

PACIFIC PETROLEUM GEOLOGIST

1958

- January "Glaciers and their Dynamic Movement" By Oliver Kehrlein
- February "Geological Investigations - Applications in Developing the Mineral Resources of a Region" By Dr. George A. Kiersch
 "Reconnaissance in Alaska" By Russell R. Simonson
 "Oil in the Sahara, A Review of Exploration in Franch North Africa" By Thomas A. Baldwin
 "Geology of South Central Utah" By Otto Hackel
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 "Geology of a Part of the Funeral Mountains, Death Valley National Monument of California" By Carrol A. Richards
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 "Methods of Study of Continental Sediments" By Dr. C. T. Bressler
 "Reverse Faults of the Ventura Basin" By Robert F. Herron
- May "The San Gabriel Fault Problem in the Castaic Area" By Ted Off
 "A Proposed Binomial System of Sedimentary Rock Nomenclature" By Dr. V.E. McKelvey
 "Geophysicology"? Dr. S. K. Runcorn
- June "Application of Recent Sediment Studies to the Interpretation of Ancient Deposits" By Dr. Tjeerd H. van Andel
 "Movement on the San Andreas Fault Since Miocene Time" By Gerald L. Fletcher
- July "The Llano Seco and Perkins Lake Gas Fields, Butte and Tehama Counties, California" By Tod P. Harding
 "Geologic Control of Mineral Composition of Surface Waters of the Southern Coast Ranges, California" By George H. Davis
 "P. G. & E. Gas Storage Operations at the Pleasant Creek Gas Field" By Jeff Watts
 "Recent Developments in the Land Subsidence Problem in the San Joaquin Valley" By Joseph F. Poland
 "The General Geology of Colombia" By Roy Miley
- August "Types and Properties of Bentonitic Clays" By Donald A. Henriksen
- October "The Sespe Formation in the Ventura Basin" By Robert Paschall
 "British Honduras" By Ed Gribi, Jr.
 "British Guiana" By G. F. Worts, Jr.
 "Land Subsidence on the West Side of the San Joaquin Valley" By R. F. Laird
 "Geophysics and Stratigraphic Problems" By G. H. Westby
- November "Geology and Oil Exploration of the Tepusquet Area, Santa Barbara County, California" By Lowell Redwine
 "Philippines" By Paul H. Dudley
- December "Mechanics of Basin Evolution and Its Relation to the Habitat of Oil in the Basin" By Karl F. Dalmus
 "Reconnaissance Geology of Western Libya" By Stewart Chuber
 "Limestone Facies and Stratigraphic Traps" By Dr. Ralph W. Edie

PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 12

January 1958

No. 1

ASSOCIATION ACTIVITIES

SACRAMENTO GEOLOGICAL SOCIETY MEETING

Members of the Sacramento Geological Society enjoyed an informative talk on "Glaciers and their Dynamic Movement" by Mr. Oliver Kehrlein of San Francisco. Mr. Kehrlein, consulting engineer, has been a director of the Sierra Club for twenty years and has pursued his hobby of Glaciology for the past thirty years.

By definition, valley glaciers are "streams of ice that flow downward through valleys in highlands". It was pointed out that no one definition is applicable to all glaciers. Mr. Kehrlein divided his talk into three general areas on Glaciology.

1. Physical characteristics of glaciers were excellently illustrated with numerous color slides. The fountainhead or neve from the downstream area of ablation is the firm line along which the yearly layers of accumulation of snow can be seen and counted. The various moraines were discussed and illustrated. Ice below the thick crustal surface is in a plastic state that flows over the rock surface. Movement of ice from the Bergschrund (crevasse occurring at the head of a mountain glacier) to the ice front requires about 250 years for Sierran glaciers. Most of the 49 Sierran glaciers are presently retreating as evidenced by the low (25° or less) frontal terminus. Advancing glaciers maintain a 37-45° frontal slope.

2. Glacial evidence in the form of terminal moraines, U-shaped valleys, glacial polish and striae, erratics, glacial milk and lakes constituted Mr. Kehrlein's second area of interest and was well illustrated with color slides.

3. Glacial trips into the Sierra Nevada and Canada showed the beauty and grandeur of the high country. The largest body of glaciers in the United States is at Mt. Rainier which contains a 400 foot thick glacier at 10,000 feet. Howell Glacier, 11 miles south of Whitney, is the most southerly glacier in the U.S.A. Palisade Glacier (Kings Canyon area) is the largest in California.

NOTICE

The S.E.G. Luncheon Meeting, on "Geological Mapping in California Prior to 1860" by Dr. V. L. Vanderhoof, which was originally scheduled for January 9th has been postponed to January 23rd.

COAST GEOLOGICAL SOCIETY

The Coast Geological Society monthly dinner meeting, held at the Montecito Country Club in Santa Barbara on December 4, was highlighted by a talk by Dr. Warren O. Thompson, Chairman of the Department of Geology and Geography, University of

Colorado. Dr. Thompson, an A.A.P.G. distinguished lecturer, spoke on "Ancient Beaches in Oil Finding". Members and guests of the society thoroughly enjoyed his well organized, well illustrated, and entertaining talk.

An abstract of Dr. Thompson's paper was printed in the December 1957 issue of the P.P.G. Although the nature of his talk was largely academic, the economic significance of detailed stratigraphic studies like that described by Dr. Thompson is becoming increasingly clear as the difficulty of finding new oil and gas pools continues to increase.

Earlier in the day, Dr. Warren O. Thompson presented his excellent lecture to the Los Angeles group at the Roger Young Auditorium.

NOTICE

The Executive Committee of the A. A. P. G. announces the following items of interest:

(1) Dates and places of future National Conventions, namely, 1958 Los Angeles; 1959 Dallas; 1960 Atlantic City; 1961 Denver; 1962 San Francisco; 1963 Houston; 1964 Detroit; 1965 New Orleans.

(2) Question of continued support for American Geological Institute. The A.A.P.G. approved \$10,000 support through 1958, amounting to about \$.70 per A.A.P.G. member. Possible support beyond 1958 will be an important business item at the National Convention next March and members should acquaint themselves with the pros and cons in order to vote intelligently.

BRANNER CLUB

On December 11, Mike Sherrick, Zoology student at U. C. L. A., and one of the nation's outstanding rock-climbers, presented a very well organized and beautifully illustrated talk on his pet subject at the dinner meeting held at the Athenaeum, on the Cal Tech campus. He first discussed the fundamentals of the sport and then presented a series of slides depicting climbing episodes, and gorgeous mountain scenery from the volcanoes of Mexico to the Canadian Rockies.

His outstanding achievement was the recent conquest of the 2000 foot vertical north face of Half Dome, in Yosemite Valley. This project took him and his two companions five days during which they carried all their food and water and slept tied to the rocks!

At this meeting, Ralph Arnold, charter member and first president, presented the club with an autographed portrait of J. C. Branner, which had been a cherished possession of his for many years.

**EXECUTIVE COMMITTEE, PACIFIC SECTION
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS**

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PACIFIC PETROLEUM GEOLOGIST

Published monthly by the Pacific Section, American Association of Petroleum Geologists. Address communications to the Pacific Petroleum Geologist, 550 South Flower Street, Los Angeles 17, California.

Editor	Millis H. Oakes
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Activities	Tom O'Neill
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Personal Items	Bob Badger
Selected Bibliography	Lacy Birdsall
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Sacramento Correspondent	Bruce Hill
Northwest Correspondent	Ralph Rudeen

NEXT DEADLINE JANUARY 30

NOTICE

Address all inquiries for Pacific Section cross-sections and guidebooks to Martha J. Gallagher, Kern Oil Co., 430 Statler Building, Los Angeles 17. The minimum mailing charge is \$.50, which covers 5 cross-sections or less. Add \$.10 for each additional cross-section.

FAMOUS LAST WORDS



NOTICE

Address all correspondence for Pacific Section Treasurer Bob Knapp, to:

Robert R. Knapp
S. O. Co. of Calif.
Exploration Department
605 West Olympic Boulevard
Los Angeles 15, California

PERSONAL ITEMS

The rumor at Richfield is that Ray "The Orator" Arnett is doing geology "permanently" at his de-cob-webbed desk after a short stint of well-site work in Alaska. Long enough we hope to give his voice a good rest.

Ed Bien returned from a leave of absence from Richfield in Bakersfield. Ed both vacationed and did some geology for two months for the Formosan Government in Taiwan. He ranks the pictures he took on his globe circling trip as better than Mike Todd's.

Tom Brady has joined the Bakersfield geological department of Richfield. Tom received his Master's degree from U.C.L.A.

Tom Roy announces that he has several copies of the 1958 AAPG - SEG - SEPM directory. Contact Tom at Ohio in Bakersfield.

Four Richfield geologists - Dale Duley and Bob Morrison of Ojai, and George Clark and Fred Sierveld of Bakersfield - have left for Richfield-type winter vacations in Canada. They will spend the next three months basking under the Aurora Borealis along the beautiful Athabaska River in northern Alberta. Bob Morrison recently joined the Richfield geological staff after receiving his Master's degree at U.C.L.A.

Manuel Castro and Jim Cowell, of Shell in Ventura, are going to Houston, January 12-17, for the annual Shell Geological conference, where they will present papers on the Ventura Basin. Manuel will also take a couple of days off for a side trip to New Orleans.

The Texas Company geological and land department office in Santa Paula has been moved, lock, stock, and electric logs, to Ventura. Rex Grivetti and his gang now reside in a plush new office at 3482 Loma Vista Road (P. O. Box 3247), Ventura; telephone, MI 8-6831. This move represents a consolidation of the several Texaco offices in the Ventura Basin, with all departments now under one roof. Coffee break time losses will be virtually eliminated in the new office, since there are no restaurants nearby. Suffering among the geologists is already acute, but the Texas Co. must be congratulated for shrewd selection of an office location.

Frank Johnson, of Standard in Ventura, has accepted a position as Seismic Interpretation Supervisor for Richmond Exploration Co., a Standard subsidiary, in Maracaibo, Venezuela.

Red Pope, Standard scout in Ventura, has been elected President of the Coastal Oil Scouts Association for 1958. Other newly elected officers are: Vice President, Mike Adams, Western Gulf in Ventura; Secretary-Treasurer, Bill Castle, Richfield in Ojai; and Editor, Sam Tate, Humble in Ventura.

Jerry Rickels is the new Los Angeles Basin Division Geologist for Union at Santa Fe Springs; he replaced Dick Peryam, who has been transferred to Havana, Cuba, with the foreign exploration group.

Walt Harris was hired by Texaco on December 16th. Walt recently received his M. A. from UCLA; he is working in the Los Angeles office and will be transferred to Santa Maria.

Verne Crackel has been transferred from Western Gulf's Ventura office to Los Angeles. Mark Latker, lately of Los Angeles, is now at Ventura.

Declan Ford of DeGolyer & MacNaughton, Madrid, Spain, is in town on a two weeks vacation for the holidays. Declan formerly worked for Continental and Tidewater in Southern California; his many friends will enjoy seeing him again.

Jim Moore, Shell at Olympia, is complaining because duck season will be over when he gets back home from Los Angeles.

Bob Thornburgh, Shell at Los Angeles, retired on January 1st; Bob's many friends wish him the best of luck.

Iver McCrea, Shell at Olympia, broke all speed records coming to Los Angeles for Christmas; he made it in one day without using his T-bird.

Pete Gester, Standard at Los Angeles, was recently observed trying on long handled underwear in preparation for his new Alaskan assignment. Early in 1958, Pete will report to Anchorage, where he will be District Superintendent of the Kenai District.

Jim Valentine, of UCLA, married Grace Whysner, also of UCLA, on 21 December; they honeymooned in Mexico.

Al Kerr, Bakersfield consultant, left December 20th for Bahia, Brazil, where he will work for Petrobras as development geologist for the Bahia Basin. His family expects to join him soon after the first of the year.

Jack Weldon, geologist with Shell, Bakersfield, is due back from a short tour at Shell's school in Houston.

The Standard Oil Co. exploration group celebrated Christmas at the Bakersfield Elks Club. The small party dined on turkey and doused with refreshments served by Diz (Suds) Deane and Bob (Reject) Ortalda. Diz claims that pouring for the 180 left too little time for tippling.

F. Tom Ise of Standard, at Bakersfield, trekked to the Lone Star State to join his fiancée for a much shorter trip to the altar. Let's hope emigration from Texas won't delay the honeymoon too long.

Herb Mann, Shell geologist from Bakersfield, has been transferred back to Seattle with a promotion to District Geologist of the Alaskan District.

Don't bother calling the Tidewater office in Ventura these days. All of the geologists are on vacation except Jack Kappeler, who is so busy trying to line up a program for the January meeting of the Coast Geological Society that he doesn't have time for anything else.

An overwhelming majority of Ventura Basin geologists, apparently exhausted by various forms of overwork, and/or overindulgence during the Holiday Season, are taking year-end vacations. Most of them are taking R & R vacations at home, but a few members

of our fraternity, like Lum Lovely (skiing at Mammoth Mountain) and Dick Lyon (golf at Carmel), both of Union in Santa Paula, have been more energetic.

Ken Erskine of Shell has returned to the Ventura Office from a four-month stay at the Shell Training School in Houston.

Ralph Hawkins, Shell in Ventura, is now well-sitting and golfing in the Salinas Valley. He has had to trade the Saticoy Country Club for the somewhat less glamorous surroundings of the course at King City.

Jack Coniff, Shell paleontologist in Ventura, has moved into his new country club-type home complete with a kidney-shaped swimming pool.

Dick Stewart, of Union in Santa Paula, recently showed up with a heavily bandaged finger. The injured digit had been so severely smashed, lacerated, and chipped that Dick even had to saw his wedding ring off. Sound like a drilling rig accident? Not a bit of it-- Dick just closed a car door on his finger.

Howard Level, of Union in Santa Paula, was seen chasing his wife, Irene, around the block on December 31. The Levels are expecting a baby, the due date was December 28, but no arrival by New Year's Eve; so Howard was just doing his utmost to get that extra income tax exemption before the midnight deadline.

Highlight of the Holiday Social Season in the Santa Maria Basin was a party at the home of Ernie Bush of G.P. This eminently successful affair featured "Russian Artillery Punch", a concoction of unknown origin and contents but of predictable effects. The absentee rate at the Santa Maria geological offices was high for several days after the party.

It is reliably reported that "Lucky" Sam Brown, who has been with Texaco in Santa Maria for 3-1/2 months, hasn't changed his shirt or a \$10.00 bill since he arrived. So great has been his good fortune in flipping for coffee, meals, drinks, etc., that he still has all the money he brought to town with him.

Don Bruce, of the Division of Oil and Gas in Santa Maria, managed to play seven different golf courses during a recent three-week vacation.

Bill Hughes, Texaco, has been transferred from Santa Maria to "Frontierland" in Los Angeles -- that's the Alaskan Group, son.

The recent marriage of Tom Benson, of The Texas Co., Santa Maria, brought an abrupt end to a four-year steady diet of meat and potatoes. The combination of fresh vegetables and married life is making a new man of Tom.

Jack Holzman of Shell, formerly District Geologist for the Los Angeles Basin, has been transferred to Durango as District Geologist there. Bob Blocher, formerly District Geologist for Shell in Seattle, will replace Jack as L. A. Basin District Geologist.

Frank Della-Rose and Al Marsau of Shell are being transferred from the Long Beach office to Bakersfield. This is Al's first move after nearly seven years with Shell.

Richfield geologists from Bakersfield, Fred Sierveld and George H. Clark, Jr., are transferred to Edmonton for a three month work tour.

Dick Atchison, Ohio geologist in Bakersfield, is recovering nicely from a severe laceration of the eyeball. The cause of the accident is not clear, but it could have been a faulty rebound of a defective set of dice.

Bob Paschall, of Hancock in Ventura, is painting a large mural on the garage wall at his home in Meiners Oaks. This mural is an excellent cross section depicting in some detail the geologic features of the Ventura Basin. Bob may be accused of carrying Levorsen's concept of "discovery thinking" a bit too far.

The same Bob Paschall (a real newsmaker, that boy) and Don Henriksen of Richfield in Ojai, recently underwent minor surgery for removal of small sebaceous cysts. Bob described his operation as follows: "Oh, I just had a small bump removed from my abdomen." No comment.

Nolan Webb and William Rascher, Richfield Geophysicists, have been transferred from Bakersfield to Long Beach.

NURSERY ITEMS

Bob Hindle, Sunray at Los Angeles, became the proud papa of a 7 lb. 13 oz. baby boy on 21 December.

James Foster was born to Patty and Jim Salvesson, Standard at Los Angeles, on 19 November; he weighed in at 9 lbs. even and is the Salvesson's second child.

Jan and John Galloway, Standard at Los Angeles, received John Duncan Jr. on 21 November. Jack is the Galloway's second and weighed 8 lbs. 11 oz.

Mr. and Mrs. Skip Lippitt of Cal Research Corp. announced the arrival of Bonnie Dee on 11 December; she weighed 7-1/2 lbs.

Bob Kropschot, geologist for Standard, and his wife, Corrine, announce the birth of a son, Robert Van. Weighed in at a whopping 9 lbs., 4 oz., on December 5th.

Dick Vaughan, geologist for Franco Western, and Polly, have a new daughter, Carolyn Kay, 8 lbs., born November 2nd.

Bob Nelson, geologist for Honolulu, is the proud papa of a new girl, Paula, born "sometime in December".

Paul and Sue Day, Western Gulf in Palo Alto, are the parents of a son, Steven Michael, born December 5, 1957, weighing 8 lbs. 3 oz. The Days also have a little girl.

Red Pope, Standard scout in Ventura, is the proud father of a baby boy, Craig Martin, born November 29, 1957. The new addition to the Pope family weighed 7 lbs. 12 oz.

Ralph and Frances Cahill, Texaco in Ventura, have added a third child, second boy, to their family. The newcomer, named Richard, weighed 6 lbs. 9 oz.

CALENDAR

January 9, 1958: Thursday, Noon, A.A.P.G. Luncheon, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "Reconnaissance in Alaska" by Russell R. Simonson, The Ohio Oil Company.

January 9, 1958: Thursday, 6:30 P.M., Dinner Meeting, A.I.M.E. Junior Petroleum Group, place to be announced, "Secondary Recovery and Waste Disposal in the Oil Industry".

January 14, 1958: Tuesday, 7:30 P.M., Sacramento Geological Society, Board Room of Public Works Building 1120 N. Street, Sacramento, "Geological Investigations in the Development of the Mineral Resources of a Region" by George A. Kiersch of the Southern Pacific Railroad Company.

January 21, 1958: Tuesday, 7:00 P.M., A.A.P.G. Forum Meeting, Auditorium of the General Petroleum Building, 612 Flower Street, Los Angeles, "The Sahara--a Review of Exploration in French North Africa" by Tom Baldwin, Monterey Oil Company.

January 23, 1958: Thursday, Noon, S.E.G. Luncheon Meeting, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "Geological Mapping in California Prior to 1860" by Dr. V. L. Vanderhoof, Intex Oil Company.

January 27, 1958: Monday, Noon, A.I.M.E. Petroleum Forum, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "Mineral Assessment and Taxation of Oil Producing Properties", by F. C. Hodges, Richfield Oil Company.

February 11, 1958: Tuesday, 7:30 P.M., Sacramento Geological Society, Board Room of Public Works Building, 1120 N. Street, Sacramento, "Earthquakes and Faulting in California" by Dr. V. L. Vanderhoof, Intex Oil Company.

March 10 - 13, 1958: A.A.P.G. - S.E.P.M. Annual Meeting, Biltmore Hotel, Los Angeles.

BIBLIOGRAPHY OF RECENT PUBLICATIONS

California Division of Mines

Bulletin 158

"Evolution of California Landscape", by Norman Hinds (Reprint. No maps included)

United States Geological Survey

Bulletin 1046-F

"Notes on the Geology of Uranium", by M. R. Klepper and D. G. Wyant

Bulletin 1056-A

"Geologic Names of North America introduced in 1936-1955", by D. Wilson, W. J. Sando, and R. W. Kopf, assisted by others

Bulletin 1059-C

"Selected annotated bibliography of the geology of Sandstone-type Uranium Deposits in the U.S.", by Robert E. Melin

Bulletin 1066-C

Geophysical abstracts 170. July-Sept. 1957

Water Supply Paper
1492

"Bibliography of Publications relating to Ground Water, prepared by the

Geological Survey and
Cooperating Agencies, 1946-
1955", by Robert C. Vorhis

Oil and Gas Map
OM 188

"Geology of the Doty-Minot
Peak Area, Washington", by
Maurice H. Pease, Jr. and
Linn Hoover. (Released
December 30, 1957)

Map I-249

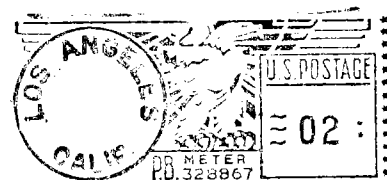
"Preliminary Geologic Map
of the Nulato and Kateel
Rivers Area, Alaska", by
R. S. Bickel and W. W.
Patton, Jr.

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Vol. 12

No. 1

Fred R. Neumann
381 E. Fourth Street
Chico, California



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PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 12

February 1958

No. 2

ASSOCIATION ACTIVITIES

ONLY 220 OUT OF 1300 CALIFORNIA

A.A.P.G. MEMBERS HAVE SENT IN POLL

If you have not already submitted one of these polls, PLEASE cut this one out and mail immediately so we guesstimators can tell how many airplanes to charter and how big a dance floor to rent!!

- Trip (A) - AIRPLANE TRIP - \$30.
- Trip (B) - WESTERN LOS ANGELES BASIN - \$5.
- Trip (C) - NORTHERN LOS ANGELES BASIN - \$5.
- Trip (D) - SOUTHERN AND EASTERN
LOS ANGELES BASIN - \$5.
- Trip (E) - VENTURA BASIN - \$6.
- Trip (F) - MUSEUM TRIP - \$1.50

For further information see page 200 in the January A.A.P.G. Bulletin.

K. L. Rathbun, Chairman,
Registration Committee.

SACRAMENTO GEOLOGICAL SOCIETY MEETING

Dr. George A. Kiersch with the Southern Pacific Company in San Francisco was the guest speaker at the Sacramento Geological Society meeting on Tuesday, January 14, 1958. He spoke on the subject, "Geological Investigations - Applications in Developing the Mineral Resources of a Region," which was illustrated with slides and maps.

Dr. Kiersch's remarks were confined to large scale surveys rather than to a single commodity or specific application survey. In large scale surveys the inter-related natural resources of a region are systematically inventoried and evaluated; and their potential non-renewable resources are appropriately described, regardless of category, e.g., metallics, non-metallics, fuels, water, soils, or engineering applications. The inventory should classify the mineral resources as to their worth into three categories: immediate, future, and long-range. Use of the information should be applicable over at least the ensuing 25-50 years according to demands and technical advances.

The mineral resources needs for future generations, according to the geo-chemists, will be supplied by a combination of six basic raw materials: sea water, air, ordinary rock, limestone, phosphate rock, and sunlight. Dr. Kiersch feels that if this forecast is projected only 10-15 years in line with our current needs and thinking we might add: oil shale, high-alumina clays, dolomite, coal, calcium sulphate, and the reactive or energy metals, e.g., boron, beryllium, monazite, thorium, columbium and uranium. At the other extreme in thinking are those who would concentrate on searching for additional deposits of the currently popular materials in a size, grade, and type of occurrence that are almost non-existent.

All too frequently many less-sparkling resources of vital importance to our economy suffer from lack of attention, such as locating reserves for our chemical industry, largest consumer of minerals.

It was pointed out that low grade granite contains recoverable amounts of uranium and thorium, and the processing of the rock could probably extract a multitude of elements that are needed. For example, 100 tons of granite contain 8 tons of aluminium, 5 tons of iron, 1,200 pounds of titanium, 180 pounds of manganese, 70 pounds of chromium, and lesser amounts of nickel (40), vanadium (30), copper (20), tungsten (10), and lead (4).

SURVEY TRENDS: Probably the earliest program of economic development in the United States, based on the inter-related natural resources of a region was the Tennessee Valley Authority in the 1930's. This was followed by the broad scale survey in the vicinity of the Hoover Dam in 1934. Today this same general type of survey is being conducted in many regions of the world, (e.g., Ceylon; Manitoba, Canada; Colorado Plateau; Sahara Desert, etc.), by private companies, contract companies and government agencies.

The geological methods and techniques, employed in a regional survey (in general the same as used in any economic surface investigation) were discussed and illustrated.

Dr. Kiersch recommended the following as helps in our search for new mineral resources:

- 1) Foresee future needs and search for the minerals as forecast.
- 2) Attain a better understanding of the origin of mineral deposits.
- 3) Adequately determine and record the physical properties of rocks and soils for near-future utilization or use in developing needed resources from "rock".
- 4) Attain a better knowledge of the distribution of elements in the earth's crust in concentrations currently considered too small for extraction.

A.A.P.G. LUNCHEON MEETING

The Pacific Section's monthly luncheon meeting was oriented on the highlights of oil finding - west of the Yukon, as Russell R. Simonson, The Ohio Oil Company, presented an interesting "Reconnaissance in Alaska". Stirring Kodachromes of Alaskan geology were shown. Among the areas illustrated were: the active glaciers, Mendenhall and Malaspina along the north shore of the Gulf of Alaska; the excellent structural and stratigraphic geology presented in the Paleozoic, Mesozoic, and Tertiary sediments,

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NEXT DEADLINE FEBRUARY 27, 1958

including the large thrust at Mt. Saint Elias of undefined older metamorphics over Tertiary sediments, and the sea cliff exposure of the large Bruin Bay thrust fault, a classic academic example of nature's compressional handicraft; and the brackish and marine cross-bedded Tertiary sediments in the Yakataga Area where Phillips Oil - Kerr McGee have drilled several deep tests.

The slides of the numerous gas and oil seeps, the Havenstrite operation on the Alaska Peninsula's Fritz Creek anticline, and the Naval Oil Reserve - Four on the Arctic Coastal Plain with all of its relatively untested structures, contrasted with those of the abandoned Katalla oil pool on the north shore of the Gulf of Alaska. Mr. Simonson culminated the tour with several scenes of the Eskimos in their native habitat.

CONVENTION TO FEATURE AIR TRIP

GEOLOGISTS WILL VIEW SCENE BELOW FROM ABOVE

Geologists attending the Annual Meetings in Los Angeles in March will be given an opportunity to participate in a new type of field trip, hitherto unattempted on this scale in California. John Shelton and his committee have planned a 350 mile, two hour airplane trip by chartered airliners over selected points of geologic interest in the Los Angeles, Ventura, Cuyama, and San Joaquin Valley oil districts including a careful look at the San Andreas fault and other outstanding geological features.

These trips are planned for every afternoon of Convention week, Sunday through Friday, and will cost \$30.00 per seat with a good view of the ground. Those who have expressed interest in the trip in the preliminary questionnaire are being given the opportunity by mail of purchasing their tickets in advance to assure themselves of a seat. Anyone who failed to respond to the questionnaire is hereby urged to join the happy and affluent throng of aerial geologists by sending a check (made out to A.A.P.G. 1958 National Convention Account) for \$30.00 to Harold H. Sullwold, Jr., Chairman of Field Excursions Committee, 3161 Oakdell Lane, North Hollywood. Accompanying the

check should be a statement as to which day is preferred, if any. Sunday is recommended, as it does not interfere with technical sessions. Advance sales are imperative because of the necessity of reserving expensive planes. Since reservations will be handled in order of receipt, it is important that they be made promptly, preferably by February 20.

Four all-day trips by bus on the ground are also scheduled as well as an afternoon trip to the Los Angeles County Museum and Hancock Foundation. Those tickets will be on sale at the Convention. Those planning to participate in the Monday trip of the Western Los Angeles Basin which includes a boat trip in the harbor and around the Monterey drilling island should make every effort to purchase their tickets Sunday as this trip is limited to 120.

Trip descriptions appearing in recent issues of the Bulletin and in the questionnaire are essentially correct.



HIS COULD BE A WATCHBIRD WATCHING YOU, BUT ITS REALLY ONE WAY THAT KEITH RATHBUN GETS PEOPLE TO FILL OUT THEIR CONVENTION QUESTIONNAIRES (NOT VERY EFFICIENT, THOUGH). SAVE YOURSELF THIS EMBARRASSMENT BY SENDING IN THE FORM ON BACK PAGE OF THIS ISSUE (IF YOU HAVE NOT ALREADY COMPLIED).

* NO RELATION TO M. KLINE.

1958 PACIFIC SECTION DIRECTORY

The 1958 Directory of Membership of the Pacific Section, AAPG-SEG-SEPM will be offered for sale again at the National Meeting in March at the convention price of \$2.00. At the present time only about 425 copies remain to be distributed. It is entirely possible that this issue will sell out during the convention.

The directory is available by mail immediately for \$2.50, postage prepaid, from Lee R. Choate, Baroid Well Logging Service, P.O. Box 9125, Long Beach 10, California. Make checks payable to Pacific Section, A.A.P.G. Members are urged to pass this information on to their friends.

Anyone who paid for a directory at the fall meeting and failed to pick it up may redeem his paid registration receipt for a copy by sending it to the address above. The receipt will be returned.

NOTICE

Rocky Mountain Section A.A.P.G. is holding its Eighth Annual Meeting in Casper, Wyoming, April 27-30, 1958. Address all enquiries to B. A. Taylor, P.O. Box 359, Casper, Wyoming.

Mr. Thomas A. Baldwin, Senior Geologist for Monterey Oil Company, addressed the Los Angeles Geological Forum meeting held at the General Petroleum Auditorium on January 21, 1958. Those in attendance enjoyed a well presented and informative talk entitled "Oil in the Sahara, A Review of Exploration in French North Africa".

During recent months six oil or gas discoveries have been announced in the Sahara Desert. Publicity has been given to enthusiastic reserve estimates as high as 7,000,000,000 barrels for the largest field (Hassi Massaud). The presence of oil has combined with French plans for American participation in developing vast concessions to arouse interest in this little known area.

These discoveries have resulted from French efforts to bolster their economy by developing oil resources within the Franc block. French Governmental agencies have completed more than five years of surface geology, core drilling and geophysical work, from the Atlas Mountains to the remote southern rim of the Sahara.

Three structural provinces are involved - the Atlas Mountains, a complexly folded Mesozoic and Tertiary geosyncline (part of the ancient seaway of Tethys); a Saharan Paleozoic Basin covering an area larger than the State of Texas; and the shelf area of Tanezrouft, the northern edge of the African shield where a thin continental Mesozoic section unconformably overlaps gently dipping Paleozoic rocks and locally lies upon pre-Cambrian.

In the center of the Sahara Basin gas and condensate has been discovered in basal Triassic sands at Hassi Ram'1. A major oil discovery at Hassi Massaud has been developed with a half dozen 1,000 B/D wells presently completed at depths from 10,000 to 12,000 feet. A small pipeline has been completed to railhead.

A major gas field has been discovered in Devonian reef limestone in In Saleh (Western Sahara).

At the southern rim of the Paleozoic Basin, Carboniferous strand-line sands have produced at three shallow fields (1500 to 3000 feet) - Farzatine, Tiquenturine and Edjele. Edjele shows promise of a major reserve with individual wells producing from 100 to 400 B/D.

These discoveries have become an important factor in the present disturbances between France and the Arab Terrorists in Algeria. Success of the French effort to hold the growing oil reserves of the Sahara could put the French economy on a solid basis; thus strengthening one of America's most important continental allies.

ANNOUNCEMENT OF NEW OFFICERS FOR
THE ROCKY MOUNTAIN SECTION
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

PRESIDENT

John F. Partridge, Jr., Casper, Wyoming, Consultant, a graduate of Stanford University, to fill out the term of R. W. Mallory, who has been transferred to Calgary, Alberta, as Division Manager for Champlin Oil and Refining Company.

VICE PRESIDENT

J. R. Boshard, Durango, Colorado, District Geologist, Sun Oil Company, a graduate of Brigham Young University, to fill out the term of G. K. Elias, who has been transferred to Turkey as Exploration Manager for the Gulf Oil Corporation.

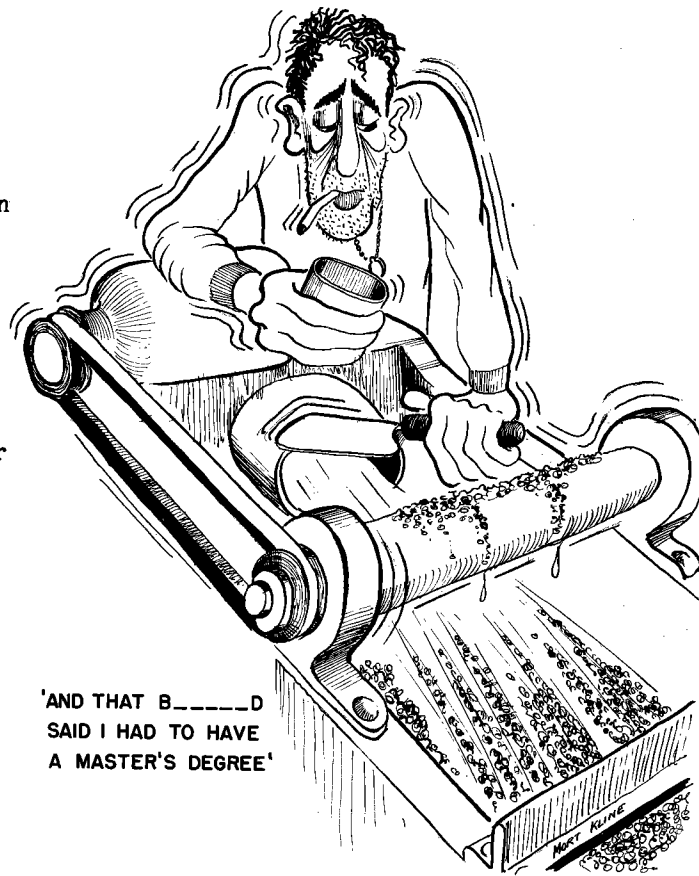
The members of the San Joaquin Geological Society enjoyed a very interesting and informative talk on "Geology of South Central Utah" by Mr. Otto Hackel of the Intex Oil Company at Bakersfield.

Mr. Hackel, along with Mr. Roy Turner, made a surface and subsurface geological reconnaissance study of this area for Intex during the spring of 1957.

A short review of previous geological studies in the region was presented and slides depicting the stratigraphy and structure were shown. The area is famous for many classic monoclines which Mr. Hackel believes to be reflections of deep-seated faulting.

Oil shows in outcrop are common, but no commercial production has been found. Approximately twelve definitive tests, located on structural crests, have been drilled in this area of 8,000 square miles, resulting in subcommercial production on the Last Chance anticline (Permian reservoir) and on the Upper Valley anticline (Mississippian reservoir). The tests were drilled on Laramide structures in search of Paleozoic production.

It is possible oil will be found in buried Paleozoic structures and in stratigraphic traps. Available acreage in this region is practically non-existent, especially on the prominent structures, however, because of the recent oil exploration activity in the nearby Paradox basin. An analogy might be made between the present status of South Central Utah and that of the Paradox basin before the recent discoveries.



'AND THAT B_____D
SAID I HAD TO HAVE
A MASTER'S DEGREE'

COAST GEOLOGICAL SOCIETY

The monthly dinner meeting of the Coast Geological Society, held at the Montecito Country Club in Santa Barbara on January 21, featured a talk on "Reconnaissance in Alaska", by Russ Simonson of the Ohio Oil Company. Members and guests of the society thoroughly enjoyed his interesting and well

organized presentation, which was illustrated with excellent Kodachrome slides.

NOTICE

The California Field and Pool Names list, effective as of January 1, 1958 and issued jointly by the Classification Committee of the Pacific Section of the A.A.P.G. and the Conservation Committee of California Oil Producers is now available. If you desire copies of this list, send your request to:

M. T. Whitaker
General Petroleum Corporation
P.O. Box 2122, Terminal Annex
Los Angeles 54, California

PERSONAL ITEMS

Certain members of the Shell geological staff in Ventura are giving a series of lively "going-away" parties in preparation for any possible sudden transfers. As far as is known, no transfers are impending, but the Shell boys really enjoy those parties.

Although a large group enjoyed Russ Simonson's talk and slides on Alaska at the January C.G.S. meeting, it is fortunate that no CAA representatives were present to hear of the "flat-hatting" techniques that were used in observing the outcrops and wildlife of the area.

The sometimes drab surroundings of the Ventura Basin oilpatch were brightened considerably on Saturday, January 18, by the visit of 39 girls from the Bakersfield, Taft, and Ventura Desk and Derrick Clubs. The lucky fellows who were privileged to assist in conducting the tour included Ed Hall and Dick Stewart of Union in Santa Paula, and Don Henriksen, Richfield in Ojai.

A big farewell party for Eric Phillips was given on January 11 by Helen Boyd of the Western Gulf office in Ventura. It ended up with everyone playing a card and dice game called "Whoopee"; sounds like a very docile party.

Here is the last first-hand quote from Bob Paschall for the P.P.G. personal items this year: "You are becoming more of a journalist than a geologist, and in the future all I'll say to you is 'hello'".

John Gates of Western Gulf, Ventura, visited the Gulf Lab in Pittsburgh the week of January 12-18 to catch up on the latest developments in geophysics.

Bill Reed of Standard has been transferred from the Western Explorer to development work with Bob Erickson in the Ventura Office.

Geoffrey Holstrom has joined the Standard geological staff in Ventura after a hitch in the Navy.

Rex Olsen, graduate in Paleontology from the University of California, is now working with Humble in Chico. We hear Rex's wife was quite excited about marrying a geologist with the chance of seeing the world. Where was Rex's first assignment? - you guessed it - in Chico, her home town.

The Don Barrett's, with General Petroleum in Rock Springs, Wyoming (recently transferred from Sacramento) were recent visitors at the Karl Arlth's (Ohio), in Sacramento. A dinner party attended by about 40 friends in the oil business was held in their honor at the Sacramento Inn on January 22.

Shell held a core party on January 21st at Olympia which was attended by Southern Californians Harry Jamison and Don Henriksen of Richfield and George Feister of Union. The affair was well organized and featured a smorgasbord luncheon between the morning's work of describing and the afternoon's sampling.

Word comes from Superior that Al Rupprecht has solved the traffic problem. He now takes nerve-soothing pills before plunging into the melee.

Jack Van Amringe has been transferred to Union's Santa Fe Springs office from the North Coastal District; he reported in February 3.

Texaco hired Dave Pasta as a junior geologist on January 15th. Dave recently completed work for his MA at U.C.L.A.

Union recently promoted Bob Carlson to District Geologist for the North Coastal District with offices at Orcutt and Dick Stewart to District Geologist for the South Coastal District at Santa Paula; both districts come under Ed Hall, Division Geologist of the Coastal Division. Bernie Minch has been promoted to District Geologist for the Sacramento District under Harold Billman.

Bob Dott, Jr. is rejoining Humble after serving in the Army. He will be at Ventura and Dick Walters will transfer his efforts to the San Joaquin Valley from Ventura.

Cy Bird is leaving Humble's San Joaquin office to work on Special Projects.

Glen Specht is now with Humble's West Coast Navy or offshore group after serving six months in the Army; he was previously working in offshore geophysics in Louisiana.

Bob Scott, Geologist, late of The Texas Company, is now with Signal Oil in Bakersfield. It took Bob two days to learn how to work all the accessories on his new company car.

Franco Western in Bakersfield has increased its compliment with the addition of Tex Leverett. Tex had been Union's chief scout.

The Texas Company office staff in Ventura still has no coffee break facilities; however, thanks to the Campfire Girls, they have plenty of Blue Bird Peanuts.

Dan O'Halloran, Standard Oil, has been transferred effective March 1 from Los Angeles to Salt Lake City where he will work in geophysical interpretation. If you don't agree that big things happen all at once to the O'Hallorans, please refer to the nursery news this month.

John Becker, Standard Oil, was recently transferred from Los Angeles to Bakersfield where he will continue to work as a seismic computer.

Jim Lindsay has been transferred from Los Angeles to the Four Corners area by Standard Oil Company. He will continue to work as a scout and be located in Durango, Colo.

Orin Gilbert, Standard Oil, was transferred from Salinas to Anchorage, Alaska, last December. He will continue to work as a development geologist in his new location.

Dick Frost, Shell at Grand Junction, and Al Robins, Shell at Bakersfield, will be in Los Angeles for several months. Frank Morgan has returned to Shell's Easterly office and Jim Moore to Olympia.

Reorganization of the Western Gulf geological department, to conform with the "Zone System" of the parent Gulf organization, is continuing. Bob Nesbit, recently transferred from Bakersfield, is now Zone Exploration Manager in Ventura. Vern Crackel, recently transferred from Ventura, is Zone Geologist in Los Angeles. John Gates has been promoted to Zone Geologist in Ventura. Eric Phillips of the Ventura office has been transferred to Bakersfield as Zone Geologist. Mark Latker, formerly in Western Gulf's L. A. Office, has been transferred to Ventura after a short sojourn in Venezuela.

Mike Adams has resigned as Western Gulf scout in Ventura. He intends to open a scouting service in Anchorage, Alaska. Mike's many friends wish him the best of luck in his new venture.

The Pacific Coast Oil Scouts and Landmen's Association elected officers for 1958 at a meeting of the delegates in Bakersfield on January 17. The new officers are: President, Barney Bernard, Richfield in Bakersfield; Vice-President, Bill Castle, Richfield in Ojai; and Secretary-Treasurer, Dale Rodman, The Ohio Oil Company, Bakersfield.

Gene Johnson, formerly Shell scout in Long Beach, has been transferred to Shell's Ventura office, replacing Kenny Frost.

Kaz Pohopien was married in Chicago on December 28, 1957. He plans to enter U.C.L.A. to study for the Ph.D. in Physiology.

A farewell party which started early and lasted very late was given in Santa Maria in honor of Bill Hughs of The Texas Company, who has been transferred from the Santa Maria Office to the Alaskan Group. Among the companies and personnel present were: Texaco, Joe Ernst, Tom Benson, "Fat" Sam Brown, Lou Canut, Ed Lacey, and Jon Gressle; G. P., Rod Colvin and Ernie Bush; D. O. G., Cecil Barton and Don Bruce; Union, Jim Eke; George B. Ellis and Assoc., Stan Borst. Wives also attended, unfortunately. Bill received many fine and useful gifts, including an Alaskan "beaver-board", to be used in low brush; a rather small hand-knitted sweater, apparently for the thumb; and a navel-lint remover.

Rod Colvin of G. P., Santa Maria, recently suffered a broken rib when he fell from the church which he is helping to build. He was saved from being dashed to the ground by falling on the out-house, which has now been memorialized as "Colvin's Privy".

On February 4, 1958, Ernie Bush of G. P. will present a "Pictorial Review of Alaskan Faunal and Floral Ecology" at the Santa Maria geological meeting in Orcutt. Ernie will also discuss the requirements for "Sourdough", two of which he has fulfilled.

Alan Johnston has left Standard's Ventura office to return to school. He will attend the University of California at Santa Barbara during the Spring Semester.

Don Hagen, who recently received his M. A. at U. C. L. A., has joined the Texas Company geological staff in Ventura. Don has been skiing several times with Lee Freeman, also of Texaco in Ventura, and both have been lucky so far -- no major injuries.

Andy Foraker, with Humble in Chico, is currently very active on the political scene. Andy was recently elected chairman of the Young Republicans League for Butte County.

Friends of Jeff Watts, with the Natural Gas Corporation in San Francisco, will be glad to know he is recovering after suffering a collapsed lung.

The origin of the "Russian Artillery Punch" that was so devastating to the Santa Maria geological offices during the Holiday Season has been traced to Anatole Safonov, Brazos in Sacramento. Anatole introduced the concoction at a house warming party in 1954. He is willing to supply the recipe to "responsible persons" on request.

Richard Zingula, with Humble, formerly in Chico, recently received his Ph.D. in micro-paleontology from Louisiana State University. Dick spent 18 months at LSU working on his Ph.D. and is now with Humble's Geologic Research Staff in Houston.

Brazos will move their office from Sacramento to Isleton about March 1.

George Witter with General Petroleum was recently transferred to Sacramento from Durango, Colorado.

George La Perle has joined the ranks of Richfield's noted orators. George gave a talk to a local group on the stock market and its technical approach.

OIL SURPLUS SOLVED! Tom A. Roy, Bakersfield Political Crusader, has just sprung for a fire engine red four-holer. On a fair test under average conditions (from Lebec to Grapevine with wife pushing), said car averaged a whopping 25 miles to the barrel. (Miles per gallon calculations will be available to interested parties upon the completion of a log-log duplex, poly phase decitrig analysis.)

Dean Morgridge, Humble at Los Angeles, found that the difference between 45 and 70 on the Ridge Route is 37 dollars.

Olaf P. Jenkins has announced his retirement as of March 1, 1958. Dr. Jenkins' name has been nearly synonymous with the California State Division of Mines for a long time. He has served the Division since 1929 and has been State Mineralogist and chief since 1947. Under his direction the Division has grown in size and particularly in value to the State and the geologic profession. Happy days, Olaf!

L. H. (Bill) Boyd has been transferred from California Exploration Company in San Francisco to a sister company, Richmond Exploration Company, in Maracaibo, Venezuela.

F. Ken North of California Exploration Company, San Francisco, is off to Cuba and Trinidad for a ten week study of structures on those islands.

The 1962 AAPG Convention is to be held in San Francisco. Gordon Oakeshott has accepted the appointment of general chairman.

Nostalgic Midwesterners! Photos are now available of George Starke, Standard in Salinas, wearing his red and white Wisconsin letter-sweater while doing field work. This offer may also apply to aspiring Stanfordites.

Lincoln E. Warren is transferring from Western Gulf's Houston office to Los Angeles; he will be the new Exploration Manager replacing Glen Ledingham.

Jerry Knowles of Richfield's Foreign Group, is off on a two-week trip to Bogota, Columbia. Jerry reports that the hotel he stopped in at Panama City features complete room service.

Chuck Cary of Bakersfield is the 1957 singles champion of the Union Oil Company's Valley Division Golf Club.

John West, The Texas Company, has been transferred from Long Beach to Bakersfield.

Herb White, the Wellex wonder, has been transferred to Denver and promoted to Division Sales Manager.

Jim O'Neill, Oceanic's Mid-Continent authority, is back in Bakersfield. Seems he heard that the San Joaquin Geological Society is finally making money, and the title of treasurer is no longer an honorary title.

Jack Clare and Bill Winter, Superior in Bakersfield, have both volunteered to relieve District Geologist Horace Harrington of some of his time-consuming and more menial chores. They can't understand why Horace prefers the tiresome task of interviewing for a new secretary, personally.

The Bakersfield office of General Petroleum has spent the last three weeks putting the final touches on a skit for the G. P. staff meeting in Los Angeles February 1st. I wonder if they feel a song and dance will be more impressive than this year's oil prospects.

Bakersfield's Bob Herron of Hancock and Cutler Webster of Honolulu spent a weekend at Pismo clamming. Besides near-drowning, mistaking his foot for a clam (record breaker too, darn it!), the cold water reaffirms Bob as "The Great Blue Herron." Don't know if Bob shared his clams with Jack West, but he did share the cold he brought back.

Scarecrows come in all forms. After reporting his car stolen, Archie Warne of Richfield in Bakersfield was notified by police that it was found standing vigil in the middle of a farmer's field.

Desk Jockey Al Hopkins of Richfield in Bakersfield is taking off some fat by doing field work. This couldn't be a prelude to volunteering for the same duty in Alaska could it?

Happy Endings Dep't: You may remember that last month we left Howard Level of Union in Santa Paula chasing his wife around the block on New Year's Eve, trying to hasten the overdue arrival of their baby. Everything is now serene in the Level household; the baby was born at 7:50 P.M., December 31, and Howard had his extra income tax exemption with four hours and nine minutes to spare.

William Bazeley is leaving Richfield's Ojai office to return to U.C.L.A., where he will pursue studies for the Ph.D. degree in geology. A farewell party was held at the Spencer Fine home in Ojai. "Commodore" Bazeley will be missed by his many friends in the Ventura Basin, particularly his Richfield colleagues who will have to take over his offshore well-sitting duties.

Larry Malarin is being transferred by Standard Oil from Los Angeles to Oildale. Happy Larry will take over as Division Geophysicist on February 17th.

Cal Thompson, Standard Oil Geologist, is being transferred from Los Angeles to Ventura effective February 17th.

C. J. Leith, Standard Oil, is being transferred from Los Angeles to Oildale where he will work in geophysical interpretation. Jay's transfer will be effective March 1.

Hershell Nixon, Tidewater's Area Geologist for the Los Angeles Basin, has been transferred to San Francisco. Jim Saunders has temporarily taken Hershell's place in the Los Angeles office.

Hugh McClellan, Continental at Los Angeles, is enjoying a week's vacation skiing at Mammoth Lake.

Bob Blocher, District Geologist, Shell Oil Company, Seattle, is finally getting away from the problems of Alaskan geology; he has just been transferred to Long Beach, California. His position is being filled by Herb Mann of Bakersfield.

Gordon Bell, Western Gulf, Ventura, has been transferred to Olympia, and Floyd Johnson has left the northwest for Bakersfield.

After vacationing in Hawaii during November, Stan Schindler, geologist, Shell, Olympia, is attempting to convince management that surface mapping in the Islands is in order. He keeps muttering something about good contours.

Dick Vivion, Humble, and Ivor McCray, Shell, both Olympia, were seen (just barely) at the scouts convention in Bakersfield in December.

Don Ford, lately of Bakersfield, has become a resident of Washington State with the Department of Natural Resources.

Bill (Gulkana) Godsey, Geologist, Standard, Seattle, will soon join the ranks of the exploration group in Anchorage and hopes the same opportunity will be afforded some of his colleagues - Bill Barlow included.

Jim Parkinson, Development Geologist, Standard, Salt Lake, recently transferred to Anchorage. Jim acquired a bride in the process. -- Congratulations!!

Earl Bescher from Humble's Houston office was a recent visitor in Northern California.

A New Year's Eve party was enjoyed by 15 oil men and their wives at the home of Swiss Holmes of Shell, in Sacramento. Swiss took a number of photographs including "about a dozen excellent blackmail photos" he is willing to sell.

A. W. (Bob) Gentry, Monterey Oil, has been advanced to the position of vice-president, operations.

NURSERY NEWS

John David at 8 pounds 13 ounces born November 17th is the No. 2 boy for the Andy Bengtsen family with Standard in Bakersfield.

Dana Sue Ehring, born January 9th at 6 pounds 4 ounces, makes it 2-to-1 for the girls for Pat and Ted of the Texas Company in Bakersfield.

A first for Jane and Bill Hamlin, with Shell in Bakersfield. Vernon William born under the wire on December 28th at 7 pounds.

Tom Brady with Richfield in Bakersfield, is losing sleep to Susan Elizabeth born January 15th at seven pounds.

Bart Ferguson, Sunray at Newhall, announced the arrival of Joyce Elaine on January 16th. Joyce weighed nine pounds, one ounce.

Mr. and Mrs. Dan O'Halloran have a new boy born January 24th. This makes two boys and two girls for the O'Hallorans.

A third son, Keith Bryan, was born to Irene and Howard Level, Union in Santa Paula, on December 31, 1957. Naturally enough the baby has been nicknamed "Kelly Bushing".

CALENDAR

February 10, 1958: Monday, Noon, A.A.P.G. Luncheon, Rodger Young Auditorium, 936 West Washington Blvd., Los Angeles, "Future Growth and Financial Requirements of the World Petroleum Industry" by Kenneth E. Hill, Vice President of Chase Manhattan Bank.

February 13, 1958: Thursday, Noon, S.E.G. Luncheon Meeting, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "The Use of Gravity to Determine Basin Configuration and the Thickness of Sedimentary Sections" by Bill Basham, Standard Oil Company of California.

February 18, 1958: Tuesday, 7:00 P.M., A.A.P.G. Forum Meeting, Auditorium of the General Petroleum Building, 612 Flower Street, Los Angeles, "The Geology of a Part of the Funeral Mountains in Death Valley National Monument" by Carrol A. Richards, State Lands Commission.

February 18, 1958: Tuesday, 7:30 P.M., Sacramento Geological Society, Board Room of Public Works Building, 1120 N Street, Sacramento, "Earthquakes," illustrated with slides, by Dr. V. L. Vanderhoof, Intex Oil Company.

February 20, 1958: Thursday, 6:30 P.M., Dinner Meeting, A.I.M.E. Junior Petroleum Group, Candlewood Country Club (formerly the Clock Country Club), Telegraph Road South of Whittier, "Use of Aluminum in Oil Production and Exploration" by Edward Marquand, Aluminum Company of America.

February 24, 1958: Monday, Noon, A.I.M.E. Petroleum Forum Meeting, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "The Drilling Contractor; His Prospects and His Problems" by Gene Graham, Graham and Klassen Drilling Company.

March 6, 1958: Thursday, 7:30 P.M., Sacramento Geological Society, Board Room of Public Works Building, 1120 N Street, Sacramento, "Some Applications of Regional Paleogeography" by Dr. A. I. Levorsen, world-wide geological consultant.

March 10 - 13, 1958: A.A.P.G. - S.E.P.M. Annual Meeting, Biltmore Hotel, Los Angeles.

April 27 - 30, 1958: A.A.P.G. Rocky Mountain Section Eighth Annual Meeting, Casper, Wyoming.

BIBLIOGRAPHY OF RECENT PUBLICATIONS

California Division of Mines

Bulletin 176

"Mineral commodities of California", Under the direction of Olaf P. Jenkins, edited by Lauren A. Wright

United States Geological Survey

Professional Paper 294-F

"Foraminifera from Carter Creek, northeastern Alaska", by Ruth Todd

Professional Paper 294-G

"Miocene Arthropods from the Mojave Desert, California", by Allison R. Palmer, with sections by J. C. M. Carvalho, D. R. Cook, Kellie O'Neill, Alexander Petrunkovitch, and R. I. Saller

Open-file Reports

"Application, technique and theory of Gish-Rooney Instruments, methods, and interpretation of electrical resistivity measurements", by H. Cecial Spicer. (On file for reference at Los Angeles Public Inquiries Office.)

Mail To Registration Committee

POLL TO HELP THE COMMITTEES

Mail soon to
A.A.P.G. Registration Committee
c/o Continental Oil Company
1137 Wilshire Boulevard
Los Angeles 17, Calif.

Members "probably coming" to the convention as well as all those whose plans to do so are already definite are asked to help hard working Convention Committees by checking appropriate squares below and returning to A.A.P.G. Registration Committee before November 1, 1957. This is for statistical use only; your best guess now will be helpful and you incur no obligation whatsoever. Return unsigned if you like, but please return it if you think you are coming.

I plan to attend the convention
I plan to bring my wife
I shall want a reservation at a downtown hotel
I plan to sign up for field trips as follows

Yes

Probably

No

A
☐

B
☐

C
☐

D
☐

E
☐

F
☐

I plan to attend the social hour ☐; the dinner-dance ☐
My wife plans to attend the social hour ☐; dinner-dance ☐; fashion show luncheon ☐; Disneyland tour ☐; ladies brunch ☐.

Name _____

Address _____

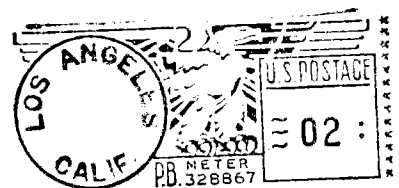
PACIFIC PETROLEUM GEOLOGIST
PACIFIC SECTION, A.A.P.G.
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LOS ANGELES 13, CALIFORNIA

Vol. 12

No. 2

Fred R. Neumann
381 E. Fourth Street
Chico, California

GA



PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 12

March 1958

No. 3

ASSOCIATION ACTIVITIES

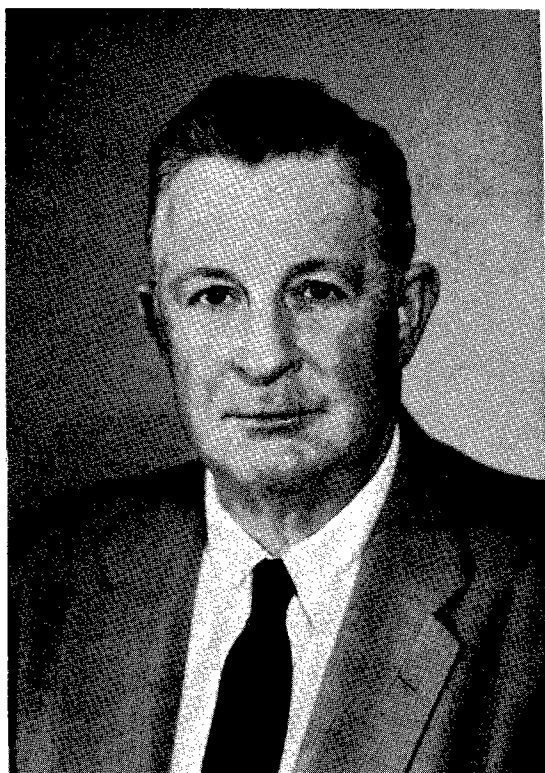
WELCOME!

The Pacific Section, A.A.P.G., as host for the 43rd National Convention of the Association, welcomes the membership to its headquarters city for what it hopes will be an enjoyable, profitable and memorable occasion.

U. S. Grant IV
President
Pacific Section

BUCHANAN NEW A.A.P.G. PRESIDENT

George S. Buchanan, Director, Husky Oil Company, Cody, Wyoming, will become the 42nd president of the American Association of Petroleum Geologists on March 13, as announced by Graham B. Moody, president of the Association. Serving with Buchanan on the 1958-59 Executive Committee of the world's largest geological organization will be Graham B. Moody, consulting geologist, Berkeley, California, as past-president; the present editor of the A.A.P.G. monthly Bulletin of Petroleum Geology, Sherman A. Wengerd, professor of geology, University of New Mexico, Albuquerque, and two other newly elected officers: Vice-president Gordon I. Atwater, senior member of Atwater, Cowan & Associates, New Orleans, Louisiana; and Secretary-



A.A.P.G. PRESIDENT '58-'59

G. S. Buchanan, Husky Oil Co.

treasurer Harold T. Morley, chief geologist, Pan American Corporation, Tulsa, Oklahoma.

A.A.P.G. ANNOUNCES 1958 HONOREES

Graham B. Moody, President of the American Association of Petroleum Geologists, announces the following recipients of honorary awards, to be formally presented Tuesday, March 11, at the 43rd Annual Meeting of the Association in Los Angeles.

Paul Weaver, Professor of Geology, Texas A & M College, Houston, Texas, will receive the Sidney Powers Memorial Medal in recognition of his outstanding contributions to, and achievements in petroleum geology. The presentation will be made by Roy R. Morse, consulting geologist of Houston.

As a symbol of distinguished services performed in the field of petroleum geology, certificates of Honorary Membership will be presented to Carroll Edward Dobbin, regional geologist, U.S.G.S., Denver, Colorado, by J. V. Howell, consulting geologist of Tulsa; K. C. Heald, petroleum consultant, Fort Worth, Texas, by M. Gordon Gulley, Gulf Oil Corporation, Pittsburgh, Pennsylvania; William Bayard Heroy, president, the Geotechnical Corporation, Dallas, Texas, by A. Rodger Denison, Amerada Petroleum Corporation, of Tulsa; A. I. Levorsen, consult-



A.A.P.G. PRESIDENT '57-'58

G. B. Moody, Consulting Geologist

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PACIFIC PETROLEUM GEOLOGIST

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Editor	Millis H. Oakes
Assistant Editors:	
Activities	Tom O'Neill
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Personal Items	Bob Badger
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Coast Correspondent	Don Henriksen
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Northwest Correspondent	R. P. Ottenstein

NEXT DEADLINE MARCH 27, 1958

ant, Tulsa, Oklahoma, by Paul E. Fitzgerald, Dowell Incorporated, of Tulsa; Raymond C. Moore, principal State geologist, Lawrence, Kansas, whose presentation will be made by K. K. Landes, University of Michigan, Ann Arbor, Michigan; and Wallace E. Pratt, consulting geologist, Carlsbad, New Mexico, by L. T. Barrow, Humble Oil & Refining Company, of Houston.

NEW S.E.P.M. OFFICERS

Gordon Rittenhouse, of the Shell Development Company, Houston, Texas, will become president of the Society of Economic Paleontologists and Mineralogists on March 13, 1958, as announced by R. V. Hollingsworth, president of the Society. Serving with Rittenhouse on the 1958-59 Council will be R. V. Hollingsworth, Paleontological Laboratory, Midland, Texas, as past-president; W. M. Furnish, Iowa State University, Iowa City, Iowa, as vice-president; Raymond E. Peck, University of Missouri, Columbia, Missouri, as secretary-treasurer; M. L. Thompson and Charles W. Collinson, State Geological Survey, Urbana, Illinois, as co-editors of the Journal of Paleontology; and Jack L. Hough, University of Illinois, Urbana, Illinois, as editor of the Journal of Sedimentary Petrology.

The new S.E.P.M. officers will assume the responsibility of directing this 1,400-member organization at the close of the 32nd annual meeting of the Society, which will be held at the Biltmore Hotel, Los Angeles, California, March 10-13, 1958.

COAST GEOLOGICAL SOCIETY

The annual Ladies' Night dinner meeting of the Coast Geological Society was held at the Miramar Hotel in Santa Barbara on February 11. Members of the Society and their wives were treated to an interesting and amusing safari through Africa narrated by Bill Pemberton and illustrated by Kodachrome.

Bill introduced his slides and talk by saying that he went to Africa to take pictures of animals, and that he soon found out the natives are the most interesting animals. His fine pictures of natives of many tribes certainly bear out that statement.

Of special interest to the men present were several intriguing slides showing unclad albino natives. It is understood that Mr. Pemberton is the only photographer ever to succeed in taking pictures of these albinos in their natural habitat.

Bill's many excellent Kodachromes illustrated a great variety of African fauna and flora, as well as topographic and geologic features. His witty, often spicy, narration added greatly to the audience's enjoyment of the slides.

SACRAMENTO GEOLOGICAL SOCIETY MEETING

Dr. V. L. Vanderhoof with the Intex Oil Company in Bakersfield was the guest speaker at the Sacramento Geological Society meeting of Tuesday, February 18, 1958. He gave a very interesting talk on "Earthquakes in California", illustrated with slides showing the damaged structures.

A map was presented showing the locations of earthquakes in the United States with a general discussion of the more significant ones.

The earthquakes in California that were discussed in detail and illustrated with slides were: the San Francisco earthquake of 1906, the Santa Barbara earthquake of 1925 and the Bakersfield earthquake of 1952.

San Francisco Earthquake: The San Francisco earthquake of April 18, 1906 was the result of movement along the San Andreas fault. The quake was generally of high intensity from Fort Bragg on the north to Sargent on the south. In the vicinity of Olema, south of Tomales Bay, there was 21 feet of right lateral movement as evidenced by offset fences, roads, etc..

Damage to buildings was severe, especially to those of brick and lime mortar construction. The heavy cornices and "gingerbread" common to 19th century architecture proved to be especially vulnerable to the quake. Poor architectural practices were responsible for much of the damage such as failure to tie the floors of a building to the walls and the practice of laying two rows of bricks for a wall and then filling the space between the bricks with rubble.

The early hour of the day (5:44 A.M.) when the quake struck probably was responsible for the saving of many lives inasmuch as many schools and public buildings were severely damaged or destroyed.

Santa Barbara Earthquake: The Santa Barbara earthquake of June, 1925, probably was the result of movement along the Mesa fault off shore in the Pacific Ocean. Most of the damage was centered in an area of swampy land in the vicinity of the powerhouse in Santa Barbara. Damage was most severe to buildings of brick and lime mortar construction. Brick buildings and chimneys utilizing cement mortar withstood the quake with little or no damage. Cross braced stucco buildings withstood the quake without cracking.

Bakersfield Earthquake: The Bakersfield earthquake of 1952, an aftershock of the severe Arvin-Tehachapi earthquake of July 21, 1952, was the result of movement along the White Wolf fault.

Damage was severe to old buildings especially those of brick and lime mortar construction. The quake struck in mid-afternoon on a busy week day with the streets crowded with people. The small number of deaths (2) was attributed to a well informed populace. There was much publicity following the Arvin-Tehachapi earthquake concerning what to do and what not to do during an earthquake.

Following Dr. Vanderhoof's talk, Anatole Safonov, with Brazos in Sacramento, presented for comparison the 1925 and 1956 editions of the Geologic Map of Russia. The outstanding difference between the two maps is in the Siberian Region. The 1925 edition is almost completely blank in the Siberian Region, whereas, the 1956 edition shows the geology in the same area in great detail.

Anatole reported that the Russians have changed the name of the city of Perm, capital of the province of Perm, to Molotov. The late Paleozoic Permian system was named by Murchison in 1841 in this area. Anatole doubts that the Russians will propose changing the name of the Permian system to "Molotovian."

The Russian counterpart to our U. S. G. S. is their Ministry of Geology. Anatole reported there are about 25,000 geologists in Russia.

A.A.P.G. LUNCHEON MEETING

"Future Growth and Financial Requirements of the World Petroleum Industry" was presented by Kenneth E. Hill, Vice President of Chase Manhattan Bank, to the luncheon meeting of the Pacific Section, Monday, February 10th.

Authoritative sources estimate a rise in population in this country from 168 million in 1956 to 197 million by 1966. This growth, coupled with a rising standard of living, points to a continuous expansion of over-all activity and predicates a corresponding increase in our energy requirements which are estimated at 45 percent more in 1966 than at present. Petroleum is expected to supply approximately one half of these needs and demand will therefore grow at an average rate of five percent yearly, increasing to 14.3 million barrels per day by 1966.

The demand for oil in the Free Foreign World will probably expand more rapidly than in the United States and will increase to 14.2 million barrels in 1966. The combined demand of the Free World is esti-

mated at 28.5 million barrels by 1966.

Crude oil reserves in the Free World are ample to supply this anticipated demand, but reserves are unevenly distributed when related to areas of greatest consumption. Although this country accounts for 57 percent of the world requirements, we have only 15 percent of Free World reserves with only a small reserve producing capacity. Further growth of production in the United States must depend on the rate of discovery. The industry must find one and one half barrels of new oil for each barrel produced to provide an adequate inventory. To increase production from 7.2 million barrels a day in 1956 to 9.5 million barrels daily in 1966, 3.6 billion barrels of new oil must be found yearly, 15 percent greater than the rate at which we have found oil since World War II. This will require a greatly expanded drilling program estimated at 735,000 new wells during the next ten years. Such a program can only be accomplished by favorable tax and regulatory climate which will provide sufficient funds.

Expansion of output in the Free Foreign World at a faster rate than in this country is possible because reserves are much greater when related to current production. Our domestic oil industry faces a gigantic challenge to meet the ever-increasing demands for cheap sources of energy.

FORUM MEETING

Mr. Carrol A. Richards, an oil and gas engineer for the State Lands Commission of California, addressed the Los Angeles Geological Forum meeting held at the General Petroleum Auditorium on February 18, 1958. Mr. Richards discussed the "Geology of a Part of the Funeral Mountains, Death Valley National Monument, California".

The part of the Funeral Mountains of the Amargosa Range included in this report contains rocks of Paleozoic and Cenozoic ages. Lower Cambrian and Middle Cambrian formations are widely exposed in and near Echo Canyon. The bulk of the hills and moun-



KEYNOTE SPEAKER

M. E. Spaght, Shell Oil Co.



A.A.P.G. VICE-PRESIDENT '58-'59

G. I. Atwater, Atwater, Cowan & Assoc.

Page 4. tains consist of Middle Cambrian to Devonian strata. Pliocene lake beds and fanglomerates are present at lower elevations in widespread deposits, usually unconformably overlain by breccia of Pliocene(?) age, and terrace deposits of Pleistocene age. Recent alluvium covers valley and canyon floors.

Of the Paleozoic rocks, 6,884 feet of beds were measured and subdivided as follows: undifferentiated Middle Cambrian Cornfield Springs-Bonanza King formation, 792 feet; Upper Cambrian Nopah dolomite, 1,710 feet; Lower Ordovician Pogonip limestone, 1,393 feet; Middle Ordovician Eureka quartzite, 359 feet; Upper Ordovician Ely Springs dolomite, 403 feet; Silurian Hidden Valley dolomite, 1,473 feet; Middle Devonian Sultan dolomite, 754 feet. The Middle Cambrian and Middle Devonian measurements are only partial ones and therefore do not represent the total thickness of those formations in the area. In the Tertiary rocks, the fanglomerate facies of the lower Pliocene Furnace Creek formation measures 1,790 feet, whereas only 997 feet of the finer-grained facies are exposed west of Hole-in-the-Wall. A crude measurement of the fine-grained facies between Hole-in-the-Wall and Quarry Mountain indicates a thickness of 2,960 feet.

Red Amphitheater breccia is a name proposed for the masses of huge blocks, breccia, and minor amounts of fanglomerate that are exposed on the hills around Red Amphitheater. These rocks are assigned to the Pliocene(?) age and are believed to be derived from landslides, debris slides, or mass wasting from the rising Pyramid Peak fault block. The oblong valley lying between Hole-in-the-Wall and Quarry Mountain is recognized as a graben. Large scale normal faulting has lifted Pyramid Peak, Schaub Peak, Quarry Mountain, and some unnamed ridges several thousand feet in relation to adjoining down-faulted blocks. Anticlinal and synclinal flexures occur in the Pliocene lake beds southwest of Hole-in-the-Wall and in Lower and Middle Cambrian formations northwest of Schaub Peak. Minor features such as drag folds, ripple marks, and intraformational conglomerate were noted.

The ensuing discussions on questions raised by J. C. Hazzard and J. F. McAllister on: the Keane Wonder Fault and whether or not it is involved in the Red Amphitheater breccia; the accuracy of measured field sections; the relationship and correlations of Tertiary sediments in the area stimulated further audience interest.

S.E.P.M. ELECTS HONORARY MEMBERS

The Research Committee of the Society of Economic Paleontologists and Mineralogists has unanimously nominated and the Society's Council has elected three honorary members. They are: Marcus Albert Hanna, of Houston, Texas, Charles Elijah Decker, of Norman, Oklahoma, and Hans Erns Thalmann, of Stanford, California. The honorary membership certificates will be formally presented to them at the Society's 32nd Annual Meeting in Los Angeles, California, on Tuesday, March 11, 1958.

NORTHWEST GEOLOGICAL SOCIETY MEETING

Dr. D. L. Blackstone, Jr. gave a talk to the Northwest Geological Society, February 20, on "The Tectonic Framework of the Rocky Mountains".

The Rocky Mountain system extends from the Liard River, British Columbia, to near Santa Fe, New Mexico, and contains within itself a wide diversity of structural phenomena. The basic structural framework of this region can be discussed in terms of the present structural position of the Precambrian crystalline basement. The basic

divisions based on this scheme are: 1-Canadian shield; 2-thinly covered shield; 3-area of locally exposed basement; 4-area of deeply buried basement; 5-and the area where the basement is no longer recognizable.

The Rocky Mountain system as a whole constitutes a belt of deformation which developed in Laramide time. The presence of large crustal folds in which the basement is involved is not typical of the deformation which usually arises from the shelf area that lay adjacent to a trough site of deposition. Factors involved in this development as well as local variations on the general pattern were discussed.

SAN JOAQUIN GEOLOGICAL SOCIETY

The San Joaquin Geological Society at their yearly ladies night dinner meeting held February 4th, at the El Tejon Hotel, Bakersfield, had the pleasure of hearing John Zimmerman speak on the "Geology of the Sierra Nevada Mountains". Mr. Zimmerman, Instructor of Geology at Bakersfield College, gave a very interesting talk accentuated by numerous beautiful color slides.

NOTICE

The reprint of the "Geology of California", by R. D. Reed, and the "Structural Evolution of Southern California", by R. D. Reed and J. S. Hollister, bound together, is now available for distribution.


The price is \$6.00 to members, and \$6.50 to non-members. Orders and remittances should be sent to: A. A. P. G., Box 979, Tulsa, Oklahoma.

SACRAMENTO VALLEY FIELD TRIP PLANNED NEXT MONTH

Mr. Oliver E. Bowen, Jr. (Division of Mines, San Francisco) and Lorin D. Clark (U.S.G.S., Menlo Park) will lead a two day field trip in the Mother Lode country on April 19 and 20, 1958.

FAMOUS LAST WORDS



"Where's the illiterate  that labeled these samples?"

MORT KLINE

It is planned to meet at 9:00 A.M. at Folsom (20 miles east of Sacramento) Saturday morning and to stay overnight at Sonora. Much of the trip will be concerned with the Mother Lode System and the related metamorphic and granitic rocks. Also several stops will be made to view the Ione and Valley Springs formations of the foothills bordering the Sierras to the west.

At a dinner meeting Saturday night, Mr. Bowen will talk on the "Mining History of The Mother Lode". Page 5

The field trip will be sponsored by the Sacramento Geological Society. A syllabus and road log will be available at a nominal price. It is suggested that motel reservations be made in Sonora in advance. Be sure to bring your lunch.



A.A.P.G. NATIONAL CONVENTION CHAIRMAN

L. R. Newfarmer, Shell Oil Co.



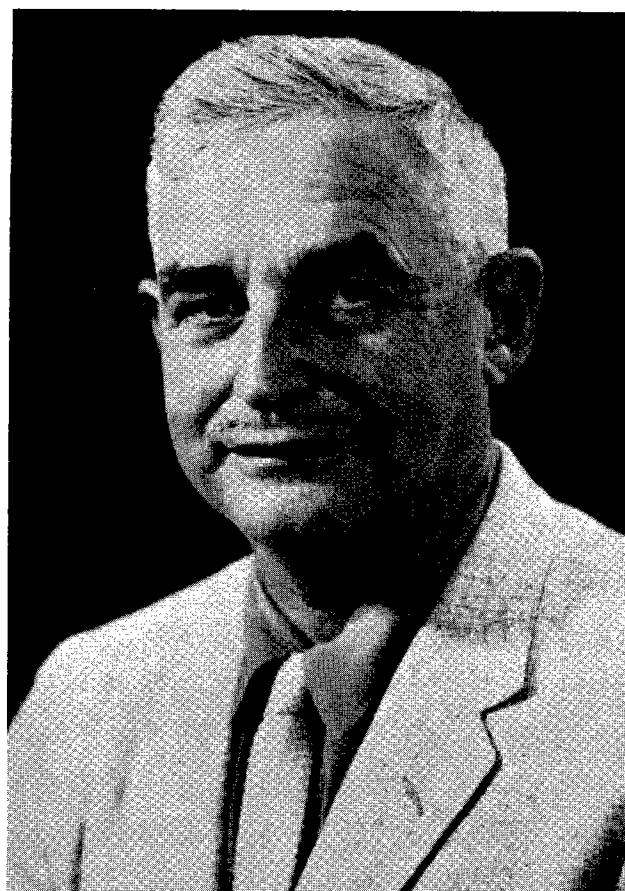
PACIFIC SECTION PAST PRESIDENT & PRESIDENT

U. S. Grant IV (U.C.L.A.) accepting gavel from H. W. Lee (Union Oil Co.).



S.E.P.M. CONVENTION VICE-CHAIRMAN

J. D. Bointon, Standard Oil Co. of Calif.



TECHNICAL PROGRAM CHAIRMAN

J. C. Hazzard, Union Oil Co.

PERSONAL ITEMS

U. S. Grant IV and wife will tour Europe this Spring. They are leaving in mid-April and are returning the end of June.

Noeth B. Gillette has joined the Franco-Western staff in Bakersfield as chief landman. Noeth previously worked for Signal in Los Angeles and Shell in the Rockies.

Wes Bruer has left Bakersfield for Oregon again for a short tour of duty for Superior.

Quentin Query and Charles Manlove have joined the Bakersfield staff of Great Basins Petroleum Co.

Tom Wilson, Ohio Oil, Bakersfield, has just returned from a six-weeks' sojourn to the Kenai Peninsula area of Alaska. Tom, jingling a pocketful of "Alaskan nickels" (silver dollars) and wearing the latest in Alaskan fashions, has strong recommendations for the cuisine, etc. up there, but he wouldn't say which way. We understand the better eateries took down their Duncan Hines signs for ones stating "Wilson Ate Here".

Art Hawley, with Western Gulf in Sacramento, has recently become the Business Manager of the newly formed Sacramento Ice Hockey Association. Thirty-two games are planned for the current season and the Association is reported operating in the black.

Swiss Holmes, with Shell in Sacramento, and Carl Helms, with Standard in Bakersfield (recent transferee from Sacramento), were the recipients of the Oil Information Committee's "Go Devil Award".

John R. Sprague of General Petroleum is now located in the L. A. Office. John was formerly at Eugene, Oregon and more recently at Bakersfield.

Jack Gilboe, Shell at Bakersfield, has been in the hospital for over a month with a serious illness.

The chairmen and members of the various committees for the National Convention have worked exceedingly hard to make this convention a success. They deserve congratulations from all of us.

Dick Frost, Shell at Grand Junction, arrived here to work in the L. A. office for a few months but had to spend the first few days in the hospital as the result of a ski injury. Dick is back at work now and is trying to find a good safe place to go skiing.

John Michelson, Amerada, has recently been transferred to Los Angeles from Salt Lake City.

W. C. Bradford, formerly with the California State Div. of Oil and Gas in Santa Maria, has recently accepted the position of geologist and engineer with the Western Petroleum Company; his office is in Long Beach.

Bill Bishop and Les Brockett, both of Richfield, are among the current Alaska commuters.

Jerry Knowles of Richfield can testify about the efficacy of mental telepathy upon his return from Columbia. He and Isabella had no difficulty in conversing despite the lack of a common language.

John F. Mann, Jr., Associate Professor of Geology at U. S. C., has resigned to devote full-time to groundwater consulting.

Dr. John Harbaugh's Stanford University petroleum geology class took their annual field trip recently in the Ventura Basin. C. M. "Kit" Carson arranged and supervised their visits to a number of oil fields and areas of general geologic interest, and Spence Fine of Richfield in Ojai conducted the class through the Ojai-Sulphur Mountain area and offshore to Richfield's drilling barge "Rincon".

Dick Stewart, Union in Santa Paula, has been elected Secretary of the Coast Geological Society. He replaces Jack Kappeler of Tidewater, who advanced to the Vice Presidency, filling the vacancy left by the transfer of Vern Crackel of Western Gulf. Dick's first act in office was to rig the whiskey raffle at the C. G. S. dinner meeting so that he won a fifth.

Eric Lindvall, formerly with Shenon & Full in Grand Junction, has joined Richfield's geological staff in Ojai. Bob Morrison has returned to the Ojai office after a chilly three month tour of duty at Richfield's tar sand concessions in northern Alberta.

Tom Adams of Western Gulf has replaced Mike Adams as Zone Scout in Ventura.

Curtis H. Johnson, formerly with General Petroleum in L. A., has recently returned to Los Angeles after several years overseas in The Hague and London with Geophysical Service, Inc. Curt has opened an office here (816 W. 5th St.) and has moved his family back to San Marino, their former home.

Rod Colvin of G. P. has been elected Chairman of the Santa Maria Geological Study Group. He replaces Bob Carlson of Union, who has done a commendable job.

John Curran, Honolulu Oil Corp., Santa Barbara, has been elected A.A.P.G. District Representative. He will succeed Bob Paschall of Hancock, who has served very ably.

Lieutenant Howard Level, USNR, of Union in Santa Paula, is on a two week military leave attending reserve school in San Diego. He and his fellow officers are probably analyzing the problems of Project Vanguard.

Several members of the Texas Co. geological staff in Ventura have become hi-fi addicts. Some of the boys still like to mix lo-fi with their hi-fi, however, as evidenced by the fact that they are also addicted to (ugh!) Dixieland.

Lum Lovely and Harold Lian, both of Union in Santa Paula, have been taking advantage of the recent snows in southern California. Lum has been skiing at Mammoth Mountain and Harold at Snow Summit and Wrightwood.

The occupational hazards of skiing have finally caught up with Don Hagen of Texas Co. in Ventura. He is recuperating from a split chin suffered during a recent skiing trip.

Jack Clare, with Superior in Bakersfield, gets more mushrooms than ditch samples nowadays while watching one of the company's faster wells on the West Side.

The oil situation in California is apparently being "sweated-out" by Al Hopkins, with Richfield in Bakersfield, who, as rumor has it, has been considering a business course, thinking that geology is fine, but a sideline won't hurt any.

J. H. Beach, with Beach, Church & Bell, Bakersfield, has had his wires crossed (car wires, of

course!). The only way Jack can start his convertible is to put the top up. When the top is down the ignition is off. This makes for very sloppy transportation during the winter rains.

Sam Brown of the Texas Co. in Santa Maria has developed a nervous twitch since hearing Ernie Bush's hair-raising tales about Alaskan bears.

NURSERY NEWS

Jack Jensen Bedford, born February 9 to Bill and Molly of The Texas Company in Bakersfield. Three tries; finally a boy.

George LaPerle, geologist with Richfield, announces a new daughter born February 12. The sex was optional as the LaPerles already had a mixed pair.

Mr. and Mrs. Don Hembre, Standard at L. A., announced the arrival of a new baby boy born February 13th. David Eric weighed 7 lb. 11 oz.

A third child, second daughter, was born February 10, 1958, to Dolores and Frank Yule of G. P., in Ventura. Barbara Jean weighed in at 9 lbs. 5 oz.

Rex and Bessie Olsen, Humble in Chico, are the proud parents of a son, Mark Leonard, born January 25, 1958, weighing 7-1/2 lbs. The Olsens now have a boy and a girl.

CALENDAR

March 6, 1958: Thursday, 7:30 P.M., Sacramento Geological Society, Board Room of Public Works Building, 1120 N Street, Sacramento, "Some Applications of Regional Paleogeography" by Dr. A. I. Levorsen, world-wide geological consultant.

March 10-13, 1958: A.A.P.G. - S.E.P.M. Annual Meeting, Biltmore Hotel, Los Angeles.

March 12, 1958: Wednesday, 6:30 P.M., Dinner Meeting, A.I.M.E. Junior Petroleum Group, Candlewood Country Club, 14000 Telegraph Road, Whittier. Speaker and Title to be announced.

March 17, 1958: Monday, 7:30 P.M., Coast Geological Society Monthly Dinner Meeting, Gold Room of the Miramar Hotel, Santa Barbara, "Some Applications of Regional Paleogeology" by Dr. A. I. Levorsen, world-wide geological consultant.

March 18, 1958: Tuesday, 8:00 P.M., A.P.I. Basin Chapter Meeting, Shell Recreation Hall, 2080 Obispo Avenue, Long Beach, "Drilling and Producing Operations in Residential Areas" by George Cheyney and Jim Schaeffer, Jr.

March 19, 1958: Wednesday, Noon, A.A.P.G. Luncheon, Rodger Young Auditorium, 936 West Washington Blvd., Los Angeles, "Some Applications of Regional Paleogeography", by Dr. A. I. Levorsen, world-wide consultant.

March 24, 1958: Monday, Noon, A.I.M.E. Petroleum Forum Luncheon, Rodger Young Auditorium, 936 West Washington Blvd., Los Angeles, "The Conservation Committee and the M.E.R. Concept", by Nick Van Wingen, Consultant and Professor, University of Southern California.

April 27-30, 1958: A.A.P.G. Rocky Mountain Section Eighth Annual Meeting, Casper, Wyoming.

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Page 7

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"Lead and Zinc in California", by J. Grant Goodwin, Journal, vol.53, Nos. 3 and 4, 1957.

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Volume 69, February 1958, Petrology and origin of the Poway Conglomerate, San Diego County, California", by George J. Bellemin and Richard Merriam, pp 199-220.

Volume 69, February 1958, "Structural geology of the southern Snake Range, Nevada," by Harald Drewes, pp 221-240.

Volume 69, January 1958, "Shallow submerged marine terraces southern California", by K. O. Emery, pp 39-60.

United States Geological Survey

Professional Paper
260-T

"Chemical erosion of beach rock and exposed reef rock" by Roger Revelle and K. O. Emery.

Professional Paper
260-U

"Geothermal measurements on Eniwetok and Bikini Atolls", by J. H. Swartz.

Professional Paper
294-H

"The lower ordovician gastropod Ceratoceras", by E. L. Yochelson and Josiah Bridge.

Bulletin 1028-G

"Ocean floor structures, northeastern Rat Islands, Alaska", by George L. Snyder.

Bulletin 1046-E

"Reconnaissance for uranium in asphalt-bearing rocks in the western United States", by W. J. Hall, Jr.

Bulletin 1052-A

"Scattered gamma rays from thick uranium sources", by A. Y. Sakakura.

Bulletin 1052-B

"Three-dimensional heat conduction in permafrost beneath heated buildings", by Arthur H. Lachenbruch.

Bulletin 1052-C

"Infrared luminescence of minerals", by David F. Barnes.

Water Supply Paper
1423

"Phreatophytes", by T. W. Robinson.

Water Supply Paper
1492

"Bibliography of publications relating to ground water", prepared by the Geological Survey and co-

operating agencies, 1946-1955, by Robert C. Vorhis.

Open-file Reports

"Aeromagnetic map of parts of the Ugashik and Karluk quadrangles, Alaska", by G. E. Andreasen, W. J. Dempsey, and J. L. Vargo. 1 map.

"Aeromagnetic map of part of the Dillingham quadrangle, Alaska", by G. E. Andreasen, W. J. Dempsey, and J. R. Henderson. 1 map.

"Aeromagnetic map of part of the Naknek quadrangle, Alaska", by G. E. Andreasen, W. J. Dempsey, and J. L. Vargo. 1 map.

(Open-file reports are not available for purchase. Copies are on file for inspection at the Public Inquiries Office.)

Map I 243

"Reconnaissance geologic map of the Kateel River quadrangle, Alaska", by John T. Cass.

Map MF 136

"Geologic map and sections of the Pioche Hills, Lincoln County, Nevada", by C. F. Park, Jr., Paul Gemmill, and C. M. Tschanz.

Map MF 138

"Geologic map of Clark County, Nevada", by Ben Bowyer, E. H. Pampeyan, and C. R. Longwell.

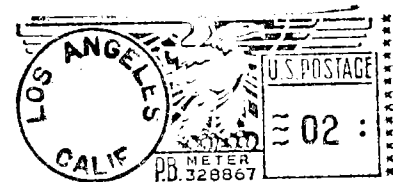
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NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 12

April 1958

No. 4.

ASSOCIATION ACTIVITIES

COAST GEOLOGICAL SOCIETY

Dr. A. I. Levorsen, A.A.P.G. distinguished lecturer, was the featured speaker at the Coast Geological Society monthly dinner meeting held March 17 at the Miramar Hotel in Santa Barbara. His extremely interesting and well illustrated talk on "Some Regional Applications of Paleogeology" was enthusiastically received by a large audience.

Many different kinds of geologic maps are used in modern petroleum exploration. They include structure, paleogeologic, facies, isopach and hydrodynamic maps, and structural and stratigraphic sections. These are inter-dependent and are most useful when several can be applied to the same area.

Paleogeologic maps are helpful in many local problems and also are useful reconnaissance tools in a variety of regional problems. The data may be from well records, they may be from areal maps, or they may be a mixture of both. Dr. Levorsen's lecture was chiefly devoted to a discussion of some of the applications of paleogeologic maps to such regional problems as geologic history, truncation vs. shore line, location of wedge belts of rocks, time of oil and gas migration, pre-unconformity structure, sources for post unconformity sediments, paleo-hydrodynamic gradients, and continental drift.

In addition to some well known examples of paleogeologic maps in the Mid-Continent region of the United States, paleogeologic studies of several foreign areas were used to illustrate some of the applications. The areas include the Canadian shield, the African shield, the Angara shield of Siberia, the Paris Basin of France, and the use of paleogeologic maps applied to the problem of possible continental drift between southern Africa and South America. In conclusion, reconnaissance paleogeologic maps of the pre-Cretaceous surface and the pre-Mesozoic surface of the world were presented to show the areal geology of the earth at those two times in geologic history.

PACIFIC SECTION ANNOUNCES NEW VOLUME ON SOUTHERN CALIFORNIA PETROLEUM GEOLOGY

"A Guide to the Geology and Oil Fields of the Los Angeles and Ventura Regions", the handsome new volume which made its first appearance at the recent national meetings in Los Angeles, is now available for sale by mail, according to Harold H. Sullwold, Jr., chairman of the convention field trip committee.

Handsomely bound in blue fabrikord and stamped with gold letters, the book measures 8-1/2 X 11 inches and contains 232 pages, including 88 illustrations. It was edited by James W. Higgins, district geologist for Standard Oil Co. in Los Angeles, and includes ten regional type papers, 19 oil field papers (10 fields never before

published), four road logs, one air-tour log, two correlation charts, and an aerial mosaic of the Los Angeles Basin. Well worth the price of the entire book are such single contributions as Stan Wissler's up-to-date correlation chart of the Los Angeles Basin, Bill Holman's brand new correlation chart of the Ventura Basin, Bill Barbat's Los Angeles Basin article, and Al Woodward's description of the Sansinena field.

The volume may be purchased by sending a check for \$7.00, payable to the Pacific Section, to Martha Gallagher, Kern Oil Co., 900 Wilshire Blvd., Los Angeles 17. The price includes the tax, which the Pacific Section has already paid, and mailing costs. When queried about the price of the book spokesmen for the editorial staff admitted that as editors and publishers they make excellent geologists and wish to apologize for the increase in price over that previously suggested. They had nothing but high praise for the staff of Economy Lithograph Co. who did a fine job printing the book but suffered from some erroneous rumors that sprang up in the confusion accompanying the volume's publication.

SAN JOAQUIN GEOLOGICAL SOCIETY

On March 18th at Top's Restaurant, Bakersfield, the San Joaquin Geological Society responded with a record-breaking attendance of approximately 250 geologists to hear Dr. A.I. Levorsen's extremely interesting talk, "Some Applications of Regional Paleogeology."

NORTHWEST GEOLOGICAL SOCIETY

On the 21st of January, 1958, Dr. C. T. Bressler of the Department of Science at the Western Washington College of Education at Bellingham addressed the Northwest Geological Society at Tacoma. Dr. Bressler's subject, "Methods of Study of Continental Sediments", was well received by one of the largest attendances of the year.

Dr. Bressler's study of non-marine sediments primarily involved the Roslyn and Swauk formations of Eocene age and the Chuckanut formation of Paleocene age.

Field and laboratory methods discussed as related to this problem were:

- a. Sampling techniques and corresponding errors.
- b. Size analysis and distribution.
- c. Mineral associations.
- d. Thin sections and mineral mounts.
- e. Preferred orientations of grains.
- f. X-ray techniques.

EXECUTIVE COMMITTEE, PACIFIC SECTION
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PACIFIC PETROLEUM GEOLOGIST

Published monthly by the Pacific Section, American Association of Petroleum Geologists. Address communications to the Pacific Petroleum Geologist, 550 South Flower Street, Los Angeles 17, California.

Editor	Millie H. Oakes
Assistant Editors:	
Activities	Tom O'Neill
	Dean Laudeman
Personal Items	Bob Badger
Selected Bibliography	Lucy Birdsall
Calendar	Bob Elaisdell
Cartoonist	Mort Kline
	Harold Sullwold
Coast Correspondent	Don Henriksen
San Joaquin Correspondent	Dave Callaway
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Northwest Correspondent	R. P. Ottenstein

NEXT DEADLINE APRIL 24, 1958

The paleogeography, distribution and source of the Roslyn formation were also discussed.

On the basis of physical and mineralogical characteristics, Dr. Bressler suggests a three fold division of the Roslyn formation.

SACRAMENTO GEOLOGICAL SOCIETY
SPRING FIELD TRIP

The Sacramento Geological Society wishes to announce the dates (April 19-20, 1958) of its forthcoming Annual Spring Field Trip to the Mother Lode country.

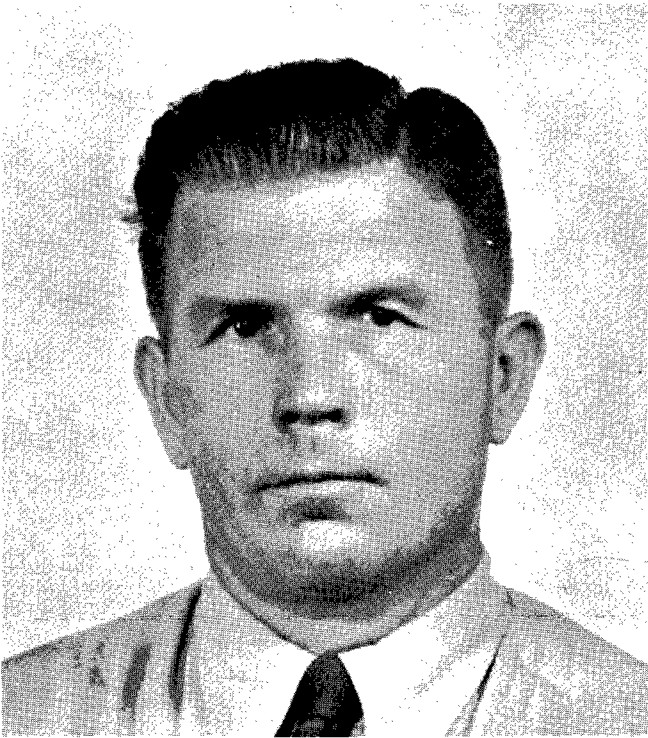
The group will meet at 9:00 AM, Saturday, April 19, 1958, just north of the town of Folsom on Greenback Lane 100 yards west of the intersection of Greenback Lane and Auburn Road. A dinner is planned for 6:30 PM, Saturday evening in the Gold Room of the Sonora Inn, Sonora, California.

Each member must supply his own transportation. In the interest of consolidating the group, and because of the limited parking at many of the stops, it is requested that you double up in cars wherever possible. See March, 1958 Pacific Petroleum Geologist for further details.

NOTICE

Much attention has been given to the proposed re-publication of Division of Mines, Bulletin #170. Due to lack of funds this bulletin will not be published this year. However, if you are one of the unfortunate persons who have not been able to add this valuable edition to your library, write your request to the Division of Mines, Ferry Building, San Francisco, California.

It is imperative that these requests be sent during this session of the state legislature. If enough requests are received an allocation of funds will be made for its publication.



IN MEMORIAM

Iliff Anderson passed away March 7, 1958 after a short illness of pneumonia followed by a heart attack. At the time of his death Iliff was the Zone Exploration Manager for Western Gulf Oil Company in Bakersfield.

During his career he worked in many areas of western North America. Following graduation from U.C.L.A. in 1938 he worked for a short time with the California State Lands Commission before his first employment as a geologist for the Pure Oil Company. His initial work for Pure Oil included surface mapping in the Peace River area of Canada. Iliff enlisted in the Army in March, 1941. He served as a First Lieutenant in the Coast Artillery in the Asiatic-Pacific Theater before transferring to the Air Force. In the latter service he was a B-17 pilot, with many missions in the European Theater of Operations. After the war he resumed his employment with Pure Oil in New Mexico and later worked for C.C.M.O. with mapping assignments in Utah and California. He left C.C.M.O. in 1948 and became an avocado grower in San Diego County for a short time before renewing his education at San Diego State and U.C.L.A. In 1951 he received his M.A. in Geology from U.C.L.A. and went to work for The Texas Company in the Santa Maria Basin of California. He joined Western Gulf in 1953 and has worked in the Santa Maria and San Joaquin Valley areas.

He is survived by his wife, Barbara, and two daughters, Suzanne and Sandra.

SAN ANGELO GEOLOGICAL SOCIETY FIELD TRIP

The San Angelo Geological Society will conduct its Third Bi-Annual Spring Field Trip, "The Base of the Permian - A Century of Controversy", to study the base of the Permian in Coleman, Brown and McCulloch Counties, Texas, April 17, 18 and 19, 1958. The field trip will be directed by Dr. Raymond C. Moore, University of Kansas, and President of the Geological Society of America, and Mr. Robert Roth, Humble Oil & Refining Company. The name of the trip was chosen because this year is the 100th anniversary of the publication of the Permian by G. C. Swallow in the year 1858.

Advance registration may be made by writing to the San Angelo Geological Society at 411 McBurnett Building, San Angelo, Texas. Late registration and distribution of Guidebooks will be handled at the Brownwood Hotel, Brownwood, Texas, during the afternoon and evening of April 17th.

REVERSE FAULTS OF THE VENTURA BASIN

Robert F. Herron, Hancock Oil Co., gave a thought-provoking talk for the September 10, 1957, San Joaquin Geological Society dinner meeting at the El Tejon Hotel.

The Ventura Basin, a portion of the Transverse Range province of Southern California, lies northwest of Los Angeles and extends in an east-west direction approximately 150 miles, with a total area of about 5,000 square miles.

Up to 60,000' of sediments ranging from Quaternary to Cretaceous are present, with an east-west regional trend. The numerous reverse faults, commonly referred to as "thrust faults", are the outstanding structural features, and extend from a few hundred yards to nearly 100 miles in length. These faults dip from 0 to 85°, averaging 60°, and generally increase in dip with depth. Observable displacements range from a few hundred feet to possibly 33,000' on the San Cayetano fault.

Field observations show that fault movement in some cases have emplaced Eocene sediments over Quaternary terrace gravels. Field relationships show that when two reverse faults with opposing dips intersect, the North dipping fault always overrides the South dipping fault, indicating that the North dipping faults are the younger. These reverse faults are probably the result of the same Pleistocene orogeny.

It was suggested that the apparent "thrust" fault relationships may have been partially the result of normal (gravity) faulting with subsequent compressive movements which folded them near the surface.

A large number of the oil fields in the Ventura Basin are closely associated with these faults. Oil accumulations occupy most of the conceivable relationships, some of which are listed below with a field example:

1. Oil in anticlinal structure on upper plate - South Mountain field.
2. Oil on anticlinal structure on lower plate - Torrey Canyon (deep).
3. Oil in upper plate and trapped by fault - Ramona field.
4. Oil in lower plate and trapped by fault - Ojai field.
5. Oil zones repeated by fault - Oak Canyon field.

Jack Harding, Barney Barnard and Bob Brace raised questions concerning Mr. Herron's interpretation of the fault patterns. Particularly the relationship between the Santa Susana, San Cayetano, and Sisar faults. Mr. Herron's paper was well illustrated and enjoyed by all those present.

SACRAMENTO GEOLOGICAL SOCIETY MEETING

Dr. A. I. Levorsen, worldwide consulting geologist and A.A.P.G. distinguished lecturer from Tulsa, Oklahoma, was the guest speaker at the Sacramento Geological Society meeting of March 6, 1958. Dr. Levorsen spoke on the subject "Some Regional Applications of Paleogeology".



IN MEMORIAM

Friends of Henry T. Herlyn were shocked and saddened to learn that Hank was aboard a chartered aircraft which was lost in the Gulf of Alaska, near Kodiak Island, on March 5, 1958.

The plane was last heard from when the pilot reported the loss of both engines 20 miles north of Landfall on a flight to Anchorage from Chirikof Island, southwest of Kodiak. Despite an intensive search of the area by the Civil Air Patrol and the Navy, no trace of the plane or its six passengers has been found.

At the time of the accident, Hank was working in Alaska as a geologist for Phillips Petroleum. Prior to joining Phillips, Hank spent two field seasons in Alaska with Shell Oil Company.

S.E.P.M. ANNOUNCES BEST PAPER AWARDS

Recipients of the awards for the Best Paper in the Journal of Paleontology and the Journal of Sedimentary Petrology for 1956 have been announced by R. V. Hollingsworth, President of the Society of Economic Paleontologists and Mineralogists.

Mrs. Christina Lochman-Balk, professor of geology at the New Mexico Institute of Mining & Technology, Socorro, will receive the award for her paper entitled, "The Evolution of Some Upper Cambrian and Lower Ordovician Trilobite Families," published in the Society's bi-monthly Journal of Paleontology, Volume 30, Number 3 (May, 1956).

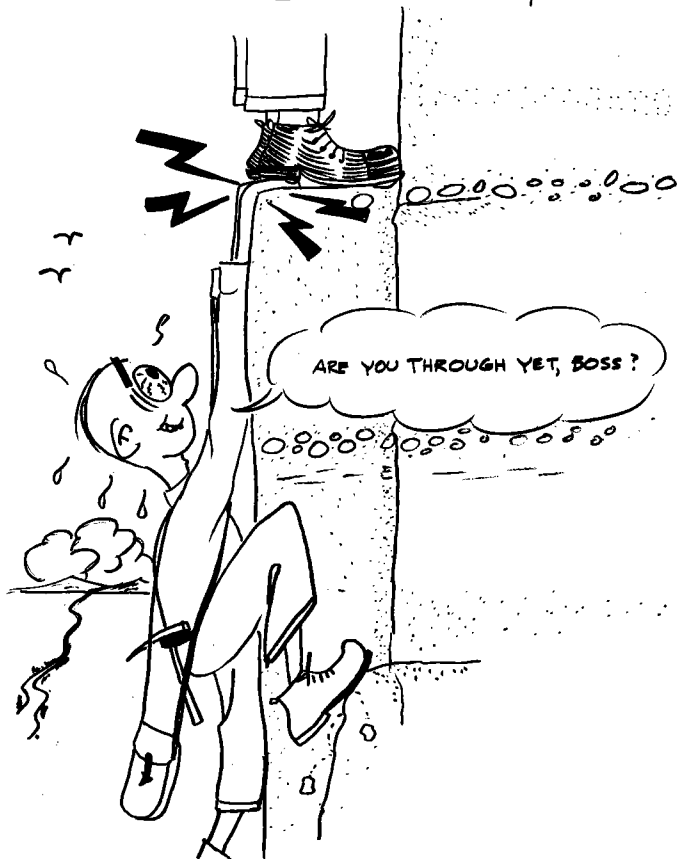
Maurice A. Carrigy, now with the National Research Council of Alberta, Edmonton, will receive the award for his paper entitled, "Organic Sedimentation in Warnbro Sound, Western Australia," published in the Society's quarterly publication, the Journal of Sedimentary Petrology, Volume 26, Number 3 (September, 1956).

These Best Paper Awards are the fourth to be presented by the S.E.P.M. They consist of a certificate given to the author whose paper appearing in the Journals during the second preceding year

is judged by the Research Committee to be the most outstanding contribution of that year.

ANDY CLINE

by Sullwold



PERSONAL ITEMS

Dan Flynn of Bakersfield begins his twenty-first year with General Petroleum in April.

Bob Brace has transferred from Bakersfield to Anchorage to head Standard's geophysical operations there.

Standard Oilers in Bakersfield, Bill Hornung and F. T. Ise are in the initial stages of beard growing. Preparations are for hometown celebrations in Montana and Colorado late this summer. Neither are sure whether the wives now laugh at them or with them.

During the convention Mat Matjasic of Honolulu with John Reckamp and Floyd Johnson of Western Gulf were approached by a panhandler while awaiting a cab. On failing to get ten cents from Floyd, he asked him what the convention badge was, and then whether he knew what an anticline was. As the fellows got in the cab, his parting words were "I've got 640 acres leased to Tidewater in Arizona". This ALMOST got the dime!

While conventioning, Tennant Brooks, Mike Rector, and Bill Horsley, in an attempt to save a shekel, bought some discount tickets for the Hobby Show from a Salvation Army lass. They paid more than face value for the tickets; then found the ducats worthless at the gate.

Lee Wicks has taken over as Western Gulf's new Zone Exploration Manager at Bakersfield. Lee replaced Iliff Anderson who passed away this month.

Jim Wylie, with Western Gulf in Sacramento, is presently finding plenty to do in his spare time as Chairman of the forthcoming Sacramento Geological Society Spring Field Trip. Recently while covering the proposed route of the trip, Jim got well acquainted with poison oak and ended up spending a few miserable days getting rid of it.

Mike Trapesonian, paleontologist with Shell in Sacramento, is being transferred to Grand Junction, Colorado.

Bob Reedy, with Western Gulf in Sacramento, was recently promoted to Zone Geologist in Sacramento. Bob is presently attending a Western Gulf Geophysical Conference in Pittsburgh, Pennsylvania.

Bob Riddle, landman with Humble in Chico, is being promoted to Assistant Area Landman in Los Angeles.

Andy Foraker has been promoted to landman in Humble's Chico office.

Art Hawley, with Western Gulf in Sacramento, was recently appointed Zone Exploration Manager for the Sacramento Valley.

Bill McEachin, with Western Gulf in Sacramento, was recently appointed Zone Landman for the Sacramento Valley.

Taking advantage of the opportunity, Dick Atchison of Ohio, Bakersfield, partook of sulfur bath therapy while well sitting in Paso Robles. Dick claims there's nothing like it for rejuvenating geologists' "subsurface muscles".

"Diz" Deane of Standard has been transferred to a review team in Taft. The valley commuter claims this really impares his pasteboard proficiency.

Casualty-of-the-Month-Club. Bert Amundson of Standard, Bakersfield, after skiing at Alta, is sharing his company with a cast until June 1st. Sort of keeping a stiff upper tibia.

J. Wagner of Union, Bakersfield, having just completed a series of golf lessons finds himself getting more distance out of his clubs by throwing them.

Wedding bells rang for Martin Reiter of Shell, Bakersfield, and Katherine Gregory February 21, in Los Angeles. The newly-spliced couple honeymooned in San Francisco.

The Bakersfield office of Shell is the site of a 30-day winning streak of dominoes. It's a question of whether Tom Brady's nerves will hold out or whether dogged persistence on the part of Dave Hanrahan will turn the tide and break the skein.

Results of noon volleyball at Shell in Bakersfield: Ted Bergen--one broken pinkie; Jess Parker--one strained back; Hal Clifford--one turned ankle. Whatever happened to that less energetic game called tiddlywinks?

Ed Bien of Richfield, Bakersfield, was the guest speaker March 21, for the S.E.G. Ed gave a talk titled "Fragmentary Geological Observations on Formosa (Taiwan)", site of his recent vacation and business trip.

Irv Schwade of Richfield is off again on a three week trip to Peru.

Mason Hill, Richfield's Manager of Exploration, is attending the G.S.A. convention at Eugene. He will present a paper on Classification of Faults.

Dale Duley of Richfield has returned to the Ojai office after a three-month tour of duty in northern Alberta.

Walt Harris, The Texas Company in Santa Maria, has returned to work after spending two weeks in the hospital with Virus Pneumonia.

Word has been received in Santa Maria that former compatriot Bill Hughs, Texaco in Los Angeles, is the proud holder of a life membership in Vic Tanney's Gym and is now subsisting on soybean and carrot juice martinis.

Ernie Bush of G. P., Santa Maria, obtained three Navy Department films on exploration in the Naval Petroleum Reserve No. 4, Alaska. The films, entitled "Introduction to the Arctic", "Exploring for Oil (Geology and Geophysics)", and "Logistics", were shown to the Santa Maria Geological Study Group on March 4, 1958.

A well known Santa Maria cabaret owner has been complaining loudly about the Texas Company transferring his wealthy bachelor customers and replacing them with "poverty-stricken married folk".

Jim Swarbrick of Shell, formerly an exploitation engineer in the Ventura office, is being transferred to geological work in Durango.

The greatest out-fumbling act of the year took place at Little Joe's in L. A. during the A.A.P.G. Convention, with Mickey McKnight and Red Pope of Standard and Jack Nair of Phillip's each trying desperately (and with good reason) to avoid getting stuck with the luncheon check.

Jim Jackson, Art Weller, Jeff Jeffreys, and Jim Swarbrick of Shell have returned to the Ventura office after a week's vacation (drinking rum, fishing, drinking rum, eating shellfish, drinking rum, and sleeping on the sand) at San Felipe, Baja California.

Seen during the convention in L. A.: Bill Horsley, Richfield in Bakersfield, playing the gallant gigolo to two sweet, wealthy, little old ladies in Manning's Cafeteria.

Among the Ventura Basin geologists who attended the Schlumberger Conference in Bakersfield were Jim Trotter and Lou Villanueva of Tidewater, Whit Stucker of Western Gulf, Stuart Keesling, Lee Freeman, and Jim Vernon of Texaco, and Bob Paschall of Hancock.

Dee Trent of Amerada married Miss Pat Hudson, a United Airlines stewardess, on March 22. They are honeymooning in Arizona in his MG.

Fred H. Sperber, Consulting Petroleum Engineer of Bakersfield, passed away unexpectedly due to a heart attack at 4:30 A.M., March 25.

Neil Rosser, Amerada at Ventura, has solved the commuting problem by moving his home from Ojai to Ventura.

Lee Baker of Signal has recently been transferred to Los Angeles from Huntington Beach where he was with Southwest Exploration. On coming up to the big city Lee requested an "iceberg white" company car and got it.

D. Barrett Givens, famed skiing geologist of the Standard Oil Company of California, is currently sporting a plaster argyle as a result of a minor mishap suffered during a recent outing on the slopes.

Friends of Iliff Anderson may be interested to know that a memorial fund has been set up at the U.C.L.A. Geological Department to be used for the purchase of books or equipment in Iliff's memory. Those interested in contributing may do so by contacting Bob Herron at 403 Haberfelde Building, Bakersfield.

Layton Stanton, Union Oil, has been transferred to Denver where he will be Manager of Operations for the Rocky Mountain Division; he was previously Geologic Coordinator of the Canadian and Rocky Mountain Divisions.

Liz Watson, Union Oil, has just returned from a super vacation: 5 weeks skiing in Switzerland and Austria. Hi-lites included the F.I.S. races at Bad Gastein and a day in Vienna as a guest of the Austrian Oil Company complete with opera, chauffeur, and local geology.

The mailing address and telephone number of the Richfield Oil Corporation Coast District Office has been changed effective April 1, 1958. The new address is P.O.Box 828, Ojai; telephone, Jackson 5-3326, Santa Paula. The location of the office is unchanged.

Union Oil Company's Santa Paula office also has a new telephone number, effective April 1: Jackson 5-4422.

Lew Nelson, Ohio Oil Company in Ventura, has been vacationing in Death Valley.

After one of several recent heavy rains, huge chunks of the back yard of Harold Lian's (Union, Santa Paula) home in east Ventura slumped several inches and began sliding slowly but inexorably toward the adjacent barranca. This is an excellent example of the value of geological training in selecting a home site.

Ron Ensign, formerly of California Well Logging, is now with Geologic Engineering Service in Ventura.

Paul L. Hayes is now working as a consulting geologist. Paul's business address is Box 268, Altadena, California, Sycamore 4-7083.

Bill Johnson, Shell geologist from the Alaska district, has been transferred from Seattle to Bakersfield.

K. Molenaar, Shell geologist, Alaska district, has been transferred to Eugene, Oregon.

Bob Schupp, graduated into the two car class with a new '58 Buick, might be permitted to drive the new one to work within the next few years.

NURSERY ITEMS

Ruth and Hy Seyden of Standard announce the birth of Rick Allen born March 2 at 5 pounds 11 oz.

Lavonne Eileen Laswell born February 27 at 8 pounds 1-1/2 ounces to Don and June. This is the third lovely lady for the Laswells.

Krista Marie Schlax, a second daughter, was born on March 4 to Joan and Bill Schlax. Bill is with George H. Roth and Associates of North Hollywood.

Bob Carlson of Union in Orcutt is the proud father of a baby boy, Joseph, born February 21, 1958. This makes seven children for the Carlsons.

CALENDAR

April 2, 1958: Wednesday, 7:00 P.M., A.A.P.G. Forum Meeting, Auditorium of the General Petroleum Building, 612 Flower Street, Los Angeles, "Geologist in New Guinea" by Victor King, exploration manager for General Petroleum; and a film titled "This Way Up" which depicts a helicopter moving a rig in New Guinea, presented by Sikorsky Aircraft Corporation..

April 8, 1958: Tuesday, 7:30 P.M., Coast Geological Society monthly dinner meeting, Miramar Hotel, Santa Barbara, "The San Gabriel Fault Problem in the Castaic Area" by Ted Off, Ojai Oil Company.

April 8, 1958: Tuesday, 7:30 P.M., Sacramento Geological Society, Board Room of Public Works Building, 1120 N Street, Sacramento, "A Proposed Binomial Nomenclature for Sedimentary Rocks", by Mr. V. E. McKelvey, U.S.G.S. Mineral Deposits Branch.

April 9, 1958: Wednesday, 6:30 P.M., Dinner Meeting, A.I.M.E. Junior Petroleum Group, Candlewood Country Club (formerly Clock Country Club), 14000 Telegraph Road, Whittier, "Offshore Drilling from a Floating Barge, the CUSS No. 1", by R. F. Bower, A. J. Field, and H. Stratton, C.U.S.S. Group.

April 15, 1958: Tuesday, Noon, S.E.G. and A.A.P.G. Joint Luncheon, Roger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "Paleomagnetism", by Dr. S.K. Runcorn, world authority on residual magnetism who has uncovered new material supporting continental drift.

April 21, 1958: Monday, Noon, A.I.M.E. Petroleum Forum, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "Mechanics of Compaction and the Precision Collar Location Technique", by Mr. Jan Law, Consultant.

April 27-30, 1958: A.A.P.G. Rocky Mountain Section Eighth Annual Meeting, Casper, Wyoming.

BIBLIOGRAPHY OF RECENT PUBLICATIONS

American Association of Petroleum Geologists

A guide to geology and oil fields of Los Angeles and Ventura regions. Edited by James W. Higgins. 232 pages, 88 illustrations. (Price \$7.00 - order from Martha Gallagher, Kern Oil Company, 907 Wilshire Blvd. Los Angeles)

United States Geological Survey

Professional Paper
314-C

"Stratigraphy of pre-keweenawan rocks in parts of northern Michigan," by Harold L. James.

Bulletin 1021-N

"Geology of the Clarkdale quadrangle, Arizona," by Robert E. Lehner.

Circular 402

"Water and the conservation movement," by Luna B. Leopold.

Mineral Investigations
Field Studies Map
MF 137

"Preliminary geologic map of the Leadpoint quadrangle, Stevens County, Washington," by R. G. Yates and J. F. Robertson.

Oil and Gas Investigations Chart OC 57

"Stratigraphy and foraminiferal zonation in some of the tertiary rocks of southwestern Washington," by Weldon W. Rau (To be released for sale - March 31, 1958)

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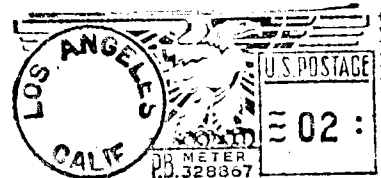
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No. 4

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Fred R. Neumann
381 E. Fourth Street
Chico, California

CA



PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 12

May 1958

No. 5

ASSOCIATION ACTIVITIES

COAST GEOLOGICAL SOCIETY

Ted Off, Ojai Oil Company, was the featured speaker at the monthly dinner meeting of the Coast Geological Society, held April 8 at the Miramar Hotel in Santa Barbara. His subject was "The San Gabriel Fault Problem in the Castaic Area." Ted presented a re-evaluation of the type and magnitude of movement which has occurred along the San Gabriel fault and the Palomas fault, its companion feature to the northwest.

In recent years, the idea of large (15- to 25-mile) post-Miocene strike-slip movement on these faults has been postulated in several speeches and articles, primarily by Dr. John C. Crowell of U.C.L.A. That concept is based on the fact that, northwest of Castaic, upper Miocene anorthosite-bearing conglomerates on one side of the fault lie opposite upper Miocene gneiss-bearing sedimentary breccias on the other side. The inference has been made that basement masses with those source rocks must once have been opposite these coarse clastics, and that such basement masses could have been removed from the area only by strike-slip fault movement.

Several features were pointed out which afford an interpretation for the region's history based on vertical fault movements only:

1. In and near the Honor Rancho oil field, two cases of sedimentary gradation have been established in recent years. First, the brackish-water Castaic formation, of upper Miocene age, grades southwest across the "fault" into the uppermost part of the Modelo formation. Second, the upper part of the underlying nonmarine Mint Canyon formation grades southwest across the "fault" into the lower Mohnian portion of the marine Modelo beds. In other words, both the San Gabriel and Palomas faults die out in the Newhall-Castaic downwarp, and marine and non-marine beds interfinger in this vicinity. This interfingering, in itself, invalidates the strike-slip concept.

2. Isopachs of the Castaic formation and the upper Modelo reveal that their maximum developments (both are over 5,000 feet thick) are directly opposite one another. This suggests that the brackish-water Castaic beds, northeast of the two faults, were deposited in a San Francisco Bay type of environment, grading into open-ocean Modelo beds only at the "Golden Gate" near the Honor Rancho field. A remarkable coincidence must be invoked in order to bring these two units into juxtaposition by large strike-slip fault movement.

3. The Soledad Canyon area, east of the San Gabriel fault, is the apparent eastern (continental) end of the Ventura Basin downwarp, at least for the Miocene series. If it is the basin's east end, no large strike-slip movement may be considered. If it is not the east end,

the basin's east end must have been moved twenty miles to the southeast, completely removed by erosion, and replaced in space by a basin of similar dimensions and sediments.

4. Field geology northwest of Castaic shows that there is a gneissic mass and pre-Miocene anorthosite conglomerates, which could have furnished clastic debris to the areas required, employing vertical movement only. This does not prove vertical movement, of course, but it does offer a feasible alternative to the strike-slip hypothesis.

5. Palinspastic cross-sections across the Palomas and San Gabriel faults reveal that vertical movements of only 5,000 to 8,000 feet can account for present structure and stratigraphy. Horizontal movement of 100,000 feet or so is not required.

6. Possibly correlative Eocene-Oligocene sequences are structurally aligned on opposite sides of the Palomas fault. Large horizontal movement does not properly account for the present distribution of such rocks.

In summary, it was remarked that Miocene sedimentary gradations near the Honor Rancho preclude large post-Miocene strike-slip fault movement. Even without that evidence, however, a remarkable series of coincidences would have been necessary, in various aspects of structure and stratigraphy, to have produced the present geology by strike-slip movement.

Following Ted's talk, John Crowell presented a review of the lines of evidence favoring long lateral displacement on the San Gabriel fault (Bull.A.A.P.G., Vol. 36, no. 10, pp. 2026-2035; and Calif. State Div. Mines Bull. 170, Ch. IV, pp. 49-52). While conceding that the new evidence which was presented (especially points 1 and 2 above), if correct, effectively refutes the concept of long lateral movement, John felt that some of his original arguments for such movement are still valid. In addition, Bill Corey of Continental, offered new data - chiefly the presence of oblique-slip slickensides, dipping at angles of 25 - 30°, on both the San Gabriel and Palomas faults - which indicate that movement with the strike-slip component predominant has occurred on the San Gabriel-Palomas fault trend.

A lively and stimulating discussion ensued, with several members of the large audience contributing questions, answers, and observations relating to the problem. It was generally agreed that: (1) Ted and his associates have made a significant contribution in presenting this new evidence and interpretation; (2) Neither Crowell's original hypothesis nor Off's new interpretation satisfactorily accounts for all observed geologic features; (3) A great deal more field and sub-surface work remains to be done before a perfect solution to the San Gabriel fault problem is attained.

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NEXT DEADLINE MAY 29, 1958

FORUM MEETING

At the Geological Forum, Wednesday, April 2, 1958, V. H. King, Manager of Exploration for General Petroleum Corporation, discussed general drilling operations and exhibited Kodachrome slides of Papua. Historically, a number of shallow wells had been drilled in Papua prior to World War II. The first concerted attempt to explore the oil prospects of the country began in 1936 when Australasian Petroleum Pty. Ltd. commenced operations. The A.P.C. has drilled thirteen wells aggregating over 100,000 feet of exploratory footage, in addition to operating magnetometer, gravity, seismic and geological field parties. No significant oil showings have been reported. Two wells have established strong flows of gas.

Much of the area is covered with thick tropical rain forest, and transportation of heavy equipment is principally limited to use of water-born equipment. Road building costs to exploratory locations, removed any distance from the larger rivers, have been inordinantly expensive. In an effort to reduce these costs, and also to cut down the time element necessitated by slow progress of building roads, the A.P.C., in 1957, employed three Sikorsky S-58 helicopters to haul drilling equipment. The draw-works, pumps, sub-bases, derricks, and other equipment, were stripped or disassembled into loads not exceeding 4000#. Loads were so organized in the trip schedule that the helicopter eliminated the necessity of cranes, A-frames, etc. in the rig construction. Field reports indicate that this method of transport has been entirely successful.

SAN JOAQUIN GEOLOGICAL SOCIETY

On Tuesday, April 1, 1958, the San Joaquin Geological Society met at the El Tejon Hotel in Bakersfield. The guest speaker for the evening was Mr. John Walstrom with the Standard Oil Company of California, who gave a very interesting talk titled "Latest Developments in Formation Evaluation."

A short run down was presented on types and applications of presently available formation evaluation methods and tools whose availability for general use is in the near future.

Among the many new tools and evaluation methods, those employing some form of radioactive agent for the detection and development of hydrocarbons are becoming more exacting so as to become more useful to all.



IN MEMORIAM

S. Rush Bailey, Chief Geologist for Mohawk Petroleum Corporation, was killed on April 21, 1958, in a mid-air collision over Nevada between a commercial airliner and an Air Force Fighter.

Mr. Bailey was born in Christine, Texas, on April 18, 1922, and received his high school education in San Antonio, Texas. He attended Baylor University and the University of Texas. After three and one-half years service during World War II as a pilot with the Army Air Force in the continental United States and Europe, he completed his formal education at UCLA, where he received his B.A. degree in Geology, in 1948.

After graduation he was employed by Stanolind Oil & Gas Co. (now Pan American Petroleum Company) in Midland, Texas, and became associated with Mohawk in October, 1951. He remained in Texas until February, 1953, when he was transferred to Bakersfield, California, and then to Los Angeles, in 1954.

Rush Bailey was a member of the A.A.P.G. and A.I.M.E.

He is survived by his wife, Loretta; a son, Rush III; a daughter, Tina; his parents, Mr. and Mrs. Samuel Rush Bailey; and sister, Frances Taylor, of San Antonio, Texas.

He will be greatly missed by his associates and countless friends in the oil industry.

It is the wish of Rush Bailey's wife that in lieu of flowers, the money should be donated to the Exceptional Children's Foundation. Anyone wishing to contribute to this fund should send his check and address to Bob Knapp, Standard Oil Company of California, 605 West Olympic Boulevard, Los Angeles 15, California. Make all checks payable to the Exceptional Children's Foundation.

SACRAMENTO GEOLOGICAL SOCIETY MEETING

Dr. V. E. McKelvey, with the U.S.G.S. Mineral Deposits Branch in Menlo Park, was the guest speaker at the Sacramento Geological Society meeting of April 8, 1958. Dr. McKelvey presented an interesting paper on "A Proposed Binomial System of Sedimentary Rock Nomenclature."

"In this system the full name of most rocks consists of two nouns, one of which reflects the mineral composition of the main part of the rock, the other the texture. Most existing names can be used in this system with little or no change in their basic meaning, and although a few names need to be coined to achieve a comprehensive nomenclature, most of them are formed by readily understandable combinations of existing terms."

"The nature of the changes proposed and the need for them are best understood in the light of current nomenclatural practices."

The conventional classifications of sedimentary rocks are usually divided into two main genetic groups, e.g. detrital and chemical. The names (i.e. nouns) applied to rocks within these groups are descriptive and generally reflect one major property in the realm of either composition or texture. A few, such as chalk and quartzite, describe both composition and texture. Under the conventional system a complete description is attempted by the use of modifying adjectives.

Weaknesses of the Conventional System:

(1) Most of the existing names reflect either texture or composition and few describe both; with the result that the property not described by a noun is subordinated in observation. (2) Many of the present names overlap in meaning. For instance, a sandstone, defined on the basis of texture alone might also be called a limestone if defined on the basis of composition. (3) The definitions of names are not standardized and often vary considerably from author to author (graywacke, for example). (4) The use of adjectives to describe the composition of a rock named on the basis of texture and vice versa is ambiguous in basic meaning. (5) The use of identical names, such as glauconite and dolomite, for both minerals and rocks and others such as oolite and pisolite for both grains and rocks is confusing.

Grabau's Classification: "The classification and nomenclature of sedimentary rocks devised by Grabau is by far the most systematic and comprehensive yet developed." In his classification sedimentary rocks are divided into two main groups - endogenetic and exogenetic. The main names in this system denote size of grain and kind of grain e.g. rudite, arenite, lutite, etc. Prefixes are added to the main name to indicate composition (e.g. silici, calc, argil, etc.) and genetic processes (e.g. hydro, anemo, bio, etc.).

Disadvantages of Grabau's System: The most frequently mentioned disadvantage of Grabau's system is that his terms are complex and unappealing. A more serious disadvantage is that the textural part of his names reflect only grain size and ignore sorting and roundness. In addition his compositional terms are too general for many purposes and his terms for source sometimes mean environment, sometimes agent. For instance, bioclastic means broken by organisms and a fragmented crinoidal limestone would be a hydro-calcarenite.

Proposed Binomial System: The purpose of this system is to provide a nomenclature that

describes both composition and certain aspects of texture, namely grain size, sorting, roundness, and morphology, by means of already established or readily understandable terms. The system proposed is wholly descriptive. (1) Two nouns are used for the rock name, the first describes composition, the second texture (e.g. quartz sandstone). (2) Additional mineral or rock particles that occur in amounts of approximately 20 percent or more are named as nouns (hyphenated), the least abundant first--e.g. apatite-quartz sandstone. Lesser constituents are not part of the rock name, but may be mentioned in supplemental description. (3) Sedimentary rocks are considered to be made up of six different grain morphological types as follows: pyroclastic, clastic, bioclastic, biolithitic, crystalline, and colloform. (4) Mixtures of grain-morphological types are portrayed by the use of hyphenated nouns, analogous to those used for mineral composition, e.g. glauconite-quartz oolite-sandstone. (5) The textural name is based on what the rock is observed to be now, not what it may once have been. (6) Either the compositional or the textural names may be used alone. (7) When both names are used the compositional name is a mineral name. When the compositional name is used alone it is a rock name (limestone, bentonite, bauxite, etc.).

Supplemental Description: The name of a rock in the binomial system consists only of nouns which are intended to reflect the main aspects of composition and texture. To make the description complete, a supplemental description should follow the rock name.

The binomial system of nomenclature as proposed makes it possible to indicate the most fundamental rock properties in the rock name. This system lends itself well to several classifications based on composition, texture or a combination of both.

SAN JOAQUIN SEG MEETING

The Bakersfield-Hacienda was the gathering grounds on Tuesday, April 15, 1958, for one of the largest turnouts of Geophysicists in the Valley. A technical program of Geophysics was presented during the day by men whose experience in the field furnished a valuable wealth of data to all present. The highlight of the session was an enlightening talk by AAPG-SEG Distinguished Lecturer, Dr. S. K. Runcorn, professor and director of the Department of Physics, Kings's College, University of Durham, Newcastle upon Tyne, England.

Dr. Runcorn is an internationally renowned authority on residual magnetism in igneous and sedimentary rocks. The direction of this magnetization can often be shown to have changed little since early in the history of the rock. The directions of magnetization of such "stable" rocks (i.e., red sandstones and basalts), in one continent vary greatly through the geological column. If it is assumed that on the average the geomagnetic field is a dipole then the directions of magnetization may be represented by a slow motion of the dipole axis relative to the sampling site through geological time.

Theory and observation alike suggest that the magnetic axis of the earth when averaged over times longer than a few thousand years coincides with the axis of rotation. Examination of plots of the residual magnetism of the continental areas shows centers of magnetism which in turn vary through geologic time, giving indications there has been considerable polar wandering at a roughly constant

rate through geological time. Some comparison between the paleomagnetic results and paleoclimatic evidence is possible, and the results are correlative.

The observations made from the residual magnetism plots can be interpreted to mean that the continents of the earth were not always in their present geographic positions.

Many geologists and geophysicists have rejected the theory of continental drift in the past, because the evidence was qualitative, based on these observations of unusual distribution of prehistoric fauna and flora, evidences of different prehistoric climates, and the pure coincidence of apparent fitting together of the various continental masses. The work of Dr. Runcorn and others affords quantitative evidence to support the theory.

Dr. Runcorn's studies are continuing, and, at the present, are directed at gathering "evidence" from the South African, South American, and Antarctic Continents. If the theory can be demonstrated as quantitatively acceptable, it explains many geological phenomena such as the origin of great mountain ranges and huge basins of sedimentary rocks containing reservoirs of oil and gas, which have puzzled earth scientists for so long. Location and frequency of earthquakes and volcanic activity can also be better explained.

NOTICE

The Roswell Geological Society will conduct its Eleventh Field Conference on Wednesday, Thursday and Friday, May 14, 15 and 16, 1958. This Conference will include trips to the Hatchet Mountains, Cooks Range and Florida Mountain Areas in extreme Southwestern New Mexico.

Registration fee and reservations must be in by May 1, 1958. The fee will be \$7.00, which will include a guidebook. Students may register free.

For further details contact George R. Washburn, Chairman, P.O. Box 6732, Roswell, New Mexico.

NOTICE

1958 A.A.P.G. Guide Book is still available. Contact Martha Gallagher, c/o Kern Oil Co., 430 Statler Bldg., L. A. 17. Make checks payable to Pacific Section, A.A.P.G.

PERSONAL ITEMS

"Party Poopers" - that's the name currently given the Shell Geologists in Sacramento who didn't stick around for the second day of the field trip. Bob Ohrenschall and Swiss Holmes were there to the end.

A number of Geologists were seen charging through a patch of poison oak during the grand rush for the beer wagon on the Sacramento Geological Society Field Trip. No reported victims as yet.

Woody Hinricks of Fairchild was in London recently and reports that the Glen Ledinghams are now fully acclimated and send greetings to their friends in Southern California.

The spirit that won the West is not dead. Just after the last big storm, Dick Stewart and Carl Bidingier of Union, Santa Paula, launched a leaky rubber life raft at the mouth of Castaic Creek and rode it for more than 7 miles down the rain-swollen, turbulent Santa Clara River, until darkness and wetness forced a halt. The raft capsized at least once, and Dick reports that swimming in the Santa Clara River is a little like falling into a mud sump.

While we're on the subject, Bob Herron of Hancock in Bakersfield is contemplating a boat trip down the San Juan and Colorado Rivers around July 1 and is looking for companions.

Bill Yost, Shell production geologist, has been transferred from the Bakersfield office to Ventura after spending 3-1/2 chilly months well-sitting in snowy Colorado.

The Santa Maria office of the Division of Oil and Gas has a new mailing address: P. O. Box 227, Santa Maria.

Glen Ware of the Texas Company has been transferred from Ventura to Sacramento.

Don Hagen of Texaco, Ventura, has been temporarily transferred to the Alaskan Group in Los Angeles.

Because of a severe cold, Harold Lian of Union in Santa Paula was forced to turn down the golden opportunity of spending an evening with some of his company's other executives at the Desk and Derrick Club's recent Industry Appreciation Dinner.

Frank Yule of G. P., Ventura, is now driving a beautiful metallic maroon reconditioned '52 MG, supercharged, full-blown, and completely sporty, for a company car. This is a recession? Recently, Frank's MG broke down and he had to be towed from the highway to G.P.'s garage.

The yachting season at Santa Barbara has officially opened for the local geological fraternity. John Curran of Honolulu (becalmed) and Pete Hall of Richfield (on the wrong course) were among those entered in the first race.

Santa Barbara geologists will present talks and field trips for the Boy Scouts (Mission Council) at their Camp Drake in the Santa Ynez Valley during June and July. This is part of the Mission Council's continuing geological program, and the geologists involved are to be highly commended for their participation.

The morning coffee break at the Honolulu Oil Corp. office in Santa Barbara on April 8 was highlighted by a floor show better than the Colony Club's finest. Across the street, dancing with gay abandon on a front lawn, was a completely nude well-endowed blonde yelling "Live Modern!" John Curran reports that the services of 5 police officers and two nurses were required to get her into an ambulance; John was too engrossed to offer assistance. Lowell Redwine later complained of bad luck in being out of town that day after 12 years of watchful waiting.

Rich Rowland, with Ohio in Sacramento, is being transferred to Paso Robles.

During the Sacramento Geological Society Field Trip, Bob Lindbloom, with Standard in Bakersfield, was seen enjoying a cool dip in the Stanislaus River in the company of a female Geologist from the U.S.G.S.

Swiss Holmes, with Shell in Sacramento, demonstrated his ability to talk his way out of a tight spot during the recent Sacramento Geological Society Field Trip. Swiss had been pushing Keith Jones' (Western Gulf, Sacramento) auto, which had developed fuel pump trouble near Jackson, when he was stopped by a Highway Patrolman who proceeded to give him a ticket for following Keith too closely. Swiss then succeeded in convincing the lawman that he was supplying the means of locomotion for the car in front and that he was not merely following it.

Charlie Guion has been seen sitting in the same chair each week in the scout meeting at the Sacramento Inn. It's not that this one chair is particularly comfortable, it just happens to be the only chair providing a view of the fair damsels in the swimming pool.

Charlie Cross, with Honolulu in San Francisco, arrived in Sacramento for the Field Trip without his khaki trousers. He went to the local Sears store to buy a pair, but not without some difficulty. The saleslady had quite a time convincing Charlie he needed a size 36" - 30" instead of the "boyish figure" 30" - 34" he kept demanding.

Whit Stucker of Western Gulf has been transferred from Ventura to Turkey. Whit showed great foresight in equipping himself with a hookah, fez, and personal toilet seat (all required items in Turkey) before he left.

Warren Hagist is living a life of carefree abandon amidst the Bohemians of West Los Angeles. His latest experience of note was to discover that Martinis served in brandy snifters are called "Mammoth Martinis".

Bill Kleinpell, Bakersfield consultant, is considering setting up bleachers and selling royalties on the hot dog and binocular concessions for the ringside window he has facing the hotel across the street. Last week a nude beauty held his rapt attention so long that he almost missed lunch.

John Reckamp, Western Gulf, late of Bakersfield, has been transferred to Gulf's eastern sphere of operations and will work out of Ankara, Turkey.

Among the Bakersfield group that went on the "Mother Lode" Country field trip were Bob Herron and Dan Klemme (Hancock), T. J. Brooks (Ferguson and Bosworth), and Vince Scurry (Seaboard). The fellows felt that the weather, scenery, and historic background of the area helped make a superb field trip. Bob said he brought back some color slides, rock samples and a latent desire to join the pick and pan bunch and forget all about oil.

Texaco moved into their new 12-story building at 3350 Wilshire Blvd. on April 21st. The new phone number is Dunkirk 5-0515.

G. E. (Jerry) Knowles, Richfield Oil dreamy-eyed geologist, has returned from his short sojourn in Colombia; he is going back to be married to a lovely little senorita he met while supposedly being out in the jungle working. He and his bride will return to Los Angeles from their honeymoon a week before the Richfield Spring Field Conference. Jerry says he doesn't think he will be able to make the conference this year.

John Szatai, foreign exploration geologist for Richfield Oil, finally made it out of

continental United States. John has been packing and unpacking his suitcase for the past two years. His trip will cover the Middle East.

Bill Bishop and Les Brockett, Richfield geologists, are househunting in Alaska. Anyone interested in buying a house in the Inglewood or Los Alamitos area?

Bob Jennings and Dee Trent of Amerada will soon be on their way to Alaska for the summer. Bob may have to go alone as Dee is now sick in bed.

Overheard during a demonstration of one of Schlumberger's newest tools was this comment, "with their background and reputation they could sell a pickle on a string."

Franco-Western has hired Ray Knight to operate out of their Farmington office. Ray graduated from USC and was formerly employed by Shell in Durango.

Bakersfieldians Jim Kurfess and Bill Haney (Tidewater), Murray Nadler (Franco), George LaPerle (Richfield), and Ed Tilbury have been toning muscles and losing weight (?) via the handball at the Elks method. Round robins on the courts are followed by rounds of brew. Point and counterpoint.

Dave Callaway with Oceanic in Bakersfield has put into operation a consulting dipmeter computing service. This after-hour sideline must be responsible for those bags under his eyes.

A couple of terrific oil (or is it elderly?) tennis players, Lee Jordan and Ed Wellbaum of Kern Oil have been astounding youngsters, Frank Weagant and Dick Vaughn (Franco-Western) with their stamina and champion-playing ability.

J. Wagner of Bakersfield is the hero of the local Union Oil Bowling League by virtue of capturing high series for the year.

The current recession has gone to Ed Borglin's head. During a recent group-sponsored function in Bakersfield, he locked up the whiskey to save the fellows money and they had to fight him to get to it.

The Bakersfield Exploration group of Standard has two volleyball teams in the City League. Captained by Greg Stanbro and Dick White they have batted .500 in six games.

After bidding and making Seven No Trump during lunch at Standard in Bakersfield, Bob Lindbloom is beginning to believe that maybe bridge, rather than the Thespian art, is his calling.

Ben Phillips with General Petroleum in Bakersfield has been tapped for Alaskan duty this summer.

New aspirants for the "lardlorn" column are T. J. Brooks, Harold Billman, and Harold Bosworth who have been conscientiously working out at Strellich's gym in Bakersfield.

Bob McConville with Signal has left the Bakersfield scene for an indeterminate tour of duty in Venezuela. Those who wish to send "Care" packages, please contact Bob Scott.

Bob Ohrenschall, with Shell in Sacramento, is wanted by the Amador County Goat Herders

Association, that is if there is such an organization. Bob took his dog along on the field trip and while eating lunch the pooch succeeded in sending a sizable herd of goats scurrying over fences in all directions.

John Sloat of Union Oil Company was recently seen in the Palmer and Anchorage areas of Alaska. Specifically he was spotted by Bob Brace and Bob Kropschot of Standard who immediately hid all their seismic data and installed anti-swab gear. They say Sloat went away moose-happy.

George Brown, with Ohio in Los Angeles, is being transferred to Bakersfield, he will be leaving behind two broken-hearted beauties.

Ron Heck of Sunray married Shirley Wasden on April 12th.

Dick Eckhardt of Sunray is another of the numerous Alaskan emigrants. Dick is driving north in a 3/4 ton pickup; we hope he makes it OK.

Recently Texaco scout Austin Drake, while looking over the Imperial Valley region, noticed a derrick man hanging helplessly in his safety belt. Austin alerted the drilling crew and they got the man down without injury.

The big black bug noted on Harry Stuveling's arm last week at 3 A.M., en route from the Ventura bridge? party was not the result of the party as feared. It was alive and crawling (thank goodness) when found in the car the next day.

After six months of going away parties, the Bakersfield contingent is now in the midst of plans for a homecoming party for Bob McConville of Signal. Latest reports had Bob's company car "lost" in an L. A. parking lot.

George Feister of Union Oil has been transferred from Pacific Coast Exploration to the job of Assistant Geological Coordinator located at Los Angeles. He will be concerned with geology throughout the USA except for the Pacific Coast.

Howard Barnes, Shell at Olympia, is working in the Los Angeles office for a two-month period.

Keith Oles, Union geologist in the Special Exploration Group, is being transferred to the Rocky Mountain Division at Denver.

Bob Scott, of Texaco, has caught a variety of things while fishing off the Paradise Cove Pier. Among his recent catches are two sharks, a 10 lb. loon (genus *Gavia*) and a small gastropod.

NURSERY ITEMS

John and Patty Kirkpatrick are the proud parent of Sandra Lea Kirkpatrick, weight 5 lbs 10 oz. Born April 3, Sandra is the first child for the Kirkpatricks.

A twin birth for the Bob Scotts, with Signal in Bakersfield. Born April 16, the newcomers are doing nicely but have a hangdog look.

Phyllis and Bob Morrison, Richfield in Ojai, announce the birth of their second daughter, Suzanne Ashby Morrison, April 12, weighing 7 lbs 9 oz.

Ed and Joyce Taylor, Western Gulf, announce the birth of David Byard Taylor on April 12th.

Dave weighed 6 lbs 14 oz, and is the Taylors' second son.

Bob and Rita Wheaton, Union Oil, Bakersfield, have a son, 7 lbs 4 oz. Robert O. Wheaton, Jr. was born April 27th.

ANNUAL STAG PICNIC JUNE 6, BRITT PARK



CALENDAR

May 2-3, 1958: A.A.P.G.-S.E.P.M. Annual Spring Dinner Meeting and Field Trip, Imperial Valley Region, Friday, 7:00 P.M., Firecliff Lodge, Palm Desert.

May 8, 1958: Thursday, Noon, S.E.G. Luncheon Meeting, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "Resolution of Anomalous Masses" by E. V. McCollum, Easy, McCollum and Company, Oklahoma.

May 12, 1958: Monday, Noon, A.A.P.G. Luncheon, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "Application of Recent Sediment Studies to the Interpretation of Ancient Deposits", by Dr. Tjeerd H. van Andel, A.A.P.G. Distinguished Lecturer.

May 12, 1958: Monday, 7:30 P.M., Coast Geological Society Monthly Dinner Meeting, Miramar Hotel, Santa Barbara, "Application of Recent Sediment Studies to the Interpretation of Ancient Deposits," by Dr. Tjeerd H. van Andel, A.A.P.G. Distinguished Lecturer.

May 13, 1958: Tuesday, 6:00 P.M., Sacramento Geological Society, Annual Dinner Meeting for members and wives, Del Prado Restaurant, 5500 Stockton Boulevard, Sacramento, "Looking for Oil in Alaska", by Dr. Max Birkhauser, Shell Oil Company.

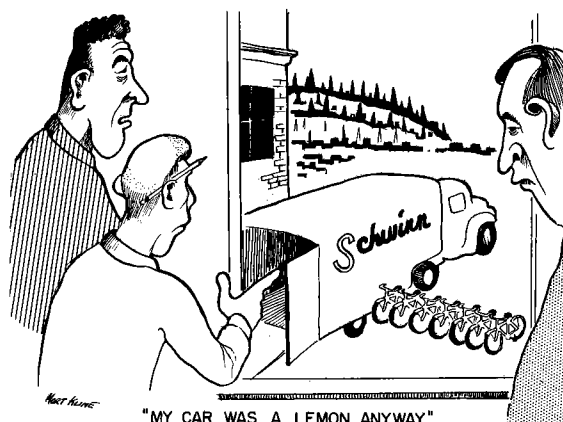
May 14, 1958: Wednesday, 6:00 P.M., Dinner Meeting, A.I.M.E. Junior Petroleum Group, Candlewood Country Club, Telegraph Road, Whittier, "Secondary Oil Recovery using L.P.G. Injection", by Stan Rawn, California Research Corporation.

May 17, 1958: Saturday, 8:00-9:00 A.M.,
Speedway Parking Lot (on North Chester Avenue,
Oildale), San Joaquin Geological Society Annual
Field Trip.

May 19, 1958: Monday, 7:00 P.M., A.A.P.G. Forum,
General Petroleum Auditorium, Los Angeles.
"Movement on the San Andreas Fault since Miocene
Time", by Gerald Fletcher, graduate student UCLA.

June 6, 1958: Friday, A.A.P.G. Annual Spring
B.B.Q. at Britt Park, Ventura County, & Golf
Tournament preceding.

June 6, 1958: Friday, Lakewood Country Club,
A.P.I. Golf Tournament and Barbecue.



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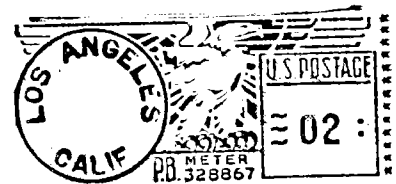
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NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 12

June, 1958

No. 6

ASSOCIATION ACTIVITIES

A. A. P. G. LUNCHEON MEETING

Dr. Tjeerd H. van Andel, Scripps Institute of Oceanography, enlightened members of the Pacific Section at the monthly luncheon meeting, with an A.A.P.G. distinguished lecture on the "Application of Recent Sediment Studies to the Interpretation of Ancient Deposits". Dr. van Andel is at present, Project Director of the A.P.I.'s Research Project 51.

Regional paleogeographic investigations of basin-wide extent, formed the nucleus of the material presented. Various aspects of the study of ancient sedimentary facies and of paleogeography were discussed in connection with the results of modern regional studies of Recent depositional basins, as for example, the Gulf of Mexico, Orinoco shelf, and the Rhone and Rhine deltas.

Principal aspects of paleogeographic research are: (1) the recognition and mapping of facies units and the position of shore lines; (2) the location and nature of sediment sources and the pattern and rate of sediment supply; (3) the degree and type of tectonic control, tectofacies distribution and the rate of subsidence; and (4) the study of trans- and regressions and the depositional history of the basin. The results are of interest, both geologically and also economically, since they, for example, permit the identification of zones of potential oil source and reservoir rocks and the evaluation of the time, direction and efficiency of oil migration.

As a consequence of the principle of uniformitarianism, if accepted with reservations, the study of Recent sediments is one of the key methods leading to the interpretation of ancient deposits. Close correlation between these two types of research, however, is required, since many techniques applied to Recent sediments are not applicable in the study of ancient deposits, and time and the vertical sequence of beds so important in ancient deposits are not readily studied in modern sedimentary basins.

In a regional approach, where control points are widely spaced, both vertically and horizontally, broad facies units have to be used. By simple techniques a number of such units have been distinguished and described for various modern basins, as for example, the Gulf of Mexico and the Orinoco shelf. Their patterns and characteristics were outlined briefly. Very similar facies and facies patterns can be distinguished in many ancient basins, of which the older Tertiary of Western Venezuela may be cited as an example. Basic techniques in such a study are isopach, lithofacies, biofacies and simple petrographic analysis.

Studies of the mineralogical composition of Recent sediments based on heavy and light minerals have shown that far-reaching conclusions can be drawn concerning the nature of the source areas and

the patterns of distribution of the sediments. Good examples are the Gulf of Mexico and the Gulf of Paria-Trinidad. Occasionally, severe limitations are imposed by the presence of strong facies control of mineral assemblages as shown by a study of the Rhone delta. Interesting examples of the application of mineralogical analysis to the investigation of the depositional history of sedimentary basins are provided by the Tertiary Molasse Basin in Bavaria, Germany, and by the Cretaceous and early Tertiary of Western Venezuela.

In Recent sediments the approach so far has been very largely descriptive. Hence, the application to the investigation of ancient basins is restricted to direct comparison rather than based on the understanding of fundamental physical and chemical processes of sedimentation. Consequently, detailed applications have been successful primarily in Tertiary basins where physical and biological conditions were reasonably close to those prevailing today. Considerably more difficulty is encountered in the interpretation of Mesozoic and Paleozoic sediments because of the great differences in fauna, vegetation cover, source areas, climate and partly also general tectonic conditions. Moreover, the study of Recent sediments has been restricted largely to clastic terrigenous deposits in just one type of tectonic and physiographic setting which is best typified by the Gulf of Mexico. Narrow basins with strong tectonism, fault grabens and intracratonic troughs, and calcareous, siliceous, phosphatic or ferruginous sediments have not received comparable attention. Great advances in our understanding of ancient basins may be expected when these blank spots obtain adequate coverage. Nevertheless, it is Dr. van Andel's conviction that much time and energy will be lost if ancient basins do not, simultaneously, receive similar attention, so that the results of both types of research may mutually influence each other.

SAN JOAQUIN GEOLOGICAL SOCIETY

The San Joaquin Geological Society presented its first Spring Field Trip May 17. 190 geologists and paleontologists turned out for the event and it is hoped that the Society will make this an annual affair. The trip titled "Eastside Structure and Stratigraphy" dealt with the Round Mountain area, a segment of the east side of the San Joaquin Valley. Exposed strata along the route included most of the stratigraphic section from the "basement complex" (Jurassic), to the Kern River formation (Pliocene). Dana Detrick (Shell) was the field trip chairman. Trip leaders, Otto Hackel and Ken Krammes (Intex), also talked on the stratigraphy of the area. Other speakers included Herb McMasters (Honolulu) who spoke on structure, Cliff Church (Tidewater) on megafossils, and Stan Beck on microfossils. Cutler Webster handled the refreshments and T. J. Brooks the guidebooks, which included a section, map, road log, and copies of talks. For anyone who missed

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NEXT DEADLINE JUNE 26, 1958

the trip, but would like a copy of the syllabus, Margaret Dunn of Petroleum Secretarial Service in Bakersfield has them for sale at \$1.00 per copy.

FORUM MEETING

At the Los Angeles Geological Forum Meeting on Monday, May 19, 1958, Gerald L. Fletcher, graduate student at U.C.L.A., presented a talk on "Movement on the San Andreas Fault Since Miocene Time".

The controversy among California geologists concerning the nature and amount of movement along the San Andreas fault has persisted for nearly fifty years and still is far from being solved. Two factions predominate, those in favor of right lateral movement and those in favor of recurrent vertical movement. The conclusions presented by the speaker indicate that there has been large right lateral movement along the fault zone.

The sediments selected for study along the central portion of the San Andreas fault were those of the Santa Margarita formation of Delmontian age. This part of the section lends itself very well to a study of this type because it contains unique and areally restricted rock types such as the coarse clastics of the Temblor Range and the Red Hills conglomerates. The coarse clastic Santa Margarita of the south end of the Temblor Range represents probably the most distinctive environment and lithology anywhere on the east side of the fault and for this reason its outcrop area is taken as a reference area on the east side of the fault. A search was made on the west side for a source for this material and for an equivalent stratigraphic sequence. The preliminary examination of the area west of the fault singled out three areas as possible correlatives of the Temblor region. These, in turn, were systematically examined in order to see if they satisfied the conditions dictated by the environment and lithology of the Santa Margarita of the Temblor Range.

Correlations made on the basis of stratigraphic and lithologic similarity of the Delmontian sedi-

ments on either side of the fault and the similarity of source areas for these sediments, indicate that the Pinnacles region was adjacent to the south end of the Temblor Range during the Delmontian age.

The amount of movement which these correlations indicate is approximately 125 miles in a right lateral sense, during the time interval of Delmontian to the present. This represents a rate of movement of 0.7 inches per year, slightly less than the rate recorded by the Coast and Geodetic Survey since the San Francisco earthquake in 1906.

SACRAMENTO GEOLOGICAL SOCIETY MEETING

The Sacramento Geological Society held their Annual Ladies' Night Dinner Meeting May 13th, at the Del Prado restaurant in Sacramento. Ninety-four people, including geologists and their ladies, had the pleasure of hearing Dr. Max Birkhauser speak on "Looking For Oil In Alaska." Dr. Birkhauser, Senior Geologist with the Shell Oil Company in Los Angeles, gave a very interesting talk accentuated with numerous beautiful color slides.

**"WE CALL THIS OUR
CREATIVE THINKING LAB"**



ANNOUNCEMENT

George Feister has accepted the position of Program Chairman for the 1958 Fall Convention. He requests that prospective speakers contact him as soon as possible so that selection may be made of those papers that are timely or best suited to the theme of new discoveries and new developments in petroleum geology in the Pacific Coast Region. George may be reached at Huntley 2-7600, or at Union Oil Co., Room 923, P. O. Box 7600, Los Angeles 54, California.

OFFSHORE SEMINAR

The Offshore Seminar was presented by the Oil Scouts and Landmens Assoc., Friday, May 23, 1958, at the Miramar Hotel, Santa Barbara.

Details on the talks presented are as follows:

1. "Summerland Offshore Operations", by David Goodwill, District Superintendent, Standard Oil Company of California -- talk included discussion on the platform, drilling and production methods -- illustrated with slides

plus a scale model of platform was on view.

2. "Drilling Island - Rincon", by John A. Blume & Associates (Engineering Consultants for the Drilling Island), - discussion of the drilling island off the Rincon presently under construction for the Richfield Oil Corporation - illustrated with color slides.

3. "Oil Industry Public Relations", by O. W. Hillgren, Public Relations Mgr., Wilshire Oil Company - general discussion of public relations as related to the oil industry.

4. "Past, Present & Future of California State Tidelands", by T. C. Moroney, General Counsel and Secretary, Honolulu Oil Corporation; member of Public Lands Committee, Western Oil & Gas Association - discussion of the history and problems of the California State tidelands.

NOTICE

The nominating committee for new officers of the Pacific Section are:

Chairman Mason L. Hill (Past President)
Frank B. Carter (Past President)
Russell R. Simonson (Past President)
Kenneth F. Krammes (Valley)
Howard E. Stark (Coast)

Please contact any of the above with your suggested candidates.

SAN JOAQUIN GEOLOGICAL SOCIETY

The San Joaquin Geological Society met May 7 in Bakersfield and had the pleasure of hearing Ted Off, geologist with the Ojai Oil Company, speak on the San Gabriel fault problem in the Castaic area (see May, 1958 Pacific Petroleum Geologist for abstract). This interesting talk provoked a controversial but educating discussion afterward. Assisting Ted with the many questions from the floor were Bob Herron of Bakersfield and Bob Paschal of Ventura, both with Hancock. Ted and associates did a very commendable job with the presentation of their interpretation of the problem.

NOTICE

Copies of the guidebook covering the Annual Field Trip of the Geological Society of Sacramento, April 19-20, 1958 are still available. Copies of this guidebook entitled "East Side Sacramento Valley-Mother Lode Area, California" may be obtained by sending your name, address and \$2.00 to Karl H. Arleth, Ohio Oil Company, P. O. Box 4161, Sacramento 21, California.

ANNOUNCEMENT

The Wyoming Geological Association is holding their Thirteenth Annual Field Conference Camp-Out July 23-26. The northwest and east flanks of the Powder River Basin will be covered in this trip.

Address all enquiries to:

Registration Committee
Wyoming Geological Assn.
P. O. Box 520
Casper, Wyoming.

COAST GEOLOGICAL SOCIETY

Dr. Tjeerd H. van Andel, Distinguished Lecturer,

gave his excellent presentation to the assembled members of the Coast Geological Society, May 12th, at the Miramar Hotel, Santa Barbara.

PERSONAL ITEMS

On May 6, 1958, a review of "Stratigraphic Facies Differentiation & Nomenclature", by J. Marvin Weller, A.A.P.G. Bulletin Vol. 42, No. 3, was presented to the Santa Maria Geological Study Group by Vern Rutherford, Union Oil, Tom Benson of the Texas Co., John Curran of Honolulu Oil Co. Following their presentation, there was a rather vigorous open group discussion.

Jim Eke, Union Oil Co. in Orcutt, and his wife, have just returned to civilization after an enjoyable fishing trip at Guaymas, Mexico.

A new episode has occurred in the "history of Rod Colvin's Accidents". As you remember, when we last left our hero he had just fallen from the roof of the church, breaking a rib. In the new chapter, he recently retired to the doctor for X-rays of fingers, injured while body surfing at Refugio Beach. Watch this space for more action next month.

The latest in Men's Beach Attire was recently modeled by Tom Benson of Texas Co. in Santa Maria. Tom was seen walking Avila Beach in red bathing trunks, engineer boots, and with his Siamese cat on a powder blue leash and harness.

Jim Swarbrick, Shell, Ventura, has been transferred to Durango, Colorado.

General Petroleum's Exploration Department recently traveled to Johnsondale, above Bakersfield, for their annual spring fishing trip. While waiting for the big ones to hook on, the boys played a few innings of softball, and Ben Lupton having heard that a major league scout was in the vicinity really played the "ol" ball game, with the result that he is now nursing one fractured finger.

Jim Brown, of General Petroleum, has been transferred from the Denver Geological Department to the Los Angeles office.

George Brown, of Ohio Oil Company in Los Angeles, has been transferred to the Sacramento office.

Hal Lian, with Union in Santa Paula, has headed north to meet Gene Borax of Union, and Tom Wilson, of Ohio Oil Company at Anchorage, Alaska.

W. R. (Sam) Brown, of The Texas Company, has been transferred from Santa Maria to the Division office in Los Angeles.

Muffled shouts heard recently from the direction of the automatic elevator shafts at the new Union Oil Center, turned out to be Hal Fothergill, who was tiring of the free rides up and down. It seems Hal was trying to get down to "B" level at the garage, and, after stopping to let passengers out at "A" level, the elevator promptly took off for the 12th floor. So Hal pushed the button for "B" level again, and 55 minutes later was happily climbing into his car to fight the battle of the freeways.

From Sunray Oil comes word that Buz Welch is enjoying the fine fishing of the Pineville, Oregon area where he is currently taking care of #1 Bear Creek Unit.

John Todhunter, of Sunray, has gone to Alaska to join Dick Eckhart in field mapping for the summer.

Bob McConville, of Signal Oil and Gas, is back from his recent trip to Venezuela.

Mick Lachenbruch and Paul Day, of Western Gulf Oil Company, headed north recently for a summer of field mapping in Alaska. Rumor has it that field supplies consisted largely of bologna sandwiches.

Glen Ware, Jr., with The Texas Company, has recently been transferred to Sacramento from Ventura.

Ed Karp, with Western Gulf in Sacramento, is being transferred to Casper, Wyoming for the summer.

Jim Gale, Texas Co. landman in Sacramento, has been transferred to Bakersfield.

Joe Harvey, Bob Beatie, George Witter, Jr., Ed Pittman and Dave Martin, all with General Petroleum in Sacramento, left recently for Alaska to spend the field season in the land of helicopters and Alaskan bears.

Vern Jones, Exploration Logging Company in Sacramento, recently returned from a six-week "business trip" through Europe. Vern took advantage of the opportunity and spent some time skiing in the Alps.

What old gray-haired scout in the San Joaquin Valley ran short of petty cash due to an illegal run-in with a legal secretary?

Twenty geologists from Union Oil spent a recent weekend fishing in the Sierras. The trip was organized by George Feister and each angler caught his limit of trout as guaranteed by Chuck Cary. Of general interest was the filming of Ed Scott's bath in an icy stream by Lum Lovely and Ed Hall's bourbon salad dressing.

Bill Binkley, chief paleontologist with Superior in Bakersfield, has a woeful tale of "too late with too little." When getting his driver's license renewed, it was discovered that he had let the license lapse and that a drivers' test was then in order. Bill is now driving with a special permit until his driving lessons are completed.

Quentin Moore with General Petroleum has left Los Angeles to temporarily take over in Bakersfield for Bob Orwig. Bob and Ben Phillips are in Alaska field mapping for the summer.

Mike Trapesonian, with Shell's paleo department in Sacramento, has been transferred to Grand Junction, Colorado.

Regardless of recessions or tight-money excuses, when it comes to expense accounts, educational advancement will out, as with three Shell paleo men, Bob Steinart, Martin Reiter, and Bill Hamlin, who drove their own car, ate native dates and fought scorpions in their tent while attending the Imperial Valley field trip which they claimed was well worth the struggle.

Is it really true that Shell geologists take out trip insurance when they go out in the field? Due to result of a recent experiment with the effects of gravity, all jeeps are now modified with roll bars.

Roy Cline, Frank Webster, Ventura, Ralph Rudeen, Seattle, Jim Ellison, Farmington, Hal Clifford, Bakersfield, and Tom O'Neill, Long Beach have returned to work after a two week Shell training course (Charm School) in Arcadia.

Bob Schupp, Shell Geologist, ex-Long Beach, is on his way to Houston for 4 months of special training, and then will return to Durango.

The "General" wishes to report that they are well along on their project "Fallen Arches", and that the slipstream of those Italian butterflies almost bowls you over. He has also heard a rumor that edgewater is breaking in on the Petroleum Club gin reservoir, probably due to too fast a production rate on too high a bean.

Don Collins, Shell, Durango, and Walt Howe, Shell, Sacramento, will be in the Los Angeles area office for the next two months.

Bob Blocher, Long Beach, Art Weller and Adrian Maaskant, Ventura, are recovering from a full week course of Shell management training in Arcadia.

The Standard Exploration Department of Bakersfield had their annual stag picnic at Hart Park, May 24. Diz Deane, Ed Laskowski, and John Carson were the chairmen for the brawl which saw ninety cheerful fellows in attendance. Athletic prowess in many events were of note. John Tucker won the golf tourney, and Indiana reigned supreme as Dale Kline continued for the fifth year to walk away with the horseshoe championship. John Carson developed a foolproof (or 3.2 proof) technique for reaching first base. While most were in a sublime mood, Don Laswell and Bob Ortalda proved too much for the poor defenseless shrubbery.

Standard's Bill McKay is leaving Bakersfield for Calgary to tie the knot with a Canadian lass he met in a Bakersfield hospital.

Tom Wilson of Ohio in Bakersfield stocked up heavily on mosquito and bear repellent; then took off again for Alaska's Kenai peninsula and a summer of field mapping.

Steve Shenk (Superior) is staying out of elevators these days. Seems that while navigating a light plane over the canyon country of Utah, Steve got lost. Thought he was flying downstream on the Colorado while actually he was flying upstream on the Escalante! Night fell. The plane ran out of gas. Luckily a dirt road was spotted just in time. The pilot landed O.K. but could not negotiate a curve and the plane went into a gully. Both Steve and his pilot friend walked away from the wreck and found their way to a nearby town, where they were welcomed with open arms by the bored inhabitants. However, Steve hasn't forgotten the sensation he felt when the plane plunged downward that night. So he's staying out of elevators.

Bert Thach and Gene Johnson, Shell Scouts, attended the Oil Scouts and Landmens Convention in Tulsa. Reportedly, Bert is taking his golf clubs.

Bob Nesbit, Western Gulf, Ventura, has finally moved his family over from Bakersfield. After six months of commuting, Bob felt that the distance between Ventura and Bakersfield was getting longer every weekend. Anyone want to buy a house in Bakersfield!

The Oil Scouts are to be complimented for the fine Offshore Seminar held in Santa Barbara. All the affair was very legal, many who attended would prefer to remain anonymous.

Helping to make the Annual Ojai Tennis Tournament a great success were the following geologists who called lines for the matches: Jim Blom, Standard Oil, Ventura; Bob Paschall, Hancock, Ventura; Spence Fine, Don Henriksen, Dale Duley, and Eric Lindvall, Richfield, Ojai.

Tom Adame has recently joined the Sun Oil Co. in Guatemala. Tom was formerly a geologist with Lewis & Ganong Consultants in Bakersfield. His new

address is: Guatemalan Sun Oil Co., Apartado 1533, Guatemala, Guatemala.

Bill Montz, Shell, Long Beach is back after a two month visit to the Los Angeles area office.

With a little influence, you too may have a paid vacation in Alaska. These boys have succeeded: Eric Lindvall and Bob Morrison, Richfield, Ojai; Neil Rosser, Amerada, Ventura.

Don Henriksen is surface mapping for Richfield in Oregon and Washington this summer. He promised to have the best fishing holes located for vacationing geologists.

Bob McMullin and Ralph Newton, Standard Oil, Ventura, climbed Topa Topa Peak recently. Nearly a dozen local geologists volunteered their company, but no one showed up on the morning of the hike.

Bob Paschall, Hancock, Ventura, is sporting a new company car. It was parked at the Hancock Refinery when the fire broke out, but luckily escaped damage.

The morale of the girls in Ventura has reached a new low because the Casanova of Standard Oil has gone on vacation. When Billy Reed returns from Altus, Oklahoma this situation is bound to improve.

Jack Conniff, Shell, Ventura has a new swimming pool that is certain to attract numerous visitors this summer.

A new Bakersfield TV star is soon to make her debut. Sonia Blegen with Shell's paleo department has been selected with twenty-five other ladies with odd occupations (for women, we presume) to appear this fall on a program titled "Distaff". Coast News Pix took pictures of Sonia covering all aspects of her work from doing micro-paleo studies in the lab to checking samples at the well site.

Dave Shoemaker, with Shell in Bakersfield, shows signs of still being a little weak from his recent bout with Valley Fever. On a recent fishing trip with the fellows he let the "wind-up of the day" slip out of his grasp and break on the floor of the tent. Result; a few parched throats and that clean, fresh Dago-red odor to put them to sleep.

In court, not too recently, the Ed Millers (Ohio, Bakersfield) played runner-up to the stocking bandit. Both the judge and Ed's wife thought an unlicensed dog rather anticlimatic.

Horace Harrington, district geologist with Superior in Bakersfield, was seen of late well sitting. He was either keeping in training or just giving the rest of the crew a breather.

Continuing the casualty list, resulting from noon volleyball at Shell in Bakersfield, Bill King sprained his ankle and has a crutch; Stan Schindler has a sprained back which kept him out of the field for a brief time; and Dick Bevins has a wrenched knee. The box score so far is six down. Rumor has it that either Shell provides playing cards, or the health insurance rates will go up.

Nat MacKevett, district geologist in Bakersfield, has returned from one week executive training at Shell's "Charm School" in Arcadia.

George Owens and Stan Schindler with Shell in Bakersfield leave this June for four months of training school in Houston.

Last January, Jack Gilboe, with Shell, was

hospitalized at the Bakersfield Memorial Hospital as the result of a stroke which paralyzed him. Jack has now regained the use of his right side but is finding the long road to recovery mighty lonesome.

Dick Atcheson of Ohio in Bakersfield has recovered nicely from a displaced vertigo which he suffered while stretching for one of his son's Texas leaguers.

Rick Shoemaker, Ohio in Bakersfield, and wife, Billie, have just returned from a 7200 mile, 3-week vacation trip to Florida where their son, Don, is stationed with the Air Force.

Al Solari, Assistant to Standard's Vice-President -- Exploration in San Francisco, will be moving to Maracaibo, Venezuela, where he will fill a similar post with Standard's affiliate.

L. A. Tarbet, formerly District Superintendent with Standard at Salinas, has recently moved to San Francisco on a staff assignment.

NURSERY ITEMS

The John Bealls, with Shell, Ventura, welcomed their second offspring, a daughter, Allyson, May 12, weighing 6 lbs 13 oz.

Dick and Alice Pierce, Richfield in Bakersfield, announce the birth of a son, Marc Lacy, born May 18, weighing 8 lbs, 6 oz.

Gordon and Eleanor Hardey, with Standard in Bakersfield, are the happy parents of their first daughter, Eloise Beth, born May 4. Weight seven pounds, fifteen ounces.

Jack and Diane Cunningham announce the arrival of their fourth son, Frederic Stanley, born May 17, at six pounds, fourteen and one-half ounces.

Eric and Lynette Philips added a fourth boy to the clan. David Scott was born May 25.

CALENDAR

June 6, 1958: Friday, Lakewood Country Club, Los Angeles, A.P.I. Golf Tournament and Barbecue.

June 6, 1958: Friday, A.A.P.G. Annual Spring B.B.Q. at Britt Park, Ventura County; Golf Tournament preceding.

June 10, 1958: Tuesday, 7:30 P.M., Coast Geological Society Monthly Dinner Meeting, Miramar Hotel, Santa Barbara, "Geology of Columbia" by Roy Miley, Texas Company.

June 10, 1958: Tuesday, 7:30 P.M., Sacramento Geological Society Meeting, Board Room of Public Works Building, 1120 N Street, Sacramento, election of officers and four 15 minute petroleum talks.

June 11, 1958: Wednesday, 6:30 P.M., Dinner Meeting, A.I.M.E. Junior Petroleum Group, Candlewood Country Club, Telegraph Road, Whittier, "Precision Collar Location and Mechanics of Compaction" by J. Law and L. Brock, Long Beach Harbor Department.

June 12, 1958: Thursday, Noon, S.E.G. Luncheon Meeting, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "Seismic Recording of an

A-Bomb Test" by Dr. F. G. Blake, California Research Corporation.

June 23, 1958: Monday, Noon, A.I.M.E. Petroleum Group Luncheon, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "X Minus 80 Days"-film on Satellite Explorer #1 and "Petroleum Products for High Energy Rocket Fuels", by Geoffrey Robillard, California Institute of Technology.

June 23, 1958: Monday, 7:00 P.M., A.A.P.G. Forum Meeting, General Petroleum Building Auditorium, Los Angeles, "The San Gabriel Fault Problem in Castaic Junction Area", by Ted Off, Ojai Oil Company.

BIBLIOGRAPHY OF RECENT PUBLICATIONS

United States Geological Survey

Suggestions to Authors: Fifth edition
(bound in buckram)

Professional Paper
305-D:

"Test wells, Topagoruk area, Alaska," by F. R. Collins, WITH "Micro-paleontologic study of the Topagoruk test wells, North Alaska," by H. R. Bergquist.

Bulletin 1019-L:

"Selected annotated bibliography of asbestos resources in the United States and Canada," by Ruth B. Avery, Mary Lou Conant, and Helen F. Weissenborn.

Bulletin 1070-A:

"A reconnaissance of the Idaho batholith and comparison with the Southern California batholith," by Esper S. Larsen, Jr., and R. G. Schmidt.

Miscellaneous Geologic Investigations Maps

Map I-270-B:

Arabian Peninsula
(Geographic)
Scale 1:2,000,000.

Mineral Investigations
Field Studies Maps:

MF 138:

Geologic map of Clark County, Nevada, by Ben Bowyer, E. H. Pampeyan, and C. R. Longwell.

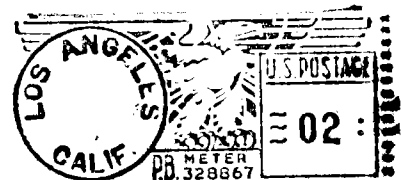
Open File Reports:

Core logs from five holes near Kramer, in the Mojave Desert, Calif., by W. K. Benda, R. C. Erd, and W. C. Smith.
(Deposited at the Los Angeles Public Inquiries Office; for reference only.)

PACIFIC PETROLEUM GEOLOGIST
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Fred R. Neumann
381 E. Fourth Street
Chico, California

GA

PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 12

July, 1958

No. 7

ASSOCIATION ACTIVITIES

SACRAMENTO GEOLOGICAL SOCIETY MEETING

The Sacramento Geological Society held its final meeting of the current season on June 10, 1958. Four interesting and informative papers were presented by members of the Society.

THE LLANO SECO AND PERKINS LAKE GAS FIELDS, BUTTE AND TEHAMA COUNTIES, CALIFORNIA

Tod P. Harding
Humble Oil and Refining Company
Chico, California

The Perkins Lake and Llano Seco gas fields are located in the northern portion of the Sacramento Valley 12 and 16 miles, respectively, southwest of the city of Chico.

The Llano Seco field was discovered in November, 1954. Production is from the Upper Cretaceous Estes and Sannar sands at a depth of approximately 3,300 feet. Structurally, the field is situated on a broad, symmetrical north trending anticline.

The larger Perkins Lake field, discovered in September, 1955, produces from the Lower Eocene "Perkins Lake" sand at depths ranging from 3,365 to 3,505 feet. The structure is an elongated, northeast trending anticline.

Stratigraphically, the two fields are quite dissimilar. The Llano Seco field has an almost normal sequence of Lower Eocene and Upper Cretaceous beds, whereas the Perkins Lake field, being in an Eocene erosional gorge, has a Lower Eocene section which is greatly thickened at the expense of the Upper Cretaceous section. The pronounced unconformity at the base of the Eocene is found 1,300 to 1,800 feet lower at Perkins Lake than at Llano Seco, whereas within the Cretaceous the two fields are nearly flat structurally.

GEOLOGIC CONTROL OF MINERAL COMPOSITION OF SURFACE WATERS OF THE SOUTHERN COAST RANGES, CALIFORNIA

George H. Davis
U. S. Geological Survey
Sacramento, California

Chemical analyses of waters of streams that drain the semiarid eastern slope of the southern Coast Ranges in California demonstrate that differences in the anion composition, especially in the ratio of bicarbonate to sulfate, are related to the lithology of the rocks exposed in the tributary drainage area.

Where more than half the drainage area of a typical east-slope stream is underlain by clastic marine sedimentary rocks of Jurassic and Cretaceous age, bicarbonate generally predominates over sulfate; the ratio of bicarbonate to sulfate in samples of the low flows of the streams ranges from 0.8 to 6. Conversely, where more than half the drainage area

is underlain by marine and continental deposits of Tertiary age and continental deposits of Quaternary age, sulfate predominates over bicarbonate, and the ratio of bicarbonate to sulfate in samples of the low flows ranges from 0.02 to 0.7.

Organic siliceous marine shales of Tertiary age deposited in a reducing environment are considered to be the primary source of sulfate in the region. Secondary deposits of sulfate minerals, chiefly gypsum, abundant in the continental deposits of late Tertiary and Quaternary age, also contribute sulfate to the stream waters.

P. G. & E. GAS STORAGE OPERATIONS AT THE PLEASANT CREEK GAS FIELD

Jeff Watts
Natural Gas Corporation
San Francisco, California

The Pacific Gas and Electric Company is proposing to convert the Pleasant Creek Gas Field to an underground storage project to service the peak gas loads in the Sacramento and North Bay areas. The field was selected for this purpose because it is small and appears to have a rapid response to a small quantity of injected gas.

The storage zone is contained in the Upper Cretaceous Peters Sand. The field is located on an east dipping monocline with the more steeply dipping Cretaceous beds having been truncated by the Eocene Capay formation, thus providing closure on the west. The Peters Sand pinches out to the north and southeast; however, closure on the east is against the water table.

A pilot-test injection program has been conducted in the field to test its suitability for storage. The results of these tests are considered favorable. It appears the field will have withdrawal capacity of 80,000 Mcf-per-day rate when it is full of gas. After a storage volume of 3,250,000 Mcf is withdrawn, this will decline to about 32,000 Mcf-per-day rate.

Well performance, as determined by back-pressure tests, indicates that average permeability in the Peters Sand is about 280 millidarcies. This is about 1/3 of the value obtained by core analysis. This permeability is believed to be sufficient to allow rates of withdrawal of 10,000 Mcf per day per well. This rate appears to be realistic when analyzed from the standpoint of the amount of vertical closure between the water table and the bottom perforation of each well.

Field facilities probably will be installed to provide compression of gas on both the injection and withdrawal cycles. It is contemplated to provide high pressure collection lines to each well from the compressor discharge header. This will allow the field to take gas on injection and to produce gas on withdrawal without forcing it through any particular well or field location.

EXECUTIVE COMMITTEE, PACIFIC SECTION
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PACIFIC PETROLEUM GEOLOGIST

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Northwest Correspondent	R. P. Ottenstein

NEXT DEADLINE JULY 25, 1958

RECENT DEVELOPMENTS IN THE LAND
SUBSIDENCE PROBLEM IN THE SAN JOAQUIN VALLEY
Joseph F. Poland
U.S.G.S., Sacramento, California

Land subsidence in the San Joaquin Valley has been found to be intimately related to the extraction of ground water. In 1906, 1/4 million acre-feet of ground water was used for irrigation. By 1955, 9 million acre-feet was being extracted per year for this purpose.

There are two types of aquifers from which ground water is extracted (1) confined aquifers - in which the aquifer is overlain by an impervious bed, usually clay and, (2) unconfined aquifer - in which there is no confining bed and the surface of the water is referred to as the water table.

Land subsidence in the San Joaquin Valley was first noted in the 1930's. Subsidence is known to be a wide spread occurrence in the following areas of the Valley: (1) Los Banos-Kettleman City area covering 1,100 square miles of subsidence with a maximum subsidence of 20' near Mendota (2) Tulare-Wasco area covers more than 500 square miles and has subsided at least 13', (3) Arvin-Maricopa area. Subsidence to this degree creates a very serious problem in the construction of large canals and other engineering projects.

Subsidence in the San Joaquin Valley has been observed only where there has been considerable lowering of the artesian head of confined aquifers. The lowering of the artesian pressure removes part of the hydraulic support of the confining clay and overlying deposits thus increasing the effective load on the confined aquifer below, causing them to compress. In areas where a comparable lowering of the water table in unconfined aquifers has taken place, no subsidence has occurred.

In areas where withdrawal of water from confined aquifers has decreased due to use of surface waters (as from the Friant-Kern Canal) for irrigation purposes, land subsidence has ceased. In areas where the pumping of confined water continues and introduction of surface waters has not occurred, subsidence continues.

NOTICE

The Sacramento Geological Society announces the election of new officers, as follows:

President:	Robert T. Bean	State of California Dept. of Water Resources
Vice President:	Vern C. Jones	Partner, Exploration Logging Company
Secretary:	Ray Sturdevant	Shell Oil Company
Treasurer:	Roland J. Bain	The Texas Company

NOTICE

TELEPHONE CHANGES:

Signal Oil & Gas Co.	Madison 4-8311
Bandini Petroleum Co.	Madison 7-9551
Kern Oil California, Ltd.	Madison 8-4231
Standard Oil of California	Madison 4-2711
State Exploration Co.	Madison 7-6146
Superior Oil Co.	Madison 3-2111
Tidewater Oil Co.	Madison 4-6251
Amerada Petroleum	Madison 4-9544
Union Oil Company of California	Huntley 2-7600
Aden W. Hughes	Madison 8-7641
The Texas Co.	Dunkirk 5-0515

NORTHWEST GEOLOGICAL SOCIETY

The last meeting of the Pacific Northwest Geological Society prior to the summer field season was held in Tacoma, Washington on the first of May. Dr. Ted Danner, Professor of Geology at the University of British Columbia, presented an interesting and well illustrated talk on the geology of the Olympic Mountains of Washington. Dr. Danner considered the sedimentary rocks making up the core of the Olympic Mountains were older than the Metchisin basalt of Middle to Lower Eocene in age. However, he concluded that the structural relationships between these two rock units were not completely known.

COAST GEOLOGICAL SOCIETY

At the June 10th meeting of the Coast Geological Society, Roy Miley spoke on "The General Geology of Colombia". Mr. Miley spent 16 years in Colombia with the Texas Company.

The regional geology of Colombia was discussed and illustrated with a geologic map, cross-section, correlation chart, and colored slides.

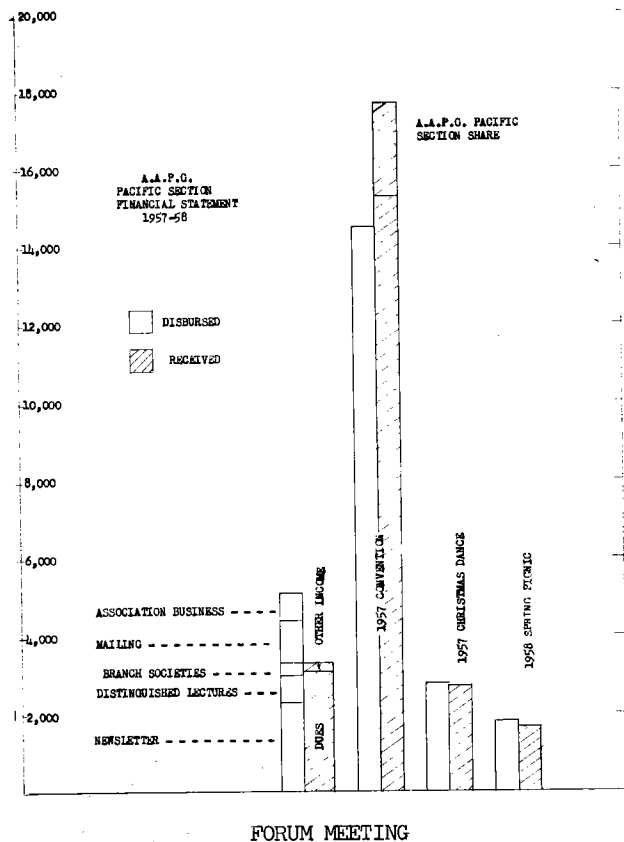
The country has both a Pacific and Atlantic sea coast and is crossed from south to north by three Andes ranges; the Eastern, Central and Western Cordilleras. The Cauca Valley is formed between the Western and Central Cordilleras, and the Magdalena Valley between the Central and Eastern Cordilleras.

Geologically the country can be divided into two provinces. The eastern province consists of an old, stable, igneous mass extending easterly from the eastern foothills of the Andes. The western province includes the western coastal area, the three mountain chains and the intervening valleys. This province can be further subdivided into the eastern and western geosynclines by the Central Cordillera. This division is based on dissimilar types of Cretaceous beds.

The age of the producing formations varies

from Pliocene to Cretaceous, with up to 50,000 feet of Cretaceous in the eastern geosyncline. So far the greater part of the oil has come from Oligocene-Eocene reservoirs. The Sespe formation of the Ventura Basin has its Columbian counterpart in the Guduas formation. The Guduas is an oil-bearing, brackish and non-marine Oligocene-Eocene unit.

The older and main producing areas are the Magdalena Valley and an area on the northeast side of the Eastern Cordillera, the Columbian sector of the Maracaibo basin. Activity is not limited to these areas, however, as new discoveries have been made along the northern coast of Columbia, adjacent to the Caribbean Sea.



The A. A. P. G. Forum meeting held at the G. P. Auditorium, Los Angeles, heard Ted Off present his talk on "The San Gabriel Fault Problem in Castaic Junction Area". The large crowd heard and viewed the pros and cons discussed by Ted Off, John Crowell, Tom Dibblee, Tom Baldwin, Bill Corey, and Hans Ashauer during the question period following the first round.

NOTICE

The Wyoming Geological Association is conducting its THIRTEENTH ANNUAL FIELD CONFERENCE... CAMP-OUT TRIP - MEN ONLY, on July 23-26 inclusive. The areas to be visited are the northwest and east flanks of the Powder River Basin. Those planning to attend contact Registration Committee, Wyoming Geological Association, P. O. Box 520, Casper, Wyoming.

PERSONAL ITEMS

Otto Hackel, Intex, Bakersfield, is doing summer work in Utah.

Jack Kappler, Tidewater, Ventura, will spend a cool two weeks on active duty in El Centro.

When notifying the Texas Company of an upcoming core party Ken Jensen, scout with Tidewater in Bakersfield, specified that under no circumstances would Bill Bedford or Jess Parsons be allowed; thus assuring himself of enough leftover beer to last at least a week at home. Bill and Jess intend to retaliate by dropping in at Ken's this weekend to wipe out his supply.

Shades of Hollywood -- Sonia Blegen, the lovely lass who was discovered in Shell's paleo lab at Bakersfield, no sooner became a potential TV star than she was seen sporting a new Triumph TR-3. It is best that word of this does not reach Kim and Zsa Zsa or the general may really be in hot water.

Bill Hamlin took the high series trophy and Martin McAndrews the trophy for high game in the Shell bowling tourney at Bakersfield. The volleyball season seems to have had it due either to the hot weather or the lack of physically-capable participants. You will note the word participants was utilized rather than the word players. This is the result of the writer believing that player, used in such a sentence, has a connotation of some degree of prowess and ability. This, obviously, was not the case.

Bob Herron of Hancock in Bakersfield has organized a trip down the San Juan and Colorado Rivers. Bob's entourage consists of his daughter and her girl friend; Otto Hackel, Allen May, and Frank Rosenlieb of Intex; Ken Myron, Wayne Eckart, and Broderick Dunlap of The Texas Company; and Jim and Barbara Kurfess of Tidewater. The group will leave June 28 when they will go through Monument Valley to Mexican Hat where via rubber rafts they will ride the San Juan through the Goose Necks to the Colorado, through the lower half of Glen Canyon and come out at the Marble Canyon Dam, 195 miles and six days later. Side trips to Indian ruins and up canyons are in order. Scenery and geology are the reasons for the trip but the way Herron is loading up with film and camera equipment, one suspects a financial coup in the offing.

In regards to the A.A.P.G. Picnic at Britt Park last month, much thanks and appreciation is due to the following gentlemen: Jack Wood, who prepared the meat and lobster so capably; Art Weller, the grounds chairman; Homer Stieny, the ticket chairman; Tom Cate, who procured the contributions; Andy Vidos, the iceman; Frank Yule, the golf chairman; Dick Triplett, the salad chef; and Bob Paschall, the chairman of vice. Congratulations to Bob Herron, picnic chairman, for corralling these capable men and successfully shepherding them and their helpers on this years terrific picnic.

John Beall, Joe Egan, John Cronin, Keith Green, Shell, Ventura, all bought new homes in the same housing development. They are now happy home owners and can spend all their time spading, mowing and watering.

Rumor has it that Mick (Hair) McKnight is working out at a local gym so that he will be able to compete with the younger men at the annual get-together of water skiers at Bass Lake. Could this have anything to do with his inability to remain upright last summer?

After waiting four years for the completion of the new Exploration Building at Murphy Coyote, Jim Higgins of the Standard Oil Company of California was notified that he is being transferred to San Francisco effective July 1, as the Staff Assistant to the Vice President of the California Research Corporation. Anyone in need of a house in Sunny Hills, or a membership in Los Coyotes Country Club?

Russ Simonson of Ohio left for Alaska on June 28th for a 3 week tour with company officials in the company plane.

John Mann of Standard Oil has been transferred to Los Angeles from Salt Lake City and will be the district geologist for the Los Angeles Basin.

Jerry Knowles, Richfield Foreign Department, has returned from Colombia with his attractive wife, Isabella, after honeymooning in Mexico City. Jerry has audibly improved in his Spanish and has also partially lost that dreamy vacant look he had prior to the nuptials.

Mason Hill, manager of exploration for Richfield, has returned from a week's vacation and inspection tour of Richfield's summer field program in Alaska.

John Szatal, Richfield's Foreign Department, returned from a two-month tour which resulted in a flying trip around the world and a near record expense account. John reports that restaurant service in Tokyo is the most thorough and accommodating he has ever experienced.

Tom Rothwell, division paleontologist, for Richfield in Long Beach, was official photographer for the college dinghy races in Newport Beach, during one week in his vacation. His boy, Bill, was part of the Occidental College crew during the races.

Paul Roth, of State Exploration, has just come back from a two week vacation in Honolulu. Paul says vulcanology was dropped in favor of a geological reconnaissance of Waikiki Beach.

James Roth, son of George Roth (consultant), was married on June 13 to Miss Martha Davis, a graduate nurse of UCLA. Jim is about to receive his masters degree in geology from UCLA.

Jim Trotter, Tidewater, Ventura, was married to Betty Wentworth on June 22. Charlie Sturz, Bob Hoffman, and Lou Villanueva also Tidewater geologists, assisted at the wedding as best man and ushers.

Lou Nelson, Ohio, Ventura, is in charge of the annual coast geological barbecue. He is accepting applications for assistants.

Jack Gilboe, with Shell at Bakersfield, is out of the hospital and is walking around with a cigar in his mouth. His friends are certainly welcome and a visit would really speed Jack's recovery.

Word has finally filtered through from John Reckamp of Western Gulf who was transferred to Turkey a short while ago. John's meat diet of lamb in the last thirty days surpassed that of the previous thirty years. The only variation in diet is from stray bedbugs which fall unnoticed into his Scotch and Soda.

Bob Lindbloom and Keith Berry of Standard in Bakersfield are on their vacations. Keith and family are sightseeing in the Sierras and Bob is back in Duluth, Minnesota, probably recementing old ties with the hot fires that died to old flames when he left.

Ken Bishop recently visited in Ventura while on vacation. He is with the Texas Co. in Bogota, Colombia.

Bob Morrison, Richfield, Ojai, returned after a short and eventful Alaskan trip. His experience in the helicopter crash topped the list of Alaskan stories.

Jim Vernon, Texas Co., Ventura, just completed two weeks of active Navv duty.

Lee Freeman, Texas Co., Ventura, returned from his vacation in Detroit, where his parents celebrated their Golden Wedding anniversary.

Jeff Holstrom, recently joined Standard Oil staff in Ventura as a geologist-geophysicist. Jeff is a Stanford graduate.

Two Bakersfield oil men will leave early in July for Thailand. Frank Rieber and Tennant Brooks plan to spend about two months developing the countries' present production. T. J. has been taking an intensive course of study on how to aim his camera to get the most out of a roll of film. The two feel that the filming of the trip and the country ought to be worth viewing on "I Search for Adventure".

To set the record straight, Ohio's George Rudkin-- pink champagne procurer for the recent Petroleum Wives' dance at the Bakersfield Country Club --- wants it known that it was purely happenstance that he was one of the winners of the two bottles of giggly water used for door prizes.

The annual northward migration of the midnight fishermen has taken place. This select group includes Messrs. Herb Mann, Ralph Rudeen, Hank Tomko, Pete Grimstad, Bob Smith, and Howard Barns, Shell Oil Company geologists, and Bob Ottenstein and Pete Fish of Standard.

Bob Gallison, General Petroleum landman in Sacramento, is being transferred to Los Angeles.

Bill Wagner, Texas Co. landman, was recently transferred to Sacramento from Los Angeles.

Anatole Safonov formerly with Brazos in Sacramento, has become a Consultant specializing in the Sacramento Valley. Anatole has spent the past 9 years doing geology in this area. His address is 1881 11th Avenue, Sacramento, California, phone GILbert 2-1381.

Doc Lammers, Standard Oil, Los Angeles, has been such a regular commuter on the Lark between Pasadena and San Francisco, that the bartenders on the club car have taken to calling him by his first name.

Don and Ruth Six, Texas Co., Los Angeles, are the proud parents of 5 pound twin boys, born June 30th and tentatively named David DeKemper and Stephen Bruce. They have a daughter, Becky, who is 2 1/2 years old. Don seems to be patterning his family after his boss, Hans Aschauer, who has a daughter and twin sons -- with the daughter 2 1/2 years older.

The recent Texas Co. - Seaboard merger has resulted in the following Seaboard geologists being absorbed into the Texas Company organization; L. S. (Snooky) Chambers, Senior Geologist at Los Angeles; T.A. Lee and C. P. Rogers, geologists at Los Angeles; Jerry Ganapole and Vince Scury, geologists at Bakersfield.

Wayne Shaw (Tidewater, Bakersfield) and family have packed into a new set of wheels and are now visiting relatives in Oklahoma.

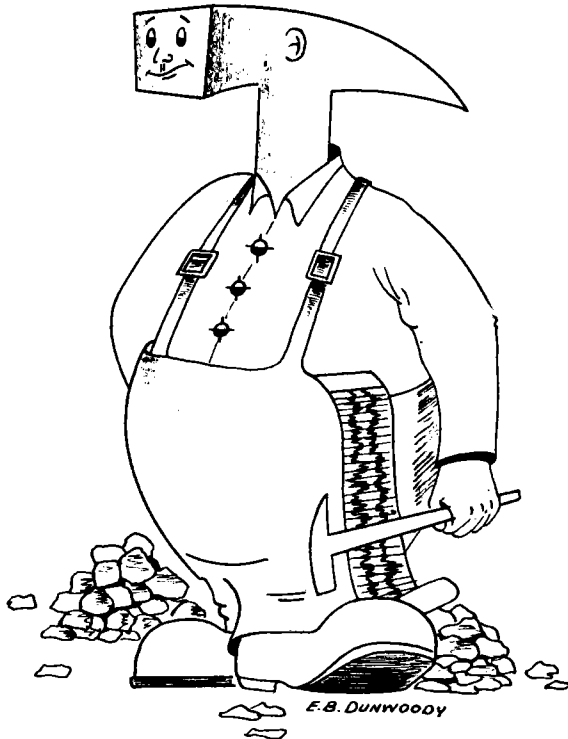
R. Larry Johnson is doing summer work in Bakersfield for Tidewater. Larry is working on his master's at U.C.L.A.

Wes Bruer with Superior has been transferred to Casper, Wyoming. Jack Clare had a going-away party for the event and the word from those who still could talk the next day, was that it was a

real blowout. A memo has been sent to Los Angeles requesting enough time between transfers to give the celebrators a chance to recover in order to fully appreciate the rest of the upcoming parties.

Apparently J. Wagner of Union in Bakersfield believes Jerry Fawcett who insists baldness is a sign of virility as J. is now sporting a Yul Brynner head. A phrenologists' paradise, from all the bumps in evidence.

Jack Nisbet, Tom Brady, and Hal Reade with Richfield have departed from Bakersfield to spend the summer in Alaska doing field work.



A geologist is a geologist, is a geologist are people?

NURSERY ITEMS

Ralph and Trudy Hawkins, of Shell, Ventura, are the proud parents of a baby girl, Susan Ellen, born May 27, weighing 9 pounds 9 ounces.

The Rye Demsters, Shell, Ventura, announce the arrival of a new addition to their family Peter Ryland, who was born June 5, weighing in at 7 pounds 4 ounces.

Roy and Marian Turner, Intex, Ventura, were proud to announce the arrival of their baby girl, Anne, who weighed 7 pounds 7 ounces, making her first appearance June 6.

Roland and Sylvia Bain, Texas Co. in Sacramento, announce the arrival of a son, William Michael, born June 18, weighing 8 pounds 13 ounces.

Dale and Sally Rodman, Ohio, Bakersfield, are proud parents of their third child (second son), Kevin Dean, born June 9, weighing in at 6 pounds 13 ounces.

Tod and Babette Harding, Humble in Chico, are the happy parents of a son, Mathew Barmann, born June 22, 1958, weighing 7 pounds 3 ounces. This is number one for the Hardings.

Dave and Margaret Costello, Tidewater, Bakersfield, announce the birth of their third child. Born June 13, Daniel Joseph weighed in at 7 pounds 3 1/2 ounces.

Hank and Jane Adams, Ohio, Coalinga, announce their first child, Elizabeth Marie, born March 22, weighing 7 pounds 4 ounces.

Bill and Leticia Yerington, Ohio, Coalinga, new parents of their first daughter, DeAnn Frances, born April 24, weighing 6 pounds 9 ounces.

Joe and Kitty Johnson, Shell, Bakersfield, had their first boy (second child) Friday, June 13. Mathew Victor weighed 7 pounds 7 ounces.

The Ed Johnsons, Shell, are the parents of their first. The lady is Patricia Ann and is 6 pounds 11 1/2 ounces.

Charles and Kathleen Cline, General Petroleum in Sacramento, announce the arrival of their second daughter, Carolyn, born June 4, 1958, weighing 6 pounds 2 ounces.

Charlie and Carol Fulmer (Standard) announce the arrival of their third son, Clark J., on June 20.

CALENDAR

July 7, 1958: Monday, Noon, A.I.M.E. Petroleum Group, Luncheon, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "Wilmington Water Flooding", by R. H. Newnan, Senior Production Engineer for Long Beach Oil Development Corporation.

July 9, 1958: Wednesday, 6:30 P.M., Dinner Meeting, A.I.M.E. Junior Petroleum Group, Candlewood Country Club, Telegraph Road, Whittier, "Air Pollution Control in the Oil Industry", by Carl Kanter, Air Pollution Control.

July 10, 1958: Thursday, Noon, S.E.G. Luncheon Meeting, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "The Benson Lehner Electro-Plotter, Model S, and its Application to Geophysics", by P. K. Worsey, Benson Lehner Corporation.

July 19, 1958: Saturday, late afternoon, Annual Coast Geological Society Barbeque, Lagomarsino Ranch, Gridley Road, Ojai, swimming and refreshments.

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" GP 178 "Aeromagnetic Map of Montesano County Quadrangle, Grays Harbor & Pacific County, Washington"

" GP 180 "Aeromagnetic Map of the Rochester Quadrangle, Thurston, Grays Harbor & Lewis Counties, Washington"

" GP 184 "Aeromagnetic Map of South Bend Quadrangle, Pacific County, Washington"

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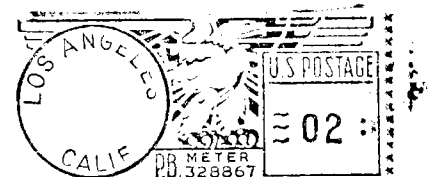
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Vol. 12

No. 7

Fred R. Neumann
381 E. Fourth Street
Chico, California

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PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 12

August, 1968

No. 8

ASSOCIATION ACTIVITIES

GEOLOGY AT UNIVERSITY OF CALIFORNIA'S SANTA BARBARA CAMPUS

Members of the geologic profession on the West Coast may not be aware that since 1944 Santa Barbara College has been part of the University of California and that it now has a full geology major program.

The present Santa Barbara staff consists of Dr. Robert W. Webb (Chairman of the Department of Physical Sciences), Dr. Robert M. Norris (Vice-Chairman, Geology), and Dr. Richard V. Fisher. Bob Webb is so well-known to the profession that it is almost unnecessary to report that his interests lie in Geomorphology and Mineralogy and that his mineralogy students at Santa Barbara have much in common with those of you who took your mineralogy at UCLA. Bob Norris's special interests are Marine Geology and Field Geology and Dick Fisher has responsibility for Structure and Stratigraphy. Temporary staff and Webb have handled Petrology and Economic Geology. Dr. Donald W. Weaver from U. C. Berkeley will assume duties in Paleontology as a regular staff member on January 1, 1959.

Total enrollment on the Santa Barbara campus is now about 2500, 50 of whom are geology majors. This represents considerable growth in a short time because the geology major was first offered in 1954 and the first geologists graduated in 1956. The rapid growth is such that the present Physical Sciences Department will disband in 1960 and geology will become a full-fledged department.

The curriculum parallels the University of California pattern of Berkeley, Los Angeles and Riverside. Santa Barbara, in common with other parts of the University requires a year course in field geology, usually in the junior year, plus an advanced summer field course at the end of the senior year. Santa Barbara students have been enrolling in summer field usually at UCB or UCLA.

The physical plant is very crowded, partly because of the very rapid growth of the geology program. Building plans on campus indicate that geology will enjoy more adequate housing in the next few years.

The department welcomes visitors from the profession and will be happy to answer any inquiries about the program or plant.

ANNOUNCEMENT

The executive council of the Pacific Section has recently discussed the need of an increase in dues. At the present time the dues payments do not cover the expenses of the newsletter, distinguished lecturers, charges of branch societies, mailing (these costs will go up due to postal rate changes effective the 1st of August) and general association business. This difference

in the dues and our operating costs has usually been made up by the profit derived from our Fall conventions. This may not always be the case as evidenced by our recent loss from the National Convention held here last March. It is entirely possible that the same thing could happen at our Fall convention, if not this year, at some future date. If this condition continued under our present set up, the Society could be financially embarrassed.

The annual picnic has also been a source of revenue, but for the last two years the loss has been in excess of \$150.00 per year, so that some assistance for this function would come from a raise in the dues. There are many who think this activity should be financed entirely by the admission price with no assistance from the service companies.

The plan which has been suggested by the council calls for an amendment to the constitution which would increase the dues one dollar a year or only about eight cents a month. This amount of money would currently give us a safe margin on which to operate, and at the same time make our organization more self sustaining. We would be less dependent on our good friends the service companies who have helped us so much during the past few years at picnics, dances and conventions.

Ballots for this amendment will be mailed in the future.

TYPES AND PROPERTIES OF BENTONITIC CLAYS

The featured speaker at the monthly dinner meeting of the A.P.I. Drilling Fluids Study Group, held at the Wagon Wheel in Oxnard, on April 3, was Donald A. Henriksen of Richfield Oil Corporation. The subject of his talk was "Geologic Occurrence and Properties of Wyoming Bentonite and California Clays." The relation of the geologic occurrence and mineralogy of the various types of clay materials to their suitability for use in drilling muds was emphasized.

A general description of clay minerals and clay deposits and their occurrence and origin opened the discussion. Several clay minerals are used in drilling muds in a relatively pure state. Most important of these is montmorillonite, the chief constituent of bentonite.

Most bentonite deposits are the result of devitrification and partial decomposition of glassy volcanic ash. Bentonites are of two types: (1) those which swell to several times their original volume in water; and (2) those which swell no more than ordinary clays in water (called nonswelling bentonite). Wyoming bentonite is of the swelling type and will give a workable

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NEXT DEADLINE AUGUST 28, 1958

drilling mud at concentrations as low as 5-1/2-7 percent by weight of mud, with water alone, corresponding to a yield of from 80 to more than 100 barrels of 15 centipoise mud per ton of bentonite.

The major source of drilling mud bentonite at present is the area along the east side of the Black Hills uplift near Upton, Wyoming, and Belle Fourche, South Dakota. Nearly all of the bentonite mined in the Black Hills district has been taken from the Clay Spur bentonite bed, in the uppermost strata of the Mowry shale, of Upper Cretaceous age. The steps in mining and processing Wyoming bentonite for use in drilling fluids are: core drilling (to determine the extent of the commercial bentonite), strip-mining, slicing, drying, grinding, air classifying, and bagging. Wyoming and South Dakota produce from 55 to 70 percent of all U. S. clay classed as bentonite and 100 percent of the high-grade oil well bentonite.

The California clays which have been mined for use in drilling fluids occur in three types of deposits. These are: (1) Lacustrine silt and clay deposits in dry lakes, which produce clays of relatively low yield (10-20 barrels of 15 cp. mud per ton); (2) Marine shales and claystones, which generally have produced clays of moderate yield (20-40 barrels of mud per ton); and (3) Altered volcanic rocks, which produce bentonite, or high-yield clays (more than 50 barrels per ton). Examples of the above three types of deposits are (1) A playa-type deposit near McKittrick, and several Mojave Desert playa lakes; (2) Wilmington Slough clay, Frazier Mountain clay, and the "Mud-pit shale" of Ventura Avenue; and (3) The hectorite deposit near Hector, San Bernardino County, and the Vallecitos swelling bentonite, San Benito County.

The California clays now used in drilling muds have been produced chiefly from Buckhorn, Rosamond and Rogers (better known as Muroc) dry lakes, in Kern and Los Angeles Counties. The clay material of these Mojave Desert playa lake

deposits is composed chiefly of illite, fine sand, and chlorite. Several hundred thousand tons of this material has been stockpiled.

Although California has produced large quantities of low- and medium-yield drilling mud clays, the state has not yet been able to produce significant tonnages of high-yield clay to compete with Wyoming bentonite.

UNIVERSITY OF OREGON NEWS

Dr. Lloyd Staples is with our field camp this year as usual. The first part of this camp is held on the Oregon coast where the students get a good look at the marine Tertiary. The latter portion is held in Eastern Oregon.

Dr. E. M. Baldwin is continuing his studies of the geology of coastal Oregon. In addition, he expects to complete his volume on the "Geology of Oregon" sometime this summer. Arrangements for a publisher have been made.

CAL TECH NEWS

C. Hewitt Dix plans to make a trip this summer to Houston, Texas, and then from Houston to Montana with stops along the way to set up to receive possible seismic reflections from the Mohorovici discontinuity. The above setups will be made with the permission of the various oil companies. In addition it is hoped that some seismic reflection velocity surveys can be carried out not only to determine the velocity of the sediments but also of the crust.

Robert P. Sharp will spend about 3 weeks in the Caltech Summer Field camp in the Sacramento Mts. of New Mexico. In August he will again be on the Blue Glacier in the Olympic Mts. of Washington with a crew of 6 (all Caltech men) conducting studies to obtain information that will contribute to the evaluation and formulation of flow laws for temperate valley glaciers. Studies of structural features and relations, including crystal fabrics, within the ice will also be made. In September, Sharp will present a joint paper (with Sam Epstein of Caltech) on oxygen-isotope ratios and glacier movement at the Symposium on the Physics of Ice Movement to be held in Chamonix, Mont Blanc, France.

Frank Press hopes, in August, to participate in the International Geophysical Year Conference in Moscow and to visit Russian geophysical laboratories.

Ian Campbell on a leave of absence status, will continue work initiated last season investigating Tertiary volcanic rocks in southeastern Oregon for the Humble Oil & Refining Co.

A. E. Engel will continue studies in the southeastern part of the Canadian shield aimed at calibrating the physical-chemical conditions under which that part of the earth's crust formed.

R. H. Jahns has spent the last six months at the Pennsylvania State University under a National Science Foundation grant conducting, with C. Wayne Burnham, a Caltech Ph.D. now at Penn State, studies of pegmatite genesis through controlled laboratory synthesis. This is the second stage in a broad program, Stage I of which, involving preliminary experimental work, already has been completed. Stage III, to be carried on at Caltech and in which processes of pegmatite formation will be considered more quantitatively and in greater

detail, has been planned for the future, and will depend heavily upon the results of the investigations in Stage II.

Heinz Lowenstam will go this summer to Palau Island, one of the Carolines in the South Pacific, where he hopes to obtain a cross section of the reef fauna, in connection with his paleo-ecological research.

Clarence R. Allen and L. T. Silver will continue their studies in Baja California of the Agua Blanca fault zone, and of the Cretaceous sedimentary rocks in that area. Allen will also spend a couple of weeks at the Summer Field Camp in New Mexico. In addition Allen will be one of the 6-man crew on the Blue Glacier.

Harrison Brown accompanied by his son will go to Moscow in August to attend the meeting of the Tenth General Assembly of the International Astronomical Union. From there he will travel to England where he will attend the meeting of the Commission on Geochemistry of the International Union of Pure and Applied Chemistry at Oxford from Sept. 8 to 12. On September 14 he will be in Kitzbühel, Austria, to attend and give a paper at the meeting of the Third Pugwash Conference.

NOTICE

The California Association of Engineering Geologists has been organized in the past few months, and are starting scheduled activities.

Clair Holdredge, of the Army Corps. of Engineers, Sacramento, is chairman of the executive committee. The Los Angeles regional section officers are: Zd Zielbauer, Chairman, Los Angeles County Flood Control District; Glen Brown, Vice Chairman, State Department Water Resources; Bob Thomas, Secretary-Treasurer, State Department Water Resources.

For information on meetings and field trips call Bob Thomas at Madison 6-1515, ext. 2185.

NOTICE

Richard E. Faggioli, general chairman of the Pacific Section AAPG fall meeting has announced the appointment of the following committee chairmen:

Associate General Chairman:	Everett Pease Sunray Mid-Continent Richmond 8-5171
Program:	George Feister Union Huntley 2-7600
Arrangements:	Fred Vandenberg Kern Oil Madison 8-4231
Exhibits:	Harry Jamison Richfield Madison 9-4111
Projection:	John Fackler Monterey Michigan 3701
Program Advertising:	Warren Hagist Superior Tucker 2111

Registration:	Frank Reynolds Sunray Mid-Continent Richmond 8-5171
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Finance:	Bob Knapp Standard Michigan 2711
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Publicity:	Paul Dudley Humble Madison 6-7701
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Simultaneously, Robert B. Moran, SEG general chairman, announced the following committee heads:

Exhibits:	Ted Braun Superior RYan 1-2101
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Arrangements:	Bill Basham Standard Michigan 2711
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Program:	Matt Slavin United Geophysical RYan 1-1134
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Edward L. Winterer, president of the SEPM is handling the societies arrangements for the Convention.

George Feister and Matt Slavin, respective Chairmen of the AAPG and SEG program committees, are in need of interesting papers pertaining to the convention theme of "New Discoveries and Developments in the Pacific Coast Region". Ideas from the membership at large will help George and Matt line up an outstanding program for the joint fall meeting.

NOTICE

A course in "Ground Water Resources" covering principles of ground water geology and hydrology will be given this fall at Mount San Antonio College. All interested Petroleum Geologists are invited.

Registration before September 12 is necessary to get a class started. The class will be on each Monday night from 7 to 10 p.m. starting September 15 through January 19.

NOTICE

The Alberta Society of Petroleum Geologists is planning its Eighth Annual Field Conference to be held from August 20th to August 23rd at Nordegg, Alberta.

Areas of geologic interest to be covered include, the Ram River Valley, the North Saskatchewan River valley to Cline River, and Box Canyon.

Registration forms are available at 401 Natural Gas Building, Calgary and 120 Commercial Building, Edmonton.

NOTICE

The Kansas Geological Society announces its Twenty-second Annual Field Conference to be held in South-Central Colorado, September 17-20, inclusive.

Those interested in attending should contact Don B. Brown, Chairman, Field Trip Committee, 508 East Murdock, Wichita, Kansas.



"We had a show."

PERSONAL ITEMS

Paul Elliott, Western Gulf, is undergoing his annual two weeks military duty in San Diego. If you get to Lebanon, Elliott, send us a postcard.

Effective July 1, Hans Ashauer, formerly Division Geologist, Texas Company in Los Angeles, has been made Assistant Producing Manager of the Producing Department. He is succeeded by Wayne M. Felts who has been on special duty in Alaska.

The offshore group of the Union Oil Company has moved their offices (e.g. their pigeon "mites" infested offices) from the Quinby Building to the Union Oil Center. This group included Doyle Graves, Dana Braislin, and Larry Morris.

Jim (The new waistline) Higgins, Standard Oil, Los Angeles, is recovering from surgery following an operation on his mid-section.

Geological personnel, with General Petroleum, involved in the recent move to the Santa Fe Field offices include: Ben Lupton, Jim Brown, John Forman, Warren Addicott, Bob Woods, and Bill Heiner.

Tom Cate, Shell Oil, is house hunting in Salt Lake after being transferred as landman to the Salt Lake Division. Tom is looking for a three-bedroom home, but after talking with local inhabitants he wants to start out with a six bedroom home.

After returning from Alaska, Max Birkhauser, Shell, Los Angeles, reports that the oil companies have more helicopters there than the territory has ducks.

Rich Rowland, with Ohio in Paso Robles, recently had an accident with a jeep in the Santa Cruz Mountains. Seems Rich was doing geology from the driver's seat instead of watching the road, with the result that two rolls and fifty feet later Rich was upside down in a stream bed. We are happy to report that the jeep, not Rich, is under repairs.

Jim Lindsey, Standard, returned from leave of absence and will be working in the Ventura office.

Tom Benson, geologist at Santa Maria for The Texas Company, has taken a leave of absence to work for a Ph.D. at Yale University.

Walt Howe is returning to Sacramento, and Don Collins will report at Farmington, New Mexico after serving time in Shell's Los Angeles office. Don Preston from Salt Lake, and Tom O'Neill from Long Beach will be in the Los Angeles office for a two months briefing. Walt and Don are anxious to get back to Sacramento and Farmington, so they can give the local boys a lesson in dominoes.

Fred Peters has returned from an assignment with Formation Logging Company in Turkey. Fred reports that while he was there he saw Tony Morris who is working for E. W. Pauley. On the trip home he stopped in to see Ann and Glen Ledingham with Gulf Eastern Company, in London. Fred, who was a track and field man at Stanford in 1957, reports that he tried to teach the natives the art of discus throwing with not much success.

Hal Nelson, of Superior, Los Angeles, is vacationing for two weeks with family, French poodle and new Chevy station wagon in Minneapolis.

After a three week tour of Alaska, Russ Simonson of the Ohio Oil Co. arrived in the Los Angeles Office sporting a lovely black eye. He keeps mumbling something about the L. A. Coliseum gate protuberances, etc. This is quite a letdown considering the latent possibilities for a hair-raising bear story.

Dick Eckhart, Sunray Mid-Continent, returned to Los Angeles for several days, but after a hasty consideration of smog vs. mosquitos, voted in favor of the latter, and headed for Alaska with a replenished supply of "6-12" on a permanent transfer.

Tom Newbill, enterprising geologist with Standard Oil, Los Angeles, never misses an opportunity. Tom is now attempting to organize an

apartment rental agency for single females, preferably young ones.

Claude Fiddler, Occidental College N.C.A.A. two-miler, has joined the Standard Oil Company ranks. Erudite Claude received his Masters Degree in geology from Cal Tech.

Jay Wagner, Union, after a recent geological function in Bakersfield, was asked by his spouse why he came home half-loaded, was heard to reply "because I ran out of money; that's why!".

Joe Dunwoody, Tidewater, has returned to Bakersfield from a vacation at Catalina where he grew a mustache. The office still isn't sure whether they are working with a geologist or a walrus.

Wayne Shaw with Tidewater in Bakersfield has been living alone this last month after leaving his wife in Oklahoma with her folks. He has to give his cleaning lady a 3-day contract to clean the mess before his wife's return.

Gordon "Sharkspinner" Hornaday, an aspiring "sea urchin", the title given to graduates of a course in skin diving, is evidently taking his nickname too seriously. The only place Gordy really feels safe with his bright yellow tank on is in his bathtub.

Due to extreme pressure and coercion, and and 80-pound weight advantage, no further references to Jess Parsons will appear in this paper. Jess feels that the undue notoriety is affecting his status with his fellow workers at The Texas Company in Bakersfield.

Bob Knapp, Standard, Los Angeles, has ordered a swimming pool to enhance the landscape of his recently purchased home in Los Alamitos. Bob reluctantly admits he hasn't inherited any money, but because of his excessive dimensions and natural talent for displacing large volumes of water, he will be able to finance the pool through the consequential water savings.

Latest word from the body building department is that Lum "Adonis" Lovely of Union Oil, Santa Paula, was heard trying to con his friends into signing for a course at Vic Tanny's. It turns out that the promoters of this health(?) scheme promised him a lifetime career of muscles if he ratted on enough of his friends.

All those interested in trying barrel rolls in field jeeps sans roll bars, please contact Dick Lyon, Union Oil Co., Santa Paula.

Jess Parsons with The Texas Company in Bakersfield had been patiently awaiting a new company car till he heard that the only new company wheels for him would be roller skates.

Neal L. Hurley with Richfield is now working in Peru. This is just a temporary location.

Bob Plumb with General Petroleum in Bakersfield is in Alaska for a short tour of duty.

Gill Horning with Standard in Bakersfield spend three and one-half months growing an exquisite beard for his hometown wild west celebration in Billings, Montana. Gil blew his stack when he discovered the affair had been canceled; and, to really top things off, he was almost picked up for vagrancy.

Standard Oilers softball team is tied for first place in the Bakersfield City "C" league.

Bob Lindbloom claims it is due to his managing and not to Diz Deans' .500 batting average.

Bert Amundson, Standard, hosted a housewarming at his new apartment in Bakersfield. His main contribution to the conversation in the later hours was, with yard torch in hand, "Let the games begin".

Drex Dana, Bakersfield consultant, informs us that his daughter, Toni, has taken a summer science course at the University of Wyoming. Fifty fellows and twenty gals have been doing their field work near Centennial, Wyoming in the Medicine Bow Range. Toni will be a senior in geology this fall at Stanford.

Jack West with Hancock in Bakersfield is vacationing at Laguna. He stopped off at Hollywood Park on the way so it isn't known yet how long the vacation will last or if he ever got there.

The Colorado River Expeditionary group led by Bob Herron has returned lauding the venture as par excellence. Ken Myron's birthday was celebrated the first day out with a cake and scotch. The Fourth of July was celebrated but with no cake and a contingent of Boy Scouts floated by with faces averted. A hair-raising "moonlite" ride while lost for a brief time---the disappointing feeling incurred when steaks and ice cream were flown in to a group going "first cabin", were a few of the many memorable events experienced on the trip. Bob's next sojourn will be down the Kern River from Bakersfield to Buena Vista Lake. This solo event with Bob only wearing water wings, will be a warm-up to a trip planned for next year on a more violent stretch of the Lower Colorado.

NURSERY ITEMS

Robert Neil Scott, Jr. was born July 23 at 2:30 A.M., weighing in at 5 pounds 10 ounces. He is the first child of Mr. and Mrs. R. N. Scott, Tidewater, Los Angeles.

Nancy and Bob Dott, with Humble in Los Angeles, are the proud parents of Eric Richard, their third child and second son, born July 12, and weighing 7 pounds 6 ounces.

Dale Warren Jamison was born July 20 to Joy and Harry Jamison, Richfield, Los Angeles. Dale weighed 8 pounds 2 ounces and is the fifth child. Box score is three boys and two girls.

CALENDAR

August 13, 1958: Wednesday, 6:30 P.M., Dinner Meeting, A.I.M.E., Junior Petroleum Group, Candlewood Country Club, 14000 Telegraph Road, Whittier, "Leasing and Drilling in the City of Los Angeles", by E. E. Wolter and J. J. LaBouff, Signal Oil Co.

August 14, 1958: Thursday, Noon, S. E. G. Luncheon Meeting, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "Electronic Surveying in the Middle East, near the Russian Border", by H. E. Ohanian, Moran Instrument Company.

August 14, 1958: Thursday, 7:30 P.M., Coast Geological Society Monthly Dinner Meeting, Miramar Hotel, Santa Barbara, "Tapia Field", by H. Miller, Intex Oil; and D. Crawford, Union Oil Company, will present his method of dipmeter calculations.

August 25, 1958: Monday, Noon, A.I.M.E. Petroleum Group Luncheon, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "Discussion on Drilling Fluids", by J. DeBusk, Magnet Cove Barium Corporation.

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Geological Society of America:

- Memoir 72, 1958 "Coastal sand dunes of Oregon and Washington" by Cooper, William S.
- Bulletin vol. 69, no. 1, pp 39-69, 1958 "Shallow submerged marine terraces of southern California" by Emery, K.O.
- Bulletin vol. 69, no. 1, pp 69-98, 1958 "Recent underwater surveys using low-frequency sound to locate shallow bed-rock" by Smith, W. O.

California Division of Mines:

Calif. Division Mines Journal, vol. 54, no. 2, pp. 215-236, 1958: "Effect of clay-mineral composition on strength of Central-California sediments". by Robert B. Langston, Parker D. Trask and Joseph A. Pask.

United States Geological Survey:

- Professional Paper 308: "Geology and ore deposits of the Jerome area, Yavapai County, Arizona" by C. A. Anderson and S. C. Creasey.

Professional Paper 314-B:

"BATHYGALEA, a genus of moderately deep-water and deep-water Miocene to Recent Cassida" by W. P. Woodring and A. A. Olsson.

Bulletin 1066-E: Index to geophysical abstracts 168-177, 1957.

Bulletin 1086-A: Geophysical abstracts 172 January-March 1958.

Bulletin 1072-A: Records of unsuccessful test wells drilled for oil and gas in Mississippi as of July 1, 1958.

Water Supply Paper 1466: Quantity and quality of surface waters of Alaska, October 1950 to September 1953.

Circular 403: Reports and maps of the Geological Survey released only in the open files, 1957, by B. Weld, E. S. Asselstine, and Arthur Johnson..

Circular 404: Water resources summary for Southern California, 1957, by William C. Peterson.

Announcement: the following are again available

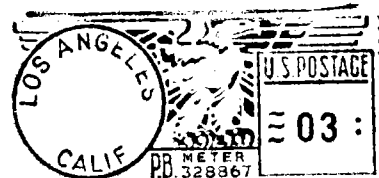
Bulletin 770: Data of Geochemistry, 5th Edition, F. W. Clarke.

Bulletin 845: Guidebook to Western United States, Part F, Southern Pacific line, New Orleans to Los Angeles. N. H. Darton.

PACIFIC PETROLEUM GEOLOGIST
PACIFIC SECTION, A.A.P.G.
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LOS ANGELES 13, CALIFORNIA

Vol. 12

No. 8



Fred R. Neumann
381 E. Fourth Street
Chico, California

GA

PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 12

September, 1958

No. 9

ASSOCIATION ACTIVITIES

COAST GEOLOGICAL SOCIETY

The program for the monthly meeting of the Coast Geological Society on August 14th, consisted of two papers. The first guest speaker was Holmes Miller, reservoir engineer for Intex Oil Company, who spoke on the Tapia Canyon field.

The Tapia Canyon field is located near the town of Castaic in Los Angeles County. The discovery well was drilled by Intex Oil Company in August 1957 and completed at about 1000 feet. The producing zone consists of a lenticular Pliocene sand slightly complicated by faulting. Although the average daily production per well is less than 100 barrels, the shallow depth of the producing zone permits the field to pay out in less than one year.

The second speaker of the evening was Doug Crawford, Union Oil Company, who demonstrated several methods of dipmeter computations. It was emphasized that the paper was not meant to teach the audience to calculate dipmeters, but only to show the available methods.

The solution by descriptive geometry or graphic method is most commonly used but is more time consuming and cumbersome than some other solutions.

Mr. Crawford has derived algebraic formulas for the dip magnitude and direction. The formula for dip magnitude has been converted into a nomographic chart which makes solutions of dipmeter problems very rapid. Corrections must be made however, if the hole is not vertical.

The apparent dip nomograph commonly used in the construction of subsurface cross-sections may also be used in dipmeter calculations. After a dip magnitude is determined between any two electrodes, a true value can then be arrived at by use of the nomograph.

The stereographic net is a very useful tool. Complete problems may be solved by this method or it may be used in conjunction with other methods. The stereonet is particularly helpful in correcting for directed holes.

ANNOUNCEMENT

Coast Geological Society Semiformal Dinner Dance will be held Saturday, September 27, in the Loggia Room of the Santa Barbara Biltmore Hotel. Cocktails will be served at 7:00 P.M., buffet dinner at 8:00, and dancing from 9:00 to 1:00 A.M.

The price of \$14.00 per couple includes the cocktail party. Make your reservations by September 24th with Frank Yule, c/o General Petroleum, P. O. Box 770, Ventura. Checks should be payable to Coast Geological Society.

NOTICE

The following nominees for the 1959 A.A.P.G. officers have been announced by President George S. Buchanan:

President

W. Dow Hamm, Atlantic Refining Co.
Lewis G. Weeks, consulting geologist

Vice-President

Alfred H. Bell, Illinois Geological Survey
Leo R. Newfarmer, Shell Oil Co.

Secretary-Treasurer

George C. Grow, Jr., Transcontinental Gas
Pipe Line Co.
Harold T. Morley, Pan American Petroleum Co.

Editor

Daniel A. Busch, consulting geologist
Grover E. Murray, Louisiana State University

NOTICE

The Pacific Section nominating committee has selected the following slate of 1959 officers:

President

Peter H. Gardett, consulting geologist
John T. Isberg, Superior Oil Co.

Vice-President

Irving T. Schwade, Richfield Oil Co.
Stanley S. Siegfus, Tidewater Oil Co.

Secretary

Paul H. Dudley, Jr., Humble Oil & Ref. Co.
Bradford K. Johnson, Ohio Oil Co.

Treasurer

Harold L. Fothergill, Union Oil Co.
Robert L. Rist, Monterey Oil Co.

ANNOUNCEMENT

Southern California Oil Scouts Association Annual B-B-Q will be held on Friday, September 19, at Union Oil Brea Park Picnic Grounds. Festivities start at 3:00 P.M. Dinner at 7:00 P.M. Contribution is \$5.00/person. Reservations are required. Please mail checks to Wiley Price, Secretary, c/o General Petroleum, 612 South Flower Street, Los Angeles 17.

**EXECUTIVE COMMITTEE, PACIFIC SECTION
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS**

Ulysses S. Grant	President
Thomas A. Baldwin	Vice-President
George Y. Wheatley	Secretary
Robert R. Knapp	Treasurer
Millis H. Oakes	Editor
Harvey W. Lee	Past-President
Everett W. Pease	San Joaquin Representative
Dick Haines	Coast Representative

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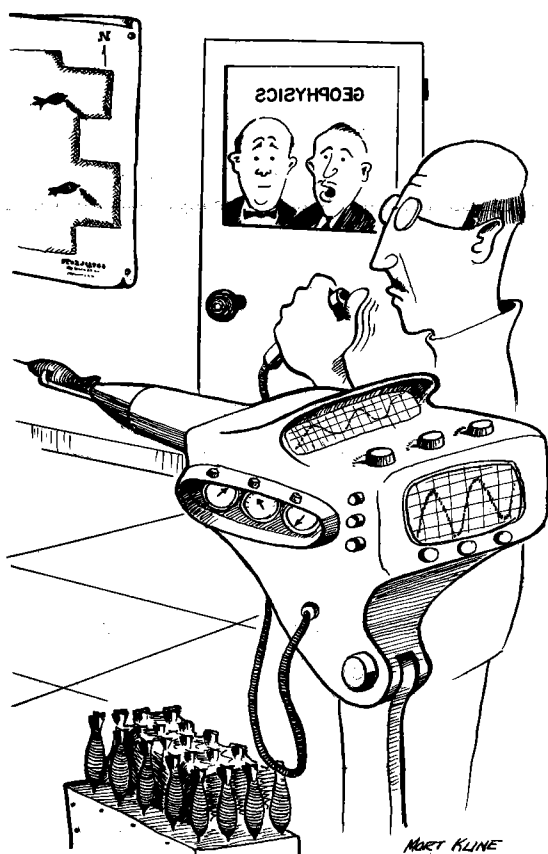
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San Francisco Correspondent	James E. Young
Sacramento Correspondent	R. P. Ottenstein
Northwest Correspondent	

NEXT DEADLINE SEPTEMBER 25

NOTICE

As an aid to the incoming treasurer, all members attending the fall convention will be expected to pay the annual dues for 1959 at the same time the registration fee is paid. Your cooperation in this matter will be greatly appreciated.

**"THEY HAVE ELIMINATED THE
HUMAN ERROR."**



NOTICE

The Directory Committee informs us that copies of the 1958 Directory of Membership of the Pacific Section, A.A.P.G., S.E.G., and S.E.P.M. are still available.

To order by mail send \$2.50 to Lee Choate, Baroid Well Logging Service, P. O. Box 9125, Long Beach 10, California. Make checks payable to Pacific Section, A.A.P.G.

PERSONAL ITEMS

Wayne Hoylman spent the last ten days of July in Alberta and Northwest Territories (Canada). While it was reportedly a business trip, pictures have been found in Wayne's pocket which show him holding a string of pickerel which may have been caught by geophysical means in the Great Slave Lake.

From bugs to bombs was the transition made by Eddie Stinemeyer, Shell's division paleontologist at Bakersfield. Colonel Ed has just completed his tour of Army reserve duty at Fort McArthur where he studied "Tactical Atomic Warfare"

Paul Harris has replaced Ken Myron as The Texas Company's district geologist in Bakersfield. Ken was transferred to Houston, Texas.

Bruce Brooks with Superior has been transferred from Bakersfield to Casper, Wyoming. Bruce wishes the situation of selling and buying of houses in the two towns was reversed.

Wes Bruer, late with Superior, is back in Bakersfield working temporarily for Bob Anderson, local consultant.

During the rebuilding of The Texas Company's offices in Bakersfield, Bill Bedford finally cornered a small office where he could work undisturbed. Nobody has yet had the courage to tell Bill that Bedford is not spelled M-E-N.

Tom Wilson, Ohio's delegate to the 49th State, reports that he has attended his first Alaskan cocktail party, even though it was hosted by Ohio. He reports absolutely no trouble whatsoever getting mouth and martini together through an almost impenetrable growth of full-blown facial foliage.

Tennant Brooks took a leave of absence from Ferguson and Bosworth. He left August 13 for Thailand with a brief stop at Tokyo to check the veracity of a tale. T. J. is expected to return to Bakersfield October 15.

The Oceanic geologists have been giving the U. S. a real looking-over. Dave Callaway and family vacationed in the North Woods of Minnesota and Jim O'Neill has been touring Montana, Colorado, Wyoming, Kansas, and Oklahoma under the guise of work.

Frank Weagant, with Franco Western at Bakersfield, now has the reputation of being a big game hunter. With his 56 caliber MG, Frank about decimated the deer population in Canada. He could have done better but ran out of fenders.

Rex Grivetti, Texas Company in Santa Paula spent three weeks vacationing in Montana where he was visiting relatives and friends.

Ralph Newton and family, Standard, Ventura, returned from a three week motor trip back to Michigan. Two highlights of the trip were a visit with Erwin Clark in Salt Lake City and a tour of the new Mackinaw Straits Bridge.

Dr. Ekrem Goksu will be working temporarily in the Ventura Office of Western Gulf. He is a visiting professor from Istanbul, Turkey, and has been teaching for several months at Stanford University.

Bob Arnal, Western Gulf, Ventura, has accepted a position as Assistant Professor of Geology at San Jose State College. He will start the new job in September.

Rod Colvin vacationed in Santa Cruz and returned without a single broken bone.

Dick Ferguson is spending the summer working for Richfield out of the Ojai office. Dick graduated from Whittier in June and plans to return to school in the fall.

The payroll department of Shell's Ventura office is confused because the local newspaper listed six John Does working in that office and no one will claim the pay checks.

Thanks are due to Lou Nelson and Jack Wood for a fine Coast Geological Society Bar-B-Que. The beer was ample and the food was excellent.

Dave Sears, Shell, Ventura, is rearing a group of tennis champions. At a recent local tournament the three boys won in their respective age groups.

"Atch" Curry and Roy Farnsworth, Shell Oil, took their families camping on Lake Shasta. They highly recommended the area as a vacation spot. The only crowding encountered was when the two families got into the 14 foot boat.

The Schlumberger engineers in the offshore division are becoming experts at cribbage and gin rummy. How long can a good thing last?

Harry Whaley, district geologist for Tide-water in Ventura, recently took a two weeks vacation and headed north, traveling as far as British Columbia and Alberta.

Warren Hagist of Superior is selling auto batteries to his friends in the industry in order to earn money to take water ski lessons. It is reported these batteries are no good.

James E. Slosson, head of Department of Geology, San Fernando Valley Junior College, was recently awarded his doctorate by U.S.C. (probably for his efforts in track, especially the 880), and is spending the summer with the State of California as party chief for the Water Development field geology crews in northeastern California. Jim hopes to find a source of Olympia water and open his own brewery.

Diz Deane, Standard's Olympia (it's the water) Diving Ace, picked the shallow end of a neighbor's pool for some exhibition dives. If one peers closely between the tapes, scars, and Mercurochrome a wee bit of Diz is still recognizable.

George Rudkin and Tom Roy, both of Ohio, Bakersfield, and their families took off to spend a "quiet" week end in the Sierra "back-country" at Camp Nelson on the Tule River. Half of Los Angeles was there to greet them, and tent-pitching real estate as well as rocks from which to fish

were nearly nonexistent. By the end of fishing season, Tom and George expect to have a limit of trout between them.

Harold Lian, Union in Santa Paula, is doing surface geology in the Matanuska Valley and reports that nearly all of the outcrops are along raging streams.

Bob Paschall, Hancock, Ventura, recently took an enjoyable vacation up into Oregon and Washington. Bob says he definitely was not looking for a homestead to take up farming again.

Dave Pontius, Shell Production Geologist in Ventura, has been transferred to Houston where he will be doing research.

Jim Taylor, Shell production geologist in Los Angeles, has been transferred to Ventura.

Spence Fine, Richfield in Ojai, recently enjoyed a two week vacation in the Rockies.

Howard Stark, Richfield in Ojai, has been transferred to Long Beach where he will be district geologist, handling the Los Angeles Basin.

Due to a reduction in the office staff of Western Gulf, John Truex and Tom Adams are no longer in the Ventura office.

John Curran, Honolulu in Santa Barbara, took his vacation at Huntington Lake where he sailed his Mercury Sailboat in the Nationals.

Lowell Redwine, Honolulu in Santa Barbara, spent a week at Bass Lake but his vacation was cut short because he had to come back to abandon a well.

Bob Nelson and Bob Critchlow, Honolulu in Bakersfield, were recently doing field work in the mountains, but had to return to the Santa Barbara office during hunting season for personal safety. Lowell Redwine suggested that they carry a gun and shoot back.

Mike Zaikowsky, Texas in Ventura, recently returned from a 2 week fishing trip in Montana. Mike said that Montana fishing is just as the Chamber of Commerce advertises.

Gerry Ganopole, The Texas Company, Bakersfield, is spearfishing at Catalina.

Tom Roy, Ohio, Bakersfield, is in Oregon with the "Research and Development" branch of the Army for his reserve tour of duty.

The Bob Ortalda and Bud Warren families, Standard, Bakersfield, are at "Twain Hart" in the Sierras back of Sonora.

NURSERY ITEMS

The John Terpenings, General Petroleum in Bakersfield, announced that their fourth boy, Luke Richard, was born August 20 at 8 pounds 13 ounces.

Colette and Lowell Garrison of Western Gulf, Ventura, are the proud parents of a baby boy, Barrett Anthony, born June 25th, weighing 5 lbs, 12 oz.

Pattie and John Thompson, Honolulu Oil in Santa Barbara, recently welcomed the arrival of Helen Maria, born August 1, weighing 9 lbs, 3 oz. She has two older brothers.

CALENDAR

September 9, 1958: Tuesday, 7:30 P.M., Coast Geological Society monthly dinner meeting, Miramar Hotel, Santa Barbara; "The Sespe Formation of the Ventura Basin" by R. H. Paschall.

September 10, 1958: Wednesday, 6:00 P.M., Dinner Meeting, A.I.M.E. Junior Petroleum Group, Candlewood Country Club, 14000 Telegraph Road, Whittier, "Water Flooding Operations by Long Beach Oil Development Company in Long Beach Harbor", by C. H. Jones, Long Beach Oil Development Operations.

September 16, 1958: Tuesday, 8:00 P.M., A.P.I. Basin Chapter Meeting, Shell Recreational Hall, 2080 Obispo Avenue, Long Beach, "Drilling and Production Panel on Power Tools and Special Equipment for Handling Tubular Goods and Rods", Discussion by A. Cooper, J. Keeley, and H. Campbell.

September 22, 1958: Monday, Noon, A.A.P.G. Distinguished Lecture Series, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "Geophysics and Stratigraphic Problems" by G. H. Westby.

September 22, 1958: Monday, Noon, A.I.M.E. Petroleum Forum Luncheon, Rodger Young Auditorium, 936 West Washington Boulevard; Subject to be announced; speaker: E. Goodin of Petroleum Information.

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Vol. 12

No. 9

Fred R. Neumann
381 E. Fourth Street
Chico, California

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United States Geological Survey

Bulletin 1059-D: Selected annotated bibliography of the geology of uraniferous and radioactive native bituminous substances, exclusive of coals in the United States, by Harriet Nell Jones.

Bulletin 1052-D: Magnetic-doublet theory in the analysis of total-intensity anomalies, by Roland G. Henderson and Isidore Zietz.

Water Supply Paper 1427: Geology and ground water in the Santa Rosa and Petaluma Valley Areas, Sonoma County, Calif., by G. T. Cardwell.

Miscellaneous Investigations:

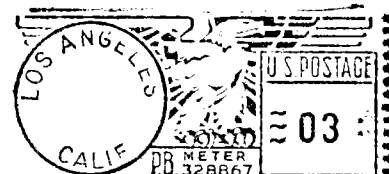
I-207-A: Geologic map of the northern Tuwayq quadrangle, Kingdom of Saudi Arabia, by R. A. Bramkamp and L. F. Ramirez.

I-276: Progress map of the geology of the Juneau quadrangle, Alaska, by Ernest H. Lathram, Robert A. Loney, William H. Condon, and Henry C. Berg.

Circular 218. Revised 1958. Development of photogrammetry in the U. S. Geological Survey, by M. M. Thompson. 1952.

State Geologic Map Index

Geologic map index of Arizona, compiled by Leona Boardman, revised 1957 by A. N. Bove. 1958.



PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 12

October, 1958

No. 10

ASSOCIATION ACTIVITIES

COAST GEOLOGICAL SOCIETY

Featured speaker at the monthly dinner meeting of the Coast Geological Society, held on September 9 in Santa Barbara, was Robert Paschall, District Geologist for Hancock Oil in Ventura. Bob presented an interesting and stimulating talk on "The Sespe Formation in the Ventura Basin."

Large new reserves of oil in the Sespe formation have been discovered in the Oxnard Plain during the past five years; yet the first Sespe oil was produced 71 years ago. Deepest Sespe production at present is from 14,800 feet, but Sespe oil has been produced from a depth of only 75 feet. Sespe-like rocks 80 miles southeast of the type locality have been referred to the Sespe formation for 30 years, yet many geologists refuse to concede that similar rocks only 20 miles east of the type locality are Sespe. Such contrasts and paradoxes are typical of the Sespe red beds.

Paschall pointed out that the Sespe formation of the Ventura Basin is not a unique formation which demands a unique explanation. Rather, red-bed sequences analogous to the Sespe occur in every Tertiary sedimentary basin in southern California. In each basin the red beds are underlain by Eocene marine sediments or pre-Tertiary rocks, and overlain by lower or middle Miocene marine sediments. During and immediately before and even after Oligocene time, then, essentially similar environmental conditions existed over a wide area, with red bed deposition in a number of basins.

In the Ventura Basin the Sespe formation underlies a land area of about 1,250 square miles. The volume of Sespe sediments is at least 950 cubic miles. Lithologically, the Sespe consists mainly of red to occasionally green gritty claystone and siltstone, and red, buff, light gray, and white feldspathic sandstones, with some conglomerate beds.

The Sespe attains a maximum thickness of about 7,500 feet in the Simi Valley - Montalvo trend, where it also has its maximum age range, from middle Eocene to lowermost Miocene. The formation thins rather uniformly westward toward Gaviota Pass; at Tecolote Tunnel, west of Santa Barbara, it is 2,500 feet thick. Farther west it grades laterally into the marine fossiliferous Alegria formation. In this western area the Sespe is probably confined to the Oligocene.

The Sespe produces oil over a 90-mile east-west belt, a wider extent than any other producing formation in the Ventura Basin. Oil is trapped in the Sespe, in one or more fields, in almost every manner in which oil can be trapped in a sandstone. There are two major Sespe oil-producing areas, the Oxnard Plain and South Mountain-Oak Ridge.

Paschall considers the Sespe to be definitely

continental in origin. Lines of evidence supporting this view are: (1) The lithologic contrast between the Sespe and its marine lateral equivalents to the west; (2) The common red color; (3) The lack of organic remains; (4) The clayey, poorly sorted nature of the Sespe sands; and (5) The presence of unfossiliferous red beds in all Southern California basins, indicating a marine regression in Oligocene time. It was suggested that the Sespe formation is probably a combination of alluvial fan, playa-lake, and river floodplain deposits.

The Sespe formation is the only Oligocene red bed series that has yielded oil in commercial quantities. Origin of this oil is regarded by Paschall as the toughest problem concerning the Sespe.

The areas of Sespe production were considered individually, and the possible sources for the oil in each were examined. It was concluded that there were multiple sources for the Sespe oil. These are: (1) The Alegria formation, the basinward marine equivalent of the Sespe; (2) The underlying marine upper and middle Eocene sediments; and (3) In the important South Mountain-Oak Ridge fields, the richly petroliferous Pliocene-Miocene section beneath the Oak Ridge fault. Numerous arguments and illustrations were presented in support of a sub-fault source for the Oak Ridge Sespe oil.

A very lively and entertaining open discussion followed the talk.

A. A. P. G. LUNCHEON MEETING

Ed Griibi, Jr., Bandini Petroleum, presented an interesting talk on British Honduras to the Pacific Section.

Bandini Petroleum Company acquired approximately two million acres of exploration concessions in southern British Honduras. The information presented is the result of a number of trips to the Colony by the speaker, in connection with the acquisition of the concessions and the initial stages of exploration thereon. This small British possession at the base of the Yucatan Peninsula borders on Mexico, Guatemala and the Caribbean Sea.

The area of Bandini's holdings lies between the Maya Mountains of central British Honduras on the north and the Guatemalan Sierra near the Guatemala-Spanish Honduras border on the south. Rocks outcropping between these two exposures of pre-Cretaceous rocks are of Miocene, Eocene and Cretaceous ages. Miocene limestones are exposed locally in eastern Guatemala unconformably overlying the Toledo formation (shales, sandstones, limestones) of Eocene and uppermost Cretaceous age. The Cretaceous consists of the San Cristobal limestone (Maestrichtian, Upper Cretaceous) and the Sierra Madre dolomite (Aptian-Albian, Lower Cretaceous). The average total thickness of the

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PACIFIC PETROLEUM GEOLOGIST

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Eocene and Cretaceous rocks can only be estimated to be on the order of 10,000 feet with the three formations being approximately equal in thickness.

The area is generally one of structural compression with faulting and fairly sharp folding being most prevalent near the Guatemalan Sierra and gradually decreasing in intensity to the north. The structural basin trends generally about N 60 E to N 80 E and it is suspected that the basin plunges gently seaward from the dominantly Cretaceous outcrops of southwestern British Honduras. Long folds and faults parallel this trend with occasional cross trends at right angles.

Gulf, in partnership with Shell, is drilling the ninth of a series of wildcat wells in the northern half of the country. The deepest well in this series went well into the Paleozoic rocks to a depth of about 10,500'.

SACRAMENTO GEOLOGICAL SOCIETY

The Sacramento Geological Society held its first fall meeting of the current year on September 9, 1958. Mr. G. F. Worts, Jr., District Geologist, Ground Water Branch-Department of Interior in Sacramento, gave a very interesting talk on his 2-month detachment to British Guiana, starting in February 1957, to make a brief appraisal of the ground-water conditions and to recommend a program for the further study of the water supply of the Colony.

His talk, though largely of a travelogue character through the use of some 125 color slides, presented the basic geology of the Colony.

The Colony is underlain at relatively shallow depth by granite rocks of probably pre-Cambrian age. In the interior, most of the overlying rocks are metamorphic and are cut by numerous dikes, largely doleritic. The coastal area is underlain by several thousand feet of marine sand, probably of Pleistocene and Pliocene age,

known as the White Sand series, and is the principal source of artesian ground water. One oil test hole, drilled in the northeastern part of the Colony near the town of New Amsterdam, penetrated 6,300 feet of marine sediments before encountering the granitic rocks. No oil shows were found.

Approximately 90 to 95 percent of the total population of about 500,000 lives within a 5-mile-wide strip along the Atlantic coastline. These people are supplied with deep (300-1,500 feet) artesian ground water from about 200 flowing wells. The drilling and operation of these wells is under the control of a Colonial agency called the Pure Water Supply Scheme. None of the wells is pumped and no sea-water intrusion into the deep aquifers has occurred, although a shallow (100-300 feet) aquifer is contaminated with saline water.

The brief study showed the possibility of developing a deeper artesian aquifer, if an additional source of supply is needed. This aquifer, identified in the sample and electric logs in these deep wells, was encountered at depths of 1,500 to 1,700 feet, but never has been tested.

The results of Mr. Worts' work in the Colony is to be published soon as Bulletin 33 of the Geological Survey of British Guiana, and the report is entitled, "Report on an investigation of ground-water conditions and resources in the coastal artesian basin of British Guiana."

SAN JOAQUIN GEOLOGICAL SOCIETY

On September 2, at the El Tejon Hotel, the San Joaquin Geological Society heard R. F. Laird, Assistant Engineering Geologist with the Department of Water Resources for the State of California, talk on "Land Subsidence on the West Side of the San Joaquin Valley."

There are two distinct types of land subsidence occurring in the area, shallow subsidence and deep subsidence. This talk dealt primarily with the phenomena of shallow subsidence. Shallow subsidence occurs with the application of water to the land. What appears to be of primary importance is the low density and low moisture content of the soils. Subsidence is recognized by down-dropping of irrigation ditches, hummocky land areas, sink holes, break in slope between irrigated and nonirrigated lands, characteristic cracking and tilted structures. Field mapping, soil sampling and testing, and the construction of test plots are part of the criteria used in obtaining data to delineate the areas of subsidence which will effect the construction of structures.

The Department of Water Resources is concerned with the alignment of the Feather River Project Aqueduct through the subsidence area. Means of presubsiding, ameliorating, or arresting this area of subsidence were discussed.

A test plot 100' X 100' was established. Bench marks were installed to gauge the subsidence, the plot filled with water and the level was kept static.

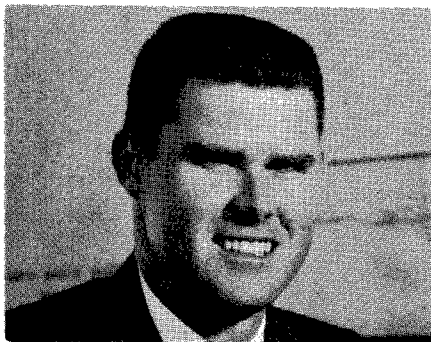
After nine months of soaking the test plot, five to six feet of subsidence was noted; after 18 months, nine feet of subsidence had occurred.

The rearrangement and compaction of the soil when wet causes the sinking. Any place where water is allowed to collect will have subsidence

to a degree. Moderate to high subsiding soil is silty clay to clay. Nonsubsiding soil has a large percentage of nonclastic sand.

Mr. Laird showed slides of the seven test plots located at Mendota, Huron, Kettleman Hills, North Lost Hills, South Lost Hills, Tupman, and Maricopa Flats. These test plots were of pipe eight feet in diameter and six feet deep filled with water to gauge the degree of shallow subsidence in different areas. Slides also depicted the concentric cracking of the soil around these test plots along with other examples of natural subsidence.

A brief period of questions followed this very interesting and illuminating talk.



IN MEMORIAM

During the night, on August 30, George Edward Hetherington died of cancer following a long illness. He was 26 years old. Funeral services were held on September second and his body was interred at Rose Hills Memorial Park in Whittier.

A native of Huntington Park, George graduated from Huntington Park High School and attended UCLA where he was a member of Phi Kappa Psi Fraternity. He received his AB in Geology in 1955 and his MA in 1957. Following college George began his employment with the Standard Oil Company of California on January 28, 1957 as an exploration geologist; he remained with Standard until he became too ill to work.

George had many friends in the oil industry, especially among fellow geologists at Standard and at UCLA. His untimely death is a shock to all. George had a real love for Geology. He worked hard and his infectious enthusiasm earned him the respect and friendship of all those who knew him. Had he lived he would have had a brilliant career.

He is survived by his father and mother, Mr. and Mrs. Russell Hetherington of 2531 Olive, Huntington Park, and by an older brother, John, who resides in Redding, California.

THIRTY-FIFTH ANNUAL MEETING

Mr. U. S. Grant IV, President of the Pacific Section of the American Association of Petroleum Geologists, announces that the thirty-fifth joint meeting of the A.A.P.G., S.E.P.M., and S.E.G. will be held at the Ambassador Hotel, Los Angeles, California, Thursday and Friday, November 6 and 7, 1958.

The Fall Convention will be attended by over 1,000 members of the Petroleum Industry, who will hear numerous papers dealing with "New Discoveries and Developments in the Pacific Coast Region".

NOTICE

Nominations for officers of the Coast Geological Society are now in order. Any member of the Society wishing to express his preferences for candidates should contact a member of the nominating committee (Tom McCroden, Standard Oil Co.; Ted Off, Ojai Oil Co.; Bob Nesbit, Western Gulf) before the October 14 meeting.



IN MEMORIAM

Joseph Edmund Eaton passed away on July 25, 1958, of a coronary defect. He is survived by his mother, Mrs. Lillian Crane; two sisters, Francis Saffholme and Helen Eaton; and a half-brother, John Crane. Joe was born September 7, 1895, in Portland, Oregon.

Joe entered Oregon State College in 1913, majored in Literature and became interested in journalism. With U. S. entry in World War I, he went to France as a pilot in the Air Force. Dr. C. A. Bonine, Professor of Geology at Pennsylvania State College and head of the State Geological Survey, interested Joe in geology and gave him his elementary training in it. Especially interested in geology's economic applications, Joe worked for Rocky Mountain Oil Company in 1919 and 1920. He then joined Desaix B. Meyers, who for two years gave him more practical field training.

Joe Eaton was a senior geologist for Milham Exploration Company in 1925 and 1926, resigning to become consultant for many companies and individuals in the West. Joe's journalistic inclination and his intense interest in the search for oil, brought out many concise, sound contributions to the literature, many of which are of major importance to the geology of California.

Joe Eaton was an early member of the American Association of Petroleum Geologists, and a Fellow of the Geological Society of America.

NOTICE

Everett Pease, Chairman of the Cross Section Committee, announces that two new correlation cross sections will be made available at the forthcoming convention. These cross sections are continuous and cover a traverse from the Rio Vista field in the Sacramento Valley to the Live Oak Canyon outcrop section in Kern County. These sections have been under construction for the past five years and were recently completed by the sub-committee of which Victor Church and Ken Krammes are co-chairmen. In addition to the many geologists who assisted in the preparation of these two sections, much credit should be given to Stanley R. Beck, who contributed a large amount of his time in reworking the samples from many of the more important wells. These cross sections identified as "10 North" and "10 South" will be sold in the registration lobby at the convention at a cost of \$1.50 each.

SAN JOAQUIN GEOLOGICAL SOCIETY

On September 22, at the El Tejon Hotel, the San Joaquin Geological Society heard Mr. G. H. Westby speak on "Geophysics and Stratigraphic Problems." Mr. Westby is President of Seismograph Service Corporation in Tulsa, Oklahoma.

The era of structure finding for the location of oil fields in the United States is waning. The era of geological and geophysical search for stratigraphic trap oil fields has barely begun. Vast oil reserves in stratigraphic traps are surely available if suitable means can be developed to find them.

Geophysical methods in the past and as applied up to the present have had some small success in solving stratigraphic problems and locating stratigraphic traps. The magnetic method has determined the depth of basement rocks and, thereby, the section of sedimentary beds available. The gravity method has, of course, located many salt domes, but these are not considered in this discussion. It has, as the sole method employed, been very successful in the location of shallow reefs, shallow productive areas of porosity in limestone or dolomite reservoirs, and may even, in favorable cases, locate shallow sand bars.

The seismic reflection method, through proper identification of important reflecting horizons, their presence and absence, plus the use of time intervals between reflections, has provided some stratigraphic data of value. The time interval or isochron maps were used in Oklahoma in the Golden Trend to project areas of stratigraphic accumulation of oil. The disappearance of certain reflections has been used to map edges of stratigraphic traps such as the West Edmond field in Oklahoma.

New methods available to the seismic industry include the continuous velocity log and its derived reflection coefficient log and synthetic reflection record, the Siran, an electronic simulator of the entire seismic process, magnetic recording and reproducing, corrected normal and variable-density cross-sections derived from the magnetic data and a device, one type called a Seisverter, to rerun old paper seismic records and give them modern cross-section or magnetic type treatment.

Of these new developments, the continuous velocity log and the synthetic reflection record, whether derived from the CVL or through the Siran, are important. Reflection complexes can be unscrambled and much more stratigraphic data revealed. Theoretical studies with synthetic reflection records indicate a reasonable possibility of determining from seismic data the presence or absence of certain important sandstones which produce under stratigraphic-trap conditions.

The presentation of seismic data on corrected record sections, particularly the variable density type, reveals more data of low-amplitude reflections and greatly improves stratigraphic study.

The Seisverter enables the geophysicist to apply these new techniques to old seismic records shot by conventional means.

These new methods promise much greater success in the revelation of stratigraphic problems by the seismic method if properly studied and applied.

It is the purpose of this paper to acquaint

geologists with these new techniques, so that cooperation with geophysicists in the study of stratigraphic problems can be improved and intensified.

HOLIDAY DINNER DANCE

Make your plans early to attend the Holiday Dinner Dance. Most gala and festive affair of the winter season. A delightful cocktail party will be followed by dinner and dancing to the music of Tony Ferraro and his orchestra. Mark December 27th on your calendar as the day to present your wife and yourself with the nicest Holiday gift of all.

POMONA COLLEGE NEWS

Donald B. McIntyre had an appointment as geologist with the Gravity Division of the Dominion Observatory, Ottawa, Canada, and made a reconnaissance of a large area between Hudson's Bay and Labrador.

Gerhard Oertel was engaged in geological reconnaissance for the Richfield Oil Corporation in Alaska.

John M. Christie and C. Barry Raleigh were working on the Orocopia Schists. John Christie has accepted an appointment as Instructor in the Geology Department at U.C.L.A. beginning in the fall, 1958.

Alex K. Baird will join Pomona College faculty as Instructor in geology in the fall, 1958; he spent the summer in the Mother Lode country.

During the year 1957/58 two M.A. degrees in geology were awarded by the Claremont Graduate School: Patsy J. Smith wrote a thesis entitled "Recent Foraminifera off Central America; quantitative and qualitative analysis of the subfamily Bolivina". Olaf Van West's thesis was on "The Geology of the San Benito Islands and southwestern part of Cedros Island, Baja California, Mexico".

A new building to house the geology department is under construction and is expected to be extraordinarily well equipped.

Outstanding additions to our library include the Paleontographical Society Monographs from Volume 1 (1847) and the late Dr. L. F. Spath's reprint collection. The latter contains more than 2,000 items and, once it has been catalogued, should prove of great value to everyone working on ammonites.

PERSONAL ITEMS

Last month it was noted that the Bakersfield Tidewater Oil Company office wasn't sure whether Joe Dunwoody or a walrus had returned from Catalina. The consensus of opinion now is that it's a walrus because of the better quality of work turned out along with more barking than usual.

Ben Phillips and Bob Orwig have returned to Bakersfield after spending a vigorous summer in Alaska for G. P.

At the Scouts' Barbecue in Bakersfield, Bob Lindbloom with Standard and Bruce Robinson with Kern County Land Company tied for low net in the

golf tourney. To prove tht it takes more luck than sense, Bob cut a three of hearts to beat out Bruce's deuce of diamonds for the tie breaker. During the same tournament, Standard's Milt Zeni achieved his first hole-in-one; the only one of the day.

Adrian Nelson with Tidewater Oil at Bakersfield raised his hand at the wrong time and found himself volunteering for duty in Pakistan. Because of this, hand-raising at Tidewater has become obsolete as the fellows are now using "relief memos."

Bob Dott, Jr., has left Humble Oil and Refining Co. to accept an assistant professorship at the University of Wisconsin.

The Herb Johnston's of Humble are awaiting the stork. Herb is a recent transfer from Alaska.

Dick Wilson, Humble, has been transferred from production geology to subsurface geology in the Ventura Basin.

Wayne Jones, Humble, has been transferred from Salinas to production geology in Los Angeles.

John Smith, of Humble, has been transferred from the off shore group to subsurface geology in the Salinas Valley.

Dick Eckhart, Sunray in Alaska, came floating in with the rain storm last week.

Don Preston, Shell, is returning to Salt Lake City after working three months in the Los Angeles office. He will be replaced by Glenn Harris from Ely, Nevada.

Tom O'Neill, Shell Oil, will be returning to Long Beach with area office domino money and will be replaced by Dave Shoemaker from Bakersfield.

People are saying that the new Standard offices at La Habra have special exits so the Exploration personnel can leave early without disturbing the management.

Bill Hughs, geologist with The Texas Company, was married in Los Angeles on October 3, to Miss Susan Bogard. Bill recently returned from Alaska.

Don Herring, senior geologist with The Texas Company at Los Angeles, left recently on a special assignment to North Africa.

Larry Morris, Union geophysicist, left for Costa Rica for an extended tour of duty.

Doyle Graves, Union geologist, is on a three-week business trip to Buenos Aires, Argentina.

Steve Brooks, geologist with Union Oil Company, is returning to the University of California at Berkeley for additional graduate work.

Frank Webster of Shell, Ventura, was married recently after 38 years of bachelorhood and several years of near-total baldness. Shortly after the wedding, his colleagues noted that hair was growing back on his head. As yet, however, they have not been able to decide whether this hirsute activity is due to married life or to the gimlets served at the wedding reception.

John Evers, formerly with Western Gulf in Sacramento, is now self-employed doing reproduction work, drafting, and other duties similar in nature.

Ed Goodrich, G. P., has been transferred from Bakersfield to Santa Fe Springs.

Dave Costello with Tidewater Oil in Bakersfield is on a short tour of duty in the Casper office.

Cliff Church and Bill Cortwright with Tidewater Oil in Bakersfield took separate vacations to Yellowstone National Park. They returned to find they had photographed the same bear still in the same spot.

Joe Bigelow has the cure for all you desk-bound geologists. He and two other fellows from Western Gulf's Bakersfield office climbed Mt. Whitney; claims it really tones up the muscles.

Tom Brady, Hal Reade, and Jack Nisbet have returned to Richfield in Bakersfield from a summer working in Alaska.

Ray and Marsha Pearson, Richfield in Bakersfield, have returned from their vacation in Hawaii.

Rick Shoemaker, Ohio district geologist in Bakersfield, and a resident of that city for twenty years, has been appointed district geologist of Ohio's new Alaska district, headquartered at Anchorage.

Paul Hayes, Altadena consultant, and Tom Roy, with Ohio in Bakersfield, completed their two-week U. S. Army Reserve R. & D. seminar at Oregon State college. They reported that the geological contingent there numbered only three from a list of 131 scientific and engineering reservists attending the symposium.

A group of Bakersfield geologists, including Jim Kurfess, Dave Callaway, Don Swiers, George Starke, Darrel Kirkpatrick, and Lesh Forrest, took a trip to Catalina for sport and wound up feeding the fish, not catching them. Only Starke brought home enough for a meal, provided his kids ate weiners.

Ask E. C. (Skinhead) McKnight of Standard, La Habra, why the younger men (with more hair) called him "Itchy" at Bass Lake this summer.

Is it true that Hal Rader of Standard, La Habra, has a new self-winding watch and he makes it a point to go downstairs every afternoon to make sure it is running properly?

Walt Record, geologist with Richfield, has returned to Los Angeles as regional geologist in charge of Canadian operations after living in Calgary for six years.

Jerry Fletcher, recent Ph.D. candidate from U.C.L.A. is en route to Canada to assume geological duties in Richfield's Calgary office.

Rodger Judson, geologist with Standard Oil Company, has been transferred from Ventura to La Habra.

Bob Sanem, geologist with Standard in La Habra, has been transferred to Bakersfield for a four months training course in geophysics.

Dick Glenn, geophysicist with Standard in La Habra, has been transferred to Ventura.

Jerry Raydon, geophysicist with Standard, has returned to U.S.C. to study for a law degree.

Dick Burgess, geological technician for Standard, has returned to U.C.L.A. to complete

his studies for a degree in geology.

Marshal Petersen, formerly of the micro-paleontological laboratory with Standard, has returned to Redlands University to complete his degree in geology.

Jim Trotter, Tidewater in Ventura, has been temporarily transferred to Casper, Wyoming, with Tidewater's Uranium Division. Word of the transfer (for about one month) came just as Jim and his bride of less than three months were moving into their Solimar Beach home. Well, that's the oil business for you.

Gene Johnson, Shell scout in Ventura, was offered contracts by three Las Vegas clubs after singing and doing a hula while under hypnosis at a Bakersfield night club.

John Curran, Honolulu, Santa Barbara, assumed the duties of chairman of the A.A.P.G. Santa Maria Basin Cross Section Committee at the last meeting of the Santa Maria Geological Study Group.

Bob Deacon of the Texas Company has returned from Alaska and is now in the Santa Maria office.

Jerry Williams, Ohio in Ventura, agrees that there's no place like home. He planned a week's vacation at Mineral King but was rained out the second day. A second week at Big Bear was also washed out.

Bob Nesbit, Western Gulf in Ventura, recently took an enjoyable family vacation visiting relatives in Illinois and Tennessee.

Dale Duley, Richfield in Ojai, hiked over Mono Pass into the high Sierra with several friends and spent a leisurely week catching limits of golden trout.

Don Henriksen, Richfield, has returned to the Ojai office after four months in the beautiful Pacific Northwest.

Lum Lovely, Union in Santa Paula, is sporting a new form-fitting T-Shirt these days, a gift from the local Universal Health Studio for obtaining two new members, Ed Hall of Union and Roy Miley of Texas in Ventura.

Dick Lyon, Union in Santa Paula, is reported to be sharpening up his golf game while on vacation in Chicago.

Mike Jager has returned to Richfield's Ojai office following a 2-1/2 year hitch in the Air Force. Considering his reserve status and the present Formosa situation, Mike isn't sure how long he'll be around.

Lew Nelson of Ohio Oil Company is at long last moving from Port Hueneme to Ventura.

Sam Stanovic, formerly with Western Gulf in Sacramento, has returned to work with the U.S.G.S.

Ed Karp, Western Gulf in Sacramento, just returned from a temporary assignment in Casper, Wyoming. His family was with him, and they report visiting many interesting places.

Joe Harvey, General Petroleum in Sacramento, is now home from an assignment in Alaska.

Vern "Do it yourself" Rutherford, Union Oil Co. of Santa Maria recently completed the room additions to his house, and a fine job it is, too.

Dick Stewart, Union in Santa Paula, recently purchased a cabin at Arrowhead with two friends. Dick claims the bedroom is his 1/3.

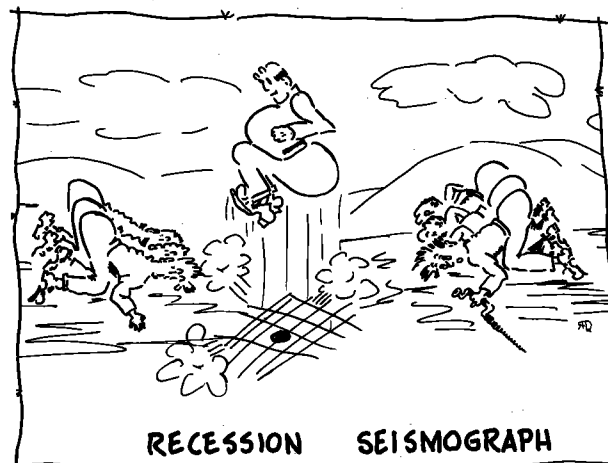
Don Trotzman, Standard in Ventura, is taking a leave of absence to work on his Masters Degree at U.C.L.A. Don's friends can find him at 7650 Balboa Avenue, Van Nuys.

Don Bruce of the Santa Maria D.O.G. recently returned from a northern California vacation. It is rumored the F.B.I. is on his trail to track down his source of "shady" greeting cards sent to friends. He must have kept moving fast, for not a single pound did he gain in spite of eating dishpan-size abalone steaks and hanks of venison.

Joe Ernst, district geologist of The Texas Company, Santa Maria, has been transferred to the Long Beach office where he will resume similar duties. The collector of internal revenue is eyeing his capital gain potential.

Ernie Bush of General Petroleum in Santa Maria, recently had his license revoked as "Dirty Ernie, the friendly used car dealer" when neighbors objected to the use of Mobilgas pennants displayed in a residential area.

Darrel Kirkpatrick, Bakersfield consultant, is vacationing in Mexico with his family. Kirk had a mental picture of a 120 pound sailfish he caught hanging on the living room wall but his wife refused to give up her seat for a fish.



NURSERY ITEMS

Joe and Nora Harvey, General Petroleum in Sacramento, are the proud parents of Nancy Eileen Harvey, 8 lbs 14 oz., born on July 11, 1958.

Jim and Frankie Alkire, General Petroleum in Sacramento, proudly announce the arrival of Nancy Ann on September 7, 1958. Nancy weighed 7 lbs 13 ounces.

Allen and Jan Rupprecht, of Superior in Los Angeles, announced the arrival of a boy, Thomas Alfred Rupprecht, weighing 8 lbs 7 oz., born September 8. This brings the total to two boys and one girl.

Mr. and Mrs. Ernie Bush, G.P. in Santa Maria, welcomed the arrival of their second child, first daughter, on September 9. Stacy Miller Bush weighed in at 7 lbs. 5 oz.

At almost the same time, Mr. and Mrs. Walt Harris, Texaco in Santa Maria, became the proud

parents of Lisa Michelle, their first child, born September 10, weight 7 lbs. 12 oz. The two wives were roommates in the hospital.

Dick Stites and wife, Pat, with Ohio in Bakersfield, are parents of their fifth child (fifth daughter, too). Peggy Kay was born September 15 at eight pounds three ounces.

Don and Velma Sorgenfrei, with Superior in Bakersfield, announce the birth of William Don, born September 4 weighing five pounds twelve ounces.

CALENDAR

October 9, 1958: Thursday, Noon, Luncheon Meeting, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "The Use of a Carborne Scintillation Counter for the detection of Surface Faults in the San Joaquin Valley" by B. L. Vanderhoof, Intex Oil Company.

October 14, 1958: Tuesday, 7:30 P.M., Sacramento Geological Society, Board Room of Public Works Building, 1120 N Street, Sacramento, "Earthquakes in the Great Basin" by V. Gianelli.

October 14, 1958: Tuesday, 7:30 P.M., Coast Geological Society monthly dinner meeting, Gold Room of the Miramar Hotel, Santa Barbara; "Geology of the Tepusquet Area" by Lowell Redwine, Honolulu Oil Corporation.

October 16-17, 1958: National Convention of the American Institute of Mining and Metallurgical Engineers, the Society of Petroleum Engineers, and the Southern California Petroleum Section, Fall Meeting, Biltmore Hotel, Los Angeles.

October 1958: A.A.P.G. Forum Meeting: to be announced.

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"Borate deposits of the Mojave region, California" By Ward C. Smith. Vol. 48, No. 8, pages 23-26, 36, July 1958.

United States Geological Survey

Professional Paper
293:

"Quaternary and engineering geology in the central part of the Alaska Range"

- Page 7
- A. Quaternary geology of the Nenana River Valley and adjacent parts of the Alaska Range. By Clyde Wahrhaftig.
B. Engineering geology along part of the Alaska Railroad. By Clyde Wahrhaftig and Robert F. Black.

Bulletin 1059-D:

"Selected annotated bibliography of the geology of uraniferous and radioactive native bituminous substances, exclusive of coals in the United States" By Harriet Nell Jones.

Miscellaneous Geologic Investigations Map

I-256:

"Preliminary geologic map of the southeastern part of New Mexico" By Carle H. Dane and George O. Bachman.

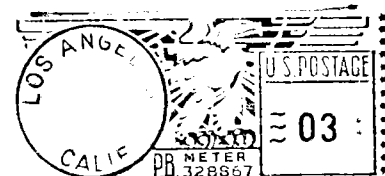
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Fred R. Neumann
381 E. Fourth Street
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ASSOCIATION ACTIVITIES



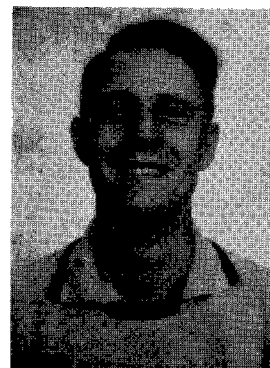
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COAST GEOLOGICAL SOCIETY

Lowell Redwine, District Geologist of Honolulu Oil Corp. in Santa Barbara, was the featured speaker at the Coast Geological Society monthly dinner meeting, held October 14 in Santa Barbara. He presented an extremely interesting and comprehensive talk on "Geology and Oil Exploration of the Tepusquet Area, Santa Barbara County, California."

The Tepusquet area covers 100 square miles in the San Rafael Mountains of Northwestern Santa Barbara County. It is bounded approximately by the Cuyama River on the west and north, by Buckhorn and La Brea Canyons on the east, and by the Sisquoc River on the south. This geologically little-known area, part of a northwest-trending Tertiary structural basin which bifurcates on both ends, lies along the present northeastern edge of the Tertiary rocks of the Santa Maria Basin. Here the Pliocene has been largely stripped off, so that the pre-Pliocene stratigraphy and structural patterns may be studied. Farther out in the basin these features are masked by the unconformably overlying Sisquoc formation, and they must be largely interpreted from wells which are widely scattered in places.

Probably the dominant character of the struc-

ture of the Tepusquet area is a complex system of predominantly northwest-trending faults. All of the larger faults are lateral or strike-slip faults, as shown by several lines of evidence. Direction of slip has not been definitely determined, however.

Folds in the area also trend northwesterly, and almost invariably each fold terminates northwesterly against the fault to its southwest, producing a marked en echelon arrangement. Without exception, the folds are asymmetric, with the steeper flank on the southwest.

Rocks outcropping in the area range in age from Jurassic to Recent. These rocks are predominantly marine sediments, with some pyroclastic sediments and volcanic, and possibly hypabyssal, igneous rocks, as well as a few red beds. In ascending succession the formations mapped in the area are: (1) Franciscan-Knoxville undifferentiated, of Jurassic and possibly Cretaceous age; (2) Cretaceous undifferentiated approximately 2500' of marine shale and thin interbedded sandstone; (3) An unnamed formation, as much as 3900' thick, consisting almost entirely of abundantly biotitic arkosic sandstone, but locally including red beds (mapped as questionable Sespe); age of the unnamed formation may range from late upper Cretaceous to Oligocene, but is thought to be probably Paleocene and/or Eocene; (4) Vaqueros

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sandstone, 4000' to 500' thick, of lower Zemorrian age; (5) Rincon shale, as much as 2800' of siltstone and claystone of lower Zemorrian age; (6) Obispo tuff, 1100' thick, of Saucian age; (7) Point Sal formation, as much as 3000' of marine sediments comprising several different facies, predominantly shales, of Relizian age; (8) Lower member of Monterey shale, dolomitic and limy, 500' thick, of Luisian age; (9) Upper member of Monterey shale, 1500' of siliceous, diatomaceous, porcelaneous, and silt shales of Mohnian and Delmontian age; and (10) Sisquoc formation, Tinaquaic sandstone member, 1200' thick, of middle Pliocene age.

The Tepusquet area is considered attractive for oil exploration because it is marginward from the prolific Santa Maria basin, and because of the presence of good sandstone objectives, numerous structures, several unconformities, ample source rocks, and surface evidences of oil. Twenty exploratory wells have been drilled in the area to date. The more important wells were discussed in some detail. Several wells had oil and/or gas shows, but none yielded commercial production.

Redwine concluded that the complex geology of the Tepusquet area, as revealed by surface and subsurface studies to date, has brought to light some interesting facets of the structure, stratigraphy, and geologic history of the greater Santa Maria basin. Large lateral faulting apparently plays an important structural role. Stratigraphically, it is noteworthy that even though the Tepusquet area is far removed from the axis of the Santa Maria basin, the formations, with two exceptions, are remarkably similar in lithology to those in the deeper parts of the basin. Relatively near-shore conditions are reflected only in the unnamed formation and in the Tinaquaic sandstone member of the Sisquoc formation, and possibly in the Sespe(?) formation. With a sufficient density of exploratory drilling, one or more oil fields may yet be discovered in the area.

Lowell is to be commended for a well organ-

ized and smoothly presented talk, which was well received by a large, appreciative audience. His illustrations, which included a geologic map, numerous cross sections, and kodalides, were clear, pertinent, and esthetically pleasing.

LUNCHEON MEETING

The regular luncheon meeting of the Pacific Section received a variation from the usual talks concerned primarily with geology, when Paul H. Dudley, consultant, presented colored slides and a discussion of some of the more romantic and intriguing places in the Far East that relatively few Americans get to see, "The Sulu Sea, Hongkong, and Macao." The pictures were taken on his second visit to the Philippines as a consulting geologist for The Philippine Oil Development Company.

Geology took the front as Mr. Dudley gave a resume of exploration in the Islands to date and a brief review of the structure and stratigraphic section in the Cagayan Valley, wherein most of the drilling has taken place. This valley opens to the north coast of Luzon and is comparable with the southern half of the San Joaquin Valley in size. The Tertiary section ranges from Upper Pliocene to Oligo-Miocene and is now known to be at least 25,000 feet thick in the central part of that basin. There are a number of large anticlinal folds whose axes generally trend northerly. The folds usually are asymmetric, the east flank being steeper.

The Philippine Oil Development Company has drilled two wells on Tumauini anticline, the second test going to 13,512 feet and bottoming in lower Miocene above the lower Miocene and Oligo-Miocene sands that crop out along the sides of the valley. STANVAV, drilling at different locations, obtained substantial dry gas in a second test and is currently drilling its third well. There have been two tests on islands other than Luzon this past year but neither encountered commercial showings.

Mr. Dudley's discussion of the Sulu Sea was based on an aeromagnetic survey of, and a subsequent visit to, the Tubbataha Reefs on which Philippine Oil Development Company held an exploratory concession. The investigation suggested that the concession was devoid of oil possibilities but the reef itself proved so interesting from the standpoint of what was found on it, particularly in the way of coral, bird assemblages and relics of World War II that the pictures were a treat to anyone intrigued by far-away places.

The luncheon meeting then visited the great free ports of Hongkong and Macao, 2-1/2 hours by air from the Philippines. These are two of the most beautiful and exotic cities in the world, Hongkong being one of the few remaining places in the world where there is still true economic freedom.

NOTICE

"Lower Tertiary Biostratigraphy of the California Coast Ranges" by V. Standish Mallory will soon be off the press. A special exhibit will feature this volume at the Annual Meeting of the Pacific Section of A.A.P.G. on November 6-7, 1958 at the Ambassador Hotel, Los Angeles, California. The Pacific Section has underwritten the publication of this book and all persons

attending the meetings are urged to visit the exhibit and place orders for this volume.

"Miocene Stratigraphy of California" by R. M. Kleinpell and "Geology of Southern California" by Reed and Hollister will also be available for order.

NOTICE

As the 1958 Fall Convention rolls around in a few more days it will mark the end of a full year that the 1958 Membership Directory has been in the hands of members and friends of the Pacific Section. Inasmuch as the directory will have served half of its normal useful life span it will be offered at the convention and thereafter for HALF-PRICE - \$1.00. Mail orders will be \$1.25.

Checks should be made payable to "Pacific Section, A.A.P.G." and mail orders sent to: Lee R. Choate, Baroid Well Logging Service, P.O. Box 9125, Long Beach 10, California.

It may be of interest to members to have a report on the standing at this time. There are 1385 members listed in the directory. During this past year 1140 copies have been purchased by these members and friends. An additional 82 books were given complimentary to advertisers, institutions, student members of committees, etc. There remains 283 copies of which members may avail themselves during the coming year. To the directory committee this record is deeply gratifying for it represents very generous acceptance by the membership of its efforts.

ANNOUNCEMENT

One-hundred small, inexpensive earthquake recorders developed by Dr. G. W. Housner and Dr. D. E. Hudson of Caltech will be installed in Los Angeles and San Francisco metropolitan areas within a year to help determine what effect geology has on ground shaking.

Los Angeles may be built on a dozen different types of alluvial soil. They want to know how much difference it makes to buildings whether they are on softer or firmer ground. It is likely to be found that structures will require more reinforcing when built on certain kinds of soil.

Dr. Housner said it will take several years to obtain the information from the two large metropolitan areas. Later, other areas of California will be surveyed for installations.

One of the instruments is being sent to Chile and another to India, he added, for possible similar studies in those nations.

FOREIGN CALIFORNIAN

Preparing for surface exploration in Western Pakistan is like planning a safari. One of the towns sells gasoline and oil, but most of the food and all other supplies will probably have to be flown in, and no available accommodations. Field geology will be "1875 style" with the added help of helicopter and camel caravans. Actually the region is an avid field mans paradise--absolutely no vegetation, no ticks, and you can trace an outcrop for 20 miles from a high ridge or plane.

The natives are friendly and such things as mirrors and large trucks attract as much

attention as a "flying saucer" in Los Angeles. There are some bandits roaming the hinterland and armed guards are a necessity in some areas. In fact the guards follow you from outcrop to outcrop and enjoy helping sample, although they feel that either you are looking for gold or just plain crazy.

One thing you miss most is something cold. In the U.S.A. you might be back in the boondocks somewhere but you usually can find a store or ice, and here you are 400 - 500 miles from it.

It was great to get back to the city and be able to use an electric shaver, besides that cold beer sure tasted delicious!

Ed Fritz
Your Foreign Correspondent

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MORT KLINE

ANNOUNCEMENT

The amendment to increase the Pacific Section dues failed to pass.

In order to maintain balanced books it will probably be necessary to reduce the number of issues of the Pacific Petroleum Geologist or some other services paid for by your Association.

PERSONAL ITEMS

Gene Lawrence of the D.O.G. in Santa Maria has recently returned from a trip to Colorado where he drove to see whether his new DeSoto would climb Pikes Peak.

John Gressle of Texas Co., Santa Maria, was recently notified that his landlord in Santa Maria was raising the rent and that the tenant occupying John's Los Angeles home was vacating. The following week John was transferred from Santa Maria to Long Beach, where he and Fern will replace their ex-tenant. The Gressle's insist they just live right.

John Weaver is being transferred from Texas Company's Los Angeles office to Santa Maria, where he replaces John Gressle as district landman.

Walt Harris of Texas Company and Ernie Bush of General Petroleum, Santa Maria are both suffering from acute loss of sleep. It seems their 5 weeks old baby girls have not yet learned that sleeping is supposed to be done at night.

Don Six of Texas Company, recently transferred from Los Angeles to Santa Maria as district geologist, has rented a house in Santa Maria. He claims he prefers having his family with him to bring in the expense account.

Gordon Hornaday, captain of the Standard Oil "Explorers" bowling team in Bakersfield, is doing all the managing from the scoring table. Seems his average is so low that he is consistently bumped off the playing team.

Bob Jennings, Otto Seal, Les Roth, Dee Trent and Neil Rosser, of Amerada, are back from a summer in Alaska. Les Roth went to Hawaii for rest and recreation after serving beyond the call. (It is rumored that a certain girl is also in the Islands.)

Eric Lindvall has returned to Richfield's Ojai office after a long summer in Alaska, where his principle contribution to geology was the shooting of a very large bull moose.

Dick Eckhart, of Sunray, after spending the summer in Alaska, has sold his house and moved to Anchorage as a permanent resident. He has moved into the house next door to Orrin Gilbert of Standard.

Eugene Borax and Hal Lian, Union Oil Co. and Tom Wilson, Ohio Oil Co. have returned to the Los Angeles office after spending the summer in Alaska.

Earl Turner, Union, is also back (at least for a while) from the Four Corners area.

Bill Greenwald, formerly Chief Geologist for Union's Canadian Division, has moved to Buenos Aires, Argentina, as Chief Geologist. Presently

he is preparing the ground work prior to exploration work.

Edwin M. Bedford, Manager of the Land Department of Western Gulf Oil Company, plans retirement effective November 1, 1958. On that date, Ed will have completed 34 1/2 years service with the Gulf Companies. Ed will continue in the land business as a real estate broker and land consultant, and anyone needing a fourth for golf may find Ed waiting at the tee before they can hang up the telephone. Ed is a Charter Member of the Petroleum Club, a member of The Oil Club, Los Angeles Athletic Club, Riviera Country Club, American Association of Petroleum Geologists and Petroleum Production Pioneers.

Wiley Price is back from his vacation spent at Lake Mead (where he had his boat) and a place called Lost Wages!!!

Tom Rothwell, Richfield Oil Corporation, Long Beach, recently returned from a trip to Graham Island, Southern British Columbia, and Washington, where he amazed all the ROC geologists with his perpetual motion surface sampling technique.

Joe LeConte, Richfield Oil Corporation in Long Beach, is studying Spanish in night school. This will probably result in Joe's being moved to Alaska.

Ben "No Dope" Ryan, with Richfield in Caracas, returned for a brief visit in Los Angeles during part of an extended State-side vacation.

Billy Reed, Standard Oil at Ventura, seems to have a number of "Grandmothers" that have to be taken care of since he was notified that the U.S. Air Force is breathing down his neck. Can this really be true - are these Grandmothers??

J.P. Bailey, Standard Oil, has returned to the La Habra office after an absence of two years.

Tidewater Oil Co. is in the process of closing its exploration office in Ventura. The Bakersfield office will be Tidewater's only remaining district office in the Western Division. Most of Tidewater geological and paleo staff are being transferred to Bakersfield. Their rather abrupt departure leaves quite a gap in the rank of the Coast Geological Society and the active, friendly Tidewater group will be missed by their many friends in the Ventura Basin.

Harry Whaley formally Tidewater District Geologist, will remain in Ventura as Senior Exploitation Geologist.

Lou Taylor, Tidewater scout is being transferred from Ventura to Los Angeles. John Bullington will be transferred to Ventura to replace Lou.

New with Union Oil Co. in Santa Paula is Don Scanlin, who recently received his M.A. in geology at U.C.L.A. following undergraduate work at the University of California.

Lum "Adonis" Lovely is showing up at Union Oil Santa Paula office more bleary-eyed than usual these days, attempting to explain this condition with some ridiculous story about new contact lenses.

Harold Lian, Alaskan Ambassador for Union Oil's Santa Paula office has traded his mukluks for dress shoes and is currently laboring in Union's home office in Los Angeles.

Word from an undisclosed source has it that a behind the scenes battle for control of the numbers racket and football pools is currently raging at the Santa Paula office of Union Oil.

Principle contenders are said to be Howard "Lucky" Level and "Dirty" Dick Lyon who recently returned from an inspection tour of popular persuasion methods in Chicago.

Jim Doty, Shell seismologist in Ventura, is being transferred to Salt Lake City.

The current Coast Geological Society nominees for 1959 have overtones of Tammany Hall. Members must return their voted ballots to Dick Stewart of Union in Santa Paula, who is one of the candidates for president. Outcome of this election is being watched with great interest.

"Atch" Curry of Shell, Ventura, has recently returned (with cold) from the S.E.G. Convention in San Antonio.

Carroll Hoyt, General Petroleum, Ventura and an undetermined number of other scouts attempted to get up to a wildcat well in the Mint Canyon area on October 21st, but were turned back by the Highway Patrol because of the Tick Canyon Fire. This is an effective but somewhat extreme method of frustrating scouts.

Otto Hackel of Intex, Bakersfield, has just returned from a field trip in New Mexico and Arizona, the highlight of which was a hike to the bottom of the Grand Canyon.

Manuel Castro of Shell, Ventura, renounced his bachelor existence and was married to Francis Schrader, a former Shell secretary on October 25th.

Vern Rutherford of Union Oil, Orcutt, has been elected chairman (by unanimous vote) of the Santa Maria Geological Study Group. Speculation is rampant regarding the type of structures which the group will now study.

Jim Eke of Union Oil, Orcutt, has been doing a lot of clamming during recent low tides at Pismo Beach. Between tides he has been observed photographing "non-geological structures" along the beach. Perhaps Jim contemplates switching to vertebrate paleo.

Mack Robinson, with a waning gleam in his eye, returned to Bakersfield from one month of well site work in Alaska from Shell. He was imposed upon to leave for Alaska just five days after his wedding.

Ray Pearson, with Richfield, was transferred from Bakersfield to Los Angeles with a promotion to Regional Geologist for the Northern Division. Replacing Ray is Stan Carlson, who is now Division Geologist.

Dave Martin, a recent U.C.L.A. graduate, worked this summer in Alaska for General Petroleum and is now stationed permanently in Bakersfield.

Bob Heiner has been transferred from General Petroleum's Santa Fe Springs office to Bakersfield.

Friends of John E. Sherborne will be glad to know he is now recuperating from a coronary attack. He can not take phone calls as yet, but his home address is 1004 E. Summit Drive, Whittier.

A gala going-away party for Rick Shoemaker was staged in Bakersfield on September 26 by almost all of Ohio's California geologists at which Rick was presented a tripod for his stereo camera, snug, warm mukluks, and other cold weather miscellany. Toasts to Rick continued on long after Rick (who doesn't imbibe) had gone home. After a leisurely

coastal trip to Seattle with a stop-over in San Francisco, Rick and Billie flew to their new home of Anchorage. Billie, Rick's wife, set a new all-time record in selling their home in Bakersfield, and for cash! (Geologists' wives, please take note!)

Ross M. Phillips, geologic and engineering consultant, has moved his offices to: Suite 2, Masters Building, 436 Heliotrope Ave., Corona Del Mar, telephone Oriole 3-3984.

Paul Harris, The Texas Company district geologist, was really a man of action, calm to the bitter end. When transferred to Bakersfield, he sold his old home, bought a new one and took care of his child; all while his wife was giving birth to another.

Art Hawley has been transferred to Western Gulf's Bakersfield office from Sacramento to become Zone Exploration Manager. His is replacing Lee Wicks who has been transferred to Alaska as Zone Exploration Manager there.

Jim Kurfess, Tidewater Oil Company geophysicist, has been transferred from Bakersfield to Los Angeles.

Chuck Cary, with Union in Bakersfield, recently attended a costume party as a very effective and lovely geisha girl. As such, Chuck caused a near-panic in the men's room.

George Owens and Stan Schindler, with Shell in Bakersfield, have returned from a four-month training program in Houston.

NURSERY ITEMS

Keith and Barbara Berry, with Standard in Bakersfield, have a brand new daughter, Margaret Elaine, born October 11 at 9-1/2 pounds.

Keith and Frankie Jones, Western Gulf in Sacramento, are sporting a new little girl. October 15 was the date for Tracy Deborah.

J. Wagner and Carol of Union in Bakersfield, have a new son, Paul Barnaby, born in October. J. figures with that name he will be called Barney, but it never works out that way.

Born to Nancy and Frank Smith, Standard at La Habra, a son. This budding geologist weighed in at 8 lbs. 1 oz. and will be known as Brad Smith.

Herb and Barbara Johnston, Humble, announced the birth of a son (their first) October 15, who weighed in, without geology banner, at 7 lbs. 11 oz. He answers to Herbert Scott Johnston.

Cy and Yvonne Bird, Humble, Los Angeles, announced the birth of their second daughter, born September 29. She has been named Debra Ann.

CALENDAR

November 6-7, 1958: Thirty-fifth Annual Meeting of the Pacific Sections of the A.A.P.G., S.E.G., and the S.E.P.M., Ambassador Hotel, Los Angeles.

November 12, 1958: Wednesday, 6:30 P.M. Dinner Meeting, A.I.M.E., Junior Petroleum Group, Candlewood Country Club, 14,000 Telegraph Road, Whittier "Lease Automatic Custody Transfer" by Ken Hartwein, Shell Oil Company.

November 17, 1958: Monday, 6:30 P.M. Dinner meeting of the San Joaquin Geological Society,

El Tejon Hotel, Bakersfield. "Geology and factors affecting oil exploration in Alaska" by L. F. Ivanhoe, local consultant, geologist and geophysicist.

November 17, 1958: Monday, 7:00 P.M., A.A.P.G. Forum Meeting, General Petroleum Building Auditorium, Flower Street, Los Angeles, "Oil and Views of Venezuela" by Art Huey, Hancock Oil Company.

November 18, 1958: Tuesday, 8:00 P.M., A.P.I. Basin Chapter Meeting, Shell Recreational Hall, 2080 Obispo Avenue, Long Beach, "Lease Automatic Custody Transfer" by Ken Hartwein, Shell Oil Company, also film, "Winter in Sun Valley."

November 24, 1958: Monday, Noon, A.I.M.E. Petroleum Forum Luncheon, Roger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "Corporation, Economics and Finance" C. F. Parker, Union Oil Company.

December 5, 1958: Friday, 7:30 P.M. Coast Geological Society Monthly Dinner Meeting, Gold Room of the Miramar Hotel, Santa Barbara, "Mechanics of Basin Evaluation and Its Relation to the Habitat of Oil in the Basin" by Carl Dallmus, formerly of Creole Petroleum Corporation.

December 8, 1958: Monday, 6:30 P.M. Dinner meeting of the San Joaquin Geological Society, El Tejon Hotel, Bakersfield. "Mechanics of Basin Evolution and its relation to the habitat of oil in the Basin" by Mr. Carl F. Dallmus, A.A.P.G. distinguished lecturer.

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Vol. 54, No. 3, July 1958

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No. 11

Fred R. Neumann
381 E. Fourth Street
Chico, California

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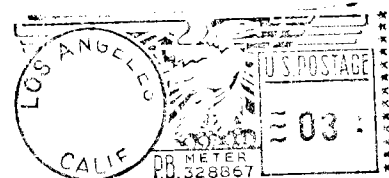
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Bulletin 1058-A: "Reconnaissance for radioactive deposits in southeastern Alaska," 1952, by J.R. Houston, R.C. Bates, R.S. Velikanje and Helmuth Wedow, Jr.

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PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

ASSOCIATION ACTIVITIES

Vol. 12

December, 1958

No. 12

NORTHWEST GEOLOGICAL SOCIETY

Karl F. Dalmus, Consulting Geologist, Caracas, Venezuela, and Distinguished Lecturer for the A.A.P.G. was guest speaker at the monthly dinner meeting of the Northwest Geological Society in Tacoma on October 30. Sixty members were present to hear his paper on "Mechanics of Basin Evolution and Its Relation to the Habitat of Oil in the Basin".

The earth is a spheroidal body with finite dimensions. Its size and shape, together with the strength of the crust upon which the sediments rest, determine the size and shape of the tectonic units formed by diastrophism.

The outline and size of the sedimentary basins are controlled entirely by the pre-existing topography, but actively forming structural basins have definite maximum dimensions and geometrical shapes, depending on their mode of origin.

Primary dynamic basins are formed by the subsidence of a portion of the earth's crust as a unit. The individual unit is always round or elliptical, and the maximum diameter of the area, which approaches a plane surface, is of the order of 400 kilometers. The central area, within the points of inflection shown on the profiles where the subsiding floor becomes less convex than the curvature of the earth, is necessarily put into compression. This tangential pressure is transmitted to the sediments as they are deposited. The area outside of the points of inflection on the profiles where the curve becomes more convex than the curvature of the earth constitutes the dynamic rim of the basin and is continuously in tension as long as the basin subsides.

Secondary dynamic basins are grabens and half-grabens formed by normal faulting on top of actively rising large regional uplifts. During their growth such features are in tension normal to their long axis, and in compression parallel to the long axis. The transverse diameter is controlled by the size of the uplift upon which the secondary basins occur and the maximum longitudinal diameter of the individual depression is also of the order of 400 kilometers.

The compaction of clastic sediments is a function of both load and time. Because of the pressure differential between the compressional central area of a dynamic basin and the tensional dynamic rim there is a continuous and diminishing expulsion of fluids from the sediments in the central area towards the rim until compaction ceases or until the rocks reach grain density. As long as the basin is sinking the expulsion of fluids takes place in an updip direction preferentially along permeability channels parallel to the bedding. Although the

exact mechanism of oil migration is not known, it is an observed fact that more than 90 per cent of all the oil in a dynamic basin filled with clastic sediments occurs in traps of all kinds within or related to the dynamic rim of that basin.

The same pressure differential exists in dynamic basins which become filled with non-clastic sediments, but because of the lack of more or less continuous permeability channels in an updip direction, the oil accumulations occur at random throughout the basin. The size of such oil accumulations depends on the area of the gathering ground toward the center of the basin and their location in this case is controlled more by permeability pinchouts than by structure.

SACRAMENTO GEOLOGICAL SOCIETY

The featured speaker at the November monthly meeting was Mr. Stewart Chuber, Geologist for General Petroleum in Sacramento, who spoke on the "Reconnaissance Geology of Western Libya".

In 1954, Socony Mobil Oil Company began a reconnaissance geologic study of Libya aimed at finding areas of favorable oil prospects.

Barren plateau and steppe topography form the interior surface of Libya. Broad, flat hamadas, or stony deserts, occur in several areas, especially in the Cretaceous plain of centralwestern Libya. Scattered sand exists in many places, but there are only two concentrated large sand seas, impassable to vehicles. Generally speaking Libya is one big rock outcrop with good exposures in almost every area.

The Italians compiled much geologic data before the war, and under Dr. Ardito Desio, they published a 1:3,000,000 geologic map of Libya.

STRATIGRAPHY

A fairly complete section of Paleozoic, Mesozoic, and Tertiary rocks totaling over 10,000 feet in composite thickness, crop out in Libya. In general, the sediments are mature types: clean sands, with shale and a high proportion of limestone and marl.

Exposed Paleozoic sediments occur in the southwest part of Libya. They extend westward into Algeria where carboniferous oil discoveries have recently been made. Sands and shales predominate in the Lower Paleozoic, while limestone makes up a small part of the Carboniferous. Overlying all older rocks a group of sands, called the Nubian Series, probably ranges from Late Paleozoic to Mesozoic in age. The sands cover a broad area of southern Libya. Except for the Nubian contact, the remaining Paleozoic rocks are accordant and apparently conformable. The entire section measures about 4200 feet thick. In 1957 a small

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Selected Bibliography	Lucy Birdsall
Calendar	Allan M. Rupprecht
Cartoonist	Mort Kline
	Harold Sullwold
Coast Correspondent	Don Henriksen
San Joaquin Correspondent	E. L. Marier
San Francisco Correspondent	Ken Edwards
Sacramento Correspondent	James E. Young
Northwest Correspondent	R. P. Ottenstein

NEXT DEADLINE DECEMBER 24, 1958

oil discovery was made in Devonian sediments of southwest Libya.

Good outcrops of Mesozoic rocks occur near the coast in Western Libya. Sandstones and limestones, with some marls, comprise the 3000-foot Mesozoic section. Triassic sands are very limited in exposure, but the rest of the section crops out in a long east-west band. Cretaceous rocks account for over half of the measured thickness. A possible disconformity separates the Lower and Upper Cretaceous rocks; all others are accordant and probably conformable. Triassic sands produce gas in Algeria.

Tertiary rocks crop out extensively in central and eastern Libya (in part called the Sirte Basin). Except for Oligocene evaporites and cross bedded continental sands, limestone, marl, and some shale comprise the 3000 feet of measured section. The sediments are prolifically fossiliferous--a paleontologist's paradise. Concentrated efforts by the oil companies have recently paid off with two oil discoveries in the Sirte basin.

STRUCTURE

The thin mantle of mature sediments attests to the crustal stability in Libya. Long continuous structural trends--faults, often with associated folding--infrequently interrupt the low seaward dip of Tertiary rocks in the Sirte Gulf. Some recent volcanic plugs bow up Mesozoic strata in a regionally flat-lying structure of northwestern Libya. Paleozoic rocks dip gently on every side into the center of their basin. Neither sedimentation nor deformation has occurred in Libya as pronounced as it has in California.

With more than half the country covered by concessions, a high pitch of oil-finding activity, and proved production from Paleozoic and Tertiary rocks (as well as nearby Mesozoic production), Libya appears to be a nation with a destiny close to petroleum.

On November 21, Dr. Ralph W. Edie spoke before the Northwest Geological Society on "Limestone Facies and Stratigraphic Traps". Dr. Edie is with Andrichuk and Edie, Consulting Geologists, Calgary, Alberta, and at present is on an extensive lecture tour for the A.A.P.G. His paper was well received by a large turnout at the monthly dinner meeting in Tacoma.

The texture and faunal content of bedded limestones may be used to outline various environments of deposition including those of shelf (shoal, inter-shoal and lagoon) and basin areas. Shoal deposits, represented in general by well sorted calcarenites of both bioclastic and precipitated origin, are commonly the most porous and permeable limestone types. Thus, where petroleum accumulation in bedded limestone units is limited at least in part by primary up-dip or lateral permeability variations, facies maps showing the probable distribution of permeable shoal areas are extremely valuable in outlining petroleum prospects. Such prospects include both field extensions (most critical during early development drilling) and prospects in strictly wildcat areas. In most cases, drilling locations to test the stratigraphic anomaly may be given without further geological or geophysical work. This method of exploration is extremely cheap and its effectiveness is limited only by the quality of the lithologic data available and the environmental interpretation.

An example of the application of lithofacies and biofacies techniques to petroleum exploration is shown by recent studies along the Mississippian Midale trend in southeastern Saskatchewan. Fields along this trend form part of a huge regional stratigraphic trap formed largely by truncation and sealing of the Midale member of the Charles formation. The seal is formed by secondary anhydrite infilling pores at the truncated erosion surface and overlying impermeable red beds. Also important to entrapment is the presence of a locally developed primary anhydrite bed beneath the pay zone. This anhydrite unit forms a floor to the reservoir and prevents oil from migrating up-dip along the unconformity.

The permeability variations are directly related to primary sedimentation patterns. Thus, detailed facies maps of the Midale member show the close relationship between productive areas and permeable limestone (shoal) facies. These maps are presently being used to outline drillable petroleum prospects.

SAN JOAQUIN GEOLOGICAL SOCIETY

At the November 17 dinner meeting of the San Joaquin Geological Society, L. F. Ivanhoe presented an interesting and informative talk on the "Geology and Factors Affecting Oil Exploration in Alaska". "Bus" Ivanhoe is a Bakersfield consultant with considerable foreign and domestic geological and geophysical experience. He recently completed a comprehensive investigation of Alaska for the Polaris Exploration Company of Anchorage and also accompanied a Japanese technical mission to the Bering River coal fields in southern Alaska. Ivanhoe's talk was replete with colored slides and covered practically all phases of geology, geography, economics, climate, etc. Of particular interest were his pictorial studies of denuded structures.



DONALD EVERETT GREENLEE

IN MEMORIAM

On November 5, Don Greenlee died as a result of a heart attack in Long Beach, California. Born in Idaho on February 19, 1914, he attended Stanford University and the University of Calif. at Berkeley, where he was graduated in 1942. From November, 1940, until the time of his death he held a progression of assignments from rotary helper to senior geologist with the Shell Oil Company in various California oil centers, the last as senior geologist in the Los Angeles office. His many friends will never forget his warmth and enthusiasm.

NOTICE

The economics and hazards of hillside building development, familiar to Los Angeles, will be discussed by engineers, geologists, and lawyers at a January 30-31 conference in the Chemistry-Geology Building at the University of California, Los Angeles.

State, University, military, and private geologists and engineers will present case studies of hillside developments at Portuguese Bend, the northern slope of the Santa Monica Mountains, and in Berkeley.

Workshops on landslides, cuts and fills, and drainage and water problems will meet during the second day of the conference, which is sponsored by the UCLA departments of geology and engineering and University Extension.

Other group meetings will deal with the problems of inspectors, contractors, sub-dividers, architects, city and county planners, insurance adjusters, and landscape architects.

Dr. James M. Gillies, Assistant Dean of the UCLA School of Business Administration, will address the January 30 dinner on "Outlook for Building and Hillside Construction."

Information and registration forms may be obtained from University of California Extension, Los Angeles 24.

SACRAMENTO GEOLOGICAL SOCIETY

Mr. Vince Gianelli, from the State of Nevada, was the featured speaker at the Sacramento Geological Society monthly meeting in October. He presented an interestingly complete talk on the "Historical Faulting in the Great Basin" by describing fault scarps which have occurred in very recent time.

On November 3, the Paleontological Biostratigraphy Seminar held its second session of the year. An interested audience heard Dr. Joel W. Hedgpeth speak on "Marine Ecology and Paleogeology". Dr. Hedgpeth is presently director of the Pacific Marine Station at Dillon Beach, Marin County, California, which is affiliated with the College of the Pacific at Stockton.

The P.B.S. lecture series is under the auspices of the Bakersfield College Adult Education Program. Meetings are held throughout the academic year on the first Monday of every month in Room 56, Science and Engineering Bldg., on the Bakersfield College campus. The program is arranged by an advisory committee of local geologists and paleontologists. Stan Carlson of Richfield is committee chairman for this year.

The lectures are not as forbidding as the seminar title would suggest. They are usually of general interest to all geologists and paleontologists, and anyone interested is invited to attend.

HOLIDAY DINNER DANCE

The 8th Annual Holiday Dinner Dance, sponsored jointly by the A.A.P.G. - S.E.G. - S.E.P.M. will be held on Saturday, December 27, 1958, at the Oakmont Country Club, Glendale. Dance tickets will be \$13.50 per couple.

An industry sponsored cocktail party will commence at 7:00 P.M. followed by dinner and dancing to the music of Tony Ferraro and his orchestra. The dance committee which includes Dick Haines, Doug Traxler, Bob Patterson, and Klaas Van Der Weg is busy making final arrangements for this gala holiday affair. Present plans are to limit the function to 300 persons. Reservation cards are being mailed to the members of three sponsoring societies.

The following listed companies have generously contributed to a cocktail party to precede the dinner:

Baker Oil Tools, Inc.
Baroid Well Logging
B J Service, Inc.
Economy Blueprint & Supply Company
Fairchild Aerial Surveys, Inc.
Formation Logging Service Company
Geophysical Service, Inc.
Johnston Testers, Inc.
Lane-Wells Company
Macco Corporation
Mercury Oil Tool Company, Inc.
Pacific Towboat & Salvage
Rapid Blue Print Company
Read and Company
Robert H. Ray Company
Schlumberger
Seismic Explorations, Inc.
United Geophysical Corporation
Western Geophysical Co. of America.

NORTHWEST GEOLOGICAL SOCIETY

The newly-elected officers of the Northwest Geological Society are:

President-Marshall T. Huntting, Washington Div.
Mines & Geol.
Secretary-Richard W. Vivion, Humble Oil & Ref. Co.
Treasurer-Vaughn E.(Ted) Livingston, Wash. Div.
Mines & Geol.

ANDY CLINE

by Sullwold

YAS, THE DRINKS ARE FREE—
NO, YOU CAN'T USE YOUR
OWN GLASS!



STANFORD UNIVERSITY NEWS

Field geology at Stanford has aimed traditionally at two important goals: to teach field techniques and procedures to beginners, and to encourage the individual student to think independently. The first of these goals has been accomplished by using an adequate teaching staff (our ratio of instructors to students is one of the best in the country) and by giving the student plenty to do. The second is accomplished by encouraging the student to strike out on his own in areas where there are plenty of structural, stratigraphic, and petrologic problems to solve. Finally by writing a thorough, well-illustrated report, the student receives further opportunity for independent thinking.

As is now customary, the first half of the field course is spent in an area where stratigraphic and structural studies of sedimentary rocks are emphasized, while the second half of the course is spent in an area which includes plenty of igneous and metamorphic rocks, and, where possible, ore deposits. The end of the course consists of a two-week period of report writing at the close of the summer.

This year the class, consisting of 26 students and 5 instructors, worked for four weeks in the Junipero Serra quadrangle, near the headwaters of the San Antonio and Arroyo Seco in the Santa Lucia Range. Detailed mapping in the thick Tertiary and Upper Cretaceous sequence proved the presence of a large overturned isoclinal syncline and major reverse faults adjacent to the crystalline (Sur Series) core of the Junipero Serra mountain mass. Plane table methods were used to measure and describe the details of the Vaqueros-Sandholdt section that is well exposed in the vicinity of the Indians Ranch.

The second half of the summer was spent mapping in the Santa Rosa mountains, which lie 40 miles north of Winnemucca, Nevada. Here, the class made important contributions to a long-range study of an unusually thick Upper Triassic metasedimentary sequence that is intruded by Cretaceous granitic stocks, and is

overlain by a variety of Tertiary volcanic rocks. The field geology group found several key fossils, blocked out two new formations, and had plenty of practice using both sedimentary and metamorphic structures in measuring the tightly folded rocks. Visits were made to the Nevada-Massachusetts tungsten deposits, which occur in the same general sequence of rocks as those of the Santa Rosa mountains, and to the Bretz Quicksilver Mine, west of McDermitt, Nevada.

The second half of the summer was one of the stormiest in memory, and in addition to bringing some tents down, the thunderstorms (or something) brought out large numbers of rattlesnakes. After a day of hard climbing, dodging rain and snakes, a student was heard to cautiously but earnestly put the question to me, "I like this field geology a lot, but why wasn't it explained to me that it was going to be like this?"

ANDY CLINE

by Sullwold



NEW OFFICERS SAN JOAQUIN GEOLOGICAL SOCIETY

Newly elected officers of the San Joaquin Geological Society are Tom Roy of Ohio Oil, President; Bill Winters with Superior Oil, Vice-President and Program Chairman; and Lee Jordan, Kern Oil, Treasurer.

PERSONAL ITEMS

The Standard Oil Annual Golfing "Turkey Tourney" was held November 22 at the Kern River Golf Course. Don Laswell had low gross of 85 and turkeys were won by Dick Meditz, Tom Ise and Marty O'Keefe. Gordon Hornaday and Will Classen got their money's worth by using 138 strokes to get around the course. Bob Lindblom and Bob Ortalda were chairmen of the event.

A group of geologists including Bob Paschall, Bob Herron, Roy Turner, and Otto Hackel spent a riotous evening at Don the Beachcomber's during the convention. After Paschall had consumed four Navy Grogs and the group had eaten dinner, the rest of the boys quietly sneaked out, leaving Bob with a check in excess of \$80.00 and a bankroll considerably less than that amount.

Mark Latker of Western Gulf, Ventura, and his wife are on a flying vacation trip to Mexico.

Late arrivals at Texaco's core party spectacular (150+ cores) at Shiells Canyon managed to avoid helping to lay out the core trays. The slackers included Dale Duley and Bob Morrison of Richfield, Roy Turner of Intex, and Ted "Beau Brummel" Off.

Ivor McCray, Shell Scout, Olympia, was last seen heading for L.A. for Thanksgiving. Competitors in the Northwest can relax for a week or so.

Gordon Bell of Western Gulf has left the Northwest and is now working out of the L.A. office.

A contingent of Shell people out of Olympia and Seattle was seen in L.A. recently. The group included Vince Finch, Herb Mann, John Griffiths, Grant Valentine, and Jim Moore.

Another hardy soul has been selected for Alaska duty. Charlie Fulmer, Standard, Seattle, is being transferred to Anchorage.

The Maury Prices, Shell, Olympia, are vacationing in Southern California. Their arrival coincided with that recent cold snap.

It is rumored that Standard is encountering more sediments in its Northwest wells now that the volcanic expert, George Webb, isn't well sitting anymore.

Irv Frazier, of Texaco, drove his Pontiac on a recent vacation trip to Denver, where it promptly burned up, along with 27 other cars, in a \$100,000 storage-garage fire. Irv makes this sound like a disaster, but he somehow came out of it with a Cadillac.

Don Pearson, Schlumberger Engineer in Sacramento, was transferred on October 1 to the Bakersfield District.

Art Hawley, Western Gulf in Sacramento, recently assumed a new job as Zone Exploration Manager for both Sacramento and Bakersfield. Lee Wix, former Zone Manager in Bakersfield, took on a new assignment in Alaska.

A couple of Western Gulf Geologists in Sacramento have been enjoying Fall vacations, they are Jack Kearns and Ed Karp.

A few Geologists, Engineers and others in Sacramento recently teamed together to form a basketball team. They will pay any team so long as the opposition holds the pace down to a trot, preferably a walk.

One less bachelor among the Geologists in Sacramento. Bob Beatie, General Petroleum, and Phylliss Moore of Lodi were joined in matrimony, November 9, 1958.

J. L. Harvey, General Petroleum Geologist, in Sacramento, has his bag packed and ready for transfer to Durango. He should be in his new assignment by the next issue of this paper.

Maretta Newall, Exploration Logging Secretary, in Sacramento, was married on November 22, in Carson City, Nevada, to Milt Baldwin.

Lee Freeman, Texaco in Ventura, plans to fly east to spend Christmas with his parents in Michigan.

Page 5
Rumors that Ed Dryden, Standard in Ventura, is becoming a good cook persist despite the fact that, during a recent well-sitting stint, he managed to spill, face down on the floor, a freshly baked mince pie which he had just removed from the oven. He and his companions ate the pie anyway--which should prove something.

Ted Off, Ojai Oil Co., John Curran, Honolulu and Dale Duley, Richfield, and wives traveled north for Big Game weekend. The Duleys celebrated while the Currans and Offs commiserated.

Ralph Cahill of The Texas Company, Ventura, an Iowa alumnus, is all worked up over the impending Cal-Iowa Rose Bowl games. It may be noted that most local Cal alumni are not looking forward to the game so eagerly.

Who is the Standard geologist in Ventura who refuses to shave off his beard until he gets a date?

Gordon Chase, Shell seismologist, returned to Ventura from Washington just in time to receive word that he will be transferred to Sacramento about the first of the year.

Carroll Hoyt of G.P., Bill Castle of Richfield, and Gene Johnson of Shell were fascinated by the very lush nudes in still-life poses at L.A.'s Tiffany Club. Carroll had decided that they were just "rubber models", until the three girls came over and sat down at their table.

We all know of two-car families, but how many know of two-home families? Herb Mann, District Geologist for Shell, is buying a home in Seattle while still making payments on his former residence in Bakersfield, even though it's been a year since his transfer.

Shell has transferred two of their seismologists out of Bakersfield. Clark Done went to Long Beach and Floy Ivie to Salt Lake City.

Anyone wishing to vent their anger and frustration after getting involved in these new complicated highway interchanges may now write to Bob Pote, who was formerly with Shell in Bakersfield and who is presently with the Division of Highways in Fresno, designing clover leaves.

Bakersfield will lose one of its most distinguished geologists and raconteurs on January 1st when Dr. V. L. Vanderhoof leaves Intex to accept a position as Director of the Santa Barbara Museum of Natural History.

Our International relations with Japan are due for a serious setback unless Henry Clark, General Petroleum's Bakersfield scout, can improve the gas mileage on his new Toyopet. He recently traded in his Volkswagen for this new toy and suffered a net loss of 10 miles per gallon.

The Burlesque girls in Los Angeles who look forward to the annual A.A.P.G. convention with wild anticipation were again entertained by such perennial fron row customers as Jim Eke of Union and Weldon Rau of the U.S.G.S.

Bob Wheaton, with Union in Bakersfield, reports that he enjoyed the long trip from New Hampshire, Mass., where he and his family recently vacationed in order to visit his mother-in-law. Draw your own inferences!

Page 6 Eric Lindvall of Richfield, Don Hagen of Texaco, Jerry Williams of Ohio, and Les Roth of Amerada are going to Alta, Utah, for a week of Skiing and/or she-ing. With Les' fabulous list of acquaintances among airline stewardesses all over the Western U.S., one trip to the Salt Lake City airport will probably be sufficient to supply the boys with dates for the whole week.

Geoff Holstrom, Standard geophysicist, has been transferred from Ventura to La Habra.

John Spotts has returned to Standard's Ventura office after receiving his Ph.D. at Stanford.

Bob Paschall of Hancock, Ventura, and Paul Dudley Sr., both petroleum geologists of long standing, recently climbed Mt. San Jacinto-10,805 feet of basement rock. What a waste of time!

Don Gresser, Jack Holzman, and Hugh Smith, all of Shell, recently visited their former colleagues in Shell's Ventura office while on vacations from the snowy Four Corners and Salt Lake City.

Why did Don Bruce, D.O.G. in Santa Maria, wear dark glasses and miss all coffee breaks and social gatherings for two weeks recently? Could it really be true that he was afflicted with snow-blindness while deep-sea fishing off Morro Bay?

Jim Vernon must be keeping his mind occupied with geology these days while driving to and from Texaco's Ventura office. Honestly, Jim, the company wants you to keep gas in the tank.

Dr. Ian Campbell, professor of geology at the California Institute of Technology, has become the new chief of the California Division of Mines. Dr. Campbell leaves Cal Tech after many years of teaching, during which time he has been an inspirational and moving force in many national geologic and mining organizations. Dr. Campbell will assume his position with the Division of Mines at the San Francisco headquarters on 12 January 1959.

Robert D. Ford has been appointed to post of President of Schlumberger Surencos, S.A., head office in Caracas, Venezuela, for operations covering Central America, South America and the Caribbean area. Bob graduated from Stanford in 1936, majoring in mechanical engineering. He joined Schlumberger in July, 1936, and has been Executive Vice President of Surencos since January 1, 1952.

On January 17, 1959, Dr. Robert P. Sharp, Chairman of the Division of Geological Sciences at Cal Tech will be on the television show, "The Next Hundred Years". He will answer the question "The Ice Age Cometh?" on KRCA, Channel 4, at 6:00 P.M.

Louis Christian, formerly of Standard Oil Co. in Los Angeles, is now Chemist with Rinshed-Mason Co. and independent geologist at 4668 Kingsley Avenue, Montclair (Phone: NA 4-1558).

John Curran of Honolulu Oil, Santa Barbara, a Stanford alumnus, collected a \$5.00 bet from his 10-year-old son, a Cal partisan, on the Big Game. The scoundrel forced the poor, innocent child to give him 11 points on Stanford.

Former Seaboard geologists who attended the recent convention en masse are still recovering from the rude shock they received when they found out their new Texas Company expense accounts wouldn't quite provide for the high standard of living to which they had become accustomed.

Joe Dunwoody with Tidewater in Bakersfield has decided to return to work in order to recuperate from his recent operation. His wife gave birth to a new daughter a few days after Joe's internment and he found that home life with the two youngsters and a baby was too rigorous for his delicate nervous system.

The boys at Texas Company's Bakersfield office have revoked Gene Tripp's coffee privileges since he spilled a full cup all over the final copies of the maps accompanying a red hot, rush play just before it was to be mailed in. Naturally, this disaster occurred at 4:30 in the afternoon, too.

Gerry Ganopole, formerly with Seaboard, has been attempting to infuse some cultural appreciation into his new colleagues at The Texas Company by introducing them to the finer things of life that can be seen from the front row at the Tiffany Club. Bill Bedford is a complete and enthusiastic convert.

Recent changes in Richfield's Bakersfield office have elevated Stan Carlson to Northern Division Geologist, Ray Arnett to Assistant Northern Division Geologist, and Richard Pierce to Northern Division Paleontologist.

Jack Clare with Superior was back in Bakersfield for a few bleary-eyed days to gather up his wife and other belongings and take them back to Billings, Montana, where he was recently transferred. We understand that the weather back there has put him in full sympathy with the proverbial brass monkey. The artillery punch that was served at his going-away party should serve as an effective antifreeze (or embalming fluid) though.

Lowell Redwine of Honolulu Oil, Santa Barbara, attended the U.S.G.S. photogrammetry school in Menlo Park.

Peter Wygle has joined the staff of Standard Oil in Ventura as a technical assistant. He replaces Don Protzman, who returned to school in September.

Charlie Sturz of Tidewater is leaving Ventura for a new assignment in Ankara, Turkey. Most of the rest of the Tidewater's Ventura geologists are in the process of finding new homes in Bakersfield.

NURSERY ITEMS

Joe and Alene Dunwoody, Tidewater in Bakersfield, have added a future Republican vote to the polls. Their new daughter, Leah Alene, was born November 13, weighing 7 lbs., 8 oz.

Stan Schindler with Shell in Bakersfield was presented with his first youngster on October 23. Their daughter's name is Leslie Ruth. She weighed in at 6 lbs., 13-1/2 oz.

Jim Eymann with Western Gulf in Bakersfield and his wife, Hannah, have welcomed a new baby girl into their household. Megan Anne was born October 30 and weighed 9 lbs., 6 oz.

Ruth and Joe Egan of Shell, Ventura, are the proud parents of a son, Robert Joseph, who arrived November 22, 1958, weighing 7-1/2 lbs. He is their second child, first boy.

Conrad and Wanda Howard, Shell, Olympia, announce the arrival of their second daughter, Stephanie, born November 17, at five pounds, six ounces.

Louis and Alice Christian of Montclair announce the birth in September of their first gorgeous daughter, Inge.

Bill and Nancy Strong, Schlumberger Engineer in Sacramento, have a new son, Robert Charles, born on November 11, 1958.

Thomas Bond Hall was born October 24, 1958, to Emily and Pete Hall, Richfield in Ojai, weighing 6 lbs., 12 oz. His arrival didn't create much excitement, inasmuch as he is the Hall's seventh son (no daughters).

Bob and Helen Reedy, Western Gulf in Sacramento, are the proud parents of Maureen Ann, born on October 19, 1958. She weighed 7 lbs., 13 oz.

CALENDAR

Mr. Karl F. Dallmus, AAPG Distinguished Lecturer will speak on "Mechanics of Basin Evolution and Its Relation to the Habitat of Oil in the Basin" at the following places and times:

December 4, 1958: Thursday, 8:00 P.M., Room 320 Geology Bldg. Stanford Un., Palo Alto.

December 5, 1958: Friday, 7:30 P.M., Dinner Meeting, Coast Geological Society, Miramar Hotel, Santa Barbara.

December 8, 1958: Monday, AAPG Luncheon Meeting, 12 Noon, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles.

December 8, 1958: Monday, 6:30 P.M., San Joaquin Geological Society Dinner Meeting, El Tejon Hotel, Bakersfield.

December 11, 1958: Thursday, 12 Noon, SEG Luncheon Meeting, Rodger Young Auditorium, 936 West Washington Boulevard, Los Angeles, "Lightning Protection for Geophysical Field Parties" by Mr. Paul McCredy, Meteorology Research.

December 15, 1958: Monday, 12 Noon, AIME Petroleum Forum, Rodger Young Auditorium, 936 West Washington Boulevard, "Mechanical-Production Aspects of the Rincon Island Development" by Mr. Robert Flaherty, Richfield Oil Corp.

December 27, 1958: Saturday, Annual AAPG-SEG-SEPM Holiday Dinner Dance, Oakmont Country Club, 3100 Country Club Drive, Glendale; Cocktails at 7:30 P.M., Dinner at 8:00 P.M., Dancing until 1:00 A.M.

January 5, 1959: Monday, 7:30-9:30 P.M., Paleontology-Biostratigraphy Seminar, Bakersfield College, Room 56, Science & Engineering Bldg., "Use of Planktonic Forams in Stratigraphy" by Dr. Alfred Loeblich, California Research, La Habra.

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Fred R. Neumann
381 E. Fourth Street
Chico, California

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