



Texas Railroad Commission

Chairman Christi Craddick
Commissioner Ryan Sitton
Commissioner Wayne Christian

November, 2017





Railroad Commission of Texas

by

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and**

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Environmental Protection
Programs and Regulations

Abandoned Wells

Reclamation

Remediation

Hydraulic Fracturing

EPA Study Area

Seismicity

Introduction and History



- The RRC is the oldest regulatory agency in the State of Texas created in 1891 to Regulate Railroads
- Initially regulated rates which Railroad Companies charged Consumers to move products.
- In 1917 - authority to regulate the rates for pipeline transport of crude oil from the oil fields to refineries



- Additional authority was granted in 1919 as the commission was already “regulating pipelines”.
- The RRC evolved into a world renowned regulatory, safety ,and conservation agency which has jurisdiction over the oil and gas industry in the state of Texas.

RRC Mission Statement



Our mission is to serve Texas by our stewardship of natural resources and the environment, our concern for personal and community safety, and our support of enhanced development and economic vitality for the benefit of Texans.



- Commission Divisions: Oil and Gas, Surface Mining, Oversight and Safety
- Each with environmental protection rules
- Focus of talk: Oil and Gas Division

Categories of Division Responsibilities



- Regulatory
- Environmental
- Safety
- Some of the Rules overlap 1 or more of these 3 categories and have multiple functions

Environmental Responsibilities



- Well Construction/Plugging Rules
- State Managed Plugging/Cleanups
- Oil Spills (Non-Coastal)
- Spills of Produced Water
- Other Spills such as Drilling Mud etc.

Environmental Responsibilities



- Blowouts
- Class II Injection Wells
- Brine Mining
- Underground Storage of Hydrocarbons
- Naturally Occurring Radioactive Materials

Environmental Responsibilities



- Recycling
- FracFocus
- Seismicity

Environmental Programs



- Technical Permitting
- State Managed Plugging and Cleanup
- Operator Cleanup Program
- Voluntary Cleanup Program
- Brownfield (Grants) Program

Safety Responsibilities of the Division



- Rule 36 – Hydrogen Sulfide safety. Tiered levels depending upon concentration, volume of H₂S and public area.

RRC Safety Division Responsibilities



- Intrastate Pipeline Safety for Crude Oil, Natural Gas and other Hazardous Material [LPG, Hydrogen, Gasoline, etc].
- LPG tanks
- Reminder Safety only, RRC Safety Div. has no environmental responsibilities

MOU Between RRC and TCEQ



- Helps define the jurisdictional boundary between the two agencies.
- Codified as *16 TAC § 3.30*
- Generally RRC has jurisdiction from Drilling , Production, and Transportation to the fence line of a Refinery except for air emission issues.
- One exception is the Oil and Gas Service industry where TCEQ has jurisdiction.

RRC Jurisdiction



- Houston District 3
- Basically Southeast Texas 29 counties plus parts of 6 other counties
- Wells and Interstate Pipelines Land , Bay, and Offshore
- State Territorial waters extend out 3 marine leagues [approx. 9.9 miles]

RRC Capabilities



- About 40 Personnel in Oil and Gas and Safety Divisions (15 inspectors, including DOCCs and plugging staff)
- Vehicles
- Basic equipment [cell phones, laptops, hand augers, etc]
- No Boats or Booms etc

State Funded Cleanups and Well Plugging



- Oil and Gas Regulation and Cleanup Fund (OGRC)
- Plugging and Cleanup – Abandoned Sites
- Funding comes from Fees that the Oil and Gas Industry pay

State Funded Cleanups and Well Plugging



- Plugging Goals for FY18-FY19 (biennium)
 - 3,000 orphaned wells with \$67 million (ESF)
- Site Remediation Goals for FY18 only
 - 259 cleanup activities with \$9 million (OGRC)

Authority



- TWC §26.131 (1) – RRC solely responsible for the control and disposition of O&G waste and the abatement and prevention of pollution of surface and subsurface water.
- TNRC §91.101 - adopt and enforce rules and orders to prevent pollution of surface water or subsurface water in the state.

TNRC §91.113 - INVESTIGATION, ASSESSMENT OR CLEANUP BY COMMISSION

- If oil and gas wastes or other substances or materials regulated under Section 91.101 are causing or likely to cause the pollution of surface or subsurface water, the commission may use OGRC funds to investigate, assess, control or cleanup if.....

Authority



- The responsible person fails or refuses;
- The responsible person is unknown, not found, or has no assets with which to control or clean up;
- The oil and gas wastes or other substances or materials are causing pollution of water.



COST RECOVERY

- TNRC § 91.113 (f)
- Recovery of all costs incurred by the commission
- Seek cost recovery from any person who was required by law, rules adopted by the commission, or a valid order of the commission to control or clean up

RRC Cleanup Rules



- §3.8 – Water Protection Rule
- §3.20 – Notification Requirements
- §3.91 – Cleanup of Soil Contaminated by a Crude Oil Spill
- §3.98 – Standards for Management of Hazardous Oil & Gas Waste
- §4 D – Voluntary Cleanup Program
- §4 F – Disposal of NORM Waste
- *Note: Does not include well plugging and other safety rules.

<http://www.rrc.state.tx.us/general-counsel/rules/>

Other RRC Rules



- §3.9 / 3.46– Disposal Wells/Injection Wells
- §3.13 – Casing, Cementing, Well Control, Comp.
- §3.14 – Well Plugging
- §3.29 – Hydraulic Frac Chem Disclosure
- §3.32– Venting, Flaring

<http://www.rrc.state.tx.us/general-counsel/rules/>



Pictures of State Pluggings and Cleanups



Well Plugging







Abandoned Well

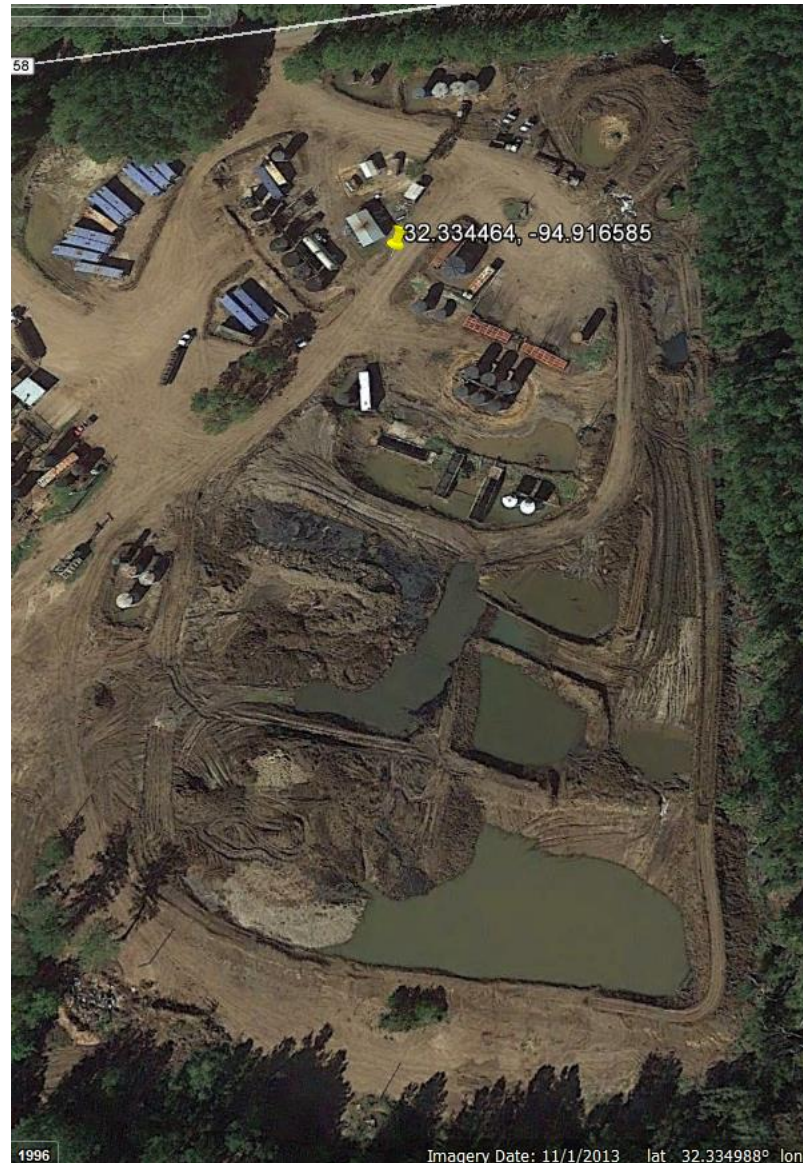




Reclamation Facility



- Waste Piles
- Pits
- Storage Tanks
- Frac Tanks



Reclamation Facility



Reclamation Facility



Site Remediation Activities



Dig and Haul



Oil and Gas Regulation and Cleanup (OGRC)
Fund



Site Remediation Activities



- Emergency flume dam



Finished emergency flume dam # 3.

Site Remediation Activities



State Managed Cleanup



Site Remediation Activities



State Managed Cleanup



Oil Spill – Kilgore District



Vandalism/Unplugged Well







30,000 BBL Tank



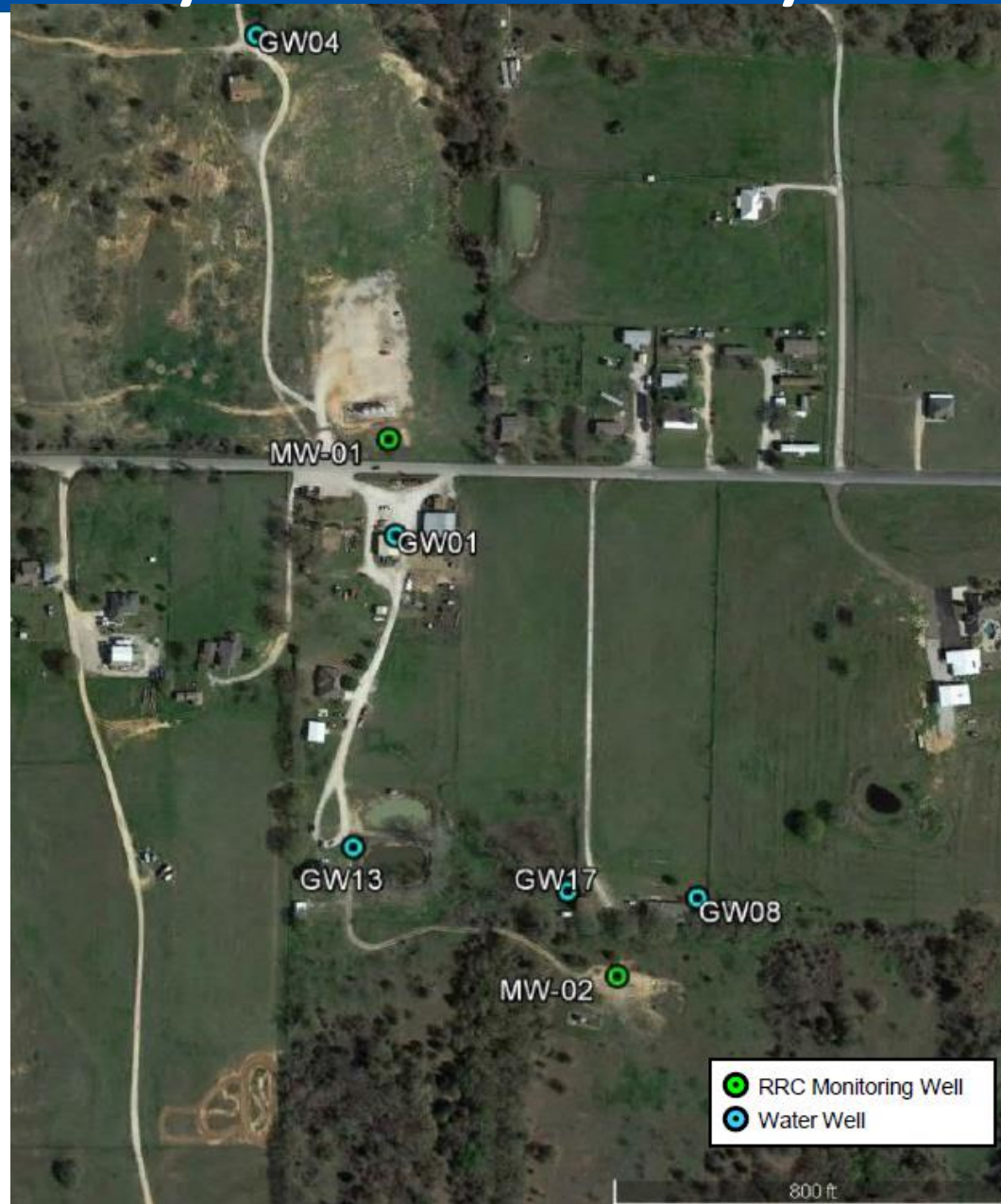


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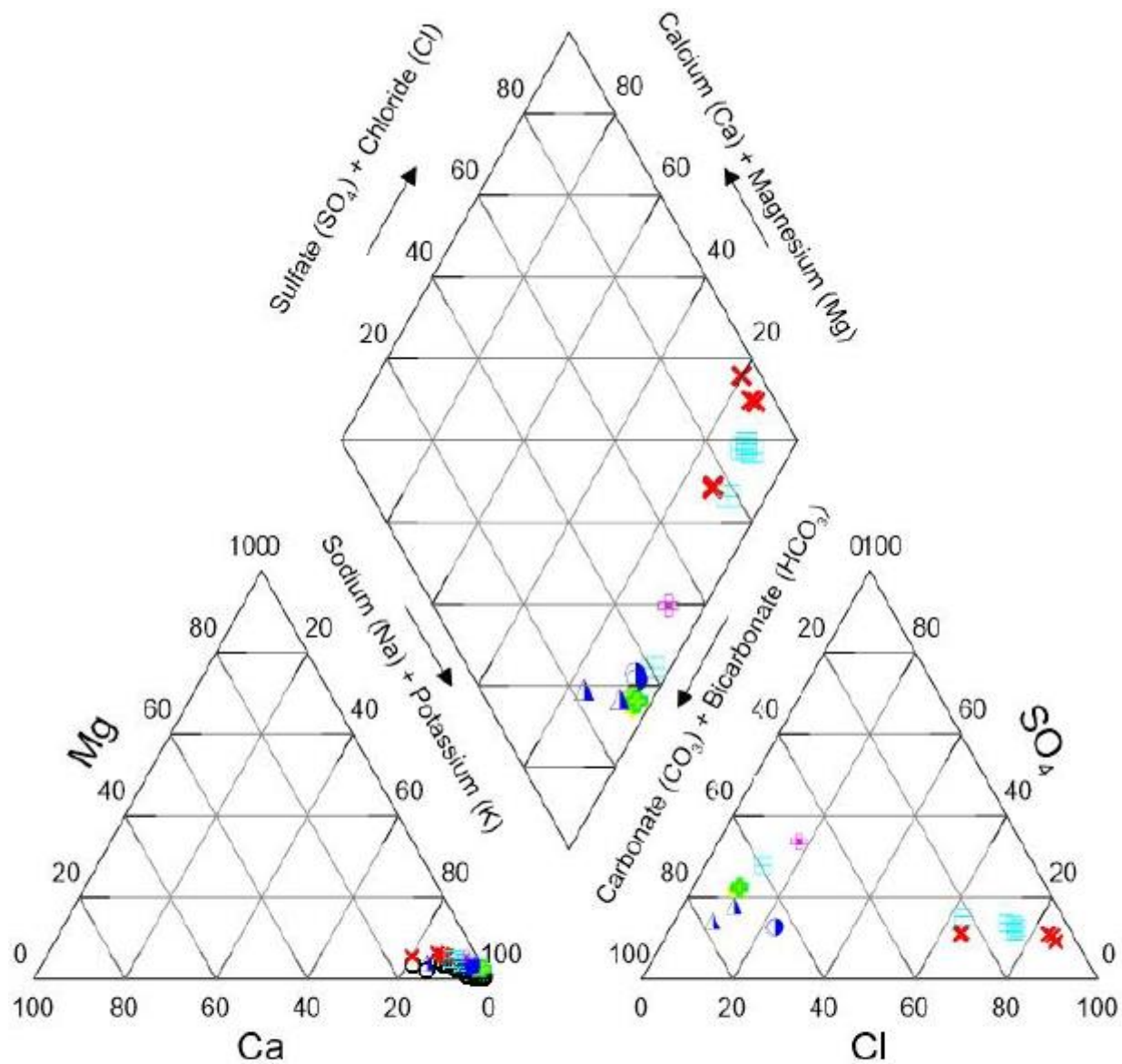




EPA Hydrofrac Study Area







- X - GW01 ● - GW04 ≡ - GW08
 + - GW13 + - GW17 ▲ - MW-01
 ● - MW-02



- **RRC Regulatory Actions**
 - 2012 Chemical disclosure rule
 - 2013 Recycling rules
 - 2014 Well construction/testing/control rule
 - Disposal wells
 - Modification of permit requirements for disposal wells in certain areas
 - Regulations relating to seismicity

- 2012 Chemical Disclosure 16 TAC §3.29
 - Use of FracFocus (<http://fracfocus.org/>)
 - Service companies must supply info to operators
 - Allows for Trade Secret protection
 - Limited challenge to Trade Secret claim
 - Must disclose to emergency responders and health professionals

FracFocus



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HYDRAULIC FRACTURING
HOW IT WORKS

GROUNDWATER
PROTECTION

CHEMICAL
USE

REGULATIONS
BY STATE

FIND A WELL
BY STATE

FracFocus 3.0

IT'S ALMOST HERE...

FracFocus is continuing to evolve and expand its performance and versatility by providing more than a dozen enhancements including:

- Expand the public's ability to search records
- Improve data accuracy
- Provide extraction of data in a "machine readable" format
- Update educational information on chemical use, oil & gas production and potential environmental impacts

These upgrades will be designed to dramatically enhance the site's functionality for the public, state regulatory agencies and industry users.

Adding more participating companies and reported wells from across the country, FracFocus' continued success is the result of state and federal government agencies and the oil and natural gas industry to provide public transparency.

[FIND OUT MORE >](#)

Looking for information about a
well site near you?



Search for nearby well sites that have been hydraulically fractured to see what chemicals were used in the process.

TOTAL WELL SITES
REGISTERED

1 2 7 7 8 1

[Welcome](#) [Hydraulic Fracturing](#) [Casing & Cement](#) [State Regulations](#) [Chemical Use](#)



FracFocus machine-readable data now available!

FracFocus is pleased to announce the release of disclosure data to the public in machine-readable (SQL) format.

By clicking the button below you may download a ZIP file that contains a copy

FAQs

◀ 1 / 3 ▶

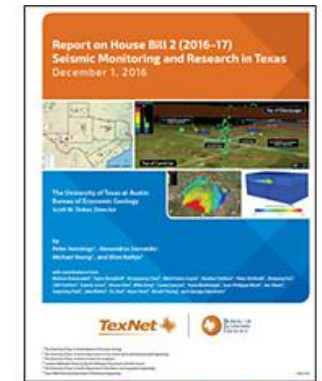
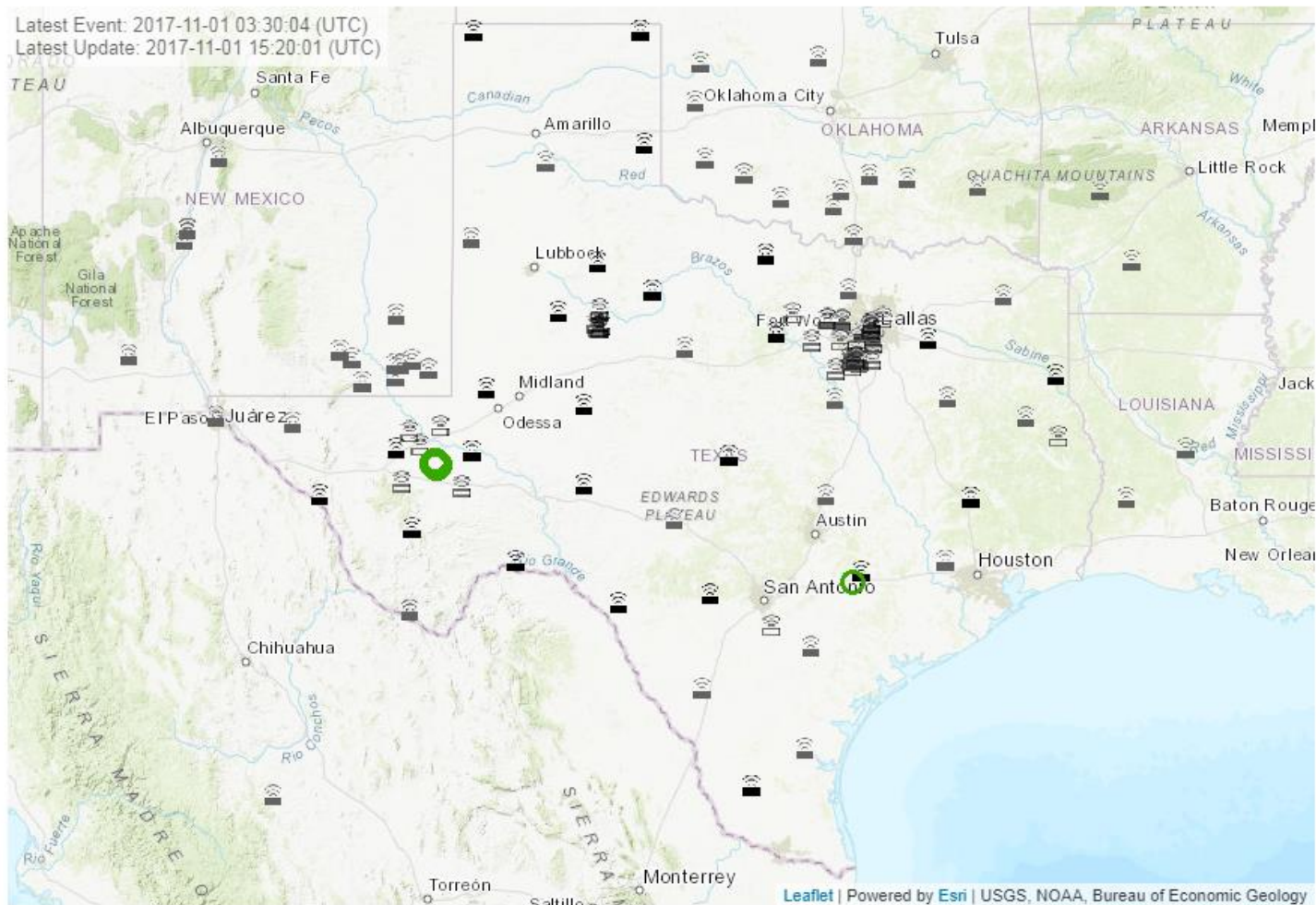
Q. Solving the most common problems encountered in FracFocus

A. There are a number of common problems which occur with regularity when using FracFocus. The following is a list of the most

Seismicity



Latest Event: 2017-11-01 03:30:04 (UTC)
Latest Update: 2017-11-01 15:20:01 (UTC)



[TexNet 2016 Final Report](#)

Earthquakes

- ☒ 1.5 < Magnitude <= 2.0
- ☐ 2.0 < Magnitude <= 2.5
- ☐ 2.5 < Magnitude <= 3
- ☐ 3 < Magnitude <= 3.5
- ☐ 3.5 < Magnitude <= 4.0
- ☐ 4.0 < Magnitude <= 5.5
- ☐ Magnitude > 5.5

Stations

- ☒ TexNet Permanent
- ☐ TexNet Temporary
- ☐ Non-TexNet

Seismic Regions



Earthquake Magnitude



☐ Lock Magnitude

Date Range

SELECT DATE RANGE...

Latest Date



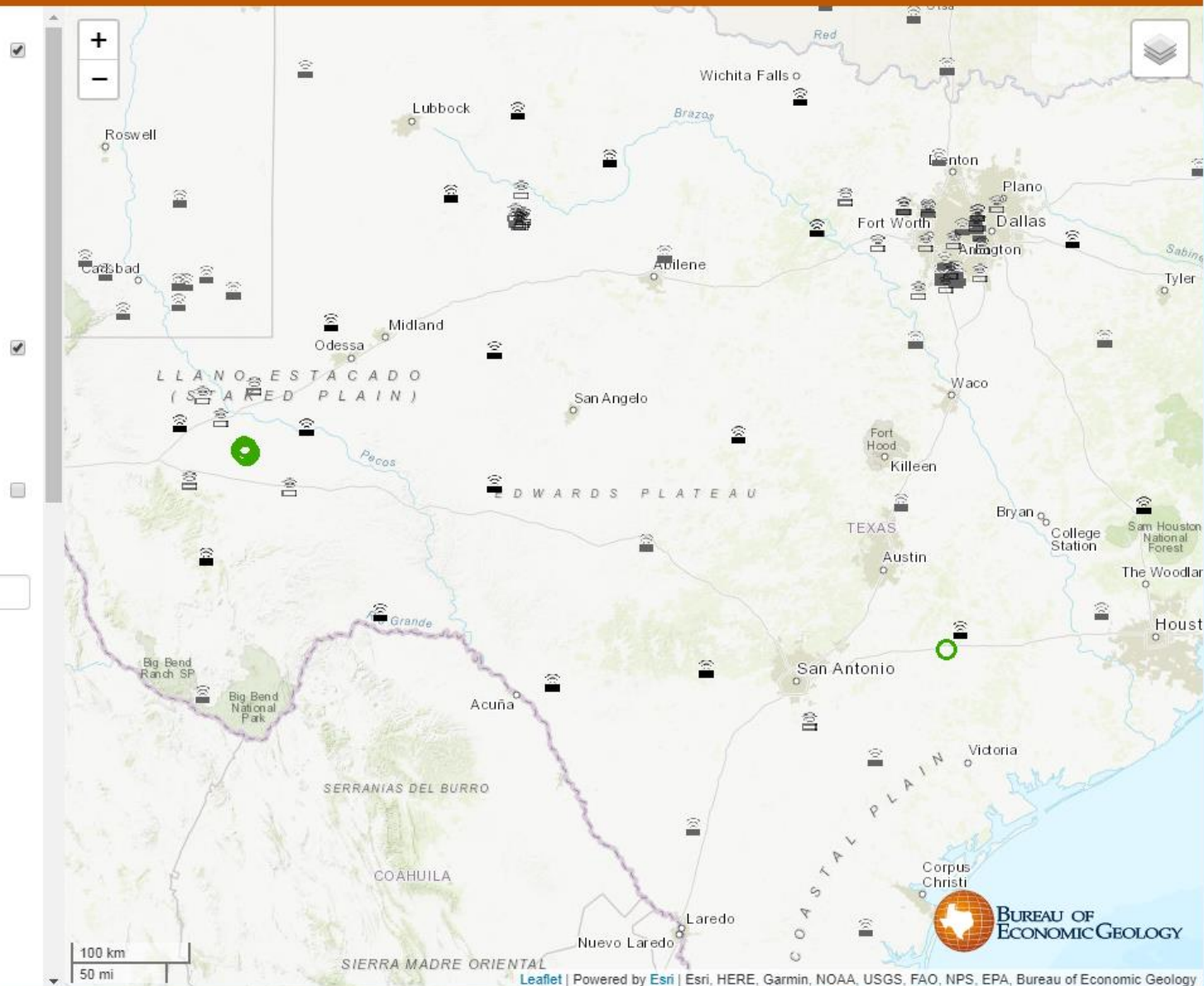
11/1/2017



Earliest Date



10/1/2017



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