

# CASE STUDY

## RemScan Used in Rapid Response to Diesel Spill

A significant amount of diesel leaked from a storage facility in Western Australia and was captured in an emergency bund area.

RemScan was used to rapidly quantify the amount of diesel in the bund area, and later to validate the site remediation works.

During the emergency response, Ziltek collected soil samples and built a site-specific calibration model in the instrument to allow a rapid and accurate determination of Total Petroleum Hydrocarbons (TPH) C<sub>10</sub> to C<sub>36</sub>.

During subsequent remediation works, RemScan was used to measure more than 200 samples per day - this allowed the validation work to be completed in less than 4 days, without the constraints of standard laboratory analysis turnaround times.

During wet weather, samples were taken to the site hut for continuous high throughput processing.

To independently verify the instrument's performance, 19 'blind' soil samples were sent to a NATA-accredited laboratory for analysis. A very close correlation was observed between the TPH values predicted by RemScan and the laboratory data with an R<sup>2</sup> value of 0.997.

Without RemScan, the validation works would have been extended by several weeks.

The cost savings due to accelerated project closure and reduced laboratory analysis were estimated at more than \$30,000.



Comparison of RemScan data to lab data for TPH (C<sub>10</sub> - C<sub>36</sub>)

