a violation of Texas law to fail to make the required 8-1-1 calls.

Related Links

GIS Viewer Load Screen



<https://gis.rrc.texas.gov/GISViewer/>





- Live Demo
 - GIS viewer load screen components
 - Visibility
 - Legend
 - Toolbar – overview
 - Basemaps
 - Help

Coordinates: Datums



- **Datum** – A set of numbers which describe the shape, size, and position of an ellipsoid that best approximates the surface of the Earth, either locally or globally.
- The datum can be *local* where it best matches the area of interest or *global* where it approximates the earth on a global scale.
 - The Clarke 1866 (used for NAD 27) and GRS 1980 (used for NAD 83) ellipsoids are positioned to best match the north American continent and are therefore examples of local datums.
 - The WGS 84 ellipsoid is an example of an ellipsoid that is suitable for use on a global scale.

Coordinates: What We Accept



- Geographic Coordinate Systems

- NAD 27, NAD 83, WGS 84

- Degrees Minutes Seconds - ex.
30 16 28.69, -97 44 25.33

- Decimal Degrees - ex.
30.274638, -97.740370

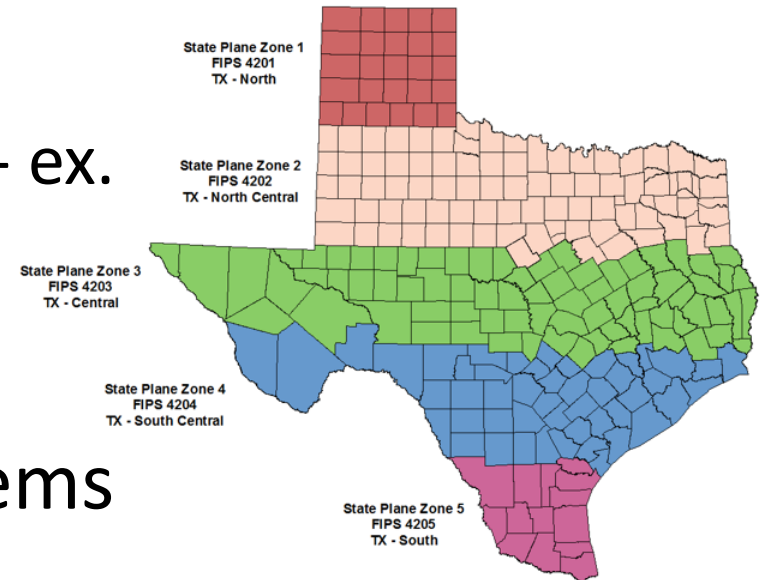
- State Plane Coordinate Systems

- NAD 27 and NAD 83

- 5 Zones in Texas (Run East – West)

- North, North Central, Central, South Central, South

- State Plane (NAD 27 TXSC) X = 1469657.61,
Y = 855549.92



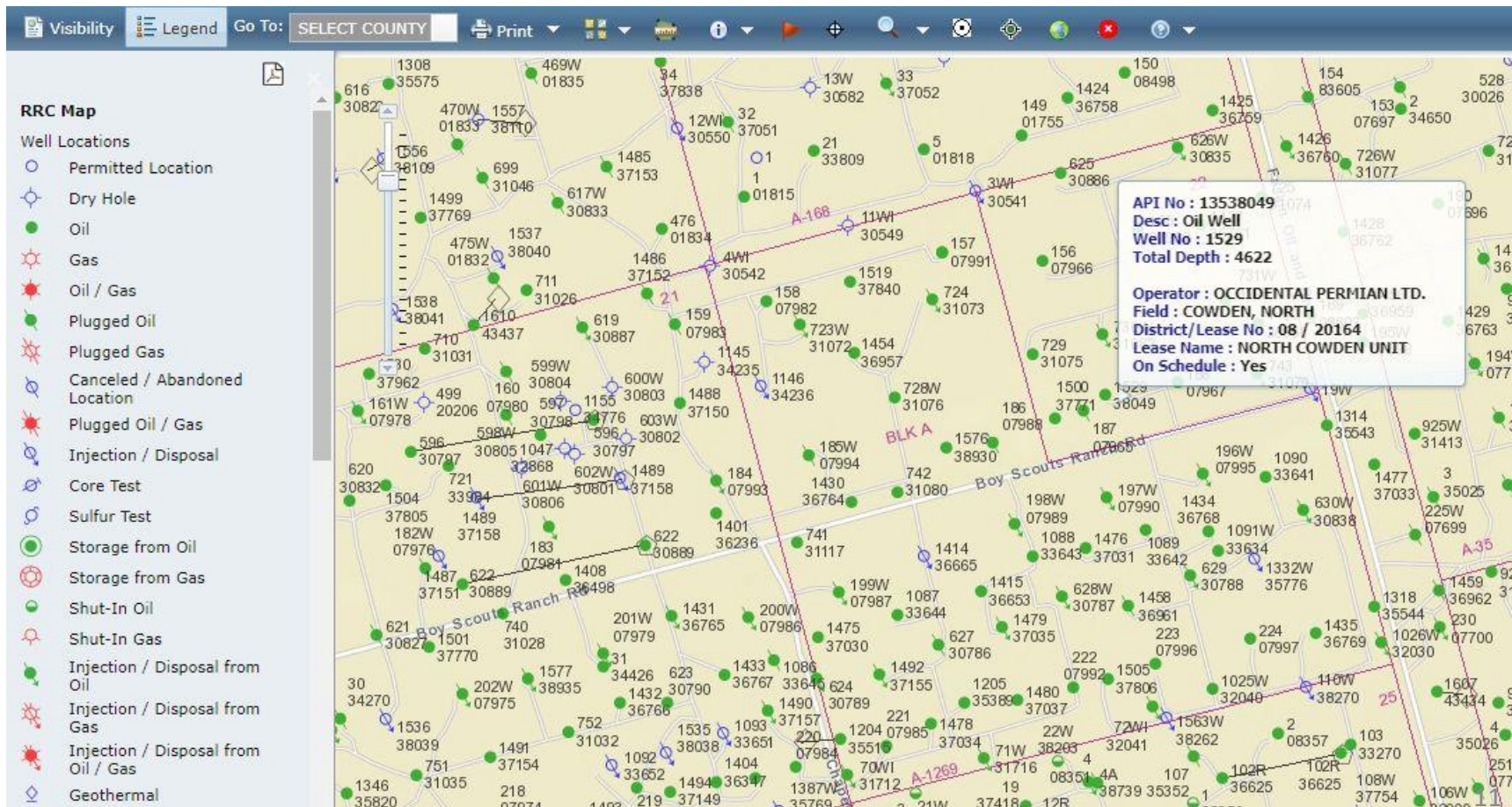


- API Number
 - Must include 8 digits, FIPS & Unique Identifier
- RRC Lease ID
 - 5 digit oil ID or 6 digit gas ID
 - Single gas well displays or all wells under oil lease ID displayed
- Survey Information
 - Not all attributes need to be entered
 - Spelling, punctuation and spaces are important and will affect results.

Hover



- Move the cursor over any well
 - Dialogue box appears with well information



Identify



- Click on the feature using the Identify tool
 - Additional information appears in the dialogue box window

The screenshot shows a GIS application window with a map of well locations. The 'Identify Wells' dialog box is open, displaying the following information:

Number of identify results: 1

Result #1		
API	13537840	
GIS WELL NUMBER	1519	
GIS SYMBOL DESCRIPTION	Oil Well	
GIS LOCATION SOURCE	Coordinates - Operator reported	
GIS LAT (NAD27)	32.050043	
GIS LONG (NAD27)	-102.504747	
GIS LAT (NAD83)	32.050159	
GIS LONG (NAD83)	-102.505174	
Well Logs	Drilling Permits	Disposal Permits

OPERATOR/WELLBORE

WELLBORE STATUS	OPEN
LAST PERMIT ISSUED	496118
LAST PERMIT OPERATOR NUMBER	617544
LAST PERMIT OPERATOR	OCCIDENTAL PERMIAN LTD.
LAST PERMIT LEASE NAME	NORTH COMB UNIT

Identify Results




- API
 - Geographic information
 - Links to Well Logs and Permits
- Operator/Wellbore
 - Information from most recent approved drilling permit
- Completion Record
 - Current *and* historical records
 - Links to production and hardcopy records

GIS Identify Results - Well Location Attributes	
Number of identify results: 1	
Result #1	
API	44133780
GIS WELL NUMBER	1
GIS SYMBOL DESCRIPTION	Oil Well
GIS LOCATION SOURCE	Operator reported location - Distances and Plat
GIS LAT (NAD27)	32.511745
GIS LONG (NAD27)	-100.041566
GIS LAT (NAD83)	32.511865
GIS LONG (NAD83)	-100.041941
Well Logs	Drilling Permits
	Disposal Permits
OPERATOR/WELLBORE	
WELLBORE STATUS	OPEN
LAST PERMIT ISSUED	744958
LAST PERMIT OPERATOR NUMBER	884527
LAST PERMIT OPERATOR	VENTEX OPERATING CORP.
LAST PERMIT LEASE NAME	IRVIN UNIT
TOTAL DEPTH	4750
SURFACE LOCATION	Land
ABSTRACT	366
SURVEY	T & P R.R. CO.
BLOCK	18
SECTION	23
DISTANCE 1	851
DIRECTION 1	1217
DISTANCE 2	
DIRECTION 2	7B
COMPLETION RECORD	
PRORATION SCHEDULE	OIL
DISTRICT	7B
LEASE/ID	28082
OPERATOR NUMBER	884527
OPERATOR	VENTEX OPERATING CORP.
LEASE NAME	IRVIN UNIT
FIELD	CASADY (STRAWN)
WELL NUMBER	1
TYPE WELL	HISTO RY
ON SCHEDULE	NO
Production Data Query(PDQ)	Oil/Gas Imaged Records for Lease/ID: 28082

Download Wells Within a Defined Radius (1 fo 2)



- Select the icon 
- Enter the radius (up to 2.5 miles) by typing in the number

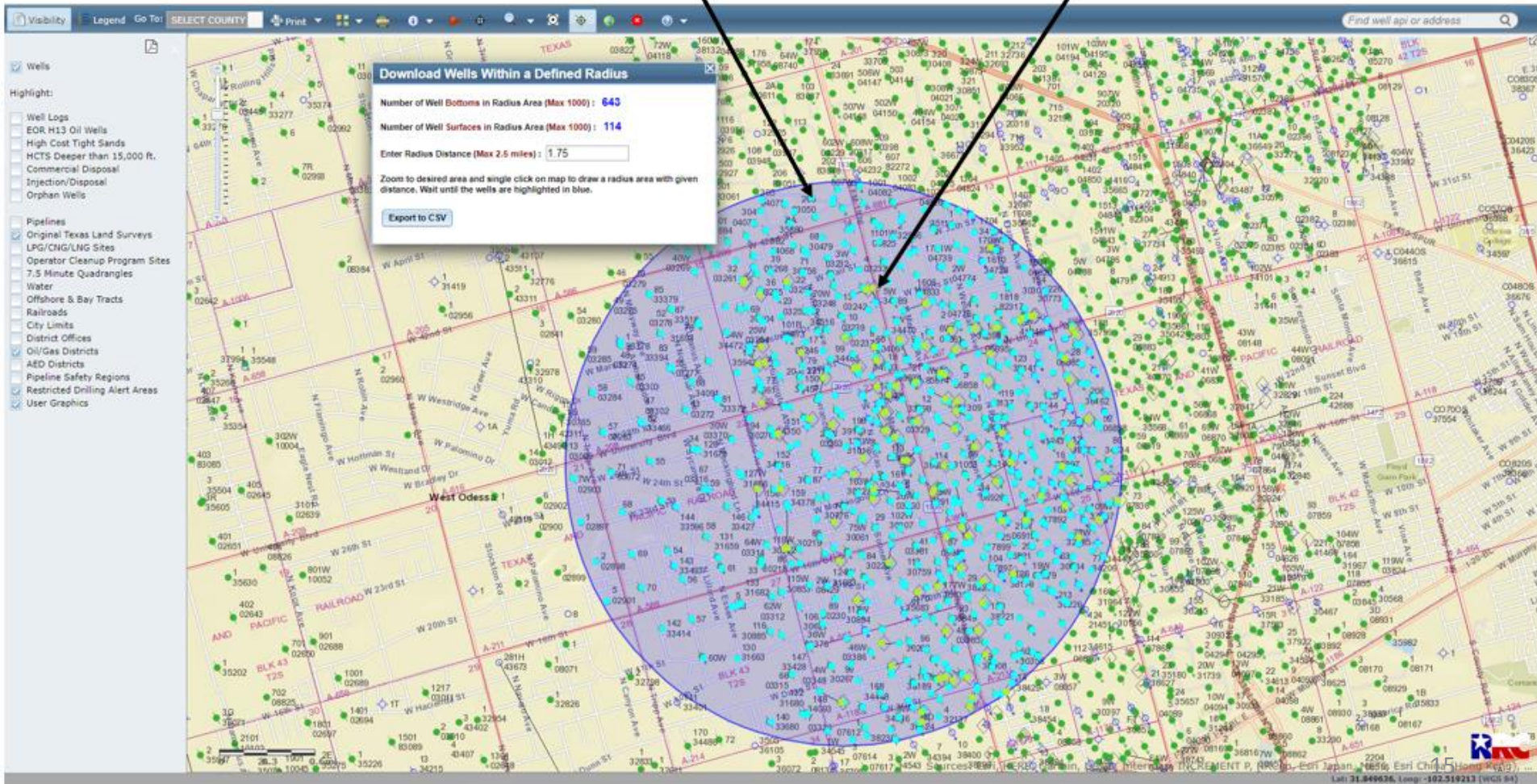
A screenshot of a web application interface for downloading wells within a defined radius. The interface includes a map of Texas with 10 numbered regions (1-10) outlined in green. A pop-up window titled "Download Wells Within a Defined Radius" is displayed over the map, showing the number of well bottoms and surfaces in the radius area (both 0) and a text input field for the radius distance (0.25 miles). The interface also features a search bar, a legend, and a scale bar.

Download Wells Within a Defined Radius (2 of 2)



Cyan: Well Bottom Location

Green: Well Surface Location



More Than 1000 wells inside the Radius...



- The 'Too Many Results' dialogue box appears
 - The first 1000 wells are exported

The screenshot displays the RRC Public GIS Viewer interface. A large blue circular radius is drawn on a map of Odessa, Texas, containing a dense cluster of green well markers. A dialog box titled "Download Wells Within a Defined Radius" is open, showing options for "Number of Well Bottoms in Radius Area (Max 1000)" and "Number of Well Surfaces in Radius Area (Max 1000)", both set to 1000. The "Enter Radius Distance (Max 2.5 miles)" field is set to 2.5. A message box above the dialog states: "www.gisp.rrc.texas.gov says: There are too many results to display on the map; not all of the selected wells will be highlighted." A text box with a downward arrow points to a "Page Unresponsive" error message that says: "If this dialogue box appears, continue to wait, you will eventually receive the .csv download file". The error message also includes "RRC Public GIS Viewer" and "Wait" and "Exit page" buttons. The bottom of the screen shows the RRC logo and contact information: "16 RRC www.rrc.texas.gov Integrated, INCREMENTS, RRC/CARLE, METI, EER, CHS, King, Ltd. 31.940666, Long. -102.424362 (WGS 84)".

Download Wells Results



- Export results are .csv file
 - Lat and Long are automatically generated by the GIS when well is created
 - Well location source document determines reliability
- Use lat and long to convert to geospatial data

The screenshot shows the Microsoft Excel interface with a table of well data. The table has columns for API, Well Number, Symbol Desc, Symbol, Reliab, Location Source, Lat27, Long27, Lat83, Long83, Wellbore Status, and Last Permit Issued. The data includes various oil wells and permitted locations with their respective coordinates and permit numbers.

API	Well Number	Symbol Desc	Symbol	Reliab	Location Source	Lat27	Long27	Lat83	Long83	Wellbore Status	Last Permit Issued
00342277	9	Oil Well	4	40	Operator reported location - Distances and Plat	32.08853566	-102.27372872	32.08865371	-102.27415121	OPEN	705543
00346959	3502	Oil Well	4	55	Coordinates - Operator reported	32.09076111	-102.26542778	32.09090586	-102.26586841	OPEN	801167
00346960	3503	Oil Well	4	55	Coordinates - Operator reported	32.08883607	-102.26849449	32.08895418	-102.26891688	OPEN	801174
00346961	3505	Oil Well	4	55	Coordinates - Operator reported	32.08966389	-102.25695556	32.0898087	-102.25739594	OPEN	813705
00346961	3505	Oil Well	4	55	Coordinates - Operator reported	32.08966389	-102.25695556	32.0898087	-102.25739594	OPEN	813705
00346963	3506	Oil Well	4	55	Coordinates - Operator reported	32.08788885	-102.26451393	32.08800698	-102.26493616	OPEN	813712
00346963	3506	Oil Well	4	55	Coordinates - Operator reported	32.08788885	-102.26451393	32.08800698	-102.26493616	OPEN	813712
00346964	3508	Oil Well	4	55	Coordinates - Operator reported	32.08710833	-102.25982778	32.0872532	-102.26026823	OPEN	801189
00346966	3504	Oil Well	4	55	Coordinates - Operator reported	32.09061111	-102.26093056	32.09075588	-102.26137106	OPEN	801203
00347002	2H	Permitted Location	2	55	Coordinates - Operator reported	32.07336708	-102.28298241	32.07348554	-102.28340475	LOCATION	802006
00347003	3H	Permitted Location	2	55	Coordinates - Operator reported	32.07390067	-102.28069413	32.07401916	-102.2811164	LOCATION	802009
00347004	4H	Permitted Location	2	55	Coordinates - Operator reported	32.07443455	-102.27840584	32.07455297	-102.27882806	LOCATION	802010
00347005	5H	Permitted Location	2	55	Coordinates - Operator reported	32.07496815	-102.27611755	32.07508658	-102.27653971	LOCATION	802013

Digital Map Data (1 of 2)



- Data is free to download

The screenshot shows the Texas Railroad Commission website. The navigation menu includes: Contact Us, RRC A to Z, RRC Online Log In, Jobs, Resource Center, and a search bar. The Resource Center page is highlighted, showing sections for Frequently Asked Questions, Filing Forms at RRC, Other Internet Sites of Interest, Publications, and Research. A red arrow points to the 'Research' section, which lists: Data Sets Available for Download, Public GIS Viewer (Map), Online Research Queries, and Special Studies. Another red arrow points to the 'Resource Center' link in the navigation menu.

The Railroad Commission serves Texas through:

Digital Map Data (2 of 2)



- Choose your layer
 - Click on ArcView Shape File
- Open the index
- Download zipped file by county
- Open in GIS Software

Index of /shpwell

[\[parent directory\]](#)

Name	Size	Date Modified
Wells/		9/25/19, 7:00:00 PM

Digital Map Data				Back
Data Set Name & Description	Download	Manual	Updated	Learn More
Pipeline Layers by County	ArcView Shape File	PDF	Nightly	Learn More
Survey Layers by County	ArcView Shape File	PDF	Nightly	Learn More
Well Layers by County	ArcView Shape File	PDF	Nightly	Learn More
Base Layers by County	ArcView Shape File	PDF	Nightly	Learn More
All Layers by County	ArcView Shape File	PDF	Nightly	Learn More

Index of /shpwell/Wells/

[\[parent directory\]](#)

Name	Size	Date Modified
well001.zip	590 kB	4/30/20, 8:09:00 AM
well003.zip	3.2 MB	4/30/20, 8:09:00 AM
well005.zip	83.4 kB	4/30/20, 8:09:00 AM
well007.zip	199 kB	4/30/20, 8:10:00 AM
well009.zip	4.1 MB	4/30/20, 8:10:00 AM
well011.zip	12.5 kB	4/30/20, 8:10:00 AM
well013.zip	1.0 MB	4/30/20, 8:09:00 AM
well015.zip	216 kB	4/30/20, 8:09:00 AM
well017.zip	12.7 kB	4/30/20, 8:10:00 AM
well019.zip	17.7 kB	4/30/20, 8:09:00 AM

New Layers (1 of 2)



- Voluntary Cleanup Program Sites
 - Contact: SR-VCP-BRP@rrc.texas.gov
- Brownfield Response Program Sites
 - Contact: SR-VCP-BRP@rrc.texas.gov

Brownfield Response Program Sites

- ★ Brownfield, Accepted
- ☆ Brownfield, Closed

Voluntary Cleanup Program Sites

- ◆ VCP, Accepted
- ◇ VCP, Closed

New Layers (2 of 2)



- Commercial Waste Disposal Sites
 - Search using Site ID, Facility or Operator name
 - Contact: enviro.permits@rrc.texas.gov
- Discharge Permits
 - Search using Permit Number, Facility name or Operator name
 - Contact: enviro.permits@rrc.texas.gov

Commercial Waste Disposal Sites & Discharge Permits



Commercial Waste Disposal



Discharge Permits



- Live Demo

- Demo search and navigation options and navigate to a well
- Turn on well logs highlight
- Identify a well and discuss results
- Show how to access a well log
- Display “Neudocs” records – PDF images of hardcopy oil and gas records
- Demo download wells tool and export results
- Review exported results and provide an example of how to use in GIS software
- Elaborate on Digital Map Data as an alternative to download wells tool

Request to Change Information (1 of 2)



- Contact us with any questions
 - Call or email
 - 512-463-6851
 - rrc.mapping@rrc.texas.gov
 - Provide as much information as possible
 - Ex. – Historic well records, Permits, Plats, Maps, etc.
- We will
 - Review the request
 - Ask for more information to clarify the request
 - Deny the request
 - Lacks required information
 - Already resolved based on a previous request
 - Direct it to another department or agency

Request to Change Information (2 of 2)



- If accepted, then a GIS specialist will research the request
- Changes and additions
 - You will receive a final determination of your request
 - Changes will be posted within 24 hours of the determination
- Getting to “Yes”
 - Provide the required information to receive faster resolution
 - Work with us throughout the process
 - Clarify any discrepancies

Points of Contact



RRC Mapping

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RRC.Mapping@rrc.texas.gov

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Questions?

Commissioner Contact Information



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