

Saltwater Disposal – Remote Level Monitoring



Agua Libre Midstream a wholly owned subsidiary of Basic Energy Services provides a wide range of production services to over 2,000 oil and gas companies in the United States with over 130+ area offices. The water logistics service provides oilfield supply, transportation, storage and disposal.



Applications:
Salt Water Disposal

Market:
Oil and Gas

Challenge

Agua Libre Midstream is challenged with reducing costs of their field operations while maintaining a safe and environmentally sound field operation. Like most salt water disposal sites, Basic Energy sites monitor tank levels locally when a field operator makes a routine trip to the site. The major concerns are reducing unnecessary travel, improving reliability of the operation, and knowing what is happening at the site when no-one is present.

Physically traveling to the remote sites can take more than an hour for each location. With winter and cold weather conditions that can leave risks of travel during each trip. If the operator is rushed, the system checks may be missed or overlooked.

“With remote cellular level monitoring and full-service support, TankScan has been a great benefit and has allowed us to reduce field trips to each disposal site, while increasing our visibility and reliability of each site”, said Shane Dimando, Operations Manager.

Solution

In 2019, Agua Libre Midstream installed the TankScan cellular tank monitoring system at three saltwater disposal locations in the Bakken shale formation in Western North Dakota. The remote monitoring system leverages existing wireless cellular infrastructure and a cloud software application to eliminate large startup and setup costs associated with typical SCADA systems. The install requires screwing the monitor into a 2" port on the top of tank and plugging in the battery. The cloud application is setup remotely and offers unlimited users, historical trending, and email/text notifications.

The tank levels are viewed from field operator's cell phone or from a PC at a remote office. The system is cost effective due to its use of existing infrastructure of the internet connectivity, internet browser, email, text message and cloud compute. The user is provided with accurate readings to devices he already owns, understands and supports.

Results

Agua Libre Midstream has realized numerous benefits from remote level monitoring including:

- Reduced labor associated with trips to the field locations
- Improved reliability of their field operations with remote tank level visibility
- Improved confidence and reduced environmental risk with automated notifications
- Improved safety by reducing travel in hazardous weather conditions

"The remote tank monitoring provides Basic with an additional differentiation in the market that has allowed them to reduce trips and become more efficient and effective in their field operations", said Dimando.