



ASSOCIATION OF ENGINEERING GEOLOGISTS

Southern California Section

*"Serving Professionals in Engineering, Environmental,
and Groundwater Geology Since 1957"*

NEWSLETTER – January 2005

Officers

Chair- Matthew Hawley, mhawley@lqcgeo.com, (805) 579-3434
Vice Chair- Charles Nestle, cnestle@ladpw.org, (626) 458-4923
Treasurer- Brian Villalobos, bvillalobos@petra-inc.com, (714) 549-8921
Secretary- Rosalind Munro, rmunro@lqcgeo.com, (949) 650-1018

Meeting Date: **Tuesday, January 11, 2005**
Location: **Steven's Steak House, 5332 Stevens Place, Commerce, CA**
Time: **Social Hour: 6:00 PM; Dinner: 7:00 PM; Presentations: 7:45 PM**
Reservations: **Call (949) 253-5924 ext. 564, or email Brian Villalobos, by Noon, Monday, January 10**
Cost: **\$25 per person with reservations, \$30 at the door; \$12 for students with valid student ID.**
Presenter: **Mark McLarty and Jeffrey Geraci**
Topic: **Stabilization of a Southern California Coastal Bluff Using Ultrafine Cement Grout and Cement-Treated Soil**

Abstract:

Erosion processes are continually at work in ocean bluff areas, often threatening adjacent structures and property. Many local planning and regulatory agencies have rejected typical mitigation measures that rely on reinforced concrete and unsightly earthworks. The property in this case study is situated at the top of just such a bluff. An unattended irrigation system positioned at the rear of the property locally saturated clean, sandy terrace deposits, causing a prominent slope failure. Approximately 12m of marine terrace deposits locally cap resistant metamorphic bedrock, forming the remaining portion of the 40-m sea cliff. Terrace deposits

consist of medium sand with less than 5 percent passing the #200 sieve. These materials are typically uncemented, and when exposed in steep slopes, have a tendency to run. Mitigation measures involved ground improvement within undisturbed terrace soils, and reconstruction of the former slope face with cement treated soil (CTS). Permeation grouting methods were used to stabilize surrounding terrace sands to allow for steep, near-vertical backcuts on the order of 6m to 8m high. Initial design considerations were based on laboratory studies of several grout and CTS mix designs. Treatment of the outer portion of the terrace deposits to a depth of

4.5m was initially accomplished with sodium silicate grout. Interior portions of the terrace deposit were treated with ultrafine cement grout, mixed at a 4:1 ratio. Sleeve port pipes were used to isolate discrete treatment intervals. Excavation of the backcuts for the grading phase revealed a thoroughly cemented profile. All grading was performed by hand, and required the use of air-spades to dig through the grouted sands. These excavations revealed a uniformly cemented earth mass with sufficient strength to safely allow the near vertical excavations required for construction of the CTS slope repair. The keyway for the repair was established on a

nearly level excavation on relatively unweathered bedrock. Slope reconstruction involved incremental construction of a compacted CTS berm at the face of the slope, followed by filling of the area between the berm and the backcut with sand-cement slurry. Seepage encountered during construction was mitigated by a system of drilled horizontal drains, and typical excavation backdrains. The combined repair scheme, consisting of soil cement replacement and permeation-grouted earth mass has resulted in a reconstructed slope configuration that has a factor of safety in excess of 1.5.

Speaker Biographical Information:

Mark McLarty:

Mark McLarty is a Principal Engineering Geologist with AMEC Earth & Environmental, Inc.'s Anaheim, California office. He received a BS degree in Geology from California State University, Los Angeles in 1973. Mark has managed and consulted for numerous projects throughout his career, including fault and seismic evaluations, landslide and slope stability studies, dam embankment and other hydrologic projects, groundwater projects, and litigation support. His experience has allowed him to work with a number of public agencies and private design firms.

Jeff Geraci:

Jeff Geraci has been with Moore & Taber since 1990. He is an engineering geologist, and currently works as a Project Manager for geotechnical construction services. He has designed and managed numerous remedial grouting and ground improvement projects. He designed and maintains the Moore & Taber website (mooreandtaber.com), and publishes the company newsletter "Geotechnical Constructors Journal". Jeff is a member of the ASCE Grouting Committee, and has recently been appointed to AEG's Website Design Working Group. He is also a member of the ACI Committee 552 "Cement Grouting". He also serves as Webmaster/Editor for the Los Angeles Chapter, ASCE Forensic Engineering Technical Group (asceforensics.org).

Chair Column (by Matthew Hawley)

Happy New Year SoCal Section. Here are the latest updates as things are really starting to take shape with our group.

Our goal of establishing a Field Trip Committee has taken off with the leadership of Committee Chair **Kim Bishop**. Kim, along with **Alan Pace** and **Joe Cota**, has started to mobilize a field trip along the LA/Ventura Coast and then eastward into a portion of the Transverse Ranges. Kim has requested submittal of abstracts for this general area to see if he can put together a one day sweep of interesting stops. The general idea is to keep the trip simple; don't expect a leather-bound guide for this one. We will meet at a suitable location and clamber into buses to visit the scheduled stops. This will relieve you of having to keep up with the lead car and find a parking spot along the shoulder of a busy highway. However, it will require a modicum of self preservation such that you avoid pickling yourself and are able to drive home at the end of the day. Perhaps the designated driver concept will work well for you for this one. Should you have something you believe might interest our group in this general area please contact Kim through his e-mail at kbishop@exchange.calstatela.edu. I think this trip is well overdue, will be fun, easy and a nice money maker for our section.

Vice Chair **Charles Nestle** is keeping himself busy by putting on several hats for our group. Hiding beneath his News Reporter Fedora and an instinct to glean the story, Charles sometimes hooks the fedora for another chapeau.

- Although not entirely filled, Safari Hat Charles trekked down speakers and put together a schedule for the following year. We are still looking for a few speakers for the months of July and November but we expect those to be occupied soon with our schedule finalized and posted on our website aegsc.org at the end of January. If you or someone you know has a topic that would be of interest please contact Charles at cnestle@ladpw.org.
- Charles will also don his Derby when he attends the Sunset Review Hearing on January 6, 2005. Charles has become involved with the legislative aspects of our group and has volunteered to attend this critical meeting on our behalf. Our section, through Charles, will speak in favor of retaining the BGG and its functions. The BGG is *the* organization that determines who is a professional geologist, if geologic practice is being properly applied, if fines or licensure revocation is in order, and most of all if the public is being properly served by the profession as a whole. What would you be without your registration and numbers? How our industry would crumble if any charlatan could make geologic or geotechnical recommendations. If you would like to show your support or provide your opinion, please contact Charles or myself.
- If you are not aware, Charles donned his Indiana Jones Hat and ventured into a CCGO meeting only to emerge as that organization's Vice President. As we all concluded at our last meeting, we need a better understanding of our future relationship with CCGO. Charles' curiosity and eagerness are most welcome.

ALERT!!! ALERT!!! ALERT!!! ALERT!!! ALERT!!! ALERT!!! ALERT!!!

I will, on your behalf, decide and vote the future name of our current AEG. I have requested input from all our members and so far have had an overwhelming vote in favor of the name change with only one "I'd vote for leaving AEG as it is." Hmmm, great, but why?

I DO NOT WANT TO HEAR FROM IRATE MEMBERS IF THE NAME CHANGE GOES THROUGH AND YOU ARE UNHAPPY WITH IT.

Past President **Eldon Gath** presented a short outline at our last meeting as to why it would be a fine idea to change our organization's name. Write me a note or letter or call me and let me know what you want and why. (If you're of sound mind, you can pass it on to Eldon at gath@earthconsultants.com for his input). It would really help if you attended a meeting to get a better picture of why this was proposed in the first place if you don't already know. You may soon be a member of:

The Association of Engineering and Environmental Geology

Reach me at mhawley@lgcgeo.com or 805-579-3434.

Dave Seymour has volunteered to continue as our Publications Manager. We are looking into finding old AEG publications and reprinting them for sale. Dave will head this up and we'll let you know what's available.

I'm still hoping to put together a short course/seminar for our members. This is another great way to produce some income for our section. If you or someone you know has experience with either organizing or at least professing a topic please let me know.

An Education Committee is starting to form. **John Foster** of CSU Fullerton and **Seema Sutarwala** have volunteered to help with this committee. I will continue my involvement for at least the remainder of my tenure as Chair. I am looking though for a person to lead this committee. I strongly believe this committee is every bit as valuable as our legislative committee as we will wither and die without new members. I'm looking for a person from a local university or someone with ties to local universities or the ability to initiate communication with the universities to lead this group. Dr. Foster is unavailable for he is leaving for sabbatical shortly. Please consider helping with this committee. I have the groundwork established and simply want to hand it off to that significant person.

As always, please stay active with **YOUR** organization, and **pay your dues**.

Cheers – Matthew Hawley

Dear AEG Member:

Just a quick note to all AEG members. Once again, we are in the "giving" season, and the Engineering Geology Foundation (EGF) is asking for your help. Contributors, through the check-off boxes on your AEG dues statement, have been generous. However there are too few contributors to accomplish the goals of the EGF. Just a few of the accomplishments in this last year:

1. Awarded 3 scholarships, the Marliave Scholar award and two Tilford scholarships for field studies.
2. Now coordinating the "Stout Scholarship."
3. Contributed to sponsoring the "Jahns Lecturer."
4. Provided financing for the very successful "First Shlemon Conference."
5. Provided financing for the upcoming AEG electronic publishing of the Journal.
6. Financing the "Perspectives" CD (now in publication).
7. Underwrote the cost of the "Visioning Symposium" at the Annual Meeting.
8. Initiated an internal Finance Committee and developed a plan for investing the Foundation contributions in a defined and safe manner.
9. Revised the by-laws of the Foundation.
10. Developed a strategic plan for the Foundation.

The Foundation would like to progress with other programs and to assist AEG in fulfilling their objectives. To accomplish these goals, we need YOU to contribute. To ensure that your contribution can be deducted this year, put your check in the mail to: AEG Foundation, P.O. Box 460518, Denver, CO 80246, or go to the AEG web site and contribute with your credit card. Remember also, a smart way to contribute would be to donate appreciated assets to the AEG Foundation. You don't have to pay taxes on the capital gains. Don't contribute assets that have gone down in value, however. Instead, sell those shares and use the capital losses to cut your taxes. Then, donate the proceeds to the Foundation.

Thanks for your time. May all of you have a very prosperous New Year.

Bob Valentine, AEG Foundation President

Call for Field Trip Stops and/or Papers

The AEG Southern California Section is tentatively planning an April or May field trip this coming year to the Malibu area and possibly to the Oxnard plain and back through the Fillmore area. If you have any potential engineering geology related field trip stops and/or papers regarding these areas, please contact Kim Bishop at kbishop@calstatela.edu or (323) 343-2409. We are particularly interested in the topics of coastal erosion, landslides, and the Malibu Coast Fault.

Scholarship Information

Applications for the 2005 undergraduate and graduate Norman R. Tilford Field Studies Scholarships are now available on the AEG web site at www.aegweb.org (follow the AEG Foundation link to Tilford Fund information).

Field study and interpretation of the resultant data is a cornerstone of our profession, and Past-President Norman R. Tilford was an impassioned teacher of field geology. The Norman R. Tilford Field Studies Scholarships are student awards granted by the AEG and the AEG Foundation (AEGF) in support of graduate and undergraduate field studies. Tilford Scholarship awards are made to qualified student members of the AEG based upon demonstrated scholarship, ability, participation, and potential for contributions to the profession. Students who are not currently AEG members who are interested in the scholarship, may submit membership applications with the Scholarship Application form. Membership applications can be found on the AEG web site at www.aegweb.org.

THE APPLICATION DEADLINE IS FEBRUARY 1, 2005 (applications must be RECEIVED by this date to be considered). See the AEG web site for more information regarding applying for the scholarship, or contributing to the Tilford Scholarship Fund.

If you have questions, please contact Deb Green, Chairman of the Norman R. Tilford Scholarship Committee, at (505) 867-0670 or tilgreen@aol.com.

Please distribute this message to your students, sons, daughters, and friends who are enrolled in geology programs, who could benefit from this scholarship.

David W. Bieber, President
Association of Engineering Geologists

San Diego County Science Olympiad

The Patrick Henry High School science department is planning to participate in the San Diego County Science Olympiad on February 5, 2005. This event will be held at Rancho Bernardo High School. We are looking for 4-6 community members who can spend a little time coaching the Science Olympiad student teams in specific project areas. Some of the projects will include identifying and selecting fossils, remote sensing, fermi questions, and practical science (PC Technology, data gathering, etc.). Hours would be kept to a minimum for the community volunteers. It would be a fun event for all involved.

If you are interested, please contact Yvonne Walden, Employer Outreach Specialist, Patrick Henry High School, 619-286-7700 x2216 - ywalden@mail.sandi.net. Any help you can provide would be greatly appreciated!

Section Business Donation

- Platinum - \$500
- Gold - \$250
- Silver - \$125

Company receives a line in the section newsletter giving their name or their company name under the appropriate metallic heading.

National Business Donation

- Platinum - \$1,000
- Gold - \$500
- Silver - \$250

Company name, address and contact information are presented in AEG News and section receives 10% of donation. A national donation does not yield a line in our local section newsletter.

Newsletter Advertising

	<u>Month</u>	<u>Year</u>
▪ Business Card	\$10	\$100
▪ ¼ Page	\$20	\$200
▪ ½ Page	\$35	\$350
▪ Full Page	\$50	\$500

* The deadline for submitting an advertisement for next month's newsletter is Wednesday, January 26.

YEAR 2005 CONTRIBUTORS NEEDED

Contributions from corporations and individual members are greatly appreciated. Contributors will be listed in our newsletter throughout the year and can post their logo or business card in the newsletter if so desired. Please mail contributions made out to **AEG** to our section treasurer, Brian Villalobos.

2005 MEMBERSHIP RENEWAL

For those of you who have not yet renewed **(the deadline was November 1)**, are unsure about your membership status, or did not receive your membership dues statement, please contact AEG Headquarters at www.aegweb.org. You can renew your membership online. Please update your membership if you wish to continue to receive future issues of the newsletter.

EMPLOYMENT OPPORTUNITIES

(1-05)



GeoSoils, Inc. (GSI) is a geotechnical and environmental engineering consulting firm which was founded in 1974. GSI provides services regionally, nationally and internationally, and currently has offices in Orange, Riverside, and San Diego Counties. GSI is looking for a project to senior level engineering geologist for our Orange County office. The qualified candidate should have a strong background in hillside development, good project management and marketing skills, as well as experience in Orange County and the Inland Empire. Environmental experience is helpful, but not mandatory. Compensation is commensurate with experience. Excellent benefits, profit sharing/401K plan, etc. Please submit a resume with a cover letter, in confidence, to GeoSoils, Inc., 5741 Palmer Way, Carlsbad, CA 92008, or fax to 760.438.5825. EOE. Please visit our website: www.geosoilsinc.com.

(1-05)



Lawson & Associates
Geotechnical Consulting, Inc.

Lawson & Associates Geotechnical Consulting, Inc.

2045 Royal Avenue, Ste. 125
Simi Valley, CA 93065
Tele: (805) 579-3434 Fax: (805) 579-3435
Email: kesmond@lgcgeo.com

1319 Calle Avanzado
San Clemente, CA 92673
Tele: (949) 369-6141 Fax: (949) 369-6142
Email: info@lgcgeo.com

Website: www.lgcgeo.com

LGC is looking for dynamic individuals to join our team and work on some of southern California's most interesting and technically challenging projects. If you are an experienced geotechnical professional, or just starting your career, please do not hesitate to contact us. All inquiries will be considered in the utmost confidence. We look forward to hearing from you.

(1-05)

**February 2005
CPT Short Course**

The Latest Developments in Environmental and Geotechnical CONE PENETRATION TESTING

Gregg In Situ, Inc. is pleased to announce the scheduling of two short courses on the latest developments in the use of Cone Penetration Testing (CPT) in environmental and geotechnical site investigations.

These short courses will provide engineers and geologists with the knowledge and background to plan and supervise site investigations and to interpret CPT and SPT data. Emphasis will be given to recent advances and regulatory requirements in the area of liquefaction potential determination and remedial design considerations.



Earn
Professional
Development
Hours (PDH's)
by attending.

Monday - February 28, 2005

HILTON LONG BEACH
701 West Ocean Boulevard
Long Beach, California 90831

8:30 a.m. to 5:00 p.m. - *registration/
continental breakfast at 8:00 a.m.*

Environmental or Geotechnical Short Course

COURSES ALSO OFFERED IN:

- SAN FRANCISCO - FEBRUARY 21ST
- SACRAMENTO - FEBRUARY 22ND
- SAN DIEGO - FEBRUARY 25TH

Both environmental & geotechnical courses
will be conducted simultaneously.

COURSE INSTRUCTORS

Peter Robertson, Ph.D.
Professor of Geotechnical Engineering
University of Alberta

AND

David Woeller, P.E.
President
ConeTec, Inc

Visit our web site at www.greggdrilling.com/seminars for more information on course instructors, content, locations or to print additional registration forms.



Phone: (562) 427-6899
Fax: (562) 427-3314

2005 SHORT COURSE REGISTRATION FORM — LONG BEACH

Payment must be received by Jan. 21, 2005 to qualify for early registration fee.

Mail/Fax your completed registration form to:

Indicate course attending by checking the corresponding box.

(Make checks payable to: Gregg In Situ, Inc.)

Monday - February 28, 2005 \$175.00 early registration - \$250.00 late registration

☐ Environmental Site Investigation Course OR ☐ Geotechnical Site Investigation Course

Environmental and Geotechnical courses will be conducted simultaneously, register for one course only.

Gregg In Situ, Inc.
2726 Walnut Ave.
Signal Hill, CA 90755
ATTN: Maryann Keating
E-MAIL: mkeating@greggdrilling.com

Attendee Name: _____ Title: _____ Company/Agency: _____

Address: _____ City, State, Zip: _____

Phone: _____ E-Mail Address: _____

Payment information must be completed for processing: (Check one) ☐ My check # _____ in the amount of \$ _____ is enclosed.

☐ Charge my credit card in the amount of \$ _____ ☐ AMEX ☐ VISA ☐ M/C Card number: _____ Exp. Date: _____

Card Holder Name: _____ Billing Address: _____

Registration fee includes seminar, reference materials, continental breakfast, lunch, break refreshments, and hotel parking. Class size is limited; early registration is advised. On-site registration will be on a space available basis. Gregg In Situ, Inc. reserves the right to cancel any seminar. If a course must be cancelled, a full refund will be issued. A charge of \$75.00 for any cancellation within 10 business days of the seminar will be assessed. No refund for cancellation within three business days of the seminar will be offered. Notice of cancellation or substitution must be submitted in writing, listing attendee name and seminar date.

(1-05)



TerraPacific Consultants, Inc. is a San Diego based geotechnical consulting firm working on projects throughout the southwest. We concentrate on new commercial/industrial/custom residential construction and repair construction in addition to forensic engineering. We are seeking motivated engineers and geologists who are interested in finding solutions to challenging engineering problems.

Field work and out of town travel will be required on regular basis throughout California, Nevada, New Mexico, Arizona and Hawaii. All positions demand an organized self-starter with "hands-on" management ability.

We offer the ability to learn and grow your career by working with seasoned professionals. Please visit our web site at www.terrapac.net.

Senior Geotechnical Engineer

Position responsibilities include project management, collecting field data, analysis, report writing and client communication. Oversight of construction inspection will also be required. Qualified candidates must be a licensed G.E., have a minimum of 10 years experience and good communication skills. At least 2 years experience in geotechnical forensic investigations is preferred.

Project Geotechnical Engineer/Geologist

Position responsibilities include project management, collecting field data, analysis, report writing and client communication. Oversight of construction inspection will also be required. Qualified candidates must be a licensed PE (GE is a plus), RG or CEG, have a minimum of 5 years experience and good communication skills. At least 2 years experience in geotechnical forensic investigations is preferred.

Staff Geologist/Engineer

We are looking for an honest, hard working, technically minded graduate to perform subsurface investigations, collect field data, perform geotechnical analysis and write reports. Construction inspections will also be required. Qualified candidates should possess good communication skills. Some experience in geotechnical investigations is preferred but recent graduates will be considered. Field work and out of town travel will be required on regular basis. Position demands a motivated, organized, self-starter with the ability to get things done in a timely manner.

The right qualified, independent and hard-working individual will be offered an excellent salary (commensurate with their experience), profit sharing/401K plan, company sponsored insurance program and bonuses. If you are interested in pursuing quality in your life and your career please submit a resume and cover letter to: TerraPacific Consultants, Inc., 12245 World Trade Drive, Suite G, San Diego, CA 92128; or by fax to 858-521-1199; or by e-mail to jimg@terrapac.net.

(1-05)

Layne GeoSciences, a division of *Layne Christensen Company*, is looking for a **Senior Hydrogeologist** to fill a key role in our Southern California operation in Fontana, CA.

Why should you consider working for *Layne GeoSciences*?

➤ **Ever wish you could use your geologic and hydrogeologic experience on projects for major water suppliers in the southwestern US?**

As the nation's largest groundwater resource development contractor, Layne Christensen Company works with many of the most influential water supply organizations.

➤ **Tired of worrying about utilization and filling out a timesheet?**

Yup, that's right...no timesheets. Get the job done, get the job done right. You are a professional, you know how much time to spend on a project task.

➤ **Has serving your client's needs become secondary to billing rates?**

Many of our clients have worked with Layne for decades...life long clients appreciative of attention to their needs.

➤ **How long has it been since you have done real hydrogeology and geology?**

We don't design 20 foot deep monitoring wells...we design 2,000 foot deep high capacity water supply wells. We don't guess where a new water supply well should be located...we utilize state-of-the-art geophysical techniques to site production wells. Our clients seek our guidance to enhance the operation of multi-well wellfields.

➤ **Ever wish you had the internal resources to test your scientific theory?**

Need a drill rig, pump rig, or maybe borehole or surface geophysical equipment? We have it. We have the field equipment, experienced operators, as well as scientific and engineering professionals to create a comprehensive set of skills to address hydrogeologic questions. *Scientific and engineering professionals matched with savvy, experienced field crews...a formidable combination and an exciting place to work.*

If this sounds interesting, check out the information below:

Qualified candidates must possess:

- BS/MS in Geology, Hydrogeology, or Engineering Geology with emphasis on groundwater resources
- Minimum 8-10 years of experience in performing hydrogeological studies (e.g., groundwater exploration and/or water resource development, production well installation and design, wellfield design, surface and borehole geophysics)
- Excellent written and verbal communication skills, good computer skills
- Candidate may have periodic travel requirements
- Candidate must be a motivated, self-starting individual looking for a challenging, key position in an expanding organization

The successful candidate will be involved in hydrogeological studies at project locations primarily in the southwestern US. Qualified candidates are encouraged to send a resume to:

Layne GeoSciences

ATTN: Mr. Tony Morgan

Manager-West Coast Operations

11001 Etiwanda Avenue

Fontana, CA 92337

909-390-2833 Voice 909-390-6097 FAX

Resumes should be submitted by email to

tmorgan@laynechristensen.com

We are a drug-free and smoke-free workplace.

EOE/M/F/D/V

(1-05)

RGS Engineering Geology
Staff Geologist

RGS Geosciences has an excellent opportunity for highly motivated individual seeking a mid-level engineering geologic position for residential, commercial, and municipal projects. The ideal candidate will be placed on a fast track and exposed to multiple project phases ranging from investigation to remediation, with an overall career path towards project management to meet client needs and complement other staff skills. The desired candidate will have the ability to perform independent hands-on fieldwork, and oversee contractors and other field personnel. The position requires an individual who thrives in a team-oriented environment. Flexibility to work on a multitude of diverse projects, a positive attitude, willingness to learn, and commitment to workplace health and safety are imperative.

Job Description:

- Site investigation, field geologic mapping, coordination and oversight of subsurface exploratory borings and trenches.
- Perform soil/rock sampling and assist in the development of laboratory testing programs
- Complete test trench and boring logs, prepare geologic cross sections, maps, and other illustrations
- Groundwater sampling and analysis
- Assist in engineering evaluations for slope stability, liquefaction analysis, fault and seismic exposure analysis, settlement, foundation design, and other geotechnical factors related to earthwork.
- Preparation of geologic and geotechnical reports relating to development of residential, commercial, and municipal projects.

Experience/Requirements:

- Bachelor's Degree in Geology or related science
- Graduate level education preferred but not required
- 2-4 years experience with field investigations (geologic mapping, exploratory borings/trenches) --- Experience in southern California preferred
- Candidate should be knowledgeable in earthwork and grading operations for hillside and large scale projects.
- Strong technical writing skills and exemplary time management skills
- Experience with engineering analysis and evaluations including slope stability, liquefaction, stereonet projections, foundation design, environmental engineering and earthwork/grading.
- Excellent written and verbal communication skills
- Proficient computer skills including word processing and excel. Other geologic software experience, including slope stability, liquefaction, fault/seismic design parameters, seismicity, and autocad preferred.
- OSHA 40-hour HAZWOPER/CPN Nuclear Gage training a plus.
- Valid California drivers' license, current DMV printout, and vehicle for use to travel to various sites.
- Able to lift up to 50 lbs. on a routine basis
- All candidates are required to provide a post-offer/pre-employment drug test and physical

Please respond ASAP if you would like consideration. This is an immediate opening in the Inland Empire region of southern California. For immediate consideration please fax resume and salary history to Rosa Garcia at (909) 945-2407 or mail to RGS Geosciences, 8800 Onyx Avenue, Suite D, Rancho Cucamonga, CA 91730.

An Affirmative Action Participant EOE

Benefits and salary based on experience

Intentionally Blank

AEG Southern California Section
J. Relyea
Earth Resources, Inc.
18302 Sierra Highway, #102
Santa Clarita, CA 91306