



SAN DIEGO ASSOCIATION OF GEOLOGISTS

1994 EXECUTIVE COMMITTEE

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MEETING NOTICE

WEDNESDAY, JANUARY 19, 1994

- SPEAKER:** Franco Corona, Unocal Corporation, Energy Resources Division
- TOPIC:** Structural Framework of the Imperial Valley, Southeastern California, derived from Landsat and Image-Enhanced potential field data.
- PLACE:** Tickled Trout, Ramada Inn, 619 291-6500
2151 Hotel Circle South
San Diego, CA 92108
- TIME:** 6:00-Social Hour
7:00-Dinner
8:00-Program
- DINNER:** Tossed green salad, rolls & butter, roast turkey, dressing, mashed potatoes with gravy, cranberry relish, chocolate kahlua nut crunch cake, coffee, tea, milk.
- COST:** \$15.00 (Please make checks payable to SDAG)

RESERVATIONS REQUIRED by noon Friday, January 14th. Early reservations are necessary because Monday January 17 is a holiday. Please phone in your reservation to Anne Sturz, 461-2644. Leave name, number in party and affiliation. Please call Anne if you need to cancel your reservation. If you have special diet requirements (ie. vegetarian), contact Joe Corones, 492-5034.

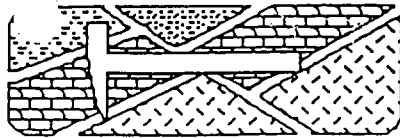
ABSTRACT

An integrated structural interpretation of available geologic, Landsat Thematic Matter (TM), and image-enhanced potential field (gravity and magnetic) data was carried out for the Imperial Valley area of the Salton Trough, Southeastern California. From this interpretation, a detailed tectonic framework of the Imperial Valley was constructed. This framework is comprised of a system of northwest-trending, right-lateral, strike-slip (wrench) faults connected by a series of basins or basinal blocks at strike-slip fault jogs or oversteps. Those fault-jog basins appear to be bounded and segmented by north-trending faults that are extensional in nature. In places, northeast-trending structures cut the system and are probably left-slip faults. This assemblage of interrelated structures is associated with the San Andreas right-lateral wrench fault system. The San Andreas Fault is compatible with transtension along the San Andreas right-lateral wrench fault system. The San Andreas is last exposed in outcrop in this region in the Durmid Hills along the southeastern margin of the Salton Sea. From there, the fault is interpreted to jog southeastward across the Imperial Valley through the proposed system of northwest-trending right-slip faults and transtensional basins. This network of strike-slip faults and related basins is postulated to be a late Neogene style of deformation that overprints mid-tertiary extension. This extension, in turn, established the precursor tectonic architecture for the Salton Trough which may have influenced the propagation of the San Andreas wrench fault system.

Franco Corona is a Senior Applied Geologist with Unocal Energy Resources Division of their Exploration and Seismic Technology Group at Brea, California. He is a member of the Structural Geology team specializing in structural-styles analysis and fault-seal prediction and is also an instructor in Unocal's tectonic field seminars. Franco received his B.S. (1977) and M.S. (1980) in geology from the University of Pittsburgh. Recent publications include a field trip guidebook along the San Andreas fault system in the Salton trough for the Ninth Thematic Mapping Conference on Geologic Remote Sensing (2/93) and a paper on the San Andreas Fault in the Salton trough region as expressed on remote sensing data (San Bernardino County Special Publication 93-1).

ANNOUNCEMENTS:

1. **Corporate Sponsors:** As we begin another year of activities, we would like to remind everyone that Corporate Sponsorships contribute greatly to the quality and efficiency of the yearly operation of SDAG. Corporate Sponsor contributions are used to sponsor students at our monthly meetings, support our annual picnic and field trip, offset guidebook publication costs and upgrade SDAG equipment. If you or your company would like to become a Corporate Sponsor and be recognized in our SDAG newsletter, directory and at the monthly meetings, send a minimum of \$100.00 contribution to SDAG, c/o Anne Sturz, 6466 Bonnie View Dr. San Diego, CA 92119.
2. **Thank you to all Corporate Sponsors** received this year: Thransglobal Environmental Chemistry, Pacific Soils and Engineering, Woodward-Clyde, William J. Elliot, Carole Ziegler, Gallagher Drilling Service, Perry and Nona Crampton, IT Corporation, Anne Sturz, Robertson Geotechnical Inc.
3. **SDAG 1994 Membership Dues** are due in January. A 1994 membership form is included with this newsletter. Please complete and mail with your check to SDAG c/o Anne Sturz 6466 Bonnie View Dr. San Diego, CA 92119. Dues may also be paid at the monthly meetings. Also, if you know someone else who is interested in becoming a member, feel free to copy your blank membership form and pass it along or post on your company bulletin board.
4. The February SDAG meeting will be a joint meeting with the South Coast Geological Society. It will be held Wednesday, February 9, 1994 in San Juan Capistrano, at the El Adobe Restaurant. The Speaker will be Dr. Roy J. Shlemon. Topic: *Ground fissures in southwestern Riverside County: impact on the professional standard of care.* **Please note: This meeting is one week earlier than our normal meeting time.**
5. **Deadline for announcements to be included in the February Newsletter is Friday January 21st.** Please submit your items in writing to Anne Sturz by mail (6466 Bonnie View Dr. San Diego, CA 92119) or fax (260-6804).
6. The **1994 Annual SDSU Alumni Field Trip** will held on February 25, 26 and 27, 1994 and will visit the American Girl Gold Mine located in the Cargo Muchacho Mountains, west of Yuma. For details please contact Bill Elliott at 586-0870.
6. A limited number of proceedings from the short course entitled, "Landslides: Recognition, Investigation, and Mitigation" and guides from SDAG's recent field trip "Colorado Desert and Salton Trough Geology" are still available. The cost for the landslide proceedings is \$8.00 and the field trip guides are \$12.00. If interested, please contact Phil Rosenberg. SDAG also has several other publications that are available for purchase which would make good belated Christmas presents, paper weights or possible reference material. Contact Phil Rosenberg for a list of available publications.
7. **PRELIMINARY CALL FOR PAPERS:** The 1994 SDAG Field Trip is tentatively scheduled to revisit the "Geology of Camp Pendleton". Anyone interested in submitting a paper or assisting, please contact Phil Rosenberg.
8. The Cordilleran Section Geological Society of America meeting will be held in San Bernardino this year, March 21-23. There are a number of field trips before and after the meeting that may be of interest to geologists in the San Diego area. For information contact: Joan Fryxell, Department of Geological Sciences, California State University, 5500 University Parkway, San Bernardino, CA 92407-2397, (909) 880-5311.



Geology Alumni

EIGHTH ANNUAL

S.D.S.U. ALUMNI WINTER FIELD TRIP

CARGO MUCHACHO MOUNTAINS and the AMERICAN GIRL GOLD MINE

TUMCO GHOST TOWN (ruins) and GOLD ROCK RANCH

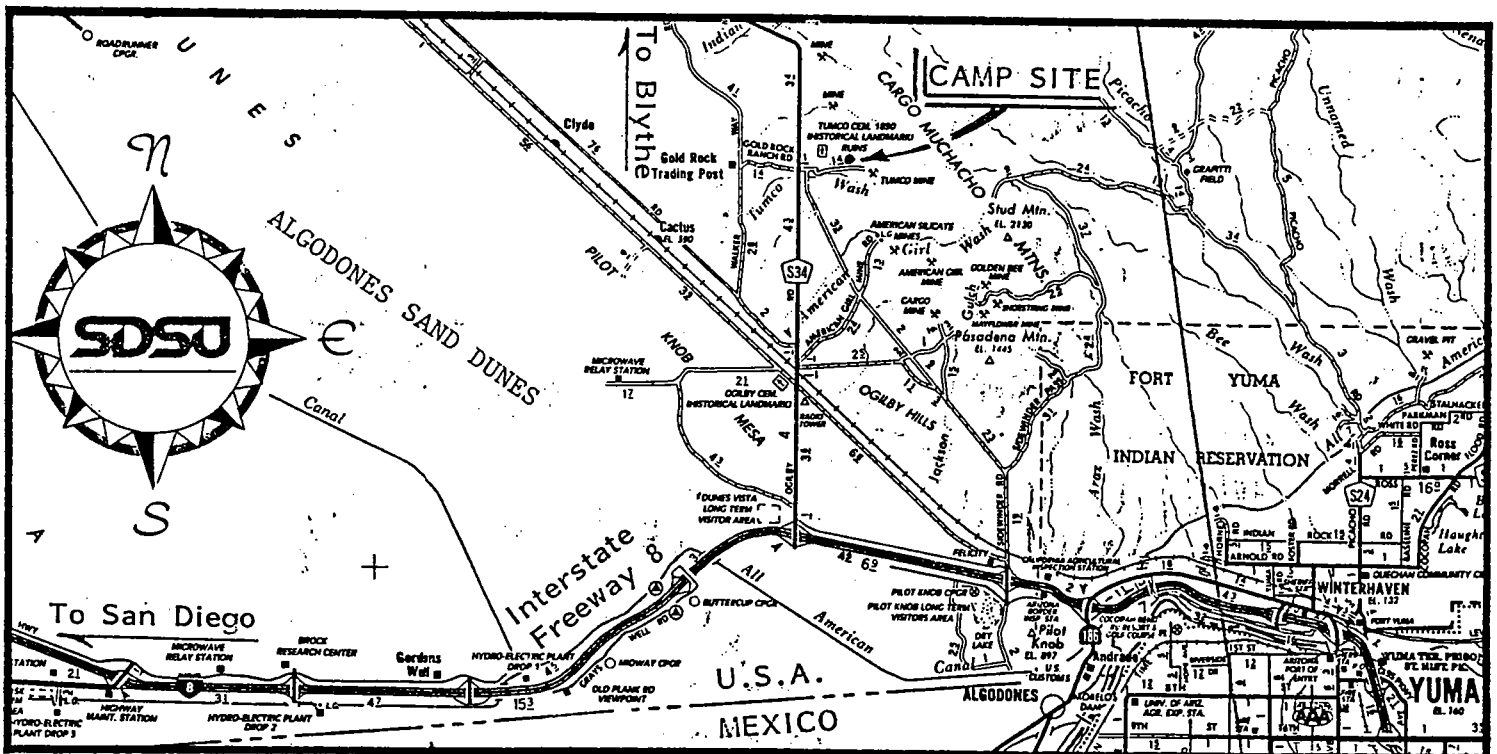
Field Trip Date: February 25, 26, and 27, 1994

Directions to camp: Starting at San Diego State University. Go east on Interstate Freeway 8, 147.5 miles to the S-34 / Ogilby Road off-ramp. Turn left (north) at the top of the off-ramp and go north 8.4 miles on paved road to the Gold Rock Ranch turn-off. (An approximately 5'x5' black-lettering-on-white-sign reads: "Gold Rock, Antiques, Minerals, Rocks ← 1½ mi., Trailers, RV storage, ...") Do not turn left to Gold Rock Ranch, TURN RIGHT (east) at this sign for 1.0 mile on a well-used dirt road to the camp site - amongst the ruins of the Tumco Ghost Town, mines and mill.

As in the past, this will be a dry camp, so bring everything you will need. The nearest services are at Winterhaven and Yuma, approximately 20 miles from camp. The only thing you can get at Gold Rock Ranch is souvenirs and ice-cream bars.

Bring your family and friends - the more the merrier!

Please call Bill Elliott (619-586-0870) or Daryl Streiff (619-726-6678) for details.



A TIME TO REMEMBER THE LIFE OF IAN JOHNSTON

The San Diego Geological Community is in mourning due to the death of one of their most active members, Ian M. Johnston. Ian passed away December 17, 1993, after a long, courageous battle with cancer. He leaves his wife, Barbara, who many of us know from various San Diego State University Geology Department and Alumni functions, and three sons, Jeffrey, Cameron and Douglas.

Ian Johnston was born on November 29, 1932, in Maywood, California. Shortly after that his family moved to San Diego. He attended La Mesa Grammar School, Grossmont High School, San Diego State College (now University), the University of California at Berkeley and the University of Arizona at Tucson.

Ian first met Barbara when he was eight and she was six. He liked to say that he never had a chance. Barbara used to convince her bother, Jerry, to play at Ian's house near dinner time just so she could go get her bother, and coincidentally see Ian. They were married in 1953.

Ian loved rocks and fossils all of this life. He and Barbara spent many happy days clambering over outcrops and trying to dig garnets out of granite boulders. As a graduate student, Ian presented evidence at a seminar in Arizona which proved that fossil "mud pots" were actually mammoth tracks. As a result of his presentation the National Park Service traded land so that the tracks would be apart of the park.

Combining rocks and fossils, Ian went to Saudi Arabia as a paleontologist/geologist where he was influential in the development of the Saudi Arabian Museum of Antiquities in Riyadh.

For the last several years Ian was the Director of the Allison Center Research Library located within the Department of Geological Sciences at San Diego State University. This was a non-paid volunteer position which involved accepting the responsibility for collecting, classifying and organizing the various reference materials available for the students and staff in the Department of Geological Sciences.

Ian was also involved in various Geology Department activities, the San Diego Association of Geologists, the Geology Department Alumni Committee and the Geological Society of America. During the 1991 GSA convention here in San Diego, Ian and Barbara were a committee, by themselves, for Special Events and Spouse Activities. It was no surprise when Ian was pronounced the winner of the GSA tennis tournament that year for having the highest number of overall points of the contestants.

For the last 6 years, Ian has been teaching General Geology and Natural Disasters at San Diego State University. He was the motivational force for the annual Del Mar Fair exhibit which was a combined Geology Department and Alumni Association effort.

Ian was a natural teacher. Whether he was in the classroom, on the softball field, or even on his back patio, he would find a way to help folks learn about their world. Even as his life was ending, he insisted on making provision for the continuation of the Allison Research Center. In lieu of flowers, Ian requested that memorial contributions be sent to:

Allison Research Center
Department of Geological Sciences
San Diego State University
San Diego, CA 92182-03378
or
The American Cancer Society



SAN DIEGO ASSOCIATION OF GEOLOGISTS

1994 MEMBERSHIP FORM

SAN DIEGO ASSOCIATION OF GEOLOGISTS

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DUES: _____ STUDENT MEMBER \$5.00
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_____ CORPORATE SPONSOR \$100.00

NEW MEMBER? _____ CONTINUING MEMBER? _____

DATE: _____

PLEASE ENCLOSE A CHECK MADE PAYABLE TO S.D.A.G. AND MAIL TO:

ANNE STURZ
6466 BONNIE VIEW DRIVE
SAN DIEGO, CALIFORNIA 92119

MEMBERSHIP DUES MAY ALSO BE PAID AT MONTHLY MEETINGS

SAN DIEGO ASSOCIATION OF GEOLOGISTS
1550 LOWER LAKE COURT
CARDIFF-BY-THE-SEA, CA 92007



SUSAN E. TANGES
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EL CAJON, CA 92019