



MONITORING AND COMMUNICATING WITH FIXED AND MOBILE ASSETS IN REMOTE LOCATIONS

The Challenge

IOR Petroleum (IOR) identified a need for implementing better monitoring and communications for their fixed and moveable assets in remote locations across Australia. This business objective was critical for IOR to operate its full-service fuel management system outside of cellular coverage and simultaneously ensure the safety of its workers.

The Solution

Pivotal provided an integrated system of mobile satellite devices to enable IOR's remotely located assets with satellite coverage and support close monitoring of workers with little access to cellular connection.

“ We’ve worked with the Pivotal team for many years now and we can’t fault their customer service. Pivotal has been integral in ensuring the safety of our remote employees and accurate monitoring of our fuel management systems – their tailored solutions, approach to their customers and technical advice has been very valuable over the years. ”

- Drew Leishman
IOR Petroleum, Head of Operations

The Business Problem

With a network of diesel stops operating in some of the most remote locations in Australia, IOR Petroleum must be able to communicate with personnel at all times and efficiently respond to emergencies or injury as soon as they occur.

To achieve this, IOR were in need of a monitoring and communication solution that allowed them to communicate effectively with fixed (diesel stops, airports and regional depots) and moveable (remote workers and trucks) assets with limited or no access to cellular infrastructure.

Head of Operations at IOR Petroleum Drew Leishman said if injuries to personnel, damage to equipment, theft or any other kind of incident occurred while IOR leadership is uncontactable it could result in major consequences for the company.

“Getting truck drivers and remote workers from point A to point B safely is our priority, but this is difficult to achieve without effective and around the clock communication with assets and workers,” Drew said.

IOR has also developed its own innovative technology to offer customers full-service fuel management and monitoring systems.

This includes their fuel tracking technology named HyDip, which provides customers with accurate monitoring and control of their fuel consumption, and IOR Quick Pay, which is a mobile app that allows users to authorise a pump and pay for their fuel from inside their vehicle.

To enable access to these technologies for workers while travelling outside of normal cellular coverage, IOR required access to a reliable satellite Internet of Things (IoT) service.

The Business Solution

Pivotel stepped in more than six years ago to enable a range of mobile satellite devices in all of IOR Petroleum’s remote sites and assets.

IOR Petroleum now employs more than 220 Pivotel services including the Tracertrak portal, voice satellite services, SPOT Gen3 messengers, Smartone C tracking devices and M2M satellite data solutions for their fuel management technology.

“We operate a network of diesel stops, both manned and unmanned, from Katherine to Ballarat, so the satellite IOT service supplied by Pivotel is crucial for the daily operation of our business,” Drew said.

This technology has also complemented IOR’s risk and incident management protocols and has solved a multitude of OHS issues for the company, allowing faster incident response times and providing personnel with peace of mind when working remotely.

Pivotel continues to provide IOR with cost effective satellite solutions.

The Outcome

Pivotel’s Tracertrak technology provides full visibility of IOR’s deployed assets to the company and its stakeholders.

The technology system also allows better coordination of vehicle pick-ups and asset maintenance and advises when petroleum refills or asset replacements are required.

“Without Pivotel technology we would need to physically monitor each of our remote sites on a regular basis. This would result in inefficient monitoring processes and require us to vastly increase labour costs across the business,” Drew said.

“Pivotel consistently provides us with tailored and technical advice to better our satellite communication capabilities. The increase in efficiency and cost reduction we have seen has convinced us to continue rollout of Pivotel’s satellite technology across all our assets as they are deployed remotely.”

The Hardware



SmartOne C/SmartOne Solar

Used to track and monitor portable tanks, trailers and tankers that transport high value and dangerous goods around Australia.

- Asset location tracking device
- Each unit supports up to two external alarm inputs
- Simple installation with mounting bracket
- Battery Life: SmartOne C - Up to 500 days | SmartOne Solar - Up to 10 years

Hughes 9502

A site-based solution for remote fueling stations and tanks with limited or no access to cellular coverage.

- IP data connectivity up to 448 Kbps
- Sends data from remote M2M sensors
- Feeds site data back to head office
- Suits SCADA and M2M applications

SPOT Gen3/Satellite Phones

Used to track, monitor and communicate with remote and isolated staff, allowing IOR to ensure the safety of their workforce.

- Check-in/leave site
- Scheduled check-in management
- SOS emergency alerts
- Location monitoring

About IOR Petroleum

Since 1984, IOR Petroleum has been an Australian owned family company, helping fuel regional and remote Australia

with a network of over 80 diesel stops, delivery of bulk fuel, fuel storage and monitoring solutions throughout Australia.