

A vertical photograph showing the silhouette of an oil rig worker on a platform. The worker is wearing a hard hat and is looking towards the left. The background is a bright sunset or sunrise, with the sun low on the horizon, creating a lens flare effect. The rig's structure is dark and complex, with various beams and ladders visible.

QUICKSILVER RESOURCES

Fort Worth Community Meetings

Salt Water Disposal Wells

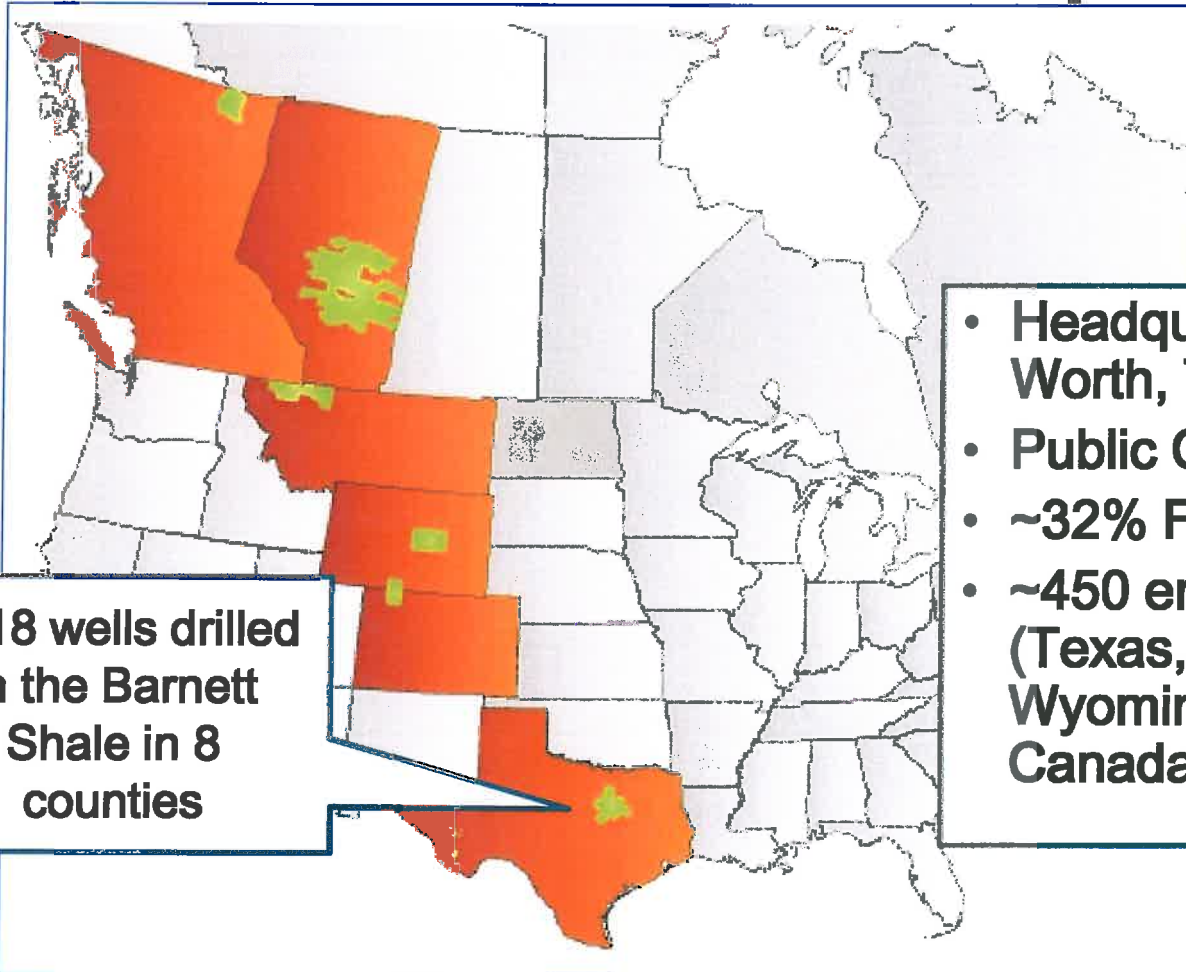
NYSE: KWK

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Company Info

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**1018 wells drilled
in the Barnett
Shale in 8
counties**

- **Headquartered in Ft. Worth, Texas**
- **Public Company**
- **~32% Family Owned**
- **~450 employees
(Texas, Montana,
Wyoming, Colorado,
Canada)**



Terms

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- **Underground Injection Control (UIC)**
- **Class II Injection Well**
- **Saltwater Disposal Well (SWD)**



EPA Injection Well Types

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Class	Use	US Inventory	TX Inventory
Class I	Inject hazardous wastes, industrial non-hazardous liquids, or municipal wastewater beneath the lowermost USDW	650 wells	58 HW wells 50 Other wells
Class II	Inject brines and other fluids associated with oil and gas production, and hydrocarbons for storage	151,000 wells	52016 wells
Class III	Inject fluids associated with solution mining of minerals beneath the lowermost USDW	21,000 wells	79 sites 6075 wells
Class IV	Inject hazardous or radioactive wastes into or above USDWs. These wells are banned unless authorized under a federal or state ground water remediation project	24 sites	6075 wells
Class V	All injection wells not included in Classes I-IV. In general, Class V wells inject non-hazardous fluids into or above USDWs and are typically shallow, on-site disposal systems. However, there are some deep Class V wells that inject below USDWs	400,000 to 650,000 wells	4 sites
Class VI	Inject Carbon Dioxide (CO2) for long term storage, also known as Geologic Sequestration of CO2	6-10 commercial wells expected by 2016	new category



Permitting Requirements

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○ Railroad Commission of Texas

- Permit to Drill
- UIC (SWD) Permit for Injection

○ TCEQ

- Air Permit

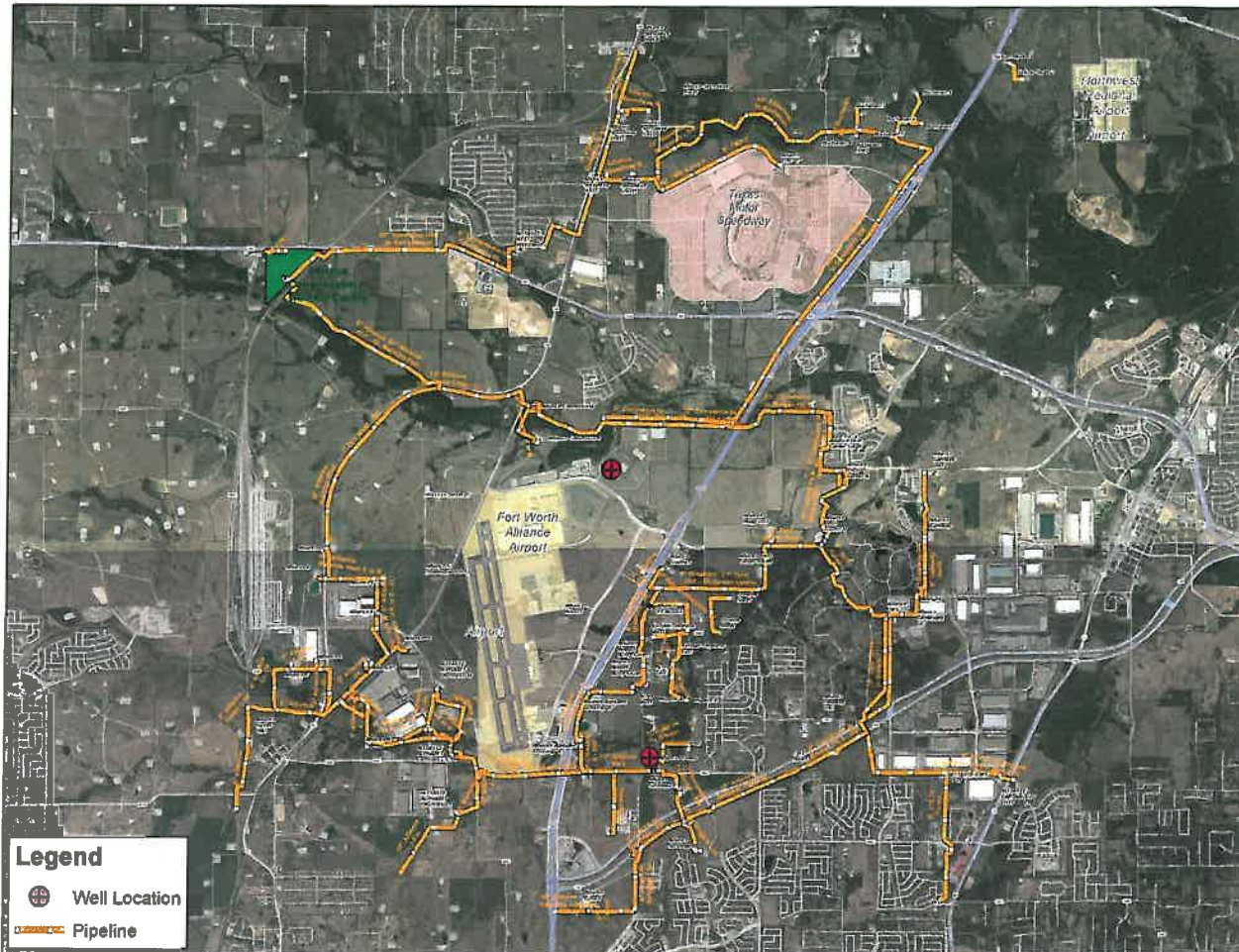
○ City of Fort Worth (proposed)

- Land use restrictions under COFW authority



Alliance Produced Water Pipeline System

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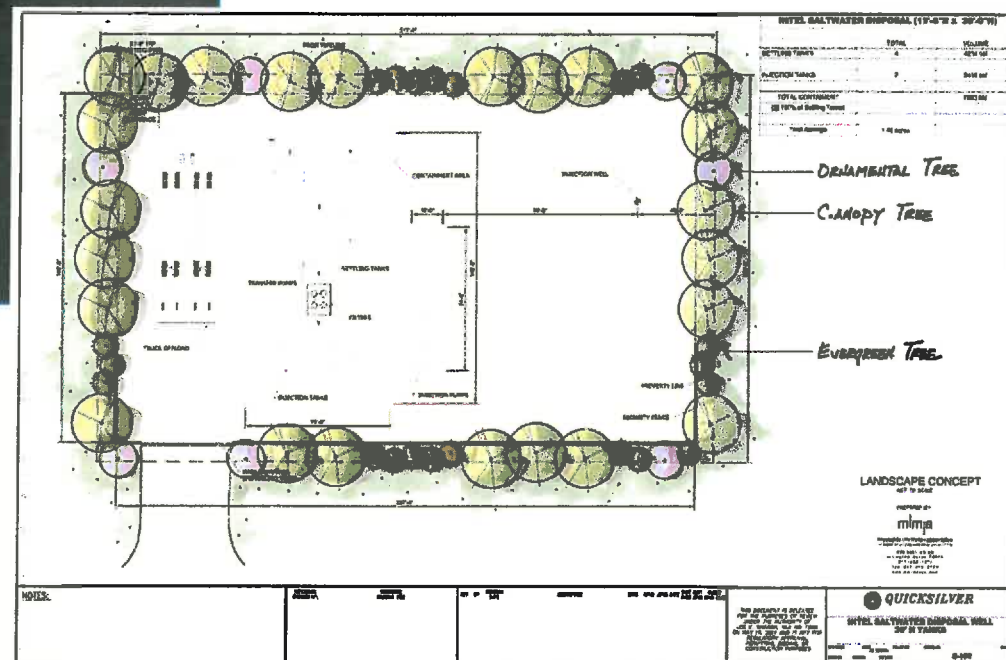
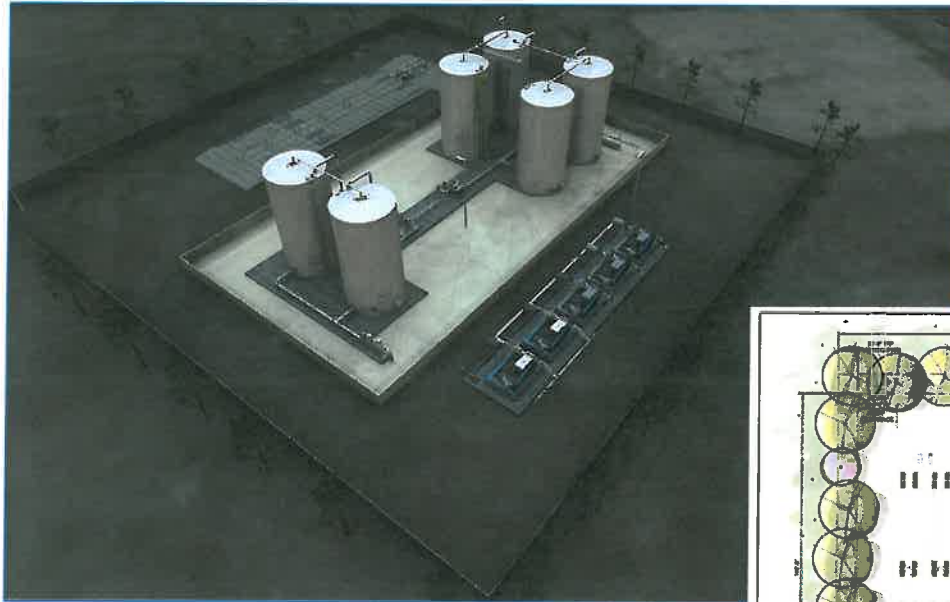
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SWD Facility Concept

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Hot Topics

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- 🌐 Earthquakes
- 🌐 Water Reuse or Recycling



For More Information

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- **Railroad Commission of Texas**
<http://www.rrc.state.tx.us/about/faqs/saltwaterwells.php>
- **EPA UIC Info**
<http://water.epa.gov/type/groundwater/uic/>
- **City of Fort Worth**
<http://fortworthtexas.gov/gaswells/>
- **Email Address for SWD Comments**
FortWorthDisposalWells@fortworthtexas.gov

