



Project: UMM ER RADHUMA STUDY, SAUDI ARABIA AND BAHRAIN

Location: Eastern Province of Saudi Arabia and State of Bahrain

Client: Ministry of Agriculture and Water, Kingdom of Saudi Arabia

Background

This study was commissioned to evaluate the water resources of the Tertiary carbonate aquifers of eastern Saudi Arabia and Bahrain, to evaluate the soils and agricultural potential of the region, and to produce a development plan for agriculture based on groundwater irrigation.

As one of a team of project hydrogeologists Chris Jewell was responsible for compiling an inventory of existing groundwater users; groundwater sampling; supervision of drilling and geophysical logging; and core logging. Chris wrote sections of the interim and final reports, and assisted with report production. On conclusion of the field phase of the study, he returned to the UK where he developed an integrated finite-difference model of the numerical model of the multi-layered Dammam aquifer complex in eastern Saudi Arabia and Bahrain. Chris was responsible for program development, model calibration and operation, and presentation of the results.

Associated Company

Groundwater Development Consultants (International) Ltd
Demeter House, Station Road
Cambridge
England