

Case study

Mapping Groundwater Contamination

Willowstick used to map groundwater seepage and track contaminant flow paths

Willowstick was used to locate preferential seepage paths beneath a historic chemical disposal pit helping locate the likely flow of contaminants and direct remedial works.

The non-intrusive and rapid survey technique ruled out the need for using expensive and time consuming boreholes and significantly reduced the required remediation.

Significant contamination from historic disposal site

The disposal site in a remote desert location was used for 3 years in the early 1970s to dispose volatile organic compounds (VOCs).

VOCs still resident in the ground were being leached into the water table through percolating rainwater runoff which collects in the basin.

The client wished to determine the route of contaminant transport from the disposal pit to the water table. In order to do this the location of the groundwater seepage paths were required.

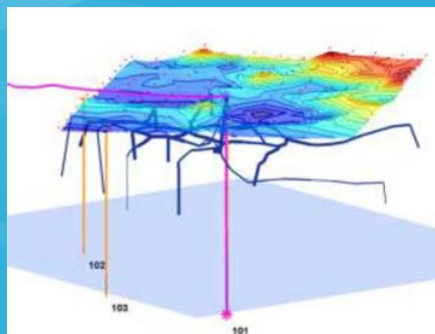
Due to the extensive area the use of existing techniques including trial and error borehole drilling and soil sampling was considered too costly. As a result Willowstick was employed to deliver rapid and non intrusive results.



Discrete flow paths discovered enabling targeted remediation

The Willowstick survey results identified that the groundwater followed discrete preferential flow paths towards the water table.

Locating these flow paths enabled the client to conduct targeted remediation significantly reducing the scope of works and bringing large cost savings.



3D model of the preferential flow paths