

Selected projects

- Groundwater drawdown for the enhancement of main station Berlin-Ostkreuz (Germany), on behalf of DB Netz AG (2007-2018): monitoring, numerical flow modelling and management of technical measures
- Groundwater inflow into the mine during the exploitation of lead & zinc in Ain Azel, Algeria, on behalf of ENOF (since 2013): exploration, analysis and numerical modelling
- Planning and optimisation of a protection for water discharge on the site of the wastewater treatment plant in Bottrop, Germany, on behalf of the Emscher-genossenschaft Essen (2016-2019): Groundwater modelling and development of a groundwater monitoring system
- Artesian geothermal well for water heating of a swimming pool in Belgium, on behalf of VITO (2018): Hydraulic test for measuring the hydraulic pressure head, permeability and yield of the aquifer

Further selected projects

- Overall assessment of the water cycle of the East Rand Basin in South Africa on behalf of the Council for Geoscience (2012-2014): Development of a forecasting system for water quantity and quality when coupling groundwater and surface water
- Groundwater inflow in the diamond mine in Mirny, Russia, on behalf of ALROSA (2018): Monitoring, numerical modelling and evaluation of the effectiveness of measures to prevent water inflow

DMT GROUP

DMT is a group of independent, global engineering services companies operating in more than 30 locations. We carry out a large number of projects all over the world every year.

Being a leader in engineering, DMT is part of TÜV NORD GROUP, with markets in plant construction and process engineering, infrastructure and construction, and raw materials.

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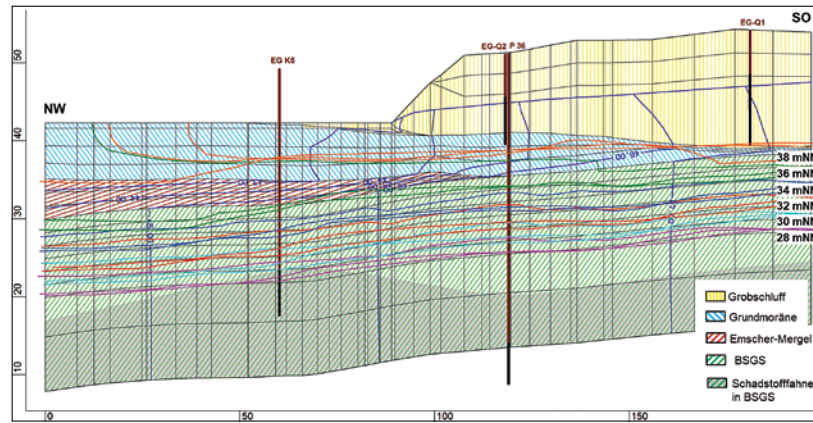
Integral groundwater management

Infrastructure. Water supply. Mining.

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Engineering
Performance

TÜVNORDGROUP



Groundwater as central element of complex systems

DMT offers integrated solutions for managing groundwater to private companies and public clients. The industry together with the water supply sector and nature conservation agencies and initiatives are facing up to the challenge: competing uses and interests under constantly changing conditions.

Sustainability and environmental protection under the aspect of profitability: DMT knows how.

Exploring

Getting to know the aquifer:
with commitment and know-how

- Geophysical methods
- Hydraulic tests
- Conceptual modelling of pore, fissure and karst aquifers
- Conceptual modelling of the coupling of ground and surface water
- Hydrochemical characterization

Monitoring / Analysing

To observe groundwater:

How flow conditions and chemistry evolve in space and time

- Monitoring concepts: Number / position of measuring points, frequency of sampling, parameter scope
- Analysis of protective goods
- Trend analysis of pollutant concentrations
- Hazard estimation

Forecasting

Venture a prognosis:

When complex and coupled processes are captured

- Numerical modelling of groundwater flow and reactive mass transport
- Scenario analysis
- Short-term and long-term forecasts

Software: SPRING, FEFLOW, REACFLOW, MODFLOW

Optimizing / Technical measures

Time to perform:

Implementation according to plan

- Groundwater withdrawal
- Groundwater drawdown
- Groundwater recharge
- Network planning: wells and pumping rates for the extraction / recharge of (ground) water
- Hazard prevention / remediation measures

The final product

You determine our services:
Hydrogeological consulting / expert opinion / concept studies / planning / feasibility studies / permit management

DMT assures you full commitment, longstanding experience and flexibility.