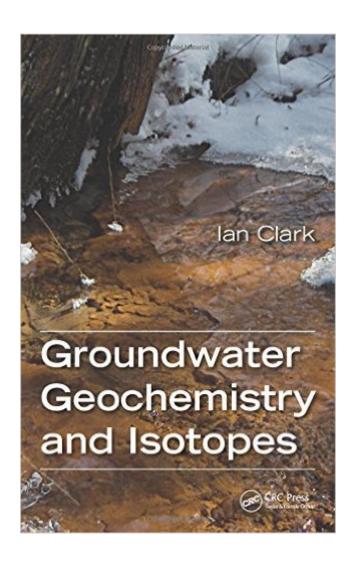
## The book was found

# Groundwater Geochemistry And Isotopes





# Synopsis

Understand the Environmental Processes That Control Groundwater Quality The integration of environmental isotopes with geochemical studies is now recognized as a routine approach to solving problems of natural and contaminated groundwater quality. Advanced sampling and analytical methods are readily accessible and affordable, providing abundant geochemical and isotope data for high spatial resolution and high frequency time series. Groundwater Geochemistry and Isotopes provides the theoretical understanding and interpretive methods and contains a useful chapter presenting the basics of sampling and analysis. This text teaches the thermodynamic basis and principal reactions involving the major ions, gases and isotopes during groundwater recharge, weathering and redox evolution. Subsequent chapters apply these principles in hands-on training for dating young groundwaters with tritium and helium and ancient systems with radiocarbon, radiohalides and noble gases, and for tracing reactions of the major contaminants of concern in groundwaters. Covers the basics of solutes, gases and isotopes in water, and concentration-activity relationships and reactions Describes tracing the water cycle, weathering, and the geochemical evolution of water quality Explores dating groundwater as young as a few years to over hundreds of millions of years Uses case studies to demonstrate the application of geochemistry and isotopes for contaminated groundwaters. Accessible to consultants and practitioners as well as undergraduates, Groundwater Geochemistry and Isotopes presents the basics of environmental isotopes and geochemistry, and provides A you with a full understanding of their use in natural and contaminated groundwater.

### **Book Information**

Hardcover: 456 pages

Publisher: CRC Press (April 13, 2015)

Language: English

ISBN-10: 1466591730

ISBN-13: 978-1466591738

Product Dimensions: 6.2 x 1.2 x 9.2 inches

Shipping Weight: 1.8 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars Â See all reviews (1 customer review)

Best Sellers Rank: #1,831,675 in Books (See Top 100 in Books) #106 in Books > Engineering &

Transportation > Engineering > Civil & Environmental > Environmental > Groundwater & Flood

Control #223 in Books > Science & Math > Chemistry > Geochemistry #501 in Books >

Science & Math > Nature & Ecology > Water Supply & Land Use

#### **Customer Reviews**

Excellent text, well written, and a great overview of the subject.

#### Download to continue reading...

Groundwater Geochemistry and Isotopes Table of Isotopes Isotopes: A Very Short Introduction (Very Short Introductions) Kimberlites, Diatremes, and Diamonds: Their Geology, Petrology, and Geochemistry (Special Publications) Electromagnetic Soundings (Methods in Geochemistry and Geophysics) Geochemistry of Sedimentary Carbonates, Volume 48 (Developments in Sedimentology) Principles of Stable Isotope Geochemistry Stable Isotope Geochemistry Modeling Groundwater Flow and Contaminant Transport (Theory and Applications of Transport in Porous Media) Introduction to the Numerical Modeling of Groundwater and Geothermal Systems:

Fundamentals of Mass, Energy and Solute Transport in Poroelastic Rocks (Multiphysics Modeling) Geochemical Modeling of Groundwater, Vadose and Geothermal Systems (Multiphysics Modeling) Applied Groundwater Modeling, Second Edition: Simulation of Flow and Advective Transport Developing Groundwater: A Guide for Rural Water Supply Arc Hydro Groundwater: GIS for Hydrogeology Mechanics of Groundwater in Porous Media Groundwater Science Groundwater Lowering in Construction: A Practical Guide to Dewatering, Second Edition (Applied Geotechnics) Estimating Groundwater Recharge Groundwater Hydraulics of Groundwater (Dover Books on Engineering)

Dmca