"Water From Wells or Water From Aquifers?"

Wednesday 18-June-2008

5:00 - 6:00  Geologist Orientation  Bar Room
6:20 - 7:20  Dinner Meeting  Banquet Room
7:30 - 8:30  Guest Speaker Presentation  Banquet Room

Marie Calendars, Temecula
(Meeting Cost $30.00, includes taxes, room and gratuity)
(Fund-raising donation suggested is $5.00, or more)
(RSVP/Directions below)

This Months Speaker

Dr. John A. Izbicki, Research Chemist, U.S. Geological Survey, California Water Science Center, San Diego, California

Abstract

Water samples collected from the surface discharge of wells may not adequately characterize ground-water quality in complex aquifer systems. In contrast, the combination of well-bore velocity and depth-dependent water-quality data collected from production wells under pumping conditions is highly effective in determining how the distribution of aquifer properties and the differences in ground-water quality with depth combine to control the quantity and quality of water yielded by wells. Traditional methods of collecting these data involve the use of vertical-axis current meters (commonly known as spinner tools) and wire-line samplers that cannot enter most production wells under pumping conditions without lifting the motor, pump, and column. Injection of an easily measured tracer into a well at different depths using small-diameter high-pressure hose can be used to construct velocity logs using the tracer-pulse method. The same equipment can be used to collect depth-dependent water-quality data from a well.
Well-bore flow and depth-dependent water-quality data were used to determine the depth where water containing high concentrations of arsenic enters production wells. Changes in well design that exclude water having high concentrations of arsenic were done to reduce concentrations in the surface discharge of the well to less than the U.S. Environmental Protection Agency Maximum Contaminant Levels. Simulations of flow to the well at the well-bore scale show pressure responses to pumping, and particle-tracking data linked to the model illustrate the movement of water to the well. The model was used to predict changes in arsenic concentrations given different well modifications.

Speaker Biography

John Izbicki attended West Virginia University, Penn State University, and obtained a Ph.D. from the University of California Riverside in 2000. Dr. Izbicki worked as a hydrologist for the U.S. Geological Survey for 25 years and spent the last 15 years in southern California. While in California, he has focused on studies designed to apply environmental tracers to further the understanding of physical hydrologic processes. These studies addressed issues related to seawater intrusion and brine invasion, natural and artificial recharge processes, stormwater and beach contamination, well-bore hydraulics, and the occurrence and distribution of trace elements in desert environments.

Comments from the Chair

There was no May meeting this past month in lieu of our AEG Geology Continuation Course on the new California Building Code changes concerning seismic ground motion analysis that went into effect on January 1, 2008. The course was held at University California Riverside (UCR) on May 17, 2008 and was attended by over 100 geologists and geotechnical engineers. Presenters were Dr. Zia Zafir, principal engineer with Kleinfelder, Sacramento, CA, Shelton Stringer, principle geotechnical engineer with Earth Systems Southwest, and Anne Rosinski, Senior Engineering Geologist with the California Geological Survey. The course included a panel discussion following presentations and in the afternoon a hands-on tutorial on-line workshop led by the speakers. Thanks to all who attended. This class was very informative and timely based on the positive response the board has received.

Please note that future RSVP’s to attend monthly meetings can be completed by either sending an email to Mike Cook at mcook@kleinfelder.com, Lisa Battiato at thegeochic@aol.com or calling Kleinfelder, Redlands at 909-793-2691 and leave your name and company with the receptionist.

See you at the next meeting and remember a geologist can pronounce the word molybdenite on the first try.

- Mike Cook
Chapter Chairman

[Ed. Note: and also spell it and molybdenum correctly.]
Thanks to the 99 paid up participants attending the Saturday 17-May-2008 “California Building Code for Geologists and Engineers” Geology Continuing Education Course held at University of California Riverside, Continuing Education Center. 103 persons attended, with speakers and instructor of record. The course session was led by both Rick Gundry, Instructor of Record and Course Coordinator, Inland Geologic, Inc., Moreno Valley, and Mike Cook, Co-Coordinator, Kleinfelder, Redlands California. Speakers for the talks, panel discussion and hands-on tutorial included, Anne Rosinski, California Geological Survey, Zia Zafir, Ph.D., Kleinfelder, Sacramento, and Shelton Stringer, Earth Systems Southwest, Bermuda Dunes. Attendee participants included one person from out of State, and 4 persons from Central California; and the rest were from all over southern California. Just over 50% of attenders were Engineers, the rest Geologists, and no others. The three invited speakers were awarded with large plaques of appreciation by Chairman Mike Cook, just before the class was adjourned exactly at 4:30 pm. Additional Statistics may be available in a future Newsletter.

Please Note: We have not seen the course attender comments but have received many favorable comments from many attenders, and many questions about receiving course notes (Speaker’s Power Point presentations). The details are being worked out, and when ready, and approved by the Chapter Board of Officers, all course notes will be sent to each attender soon, to be distributed by the AEG Inland Empire Chapter (NOT UC-Riverside). The Board is plagued with questions as to when the course will be offered again and if to be offered in other areas of southern California. The answer is that is not known at this time, but may be considered in future Board actions.

California Department of Conservation
State Mining and Geology Board

The Board approved a schedule for a period of years to conduct Mineral Land Classification Studies throughout California at its February 14, 2008 Board Meeting in Sacramento, California. Additionally, the Board approved to continue Official Designation of previously classified areas since 1990 as Known Mineral Resource Areas. Other news is as follows:

California Department of Conservation
California Geological Survey

- PUBLICATIONS RELEASES -

The Uniform Earthquake Rupture Forecast by the 2007 Working Group on California Earthquake Probabilities was released on April 14, 2008.

A Reprint of the infamous CDMG Bulletin 189 “Minerals of California” was released March 13, 2008.
California Department of Conservation
California Mining and Geology Board

SMGB convened its May 10th, 2008 regular Board Meeting where the Board made available for public comment the preliminary draft Reclamation Plan Form for the Board when it acts as a Lead Agency under SMARA.

NO other information is available about AP-ACT TAC Meeting and other regular business.

California Department of Conservation
Board for Geologists and Geophysicists

The most Recent BGG Newsletter is that of Last Summer 2007.

The Board has announced a regulatory change to Section 3065 of Title 16 of the California Code of Regulations (16 CCR 3065) effective April 25, 2008. This regards Title 16 (Professional and Vocational Regulations), Division 29 (Board for Geologists and Geophysicists), Article 5 (Denial, Suspension and Revocation of Registration).

This “Article” lists two Items “b” and no Item “c” so guess. This pertains to the following:

- Compliance with Applicable Law;
- Competency;
- Representation;
- Conflict of Interest;
- Confidential Information; and,
- Document Submission.

You might want to read what it says to see what it means. This is quite clairvoyant.

Two of the four 2008 meetings of the Board will be in southern California locations to be determined. The intervening Board meetings will be held in Sacramento (other than examination Committee Meetings): as follows:

- 22-Aug-2008    Sacramento
- 14-Nov-2008    So Cal (TBD)

Upcoming Filing Dates and Test Dates:
The BGG has been recruiting Subject Matter Experts ("SME")s for examination development. Only those qualified for specific examinations may apply. For other information, please see the BGG website at [www.geology.ca.gov](http://www.geology.ca.gov)

California Department of Conservation  
Division of Oil, Gas and Geothermal

The DOGGR (formerly “DOG”) issued a complimentary Calendar for 2008, and also issued an order or new rules for installing conductors. At this time, that Calendar is suppressed or unavailable.

The 2007 Preliminary Annual Report has been released: The Preliminary Annual Report of California Oil and Gas Production (based on ten months of data) and is posted on the DOGGR web-site

**Meeting Details and Location**

Advance RSVP is requested by Thursday 12-June-2008 by Close of Business:

*RSVP Due by COB 12-Jun-08.* Send Name, Company/Affiliation to Lisa Battiato [TheGeoChic@aol.com](mailto:TheGeoChic@aol.com) or call (909) 793-2691, Kleinfelder West, say “AEG Meeting” in RSVP.

**Location:**

The meeting site is located in City of Temecula: Rancho California Road, just east of the I-15: proceed east 0.2-mile and turn RIGHT (South) and park:

Marie Calenders Family Restaurant  
29363 Rancho California Road  
Temecula, CA 92591-5201  
(951) 699-9338, 9339  

No Host Bar, drinks additional.

**Future Meetings**
JUL Wednesday July 16th, 2008, Redlands

− “Attack of the Killer Bacteria - The Fate of Perchlorate at the Stringfellow Superfund Site”
Dr. Galen Kenoyer, PG, Principle Hydrogeologist, Kleinfelder West, Inc., Redlands, California.
Election of Chapter Officers

AUG Wednesday August 20th, 2008, Temecula

− “Demonstration of Virtual Structural Mapping with Terrestrial Photogrammetry”
Jeffrey R. Keaton, MACTEC, Los Angeles, CA
Installment of New Chapter Officers
Installment of 2008-2009 Officers

SEP NO MEETING Due to National AEG Meeting
Meetings to begin Third Wednesday, October
New Officers in charge

Other Local/Regional Meetings/Symposia

SHORT COURSES

Continuing Education Ongoing Short Courses

An Online course

“An Introduction to Landslides or Mass Wasting”
AIPG Accredited (3.5 CEU’s)
rgfont@geosciencedm.com, slbishop@geosciencedm.com
www.geodm.com Robert Font, Ph.D.

CONFERENCE

JAN Sun-Sat Jan 4th-11th, 2009, Tucson, Arizona
− “International Conference on Rock Joints and Jointed Rock Masses”
P.H.S.W. Kutatilake and Associates, Conference Chair, Professor, University of Arizona, Tucson, Arizona.
(Abstracts due 30-April-08, field trips/papers)
http://jointedrock2009.org

Inland Empire Chapter Officers and Section/National Contact Information
Connecting . . .

Professionals
Practice,
And the Public

Sorry folks ole computer has issue with WIN32.exe Executable - not good - Ed."
Then the monitor died last Thursday before last
But just got a new Vista Machine, and all is not up and well, except for well that Its up !
Oh yes other problems more than to say, but here is a timely Newsletter [Ed.]
- Cheers

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- Vacant

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DGadie@rctlma.org

Meeting Details (see inside)
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Send Name, Company/Affiliation to
Lisa Battato  TheGeoChic@aol.com
or call (909) 793-2691, Kleinfelder West, say “AEG Meeting” in RSVP

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Gary Wallace  2006
Rick Gundry  2007

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and Engineering Geologists. For more information visit websites shown in Newshead page 1

Submittals: Deadline  28th of the month. Employment notices,
job position vacancy announcements  no cost. (See notice
inside this Newsletter)

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