

Imaging the Fate and Transport of Salts with Time-Lapse Resistivity

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Produced water spills and their associated environmental impacts are a concern for the upstream petroleum industry. Development of innovative technologies and protocols to accurately evaluate salt distribution and also assess the efficiency of the remediation processes will significantly help industry and regulatory bodies in conducting remediation programs and conclusive risk-based closure assessments. In 2004, the Environmental Research Advisory Council (ERAC) funded the first year of a three-year project for Imaging the Fate and Transport of a Salt Spill During Remediation with Time-lapse Electrical Resistivity. This project emphasizes the use of electrical resistivity imaging (ERI) along with other measurements to produce an integrated time-lapse framework to create near real-time monitoring of the evolution of the salt distribution within the subsurface. This document reports on the progress of the project. Year 2 funding is currently under review.

2002 UoC_Imaging the Fate and Transport of a Salt Spill

2005 UoC_Imaging the Fate and Transport of a Salt

Spill During Remediation with Time-lapse Electrical
Resistivity

2005 UoC_Fate and Transport of Salt Release Yr 1

2006 UoC_Fate and Transport of Salt Release Yr 2