

# PACIFIC PETROLEUM GEOLOGIST

1953

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# PACIFIC PETROLEUM GEOLOGIST

## NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 7

January 1953

No. 1

### ASSOCIATION ACTIVITIES

#### A.A.P.G. LUNCHEON

Dr. U. S. Grant, Professor of Geology at U.C.L.A., was guest speaker at the monthly luncheon at Rodger Young Auditorium on December 4. Dr. Grant's topic, "Mechanics of Subsidence and Horizontal Movement in the Wilmington Oil Field," attracted an audience of over 100 persons. Dr. Grant pointed out that a small subsidence has taken place over the last two or three decades in the southern portion of Los Angeles coastal plain due, probably, to depletion of artesian water. A much accelerated subsidence localized over the Wilmington oil field became conspicuous in 1937 shortly after the beginning of development of the field. Subsidence contours plotted from spirit level surveys center over the anticlinal axis and near the geometric center of the productive area.

An analysis of all possible causes of the subsidence made by James Gilluly and Grant<sup>1</sup>

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<sup>1</sup> Gilluly, James and Grant, U. S. (1949) Subsidence in the Long Beach Harbor Area, California, Bull. of the Geol. Soc. of Amer., vol. 60, p.461-529.

resulted in the conclusion that reduction of hydrostatic pressure in reservoir sands is responsible for compression of the producing zones and lowering of the surface.

Dr. Grant explained that the weight of the overlying sedimentary material rests in part on the sedimentary skeleton of the oil zones and partly on the interstitial fluids. If hydrostatic pressure in the fluids is reduced as is done by oil production, more of the overburden weight is imposed on the sediments. This compresses the sediments by (1) rearranging the grains and squeezing out calcitic, ferruginous or clay cement from stress shadows in the larger voids, and (2) by elastically compressing the grains. Thus some of the compression of the oil zones is elastic and therefore, recoverable, and some is a plastic strain and not recoverable.

After subsidence had proceeded to a maximum of several feet, triangulation surveys and precisely measured lines indicated considerable horizontal movement of surface survey stations. The survey stations moved approximately toward the center of subsidence with maximum movement at the inflection point. Dr. Grant pointed out that these movements were the result of rotation accompanying bending of strata.

Another phenomenon became evident about 1947 when spirit level surveys demonstrated marginal uplifts. Dr. Grant likened the uplifts to the behavior of an infinite beam resting on an elastic foundation and deformed by a point load. Marginal uplifts are ephemeral - a fatigue effect reduces them, or shearing in neutral plane reduces flexural rigidity.

Following this, in the autumn of 1947, a series of wells were damaged by shearing at about 1600 feet depth. Dr. Grant demonstrated that the maximum shearing stress in a beam or plate is in the neutral plane. Hence, the shearing of oil

well casings should be half way between the surface and the bottom of the plate of overburden sediments. At Wilmington oil field this is about 1500 feet, which is the average depth of original shearing.

Dr. Grant concluded his talk with a discussion of subsidence in other oil fields including Goose Creek, Texas; Lake Maracaibo, Venezuela; Long Beach oil field, California, and others.

#### DETERMINATION OF GEOLOGIC TIME

The Branner Club held its first meeting of the 1952-53 season at the Caltech Athenaeum on Tuesday evening, December 2, and a group of 84 members and guests from all over southern California were present. Officers for the current year are George Tunell, President, Aden Hughes, Vice-President, and Lloyd Pray, Secretary-Treasurer. After the dinner, Dr. Tunell introduced as principal speaker Dr. Harrison Brown, Professor of Geochemistry in the Division of Geological Sciences at Caltech. Dr. Brown spoke on "Recent Developments in the Determination of Geologic Time," a subject which reflects his major research interests. Since coming to Caltech a year ago, Dr. Brown has been organizing laboratory facilities and a staff for carrying on a broad program of geochemical research, much of which will be devoted to the determination of the age of rocks.

Dr. Brown briefly reviewed the speculations regarding the duration of geologic time that existed prior to the discovery of radioactivity by Mme. Curie early in the present century. Her discovery, and those that followed in rapid succession, led to the determination of the age of rocks through the quantitative analysis of the radioactive elements uranium and thorium, and some of their decay products, principally lead and helium. The first determination was made in 1909 using zircon as a source mineral for the radioactive element. Subsequent to this, and particularly during the 1920's and 1930's, many determinations of the age of rocks were made, and most of the dates reported in the geologic textbooks are based on these experiments. In 1939 Professor Nier of the University of Minnesota demonstrated that many of the previously accepted age determinations were unreliable by applying the accepted techniques to test the ages of separate minerals within the same rock, and noting the major discrepancies obtained. Nier pioneered with the use of the mass spectrophotometer in the determination of isotopic composition, and refinements of this instrument now make accurate age determinations possible. The first reliable ages of rocks determined by the new methods were for 25 specimens studied by Nier just before the war, and ranged from two billion to sixty million years. Unfortunately, only 3 of these 25 could be placed within narrow limits in the established geologic column.

The rapid progress in nuclear research during the war resulted in the refinement of many techniques for analysis of the extremely small quantities of decay products in minerals contain-

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PACIFIC PETROLEUM GEOLOGIST

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Next deadline February 2, 1953

ing radioactive elements. One major contribution toward this refinement of analytical techniques is the isotope dilution method, largely the result of work by Dr. Brown and his colleagues at the University of Chicago during the years just after the war. The method depends on the availability of highly enriched isotopes and has only been possible in the last few years. Using this method and other analytical refinements, it is now possible to make an accurate analysis of the amount of uranium in a rock, even if present in only one part per billion, or the analysis of lead if present in only one part per million.

Experiments are now in progress based on the uranium-lead method to determine the ages of various minerals in several granitic rocks, including some from the southern California batholith. Results based on the different lead isotopes within zircon are internally consistent, and the differences between the ages so determined for various accessory minerals within the batholith are encouragingly small, although these leave room for much experimental refinement.

Dr. Brown pointed out that other radioactive decay sequences offer much promise in the determination of geologic time. One series of experiments which he and his colleagues had conducted used the decay of potassium into calcium and argon. Research on crystals of sylvite (KCl) from the Permian evaporite deposits at Stassfurt indicates an age of 99 million years, with a probable error of one million years. This age appears to indicate the mineral sylvite formed long after the initial crystallization of the salts, a conclusion reached earlier by Vant Hoff.

Another decay sequence being investigated is the change from rubidium to a radioactive isotope of strontium. Ahrens, of MIT, is currently studying the lithium-rubidium bearing mica, lepidolite, from many pegmatites. If the present rate of disintegration of rubidium proves to be correct, the oldest reliable age determinations now available are for a lepidolite from a South African pegmatite, with an age of 2.8 billion years.

The significance that accurate dating by the radioactive carbon has had during the last few years in archeology and geology was discussed briefly by Dr. Brown. Its major importance to

geologists has been the accurate dating of late Pleistocene events, and the determination of the rate of some geological processes, such as sedimentation within the ocean basins. The major drawback to the method is its limitation to about the last 20,000 years caused by the relatively short half life of C<sup>14</sup>.

The greatest lack at present is a method for accurate determination of ages between those readily determinable by C<sup>14</sup> and those older than about 60 million years that are easily obtained by the uranium-lead method. Dr. Brown and his associates are currently investigating the laboratory feasibility of using the uranium-helium decay and the isotope dilution method with He<sup>3</sup>. Theoretically the techniques now available should make possible the measurement of the amount of helium produced by the radioactive disintegration of one-millionth of a gram of uranium in 10,000 years. If this proves to be experimentally successful, it will permit the determination of helium produced by the one part per million of uranium in an average carbonate shell. The geologic significance of an accurate age determination for a fossil shell is readily apparent.

In closing, Dr. Brown stressed that whether or not the present laboratory programs prove to be successful, if the rate of progress that has been made during the past decade continues for another two decades (and he feels this will be true) it will then be possible to accurately date rocks in the laboratory from any part of the geological column.

PACIFIC SECTION DUES

1953 Pacific Section Dues are still payable. Your Treasurer wishes to thank those more than 650 members who have voluntarily come forth and paid their dues and once again admonish the delinquents to do likewise. In appreciation of those who have paid their 1953 dues, IT WILL BE NECESSARY TO DELETE FROM THE MAILING LISTS THE DELINQUENTS.

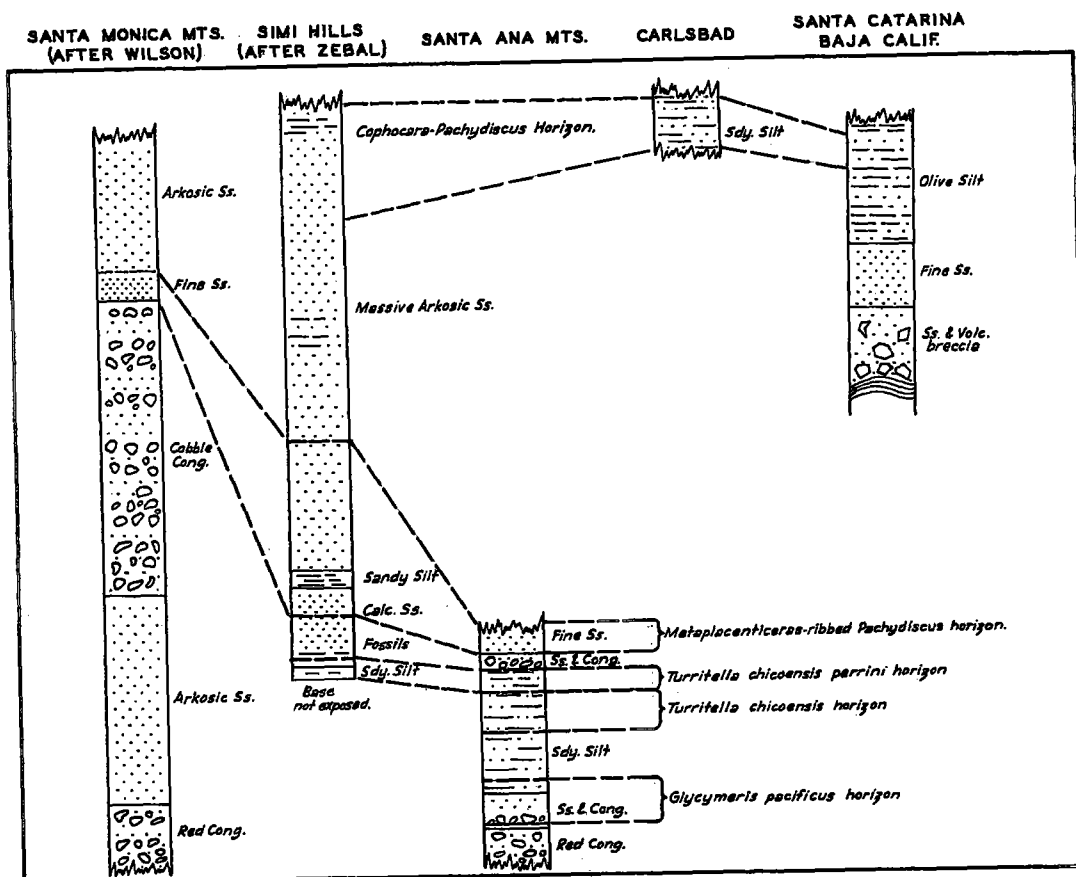
BAKERSFIELD ASSOCIATION ACTIVITIES

The Geologists' Wives held their annual Christmas Dance at the Bakersfield Inn on December 12th. About 136 couples enjoyed the very merry occasion. Toys for the needy were brought by all couples - some of whom attempted to assist the orchestra with the toy trumpets and drums.

Another terrific success was chalked up by the Bakersfield Scouts with their annual Christmas party. The affair took place in the Normandy Room of the Bakersfield Inn on December 18th. All of the 140 participants seemed to enjoy the food and liquid refreshments most heartily. An atmosphere of sedate quietness pervaded the entire occasion - especially when Lanny Graff hit his first winning streak at the sporting table. A few of the visiting dignitaries noted were: George Feister, Earl Bescher, Irv Frazier and Graham Moody. Credit for the fine handling of the arrangements goes to Bob Rist and his crew of helpers - Ray Alexander, Hal Ross and Hal Hanson.

NATIONAL CONVENTION

Homer Steiny, now back on his old job as Chairman of the Transportation Committee, announces that he has ordered sixty seven spaces on the Southern Pacific Sunset Limited to go to the National Convention in Houston. This is the finest and newest Southern Pacific train. It leaves Union Station in Los Angeles at 8:00 P.M., Friday, March 20, 1953 and arrives in Houston at 8:40 A.M. on Sunday morning, March 22, 1953. Reservations are now being accepted.



UPPER CRETACEOUS FORMATIONS AND FAUNAL HORIZONS  
OF SOUTHERN CALIFORNIA AND BAJA CALIF.

W. P. POPNOE, DEPT. GEOLOGY, U.C.L.A., 1952

VERTICAL SCALE 0 500 1000 1500

#### S.E.P.M. EVENING MEETING

Dr. O. L. Bandy presided at an evening meeting of the S.E.P.M. held on December 8, 1952, in the spacious new quarters of the U.C.L.A. Geology Department. The speaker of the evening, Dr. W. P. Popenoe of U.C.L.A., presented an interesting paper on the "Upper Cretaceous of Southern California and Baja California."

The principal upper Cretaceous outcrop areas of this region were listed as follows: Santa Monica Mountains, Simi Hills, Santa Ana Mountains, Carlsbad, La Jolla and Point Loma, Punta Banda, San Antonio del Mar, Rosario and Santa Catarina landing, the latter four localities being in Baja California. Of these areas, the five sections illustrated on the accompanying chart were discussed in some detail as the more important of the group.

These upper Cretaceous sediments represent a composite thickness of at least 13,000 feet and, with the exception of the Santa Ana Mountains section, carry a rather sparse megafauna. The latter locality, however, carries a prolific fauna of approximately 200 species, about six of which are ammonites and the remainder gastropods and pelecypods.

In discussing the five important sections shown on the chart, the speaker gave the following approximate thicknesses for the various members, bottom to top:

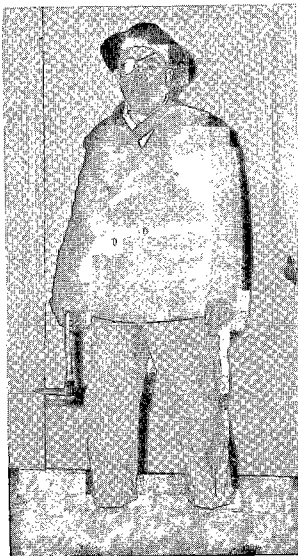
<u>Santa Monica Mountains</u>	
Red basal conglomerate	....750'
Arkosic sandstone	....2500'
Cobble conglomerate	....4000'
Fine sandstone	....300'
Arkosic sandstone	....1500'
<u>Santa Ana Mountains</u>	
Red conglomerate (Trabuco fm)	....400'
Sandstone and conglomerate (Baker Cn. member)	....300'

Sandy silt (Holz member)	....1500'
Sandstone and conglomerate (Schulz member)	....200'
Fine sandstone (Pleasants member)	....300'
<u>Santa Catarina Landing</u>	
Sandstone and volcanic breccia	....500'
Fine sandstone	....500'
Olive siltstone	....1000-1500'
<u>Simi Hills</u>	
Sandy silt	....200'
Calcareous sandstone	....900'
Sandy silt	....200'
Arkosic sandstone	....5500'
<u>Carlsbad</u>	
Sandy silt	....100'

In summary, Dr. Popenoe emphasized the tentative nature of some of his correlations, particularly as applied to European stages. He also noted the difficulty of correlating by means of megafauna between the San Joaquin Valley and Southern California due to the barren nature of much of the Panoche formation. However, the occurrence of smooth *Pachydiscus* near the top of the Panoche suggests a tie with the top of the Simi Hills, Carlsbad and Santa Catarina sections. In general, the speaker regards these smooth *Pachydiscus* as being no older than the Maestrichtian stage of Europe. Inasmuch as 4000 feet of Moreno (post-*Pachydiscus*) sediments probably required a considerable period of time for their deposition, Dr. Popenoe prefers to date the smooth *Pachydiscus* horizon as being very near the Campanian/Maestrichtian boundary.

In descending order, the speaker considers the *Metaplocenticeras*-ribbed *Pachydiscus* beds as representing some part of the Campanian and the *Glycymeris pacificus* horizon, found only in the Santa Ana Mountains near the base of the section, as probable late Turonian in age.

# CHRISTMAS HIGH JINKS



ME! AN OIL MAN?

Reproduced below, with permission of Bill Geis, is the poem so touchingly rendered by Homer Steiny at the Western Oil and Gas Association's Wildcat Christmas Jinks on December 10th.

Oh, I climb the mountains and I search the woods  
And I seldom come back without the goods.  
I take one look at a piece of shale  
Thereupon I unfold a most extravagant tale.  
I can tell how the water used to flow  
More than a hundred million years ago.  
How it deposited the silt and soil  
And how the poor fish turned into crude oil.  
I can tell the depth to the pay-off sand  
I lead the oil companies to the promised land.  
I'm the guy that knows his stuff  
If the well is dry, why it ain't deep enough.  
If the well is wet, it's the cement job  
The superintendent's a careless slob.  
Yea, I'm the guy that rings the bell  
But I've yet to find a producing well,  
Sure, a millionaire I ought to be  
But I'm a scientist not interested in money.  
Consider all the oil I find  
Say, could one of you guys lend me a dime?

## A.A.P.G. HONORS ALEXANDER DEUSSEN AND HARRY R. JOHNSON

Morgan J. Davis, president of the American Association of Petroleum Geologists, announces that the A.A.P.G. executive committee has elected two pioneer petroleum geologists to honorary membership in the Association: Alexander Deussen, consulting geologist of Houston, Texas, and Harry R. Johnson, consulting geologist of Los Angeles, California. Only 16 other living geologists have been so honored during the 35-year history of the Association. Presentation of the coveted certificates of honorary membership will be a highlight of the 1953 annual A.A.P.G. convention, to be held in the Sam Houston Coliseum, Houston, Texas, March 23-26.

# PERSONAL ITEMS

Howdy Kirk, Claude Leach, Bob Milner and Herb Dodson, all with Tidewater Associated, were in California last month. They returned to Canada in time for a white Christmas.

Larry Malarin and Joe Floyd are transferring from Standard Oil Company's Bakersfield office to Sacramento.

Fred Green and D. L. (Kirk) Kirkpatrick have just announced their plans to converge as a dual consulting firm. Headquarters will remain in Bakersfield.

The Geological and Scouting Departments of Standard Oil are apparently integrating their efforts as indicated by the recent marriage of Marshall Ayres, geologist, to Betty Poteete, scouting office.

Bob "Buck" Buchanan, formerly with Richfield in San Joaquin Valley Division, is now geological adviser to William R. Whittaker Co., Ltd., and will operate from the Los Angeles office.

Hugh Smith of Shell's Paleo Lab in Long Beach is being transferred to Ventura.

The Texas Company has announced the following promotions: F. D. "Dashy" Bode of Los Angeles was transferred January 1st to Denver to be Division Geologist for the Rocky Mts. Division, including developments in the Williston Basin. Hans Ashauer, District Geologist of Taft, replaced Dashy in Los Angeles and K. E. "Ken" Myron of the Taft office will replace Hans as Division Geologist for the North Coastal District.

It was good seeing Bill Winham, a past Pacific Section President, in town from Salt Lake City during the holidays. His many friends certainly made it a real "celebratin' season" for him with Frank Carter's "geological party" to see (?) the new year in! Scout reports from the field have confirmed they did make it to the Rose Bowl Game the next day as scheduled.

Frank Carter, DeWitt Taylor and John Dodge, among others, spent half of last month in Houston living off the "fat of Texas" in the fabulous Shamrock Hotel as guests of Baroid. Our men really set 'em straight down there with their high powered technical witnessing in the courts in behalf of the Baroid people.

Jim Benzley, formerly geologist for Amerada, is now with Western Gulf in Los Angeles.

Sam Stewart's wife, Irene, recovering from a polio attack, has been moved from Canada to the Orthopaedic Hospital in Los Angeles and we are glad to know Sam was able to be in town to spend the Christmas holidays with her.

L. Courtney Decius has retired from corporation practice and will devote his time to consulting work. His office address is 210 Post Street, San Francisco.

Earl M. Bagley with Bishop Oil in Bakersfield has been transferred to Midland, Texas as division geologist.

Andy Marin, previously with Western Gulf, and Paul Siemon, previously with Tidewater, have joined forces in a consulting venture. Their office is located at 3016 Union Avenue, Bakersfield.

Friends of Hal Hanson who wondered where to send his Christmas cards will note that his present address is: Route 3, Box 629, Foothill Road, Ojai. He is now with Oceanic Oil Company.

Pertinent oil news in the San Joaquin Valley area is now being aired by the Frank Hornkohl Laboratories every Monday night at 7:35 over Station KERO. Frank is covering all phases of the oil industry, both technical and as personal as possible. By what means Frank was able to grab the spot on the evening program right after the popular Bob Hope show remains a bit of a mystery. Anyone having more or less censored news items are invited to contact Frank at his sweat shop or call Bill Rintoul.

Roy Meade plans to join the ranks of consulting geologists in the San Joaquin Valley. Roy has been with Mohawk Petroleum Corporation for several years.

Have you noticed Jim Wylie wearing a tin hat when he plays golf at the Bakersfield Country Club now? His reasons are deeply couched in usual golfer's terms of angle of shot, wind velocity, heat waves, humidity, etc. Will Kanagy may have the answer, but he merely mutters something about "now we even have mobile handicaps!".

Rolfe and "Corky" Johnson have announced the arrival of their second boy, Dana, born December 12.

Rolfe is leaving Sunray Oil Corporation in Los Angeles and plans to don snowshoes and head for Calgary, where he will be employed by Pacific Petroleum, Ltd.

Due to earthquake damage to Bakersfield buildings, the following companies have new addresses: Continental, 612 18th St., Honolulu, 2510 Encino St., Wilshire, 1622 G St., Bishop, 2720 Chester Ave., and Glenn Ferguson, consultant, temporarily at 2503 Alta Vista while his new location is being remodeled at 307 4th St. All phone numbers have remained the same.

Everett Pease, former District Geologist for Sunray in Bakersfield, will open consulting offices in the Haberfelde Building about January 15.

Hal Summers, Tidewater geologist, had reason to claim fame when he intercepted a pass thrown by Don Heinrich, the nation's leading collegiate passer, when the latter was demonstrating Voit rubber footballs at a San Francisco store. For his successful efforts, Hal was given the ball.

Len Lombardi has recently joined Gulf Oil's Geophysical staff in San Antonio, Texas. For the past three years Len was associated with the Department of Geophysics of the Stanford Research Institute, during which time he specialized in the study of the Poulter Air Shooting seismic method.

According to notes forwarded by Graham Moody, Bill Kew, a wine connoisseur extraordinaire, has had opportunity to visit the foremost wine producing regions of Germany and France during his tour of the continent.

Jan. 8, 1953, Thurs., Noon, AAPG, Pacific Section Luncheon, Rodger Young Auditorium, Los Angeles: Roger M. Dungan, Continental Oil Company, "A Geologist's Impressions of Mexico" with Kodachrome Slides.

Jan. 8, 1953, Thurs., Noon, SEG Luncheon, Rodger Young Auditorium, Los Angeles: Mr. Don Karliskind of Vector Manufacturing Company, "Results of the Use of Uphole Cable".

Jan. 13, 1953, Tues., 7:00 P.M., AAPG, San Joaquin Valley Section, El Tejon Hotel, Bakersfield: S. T. Yuster, UCLA Department of Geology, "Theoretical Consideration of Tilted Water Tables".

Jan. 19, 1953, Mon., 7:00 P.M., Pacific Section Forum, General Petroleum Auditorium: Mr. Irving M. Smith, City Atty. of Long Beach, "Present Status of Tidelands Issue". Mr. Dean Walling, Western Geophysical Company, "Offshore Seismic Operations". Speaker to be announced on "Offshore Coring Operations".

Jan. 20, 1953, Tues., 7:00 P.M., API Dinner Meeting, Stockdale Country Club, Bakersfield: Pacific Gas and Electric - "Microwave"; Official Pictures of the Bikini Atom Bomb Test.

Feb. 9, 1953, Mon., 7:00 P.M., Joint AAPG-SEG Dinner Meeting, Rodger Young Auditorium, Los Angeles, Dinner 7:00 P.M. Lecture 8:15 P.M. Dr. Maurice Ewing of Lamont Geological Observatory, Columbia University, "Ocean Basins and Their Margins".

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"What Does Peace River Mean to Western Canada". Theodore A. Link. p. 298.

"New Discoveries Spur Saskatchewan Exploration". Maurice Kamen-Kaye. p. 326.

"Discoveries in Panhandle Back-up Geologic Theory". Fred R. Haeberk. p. 116.

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"Petroleum Development of Colombia". Victor Oppenheim.

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## NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

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No. 2

### ASSOCIATION ACTIVITIES

#### A.A.P.G. FORUM

The Forum program for the evening meeting on January 19 was a symposium on various phases of offshore exploration.

Mr. Irving M. Smith, City Attorney of Long Beach, opened the program with a talk on "The Present Status of the Tidelands Issue." His discussion was built around the thesis of State rights to tidelands and navigable waters and minerals therein as established by precedent as early as the conclusion of the Revolutionary War and the writing of the Constitution of the United States. A twenty-minute movie was presented which told the story pictorially.

The speaker emphasized the fact that State ownership was recognized and even supported by the Federal Government through all the years between the formation of the Constitution and the discovery and development of vast oil reserves beneath these lands. Following this time, the previous stand of the Federal Government was reversed by the Supreme Court handing down decisions in 1947 and 1950 by which the Federal Government laid claim to these lands and their minerals in the name of the people as a whole rather than merely the few states involved.

Mr. Smith pointed out that concern over such practices on the part of the Federal Government was magnified by the feeling that this tideland move might be merely the first step toward additional "grabs" and infringements of similar nature on the personal rights of the people on the part of the Federal Government.

In conclusion, Mr. Smith pointed out statistical discrepancies in various speeches made by President Truman between May 28, 1952, and January 16, 1953. These involved differences in probable total oil reserves beneath submerged lands of the United States which ranged from 2.5 billion barrels to 40 billion barrels.

The second speaker of the evening, Mr. Dean Walling of Western Geophysical Company, presented a talk on "Offshore Seismic Operations," which was illustrated by a Pacific Towboat and Salvage Company film showing various procedures involved in the work. The fleet utilized for this operation consists of a recording boat, two tailboats, one shooting boat, one survey boat and a powder boat. The latter is also used for obtaining bottom samples by means of a drop-coring device. In addition, a State Fish and Game boat is always present in the shooting area in order to immediately check on the number and type of fish killed. The crew is headquartered at some good nearby port in which the fleet anchors over weekends. During the week other coves along the coast are used for overnight anchorage.

The usual procedure is to lay out an L-shaped spread of two parts - the line spread (parallel to the seismic line) and the cross spread. The ends are pulled out by the two tail boats with the recording boat at the approximate right angle formed by the junction of the two spreads. The shot point

is located near the center of the V formed by the spreads. Seismometers are hung from the line at a depth of 10 feet below the surface and black powder charges, limited to 90 pounds per shot, are suspended about 5 feet below the surface from rubber balloon floats.

After setting up a spread on which the recording boat is located by Shoran and the spread and shot point locations by the surveyor, successive shots are set off along the lines at about 3 1/2 minute intervals. Under normal conditions, 2500 to 3000 profiles per month are shot by this method.

Mr. Robert R. Knapp, geologist with Standard Oil Company of California, concluded the meeting with a talk on "Offshore Coring Operations" which was also well illustrated by slides and movies.

This work was carried on from the deck of a converted 135-foot mine sweeper which was manned by a crew of 12, including one geologist. The latter, aside from helping supply the cook with fresh fish, was charged with the responsibility of determining from the cores whether sufficient penetration of the overburden had been attained in order to reach pre-Recent formation.

The operation utilized a jet-coring device, largely developed by the United Geophysical Company, which is capable of recovering an orientable core from beneath a blanket of Recent overburden of varying thickness. This equipment consists of a jet tube of 3 1/2" drill pipe with a stainless steel section on bottom milled to receive the core cutter and Eastman survey assembly which is dropped to the bottom of the pipe when a core is cut. Jetting action is attained by sea water pumped down the jet tube by means of 5-inch OD high pressure hose connected to the pipe by a Chicksan joint. Operating pressures during jetting run about 300 pounds.

In normal operation the ship was located on a predetermined core point which was shot in by a surveyor from a small launch and marked with a buoy. Secure anchorage was achieved by the use of three hooks, one at the bow and two at the stern. Following location at a core point, the jet assembly was run over the side and spudded through the overburden, if any, until a limit of the pipe carried on board or firm formation was believed reached. At this point the core cutter and Eastman survey assembly secured in the top of the jet pipe was released electrically and allowed to drop to the bottom by gravity aided by jetting water under pressure from the pumps. The core thus cut was recovered by pulling the cutter and camera assembly with a regular wireline overshot, checked by the geologist for preliminary data and stored in plastic tubes for further study.

Additional equipment carried on board were a bottom sediment sampler, which was used at each core location, and a drop-coring device. This dart, weighing in the neighborhood of 700 pounds, was used in water too deep to operate the jet coring assembly. Suitable cores were recovered by this method in areas of little or no overburden.



EXECUTIVE COMMITTEE, PACIFIC SECTION  
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

## COAST MEETING

Russell R. Simonson President  
Rufus M. Smith Vice-President  
Robert G. Maynard Secretary  
Tom E. Folsom Treasurer  
Homer J. Steiny Past-President  
Art Huey San Joaquin Representative

## PACIFIC PETROLEUM GEOLOGIST

Published monthly by the Pacific Section, American Association of Petroleum Geologists. Address communications to: Petroleum Geologist, Room 1007, 609 South Grand Ave., Los Angeles 17, California.

Editor: Bob Kelly  
Assistant Editors: Ben Lupton  
Activities: John Ruth  
Personal Items: Paul Elliott  
Selected Bibliography: Frank Della-Rose  
Calendar: Warren Hagist  
Cartoonist: Harold Sullwold  
Coast Representative: Hank Neel  
Sacramento Representative:  
San Francisco Representative: Bob Anderson  
San Joaquin Representative: Bob Johnston

Next deadline March 2, 1953

## PACIFIC SECTION DISTRICT REPRESENTATIVES

The following candidates for the Los Angeles District were nominated at the noon luncheon Feb. 5. Cards will be circulated and members will vote for three candidates: Harold Rader, Bob Anderson, Mel Hill, Wally Matjasic, Ben Lupton and Homer Steiny.

The regular dinner meeting of the Coast Geological Society was held at the Barbara Hotel, Tuesday, January 13. The speakers at the meeting were Mr. Manley Natland, Division Geologist of Richfield Oil Corporation and Mr. Flint Agee of United Geophysical Company.

Mr. Natland gave a very interesting talk on his zoning of the Pliocene of Southern California. This was of particular interest to this group because the type sections of several of Natland's zones are in the Ventura area.

Natland has divided the Pliocene into zones including the lower, middle and upper Repettian, Venturian, Wheelerian and lower and upper Hallian. In the western part of the Ventura Basin the lower and middle Repettian are not present and the upper Repettian lies apparently conformably on Delmontian upper Miocene. The Venturian lies above the upper Repettian and is equivalent to the lower Pico as used by many geologists in this area. The Wheelerian includes the middle Pico and a portion of the upper Pico. The division between the Wheelerian and the base of the lower Hallian is within the upper Pico or "Mud Pit Shale". The lower Hallian is roughly equivalent to the upper half of the upper Pico. The upper Hallian is the marine portion of the series of coarse sediments sometimes referred to as the Saugus in the Ventura area.

The accompanying chart kindly furnished by Mr. Natland depicts his stages and correlations.

The second speaker, Mr. Agee, showed a number of beautiful Kodachrome slides accompanied by an excellent commentary showing the methods of conducting offshore seismic work.

3817 Ave. April 1953

AGE	STAGE	ZONE	ENVIRON- MENT	CHARACTERISTIC FAUNA  * most important species	LOS ANGELES BASIN		VENTURA BASIN		OTHER AREAS		PREVIOUS		CORRELATIONS		THIS REPORT		
					Texas Co. Gardena Comm. 5'	Repetto Hills Section	San Pedro Hills	Wheeler Canyon Section	Hall Canyon Section	Bathhouse Beach Santa Monica	Schumacher Cort. Sect. Santa Maria	Pacific Beach San Diego	S.E.P.M. Committee 1930	Grant 1931	Bailey 1938	Wheeler 1941	Woodring Granulate Kaw 1941
Quaternary	Recent	Unclassified	Non-marine	<i>Equus cf. occidentalis</i>		500'±	50'±	3600'± Saugus	1667'	?	Paso Robles variable	?				Non- Marine	
	Pleistocene	Hallian	Lagoonal Littoral 0-125' Upper Neritic 125'-900' 19°-8.5° C.	* <i>Notolite beccarii</i> <i>Elphidium psyanum</i> <i>Elphidium hernal</i>		Not Exposed	Palos Verdes & San Pedro Sp. in part 0-300'	1360' Los Posos	1465'	?	Caraga 250'	?		Saugus and Las Posas	San Pedro	Palos Verdes Sd.	Upper Hallian
		Lower	Lower Neritic Upper Bathyal 125'-900' 19°-8.5° C.	* <i>Cassidulina limbata</i> <i>Cassidulina tortuosa</i>		200'±	San Pedro 300' (up to 1000') Palos Verdes 0-250'	765' St. Barbara	945' "Mud pit Sh."	Marl bed at Bathhouse Beach 180'	Upper part of Foxen 80'	San Diego Form. 1250'			Santa Barbara	Thomas Pt. Lomita Marl.	Lower Hallian
Tertiary	Pliocene	Wheelerian	Upper Bathyal 900'-2000' 8.5°-5° C.	* <i>Pulvinulinella (Episteminella) pacifica</i> <i>Uvigerina peregrina</i> <i>Bolivina interjuncta</i> <i>Bolivina spissa</i>	First core of 3120' in this stage	1500'±	1000'±	Absent	7785' Upper Pico	6" buff bed	Part of Foxen Thickness?			Pico		Upper Middle Pico	Wheelerian
		Venturian	Middle Bathyal 2000'-4000' 5°-2.5° C.	* <i>Bulimina subacuminata</i> <i>Bulimina sinuata</i> <i>Bulimina pagoda v. habaspinata</i> <i>Uvigerina pygmaea</i>		450'	Absent	Absent	2180' Lower Pico					Pico		Lower Pico	Venturian
	Repettian	Upper	Lower Bathyal Abyssal 4000' + 2.5°-1.5° C.	* <i>Cibicides mckennai</i> <i>Nonion pompilioides</i> <i>Platofrendicularia californica</i>		1170'	1700'	Absent	3730' Repetto								
		Lower		* <i>Karreriella milleri</i> <i>Ellipsenodosaria (Nodosarella) verneuili</i> <i>Liabusella pliocenica</i> <i>Hopkinsina nodosa</i>		1130'	950'±	20'±	Probab- ly Absent		Not Recognizable				Repetto	Repetto	Repetto
	Miocene	Delmontian			<i>Rotella garveyensis</i>		420'	400'±	Absent	Probab- ly Absent.							

CORRELATION  
OF  
PLEISTOCENE & PLIOCENE STAGES  
IN  
SOUTHERN CALIFORNIA  
MANLEY NATLAND — 1952

NATIONAL A.A.P.G. OFFICERS

John Emery Adams, Senior Geologist, Standard Oil Company of Texas, Midland, Texas, will become the 37th President of the A.A.P.G. on March 26, as announced today by Morgan J. Davis, President of the Association. Serving with Adams on the 1953-1954 Executive Committee will be Morgan J. Davis as Past-President, and three other newly elected officers of the Association: Vice-President Leslie M. Clark, Director and Vice-President of Pacific Petroleum, Ltd., Calgary, Alberta, Canada; Secretary-Treasurer, Elliott H. Powers, Vice-President of the Southern Production Company, Inc., in Fort Worth, Texas and as Editor of the A.A.P.G. Monthly Bulletin of Petroleum Geology, Armand J. Eardley, Chairman of the Division of Earth Sciences, University of Utah.

NATIONAL A.A.P.G. CONVENTION

The annual geologist's special cars to the 38th National Convention will leave the Los Angeles Union Depot at 8:00 PM (P.S.T.), Friday, March 20, 1953, on the Southern Pacific Sunset Limited, train No. 2 and go direct to Houston, Texas, arriving there Sunday morning, March 22, 1953 at 8:40 AM (C.T.).

This trip is being arranged through Mr. R. L. Odell, city passenger agent of the Southern Pacific Company, Room 424, Pacific Electric Bldg., Los Angeles 14; telephone Michigan 6161, local 2676.

Transportation committee members include Homer Steiny, Chairman, Irvine Frazier, William Kleinpell, Harvey Lee and Harold Rader.

S.E.P.M. - A.A.P.G. FIELD TRIPS

Arrangements for two field are well underway according to Orville Bandy, President of S.E.P.M.

April 11 has been set as the date for a trip through the section exposed on the north side of the Ventura basin. A dinner meeting will be held Friday evening, April 10, probably in the Pierpont Inn at Ventura.

The second trip, which will be in the Santa Ana Mts., is scheduled for May 16, and will be led by Jack Schoellhamer of the U.S.G.S. The proposed itinerary will include the rocks exposed in Santa Ana Canyon and the Cretaceous formations in Black Star Canyon.

PERSONAL ITEMS

Boris Laiming, the "confirmed bachelor" of the Texas Company's Paleo Lab in Los Angeles, surprised everyone with the announcement of his marriage to Natalie M. Borisoff of Hollywood on January 21.

For those of you who missed Alexander Anderson during last year, he was attending the 50th reunion of his Royal Scots Regiment in Edinburgh, Scotland. This regiment fought in the Boer War in South Africa in 1900 and 1901 under Lord Kitchner. He also rented an automobile and toured Scotland visiting many places that renewed boyhood memories.

Jack Leach, a recent grad of UCLA, has been employed as geologist by Sunray Oil Corporation and will work out of their Los Angeles office.

J. A. (Cris) Christensen recently was seen in Los Angeles en route to Lebanon from Calgary.

Robert Duane Brace of the Standard Oil Geological Department was married December 13, 1952 to Miss Patricia Mollett of Davis, California. Following a honeymoon at Lake Tahoe they returned to the southland where Mr. Brace will be in the Los Angeles office.

The many friends of Miss Barbara Caldwell of Union Oil will be happy to hear that on January 5 she became Mrs. Robert Tyson at the Chapel of Roses in Pasadena. Mrs. Helen Hurt was maid of honor, while Mr. Don Cronin served as best man.

Walt Stokesbury, formerly Division Paleontologist for Shell in Bakersfield, is now acting Division Exploration Manager, replacing W. E. McKittrick who has been transferred to Los Angeles.

Jerry Marrall has concluded a hitch with the Marine Corps in Korea and is now working in Santa Paula for Union Oil Company.

Bob Ortalda, Standard Oil Company, is leaving the Ojai office about February 1 and will move to the Salinas office. Ralph Newton is being moved from the Sacramento office to Ojai to replace Bob.

Stan Day of the surface mapping staff of Shell Oil Company has been transferred to New Orleans.

Ted Cook, paleontologist with Shell Oil Company, has been transferred to Corpus Christi, Texas to do stratigraphic work.

Jim Jackson, Shell Oil Company, who recently was moved from scouting to geological work, is now in Houston, Texas taking specialized training.

J. Minton Brown has resigned from Shell and is now with Oceanic Oil in Los Angeles.

Charles E. Sturz has been transferred to Ventura to take charge of the TWAO paleontology lab. Charley has been working in Tidewater's San Francisco office for the past four years.

R. J. "Bob" Hindle of Sunray is moving from Los Angeles area to Santa Maria.

Bud Trumbull, who has been District Engineer in Ohio's Bakersfield office, has been promoted to Division Superintendent of the Terra Haute division in Indiana.

Bob Maynard has assumed his new duties as District Geologist for Sunray in Bakersfield.

Tilden Fryer of Standard Oil at La Habra is being transferred to Los Angeles with John Silcox taking his place.

COASTAL NURSERY NEWS

Mr. and Mrs. Joe Dozier, Shell Oil Company, a daughter, Susan Lee, January 20th.

Mr. and Mrs. George Yeckel, Standard Oil Company, a son, David, December 31st. This is No. 5 for the Yeckels. Mason Hill and Bill Booth please note.

Mr. and Mrs. Dan Sullivan, Continental Oil Company, a son, Daniel F., Jr., December 29th.

Mr. and Mrs. C. K. Ham, Union Oil Company, a son, Curtis K., December 3rd.

Mr. and Mrs. Ed Hall, Union Oil Company, a son, John Edward. Ed was unable to recall whether his new son was born in November or December 1952. However, Mrs. Hall recalled very clearly that John was born on November 15th.

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Charles G. Higgins. Vol. 29, No. 5, pp. 181-264.

## CALENDAR

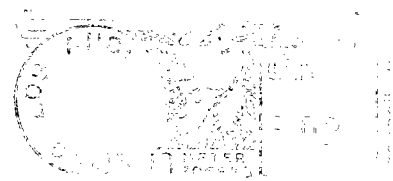
Feb. 16-21, 1953: A.I.M.&M.E. Annual Joint Meeting  
of Petroleum, Metal and Mining Branches, Statler Ho-  
tel, Los Angeles, California.

Feb. 17, 1953: Tues., P.M., A.P.I., Taft Petroleum  
Club, Taft: J. R. Pemberton, African Trip with  
slides and movies. Meeting to be preceded by a  
barbecue dinner, 6:45 P.M.

No A.A.P.G. Pacific Section Forum in February due  
to A.I.M.E. National Convention.

PACIFIC PETROLEUM GEOLOGIST  
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Chico, Calif.

# PACIFIC PETROLEUM GEOLOGIST

## NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 7

March 1953

No. 3

### ASSOCIATION ACTIVITIES

#### S.E.G. - A.A.P.G. DINNER MEETING

A dinner meeting was held on February 9 at Rodger Young Auditorium, Los Angeles, which featured as guest speaker Dr. Maurice Ewing, Director of the Lamont Geological Observatory, Columbia University. Dr. Ewing, currently on tour in connection with the regular A.A.P.G. - S.E.G. distinguished lecturer programs, gave a very interesting and comprehensive talk on "Ocean Basins and Their Margins."

In developing his subject, the speaker outlined part of the procedure for gathering geological and geophysical data during regular three-month Atlantic cruises sponsored by the University. This operation, involving the use of two ships and covering many fields of research, is financially supported by various organizations such as the Geological Society of America, the National Geographic Society, oil and mining companies, as well as government contracts for the Bureau of Shipping and Air Force, and private individuals.

These studies began as seismic refraction surveys across the continental shelf areas and the ocean floor. The results of this research combined with gravity meter data, onshore and offshore, and a study of earthquake surface waves have led Dr. Ewing to conclude that basaltic rock underlying the Atlantic basin is of much the same type as that of the Pacific and Indian Ocean areas. In addition, it is indicated that this basaltic substratum stands at a much higher relative position and supports a thinner sedimentary mantle under the ocean basins than under continental masses.

Much additional data have been compiled during the course of this work by means of bottom cores and fathometer traverses from which many conclusions have been drawn regarding ocean basin topography, sedimentation and performance of turbidity currents. Approximately 500 localities have been cored in the Atlantic area by the use of 2 1/2-inch weighted core barrel lowered on a 1/2-inch wire line with allowance made for a short free fall to provide sufficient penetration. These cores average about 30 feet in length although some as long as 60 feet have been recovered.

Dr. Ewing divides the ocean basins into four principal provinces as follows: (1) abyssal plains, (2) steep slopes, (3) continental shelf, and (4) jutting hills. The "abyssal plains" comprise very large flat areas which cover most of the ocean floor. The relief of irregularities on these plains is generally less than 6 feet and the general gradient usually less than 1 to 1000, except for the gentle slopes at the transitional edges where the gradient approaches 1 to 100. Sediments cored on these plains usually consist of alternating lenticular sands and clays giving way to red clay deposits locally. The red clays are characterized by a calcium carbonate content of less than 1 percent.

The "steep slopes" form the break between the shelf area, or flanks of submarine prominences such as the mid-Atlantic ridge, and the abyssal plain. These slopes are frequently bare of unconsolidated sediments except for a temporary accumulation of

such material near the top of the slope at its junction with the continental shelf. Consequently, older outcropping rock ranging in age from Cretaceous to Pliocene is frequently cored on the slopes although the oldest sediment cored on the flanks of the basaltic mid-Atlantic ridge is upper Miocene. Submarine canyons are often traced up these steep slopes of the continental rise and found to continue across the shelf area. These canyons are apparently flushed at intervals by turbidity currents leaving the walls fairly clean with only the coarser sand and gravel remaining behind to be deposited on the floors of the canyons.

Cores recovered from the flat, gently sloping "continental shelf" area were generally found to be Pleistocene to Recent in age.

An example given by the speaker for the submarine "jutting hills" was the type of topography found to the north of Puerto Rico where hills five to six miles across rise abruptly to an elevation as great as 1000 feet above the abyssal plain.

According to Dr. Ewing, large turbidity currents frequently have their inception along the steep slopes of the continental rise. Here a large quantity of unconsolidated sediment temporarily at rest near the top of the slope becomes dislodged, sometimes due to an earthquake, and takes off downward at high speed. By the time the lower levels are reached, sufficient sediment is held in suspension to create a density current capable of transporting sediment great distances, even out over the abyssal plains of very low gradient.

Dr. Ewing offered as evidence of the speed and force generated by turbidity currents, the breaks in the transatlantic cables following the Grand-bank earthquake of 1929. Sediment triggered into motion on the steep slopes of the bank formed turbidity currents of such force that 100 to 200 feet of each cable encountered was carried away. The time of the successive breaks gave an accurate check on the speed of the current which was calculated to range from 55 knots at the first cable break to 12 knots at the last.

One interesting feature discovered last summer was a north-south trending canyon on the north Atlantic abyssal plain. This canyon apparently winds around the eastern end of a known ridge trending from Newfoundland toward the Azores. Although the southern end of the canyon is not yet charted, Dr. Ewing is of the opinion that further study will probably show the canyon to be a connection between the north and south Atlantic basins.

#### OIL FIELD NOMENCLATURE

New lists of the California oil field and pool names, just released by the Conservation Committee and the A.A.P.G. Classification Committee, Pacific Section, are available for distribution. A phone call or note to Irv Frazier, The Texas Company, 929 S. Broadway, Los Angeles 15, or TRinity 9271, will get you one, free of charge. This list will help standardize correct usage of names of individual pools and fields.

EXECUTIVE COMMITTEE, PACIFIC SECTION  
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

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Next deadline March 30, 1953

CONVENTION TRAIN

The passenger list for the Geologists' Special, leaving for Houston on March 20 at 8:00 P.M., includes at press time the following members: Glen Ledingham and wife, Mel Hill and Orrin Wangness of Western Gulf; H. V. Church and wife, Oceanic; M. E. Loy and wife, Schlumberger; W. D. Kleinpell and wife, Consultant; Jim Dorrance and F. F. Lambrecht, Texas Co.; C. W. Porter and wife, Pacific Western; E. H. Steinmeyer and N. H. Mackevett, Shell; Eric Jacobsen and Orrin Gilbert, Standard; Kemp Barley, Baroid; Lowell Redwine, Honolulu; Ed Hamner, Joe Hudson, Hunter Yarborough, O. K. Fuller, J. R. Jackson, Dick Faggioli, John Frick and wives and R. M. Touring and H. C. Minturn of Humble; John Sloat and W. L. Stanton, Union; Robert Paschall, Amerada; R. M. Barnes, Continental; K. F. Krammes and wife and Loren Snedden, Intex; H. J. Steiny and H. H. Neel and wife, Tidewater-Associated; S. L. Gillan, Consultant; John Looftbourow, Sunray; and E. A. Pielemeier and wife, United Geophysical Company.

NATIONAL S.E.G. OFFICERS

President Curtis Johnson has announced the following successful candidates will take office at the National Meeting in Houston March 23, 1953:

President: Roy L. Lay, The Texas Co., Houston  
Vice-Pres.: Karl Dyk, Stanolind Oil & Gas, Tulsa  
Sec.-Treas.: Bart W. Sorge, United Geophysical, Pasa.  
Editor: Milton B. Dobrin, Magnolia Petroleum, Dallas

NEW PACIFIC SECTION DIRECTORY PLANNED

A new directory of Pacific Section members is planned that will be ready for distribution during the annual fall meeting of this year. Dick Faggioli has been appointed Directory Chairman and Earl Bescher will be Advertising Manager. In addition to the A.A.P.G. membership, the S.E.G. and S.E.P.M. will be included in the 1953 edition. Appointments have been made in these societies of the individuals who will coordinate gathering the data and pictures: Kenny Fuller for the S.E.G. and Wilbur Rankin for the S.E.P.M. We all appreciate the fine work that Art Huey, Dan Klemme, Bob Maynard and the rest of their group did in pioneering the 1951 directory and subsequent revisions, all of which will be used as a basis for the new edition.

DISTRICT REPRESENTATIVES

Pacific Section Secretary, R. G. Maynard, has announced the results of the recent election of District Representatives as follows:

Los Angeles District

Harold Rader, Standard Oil Company  
Ben Lupton, General Petroleum Corporation  
Wallace Matjasic, Honolulu Oil Corporation

Wally drew the short match and thereby won the short term as a replacement for Jack Knight, British-American, who has moved to Denver, Colorado.

San Joaquin Valley District

Stan Carlson, Richfield Oil Corporation  
R. L. Hewitt, Trico Oil & Gas Company

Coast District

Dick Shelton, Ohio Oil Company

District Representatives are elected from geographical districts on the basis of one representative for each 75 members in that district. They represent their districts at National meetings and screen applicants for membership from their own districts. They represent geographical districts only, and have no official connection with local affiliated societies which may be in their districts. Their term of office is for two years.

Eocene FORAMINIFERA

A few copies of the "Range Chart of Eocene Foraminifera of California" compiled by Paul P. Goudkoff and Nereida Mendoza Henderson are now available. Copies may be had for \$1.50, to cover the cost of printing, by addressing Paul P. Goudkoff, 799 Subway Terminal Bldg., Los Angeles 13, California.

A.A.P.G. ROCKY MOUNTAIN SECTION MEETING

The Third Annual Meeting of the Rocky Mountain Section will be held in Casper, Wyoming on April 23-24, 1953.

It is evident from the Tentative Program that the Convention Committee has planned an outstanding group of papers covering all the sedimentary basins of the Rocky Mountain region.

IN MEMORIAM

FLOYD THOMAS LUND  
1924 - 1952

Relatives and friends were deeply grieved by the premature death of Floyd Thomas Lund who, during his ten years as a Seismologist largely with Western Geophysical Company, had become widely known in exploration circles.

Floyd, a native of Sheridan, Wyoming, was one of the youngest seismograph Party Chiefs in the industry. He had worked in most areas of the United States and served as Party Chief for two years in Paraguay. The climax of his career came last year when he was appointed Party Chief of an important Pacific Coast offshore crew headquartered at Santa Barbara.

Death came on the afternoon of December 31, 1952 in Santa Barbara while undergoing surgery for a brain tumor. Floyd is survived by his parents, Mr. and Mrs. John Lund and his brother, Clyde, of Sheridan; his widow, the former Isabel Romero of Asuncion, Paraguay and his three children, Patricia Geraldine (four years), Henrietta Diana (two and one-half years) and John Fabio (one week).

We wish to express our deepest sympathy and most sincere condolences to the bereaved.

A.A.P.G. LUNCHEON

Mr. D. H. Shepherd, Manager of the Tax Division of Union Oil Company, was guest speaker at the monthly luncheon at Rodger Young Auditorium on February 5. Mr. Shepherd's topic, "Federal Income Tax Treatment of Exploration Expenditures", attracted an audience of over 100 persons.

In his introduction, Mr. Shepherd pointed out that exploration costs include not only geological and geophysical surveys and analyses but many other services and activities such as scouting, drafting, clerical help, land department functions, laboratory tests, supplies, equipment depreciation, etc.

Long before the advent of income taxes it was an established practice of oil and gas producers, a practice endorsed by public accountants and approved by the Securities and Exchange Commission, to treat exploration costs as current business expenses for financial accounting purposes. With the advent of income taxes and prior to 1942, the Treasury Department agreed with this practice and allowed the industry to deduct these expenses during the year incurred. In 1942, however, the Department reversed its policy and now requires that the cost of such surveys be capitalized and added to the cost of properties secured or affected thereby. As a result, these costs can only be recovered as a loss if and when the properties are quitclaimed.

Some of the reasons for this change in policy by the Treasury Department are the increase in exploration activities after the depression and before World War II, coupled with the increasing difficulty in finding new oil fields and the widespread use of seismological devices for searching for oil. These factors which tremendously increased the cost of exploration became an item of greater significance to the Department.

The change in policy by the Treasury Department has been accomplished by two published documents. In 1942 the Department issued a very general and ambiguous field memorandum which was variously interpreted by its field offices, resulting in inequitable treatment for some members of the industry.

Then, in 1950, tax ruling I.T. 4006, which was issued over the objections of the industry, clarified points in the preceding memorandum but did not change the basic principle of capitalizing exploration costs.

The tax ruling imposes a large financial burden on the petroleum industry in two ways. First, the ruling assumes that exploration activities for all oil companies follow a fixed pattern in which a project is set up covering a definite large area in which reconnaissance surveys outline an area or areas of interest. Detailed surveys then are assumed to be carried on in the area of interest that result in the acquisition of land. The cost of both the reconnaissance and detail surveys must then be capitalized and considered as part of the cost of any lands leased. However, if several areas of interest are outlined, the cost of the reconnaissance survey is divided equally between them, whereas the costs of detail surveys in areas of interest are divided between the various leases on an acreage basis. This inflexible plan causes many administrative and accounting difficulties for the oil industry as several problems arise, such as: determining exactly when reconnaissance surveys cease and detail surveys start; what part of geological surveys should be capitalized or expensed in a given instance; the problems of determining precisely the boundaries of a particular project; and the lack of assurance of finality of determination of any decision prior to agreement with the Treasury Department. These problems demand the time not only of the tax and accounting departments but of geologists and geophysicists.

Secondly, the requirement of capitalization operates as a deterrent in the search for oil. The moving of exploration costs from the expense to the capital gains columns on the companies' books means that they must pay much larger taxes each year. These taxes, even if returnable when and if the properties are quitclaimed, drastically reduce the sums available for exploratory efforts. As a result, many low grade plays which are a potential source for much oil are not drilled because the leases are quitclaimed to take the tax loss.

At present, it does not appear that the Bureau of Internal Revenue will change its position. The oil industry then has the choice of litigation or legislation. Litigation is uncertain and expensive and may take years. Since the executive and administrative departments of the Government have been behind every effort of the industry to find more oil and Congress in 1951 alleviated a similar situation in the mining industry, it appears that legislation is the most promising way to relieve this burden.

It is proposed that the Internal Revenue code be amended to provide for the deduction of all expenditures incurred during any taxable year for the purpose of ascertaining the existence, location or extent of any deposits of oil or gas. This amendment would not substantially change the flow of revenue into the treasury when averaged over a period of several years. This is true because about 96 percent of exploration expenditures, whether expensed or capitalized, are ultimately recovered as deductions. The remaining 4 percent is the cost of leases under which oil is discovered and thus does not reduce taxable income. Procedures under the proposed amendment, Mr. Shepherd pointed out, would be much simpler with elimination of much confusion and unnecessary expense and delay. Furthermore, additional dollars would be available to the oil industry for increased exploratory effort with resultant greater job opportunities.

APPOINTMENTS

Pacific Section President, R. R. Simonson, has announced the appointments of the men who will assist him during 1953.

Distinguished Lecturer Representative

Loyde Metzner, Signal Oil & Gas Co.

Geological Forum Chairman

Orrin Gilbert, Standard Oil Co.

Publicity

Louis Simon, The Texas Co.

Projectionist

Ed Wellbaum, Kern Oil Co.

Convention General Chairman

Mel Hill, Western Gulf Oil Co.

Convention Program Chairman

John Loofbourow, Sunray Oil Corp.

Classification Committee Chairman

Irv Frazier, The Texas Co.

Legislative Committee Chairman

W. W. Porter II, Consultant

Spring Picnic Chairman

Herb Babione, Humble Oil & Refining Co.

Transportation

Homer Steiny, Tidewater Associated

Golf

Harold Sullwold

Directory Revision Chairman

Dick Faggioli, Humble Oil & Refining Co.

Advertising Chairman, Directory Revision

Earl Bescher, Humble Oil & Refining Co.

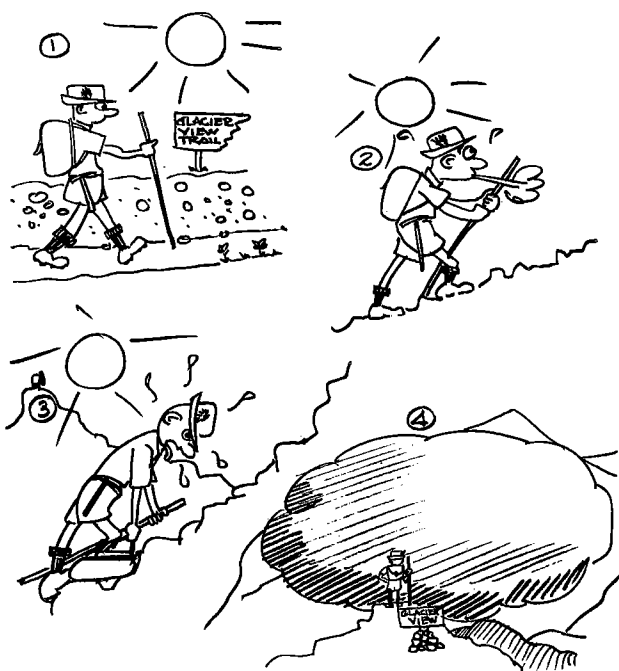
Cross Section Sales

Vince Scury and Bill MacKersie, Seaboard

Asst. Editor, A.A.P.G. Bulletin, Pac. Coast

John Hazzard, Union Oil Co.

# ANDY CLINE by sullwold



## NEW FIELD TRIP DATE

Date for S.E.P.M. - A.A.P.G. field trip through the section exposed on the north side of the Ventura Basin has been changed to April 18. A dinner meeting will be held Friday evening, April 17, at the Ventura Elks Club.

## PERSONAL ITEMS

George Cunningham, president, and Jim Kirby, chief geologist of American Overseas Petroleum, Ltd., were visitors last week at the Standard offices in San Francisco en route to Australia.

Al Solari, Standard Oil Company, denies that his company found black gold on the Tevis Ranch in Marin County and then capped the well as insinuated by a San Francisco gossip columnist. It is a question as to whether Al, or the neighbors mentioned in the column, are in the biggest tizzy.

Gladys Peyser, well known lady geolifer for The Texas Company, has moved headquarters from Santa Rosa to Taft.

Companies who recently have moved from their earthquake-damaged offices in Bakersfield to new quarters included: General Petroleum to 1825 19th Street; Seaboard to Rm. 302, Haberfelde Bldg.; and Ferguson and Bosworth to 307 Fourth Street.

Honolulu's Norman Nichols is back in the Los Angeles area again after a year's absence during which time he was doing geophysical work in the Sacramento Valley.

Dave Pontius of Shell Oil has been transferred from Montana to the Long Beach office.

The call has come in for any geologists desiring a little "field work" on weekends to contact Harvey Lee to help him put in his new lawn.

Jim Tasker has joined Standard's geological department in Los Angeles. He is a Cal-Berkeley graduate and was married January 31st to Joan Ralls.

Glen Gariepy and Russ Simonson, Pacific Section President, attended a ten day geological conference at Ohio Oil Company's headquarters in Findlay, Ohio.

W. C. "Bill" Gere of the U.S.G.S. at Los Angeles has been in Washington, D.C. for the past several months preparing to open a new U.S. Minerals Classification office in Salt Lake City where he will serve as Regional Director. Don Van Sickle takes his place here in Los Angeles.

Bill Willeges of Western Geophysical is being transferred from Santa Barbara to New Orleans.

Will Kanagy, Seaboard geologist in Bakersfield, thinned the ranks of that city's few remaining bachelor geologists by exchanging marriage vows with Miss Marjorie Eddy, also of Bakersfield. The event was solemnized on St. Valentine's Day in Costa Mesa.

Bill Cortwright, District Geologist of Tidewater-Associated's Bakersfield office, left March 2nd for a two-month trip to the Rocky Mountain area.

Interest was at a white heat at the last monthly meeting of the San Joaquin A.A.P.G. Chapter when Floyd Johnson finally paid off his debt of honor (?) to Ken Krammes. It is too involved to detail here, but imagine Floyd betting that Truman would win -- and paying off in musty old Confederate bills!

The daily geological seminar for the San Joaquin Valley has been moved to the Salad Bowl in an effort to find a more palatable luncheon. It seems Stan Beck is one of the die-hards and still goes to the El Tejon, although he and Dave, the Maitre d', may run out of conversation; in which case we should see Stan at the head of the table once more.

Douglas Andrews, a University of California graduate, and formerly with International Geophysical Company, is now with Tidewater Associated Oil Company as geologist in their Bakersfield office.

Harold Summers has been transferred to Tidewater-Associated's Ventura office. Hal has been working in the San Francisco office for the past several years.

Willard Classen, Jr. (Bill) has assumed his new duties as a paleontologist in the San Joaquin division of Standard Oil Co. Bill recently received his Master's degree at U.C.

Daniel J. Pickrell, co-owner of the Golden Gate Petroleum Co., proudly announced a personal dividend in the person of Christine Maria, born on Feb. 25. Christine is the third child for the Pickrells.

Bill Cortwright was seen briefly in San Francisco en route from Bakersfield to the Williston Basin where he will look over Tidewater's interests for a few weeks.

Paul Hodge, GSI supervisor, has been transferred from Bakersfield to Maracaibo, Venezuela where he will take charge of a marine operation.

Rufus Smith, Assistant to the Regional Geologist of Continental Oil Co. in the Western Region and Vice-President of Pacific Section, A.A.P.G., will leave the first part of March for Houston where he will assume the position of Director of Training for the Production Department of Continental.

Robert Thomas of the State Division of Water Resources, who has been in Ventura for some time, has been moved to Los Angeles.

Page Richardson of Tidewater-Associated Oil Company, who has been scouting in the Los Angeles Basin and the Coastal areas, has been transferred to Casper, Wyoming. Harold Summers from San Francisco will replace Page as scout and will make his headquarters in Ventura.

James Saunders of Tidewater-Associated Oil Company has been transferred from Paso Robles to Los Angeles.

Don Gresser, Shell Oil Company, Ventura, was married February 27th to Miss Thelma Bell, also of Shell. Immediately following the wedding, Mr. and Mrs. Gresser left for New York where Don will take up duties in the New York office of Shell.

Ed Johnson, Exploration Department, Continental Oil Company in Ventura has transferred to the Exploitation Department at the San Miguelito Field. Dan Sullivan, Exploitation Department, San Miguelito Field, transferred to Exploration Department in Ventura.

J. H. Beebe of Standard is now working in their Bakersfield office having moved there from Santa Maria.

Holmes Miller, formerly engineer with The Texas Company at Fellows, has resigned to join forces with the Intex Oil Company as reservoir engineer.

Bill Horsley has left Peters Logging Service to join Seaboard Oil Company as scout. He replaces Wilton McCombs who has transferred to their Land Department.

Wayne Eckert, formerly scout and landman for The Texas Company in Sacramento, has been promoted to Lease Man and is currently working out of the Bakersfield area.

Vern Crackel, geologist for Southern California Petroleum Corporation in Los Angeles, is taking a leave-of-absence to serve as Chief Geologist for Blair Oil and Gas Corporation with offices at Room 130, Petroleum Building, in Tallahassee, Florida.

Paul Hayes has returned from SoCal's Midland office to Los Angeles.

Pete Gester, who has been working for Standard Oil Company in Sacramento, is now headquartered in Los Angeles.

Howard Gonsalves of Standard has moved from Salinas to Bakersfield.

## NURSERY NEWS

Word from Billings is that Mr. and Mrs. J. T. Llewellyn, Honolulu Oil Corp., were successful in their efforts to increase Montana's population with the completion of Llewellyn #1, Karen Elizabeth on February 19th.

Mr. and Mrs. Charles Sturz, T.W.A.O., are the proud parents of Brian Jeffrey, born on February 9. Brian weighed in at 7 lbs., 11 oz. Charlie wonders if the numerical combination of 7-11 portends a lucky future.

Mr. and Mrs. Ted Cook (formerly of Ventura, now in Houston), Shell Oil Co., first child, a daughter, Carolyn Elizabeth, February 7th, 7 lbs., 10 oz.

Mr. and Mrs. F. B. Conger, Shell Oil Co., first child, a daughter, Anne Merrill, February 6th, 7 lbs., 8 oz.

Mr. and Mrs. H. G. Bemko, Glendale, a daughter, tenth grandchild of Silas L. Gillan, January 26, 1953.

## **BIBLIOGRAPHY OF RECENT PUBLICATIONS**

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"Cambrian Stratigraphy in Southwestern Montana". Alvin M. Hanson.

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"Surface Electrical Method Detects Oil Directly". H. M. Evjen. P. 93.

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## CALENDAR

Mar. 9, 1953: Mon., 7:30 P.M., S.E.P.M., Founders Hall, U.S.C. Campus, Room 229, Los Angeles: Dr. Hoyt R. Gale, "Philosophical Significance of Evolution" and Mr. Tom Rothwell, "The Age of Biofacies Correlations in Petroleum Geology".

Mar. 10, 1953: Tues., 7:30 P.M., A.A.P.G., Coastal Geological Society Dinner Meeting, Barbara Hotel, Santa Barbara. Talks on "Mechanics of Formation Testing" by Mr. Charles White of Johnson Formation Testers and "Evaluation of Formation Testers" by Mr. Robert Eddy. Also short movie on Airborne Magnetometers.

Mar. 12, 1953: Thurs., 12:00, S.E.G. Luncheon Meeting, Rodger Young Auditorium, Los Angeles: Mr. E. H. Coughram, Applied Science Dept. of I.B.M. will talk on "Electronic Computers and Geophysics".

Mar. 12, 1953: Thurs., 6:30 P.M., A.I.M.E., Junior Petroleum Group, Dinner Meeting, Turf Club, Lake-wood and Anaheim-Telegraph Road: Informal Round Table Discussion on Corrosion.

Mar. 17, 1953: Tues., 7:00 P.M., A.P.I. Dinner Meeting, Stockdale Country Club, Bakersfield: Mr. John Riegals, Southern California Gas Co. will talk on "Gas Storage" to be followed by film, "River Beyond".

Mar. 17, 1953: Tues., 8:00 P.M., A.P.I. - Los Angeles Basin Chapter, Shell Oil Company Meeting Hall, Long Beach: Floyd Schoomober of Monterey Oil Company - Illustrated Talk on "Methods and Uses of Fluid Levels and Applications". Also, J. R. Pemberton will show slides of his trip to Africa.

Mar. 18, 1953: Wed., 6:00 P.M., Northern California Geological Society Dinner Meeting, Domino Club, 25 Trinity Place, San Francisco: A.A.P.G. Distinguished Lecturer, Dr. A. Rodger Denison, "Williston Basin - Structure and Stratigraphy in Relation to Recent Oil and Gas Discoveries", \$3.25.

Mar. 18, 1953: Wed. noon, Sigma Gamma Epsilon - Geologic Fraternity, Bridge Hall, Room 412, U.S.C. Campus: "Carlsbad Caverns". Sam Brown.

Mar. 19, 1953: Thurs., 7:00 P.M., A.A.P.G. Pacific Section Dinner Meeting, Rodger Young Auditorium, Los Angeles: Mr. A. Rodger Denison, Vice-President, Amerada Petroleum Company, Tulsa, Okla., will discuss "The Williston Basin - Structure and Stratigraphy as Related to Recent Oil and Gas Discoveries".

Mar. 20, 1953: Fri., 7:00 P.M., A.A.P.G. - San Joaquin Section, Spanish Ball Room, El Tejon Hotel, Bakersfield: Mr. A. Rodger Denison, Vice-President, Amerada Petroleum Company, Tulsa, Okla., will discuss "The Williston Basin - Structure and Stratigraphy as Related to Recent Oil and Gas Discoveries".

Mar. 23-26, 1953: Joint Annual Meeting of A.A.P.G., S.E.G. and S.E.P.M., Houston, Texas.

Mar. 25, 1953: Wed. noon, Sigma Gamma Epsilon - Geologic Fraternity, Bridge Hall, Room 412, U.S.C. Campus: "Polynesian Atolls". John Byrne.

Mar. 27-28, 1953: Fri., G.S.A. Cordilleran Section, Spring Meeting, Stanford University. Field trips are scheduled for Thurs., March 26.

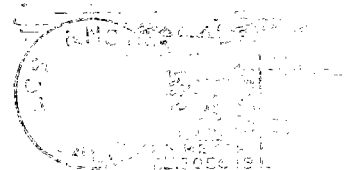
Apr. 2, 1953: Thurs. noon, Pacific Section Luncheon, Rodger Young Auditorium, Los Angeles: Eugene Borax, Union Oil Company, "Cook Inlet Area of Alaska". Talk will be accompanied by color slides.

Apr. 7, 1953: Tues., 7:00 P.M., A.I.M.E. Dinner Meeting, Stockdale Country Club, Bakersfield: Panel Discussion either on "Water Flooding" or "Waste Water Disposal".

Apr. 8, 1953: Wed. noon, Sigma Gamma Epsilon - Geologic Fraternity, Bridge Hall, Room 412, U.S.C. Campus: "Oceanographic Work Aboard Velerio IV". John Grady.

PACIFIC PETROLEUM GEOLOGIST  
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# PACIFIC PETROLEUM GEOLOGIST

## NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 7

April 1953

No. 4

### ASSOCIATION ACTIVITIES

#### A.A.P.G. DINNER MEETING

Dr. A. Rodger Denison, Vice-President of Amerada Petroleum Corporation and Past-President of the A.A.P.G., was guest speaker at a dinner meeting held at Rodger Young Auditorium, Los Angeles, on March 19, 1953. Dr. Denison, currently on tour for the A.A.P.G. in connection with the Distinguished Lecturer program, gave an interested audience of 133 persons a very informative talk on "The Williston Basin - Structure and Stratigraphy in Relation to Recent Oil and Gas Discoveries".

The speaker defined the Williston Basin as an area of approximately 120,000 square miles, or slightly less than that of the State of New Mexico, which covers parts of the States of North Dakota, South Dakota and Montana and the Provinces of Manitoba and Saskatchewan. The basin was originally named by W. T. Thom in a press release dated June 13, 1923, in which the writer recognized the possibility of oil and gas accumulation in northwestern North Dakota with Nesson anticline the most favorable structure.

Dr. Denison refers to this basin as "two-layered": a Mesozoic layer characterized by shales and sandstones, and a Paleozoic layer in which carbonates and evaporites comprise the dominant rock type. The basin apparently originated as early as Ordovician or perhaps Cambrian time and gradually subsided with the accumulation of sediments. This sinking with accompanying deposition of sediments came to a halt in the Williston Basin at an earlier date than in the neighboring Denver-Julesburg and Powder River Basins. This is indicated by the relative subsea positions of the top of the Dakota member which occurs at approximately -4000 and -6000 feet, respectively, in the latter two basins in contrast to a maximum of -3000 feet in the Williston. In addition, the Denver-Julesburg and Powder River Basins received a considerable thickness of upper Eocene sediments which were not deposited in the Williston Basin.

During the long period of sinking and filling, a thick section of Ordovician, Silurian, Devonian, Mississippian, Triassic, Jurassic and Cretaceous rocks was deposited in the Williston Basin. The speaker exhibited several paleogeologic maps based on well data which illustrated the various fluctuations of the basin outline during these periods from Ordovician through Triassic. Throughout this great period of time the point of thickest section for each successive period remained fairly constant in northwestern North Dakota except for the Devonian period, when this point shifted to southern Saskatchewan. This shift was due to the development of thick salt members within the Devonian series.

Interruptions of deposition during periodic pulsations within the basin resulted in disconformities in the center of the basin and erosional unconformities in the margins. The greatest such hiatus came at the close of the Mississippian when a general uplift of the basin was followed by non-deposition and widespread erosion during the Pennsylvanian and Permian epochs. Dr. Denison pointed out that this unconformity is the same as that which is found to be so prolific an oil producer

in the Mid-Continent area. This break was followed by deposition and partial erosion during Triassic period. A widespread Jurassic transgression is represented by sediments still present in basin-wide distribution. These latter beds truncate and rest upon rocks of various ages down to pre-Cambrian.

Folding within the Williston Basin is rather diverse and ranges from very gentle, broad structures to steeper folds having dips as high as 25° on the flanks. Most of the oil is found in closed structures, although stratigraphic traps do exist, such as the truncated Mississippian of the Virden field.

Although oil has been found in rocks of all periods represented in the Basin, the speaker emphasized that the large proportion of the oil produced to date has come from the carbonates and evaporites of the Paleozoic rather than from the Mesozoic sand and shale section. For this reason Dr. Denison does not consider any well in this area to be a conclusive test until it has at least penetrated the Mississippian.

The development of oil in the Williston Basin has progressed at a phenomenal rate, as prior to February 1951 commercial production had not been attained. Since that time a total of 18 fields have been discovered which produce nearly 20,000 barrels per day from a proved area of more than 30,000 acres. As this proved area is confined to a small part of the basin as a whole, Dr. Denison stated that in his opinion "...far more fields and far more oil will be found in the Williston Basin in the future than have been found to date".

In conclusion, the speaker emphasized the tremendous sociological impact on the people of this region by the abrupt intrusion of a partial oil economy on this wheat-farming territory. However, he feels that this change is for the good as it eliminates to some extent the effects of drought and depression which have intermittently plagued this part of the country in the past.

#### ENGINEERS' CLUB

Announcement has been made of the formation of the Los Angeles Engineers' Club as a result of much hard work by the members of the Founder Societies, which include the A.I.C.E., A.S.C.E., A.I.E.E., A.I.M.E. and A.I.M.M.E. Club rooms have been leased on the third floor of the Biltmore Hotel and are those formerly occupied by the Petroleum Club.

Membership is open to all gentlemen who are members of the above societies or who are Registered Professional Engineers.

Three types of membership will be available as follows:

Founders: (transferrable) \$120 and \$9/month dues  
Resident: (non-transferrable) \$30 and \$9/month dues  
Non-resident: \$18 and \$1.50/month dues. Non-resident membership is limited to those whose place of business is more than 15 miles from the Biltmore Hotel.

Membership will be restricted to a total of 500. Further information regarding the Club may be secured by contacting the Engineers' Club, Biltmore Hotel, Los Angeles 13, California.

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PACIFIC PETROLEUM GEOLOGIST

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Next deadline April 27, 1953

S.E.G. SPRING MEETING

The annual spring meeting of S.E.G. will be held Friday, May 8 in Bakersfield at El Tejon Hotel. A full afternoon and evening program with topics of interest to both geologists and geophysicists has been arranged by Chairman Bill Cortright.

PACIFIC SECTION DIRECTORY

Initial responses by Pacific Section A.A.P.G. members in returning the directory revision data cards has been encouraging, but about one-half are still outstanding, so "keep them coming". Any paid Pacific Section member who has not received a data card for completion should contact Dick Faggioli, Humble Oil & Refining Company, 612 So. Flower, Los Angeles 17, Madison 6-7701.

S.E.P.M. - A.A.P.G. FIELD TRIP

A dinner meeting will be held at 7:00 P.M. Friday evening, April 17 at the Ventura Elks Club, Main and Ash Streets. The following talks will be given: "Stratigraphy of the Ventura Area" by C. M. Carson; "Structure of the Ventura Area" by Tom Bailey and "Geology of the Ventura Avenue Field" by J. L. Arthur.

The field trip on Saturday will start at the Ventura Junior College parking lot and will include a portion of the Ventura Avenue oil field, the section exposed from Ventura Avenue to Ojai, the Upper Ojai Valley and North Sulphur Mountain areas, Sisar Creek and Santa Paula Creek. The trip will terminate at Santa Paula.

CHANGE OF ADDRESS NOTICES

Each month from 10 to 20 Newsletters are returned to the Editor because the addressee has moved. An attempt then is made to obtain the new address of the member, but in many cases the effort is in vain.

It would be greatly appreciated if "Change of Address" cards are sent to the Editor so the mailing list can be kept up to date.

COAST GEOLOGICAL MEETING

The regular dinner meeting of the Coast Geological Society was held at the Barbara Hotel, March 10th. Following the dinner, Robert Herron of M.J. M.&M. Oil Company gave a short review of James Gilluly's 1949 G.S.A. presidential address entitled "Distribution of Mountain Building in Geologic Time".

Mr. Charles White of the M. O. Johnston Oil Field Service Corporation then spoke on the history and mechanics of formation testers.

Prior to 1928 there were no formation testers available and it was necessary to set pipe and swab in order to test for possible production. During 1929 and 1930 testers with the cone-type packer were developed. This type could only be used when the hole size had been reduced. In 1932 the rubber sleeve type of straight hole packer was developed. Since that time the principle of formation testers has remained essentially the same, although many improvements and new developments have been added. In 1936 the development of bottom hole pressure recorders increased the usefulness of the formation testers considerably. Mr. White pointed out that, contrary to the fears which seem to prevail in some sections, there is little danger of leaving a tester in the hole. Within the memory of the Ventura Johnston staff they have left no more than 10 testers in holes in this area since the practice began.

Mr. Robert Eddy, exploitation engineer with Shell Oil Company in Ventura, followed with a talk on the "Evaluation of Formation Tests". Mr. Eddy described the hole conditions required for optimum results of tests. He was in favor of making tests while the hole was being drilled rather than plugging back and testing after the total depth is reached. He stressed the importance of having the hole in good mechanical condition and taking time to thoroughly condition the mud before running the tester.

The second and most instructive part of Mr. Eddy's talk was an interpretation of various tests including the pressure charts recorded during the test. Among the examples given were tests in which the tester plugged; tests in which the production was all salt water; and a test in which too much water cushion was used and the result of the test was a suction instead of a blow.

Following Mr. Eddy's talk a film furnished by the Civil Aeronautics Authority was shown. The film was a very interesting account of the operation of airborne magnetometers and the mechanics of the construction of aeromagnetic survey maps.

BAKERSFIELD PETROLEUM WIVES

"The Association of Petroleum Wives" held their annual free party, "The Daze of the 49'ers", March 21, 1953 in Bakersfield. Gold Rush days returned for members and their husbands as many costumed figures met for the party of the year. Thanks to M.C. "Barney" Barnard and the committees who planned and worked on this successful event.

The Association of Petroleum Wives wishes to acknowledge and thank the following companies for their generous contributions: B. & C. Laboratories, Baroid Sales, Byron Jackson, Core Laboratory, Inc., Eastman Oil Well Service, Formation Logging Service, Geolograph, Geophysical Service, Inc., Halliburton, Homco, Inc., Kern Co. Land Co., Lane Wells, McCullough Tool Co., M. O. Johnston Testers, Inc., Earl Price, Schlumberger, Sperry - Sun Well Surveying, Western Geophysical Co.

## LUNCHEON MEETING

Mr. Peter H. Gardett, consultant, was the guest speaker at the monthly luncheon meeting at Rodger Young Auditorium on March 5th. His subject, "Activities and Significant Events in the Rocky Mountain Area in 1952", attracted a large and attentive crowd.

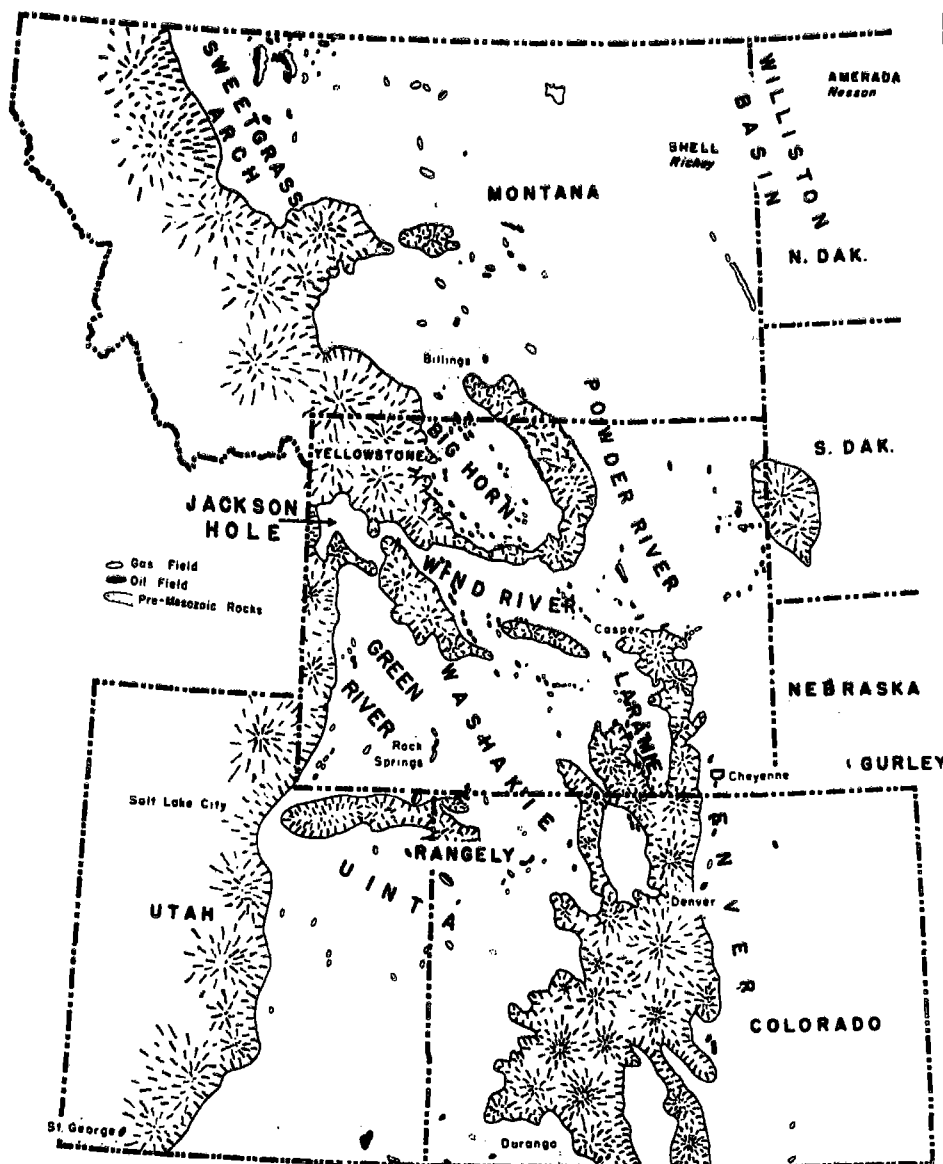
Mr. Gardett pointed out that 1952 was the most active year from an exploration and drilling standpoint that the Rocky Mountain area has known since the discovery of oil in the area at Florence, Colorado in 1863. The exploration activity is indicated by the fact that over 30 percent of the active geophysical units in the United States were in the area. It is estimated that \$280,000,000 were spent in drilling the 1567 development and 790 exploratory wells in the area during the year. About one-half of the wildcat wells were drilled in Colorado and southwest Nebraska, showing the continued interest in the Denver-Julesburg Basin, which affords relatively shallow prospects with low drilling costs and a favorable discovery rate.

The over-all discovery rate for the Rocky Mountains in 1952 was 12.3 percent or a ratio of approximately one discovery to every eight wildcat wells. Ninety-seven new fields or pools were discovered by the 790 wildcat wells. Colorado with 25 discoveries and Wyoming with 22 were well ahead of the other Rocky Mountain states.

The Platte pipeline from Wyoming to the mid-west markets was completed in 1952. This event will greatly alleviate the "lack of outlet" problem faced by many of the smaller producers in the area and should stimulate development drilling. The daily production of 300,000 b/d should be substantially increased in this and subsequent years.

In the second part of his talk, Mr. Gardett reported on the 1952 Wyoming Field Conference held in the Big Horn Basin with headquarters at Thermopolis. An excellent guidebook was published for the Conference and is still available through Petroleum Information at Casper, Wyoming. Color slides were shown of the formations seen during the trip and were arranged in stratigraphic sequence, from youngest to oldest.

Mr. Gardett also pointed out that, in addition to interest in closed structures in the Big Horn Basin, several westerly-plunging noses on the east side of the basin have been found to contain oil due to stratigraphic traps in the Phosphoria formation of Permian age. From much of the discussion at the Conference, and because many of the papers and maps in the guidebook dealt with this formation, it appears that a basic reason for this conference was to review the facies changes in the Phosphoria in the area and the bearing of such changes on recent discoveries and future prospects.



GEOL. AGE	FORMATION OR MEMBER	LITH. LOG	APPROX. EQUIV. FORMATION
CENOZOIC	BISHOP CO.		DUCHESNE RIVER
	WHITE RIVER		UINTA
	BRIDGER		
	GREEN RIVER		WIND RIVER
	WASATCH		
MESOZOIC	FT. UNION		EVANSTON
	LANCE		LARAMIE
	LEWIS		BEAR PAW
	MESAVERDE		PIERRE
	STEELE		MANCOS
	NIobrARA		CODY
	CARLILE		COLORADO
	FRONTIER (Wolf Creek)		
	MOWRY		ASPEN
	THERMOPOLIS (Muddy)		NEWCASTLE
PALEOZOIC	DAKOTA		CLOVERLY
	FUSON		KOOTENAI
	LAKOTA		
	MORRISON		BECKWITH
	SUNDANCE		NAVAJO
PALEOZOIC	NUGGET		ELLIS
	CHUGWATER		TWIN CREEK
	CHUGWATER		CHINLE
	CHUGWATER		SHINARUMP
	CHUGWATER		MOENKOPI
	PHOSPHORIA		KIABAB
	PHOSPHORIA		PARK CITY
	TENSLEEP		HERMOSA
	WEBER		PARADOX
	WEBER		FOUNTAIN
PALEOZOIC	BIG SNOWY		AMSDEN
	MADISON		MONT. & N. DAK.
	MADISON		LEADVILLE
	JEFFERSON		N. DAKOTA
	JEFFERSON		N. DAKOTA
PALEOZOIC	STONEMAN		
	STONEMAN		
	STONEMAN		
PALEOZOIC	BIG HORN		
	BIG HORN		
PALEOZOIC	DEADWOOD		
	DEADWOOD		
PALEOZOIC	GRANITE		
	GRANITE		

The exhibits and papers in the guidebook, along with the discussions at caravan stops at various localities of the formation, emphasized the rather rapid change in facies across a north-south trending zone which can be roughly traced from New Mexico to Montana. This change in facies is from predominantly limestone on the west to predominantly red shales on the east. Porosity has been developed along this zone of change and such fields as Worland, South Worland, Slick Creek, Manderson and Five Mile, all of which produce principally from the Phosphoria, can attribute, at least in part, the accumulations and porosity development to the geologic conditions that parallel this line of facies change.

Phosphoria production in these fields is accompanied by H<sub>2</sub>S gas. The natural gas at Worland is 32 percent H<sub>2</sub>S and that at Nieber Dome is 42 percent H<sub>2</sub>S. This gas presents serious production problems as it is poisonous, explosive, corrosive and forms hydrates. However, if a sufficient reserve of H<sub>2</sub>S gas is present, it is economically attractive to build a processing plant to remove the pure sulfur. The plant at the Worland Field removes about 320 tons per day of sulfur from the gas which is produced along with approximately 3000 barrels of oil. It is estimated that there is a reserve of 4,000,000 to 5,000,000 tons of sulfur in the oil fields of Wyoming.

Mr. Gardett closed his talk with the announcement that the 1953 Wyoming Field Conference will be held July 30 and 31 and August 1, with headquarters at Laramie, Wyoming. The area to be covered includes the Laramie Basin in Wyoming and the North Park Basin in Colorado.

#### CORRELATION OF PLEISTOCENE AND PLIOCENE STAGES

Subsequent to the publication in the Pacific Petroleum Geologist, Vol. 7, No. 2, February 1953, of M. L. Natland's Correlation Chart of Pleistocene and Pliocene Stages in Southern California, Mr. Natland has received correspondence from authorities who disagreed in part with some of his correlations. For that reason Mr. Natland wishes the following letter of explanation to be published.

"In the February 1953 issue of the Pacific Petroleum Geologist a chart was printed showing the correlation of various Pleistocene and Pliocene sections of Southern California with newly proposed stage names. Unfortunately, two columns were taken off a much-more-inclusive chart sent to the editor, which the author wished to withhold from publication at this time. These two columns show the correlation - on a foraminiferal basis - of the San Diego, Careaga, and the upper part of the Foxen formations, with the Pleistocene; whereas, molluscan workers place these formations in the Pliocene.

In the late twenties, the correlation of the San Diego formation with the Los Angeles and Ventura basin sections was the subject of many heated debates between megafossil and foraminiferal authorities. This problem has lain dormant for several years, without conclusive solution. It is my hope that in the near future a meeting of all interested parties can be held to iron out the difficulties. From a foraminiferal standpoint, the correlations shown on the published chart are the only ones that can be made. We freely admit, however, that although the San Diego and Timms Point formations have the same foraminiferal fauna, they may have been deposited at different times, and that the similarity of their fauna may have resulted from both being deposited under similar environmental conditions. The molluscan workers may have a better guide to the actual age relationship of the two isolated exposures, because there are a considerable number of extinct molluscan species in these formations which may have time significance.

Consequently, I believe it best to hold in abeyance any use of the San Diego and Santa Maria area correlations as shown, until such time as a meeting of the minds on the subject has been accomplished. There is no argument with other correlations shown, except that Mr. Wissler points out that the top of his upper Pico should coincide with the base of the Lomita marl and not overlap it, as shown on his chart. In his text he uses Uvigerina tenuistriata as a guide to this division. This species is found in the Lomita marl; hence, the line was drawn higher than Wissler drew it. However, in a discussion of this matter with Mr. Wissler, he indicated that he meant to use the species name only as a name of an interval, recognizing that the range of this species extended above the limits of the division".

#### NEW VICE-PRESIDENT

Pacific Section President Russ Simonson announced that John Kilkenny, Union Oil Company, has been appointed Vice-president to fill the unexpired term of Rufus Smith, who was transferred to Houston.

#### PERSONAL ITEMS

Don Grinsfelder, Richfield geophysicist, is moving to Calgary from Bakersfield.

Jim Tasker who recently started with Standard in their Los Angeles geological offices has been drafted for a hitch with the Armed Forces.

Vincent W. Finch of Shell's Los Angeles office has moved to Seattle to establish a company office there.

Wes Porter remarked that the Lost Hills Hotel would have been a pleasant place to stay, as compared to their hotel accommodations amongst the cacti during the National Convention.

Indecision -- Was it the Cork Club at the Shamrock or the swimming pool accessories which interested Bill Lewis and Louis Regan one afternoon at the Convention?

Charley DeLancey is moving from Los Angeles to become a resident of Chico in the Sacramento Valley.

Howard Gonsalves, geologist with Standard Oil, is being transferred from the Salinas office to the Bakersfield office.

Wayne Marrs of Conoco is temporarily working in the Los Angeles office.

Jim Gale of the Texas Company scouting department has recently moved from Sacramento to Bakersfield.

Bill Emerson, formerly with Wilshire Oil Company, is now handling the scouting for the Monterey Oil Company.

George Hadley of Cuyama Valley was killed in a recent auto accident.

General Petroleum Corporation has announced the following changes: Rod Colvin has moved from Bakersfield to Santa Maria; Howard Casey has moved from Santa Maria to Ventura; Chuck Edwards has moved from Ventura to Bakersfield.

Stan Jeffreys of Shell has been appointed District Geologist for the Santa Paula District, relieving Mr. H. L. Popenoe, who assumes duties as a Senior Geologist in the Shell Exploration Office in Los Angeles.

Bob Blocher has been transferred from the Shell office in Ventura to Seattle, Washington.

Jim O'Neill, formerly with the Miller and York drilling firm, is now with Oceanic Oil Company in Bakersfield.

Ed Gribi, Jr., geologist for General Petroleum in Salinas Valley, has resigned from the company to enter consulting practice with the firm of Virgil R. Chamberlain and associates, 406 Electric Bldg., Great Falls, Montana.

George Lutz has returned to his duties as Paleontologist with Shell in Ventura after serving 1 1/2 years as 1st Lt. with the Marine Corps. "Barney" worked with Camp Pendleton Ground Water Resources as a military geologist.

One of our members has taken the bull by the horns and plans to make an extended tour of Europe - at his own expense. Addison Cate left March 16th aboard the "Liberte", fulfilling a lifelong desire to see the rest of the world.

Richard G. Stearns has resigned from Standard Oil Company to assume the position of Assistant Director of the Tennessee State Division of Geology. Dick will make his home in Nashville.

John Weaver, Texas Company scout, has been transferred from Bakersfield to Sacramento.

Gary Raydon has joined Standard's Sacramento staff. Gary received his Master's Degree from the University of California.

Ed Heylman, General Petroleum Geologist, is now serving on the U.S. Army, stationed at Fort Ord. Floyd R. Nave has been transferred from the Rocky Mountain area to replace Ed in G.P.'s Sacramento office.

Bob Corlett has resigned as landman from Standard Oil Company to engage in private law practice in San Anselmo.

Art Nelson is now District Landman for Shell Oil Company in the Sacramento Valley. Art was recently transferred from Billings, Montana.

Cliff Johnson of Richfield was awarded top honors in the Southern California Camellia Society's recent Annual Flower Show in Pasadena. His entry - a beautiful red and white Adolphe Audusson Special - was judged the best flower of the show! Cliff and his wife are real authorities on camellias and have some 125 varieties of their own. They were two years in developing their prize-winning flower.

Richfield's John Wiese was able to get away from Casper long enough to spend a little vacation time in the Los Angeles area last month.

The Texas Company has announced the following promotions in their Los Angeles offices: Jim Dorrance now Assistant Division Manager of Production, Pacific Coast Division; Hans Ashauer now Division Geologist; Elmer Baddley now Assistant Division Geologist; C. E. Van Gundy now District Geologist.

## NURSERY NEWS

The Herb Manns of Shell Oil Company have a baby boy, Thomas Herbert, born February 6th.

Bob Bennett, with Western Gulf Oil Company, is the proud father of a third boy (fourth child) born on March 27th.

Jim McDonald of Humble Oil & Refining Company now has two boys with the same birthday - March 29th.

Mr. and Mrs. Don Greenlee, Shell Oil Company, have welcomed a baby daughter, Marlese, born March 7th. The third little Greenlee weighed in at 6 lbs.

Mr. and Mrs. Robert Blocher, Shell Oil Company, second child, a daughter, Janice Eileen, born March 14th weighing 7 lbs., 13 oz.

Congratulations are in order to Mr. and Mrs. Frank Goodban of The Texas Company, Los Angeles offices with their announcement of a second son, Stephen, born March 20th.

Don and Charity Stone are the proud parents of an 8 lb., 8 oz. baby girl, Katherine, born February 26th, 1953. Don is working in Standard's Sacramento office.

The Superior Oil Company releases the following stork news:

Mr. and Mrs. A. M. Rupprecht, Los Angeles, a girl, Lennea Helen, born February 14, 1953.

Mr. and Mrs. Pat Wright, Bakersfield, a girl, Melody Kay Wright, on January 26, 1953.

Mr. and Mrs. B. J. Winter, Bakersfield, a boy, Phillip Clare Winter, born February 3, 1953.

## **BIBLIOGRAPHY OF RECENT PUBLICATIONS**

### SCIENTIFIC PUBLICATIONS - JOURNALS AND BULLETINS

Bulletin of the Geological Society of America.  
March 1953.

"Fossils in Metamorphic Rocks - a Review".  
Walter H. Bucher. Pp. 275-300.

"Non-radiogenic Isotopes in Geology - a Review". Earl Ingerson. Pp. 301-374.

Geophysics. January 1953.

"Exploration Work in Mexico". Antonio Garcia Rojas. P. 188.

"Petroleum Exploration on our Public Lands". John R. Killough. P. 201.

### TRADE JOURNALS AND MISCELLANEOUS MAGAZINES

Oil and Gas Journal. March 1953.

"Eocene Search in South San Joaquin Valley". D. H. Stormont. P. 148.

"An Evaluation of Foraminifera". C. C. Church. P. 171.

World Petroleum. March 1953.

"The Williston Basin Holds Leading Place in Exploratory Activity". Tom Dougherty. P. 82.

Petroleum Engineer. March 1953.

"Electromagnetometer in Exploration". William Rintoul. P. B-95.

## CALENDAR

Apr. 7, 1953: Tues., 6:00 P.M. A.I.M.E., Saddle and Sirlain, Bakersfield: J. Shannon Baker, "Recent Developments of Gun Perforating of Oil and Gas Wells".

Apr. 8, 1953: Wed. noon, Sigma Gamma Epsilon - Geologic Fraternity, Bridge Hall, Room 412, U.S.C. Campus: "Oceanographic Work Aboard the Velero IV", John Grady.

Apr. 9, 1953: Thurs. noon, S.E.G. Luncheon Meeting, Rodger Young Auditorium, Los Angeles: Discussion of Seismic Modeling by Mr. Glenn Brown from Institute of Geophysics at U.C.L.A. Illustrated with slides.

Apr. 9, 1953: Thurs., 6:30 P.M., A.I.M.E., Junior Petroleum Group, Dinner Meeting, Turf Club, Lake-wood and Anaheim-Telegraph Road: Informal Round Table Discussion on Secondary Recovery Prospects in California.

Apr. 13, 1953: Mon., 7:00 P.M., A.A.P.G. Pacific Section Forum, General Petroleum Auditorium, Los Angeles: Discussions of Lateral Faulting in Southern California led by Doctors John C. Crowell and Mason L. Hill.

Apr. 15, 1953: Wed. noon, Sigma Gamma Epsilon - Geologic Fraternity, Bridge Hall, Room 412, U.S.C. Campus: "Geology in the Armed Forces", Don Gorsline.

Apr. 17, 1953: Fri., 7:00 P.M., S.E.P.M.-A.A.P.G. Pre-Ventura area field trip dinner, Elks Club, Main and Ash Streets, Ventura: Talks on "Stratigraphy of the Ventura Area" by C. M. Carson; "Structure of the Ventura Area" by Tom Bailey and "Geology of the Ventura Avenue Field" by J. L. Arthur.

Apr. 18, 1953: Sat., S.E.P.M.-A.A.P.G. field trip through the section exposed on the north side of the Ventura Basin. The trip will start at 8:00 A.M. sharp from the Ventura Jr. College parking lot at Poli Street and Hall Canyon Road.

Apr. 21, 1953: Tues., 6:00 P.M., A.A.P.G.-San Joaquin Valley Section, Spanish Ballroom, El Tejon Hotel, Bakersfield: John W. Frink, Senior Geologist with Bureau of Reclamation, "The Corcoran Clay - A Unique Lacustrine Deposit".

Apr. 21, 1953: Tues., 6:00 P.M., Taft Petroleum Club, Taft, Barbecue Dinner: Myron McKinley, famous oil fire fighter from Texas, will discuss "Oil Field Fires". The talk will be illustrated with color films.

Apr. 22-24, 1953: A.A.P.G.-Rocky Mountain Section Meeting, Casper, Wyoming.

Apr. 27, 1953: Mon., 7:30 P.M., Pacific Petroleum Chapter A.I.M.E.-Technology Forum, General Petroleum Auditorium, Los Angeles: Mr. Rufus Clark of Richfield Oil Corporation will talk on the "Use of Decline Curves in Reserve Estimates".

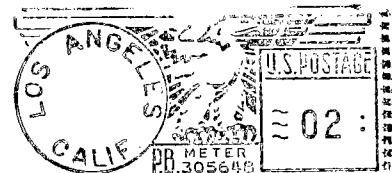
Apr. 29, 1953: Wed. noon, Sigma Gamma Epsilon - Geologic Fraternity, Bridge Hall, Rm. 412, U.S.C. Campus: "Notes on Anthropology in Southern California", Robert Hammond.

May 8, 1953: Fri., 1:00-4:00 P.M. (Afternoon session) and 7:00 P.M. (Evening session), Pacific Coast Section of the S.E.G., El Tejon Hotel, Bakersfield.

**PACIFIC PETROLEUM GEOLOGIST  
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# PACIFIC PETROLEUM GEOLOGIST

## NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 7

May 1953

No. 5

### ASSOCIATION ACTIVITIES

#### BAKERSFIELD MEETING

Mr. John Frink, geologist with the Bureau of Reclamation, was the speaker at the San Joaquin Valley Chapter meeting held at the El Tejon Hotel on April 21, 1953.

Mr. Frink discussed "The Corcoran Clay, A Unique Pleistocene Lacustrine Deposit in the San Joaquin Valley, California."

The general extent and character of the Corcoran Clay have been studied during the past few years as a result of the investigation of groundwater storage in the valley. The clay member represents a complete break in the Quaternary history of the valley and has a considerable practical importance to groundwater hydrology and possibly some significance to petroleum geology.

Over 6000 drillers logs, 300 electric logs of water wells and 400 electric logs of wildcat wells were analysed for the data necessary for a subsurface study. This information was supplemented by the Bureau's own coring program in which 64 holes were cored for added detail. During the detailed subsurface study of the shallow Pleistocene sediments thruout the valley the very distinctive claystone body appeared to be an excellent marker bed over a wide area.

The Corcoran bed is a dark greenish-gray, silty clay, slightly to moderately plastic, that is easily distinguished on the electric log. It is generally massive but marginally it contains thin beds of silt and very fine sand. Probably the most diagnostic feature of the Corcoran clay is its diatom content which generally varies from sparsely diatomaceous near the top and bottom to a highly diatomaceous zone between. The diatoms are a fresh water type, mostly *Melosira*.

Although the exact limits are not established as yet, the Corcoran clay can be traced from northern Kern County to the vicinity of Tracy. Over most of its extent the clay member is about 100' thick. Maximum thickness of the clay is reached west of the topographic trough of the valley. Present evidence places the age of the lake between extreme upper Pliocene and late Pleistocene.

A logical explanation for the widespread, uniform fresh water lake sediments appears to follow along the lines of eustatic changes in sea level in combination with a damming-up of the upper end of the valley by the old Sacramento River. Late Pliocene deformation broke all direct connections of the valley drainage to the ancient coast line. A slight subsidence of approximately 150-200 feet provided the topographic basin to be occupied by the very shallow fresh water lake.

Future groundwater surveys in the valley will involve further study of the Corcoran clay since it plays such a significant role in forming a barrier to vertical movement of water over two-thirds of the valley floor. Of possible use to the oil industry is the fact that subsurface maps using the clay member for a marker have shown reflections of several known structures. More intensive data may indicate additional structures not noted to date.

#### S.E.P.M. FIELD TRIP

The field trip through the northern Santa Ana Mountains will start at 8:30 A.M., Saturday, May 16, 1953 from the intersection of the southern end of the divided portion of the Santa Ana Canyon Freeway (Highway 55, 18, 91) and Anaheim Olive Boulevard (Highway 18 and 91) one-half mile east of the town of Olive. Olive is located four miles east of Anaheim on Highway 18 and 91, and three miles north of Orange on Highway 55.

The route will be eastward along the Santa Ana Canyon Freeway to Corona, then over the crest of the Santa Ana Mountains on the Corona-Skyline Drive and Black Star Canyon Road, returning to Olive via Santiago Canyon Road.

Bring your lunch. Liquid refreshments will be available.

A charge of \$1.00 will be made for the geologic map and road log.

#### S.E.P.M. MEETING

Lack of space in the April issue of the Pacific Petroleum Geologist prevented the inclusion of two very interesting papers given at an evening meeting of the S.E.P.M. on March 9, 1953, at Founders Hall, U.S.C.

Mr. W. T. Rothwell of Richfield Oil Corporation opened the meeting with a talk on "Age or Biofacies Correlations in Petroleum Geology". This paper, incorporating the results of many years of ecological research involving the life zones of various types of ostracods, foraminifera and fish, was well illustrated by several charts.

One chart, drawn in plan, identified by means of color bands the types of ostracod and foraminiferal assemblages encountered in a traverse across the Catalina channel. Three other charts, drawn in section, incorporated this information with range data of certain types of fish. These charts were based on Recent, early Pliocene and upper Miocene ecologic distribution of the Pacific coastal province. The latter charts offered the audience a very graphic concept of the varying ecologies found between land and deep, open sea along with their principal faunal constituents in the line of foraminifera, ostracods and fish.

In conclusion, the speaker outlined some criteria for determining the dominant environment of several Southern California upper Miocene and early Pliocene formations on the basis of their contained microfauna.

The second speaker of the evening, Dr. Hoyt Rodney Gale, Professor of Geology at Pasadena City College, presented a paper on "The Philosophical Significance of Evolution". As an introduction, the speaker called attention to the economic value of paleontology to mankind, other than as an aid to oil finding. His thesis stressed the possibility that clues to the future may be detected by a projection of the past record in much the same way that modern business forecasts are made by the projection of curves based on past statistics. Dr. Gale pointed out that certain serious problems face the people of today and clues to the solution of



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PACIFIC PETROLEUM GEOLOGIST

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Next deadline June 1st

these problems may be found by studying the "trend line of evolution" which reveals how life has dealt with serious problems in the past during its evolution from pre-Cambrian times.

Four such serious problems of major importance presently facing mankind were enumerated as follows: 1) international war, 2) economic strife within the nation (leading to the possibility of civil war), 3) problems of community life (increasing divorce rate, etc.), and 4) problems of the individual (steady rate of increase of insanity, etc.).

Dr. Gale identified such problems as symptoms of psychological maladjustments and intimated that a study of the trend line of evolution might reveal how life had met with similar crises in the past and thus aid in their solution.

As illustration of the evolutionary trend of life, the speaker presented several comprehensive charts showing the "main line of evolution" and different points during geologic time at which various forms of life branched off to begin their development - some continuing to the present and others becoming extinct. In brief, according to Dr. Gale, the main line began with some form of very simple life - perhaps on the order of a filterable virus - and presently culminates with man, with all forms of plant and animal life having developed at various periods in between.

In discussing the importance of "natural selection" to evolution, the speaker emphasized the fallacy of considering the most ferocious animals as being the most fit to survive. On the contrary, the reverse has proved to be true as some of these latter types constitute some of the best index fossils in paleontology due to their limited geologic range. Actually, those forms of life that have been selected as most fit to survive are usually small, unprotected but very receptive forms which owe their survival to their ability to remain constantly alert and aware of their surroundings. This type has been a progressive creature throughout time and has been able to retain an all-round balance of capabilities and to refrain from specialization in any one narrow direction.

Present day man qualifies as such a creature, although, as pointed out by Dr. Gale, the foregoing might appear to condemn the paleontologist - generally considered to be a specialist. However, the speaker held out hope for the paleontologist in that he defines such specialization as only a part of and contribution to the all-around balance of mankind's capacities as a whole.

N.C.P.R.T.

The Northern California Petroleum Round Table will hold their second annual barbecued steak dinner at the Yolo Fliers Club on Friday, June 12, 1953. This event is open to all oil industry personnel interested in production or exploration in the Sacramento Valley.

In addition to the dinner, those attending may enjoy the use of the country club's swimming pool, card room and golf course. A blind bogey golf tournament will tee off at 1:00 P.M. Contribution toward the barbecue costs is \$3.50 per person.

The Yolo Fliers Club is located northwest of Sacramento on the Woodland-Madison Road about 5 miles west of Highway 99 W.

For reservations and further information any of the following representatives may be contacted: Los Angeles: Earl Bescher, Humble Oil & Refining (phone MA 6-7701)

Bakersfield: Robert L. Rist, Monterey Oil Co. (phone 4-0565)

Sacramento: Tom N. Wilson, Brazos Oil & Gas Co. (phone HU 1-3085)

San Francisco: Robert W. Anderson, Honolulu Oil Corp. (phone SU 1-3123)

LUNCHEON MEETING

Eugene Borax, Union Oil Company, was guest speaker at the monthly luncheon meeting at Rodger Young Auditorium on April 2, 1953.

His subject, the "Geology of the Cook Inlet Area of Alaska", was effectively presented by means of Kodachrome slides which showed the physiography and stratigraphy of the region.

The generalized columnar section shown below applies to the area of Cook Inlet southwest from Homer on the east side and Tuxedni Bay on the west side.

<u>CRETACEOUS</u>			
Middle & Upper		Several hundred feet	Sandstone, greenish-gray, medium-grained, current-bedded, fossiliferous.
<u>JURASSIC</u>			
Upper	Naknek Fm.	Several thousand feet	Upper part: sandstone, greenish-gray, current-bedded, medium-grained, fossiliferous. Lower part: conglomerate, some tillite(?), with interbedded sandstone and siltstone. Great lateral changes. Fossiliferous.
	Chinitna Fm.	3000'±	Predominantly siltstone, some sandstone near top. Fossiliferous.
Middle	Tuxedni Fm.	6000'±	Sandstone, with interbedded siltstone and conglomerate. Fossiliferous.
Lower		Several thousand feet	Volcanic flow and pyroclastic rocks, some interbedded sandstone, siltstone, and limestone. Fossiliferous.
<u>TRIASSIC</u>			
Upper	Kamishak chert	2000'±	Interbedded limestone, siliceous limestone, calcareous shale and chert. Fossiliferous.

COASTAL MEETING AND FIELD TRIP

The S.E.P.M. - A.A.P.G. dinner meeting and field trip in the Ventura basin April 17 and 18 went off without a hitch. The attendance of over 200 at the dinner somewhat overtaxed the capacity of the Ventura Elks Club; however, after serving in two installments, everyone was fed and the evening meeting proceeded.

C. M. Carson spoke on the "Stratigraphy of the Ventura Region", stressing the "migration" of the Pliocene-Pleistocene contact caused by different correlations by various workers through the years. Manley Natland then discussed the stratigraphy of the Pliocene-Pleistocene contact and Dr. Tom Bailey spoke on the "General Geology of the Ventura Area". J. L. Arthur followed with a summary of the "History and Geology of the Ventura Avenue Oil Field".

The field trip on Saturday was outstanding in that the caravan of 85 cars was conducted through the Ventura Avenue field without traffic incidents and no more than 2 or 3 cars became detached from the group. Also the public address system functioned without fail throughout the entire trip. The field trip covered the stratigraphic section from Recent terrace deposits through the Pleistocene, Pliocene, Miocene and Oligocene formations, and provided a good long-distance view of the Eocene and Cretaceous beds.

PROGRAM COMMITTEE ANNOUNCED

Mel Hill, Western Gulf, General Chairman for the fall convention has appointed John Loofbourrow, Sunray, Chairman of the Technical Program Committee. The following will serve as members of this committee:

Charles Cross - Honolulu - for the San Francisco area

Bob Johnston - Western Gulf - for the Valley

Hal Fothergill - Union - for the Coast

Jim Anderson - Continental - for the L.A. Basin

Anyone interested in presenting a paper or knowing someone who should present one is asked to contact this committee.

BRANNER CLUB DINNER MEETING

The spring meeting of the Branner Club for the 1952-53 season will be a dinner meeting early in May. The vital statistics are below:

Date and time: Tues., May 5, 1953, 6:30 P.M.

Place: Hall of the Associates, Athenaeum, 551 So. Hill Ave., California Institute of Technology, Pasadena.

Speaker: Dr. U. S. Grant, IV, Professor of Geology, University of California at Los Angeles.

Subject: "Cause and Effects of the Subsidence of the Wilmington Oil Field".

Reservations: For late reservations, telephone SYcamore 6-7121 or RYan 1-7171, Ext. 112 or 125.

CHANGE OF ADDRESS NOTICES

Each month from 10 to 20 Newsletters are returned to the Editor because the addressee has moved. An attempt then is made to obtain the new address of the member, but in many cases the effort is in vain.

It would be greatly appreciated if "Change of Address" cards are sent to the Editor so the mailing list can be kept up to date.

ANNUAL STAG PICNIC, JUNE 5ANNUAL SPRING PICNIC - JUNE 5, 1953

Herb Babione, this year's picnic chairman, reports that the Annual Spring Picnic of the Pacific Section of the American Association of Petroleum Geologists will be held at the Standard Oil Company Camp Grounds in Pico Canyon on June 5 at 2:00 P.M. Homer Steiny will be waiting at the gate to collect the \$2.00 entry fee which covers all refreshments and an opportunity to participate at the various games of skill (?).

The beef will be jointly furnished by the Kern County Land Company and the Newhall Land and Farming Company while service companies are going all out to satisfy the thirst of those present. Hank Fidler, last year's barbecuer, will again prepare the meat and frijoles.

A "sunrise breakfast" of ham and eggs will be served for those hardy souls able to endure the rigors of a night in the hills and the ones still looking for their cars Saturday morning.

A golf tournament will take place prior to the picnic with Harold Sullwold (Phone: Hempstead 5277) and Jack Beach (Phone: Bakersfield 35281) as co-chairmen. The tournament will be held at the San Fernando Country Club in Woodland Hills, just off Ventura Blvd., nine miles west of Sepulveda Blvd. Jack Beach is in charge of match making and starting times with the first foursome teeing off at 9:00 A.M. Entry fee will be \$4.00, which includes green fee and prizes for low gross, low net and blind bogey. All players are requested to furnish established handicaps or the scores from their last three games.

Members will be contacted by mail some time early in May, requesting information regarding attendance at the above functions and Herb Babione asks that members reply as soon as possible in order that a relatively accurate estimate can be made of the number who plan to attend.

## INDEX FOR 1952 GUIDEBOOK

Through the courtesy of Oceanic Oil Company, an alphabetical index of the March 1952 A.A.P.G. Guidebook was compiled and distributed to a limited number of members.

We have been notified that copies are still available. Requests may be sent to Oceanic Oil Company, 3120 18th Street, Bakersfield, Calif.

## SANTA MARIA LUNCHEON MEETINGS

Santa Maria geologists have changed their Thursday noon luncheons at the Santa Maria Club to the first and third Tuesdays of each month.

All visitors to Santa Maria are cordially invited to attend.

## **PERSONAL ITEMS**

John Pujol of Tidewater is moving from Bakersfield to Woodland to continue geological activities.

Gene Wilson of the Ohio Oil Company is leaving Bakersfield to set up offices at Coalinga.

Bill Lewis, formerly with General Petroleum Corporation in Bakersfield, has resigned to set up an office for Bysshe and Barrett. Bill will be located in the Mack Building at 1603 California Avenue, Bakersfield.

Floyd Johnson of the Honolulu Corporation has stopped climbing hills in Nevada long enough for a minor operation some two weeks ago. Floyd is feeling swell again and rarin' to go.

Two geophysicists have been added to the Richfield staff in Bakersfield: Nolan Webb, formerly with International Geophysics Inc. and William Rascher, formerly with Geophysical Service Inc.

Gladys Peyser, the roving Texas Company geologist, has been transferred from Taft to Hollister.

Andy W. Marianos, paleontologist in Humble's Chico office, plans to return to Louisiana State this summer for advanced studies.

Sacramento oil men have been taking to the golf links in force lately. This might be caused by a desire of some to develop a little competition for Charlie Guion, Humble scout, who shoots in the low 80's. Or it may be that they are establishing their handicaps for the golf tournament that will be held at the annual Petroleum Round Table barbecue next month at the Yolo Fliers Club.

Richard H. Vaughn is a new Standard geologist attached to their Sacramento office. Dick was in Idaho for the past two years with the American Smelting and Refining Company.

Jay de l'Eau has moved to Sacramento as district landman for Signal Oil and Gas Company.

M. C. (Mick) Lachenbruch, Western Gulf geologist, has been transferred from Bakersfield to Chico.

Glenn Shepherd, formerly with the Honolulu Oil Corporation in Santa Paula, is now with Tom Woodward, Consultant in Taft.

Al Kerr has resigned from the staff of Long Beach City College to accept a position in Bakersfield as geologist for Richard S. Rheem.

Truxton (Bill) King, a new Shell geologist, is now in their Sacramento office.

Dick Shelton, Ohio Oil Company, has left Fillmore to open an office in the State of Washington. Karl Arleth, Jr., now in the Bakersfield office, will be geologist for Ohio Oil Company in the Ventura area.

Chester Cassel has resigned as Manager of Operations for Union Oil Company in their Rocky Mountain Division.

W. E. Morgan, formerly Land Manager, will be acting Manager of Operations.

Jack Harding will conduct his consulting practice from Bakersfield as soon as his new home is completed.

Ilif Anderson is now working with Western Gulf Oil Company out of their Santa Maria office. He was formerly with The Texas Company.

Stan Conrad of Richfield's Olympia, Washington office made it back to Southern California to enjoy some sunshine for a few days last month.

Norman Nichols, formerly of Honolulu Oil, is now with Gladding McBean & Company and will be working in Southern California. Norman is back to his first love - that of tracking down and developing mineral deposits.

Ed Pickett has left Wilshire Oil and is now associated with Bandini Oil in Los Angeles with offices in National Oil Building.

## NURSERY NEWS

Mr. & Mrs. W. A. "Bill" McKersey - Seaboard Los Angeles office - welcomed a new son, Robert, on March 23rd. Not much chance of little Robert becoming spoiled for he has two brothers and two sisters.

Mr. & Mrs. John F. Curran, Honolulu Oil Corp., a daughter born April 24. John and Bebe evidently expected a son because the arrival of a daughter caught them completely unprepared so no name has been selected as yet.

Mr. & Mrs. Carl Helms, Jr., Standard Oil Company, announced the arrival of Steven Michael, born April 17 in Sacramento.

Mr. & Mrs. John S. Weaver, The Texas Company, have a new baby girl, Elizabeth Anne, born March 29 in Sacramento. Elizabeth, who weighed in at 8# 8 oz., is the second child for the Weavers.

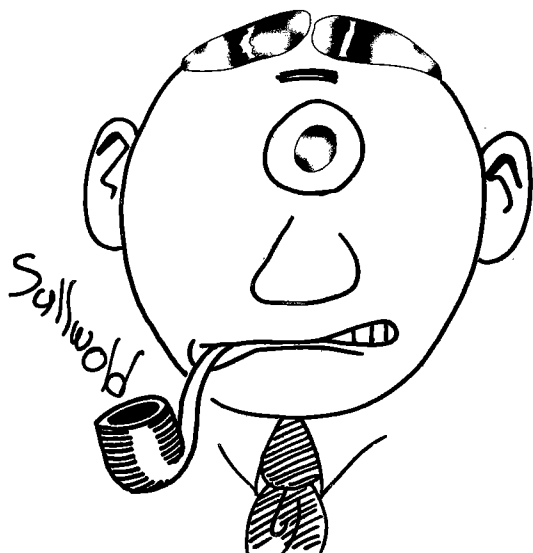
Mr. & Mrs. Bruce Brooks, The Superior Oil Company, are the proud parents of Stephen Douglas, their second child and first boy, born on April 8 in Willows. Already he has shown exceptional vocal ability.

The Jim McDonalds are proud parents of a baby boy, Doug, born March 29th.

Bernie Minche and wife added a baby girl, Marilyn, to the family staff on April 13th.

The Francis Barkers are proud parents of a baby boy born April 14th.

YEAH, I PREFER A  
MONOCULAR MICROSCOPE  
..... WHY ?



## BIBLIOGRAPHY OF RECENT PUBLICATIONS

### SCIENTIFIC PUBLICATIONS - JOURNALS AND BULLETINS

#### Journal of Paleontology. March 1953

"Ecology and Paleogeology of Some California Foraminifera".

Part I: "The Frequency Distribution of Recent Foraminifera off California". P. 161.

Part II: "Foraminiferal Evidence of Subsidence Rates in the Ventura Basin". P. 183.  
Orville L. Bandy.

#### Journal of Geology. March 1953.

"Temperature Variations in the Lower Pleistocene of Southern California". C. Emiliani and S. Epstein. P. 171.

### TRADE JOURNALS AND MISCELLANEOUS MAGAZINES

#### Oil and Gas Journal. April 20, 1953.

"New Mexico Devonian Oil Steps Out". P. 199.

## CALENDAR

May 4, 1953: Mon., 7:00 P.M., A.A.P.G. Section Forum Meeting, Edison Auditorium, 601 W. 5th St., Los Angeles: Panel Discussion - Geologists, Geophysicists and Management. Led by: Mr. K. H. Crandall, Vice-President, Standard Oil Company; Mr. E. J. Hamner, Manager of Pacific Coast Area of Humble Oil and Refining Company and Mr. Henry Salvatori, President, Western Geophysical Company.

May 6, 1953: Wed. noon, Sigma Gamma Epsilon - Geologic Fraternity, Bridge Hall, Rm. 412, U.S.C. Campus: Mr. John Marlette will speak on the Redondo Beach Breakwater.

May 7, 1953: Thurs. noon, A.A.P.G. - Pacific Section Luncheon, Rodger Young Auditorium, Los Angeles: Mr. F. W. Hinricks of Fairchild Aerial Surveys will speak on Airborne Magnetometers.

May 8, 1953: Fri., Program outline of the Annual Spring Meeting of the Pacific Coast Section of the S.E.G. which will be held at the El Tejon Hotel, Bakersfield. Afternoon session (1:00 P.M., Spanish Ballroom). (1) Curtis Johnson, President of the S.E.G., will present his interesting topic, "Our Human Assets in Geophysics". (2) J. W. Mathews, Richfield Oil Corp., Bakersfield, will present "The Case History of South Cuyama Oil Field". (3) Herman Schaller, McCullough Tool Co., Los Angeles, will give a paper on the newly-developed well-logging device which produces the scintillometer log. (4) Two motion picture films will be shown, one dealing with the airborne magnetometer (U.S.G.S.) and the other concerning photogeology (Geophoto, Denver). Evening Dinner Meeting (7:00 P.M., Spanish Ballroom): Dr. Paul Weaver, Gulf Oil Corp., Chief Geophysicist, Gulf Coast Area. Title of paper is unannounced.

May 12, 1953: Tues., 7:00 P.M., A.A.P.G. - Coastal Geological Society Dinner Meeting, Barbara Hotel, Santa Barbara: Mr. Mortimer Kline will speak on leases and royalties and Mr. B. A. (Bud) Ogle of William Ross Cabeen and Associates, will speak on the Pliocene of the Eel River Basin.

May 13, 1953: Wed., 6:00 P.M. A.A.P.G. - San Joaquin Valley Chapter Dinner Meeting, Spanish Ballroom, El Tejon Hotel, Bakersfield. Speakers are to be Mason Hill and John Crowell with the subject, "Discussion on Lateral Faulting in Southern California."

May 14, 1953: Thurs. noon, S.E.G. - Luncheon Meeting, Rodger Young Auditorium, 936 W. Washington Blvd., Los Angeles: Dr. W. L. Morris will speak on "Radioactivity Surveys of Shot Hole Cuttings". Topic will be illustrated with slides.

May 14, 1953: Thurs., 6:30 P.M., A.I.M.E. - Junior Petroleum Group, Dinner Meeting, Turf Club, Lakewood and Anaheim-Telegraph Road: Informal Round Table Discussion on Primary Cement Jobs.

May 19, 1953: Tues., 6:30 P.M., A.P.I. - Dinner Meeting, Stockdale Country Club, Bakersfield. Topic will be "Alaska - New Oil Frontier" with guest speaker to be announced.

May 16, 1953: Sat., 8:30 A.M. - S.E.P.M. - A.A.P.G. field trip through the Northern Santa Ana Mountains. Assemble at the intersection of Highway 18 and 91.

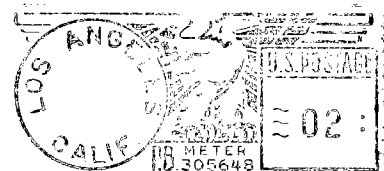
May 25, 1953: Mon., 7:30 P.M., A.I.M.E. - Petroleum Technology Forum, Edison Auditorium, 601 W. 5th St., Los Angeles: Mr. Francis Barker, Petroleum Engineer for Union Oil Co. in Bakersfield, will speak on "The Use of Volumetric Methods in Reserve Estimation". This is the second talk of a series of talks on Reserve Estimation.

June 5, 1953: Fri., 2:00 P.M. - A.A.P.G. - Annual Spring Picnic, Standard Oil Co. Camp Grounds in Pico Canyon.

June 12, 1953: Fri., 3:00 P.M., Northern California Petroleum Round Table Barbecue, Yolo Fliers Club on Woodland-Madison Road 5 miles west of U.S. Highway 99W. Reservations required and may be made through areal representatives. Golf tournament 1:00 P.M.

PACIFIC PETROLEUM GEOLOGIST  
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# PACIFIC PETROLEUM GEOLOGIST

## NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 7

June 1953

No. 6

### ASSOCIATION ACTIVITIES

#### AIRBORNE MAGNETOMETER

Mr. Milton Glicken of Fairchild Aerial Surveys was guest speaker at the regular monthly luncheon held May 7 at Rodger Young Auditorium. Mr. Glicken, substituting for Mr. F. W. Hinrichs, presented a sound film, "The Airborne Magnetometer", which showed operations of the Airborne Magnetometer section of the U. S. Geological Survey.

The film illustrated how a uniform field normally surrounds a magnet (of which the earth is an example) and how a paramagnetic body, when placed in the field of a magnet, such as a piece of steel near a bar magnet or a geologic structure on the earth, can distort the field. The airborne magnetometer is a sensitive device for measuring such anomalies. The magnetometer is carried in a bomb-shaped "bird" suspended at the end of eighty feet of cable to avoid the effects of the aircraft's engines, and is towed back and forth over an area in parallel flights much like a lawn is mowed, until the area is covered.

As seen in the film, the U. S. Geological Survey uses a DC-3 with a four-man crew: pilot, co-pilot-navigator, magnetometer operator and observer. Flight lines are laid out in advance on a map and the navigator guides the plane along them while flying at an altitude of 500 feet above terrain. The observer, meanwhile, is watching the ground below through a viewfinder, and when the aircraft passes over a checkpoint, he presses a button which exposes a fiducial mark on the continuous-strip aerial camera and also prints one on the magnetometer record which is going simultaneously. Counters synchronize them all with the map on which the observer marks the fiducial number at the checkpoint. The magnetometer, meanwhile, is recording the magnetic level continuously along each flight.

Later, in the laboratory, the various records are compiled into a magnetometer map. First, the checkpoints are accurately plotted on a topo map or photomosaic by means of the fiducial marks on the continuous-strip photography. Then an overlay is prepared, showing paths of all flights and location of fiducial marks. Second, a pantograph-like machine called a rectifying plotter operates on the magnetometer records, changing from curvilinear coordinates on the original record to rectangular coordinates and changing horizontal scale of the record to scale of the map, etc. The magnetic values are then read from this curve and transferred to corresponding locations on the overlay. There then remains only the job of contouring the data, usually to a ten-gamma contour interval. In an effort to simplify the film, the U. S. Geological Survey showed very little of the flying of the lines, flown perpendicular to the magnetic traverses, and the intricate problem of using them in the compilation to reduce all traverses to a common datum and eliminate effects of drift and magnetic diurnal variation.

To the geophysicist, the contour map is merely the starting point in his studies of the geology, and the questions asked by the audience indicated

a lively interest in interpretation. Among the things that were discussed were the advisability of multi-level flying, the use of helicopters for magnetometer work, and Meteor Crater, a special case in which the airborne magnetometer has revealed the presence of a small magnetic anomaly under the south rim where the main meteorite has been postulated, but not as large as would be expected from a body that size. (See Bull. A.A.P.G., Vol. 37, No. 4 (1953) for discussion of Meteor Crater, Arizona. Ed.)

#### A.A.P.G. FORUM

"Geologists, Geophysicists and Management" was the subject of a panel discussion held in the Edison Auditorium May 4, 1953, led by Mr. K. H. Crandall, Vice-President of the Standard Oil Company of California, Mr. E. J. Hammer, Pacific Coast Area Manager for the Humble Oil and Refining Company and Mr. Henry Salvatori, President of the Western Geophysical Company. Forum chairman Orrin Gilbert acted as moderator.

As the first speaker of the evening, Mr. Crandall commented on qualifications necessary for managerial work and noted that in his opinion geologists generally are somewhat better fitted than the average for such work due to their broad training. He pointed out that a member of this profession needs to be imaginative and have the ability to gauge future possibilities of petroleum reserves as well as make sound decisions and coordinate activities, all of which are basic managerial functions. Mr. Crandall was not concerned with the possibility of the geologist becoming too specialized nor did he feel that increased specialization in the future would materially affect the geologist's suitability for a position in management.

In preparing himself for managerial work, the speaker emphasized that the geologist should acquaint himself with every available tool in geology and know when to use it. He should sharpen his sense of values and knowledge of organization and learn to handle personnel. He should also acquire as much knowledge as possible of oil field economics and avail himself of the basic principles of other departments within the oil business.

In regard to the scholastic training of future petroleum geologists, the speaker voiced the opinion that present university geologic curricula need revision so as to include more work in geophysics, stratigraphy and oil field economics.

In conclusion, Mr. Crandall stated that the demand for the services of petroleum geologists in the future should increase in proportion to the increased need of raw material.

Mr. E. J. Hammer was in agreement with most of Mr. Crandall's conclusions. However, it was Mr. Hammer's opinion that future overspecialization will probably decrease the geologist's chance for managerial positions although he recognizes that at the present time the geologist is generally well qualified due to his familiarity with many phases of the business. He pointed out that Humble cannot give the present day geologist as well rounded a

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Next Deadline June 29, 1953

training program as in former years although an effort is now being made to do more rotating of men through various jobs every two or three years.

It was Mr. Hammer's observation that 75 percent of the geologists with Humble prefer managerial jobs over those of technical nature due to the higher salaries and more impressive titles connected with such positions. It was his thought that the technical men in the department should receive better salaries and more general recognition in order to offset this attitude.

Mr. Henry Salvatori completed the formal discussion with a review of progress in geophysics since the early day pioneering of contracting companies and outlined the opportunities existing for new employees with Western Geophysical Company. Mr. Salvatori emphasized the importance and continuing need of contracting companies in the oil industry in spite of the fact that since the refinement of instruments and techniques of the science many major oil companies have begun operating their own geophysical crews.

In conclusion, Mr. Salvatori pointed out that the continued shortage of well-trained, young geophysicists creates ample opportunities for a new worker in this field if he is prepared to be moved frequently during the first few years of employment.

A.I.M.E. FIELD TRIP AND BARBECUE

The Pacific Petroleum Chapter of the A.I.M.E. will hold its Annual Field Trip and Barbecue on Saturday, June 20th, in the eastern part of the Ventura Basin.

The field trip will start from Tip's Restaurant No. 2, at the intersection of Highway 99 and Saugus Road at 8:45 A.M. The trip will visit the Honor Rancho, Castaic Hills, Oak Canyon, Del Valle, Ramona, Tapo, Castaic Junction, Placerita and Newhall Potrero oil fields. Box lunches will be available for \$1.00 and a complete set of maps of the oil fields visited can be obtained for a nominal sum.

The "Chuckwagon" (all you can eat) Barbecue will be served about 5:30 P.M. at the Pico Canyon Picnic Grounds, fee \$2.50, beer and soft drinks free.

Non-members of A.I.M.E. should contact Kemp Barley, Baroid, at Michigan 1381 for reservations for either event.

N.C.G.S. MEETING

The members and wives of the Northern California Geological Society enjoyed a dinner meeting on Thursday evening, May 14, at the Fly Trap Restaurant in San Francisco. Frank Noble, Union Oil Company geologist, won the stimulating door prize.

Mr. Chuck E. Kirschner, Standard Oil Company geologist and speaker of the evening, showed two very interesting movies on hunting and fishing in Alaska. The pictures were taken in the Wide Bay area which is on the peninsula northeast of Kodiak Island. There were many excellent pictures of the big Alaska brown bear in addition to pictures of moose, elk, ptarmigan, etc.; 6 lb. trout and 35 lb. salmon were depicted as being so plentiful in the rivers and streams that the fishermen used barbless flies and hooks to enhance the sport of landing them. Occasionally as one got away Chuck would point out that the mountains in the distance were probably middle Jurassic rocks.

Chuck and Jim Heppert have already left for Alaska for the field season which ends in early September.

PACIFIC SECTION DIRECTORY

More than 25 percent of the directory revision data cards are yet to be returned. As considerable work has to be done with the cards before the data can be given to the printers to have the edition ready for the Fall Meeting, a special effort should be made to get the outstanding cards to Dick Faggioli as soon as possible.

A.A.P.G. - S.E.P.M. FIELD TRIP

One of the most successful and informative field trips in recent years was arranged by Orville Bandy and conducted under the leadership of Jack Schoellhamer of the U. S. Geological Survey on May 16, 1953. R. F. Yerkes of the Geological Survey and C. H. Gray of Claremont Graduate School also participated in discussions at various stops.

The route of the trip followed the Santa Ana Canyon freeway from the starting point on Highway 55 east of Olive to Corona, then over the Santa Ana Mountains on Corona Skyline drive and Black Star Canyon road. Santiago Canyon road was followed back to Highway 55.

No one was left at the luncheon stop although ample refreshments were provided by committeeman R. B. Kelly through courtesy of Bell and Burden, Globe Oil Tools, Herbell Drilling Co., Macco Corp., Mercury Oil Tool Co., Petroleum Technologists, Inc., Schlumberger, Security Engineering and Shaffer Tool Works. Lane-Wells Co. kindly provided a sound truck and thanks are extended to Continental Oil Co. for drafting the field trip map.

Those planning to retrace the field trip should do so before Black Star Canyon road is closed for the fire season.

FIELD TRIP MAPS

Additional copies of the Road Log and Geological Map for the S.E.P.M. field trip in the Santa Ana Mountains may be secured from Dana Braislín, Union Oil Company, 17810 So. Central Ave., Compton.

Checks for \$1.00 should be payable to Pacific Section, S.E.P.M.

S.E.G. SPRING DINNER MEETING

Dr. Paul Weaver, Technical Assistant to the Vice-President, Gulf Oil Corp., Houston, Texas, was guest speaker at the annual spring dinner meeting of the Pacific Coast Section of Society of Exploration Geophysicists which was held at the El Tejon Hotel, Bakersfield, on May 8 last. The San Joaquin Geological Society collaborated with the S.E.G. in presenting the dinner meeting.

Dr. Weaver's subject was "Structural Evolution of Basins as Deduced from Geophysical Data", and he dealt in particular with the geology and associated geophysical information obtained from the Mexican Gulf basin. Several kinds of geophysical results are available from the area, but gravity data are at present most widespread. The Lamont Geological Observatory is concluding a refraction program in the Gulf which should contribute much to existing knowledge.

The land area is underlain by Mesozoic and Cenozoic clastic and non-clastic (principally evaporite) sediments with the latter found in the south part of the basin in southern Florida and Yucatan. The transition zone between these and the shallow-water deposited clastics to the north is often narrow, and geophysical determinations probably indicate that the zone is continuous across the Gulf. With few exceptions, Paleozoic or basement rocks on land lie at depths in excess of 40,000 feet.

Epics of accentuated thickening occur in the clastics which resulted from a depression of basement equal to the rate of deposition. These "floods" of clastics occur in relatively narrow zones and have been found in the Jurassic, Cretaceous, Eocene, Plio-Miocene, and Quaternary. Gravity and magnetic maxima occur shoreward to the north due to stripping of the basement, while basinward a gravity maximum accompanying a thick sedimentary load is associated with a magnetic minimum resulting from basement depression.

Barton first interpreted gravity data in terms of sedimentation and basement configuration. His scant data led him to infer a geosyncline slightly inland from the coastline of Louisiana and Texas. However, subsequent marine drilling has not substantiated a thinning of the sediments which would take place on the south flank of such a geosyncline. A magnetic profile made across the Gulf from Kingston to Brownsville has produced deepest values (with an interpreted deep basement) in Sigsbee Deep, lowest topographic expression in the Gulf basin, from near the mouth of Apalachicola River, Florida to near Brownsville, Texas.

In conclusion, Dr. Weaver suggested that gravity and magnetic data now indicate a Gulf Coast geosyncline is located gulfward rather than inland, and that thick wedges of clastic sediments thinning updip to the north from the edge of the continental shelf offer excellent possibilities for oil exploration.

COAST DINNER MEETING

The regular dinner meeting of the Coast Geological Society was held May 12th at the Miramar Hotel, Montecito, California. The speakers of the evening were Mr. B. A. (Bud) Ogle of Wm. Ross Cabeen & Associates and Mortimer A. Kline of the law firm of Kline, Barton and Stanley.

Mr. Ogle's talk on the "Geology of the Eel River Valley area in Northern California" was of very great interest to the coastal area geologists

because of the similarity between the Eel River basin and the Ventura and Los Angeles basins. The stratigraphic section of the area, from older to younger rocks, is listed below:

Franciscan: found in a 20 mile wide belt to the northeast of the Eel River basin.

Yager: composed largely of shales and hard graywacke of probable Cretaceous age, although it may extend from Jurassic to Eocene.

False Cape Shear Zone: a very much shattered and gougey zone which is mapped as though it were a stratigraphic unit. It contains fragments of both Cretaceous and Eocene rocks and possibly most of the other formations present in the area.

Wildcat Group: consists of a maximum of 12,000' of sediments which have been mapped together in the past that ranges from upper Miocene to possibly Pleistocene in age. The group has been divided by Mr. Ogle as follows:

Pullen: This unit consists of 600' to 1100' of sediments with a basal sandstone up to 200' thick. The age is upper Mohnian to lower Repettian and the lithology is in part very similar to the upper Miocene Monterey formation of southern California.

Eel River: This unit is a deep water glauconitic sandstone 600' to 2000' thick with lower Pliocene forams similar to the Repettian of southern California.

Rio Dell: This unit consists of 3000' to 6000' of interbedded sandstones and claystones similar to the Pico formation of the Ventura basin. The lower and upper portions are primarily shale or claystone with a middle sandstone member. Forams indicate this unit is equivalent to the Pico formation of middle to upper Pliocene age.

Scotia Bluffs: This unit rests conformably and gradationally on the Rio Dell and consists of 1000' to 2000' of massive sandstone. It is of shallow water origin and the upper part may be non-marine.

Carlotta: 500' to 3000' of non-marine, poorly sorted conglomerate with a few marine lenses very similar to the Saugus formation of southern California.

The area is extensively faulted and folded with considerable similarity to the Ventura basin.

There has been no commercial oil production from the Eel River basin; however, oil shows have been reported in the Pullen beds. The Thompkins Hill gas field has seven wells producing from the Rio Dell.

Mr. Ogle pointed out that the area has been somewhat neglected by oil companies in the past. Most companies keep track of the Eel River basin from offices located as far away as Los Angeles. This is somewhat unusual when it is considered that the area of exposed Tertiary sediments in the Eel River basin is larger than the Los Angeles basin and almost twice as large as the Ventura basin.

Mr. Mortimer Kline gave an extremely interesting talk on the legal aspects of the petroleum industry. The talk was based on a great number of questions sent in by members of the Coast Geological Society and covered such items as property rights, basic provisions of oil and gas leases, operating agreements, royalties and rents, legal status and responsibilities of geologists and engineers, and the functions of oil company legal departments. Mr. Kline's remarks were very concise and informative.



"EOCENE AND PALEOCENE DEPOSITS AT MARTINEZ, CALIFORNIA", by Charles E. Weaver, Professor of Geology, University of Washington, University of Washington Publications in Geology, Vol. 7, pp. 1-102, April 15, 1953, \$4.00, University of Washington Press, Seattle 5, Washington.

This publication should be indispensable to any student of Paleocene and Eocene or of the geology of Central California. This is another of Dr. Weaver's detailed, exhaustive and comprehensive investigations of the stratigraphy and paleontology of Pacific Coast Tertiary formations in areas where type sections have been established. He not only has placed on record all obtainable data on the Paleocene and Eocene formations of the vicinity of the area where the Martinez group was established, but also describes the underlying Cretaceous and the overlying Oligocene and Miocene rocks of the area.

The paper is profusely provided with tables, correlation charts, faunal check lists (with descriptions of localities), and detailed lithologic descriptions. It is accompanied by 14 detailed geologic map and cross section plates on 9 sheets and by 3 stratigraphic columnar sections.

Dr. Weaver's discussions of the conditions of deposition and distribution of lithofacies, and the faunal relations and correlations of the upper Cretaceous to upper Miocene formations in the region are especially valuable. It seems timely to this reviewer that Dr. Weaver describes some Cretaceous to Oligocene lithofacies differences in juxtaposition across a main fault which perhaps could be explained better by considerable lateral offset on the fault, rather than by his postulated dividing ridge.

William Henry Corey

## PERSONAL ITEMS

The annual San Joaquin Scouts' Barbecue, held May 15th at Shell Park, went off with its usual success. The weather was a little damp, but apparently did little to dampen the spirits of all present. Stan Beck gave away the door prizes this year, and you can guess (percentagewise) whose boys took home the most liquid. The report is out that "Barney" Barnard can now board his three horses instead of selling them to the glue factory. Who said, "It isn't hay!" Eh, Barney?

Jim Sheller of the State Exploration Co. left Ojai May 28 with baggage and family for Lafayette, Louisiana, where he will open an office for State Exploration.

Eugene Wiancko has been appointed Division Geophysicist of the coast area for Union Oil Co. His headquarters will be in Santa Paula and his sphere of activities will be the Santa Maria, Ventura and Los Angeles basins.

Following a recent incident in which Richfield Oil Corp. disposed of some waste oil near Carpinteria, there is a movement on foot to require any such deposits to be clearly and legibly labeled. This is to prevent a recurrence of the unfortunate predicament of a well known geological department which mistook Richfield's discarded oil for a reactivated oil seep, much to their consternation and embarrassment.

Dan Sullivan of Continental Oil Co. has been attending a company electric log school in Ponca City, Oklahoma.

Mack Samford, visiting the California office from Humble's East Texas Division, found recently that all the sharp domino players are not in Texas. His protest to the effect that playing on spinners is unscientific has not yet resulted in any of his money being returned.

The Bakersfield Petroleum Wives held their annual fashion show at the Bakersfield Inn, Tuesday evening, May 26th. This year's motif was of the forthcoming British Coronation, with decorations being small crowns on pillows.

Don Greenlee, Shell Oil Co., has been made Offshore District Geologist. Don's previous district, the Ventura and Santa Maria basin, has been divided between Lyle Smith, who will handle the Santa Maria basin, and Stan Jeffreys the Ventura basin.

Joe Hudson will take Hunter Yarborough's place as Humble's Area Geologist while Hunter is in Houston. Rex Smith is now California Area Production Geologist and Dick Faggioli is Area Exploration Geologist.

Richfield Oil Corp. has moved into their new Ventura District office which is located 8 miles north of Santa Paula on Highway 150. They would like to have it known that their new address is Route 1, Box 150-R, Ojai, and their telephone is Santa Paula 1500. No date for a housewarming has been set.

One of Bakersfield's most eligible bachelors, Harry Williams, of Shell's scouting department, has finally joined the married ranks. Harry and Miss Alpha Henry were married on March 27th in the Little Chapel of Sacred Memories at the First Methodist Church in Bakersfield. Congratulations Alpha and Harry.

M. N. Mayuga has returned to his former position as Principal Geologist with Long Beach Harbor Department after two years of active military service in Washington, D.C. as a Major, U.S.A.F., and as Chief of the Photo Intelligence Section, Directorate of Intelligence, Headquarters U.S.A.F.

Ohio Oil Company has opened an office in Ventura at 2412 E. Main St. with Karl Arleth, Jr. in charge.

Peter H. Gardett has moved his geological office to 903 Fair Oaks Avenue, South Pasadena.

A group of Shell's Bakersfield, Sacramento and Ely, Nevada geological personnel have been transferred to the Alaska Division with headquarters in Seattle, Washington. Those being transferred are Jim Elison and Mahlon Kirk, from Bakersfield; Jim Kennell, Bob Johnson and Don Gillespie of Sacramento; and Joe Johnson of Ely, Nevada.

John Yeager, recently graduated from U.C.L.A., has commenced work for the Ohio Oil Company in Bakersfield.

## CALENDAR

Paul Elliott of Western Gulf and a Lieutenant Commander in the Naval Reserve, is serving a two weeks' tour of duty at San Diego. We wonder if Paul was able to fit into his old uniform.

A geological luncheon table has been started in Ventura and meets every Thursday noon at the Pierpont Inn in Ventura. Any and all transient and local geologists are cordially invited to attend. No reservations are necessary.

Mr. John Curran, Honolulu Oil Corp., has joined the "creamed chicken and canned peas" circuit along with Lowell Redwine, Dr. Vander Hoof and Hank Neel. In keeping with the Coast Geological Society's efforts to disseminate some geological information to laymen and popularize the profession, these four, at considerable gastronomic risk, have delivered approximately 35 talks to various service clubs in Ventura, Santa Barbara and Los Angeles counties.

Curtis Johnson, formerly assistant chief geophysicist of General Petroleum Corp., has assumed the position of manager of the newly formed Marine Division of Geophysical Service Inc., with headquarters in Dallas, Texas.

John Crowell, Assistant Professor of Geology at U.C.L.A., has been awarded a Guggenheim and a Fulbright scholarship for the coming year. By taking advantage of a sabbatical leave John and his family plan to leave for Paris on June 19 where they will pick up a new car. The Swiss Alps will be the scene of operations for his study of "Evidence for Great Tectonic Displacement". He will return to the staff at U.C.L.A. in September 1954.

Herschel L. Driver has been appointed Senior Staff Geologist in the Exploration Department of Standard Oil Company. He has bought a home in Palo Alto as he will make his headquarters in San Francisco.

Al and Mrs. Solari spent a pleasant week's vacation at the resort town of Guaymas on the Gulf of California. Although this area is noted for its good marlin fishing, the run had not started. However, Al said it was fun trying.

Wayne Marrs of Continental Oil Company is showing an unretouched ? photograph as evidence that he caught a 108 lb. sailfish during a recent trip to Guaymas. Al Solari please note.

### NURSERY NEWS

The Rod Calvins of General Petroleum in Santa Maria are the proud parents of a baby girl, Mary Anne, born May 1st. They now have a boy and girl. Bob and Julie Hacker, Union Oil Co., a boy, Paul Durland, 8 lb., 4 oz., born May 21, 6:00 A.M. Mr. and Mrs. Bill LeRoy of Standard Oil in Bakersfield welcomed a baby girl, Beth Margaret, born May 5th.

Vernon and Arlene Rutherford, Union Oil Co., a girl, Jane Ann, born May 23, 4:30 P.M.

Also with Standard in Bakersfield, the Bob Foresters are happy over the arrival of their first born, a little girl named Teri Lynn, born April 25.

Mr. and Mrs. Bruce Robinson of Superior in Bakersfield, welcomed their second daughter, Marian Lynn, born May 16th.

June 9, 1953: Tues., 6:00 P.M., A.A.P.G. - San Joaquin Valley Chapter Dinner Meeting, Spanish Ballroom, El Tejon Hotel, Bakersfield. Mr. Mason Hill and Mr. John Crowell will discuss "Lateral Faulting in Southern California".

June 11, 1953: Thurs. noon, S.E.G. - Luncheon Meeting, Rodger Young Auditorium, 936 W. Washington Blvd., Los Angeles. Mr. Milton Loy of Schlumberger Well Surveying Corp. will speak on "A Discussion of Mechanical Problems in Well Velocity Surveys".

June 11, 1953: Thurs., 6:30 P.M., A.I.M.E. - Junior Petroleum Group, Dinner Meeting, Turf Club, Lakewood and Anaheim-Telegraph Road. Informal Round Table Discussion on well completion methods in Los Angeles Basin.

June 12, 1953: Fri., 4:00 P.M., Northern California Petroleum Round Table Barbecue, Yolo Fliers Club on Woodland-Madison Road, 5 miles west of U.S. Highway 99W. Reservations required and may be made through areal representatives. Golf tournament 1:00 P.M.

June 22, 1953: Mon., 7:30 P.M., A.I.M.E. - Petroleum Technology Forum, General Petroleum Auditorium, Los Angeles. Mr. N. Van Wingen will speak on "Reserve Estimates as determined by Material Balance Methods".

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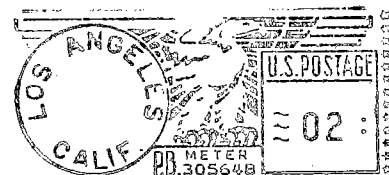
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Canadian Review Number.

**PACIFIC PETROLEUM GEOLOGIST**  
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# PACIFIC PETROLEUM GEOLOGIST

## NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 7

July 1953

No. 7

### ASSOCIATION ACTIVITIES

#### SAN JOAQUIN CHAPTER MEETING

A very interesting and thought-provoking discussion concerning faulting in California, with special reference to the San Andreas fault zone, was led by Mason Hill and John Crowell on June 9 at the El Tejon Hotel in Bakersfield. Their topic was "Discussion of Lateral Faulting in Southern California".

Introductory remarks by both speakers emphasized the previous lack of recognition of horizontal movement along faults in California. A definition of terms for the various types of faults occurring in the area was reviewed. The convenient usage of "right lateral" and "left lateral" to denote separation along a fault plane was pointed out. A right lateral fault is one in which the block opposite the observer, as viewed in horizontal section, is offset to the right.

As Bakersfield is located only a few miles from the San Andreas fault, the portion of the talks covering this major tectonic feature was of special significance to the group. It is quite apparent that such a major structural break in the earth's crust must have been a dominant factor in controlling the pattern of minor folding and faulting in adjacent areas.

Evidence for right lateral movements of the San Andreas is shown by consistently offset drainage lines, oriented trenches due to tensional strain, and locally developed west-northwest-trending folds near the fault. Of more regional character, but probably more significant, are the offset time-rock facies on opposite sides of the fault.

A right lateral displacement of approximately 10 miles since Pleistocene time is suggested by the juxtaposition of coarse Pleistocene gravels along the south side of the San Andreas fault in the San Emigdio Mountains adjacent to a pebbly conglomerate composed of Miocene shale on the north side of the fault. The possibility that nonmarine beds at the north end of the Carrizo Plains may correlate with beds of similar lithology at the southeastern end of the San Joaquin Valley may indicate a right lateral offset of some 65 miles since upper Miocene time. Displacements of much greater magnitude can be inferred from the lithologic similarity of Oligocene and Eocene beds adjacent to the San Andreas fault in the San Emigdio Mountains with those in the Gabilan Range and Santa Cruz Mountains. It was pointed out that the southern limit of the Cretaceous strata in the Temblor Range may match with the southern limit of Cretaceous beds near Fort Ross north of San Francisco - an offset of about 320 miles. Finally, there is some corroborating evidence that the southward-trending contact between the Sierran complex and the Coast Range Franciscan complex concealed by sediments in the San Joaquin Valley may have its counterpart concealed by the sea north of Point Arena. Such an offset would amount to a right lateral displacement of at least 350 miles since Jurassic times.

Both speakers urged that the importance of lateral faulting should not be overlooked when

considering regional tectonics. More care should be taken in attempting to ascertain the relative amounts of strike slip as well as dip slip along fault planes. Several questions at the end of the presentation touched off a lively discussion concerning forces responsible for the San Andreas and the nature of the fault zone itself in various localities.

#### A.A.P.G. FORUM

Mr. George C. Hepburn, Jr., District Manager of Schlumberger Well Surveying Corporation, was guest speaker at the A.A.P.G. Forum held in the General Petroleum Corporation Auditorium June 29, 1953. The title of his talk was "Meaning of Resistivity".

Mr. Hepburn opened his discussion with a brief history of the development of Schlumberger electrical logging. He pointed out that resistivity measurements date back to 1912 at which time elementary experiments were made by burying minerals of known characteristics in sand boxes.

Between the first World War and 1927, similar primitive methods were used to locate ore bodies and salt domes in Europe and Africa. It was not until 1927 that measurements were made in place by lowering instruments in well bores. By taking measurements every three feet the points were plotted and a crude curve resulted which eventually evolved into the continuous curve in use today.

It was pointed out, however, that resistivity by itself is little help as a geological tool. Such factors as amount and distribution of porosity of the rock and the salinity and saturation of formation water independently affect the amount of resistivity. The speaker emphasized that the resistivity of interstitial water and porosity of the reservoir are extremely important factors and must be known to interpret an electric log properly. Otherwise, sand bodies in a well may be passed up because they appear wet when actually they may be productive of oil. Examples of oil sands showing low resistivity were cited from Wilmington oil field, California, and Louisiana.

Questions from the floor indicated a great interest in this subject and it is hoped other groups may have the opportunity of hearing Mr. Hepburn's talk in the future.

#### BRANNER CLUB OFFICERS

Following the best tradition of this ancient and honorable society, the Nominating Committee's recommendations have been duly elected.

New officers are Aden Hughes, President; John Mann, Vice-President; Lloyd Pray, Secretary-Treasurer.

#### PACIFIC SECTION TRUST FUND

Frank Carter of General Petroleum has been appointed by the Executive Committee to serve with Harold Hoots and Cliff Johnson as a Trustee of the Pacific Section A.A.P.G. Trust Fund. Frank will replace Herschel Driver who is now in San Francisco.

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Next Deadline August 3rd

BIRDIES AND BOGEYS BAGGED BY BALL BEATERS

Golf balls flew far and wide (mostly wide) last June 5 at the San Fernando Country Club as sixty odd divot-diggers surged around 18 holes in the annual Pacific Section tournament without mishap.

Scores ranged all the way from 70 to 169 as ranked experts and rank beginners vied for the rich assortment of prizes in the tourney which preceded the annual stag picnic. Honors for low gross went to Bert Thatch with a 34-36-70, a sizzling one under par performance featuring three birdies and only two bogeys. Sam Watson was second with a 77 and Glenn Ferguson third with 79.

In the Blind Bogey competition Roy Mead managed to develop a 54 handicap which, coupled with his gross 96, resulted in a net 42, six strokes in front of his nearest rival. Will Kanagy was second with a 114-66-48, and Cornelius (believe it or not) Ham third with 81-30-51. About twenty blind bogey winners received prizes ranging from collapsible aluminum caddy carts, through putters and shirts to golf balls. In addition, the low gross in each foursome received two golf balls. Five dozen balls were distributed.

Prizes were partly paid for from fees and partly from donations from M. O. Johnston, Peters Logging Service, Schlumberger, Core Lab, Geolograph, Lane Wells, BJ Service and Oilwell Cementing. The tournament was under the supervision of Jack Beach and Harold Sullwold, ably assisted by Jack Gearhart.

NEW FOSSIL PUBLICATION

"Facts About Fossils" is the title of Miscellaneous Paper No. 3 just issued by the State Department of Geology and Mineral Industries. This paper is a collection of eight articles on fossils previously published by the Department, chiefly in its monthly publication, The Ore.-Bin. Authors of these reprinted articles are: Dr. John E. Allen, Dr. E. L. Packard, Mr. R. E. Stewart, Dr. Ralph W. Macey and Mr. W. F. Barbat. The paper was issued to supply the demand which has built up among geology students and fossil collectors in Oregon.

Miscellaneous Paper No. 3 may be obtained at the Portland office of the State Department of Geology and Mineral Industries in the State Office Building, or at Department field offices in Grants Pass and Baker. The price is 35 cents.

BAKERSFIELD ACTIVITIES

The Bakersfield Petroleum Wives had a very enjoyable evening Friday, June 20th at the Stockdale Country Club. About sixty couples were in attendance at the affair, which was planned with a Mexican motif. The tasty buffet dinner was preceded by swimming and was followed by dancing during the cool hours of the evening.

CONVENTION COMMITTEE  
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**PERSONAL ITEMS**

Bruce Robinson has left The Superior Oil Company to join Bishop Oil Company in Bakersfield.

Dr. Thane McCulloh will join the faculty at Cal-Tech this fall as assistant professor of geology. Francis G. Stehli, who received the Ph.D. degree from Columbia University in June, also will join the staff as assistant professor of invertebrate paleontology.

A. I. Levorson, who was in California to attend his son's graduation from Pomona College, was seen in the coastal area during the last couple of weeks.

Bill McEachin, Texas Company scout and landman, has been transferred to the Sacramento office.

Bill Hickler, division landman for Union Oil, is welcomed into the ranks of the married men. Bill was married June 19th to Dorothy Sims. After honeymooning at Carmel the Hicklers will return to Bakersfield to set up housekeeping.

Alvin P. Loskamp has become associated with E. B. Noble, Petroleum Consultant, 854 General Petroleum Building, Los Angeles, California. Loskamp will handle problems of West Texas and New Mexico, where he has been a resident since 1928 and while there was engaged in exploration work for the Barnsdall Oil Company and later with the Union Oil Company. He is a graduate of Syracuse University where he was a Captain of the crew. He took graduate geological work at Stanford.

Howard Casey of General Petroleum Corporation was the star of a fishing trip taken by 19 geologists June 13 off Anacapa and Santa Cruz Islands. Howard, who is a Rocky Mountain landlubber, caught the largest number of fish on this, his first deep sea fishing trip. The excitement was such that he did not have time to be seasick until he arrived home where he was seasick all night long.

Floyd Johnson, formerly with Honolulu Oil Corporation, is now employed by Western Gulf. Floyd will grab his umbrella and web feet and head for Oregon and Washington.

Standard Oil Company has reported the following personnel changes: Ed Doell, formerly Exploration Superintendent of the Southern District in Los Angeles, and Tony Paap, District Geologist of the Northern District in Bakersfield, have been transferred to San Francisco. Hal Bemis, formerly Chief Geophysicist, has been transferred from Bakersfield to Los Angeles, replacing Doell. E. G. Dobrick, formerly with the California Company, will be the new Chief Geophysicist in Bakersfield. Murray Nadler and Dick Bowen have been transferred from Bakersfield to Sacramento.

Keith Jones, previously with the State Division of Water Resources working in the Los Angeles basin, is now with Western Gulf in Bakersfield. Keith is 6'3" and was formerly on the U.C.L.A. boxing team - so be careful, fellas.

Bob Reedy of the United Geophysical Company has been sent to Santa Paula to work with Eugene Wiancko of Union Oil Company.

Dave Costello is glad to be back with T.W.A. in Bakersfield after two years in the Air Force as intelligence officer. Dave replaces Dick Clark who will be working off a little weight doing field mapping.

Joe Ernst of the Texas Company has been transferred to Santa Maria where he will be resident geologist.

The Texas Company announces the presence of two new men on their staff: Ralph Cahill, who will work out of Taft, and William Bauer, who will be in the Sacramento office.

Friends of H. J. "Bud" Buddenhagen will be happy to know of his transfer back from The Hague to the Shell Los Angeles offices.

Dick Reese, Chief Geologist for Hudson's Bay Oil and Gas in Canada, was welcomed by his friends around Los Angeles during his short visit a couple of weeks ago. He had been attending his boy's wedding the previous week in San Francisco.

Jim Slosson, who is doing summer work for Western Gulf Oil in Los Angeles, is instructor of geology at Los Angeles Valley Junior College in Van Nuys where he also serves as track coach.

Art Hawley has resigned his position with Union Oil in Bakersfield.

Orrin Wangsness, who has been with Western Gulf Oil in Bakersfield, is now working out of the Los Angeles offices. He has just acquired a new home in Whittier and we understand is spending his spare moments trying to trace the Whittier fault to see if it passes under his house.

The National Oil Scouts and Landmen's Association held a very successful convention at Fort Worth, Texas, June 17 thru 20. Among the delegates from the West Coast were: Mike Adams, Western Gulf; "Tex" Leverett, Union; Sam Tate and Earl Bescher, Humble; and Cliff Edmundson and Elmer Hutchins of Shell. Plans are progressing for the west coast scouts to become officially affiliated with this national organization.

Bradley McMichaels, who has been with Standard Oil in Bakersfield, is being transferred to the State of Washington.

Bill Yerington, with Ohio in Bakersfield, will spend the summer months on a temporary project in Washington. (Lucky boy!)

John Wiese of Richfield came down from the Rocky Mountains to thaw out and spend a few days visiting with friends in Bakersfield.

Dr. Hugo Benioff, professor of seismology at the California Institute of Technology, has been appointed to a one-year term on an advisory panel of the National Science Foundation, Washington, D.C. The Foundation is a federal government agency established for the encouragement and support of education and research in science and engineering.

Edward Gribi, Jr. has resigned from the firm of Chamberlain and Associates and is opening a temporary consulting geological office at 2608 6th Avenue North, Great Falls, Montana. He plans to relocate in Denver in the fall.

Jack Oney plans to open a geological office in the Mock Building in Bakersfield. Jack will leave Honolulu Oil Corporation to embark on his solo career about the 1st of July.

Bysshe and Barratt have acquired a new petroleum engineer, Dick Ganong, who will supervise their development work in the San Joaquin Valley. Dick was formerly with General Petroleum.

Humble's scouting staff is undergoing a series of transfers with Sam Tate leaving Bakersfield to cool off in Ventura. His place will be filled by William Foraker who has been working in their Chico office.

A number of coast district geologists attempted to absorb a bit of culture by attending the American Association for the Advancement of Science meetings during the week of June 17th in Santa Barbara. The subject most interesting to most of those who attended was the Carbon 14 method of dating prehistoric objects.

John Henderson, former assistant chief clerk, Land Department, for The Texas Company in Los Angeles, is now working as Land and Lease man for Richfield Oil Corporation.

#### "WISH YOU WERE HERE" DEPARTMENT

Kim Hamm, Union Oil Company, is vacationing on Nantucket Island, Mass. where, among other things, he will act as best man in a wedding.

Mr. and Mrs. Bill King, Texas Company, are vacationing in Honolulu.

Charles Foss, T.W.A.O. Company, has returned from a tour of the Pacific Northwest.

Mr. and Mrs. Herm Weddle of Standard Oil Company in Bakersfield are visiting their son who is stationed in Alaska.

Harry Whaley, T.W.A.O. Company, has also returned from touring Oregon, Washington and British Columbia.

#### NURSERY NEWS

John and Colleen Silcox have joined the ranks of baby sitters for the first time with the arrival of their little boy, Clark Reed Silcox, on April 27th. John is with Standard at La Habra.

Mr. and Mrs. Quentin Moore, General Petroleum in Los Angeles, announced the arrival of a "Junior" on June 21st.

Ed Parker of Standard Oil in Bakersfield is happy to announce the arrival of a baby boy, born Saturday, June 20th.

## CALENDAR

July 9, 1953: Thurs. noon, S.E.G., Luncheon, Rodger Young Auditorium, 936 W. Washington Blvd., Los Angeles. "Eastman Kodak Film - Function of Photography, Industrial Uses and Techniques".

July 9, 1953: Thurs., 6:30 P.M., A.I.M.E., Junior Petroleum Group, Dinner Meeting, Turf Club, Lake-wood and Anaheim-Telegraph Road. Informal Round Table Discussion on Electric Logging.

July 14, 1953: Tues., 7:00 P.M., A.A.P.G., Coast Geological Society, Miramar Hotel in Santa Barbara. The speaker will be Dr. V. L. Vander Hoof. The subject: "A New Look at the Sespe Fauna".

July 27, 1953: Mon., 7:30 P.M., A.I.M.E., Petroleum Technology Forum, General Petroleum Auditorium, Los Angeles. Mr. Howard Grant will speak on "Gas and Condensate Reserve Estimates".

The San Joaquin Valley sections of the A.A.P.G., A.I.M.E., A.P.I. and S.E.G. will have no meetings during the summer months. All sections plan to get under way again in September.

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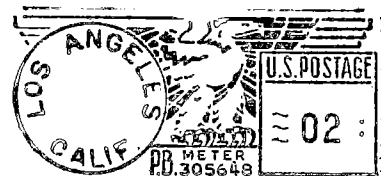
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# PACIFIC PETROLEUM GEOLOGIST

## NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 7

August 1953

No. 8

### ASSOCIATION ACTIVITIES

#### COAST GEOLOGICAL MEETING

The regular meeting of the Coast Geological Society was held July 7th at the Miramar Hotel, Montecito. The speaker was Dr. V. L. Vanderhoof of Intex Oil Co., formerly professor of geology at Stanford University. The title of Dr. Vanderhoof's talk was "A New Look at the Sespe Fauna".

He described the fauna which has been found in the Sespe formation and reviewed the history of Sespe studies and interpretations of the faunal evidence.

Dr. Chester Stock spent 14 years studying and collecting from the Sespe formation and his collection is stored at the California Institute of Technology. Dr. Vanderhoof pointed out that the entire collection consists of 38 trays containing 1500 individual specimens with a total weight of approximately 300 lbs. The extreme paucity of fossil remains was illustrated by a comparison with some of the nonmarine formations of the Rocky Mountains where 300 to 400 lbs. of material can be collected in a single morning.

No complete skeletons have ever been found in the Sespe formation and most of the specimens consist of fragmentary and abraded pieces of bone which show evidence of having been transported some distance before deposition. No fossils found in the Sespe appear to be in the place in which the animal died.

Although the fossils do not reliably indicate the conditions of deposition because they are out of place, they do indicate the age of the Sespe. The age has been established as uppermost Eocene to lowermost Miocene, although throughout most of its extent the Sespe is probably Oligocene.

The primary enigma of the Sespe formation concerns the conditions under which it was deposited. The red coloration has been considered an indication that the Sespe was formed under humid jungle conditions. However, no fossil wood other than very minor amounts of charred material has been found in the Sespe.

Lithologically the Sespe consists of sediments of all sizes from claystone to coarse conglomerate. A common misconception is held that the Sespe is poorly sorted; however, individual beds and members of the Sespe formation are well-sorted and well-bedded which somewhat refutes the idea that the Sespe was all deposited as an alluvial plain.

No marine fossils have been found within the main body of the Sespe. All marine fossils which have been reported are open to question as they have been found either near the top or bottom of the Sespe and quite possibly represent a brief transgression of the sea, or reworking from some older formation. No fresh water ostracods, leaf impressions or other evidence usually associated with fresh water beds have been found.

The vertebrate faunal remains are confusing and not a good criterion for the environment of the Sespe. Animals representing several types of environment such as jungle and plains are found in the same location so no conclusions can be reached from the fauna as to the environment of the Sespe.

In conclusion, it may be said that the Sespe contains no marine fossils so it cannot be marine. The good bedding and sorting indicate that it cannot be fluvial. The absence of ostracods, leaf impressions, etc. indicate that it is not lacustrine. The red color indicates humid jungle conditions but this is denied by the almost complete absence of any vegetable matter. None of the animals found as fossils appear to be in place, so the question still remains: What is the Sespe?

#### RADIOACTIVE MINERAL EXPLORATION

The Advisory Committee on Radioactive Mineral Exploration was organized in June 1952 under the auspices of the A.A.P.G., the S.E.G., and the S.E.P.M. as a result of conferences between Fred-eric H. Lahee, present chairman, and the Atomic Energy Commission. The Committee's main function, which is purely advisory, is to present to the oil industry information regarding distribution of the reserves of radioactive ores and to urge individual companies to be on the alert for their indications.

New supplies of uranium and thorium are difficult to discover due to the limited range of detection instruments. As little as a 6" layer of earth lying over a radioactive deposit reduces the chance of detection by 50 percent. Four feet of overburden would almost completely mask the radioactive effect. A simple check by geiger counter or scintillation counter of the cuttings of wells drilled for oil, water wells, and geophysical shot holes would mean that thousands of square miles per day could be checked at very little cost. There are over 4,000 seismic shot holes drilled each day and about 1,000 oil wells drilled each week in the United States. In addition, the Committee is advocating that gamma ray logging of the upper 500 feet of hole be run when practicable. Field geologists are also advised to be on the lookout for surface indications of radioactive ores.

The Rocky Mountain states and the semi-arid portions of the southwestern states are the most likely areas in which radioactive ores may be expected to be found; although this fact does not preclude the possibility of their occurrence in the petroliferous areas of California.

The Committee recommends that oil operators carry on these activities as a business proposition. The Committee points out that for a small additional cash expense for detection instruments plus some time expenditure by scientific employees it might be possible to discover an important deposit of radioactive material that is needed for national security, and at the same time make a profit.

West Coast committee member Clifford C. Church, paleontologist for Tidewater Associated Oil Company and past National President of the S.E.P.M., attended a recent meeting in Denver where it was reported that 40 detection instruments are known to have been purchased by oil companies and geophysical companies to carry on the program.



EXECUTIVE COMMITTEE, PACIFIC SECTION  
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San Joaquin Representative:	Bob Johnston

Next deadline August 31, 1953



Mr. Harry Johnson, right, receives certificate of Honorary Membership in the A.A.P.G. from Homer Steiny at the geological luncheon on July 2 at Rodger Young Auditorium.

Mr. Steiny accepted the award for Mr. Johnson at a ceremony during the National Convention in Houston last March. The entire membership congratulates Mr. Johnson for receiving this tribute of recognition for his distinguished career in geology.

BOY SCOUTS PUBLICATION

The Boy Scouts of America have recently published an 83 page pamphlet on geology which is No. 3284 in the Merit Badge Series. It is an excellent brief survey of the science and is written in a style that will please the adult layman as well as the young reader. This pamphlet was prepared by a committee of the A.A.P.G., Frank Gouin, Chairman. It was written by Dr. Chalmer L. Cooper, U.S.G.S.; Dr. Robert C. Spivey, Shell Oil Company; Mr. Max W. Ball, Petroleum Geologist; and Dr. Carl C. Branson, University of Oklahoma. Copies may be obtained for 25 cents per copy by writing to Boy Scouts of America, 2 Park Avenue, New York 16, New York.

GEOLOGICAL LUNCHEONS

The Thursday noon Geological lunch in Ventura has moved from the Pierpont Inn to Spec's Broiler, 1015 N. Ventura Avenue.

Los Angeles geologists will find their friends on Thursday in Marcus Barbecue, 633 S. Olive.

WASHINGTON REPORT

Some 47 persons gathered at a picnic organized by Lou Hochman and Harry Jamison at Patterson Lake near Olympia, Washington on June 27 to pitch horse-shoes, yank little ones away from the edge of the lake, eat, drink and yak. Included were 16 geologists and 3 scouts representing Continental, G.P., Ohio, Richfield, Shell, Standard, the State of Washington Division of Mines and Geology and the Northwest Scouting Service.

Plans were made to hold another get-together in August and to have a series of professional meetings in the fall.

MONTANA FIELD CONFERENCE

Paul McGovney has advised that the Billings Geological Society will conduct their 4th annual field conference September 10, 11 and 12 in the Little Rocky Mountains of north-central Montana. Registration and reservation applications may be obtained from Tom Folsom, Honolulu Oil Corp., 612 So. Flower, Los Angeles, who can be reached at MADison 69243. Fifteen dollars should accompany registration applications to cover the cost of guide books, registration fee and a portion of the meal costs. Persons attending should plan to take their own sleeping equipment and plenty of warm clothing.

**PERSONAL ITEMS**

M. W. "Hank" Hankinson, who has been Chief Landman for Humble in California, has been promoted to Assistant Chief of Lands for the Humble Oil & Refining Co. and will be headquartered in Houston.

J. K. Bridges will be transferred out from Houston to replace "Hank" in Los Angeles.

Maurice Price is a new geologist for The Texas Co. in the L. A. Basin. He is a graduate of Redlands with a master's degree from Pomona.

Dan Sullivan, formerly geologist in Continental's Ventura Division, has been transferred to Bakersfield to assume the position of Division Geologist. Dan is widely known to all the older Bakersfield geological personnel as the fireball behind the now defunct "Geologist Baseball Team".

E. D. "Bud" Sherman resigned from Continental on July 16 to assume a position with Richard Rheem, Operator.

Paul Siemon, formerly a consultant in Bakersfield, has been employed by Continental in the Ventura Division.

Bud Ogle will open a district office in Denver for Wm. Ross Cabeen & Associates. C. Kimball "Kim" Ham, formerly of Union Oil Co., is now with Cabeen & Associates in North Hollywood.

Everyone is most envious of Honolulu's California Exploration Dept. for this fall they will be moving into their own brand new building to be erected in Bakersfield.

W. L. "Mat" Matjasic of Honolulu in Los Angeles, is going on a vacation trip covering some of the National Parks in the area of the now famous Short Creek polygamy colony of northern Arizona. He firmly maintains his vacation plans were made long before Short Creek skyrocketed into the headlines and is taking the wife and children along to prove he isn't hunting for another such colony.

Chuck Kirschner, Standard Oil Co. geologist in Alaska, recently had a harrowing experience when the bush pilot's light plane in which he was a passenger failed to make the runway at Cordova and landed in the middle of a lake. Chuck managed to remove his clothes and swim to shore where he was able to get aid to the pilot. Fortunately, neither was injured beyond a good soaking and chilling.

Vic Church's little six year old girl spent most of her vacation teaching her father how to catch mountain trout in the Kearsarge Pass area. Vic finally decided to review his glacial geology under the shade of a white fir and let his girl keep the family food box full of fish.

Leonard Swords, formerly with Western Geophysical in California, has been appointed by Union Oil as their Chief Geophysicist for West Texas Division.

Donald Minar, Shell paleontologist, Ventura, was married July 29th to Miss Marian Koontz of Lovell, Wyo. The ceremony took place on Lovell.

John Michelson has joined Otto Seal in Amerada's Rio Vista office. John was formerly a geologist in the Los Angeles office.

Brad McMichael of Standard Oil is now a resident of Seattle, Washington. Brad is a graduate of Washington University so knows when to carry an umbrella. Brad will be taking along a newly-arrived member of his family when he moves north - a Miss Valerie Marie McMichael, born July 3, 1953.

Ed Scott is now Chief Geologist for the Wiliston Basin Division of Union Oil with headquarters at Bismarck. He was formerly with Union in Houston.

Harry Stuvelling, Shell scout, has moved from Santa Cruz to the Los Angeles Basin to replace Elmer Hutchins, who, in turn, will take over the scouting duties of the northern coastal district.

Reports from the scouts have it that Bob Maynard's trim figure, clad only in white tennis shorts, may be seen occasionally at the Jastro Park tennis courts. It seems he is playing in company with Vic Church and Darrel Kirkpatrick who would "like to play longer but it's getting too dark".

Mr. & Mrs. M. Guy Edwards, consultant, are leaving about the middle of August for a trip around the world. Starting from the west coast they will visit Japan, China, India, Egypt and then remain in Europe for two months.

Claude E. Leach, assistant manager of T.W.A.O. Co. operations in Saskatchewan, has been named manager of the geological department, Mid-Continent Division.

Jim Cowell, Shell, has recovered from a plumber's strike and is now proceeding happily with the building of his new house. The plumber's strike was fortunate in that it gave Jim a little time to catch up on his golf, which has suffered a very serious setback while he has been breathing down the neck of his house builders.

Frank J. Karmelich has become associated with Westates Petroleum Corp. and its subsidiaries as Geologist and Engineer, and will be located at the company's headquarters in Kern Front Field. Mr. Karmelich was formerly with the Division of Oil and Gas.

Art Hawley, previously with Union Oil in Bakersfield, has joined Western Gulf's geological staff and will be working out of Sacramento for a spell.

On August 11th Bill Pemberton will be on his way again for another trek thru East Africa. He will fly to Nairobi on the east side of Africa by the Equator and from there begin his 2 months safari.

The popularity of the travelogue he has been giving on his first African trip is attested to by the fact that at last count he has presented it some forty times.

Doug Andrews, T.W.A.O. Co. in Bakersfield, is spending the summer in Ventura. Doug is living at the Pierpont Inn on expense account and hopes to prolong his present assignment at least until the 105° temperatures subside in the Valley. How lucky can you get?

Ted Fryer has been transferred from Standard's Sacramento office to American Overseas Petroleum, Ltd., in New York.

J. W. "Jack" Harding has moved into the Ferguson and Bosworth offices as consultant. He moved from Long Beach where he had previously worked for Hancock Oil. Jack is another former Bakersfieldite who is returning to the fold.

Donald P. Ripley, who has been with F. R. Anderson & Associates, has resigned to open consulting offices at 745 Batteravia Road in Santa Maria.

W. R. "Bill" Merrill, Standard Oil Co., Ojai, is moving to Bakersfield Sept. 1. Stan Kriz will replace Bill in Ojai.

Don Greenlee of Shell and Howard Pyle of Monterey Exploration Co. were crew members aboard the "Goodwill" on the Los Angeles to Honolulu yacht race. The "Goodwill", owned by Ralph Larabee of Huntington Beach, was the first boat over the line at Diamond Head although not the winner of the race because of its handicap. It is reported that Don's vocabulary of Hawaiian words has been considerably increased.

Bert L. Conrey is doing summer work for Standard in Los Angeles in between semesters at U.S.C. where he is working on his Ph.D.

D. D. Feldman will close their California geological offices about the first of August. Future plans of the geological staff are not known at this date.

#### NURSERY NEWS

Mr. and Mrs. Marshall Brown are the proud parents of a new 7 1/2 lb. baby boy, Garry, who was born in Berkeley on July 10. Marshall is a San Francisco consultant.

Mr. and Mrs. Jess Parsons - Texas Co. Taft office, are the proud parents of a baby daughter, Nancy, born July 29th.

Mr. & Mrs. Don Hibbard, Seaboard Oil Corp., Salt Lake City office, welcomed a baby boy, Gary Michael, born July 3.

Stale cigars (sic) were again passed out in Standard's Salinas office by George Starke in announcement of the arrival of Paul Lowell Starke, born July 17th.

John Yeager, from U.C.L.A., will work for Ohio Oil in the San Joaquin Valley.

The Richfield geologists in Ventura who were recently deprived of their ocean fishing privileges when they moved from the beach to their new Ojai office have found that life has its compensations. Reliable sources have it that Spence Fine watches out his office window until the Fish and Game fish planting truck goes by. He then grabs his tackle and dashes off to Sisar Creek and is generally successful in catching enough fish for supper.

Bud Oaks is working for Union Oil Company in Santa Paula this summer between an A.B. and M.A. degree at Cal.

Oceanic Oil Co. has employed two temporary summer replacements for general field work: Bates McKee from Yale and Hal Hollister from Stanford. Hal is a graduate petroleum engineer who plans to return to school for his Master's degree.

#### "WISH YOU WERE HERE" DEPARTMENT

Bob Paschall is vacationing in the Mammoth Lake area of the Sierras.

Bob Herron is at Lake George in the Mammoth Lake region.

Bob Kelly and family are dividing a week's vacation between Lake Arrowhead and Mammoth Lakes.

Lyle Smith has just returned from a month's vacation on the eastern seaboard with his wife and three children. They returned by automobile, driving a new Buick.

Glen Ledingham, Western Gulf, is on a three weeks vacation tour thru Western Canada after spending a few days in his home town of Vancouver, British Columbia.

Hank Neel and family are vacationing in the White Mountains.

**PACIFIC PETROLEUM GEOLOGIST  
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Vol. 7

No. 8

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"Eocene and Paleocene Deposits at Martinez, California". Charles E. Weaver. Pp. 1-102.

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#### Oil and Gas Journal

"Sixteen Discoveries in Two Years in the California's Santa Clara Valley". D. H. Stor-  
mont. July 20, 1953, p. 170.

World Oil. July 1953.

"Mistakes Can Be Costly in Geologic Correlation". Dr. Carl H. Moore. P. 109.

World Petroleum. July 1953.

"Oil Prospecting with Radioactive Methods". Hans Lundberg and George Isford. P. 40.

## **CALENDAR**

Aug. 13, 1953: Thurs. noon, S.E.G. Luncheon, Rodger Young Auditorium, 936 W. Washington Blvd., Los Angeles. Mr. E. T. Howes of United Geophysical Co. will speak on "Well Velocity Surveys and Instrumentation".

Aug. 17, 1953: Mon., 7:00 P.M., A.A.P.G. - Pacific Section Forum, General Petroleum Auditorium, Los Angeles. Mr. L. O. Heintz will speak on the "Northern Portion of the Santa Fe Springs Oil Field" and Mr. W. K. Barker, a geologist for the Union Pacific Railroad, will speak on "Possible Oil Bearing Structures in Southern Wyoming".



Mr. F. R. Neumann  
381 E. 4th St.  
Chico, Calif.

**EXECUTIVE COMMITTEE, PACIFIC SECTION  
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**PACIFIC PETROLEUM GEOLOGIST**

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San Joaquin Representative:	Bob Johnston

Next deadline September 28, 1953

**LAST CALL PACIFIC SECTION DIRECTORY REVISION DATA**

September 15 is the last day for submitting changes or new data for the 1953 Directory of A.A.P.G. - S.E.G. - S.E.P.M. Pacific Section membership. New members who have not submitted directory revision data should send immediately to R. E. Faggioli, Humble Oil & Refining Co., 612 S. Flower, Los Angeles 17, the following information: name, college, degree(s), year(s) obtained, company affiliation, position, business phone and one of the following: a) a suitable, clear, glossy print which will trim to 3/4 x 1" and leave the tie knot showing or b) a clear picture suitable for reduction plus \$1.00 to cover reduction costs.

**PERSONAL ITEMS**

Bill Quackenbush of Continental has been promoted to the position of Division Geologist, Los Angeles Division. Bob Kelly will assume other duties for Continental with title of Senior Geologist.

Bill Easton has returned to U.S.C. after a year's absence during which time he worked on the stratigraphy and paleontology of the Big Snowy Group and Amsden formation of the Williston basin for the U.S. Geological Survey.

Mr. and Mrs. Paul Howard have been enjoying an extensive tour of Mexico by car this summer. Paul should be fair game for program chairmen as a dinner meeting speaker as he has taken more than 400 color slides on his trip.

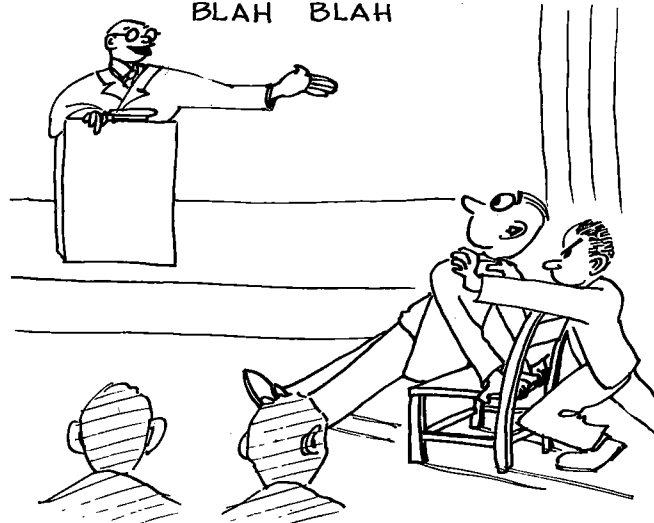
Donald Frames, a recent graduate of Univ. of California at Berkeley, has been employed by General Petroleum to work in their Bakersfield geological office.

The many friends of Ohio's Glen Gariepy will be sorry to learn of his transfer to Shreveport, La. Glen assumes the duties of Assistant Division Manager on September first. He is being replaced by R. G. "Bob" Kurtz from San Antonio.

# ANDY CLINE by Sullwold

...AND NOW, GENTLEMEN, WE ARE FORTUNATE TO HAVE WITH US ANDY CLINE, THAT GREAT GEOLOGIST AND DELIGHTFUL SPEAKER, WHO IS ALWAYS EAGER TO IMPART TO HIS FRIENDS.....

BLAH BLAH



Richard Thorup, King City consultant, stopped in San Francisco on his return trip after spending more than a month in the Denver-Julesburg basin.

Bill Cunningham and family, Brazos, enjoyed a three weeks' vacation in Honolulu last month. Mr. and Mrs. Emmett Wolter of Signal were in the Islands at the same time.

Don Six, Texas Company geologist, has been transferred from Danville to Taft. Doug Thamer has temporarily assumed Don's duties.

Glenn Lansing, Tidewater geologist, inadvertently timed his vacation on Orcus Island, Washington, to fall between the silver and king salmon runs.

Walt Gerhard, Amerada, is moving from Solvang to Ventura where he will assist Bob Paschall.

"Kit" Carson, who, incidentally, has moved downstairs to a bigger office at 455 E. Main St., Ventura, announces that he has very few of the syllabi left of the April S.E.P.M.-A.A.P.G. field trip. These are available for \$1.00. When they are gone there will be no more.

Dec Ford is leaving Continental Oil Company in Ventura to go to Spain for DeGolyer and McNaughton. He expects to be there at least one year. There is no truth to the rumor that the Ventura Association of Barkeepers and the Single Ladies Society have declared a one month's period of mourning because of Dec's impending departure.

Bruce Robinson of Bishop Oil Co. is reported to be recovering nicely after a recent appendectomy. Bruce says it will probably be sometime in the latter part of 1954 before his doctor will allow him to help lay out cores.

## CALENDAR

Floyd Johnson, Western Gulf Oil Co., is now located at 703 Cushing St., Olympia, Washington. Floyd allows he will do some driving as his territory includes both Oregon and Washington.

Naval Reserve Officers Frank Noble of Union, Bob Anderson of Honolulu and Jack Kappler of Tidewater spent two weeks flying for the Navy this past month.

The Central California Oil Scouts had an "Up the River" barbecue on August 15th. Yale Longworth was chef for the affair and did himself proud. The card-playing members of the group were very much relieved to discover that the stranger with the badge was only a Forest Ranger.

National A.A.P.G. President John Emery Adams of Standard Oil of Texas was a welcome visitor to the main offices of Standard of California at San Francisco this past month.

Russ Simonson, our A.A.P.G. - Pacific Section President and John Hazard have been in Alaska since July but to date we have received no reports of their tangling with a Kodiak bear.

E. F. "Fritz" Davis, Los Angeles consultant, fulfilled a lifelong dream when he left September 2nd for a month's vacation in Spain.

Wayne Denning, a supervisor with United Geophysical for many years, has retired to live at Morro Bay. From now on golf is the order of the day. He concluded his active service with United by making a trip to Egypt this summer.

### NURSERY NEWS

Mr. and Mrs. Marc O. Miller, Continental Oil Company, are the proud parents of a 10 lb. boy, Michael Emery, born August 6.

Ann and Ed Robbins, a boy, Alan Scott, born May 11. Ann has recently returned to work as geologist in Continental's Los Angeles office.

Ernie Hoskins, Shell Oil Company, proudly announces the birth of a son, Clifford Henry, on August 29, 1953. Cliff weighed in at 7 lbs., 8 oz. and is 22" long.

Mr. and Mrs. Bill Bishop, Richfield, Ventura, a daughter, Dawn Druey, 9 lb., 5 1/2 oz., born July 5, 1953.

Mr. and Mrs. Mark M. White, Standard's Los Angeles Paleo Lab, announced their fourth child (first boy), Mark William, on August 20th.

Mr. and Mrs. Ray Pearson, Richfield at Los Angeles, have a new baby daughter, Dore Marie, born July 12th.

Bob and Mary Galeski with Honolulu in Bakersfield are happy to announce David Anthony's birth on August 28th. Little David becomes their fourth boy along with three girls.

Eric and Florence Jacobsen, Standard Paleo Lab of Los Angeles, welcomed Eric Crawford, Jr. on July 31st. Junior has a brother and sister.

Lloyd and Teresa Louise Derry, Standard's Los Angeles Paleo Lab, have named their new little girl, born July 28th, Maureen Dolores.

Les and Darlene Schultz of General Petroleum, a 6 1/2 lb. boy, Steven Leslie, August 18.

Mr. and Mrs. Don Barrett, General Petroleum Sacramento office - baby boy, July 14, 1953.

Sept. 10, 1953: Thurs. noon, Pacific Section A.A.P.G. & S.E.G. Joint Luncheon, Rodger Young Auditorium, 936 W. Washington Blvd., Los Angeles. "Logging Problems Associated with Oil Base Muds". Panel discussion: Mel Hill, Western Gulf Oil Co.; Art Curran, Schlumberger Well Surveying Corp.; Shannon Baker, Lane-Wells Co. and Thad Randolph of Oil Base, Inc.

Sept. 14, 1953: Mon., 7:30 P.M., S.E.P.M. Meeting, Edison Bldg. Auditorium, 601 W. 5th St., Los Angeles. Speakers: Merle Israelsky, U.S.G.S., "Possible Arenaceous Markers in the Lodo Formation". Stewart Edgell, Stanford U., "Stratigraphy and Paleontology in the Northwestern Basin - Australia".

Sept. 15, 1953: Tues., 7:00 P.M., Coast Geological Society Dinner Meeting, Miramar Hotel, Santa Barbara. Mr. Mason Hill will speak on "Lateral Faulting".

Sept. 19, 1953: Sat., 7:00 P.M., A.A.P.G. Coast Geological Society Dinner Dance, Montecito Country Club, Santa Barbara.

Sept. 28, 1953: Mon., 7:30 P.M., A.I.M.E. Petroleum Technology Forum, General Petroleum Auditorium, Los Angeles. Mr. William Eggleston, Chief Petroleum Engineer of Union Oil Co., "Value of a Barrel of Crude Oil".

Oct. 8, 1953: Thurs. noon, S.E.G. Luncheon, Rodger Young Auditorium, 936 W. Washington Blvd., Los Angeles. Mr. Benson, Pres. of Benson-Lehner Corp., will speak on "Application of Information Theory to Geophysics".

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#### Oil and Gas Journal

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#### World Oil

International Operations Issue with Colored Map of Columbian and Venezuelan Oil Fields. August 15, 1953.

# PACIFIC PETROLEUM GEOLOGIST

## NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 7

September 1953

No. 9

### ASSOCIATION ACTIVITIES

#### A.A.P.G. FORUM

The meeting held at the General Petroleum Auditorium August 17 was opened by Mr. W. T. Rothwell of Richfield Oil Corporation, who presented his talk on "Age or Biofacies Correlation in Petroleum Geology". This interesting paper was presented at the A.A.P.G.-S.E.P.M.-S.E.G. joint annual meeting at Houston in March of this year and also previewed at a Pacific Section S.E.P.M. meeting earlier in March. It represents the results of extensive interest and research regarding the significance of changing environments within a geologic formation as reflected by fossil fish scales and other microfauna such as foraminifera and ostracods.

In regard to the interpretation and use of such ecologic units within a formation, it was pointed out that ecologic "biofacies" zones frequently have little age significance with regional change in geographic position in a basin although they have been commonly used as "time zones" in local California stratigraphic correlations.

The speaker also emphasized that different basins of deposition may have different histories inasmuch as the environment of one basin may grade from a shallow water facies at the bottom to one of deeper origin at the top, whereas another may reflect deeper conditions at the base and shallower toward the top.

In conclusion, Mr. Rothwell suggested that the use of fossil fish scales parallels that of fossil tree leaves in paleobotany. Fish scales generally can be identified only down to genus and tend to indicate gradually warmer surface waters backward in time to the upper Eocene.

The paper was ably supported by several charts which graphically illustrated the various marine life zones, along with their principal faunal components, to be found along the Pacific coastal area.

The second speaker, Mr. W. K. Barker, geologist for Union Pacific Railroad, presented a comprehensive review of oil prospects in southern Wyoming with a talk entitled "Possible Oil Bearing Structures in Southern Wyoming".

Mr. Barker showed a slide of a structural map of southern Wyoming on which were indicated the axes of over one hundred anticlines. This was followed by a brief discussion of the size, amount of closure, surface rocks, subsurface geology and previous exploration activity of most of the structures. Geologic maps and cross sections were exhibited for closer study by members of the audience following the talk. The speaker pointed out that of the 100 or more structures found in southern Wyoming, over half are untested or inconclusively tested.

#### COAST GEOLOGICAL SOCIETY DINNER DANCE

On Saturday, September 19, the Coast Geological Society will hold its very popular Annual Dinner Dance at the Montecito Country Club in Santa Barbara. A tariff of \$3.75 per person has been set, payable to Coast Geological Society c/o Johnny Curran, 1500 Chapala, Santa Barbara. Reservation cards will be mailed to members.

#### OFFICER NOMINATIONS ANNOUNCED BY A.A.P.G.

Edward A. Koester, consulting geologist, Wichita, Kansas, and Karl A. Mygdal, Pure Oil Company geologist, Chicago, Illinois, candidates for president, head the list of candidates for 1954-55 offices of The American Association of Petroleum Geologists, as revealed in the report of the nominating committee released by John Emery Adams, president of the Association. Other nominees are: for vice-president, Graham B. Moody, Standard Oil Company of California, San Francisco, and Walter H. Spears, Union Producing Company, Shreveport, Louisiana; for secretary-treasurer, William A. Gorman, Rycade Oil Company, Houston, Texas, and Elliott H. Powers, present secretary-treasurer, Southern Production Company, Fort Worth, Texas; for editor, Armand J. Eardley, incumbent, University of Utah, Salt Lake City, and W. T. Thom, Jr., Princeton University, Princeton, New Jersey.

A.A.P.G. president Adams points out that additional nominations may be made by written petition bearing the signatures of 50 or more Association members received at A.A.P.G. headquarters in Tulsa, Oklahoma not later than November 15, 1953.

#### COLLEGE LUNCHEONS

Arrangements have been made for college luncheons to be held during the convention at the Biltmore Hotel on November 6 for alumni of U.C.L.A., Cal., U.S.C. and Stanford. Alumni from other schools interested in a luncheon reunion should make their own arrangements and notify George Feister so that notices and sign-up lists can be provided at time of registration.

#### AN INVITATION TO DANCE

Dance Chairman Bill Kennett announces that members and guests are cordially invited to attend the annual A.A.P.G. Dinner Dance in the Biltmore Ballroom on November 6. Here is your chance to relax and enjoy yourselves to the music of Bruce Hudson and his orchestra till the wee hours of the morning in the arms of your wife, your girlfriend or other geologists' wives. There will be tables accommodating groups from 10 to 16 or more. Plan your table group now and make your reservation early.

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# PACIFIC PETROLEUM GEOLOGIST

## NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 7

October 1953

No. 10

### ASSOCIATION ACTIVITIES

#### S.E.P.M. MEETING

Messrs. Merle C. Israelsky and Stewart Edgell were guest speakers at an evening S.E.P.M. meeting held in the Edison Auditorium, Los Angeles, on September 14.

Mr. Israelsky, the first speaker to be introduced by Chairman Orville Bandy, briefly outlined his work on the arenaceous foraminifera of the Lodo formation outcropping near the junction of Silver and Panoche Creeks in the Tumey hills, Fresno County. For the purpose of defining possible markers within the Lodo formation, the speaker selected nine species of arenaceous foraminifera from an assemblage of sixty-six. These forms were described and effectively illustrated by a lantern slide which showed, in addition, their relative vertical range in feet within the type Lodo. Mr. Israelsky emphasized, however, that he had no control on the lateral range of these species away from the type locality.

The second speaker on the program, Mr. Stewart Edgell, formerly with the Australian Bureau of Mineral Resources and presently a graduate student at Stanford University, spoke on the stratigraphy and paleontology of the Northwestern Basin, Australia.

This large sedimentary basin, which is about 1000 miles long and some 200 miles across, contains a section of approximately 18,000 feet of strata. Anticlinal structures studied within the basin include Cape Range anticline, about 60 miles in length and located near the coast, and, in an easterly direction, the Rough Range, Giralia and Marrilla anticlines. The Rough Range anticline is now being tested by Caltex. This well is the first exploratory hole to be drilled in the Northwestern Basin.

The sedimentary section in this basin overlies pre-Cambrian basement rocks and includes beds of Devonian, Carboniferous, Permian, Cretaceous, lower Tertiary and Pliocene age. The Cretaceous-lower Tertiary transition proved to be particularly interesting. By means of lantern slide illustrations of the outcrop, the speaker described the transition from about 500 feet of Lower Cretaceous (Cenomanian) radiolarian silt upward through a 100-foot *Inoceramus* bed (in which *Inoceramus* specimens ranging up to 3 feet in length have been collected), to a 10-foot ammonite bed which in turn grades conformably through a thin glauconitic green sand transition zone into beds of the lower Tertiary.

Mr. Edgell noted that the Cretaceous-lower Tertiary break is marked by the extinction of a great number of Cretaceous foraminifera and the rapid development of many Paleocene forms. He also pointed out the marked similarity between the upper Cretaceous microfaunal assemblages of Australia and California.

Mr. Edgell concluded his interesting talk by showing a number of color slides which gave the audience a good concept of the type of terrain to be met by the field geologist in western Australia.

#### SAN JOAQUIN CHAPTER MEETING

Mr. Mortimer A. Kline of the Los Angeles law firm of Kline, Barton and Stanley presented an outstanding talk to the San Joaquin Valley Geological Society entitled "Legal Phases of the Petroleum Industry Which Every Geologist Should Know". The meeting, held at the El Tejon Hotel in Bakersfield, September 15, 1953, attracted a turnout of over 90 members.

Mr. Kline began by summarizing a few of the accepted fundamentals such as the fact that owners of oil and gas rights, as separate from owners of surface rights, have the sole and exclusive legal right to produce petroleum found beneath their property. They may, of course, sell any fraction or interest in this right. The owner of subsurface rights has an unlimited right to access, even if considerable damage is done to surface installations, to produce or to search for petroleum deposits located under his property. Furthermore, he can seek and obtain damages for any trespass; which, in this instance, includes unauthorized geophysical work which may damage the "saleability" of oil and gas rights as well as outside bore holes which cross into his property. This ownership of oil and gas rights, however, does not imply absolute title to "oil in place", for the courts long ago decided that petroleum was a transient mineral and belonged to the person or persons who produced it, irrespective of whose property was drained - the familiar "Rule of Capture".

Oil and gas leases, as distinct from the ordinary real estate leases, are a conveyance of, or interest in, the subsurface rights of certain property. California leases generally are the most refined in the oil industry and normally contain the following clauses:

1. Statement regarding the time allowed to either procure production, commence paying rent, or quitclaim the lease - the Primary Term.
2. Duration of the lease after production is found.
3. Royalty clauses which include provisions relative to the division of petroleum produced and owner's portion and terms of payment.
4. Development provisions which govern well spacing, the rate at which development wells must be commenced and obligations to drill offset wells.
5. Termination clauses which may be automatic unless certain provisions of the lease are fulfilled, or may give the lessor a right to damages.
6. The obligation of the lessee to continue operation of the property as long as "Paying Quantities" of petroleum are obtained also is included. The definition of "Paying Quantities" does not imply that the lessee should receive profit, rather, that he obtain sufficient petroleum to cover operating expenses. However, the lessee need not continue development or abide by offsetting clauses on property that offers no hope of paying out such drilling costs.



EXECUTIVE COMMITTEE, PACIFIC SECTION  
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

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PACIFIC PETROLEUM GEOLOGIST

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Editor:	Bob Kelly
Assistant Editors:	
Activities:	Ben Lupton
	John Ruth
	Paul Elliott

Personal Items:	
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San Francisco Representative:	Bob Anderson
San Joaquin Representative:	Bob Johnston

Next deadline November 2, 1953

7. In town lot areas, pooling clauses are included which permit the lessee to group individual land parcels so as to economically develop the property. Individual owners then receive a royalty proportional to the amount of land they own in the block.

Mr. Kline cautioned the members of the audience to comply with the California Corporate Securities Act by obtaining a permit from the Corporate Commission prior to the sale or purchase of any royalty. He further stressed the necessity of title examination and recording of leases.

The inadequacy of the California Public Resources Code, in regard to compulsory unification of a petroleum reservoir, was brought out by reference to the Paloma Unit's petition to obtain co-operation in the pressure maintenance program at the Paloma Field. In this case a compulsory unitization was denied by the State Supreme Court. In Mr. Kline's opinion a similar case concerning operations of the Aliso Canyon Field will have a comparable decision rendered.

MEETING OF NORTHWEST GEOLOGISTS

Mr. Sheldon L. Glover, Supervisor, Division of Mines and Geology, State of Washington Department of Conservation and Development, spoke on "Past Exploration for Oil and Gas in Washington" at a dinner meeting on September 28 in Olympia.

Some 55 men attended this meeting and a group, non-affiliated at present, to be known as The Northwest Geological Society, was brought into existence.

The following officers were elected:  
Pres.: Grant Valentine (Shell Oil Co.)  
Sec'y.: Marshall Huntting (Washington State Div. of Mines & Geology)  
Treas.: Ivor McCray (Shell Oil Co.)

COAST GEOLOGICAL SOCIETY DINNER MEETING

The regular dinner meeting of the Coast Geological Society was held September 15th at the Miramar Hotel, Montecito. Mr. Mason Hill, Richfield Oil Corporation, presented his very interesting talk on "Lateral Faulting". This talk was especially interesting to coastal area geologists because the "type locality" of several of Mr. Hill's examples of lateral faulting are located in the coastal area.

NEWLY ESTABLISHED PUBLIC INQUIRIES OFFICE  
U. S. GEOLOGICAL SURVEY

U. S. Geological Survey Oil and Gas Maps, geologic maps, base and topographic quadrangles of California, Nevada and Arizona may now be purchased in over-the-counter sales at the new Public Inquiries Office of the Geological Survey, Room 529, Postoffice and Courthouse in Los Angeles. Survey publications, including recent bulletins and professional papers on this area, may also be purchased in this office. Mail Orders for maps should be directed to the Geological Survey, Federal Center, Denver, while publications should be ordered directly from the Superintendent of Documents in Washington, D.C.

The new office also has a reference library of Survey publications including most out-of-print numbers, Geological Folios, and acts as a depository for Open File Reports on areas in this part of the country.

NATIONAL CONVENTION PROGRAM PLANS

A. H. Bell, Technical Program Chairman for the national A.A.P.G. meeting in St. Louis next April, announces that the Great Plains Region will be the main theme for study. In addition, there will be a symposium on Oil and Gas in Continental Beds and another on Oil Fields with Tilted Oil-Water Contact. Pacific Section members having suggestions as to qualified authors on either of the symposia subjects are asked to contact C. W. Johnson, Richfield Oil Corporation, Pacific Coast member of Mr. Bell's committee.

COAST GEOLOGICAL SOCIETY DINNER DANCE

The Coast Geological Society annual dinner dance was held September 19th at the Montecito Country Club, Santa Barbara. The dance was attended by more than 100 persons, all of whom had a fine time. The enjoyment of the evening was greatly enhanced by the pre-dinner cocktail hour provided by the following concerns: Baroid Well Logging Service, Eastman Oil Well Survey Co., G. B. Ellis & Associates, Johnston Testers, Inc., McCullough Tool Co., Rapid Blue Print Co., Schlumberger Well Surveying Corp., Technical Service Co., Ventura Blueprint Co.

SCOTCH EXPERT TO TALK

U.C.L.A.'s Geological Society invites all members of the geologic profession to their next evening lecture to be held on October 21 at 8:00 P.M. in Room 2224 of the Chemistry Building.

The lecture (with colored slides) will feature the geology of Scotland. The speaker will be Max Carmen, Fulbright scholar recently returned from a year in Scotland where he viewed many classic geological phenomena. Carmen is a U.C.L.A. graduate, 1948, and at present is a candidate for Ph.D.

CAL NEWS

Thirty one students in the University of California's Summer Field Course under direction of Dr. N. L. Taliaferro spent part of their time mapping the San Andreas quadrangle. This is the first year they have worked in this area and will spend two more years completing the quadrangle.

C. G. Higgins has been transferred to the University of California at Davis where he will open a one man geological department this fall.

Dr. Myers, formerly of Anaconda Copper Company, has accepted a full professorship at California. For the most part he will teach courses in mining geology.

U.C.L.A. NEWS

"Chips fly as U.C.L.A. geologists probe Earth's secrets".

The U.C.L.A. Summer Field Camp was again located in the Mineral Hill Quadrangle, Eureka County, Nevada. Under the guidance of C. A. Nelson, D. Carlisle, A. C. Daley and M. A. Murphy, some 40 students spent six weeks mapping in an area largely covered by Paleozoic rocks. The perplexities of the geologists were alleviated somewhat by hot spring facilities near the campsite, a feature notably lacking from previous camps. (Anyone recall Cortez?) This makes the third consecutive year the U.C.L.A. camp has been at Mineral Hill and the staff hopes to produce a detailed map for publication soon.

Research activities of the faculty at present lean mostly toward hard-rock investigations. Perhaps the project of most direct interest to the oil fraternity is that of Jerry Winterer, who has resigned from the U.S. Geological Survey and is now a full-time member of the faculty. He has completed field work for a Survey Bulletin on the geology of the southeastern Ventura Basin, and the manuscript is to be submitted immediately.

D. I. Axelrod is returning from a sabbatical leave during which time he completed his manuscript for a G.S.A. Memoir on a study of five Miocene-Pliocene floras of west-central Nevada. This is a partial result of over ten years of field work and will include descriptions of twelve new formations.

Bill Putnam has nearly completed field work on the Pleistocene history of the Owens Gorge area. Results include close dating of some very recent faulting and recognition of only three glacial stages, instead of four as he had previously believed.

Cord Durrell spent the entire summer continuing field work on the Blairsdien quadrangle in Plumas County.

John Crowell, away on sabbatical leave in Austria with his family through the courtesy of Fulbright and Guggenheim Fellowships, reports that he is having the experience of a lifetime, both geologically and otherwise, and that the whole family can live very nicely on four or five dollars per day. During his absence his course in petroleum geology is being taught by Harold Sullwold, temporary member of the faculty and graduate student.

"General" Grant claims he is slowing down in his old age and has only written three papers this year, so he took a vacation trip to the high Sierra.

W. P. Popenoe taught in the summer session, spent five weeks collecting Paleozoic fossils in the Corn Belt, and is hoping his paper on the Cretaceous section in the Simi Hills will be published next year.

George Tunnell and graduate student Frank Dixon have been doing field and laboratory work on the genesis of quicksilver. This work is of a fundamental nature on origin of ore deposits, and they have completed an equilibrium diagram on the system  $HgS-Na_2S-H_2O$ , the first of its kind ever completed.

Joe Murdoch worked on the x-ray structure of scawtite, a mineral new to California, which he discovered at Crestmore. He is also continuing study of phosphate minerals from Brazil.

Ken Watson was in the field all summer in Canada. He worked on uranium deposits near Lake Athabaska for the Dome Exploration Company and then to British Columbia where he tackled the Tulameen ultra-mafic rocks and the Copper Mountain stock.

Hugh Hunter, another Canuck, spent the summer in the Grenville Lake mining district in northern Manitoba, where he mapped in basic intrusive rocks for nickel deposits for the Manitoba Department of Mines and Natural Resources.

Clem Nelson and Don Carlisle led the charge on Mineral Hill for the summer field session. Nelson is also working on the Cambrian stratigraphy of the Inyo Mountains. Carlisle's pet research is geochemical prospecting, but he has also figured out a new armchair technique, namely writing papers on mineral economics.

While not strictly members of the geology faculty, two new names are definitely news items. George Kennedy, former Professor of geology and Professor of geochemistry at Harvard, is now a Professor in the Institute of Geophysics. His field is the application of the basic sciences to problems in geology, such as the physical chemistry of sedimentary rocks, stability fields of minerals, phase diagrams, origin of igneous and metamorphic rocks and vein minerals, etc. We also have a Guggenheim Fellow working on crystal structure with a three-foot slide rule. He is Professor L. G. Berry from Queens University, Kingston, Ontario.

Several faculty members have contributed papers to the guidebook under preparation for the G.S.A. convention in the fall of 1954. This guidebook is to be published by the Division of Mines and will contain a wealth of information on California geology. Contributors include Grant, Crowell, Winterer, Popenoe and Carlisle.

U.S.C. NEWS

The Summer Field Geology class of the University of Southern California transferred back to the Coast Ranges this year, after two summers in the Illipah Quadrangle near Ely, Nevada. Twenty-six senior students, under the direction of Dr. Richard H. Merriam, assisted by Professor Fred Gros of Redlands University, have been mapping part of the Tepusquet Quadrangle near Santa Maria. Headquarters have been at the College of Aeronautics at Hancock Field. Rumors that the recent fire in the area had been started by a frustrated student trying to see what the rocks were, if any, under seven feet of chaparral, are quite unfounded!

Drs. Thomas Clements and John Mann of the U.S.C. Geology Department, together with graduate students Richard O. Stone and James L. Eymann, have been carrying on research on wind-blown sand in the desert for the Army this summer. Highest temperature reported so far was 118° riding in a jeep across the Devil's Golf Course in Death Valley in July. The record is 134° so this was relatively cool.

Dr. K. O. Emery and Dr. Orville L. Bandy have been on campus during the summer. Ken has been finishing some reports on the submarine geology of Guam and Japan for the U.S. Geological Survey. Orville is completing work on the ecology of Recent foraminifera of the basin areas off southern California. This work is being done as part of his research program in the Hancock Foundation.

STANFORD NEWS

The Stanford Summer Geology class under the direction of Dr. Robert Compton divided its time between an area in the California Coast Ranges and a mining district in Nevada. During the first part of the summer the class mapped in the northern part of the Hunter Liggett Military Reservation near King City. The latter half was spent in the Santa Rosa Mountains, Humboldt County, Nevada.

Dr. Frank Miller, formerly with the U. S. Bureau of Mines, is the new professor of Petroleum Engineering, replacing Dr. Hughes.

Dr. Arthur Howard is spending a sabbatical year in the Netherlands. He will be in The Hague for the greater part of the time and will be studying current methods in photogrammetry.

Professor C. O. Hutton will leave at Christmas time on an extensive trip to collect minerals in the South Pacific. He is going on a Guggenheim Fellowship and will be in Australia, New Zealand, Malays, the Fiji group, etc.

Professor K. B. Krauskopf is returning to Stanford from a year in Norway where he did research in geochemistry under Professor Tom Barth at the University of Oslo.

Professor Charles Park has returned from a year's sabbatical leave to resume his duties as Dean of the School of Mineral Sciences. Dean Park was in South America engaged in ore deposit studies.

## PERSONAL ITEMS

Los Angeles' loss is Bakersfield's gain, for Wally Matjasic of Honolulu has turned his back on the smog to return to his old stamping grounds. He will live at 1778 Glenwood Court.

During the past month two of Amerada's geologists became benedicts - Robert A. Teitsworth of the Los Angeles office and John Michaelson of the Rio Vista office.

The T.W.A.O. Co. Geological Dept. and Land Dept. in Ventura have moved out of the Ventura District Production Dept. offices and are now conducting operations from their plush new offices at 799 N. Olive St. The mailing address, P. O. Box 811, and telephone number, Miller 3-2154 remain the same.

Ken Krammes of Intex presented the first lecture in the Petroleum Engineers Seminar Series at Bakersfield, September 28th, sponsored by the Bakersfield College and the American Petroleum Institute. Ken covered the entire valley with the heading, "Structural Geology of the San Joaquin Valley", but forgot to discuss the locations for drilling any untested places.

Western Gulf and T.W.A.O. Geological Depts. in Ventura are now playing "freeze out" to see who will hold open house in their new offices first.

Hampton Smith, Los Angeles consultant, is spending a month in Turkey working for the Turkish Government and then will make a leisurely trip home with his family by way of Europe.

Union's Harvey Lee, while on an extended vacation trip through the Rocky Mountain States, has kept his many friends chuckling with his usual barrage of funny postcards.

Vincent W. Vandiver, exploration geologist for the Western Division of Seaboard Oil Company of Delaware, is being transferred to Dallas, Texas as of October 15, 1953, according to an announcement by N. A. Rousselot, Vice-President and Manager of the Western Division. His new duties will be as assistant to R. A. Stehr, Vice-President and Manager of Exploration for Seaboard, with offices in the Continental Building, Dallas 1, Texas.

Dr. Herbert Skolnick, Ph. D., University of Iowa 1952, has been transferred from Gulf Oil Corp. to Western Gulf and will work in the Ventura area.

Ralph Arnold of 1205 Wilson Avenue, San Marino is moving to 3182 Calle Fresno, Santa Barbara. He kindly invites all members of the A.A.P.G. to avail themselves, gratis, of the varied contents of his garden. Appointments for gardening may be made by phoning Pyramid 1-2655.

Richard S. Rheem, Operator, has added a new geologist to the staff in Bakersfield. Jim Mercie, a graduate of Colorado School of Mines, is now a resident of Bakersfield and will work with Al Kerr.

Justin Hall, a graduate of Whittier College, has joined the ranks of geologists for Humble in Los Angeles.

Bob Nesbit has left The Texas Company in Santa Paula and is now with M.J.M.&M. in Ventura.

Lesh Forrest visited several former Californians while on a quick trip to Billings, Montana. Paul McGovney of Honolulu Oil Corp. appears to be in good health and just completed a fine job of directing the last field conference of the Billings Geological Society in the Little Rocky Mountains.

We are very sorry to hear that Loren Angel with The Texas Company in Taft will be confined to a hospital bed for the next two months. He underwent an operation for a very painful herniated disc of the spinal column. We know he would appreciate a note or a visit at the Mercy Hospital in Bakersfield.

Jack Barr has seen the light (sic) and has joined the geological ranks after transferring from the geophysical department with Standard Oil in Bakersfield.

The new coastal district headquarters of the Western Gulf Geological Dept. is now open for business in Ventura. Gordon Bell, who is in charge, announces that their new mailing address is 2405 Thompson Blvd. and their telephone number is Miller 3-2296. The Santa Maria office will be maintained by Ilif Anderson and Paul Day.

W. H. "Bill" Geiss, Los Angeles consultant, is leaving this month with wife and daughter for the Orient on a trip around the world.

Dave Calloway is now with Oceanic Oil in Bakersfield. Dave comes from the hard rock country around Minneapolis and is looking forward to the heavy snows in Bakersfield.

Jim McDonald, who for the past year and a half has been with Humble in Bakersfield, is now headquartered at the Los Angeles offices.

Ed Uren, U.C.L.A. 1952, has been transferred from Bakersfield to the Ventura office of Western Gulf.

If you find it necessary to use a saw horse or ladder in the Pullmans running between San Francisco and Bakersfield, you might check the trophy desks around any of the Tidewater offices for the enticing little footstools so peculiar to railroad trains.

Horace Goodell, formerly a geologist for Cypress Oil in Los Angeles, has moved to Denver to open his own consulting office.

Manley Natland and Bill Bishop were fleetingly seen flitting about New York City on their way to Arabia. Their creditors will be pleased to know that they can be reached at the following address:  
 American Foundation, Salalah  
 c/o The Air Officer, Commanding  
 HQ British Forces  
 Aden, Arabia

In the absence of Natland, Spence Fine is oscillating between Ojai and Los Angeles trying to keep the Richfield Oil Corp. on its feet.

Warren Cebell, a recent graduate of the University of Southern California, has gone to work for Amerada in Bakersfield.

Bill Whitley, now district geologist for Intex at Tyler, Texas, is in California as part of a program to familiarize their men with operations in other areas. Bill will coincidentally take his vacation at the end of his tour in California and catch up on all the goings-on of his pals in his former company - General Petroleum.

Ted Ellsworth with Geophysical Service, Inc. has been transferred to Dallas, Texas as assistant manager to Bob Dunlap who is also well known to many in California. Temporarily, Bob Dyk, an old Bakersfieldite, will keep an eye on Californis for G.S.I. from his main office in Denver, Colorado.

#### NURSERY NEWS

"Pete" and Barbara Gardette, he of the Pasadena consultants, have a new baby boy in their family as of October 1. Little Christopher William, to be known as "Kit", has a brother.

Mr. and Mrs. Eric Phillips, Western Gulf, Ventura, a boy, John Barker, born September 22.

Mr. and Mrs. Joseph Ernst, Texas Company, Santa Maria, a girl, Susan Alice, born September 1, 1953.

Ann and Tom Macleod, Bell Petroleum, Los Angeles, welcomed their first-born, Thomas III, in the early hours of June 12.

Jack and Fairie Decker, General Petroleum, Bakersfield, TWINS, Teddy and Eddy, born Sept. 21.

## CALENDAR

Oct. 13, 1953: Tues., 6:00 P.M., A.A.P.G. San Joaquin Valley Chapter, Spanish Ballroom, El Tejon Hotel, Bakersfield. Tom Rathwell will speak on "Age or Biofacies Correlations in Petroleum Geology".

Oct. 15, 1953: Thurs. noon, A.A.P.G. Pacific Section Luncheon, Rodger Young Auditorium, Los Angeles. Mr. H. K. Armstrong, Consulting Geologist and Engineer, will speak on "European Byways". A tour of Europe illustrated with colored slides.

Oct. 19, 1953: Mon., 7:00 P.M., A.A.P.G. Pacific Section Forum Meeting, General Petroleum Auditorium, Los Angeles:

1. "Geology of Northern Portion of Santa Fe Springs Field". Mr. L. O. Heintz of the St. Anthony Oil Corp.

2. "Geology of the Puente Hills Oil Field". Mr. Read Winterburn, Chief Petroleum Engineer of Union Pacific Railroad.

3. "The City that Disappears", a 16 mm sound film about the research that has been done by the Stanford Research Center into the complexities and problems of the smog situation.

Oct. 20, 1953: Tues., 6:30 P.M., A.P.I., Stockdale Country Club, Bakersfield. Barbecue dinner to be followed by an interesting discussion of the "Pipeline Problems in South America", by Al Alcorn of the Shell Oil Company.

Nov. 5-6, 1953: A.A.P.G., S.E.G., S.E.P.M. Joint Annual Convention, Biltmore Hotel, Los Angeles, California.

Nov. 6, 1953: Fri., A.A.P.G., S.E.G., S.E.P.M. Dinner Dance.

Bakersfield group of the Pacific Coast Section of the Society of Economic Geophysicists invites anyone interested to their weekly luncheons on Fridays at the El Rancho Motel, Bakersfield.

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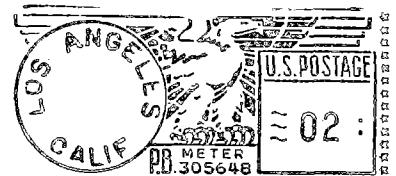
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# PACIFIC PETROLEUM GEOLOGIST

## NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 7

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### ASSOCIATION ACTIVITIES

#### A.A.P.G. FORUM

A triple feature arranged by our ace promoter, Orrin Gilbert, drew a good attendance for the meeting held at the General Petroleum Auditorium October 19.

Read Winterburn, Chief Petroleum Engineer for Union Pacific Railroad, opened the meeting with an interesting talk on the Chino Hills oil field. In his opening remarks the speaker mentioned that, although this is probably the smallest oil field - both in areal extent and production - to be laid bare at a meeting of this kind, it is very interesting in that it constitutes the only commercial production to be obtained from a wide area in the Puente Hills lying to the north of the Whittier fault.

This is a region in which various members of the Puente formation crop out at the surface in numerous minor folds which generally plunge to the northeast. The section consists of a lower Puente member of tight arkosic sandstone intercalated with siliceous shale and clay shale, which is overlain by about 2000 feet of middle Puente. The latter member, constituting the reservoir for the field, is principally sandstone but includes some siltstone and diatomaceous shale. This member is in turn overlain by the upper Puente shale member which consists of about 4000 feet of siliceous and sandy shale, and lenses of conglomerate and sandstone.

Development of the area began in 1899 when a few wells were drilled, including several on the "32 anticline" which is now being produced. However, these wells were later abandoned due to price failure and little more drilling was done until 1948 at which time the Mercury Oil Company and later the Royalty Service and L. H. Cameron became active in the area.

The "32 anticline", Section 32, 2S-8W, is a northeasterly-plunging nose which is closed to the southwest by faulting. The structure is slightly asymmetric with the steeper flank on the north and includes a productive area approximately 600 by 1500 feet.

Mr. Winterburn indicated that in all probability the best part of the field has been eroded as tarry sands within the middle Puente crop out around the structure and the sands in the upper 900 feet of the well section are saturated with very heavy oil. However, below this point there is an aggregate of approximately 850 feet of zone containing a total of about 350 feet of oil sand which presently produces about 60 B/D of 20°-23° oil from 7 wells.

In conclusion, the speaker pointed out the possibility of deeper prospects in middle and lower Miocene and Eocene beds which may underlie the upper Miocene of this area.

The second item on the program featured a 16 mm. color movie entitled "The City that Disappears", starring Messrs. O'Grady, O'Grady, O'Grady, O'Grady and O'Toole and produced by the Stanford Research Corporation which has been delving into

the "whys" and "from whats" of smog for the past several years. This effective and informative film is beamed toward the layman in an effort to bring him up to date on the progress of the investigation into this bane of the sunny Southland.

The picture emphasizes the fact that no one foreign substance in the air is responsible for smog and its irritating qualities, but rather a great number of organics and oxidants are involved which are produced by practically every activity causing combustion in this heavily populated area. These products, trapped beneath the inversion layer of warm air prevalent in this area and between the sea breezes and the encircling mountains, create a situation which is not new to the region but only has become crucial in recent years due to the very rapid growth in population and the consequent increase in industry and other activities requiring heat.

Aside from giving the Los Angeles basin back to the Indians, the only possible solution to smog appears to depend on continued isolation of substances causing air pollution and their eventual elimination at the source.

Mr. L. O. Heintz of the St. Anthony Oil Corporation very ably served as anchor man for the program with an interesting paper on the Santa Fe Springs oil field. The Union Oil Company began the development of this field in 1907 with the drilling of Meyer No. 1 although the first commercial production was not obtained until 1919 with the completion of Meyer No. 3 for an initial of 3000 B/D. The speaker traced the subsequent development of the various zones of the field until about 1928, after which activity gradually declined.

Sporadic drilling since that time has resulted in some redevelopment in several parts of the field from the Meyer, Clark and Hathaway zones. This includes the recent activity of the St. Anthony Corporation and other operators in the northern part of the field. The latter development, particularly on the St. Anthony Farwell lease, involves the Meyer zones on the north flank of the structure. Production from these sands has ranged as high as 450 B/D initial from an accumulation which may be partially controlled by updip thinning in the upper Meyer and in some cases to a certain extent by faulting.

#### DISTINGUISHED LECTURER

Pacific Section of A.A.P.G. will be host to Dr. Peter H. Misch of the University of Washington at a dinner meeting Tuesday night, November 24, at Rodger Young Auditorium. Sponsored by the Distinguished Lecture Committee, Dr. Misch will speak on "Regional Structure Types in the North American Cordilleran System". The fact that this date falls only two days before Thanksgiving should not seriously affect our attendance. This engagement is to be the last of a long and busy tour which includes speeches in San Francisco Monday night, Bakersfield Tuesday noon and Los Angeles Tuesday night.

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Next deadline November 30

A.A.P.G. LUNCHEON

Mr. H. K. (Army) Armstrong, consultant, was guest speaker at Rodger Young Auditorium on October 15. His subject, "European Byways", was illustrated by about 200 colored slides, which showed that besides being a successful geologist, Army is also an accomplished photographer.

Mr. Armstrong's trip was of several months' duration and wound a devious path through southern Europe, starting in southern Italy and continuing north through Italy to the Italian lakes region, then west through the Italian and French Riviera into Spain. His route then turned northward into southern France and then eastward into southern Germany and Switzerland.

Army's comments on the slides were most interesting and informative and included observations on the dress, habits and politics of the people and on the geography, geology and recent history of the areas visited.

NORTHERN CALIFORNIA CHAPTER

The following are the newly-elected officers of the northern California chapter of the A.A.P.G.:

Chairman: Daniel J. Pickrell, Golden Gate Pet. Co.  
Vice-Chairman: Gordon B. Oakeshott, Calif. State Div. Mines.  
Sec.-Treas.: J. Hubert Mee, Jr., Natural Gas Corp.  
Past-Chairman: Charles M. Cross, Honolulu Oil Corp.

COAST GEOLOGICAL SOCIETY OFFICERS

The election of officers for the Coast Geological Society has resulted in a tie for the office of President, which will be run off at a later date. The results are as follows:

President: a tie between Spencer Fine, Richfield Oil Corp., Ojai, and Bob Herron, M.J.M.&M., Ventura.  
Vice-Pres.: Iliff Anderson, Western Gulf Oil Corp., Santa Maria.  
Secretary: Claude M. (Tex) Leverett, Union Oil Co., Santa Paula.  
Treasurer: V. L. Vander Hoof, Intex Oil Co., Santa Barbara.

BIOGRAPHY



Russell Ray Simonson, President of the Pacific Section of the A.A.P.G., was born in Wetaskwin, Alberta, Canada on September 12, 1912. Grandfather Simonsen came to the United States from Denmark after the Prussian War of 1870. Soon after arriving he changed the spelling of his name to Simonson to Americanize it. The maternal side of the family came to America before the Civil War and are of English, Irish and Dutch extraction.

Russ moved to the United States at the age of two and spent his early boyhood in southeastern Montana. During five of these years he lived on the Crow Indian Reservation. The family moved to California in 1923 and settled in the San Fernando Valley.

Simonson was graduated from U.C.L.A. in 1934 and received his Master's Degree in geology from there in 1936. During his college years he played in the Bruin Band and is a member of Sigma Gamma Epsilon and Sigma Xi.

Upon emerging from college with all this knowledge, Russ worked with Frank B. Tolman for the Pacific Coast Alkali Company for four months in 1936 mapping an area near Death Valley in search of borax deposits. However, he was evidently destined for the oil business, no doubt because his old home ranch in Canada was practically on top of the prolific Pigeon Lake oil field. From 1936 to 1941 Russ was employed by Union Oil Company as a field geologist and paleontologist in the San Joaquin Valley. He then worked for North American Oil Consolidated as a geologist and engineer for six months in 1941. From 1942 to the present time he has been employed as a geologist by Ohio Oil Company.

Besides the A.A.P.G., Russ is a member of the S.E.P.M., S.E.G., Paleontological Society and American Geophysical Institute and a Fellow of the G.S.A. He has been very active in the A.A.P.G., having served as Program Chairman for the annual convention in 1949 and as General Chairman in 1952.

Russ married Gladys Convirs of Chatsworth, California in 1935 and they have two charming and talented daughters, Caryn, fourteen, and Merle, nine. The girls have a handsome collection of trophies won in swimming meets during the last few seasons. Caryn holds the Southern California A.A.U. record for the 150-yard medley swim.

Besides geology, Russ says his interests include photography, fishing, football, swimming and Latin music.

DISTRICT REPRESENTATIVES

President R. R. Simonson of the Pacific Section of the A.A.P.G. has announced that four vacancies will occur for the office of District Representative from the Los Angeles District at the end of the National Convention next spring. Nominations of candidates for election to this office will be received at the Business Meeting during the Pacific Section Convention on November 6.

District Representatives are elected from geographical districts on the basis of one representative for the first 25 members and one additional representative for each additional 75 members. The Los Angeles District at present has 402 active members but only four representatives. Two of these representatives go out of office next spring and two extra places created by the increase on membership must also be filled. Present District Representatives and the year their terms expire are:

Harvey W. Lee	(1954)	B. C. Lupton	(1955)
Wallace L. Matjasic	(1954)	Harold Rader	(1955)



DINNER DANCE

According to advance returns of reservations, a good turnout is expected at the annual dinner dance. Those who plan to attend the affair and have not registered should contact Dance Chairman Bill Kennett at their earliest opportunity.

The ballroom will open at 7:00 P.M. and request dinner music will provide entertainment from 8:00-9:30 P.M. Dinner will be served at 8:30 P.M. sharp followed by dancing from 9:30 to 1:30 A.M.

CONVENTION EXHIBITORS

Unusual interest has been shown by companies planning exhibits at the Fall Convention and sixteen firms have taken space, according to J. C. Benzley, Western Gulf, Chairman of the Exhibits Committee.

Last year's exhibitors who are returning include:

American Paulin System  
Braun Corporation  
Encyclopaedia Britannica  
Fairchild Aerial Survey  
Rapid Blue Print Company  
Schlumberger (Coffee Bar)  
Vector Manufacturing Company

Among the new exhibitors we welcome are:

Electro Technical Labs Inc.  
George E. Failing Company  
Keuffel and Esser Company  
Southwestern Industrial  
Electronics Company  
Techno Instrument Company  
United Geophysical Company

In addition, the lounge booth is being sponsored by Homco of California, Formation Logging Service Company (Peters) and E. J. Munger Oil Information Service. Copies of Munger's daily Oilgram may be obtained here.

Not only do these firms have many interesting exhibits planned, but their support also helps greatly in paying for the Convention expenses. We urge everyone to give as much time as possible to show our appreciation.

CALTECH ALUMNI LUNCHEON

Alumni, students, staff and friends of the Geology Division of Caltech are invited to the fourth annual alumni luncheon held in connection with the A.A.P.G. convention. The luncheon will be at the Los Angeles Athletic Club, 431 West 7th at 12:15 P.M. on Friday, November 6. For reservations contact Lloyd Pray at Caltech (RY 1-7171, ext. 112 or 125) or sign reservation list at the A.A.P.G. registration desk. Tickets are \$2.30 including tax and tip.

U.C.L.A. GEOLOGICAL SOCIETY MEETING

Frank Parker, Signal Oil and Gas Company geologist and U.C.L.A. graduate (Late Pleistocene), will return to his youthful haunts on Wednesday, November 18, at 8:00 P.M., to deliver a lecture on "Origin and Accumulation of Oil in Southern California".

The talk will be given in the geology department at U.C.L.A. and sponsored by the U.C.L.A. Geological Society. In view of the general appeal

of the subject, the Society cordially invites one and all to attend. Signs will be posted at the Hilgard entrance to guide those not acquainted with the campus. Refreshments will be served.

Considerable research and headscratching has gone into preparation of this lecture, as Frank has written the chapter on this subject for the forthcoming G.S.A. guidebook. Rumor has it that some novel notions regarding migration and accumulation may be expected.

CALTECH NEWS

The Caltech Summer Field Camp returned to the old stamping grounds - the Sacramento Mountains of New Mexico - this summer. A group of twelve seniors and graduate students conspired to keep busy the two staff members, Lloyd Pray and Bob Sharp. As in past years, some four weeks were devoted to detailed mapping of a 12 square mile area replete with excellent exposures of Paleozoic strata, facies changes, fossils, Tertiary intrusives, gnats and knotty structural problems. A 5-day field trip near the end of the camp included visits to Carlsbad Caverns, the Guadalupe Reef Front, potash mines, El Paso and Juarez (nocturnal field work).

The summer also brought about that dispersal of staff so characteristic of this season. Every year the dispersal pattern varies, and although this year involved no new heights, it did involve some new depths - achieved by Heinz Lowenstam and his aqualung off the coast of Bermuda where he has been isolating and studying some of the factors that bear on marine ecology. Further examination of the dispersal pattern would have revealed Al Engel in the Adirondacks, wresting the latest secrets from the Grenville (Precambrian) for the U.S.G.S.; Bob Sharp in Canada and Alaska, checking up on glaciers and graduate students (fortunately nowhere inextricably intertwined); Ian Cambell in Nova Scotia, presenting an invited paper on "Petrology and the Industrial Minerals" at the joint sessions of the C.I.M.M., M.S.N.S. and A.I.M.E.; Dick Jahns in Hermosa (meaning "beautiful"), New Mexico, mapping structure and ore deposits, while keeping one eye open for pegmatites; Jim Noble in British Columbia, looking for iron ore; Gennady Potapenko supervising a magnetometer survey in Arizona, etc.

But the home front too was active over the summer. At the Seismological Laboratory Beno Gutenberg and Charlie Richter have been busily engaged, along with other things, in refining and interpreting the vast amount of data obtained in connection with the Kern County quakes. A magnitude 4.8 shock registered as recently as October 7 indicates that the White Wolf fault is still restive. Hugo Benioff completed the installation of a special fused-quartz strain meter in a tunnel in Big Dalton canyon and is now studying the first records from this very sensitive instrument which it is hoped will record even secular earth strains and tidal strains in the crust.

Harrison Brown and his co-workers have been struggling to exclude the lead in our southern California atmosphere from the new geochemistry laboratories, and now have the problem just about licked, down to the last milligram. Meantime they have put a six-inch mass spectrograph into operation for light isotope work, and have a twelve-inch mass spectrograph for heavy isotope work very nearly complete. Work continues, among other things, on trace elements of the southern California batholith.

If the beginning of summer brings dispersion, the end of summer as surely brings convergence, and currently the Arms and Mudd buildings house the greatest concentration of geological talent in their history, what with all the old faces (save one - see



Hewitt Dix, below) back, and several new ones added to the roster. First of these to arrive was Edmund Schulman, visiting professor (for 1953-54) of dendrochronology. He is director of the tree-ring laboratory at the University of Arizona, and is here to collaborate with the geochemists in application of carbon isotopes to the tree-ring cycle. The next "new face", Thane McCulloh, assistant professor of Geology, needs no introduction to the southern California geological fraternity, for he is a graduate of Pomona College in 1949 and received his Ph.D. from U.C.L.A. in 1952. But it deserves also to be mentioned that he spent a year at the Mineralogical Institute in Oslo, on a Fulbright fellowship, and that last year he held one of the first post-doctoral research fellowships in geology to be awarded by the National Science Foundation. On this fellowship he completed mapping of the Lone Mountain Quadrangle in the Mohave. A third addition to the staff is Frank Stehli, assistant professor of Paleontology, who received a Ph.D. at Columbia last June, with a dissertation on Leonardian brachiopods from the Sierra Diablo, West Texas. During the past year he held a National Science Foundation pre-doctoral fellowship, and this summer was on a six-weeks expedition to the Bahamas as part of Humble Oil's research program on reefs. In residence here for the fall term, as visiting research fellow in seismology, is Dr. Amar Nath Tandon, seismologist at the Central Seismological Observatory and in charge of all seismological organizations in India; and to be here for the winter term, as visiting professor of Geophysics, is Dr. K. E. Bullen of the University of Sydney, New South Wales. The one absent member of the staff is Hewitt Dix, who is on leave until January 1, in order to carry forward a teaching and research program in applied geophysics at the Institut Francais du Petrole in Paris.

And the students are back in force. This year there are 33 on the graduate roster, with ten foreign countries represented (Australia, Canada, China, France, India, Mexico, The Netherlands, New Zealand, Norway and Pakistan), and with state delegations from as far away as Massachusetts and North Carolina; and with interests ranging from recent glaciers to paleotemperatures of Paleozoic seas, and from the earth's core to the seismic effects of the most recent blast at Corona.

## PERSONAL ITEMS

Jack West and Bob Maynard combined forces to put on a very successful cocktail party at Jack's home in Bakersfield on October 16th. Many of the geologists' wives were present to enjoy the cold cuts, barbecue snacks, and liquid refreshments.

Jack Gilboe is leaving Bakersfield for Los Angeles to become Division Stratigrapher for Shell. C. W. Prewett, who has spent the last 6 months in The Hague, will replace Jack in Bakersfield.

Horace Harrington's 13 1/2 year old son has just been accepted as a violinist in the Kern County Philharmonic orchestra. As Horace has always said - "it pays to keep fiddlin' around".

Milt Born of Amerada, who assisted on the Exhibits Committee for the convention, had an appendectomy October 27 at the Huntington Hospital in Pasadena.

Jack Denn is being transferred by The Texas Company from Los Angeles to Sacramento.

Bob Anderson, formerly with Honolulu Oil Corporation, is going back to good 'ole Bakersfield to join Richard C. Rheem as geologist.

Bill Edmonson with Superior Oil in Bakersfield has received his "Greetings" notice from Uncle Sam inviting him to go to the Navy's officers training school.

Bob Maynard ended up with two lenses left over after assembling the new projector for the San Joaquin Valley Chapter. Anyone interested in buying a couple of lenses?

Honolulu will have a housewarming in their brand new building at 120 Bernard in Bakersfield on Friday, November 13th. (BYOL)

Bob Eymann, from U.S.C., has escaped the Los Angeles smog and is now employed by Western Gulf at Bakersfield.

Several fellows have recently observed Everett Pease mumbling to himself while dazedly working with a slide rule. Snatches of his mumbblings had something to do with percentages, ratios, points, etc., and the ".....underdog Big Red team".

Tony Morris has resigned from D. D. Feldman Oil Company to open his own consulting office at 10352 Northvale Road, Los Angeles 64. Tony is leaving the middle of November for a six month's job in Peru for Douglas Oil Company. Ray Arnett will temporarily replace Tony as instructor for the evening geological course at U.C.L.A.

Don Van Sickle, who has been with the U.S. Geological Survey in Los Angeles, is being transferred to the Taft Camp where he becomes District Geologist in charge of the Mineral Classifications Branch for the government.

Mr. Bob Paschall, current President of the Coast Geological Society, denies rumors that the tie for 1954 President of the Coast Geological Society will be settled by a bare knuckles fight between Spence Fine and Bob Herron at the next Coast Geological Society meeting.

Ed Miller of The Ohio Oil Company has been transferred from Los Angeles to Ventura. The housing shortage is so acute in Ventura that Ed was almost forced to pitch a tent!

Two new members of the geological staff of The Texas Company in Santa Paula are Tom Benson, M.A. '53, Stanford, who came to The Texas Company in August and Jim Vernon, M.A., University of California, who started with the company in September following a hitch with the Navy in Washington, D.C. Prior to his service with the Navy, Jim was with the Bureau of Mines in Spokane, Washington.

If anybody could use some nice new cigar labels reading "It's a boy", contact Frank Yule with General Petroleum in Ventura. He lost - sure enough, it was a little girl!

Bob Herron of M.J.M.&M. Oil Company recently distinguished himself in the geological profession by delivering a lecture at the regular dinner meeting of the Ventura Desk and Derrick Club. Bob attaches no particular significance to the fact that a portion of his talk was concerned with the Virgin River.

Mr. and Mrs. Downs McCloskey, Amerada at Los Angeles, are enjoying a belated vacation out Honolulu way.

Manley Natland and Bill Bishop of Richfield Oil Corporation have arrived in Aden, Arabia from Cairo, Egypt after their plane was turned back twice because of engine trouble and bad weather. They say that they are living in a sultan's beach cottage which is very fancy and fully equipped, with what they did not say.

Marcos Zappi, a University of Washington alumnus and more recently with Cities Service in Louisiana is now with Dick Shelton in The Ohio Oil offices at Olympia, Washington.

Jack Schoellhamer of the U.S. Geological Survey conducted the students of Caltech on a most interesting "underground tour" last October 21st when he was guest speaker at their Geology Club. His subject was "The Floor of the Los Angeles Basin".

Stewart M. Jones, formerly with Shell at Seattle has joined the California Division of Mines at San Francisco.

Richfield's Cliff Johnson aided the cause of Oil Progress Week in Arizona last month by speaking before the Chambers of Commerce and Kiwanis Clubs of Tucson and Phoenix on the subject "Is There Oil in Arizona?" Cliff wants it known, however, that he really didn't answer the question.

Graham B. Moody, Standard's veteran geologist in San Francisco, will be the General Chairman of the A.A.P.G. annual convention to be held in St. Louis in 1954.

Paul H. Dudley, Long Beach consultant, has just returned with his family from a 5 months general geological reconnaissance trip through Africa. He is a real world traveler, having spent 6 months last year in Costa Rica. As Paul is an ace photographer, we hope he will find time to be guest speaker at a geological meeting.

Following in the footsteps of Bob Herron, Hank Neel conducted a portion of the field trip when the Tidewater Associated Oil Company entertained the Ventura Desk and Derrick Club with a field trip and luncheon at the Pierpont Inn, Saturday October 24th.

Darrell N. Helmuth has been transferred by Standard Oil from Coalinga to Oildale, California.

## NURSERY NEWS

Mr. and Mrs. Frank Yule, General Petroleum Corporation, Ventura, a daughter, Janice Anne, born October 22, 7 lb. 9 oz., their first child.

Mr. and Mrs. Dan Nolan, Continental Oil in Bakersfield, are the proud parents of a girl, their fourth child, Sandra Lucille, born October 16, 1953.

Mr. and Mrs. Alan Johnston, Standard Oil, San Francisco, a boy on October 22nd.

With this issue the outgoing staff of the P.P.G. wishes to thank its readers for their cooperation during the past year and, at the same time, extends its best wishes to the incoming staff.

Nov. 5 & 6, 1953: A.A.P.G., S.E.G. & S.E.P.M. Joint Annual Convention, Biltmore Hotel, Los Angeles, California.

Nov. 6, 1953: Fri., A.A.P.G., S.E.G. & S.E.P.M. Dinner Dance, Biltmore Hotel, Los Angeles, Calif.

Nov. 12, 1953: Thurs., 6:30 P.M., A.I.M.E. - Junior Petroleum Group, Dinner Meeting, Turf Club, Lakewood and Anaheim-Telegraph Road. Professor Sam Yuster of U.C.L.A. will speak on "Water Flooding".

Nov. 17, 1953: Tues., 7:30 P.M., Coast Geological Society dinner meeting, Miramar Hotel, Montecito. Dr. Cordell Durrell will speak on "Volcanics of the Santa Monica Mountains".

Nov. 17, 1953: Tues., 8:00 P.M., A.P.I. Los Angeles Basin Chapter, Shell Recreation Hall, Long Beach. Talk on "Use of Parallel Strings for Plunge Lift", by Mr. L. J. Tomlinson, District Superintendent for Continental Oil Company. Also, color film "Ram Highlights of 1952" to be described by Chief Scout and Assistant Coach of Rams, Clipper Smith and End Tom Fears.

Nov. 18, 1953: Wed., 8:00 P.M., U.C.L.A. Geological Society, Geology-Chemistry Bldg. Mr. Frank Parker, Signal Oil & Gas Co., will speak on "Origin and Accumulation of Oil in Southern California".

Nov. 23, 1953: Mon., 7:30 P.M., A.I.M.E. - Petroleum Technology Forum, General Petroleum Auditorium, Los Angeles. Mr. Dean H. Sheldon, "Notes on Oil Property Values".

Nov. 24, 1953: Tues., 12:00 noon, San Joaquin Valley Chapter A.A.P.G., Luncheon in Spanish Ballroom of El Tejon Hotel, Bakersfield. Dr. Peter Misch, a member of the distinguished lecturer group and professor of geology at the Univ. of Wash., will speak on "Regional Structural Types in the North American Cordilleran System".

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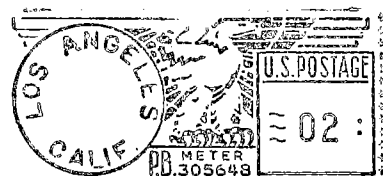
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"Truncation Type Traps Offer New Horizons". John Ryan, p. 177.

PACIFIC PETROLEUM GEOLOGIST  
PACIFIC SECTION, A.A.P.G.  
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Mr. F. R. Neumann  
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# PACIFIC PETROLEUM GEOLOGIST

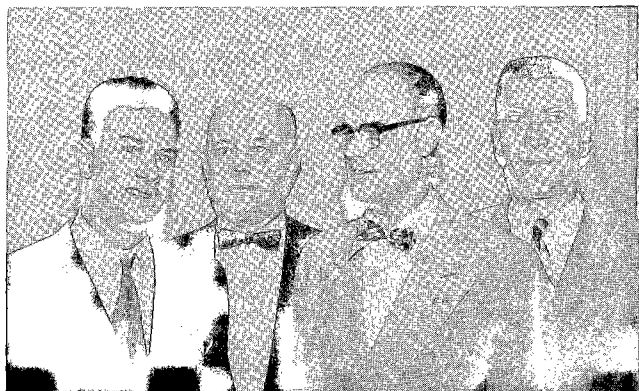
## NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 7

December 1953

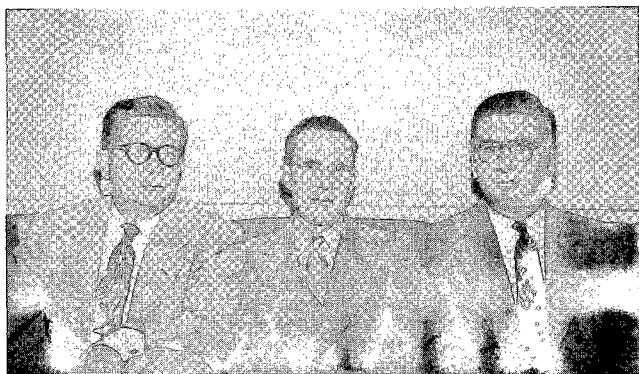
No. 12

### ASSOCIATION ACTIVITIES



A.A.P.G. OFFICERS

New officers of the Pacific Section, A.A.P.G. from left to right: George Feister, Union Oil Co., Secretary; Ted Lee, Seaboard Oil Co., Vice-President; Harold Rader, Standard Oil Co., President; Doug Traxler, Signal Oil and Gas Co., Treasurer.



S.E.G. OFFICERS

The newly elected officers of the S.E.G.: Joe Hudson, Humble, President; Bob Wells, Richfield, Vice-President, northern district and Forrest Lambrecht, Texas, Secretary-Treasurer appear sobered by the responsibility of their offices. Hal Bemis, Standard, Vice-President, southern district, was not available for a picture.

#### DIRECTORIES

Copies of the new Directory may be obtained for the sum of one dollar from:

R. E. Faggioli  
Humble Oil & Refining Co.  
612 South Flower Street  
Los Angeles 17, California

Make checks payable to the Pacific Section, A.A.P.G.

#### DINNER DANCE

Chairman Bill Kennett reports that 512 merry people attended the dinner dance at the recent Pacific Section convention. At times it seemed like all of them were on the dance floor at once.



S.E.P.M. OFFICERS

John Ruth, Standard, newly elected President of the Pacific Section, S.E.P.M., seated on the left, is probably discussing plans for 1954 with Wayne Elliot, Richfield, the new Secretary-Treasurer.

#### A.A.P.G. DINNER MEETING

Dr. Peter Misch, Professor of Geology, University of Washington, was guest speaker at a dinner meeting held at Rodger Young Auditorium, Los Angeles, on November 24, 1953. Dr. Misch, currently on tour for the A.A.P.G. in connection with the Distinguished Lecturer program, presented an extremely interesting talk on "Regional Structural Types in the Cordilleran System of North America".

Dr. Misch stated that the Cordilleran System can be grouped into four original or primary structural types. Superimposed on these primary structures are younger, different types of deformation.

The first of the four regional types of Cordilleran deformation is the Paleozoic-Mesozoic volcanic geosyncline which extends along the Pacific Coast. This region was subjected to intense prolonged deformation, extending from late Paleozoic to early Cretaceous time. Many of the large Pacific Coast batholiths show a definite genetic relationship to the adjacent metamorphic rocks and Dr. Misch suggested that these batholiths may be new "basement" rocks, regenerated from older sediments by intense metamorphism and the intrusion of a certain amount of granitic material.

The second regional type is the sedimentary geosyncline which comprises all of the northern Rockies, the western part of the central Rockies and a thin strip on the west side of the Colorado Plateau. Deformation in this eastern geosyncline was limited to Cretaceous-early Tertiary time and resulted in great folds and overthrusts.

The third regional structural type is the Colorado Plateau, a non-geosynclinal unit. This region is characterized by gentle deformation which has yielded large scale, broad warping.

The fourth type is the non-geosynclinal Rocky Mountains. Moderate deformation has resulted in broad uplifts with steep flanks. Local

## EXECUTIVE COMMITTEE, PACIFIC SECTION

## AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

E. Harold Rader	President
A. Theodore Lee	Vice-President
George H. Feister	Secretary
J. D. Traxler	Treasurer
B. C. Lupton	Editor
Russell R. Simonson	Past-President
Orrin Wangsness	San Joaquin Representative

## PACIFIC PETROLEUM GEOLOGIST

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Editor:	Ben Lupton
Assistant Editors:	
Activities:	Dick Haines Ernie Lian
Personal Items:	Bob Sitzman
Selected Bibliography:	Les Schultz
Calendar:	Bill MacKersie
Cartoonist:	Harold Sullwold
Coast Representative:	Hank Neel
Northwest Representative:	Rodger De Yoe
Sacramento Representative:	Mike Rector
San Francisco Representative:	Glenn Lansing
San Joaquin Representative:	Quentin Moore

Next deadline January 4.

overthrusting has occurred--however, on a much smaller scale than in the geosyncline to the west.

Superimposed on the four primary regional types of Cordilleran structure are younger structures of different character. The most widespread is the Basin and Range structure which was superimposed in Tertiary time. It is characterized by high angle normal faulting, vertical uplift and considerable overthrusting. Other types of superimposed structures are the Cenozoic folds of the Coast Ranges and the Tertiary basalt flows of the Columbia River region.

Although the North American Cordilleran System displays an unusual variety of structural types, Dr. Misch believes that the force or forces which caused the primary structures were similar and probably acted to some extent, on all regions at the same time. The entirely different response in different areas is undoubtedly a reflection of the structures and rock types of the postulated Archean basement which must underlie all the visible Post-Cambrian rocks. Just as this ancient basement had a controlling effect on the overlying primary regional structures, so have these primary structures had a controlling effect on the younger superimposed structures. This basic idea can be made to apply equally as well to local problems in Southern California geology.

## COAST DINNER MEETING

Dr. Cordell Durrell, Professor of Geology at U.C.L.A. was the guest speaker at the Coast Geological Society meeting at the Miramar Hotel in Montecito on November 17th and at the monthly luncheon at Rodger Young Auditorium on December 3rd. Dr. Durrell's excellent talk attracted a large and attentive audience on both occasions.

Dr. Durrell's subject was the "Tertiary igneous rocks of the Santa Monica Mountains". He pointed out that the work reported was mostly that of students, that it pertained to the eastern part of the range, no work having been done in the area west of Point Dume, and that it was mostly field observation as very little microscopic work has yet been done.

The igneous rocks are assigned to the Miocene. The volcanics are overlain and underlain by marine sediments called Topanga, and both contacts are unconformable, at least locally. The intrusive rocks cut all the older rocks, and there are some intrusions into the sediments next above the volcanics, but no volcanics or intrusions have been found in the Modelo. The volcanics are interbedded with sediments that contain marine fossils so they are believed to be of submarine origin.

The extrusive rocks range from olivine basalt to dacite, and are present as massive flows, flow breccia, tuff breccia, tuff, mudflow breccia, and volcanic conglomerate. The intrusive rocks are, in part, massive olivine diabase but porphyritic rocks with vesicular structure also occur, mostly as intrusive breccia. Feldspar-rich diabase, and small amounts of trachyte and rhyolite also occur.

Following the description of the rocks and their occurrence, Durrell discussed the problem of distinguishing between the intrusive and extrusive rocks of the area. He discussed in turn the significance of grain size, presence or absence of glass or its alteration products, the texture of the rocks, the structure of the rocks particularly breccia structure, vesicularity, variations in vesicularity, contact alterations, and alternations of igneous rock with sediments. He concluded that an intrusive origin could be established for certain only on coarse grain, thermal metamorphism, and transgressive contacts, and that extrusive origin could be ascribed only to rocks that showed very marked differences in vesicularity on the two sides, abundance of glass or its alteration products, or evident bedding structures in the fragmental rocks. Fine grain, holocrystalline texture, small amounts of glass, porphyritic texture, and fragmental structure are known to occur in both intrusive and extrusive rocks. The distinction is not an easy one to make in the field, and is even more difficult in cores where the larger features of the rocks that may be evident in the field are lacking.

Durrell concluded his talk by pointing out that the igneous rocks could be reservoirs for petroleum since they have both porosity and permeability, and, in fact, petroleum does occur in them in the Conejo field. He also stated that he saw no reason why the presence of the igneous rocks should preclude the occurrence of petroleum in the sediments beneath them. The environment of deposition was such that the baking effect and other metamorphism has been of a minor nature and would probably not affect any oil which might have been in the formations.

## APPOINTMENTS

Pacific Section President Harold Rader has announced the following appointments of the men who will assist him during 1953.

Distinguished Lecturer Representative

Mason Hill, Richfield Oil Corp.

Geological Forum Chairman

Ray Pearson, Richfield Oil Corp.

Publicity

Irv Frazier, The Texas Co.

Projectionist

Doyle Paul, Ohio Oil Co.

Classification Committee Chairman

Milt Whitaker, General Petroleum Corp.

Legislative Committee Chairman

W. W. Porter II, Consultant

Transportation

Homer Steiny, Tidewater Associated

Editor, Pacific Petroleum Geologist

Ben Lupton, General Petroleum Corp.

Our sincere condolences to Dee Taylor who is bereaved of his wife Lucille. Mrs. Taylor passed away November 24, following major surgery.

#### 1954 DUES

A.A.P.G. Pacific Section dues are now being accepted by the treasurer. Checks should be made payable to A.A.P.G. Pacific Section and mailed to Mr. J. D. Traxler, Signal Oil & Gas Co., 811 West 7th Street, Los Angeles 17, California. Dues may also be paid in person at any of the Pacific Section meetings in the Los Angeles area. The amount? \$2.00.

#### DISTRICT REPRESENTATIVES

Eight candidates were nominated for the office of District Representative at the business meeting on November 5th. Four will be elected to fill vacancies in the Los Angeles District. As District Representatives are national A.A.P.G. officers, the election will be by mail and ballots will be sent out from Tulsa around the first of next year.

The candidates are: Jim Benzley, Dan Flynn, George Wheatley, Harold Sullwold, Joe Hudson, Bob Kelly, Phillip Cook and Loyde Metzner.

#### COAST GEOLOGICAL SOCIETY ELECTION NOTICE

The tie for President of the Coast Geological Society between Spence Fine and Bob Herron was decided by a run-off vote at the dinner meeting Nov. 17th, at which time Spence Fine was elected President. Roy Turner was elected Treasurer to replace Dr. V. L. Vander Hoof, who was elected in the regular election but was unable to accept because of other activities.

#### SACRAMENTO GEOLOGICAL SOCIETY

Mike Rector, vice-president and program chairman of the Sacramento Geological Society has advised that the group meets on the evening of the second Tuesday of each month in the State of California, Public Works Building, 1120 "N" Street, Sacramento. Visitors are welcome.

#### A.A.P.G.-S.E.G.-S.E.P.M. ANNUAL CHRISTMAS DINNER DANCE

Plans are being made for the Annual Christmas Cocktail Party and Dinner-Dance. To be held this year on December 26, 1953 at the Oakmont Country Club - 3100 Country Club Drive, Glendale, Calif. Details of time, price and method for making reservations will be sent out in a few days. Please start organizing your tables in groups up to twelve (12) persons.

#### REMINDERS

See your old friends and make new ones at the Los Angeles Area Geologists weekly luncheon gathering - Thursday Noon - (except when regular A.A.P.G. luncheon is scheduled). Meet in the mezzanine of the Marcus Grill, 633 South Olive Street, Los Angeles.

All Bay Area visitors are invited to the Northern California Section regular Monday luncheon held at noon in the Fraternity Club in San Francisco. Reservations may be made by calling Dan Pickerell at Exbrook 2-6146 or Charles Cross at Sutter 1-3123.

#### FALL DINNER MEETING OF THE BRANNER GEOLOGICAL CLUB

Time: Monday Evening, Dec. 7th, 6:30 P.M. sharp

Place: The Athenaeum  
California Institute of Technology  
California and Hill Streets  
Pasadena, California

Dinner: \$2.90

Speaker: John C. Hazzard, Union Oil Co. of Calif.

Title: "Geologic Reconnaissance in Alaska"

Early Reservations Requested,  
Telephone: Lloyd Pray  
California Institute of Technology  
Ryan 1-7171, Ext. 115 or 125.

#### EXECUTIVE COMMITTEE

Section 2 of Article IV of the Pacific Section constitution was amended by popular vote at the election November 6. By this amendment, the Editor of the Pacific Petroleum Geologist is now a member of the Executive Committee, the other members being the President, Vice-President, Secretary, Treasurer, past-President and San Joaquin Representative.

#### PERSONAL ITEMS

Wedding Bells pealed for all to hear at Ventura, Thursday November 19, and Roger M. Dungan, Continental Oil Company's division geologist, took unto himself a new bride, Miss Stella Lambert of Ventura. That is the play that Roger has been trying to block in for some time now.

W. A. (Bill) Greenwalt, Jr., Union Oil Company Division Geologist at Orcutt, is transferring to Lima, Peru as resident geologist to assist Mr. R. C. Harris, Manager of Foreign operations. Bill plans to leave approximately Dec. 10 and will be followed shortly by his wife and family.

Merritt B. Smith, former consulting geologist, has joined the staff of the Mineral Classification Branch of the U.S. Geological Survey in Los Angeles. His new address is 529 Federal Bldg.

Ed Karpe, formerly with Fairchild Aerial Surveys, is now a member of the evergrowing staff of Western Gulf Oil Company in Los Angeles.

Stan Conrad, Richfield Oil Corp. geologist, has gone to Peru to check on those "fish stories" which persistently echo back from Irv Schwade, sounding like a native Chamber of Commerce press release. Stan plans to do some field work but frankly admits that his primary objective is to outfish fisherman Schwade.

What's this we hear about Homer Steiny, playing second fiddle to Frank Carter in the Wildcaters Play? Someone will pay for that. Homer has accepted his pension after 35 years of service with Tide Water Associated Oil Co. As past president of the Pacific Section, he is known and loved by almost every member. In Steiny's own words, "I'm sitting on my pension". His pension is effective December 1, 1953.

Speaking of paying for things, imagine the "where's the hole in the floor" expression on Hank Neel and Charlie Sturz when they stepped from behind the footlights at the Colony Club and found that half the audience was made up of fellow A.A.P.G. convention delegates.

R. M. (Andy) Touring, Humble Oil & Refining Co. geologist, has transferred from Salinas to the new offices at Eugene, Oregon.

Manley Natland and Bill Bishop, Richfield Oil Corporation's Arabian Sultans (Jr. Grade) are having a rough go, living on goats' milk and literally, on the fat of the land, only 7 automotive vehicles in a million square miles, but alas, they have no freeway. Poor Angelenos.

Jos. E. Pelline, geologist with Humble Oil & Refining Company at Los Angeles, took time out, about a year and half ago to say "Good Morning" to one Marilyn Jane Mitchell who worked in the office. Recently they announced their engagement and Marilyn will spend the month of December at home topping off the Hope Chest and completing their plans for a January wedding. "Got to be more careful who I speak to" says Joe.

R. D. (Bob) Brace, Standard Oil Company geologist, is transferring from Los Angeles to the Sacramento office to replace Larry Malarin who has recently transferred to Standard's geophysical department at Oildale.

Walt Gerhard, formerly with Amerada Petroleum Corporation, has joined the staff of the Union Pacific Railroad at Evanston, Wyoming and will be doing evaluation work on Union Pacific's Fee lands in the Rocky Mountain area. Does anyone have an extra pair of "longies" for poor old Walt?

Stan Jeffries, Shell Oil Company geologist, Ventura, has transferred to the Los Angeles office to do specialized problem studies. Stan is to be replaced by Don Gresser who will become district geologist of the Ventura Basin for Shell Oil Co.

W. E. Strangman, Union Oil Company geophysicist at Bakersfield, has transferred to the Los Angeles office and is to assume the responsibility of the Company's geophysical work from here.

Ted Lee, formerly geologist for Sunray in Los Angeles, assumed his duties December 1 as Chief Geologist of California for the Seaboard Oil Company in its Los Angeles office. L. S. (Snooky) Chambers, formerly Chief Geologist, is now Manager of Exploration of the Western Division, in charge of geology and land.

transfers or additions of staff members not in attendance at the open house. Honolulu Oil Corporation's new address is 210 Bernard Street, Bakersfield, phone 4-6008.

Tom Wilson, Ohio Oil, geologist from Bakers-town, recently returned from a week of Post Graduate Electric Log work at Schlumberger's Houston offices and a belated vacation.

Donald W. Gillespie, Shell Oil Company geologist, and Marlene Richardson were married in Sacramento, November 28th. No honeymoon address was given but there was some mention of the far north where the nights are long and the weather is conducive to the cultivation of warm and lasting friendship.

Tide Water Associated Oil Company's Geological and Land departments at Bakersfield have moved from the Hopkins Building into their plush new offices at 1809 19th Street. The phone number remains the same, 5-9473, and the mailing address is P.O. Box 1445, Bakersfield.

On Friday afternoon November 20th, Honolulu Oil Corporation swung wide the doors of their new offices in Bakersfield to entertain their host of friends in the industry at an open house. The affair, scheduled for 4:00 to 6:00 P.M. was such a success that the doors remained open long past the intended closing time. The spaciousness of the new quarters led some to speculate on possible

Effective December 1, 1953 W. C. (Bill) Hawk, Continental, Regional Manager of Exploration, central region, with headquarters in Oklahoma City was promoted to Manager of the Geological Section with headquarters in Houston, Texas. Congratulations, Bill!

Jack Cunningham, Standard Oil Company geophysical department, is now doing geophysical interpretation work in the Sacramento office. Jack was formerly with a Standard Oil Company field crew.

Kemp Barley, Baroid, was slightly startled when he flipped the light switch at his office the morning of November 6th and the building promptly fell down around his ears. It seems that a leaking gas main had filled the walls with gas which was ignited by the arcing switch. Kemp ended up with seven stitches in his head and first and second degree burns. A fellow worker sustained third degree burns and two of the secretaries had their hair singed. Everyone agrees that all concerned were lucky to get by so lightly as the building was practically a total loss. At last report, Kemp was wearing a butch haircut.

Paul Weaver, former Chief Geophysicist with the Gulf Oil Corporation in Houston, Texas, advises that he has retired from Gulf and can now be addressed at Room #128, Geology Building, Texas A & M College, College Station, Texas.

His many friends will be interested to know that Paul is taking up a long time hobby - underground water geology. He now represents the A & M College in the new Water Research Foundation of the Texas Water Foundation of the A & M System.

Paul also is working on a study of demonstrable surface movements which have occurred in recent years along faults near Houston; faults which date back in the subsurface to the middle Miocene. At a dinner meeting of the Houston Geological Society on September 30, he showed a set of Kodachrome slides illustrating this faulting. He plans to publish a paper on these recent movements, both in the Houston and other areas, sometime in the future.

C. Stanley Martin, Union Oil Co. drilling superintendent and friend of many in the Pacific Section, left Friday, November 6th and is now in Peru to take charge of Union's forthcoming drilling operations.

#### NURSERY NEWS

Ed and Elizabeth Gribi, consultant in Great Falls, Montana and formerly with General Petroleum at King City, report the arrival of Sharon Elizabeth on September 8. She is their second child, a red head and now weighs 6-1/2 pounds.



Mr. and Mrs. J. R. Jackson, Jr., Humble Oil & Refining Co. at Chico, have adopted a son, David, who is now seven weeks old.

Congratulations to Collen and Vince Scurry, Seaboard Oil Co. of Los Angeles, on the birth of their son, Daniel Paul, born November 21, weighing 8 lbs. 3 oz.

To Mr. & Mrs. Don Preston, Shell Oil Co., a BOY, Glenn Scott, weighing in at 10 lbs., 10-1/2 oz. Looks like Don's Alma Mater will have some promising football material about 1971 or 1972.

Don and Jeannette Ford, Sunray at Bakersfield, are proud to announce the arrival on Nov. 11th of Russell H., weighing in at eight pounds even. The Fords now boast two girls and a boy.

## CALENDAR

Dec. 7, 1953: Mon. 6:30 P.M., Branner Club dinner meeting, the Athenaeum, 551 S. Hill, Pasadena (Calif. Institute of Technology Campus). Dr. John C. Hazzard will speak on "Geological Reconnaissance in Alaska."

Dec. 8, 1953: Tues. Evening. Northern California Chapter A.A.P.G. Regular Monthly Forum Meeting, State of California Public Works Building, 1120 "N" Street, Sacramento. Salem J. Rice, California Division of Mines, will speak on "Reconnaissance Geology of the Eureka Area."

Dec. 10, 1953: Thurs., 6:30 P.M., A.I.M.E. Junior Petroleum Group Dinner Meeting, Turf Club, corner Lakewood Blvd. and Anaheim Telegraph Road. John A. Casner will discuss "Failures in Oil Field Tubular Goods."

Dec. 11, 1953: Fri., Association of Petroleum Wives, Bakersfield, presents their annual Charity Christmas Dance. 9:00 P.M. to 1:00 A.M., Palm Room, Bakersfield Inn. Perry Johnson and his orchestra. Mrs. Bruce Robinson, Chairman. Proceeds to the Memorial Hospital Fund.

Dec. 20, 1953: Pacific Section A.A.P.G. Forum Meeting, regularly scheduled for this date will not be held this month due to the Holiday Season.

Dec. 26, 1953: Sat., Pacific Section A.A.P.G. Annual Christmas Cocktail Party and Dinner Dance will be held at the Oakmont Club in Glendale. Details will be announced at a later date.

Jan. 7, 1954: Thurs., 12:00 Noon, Pacific Section A.A.P.G. Monthly Luncheon Meeting, Rodger Young Auditorium, Los Angeles. Mr. Paul Dudley, Consultant Geologist, is tentatively scheduled to deliver a Kodachrome illustrated talk on his recent trip to Costa Rica.

## UNIVERSITY ACTIVITIES

Wednesday Noon Geologic Club Talks, U.S.C., are open to all interested. Meetings are held in Bridge Hall, Room 412, U.S.C. Campus. The following subjects are scheduled:

Dec. 9, 1953: Caves of California, by Rollin Wallace.

Dec. 16, 1953: Sediments of Viscaïno Bay, Baja, Calif., by Don Gorsline.

Jan. 6, 1954: Geology of Santa Barbara Island and Vicinity, by John Grady.

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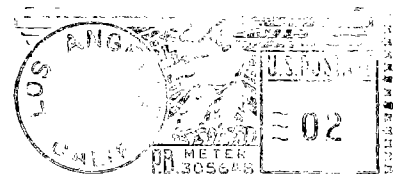
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