



## PROJECTS

### SITE REMEDIATION

SiteRem6

#### INVESTIGATION & PLANNED GROUNDWATER REMEDIATION OF MAJOR DIESEL SPILAGE, WA Iron Ore Miner.

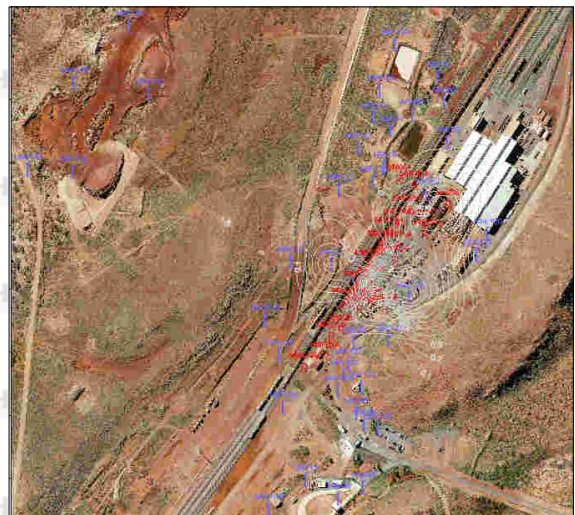


A +1ML diesel spillage occurred due to failure of an underground pipeline to a shallow freshwater fractured basalt aquifer system.

The spillage has resulted in a Phase Separated Hydrocarbon (PSH) plume over 4.5Ha, and a dissolved phase plume over a larger area.

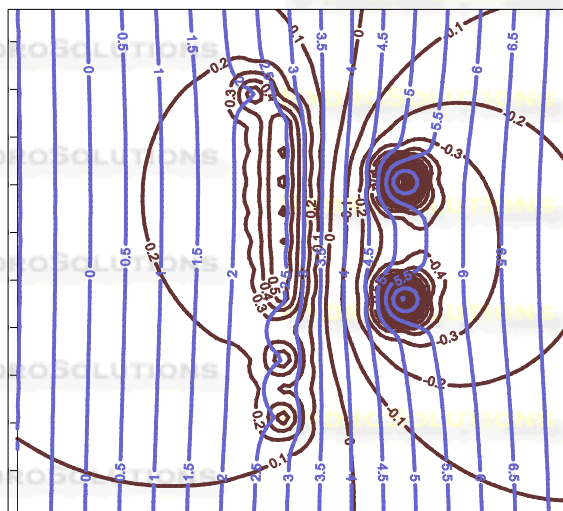
A diesel recovery system comprising 23 recovery bores equipped with skimmer pumping systems has been only partially successful in recovering diesel.

It is proposed to install a partial dual-pump dewatering system in bores on the downgradient boundary. The existing recovery system will continue to skim diesel. Air diaphragm pumps will provide adequate dewatering in the low-permeability aquifer. Recovered water with dissolved and emulsified diesel will be stilled, put through an oil/water separator, with separated diesel being discharged to a diesel recovery tank. The remaining separated water will be aerated before being recharged to upgradient reinjection bores.



The reinjected water will provide an increased gradient to promote the movement of PSH towards the downgradient recovery bores.

Dewatering will be sufficient to capture the reinjected water and prevent the on-going migration of the dissolved phase plume. The aerated water will promote the in-situ attenuation and breakdown of the dissolved phase contaminants.



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