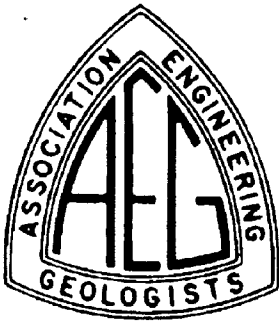


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NEWSLETTER- May 1993



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Dinner Meeting *Tuesday, May 11th*

- The Quiet Cannon
901 North Via San Clemente
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- Cost - \$20.00 (Full-Time Students - Free)
- Make reservations by Friday, May 7th!!!
Geosoils (818) 785-2158
(Leave Your Name & Number of People in Your Party)
- 5:30 Social Hour
- 6:45 Dinner

Program

"Light Non-Aqueous Phase Liquid Hydrocarbon Occurrence and Remediation Strategy, Los Angeles Coastal Plain"

by

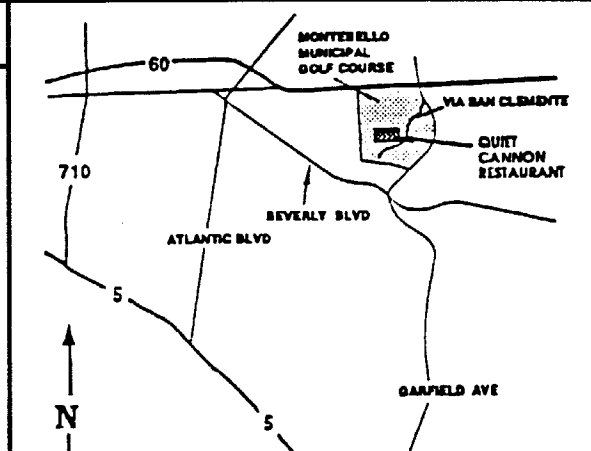
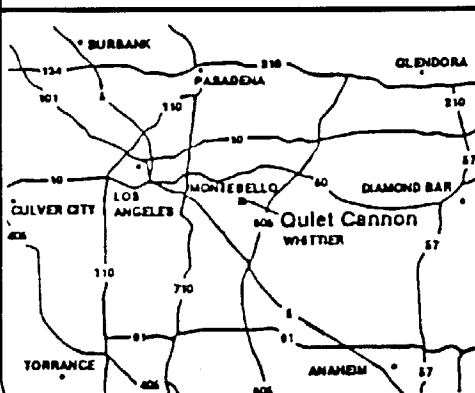
Mr. Stephen Testa, President
Applied Environmental Services, Laguna Hills

"Understanding Total Recoverable Petroleum Hydrocarbons (TRPH), CADHS 8015 Modified (LUFT method) and 418.1"

by

Mr. Gary Steube, Laboratory Director and Vice President
Del Mar Analytical, Irvine

MAP to Meeting



PROGRAM

Topic & Speaker

First Topic: "Light Non-Aqueous Phase Liquid Hydrocarbon Occurrence and Remediation Strategy, Los Angeles Coastal Plain"

Speaker: Mr. Stephen Testa, Applied Environmental Services, Laguna Hills.

California has an enriched history of oil exploration and production dating back to 1876. The Los Angeles Coastal Plain was a prime location for the construction of numerous refineries, tank farms, and major pipeline corridors in the early 1920's reflecting the close geographic proximity to both major production zones and the harbor. The Coastal Plain continues to be currently occupied by a large number of these oil facilities. Pools of light non-aqueous phase liquid hydrocarbon (LNAPL) product are widespread in the subsurface occurring in isolated perched layers of limited extent and as pools overlying the water table. Some of these LNAPL pools encompass tens to hundreds of acres in extent, and a minimum estimated volume of 1.5 million barrels. Remediation of LNAPL was initiated in the late 1970's at some sites, and accelerated by regulatory order in the mid-1980's. Comprehensive understanding of the regional hydrogeologic setting serves as an important tool in the designation of aquifer(s) for beneficial use, determination of level of remediation warranted, implementation of remediation strategies, prioritization of limited manpower and funds, and overall future management.

Mr. Stephen Testa received a B.S. and an M.S. in geology from California State University at Northridge. He is currently President of Applied Environmental Services in Laguna Hills. Mr. Testa has over 14 years experience as an engineering geologist and hydrogeologist. He is California state-registered geologist (RG) and certified engineering geologist (CEG) as well as a registered environmental assessor (REA).

Second Topic: "Understanding Total Recoverable Petroleum Hydrocarbons (TRPH), CA DHS 8015 Modified (LUFT Method) and EPA Method 418.1"

Speaker: Mr. Gary Steube, Del Mar Analytical, Irvine.

Confusion often occurs within the environmental industry when trying to determine which 8015 modified method (TRPH by GC) to request from the laboratory (volatiles vs extractables) and the differences between these GC methods and the 418.1 method (TRPH by IR). Mr. Steube will review these methods, their sample preparation, and the resulting chromatograms and spectra, to assist you in choosing the most informative and cost effective analyses for your sites.

grams and spectra, to assist you in choosing the most informative and cost effective analyses for your sites.

Mr. Steube is responsible for operational management of Del Mar Analytical. He has over twelve years of environmental laboratory experience and has worked at bench level in all areas of the laboratory. Mr. Steube has frequently provided expert testimony on the interpretation of analytical data. He has also assisted clients with the design and construction of unique apparatus to meet specific project needs.

Professional Affairs

DEADLINE TO FILE FOR RG/CEG EXAM

The deadline to file for the September 1993 registration exam for Registered Geologist, Certified Engineering Geologist, and Registered Geophysicist is June 22, 1993. Questions regarding the California state registration exams should be forwarded to State Board of Registration for Geologists and Geophysicists at (916) 445-1920

Job Opportunities

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As a solutions oriented industry leader, Environmental Solutions, Inc. invites highly motivated hands-on technical professionals to join their team. In particular, immediate openings are available for:

Vice Presidents with a "can do", "hands-on" approach to solving problems, a strong client following, and a reputation for producing quality products. Expertise in Hydrogeology preferred.

Senior Geologist with eight or more years of practical experience in engineering geology, geotechnical and hydrogeology. An M.S. or Ph.D. in geology or hydrogeology and R.G. or C.E.G. are required.

Treatability Lab Manager with a demonstrated R&D background as well as some hands-on Project Management experience.

Geotechnical Project Supervisor with eight or more years of relevant experience.

Staff Geologist with three to five years of experience.

Qualified candidates should submit a resume and cover letter to Cheryl Ellison at:

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Chairman's Column

Kelly E. Rowe

Upcoming Short Course On Saturday June 5th, the Saturday following the 3-day Memorial Day weekend, we have planned a short course to be taught by Dr. Roy Shlemon. He is the 1993

Richard J. Jahns engineering geology distinguished lecturer, co-sponsored by AEG and the Engineering Geology Division of the Geological Society of America. The title of the course is "Applications of Soil Stratigraphy to Engineering and Environmental Geology". Plan to attend and learn, for example, the significance of stonelines, cumulus profiles, and development of soils relative to engineering and environmental geology problems.

A page description flyer for the course is included in this month's and next month's newsletter along with the registration form. Post the flyer on your bulletin board or pass it along to your colleagues who you think might be interested in learning from an expert on soils. Following registration a flyer will be provided to you with additional details on the course and a map on the exact meeting location. The course will be held near the John Wayne/Orange County Airport. If you have questions about the course feel free to give me a call.

Nominated Officers for Next Year

At the April meeting, at the Knollwood Country Club in Granada Hills, we entertained nominations for the upcoming elections for officers for our section. Eldon Gath, as the nomination committee (traditionally the former section chairman), discussed with each nominee their commitment to succeed in the roles of officers of the section. They are as follows:

Chairman
Chairman-Elect
Secretary
Treasurer

James O'Tousa
Robert Larson
Anthony Stirbys
Joseph Cota

An official ballot will be presented in next month's newsletter.

All of these individuals have had significant current roles in the management and development of our section and deserve our continued support and attention. For example over the last few years, Jim O'Tousa has been the local membership chairman, treasurer, and chairman-elect (meeting program manager). Rob Larson has been the annual field trip chairman, treasurer, and the catalyst for encouraging participation of many members and non-members in AEG activities. Tony Stirbys has done a commendable job for 3 years as the membership chairman, keeping the important membership applications and associated forms flowing through the approval process, often through persistent phone calls to forgetful and/or busy members or applicants. Joe Cota has done an outstanding job as the publications chairman, establishing our section's catalog and inventory of current and relevant field-trip guidebooks and special publications into an efficient mail-order procedure through his company's (GeoSoils) Van Nuys office. Through his obsession with book sales at book stores, libraries, estate and garage sales, and his extensive network of book lovers throughout the country, Joe also has available his own copies of many rare and old geological reports and maps. The section appreciates the support the GeoSoils Van Nuys office has provided over the last year: special thanks to George Larson for hosting the many of the meetings of the Long Beach Annual Meeting Committee, and to Jenifer Greiman for processing the requests for AEG Southern California Section books.

Other volunteer roles are available for **you** to participate. For example, the annual field-trip chairman, Dave Ebersold, has volunteered to be the newsletter editor for next year. The efforts of the current editor, Kathy Williams, is sincerely appreciated by myself and I'm sure by many of you for doing a fine job this last year. Other active individuals will participate as members of the education, public relations, legislation, field trips, et al., committees. You should not forget that you are a member of the membership committee. We need to have new members to grow and to support our activities. Besides ... the more people involved the better our organization is and the more fun and interesting activities are available for us to share.

April AEG Board of Directors' Semi-Annual Meeting in Salt Lake City

Many issues were discussed at this meeting of the Association's officers and chairmen of all of the sections. As usual the subject of the AEG budget was discussed in detail. After yours truly reviewed this budget for the second time here (first time in October at Long Beach) it was obvious that AEG can not afford to provide the services we need for our members. After considerable discussion a \$10.00 annual membership fee increase was subsequently approved by the Board. It should be noted that this is the first time since 1984 that a fee increase has occurred, although expenses have continued to increase and financial losses at annual meetings have been chronic especially during the current recession. We will, therefore, continue to provide existing services to the members with a view to provide additional services as our finances improve.

This leads to the fact that Eldon Gath was nominated at the meeting to be the Treasurer for the Association during the 1993-94 period. Best of luck and wishes to Eldon in this national role.

Myself, on behalf of our section, and Bruce Clark and Larry Caan as individuals formally nominated Dr. F. Beach Leighton to be the Honorary Member of the Association for the October 1993 AEG Annual Meeting, to be held at San Antonio, Texas. Dr. Leighton was formally accepted by the Board at the meeting to be the Annual Honorary Member. Congratulations Beach. See you in San Antonio.

Abstract Submittal Deadline AEG San Antonio - May 1st

Send abstracts to Chris Mathewson, Technical Program Chair, on or before May 1, by Electronic Mail (E-Mail) Compuserve 70702,2006, or by U.S. Mail Mathewson, Dept. of Geology, Texas A & M University, MS 3115, College Station, Texas 77843-3115

It will help the Assoc. with finances for you to pay for your registration for the and to sign up for rooms at the Hyatt Regency Hotel - San Antonio as soon as possible.

AAPG, AEG, et al. May 5-7 Annual Meeting in Long Beach

The section needs AEG members attending the upcoming AAPG Pacific Section annual meeting, May 5 to 7, to staff our booth. AEG is a participating member of this meeting. Review of the meeting announcement shows that a large number of AEG members and affiliate members will be giving papers. Call me and let me know if you are interested in representing the AEG at the meeting. You can at least stop by the booth and chat with the other professionals and exhibitors in the exhibition area. The AAPG meeting is sharing the exhibition hall with the Spring HazMat West meeting at the Long Beach Convention Center.

Hydrogeology Certification Legislation Update

Hugh Robertson, Legislation Chairman, reported at the April meeting that the hydrogeology certification legislation was not discussed at the April 12th meeting in the California Senate Business and Professions (B&P) Committee. There is a conflict with acceptance of this certification by many individuals in the engineering community, even though they are considered exempt in the proposed legislation. They should accept it. Otherwise legislation may be proposed, as before, that would allow non-tested members of professional associations, who may have not even taken a single geology course in college, to be licensed hydrogeologists in California. This would effect both engineers, geologists professional practices and the public safety and welfare.

There is still time available for you to voice your support for this legislation. Send a set of letters addressed to the Senators on the B&P Committee soon so they can assess the level of support for hydrogeology certification. If there is no support, it will probably lead to inaction in the legislature and confusion for the profession.

For example, at the March AEG/ASCE Geotech. Group joint meeting, Buzz Spellman solicited support for the creation of the "Hydrogeologist" specialty with the California Board of Registration for Geologist and Geophysicists. (Buzz is the current president of the Board.) In this capacity, he provided a form letter supporting this issue himself, which he had available at the meeting.

The text of the letter is as follows:

"...We understand Senator William Craven's Senate Bill 433 titled "Geologists and Geophysicists: Hydrogeologist Certification" will appear before the Senate Business and Professions Committee on April 12, 1993 (*tabled at this meeting, due to conflicting support and opposition from attendees, (KR)*) for your approval. The Board of Registration for Geologists and Geophysicists wholeheartedly endorses and supports this very important legislation.

We believe that establishing the Hydrogeologist specialty in state law would preclude incompetent practice and resultant damage and loss. Our specialty would produce, for the benefit of all Californian's a pool of specialists who are educated, trained and examined by the board. These individuals could save the state wasted revenues and increase the general health and safety of the state's consumers..."

Write similar text for the body of a letter yourself and send it to the following members of the Senate B&P Committee if you support this Bill:

The Honorable Senator Daniel E. Boatwright
Chairman Business & Professions Committee
7th Senate District
California State Capitol - Room 3086
Sacramento, California 95814

Send a letter today!

Sen. Ruben S. Ayala, Room 2082 - 34th Dist.
Sen. William A. Craven, Room 3070 - 38th Dist.
Sen. Leroy F. Green, Room 3082 - 6th Dist.
Sen. Gary K. Hart, Room 4074 - 18th Dist.
Sen. David G. Kelley, Room 2054 - 37th Dist.
Sen. Lucy Killea, Room 4062 - 39th Dist.
Sen. John Lewis, Vice Chairperson, Room 3074 - 33rd Senate Dist.
Sen. Milton Marks, Room 5035 - 3rd Dist.
Sen. Dan McCorquodale, Room 4032 - 12th Dist.
Sen. Herschel Rosenthal, Room 4070 - 22nd Dist.

**Other B&P
Committee
Members**

BOOK SALE

Association of Engineering Geologists, Southern California Section

- Blake, T., and Larson, R.A., Eds., 1991, Engineering Geology along the Simi-Santa Rosa fault system and adjacent areas, Simi Valley to Camarillo, Ventura County, California: Guidebook for the Southern California Section of the Association of Engineering Geologists Annual Field Trip, August 24, 1991, Volumes 1 and 2, 383 pgs., 4 map sheets. \$40.00
- Buckley, C.I., and Larson, R.A., Eds., 1990, Geology and Engineering Geology of the western Soledad Basin, Los Angeles County, California: Guidebook for the Southern California Section of the Association of Engineering Geologists Annual Field Trip, November 3, 1990, 185 pgs., 2 map sheets. \$25.00
- Buesch, D., Ed., 1979, Geomorphic Applications in Engineering Geology: A State-of-the-Art Short Course: Short course held at California State University at Los Angeles, November 10-11, 1979, reprinted by the Southern California Section of the Association of Engineering Geologists, 145 pgs. \$11.00
- Byer, J.W., Ed., 1975, Sycamore Canyon Fault, Verdugo Fault, York Boulevard Fault, Raymond Fault, and Sierra Madre Fault Zone: Guidebook for the Southern California Section of the Association of Engineering Geologists Annual Field Trip, September 27, 1975, 68 pgs. \$ 8.00
- City of Los Angeles, 1982, Geologic Maps of the Santa Monica Mountains, Los Angeles, California: 333 map sheets at 1" = 400', compiled by the Bureau of Engineering, Department of Public Works, City of Los Angeles, reprinted by the Southern California Section of the Association of Engineering Geologists, 342 pgs. \$26.00
- 1992 NEW ADDITIONS
- Sieh, K.E. and Matti, J.C., October 3-4, 1992, Earthquake Geology San Andreas Fault System Palm Springs to Palmdale, 35th Annual AEG Meeting, Guidebook and Reprint Volume. \$25.00
- Ehlig, P.L. and Steiner, E.A. Editors, October 2-9, 1992, Engineering Geology field Trips: Orange County, Santa Monica Mountains and Malibu, 35th Annual AEG Meeting, \$25.00 **Optional Map and Cross Section of Big Rock Mesa \$15.00
- Bulletin of the Association of Engineering Geology, Volume XX, Number 1. Contains "Geology of Long Beach, California". Limited Supply \$5.00
- Ebersold, D.B. Editor, October 10, 1992, Landers Earthquake of June 28, 1992, San Bernardino County, California Field Trip Guide. Limited Supply \$8.00
- Stout, M. L., Editor, 1992, Association of Engineering Geologists, Proceedings for the 35th Annual Meeting, October 2-9, 1992, Los Angeles, California. \$40.00
- Shurman, G. and Slosson, James, 1992, Forensic Engineering, Environmental Case Histories for Civil Engineers and Geologists, Academic Press, Inc. \$49.95
- Pipkin, B.W. and Proctor, R.J., Editors, 1992, Engineering Geology Practice in Southern California, Star Publishing \$79.95 plus a special charge of \$5.00 shipping and handling.

Books are available from: Joe Cota, Publications Chairman, AEG Southern California Section, c/o GeoSoils, Inc., 6634 Valjean Avenue, Van Nuys, California 91406, (818) 785-2158. Make checks payable to AEG Southern California Section. **Please add 8.25% sales tax and the following postage/handling charges:** \$2.50 for the first book and \$0.50 for each additional book.

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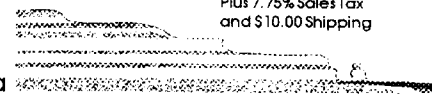
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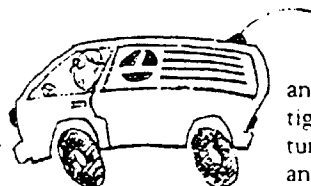
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Association of Engineering Geologists Saturday June 5th - 9-4 Southern California Section Short Course Information

Applications of Soil Stratigraphy to Engineering and Environmental Geology

Presented by

Dr. Roy J. Shlemon

Specialist in Quaternary Geology, Economic Geomorphology, Soil Stratigraphy, Geoarcheology

Dr. Shlemon has 25 years of experience consulting for private and government clients on Quaternary geology, soil stratigraphy and geomorphology problems throughout the world. Dr. Shlemon is the current recipient of the Richard H. Jabns distinguished lecturer in engineering geology award, which is co-sponsored by AEG & the Engineering Geology Division of the Geological Society of America. During 1993 he is providing sponsored lectures throughout the world on his engineering geology specialty of soil stratigraphy and geomorphology. He is kindly obliging the AEG Southern California Section's request to provide a relevant course for the interest of the professionals in Southern California through our section.

Dr. Shlemon is an outstanding lecturer and we are certain that anyone who attends this course will be rewarded with a unique perspective and good understanding of applying soil stratigraphy principles to engineering and environmental geology issues. The brief outline to the right highlights some of the subjects Dr. Shlemon will discuss in the course.

Outline for Short Course

- I. INTRODUCTION: Key Literature/Sources and Applications
- II. THE SOIL PROFILE
 - A. Soil Horizon Nomenclature
 - B. Major Soil Forming Factors (climate, parent material, topography/slope, vegetation, time).
 - C. Relative Soil Profile Development
- III. SOIL-GEOMORPHIC RELATIONSHIPS
 - A. Relative Landscape Stability
 - B. Fluvial and Marine Terrace Dating
- IV. PALEOSOLS: (buried, relict, exhumed)
- V. SOILS AS STRATIGRAPHIC MARKERS
 - A. The Geosol Concept
 - B. Soil-Forming Intervals
 - C. Paleo-Environmental Reconstruction
- VI. SOILS AS FAULT-DATING MARKERS
 - A. Preservation of the Organic Horizon
 - B. Stages of Argillic and Calcic Horizon Development
 - C. TL (Thermal Luminescence) and MRT (Mean Residence Time) Soil Dates: Applications and Uncertainties
- VII. SOILS AS INDICATORS OF SLOPE STABILITY
 - A. Origin and Interpretation of Multiple Stonelines
 - B. Formation and Environmental Significance of Cumulic Profiles
- VIII. SOILS AS TOOLS TO DELIMIT CONTAMINANT PATHWAYS
- IX. ENGINEERING AND ENVIRONMENTAL GEOLOGY CASE STUDIES

Short Course is scheduled from 9:00 a.m. to 4:00 p.m. Food & drinks for breaks & lunch provided.

Saturday, June 5, 1993: Near Orange County Airport

Exact meeting location near airport will be confirmed later.

A non-refundable fee of \$55 (AEG members), \$75 (non-AEG-members)
is required in advance to cover workshop costs, including lunch.

Participation is limited to 60 persons.

To secure your reservation, please fill in the Registration Form
(one per participant) and return it with your check.

**Make check or money order payable to
the "Association of Engineering Geologists"
and mail to:**

Registration Form

Name: _____ Phone: _____

Address: _____

City: _____ State: _____ Zip Code: _____

AEG Southern California Section
Short Course Coordinator
Kelly E. Rowe (Phone 714-979-7790)
2012 Balearic Drive
Costa Mesa, California 92626

Seminars/Meetings/Field Trips

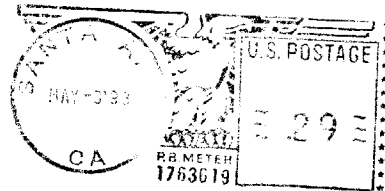
May 1993

- 5-7 **AAPG Annual Meeting in Long Beach**, CONTACT Kelly Rowe (714) 979-7379
11 **Southern California Section AEG Meeting**, CONTACT Geosoils (818) 785-2158
25-27 **The 7th National Outdoor Action Conference to Feature Aquifer Restoration, Ground Water Monitoring, and Geophysical Methods**. Las Vegas, Nv. CONTACT NGWA (800) 551-7379

June 1993

- 5 **Applications of Soil Stratigraphy to Engineering and Environmental Geology**, presented by Roy J. Shlemon. Newport Beach, CA. CONTACT Kelly Rowe, (714) 979-7790
8 **Southern California Section AEB Meeting**, CONTACT Geosoils (818) 785-2158

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