

RFID Tracking for Rental Equipment



The Challenge

Redback Energy Services is a rental and service company for the oil and gas industry. They offer a wide range of services and rental equipment to help support the completion and production of natural gas and crude oil wells.

Oil well control is a critical aspect for modern unconventional wells. Utilizing the proper equipment is essential to maintaining safety and reducing risks. The consequences for a lack of equipment, or faulty equipment, can be catastrophic for the operation and deadly for the laborers.

Maintaining the highest quality equipment is a top priority for Redback. Maintaining detailed maintenance records and equipment history is an important task for the organization. Along with that detailed item history is the need to track each of these assets as they leave for a job site and eventually return to the warehouse.

On top of these asset tracking and management demands Redback is obligated to comply with the Sarbanes-Oxley Act requiring full physical inventories on a quarterly and annual basis. Along with the physical inventories, there is an obligation to account for 95-98% of the inventory value on the balance sheet. Previous physical inventories were done manually by an internal team who were repeatedly confronted with human errors. Performing these tedious inventories were also very time consuming and required more than a week for the organization to reconcile.

The Solution

A2B Tracking's RFID Asset Management solution provides Redback the asset visibility needed to maintain total visibility of their entire inventory. With the A2B Tracking RFID system, physical inventories that previously required a full week are now accomplished in 1 hour.

Customer shipments occur daily and all assets are now RFID scanned as they leave Redback facilities. This system accounts for 100% of the assets going to customers and ensures that upon return the same RFID scanning process occurs which immediately reconciles the equipment. The RFID system is capturing the equipment at such a high level of accuracy as items get checked-out and then back-in that the Redback team has a new-found confidence in their inventory.

“With A2B Tracking we are saving about \$15,000 every month.”

-Bernie Lancaster, CFO at Redback Energy

The A2B Tracking RFID system has empowered the Redback team to easily manage their assets and improve their inventory accuracy to near 100%. Redback now knows exactly which assets are at what location, for how long and when they are expected to return. Maintaining their equipment maintenance history is now streamlined and attached to the asset history providing a complete audit trail of each individual item.



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Total asset visibility is the new normal at Redback.

A2B Tracking RFID Technology solution includes:

One of the major hurdles A2B Tracking had to overcome to ensure a successful RFID performance in an environment that involves significant metal was to find an RFID tag that could be permanently affixed to metal pups, valves and separators. A2B Tracking provided a hardened RFID tag that could be permanently epoxied to the asset for the life of these assets, which spanned many years.



The RFID tag chosen to support the harsh environmental conditions of an oil field was epoxied to the plug valve to ensure the tag survives the life of the asset.

A2B Tracking's solution involves the use of numerous Android smartphones connected to Zebra RFD8500 scanners which connects to the A2B Tracking platform in the cloud. When Redback team members need to find a specific asset, they use the A2B RFID Tracker app and Pro-Locate feature to find specific assets that need to be located in the warehouse in minutes.

When it's time to perform an inventory, multiple Redback team members use their Zebra RFD8500s to walk throughout the warehouse, instantaneously capturing all RFID tagged assets, which ensures that all inventory records are updated with a date and time stamp. The Redback team can immediately see what's missing in a fraction of the typical time it takes to count items manually or using barcode.



A2B's RFID Tracker app for Android connects to the A2B Tracking platform in the cloud to make all inventory, check in and check out, and Pro-Locate functions when coupled with the Zebra RFD8500 sled.

The Results

Redback has been able to achieve total asset visibility with fast and efficient mobile RFID inventories. They have significantly reduced the labor involved with performing physical inventories and greatly improved the accuracy.

When accounting for load-in and load-out times, Redback estimates a **\$15,000 in labor savings** per month across all locations.

As for the future, Redback will continue to develop the use of A2B Tracking in other helpful ways. Since A2B Tracking can attach documents to each asset in the system, they plan on attaching manufacturing documents to each asset record for easy access when customers ask for it. This also makes it accessible when time to sell the equipment.

“ The RFID scanners and app are very easy to use and the RFID tags are pretty easy to attach to our equipment. ”