PACIFIC PETROLEUM GEOLOGIST

1955

January
"The Geology of Death Valley" By Dr. Thomas Clements
"History & Development of Elk Hills Oil Field" By R. H. Adams
"Evolution of an Oil Field" Forum
"Some Late Cenozoic Faulting in the Great Basin" By Dr. Vincent P. Granella
"Franciscan Formation of California" Seminar

February
"A Review of the Geology and Oil Operations, Santa Barbara Channel Islands" By Lowell E. Redwine
"Geology & Scenery of Portions of the Alps" Dr. John C. Crowell
"Structural Petrology of the Pico Anticline" By Lawrence Bonham
"Stratigraphy & Paleontology of the Type Blakeley formation of Washington" By Charles V. Fulmer
"Some Structural Features of the Scottish Highlands" By Dr. Donald B. McIntyre

March
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"Recent Development of the Long Beach Airport Area" By Donald M. Smith
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"Egyptian Operations" By Paul Hayes

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"Structural Problems of the Great Smoky Mountains of Tennessee and North Carolina" By Dr. Phillip B. King
"Uranium in the Kern County Area" By William A. Bowes
"Tertiary Stratigraphy of the Port Angeles-Lake Crescent Area of Washington" By Robert D. Brown, Jr.
"The Relation Between Amount & Character of Beach Sand & Denudation Rate in Source Areas" By Ulysses S. Grant, U.C.L.A.

June
"Exploration for Uranium" By John A.S. Adams
"Geologic Study of the Devils Den-McLure Valley Area" By T. J. Brooks, Glenn Shepherd, Aden Hughes
"Bear Valley Thrust Fault in the Bitterwater Area, San Benito County, California" By Leo M. Moir, Jr.
"Geology of the Southeastern Portion of the Ventura Basin, Los Angeles County, California" By Dr. E. L. Winterer

August
"Some Examples of the Seismic Modeling Method" By Dr. F. G. Blake
"An Extension of the Roberts Mountain Overthrust" By Dr. James Gilluly

September
"The Geology of the Toquima Range & Northward" By Dr. Marshall Kay

November
"Pitfalls of Correlation" By Dr. Orville Bandy
"Reconnaissance in Turkey" By Fred Vandenberg

October
"Habitat of Oil in the Los Angeles Basin" By Frank S. Parker

December
"Jasper Field Conference" By A.E.L.Morris
"Wrench Fault Tectonics" By Melvin J. Hill & John D. Moody

PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 9 January 1955 No. 1

ASSOCIATION ACTIVITIES

A.A.P.G. LUNCHEON

Dr. Thomas Clements, Head of Department of Geology at U.S.C., was guest speaker at Roger Young Auditorium on December 2nd. He presented an illustrated talk on "The Geology of Death Valley" to a large group of geologist and guests.

Death Valley is a northwesterly-southeasterly trending depression in eastern California bounded on the west by the Panamint and Cottonwood Mountains, and on the east by the Black, Funeral, and Grapevine Mountains. It is approximately 190 miles long by 5 to 20 miles wide, and at its lowest point is 282 feet below sea level. It differs from other depressions of the Great Basin only in its greater depth and larger drainage area.

Rocks representing every era of geologic time are found in Death Valley, the Mesozoic being the least well represented. Archeozoic gneisses and schists occur in the south end of the Black Mountains and in the western part of the Panamint Mountains. Proterozoic marbles, dolomites, quartzites, phyllites, and schists are widespread, forming the core of the Panamint Mountains, and making up part of the south end of the Black Mountains, as well as part of the Funeral Range.

All systems of the Paleozoic occur in Death Valley, the aggregate thickness being more than 20,000 feet. The rocks are quartzites, limestones, dolomites, and some shales, occurring along the west side of the Panamint Mountains, as well as in the Funeral, Grapevine, and Cottonwood Mountains. The Paleozoics are intruded by granitic rocks, presumably of late Jurassic or early Cretaceous age, both in the Panamint and the Cottonwood Mountains.

Neither Paleocene nor Eocene sediments have been recognized in the Valley, but landlaid beds containing Oligocene fossils occur at the head of Titus Canyon in the Grapevine Mountains, and similar rocks are known from other areas. Rather widespread acid volcanics are probably of Miocene age, and the Pliocene is represented by a considerable thickness of lake beds and fanglomerates, the former characterized by abundant footprints of many different species of mammals and birds. It is in the Pliocene rocks that the borax deposits occur.

At the end of Pliocene time the area was eroded to a surface of low relief. Large quantities of basalt were poured out on this surface in the early Pleistocene, and then the region was subjected to large scale faulting and the present Death Valley was formed. That this faulting is still going on is indicated by the presence of fresh fault scarps cutting very recent alluvium.

In the Wisconsin age Death Valley was occupied by a lake that was the last in a series starting with Owens Lake, and including lakes in Indian Wells, Searles, and Panamint Valleys. This lake, named Lake Manly, reached its maximum extent in the Tahoe subage, when it was 90 miles long by 6 to 11 miles wide, and more than 600 feet deep. A second maximum occurred in Tioga time, and it was at this stage that the prominent shoreline features still visible in the Valley were formed.

Recent geologic events include the formation of Ubehebe Crater and at least six other craters at the north end of the Cottonwood Mountains. These are explosion vents, blasted through sediments of probable Oligocene age, and probably formed within the last one or two thousand years. The evidence suggests that the youngest crater is not more than a century or two old. Fault activity, sand dunes, mud flows, and rocks being skidded across the wet surfaces of playas by the wind are other recent phenomena that intrigue the geologist who visits Death Valley.

SAN JOAQUIN GEOLOGICAL SOCIETY MEETING

December 15, 1954, Mr. R. H. Adams, senior engineer of Standard Oil Company, Tupman, California presented before the San Joaquin Geological Society an excellent paper on "History and Development of Elk Hills Oil Field". This was a repeat performance of this paper which was prepared for the recent A.I.M.E. meeting in Los Angeles by Mr. Adams and Commander Gutch (SEC) U.S.N.

Numerous colored slides illustrated the many complex reservoir problems which have confronted the Standard Oil Company and United States Navy engineering committees. Reservoir studies revealed a serious water encroachment of the lower San Joaquin Clay (SS1 and SS2 sands) and upper Ethchegoin (Mulinia sand) on the northeast flank of the structure. A corresponding down-dip migration of oil in the same zones on the south flank was also resulting in large losses of economically recoverable oil. A remedial program has been developed to arrest the above trends and protect the estimated 700,000,000 barrel reserve of these zones.

Of particular interest to the geologists, was the conclusion that many of the faults with displacements up to 200' were not effective barriers to the migration of gas and fluids in the reservoir. This fact was established by the use of helium gas as a tracer in the repressuring program and also by hundreds of depth pressure measurements.

WILDCAT HI-JINKS

The Western Oil & Gas Association presented its "1954 Wildcat Hi-Jinks" at the Hollywood Palladium on December 7th. The 1,575 California oilmen in attendance were treated to a prime-rib dinner and an interesting program with introductions handled by Tom Sherman, Chairman of the Wildcat Committee. The Welcoming Address was given by Charles S. Jones, President of the Western Oil & Gas Association. One of the highlights of the evening's entertainment was the Wildcat playlet, titled "What's My Racket?", with Bill Brooks as Master of Ceremonies. This thespian masterpiece was written and directed by H. J. Stroud of Signal Oil & Gas. The cast contained many accomplished actors, as follows: Bill Pemberton, Frank Carter, Harold Hoots, Homer Steiny, Ward Blodget, Ed Hamner and Joe Jensen, to name but a few.

The Western Oil & Gas Association and all those who participated are to be congratulated for their continuing success in presenting this most entertaining and enjoyable annual affair.

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Northwest Representative	Floyd Johnson
Sacramento Representative	Don Barrett
San Francisco Representative	Glenn Lansing
San Joaquin Representative	Joe Parmenter

NEXT DEADLINE JANUARY 27

A.I.M.E. JUNIOR PETROLEUM GROUP

The December meeting of the A.I.M.E. Junior Petroleum Group was held at the Turf Club in Rivera on December 15th. This meeting's attendance was 94 members and guests and featured a symposium on the "Evolution of an Oil Field". The subject matter of the various featured speakers ranged from initial property procurement to final abandonment.

"Leasing, Property Procurement and Royalty Agreements" were covered by Mr. Earl Hightower, local prominent petroleum attorney. Among other things, Mr. Hightower pointed out that California has no specific conservation laws, but operates under the Rule of Capture, which likens the capture of oil to that of wild game, and implies that an oil producer has absolute rights to produce whatever oil he can reach with his well.

Another subject of interest to geologists was "Completion Practices" discussed by Mr. E. G. Bemis, Senior Engineer, Standard Oil Company. Mr. Bemis pointed out that most wells are damaged to some degree when they are drilled. Formations become mudded off, subjected to water block, the clays tend to swell and precipates tend to form. Damage can be minimized and productivity increased by properly selecting completion fluids, liners, washers, chemicals, cleaners and by drilling and operating wells according to sound engineering principals.

"Secondary Recovery" was discussed by Mr. Nico Van Wingen, prominent petroleum engineering consultant and professor of petroleum engineering at the University of Southern California. Mr. Van Wingen pointed out that water flooding, which is gaining in popularity in California, is most justified economically whenever the supply of oil is short of demand. A preliminary engineering analysis is an absolute essential to precede a pilot flood, and the pilot flood is helpful in determining water treatment, tendency to by-pass and other factors important in a full scale flood. Recovery by in-situ combustion is just entering the field test stage in California.

"Gas Storage and Abandonment Practices" were discussed by Mr. T. A. Johnson, Gas Reserves Engineer for Southern California Gas Company. Underground storage is receiving increased attention due to its lower cost per cubic foot of gas stored, and its higher safety factor. Depleted gas fields offer excellent storage facilities. Abandonment procedures have been set up by the Division of Oil and Gas, and are aimed at preventing inter-zone migration of fluids, pollution of fresh water sources and preventing hazardous surface conditions.

Excellent outlines of the subjects discussed were distributed to all those in attendance in order to serve as a guide to further studies.

NEVADA GEOLOGICAL SOCIETY MEETING

Dr. Vincent P. Granella of the University of Nevada was guest speaker at the dinner meeting of the Eastern Nevada Geological Society at the Capitol Club, Ely, Nevada on December 2nd. The talk was entitled "Some Late Cenozoic Faulting in the Great Basin". The speaker confined his text to faulting in western Nevada. Structure and faulting was illustrated by pencil sketches followed by colored photographs showing the various fault scarps.

Major block faulting occurred during late Pliocene or early Pleistocene time in western Nevada. Normal faults displaced the older erosion surface of the Truckee formation capped by later rhyolite flows. The age of the formation has been determined as late Pliocene or early Pleistocene by the presence of fossil leaves found at certain horizons. The Truckee formation must have been deposited at an elevation near sea level followed by regional uplift, and a period of gravity faulting. Grabens and tilted blocks were formed, with both hanging wall and foot wall active during the period of faulting. Recent faulting shows evidence of recurrent movement along the older fault planes.

The hade of the fault planes can not everywhere be determined, but where seen they are high angle normal faults. The strike of the faults is generally north-south paralleling the Sierra uplift. The most pronounced normal faulting is at the east and west margins of the Great Basin, along the Wasatch Mountains in Utah and the Sierra Nevadas of California.

Later minor thrust faulting is in evidence but is of little importance in the Western Great Basin.

Well prepared to battle this new years pack of wildcats.

LE CONTE CLUB MEETING

On December 4th, the Le Conte Club met at Stanford University and held a seminar on the Franciscan formation of California. Dr. Olaf P. Jenkins of the Division of Mines acted as moderator of discussions by N. L. Taliaferro, Salem Rice, Porter Church, Arthur Campbell, M. G. Bonilla, Charles Merriman, Charles Camp and others.

Dr. Taliaferro reviewed his ideas which appeared in the A.A.P.G. Bulletin Vol. 27, No. 2 (February 1943) and pointed out that the Franciscan and Knoxville cannot be distinguished on the basis of lithology alone, and that they are not separated by unconformity. He believes the base of the Franciscan has not yet been found, but thinks there is an area in northern California where it might yet be found resting on Paleozoic rocks. He states that the lower Cretaceous unconformably overlies the Knoxville Franciscan, and that while "Franciscan" type serpentines often intrude the Knoxville, they do not intrude the lower Cretaceous. Huge masses of serpentine slide breccia however are found deposited in the lower Cretaceous on the Sacramento Valley West side. Dr. Taliaferro believes the Nevadan orogeny preceded deposition of the Franciscan and Knoxville and that it produced the geosyncline in which these units were deposited.

Dr. Charles Gilbert of the University of California discussed the sedimentation of the Franciscan. He defined the Franciscan sandstones as graywacke as currently defined and pointed out that the Franciscan graywackes are petrographically similar to the rocks considered as type graywackes in other parts of the world. He stated that a suite of typical Franciscan-like sediments is called a graywacke suite or geosynclinal suite in other parts of the world. Dr. Gilbert mentioned finding a few groove casts and flute casts in the Knoxville Franciscan of the northern California Coast Range that might be interpreted as suggesting a north or northeastern origin of the sediments and predicted that further search will find more. Findings of such a search would be helpful in deciphering the origin of the Franciscan sediments.

Salem Rice presented a brief bibliography of important papers on the Franciscan and discussed the commercial products obtained from the Franciscan group. Principal ones are asbestos, chromite, aggregate, limestone for cement and mercury. Only a small amount of noncommercial oil production (in the Petrolia area of Humboldt County and Wilbur Springs area of Colusa County) has been found so far.

The geology of selected areas of Franciscan outcrops was discussed by: Gordon Oakeshott - Stanley Mtn. San Luis Obispo County; Porter Irwin - N. Coast Ranges; John Lawton - Morgan Valley; David L. Jones - Calera Limestone of San Mateo County.

Paleontological evidence of the age of the Franciscan was discussed by Charles Merriman, Charles Camp, Clifford Church, Hans Thalmann and M. G. Bonilla. Dr. Merriman pointed out early workers were so positive that the entire Franciscan was Jurassic in age that any lower Cretaceous specimens found in Franciscan rocks were ruled out on the basis that they could not possibly have come from the Franciscan. Considerable doubts now exist regarding authenticity of some of the rare fossils reported from the Franciscan by early workers. Clifford Church and Hans Thalmann discussed the forminifera from the Calera limestone member of the Franciscan formation and report they indicate a definite Cretaceous age, possibly as young as the lower part of the upper Cretaceous.

A. S. Campbell of St. Mary's College has studied radiolaria from outcrops in the vicinity of Berkeley. Although these are well preserved they are so far indicative only of a Mesozoic age.

M. G. Bonilla of the U.S.G.S. discussed the lower Cretaceous (Albian) ammonite recently found on the south side of the Golden Gate. (See Bulletin A.A.P.G. Vol. 38, No. 11, 1954).

Charles Camp described an icthysoaur jaw found in West side San Joaquin Valley in Franciscan rocks and explained the development of the tooth structure which indicates either a late Jurassic or early Cretaceous age for the specimen.

Numerous fossils (including those discussed by the speakers), specimens, and photographs of typical sedimentary structures and geologic maps were displayed before and after the symposium in Cubberly Hall on the Stanford Campus where the meeting was held.

After the Le Conte Club dinner at L'Omelette Restaurant, Dr. Charles F. Park, Jr., Dean of the Stanford School of Mineral Science, described his recent travels in Chile. His colored slides ranged from photos of areas where no rain has ever been reported in historical times to areas at the extreme south where the rain or fog is virtually never ceasing.

HOLIDAY DINNER DANCE

The Annual Holiday Dinner Dance sponsored by A.A.P.G., S.E.G., and S.E.P.M., at Oakmont Country Club on December 4th, inaugurated the holiday season for about 130 couples. The Bruce Hudson band varied good music to the delight of old-timers as well as jitter-bugs. Chairman Joe Hathaway and his assistants Kenny Fuller and Louis Simon can take credit for a job well-done. The cocktail party, which preceeded the dinner, was sponsored by Baroid, B. J. Service, Inc., Geophysical Service, Inc., Halliburton, Homco of California, Johnson Testers, Inc., Lane Wells, McCullough Tool Co., Robert H. Ray Co., United Geophysical Co., and Western Geophysical Co. And what hors d'oeuvres, cocktails and highballs they were!

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

President Bob Herron has located the master prints of the April 18, 1954 SEPM-AAPG Field Trip Road Log. This is the Ventura Avenue to Ojai Valley trip. If enough people are interested in obtaining copies of the Road Log, they will be reprinted. The price will be $1.00. Please send orders to Bob Herron, M.J.M.&M. Oil Company, Ventura. The deadline is February 15, 1955, so get your orders in now.

S.E.G. MEETINGS

Dr. Charles B. Officer, of the Woods Hole Oceanographic Institution, distinguished lecturer for the Society of Exploration Geophysicists, presented a talk to members of the Pacific Section Society of Exploration Geophysicists at a dinner meeting in Los Angeles, December 16 and again to a luncheon group in Bakersfield, December 17, entitled "Seismic Exploration and Research Over Oceanic Areas".

Dr. Officer presented some of the results of recent investigations over deep ocean areas by means of seismic reflection profiles. Such profiles demonstrate that clear sub-bottom reflections and refractions are obtained which are interpretable to show the sub-structure beneath the ocean floor. One interesting conclusion of this work was that the sediment is dispersive; i.e., that the velocity of sound propagation is a function of frequency and further that at the lower frequencies the velocity in the sediment near the bottom is less than that in the adjacent ocean. This rather interesting geophysical phenomenon can be explained theoretically in terms of propagation in a porous medium. The low velocity

section in the sediment forms a wave guide between the higher velocity ocean above and the higher velocity sediment beneath, thus explaining previously observed constant frequency arrivals. A series of such profiles from Bermuda to the continental margins form a consistent set, which can be interpreted with the aid of previous seismic refraction investigations, to show that a layer of volcanics extends out from Bermuda across the abyssal plain. This experimental work was carried out using a single hydrophone receptor at varying intervals from the energy source. The receptor was a hydrophone having a flat frequency response throughout the range from zero to ten thousand c.p.s.

Following this, Dr. Officer discussed his paper entitled, "The Refraction Arrival in Water Covered Areas" which merited the S.E.G. Best Paper Award for the year 1953. This paper presented a theoretical solution for the refraction arrival in water covered areas assuming an impulsive point source. The physical significance of the mathematical solution was discussed and experimental verification of the theoretical predictions were presented. The character, frequency, and range dependence of the refraction arrival were shown to agree with theory. Knowledge of the frequency makes it possible to determine the seismic structure from a single shot and a single receiver. In general, knowledge of frequency increases the potential information available on a record.

NEW YORK CONVENTION TRANSPORTATION

The Transportation Committee finds so many different ways to go to the New York Convention that it is difficult to pin down an exact plan. It has decided that the traveler should arrive in New York late Saturday or early Sunday, March 26th or 27th. Accordingly three trips are planned: (1) Leave Los Angeles 8:00 A.M., March 26th, United DC-7 nonstop. Arrive New York at 7:20 P.M., same day. (2) Leave on Monday, Tuesday or Wednesday, March 21, 22, or 23rd, on some United plane. This will enable traveler to take wife at reduced fare and give a few days sight-seeing. (3) Go via train taking such train as arrives at Pennsylvania Station, as Hotel Statler is across the street.

Exact details are being worked out and will appear in next issue. Transportation Chairman: Homer Steiny, NOrmandy 1-4314.

PERSONAL ITEMS

Pete Hall of Richfield's Ojai office, has finally volunteered to sit on a well!! Richfield's Santa Cruz Island wildcat, slated to spud shortly after Christmas, seemed to Pete to be an ideal place to get in some offshore fishing and wild pig hunting, so he was first in line to watch the well. Actually, all the Ojai office geologists will be taking vacations on the Island, and will stand sea bag inspection before boarding the shuttle plane.

Bill Bishop and Manly Natland have returned from Arabia with all manner of incredible stories of their travels.

Gene Wiancko, Division Geophysicist for Union in Santa Paula, is vacationing in Mexico City, and other points south.

Intex held the final word in open houses December 17th in their new plush offices at 131 South Chestnut Street, Ventura. Bill Saunders served, Bill Lee poured, and Otto Hackel supervised the mistletoe.

Bob Rist, recently Division Geologist for Monterey Oil, Bakersfield, has returned home for the holidays from New Orleans where he has been assigned the position of Assistant Division Geologist.

Mike Rector, District Geologist, Union Oil, Sacramento, will be moving his offices to Bakersfield soon.

Presley De Jarnet of Ohio Oil Company in Bakersfield is in a position to supply a few legs of mutton to the highest bidders as a result of a slight mix-up between his car and a flock of sheep in the Buttonwillow area of the San Joaquin Valley. Was the wool pulled over your eyes, Presley?

Bill Emerson, Monterey Oil, Sacramento, will no doubt stay far from Placerville in the future. Something to do with banks, mistaken identity, riot-guns and Highway Patrolmen. Better sell that station-wagon, too, Bill.

John Oglesby, Scout for Monterey Oil, and long absent from Bakersfield because of a swimming accident, was home for the holidays with his family and friends. Everyone wishes him a rapid and permanent return.

Ed Doell of Standard was seen recently snooping around Bourbon Street in New Orleans. He insists when questioned that he was there on business.

Ted Off, Ojai Oil Company Geologist, now has offices in Ojai at 714 Foothill Road - Phone: Ojai 2943.

Chuck Edwards has resigned as District Geologist for the General Petroleum Corporation, Bakersfield, and is sharing consulting offices with Tennant Brooks at 1716 Oak Street, Bakersfield. Phone - FAirview 5-5026.

Bill Lewis, geologist, and Dick Ganong, Petroleum Engineer, have opened consulting offices in the Mack Building, Bakersfield. Until recently Bill was manager and Dick was production superintendent for the Barratt & Bysshe oil operations in the San Joaquin Valley District.

Bob Herron and Bill Saunders succeeded in beating the chess endurance record set in 1913 at Vienna by Illyitch Mitchnitch vs Pltvri Stmryck by playing to a stalemate in 3 hours and 13-1/2 minutes. Mitchnitch and Stmryck maintain both Saunders and Herron were asleep.

Being transferred on the first of the year from the Sacramento office to Bakersfield are the following Shell geologists: Don Gillespie, Joe Johnson and T. "Willie" King. We will miss the smiling, sunburned faces of these West Side "Brush-buckers" of the Shell Sacramento staff.

Paul Dudley, Long Beach consultant, is on a short consulting trip to appraise prospective oil and gas lands held by an Australian company. Paul was consulting in Africa last year and this is his second trip "down under".

Jim Benzley, Western Gulf, has just returned from Barbados Island, West Indies, where he had a well-sitting job for the parent company, Gulf. We are told that Jim lost weight trying to learn a native dance.

Jack Knight, British-American Oil Production Company has been elected First Vice-President for the Rocky Mountain Association of Petroleum Geologists.

Stanley C. Herold, consultant, announces he will sell unbound copies of A.A.P.G. Bulletins beginning with January 1935. He will sell full sets up to January of any subsequent year, but no separates. Stan's address is 1330 Ethel Street, Glendale 7, California.

The Town and Country area of Sacramento, located about 7 miles northeast of the center of town, can now rightly be called the "Oil Center" of the Capital City. The Standard Oil Company will move into new quarters by February 1st. Other companies already in the T & C area are: The Texas Company, General Petroleum Corp., Ohio Oil Company, and Western Gulf Oil Company. Located in the same district are the regional offices of the United States Geological Survey and the Bureau of Reclamation.

Seen floating around the Sacramento area recently in his new blue V-8 Chevrolet was Charlie Guion, Humble Scout. The first day he had the car he was out scouting a well and was heard to remark, "Gee, this is the first time this car's been off the pavement!! You mean with all four wheels at the same time, don't you, Charlie?

Mr. Lyle W. Smith, Shell Oil Company, is being transferred from Ventura to Los Angeles. Lyle will be Senior Geologist on the Area Staff and will be replaced as District Geologist by David H. Sears. Mr. N. H. MacKevett replaces Sears in Bakersfield and Dr. A. Maascant will take charge of a new district in the Ventura Basin.

L. M. Kuenzi, Standard Oil Company geologist, has transferred from the Alaska group to the Pacific Northwest Area.

W. D. Barlow, Standard geologist, was recently transferred from Bakersfield to Seattle to do field work. We hope he took his rain clothes with him.

William Halls, Continental geologist, recently transferred from Lafayette, Louisiana, to Olympia, Washington.

Wayne Marrs, Continental, most eligible bachelor in the Northwest, will spend a couple of months in Ventura. What a break for the girls in Ventura!

John M. Beall, Shell geologist, Alaska District, was married to Lola M. Meagher, former Shell stenographer, October 16, 1954. John and Lola are now residing in Washington, Mercer Island.

Henry T. Herlyn, Shell geologist, Alaska District, was married to Nancy Dahle Erickson, October 8, 1954, in Seattle. They are now residing at 4903 Linden Avenue, Seattle.

Miss Kay Swenson, former junior laboratory technician with Shell at Elma, Washington, resigned December 15th and will be married on December 29th to Robert Gorden of the U.S. Air Force.

Jim Osborne, formerly Shell stratigrapher in Bakersfield, was recently promoted to Division Stratigrapher at Salt Lake City.

Henry Waldron, geologist for General Petroleum at Paso Robles, has resigned to enter a farming partnership at Bonago, California.

Louis Waterfall and Milt Lewis won the 6th annual Domino Tournament at the Petroleum Club. The victors won three straight games to defeat the finalists.

Henry Tomko, Shell geologist, Elma, Washington, will be married sometime during the latter part of December.

We are glad to learn that John McMillan has been named Executive Vice-President of Monterey and A. W. (Bob) Gentry has been named Manager of Field Operations, after the recent merger of Fullerton Oil Company with Monterey Oil Company.

It was a pleasure to see Graham Moody at the various holiday festivities after his recent retirement. Graham will have consulting offices at 35 Stonewall Road, Berkeley, California.

Bill Murphy and Vic Heinzerling started the Christmas holiday parties with a good time for all when they had their annual Christmas dinner for scouts, geologists and secretaries on December 13, at the Clark Hotel.

NURSERY NEWS

Gene Johnson, scout for Shell in Los Angeles, announced the arrival of a son, Kenneth Eugene, weighing 8 lbs., 7 oz., on December 3rd.

John and Barbara Wilson, Standard Oil Company, Ojai, are the proud parents of a 7 lb., 14 oz., girl, Debora Delight, born on December 17th.

Hal Clifford, exploitation for Shell in Ventura is the proud father of a husky baby boy. This makes a nice family of four for the Clifford's.

George Lutz, Shell geologist in Ventura, produced a sister for his two little boys to play with. Robin weighed 8 lbs., 6 oz., and was born on December 12th.

Don and Velma Gresser, Shell, are proud parents of a baby girl, Cheryl Lynne, 8 lbs., 2-1/2 oz., born on December 22nd.

Harry and Joy Jamison with Richfield, Olympia, announce the arrival of Daniel Clyde on November 10th, weight 8 lbs., 2 oz., making a total of two girls and two boys for the Jamisons. Harry says it definitely is not the water, so it must be those long winter nights in Washington.

Harry Williams, Shell Scout in Bakersfield, is the proud father of Thomas Henry Williams, born January 2, 1955. Tom is Harry's first.

Bob and Maryfran Gallison, General Petroleum in Sacramento, are the proud parents of a 7 lb., 15 oz. boy, born on December 5th.

To Forrest and Beverly Muire, Continental, Olympia, a girl, Sally Lynn, born December 9th, weighing 8 lbs., 3 oz.

To Ralph and Jacqueline Rudeen, with Shell at Elma, Washington, a boy, Terry Karl, 7 lbs., 11-1/2 oz., born December 1st.

To Bonnie and Bill Johnson, Shell, Seattle, a baby girl, Kimberly Ann, weight 8 lbs., 5 oz. Bonnie reportedly doing fine - father losing sleep.

To Lee and June Nering, Continental, Olympia, a girl, Linda Joyce, born December 4th, weighing 6 lbs., 3 oz.

George Roth, consultant, is again a grandfather. This time it is a boy, Erik Michaelson weighing 8 lbs. 4 oz.

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"California Tidelands - What is Their Future?", Homer Steiny and J. B. Stumm, pp B57-62.

CALENDAR

January 10, 1955: Mon., 7:30 P.M. San Joaquin Paleontology Seminar, Bakersfield J. C. Bldg. Dr. Hans Thalman, Stanford University, will be the speaker. The title of his lecture is, "Oil Accumulation and Paleontology of the Brackish Water Environment".

January 11, 1955: Tues., Cocktails, 6:00 P.M., Dinner, 7:30 P.M., Coast Geological Society Meeting, Montecito Country Club, Santa Barbara. Mr. Lowell Redwine, Honolulu Oil Corp., will give "A Review of the Geology and Operations on the Santa Barbara Channel Islands". (It is recommended that those attending bring the A.A.P.G. Channel Islands Correlation Chart.)

January 13, 1955: Thurs., 12:00 Noon, S.E.G. Luncheon, a Pasadena Restaurant (location to be announced). Miss Sibil Rock will discuss "Equipment of the Electrodata Corp". An inspection tour will follow.

January 13, 1955: Thurs., 7:00 P.M., Los Angeles Basin A.I.M.E. Jr., Petroleum Group Dinner meeting, Turf Club, Anaheim-Telegraph Road and Rosemead Blvd. A symposium on Oil Field Tankage and Automatic Gauging and Control of Tank Farms. For reservations call Oran Hazeltine, MI 8311.

January 17, 1955: Mon., 7:00 P.M., Los Angeles Geological Forum, General Petroleum Auditorium, Los Angeles. Dr. John C. Crowell of U.C.L.A. will give a talk entitled, "A Geologist in the Alps". Lawrence C. Bonham of the Cal. Research Corporation will present a paper on "The Structural Petrology of the Pico Anticline, Los Angeles County, Calif."

January 18, 1955: Tues., 6:30 P.M., San Joaquin Valley Chapter A.P.I., Stockdale Country Club, Bakersfield. First meeting of the year under new officers. Speaker and subject open.

January 27, 1955: Thurs., 7:00 P.M., Eastern Nevada Geological Society Dinner Meeting, Ranch Inn, Elko, Nevada. Mr. John C. Osmond, Gulf Refining Corp., will speak on "The Regional Relationships of the Sivy and Simonson Dolomites in the Great Basin".

February 1, 1955: Tues., 6:30 P.M. San Joaquin Valley Section A.I.M.E., Stockdale Country Club, Bakersfield. Panel meeting discussion on Slimhole Drilling.

PACIFIC PETROLEUM GEOLOGIST
PACIFIC SECTION, A.A.P.G.
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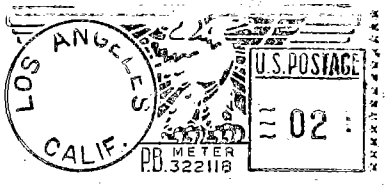
Vol. 9 No. 1



Mr. F. R. Neumann
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Chico, Calif.

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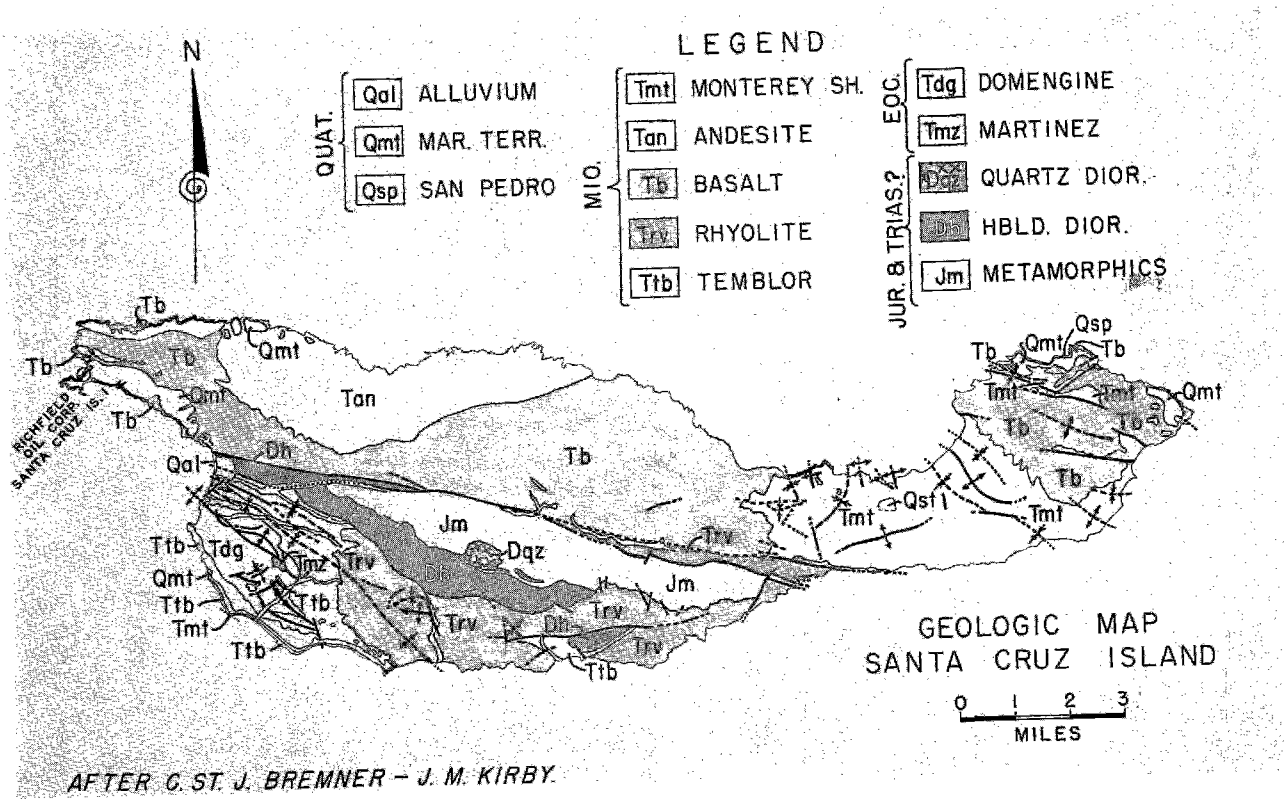
PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 9 February 1955 No. 2

ASSOCIATION ACTIVITIES



COAST GEOLOGICAL SOCIETY MEETING

Lowell E. Redwine, District Geologist for the Honolulu Oil Corporation at Santa Barbara, was the guest speaker at the Coastal Geological Society dinner meeting at the Montecito Country Club, Santa Barbara, on January 11, 1955. Mr. Redwine presented an illustrated talk on "A Review of the Geology and Oil Operations, Santa Barbara Channel Islands" to a capacity audience.

The Santa Barbara Islands are four closely spaced islands forming a chain consisting of, from east to west, Anacapa, Santa Cruz, Santa Rosa and San Miguel. This chain is the westward and seaward extension of the Santa Monica Mountains, and represents much of the southern edge of the Ventura Basin. The chain lies parallel to and south of the mainland an average distance of about 27 miles and has a total land area of about 194 square miles.

Reed and Hollister's "Tectonic map of Southern California" illustrates how the Channel Islands are closely tied to the geologic and tectonic framework of the Santa Monica Mountains and the Ventura Basin. Lowering the present sea level only 600 feet would connect the islands and a large area surrounding them to the mainland in the form of a peninsula.

The Channel Islands, except possibly the southern parts of Santa Rosa and Santa Cruz, fall in the southernmost part of the seaward extension of the Transverse Range Province. San Nicholas Island, which lies southeast of the Channel Islands, is part of the northwest-trending topographic province, which trend apparently changes abruptly to the westerly-trending topography of the Channel Islands, near the southern shores of the islands. This change is structural, and the speaker suggests the change occurs very abruptly within the Santa Rosa and Santa Cruz Islands.

There are rather widespread and persistent misconceptions of the geology and the spatial and hydrographic relationships of the islands. These misconceptions tend to mask the importance and significance of the islands in better understanding the geology of the Ventura Basin.

The geology, stratigraphy and structure of each of the islands were reviewed and numerous excellent Kodachrome slides were displayed which amply illustrated the salient data which the speaker presented.

Reference was made to W. E. Kennett's very fine columnar sections and correlation chart published by the A.A.P.G., which illustrates the complexity of the stratigraphy of the chain. The observation was made that Kennett's chart could not be condensed without losing much of its importance.

References were made to the following published reports: "Preliminary Report of the Geology of Santa Cruz Island", by W. W. Rand, published in the "Report of the State Mineralogist", 1931; "The Geology of Santa Cruz Island", by Carl St. James Bremner, published in the Santa Barbara Museum of Natural History Occasional Papers, 1932; Geologic sketch of Santa Rosa Island by W.S.W. Kew, G.S.A., 1927, and "Geologic map of San Miguel Island", by

Carl St. James Bremner, Santa Barbara Museum of Natural History, 1933.

References were also made to unpublished theses, as well as work by numerous oil company geologists, including detailed work by the speaker and Paul McGovney of Honolulu Oil Company, and R. E. Anderson, Doug Traxler, and others of Signal Oil Company.

A history of the wells that have been drilled on Santa Rosa Island was presented, together with structural sections interpreting the information thus obtained. Seven wells have beem drilled on Santa Rosa Island, all of which were abandoned. The only oil sand encountered was in the Signal-Honolulu well No. Tecolote 1. Some 20 feet of the basal Sespe were oil stained, including about one foot of good permeable oil sand containing 45° gravity oil. Lest this sound like a condemnation of the Island, note that the average well density is now one well per 7,429 acres.

Many large patches of drift tar and oil are found on the north and northwest shores of Santa Cruz, Santa Rosa, and especially San Miguel Island. These are carried from offshore seeps by the prevailing northwest wind.

Santa Cruz Island is currently in the spotlight because of Richfield's drilling activity. This island is located about 4 1/2 miles west of Anacapa Island. It is approximately 24 miles long and 7 miles wide at its maximum width. Santa Cruz Island has a land area of about 97 square miles and a maximum elevation of 2450 feet. Structurally, Santa Cruz is a northwest by west-trending faulted anticlinorium. The dominant structural feature of the island is the large, essentially vertical Santa Cruz fault, a fault zone bisecting the island and forming the crest of the anticlinorium. The highest part of the anticlinorium north of the fault is at the western end of the island. You will note on the accompanying geologic map that this is where Richfield is presently drilling the only well that has been drilled on the island. The highest part of the anticlinorium south of the fault is about the center of the island.

Although the structure and stratigraphy of the islands are complex, so also is the mainland, and it seems evident that we shall never understand the geology of the Ventura Basin until we understand the geology of these islands.

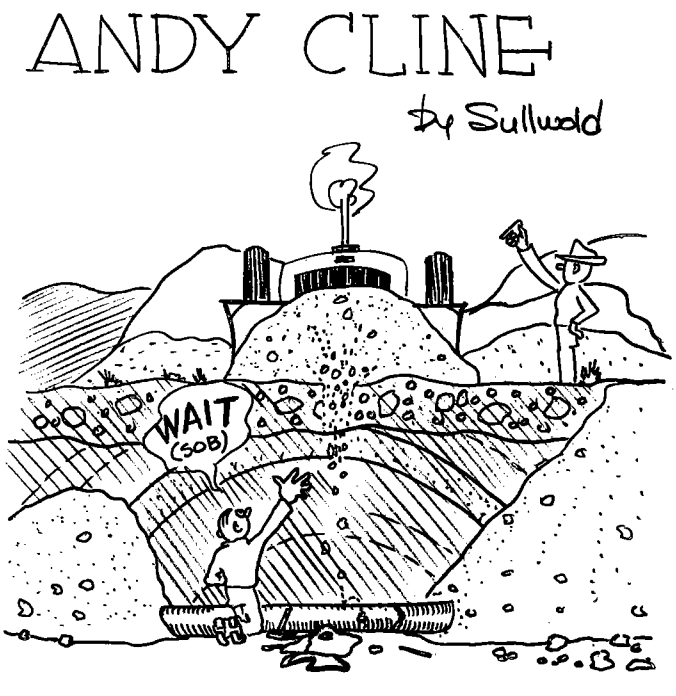
SACRAMENTO GEOLOGICAL SOCIETY MEETING

Mr. C. J. Kundert of the State Division of Mines presented a very interesting talk before a meeting of the Sacramento Geological Society on "The New State Geologic Map" on January 11. Mr. Kundert brought with him, and exhibited, several editions of State geological maps which were published by the State Mining Bureau as early as 1891. The 1916 edition was interesting in that it attempted to show the geology of the entire surface area of the State. The present (1938) edition was, of course, not so presumptuous to assume that the geology of the whole State was known well-enough to be put on a map. Therefore, where the geology was not known, the map was left blank, and the words "Unmapped Area" were inserted.

Preliminary prints of portions of the new State Geologic Map will be available before the end of the fiscal year. The map will be on a larger scale (1:250,000) than the 1938 edition (1:500,000). This larger scale will make the previous type of wall-map editions impractical, and the final map will be published as a folio. Each sheet will have its own legend and a brief geological resume. The base maps on which the geology was plotted are of the U.S.E.D., 1:250,000 shaded relief series. All but five of these base maps, which will give uniform coverage of the entire State, are available at present. The completion of the final State Geologic Map will not be possible until these are completed by the U.S.E.D. An innovation in the new geologic maps will be the retention of the base map contours.

Mr. Kundert has alone done all the compiling for this new map under the supervision of Dr. Olaf P. Jenkins, Chief of the State Division of Mines. Certainly he should be congratulated for undertaking this mammoth venture of revision and compilation.

Eight sheets which cover the southern portion of the State were on display at the meeting and are now in print. The present costs of color lithography are prohibitive, and the first edition will of necessity be in black and white. The State Division of Mines will announce the date the preliminary sheets will become available.



LOS ANGELES GEOLOGICAL FORUM

The Los Angeles Geological Forum met in the General Petroleum Auditorium on January 17th to hear two very interesting speakers, Professor John C. Crowell of U.C.L.A. and Mr. Lawrence C. Bonham of California Research Corporation.

Dr. Crowell gave an illustrated talk on the geology and scenery of portions of the Alps which he visited last year while on sabattical leave from U.C.L.A. with the aid of a Fulbright Award and a Guggenheim Fellowship. He showed slides illustrating some of the principal rock types such as Flysch, Molasse, Wildflysch, etc. The term Flysch, which has been transplanted to other parts of the world including California, is used in the Alps in three ways: as a formation name, as a lithologic term signifying interbedded sandstone and shale with some limestone, marl, and conglomerate, and as a designation for synorogenic sediments.

Some of the complex structures in the Alps were illustrated by means of colored cross-sections with field photographs taken at critical places. These served to review arguments for great movements of nappes and the ways that Alpine geologists have worked out the tectonic history. Much of this history has depended on reconstructing paleogeology from isolated and broken thrust fragments. Although the major structure is no doubt due to thrusting and folding, gravity sliding may play a role in explaining some of the very complex structures. Alpine structure seems to be the result of long-continued deformation, intermittent during the Mesozoic and Tertiary, acting upon rock types of great difference in structural response. Large masses of incompetent rocks in thrust plates may have glided northward when the root region was elevated by folding. Alpine structure can be viewed, therefore, as the folding and gliding of earlier thrust plates, composed mainly of incompetent limestone and marl interbedded with competent layers which change in thickness and lithology both laterally and vertically in the section.

Dr. Crowell also showed slides of Alpine scenery in Austria, Italy, and Switzerland. He described briefly the geology in several areas and reviewed problems facing geologists working in such a region.

The second speaker of the evening, Mr. Lawrence Bonham, talked on the "Structural Petrology of the Pico Anticline". He explained that a petrofabric field and laboratory study was made of the rocks of the Pico anticline to investigate the correlation between microstructures and large scale structures and to determine the possibility of predicting large scale structures from microstructures in unmetamorphosed sediments.

The Pico anticline is a flecture-slip fold in relatively poorly indurated conglomerates, sands, and shales of upper Miocene and Pliocene age. Separate B axes are associated with the anticlinal axis, with the plunge axis, and with a change in strike of the fold.

The quartz in the sandstones shows both preferred dimensional and crystallographic orientation, but the evidence suggests that these are inherited depositional fabrics, rather than the result of deformation accompanying folding.

The quartz microfracture orientation shows a good correlation with the large structure in this area. The microfractures are preferentially oriented in the ac plane of the fold or in two sets bisected by the ac plane. The strike of the anticlinal axis can be determined within 20 degrees from about 80 percent of the oriented samples studied. The direction and amount of plunge of the fold can be determined with about the same accuracy. This study provides evidence that even in poorly indurated and relatively slightly deformed rocks, the microfabric can be correlated with the gross structure.

NEW YORK CONVENTION

The Geologist's Specials to the national convention in New York are arranged as follows:

Train: Union Pacific, City of Los Angeles.
Leave: Los Angeles, Union Station, Wednesday, March 23 - 4:30 p.m.
Arrive: Chicago, Northwestern Station, Friday, March 25 - 10:30 a.m.
Leave: Chicago, Union Station, Friday, March, 25 - 3:00 p.m.
Arrive: New York, Pennsylvania Station, Sat., March 26 - 8:25 a.m.

Round trip fare:
$200.35 plus $20.04 (tax).....$220.39

Dependents round trip fare:
$113.35 plus $11.34 (tax).....$124.69

Pullman fare one way:

Roomette(1)	$40.50	$4.05(tax)...	$ 44.55
Bedroom(1)	54.95	5.50(tax)...	60.45
Bedroom(2)	63.65	6.37(tax)...	70.02
BedroomSuite(4)	109.90	10.99(tax)...	120.89
Compartment(2)	81.10	8.11(tax)...	89.21
Drawing Room(3)	109.90	10.99(tax)...	120.89

This train has one car that goes through to New York without change in Chicago. It has roomettes and bedrooms only. Those taking other or overflow space will have to transfer to other similar space in Chicago. This will cause no inconvenience. A "dependent" is a wife or child up to 22 years. The dependent must go on the same train as sponsor but may return any way, any time, on their own. Traveller should detail his return so that transportation and Pullman space is complete prior to leaving Los Angeles.

The Statler Hotel is across the street from Pennsylvania Station. This trip is being handled through Charles F. Hallsman, 608 South Olive Street, Trinity 9211, and reservations or information may be made through Homer Steiny or directly with Mr. Hallsman.

Plane: United-Continental DC-7 Non-Stop.
Space has been reserved on above plane.
Leave: Los Angeles, Saturday, March 26,- 9:00 a.m.
Arrive: New York(Idlewild), March 26,- 7:15 p.m.
Round trip fare: $301.90 plus $30.19(tax)...$332.09

This trip is being handled through Miss Margaret Erwin, United Air Lines, 6th and Olive Streets, Madison 60431 and reservations may be made through Homer Steiny or directly through Miss Erwin.

If you have any questions concerning the transportation or New York you may contact Homer Steiny, 580 N. New Hampshire, Los Angeles 4, Calif., Normandy 14314.

A.A.P.G. LUNCHEON

Engineers of Richfield Oil Corporation provided the luncheon program on January 6th at Roger Young Auditorium. The demonstration of "An Oil Field at Work" was interesting and informative. The subsurface reservoir model made of plastic with colored liquids representing oil and water activated by gas (CO_2) were particularly impressive.

Designers of the program had in mind the encouragement of wider public knowledge of general oil field operations. Emphasis was placed on the gain in efficiency and equality in the unitized operation of an oil field. The demonstration started with the leasing of the land and carried through to the abandonment of the field.

The program has been presented widely and has been very well received in all instances. Richfield deserves the praise they are getting for this fine presentation.

NORTHWEST GEOLOGICAL SOCIETY MEETING

On January 17 Mr. Charles V. Fulmer, geologist for Standard Oil Company, gave a talk before the Northwest Geological Society at Tacoma on the "Stratigraphy and Paleontology of the Type Blakeley formation of Washington".

The type section of the Blakeley formation is exposed in the sea cliffs along the entrance to Bremerton Inlet and along the southeastern shore line of Bainbridge Island.

Charles E. Weaver (1912) applied the name Blakeley formation to the Bainbridge Island section consisting of approximately 8,000 feet of conglomerates, sandstones, siltstones and shales. Later, Weaver included in the Blakeley formation a basal conglomeratic unit exposed at Orchard Point.

The strata constituting the Blakeley formation, as recognized by Weaver, can be grouped into three lithogenetic units. The lowermost 845 feet consists of well-bedded, hard, marine, gray sandstones, and massive conglomerates, the Orchard Point member. The middle unit consists of approximately 4,000 feet of marine, hard, massive, gray-tan siltstone interbedded with thin, hard, fine-grained sandstone: soft, limonitic-stained sandstone largely covered by beach gravels: and massive, dark-gray, silty shale. This lithologic unit is the Restoration Point member and contains the typical Blakeley molluscan faunule.

The upper lithologic unit consists of approximately 4,650 feet of massive, nonmarine conglomerates interbedded with thin, gray sandstones, and soft carbonaceous siltstones.

The Orchard Point and Restoration Point members, based on the foraminiferal assemblages contained, are best correlated with the Zemorrian stage of California.

BRANNER CLUB MEETING

Dr. Donald B. McIntyre of Pomona College gave an illustrated talk before 70 members of the Branner Club December 7th at CalTech. The subject on which he spoke was "Some Structural Features of the Scottish Highlands".

Dr. McIntyre demonstrated a geological map of Scotland and drew attention to the existence of a number of major dislocations trending approximately northeast - southwest. These are (i) the Southern Upland Boundary Fault, generally assumed to be a normal fault, (ii) the Highland Boundary Fault, with a complex history but apparently acting as a high-angle reverse fault in its main movement, (iii) the Great Glen Fault, claimed as a left lateral strike-slip fault, (iv) the Moine Thrust, for long taken as a classic example of a low angle thrust fault, and (v) the Outer Hebrides Zone of Flinty Crush Rock, a belt of ultra-mylonite injection. The apparently diverse character of these sub-parallel dislocations indicated that much work remains to be done in this already intensively studied region.

At the present time the chief problem being investigated is the relationship of penetrative movements within the metamorphic complex of the Highlands and the thrusting of these rocks onto Cambrian beds now exposed in the North-West Highlands. Over wide areas the folds trend at right angles to the supposed direction of overthrusting. The significance of this fact is not yet fully understood and several hypotheses have been put forward to account for it. Dr. McIntyre outlined these and discussed the validity of the long accepted evidence for overthrusting towards the northwest.

New officers of the Branner Club for 1955 are: John F. Mann, Jr., U.S.C., President, James R. Dorrance, The Texas Co., Vice-President, and Richard O. Stone, U.S.C., Secretary-Treasurer.

PACIFIC SECTION MAILING LISTS

In order to reduce Pacific Section operating expenses, changes are being made in mailing lists now used to notify members of Pacific Section activities. Post card announcement of luncheons and Forum meetings, for example, will be sent only to members residing in greater Los Angeles area. This will effect a monthly saving of $20 for luncheons alone.

Mailing lists for Coastal and San Joaquin Geological Societies have been made up and will be used for activities in those areas. Anyone who wishes his name placed on more than one mailing list may do so by paying 50 cents to the Treasurer of the Society from whom he would like to receive notices. It should be pointed out, however, that Pacific Section activities are reported in the Calendar of The Pacific Petroleum Geologist as well as by scouting services and trade journals.

NORTHERN GEOLOGICAL SOCIETY

The Northern California Geological Society has elected by mail ballot the following new officers for 1955: Dr. Gordon B. Oakeshott, California Div. of Mines, President, Charles E. Kirschner, Standard Oil Co., Vice-president, and E. L. Marier, T.W.A., Secretary-Treasurer. The Pacific Petroleum Geologist correspondent for the San Francisco area will be Herschel L. Driver of Standard Oil Company.

SAN JOAQUIN A.P.I. MEETING

Dr. V. L. (Van) Vander Hoof, Geologist, Intex Oil Company, Ventura, talked to an over-capacity crowd Tuesday night, January 18th, at the Stockdale Country Club, Bakersfield. The event was the first meeting of 1955 of the San Joaquin Valley Chapter-API, and the subject was "Future Oil Prospects of California".

Dr. Vander Hoof stressed the importance of finding more local oil to supply the ever increasing demand for petroleum products in California. He stated that since 1940, the market for oil has increased 48 percent, due to the influx of new people and automobiles, and the expanded uses of petroleum for the paving of roads and highways, in petro-chemicals, and in the steel industry.

The answer to this tremendous problem, according to Dr. Vander Hoof, rests on the shoulders of everyone in the oil industry. In view of the fact that new reserves are becoming harder to find, he feels that management must be convinced that all technical help must be used to the fullest extent, all possible prospects must be drilled, and deeper exploration should be carried out. Among other points stressed by the speaker were the wider use of subsurface geology to get away from "misleading surface control", more consideration of the numerous unconformities, re-appraisal of data, and the importance of avoiding prejudices.

It was pointed out by Vander Hoof that since 1908 responsible oil men have each year been able to "demonstrate" that "all of the big California oil fields have been discovered".

Vander Hoof told his listeners that with the open minded use of new untried methods, enthusiastic technical application backed by managements' "guts", California's oil industry can meet the heavy demands on its oil production.

CORRECTION

The Editor wishes to correct an error in the January 1955 issue on Page 2 in a report on the meeting of the Eastern Nevada Geological Society at which Dr. V. P. Gianella spoke on "Some Late Cenezoic Faulting in the Great Basin". Line 15 should be corrected to read, "Miocene or early Pliocene by the presence of".

U.S.C. NIGHT COURSES IN GEOLOGY

The University of Southern California will continue offering advanced geological courses at night starting on February 7th. Classes will begin at 6:00 p.m., on one night each week in the following geology courses: Monday, Geochemistry 460, Wednesday, Ground Water 525, and Thursday, Stratigraphy of North America 585. Six courses in Petroleum Engineering are also available in the night classes. The last date for registration is February 19th. Thanks to Bill Easton for bringing this to our attention.

COAST GEOLOGICAL SOCIETY SEEKS REPRESENTATION ON EXECUTIVE COMMITTEE

The 135 resident members of the Coast Geological Society desire to have representation on the Pacific Section Executive committee according to Bob Herron, President of the coastal group. A formal petition has been tendered the Executive Committee of the Pacific Section of A.A.P.G. to amend Article 4, Section II, of the Constitution to add the words ".... ... and one member selected by the Coast Geological Society".

A mail ballot on this proposed amendment will be sent to the membership at an early date.

SAN JOAQUIN VALLEY SECTION - A.I.M.M.E.

A vigorous membership campaign and schedule of panel-type technical meetings is planned for the new year by the following newly elected officers:

Chet Davis..... Chairman
W. J. (Doug) Taylor ..... Vice Chairman
R. H. Adams ..... Secretary
Gordon H. Wells..... Treasurer
Hal Case ..... Membership Chairman

It is hoped that the group may work with instructors of the Bakersfield and Taft Junior Colleges with the aim of a possible formation of a student chapter.

PACIFIC SECTION PUBLICATIONS

Guidebook - 1952 National Convention

It contains 290 pages, maps, cross sections, stratigraphic charts and road logs of 670 miles of road with short illustrated papers on regional geology and some oil fields of Southern California.
Price: $6.50 postpaid
From: Louis Simon, Treasurer, Room 715, 939 South Broadway, Los Angeles 15, California

Cross Sections

Detailed cross sections of Los Angeles Basin, Eastern Ventura Basin, Western Ventura Basin including Channel Island, Salinas Valley and North Sacramento Valley.
Price: $1.10 each postpaid
From: Dorothy V. Harkness, Union Oil Co., 617 West 7th Street, Los Angeles 17, California

Directory - 1953

Directory of A.A.P.G. Pacific Section members with individual photographs and affiliations.
Price: $1.00 postpaid
From: Warren W. Hagist, Superior Oil Co., 930 Edison Bldg., Los Angeles 17, California

SACRAMENTO VALLEY SCOUT CHECK

The following new officers were elected for the coming year in the Sacramento Valley Scout Check, which is called Northern California Petroleum Round Table: Bruce Brooks, Superior Oil Company, President, Art Hawley, Western Gulf, 1st Vice-President, Swiss Holmes, Shell Oil Company, Secretary-Treasurer, Jay Hubert Mee, Standard Oil, Editor, and Jeff Watts, P.G.&E., Delegate.

SAN JOAQUIN VALLEY CHAPTER - A.P.I.

New Officers for 1955

J. J. Oliphant..... Chairman
Harry Campbell.....Program Chairman
H. M. VanClief.....Membership Chairman
R. H. Torrey.....Secretary-Treasurer

PERSONAL ITEMS

John Pujol, Tide Water, has been transferred from Woodland to Bakersfield. He and Wayne Shaw are assigned to research work under the direction of Bill Cortright.

Glenn Lansing, Tide Water, has been transferred from San Francisco to Ventura. He and Charlie Foss have been assigned to research work under the direction of Harry Whaley.

Jim Saunders, Tide Water, is now Area Geologist for the Los Angeles Basin with headquarters in Los Angeles.

Doug Andrews, Tide Water, has been transferred from Bakersfield to Sacramento as Northern Area Geologist.

Dave Costello, Tide Water, has been appointed San Joaquin Area Geologist with headquarters in Bakersfield.

Bert Marier, Tide Water, has been appointed Basin and Range Area Geologist. His headquarters are as yet unassigned, but he has been looking at tents and Coleman stoves recently in the "Surplus Stores" along lower Market Street.

Bob Hoffman, Tide Water, will move from Bakersfield to Ventura as Exploitation Geologist and Don Didier will be Exploitation Geologist in the Bakersfield District.

The Tide Water Associated San Francisco Paleontological Laboratory will be moved to Bakersfield with Cliff Church in charge.

Dean Morgridge, who recently obtained his Master's Degree at the University of Wisconsin, has joined the staff of Humble at Eugene, Oregon.

The Texas Company has opened an exploration office in Washington with Wayne Felts in charge. The address is 119 Deschutes Way, Tumwater.

W. S. Knouse, Tide Water, has the new title of Staff Geologist and will remain in San Francisco.

Bob Herron, M.J.M.&M. Division Geologist and good will ambassador, spoke to the Ventura Desk and Derrick Club on "How an Oil Play is Developed". He traced the play from the acquisition of land to the drilling well with a general summary of the whole operation.

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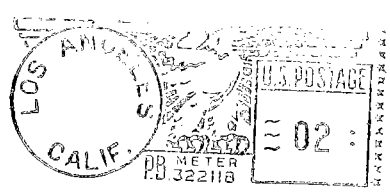


Mr. F. R. Neumann
381 E. 4th St.
Chico, Calif.

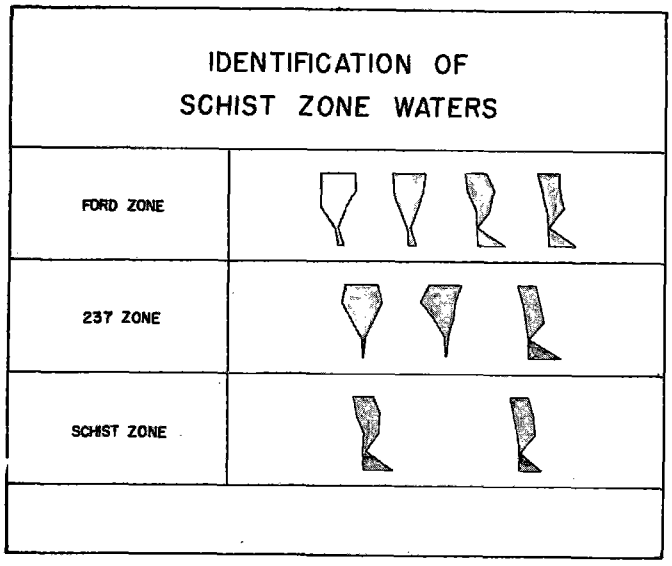
Form 3547 Requested

PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 9 March 1955 No. 3

ASSOCIATION ACTIVITIES



A.A.P.G. FORUM

Two guest speakers were featured at the February 21st Forum Meeting at the Edison Building Auditorium in Los Angeles.

The first speaker of the evening, Mr. John Rumbaugh of E. B. Hall and Co., talked on "Geochemistry of the Wilmington Oil Field Waters". The Wilmington Oil Field is currently the largest producer in California, with the preponderance of production coming from Miocene beds. The structure is a highly faulted anticline overlying and parallel to the axis of a buried schist ridge, and located between the Torrance Oil Field and the newly discovered oil field offshore from Seal Beach, California. Wilmington's southeasterly limits under the tidelands south of the City of Long Beach are not yet defined.

The waters of the Wilmington field fall into three general classes, namely, (1) waters of the overburden, (2) waters of the producing strata, and (3) waters of the fractured basement surface. The uppermost 1800' of sediments (which are of marine origin) contain meteoric waters, with the top 300' showing local counter-invasion by ocean water in response to inland fresh water pumping. The lowermost overburden waters, down to about 2200', are connate brines about which little is known. They should be lower in magnesium than ocean water and higher in sulfates than the oil zone waters below.

The producing pools consist of some seven zones in six major fault blocks. Waters produced from these strata were seen to differ from one another, yet to be typical oil field brines. Low magnesium content resulting from base exchange and low sulfate content from the biochemical action of sulfate reducing bacteria characterize their water patterns.

The waters in contact with the fractured basement, at about 6000', differ from those of other oil zones in two major respects: they are about half as concentrated and they are relatively high in sulfates. It was suggested that their composition may be the result of entrapped meteoric waters diluted by connate waters which were released from adjacent sediments upon their compaction.

An application of the graphic method of expressing geochemical water properties proposed by Henry Stiff in 1950 was utilized in the discussion of the Wilmington waters. Colored slides were used to demonstrate the construction of these water patterns and the manner in which they are used. Correlations of waters from block to block and from zone to zone were shown. Several instances of the effect of mechanical failures upon the normal producing water patterns were shown.

The accompanying chart shows how water analysis patterns are used to identify or verify water source. Such information is useful in planning and evaluating remedial work. Patterns of typical zone waters are shown to the left of each set of diagrams.

Minor constituents of the waters such as iodine, were seen to be of definite, but secondary value in water correlation work. In particular, the ammonium ion, not having a high diagnostic value at Wilmington from the standpoint of water source identification, obstructed the perception of the Stiff water patterns as initially plotted. When the ammonium ion was suppressed, the correlation value of the patterns increased noticeably.

It was concluded that the graphical expression of geochemical water analyses is increasing in usefulness as a correlation tool as data and experience are accumulated. For maximum value, the concentration indices of the Stiff pattern should be critically reviewed after local experience in the use of the patterns is acquired.

LONG BEACH AIRPORT AREA

Donald M. Smith, Long Beach consultant, concluded the meeting with a timely discussion entitled "Recent Development of the Long Beach Airport Area". Mr. Smith gave a first hand account of the early history of the Long Beach field which was discovered in 1921. The highest recovery per acre of any field in the world is credited to the Lovelady pool in the central portion of the southwest flank where recoveries are approaching 600,000 barrels per acre. Since the early 1930's development has usually been slow and steady, punctuated by frenzied booms growing out of the discovery of some new zone or fault block. About every two years there is a boom of some sort in some part of the "hill".

Mr. Smith pointed out the relationship between down-structure faulting and the absence of edge-water movement. In some zones sands are continuous and have no apparent edge-water encroachment. These zones, which are known as solution-gas drive zones and later as gravity-drive zones, may reasonably be assumed to lie above down-structure faulting. If this faulting may be assumed to exist, then further exploration is indicated to investigate down-structure trapping. Mr. Smith stated he could enumerate eight or more areas in the Long Beach field where accumulations have been discovered lying down-structure from flank faults.

The Airport area officially designated as the Cherry pool by the Conservation Committee was discovered by The Texas Company well No. Long Beach Airport (NCT-1) No. 1, Section 20, T. 4 S., R. 12 W., Los Angeles County. This well was completed February 20, 1954, flowing 141 B/D, 31.1° gravity oil, 1.4

percent cut from selected gun perforated intervals 8750 to 9065 feet. The discovery was made as a result of a seismograph study which indicated a faulted structural trap.

The well was drilled on the site of the Long Beach Airport just east of Cherry Avenue, between the east-west runways, one-fourth mile northeast of the main Long Beach field. This property is owned by the City of Long Beach and is subject to a royalty of 42.6 percent. The Texas Company acquired the lease on this property by bidding this royalty plus a bonus of $100 per acre for 1,040 acres. Part of the drilling committment was the obligation to drill 2 twelve-thousand foot wells, providing production was not obtained above those depths.

The first well was drilled to a total depth of 13,016 feet. The productive interval is the equivalent of the Lower Deep Zone in the developed part of the field. It was not until well No. NCT 2-1 was drilled and completed in the interval from 7557 to 8305 feet that the importance of the discovery became evident. This well was produced at rates up to 600 B/D of 33° gravity oil. Normally, the top of the Deep Zone is identified with the AH electric log marker, the zone extending down through a section approximately 700 feet thick. In the Airport area, the highest stratigraphic oil saturation is at the AL marker, 540 feet below the AH point. In the structurally high positions, clean saturation extends down from the AL marker for a distance of approximately 1450 feet. This includes all the lower portion of the Deep Zone to the top of the shale overlying the De Soto Zone. Permeabilities and porosities are very high - much higher than the equivalent zones in the older portion of the field. This condition, according to Mr. Smith, is the result of the down-structure position.

A sand count of the 1420 feet producing section of one well showed a net permeable sand thickness of 1215 feet or 85 percent. Proven closure in the developed area extends from minus 6500 feet to minus 7050 feet on the AH marker.

Below the Deep Zone lies a section of very high resistivity shale which is approximately 800 feet thick. No information is available as to possible production in the De Soto Zone or the underlying schist-contact zone.

Attempts have been made to tie the Airport area in with the adjacent Wardlow area to the west which was developed by R. W. Jerman and the Hancock Oil Company. In the Wardlow area saturation extends approximately 700 feet below the AH marker. Permeabilities and porosities are very much lower in this area with correspondingly lower productions and reserves. The Wardlow area is higher on structure than the Airport area.

The differences in the two areas suggest the possibility of substantial lateral movement along certain faults.

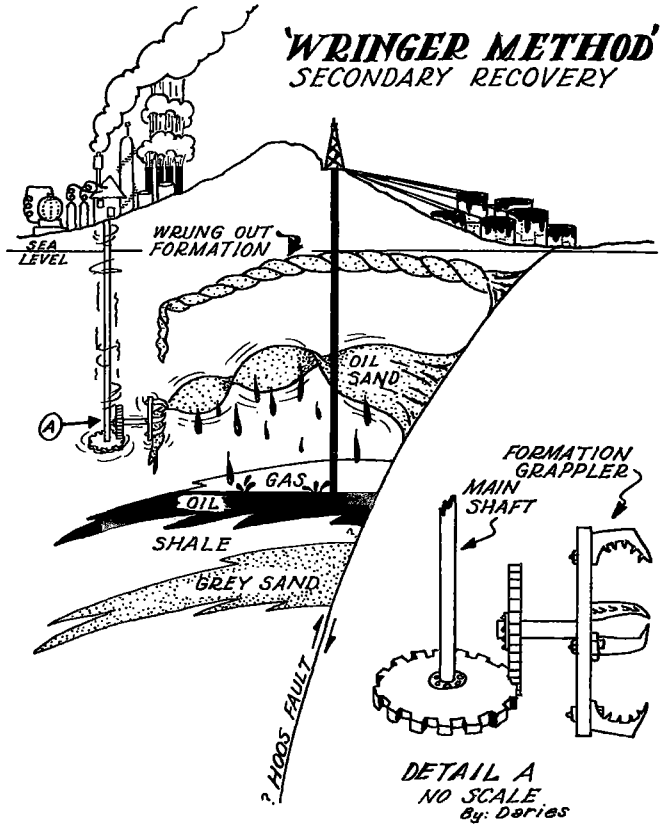
There are now 31 completed or drilling wells in the Airport area. Some of the Hancock Oil Company wells were flowed at initial rates of 3200 B/D or more. Pressures were of the order of 800# to 1000# on the tubing, casing pressures 1500# to 2000# and bean size 10 to 74/64".

DR. W. H. EASTON ON LECTURE TOUR

Dr. William H. Easton, Professor of Geology of the University of Southern California, left Los Angeles February 28th for a four weeks' speaking tour under the auspices of the Distinguished Lecture Committee of the A.A.P.G. Dr. Easton's tour will take him into twelve states and four provinces of Canada (as far north as Edmonton, and as far south as San Antonio, Texas) and he will lecture before eighteen geological societies and/or university groups. His subject is "Carboniferous Formations and Faunas of Central Montana", a paper which was given locally under the same title last year.

ATTENDING NEW YORK CONVENTION

Homer Steiny, our genial Transportation Chairman, reports at this early date that the following Pacific Section geologists have reservations on the New York Convention Specials: By train - Otto Hackel, Jim Kimble, Messrs. and Mmes. Loring Snedden, Doug Wilson, John Beach, Tom Anderson and Charles Bishop. By air - Roy Barnes.



EASTERN NEVADA GEOLOGICAL SOCIETY MEETING

Dr. John C. Osmond of the Gulf Oil Corporation was guest speaker at the monthly dinner meeting at the Ranchinn, Elko, Nevada, January 27, 1955. Dr. Osmond's subject was "Regional Relationship of the Sevy and Simonson Dolomites in Eastern Nevada".

Only in the last few years have regional studies of the geology of the Great Basin been undertaken. Prior to this time mapping had been done in isolated areas only, in areas where the minerals were of economic importance.

The Sevy dolomite is tentatively correlated with the Lone Mountain formation of east-central Nevada, on the basis of lithologic similarity and position in the stratigraphic sequence. The Sevy is a dark gray dolomite of exceedingly dense texture and composed of crystals too small to be seen with the unaided eye. The rock weathers to a characteristic whitish gray. The thickness ranges from 500 to 1600 feet. Fossils are rare but Halysites is found near the base suggesting that the lower part was deposited during later Silurian times. A widespread sandy member at the top is believed to be derived from the Ordovician Eureka quartzite.

At Lone Mountain, Nevada, Merriam reports Oriskany and Hildenberg lower Devonian fauna in the upper part of the Lone Mountain formation. In the Gold Hill District, Utah, Nolan classifies the Sevy as middle Devonian in age. At this location it unconformably overlies the middle Silurian Laketown dolomite. It seems probable that the Sevy is older in central Nevada than to the east, indicating slow eastward transgression of the seas during Sevy times.

Correlation of the Sevy with the Lone Mountain and equivalent formations can be extended into south-central Idaho, as far east as the Wasatch Mountains, Utah, and as far south as Death Valley, California. It is not, however, as extensive as the underlying Silurian Laketown dolomite, or the middle and upper Devonian strata above.

The Simonson dolomite lies above the Sevy without apparent major break in deposition. The Simonson can be subdivided into four members. The lowest member is a massive cliff forming unit of tan, coarse crystalline dolomite 59 to 317 feet thick. Above this is a sequence of light gray and dark brown dolomite beds separated by a massive cliff forming member. The Simonson thickens northwestward into the Roberts Mountains Basin where it attains a maximum thickness of about 1900 feet. The Simonson dolomite contains middle Devonian fossils and is equivalent in age to the Nevada formation in central Nevada.

The talk was accompanied by various slides showing typical exposures of the Silurian and Devonian sequence. Dr. Osmond exhibited a large map to illustrate the magnitude of the regional unconformity beneath the Sevy dolomite, and to show the areal distribution of sediments deposited in the Great Basin during Devonian times.

Although Dr. Osmond did not make reference to petroleum possibilities of the Sevy and Simonson dolomites during the course of his talk, it is interesting to note that in his published paper, "Dolomites in Silurian and Devonian of East-Central Nevada", Bulletin A.A.P.G. Vol. 38, No. 9, Sept. 1954, he states as follows: "The Sevy does not possess the qualities of a source bed of petroleum. Its texture is unfavorable for a reservoir rock except where porosity is developed by fracturing."

"The Petroleum possibilities of the Simonson are better than those of the Sevy. The brown beds of the Simonson contain 3 to 5 percent (by volume) bituminous residues indicative of indigenous petroleum. Intercrystalline porosity is well developed in the coarse member; exceptional porosity is also caused by the dissolving of tubular fossils in some beds of the upper member..... The biohermal nature of the brown cliff forming member and some of the brown beds provide evidence of reef-type traps for accumulations of petroleum."

Refer to chart showing subdivisions of the Sevy and Simonson dolomites, Figure 2, Page 1915, of the above A.A.P.G. Bulletin.

PENINSULA GEOLOGICAL SOCIETY

A new geological society to be known as the Peninsula Geological Society was organized in December 1954 and held its first meeting January 6, 1955. Professor Eliot Blackwelder, Stanford University, was elected President and Vincent E. McKelvey, Vice-President and Program Chairman. About 90 Bay Area geologists attended this initial meeting. Membership is open to any interested graduate geologist. It is planned to continue to hold monthly meetings except for summer months on the first Thursday of each month at 7:30 p.m., in Rickey's, 4219 El Camino Real, Palo Alto, California.

A.A.P.G. LUNCHEON MEETING

Paul H. Dudley, Consulting Geologist, was guest speaker at the monthly luncheon meeting at Rodger Young Auditorium on February 3rd. His talk, which was accompanied by colored slides, was entitled "Geology of the Coastal Area of Victoria, Australia". Mr. Dudley's consulting work has taken him to various interesting parts of the world and this talk involved his second and recent trip to Australia.

Mr. Dudley opened his talk by describing Australia in general and telling what makes the country and people "down under" distinctive. The area which he visited this time was Gippsland, which is the eastern part of Victoria. The coastal area there is like our Carolina Coast in that it trends northeastward, has similar shoreline features, and is underlain by a gently dipping Tertiary section. This is made up of limestones, marls, siltstones and sandstones that range from Pliocene to Eocene in age. Oil shows have been encountered at Lakes Entrance in the lower half of the sequence. Thick deposits of brown coal occur locally in beds near the base of the series. Folding in the Tertiary and underlying Mesozoic beds trends athwart that in the Paleozoic exposed to the north.

In the course of showing the Kodachromes, Mr. Dudley told much about the history of Victoria and Melbourne, its capital city.

ATTEND BILLINGS CONVENTION

The following Southern Californians attended the Fifth Annual Convention of the Rocky Mountain Section of the A.A.P.G., February 14 - 16, 1955 at Billings, Montana: Bob White, Tom Baldwin, Stan Siegfus, Jim Anderson, Frank Parker, Frank Carter, Ed Hamner, Dick Faggioli and V. E. Prestine. Most of the people got out by plane but Tom Baldwin got stuck in the storm and had to take the train back.

IN MEMORIAM

The many friends of Edward J. Kaplow are grieved to learn of his death February 7, 1955, as a result of cancer. He was Chief of the Division of Oil and Gas in Santa Paula for 8 1/2 years and served as Chief Deputy in San Francisco during the past year. Services were held February 9th at Forest Lawn, Glendale. His family requests that any contributions be made through the American Cancer Society.

PERSONAL ITEMS

Barney Yancey is replacing Ivor McCray as scout for Shell at Elma while Ivor is in Los Angeles for a month.

Robert Ottenstein, a graduate of the Univ. of Oklahoma, has joined the geological staff of Standard at Seattle.

Bud Sage is now scout for Standard at Seattle.

Visitors from the southland to the Pacific Northwest during the past month were Roy Barnes, Keith Rathbun, Mel Hill, Harvey Lee and Earl Besher.

Henry Tomko of Shell has gone to Salt Lake City for a month of training after which he will go to Alaska.

The Coastal Oil Scouts and Landman's Association held their first dinner dance on February 15th at the Hueneme Officers Club with 30 couples in attendance. Sam Tate, Humble Oil, principal organizer of the affair, states that present plans are to hold these delightful soirees at least twice each year.

Wayne Marrs, Continental, has completed his session at San Miguelito, and is leaving soon for Olympia and the Tumwater country.

Harold Lian, on a year's leave of absence from Union's Santa Paula office, and on a Fulbright Research Scholorship, writes from Innsbruck, Austria that the Alpine skiing is wonderful. He states that he is impatiently awaiting the spring thaws so he can get out of the libraries and into the mountains again. A letter to him addressed: Hans Sachs Strasse 3, Innsbruck, Austria, would be appreciated. He is slated to return next August.

Bud Ogle, Denver, is now devoting a majority of his time in search of Uranium, along with Blake Thomas, who works out of Albuquerque. These two head the group of five geologists of Ross Cabeen and Associates, who are doing exploration work for Utah Construction Company.

Leo Herrera, formerly of Shell in the wilds of Nevada, has joined the Ross Cabeen organization and will be located in Albuquerque.

The Ventura office of Shell has been increased by the transfers of the following from Atascadero: Charlie Booth, Manny Castro, Gene Reid, Joe Egan, and by John Cronin from Long Beach.

Tom Cate, Shell's Ventura Scout, shot a cool 38 at Montalvo early one morning, which was not witnessed by anyone outside of Shell.

On February 17th, Bob Herron, Coast Society Prexy, spoke to the Santa Paula High School Science and Photography Club on the geology of the Mojave Desert.

Stan Knouse, Tide Water, has been appointed Secretary-Treasurer of the Northern California Geological Society to serve in the place of E. L. Marier who was transferred to the Basin and Range area before he had a chance to take office.

Dick Mead, formerly of Shell at Casper, Wyoming, has joined the Ross Cabeen organization, and will leave soon for eastern Australia to do oil exploration work.

Friends of Homer Steiny have been unable to contact him for free lunches during the past few weeks since his activities with the Oil Information Committee of the Western Oil and Gas Association have transferred his affections to the movie set in Hollywood.

Eugene R. Murray-Aaron, Deputy in the Division of Oil and Gas at Coalinga during the past 1 1/2 years and prior to that, 12 years in Los Angeles and about 2 years in Santa Paula, is being transferred to San Francisco to the assignment of Chief Deputy.

Al Solari and Hal Bemis, Standard Oil geologists, are interchanging locale and job assignments for a few weeks. Possibly research into the causes of ulcers and falling hair is involved.

C. E. Kirschner, who has been in immediate charge of geological work in Alaska for Standard Oil, will be Area Geologist for Alaska, and his headquarters will be in Seattle when he is not in the field.

Louis Chappuis, consultant, is opening an office in Tucson, Arizona, after March 15th, specializing in Uranium surveys and core drilling. His office will be located at 731 East Elm Street, Tuscon, Arizona. Phone 3-6873. Louis will still retain his present Fillmore office.

Paul Harris, geologist for The Texas Company in Sacramento for almost three years, has been transferred to the Los Angeles Basin office.

Ask Don Barrett, General Petroleum geologist in Sacramento, why he's carrying around that red face lately. It seems he was to procure the very excellent G.P. color film, "In The Beginning", for a showing to the Sacramento State College geology class. This film portrays the formation of the earth through the various ages of time with breathtaking photography of the Grand Canyon area. But Wha-Hoppened! After the title "In The Beginning" flashed on the screen there followed an embryological study of the development of the Mammilian egg with embarrassing scenes of a Caesarean section on a rabbit. It turned out that the Dairy Industry also sponsors a movie by the same name, much to the chagrin of Mr. Barrett.

Recent personnel changes at Standard Oil are: Ed Parker, Area Geologist at Ojai, is being transferred to Seattle as Geological Supervisor; Tom McCroden is being transferred from Salt Lake to replace Ed at Ojai; Eric Jacobsen has been transferred to Salt Lake to replace McCroden in the Great Basin. New employee in the Los Angeles office of Standard is Wallie Taylor, who recently received his M.S. degree at Stanford.

Lloyd A. Lewis, Shell, Calgary Division Exploration Manager, and family were in California for two weeks in February.

Vince Finch, Northwest Division Manager for Shell, was leisurely plucking the feathers from a limit of ducks when his dog, "Penny", arrived with the seventh mallard and a Washington State game warden. Vince lost the argument with the Judge to the tune of $27.50. Vince is now trying to teach "Penny" how to count.

Lee Osborne has been appointed Assistant Vice President - Oil Development, Union Pacific Railroad Company.

Dee Taylor, well known ex-scout and geologist, was given a party on February 25th at the University Club, by Shell personnel. Dee is retiring after 32 years of service for Shell.

Henry Adams, Ohio geologist in Coalinga, has been called back into the Army and will report to the Army Research & Development Branch in Massachusetts.

Presley de Jarnet, Ohio, Bakersfield, will transfer to their Coalinga office.

Gene Vallat, Vice President in charge of exploration for Triad in Calgary, Canada, was a recent visitor to Los Angeles and Bakersfield. Gene was formerly with Ohio at Bakersfield.

We understand that Orrin Gilbert has a side line other than eating and has recently been accused of carrying on public relations activities in the Exploration Department of Standard.

Hank Neel has been appointed Western Division Exploration Manager for Tide Water Associated. Hank lives in Burlingame, California.

NURSERY NEWS

To Bob and Mary Nesbit, M.J.M.&M., a boy - John Fredric - on January 30th, who tipped the scale at 6 lb., 8 1/2 oz.

To Jim and Sally Elisen, Shell Oil Co., Alaska District, a girl, Anne, born February 8th, wt. 7 lbs., 1 oz.

Larry and Jo Kuehzi, Standard, Seattle, announce the arrival of Michael, born February 9th, wt. 6 lbs., 9 oz.

CALENDAR

March 8, 1955: Tues., 7:30 P.M., Joint Coast Geol. Soc.-S.E.P.M. Dinner Meeting, Montecito Country Club, Santa Barbara. C.M. (Kit) Carson will discuss "The Pliocene Stratigraphy and Foraminifera of the Ventura Basin".

March 10, 1955: Thurs., 12:00 noon, S.E.G. Luncheon, Conference Room, Biltmore Hotel, Los Angeles. Carl Savitt will present a paper entitled, "Sharp Filters in Dual Recording".

March 10, 1955: Thurs., 7:00 P.M., Los Angeles Basin A.I.M.E. Jr., Pet. Group Dinner Meeting, Turf Club, Anaheim-Telegraph Road and Rosemead Blvd. The program will be a symposium on "The Tidelands". Speakers and subjects will be:

J.S.Watson, Asst. Executive Officer, State Lands Commission, "Leasing".

Carl Savitt, Western Geophysical, "Offshore Exploration".

Glenn Schurman, Cal. Research, "A Review of the Literature on Offshore Structures".

Don Hare, Monterey Oil Co., "Unique Offshore Operation Problems in Drilling and Production".

March 14, 1955: Mon., 7:30 P.M., San Joaquin Paleontologists Bio-Stratigraphic Seminar, Bakersfield Jr. College, Room #117. Dr. Klaus Kupper, Stanford University, will speak on "World Wide Correlations by Use of Pelagic Foraminifera".

March 15, 1955: Tues., 8:00 P.M., A.P.I. Meeting, Los Angeles Basin Chapter, Shell Recreation Hall, Long Beach. W. T. Kennedy, Ohio Oil Company will speak on "The Paloma Deep-Test".
Eugene Davis, consultant, will relate "An Oil Man's Experience in Wildcatting in Alaska".

March 15, 1955: Tues., 6:30 P.M., San Joaquin Valley Chapter A.P.I. Dinner Meeting, Stockdale Country Club, Bakersfield. Speaker: E.E. Pyles, Vice President of Monterey Oil Co. Subject: "Offshore Drilling and Exploration".

March 15, 1955: Tues., 6:30 P.M., San Joaquin Valley Geological Society, Dinner Meeting, El Tejon Hotel, Bakersfield. Lauren A. Wright, Senior Mining Geologist, California Division of Mines, will speak on Rainbow Mountain Breccias, Amargasa Valley, California.

March 21, 1955: Monday, 6:00 P.M., Northwest Geological Society meeting, Steak House, Olympia. Mr. Robert Brown, U.S.G.S., will give a talk on the "Stratigraphy of the Port Angeles and Lake Crescent Areas".

March 21, 1955: Monday, 7:00 P.M., A.A.P.G., Pacific Section Forum Meeting, Allen Hancock Auditorium, U.S.C. Campus, Los Angeles. Dr. Donald B. McIntyre, Pomona College (formerly with University of Edinburgh, Scotland), will talk on "A Method of Study of Ancient Faulted Belts" with colored pictures of the Alps and Scottish Highlands.

March 28, 1955: Mon., 7:00 P.M., A.I.M.E. Petroleum Technology Forum, General Pet. Auditorium, Los Angeles. Scott Temple, Union Oil Company, will be the speaker. His subject is "Scouting and You".

April 5, 1955: Tues., 6:30 P.M., San Joaquin Valley Section A.I.M.E., Dinner Meeting, Stockdale Country Club, Bakersfield. Panel discussion of "Oil Well Gravel Packings".

April 7, 1955: Thurs., 12:00 noon, A.A.P.G. Pacific Section Luncheon Meeting, Roger Young Auditorium, Los Angeles. Mr. Walt Bilicke, President of Engineers' Syndicate, Ltd., suppliers of scintillation and geiger counters, will speak on "Prospecting for Uranium".

BIBLIOGRAPHY OF RECENT PUBLICATIONS

TRADE JOURNALS & MISCELLANEOUS MAGAZINES

Oil & Gas Journal

"What Ohio Learned From World's Deepest Well". P. 109, Vol. 53, No. 40, February 7, 1955.

"Huntington Beach is Now Called Bedlam Beach". D. H. Stormont, pp 77-78, Vol. 53, No. 41, February 14, 1955.

"California's Tidelands May Be Leased in 1955". P. 98, Vol. 53, No. 42, February 21, 1955.

"Stratigraphic Research That May Pay Off". Francis P. Shepard, pp. 184-189, Vol. 53, No. 42, February 21, 1955.

Form 3547 Requested

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

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LOS ANGELES 17, CALIFORNIA.

Vol. 9 No. 3

World Oil

"Water Analyses Help Identify Formations". John F. Sage, pp. 75-80, Vol. 140, No. 1, January 1955.

"Deltas Significant in Subsurface Exploration". Daniel A. Busch, pp. 82-86, Vol. 140, No. 1, January 1955.

"D.T.A. - A New Type of Formation Correlation". George B. Mangold, pp. 77-80, Vol. 140, No. 2, February 1955.

SCIENTIFIC PUBLICATIONS - JOURNALS & BULLETINS

California Journal of Mines & Geology - July-October 1954, Vol. 50, Nos. 3 and 4

"The Cool Cave Limestone Deposits - El Dorado and Placer Counties, California" by William B. Clark, pp. 439-465.

"Mines & Mineral Deposits of Los Angeles County, California" by Thomas E. Gay, Jr., and Samuel R. Hofmman, pp. 467-709.

PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 9 April 1955 No. 4

ASSOCIATION ACTIVITIES

A.A.P.G. Forum

Dr. Donald B. McIntyre of Pomona College was the speaker at the March 21st Forum Meeting at Allan Hancock Auditorium, University of Southern California, Los Angeles. The subject was "A Method of Study of Ancient Folded Belts".

Dr. McIntyre pointed out that the discovery in the Swiss Alps of great overfolds (nappes or decken) had been given more attention than the methods by which these results were obtained. Indeed some geologists, failing to understand the methods, had tried to force an "alpine interpretation" on terrain of different tectonic style, and had thus brought discredit on alpine geology. The greatest of the Swiss tectonicians had emphasised the need for clearly distinguishing between (1) geometric analysis: i.e. description in three-dimensional terms of the existing structures, (2) kinematic interpretation: i.e. study of the movement-pattern implied by the forms, and (3) attempt to construct a dynamic scheme (i.e. in terms of forces) to explain the kinematics.

In a segment of an orogenic belt the folds usually tend to be elongate in one direction. This direction has been called the fold-axis, and is defined as the nearest approximation to the line which, moved parallel to itself in space, describes the fold. Folds like this are said to be cylindroidal, and graphic methods have been devised to determine the degree to which the folds approach the ideal cylindroidal form. Usually the greater the deformation the more nearly are the structures cylindroidal. Since the fold-axis is the direction of minimum change in the structure, it is obvious that in the construction of a structure-section extrapolation should be parallel to the fold-axis and not in the direction of the dip. The true cross-section is the one at right-angles

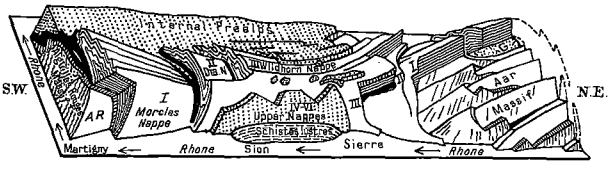

Figure 1. Empiled nappes in the High Calcareous Alps. After Arbenz (geology by Lugeon).

to the fold-axis, such a section is called a profile and is vertical only in the case where the fold-axis is horizontal.

The first example described was the High Calcareous Alps north of the Rhone Valley (fig. 1). The basement (Aiguilles Rouges and Aar massives) is overlain by a series of empiled overfolds whose interrelationships can be determined because the fold-axis plunges. The second example (fig. 2) was part of the Pennine Alps, to the south of the Rhone, and consisting largely of metamorphic rocks. The first structural geologist to realize that the methods employed in the Alps could also be used successfully in regions of low relief was E. Wegmann. Dr. McIntyre explained that he had been privileged to study with Professor Wegmann and he gave some examples of the application of the methods outlined to the study of the metamorphic rocks of Finland and Scotland.

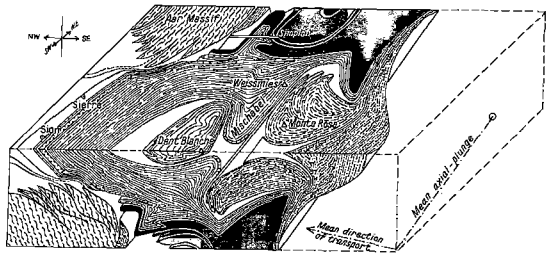

Figure 2. Structure of the Pennine Alps. After Argand (1911).

PROPOSALS TO AMEND CONSTITUTION

Members of the Pacific Section will receive ballots in a few days on two proposals calling for amendment of the Constitution and bylaws. The first is a proposal by the Executive Committee of the Coast Geological Society that the Coast Society be represented on the Executive Committee of the Pacific Section. In consideration of their growth to membership numbering 135, they feel that this representation would be mutually advantageous. The Executive Committee of the Section has taken no stand in this matter but simply wishes to point out that a large executive committee tends to be unwieldy and that this addition will raise the number on the committee to eight. Possible future and equally justified additions may also be proposed by other local societies which could further swell the committee. This consideration must be weighed against the very desirable feature of having representation of groups not readily accessible to most members of the executive committee for opinions and discussion.

The second proposal originates with the Executive Committee of the Pacific Section, and puts the question of raising annual dues from $2.00 to $2.50. This raise would be effective for 1956 and would permit distribution of the new edition of the Directory to be published later this year, to be made without additional charge to those paying dues for 1956. While an increase like this is never popular, the rising printing costs of the "Pacific Petroleum Geologist" and the elimination of direct contributions by oil companies to the convention makes the increase necessary if services to members are to continue on the same scale. During the past year, the Section has been running in part on a layer of accumulated "fat" from previous years, but this layer is fast disappearing. Some considerable reduction of total mailing costs has been effected by sending notices of Forum and Luncheon meetings only to residents of the Los Angeles area and for others outside of that area who pay an additional 50 cents per year to receive them. We also hope to make some reduction in cost of the Directory by handling the supplementary material in a different fashion not yet decided.

Despite these economies the Pacific Section is operating at a loss with dues at the present rate of $2.00 per year.

NORTHWEST GEOLOGICAL SOCIETY

On February 21st, Mr. Paul Billingsley, a consulting mining geologist, gave a talk before the Northwest Geological Society on "Some Contributions of Mining Geology to Western Tectonics". Mr. Billingsley described numerous mining areas of the western United States. Mapping of these districts has revealed significant structure patterns which, when classified into types, coincide with major tectonic patterns. These patterns are herewith summarized.

The Cordilleran Thrust Arc is a large scale tectonic arc consisting of competent layers of miogeosynclinal origin piled up as thrust plates along a pre-Algonkian shoreline. In its great arc from the Canadian Rockies to the Mojave Desert, this trend marks the limit of the eastward advance of geosynclinal materials.

The Great Basin Province is like a jigsaw puzzle with half of the pieces missing. Patches of mining districts show tight folds, multiple thrusting, and other complex features. The structures of the basin exhibit right hand drag adjacent to the Walker Shift Zone.

The Metamorphic Mountain Arc consists of lower-Paleozoic to Permian metamorphics and Triassic metamorphics and granitized rocks which make up a tectonic zone of roots. Deformation was late Paleozoic and early Cretaceous in age. Tertiary rejuvenation added to the structural complexity.

The Pacific Coastal Strip exhibits effects of the Tertiary and late tectonic movements of the metamorphic Mountain Arc.

SACRAMENTO GEOLOGICAL SOCIETY MEETING

The Geological Society of Sacramento held its regular monthly meeting on March 15th. The program was billed an "All Uranium Night", Mr. Alan Sharp, Mineral Evaluation Engineer with the U.S. Bureau of Land Management, presented a talk entitled "Uranium Prospecting on the Colorado Plateau". Mr. Sharp, in his work as a consultant and prospector, had an opportunity to visit many of the mines and other areas of interest on the Plateau. Certain remarks made to Mr. Sharp by Joe Steen, the one-time prospector, now turned multi-millionaire from Moab, Utah, led to an unscheduled second speaker of the evening.

This speaker was Mr. Wood, geologist for the Atomic Energy Commission, who is well acquainted with the Colorado Plateau area and its activity. Mr. Wood spoke in defense of the A.E.C.'s position in regard to certain "rags to riches" sagas of that area. His comments were followed by a magnificent series of colored slides he took of Uranium occurrences and mining operations in the Colorado Plateau area.

The final speaker was Mr. Mel Stinson of the California Division of Mines. Mr. Stinson's talk was illustrated with colored slides that depicted the four known types of occurrences of Uranium in California which are as follows:

1. Deposits in fissure veins.
2. Deposits localized in fractures, bedding planes and locally as disseminations in porous rocks.
3. Replacement deposits.
4. Uranium accessory minerals in pegmatites and other granitic rocks.

The capacity audience was well rewarded for their attendance by the interesting program presented.

EASTERN NEVADA GEOLOGICAL SOCIETY MEETING

Mr. Robert T. Anderson of Geophoto Services was guest speaker at the monthly dinner meeting at the Capitol Club, Ely, Nevada, February 22, 1955. Mr. Anderson gave a short talk on "The Present Status of Photo Interpretation in Petroleum Geology", followed by a film entitled "A Third Dimension for Oil", a sound and color 3-D movie. The meeting was concluded by a travelog, a movie in color of the 1954 I.A.P.G. Field conference through the Wasatch Plateau, San Rafael Swell and the Henry Mountains, Utah.

The film, "A Third Dimension for Oil" is the first film of its kind to be shown on the screen. With the use of polarized glasses, the audience viewed stereoscopic pairs of photos exactly as though the photos were viewed through the stereoscope.

During the showing of the picture, Mr. Anderson described methods of identifying formations, means of determining actual dips from apparent dips as viewed under the stereoscope and means of detecting faults. From these photos a stratigraphic section can be built up by comparison with a known section in the vicinity.

The movie in color of the 1954 I.A.P.G. field conference was informative and colorful; the brilliant hued Tertiary Wasatch formation and Mesozoic Navajo Sandstone and Chinle formation presented a striking picture throughout most of the route traversed. According to Ed Johnson, Continental, over 35 attended the meeting although it was held on a holiday.

DISTRICT REPRESENTATIVES ELECTED

The three newly elected Los Angeles District representatives of the A.A.P.G. are as follows:

Glen Ledingham, Western Gulf Oil Company

John Kilkenny, Union Oil Company

Everett Pease, Sunray Oil Company

These newly elected representatives follow the expired terms of Harold Radar, Ben Lupton, and Philip Cook. They will take office for a two year term commencing after the Pacific Section Fall Convention.

A.A.P.G. LUNCHEON

Paul Hayes, geologist for Southern California Petroleum Corporation was guest speaker at the monthly luncheon meeting at Roger Young Auditorium on March 3, 1955. He gave a very interesting talk on Egyptian operations now being conducted by National Petroleum Company of Egypt, a wholly owned subsidiary of International Egyptian Oil Company, Inc. Southern California Petroleum Corporation has a stock interest and is retained as a management and drilling contracting agent for the operation.

Concessions acquired originally included some 2 1/2 million acres. Prior to the time the current group acquired these concessions, the Standard Oil Company of Egypt carried out extensive surface mapping, core holing and geophysical explorations resulting in several exploratory wells with one successful oil well, Feiran No. 1, being completed as a small producer. In 1952, Southern California Petroleum Corporation entered the picture and seismic, surface and subsurface data were reinterpreted and reevaluated by the staff built up to carry out the operation. Since then five wells and one core hole have been drilled, resulting in two discoveries, with two more wells currently drilling.

Mr. Hayes introduced Mr. Robert Mansfield, Chief geophysicist, who presented some very interesting movies of his trip to Egypt and scenes of the drilling operations now being conducted in the area. Mr. Hayes then continued with a general description of the geology of the region.

The basement rocks of the region are those of the African shield of Pre-Cambrian age. Rift faulting at the close of Eocene time, formed both the Red Sea and the Gulf of Suez grabens. The oldest sedimentary rocks of the Gulf of Suez area are of Carboniferous age. They consist of several hundred feet of sandstones and shales of fresh or brackish water origin, which grade rapidly into marine beds basinward. Marine Jurassic overlies the Carboniferous and consists of over 6,000 feet of shales, sandstones and limestones exposed in some of the larger anticlines in northern Sinai. The Cretaceous in Sinai is 4,500 feet thick. The lower Cretaceous consists of the Nubian sandstones, about 2,500 feet thick and the upper Cretaceous of sandstones, shales and chalky limestones 2,000 feet thick. In northern Sinai Cretaceous rests on Jurassic. To the south it overlaps the Jurassic and the Carboniferous and grades from marine to continental sands as it approaches the shield. Above the Cretaceous occurs 2,000 feet of chalky limestones of the Eocene.

The grabens formed at the close of the Eocene and the surrounding highlands were eroded during Oligocene leaving the Eocene and older rock exposed, upon which the Miocene was deposited. Due to the unevenness of this surface the character and thickness of the Miocene rocks vary greatly. In a general way the Miocene can be divided into Lower and Upper Zone of Globigerina marls, and an Evaporite series. The lower Zone marls are believed to be the source beds for the oil in the Gulf of Suez region. By the end of the Miocene the connection with the Mediterranean was closed by uplift in the Suez area and faulting at the south end of the Red Sea opened the graben for encroachment of waters from the Indian Ocean. Faulting in the Gulf of Suez has occurred until very recent times with Miocene rock displaced up to 12,000 feet. Erosion again left an uneven floor upon which Pliocene and Recent sands and gravels have been strewn.

There are seven producing oil fields in Egypt. Oil accumulation is generally associated with upraised fault blocks and overlapping Miocene formation. Reservoir beds include the Carboniferous, Cretaceous, Eocene and Miocene formations. Modern gravitymeter and seismograph have accounted for most of these discoveries.

Ras Gharib is the largest field with 147 wells having produced 117 million barrels since 1938. Hurghada, with 25 wells still producing, has yielded 38 million barrels since 1913. Sudr, with 8 wells, produced 22 million barrels since 1946, while Asl produced 21 million barrels since 1949 from 5 wells. Belayim was discovered by seismograph in early 1955. On a formation test of the Miocene upper Globigerina marls the discovery well flowed 90 barrels per hour.

"GOT AN IDEA?"

The AAPG Pacific Section Convention Committee for our 1955 Fall Meeting has approved the main theme for papers to be presented, and now the success of the Convention is up to you! In addition to factual papers on new developments, we would like to spend the better part of a day (or longer, if the response warrants) on the development of "Ideas Unlimited".

Readers are aware that in California the ratio of new oil discovered against wildcats drilled is poor, and the Committee feels that the time has arrived for a self-appraisal. Why do we drill such a high ratio of dry holes? What are geologists doing to develop new ideas which could be used to the advantage of the industry? Stratigraphic analysis is a tool which has had considerable application and rewards in other areas of the United States, but how extensively is it used in California? A greater understanding of just how sedimentation takes place can be of inestimable value to the geologist. How may an understanding of movement of fluids through sands be used to find more oil? What can we do with electric logs to arrive at quantitative evaluations of sands in an analysis of facies? These are just a few questions brought to the attention of the Committee which may have some bearing on our future value to the petroleum industry, and we are sure that there are many additional facets which may be explored; the sum total of these new ideas will serve to enrich us both spiritually as well as monetarily, and demonstrate to the Petroleum Industry that the art of oil finding can be much more scientific than now practiced.

We recognize that specific areas of research are confidential, and we do not ask for papers which could result in financial loss to your company. But we do ask for papers presenting ideas and methods of research, the free interchange of which should benefit all of us.

In addition to local talent, hopefully coming from members of research teams in this area, we expect to invite a few experts in various branches of the science from all parts of the U.S. to address the convention as a part of the program theme. We likewise hope that someone on management level will come forth as Keynote speaker and "lay it on the line!"

Those of you who wish to participate and share your ideas with your fellow scientists, or who can contribute suggestions as to possible speakers, are urged to write Irving T. Schwade, Program Chairman, c/o Richfield Oil Corporation, 555 South Flower Street, Los Angeles 17.

APPOINTMENTS

President Frank Parker has announced four additional appointments in the Pacific Section for 1955.

Chairman of Cross-Section Sales

Joan Baldwin, Shell Oil Co.
1008 West 6th Street
Los Angeles 17, California

Joan replaces Dorothy Harkness, Union, who ably handled sales and distribution of the cross-sections during the past year. Cross-sections are $1.10 each postpaid.

Chairman of Boy Scouts' Activities

Bob White, State Exploration Co.

Chairman of Spring Picnic

Lou Heintz, St. Anthony Oil Corp.

Fall Convention General Chairman

Jack Isberg, Superior Oil Co.

COAST GEOLOGICAL SOCIETY

Carlton M. "Kit" Carson was guest speaker at a joint dinner meeting of the Coast Geological Society and the S.E.P.M. at the Montecito Country Club, Santa Barbara, on March 8, 1955. Mr. Carson spoke on the subject of "The Pliocene and Pleistocene Stratigraphy of the Ventura Area".

Referring to a modified version of William C. Putnam's geological map of the Ventura region (Bulletin G.S.A., Vol. 53, 1942), the areal distribution of the Pleistocene and Pliocene formations was shown by the speaker. This was followed by a series of beautiful colored slides, photographed by Hugh Smith, which ably illustrated the outcrop characteristics of the various formations. There were views of Pleistocene river and marine terraces as well as typical exposures of the San Pedro, Santa Barbara, and upper and middle Pico formations.

Of particular interest to S.E.P.M. members was a series of 38 colored slides showing the principal foraminifera of the Ventura area Pliocene and Pleistocene. The speaker discussed each species, relating its occurrence and range, as well as its spatial position in the columnar section.

The reader is referred to Mr. Carson's columnar section of the Ventura-Ojai-Santa Paula area which is included in the S.E.P.M. and A.A.P.G. Field Trip-Road Log, April 18, 1953. This Road Log has recently been reissued by the Coast Geological Society.

Several well known micropaleontological authorities took part in the discussion which followed. They seemed to agree that the upper Pliocene-Pleistocene correlations are difficult at best.

PERSONAL ITEMS

Union Pacific's City of Los Angeles left for the New York Convention at 4:30 P.M. on March 23rd with a gay and happy group including Ben Lupton, Otto Hackel, Jim Kimble and his daughter Helen. Also aboard were Messrs. and Mmes. Bill Kleinpell, Frank Parker, John Beach, Loring Sneddon, Doug Wilson, Ed Bartosh, and Charles Bishop. Rapid Blue Print presented each lady with an orchid. When the train left, those not in the vista dome viewing the L.A. River were in the club car with some over enthusiastic well-wishers who forgot to leave the train on time. Dana Detrick was among those who had a free ride to East Los Angeles.

Henry T. Herlyn, geologist for Shell in the Alaska district, has been transferred to the Columbia district at Elma, Washington.

Howard D. Barnes, geologist for Shell in Durango, Colorado, is transferring to Elma, Washington.

Harry C. Jamison of Richfield was transferred from Olympia to the Los Angeles office where he will be assistant to Irving Schwade. He was replaced in Olympia by Lester D. Brockett from Richfield's Long Beach office.

Ivor McCray, scout for Shell, has returned to Elma, Washington after spending several weeks in the Los Angeles office. Barney Yancey, who relieved Ivor during his absence, has returned to Bakersfield.

Bob Rasmussen with Standard Oil Company's Lands and Leases Department, has been transferred from Sacramento to Salt Lake City.

Monterey Oil Company has closed its doors in Sacramento, and Bill Emerson, geologist, has been moved to Los Angeles.

Bill McEachin, formerly landman with the Texas Company in Sacramento, has recently joined forces with Western Gulf Oil Company as its Sacramento Valley landman. Jim Gale has replaced McEachin in Sacramento for The Texas Company. Jim was transferred from the Bakersfield office.

With Superior Oil Company's move from Willows to Sacramento, a total of 8 oil companies are now congregated in the Town and Country area. Five of these are located in one building. Only two companies remain in the downtown area of the city--Shell Oil Company and Brazos Oil & Gas Company.

Ed Hamner, Manager of Humble Oil & Refining Compan's California area at Los Angeles has moved to the Houston office as Assistant Manager of the Exploration Department.

Each lady was presented with an orchid by the United Air Lines before the plane took off for the New York Convention on Saturday, March 26th at 9 A.M. The following elected to go by air: Mr. and Mrs. Glen Ledingham, Mr..and Mrs. Mel Hill, Mr. and Mrs. Joe Hudson, Mr. and Mrs. Bob Sumpf, Mr. W. C. Mosher, Mr. Carl Savit, Mr. Leo Newfarmer, Mr. Warren Hagist, Mr. Bill Winter, Mr. Ed Scott, Mr. and Mrs. Dick Faggioli, Mr. R. J. Kurtz and Mr. L. I. Brockway. Homer Steiny made sure all the seat belts were fastened before starting time.

Irv Frazier's enthusiasm for photography reached a new high when he was invited to witness scenes in the filming of "Barrel No. 1". Irv stated that he "never had it so good" while taking pictures of the various sets.

It seems that there are several people who don't know the whereabouts of Don Davis, lately of the Bel Air district. He is now Vice President of the Artnell Oil & Gas Company, Inc. with offices in Coalinga. Hi Don!

Kemp Barley resigned from Baroid effective February 15. Kemp, with Fred Williams and Ed McWhirter as partners, is opening a mud distributor business at Saticoy, California, to be known as McWhirter Supply Company of Saticoy, Inc. Drop in and see Kemp, or call him at Saticoy 313. Address, P. O. Box 158, California,

The many friends of Elmer Hutchins, Shell Scout, were grieved and shocked to learn of his untimely death in a highway accident near Ely, Nevada on March 14.

Glen Gariepy has been appointed Chief Geologist for the Ohio Oil Company and will be living in Findlay, Ohio.

Ralph Arnold was named to represent the California Academy of Sciences at the inauguration of Dr. Clark George Kuebler as Provost of Santa Barbara College and the dedication of the new Santa Barbara College Campus on March 28.

The motion picture industry discovered new talent when Homer Steiny was chosen as technical director for the picture titled "Barrel No. 1" for the American Petroleum Institute. "Barrel No. 1" will be shown throughout the nation during Oil Progress Week. Holly Morse is the director - when he can be found! Homer has the habit of wandering off to assist directors on sets where Ann Southern and other beauties are acting. Director Steiny's long experience in the oil business and his good natured ability to explain how the sets should appear make him a natural for the job.

W. F. Barbat, W. J. Classen, C. M. Cross, H. H. Neel, D. F. Pickrell and J. C. Wells from the Bay Area attended the National Convention in New York City. Bill Barbat contributed to the program by presenting a paper, "The Los Angeles Basin".

Gordon B. Oakeshott and Antonie Paap participated in the program during the Convention of the Western Branch of the Association of Geologic Teachers held in Fresno, March 26 and 27. The title of Gordon's paper was "Educational Functions of the State Division of Mines" and Tony presented a paper, "Relationship Between Teaching Geology and the Petroleum Industry".

Leo Moir has opened a consulting engineering and geological office at 213 Bryant Street, Ojai, P. O. Box 362. In addition to consulting, he will handle Oceanic's geological work in the Coast Division.

Dave Galloway, Oceanic, has been transferred to the Bakersfield office.

Ralph Cahill and Lee Freeman, Texas Company, and Bill Plant, Johnny Nohrden and Bob Hacker of Union Oil have each bought a new house in Santa Paula and will be occupying them in May. (Bags are packed - will travel).

Wild Bill Lee, Intex, is leaving Ventura about the middle of April for a summer's field work and speckled trout fishing in Colorado.

Ed Hall, Union - Santa Paula, attended the National Convention in New York. While there he visited the east end of Simi Fee.

Bill Bishop, Richfield's roving geologist, went to Alaska and back this time.

Bob Erickson, Standard, has transferred to Oxnard from Bakersfield.

Louis Taylor has returned to the Ventura Area after a wet winter in Washington.

The following attended the New York Convention from the Ventura area: Spence Fine, Richfield; Ed Hall, Union; Iliff Anderson, Herb Skolnick, Gordon Bell, Western Gulf; Otto Hackel, Intex; Frank Bell, Shell.

The Petroleum wives of the Ventura area held their semi-annual dinner dance at the Officers Club in Hueneme on March 26th with approximately 50 couples attending. Patti Crackel, President, and Hazel McMahan, Treasurer, were the principal organizers of the affair.

At the last meeting of the Ventura Geological Seminar, a discussion was conducted on possible lines of cross-sections and stratigraphic nomenclature to be employed in a forthcoming A.A.P.G. paper of the Ventura area. This Seminar is composed of a group of Ventura area geologists who hold informal discussion sessions on various aspects of petroleum geology. This group has been meeting once a month for over a year.

Bill Yerington, Ohio Oil Company, is being transferred from Camarillo, California, to Olympia, Washington. He will replace Dick Shelton who is going to Salt Lake City, Utah.

Bert Marier, geologist for Tide Water Associated in San Francisco, is being transferred to Salt Lake City.

Coinciding with General Petroleum's increased drilling activity in the Sacramento Valley, it has "imported" Leo Wanek, geologist, from its Elko, Nevada headquarters.

John Hoke, seismic geologist, formerly with Standard in Bakersfield, is now with Arabian American Oil Company in Saudi Arabia. John is working in the northern interior region and spends four weeks in the field and one in Dhahran from September through June.

NURSERY NEWS

To Henry and Gertrude Kane, twin girls, their first and second (children, that is), Karen Ottalie, 5 lbs. 5 Oz: and Denaric Ann, 5 lbs., on January 17th in Santa Monica. Mother and children doing fine. Henry has recently purchased bifocal glasses.

John and Edith Szatai, Standard, are taking orders from John Stephen who arrived April 1st weighing 7 lbs. 1 oz.

Lou Canut, Texas Company in Taft, and his wife, Cecilia, are proudly showing their new son, Stephen Anthony, born March 1st and weighing 6 lbs. 15 oz.

CALENDAR

April 12, 1955: Tues., 7:30 P.M., Sacramento Geological Society Meeting, State Public Works Bldg., 1120 "N" Street, Sacramento. Regular monthly meeting. Topic to be announced.

April 12, 1955: Tues., 7:30 P.M., Coast Geological Society Dinner Meeting, Montecito Country Club, Santa Barbara. Dr. U. S. Grant IV will speak on "The Relation between the Amount and Character of Beach Sand and the Rate of Denudation in Source Areas."

April 14, 1955: Thurs., 6:30 P.M., A.I.M.E. Jr. Pet. Group Dinner Meeting, Anaheim-Telegraph and Rosemead Blvd., Los Angeles. The program will be a symposium on "The Utility of Computors and Automatic Data Processing in Petroleum Production." Speakers and subjects will be:

(1) Robert Hawthorne, Union Oil Co., "The Analog Computer."

(2) "The Digital Computor," speaker to be announced.

(3) John Rumbaugh, E. B. Hall Co., "Automatic Data Processing."

(4) Don Webster, Librascope, "Automatic Curve Plotting." Mr. Webster will have one of his company's latest machines with him for demonstration.

April 14, 1955: Thurs., 6:30 P.M., El Tejon Hotel, San Joaquin Geological Society dinner meeting. Wm. A. Bowes, A.E.C. geologist, will discuss "Uranium in Kern County Area."

April 14, 1955: Thurs., 12:00 noon, S. E. G. Lunch., Conference Rm. 4, Biltmore Hotel, Los Angeles. Dr. George Shorr, Scripps Institute, will be the speaker. His subject will be, "Seismic Investigations in the Pacific Ocean."

April 16, 1955: Sat., Desk & Derrick Club, Bakersfield, Spring "Fund Raising" semi-formal dance, Bakersfield Country Club, $5.00 per couple. Everyone invited.

April 18, 1955: Mon., 6:00 P.M., Northwest Geological Society Meeting, Steak House, Olympia. Mr. Robert Brown, U.S.G.S., who was originally scheduled to talk in March, will give his talk on the "Stratigraphy of the Port Angeles and Lake Crescent Areas."

April 18, 1955: Mon., 7:00 P.M., A.A.P.G., Pacific Section Forum, General Petroleum Auditorium, 612 South Flower Street, Los Angeles.

Frank Parker, Signal Oil & Gas Co., will report on "New York and Our National Convention." Mr. Parker's remarks will be illustrated with Kodachrome slides.

Dr. Phillip B. King, U.S.G.S. (visiting professor at U.C.L.A.), will give a talk entitled "Structural Problems of the Great Smoky Mountains of Tennessee and North Carolina."

April 25, 1955: Mon., 7:30 P.M., A.I.M.E. Petroleum Technology Forum, Engineers' Club, Biltmore Hotel, Los Angeles. Dr. Melvin Barlow, Supervisor of Trade and Industrial Teacher-training at U.C.L.A. will be the speaker. The title of his talk is, "What Industrial Education Offers the Petroleum Industry."

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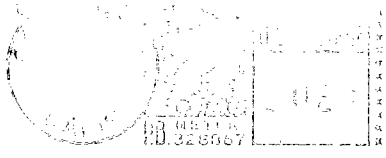

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Form 3547 Requested

PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 9 May 1955 No. 5

ASSOCIATION ACTIVITIES

A.A.P.G. LUNCHEON

Mr. Walt Bilicke, President of Engineers Syndicate, Ltd., was guest speaker at the A.A.P.G. luncheon meeting, held at the Rodger Young Auditorium on April 7, 1955. Mr. Bilicke spoke on "Prospecting for Uranium" and a near-record attendance for this luncheon meeting indicates the widespread interest that petroleum geologists have in the subject. Mr. Bilicke gave an excellent talk covering many phases of the search for and processing of uranium ore and also showed a fine movie of operations on the Colorado Plateau. A collection of typical uranium ores as well as a variety of prospecting instruments were displayed and many members took the opportunity to see these exhibits and to ask personal questions of Mr. Bilicke.

The "uranium rush" that has occurred within the United States in the past few years far exceeds the California gold rush in excitement and number of prospectors as well as in the total area involved. This feverish activity has proved that there is enough uranium in sight to (1) meet all the military requirements and (2) to enable us to enjoy the benefits intended to serve mankind.

Uranium is a common mineral in the earth's crust. In the past it has been assumed that it was found in commercial quantities in only a few types of occurrence and that these were rather restricted as to geologic age. We are discovering that it can be found in commercial or sub-commercial deposits of many different types of occurrence and that it is not necessarily restricted to the Morrison, Chinle or Shinarump formations. It occurs both as primary and secondary minerals and as placer deposits.

Uranium itself is not radioactive. Its daughter products are. When uranium is old enough to be in equilibrium, it contains about one part radium to 3 1/4 million parts of uranium. Uranium salts are soluble so if the outcrop is leached, it will still be radioactive, due to the residual radium, but it will assay very little uranium. It is recommended therefore that you drive a shaft or dig a hole a few feet and procure samples. When you get away from the leached condition, you should have uranium content equivalent to the radiometric assay, providing the ore is old enough to be in equilibrium.

In prospecting for ore, it was suggested that if you find an area that runs less than .25 of a milliroentgen per hour, which is over full scale on the sensitive range of your Geiger counter, that you dig a small, shallow hole, about two feet deep, and drop your instrument in the hole.

If the radioactivity increases, dig another two feet, until you reach that point at which you are not getting any more increase in radioactivity, which means that you have passed that area from which radioactivity comes. If you do not, continuously, get an increase as you are going deeper, there is no reason for having ore, or at least the anomaly that you picked up at the top of the ground had no bearing on commercial ore. It came from a slight increase in the thorium or uranium content in the rocks near the top of the ground.

LAW WOULD BAN PETROLEUM GEOLOGISTS

The attention of the members is directed to Assembly Bill No. 2819, introduced January 20 and referred to Committee on Governmental Efficiency and Economy, Ralph M. Brown, Chairman. This bill in essence prohibits the practice of "research, ... consultation, and all other functions which are used in making the laws of nature ... and the properties of matter useful to man ... provided these functions are carried out at the professional level .... and requiring training and experience in the engineering sciences and application of special knowledge in the mathematical, physical and engineering sciences". Furthermore, "Mining engineers are those professional engineers who deal with engineering problems relating to the discovery, location, exploration, exploitation ... of naturally occurring deposits of solid or fluid materials of organic or inorganic chemical type." Professional engineering is also further defined as including "The investigation and application of the laws, phenomena and forces of nature". "The performance of these activities at the professional level where judgment, interpretation of data, or evaluation of findings and conclusions is involved ... constitute the practice of professional engineering ...". No person shall represent a client or employer ... unless licensed as a professional engineer."

"Every person ... is punishable by a fine of not more than $500 or by imprisonment of not more than three months in jail or by both ... who ... practices or offers to practice professional engineering ... without legal authorization".

The A.A.P.G., as an organization, cannot undertake to influence legislation. Individual geologists should be alarmed at being legislated out of a job and should wish to take some action, such as writing to Sacramento to Ralph M. Brown, chairman of the committee mentioned above. Additional information on this subject may be obtained by calling Frank S. Parker.

CONSTITUTION AMENDMENTS

The constitutional amendments voted upon by members of the Pacific Section were passed by large majorities. The Ballot Committee of Frank Parker, Louis Simon, and Bob Kelly furnished the following tabulation:

1. Member of Coast Geological Society on Executive Committee, Yes: 389, No: 118
2. Raise dues to $2.50 per year, Yes: 447, No: 66

A total of 510 members out of a total membership of 1065 voted on the issues.

ANNUAL PICNIC AND GOLF TOURNAMENT

Chairman Lou Heintz reports that the Annual Pacific Section Picnic and Golf Tournament will be on June 10th. The picnic will be at the Britt Picnic Grounds at Piru, the same location as last year. The Golf Tournament will be on the morning of the same day at Ojai Country Club. Cards containing details will be mailed two or more weeks prior to the big date. Lou says preliminary arrangements are progressing nicely.

PACIFIC PETROLEUM GEOLOGIST

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Northwest Representative	Floyd Johnson
Sacramento Representative	Bill Bauer
San Francisco Representative	Herschel Driver
San Joaquin Representative	Joe Parmenter

NEXT DEADLINE MAY 26

A.A.P.G. FORUM

The monthly Forum Meeting of the Pacific Section met at the General Petroleum Auditorium on April 18th. Two speakers were on the program.

President Frank Parker reported on "New York and Our National Convention". Parker highlighted his talk with Kodachrome slides both humorous and educational. He announced that the National Convention will be in Chicago in 1956, St. Louis in 1957, and in Los Angeles in 1958.

Dr. Phillip B. King, U.S.G.S., who is now visiting Professor at U.C.L.A., spoke on "Structural Problems of the Great Smoky Mountains of Tennessee and North Carolina".

Dr. King presented some of the results of an investigation which has been conducted during the past eight years by the U. S. Geological Survey in the Great Smoky Mountains National Park.

The Great Smoky Mountains are a part of the Unaka Mountains, or northwestern belt of the Blue Ridge Province and include Clingmans Dome and other peaks which rise to altitudes of more than 6500 feet or only a little lower than the highest peaks in the United States east of the Mississippi River. They are bordered on the northwest by lower country of the Valley and Ridge province, which were carved from deformed sedimentary rocks of Paleozoic age, and on the southeast by mountainous areas of the main Blue Ridge province formed of crystalline rocks.

The rocks of the Great Smoky Mountains have been extensively thrust over those of the Valley and Ridge province along a low angle fault. This fault emerges along the outer foothills of the Great Smoky Mountains where it dips at a low angle to the southeast, but it also reappears within the foothills, in places 9 or 10 miles behind the front, in "coves", or windows. The coves are open valleys underlain by Paleozoic limestone surrounded by hills and mountains of older rocks which have overridden them.

The foothills of the Great Smoky Mountains include basal Cambrian clastic rocks, arkoses, quartzites, and slates, and these lie on much thicker and older sediments, the Ocoee series, which make up the remainder of the foothill area, and all the higher Great Smoky Mountains as well.

The clastic sedimentary rocks of the Ocoee series are of a facies peculiar to this region, quite unlike the normal, cleanly washed Paleozoic sandstones, shales, and limestones of the adjacent Valley and Ridge Province, although they much resemble geosynclinal deposits of many other regions, such as those of the Coast Ranges of California. They are prevailingly of graywache type, and were probably deposited with the aid of turbidity currents. They include very thick masses of laminated siltstone, which show flow-casting and current bedding, and an equally thick formation of coarse sandstone and fine conglomerate which shows graded bedding throughout.

Rocks of the Ocoee series have been considerably metamorphosed. Argillites and siltstones contain chlorite as a metamorphic mineral, and have been rendered foliate and schistose. Superimposed on the foliation are later structures which may have developed during emplacement of the thrust sheets. The coarser sandstones have resisted physical change longer, although the occurrence of various metamorphic minerals indicates that in places their metamorphic rank is actually higher. Under extreme deformation they have responded by flattening and elongation of their component detrital grains.

The Great Smoky Mountains show many effects of the Pleistocene ice age, although they were too far south to have been glaciated. Boulder fields and talus on the mountain sides and boulder-choked streams in the valleys testify to extensive rock breakage during the Pleistocene period, perhaps at a time when the present mountain crests stood above timber line.

SAN JOAQUIN GEOLOGICAL SOCIETY

William A. Bowes, Atomic Energy Commission geologist, discussed "Uranium in the Kern County Area" at a dinner meeting of the San Joaquin Geological Society on April 14th at the El Tejon Hotel in Bakersfield.

Mr. Bowes believes that the oil geologist of the future may be armed with a Geiger counter and scintillator as he plays the dual role of oil-finder and uranium prospector. Speaking before approximately 100 members of the Valley's oil exploration fraternity Bowes suggested that oil geologists examine outcrops and top hole cuttings with Geiger counters and scintillators as a means of furthering the nation's search for new uranium reserves. Examination of cuttings should be limited to the top 500 feet of hole which is probably as deep as an operator can profitably mine uranium under present conditions. The use of gamma logs was also suggested.

More important to the future of the California uranium industry than the shows which have been widely publicized are the questions which will be answered by deep level work. Deep level work will be necessary to tell whether or not California has the reserves to support a going uranium industry.

Uranium finds deemed worthy of mention were those made at the Miracle and Kergon Mines in Kern Canyon, the Gilbert Embree claims on Erskine Creek south of Isabella in Kern County, claims east of Mojave in the Mojave Desert, claims in the Olancha area in Inyo County, the Taft-McKittrick area, and in the Ojai area.

The Ojai shows are the closest thing to the type occurrence found in the Colorado Plateau. Uranium shows in the Ojai area occur in fluvial sandstone of Eocene age.

Occurrence in the Miracle and Kergon mines is of the vein type. The Miracle Mine, is a drifting type operation. Operators have tunneled about 300 feet into the mountainside at the mine, which is credited with making the first carload shipment of commercial ore from California. Last summer original discoverers of the mine shipped approximately 48 tons of high grade ore to Salt Lake City. Net proceeds were $2,688.24.

At the Kergon claims, three-quarters of a mile west of the Miracle Mine, workmen in a sinking operation have gone 90 feet below the surface. Great Lakes

Oil and Chemical Company is operating the claims. The Miracle and Kergon mines have found commercial ore.

In the Gilbert Embree claims on Erskine Creek occurrence is in a contact deposit between quartzite and gneiss. Mr. Embree is also developing a tungsten mine about one mile from the uranium shows and hopes to derive financial support for the necessary uranium exploration from the tungsten operation.

Claims 15 miles east of Mojave recently were credited with shipment of seven and one-quarter tons of uranium ore to the buying station at Marysvale, Utah. Occurrence is in volcanics.

Bowes advised his listeners to look at shows in the Taft-McKittrick area -- if and when they might get the chance. He reported that some interesting readings had been secured from open cuts, one as deep as 30 feet, in Sec. 2-30S-21E., about four miles northwest of McKittrick in one of the West Side's oldest oil-producing areas. Financial assistance might be forthcoming from the Defense Minerals Exploration Authority to back corehole drilling in the area.

In regard to recently publicized discoveries in the "25 Hill" area near Taft, considerable radioactivity has been noted and there might be a good quantity of low grade material there. Occurrence is probably of the vein type. Touching briefly on the Olancha area, Bowes said occurrence has been found in lake bed sediments and also in volcanics.

In California most of the shows of uranium seem to be located in fault zones, fractures, and bedding planes, suggesting secondary mineralization, which presents an economic problem in the handling of the ore.

The oil industry is taking a position in the exploration of uranium by the formation of a committee headed by Dr. Frederic H. Lahee. This group is made up of men from all professional societies connected with petroleum search and has as its express purpose "the stimulation of uranium exploration by all members of the oil industry when and where oil exploration is in progress".

EASTERN NEVADA GEOLOGICAL SOCIETY

Professor David S. Slemmons of the Mackay School of Mines, Reno, was guest speaker at the regular monthly meeting of the Eastern Nevada Geological Society at the Ranchinn, Elko, Nevada, March 21, 1955. Mr. Slemmons' subject, "The December 16, 1954, Earthquake of the Dixie Valley-Fairview Peak area, Nevada", was extremely interesting and attracted a very attentive audience. The earthquake of December 16th was one of twenty major earthquakes recorded in the United States in 1954, having a magnitude of 7.5. A magnitude of 7 or over is considered to be a major earthquake.

Mr. Slemmons briefly reviewed the history of earthquakes in an area from Lone Pine, California, northward to the area under discussion. This belt of seismic activity has a complex pattern which trends north-south and has been active throughout the years.

No accurate estimate of the damage caused by the tremor can be made, but it is estimated to be at several hundred thousand dollars. Reno and Carson City, Nevada, 80-90 miles distant, suffered damage to buildings estimated at thousands of dollars. The most severe damage was caused at the epicenter, and the intensity of the shocks was great. Extensive repairs on U. S. Highway 50 were required. At one place the highway was offset vertically 2 1/2 feet. The mines of the area probably suffered the most costly damage. Some will require timbering as a result of loosening and shattering of the hanging wall caused by the shock. The Coast and Geodetic Survey will be required to resurvey where monuments have been displaced by vertical movement up to four feet downward in the valleys and one foot upward in the mountains.

Colored slides were shown during the talk to illustrate the fault scarpes. The faults generally follow the base of the mountains showing displacements in the alluvium. However the faults cut into the ranges in places and it was possible to measure displacement of the bedrock. The faulting was of horst and graben type normal faulting, the mountains moving upward and the valleys downward. The maximum vertical displacement measured was 23 feet but 15 to 20 feet of movement was common. Horizontal displacement was difficult to measure but did take place, and where noted was generally of right lateral movement. Typical en echelon faulting extends outward into the valleys at an oblique angle from the main fault.

The visible movement may be a secondary effect related to movement at great depth. In some instances the fault zones show evidence of mineralization or follow mineralized zones. This area was one of strong thrusting during Mesozoic time.

NORTHWEST GEOLOGICAL SOCIETY

At Olympia on April 18, 1955, Mr. Robert D. Brown, Jr., of the U.S.G.S., Portland, Oregon, talked before the Northwest Geological Society on "Tertiary Stratigraphy of the Port Angeles-Lake Crescent Area of Washington".

Sedimentary and volcanic rocks with an aggregate thickness of more than 30,000 feet crop out in the north central part of the Olympic Peninsula, Washington. These strata are best exposed in the south limb of the Clallam syncline, a regional structure which apparently extends along the entire north coast of the Olympic Peninsula. Seven major lithologic units, ranging in age from Eocene to Miocene, have been recognized: from oldest to youngest these are: a. a sequence of argillite and graywacke, b. the Crescent formation (volcanic), c. a sequence of indurated siltstone, d. the Lyre formation (graywacke and conglomerate), e. sedimentary rocks of late Eocene and Oligocene age (sandstone and siltstone), f. the Blakeley formation (chiefly mudstone), and g. the Clallam formation (sandstone and mudstone).

"Imagine Waldo — this young man says he's looking for oil."

COAST GEOLOGICAL SOCIETY

Dr. Ulysses S. Grant, Professor of Geology at U.C.L.A., was guest speaker at the monthly meeting of the Coast Geological Society held in Santa Barbara, California, on April 12th. Dr. Grant spoke on "The Relation Between Amount and Character of Beach Sand and Denudation Rate in Source Areas".

Our beaches provide an important demonstration of geological processes that have been operating since the earth cooled off enough for water to exist as a liquid, and thus form oceans. Many shoreline processes operate fast enough to permit fruitful study over a very short interval of time. Dr. Grant stated that a good beach-building sand has a grain size of 150 microns or a grain diameter of 15/100 of a millimeter. In general the beach sands of southern California coast come from the shore up-current from the beach, not all the way down from Oregon, Washington, British Columbia, or Alaska, but from sources of sand along our California coast.

The Santa Monica Yacht Harbor provides an excellent sand trap by which the amount of sand moving along a beach can be measured. This yacht harbor was constructed by building a detached breakwater about 2000 feet long, parallel to the shore and about 2000 feet out from the beach as it existed at that time. Thus a relatively quiet water area was created by the elimination of wave action, which permitted all beach sand travelling along the shore to be caught and permanently deposited there. The consequence was that the beach back of the breakwater rapidly built outward-prograded-thus reducing the anchorage area in the Yacht Harbor. Careful studies conducted in 1935 have revealed that deposition was at the rate of 665 cubic yards per day. Later studies have placed the total amount of beach sand, moving mostly southward along the coast of Santa Monica, to 740 cubic yards per day.

Most of the sand arriving at Santa Monica from the north is somehow derived in the area between Santa Monica and Point Dume. This assumption presupposes that no sand of beach-building size passes around Pt. Dume to beaches east and southeast of the promontory. Due to the Rindge Reservoir across Malibu Creek it is estimated that the contributing drainage areas east of Point Dume is only 84 square miles. This then would give a denudation rate of approximately 1 inch in 27 years. Comparing this figure with denudation rate in South Pacific minor drainage areas, computed by Dole and Stabler about 50 years ago, of I inch in 720 years the Santa Monica Mountains are being denuded at an extremely rapid rate. The U. S. Forest Service estimated the average removal of 3000 cubic yards per square mile per year from San Gabriel Mountains. This is a denudation rate of 1 inch in 29 years.

Peculiar to southern California is the importance of the amount of material carried by the bed load of contributing streams as well as our steep gradient streams draining water sheds with scant vegetation and the characteristically violent fluctuations of discharge rates.

Comparison of profiles and surveys made by the Army Engineers at Hueneme in 1938 with those made in 1948 indicates a long-shore transport of beach sand of 489,000 cubic yards per year or 1300 cubic yards per day. This is about twice as much as is estimated for Santa Monica.

There are data available for a beach near Ventura that seem to indicate a long term trend toward a prograding of the beach. About 180 years ago Fray Juan Crespi, one of the missionaries, in his travels along the Ventura coast noted how narrow the beach was at what is now called Pierpont Bay. The shoreline was surveyed by the U. S. Coast and Geodetic Survey in 1855, 1870, and 1933. During that span of 78 years, the beach prograded over 500 feet. Near the mouth of the Santa Clara River the beach prograded 300 feet between 1933 and 1938 due mostly to the 1938 flood.

The problem of how far sand travels along a coast has a bearing on the magnitude of the effect on local beaches of eliminating nearby source areas. Widespread establishment of flood control works, such as dams, and also debris basins and artificial flood channels which reduce erosion of the land, are apt to reduce beach sand supply and deplete beaches.

For the statistically minded herewith is listed a summary of the chief data Dr. Grant presented:

Area	Size of Assumed Source Area	Denudation Rate
Santa Monica	84 sq.mi.(to Pt. Dume only)	1" in 27 years.
	158 sq.mi.(to Mugu Lagoon)	1" in 50 years.
San Gabriel Mts.		1" in 29 years.
Malibu Drainage Basin		1" in 165 yrs.
Nichols Canyon (Storm)		1" in 4 1/2 yrs.
Santa Barbara	235 sq.mi. (Pt. Conception to Santa Barbara)	1" in 69 years.
Entire U. S. (Dole and Stabler)		1" in 730 yrs.
Colorado River		1" in 440 yrs.
Hudson Bay Drainage Area		1" in 3900 yrs.

Dr. Grant concluded that, whereas denudation rates over large drainage basins which include much relatively flat land, flood plains and subdued topography, may be low, the rates of denudation in restricted areas of high relief are apt to be very high.

CONVENTION COMMITTEE
A.A.P.G., S.E.G., & S.E.P.M.

John T. Isberg, Convention General Chairman, has selected the following committee chairmen to assist him in planning the 1955 Fall Convention scheduled for November 10th and 11th:

Arrangements
Rufus M. Smith

Exhibits
Paul Hayes

Publicity
Orrin Gilbert

Dinner Dance
Robert Sumpf

Projections
Paul Elliott

S.E.G.
J. W. Mathews, Pres.
E. M.(Atch)Currey, General Chairman

Registration
Bill Thomas

Alumni Luncheons
Ted Bear

Finance
Louis Simon

Advertising
Leslie Schultz

Program Editor
Layton Stanton

S.E.P.M.
Harold Billman, Pres.
Jim Hamill, General Chairman

A.A.P.G. Program Committee
Irving Schwade, Chairman
Bob Paschall
Jim Macmillan
Bill Cunningham
Everett Pease

WANTED - FALL CONVENTION PAPERS

Irving Schwade, Program Chairman, requests that prospective speakers contact anyone of the committee members as soon as possible so that those papers which are timely, or are best suited to the convention theme, may be selected for presentation. We expect to have an early deadline on these selections.

JUNIOR A.I.M.E. MEETING

"The Tidelands" was the subject of the March 10th meeting of the A.I.M.E. Junior Petroleum Group at the Turf Club restaurant in Rivera, California. A panel of four speakers surveyed the problems of offshore drilling from lease acquisition to production.

The first speaker of the evening was J. S. Watson, Assistant Executive Officer of the State Lands Commission and widely known oil expert, who discussed the acquisition of offshore lands from the state. He traced the development of the present law from earlier statutes and explained the litigation and legislation which resulted in the return of tidelands to state control. Currently, the law does not permit leasing of offshore property unless it can be demonstrated that such land is being drained by other wells.

Mr. Watson expressed his belief that the law would be changed in the future to allow exploratory drilling and subsequent development of offshore lands, but he warned that the industry must proceed cautiously and avoid even small infractions of safety, water pollution, and wildlife conservation laws in order to prevent public opposition.

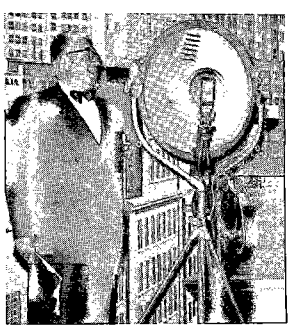
"Offshore Exploration" was the subject discussed by Carl Savit, Chief Mathematician for Western Geophysical Company. Savit's witty and enlightening talk was illustrated with color slides.

Offshore exploration has been underway along the California Coast for some time. Coring of the ocean floor, surface inspection by diver-geologists, and various means of geophysical mapping have been tried. The bulk of the money spent so far, however, has been for seismic surveys of underwater formations.

The third speaker of the evening was Glenn A. Schurman, Senior Research Engineer of California Research Corporation. He spoke on the subject of platforms for offshore drilling and producing.

The wide variation in the results of the many ocean wave formulas has led to research to determine actual forces exerted by waves on piling. Schurman described and illustrated equipment which is being used in this research. With the aid of excellent colored slides he then discussed the types of platforms now in use, from permanent steel structures to submersible barges. The advantages and disadvantages of each type were explained, and comment was made on the adaptability of such platforms to California waters.

Final speaker of the evening was D. S. Hare, Manager of Operations for Monterey Oil Company, who explained some of the unique operational problems, transportation difficulties, unfamiliar labor laws, pollution danger, space limitations, and storm hazard. Basing his remarks on Monterey Oil Company's experience in drilling off Seal Beach, Hare urged that platforms be constructed adequate to develop a field if one is found. He concluded by warning that his company was only beginning to meet many of the difficulties of offshore work.



SHOOTING "BARREL NO. 1"

Technical director Homer Steiny about to go into action in the filming of "Barrel No. 1". This picture will be shown throughout the Nation during Oil Progress Week.

PERSONAL ITEMS

Grant Valentine, district geologist for Shell at Elma, Washington, was elected Northwest representative to the A.A.P.G.

Dave Riveroll, who has been operating a paleontological laboratory for Wilbur Rankin at Montesano, Washington, for the past year and a half, is returning to Los Angeles. We are wondering what Dave will do with the bear hide that he acquired in Washington. Several months ago it was said that the Riveroll residence could be detected by the odor of bear, and that Mrs. Riveroll was most unhappy over the situation.

George Webb, geologist for Standard, was recently transferred from Salinas to Seattle.

Bill Quackenbush, division geologist for Continental at Olympia, will soon pack his fishing gear and his skis and return to the Los Angeles office.

Wayne Marrs of Continental is vacationing in Mexico. It sounds fishy when a man leaves the Pacific Northwest to go fishing in Mexico, but perhaps something besides piscatory pursuits are involved.

Geologists aren't the only ones who get transferred. J. N. Evans, draftsman for Shell at Elma, has been transferred to Seattle, and J. E. Herdon was transferred from Seattle to Elma.

Mr. and Mrs. George Kuffel, Shell, wore out two pairs of shoes and three taxi drivers in their efforts to see all of New York State, while and after attending the convention.

Bill Hare, recently graduated from the University of Colorado, will spend several months as a trainee in the Bakersfield office of Continental Oil.

Mr. and Mrs. Jack Beach, Oceanic Oil, are traveling through France, Spain, and Italy. They left on this trip immediately after the recent National A.A.P.G. Convention in New York.

The Bob Paschall's and Bob Herron's spent their Easter vacations studying the Firewater Formation in the Indian Gulch area of Death Valley.

Bob Hess, Humble, spent a few weeks in the Ventura area on a training program. He has returned to Eugene, Oregon.

Jim Barkes, Continental, is currently taking San Miguelito 1-A as his semester's training and will shortly return to Casper, Wyoming.

With the advent of Daylight time, the Montalvo Golf Course has been taken over by Shell from three 'til dark.

V. L. Vanderhoof, Intex, attended the Spring meeting of the Cordilleran Section of G.S.A., in Berkeley on the 29th and 30th of April.

Mike Zaikowsky, Texas, has been transferred from Los Angeles to Santa Paula replacing Tom Benson, who moved to Santa Maria.

Art Lewis, Union Oil, geologist from Billings, Montana, is spending a few weeks in Santa Paula and will report to the Denver office in May.

Butch Brown, Union, will soon be transferred to Santa Paula to replace Vern Rutherford, who is going to Santa Maria.

Reportedly influenza was the cause of illness to many of those from California who attended the New York convention -- or could it have been too many ice-cubes??

Russ Simonson and family purchased a new Oldsmobile, after attending the New York convention. On the way home they had a bout with a tornado, went through sand, snow, hail and rain storms. Russ reports that his Olds is older.

Glen and Mrs. Gariepy, Ohio Oil Company, were selected to appear on the "Strike It Rich" program, while attending the New York convention. Their winnings were donated to charity.

Barney Yancy, Bakersfield, has been transferred to Ely, Nevada. Barney is the Ely District Scout for Shell.

Quentin Query, former calendar editor for the Pacific Petroleum Geologist, is being transferred to Union Oil Company's Denver headquarters. Dick Eckhart is the new calendar editor. Quentin has been busy winterizing.

Bill Schlax, Superior, has been transferred from Willows, California, to Los Angeles.

John Sansone is working on the speaker's panel to support legislation pending to permit offshore drilling. John gave a talk at the Glendale Kiwanis Gateway Club on April 13th titled "Oil is Everybody's Business".

Congratulations to Mr. and Mrs. Frank Parker who celebrated their Silver Wedding anniversary on April 26th.

Harold Rader, Standard, has finally moved into his new home in Whittier. Harold will tell you not to mention yard work - he has just started to grade at his new location.

David G. Moore has switched his research work from Scripps Institution of Oceanography where he has been working for API project 51 to the Navy Electronics Laboratory's Sea Floor Studies Section. Dave will continue working on problems of marine sedimentation and the physical properties of sediments.

Everett C. Edwards and wife spent ten days touring the west coast of Mexico as far south as Topolobampo, Sinaloa. Some time was devoted to the old silver mining district of Alamos, Sonora.

Tom Clements was honored at a testimonial dinner in the Clark Hotel on April 23rd upon completion of his first 25 years at U.S.C., About 100 former students and their wives attended and felicitations were received from myriad other graduates all over the world. Tom was given a 35 mm. reflex camera and attachments as a token of the esteem in which he is held by his admirers.

Al Simpson, Jim Lamb, Bill Horsley, and Hal Reade were at the Clark Hotel, Los Angeles, Saturday, April 23rd, for Dr. Tom Clements' surprise dinner party celebrating his 25 years at U.S.C.

Jack Decker, lately resident geologist for General Petroleum, Bakersfield, announced that as of April 15th, he is in the consulting business with offices in his home.

Al Ruprecht is now Resident Geologist in Ventura for Superior.

Dee Taylor left Friday, May 6th, and will sail on the Coronia for a cruise of the Mediterranean. Dee intends to take in the World Petroleum Congress which will open in Rome on June 6th.

NURSERY NEWS

Bill and Odette Horsley (Richfield, Bakersfield) are proudly showing Elaine Marcelle, born February 24th, weighing 5 1/2 lbs.

The Bill Bedfords (Texas Company, Bakersfield) wish to tell everyone that they now have another daughter in the house. Jill Diane, born April 9th, weighing 6 lbs., was welcomed home by her older sister, Julie Ann.

Mr. and Mrs. Robert Blocher, Shell, are the happy parents of a girl, Patricia Corrine, born in Seattle on April 5th, weighing 6 lbs., 12 oz.

To Frank and Doloris Yule, General Petroleum, a boy, Scott Charles, born April 20th - and an 8 pounder.

To Roy and Marian Turner, a boy, Roy Silbur, on the 26th of March, weighing 4 lbs., 1 oz. This is the 1st for the Turners.

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CALENDAR

May 11, 1955: Wed., 7:30 P.M., Joint A.A.P.G.-S.E.G., Distinguished Lecture Series, General Petroleum Auditorium, Los Angeles. Dr. John A. S. Adams, Project Associate A.E.C. Contract, Univ. of Wisconsin, will speak on "Exploration for Uranium".

May 12, 1955: Thurs., 6:30 P.M., Los Angeles Basin A.I.M.E. Jr. Pet. Group Dinner Meeting, Turf Club, Lakewood Blvd. and Anaheim-Telegraph Road, Los Angeles. Program will be symposium on "Corrosion". Speakers and subjects will be:

Ted Bertness, General Petroleum Corporation, "Comments on Fundamentals of Corrosion".
Howard Lorenz, Standard Oil of California, "Field Application of Corrosion Prevention Measures".
Frank Davie, Shell Oil Company, "Evaluation of Results and Economic Analyses".
Preston Hill, Signal Oil & Gas, "Control of Corrosion of Oil Facilities".

May 12, 1955: Thurs., 1:30 P.M., Pacific Section S.E.G. Spring Meeting, El Tejon Hotel, Bakersfield. Afternoon session open. 6:30 P.M. evening dinner session with San Joaquin Geological Society. Dr. John A. S. Adams, Project Associate A.E.C. Contract, University of Wisconsin, will speak on "Exploration for Uranium".

May 13, 1955: Fri., 6:30 P.M., Joint A.A.P.G.-S.E.P.M., Dinner meeting, El Tejon Hotel, Bakersfield. Tennant Brooks, Geologist with Ferguson and Bosworth, and Aden Hughes, Consultant of Goudkoff and Hughes, will discuss "The Geology of the Devils Den-McLure Valley Area". This will be followed by a field trip through the area conducted by Tennant Brooks and Glenn Shepherd on May 14, 1955, Sat., 9:00 A.M. Address reservations for dinner and field trip to E. H. Stinemeyer, Box 999, Bakersfield. For field trip, bring lunches: beverages will be furnished.

May 13, 1955: Fri., 7:00 P.M., Northern California Geological Society Dinner Meeting, St. Julien Restaurant, 140 Battery St., San Francisco. Cocktails 6:00 P.M. Program will be:

George O. Gates, Chief, Alaskan Geology Branch, U.S.G.S., "Introductory Remarks on Geology of Alaska".
I. L. Tailleur, Alaskan Geology Branch, U.S.G.S. "Stratigraphy and Structure in Northern Foothills of the Brooks Range, Alaska".
Standard Oil Company of California will show newest film on Alaska.

May 13, 1955: Fri., 8:30 P.M., San Joaquin Valley Section A.I.M.E. Semi-formal Dance, Stockdale Country Club, Bakersfield, Cocktails 8:30 P.M., Breakfast 1:00 A.M. $6.00 per couple: open to all members and friends. Tickets available from members.

May 16, 1955: Mon., 7:00 P.M., Pacific Section A.A.P.G. Forum, General Petroleum Auditorium, Los Angeles. Speakers and subjects will be:

Leo H. Moir, Jr., consultant, will talk on Bear Valley Thrust Fault in Bitterwater Area, San Benito County, California.
Dr. E. L. Winterer, Assistant Professor at U.C.L.A. will talk on eastern portion of Ventura Basin.

May 17, 1955: Tues., 6:30 P.M., San Joaquin Valley Chapter A.P.I. Dinner Meeting. Lecture subject open. Program will include interesting sports subject resume' of 1954 World Series.

May 21, 1955: Sat. afternoon, San Joaquin Valley Chapter A.P.I. Spring Barbeque and Golf Tournament, Bakersfield Country Club, Bakersfield. Golf will be played at Bakersfield Country Club, Stockdale Country Club, and Buena Vista Golf Course in Taft. Golf starting times are 6:00 A.M. to 2:00 P.M.

May 23, 1955: Mon., 7:30 P.M., So. Calif. Petrol. Section A.I.M.E. Dinner Meeting, Engineer's Club, Biltmore Hotel Los Angeles. Mr. Roland Krueger, Union Oil Research, will present a paper entitled, "The Interpretation of Laboratory Tests of Mud Particle Penetration into Sandstone Cores". Cocktails, 5:30 P.M.: price $3.75, tax and tip included. Make reservations with J. I. Gates, Shell Oil Company, Los Angeles.

June 2, 1955: Thurs., 12 noon, Pacific Section A.A.P.G. Luncheon Meeting, Rodger Young Auditorium, Los Angeles. Mr. Fred Vandenberg, Kern Oil Company, will talk on and show kodachromes of his trip to Turkey.

June 10, 1955: Friday, 2:00 P.M., Annual Pacific Section A.A.P.G. Spring Picnic at Britt Park (Piru). Golf tournament at Ojai Country Club. For all details watch for mailed card notice.

ANDY CLINE SAYS:

FORGET YOUR WIFES BIRTHDAY
OR DATES WITH A SLICK-CHICK
BUT DON'T MISS THE FUN
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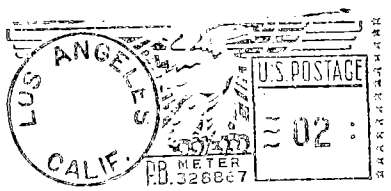

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PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 9 June 1955 No. 6

ASSOCIATION ACTIVITIES

DISTINGUISHED LECTURE MEETING

Dr. John A. S. Adams was the distinguished lecturer at the General Petroleum Auditorium in Los Angeles on May 11, 1955. The subject of his interesting talk was, "Exploration for Uranium". Dr. Adams gave the same talk at Bakersfield on May 12, 1955, at El Tejon Hotel.

Uranium exploration and production today is an industry that involves over 100 million dollars per year. The raw uranium produced is an essential part of the raw material base of the Atomic Energy Commission whose plant is valued at over six billion dollars. This plant valuation is comparable to that of General Motors and is perhaps 1/5 that of the entire petroleum industry. The building of the plant has been done in less than 15 years and 2/3 of it has been finished or started in the last five years. This build-up accounted for 3.5 per cent of the total U. S. construction costs in 1954. These statistics form part of the background for the sudden and intense demand for uranium.

The demand for uranium has been met from all available sources--the Belgian Congo, South Africa, Canada, Australia and the continental United States. Domestic exploration and production has been encouraged by over four million in bonuses and extensive government activity in drilling, road building, aerial radiation surveys, and information services. The result has been a doubling in domestic uranium production about every 18 months since 1947.

Many agencies and universities have carried out research on new methods for exploration and extraction. One of the important results of this research is the development of production from the Florida phosphate rock. Another example of research for new exploration techniques is Dr. Adams' study of Wisconsin rivers. Dr. Adams' applied microchemical techniques to measure the uranium content of various rivers in Wisconsin. His purpose was to determine if it was feasible to find new uranium reserves in the uplands by locating a river with an abnormally high uranium content. Such a river was found and careful study determined that the source was the uranium-rich phosphate fertilizer from Florida that the farmers used on their crops throughout the drainage area. The study showed that the fertilizer was contributing 8 pounds of uranium per square mile of upland area and that this amount did account for the rise in uranium content of the river. Another interesting fact that was developed was that 50 per cent of the uranium found its way into the river within 30 days after the fertilizer was spread on the fields.

SOCIETY PASSES RESOLUTION

On April 14, 1955, the San Joaquin Geological Society at its meeting in Bakersfield, California, passed a resolution stating its opposition to the controversial Supreme Court's decision in the Phillips Petroleum Company case which resulted in the Federal Power Commission's assuming price control over production of all natural gas for interstate movement. Copies of the resolution were sent to other west coast geological societies and to the thirty-two Congressmen from California.

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

A geologic study of the Devils Den-McLure Valley area was presented by T. J. Brooks, Glenn Shepherd, and Aden Hughes at the annual A.A.P.G.-S.E.P.M. Spring Meeting and Field Trip on May 13 and 14, 1955. A syllabus, three structure sections, a type log, and five geologic maps were published for this meeting. Copies may be ordered from Mrs. Margaret Dunn, Petroleum Secretarial Service, 704 Oak Street, Bakersfield, California.

Commercial production has been found along the Miocene hinge line and adjacent to the Pyramid Hills thrust fault complex with oil being produced from both hanging and footwall structures. Production has been obtained from the Escudo (Kettleman?), Agua, Avenal, and a number of zones in the Point of Rocks sand. Production from fractured shale of Refugian age has been developed on the southeast plunge of the Alferitz anticline.

Since both the structure and stratigraphy of this area are highly interpretive, alternate interpretations are shown on maps of the north plunge of the old Pyramid Hills oil field and Dagany Gap areas on the base of Escudo (Kettleman? sand-unconformity), and the base of Miocene, (exclusive of Salt Creek shale) Uvigerinella sparsicostata-unconformity.

The surface structure of the Pyramid Hills and Alferitz anticline has an average strike of north 30° to 35° west. This is in marked contrast to the subsurface productive trends which average north 40° to 45° west.

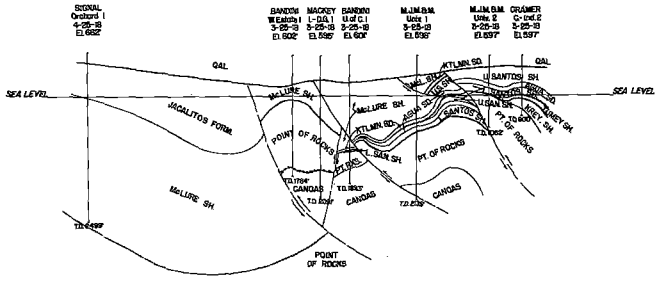


Figure 1. Cross section illustrating complex thrust faulting and stratigraphic changes.

At least five branches of the Pyramid Hills thrust fault have been recognized in the Alferitz anticline and the Dagany Gap oil field. Most of the subsurface evidence in this area indicates that the thrusting becomes distributive on approaching the surface and a bedding plane slip at depth. North of this area the main branch of the Pyramid Hills thrust plane has been contoured. The contours on the thrust plane indicate a dip of approximately 40° in a northeast direction. An additional thrust has been interpreted from meager outcrop and subsurface data which would be antecedent to the Pyramid Hills thrust. This fault evidently has a southwesterly dip component.

The geologic complexity of this area has required continued exploration to develop sufficient detailed subsurface data to outline a number of structural and stratigraphic traps. Similar to other areas of intense thrust faulting, the Pyramid Hills thrust appears to have little bearing on actual closure for the accumulation of oil.

NEXT DEADLINE JUNE 30

A.A.P.G. FORUM MEETING

The Pacific Section Monthly Forum met on May 16, 1955, at the General Petroleum Auditorium. Mr. Leo M. Moir, Jr., Consulting Geologist, and Dr. E. L. Winterer, Assistant Professor at U.C.L.A., were the speakers.

Mr. Moir presented a paper on the "Bear Valley Thrust Fault in the Bitterwater Area, San Benito County, California". The Bear Valley thrust fault is closely associated with the San Andreas Rift in the Bitterwater Valley of San Benito and Monterey Counties, California. This fault was first described in the literature by Ivan Wilson in 1938. It can be traced in this region for more than twenty-five miles.

In the vicinity of Bitterwater Valley, the Bear Valley fault is located at a grade change in the foothills north of the valley. The fault outcrop pattern is scalloped and marks the contact of Franciscan and Paso Robles sediments. The dip at the surface is 15° to the northeast and it steepens slightly to the northeast. The strike is regionally consistent at N 45° - 50° W. Its trend and that of the local folds is almost parallel in every case. The Paso Robles formation is steepened to vertical or overturned beneath this fault. Formations are correlateable across this fault from southwest to northeast throughout the Tertiary section.

Tertiary deposition in the Bitterwater Valley started in lower-middle Miocene when a well developed topographic surface was inundated and buried. This pre-Tertiary topography trended NW - SE, and had at least one well-developed ridge northeast of the Gabilan range. This ridge and the overlying sediments have been faulted by the Bear Valley thrust which causes the Franciscan to crop out above the Paso Robles formation.

The Bitterwater fault is essentially a flat lying fault, which is cut in several places by the more steeply dipping San Andreas fault. There is surface evidence locally in this region that the San Andreas fault also dips to the northeast.

The age of the Bear Valley thrust is post-Paso Robles and pre-San Andreas. The movement was of a direct thrusting action with vertical movement predominating. The associated San Andreas fault is similar in orientation and movement in this area. The final result of the Bear Valley - San Andreas movement was one of extreme compression in the Bitterwater Valley area, with the development of folds in the Tertiary basin beneath the valley floor and faulting in opposing directions in the hills on both sides of the valley.

SOUTHEASTERN VENTURA BASIN

Dr. Winterer gave a talk on "The Geology of the Southeastern Portion of the Ventura Basin, Los Angeles County, California". Most of southeastern Ventura basin lies in the Santa Clara River watershed. Old high-level erosion surfaces as well as topographically lower river terrace surfaces and deposits are conspicuous.

Pre-Cretaceous igneous and metamorphic rocks are exposed in the San Gabriel Mountains, and a thickness of several thousand feet of marine middle or upper Eocene rocks is in fault contact with the crystalline rocks. Wells near San Fernando Pass penetrate as much as 2000 feet of varicolored unfossiliferous beds between Eocene and upper Miocene marine strata. These beds are correlated with the Sespe formation. Near Aliso Canyon wells have drilled through as much as 2500 feet of marine strata correlated with the Topanga formation of middle Miocene age. The late Miocene non-marine Mint Canyon formation is present only in the northeastern part of the area, north of the San Gabriel fault. The marine Modelo formation, of late middle and late Miocene age, not present east of Newhall and Saugus, overlies the Topanga (?) formation and increases in thickness westward to more than 5000 feet at the Ventura County line. The marine Towsley formation, of late Miocene and early Pliocene age, consists chiefly of interfingering lenticular beds of sandstone, conglomerate and mudstone, and overlies and interfingers with the Modelo. Near Newhall it overlaps the Modelo and lies directly on older rocks. The thickness of the formation ranges from about 4000 feet in the southwestern part of the area to the vanishing point where it is overlapped by younger rocks to the east. The marine Pico formation, of Pliocene age, overlies and interfingers with the Towsley. Near the west edge of the area the Pico is at least 6000 feet thick. Lateral changes in foraminiferal faunas show that the water was shallowest near Newhall and became deeper toward the west. The vertical sequence of faunas suggests a gradual shoaling of the basin. The Pico interfingers with the overlying brackish-water and non-marine Saugus formation, which is about 7000 feet thick. In some places it is practicable to separate a lower member of the Saugus, the Sunshine Ranch member, characterized by greenish siltstone beds.

Abundant sedimentary structures, such as graded bedding, load casts, intraformational breccias, current ripples and lineations, slump structures, and convolute bedding, taken together with the presence of mixed shallow and deep-water mollusks in graded beds, indicate that marine turbidity currents, flowing mainly from the northeast, were major factors in the transportation and deposition of the Towsley and Pico formations.

The thick section of upper Cenozoic rocks in southeastern Ventura basin has been thrust southward along the Santa Susana fault toward the older rocks of the Simi Hills. The southeast-trending San Gabriel fault transects the northeastern part of the basin. Dissimilar facies in the pre-Pliocene rocks on the opposite sides of this fault indicate a long history of continued movement. Major folds and faults between the San Gabriel and Santa Susana faults trend northwest: most of the faults are south-dipping reverse faults.

U.C.L.A. GEOLOGICAL SOCIETY

The Geological Society of U.C.L.A. under the leadership of President T. R. Steiny sponsored a banquet on May 19th at Blarney's Castle to enable senior and graduate students to become acquainted with representatives of the oil industry.

After partaking of refreshments and a prime rib dinner, the group was entertained by the Master of Ceremonies, the inimitable Dr. U. S. "General" Grant, who spoke of early days of the Geology Department and the trials and tribulations of early-day students.

Dr. V. L. Vanderhoof of Intex Oil Company gave an interesting biography of Benoit de Maillet (1656-1738), a French career diplomat who had a keen interest in physical geology. Some of de Maillet's concepts of ocean currents and sedimentation were well advanced--even to the point of using skin divers to observe sea floor phenomena.

Dr. W. C. Putnam discussed the status of the Geological Department of U.C.L.A. and presented an interesting review of the first report of the State Geologist written over 100 years ago by Dr. John Trask.

The last speaker, Frank Parker of Signal Oil and Gas Company, gave a survey of job opportunities in the oil business and outlined methods and procedures to be followed by a graduate seeking employment. Mr. Parker stressed the desirability of obtaining higher degrees, especially during times when the number of applicants exceeds the number of available positions. Mr. Parker cautioned the students not to apply for employment through regular Personnel Department channels but to seek out managers of exploration or chief geologists and then be sure to call back from time to time to renew the contact.

SACRAMENTO GEOLOGICAL SOCIETY MEETING

The annual Spring dinner meeting of the Sacramento Geological Society was held Tuesday, May 24th at Johnson's Del Prado Restaurant. About 75 members of the society, their wives and guests, attended. The program for the evening consisted of a talk by Mr. Donald E. White. Mr. White, who is with the Mineral Deposits Branch of the U.S.G.S., chose as his subject "The Volcanoes, Hot Springs and Glaciers of Iceland". At the conclusion of his talk, Mr. White showed a spectacular, 45 minute color movie which not only illustrated the volcanic history of Iceland, but also portrayed many of the geomorphic features of that country, including several glaciers and hot springs. The program was enthusiastically received, and the evening was a climax to another very successful year of the Sacramento Geological Society.

A.A.P.G. LUNCHEON

Mr. Jack Hugus, geophysicist for Western Gulf Oil Company, was the speaker at the A.A.P.G. luncheon at Rodger Young Auditorium on May 5, 1955. Mr. Hugus gave an interesting talk entitled, "A Hunting Trip in Africa".

Mr. Hugus spent two years, beginning in 1950, in Mozambique, Portuguese East Africa, in connection with structure-drilling and seismic operations for Gulf Oil Corporation.

After a brief description of Mozambique, Mr. Hugus spent the remainder of the time showing colored slides of animals hunted both with gun and camera in Kruger Park, located in the Union of South Africa, and in Mozambique.

Mr. Hugus mentioned that the purpose of much of his hunting was to obtain meat for the natives who worked for the company and whose number sometimes was in the hundreds.

IN MEMORIAM

The many friends and colleagues of Professor Paul P. Goudkoff were deeply shocked and saddened by his sudden death during an operation performed on Tuesday, May 24, 1955. For more than thirty years Professor Goudkoff had been a familiar figure in the Pacific Coast sections of the A.A.P.G. and the S.E.P.M. where he took active part in the meetings and contributed many papers on the stratigraphy of California, as well as on many varied subjects in the realm of intercontinental geology.

Born in the very heart of Siberia in 1881, Paul Goudkoff acquired an early interest in mining. Upon receiving his diploma from the Mining Institute at St. Petersburg in 1906, both in mining engineering and geology, Paul Goudkoff joined the faculty of the newly organized Tomsk Institute of Technology at Tomsk, Siberia, as an instructor in petrography. He continued as a lecturer in petrography and physical geology at that school until 1913 when he became Professor. He taught petrography, economic geology and field geology at the Tomsk Institute of Technology through the period 1913 - 1919, being also active as a consultant for the coal mining and metallurgical industry.

Following the revolutionary upheaval in Siberia, Professor Goudkoff moved his family to Vladivostok, Russia, where he held the posts of Dean of the Department of Geology and Professor of Geology at the Vladivostok Polytechnic Institute in 1920 - 1921. Paul came to the United States in 1921 and was successful in following his chosen geological profession. While in New York in 1922 - 1923, he published two papers on metallogenetic provinces and coal resources of Siberia and gave a series of lectures on the geology and mineral resources of Russia at Columbia Univ. and later on at Stanford University. In 1923, Paul went to work for the McKanna Syndicate and, later, the Milham Exploration Company as a geologist and micropaleontologist, remaining with that company until the end of 1926.

Since 1927 to the present time, Professor Goudkoff was active as a Consulting Geologist and Paleontologist, having joined in business with Aden Hughes in 1951. Paul contributed many papers to the meetings of the A.A.P.G., the S.E.P.M., and the G.S.A., of which he was a Fellow, and had 12 papers on stratigraphy and micropaleontology published. Professor Goudkoff was one of the founders of the Society of Economic Paleontologists and Mineralogists and held the offices of Vice President in 1939 and of President of the Pacific Section of S.E.P.M. in 1933. At the time of his passing, Paul was working on a four-dimensional study of the Cretaceous of the Sacramento Valley.

Professor Goudkoff will long be remembered by all of his many friends, associates and colleagues for his broad knowledge of geology and his willingness to give untiringly of this knowledge to anyone interested. He is survived by his widow, Mrs. Valentina P.Goudkoff, and by his daughter and son-in-law Mr. and Mr. L. G. Vasian to whom, all members of the geologic fraternity wish to express their deepest sympathy and heartfelt sorrow.

COAST GEOLOGICAL SOCIETY MEETING

Mr. R. W. Ragland, Vice President,and J. M. Taves, Reservoir Engineer, of Richfield Oil Corporation, presented their demonstration of "How an Oil Field Works" to the Coast Geological Society on May 10, 1955, at the Montecito Country Club, Santa Barbara.

This demonstration has been given to many audiences throughout the state in an effort to increase public knowledge of general oil field operations and to promote interest in the conservation of California's petroleum reserves.

NORTHWEST GEOLOGICAL SOCIETY

At the last meeting of the Northwest Geological Society, held at Olympia on May 20th, Charles E. (Chuck) Kirschner of Standard and Don M. (Mack) Robinson of Shell entertained the members with movies showing how field work is done in Alaska by means of helicopter, and by horseback.

There were also some very good action pictures of bears, moose and other wild game. Chuck stated that the helicopter performed very well at 6000 feet elevation, and that it is possible to use helicopters at considerably higher elevations.

After the meeting the group indulged in games of chance, from which Jim Moore of Shell emerged considerably better off financially than when he arrived.

PRESIDENT PARKER ACCEPTS APPOINTMENT

Frank S. Parker, President of Pacific Section of A.A.P.G., has accepted the chairmanship of the Business Committee of the National A.A.P.G. The Pacific Section is justifiably proud that President G. M. Knebel has appointed Frank Parker to one of the key jobs of the world's largest geological organization.

BRANNER CLUB MEETING

Mr. Eugene Wianko, Division Geophysicist for Union at Santa Paula, was guest speaker at the Branner Club dinner meeting held at U.S.C. on May 23rd. Mr. Wianko presented an illustrated lecture describing his travels and experiences in Alaska and Mexico.

The following new officers were elected for the next year:

President - James R. Dorrance
Vice-President - U. S. Grant, III
Secretary-Treasurer - L. O. Stone

CORRECTION

The Editor wishes to correct an error in reporting Dr. U. S. Grant's talk on page 4, Volume 9, No. 5, May 1955. The statement in paragraph four, "Most of the sand arriving at Santa Monica from the north is somehow derived in the area between Santa Monica and Point Dume", is incorrect.

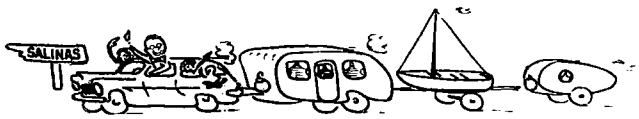
Dr. Grant summarized later in his talk that if the rate of denudation in the Malibu Creek source area is applied to the other water sheds east of Point Dume, about 200,000 cubic yards per year of sand arriving at Santa Monica are unaccounted for. Hence much sand must come from west of Point Dume and successfully bypass that obstruction.

PERSONAL ITEMS

Mick Lachenbruch is now in Western Gulf's Bakersfield office after a two-year stay in Chico, California.

The sessions of the Cordilleran section of the Geological Society of America held in Berkeley, April 28, 29, and 30, were well attended by California petroleum geologists. Mason Hill, Richfield Oil Corporation, Los Angeles, brought his term as chairman of the Cordilleran section to a very successful close. The Northern California society and the A.A.P.G. are represented on the new slate of officers for the Cordilleran section by William F. "Bill" Barbat who was unanimously elected vice-president.

James Ward, formerly a consulting geologist, is now working for Sinclair in the Portland office.



Orrin Gilbert's family and belongings are all ready for a trip to the Salad Bowl. No!! Orrin is not going to a football game; he has been transferred to Salinas.

Robert Blocher of Shell and Chuck Kirschner of Standard will attend the Alaska Science Conference to be held June 1st to 4th at the University of Alaska at College, near Fairbanks.

E. S. Parker, senior geologist for Standard, has been transferred from Ojai to Seattle.

William R. Barlow, paleontologist with Standard at Bakersfield, recently transferred to Seattle.

W. W. Barnwell, who recently received his Master's degree at the University of Wyoming, is working for Standard in Seattle.

R. P. Ottenstein, M.S. University of Oklahoma, is a new employee in Standard's Seattle office.

Bob Nesbit, M.J.M.&M., is on vacation in Chicago, visiting in-laws, and eating his way through them.

Tom Cate got a spot of drilling mud on his suede shoes at a core party.

Charlie Booth is shopping for a new '55 Olds.

Ed Miller was burned on a hot stove at the IMR Government well. He was awarded the Purple Heart.

New personnel in The Texas Company office in Santa Maria: Tom Benson from Santa Paula, Kenny Myron, Lou Canut and Bill Hughes from Taft.

Bob Titesworth of Amerada has been transferred to Rio Vista.

Ken Erskine is now with the Shell Company at Ventura.

The Texas Company has hired Dave Toelle as a Scout in Long Beach.

Ted Ellsworth of Geophysical Service Inc., Bakersfield, reports that his friends can now find him and Frank Fuller in their new offices at 515 Haberfelde Building.

Sigma Gamma Epsilon, the national honorary geological fraternity, has awarded two of the three annual prizes for scientific writing to U.S.C. students. Forty-six universities are represented. Paul F. Patchick won first prize and Emil R. Zalesny won third prize.

Howard G. Dohlen, Alexander Gritseff, and C. R. Johnson have recently formed the California Well Logging Company and have offices in Bakersfield and Los Angeles.

George Lutz, a paleontologist for Shell at Ventura, will spend the next several months in Elma, Washington.

Don Thamer, a recent Stanford graduate, has joined the staff of Shell at Elma, Washington.

Currently being exhibited on Grant Valentine's desk is a big trophy which was won by the Shell bowling team in the Elma bowling tournament.

California Oil Companies are sending quite a delegation to the National Oil Scouts & Landmen's convention at Banff June 7, 8, and 9, 1955. Among the lucky ones are: Bill Horsley, Cliff Edmundson, Earl Bescher, Swiss Holmes, Joe Dockweiler, and Harry Williams. The Canadian Oil Scouts have been working for two years to make this an outstanding convention and have promised to have an Alka-Seltzer booth set up in the lobby of the Banff Springs Hotel.

Recently transferred from Bakersfield to Sacramento is Keith Jones, geologist for Western Gulf Oil Company.

A California boy come home (to stay he hopes) is Walter Howe, geologist for Shell. Walt has been transferred from Midland, Texas, to Sacramento. He is a native Berkeleyan and a Cal grad.

The Sacramento personnel of several of the oil companies kept the transfer companies in business during the month of May. The following moved into new homes during the past month: Bill Cunningham, Don Barrett, Tom Wilson, and Walter Howe.

John Michelson, geologist for Amerada in Rio Vista, has been transferred to Bakersfield.

Bruce Brooks, geologist for Superior in Willows, has been transferred to Salt Lake City.

Bob Orwig, General Petroleum geologist, is in Alaska fighting mosquitoes and looking at outcrops between swats. Bob's family will remain in Sacramento.

Mr. and Mrs. Ed McDowd left on an extended visiting and fishing trip to Canada. McDowd is timing his trip so he can attend the National Oil Scouts & Landmen's convention at Banff.

Roscoe M. (Mandy) Touring has been promoted to district geologist in Humble's Northwest district with headquarters at Eugene, Oregon.

Bill Halls, geologist with Continental at Olympia, is being transferred to Wichita, Kansas.

Recent visitors seen at the Ranchinn at Elko, Nevada, were Keith Rathbun and Dick Haines of Continental, Manley Natland of Richfield, and Bert Marier from Tide Water's San Francisco office.

Ubiquitous Warren Hagist, Superior, was spotted passing through Reno on his way to the recent Shell core party at Ely, Nevada.

Ralph Arnold returned home May 25th from a month's trip to New York and Washington. In Washington he acted as a witness in a law suit between the Navajo tribe and the United States regarding the Rattlesnake Helium Reserve in New Mexico. Since his return he has been advised that the Navajos won the suit.

If you see a green eye-shade in Continental's office in Bakersfield, Danny Nolan will probably be under it. Something to do with Las Vegas, improving his luck, etc.

Jess Parsons has moved from Taft to the Bakersfield office of The Texas Company.

Bill Thomas, Shell, says his head is again deflated to normal size and is back at work. Bill experienced some painful complications from a tooth extraction.

NURSERY NEWS

Born to Bob and Loretta Orwig, General Petroleum in Sacramento, on April 20th, a boy weighing 8 lbs. 3 oz. and named Eugene Robert Orwig III.

Born at the inconvenient hour of 2:00 A.M., April 17th, was Annette Perry Johnston to Alan and Mary, Standard in Sacramento. Little Miss Johnston weighed in at 6 lbs. 15 oz.

A new diaper soiler has arrived at the Jack and Diane Cunningham household, Standard in Sacramento. His name: Barry Falconer. Weight: 7 lbs.

J. H. "Herb" McMasters, Honolulu Oil Corp., San Francisco recently filled out a full house when his fifth child was born. Katherine Ruth makes three boys and two girls for the McMasters.

Tennant and Louise Brooks are adding to their house to make room for Nancy Louise, born May 1st at eight pounds, eight ounces. This is number six and the second girl for the Brooks'. Any frightened creditors can find Tennant at the Ferguson & Bosworth offices in Bakersfield.

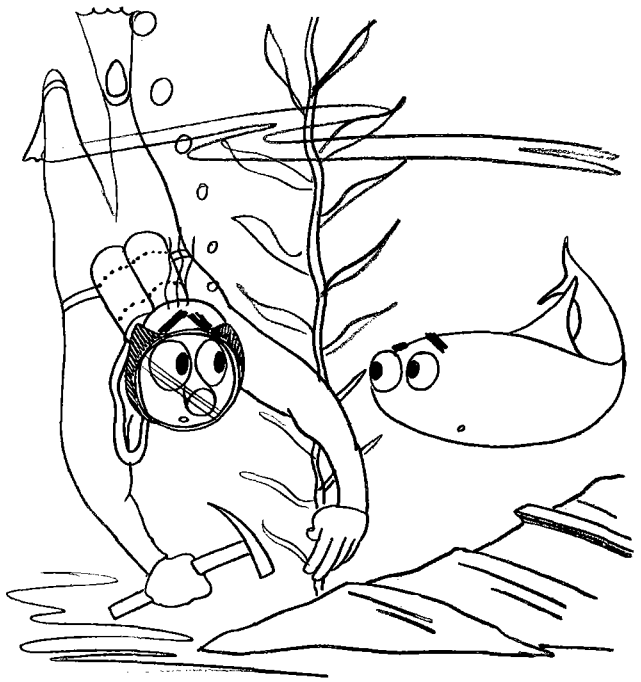
The Johnny Cagles, Continental Oil, Bakersfield, are the proud parents of their 3rd, Molly, born May 11th.

Charles and Carol Fulmer, Standard, Seattle, announce tne arrival of Stephen Frame, born April 24th, weight 7 lbs., 14 oz.

John and Colleen Silcox with Standard at Yakima, Washington, are happy to announce the arrival of Brian McAlphine, on April 23rd, weight 7 lbs., 14 oz.

John and Peggy Frick, Humble in Chico, proudly announce the arrival of Leila Kristine on May 7th. Leila weighed 8 lbs. 6 oz. at birth.

ANDY CLINE by sullwold



CALENDAR

June 7, 1955: Tuesday, 6:30 p.m., San Joaquin Valley Local Section A.I.M.E. Dinner Meeting, Stockdale Country Club, Banquet Room, Bakersfield. Mr. R. L. Koch, Magnolia Field Research Laboratories, Dallas, Texas, will speak on "Oil Recovery by In-Situ Combustion".

June 10, 1955: Friday, 2:00 p.m., Pacific Section A.A.P.G. Annual Spring Picnic, Britt Park (Piru). Golf tournament at Ojai Country Club.

June 14, 1955: Tuesday, 7:30 p.m., Coast Geological Society Dinner Meeting, Montecito Country Club, Santa Barbara. Cocktails at 6:00 p.m. Program to be announced.

June 16, 1955: Thurs., 6:30 p.m., Los Angeles Basin A.I.M.E. Jr. Pet. Group Dinner Meeting, Turf Club, Lakewood Blvd. and Anaheim-Telegraph Road, Los Angeles. $3.00 for members, $3.50 for non-members. Program will be symposium on "Recent Advances in Drilling". Speakers and subjects will be:

A.G. Bodine, President, Soundrill Corp., will speak on percussion drilling.

K.M. Nicolson, Standard Oil Co., will speak on air drilling.

June 20, 1955: Mon., 7:00 p.m., Pacific Section A.A.P.G. Forum Meeting, General Petroleum Auditorium, Los Angeles. Speakers and subjects will be:

B.F. Hake, Western Gulf, "Progress Report on American Geological Institute".

H.F. Peterson, Shell Oil Co., "Progress in Exploration Mapping and Reproduction and Land Surveying in Navajo Reservation, Four-Corners Area, Utah".

June 24, 1955: Friday, 3:00 p.m., Central California Oil Scouts Spring Barbecue, Kern County Golf Course Picnic Grounds, Bakersfield.

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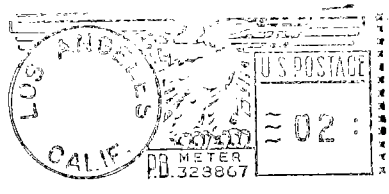

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AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 9 July 1955 No. 7

ASSOCIATION ACTIVITIES

A. A. P. G. FORUM

The Pacific Section held its monthly Forum Meeting on June 20th at the General Petroleum Auditorium. The first guest speaker of the evening was Mr. H. F. Peterson of Shell Oil Company who gave an interesting talk on surveying problems encountered by his company in the Four-Corners area of Utah. Mr. Peterson illustrated his talk with colored slides. The various problems of a survey party in the field while making an initial survey in a practically unsurveyed area were both interesting and enlightening to those in attendance.

The second guest speaker of the evening was Mr. Benjamin Hake of Western Gulf Oil Company. Mr. Hake delivered an interesting talk on the "Progress of the American Geologist Institute". The A.G.I. has eleven geological societies and the National Research Council as affiliates and was organized in November of 1948 for the following purposes:

1. To advance interest in the geological professions.
2. To promote cooperation of social and other organizations active in the field of earth sciences.
3. To promote assistance to the geological professions in matters dependent on united action.
4. To further the application of earth science to human welfare.

Mr. Hake explained that in its few years of life, the A.G.I. has made considerable progress in the fulfillment of its goals and has already initiated and participated in many activities beneficial to earth science professions, academic institutions, the government and to the people of the nation. With its fine purposes and its record of accomplishment so far, this organization certainly deserves all the support, both financial and moral, that the members of the constituent societies can give it.

Mr. Peterson, the first speaker of the evening, then returned to the speakers' stand to give a very interesting talk on the "Progress in Mapping and Reproduction". Mr. Peterson displayed several examples of the various new materials available for maps and described the newest techniques for coloring and reproduction. One of the most interesting is the acetate film overlay method. In this, a base map is drawn on acetate film and various sets of information put on other films: such as, lease information on one, contours on another, seismic on a third, etc. Any combination of these can be collated and printed and reproduced in any numbers. Color photography is also being used for reproducing maps in large numbers and very quickly. The finished product is called a chromostat and the originator of the process can supply brochures and price lists for those interested.

N.C.P.R.T. ANNUAL BARBEQUE

The annual barbeque of the Northern California Petroleum Round Table Group in Sacramento, has been postponed from its July date to sometime in mid-September. The exact date will be announced later.

A.A.P.G. LUNCHEON

Mr. Loring B. Snedden, President of Intex Oil Company, was guest speaker at the June 2nd luncheon meeting held at the Roger Young Auditorium. Mr. Snedden spoke on "Trip to Argentina".

Kodachrome pictures taken on the trip were used to illustrate conditions in the various countries and places described. Two major points were emphasized by the speaker, the first being that the Argentines are very similar to the people of the United States in racial background, most of their ancestors having come from Western European countries. He stated that the climate was similar to that in California. This similarity in climate and racial background of the people in Argentina sets it apart from the other South American countries.

The second point emphasized by the speaker was the fact that Argentina is in desperate need of petroleum resources. The Argentine government has expressed the intention of inviting American "know how" and capital in an effort to develop sufficient oil resources to reduce the dollar expenditure for oil. If this can be accomplished, the Argentine economy will be greatly strengthened. At least one major company is now seriously negotiating for exploration rights in Argentina and it is hoped more will enter the field. It was also pointed out that successful development of oil in Argentina and its beneficial effect upon the Argentine economy would greatly strengthen the Western Hemisphere private enterprise system.

A.A.P.G.-S.E.G.-S.E.P.M. 1955 DIRECTORY

Work is underway on the 1955 AAPG-SEG-SEPM Directory. The book will be ready for distribution at the fall convention in November. Warren Hagist, Directory Chairman, states that the revision cards recently sent to the members should be filled out and returned as soon as possible. Since September 1st has been set as the deadline, changes and new pictures received after that date will not be used.

As stated on the revision card, pictures submitted should be trimmed to 3/4" x 1". If your picture has not been reduced to this size, please send $1.50 along with your picture to cover the reduction costs. The same picture that was entered for the 1953 Directory or 1954 Revisions will be used if a more recent picture is not submitted.

Advertising space is avilable in the advertisement section of the Directory. Doyle Graves is Advertising Manager for this year's book. If you want advertising space please contact Doyle at Union Oil Company, 9645 South Santa Fe Springs Road, Whittier, California.

MIOCENE STRATIGRAPHY REPRINTED

The reprint of Kleinpell's "Miocene Stratigraphy of California" is now available for distribution at Association Headquarters, Box 979, Tulsa 1, Oklahoma. The cost is $4.50 to members, $5.00 to non-members. This classic reference is cloth bound and contains 450 pages, 14 line drawings, 22 plates of foraminifera, and 18 tables.

PACIFIC PETROLEUM GEOLOGIST

Published monthly by the Pacific Section, American Association of Petroleum Geologists. Address communications to the Pacific Petroleum Geologist, Room 214, 1137 Wilshire Boulevard, Los Angeles 17, California.

Editor	Dick Haines
Assistant Editors:	
Activities:	Rufus Smith
	Bob Patterson
Personal Items:	Bill Thomas
Selected Bibliography:	Paul Hayes
Calendar:	Dick Eckhart
Cartoonist:	Harold Sullwold
	Bob Sanem
Coast Representative	Bob Hacker
Northwest Representative	Floyd Johnson
Sacramento Representative	Bill Bauer
San Francisco Representative	Herschel Driver
San Joaquin Representative	Joe Parmenter

NEXT DEADLINE JULY 28

PROFESSIONAL ENGINEERING LEGISLATION

President Frank Parker reports that State legislation on Assembly Bill No. 2819, which gravely concerns all petroleum geologists, is dead until the 1957 Legislature meets.

At the request of the San Joaquin Geological Society President Parker has appointed a special committee to investigate the desirability of the geologist being registered as a separate group of professional engineers. The committee is as follows:

Chairman: Bill Porter, II, Consultant
Bob Patterson, Formation Logging
Mel Hill, Western Gulf

The committee's report will be published in the PACIFIC PETROLEUM GEOLOGIST when a thorough study has been completed.

EASTERN NEVADA GEOLOGICAL SOCIETY MEETING

The regular dinner meeting of the Eastern Nevada Geological Society was held at the Capitol Club in Ely, Nevada, on June 23rd. This was the annual business meeting of the society for electing officers for the coming year and discussing future plans of the society.

The following officers were elected to serve for the coming year:

President: W.B. Roberts, Shell Oil Co.
Vice-President: D.B. Flynn, General Petroleum
Sec.-Treas.: J.R. Price, General Petroleum

A resolution was adopted to discuss plans for a future joint Great Basin Field Conference with the Intermountain Association of Petroleum Geologists.

IN MEMORIAM

L. I. Brockway, Chief Geophysicist, Western Gulf Oil Company, died in his home in Bakersfield on June 16th at the age of 44. "Brock" had just concluded his 20th year with Gulf Corporation and was Secretary-Treasurer of the Pacific Section S.E.G. He is survived by his wife Alice and daughters, Catherine, Barbara, Elizabeth and Nancy. "Brock's" enthusiasm for everything will be remembered by his many friends, and he will be greatly missed by those who knew him in the oil fraternity.

ANNUAL SPRING PICNIC

Threatening skies failed to keep 308 geologists and guests from treking to Britt Park, Piru, on June 10th to enjoy the good food and fellowship under the spreading oaks.

Congratulations to Chairman Lou Heintz and his able committee for a highly successful picnic. Lou carried out the job of organizing and directing the arrangements from his hospital bed.

Committeemen serving under Lou Heintz were as follows: Mike Adams, Gordon Bell, Bill Castle, Spence Fine, Vern Crackel, Bill Emerson, Tom Fitzgerald, John Gates, Orrin Gilbert, Mel Hill, John Kilkenny, Joe Long, Bob Maynard, Tom McCleod, Bob McConville, Walt Mercer, Bud Oakes, Don Oliver, Bob Paschall, Bob Patterson, Eric Phillips, Homer Steiny, Dick Stewart, Wally Taylor, Gene Templeton, Doug Traxler, Dick Triplett, Ed U'Ren, and Jack West.

Generous contributions to the picnic were gratefully received from the following:

Baroid Sales Division
Byron Jackson Company
Eastman Survey
Fairchild Aerial Survey
Halliburton Logging
Homco
Johnson Testers
Kern County Land Company
Lane Wells Company
McCullough Tool Company
Mercury Oil Tools Company
Newhall Land & Farming Company
Oil Well Cementing Company
Pacific Logging Exchange
Peters Logging Service
Petroleum Technologists, Inc.
Rapid Blue Print Company
Schlumberger Well Servicing Corporation
H. C. Smith Oil Tool Company

ANNUAL GOLF TOURNAMENT

Some 80 dubs and golfers enjoyed playing the barrancas and rolling greens of the Ojai Country Club at the Annual Golf Tournament on June 10th. The success of this tournament was due to the untiring efforts of Bill Castle, George Roth, Frank Yule and Tom Fitzgerald.

President Frank Parker won the cup in the Calloway because he took a 17 on one hole. Other Calloway winners were Bob Wheaton, George Roth and Eric Phillips.

Bill Brandon, Tom Cate and Glen Ferguson tied for the Blind Bogie.

Glenn Ferguson and Bill Bedford tied for low gross with 83's. Others winning low gross prizes were Hal Case, Jack Warren, Jack Hollbrook, Scotty Green, S. C. Chillingworth, E. M. Sibenius, Tom Cate, Joe Maxwell and Bruce Arms.

Low net winners were Tony Morris, Bruce Arms, George Roth, George Feister, S. C. Chillingworth, Carl Liedecker, Burt Thorpe, Lou Knox, Dan Nolan and Hal Case. Rosenlieb had high gross with 147.

SACRAMENTO VALLEY SCOUT CHECK

The following new officers were elected for the next twelve months in the Sacramento Valley Scout Check, which is called Northern California Petroleum Round Table: Bill McEachin, Western Gulf, President, Jack S. Merriam, The Texas Company, Vice-President, Swiss Holmes, Shell Oil Co., Secretary-Treasurer, Jay Hubert Mee, Standard Oil Company, Editor, Jeff Watts, P.G.&E., Delegate.

NATIONAL CONVENTION WILL STRESS TRAPS

Dr. Lawrence L. Sloss, A.A.P.G. Program Chairman for the 1956 National Meeting at Chicago, has called for technical papers centering on one of his main themes which is to be "Sealing Factors", i.e., the barriers which halt the migration of oil or gas upstructure. Central topics such as the one Sloss has chosen have proved their effectiveness in bringing out papers of broad interest; also it gives some logic and order to grouping of the papers on the different Convention days. Sloss suggests that authors who will focus attention on the "sealing factors" which may be involved in their articles will be assured of consideration for a place on the program. Examples of the kind of subject matter he has in mind are as follows:

a. Faults - as barriers to migration, either because of the interposition of impermeable strata, or by the development of impermeable gouge along the fault planes.

b. Faults - as conduits for oil migration.

c. Unconformities - related to traps in truncated strata and to accumulations drained from truncated strata. Are there any discernible relationships between the character of beds lapping up on an unconformity surface?

d. Buried tar seals and exposed tar pools as evidence for the self-sealing of some reservoirs.

e. Vertical permeability changes not necessarily related to cementation or fracture. Do graded bedding and other upward changes in grain size and sorting provide gradual diminution of permeability to form an effective seal?

f. Multiple pay zones - do we have sufficient information on the reservoir behavior of vertically successive oil reservoirs to permit an analysis of the communication or lack of communication from one reservoir to another?

Correspondence concerning the technical program may be referred to Professor L. L. Sloss, Northwestern University, Evanston, Illinois. In his absence this summer Professor E. C. Dapples will act.

SACRAMENTO GEOLOGICAL FIELD TRIP

The annual field trip of the Sacramento Geological Society was held on June 5th. The trip covered the Cenozoic geology of the Putah Fan and the foothills west of Winters, guided by Frank Olmsted (USGS); and the Engineering Geology of the Monticello Dam, guided by William I. Gardner (USBR).

Twelve stops were made along the 45 mile route which began at Fairfield Knolls, continued southwestward across the English Hills, thence northward through Pleasants Valley and ended on the banks of Putah Creek. Along this route were viewed Recent alluvium deposits, Pleistocene "clays", the continental Tehama formation and a marine Eocene section which overlies the upper Cretaceous "Chico formation" of the Coast Ranges to the west. A one hour walking trip was made to examine the local faulted "Tehama-Capay structure north of Putah Creek.

The final hour of the trip was spent at the site of the Monticello Dam, which is now under construction by the U. S. Bureau of Reclamation. The dam will span Putah Creek about 7 miles west of Winters.

Schlumberger again furnished the usual welcome refreshments.

SACRAMENTO PETROLEUM WIVES ACTIVITIES

The Sacramento group of Petroleum Wives sponsored another successful Dinner-Dance on June 18th at the El Ranch Motel. Approximately 20 couples were on hand to enjoy the evening. This ambitious group, with the "know-how" for putting over its activities, will also sponsor a picnic on July 15th at the Town and Country Ranch on East Edison Avenue. Also on tap -- an August hayride.

EASTERN NEVADA GEOLOGICAL SOCIETY MEETING

Mr. H. F. Peterson, Manager of the Surveying and Drafting Department, Shell Oil Company, was guest speaker at the dinner meeting of the Eastern Nevada Geological Society, May 25, 1955, at the Capitol Club, Ely, Nevada. Mr. Peterson's main subject was "Recent Progress in Mapping and Reproduction" followed by a talk on "Land Surveying in the Four-Corners Area". Both talks were illustrated with colored slides, and a display of geologic maps and sections were exhibited as examples of new methods of reproduction and color processes.

The silk screen process of printing has been adopted for coloring maps when many copies are required. The stencil, a film tissue, is cut in such a manner that the three primary colors, yellow, blue and red, are sufficient to produce a seven color print. The film tissue is laminated to a silk screen then carefully matched to the map and the color applied with the use of a squeegee.

Photographic coloring is especially useful for reproduction of colored maps which are now out of print. The chromostat process of direct photocopy in color has recently been developed and is available as color prints or as color transparencies.

The talk on land surveying in the Four-Corners area was illustrated by colored slides showing the difficult terrain and often picturesque setting of the area surveyed. The area comprising six townships on the Navajo Indian Reservation, each township consisting of nine tracts, was surveyed by Shell Oil Company with other oil companies contributing to the cost of the survey.

Coloring of geologic exhibits presents a problem when many copies are required. The air brush is employed when requirements are limited to ten or fifteen copies. This is accomplished by spraying a stencil which has been carefully cut out for one color masking the remainder of the map. After drying, this process is repeated for each color.

PERSONAL ITEMS

Mark Zappi, geologist for Ohio, is now working in Eugene, Oregon. He's had some narrow escapes, but he is still single, girls.

It is reported that Ben Lupton and John Sprague were seen recently looking over the oil and gas possibilities of Crater Lake, Oregon.

Familiar faces of Californians seen at the last meeting of the Northwest Geological Society were those of Bill Corey and Andy Vidos.

At the meeting of the Northwest Geological Society on June 20th, Dr. Weldon W. Rau of the U.S.G.S. gave a talk entitled, "Ideas on Zonations of some Tertiary Rocks in Southwest Washington". There will be no more meetings until September.

Dick Peryam, Union, has been appointed Publicity Chairman to succeed Orrin Gilbert who was transferred to Salinas, California.

Ben Lupton, Pacific Section Vice-President, has been promoted to Assistant Superintendent of Exploration for General Petroleum.

Bill Kennett, Superior, recently returned from a tour of duty at Casper, Wyoming.

Hugh McClellan, Continental, recently wet his trout line in the vicinity of Reds Meadow in the High Sierras.

Ken Erskine, formerly with Formation Logging Service Company, is now in Ventura with Shell and is pacing the hills with Tom O'Neil.

The Central California Oil Scouts Association put on another one of its first class barbeques on Friday, June 24th. Burt Thach won the golf tournament with a par 71. Burt had not been playing golf for quite some time but he evidently was in top form.

Carl Klaenhammer, geologist working for George Roth in Casper, Wyoming, was in Los Angeles recently on a business trip.

Cliff Edmundson, Shell, Bakersfield, was unable to keep his secret honeymoon secret at the National Oil Scouts & Landmen's Banff convention. The Convention Chairman, Mr. M. J. Huffman of Imperial Oil Limited announced the marriage at one of the meetings Cliff married the former Miss Elinor Stich of Sacramento on June 3rd in Reno.

Joe Johnson, Shell geologist, Bakersfield, is having a very rough battle with San Joaquin Valley fever and won't be back to work for some time.

It has finally been revealed who the skip-loader operator is at the building of the Girl Scout Camp at Greenhorn Mountain near Bakersfield. Beneath all the dirt and grime was Hal Ross of Intex Oil. Hal and many others, although having no girl scouts of their own, have been contributing many hours on weekends helping to provde quarters for daughters of their friends and neighbors. Hats off to you guys.

Paul Day of Western Gulf arrived in Olympia on June 2nd with bride and house trailer to do field work in Washington.

R. B. Ross, paleontologist for Shell at Elma, has resigned, effective July 1. His future plans are unknown.

Henry Tomko, geologist for Shell, will soon leave to spend another summer in Alaska.

Howard Wilson, landman for Ohio in Olympia, just returned from a California vacation with a good suntan, and reports having caught a 40-pound yellowtail off Coronado Island.

Scott Creely has joined the Ross Cabeen organization and is presently working out of the Denver office with Bud Ogle.

Frank Nobel, Union, Santa Maria, is spending a pleasant summer in Canada hunting outcrops.

Paul Day, Western Gulf, has returned to Washington for the summer's rainy season.

Leo "Pat" Herrera, of Ross Cabeen is heading a field party on a consulting job for Cerro de Pasco Mining Company in Peru, South America.

The joint Annual Wedding Anniversary Celebration of the Bob Herrons and the Bob Paschalls was observed June 29th. This was the 15th for the Herrons and the 14th for the Paschalls. The Santa Barbara Biltmore was the site of the big affair.

Leo Roth, Amerada, has been transferred from Los Angeles to Ventura.

Walt Mercer has joined the Texas Company as a scout in Santa Paula for the South Coastal area. The Texas Company will soon be "Mercerized".

Newlyweds in Sacramento are Mr. and Mrs. Paul Westrup. The new Mrs. Westrup is the former Jane Geoghagen. June 19th was the lucky day for the new groom, who is with Schlumberger in Sacramento. The ceremony was performed in Fresno.

Charley DeLancey with Humble has been transferred from Chico to Los Angeles. John Elliott is a new geologist for Humble in Chico.

John Yaeger, Ohio Oil Company in Sacramento, is to be earnestly practicing as a toreador. It seems that while he was out "geologizing" recently, a mean old cow took a fancy to his Brunton compass and chased it over a fence.

NURSERY NEWS

Virginia and Bill King, geologist, The Texas Company at Los Angeles, are the parents of Susan Virginia, their first child, born June 10th in Santa Monica, weight 5 lbs., 6 oz.

Ed Phelps, Shell in Los Angeles announced the arrival of Laurel Ann, born June 13th, weighing 7 lbs., 11 oz.

Gordon B. Oakeshott has acquired the title of "Grandpa" as a result of the arrival of Dennis Paul Oakeshott, born to Gordon's daughter-in-law on her birthday, June 21, 1955.

Hubert and Sally Mee, Standard in Sacramento, are the proud parents of a third offspring, Catherine, who was born on May 26th and weighed 6 lbs., 13 oz.

YEAH, I USED TO BE A BUG MAN.... WHY?

BIBLIOGRAPHY OF RECENT PUBLICATIONS

SCIENTIFIC PUBLICATIONS - JOURNALS & BULLETINS

United States Geological Survey

"Foraminifera of the Lodi Formation, Central California, part 2, Calcareous Foraminifera (Miliolidae and Lagenidae)", M. C. Israelsky, Professional Paper 240-B, pp 31-79, 1955.

"A New Species of Merychippus", J. P. Buwalda and G. E. Lewis, Professional Paper 264-G, pp. 147-152, 1955.

Bulletin of the Geological Society of America, Vol. 66, No. 6, June 1955.

"Geomorphology of South-Central Washington, Illustrated by the Yakima East Quadrangle", Aaron C. Waters, pp. 663-684.

"Submarine Topography West of Mexico and Central America", John G. Heacock, Jr., and J. Lamar Worzel, pp. 773-776.

Book

"Nuclear Geology, A Symposium on Nuclear Phenomena in the Earth Sciences", edited by H. Faul, John Wiley & Sons, Inc., New York. 414 pp. 1954

TRADE JOURNALS & MISCELLANEOUS MAGAZINES

Oil Forum, June 1955

"Diamonds are a Guy's Best Friend", W. B. Emery II, pp. 211-213.

Oil & Gas Journal

"How to size up Wildcat Pay Zones", J. E. Walstrom and J. C. Wells, Vol. 54, No. 5, June 6, 1955, pp. 126-127, 130-131.

"Pacific Northwest Tempts Wilcatters", Frank J. Gardner, Vol. 54, No. 6, June 13, 1955, p. 355.

"Geophysics Can Find More Oil For You", Norman S. Morrisey, Vol. 54, No. 7, June 20, 1955, pp. 95-99.

"What It Costs to Test Formations in California", C. R. Ball, Jr., and S. F. Fine, Vol. 54, No. 8, June 27, 1955, pp. 95-97.

The Petroleum Engineer, Vol. 27, No. 6, June 1955

"Petroleum Exploration with Radio Waves", Fred W. Kelly, Jr., pp. 340-57.

"Interpretation Problems in Radioactivity Logging", James H. Russell, pp. 372-76.

CALENDAR

July 21, 1955: Thurs., 6:30, Los Angeles Basin A.I.M.E. Jr. Petroleum Group Dinner Meeting, Turf Club, Lakewood Blvd. and Anaheim-Telegraph Road, Los Angeles. Discussion topic will be "Well Stimulation". Speakers and subjects will be:

H. Carrick, Production Superintendent, General Petroleum Corp., will discuss subsurface heaters.

N. Godbe, Production Engineer, Signal Oil & Gas, will speak on well washing.

J. Fehrenbach, Ventura District Manager, Halliburton Oil Well Cementing Co., will discuss fracturing.

July 28, 1955: Thurs., 6:30 P.M., Eastern Nevada Geological Society Dinner Meeting, Ranchinn, Elko, Nevada. Dr. James Gilluly, U.S.G.S., will talk on "The Western Extent of the Roberts Mountain Thrust".

August 12, 1955: Fri., 3:00 P.M., Los Angeles Basin Scout Barbeque, Union Oil Co., Sterns Picnic Grounds, Los Angeles. Price $5.00, includes drinks and steak. Make reservations with: H. Stuveling, Signal Oil & Gas, Los Angeles, or H. Charles, Humble Oil & Refining, Los Angeles.

NOTE: There will be no Pacific Section A.A.P.G., S.E.G., or S.E.P.M. meetings during the months of July and August.

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Vol. 9 No. 7

Form 3547 Requested

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

PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 9 August 1955 No. 8

S.E.G. LUNCHEON

The Pacific Coast Section of the Society of Exploration Geophysicists luncheon meeting was held on July 14, 1955, in Conference Room Number 1 at the Biltmore Hotel. Dr. F. G. Blake of California Research Corporation spoke on "Some Examples of the Seismic Modeling Method".

Scale models provide a convenient means for laboratory studies of problems in seismic wave propagation under controlled conditions. The choice of scale factors, modeling materials, and apparatus to be used depends upon the objectives of the study. For experiments on some simple structural problems, we have chosen a scale factor of about two thousand to one, largely on the basis of convenience in the fabrication of laboratory equipment. The modeling materials used have been mostly Lumenite cement and coal tar. The former provides a moderately high velocity material of low Poisson's ratio, while the latter provides a low velocity and a high Poisson's ratio. Castone can serve as a material of intermediate properties, if needed. Inasmuch as velocities in these materials are about the same as in earth materials, frequencies must be scaled up into the low ultrasonic range. We have used barium titanate transducers as energy sources and receivers. Simulated seismic records, with scaled filtering, spread layouts, and so on, are obtained one trace at a time on a common photographic plate.

Among the phenomena studied have been diffractions from faults and pinchouts. Most of these studies have been qualitative, but have shown reflections blending smoothly into diffractions, without abrupt changes in amplitude or in signal character. The diffractions do die out gradually within a few traces after the last reflection predicted on the basis of simple geometrical ray theory. Such diffractions have been observed on a normal fault model, on a series of simple step faults, and on an idealized pinchout model consisting of a wedge of concrete imbedded in tar.

In one quantitative study of knife-edge diffraction, a comparison was made with the Sommerfeld-Pauli theory of electromagnetic wave diffraction by a perfectly conducting knife-edge. The relative, not absolute, distribution of the diffracted compressional wave energy, as a function of the angle of incidence, of the angle of scattering, and of the included angle of the knife-edge, were found to agree with the theory, within the observed ranges and the experimental error of about four decibels.

NEW VENTURA BASIN CROSS SECTION

The Coastal unit of A.A.P.G. stratigraphic studies section is currently constructing a cross-section through the Western part of the Ventura Basin. This section will extend from the Santa Ynez fault on the north to the ocean at the Santa Monica Mountains on the south and embracing the Ventura Avenue and West Montalvo-McGrath Oil Fields. The working committee presently consists of Robert H. Paschall, chairman, C. M. Carson, Ted Off, Jr., Howard Stark and Robert Nesbit. Any assistance as to information for this project will be appreciated by the committee.

EASTERN NEVADA GEOLOGICAL SOCIETY

Dr. James Gilluly of the United States Geological Survey was speaker at the monthly dinner meeting of the Eastern Nevada Geological Society at the Ranchinn, Elko, Nevada, July 28, 1955. A record of 90 were in attendence to hear Dr. Gilluly's talk entitled "An Extension of the Roberts Mountain Overthrust".

For the past six years Dr. Gilluly has been engaged in mapping the Mt. Lewis and Crescent Valley quadrangles comprising an area which lies entirely on the upper plate of the Roberts Mountain thrust. There are but three areas, or windows, at which rocks of the lower plate are exposed: Goat Ridge and Harry Creek of the Mt. Lewis Quadrangle and the Gold Acres area of the Crescent Valley Quadrangle. This stratigraphic sequence of the underplate is essentially the same as that of the Eureka District.

Rocks of the Ordovician Valmy formation are the oldest of the upper plate to be involved in thrusting. This formation, 20,000 to 25,000 feet thick, is composed essentially of quartzites, bedded chert, argillite, sandstone, greenstone and occasional limestone beds. Fossil evidence indicates that this formation is equivalent to the Ordovician Hanson Creek, Eureka and Pogonip formations of the eastern facies. The Elder sandstone 3000 to 5000 feet thick overlies the Valmy. Arkosic sandstone is dominant in this formation, with beds of tan, pale or buff chert differing from the dominantly black cherts of the Valmy formation. Above the Elder formation lie 4000+ feet of the middle Devonian Slaven Chert.

The Pennsylvanian Battle Conglomerate unconformably overlies the Devonian of the upper plate. These beds however, are always found in fault contact with the beds below, as well as with the younger beds. The younger sediments, however, lie on a later thrust sheet which is genetically related by faulting to the main plate.

Discordance of structure in the upper plate is amazing, with thrusts numerous and folding concurrent with thrusting. It has not been possible to trace the change in lithology westward as the Roberts Mountains thrust separates the eastern and western facies.

The magnitude of the thrust is estimated to be at least 50 miles with displacement to the east. The thrust has been traced in a North-South direction from the Independence Mountains to the Antelope Range and probably extends far northward into Idaho and southward as far as Tonopah, Nevada. The exact age of the Roberts Mountain thrust cannot be determined. It is definitely pre-Atoka Pennsylvanian and is probably much older.

SOLICITS PROGRAM ADVERTISERS

Les Schultz, advertising committee chairman for the 1955 Fall convention of the Pacific Section, is now contacting prospective advertisers for the convention program. This program is an excellent advertising medium, which reaches representatives of virtually all of the Pacific Coast oil industry. Companies who are interested in advertising in the program, should contact Les at the General Petroleum Corporation, 612 South Flower Street, Los Angeles - MAdison 6-5711.

PACIFIC PETROLEUM GEOLOGIST

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NEXT DEADLINE SEPTEMBER 1

JOINT LEGISLATIVE COMMITTEE

At the suggestion of Milton Loy, Chairman of the Southern California Section (Mining and Metals) of A.I.M.E., a meeting was held July 22, attended by Hal Stanier, Chairman of Southern California Petroleum Section of A.I.M.E., Lauren Wright, Mining Chairman of Southern California Section, and Frank S. Parker, President of Pacific Section of A.A.P.G. with Milton Loy presiding.

At this meeting the various problems of legislation affecting petroleum engineers, mining engineers and geologists were discussed and it was determined that a joint committee should be formed with one representative each from the Mining Section, the Petroleum Section and the A.A.P.G. with invitation to S.E.G. to join with one member representative.

The purpose of the Committee is to watch trend of legislation affecting any of those groups with the idea of sharing some of these burdens and also for any member of the committee to report to other members any action toward legislation contemplated by the group he represents.

W. W. Porter, II has been appointed representative for A.A.P.G. At the time of writing other members had not been appointed and the President of the Pacific Coast Section of S.E.G. was not available to receive the invitation to join in this effort.

A.A.P.G. 1956 OFFICER NOMINATIONS

Carey Croneis, Rice Institute, Houston, Texas, and Theodore A. Link, Link Downing, and Cooke, Ltd., Toronto, Ontario, are announced today by A.A.P.G. president G. M. Knebel as candidates for Association presidency during 1956-57. Other officer nominees revealed in the report of the A.A.P.G. nominating committee are: for vice-president, Ben H. Parker, Frontier Refining Company, Denver, Colorado, and Walter H. Spears, Union Producing Company, Shreveport, Louisiana: for secretary-treasurer, William A. Waldschmidt, consultant, Midland, Texas: for editor, William C. Krumbein, Northwestern University, Evanston, Illinois.

FIELD TRIPS IN THE NORTHWEST

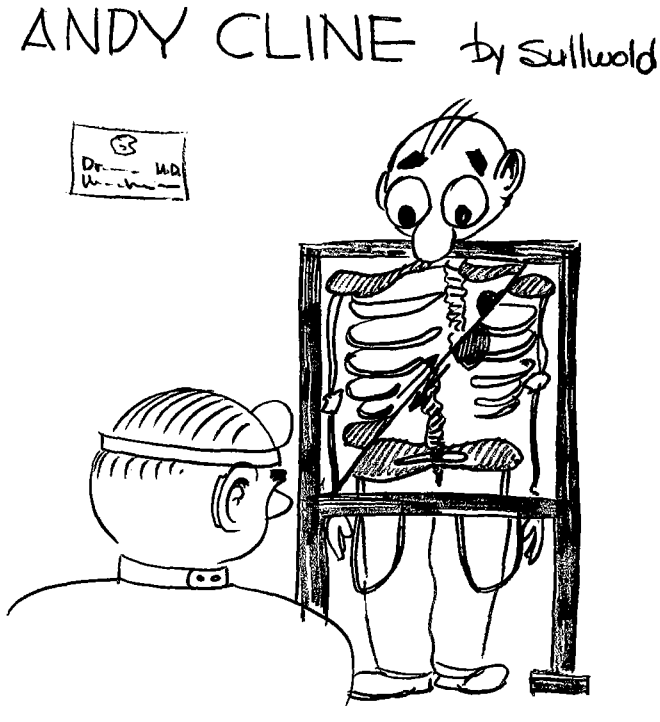
From July 13 to 15, inclusive, Mr. Hollis M. Dole, Director of Department of Geology and Mineral Industries, State of Oregon, conducted a field trip through the Myrtle formation of southwestern Oregon. Sixteen geologists from various oil companies participated in the trip, which started at Roseburg and proceeded southward to Grants Pass, then westward to Agness, then northward to Myrtle Point and back to Roseburg. Mr. Dole pointed out the various members of the Myrtle formation and demonstrated that they can be recognized in widely separated areas.

From July 23 to 25, inclusive, a field conference was conducted in eastern Oregon and western Idaho by R. E. Corcoran, geologist for the Oregon State Department of Geology and Mineral Industries. Twelve geologists from universities, the U.S.G.S., and oil companies participated. The conference started with a study of the stratigraphy of the nonmarine deposits of the Mitchell Butte area and ended in the Hagerman area of Idaho.

NOMINATION OF DISTRICT REPRESENTATIVES

The National Headquarters has notified the Pacific Section and the present District Representatives that nominations for two candidates for each of three positions for district representative of the Los Angeles District (Los Angeles, Orange, Riverside, San Diego, San Bernardino and Imperial Counties) should be in National Headquarters by August 15th in order for them to prepare mail ballots.

As no meeting of the Pacific Section will be held between now and August 15th, the President has appointed a nominating committee consisting of all of the present district representatives to make such nominations. Any member resident of the Los Angeles District can make nominations, however, by sending such nomination to the nominating committee (see page ii of the June Bulletin) or direct to Tulsa prior to August 15th.



"DISAPPEARING HOSES"

Dr. Ian Campbell, California Institute of Technology, addresses an open letter to all his A.A.P.G. friends regarding the strange case of the "disappearing hoses".

To Whom It May Concern:

Because of an alarming increase in my "fan mail" I have had to prepare this somewhat formalized statement, in lieu of the more personal answer I should have preferred to make to inquiring friends, well-wishers, amused colleagues and curiosity seekers.

So far as I personally am concerned, the case of the disappearing hose in Downey is more an example of erroneous newspaper reporting than of any "natural phenomenon". My connection with the case began on Friday, July 1, when, late in the afternoon, our Institute switchboard took a call asking for a geologist. Unfortunately, I happened to be the only geologist around at the time and so the call came to me. This was a reporter for the Los Angeles Times, who told me the story of the hose that was digging itself in and asked if I could help him with any explanation. I had no idea that I was going to be quoted, or that my name would appear, and so indulged in a bit of goodnatured joking with him, suggesting "the Indian rope trick in reverse" or a large gopher on the deep end. Both of us, I am sure, regarded the thing as a hoax of some sort and let it go at that. But I did comment, seriously, that if it were my hose, I'd surely start to dig it out before it got much farther down. (At this time, it was supposedly down only some 18 inches).

The next morning (Saturday, July 2), the Times came out with a story, including my name and some of my comments. I was a bit surprised but not greatly concerned, for the story was a rather straightforward account and mentioned me and my comments only incidentally. But apparently this was picked up and elaborated upon (entirely out of whole cloth!) by the U.P. wire service. To my horror, I read in that evening's Star-News, a story which definitely "placed me at the scene of the crime": whereas actually, I had not been in Downey in more than a year, nor do I intend even to go near Downey. But that erroneous story did it! All through Sunday and Monday (when I had hoped to enjoy a calm Fourth of July holiday at home) the phone kept ringing: amused friends, reporters, cranks, more reporters, television services, still more reporters!

All I could do, and all I can still do, is to disclaim any direct observation or knowledge of this case. At least I have been able to point out to the many who advanced "buried meteorites" or "concentrated earth magnetism" as an explanation, that such is impossible in view of the fact that this was reputedly a plastic hose with brass couplings --- both notably non-magnetic materials!

I still think that this is most probably a hoax: and I still think that someone should dig to the bottom of it! Beyond this, I have no further comment, except to say that I do appreciate the personal interest that many, because of my apparent connection with it, have taken in this summer fantasy; and to the point out to those who are still seriously concerned that they should enlist the services of a hydrodynamicist or a soil mechanics expert -- not a geologist.

Ian Campbell

PHOTOGRAMMETRISTS TO HOLD CONVENTION

Members of the Pacific Section A.A.P.G. will have an opportunity this year to attend the semi-annual Convention and Trade Show of the American Society of Photogrammetry. Being held in Los Angeles for the first time, the Convention will take place at the Statler Hotel on September 7, 8 and 9, and attendance by A.A.P.G. members is welcomed.

Of special interest to geologists will be technical papers on photogeology, but geologists will also be interested in latest techniques of map making and aerial photography, because of the close relationship that those fields have always had with petroleum geology. Special exhibits by leading aerial survey firms and suppliers will also be well worth seeing.

A.A.P.G. members can ascertain more details of scheduling of technical papers, etc., by contacting the Society's office at 8840 Olympic Blvd., Beverly Hills (BR 2-0316) late in August, or the Society's Convention Headquarters at the Statler on September 6 and 7.

DR. E. J. ENGEL TO CONDUCT FIELD RESEARCH ON METAMORPHOSIS OF ROCKS

Dr. E. J. Engel, associate professor of geology at the California Institute of Technology, leaves this month for the Rocky Mountains to conduct field research on the metamorphosis of rocks.

Concluding his studies in this country, which will be subsidized by the Department of Interior, Dr. Engel will travel on to Europe and North Africa in the late fall, continuing his research on the changes undergone by some of the oldest sedimentary rocks. He hopes to establish initial characteristics of rocks more than a billion years old to provide clues to the nature of the ancient seas, earth, and atmosphere. His work in foreign countries will be on a Fellowship of the John Simon Guggenheim Foundation.

Dr. Engel, accompanied by Mrs. Engel, plans to continue with his collections traveling through South America and in December will go to Mexico to complete his collections there. A graduate of the University of Missouri, he received the Ph.D. from Princeton in 1942 and joined the Caltech staff after six years with the U.S. Geological Survey.

FALL CONVENTION EXHIBITS

Service companies and others throughout the country are busily preparing exhibits for showing at the Joint Annual Fall Convention of A.A.P.G.-S.E.G.-S.E.P.M., on November 10 and 11 at the Biltmore Hotel. Requests for booth space were received as early as May of this year, and now only a few booths remain available. Ten companies which exhibited last year have again contracted for booths. Four additional companies have completed their arrangements and several more are expected to return contracts in the near future. We are very proud to welcome these companies who have agreed to exhibit this year, and whose support is such a vital element in making our convention so popular and successful.

American Paulin System
Encyclopaedia Britannica, Inc.
George E. Failing Company
Geolograph Mechanical Well Logging Service
Fairchild Aerial Surveys, Inc.
Formation Logging Service Co.
Houston Technical Laboratories
Johnston Testers, Inc.
McCullough Tool Company
Munger Oil Information Service
Petroleum Information
Rapid Blue Print Company
Schlumberger Well Surveying Corp.
Techno Instrument Company

In addition to these companies, a booth will also be provided for A.A.P.G. and the State Division of Mines, whose current geological publications will be displayed and available for purchase.

PERSONAL ITEMS

Mr. Hollis M. Dole has been promoted to the position of Director of the Department of Geology and Mineral Industries, State of Oregon. He had been serving as acting Director for several months prior to his appointment as Director.

Mel and Daphne Hill recently spent a few days in the Northwest while enroute to a vacation in Victoria and Vancouver, B. C.

Chuck Newell, geologist with Shell at Elma, Washington, is recovering from a recent appendectomy.

Ivor McCray, Jr., scout for Shell at Elma, is sporting a new Thunderbird. We often wonder how Ivor manages to remain single, but we think it will be even harder now.

Orrin Gilbert and family travelled to Salinas practically as cartooned in the June issue: Automobile, house trailer, and boat trailer. But scout reports say no caboose. The Gilberts rapidly are getting established after this transfer and already have selected a lot and made plans for building a new home.

John Wells showed typical geological versatility by enjoying altered vacation plans when it was necessary to return home from his initial vacation start to re-equip after thieves indicated their approval of his choice of camera and personal supplies by breaking into his car and removing these selected articles. John replaced the camera by one of the latest stereopticon variety and now has mouth-watering evidence as to the success of his second attempted vacation by pictures in third dimension of fish sizzling on an outdoor barbeque.

Butch Brown, Union geologist, Santa Paula, spent a week of his vacation laying on his patio.

Dick Stewart, Union Oil, Santa Paula, presented his appendix to St. John's Hospital in Oxnard on July 19th. Dick says such items are deductible.

The Coastal Geological Society now has a representative on the Executive Council of the Pacific Section of the A.A.P.G., in the person of Dick Haines of Continental.

Johnny Curran, Honolulu, just returned to Santa Barbara after spending two weeks at Shaver Lake.

Joltin' Joe Dockwiller, Bakersfield Scout, Union Oil. is substituting for Tex Leverett for two weeks.

Lyle Smith and family, Shell, Los Angeles, are leaving on a vacation trip to Canada. Jack Holzman, Ventura, will be Lyle's relief during his absence.

To Bob and Julie Hacker a 6 lb., 9 oz., boy, Marcus Charles on July 22nd in Santa Paula. This is the second boy for the Hacker's.

Ed Wellbaum, Kern Oil geologist, has been transferred to St. Helens Petroleum Corporation, a Kern Oil subsidiary. Ed will be stationed in Casper, Wyoming. You shouldn't have put in that new cement patio, Ed.

Tennant Brooks spent the weekend of July 24th fishing young fishermen out of the creek near Mineral King. Brooksey, brave soul that he is, took five Boy Scouts trout fishing.

On July 15th and 16th the exploration groups of Richfield from Southern California gathered at the 2-Shay Ranch Canyon for their annual get-acquainted session. Swimming, discussion of company exploration problems, sleeping bags and a barbeque were on the entertainment schedule.

British-American recently worked over an old well near Shell's exploration office in Ventura and the well momentarily got loose, soaking Jim Jackson's car and leaving a few spots on the O'Neal's and Cronin's cars. Ralph Hawkins was observed splashing some S.P.S. oil on his car. All hands got a free wash and wax job.

Manny Castro, Art Spalding and Jim Walker of Shell's Ventura Office are on a back-pack trip in the Hamilton Lake Country of the High Sierras.

Jake Bruynzeel, Honolulu, Santa Barbara, is preparing to leave for Kuwait, Arabia, for American Independent Oil Company.

Doyle Paul, Ohio, Ventura, has been transferred to Louisiana where he will exchange his car for a bayou buggy.

A sizeable group of geologists and related phenomena have formed a "Thursday Luncheon Club" and have been meeting for sometime at Gordon's Cafeteria on East Main Street in Ventura. This is an open invitation to all those in the area to attend. No dues are payable - but you have to pick up your own tab.

Bill Lee has resigned his position with Intex effective August 1st.

Otto Hackel is spending a few weeks in the field in Colorado, probably fishing in some secluded stream.

Lowell Redwine is vacationing at Bass Lake.

Roy Barnes has been promoted to senior consultant, for Continental's Western Region. Keith Rathbun has been promoted to Manager of Exploration, succeeding Roy Barnes. Dick Haines has been promoted to Regional Geologist succeeding Keith Rathbun.

Emil Kluth, Executive Vice President of Pacific Western Oil Corporation has announced his retirement from active duty. He will continue as vice-president and director in an advisory capacity. Emil and family left for a tour of Europe and a visit to Switzerland, their homeland.

Seems that a pigeon took a liking to Tom Fitzgerald's geological interpretations and has been dropping in through the open window to scout Tommy's latest plays. It is rumored to be the only live pigeon - with feathers, that is, ever to risk its life in a consultant's office.

Jack Q. Tomkins, formerly with Mid-Continent Pet. Corp., in Texas has moved closer to home by opening district offices in Salt Lake City for the Sunray-Mid-Continent Corporation. Rumor has it that Jack still speaks fluent Texas.

Guy E. Miller, retired, has been seen burning up Southern California golf courses in an electric vehicle. Doc and his partner play the fairways so fast they are able to play 9 games of dominoes and 9 games of scrabble while waiting to tee-off.

Bud Medaris, Union Oil, Santa Paula, has announced his engagement to Marjory McNeal of Hollywood.

Jack Knight has resigned his position as Division Geologist with British American to accept a position as Executive Vice-President and Exploration Manager with Petroleum Research Corporation in Denver.

Tom Bibb has been transferred from Ardmore, Oklahoma, to Casper, Wyoming, as District Geologist for British American.

J. E. (Swede) Arceneau, recently completing two years in Brazil and six months in Peru as Party Chief for Geophysical Service, Inc., will take over the position of Supervisor with headquarters in Mexico City. Evidently the headhunters of the Amazon do not rank geologists among their favorite delectable viands.

John D. Schroeter, formerly of Formation Logging Service Company, has joined forces with California Well Logging Company with headquarters in Bakersfield.

Either Bakersfield has a new fire chief or Al Kerr of R. S. Rheem, Opr., has a new "red Buick".

Don Ford, Sunray, Dave Costello, Tide Water Assoc., and Warren Ceball, Amerada, recently returned from two weeks of military leave spent at Hamilton Air Force Base. It's understood that the early morning calls were somewhat distasteful.

Harold and Dorothy Billman, Union, Bakersfield, and their two daughters flew to Indianapolis for a two weeks vacation with relatives that Harold had not seen for many years.

Jack Lavery, Reserve Oil and Gas Company, and his family, in their new Chevrolet Nomad, are vacationing for three weeks at Lake Tahoe and the San Francisco Bay area.

Bob Galeski of Honolulu Oil, Bakersfield, will transfer to Calgary, Canada, where he will join Paul McGovney of Billings, Montana. Paul formerly was in Bakersfield until the opening of the Montana office.

Bob Thornburgh was appointed Senior Geologist on the Area Exploration Managers' Staff. Ken Cohick has been appointed Area Geophysicist replacing Bob Thornburgh, Shell, Los Angeles.

There have been many inquiries about John Griffiths, Shell, Ventura. John has been exceedingly quiet the past few years. Some say John has been working too hard. There is also a rumor that John's wife has taken away his Hadacol.

Jim Cowell's thirty years of driving without a traffic citation was rudely interrupted by an officer of the law. It seems that Jim crossed over too many lanes of traffic in order to get on the right freeway. After a brief hour of conversation the officer gave Jim a ticket. It is our guess that the conversation had nothing to do with stratigraphy.

Roy Miley, Texas Company, Santa Paula, spent a week of his vacation in the Big Sur area fishing and grunion hunting.

Ralph Cahill, Texas Company, Santa Paula, took a week off to catch up with the Bandini weeds in his new front yard.

Tex Leverett is spending his vacation at Fort Bragg on the business end of a sea going spinning reel. It seems that Fort Bragg would be a postman's holiday for a Texan.

Howard Stark, Richfield, Ojai, has returned from a house-trailer trip to Oregon.

The second highly successful scouts Dinner Dance was held on July 19th at the Hueneme Officers' Club with 52 people present. One scout checked a well in the garden late in the evening. These scouts really know how to put on a party.

William G. "Wild Bill" Hare, Continental trainee at San Miguelito, arrived in the Ventura Oil Fields on July 11th from Midland, Texas, via Bakersfield.

Ed Jestes is working for Richfield in Ojai for the summer. He will return to U.C.L.A. in September where he is working for his M.A.

Jim Barkes, Continental geologist, has been transferred from Ventura to Carlsbad, New Mexico, then to Algiers, Louisiana.

Pete Hall, Richfield, Ojai, spent his vacation drying apricots raised on his new 40 acre ranch in the Upper Ojai Valley.

NURSERY NEWS

Mr. David G. Moore, Navy Electronics Laboratory and Geological Diving Consultants, Inc., has become the father of a third girl, Jennifer, born July 17, 1955.

Bob and Emy Jean Maynard of Sunray, Bakersfield, are baby sitting a new boy named Bill that arrived July 12th, weighing 6 pounds, 6 ounces.

Chuck and Marjory Edwards, Consultant, Bakersfield, have a new daughter who has been named Mary Leeds. Mary was born July 19th and weighed 9 pounds, 1 1/2 ounces, and the cigars were very good.

CALENDAR

August 12, 1955: Fri., 3:00 P.M., Los Angeles Basin Scout Barbeque, Union Oil Co., Sterns Picnic Grounds, Los Angeles. Price $5.00, includes drinks and steak. Make reservations with: H. Stuveling, Signal Oil & Gas, Los Angeles, or H. Charles, Humble Oil & Refining, Los Angeles.

August 18, 1955: Thurs., 6:30 p.m., Eastern Nevada Geological Society Dinner Meeting, Airport Lodge, Ely, Nevada. Dr. Marshall Kay, Columbia University, will talk on "Paleozoics of the Toquima Range and Northward".

August 18, 1955: Thurs., 6:30 p.m., Los Angeles Basin A.I.M.E. Jr. Petroleum Group Dinner Meeting, Turf Club, Lakewood Blvd. and Anaheim-Telegraph Road, Los Angeles. Discussion topic will be "Prediction of Water Flood Recovery". Speakers and subjects will be:

Norris Johnston, Petroleum Technologists, Inc., will discuss, "Laboratory Techniques for Predicting Water Flood Recovery".

H. Dykstra, California Research Corp., Will give a talk entitled, "Dykstra-Parsons Method".

Nick van Wingen, Consultant, will speak on, "Stiles Method".

September 7, 1955: Wed., 9:00 a.m., The American Society of Photogrammetry Semi-Annual Convention and Trade Show, Statler Hotel, Los Angeles. Speakers, subjects and exhibits fo be announced. Convention extends through September 10th.

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PACIFIC PETROLEUM GEOLOGIST
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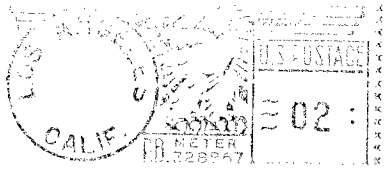

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381 E. 4th St.
Chico, Calif.

Form 3547 Requested

PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 9 September 1955 No. 9

ASSOCIATION ACTIVITIES

A.A.P.G. LUNCHEON

Mr. Eugene L. Davis, Consultant, was guest speaker at the first fall luncheon held September 1st at Roger Young Auditorium. Mr. Davis gave a talk on "Oil in the Arctic", illustrated with many fine Kodachrome slides. Those who did not attend, after making reservations, missed a most interesting program in an air-conditioned room.

Mr. Davis emphasized the necessity of learning how to live with the Arctic country and of keeping the planning flexible. Operations in the Arctic can be less expensive than in Northern Canada. Oil exploration in the Arctic presents special problems espccially in climate, transportation and communications. In general, one must plan to live within the limitations created by these problems or be willing and able to create an environment in which he can operate.

Since heavy materials can be moved in by ships only for a few weeks in summer and can be moved out to the work locations only in the following late winter and early spring by sled train, long range planning of operations is essential. Operating problems have been adequately solved so that operations on the Arctic slope are completely feasible and probably not much more expensive than in other areas that are remote from supply sources.

PRELIMINARY CONVENTION PROGRAM

Irv Schwade, Richfield Oil Corp., Program Chairman for the fall convention, announces that the program is shaping up but that there is room for a few more papers.

The preliminary program, not in order of presentation, is as follows:

Merritt - "Radiation Surveying for Oil and Gas"
Mangold - "Differential Thermal Analysis as a Geological Tool"
Dickey & Rohn -"Facies Control of Oil Occurrence"
Hepburn - "A Geological Approach to Electric Log Analysis"
Kilkenney, deLaveaga, Sumpf - "Recent Developments in Guijarral Hills Field"
Ball & Fine - "Information Versus Costs in Drilling"
Erickson - "Oxnard Oil Field"
Paschall - "The 4th Dimension in Geological Thinking"
Knebel - "The Habitat of Some Oil"
Willis - "Huntington Beach Field, Townlot Extension"
Woods - "The Composition of Reflections"
Richfield Personnel - "Marysville Buttes"
Lavery - "Recent Developments in Tejon - Grapevine Field"
Scott - "Arvin Oil Field"
Gussow - "Differential Entrapment and Oil Migration"

Irv advises authors to have their abstracts in by September 15th. Authors having slides may wish to know that the dimensions of the Biltmore Ballroom are 93 feet by 78 feet.

PACIFIC SECTION NOMINATIONS

The Nominating Committee, comprised of R. M. Barnes, chairman, Ed Bartosh, Jack Beach, George Feister, and Spence Fine have selected nominees for Pacific Section offices for the year beginning November 1955 as follows:

President - Mason L. Hill, Richfield Oil
Leo R. Newfarmer, Shell Oil
Vice President-Loyde H. Metzner, Signal Oil
James B. Anderson, Kern Oil
Secretary - Richard E. Faggioli, Humble Oil
Thomas A. Baldwin, Monterey Oil
Treasurer - Everett W. Pease, Sunray Oil
Ted L. Bear, Consulting Geologist

Additional nominations may be made by written petition of 25 or more members in good standing. The nominating petition must be received by the Secretary not later than 15 days before the election.

DISTRICT REPRESENTATIVE NOMINATIONS

President Frank Parker has announced that the Nominating Committee has selected candidates for the District Representatives. The committee was composed of Chairman John E. Kilkenny, Everett W. Pease, Joe B. Hudson, and Harold H. Sullwold, Jr.

The nominees are Harold C. Bemis, James C. Benzley, H. David Hobson, Arthur S. Huey, Victor H. King, and Milton W. Lewis.

Since District Representatives are national A.A.P.G. officers, the election will be a mail ballot conducted by headquarters in Tulsa. Three representatives will be elected from the ballot to be sent out the first of the year.

BULLETIN 170 - GEOLOGY OF SOUTHERN CALIFORNIA

The Division of Mines has announced the publication of the complete Bulletin 170, "Geology of Southern California". This bulletin is made up of ten chapters, comprising 62 papers by 103 contributors, and 34 maps.

The complete volume fulfills the need for an up-to-date summary which deals with the physical geography, general geology, historical geology, stratigraphy, geologic structure, geomorphology, mineralogy, petrology, hydrology, economic geology, and engineering geology of Southern California.

Bulletin 170 is now available at all division offices for $12.00 plus sales tax.

PENINSULA GEOLOGICAL SOCIETY

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

President: Adolf Knopf
Vice-President: Donald E. White
Secretary-Treasurer: Arthur Norman

PACIFIC PETROLEUM GEOLOGIST

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	Bob Patterson
Personal Items:	Bill Thomas
Selected Bibliography:	Paul Hayes
Calendar:	Dick Eckhart
Cartoonist:	Harold Sullwold
	Bob Sanem
Coast Representative	Bob Hacker
Northwest Representative	Floyd Johnson
Sacramento Representative	Bill Bauer
San Francisco Representative	Herschel Driver
San Joaquin Representative	Joe Parmenter

NEXT DEADLINE SEPTEMBER 29

EASTERN NEVADA GEOLOGICAL SOCIETY MEETING

The regular dinner meeting of the Eastern Nevada Geological Society was held at the Airport Lodge, Ely, Nevada, August 18th. Dr. Marshall Kay, Professor of Geology at Columbia University, was guest speaker. A large crowd was present to hear Dr. Kay's interesting talk on "The Geology of the Toquima Range and Northward". Lantern slides and sketches were used to illustrate the stratigraphy and structure of the area.

The Toquima Range lies in an area of a marginal belt between the western eugeosyncline and miogeosyncline of the Cordilleran trough of lower and early middle Paleozoic time. Two different suites of rocks of lower and middle Ordovician age are exposed in the area: the chert-slate series of the Toquima formation to the west, and the carbonate sequence of the Pogonip formation to the east.

The Ordovician carbonates are overlain by Silurian sequences. These Silurian sequences have marked differences in lithology which can be divided into northwest, central and southeast groups. Only by careful observance of this difference in sequences can the complex structure of the area be mapped, since each group is separated by major thrusts. The Toquima formation, the western facies of the Ordovician, has been thrust over the eastern carbonate series, while the youngest rocks of the underplate are upper Devonian.

Rocks of upper Pennsylvanian or early Permian age lie on the Toquima formation with great angular unconformity. Dr. Kay does not believe that the younger rocks had been moved eastward as part of the upper plate of the Roberts Mountain thrust. Conglomerates of Mississippian age are unconformably overlain by Permian limes at Carlin Canyon. It is believed that these conglomerates are derived from rocks of the upper plate of the Roberts Mountain thrust, thus dating the thrust as pre-Mississippian in age.

MUCH ADO.....

A seemingly ordinary personal item in the P.P.G. Newsletter (August issue) has inadvertently created a furor.

The item: "Butch Brown, Union Geologist, Santa Paula, spent a week of his vacation laying on his patio."

Lowell Redwine had his "equanimity" disturbed by the use of "laying on" and wrote Bill Thomas. In his letter, Lowell pondered over various interpretations of the phrase and requested explanation and an account of the real situation. His pondering was as follows:

"Could it be that in the item "laying on" was used in the Shakespearean sense? Knowing Butch, I find it hard to believe that he battered his patio Mac Duffwise, especially during his vacation.

"On the other hand, the do-it-yourself craze has produced some remarkable processes. Is there now a patio that can be installed by "laying on"?

"Of course, the item might be interpreted in a lurid sense. I think you know what I mean. But then it becomes salacious literature. Knowing both Butch and you, I find this difficult to believe -- I think."

Bill passed the letter to Bob Hacker, Coast Representative for the P.P.G., and promised Lowell an answer.

Bob replied to Lowell explaining:

".....Butch has a half a dozen leaping frogs which he keeps under a basket on his patio. During his vacations, he conducts a miniature Calaveras County frog meet and acts as "Patio Man" for the neighbors who drop in for a few side bets. Thus the statement, "laying on his patio" was in fact a fact.

"So had I written "lying on his patio", I would have been lying, and not wanting to lay down a lie about his laying, I let the frogs out of the basket instead."

Maybe the matter is settled.

PERSONAL ITEMS

Butch Brown, Union, Santa Paula, has temporarily retired from field work after a very close call. While coming down a steep grade in the Santa Monica Mountains he applied the brakes to slow down. The brakes grabbed and the car shot off the road and down a steep canyon, finally stopping, upside down 600 feet below the "take-off point". About halfway down, Butch was flung from the car, landing badly bruised and shaken but undaunted in the brush. A few days in the Oxnard Hospital (the Oxnard "Lying-In" Hospital, that is) has repaired him as good as new. When asked how he could be so lucky, Butch replied "It's just the brakes, I guess".

The Bob Herron's spent a fishless few days at Lake Arrowhead, then motored to Ensenada, Mexico, where they met the Spence Fine's.

Stan Jefferies, Shell, Ventura, is spending his vacation in Baja, California.

Ralph Hawkins, Shell, Ventura, is on a tour of Southern California golf courses. This is really no vacation.

Jim Jackson, Shell, Ventura, has gone to San Francisco for his vacation. It is rumored he will spend most of his time in the Matador Club watching movies of bull fights.

Al Ruprecht is spending his vacation in San Francisco.

The Hueneme Officers Club was the arena for the Petroleum Wives Dinner Dance on August 27th. Seventy-one people had a hilarious evening. Robin Holzman was hostess.

Bud Sage, landman and scout for Standard at Seattle, was married on August 6 in San Francisco to Miss Eleanor Goodman.

Jim Wylie of Western Gulf and Mrs. Wylie visited friends in Olympia on a recent vacation trip to the Northwest and British Columbia.

Jim Moore, Barney Sellers, Jerry Herndon, Maurice Price and George Lutz with Shell at Elma, Washington, went fishing at Westport on August 6 and brought back a limit of salmon.

Dick Haines and family visited relatives and friends in the Northwest during the latter part of August while on a combination business and vacation trip.

Paul Hayes and family vacationed in Port Townsend and visited relatives and friends in Seattle, Olympia and Portland.

Paul Day, of Western Gulf, while doing field work in Washington recently had a cache of samples raided by a group of small Indian boys who amused themselves by tossing the bags all over the Indian village. By bribing a couple of the older boys with a promise of soda pop, Paul was able to retrieve all but two of the 25 samples.

Warren O. Addicott, geologist, General Petr. Corp., Bakersfield, married Suzanne Smith of Berkeley, California, on August 20, in Piedmont, California. They are honeymooning in the Pacific Northwest, in Warren's new station wagon.

John Truex, Western Gulf, Ventura, is vacationing in the redwood country in Northern California.

Jerry Rickels, Union, Santa Paula, vacationed in San Diego.

Dick Stewart, Union, Santa Paula, is spending his vacation in the Huntington Lake country.

Ed Hall, Union, Santa Paula, spent his vacation camping out with his family in the High Sierras.

Clifford C. Church and family have changed their status from "old-timers" in Palo Alto to become new residents in Bakersfield, where Cliff will continue to direct micropaleontology work for T.W.A. The new laboratory is in the initial stages of operation. Laboratory work at the Headquarters Office, 79 New Montgomery Street, San Francisco, has been discontinued. This marks the closing of the longest functioning micropaleontology laboratory at any one location in the West.

H. H. "Hank" Neel of T.W.A. has just returned from an aerial reconnaissance trip over southern Alaska. This company has pioneered in search for oil in the "sourdough" country on two previous occasions, once during 1922 and again during 1938.

W. S. "Stan" Knouse recently completed a business and vacation trip which included aerial reconnaissance over northern Alaska. While at Barrow he followed the trail of several other Western Coast geologists by paying a visit to G. D. Hanna, who is in charge of the Arctic Research Laboratory there for the Navy. Stan has been transferred from the Western Division of T.W.A. and is now in nondivisional exploration work as Assistant to E. G. Robinson.

Elmo W. Adams and Herschel L. Driver, from the Bay Area, attended the joint Intermountain and Rocky Mountain Association of Petroleum Geologists field trip held in northwest Colorado August 24 - 27. Thanks(?) to "showers" during the first day, dust-masks were not needed. Ideal weather followed. Over 200 geologists enjoyed viewing the excellently exposed sections of rocks and in participating in this well-arranged trip.

Mike Jager, Stanford graduate, has joined the Richfield staff and will be working out of the Ojai office.

Jane Stark, wife of Howard Stark, Richfield, Ojai, is recovering nicely from an operation.

Ralph Cahill, Texas, Santa Paula, accidentally broke 100 at Montalvo recently.

Bob and Mary Kelly had a scare during their recent vacation in Yosemite when their seven year old daughter Patty disappeared from camp. She was found four hours later when she reached Glacier Point by way of the Ledge Trail. Bob had to switch from fisherman to baby sitter for the rest of the week.

Rex Grivetti, Texas, Santa Paula, is moving from the fresh air of Santa Paula to the fogs of Ventura.

Believe it or not: Jack "Oldfield" Harding was driving on the open highway and his car was struck from behind by another car driven by a very old lady. Guess Jack is slowing up these days.

Lee Freeman, Texas, Santa Paula, is vacationing in Detroit, Michigan, and is water skiing on the Detroit River.

Bill Pemberton and Paul Dudley are in Columbia for a few weeks. It has been reported that they are making a survey in conjunction with the Columbian Government. Since Paul has been consulting he has been on many foreign assignments, fulfilling his wish to see the world.

Walker Locke, Shell, started and ended his vacation on the first day of deer season. Walker was thrown from a jeep and badly bruised. Although he used his vacation time recuperating, we believe he was hurt more mentally than physically by breaking the stock on his deer rifle.

W. E. McKitrick has rejoined the Shell Senior Supervisory Staff in Los Angeles after returning from an assignment in Calgary.

Fritz Loomis, Shell, Salt Lake City, has been transferred to Sacramento as District Geologist. Fritz is replacing Howard Hopson who is being moved to the area office in Los Angeles.

Burt Thach entered the U.S. Chess Championship Tournament at Long Beach. Burt modestly said he had no business playing, but he was able to win from a few of the top players before being eliminated.

The Los Angeles Basin Scouts annual barbeque was held August 12th on the Stearns Lease at Brea. The scouts, geologists, secretaries and others attending were high in their praise for a well managed barbeque. In fact, a few did not get home before daylight.

Edward J. Taylor, Western Gulf, married Joice Stedfast in Sebago, Maine, August 6th while on vacation.

Ed Larson, McCullough Oil Tool, found a way to enjoy Las Vegas. Ed can obtain tickets to the best floor shows, eat steaks, and stay at the super motels all for a minimum rate. According to Ed, his influential contacts mean nothing unless all bets are called off before he goes over the Nevada State line.

Lew Nelson, Ohio Oil Co. Geologist, Bakersfield, has been transferred to Ventura, where he will be the new area geologist.

Everett "Chris" Christianson, late of Rutgers University, and Dick Midlitz from Indiana have joined the Standard Oil Co. as paleontologists for the Bakersfield office.

Robert F. Laird resigned his position as paleontologist for the Union Oil Co., Bakersfield, effective August 12, 1955.

R. R. "Dick" Clark from Tide Water Assoc. of California and Louisiana will join the Honolulu Oil Corp. geological staff in Bakersfield, September 1.

Noel Street has been appointed Tide Water Assoc. District Land Agent. He will replace Kim Foust who has retired from active service.

ATTENTION: Prospective Oil Secretaries
The Seaboard Production and Geological staffs will be moving to Bakersfield as soon as quarters are available. Girls are presently being interviewed for secretarial positions.

Cutler "Robinhood" Wood, geologist, Honolulu Oil Corp., Bakersfield, shot a 4-point buck July 24th in San Luis Obispo County. This is the second consecutive year that Cutler has connected in this area. Howard Hill -- please take note!

Ex-Californian J. E. "Gene" Stones, Superior Geophysicist, Oklahoma City, wife and six children were recently Bakersfield visitors. The Stones' new air conditioned Pontiac station wagon equalized the Bakersfield heat wave.

Louis "Barnacle Bill" Regan and family have been enjoying their weekends yachting out of Balboa Harbor.

Jerry "Sierra Club" Ganopole and family spent their vacation in the Big Sur, Lassen and Shasta Mountain areas.

T. J. Pujol, geologist, Tide Water Assoc., Bakersfield, was recently very-very ill on a plane returning from San Francisco. To date Mr. Pujol still claims a hangover had nothing to do with his affliction.

NURSERY NEWS

Quentin and Susan Moore of General Petroleum, Bakersfield, are proudly displaying a new addition to their family. The new baby is Kenneth Scoggins, born August 9, weighing in at 7 pounds, 15 ounces.

Warren and Marilyn Cebell, Amerada, Bakersfield, have a second son, Michael, born on July 4, weighing 5 pounds, 15 ounces.

E. L. "Bert" and Fay Narier, Tide Water Assoc., Bakersfield, parents of 3 boys and 1 girl, added a new member to their family on July 18. The new son was named Russell. The Narier's were recently transferred from San Francisco to Bakersfield.

Lloyd and Barbara Owens of Standard Oil, Bakersfield, have a baby boy, David Dennis, born on August 24. Lloyd was so excited about his new son that he spent several hours wandering around the Bakersfield Inn in a daze, trying to remember what he had come there to do. He finally remembered he had come there to have dinner!

CALENDAR

September 13, 1955: Tues., 7:30 P.M., Coast Geological Society Dinner Meeting, Montecito Country Club, Santa Barbara. Dr. E. L. Winterer, U.C.L.A. Geological Dept., will talk on "The Eastern Ventura Basin". Refreshments at 6:00.

September 14, 1955: Wed., 6:30 P.M., San Joaquin Section A.A.P.G. Monthly Dinner Meeting, Spanish Ballroom, El Tejon Hotel, Bakersfield. Mr. Bob Plumb, General Petroleum Corp., will speak on "Acoustic Logging in California". Cocktails at 6:30, dinner will follow. Future meetings of the Section will be held on the second Wed. of each month instead of the second Tues.

September 15, 1955: Thurs., 6:30 P.M., Los Angeles Basin A.I.M.E. Jr. Petroleum Group Dinner Meeting, Turf Club, Lakewood Blvd. & Anaheim-Telegraph Road, Los Angeles. Mr. Frank Parker, Signal Oil & Gas Company will speak on "Comments on the Geology and Prospects of the Los Angeles Basin". $3.00 for members, $3.50 for non-members.

September 19, 1955: Mon., 2:00 P.M., Pacific Section A.A.P.G. Forum Meeting, General Petroleum Corp. Auditorium, Mr. E. M. Pilkinton, Asst. Mgr. Conservation Division, U.S.G.S., Wash., D.C. will speak on "Unitization of Federal Lands".

September 26, 1955: Mon., 6:00 P.M., Northwest Geological Society Dinner Meeting, Poodle Dog Cafe, Tacoma, Wash. No speaker is scheduled but election of officers will take place.

September 26, 1955: Mon., 12:00 Noon, Southern Calif. Section, A.I.M.E. Petroleum Forum Luncheon, Rodger Young Auditorium, Los Angeles. Mr. H. E. Schaller, McCullough Tool Co. will speak on "Development of a Neutron Generator for Oil Field Usage". $2.25 tax and tip included. Make reservations with J. I. Gates, Madison 5-7341.

October 6, 1955: Thurs., 12:00 Noon, Pacific Section A.A.P.G. Luncheon Meeting, Rodger Young Auditorium, Los Angeles. Program to be announced.

October 6, 1955: Thurs., 8:00 P.M., Peninsula Geological Society first fall meeting, Rickey's Studio Inn, 4219 El Camino Real, Palo Alto, Calif. Dr. Eliot Blackwelder will speak on a subject to be announced.

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World Oil

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PACIFIC SECTION ANNUAL MEETING

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

Biltmore Hotel Los Angeles

NOVEMBER 10 - 11, 1955

PACIFIC PETROLEUM GEOLOGIST
PACIFIC SECTION, A.A.P.G.
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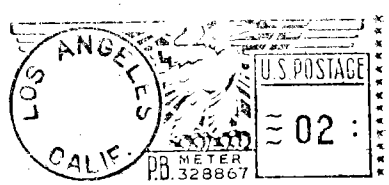

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PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 9 October 1955 No. 10

BAKERSFIELD BIOSTRATIGRAPHY SEMINAR

For the third consecutive year Bakersfield College is presenting a series of eight evening lectures under the title of "Paleontologist's Biostratigraphy Seminar" for bug-men, geologists, and all others who are interested. The lectures will be given by well-known California paleontologists and geologists, and will cover various aspects of stratigraphy and paleontology.

The present series of evening seminar programs was begun in 1951 at Taft Junior College, with Jack Bainton of Standard Oil as program chairman. It is now presented at Bakersfield College under the joint sponsorship of the College and the S.E.P.M. An advisory committee consisting of men from the several paleo laboratories, and representatives of the S.E.P.M. and the San Joaquin Geological Society meets with the representative of the College to set up a program and determine policy for the coming year. The College makes all the necessary arrangements with the speakers.

The advisory committee for this year consists of Bill Binkley, chairman (Superior), Harold Billman (SEPM), Darrell Kirkpatrick (S.J. Geol. Society), Jack Bainton (Standard), Stan Carlson (Richfield), Chuck Carey (Union), Ed Stinemeyer (Shell), and Lee Holcomb (R. Stanley Beck). John Van Osdel is coordinating instructor for the College. Meetings will be held on the first Monday of each month in the Junior College building from 7:30 to 9:30 p.m.

This year's program is as follows:

October 3:	Dr. Arthur S. Campbell, St. Mary's College - "Radiolaria".
November 7:	Dr. Donald E. Savage, U.C. - "Vertebrate Paleo".
December 5:	Not yet confirmed.
January 9:	Dr. John E. Crowell, U.C.L.A.- "Sedimentation".
February 6:	J. W. Valentine, U.C.L.A. - "Invertebrates".
March 5:	Dr. V. L. Vanderhoof, Intex Oil Co.- "Paleontology".
April 2:	Dr. Weldon W. Rau, U.S.G.S. - "Foraminifera".
May 7:	Dr. M. N. Bramlette, Scripps - "Coccoliths".

ANNUAL HOLIDAY DINNER DANCE

The annual Holiday Dinner Dance, sponsored by the A.A.P.G.-S.E.G.-S.E.P.M., will be on Saturday, December 3, 1955, at the Oakmont Club, Glendale.

Chairman Joe Hatheway and his committee are making the arrangements now and will mail notices to members in about a month.

SACRAMENTO GEOLOGICAL SOCIETY

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

President: Art Hawley, Western Gulf Oil Co.
1st Vice Pres.: Bill Bauer, The Texas Company
2nd Vice Pres.: Bob Bean, Division of Water Res.
Sec.-Treas.: Duane Woods, Div. of Water Resources

A full and interesting schedule of meetings and field trips is already arranged for the coming year.

FRANK PARKER ADDRESSES A.I.M.E.

Some highlights of the geology and the outlook for future exploration of the Los Angeles Basin were given to the Junior Petroleum Group of A.I.M.E., Thursday, September 15th, at the Turf Club by Frank S. Parker, President of the Pacific Section of A.A.P.G. The talk was illustrated by slides loaned for the occasion by Bill Barbat, who had prepared them for his paper, "Habitat of Oil in the Los Angeles Basin", presented last March at the National A.A.P.G. meeting in New York.

The structural setting of the Basin in relation to the master faults of Southern California and the general limits of the Basin defined as the Palos Verdes, Santa Monica Mountains, Raymond Hill fault, Puente Hills and Santa Ana Mountains was discussed. The Basin had its inception in the middle Miocene. The dominant features then were the Franciscan high to the southwest, the central basin area of sediments and volcanics, and the granitic and metamorphic and pre-Miocene sediments in highs to the north and east. Certain faults and features now prominent, such as the Whittier and Palos Verdes faults and the Repetto and Puente Hills uplifts, were absent or rudimentary. The structure at the close of Pasadenan orogeny (mid-Pleistocene) by contrast shows all of the present features, although the topographic basin does not coincide with the structural basin. The true basin character was shown by a thickness map of post-middle Miocene sediments which attained a maximum thickness of at least 20,000 feet. Some of the thin features of the isopachs, such as, the Anaheim nose and schist highs are primarily due to deposition over highs and some, such as the Puente Hills, are attributed to erosion of sediments from late uplifts. A stratigraphic cross-section from Palos Verdes to Pomona portraying the thickness of the various post-middle Miocene formations indicates the great subsidence in late Pliocene and Pleistocene.

The oil fields can be classified by the nature of their structure as follows: 1. Those of gentle folds with no faulting of consequence and underlain by Franciscan schist with little or no middle Miocene sediments, (e.g., Wilmington, Playa del Rey) 2. Those in which folding is more pronounced, sediments are thicker, a fair thickness of middle Miocene and prominent thrust faulting which affects the distribution of the oil, (e.g., Huntington Beach, Dominguez, Potrero) 3. Those in which folding is strong, sediments are thick, faulting is not of primary importance, middle Miocene and older sediments may be expected, and basement is granite or metamorphic rocks of the Sierra batholith type, (e.g., Richfield, Santa Fe Springs, Montebello) 4. Fields in which accumulation is controlled primarily by faulting and arching only serves to localize the oil along the fault, (e.g., Brea-Olinda, Whittier, Newport, Los Angeles City). A few fields, with minor production, such as Buena Park, Anaheim, Leffingwell, Alondra and Lawndale, have stratigraphic control and do not fall into the above classifications. Most of the production, both total and per unit area, has come from the second and third classes listed. These have produced well over 100,000 barrels per acre to date, whereas the schist basement fields, even with the rich Wilmington production, have averaged about 60,000 barrels per acre and the fault fields somewhat less. The fields of the basin as a whole average

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NEXT DEADLINE OCTOBER 27

106,000 barrels per acre with Long Beach leading at nearly 500,000 barrels.

The structural type is not, however, the dominant factor in determining the richness of the fields. The sand content of the Repetto formation is in almost direct relation to the productivity. Those fields where Miocene beds are the principal or only producers are exceptions.

As to exploration, a brief view of the past five years shows only four completely new fields have been discovered, namely, Anaheim, Bandini, Olive and San Clemente. Of these only Bandini gives promise, since Anaheim is already abandoned, and Olive and San Clemente are of minor or questionable value. The big additions have been by extensions of known fields, such as, Airport area of Long Beach, Sunset, southeast extension of Seal Beach, and the Huntington Beach Hot Spot, and by new pools within known fields, such as, the various zones in Wilmington fault blocks, the new zones of Beverly Hills, the Belmont offshore development and others.

The Los Angeles Basin is probably the most explored area in the world, with an average of nearly two wildcats per square mile and much greater density in the favorable areas. West Newport was essentially surrounded by dry holes of adequate depth before discovery, and when finally developed, practically filled all of the area between those dry holes. Some fields or areas such as Bandini and Sunset Beach were not drilled to adequate depth. It is apparent that in recent years and probably in the future the best place to find new oil in the Los Angeles Basin is under or along side of known oil fields. There remain some sizable possible areas where surface development for residence or industry precludes use of seismograph for exploration and zoning precludes drilling. The Salt Lake oil field, now occupied by La Brea Towers, is an area in which commercial production would be practically assured. The only remaining areas untested (always remembering West Newport in its ring of dry holes) are offshore. Due to physical and political difficulties, those areas have been free from drilling except adjacent to onshore production. Only a few "known" wildcats have attempted this kind of exploration and Belmont is the only discovery recognized as a new oil field. The potential offshore area is that lying south of the Hollywood fault, northeast of the Palos Verdes thrust and extending southeast to the vicinity of San Clemente. Areas, where rocks older than upper Miocene form the sea floor, are as unpromising as areas onshore where such rocks crop out.

Mr. Parker summarized by saying that the place to dig is a new fault block along side of such gems as Long Beach or Santa Fe Springs. Perhaps someone can figure out how to find such a fault block and then how to get an adequate lease block.

A.A.P.G. FORUM

Mr. E. M. Pilkinton, Assistant Manager, Conservation Division, U.S.G.S., Washington, D.C., was the speaker on September 19th at the forum meeting in the General Petroleum Auditorium. Mr. Pilkinton spoke on "Unitization of Federal Lands". The Los Angeles Landman's Association and Pacific Section met jointly in this meeting which was arranged by Dana Detrick and Ed Bedford.

Federal unitization was first authorized by Congress in 1930. Since then approximately 675 units covering about 11 1/2 million acres in the United States and Alaska have been approved, 375 with 5 1/2 million acres still active. Leases effectively committed to approved unit agreements are extended beyond their primary terms by unit production, even without leasehold production. Inasmuch as a company or individual may not hold in excess of 46,080 acres of Federal land in leases or applications for leases and 200,000 acres in options in any one state at any one time, effective commitment to a Federal unit exempts such acreage from that charge.

Unitization affords more efficient and economical use of good engineering and conservation practices. This means elimination of unnecessary competitive drilling, greater control of formation pressures, less dissipation of reservoir energies, institution of secondary recovery programs and maximum economic recovery.

Of nearly 82 million acres of Federal land under lease as of July 1, 1955, unit production accounts for nearly 50 percent of all production from Federal lands. The preponderance of leased Federal land is in the west as follows:

1. Wyoming	21.3 million acres
2. Utah	13.3
3. New Mexico	10.7
4. Montana	9.0
5. Colorado	7.8
6. Nevada	6.3
7. Alaska	2.6
8. California	2.4

The number of Federal units in these areas roughly follows the order of lease volume.

The speaker outlined a step by step procedure on how to formulate and complete a Federal unit. The meeting was attended by a large and attentive audience, which asked many questions at the close of the address.

POMONA COLLEGE ACTIVITIES

Summer camp was held at Railroad Valley, Nevada. Aerial photographs and much help were given by Shell Oil Company through Walt Smith, Ely, Nevada.

With the help of Scripps Institution of Oceanography, a geologic map was made of the San Benito Islands, west of Cedros Island off the coast of Baja, California.

Donald McIntyre succeeded A. O. Woodford as Department Chairman on the latter's retirement from 40 years of distinguished service to Geology at Pomona College. Dr. Woodford is to receive the Neil Miner Award for Excellence in Teaching of Geology at the New Orleans meeting in November.

U. C. L. A. GEOLOGY DEPARTMENT SUMMER ACTIVITIES

During the past summer the staff and students of U.C.L.A. were widely dispersed. The advanced summer field course, made up of 45 students who had already completed the year on-campus field course, spent their summer in the study of an area in central Nevada, in the Pinon Range, about 50 miles southwest of Elko. This group was guided through the mazes of the complex Roberts Mountain thrust country by Jerry Winterer, Don Carlisle, Mike Murphy and Doug Martin.

Graduate students involved in thesis studies worked in many southern California areas such as the San Gabriel Mountains, the Sierra Nevada, Lockwood Valley, Santa Paula Creek, Santa Monica Mountains and elsewhere. One, Bill Brisbin, has been interpreting gravity data obtained from submarines operating in the deep ocean bordering California.

Summer activities of the staff not on the summer field course which may be of interest are as follows: Phil King, Visiting Professor, worked for the U.S.G.S. in Denver. Joe Murdoch has just returned from his sabbatical leave in Europe where he studied many mineral localities. Ken Watson undertook mining studies in Canada, mostly in Quebec. Cord Durrell continued his pursuits in the Blairsden quad of the northern Sierras. Clem Nelson, on sabbatical, too, continued his studies of Cambrian stratigraphy in the Inyo range under the auspices of a National Science Foundation Grant. John Crowell continued field research in the Ridge Basin. Bill Putnam took a Sierra Club trip via rubber raft down the Yampa and Green Rivers and then made a sweep around the western U.S.

The department is looking forward to another year with perhaps a significant increase in enrollment, with almost 100 majors in geology and 55 graduate students. During the past year a Ph.D. in geology was acquired by Robert Stone who undertook a study of groundwater problems in the southeastern San Joaquin Valley. Ten M.A. degrees were earned by Fred Bergen, George Cleveland, Paul H. Dudley, Albert L. Ehrreich, W. Scott Keys, James R. Novotny, Leroy J. Perry, James W. Valentine, John W. West, and Richard D. Wilson. Thirty-nine A.B. degrees in geology were awarded.

ADDITIONAL CONVENTION PROGRAM

John T. Isberg, Superior Oil Company, General Chairman of the A.A.P.G.-S.E.P.M.-S.E.G., Convention, November 10th and 11th, has announced the principal speaker at the joint luncheon on Thursday, November 10th, will be G. Moses Knebel, National A.A.P.G. President, who will speak on "National Affairs of the Association".

At the Thursday evening dinner of the S.E.P.M., Weldon Rau of the U.S.G.S., will speak on "Foraminiferal Zonation in the Tertiary Sequence of Southwestern Washington".

The speaker at the Friday luncheon of the S.E.G. will be announced later.

NORTHWEST GEOLOGICAL SOCIETY

On September 26th new officers in the Northwest Geological Society for the coming year were elected as follows:

President: Jim Moore, Shell Oil Company
Secretary: Howard Wilson, Ohio Oil Co.
Treasurer: Jim Dowden, Lion Oil Company

CAL NEWS

About thirty students worked like dogs this summer at the regular summer camp near San Andreas. The camp was under the direction of Dr. N. L. Taliaferro (his 30th year) who was again assisted by Dr. Burt Slemmons of the University of Nevada. "Tucky" reports a very fine summer.

Dr. C. M. Gilbert spent part of the summer in Berkeley, but escaped to the field in southeastern Arizona in August.

Dr. Louderback, after an illness in late spring, is carrying on as usual and continues to edit the Bulletin of the Seismological Society.

Dr. Adolf Pabst is spending the fall semester on sabbatical leave in Vienna, Austria, with Professor F. Machatschki.

Dr. Williams spent the first half of the summer studying volcanic rocks in central Nevada: in August he studied the geology near Sudbury, Ontario.

Dr. C. L. Camp's summer was devoted to further development and study of the impressive ichthyosaur deposits of the Nevada Triassic.

During a four-months field season in Japan, Dr. R. W. Chaney studied plant-bearing coal deposits in Kyushu (Eocene) and Hokkaido (Oligocene), where there are fossil floras similar to those of western North America.

Dr. J. W. Durham, returning from a year of study in Europe, conducted a short field study in Washington and spent the remainder of the summer unpacking his European fossil collections, correcting galley proofs and performing routine departmental duties.

Dr. R. M. Kleinpell spent the summer in field work and consultation with officials of the Philippine Oil Development Company, American Overseas Petroleum, Ltd., and Standard-Vacuum Oil Company concerning petroleum exploration in the Philippine Islands.

Dr. R. L. Langenheim spent his summer measuring sections and collecting specimens from the Paleozoic of Nevada and Colorado.

Dr. D. E. Savage devoted his summer to academic research and to commercial consultation on problems of nonmarine stratigraphy in Nevada, Oregon and California.

Dr. R. A. Stirton made short field trips into Nevada and Colorado inspecting Miocene and Eocene exposures and engaged in research for the remainder of the summer.

U.S.C. NEWS

More graduate students than undergraduate students turned up for field work in Nevada this summer. The main camp was located at Moorman Ranch in Illipah Quadrangle, but another camp was established at Green Springs by and for the convenience of the graduates. Undergraduates continued to remap the Illipah Quadrangle. Graduates mapped the entire Pancake Summit and Green Springs Quadrangles. These two quadrangles are in the north end of the valley where Shell's producers are located.

Bill Easton started the summer in the field with the U.S.G.S. in Montana. This was followed by a tour of duty at the U.S.C. field camp in Nevada. The latter part of the summer was spent in private field work in the Great Basin.

K. O. Emery stayed home most of the summer finishing reports on studies of marine geology made during previous summers in the Persian Gulf, Hawaii, and Johnston Island.

Dick Merriam completed work on three quadrangles in southern California and finished research on aerial photography of desert areas for the Air Force.

O. L. Bandy continued his research project for Western Gulf. His year's sabbatical leave came to an end this summer and now he faces the teaching routine

again. He started a new course in Paleoecology this semester.

Tom Clements suffered through the 6 weeks Summer Session trying to teach Geology of California to a group composed mostly of teachers, using the book by Reed, which was never designed as a text. Afterwards he "relaxed" by working on the final report for the Air Force on arid regions.

John Mann aided Tom Clements and Dick Merriam on the desert research for the Air Force and continued private work in water development.

UNIVERSITY OF OREGON NEWS

The University of Oregon Geology Department held its summer camp in two localities as has been its custom in the past. The first half of the session was held at the Marine Biology Station at Charleston, Oregon, where the study of the marine Tertiary Section was carried on. The second half of the camp was held at a new locality in the Mormon Basin, south of Baker, Oregon. The work here consisted chiefly of mapping igneous and metamorphics rocks and considerable attention was given to economic geology.

The summer camp had 14 students, and the work was under the direction of Professor Lloyd Staples, who was assisted by Mr. George Thomas, a graduate student.

In addition field mapping in other parts of the state was in progress in connection with thesis work by 12 graduate students. Dr. E. Baldwin continued mapping the Coast Range for the Fuels Branch of the U.S.G.S., and Dr. C. Bressler made a study of the gypsum deposits of the West Coast.

CONVENTION DINNER DANCE

Chairman Bob Sumpf announces that music and entertainment for the annual A.A.P.G.-S.E.P.M.-S.E.G. dinner dance will be supplied by "The Firehouse Five Plus Two". This popular and talented musical group will play the kind of music that will please everyone. The dinner dance will be in the Biltmore Ballroom on November 11th.

Bob tells us that tables can be arranged best for dining and dancing comfort if reservations are for groups of 10 or 20 only. Reservation cards will be mailed soon. Plan your table group now. Make your reservation early.

CALTECH NEWS

Caltech held its annual field camp in southwestern New Mexico for six weeks during June and July.. The 1955 camp was established near the ghost town of Hermosa, a few miles east of the Black Range, and about 30 miles west of Truth or Consequences and the Rio Grande. Camp personnel comprised 13 graduate and undergraduate students: a student camp manager, Charles St. Clair, and two staff members, Dick Jahns and Lloyd Pray.

The geology of the area involves Paleozoic shelf sediments, ranging from Ordovician to Permian, that are unconformably overlain by a thick pile of Tertiary volcanics. The volcanic sequence comprises tuffs and tuff breccias, along with some flows and assorted intrusives. Interest and complexity are supplied by abundant faulting that has occurred intermittently since deposition of the oldest sediments. The area includes the old Hermosa (Palomas) silver-lead mining district.

Students mapped about 6 square miles at a scale of 4 inches to the mile. In addition, a much smaller, complexly faulted area within the mining district was mapped in detail. Some mine workings were mapped to give experience in underground techniques, and to provide further geologic control on the faults mapped at the surface. A new locality for plant fossils (largely pine needles and cones) was discovered during the work.

The most notable event involving the staff is the addition of four new members. These are Dr. Frank Press from the Lamont Laboratories of Columbia University who comes as Professor of Geophysics to work at the Seismological Laboratory and to teach geophysics courses on the campus; Dr. Clarence R. Allen who comes from the University of Minnesota to teach and to do research in the allied fields of structural geology and geophysics; Dr. Leon T. Silver, Caltech Ph.D., who will teach in petrology and field geology and do research in geology and geochemistry; and Dr. Gerald J. Wasserburg who comes from the Institute of Nuclear Studies at the University of Chicago to teach crystal structure and allied subjects and to do research in geochemistry. These last three appointments are at the rank of Assistant Professor.

As usual the rest of the staff ranged widely both geographically and in the topics of research. Included in staff activities was participation in the Geneva International Conference on the Peaceful Uses of Atomic Energy, field work in Colorado, New Mexico, California, Alaska, Baja California, and many other areas, and much laboratory work on the campus and at the Seismological Laboratory. Dr. Beno Gutenberg departs shortly for a series of invitational lectures in England and on the continent, including the famed William Smith lecture sponsored by the Geological Society of London.

ALBERTA CONVENTION

The Western Canada Regional Meeting and Fifth Annual Field Trip of the Alberta Society of Petroleum Geologists and the American Association of Petroleum Geologists was held in Jasper Park, Alberta, Canada, from September 14th through September 17th.

The Jasper Park Lodge was the convention headquarters. Six hundred registrants from the provinces of Ontario, Saskatchewan, Alberta, the Rocky Mountain area of the United States, California and Texas thoroughly enjoyed the program and the well organized field trip.

The official program was piped to order by colorful Scottish Bagpipers and included a welcoming address by the Honorable E. C. Manning, Premier of Alberta Province.

Mr. G. Moses Knebel, President of A.A.P.G., spoke on "The Habitat of Some Oil". The keynote address on "Oil and Gas Prospects of the Mississippian and Jurassic of Alberta" was by Mr. J. C. Sproule.

The papers covered the Carboniferous and the Jurassic of Western Canada and were followed on Saturday, September 17th with a field trip in the area which gave every registrant an opportunity to view and study some of the lithologic units. Excellent guidebooks were available containing detailed geology and road logs of the area. The guidebooks will be extremely valuable to anyone visiting or working in this area.

Those who made the long trek from the Pacific Coast to the Regional Meeting included: Mr. and Mrs. Sam Grinsfelder, Union, Mr. and Mrs. M. L. Natland, Richfield, John Hazzard, Union, Charlie Cross, Honolulu, Tony Morris, Consultant, and Bob Patterson, Formation Logging Service.

Former Pacific Coasters attending the meeting included: Bill Greenwalt, formerly in Union's Santa Maria office and now stationed in Calgary, John Hale now in Calgary for the Canadian Seaboard, Bob Galeski and Paul McGovney with Honolulu Oil Corp., in Calgary, Don Grinsfelder with Richfield in Calgary, and Rolfe Johnson now with Pacific Petroleum in Ft. St. John, B.C.

CONVENTION EXHIBITS

With Convention time rapidly nearing, seventeen companies are completing preparations for their exhibits at the Biltmore Hotel. Of these, eleven companies are returning to sponsor booths. These are:

American Paulin System
Encyclopaedia Britannica, Inc.
George E. Failing Company
Fairchild Aerial Surveys, Inc.
Formation Logging Service Co.
Johnston Testers, Inc.
McCullough Tool Company
Munger Oil Information Service
Rapid Blue Print Company
Schlumberger Well Surveying Corp.
Techno Instrument Company

Six companies join the ranks of our exhibitors for the first time:

Geolograph California Service Co.
Houston Technical Laboratories
Hycon Aerial Surveys, Inc.
Petroleum Information
Precision Radiation Instruments, Inc.
Western Geophysical Company

In addition, the Division of Mines and the A.A.P.G. will display and have available for purchase publications of interest to all. We again greet the returning companies and cordially welcome the newcomers. We urge all convention-goers to avail themselves of the diverse information and facilities provided by these companies. Their support is a large factor in making our meetings successful.

EASTERN NEVADA GEOLOGICAL SOCIETY MEETING

Dr. Fred Humphrey of Stanford University was speaker at the regular dinner meeting of the Eastern Nevada Geological Society September 15th, at the Nevada Hotel, Ely, Nevada. Dr. Humphrey presented a talk on "The Geology of the White Pine Mining District, Nevada," an area of particular interest to the mining geologist. A colored slide was used to show the geology in the vicinity and several sketches were shown which illustrated the complex structure of the area.

The White Pine (Hamilton) district was an important silver producer in the late sixties and early seventies. The rich silver ores were soon mined out, however, as these deposits were found at shallow depth where they occurred as replacement deposits in limestone at the top of the Devonian immediately underlying the Pilot shale. Later attempts to find additional ore body at greater depth proved futile.

In other areas, particularly at Mt. Hamilton to the west, the minerals occur as replacement deposits in dolomites and to a lesser extent in quartz, etc. There the ore deposits are associated with intrusives. There is evidence of zoning in this area. The high temperature minerals, particularly argentiferous tetrahedrite associated with chalcopyrite are found near the intrusive mass. The minerals of zinc and lead occur farther outward.

The Paleozoic sequence from middle Cambrian to Permian is exposed in various fault blocks within the area. Structure is complex with early Tertiary thrusting recognized, followed by later normal faulting with displacement up to 15,000 feet. The direction of movement of the thrust blocks is from west to east with a maximum movement of approximately one mile.

PACIFIC SECTION
ANNUAL MEETING
NOVEMBER 10 - 11, 1955

PERSONAL ITEMS

Shell Oil Company employees in the Northwest held their annual Salmon derby on September 24 with a total catch of only four salmon. Grant Valentine, Secretary Ann Parker, and Mr. Parker were the only lucky ones. The weights of the salmon are too insignificant to mention.

Glen Ledingham and Mel Hill were recent visitors in the Northwest where they found the well-laundered air a welcome relief from the smog of Los Angeles.

Bob Blocher, district geologist for Shell at Seattle, will leave shortly for New York where he will remain for about six months.

Wayne Marrs, with Continental, Olympia, returned recently from a vacation trip to northern Arizona, Colorado and Utah. While there he did some trout fishing, observed uranium prospecting methods, participated in an air search for a lost prospector in the Colorado River Canyon and learned to speak some essential Navajo.

Herb Mann, Bill Johnson, Jim Kennel, Don (Mac) Robinson, Jim Elison, K. Molenaar, John Beall and Al Oestrich, all Shell geologists, have returned from a summer's field work in Alaska.

The Chowder and Marching Club of Santa Maria held its first meeting by partaking of dinner at "Shaw's" and retiring to the home of Cliff Anderson for slides and a talk on a vacation flight to Baja, California. Charter members are Rod and Mij Calvin, G.P., Cliff and Bobby Anderson, Western Gulf, Ken and Peggy Lautenschlauger, Standard, Lou and Cecilia Canut, Texas, Bill Hughs, Tom Benson and Ken Myron, Texas, and Jack Jenson, Schlumberger. Future meetings will be held on the first Thursday of each month for those interested in spending an evening devoted to interesting conversation -- other than geology.

Bill Hughs, Texas, Santa Maria, recently gave the senoritas a break by spending a week of his vacation in Ensenada.

Art Randall has resigned from G. P., Santa Maria, to work toward a higher degree at the University of Colorado at Boulder.

Olaf P. Jenkins, California State Division of Mines, and Charles M. Cross, Honolulu Oil Corporation, from the Bay Area, attended the A.A.P.G. Western Canada Regional Meeting held at Jasper September 15-17. Reports are that an excellent program was presented, which, along with accompanying discussions, called attention to the rapid progress being made in geologic interpretation, especially in reference to the recognition and correlation of biologic and time-stratigraphic units.

Joe Hatheway will enter U.C.L.A. for two years of graduate work. Joe will maintain his position as geologist and engineer for E. W. Pauley.

An active Petroleum Wives group in Sacramento recently arranged a "hayride" for the old married set. Thunder and lightning forced a week's postponement of the event and gave folks a chance to practice up some of the old songs. The ride was followed by a weenie roast.

Gus Rehse, Standard, Ojai, has returned from a 2 month's trip to Europe.

George Rudkin of Ohio Oil Company has been transferred from Los Angeles to Bakersfield.

John Yeager, geologist for Ohio in Sacramento has been transferred to Paso Robles.

New geologists for Humble in Chico are Jack Haight and John Elliott.

Doug Andrews, newly married Tide Water geologist in Sacramento, has been transferred to San Francisco.

A recent addition to Shell's Sacramento staff, is Glenn Harris, seismologist.

The Northern California Petroleum Round Table, otherwise known as the Sacramento Valley scouts, put on a bang-up barbeque and golf tournament at the Woolbridge Golf and Country Club on September 23rd. Included among the 150 or more people present were many guests from various parts of California, including San Francisco, Bakersfield, and Los Angeles.

A recent addition to Standard's Exploration personnel in Sacramento is Ed Welge. The Welge family arrived in Sacramento from Northern British Columbia. Ed has been mapping Pleistocene glacial deposits as part of his work for an M.S. degree from the Univerity of Nebraska.

A group of Standard geologists in Sacramento were recently treated to a pre-season football scrimmage when one of them laid a beautiful downfield block on a waiter at Frank Fats. The waiter was carrying dinner for three and fumbled the ball.

Western Gulf Oil Company has recently moved into new offices in Sacramento's Town and Country area, at 2849 Fulton Avenue., Sacramento 21.

Recent additions to Western Gulf's staff in Sacramento are Gene Pousch, land department transferred from Ventura, and Bob Reedy, geophysicist transferred from Bakersfield.

Atch Curry, Shell, has been transferred from Los Angeles to Ventura. Atch was able to buy a home next door to the one he owned when he worked in Ventura before.

Dan Flynn has returned from Nevada and will be resident geologist for G. P., in Ventura.

Don Henriksen, former Cal. star basketball center, received his Doctor's Degree from Stanford in October, 1954. He was married to Marilyn Martin in Palo Alto on August 27, 1955. Don is now with Richfield in Ojai.

Harold M. Lian and family have returned from a year's stay in Innsbruck, Austria, where he was affiliated with the University of Innsbruck as a Fulbright scholar. He has resumed his duties on the geological staff of the Union Oil Company in Santa Paula, and has moved to Montalvo.

Glen Shepard has started a full faced, Abe Lincoln type beard and explains that he likes to go hunting grizzly.

The Annual Coastal Society Dinner Dance was held at the Santa Barbara Biltmore on September 24th. There were more than 200 people present and all proclaimed the affair a great success.

Lou Grivetti, son of Rex Grivetti, Texas, Santa Paula, has returned from an extended tour of Germany. His trip was sponsored by the American Field Service and the Santa Paula High School World Friendship Club. He is a senior at Santa Paula High School.

Mike Zaikowsky, Texas, Santa Paula, is moving into his new house in the Sauer tract on Ojai Road in Santa Paula.

Don Gresser, Shell, Ventura, is on vacation to Tahoe and will return by way of Bryce and Zion Canyons.

Attendance at the Thursday Luncheon Club of Ventura has been increased greatly by the Santa Paula delegation. Thirty-one were present at the last meeting. All geologists, etc., are invited to attend. The luncheons are held at Gordon's Cafeteria - near Five Points.

The annual Desk and Derrick Club "Bosses" Barbeque was held at Camp Comfort on September 20th. A large crowd was present. Preparation of the barbeque was handled by Ventura Barbeque Associates. Part of the entertainment was furnished by the Four-flushers, a barbershop combo composed of Stan Jefferies, tenor; Joe Egan, bass, of Shell, Ventura; Bud Oakes, lead; and Bob Hacker, baritone of Union, Santa Paula.

Bill Plant, Union, Santa Paula, spent two weeks in Yellowstone National Park, fishing, sleeping and running from bears.

Recent additions to the Geological Staff at Standard's Ojai office are:

Bob McMullin, who recently graduated from Colorado School of Mines.

Jim Blom, who attended CalTech and received his Doctor's from the University of Innsbruck, Austria.

Ed Dryden, who graduated from the University of Iowa this year.

Jim Walker, Don Lindsay and Gene Reid, all of Shell in Ventura, took a weekend trip to the Mt. Whitney area. They camped at the 10,000 foot level and left early the next morning for the higher levels, leaving their packs near the campsite. They were forced to return early because of snow only to find someone had stolen all their gear. Luckily they got back to civilization before dark. MORAL: Beware of the Sierran Pack Rats.

Bob Patterson, Formation Logging Service, and Tony Morris, Consultant, were seen at the Western Canada Regional Meeting of the A.A.P.G. and the Alberta Society of Petroleum Geologists held in Jasper, Alberta. Was this just the legal excuse for moose hunting in northern B.C.?

John Holtzman, Shell, Ventura, spent a week of his vacation at Balboa.

Howard Casey is preparing to leave for Venezuela to work for Socony-Mobil.

NURSERY NEWS

Frank and Debbie Noble, Union, Santa Maria, have adopted a wonderful little 16 month old girl named Holly.

To Alex and Jane Sarad, Tidewater, Ventura, on August 14th, a 6 lb. 12 oz. boy - Mathew A.

To John and Ann Cronin, Shell, Ventura, a girl - Ellen Ester, September 17th, 7 lb. 10 oz.

Carol and John Wagner, Union, Bakersfield are the proud parents of a baby girl, Ruth Elizabeth.

Bill and Alice Bauer of The Texas Company in Sacramento, announce the arrival of their second baby, a boy, named Jeffrey William, born on September 24th and weighed 6 pounds, 14 1/2 ounces.

Jack and Marge Merriam of the Texas Company in Sacramento, proudly announce the birth of a son, Mark Allan on August 20th. Mark weighed 7 lb. 5 oz.

Karl and Claire Arleth, Ohio Oil in Sacramento, parents of 2 boys and 1 girl, added a new member to their family, a son named Daniel Frances weighing 7 lb., 2 oz., born on August 12th.

CALENDAR

October 8, 1955: Sat., 8:00 a.m., Los Angeles Chamber of Commerce will sponsor an all day symposium on uranium, including exhibits and a film entitled "The Fabulous Stein Uranium Mine". Rodger Young Auditorium, Los Angeles. Registration at 8:00 a.m. Admission $2.00. Admission including lunch - $5.00.

October 10, 1955: Mon., 7:30 p.m., Sacramento Geological Society Monthly Meeting, Scheidel's Bavaria, 2764 Fulton Avenue, Town and Country Area, Sacramento. Mr. John Logan of the U.S. Bureau of Reclamation will speak on his recent work in the Belgian Congo. Mr. Logan will illustrate his talk with colored slides. A social hour will follow Mr. Logan's presentation.

October 11, 1955: Tues., 7:30 P.m., Coast Geological Society Dinner Meeting, Montecito Country Club, Santa Barbara. Speakers to be announced.

October 12, 1955: Wed., 6:30 p.m., El Tejon Hotel, Bakersfield, San Joaquin Geological Society dinner meeting. Promises to be a very interesting meeting. Subject will be announced later.

October 13, 1955: Thurs., 6:30 p.m., Los Angeles Basin A.I.M.E., Jr. Petroleum Group Dinner Meeting, Turf Club, Lakewood Blvd., and Anaheim-Telegraph Road, Los Angeles. Subject "Drill Stem Testing". Speakers to be announced. $3.00 for members, $3.50 for non-members.

October 17, 1955: Mon., 7:00 p.m., Los Angeles Basin Joint S.E.P.M.-A.A.P.G. Forum dinner meeting, Clark Hotel, Los Angeles. Dr. Orville Bandy will talk on the pitfalls of correlation. $2.85 per person. Reservations necessary. Call Dana Detrick - MA 57341.

October 21, 1955: Fri., 12:00 Noon, A.I.M.E. Fall Meeting All Sections Luncheon, Biltmore Hotel. Dr. Harrison S. Brown, Professor of Geochemistry, California Institute of Technology, will speak on the future of the world's mineral resources.

October 24, 1955: Mon., 12:00 Noon, Southern California Section A.I.M.E. Petroleum Forum Luncheon, Rodger Young Auditorium, Los Angeles. "Theories of the Displacement of Oil by Water" by George Hadley of California Research. $2.25 per person.

October 31, 1955: Mon., 6:00 P.M. Northwest Geol. Society Dinner Meeting, Poodle Dog Cafe, Tacoma, Washington. Dr. W. C. Gussow, A.A.P.G., distinguished lecturer, will talk on "Differential Entrapment and Migration of Oil."

November 1, 1955: Tues., 7:30 p.m., Sacramento Geological Society meeting, State Public Works Bldg., 1120 "N" Street, Sacramento. Mr. M. J. Hill, Chief Geologist, Western Gulf, will speak on "Wrench Fault Tectonics".

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

Biltmore Hotel

Los Angeles

NOVEMBER 10 - 11, 1955

PACIFIC PETROLEUM GEOLOGIST
PACIFIC SECTION, A.A.P.G.
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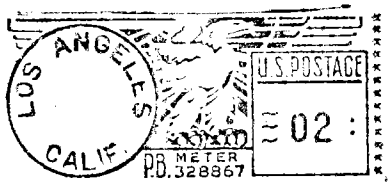

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381 E. 4th St.
Chico, Calif.

Form 3547 Requested

PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 9 NOVEMBER 1955 No. 11

ASSOCIATION ACTIVITIES

A.A.P.G. OFFICERS

New officers elected by mail ballot by the Pacific Section, A.A.P.G., for 1956 are left to right: Mason L. Hill, Richfield Oil Corporation, President, Loyde H. Metzner, Signal Oil and Gas Company, Vice-President, Thomas A. Baldwin, Monterey Oil Company, Secretary, Everett W. Pease, Sunray Mid-Continent Oil Company, Treasurer.

A.A.P.G. - S.E.P.M. FORUM

On October 17th, Dr. Orville Bandy, U.S.C. Professor of Geology, addressed the Los Angeles Basin Joint AAPG-SEPM Forum at a dinner meeting held at the Clark Hotel. Dr. Bandy's subject, "Pitfalls of Correlation", was of equal interest to both paleontologists and geologists.

A good many examples of pitfalls in correlations have appeared in the past few years. Four types, selected for a brief review at this time, include, (1) lithologic correlations, (2) improper evaluation of index fossils, (3) failure to recognize ecologic controls of benthonic species, and (4) failure to recognize ecologic controls of planktonic species.

In illustration of the first pitfall, reference is made to the familiar case of the Franciscan Series of California. It is now apparent that Franciscan type rocks have been reported as (1) older than, (2) equivalent to, and (3) younger than Knoxville strata of Tithonian age. In the Stanley Mountain area, upper Jurassic fossils (Knoxville) occur in Franciscan type strata. In the northern coast ranges of California, the Franciscan appears to be older than the Knoxville strata. However, members comprising this famous series in its type area around San Francisco contain large numbers of Cenomanian (upper Cretaceous) Foraminifera. Inclusion of all of these beds in one unit is equivalent in a time sense to including the lower half of the Tertiary of California in one unit.

The second pitfall is illustrated by the quotation of one or two specific names for correlation purposes. For example, Cassidulina spinifera has recently been cited as evidence of a middle Oligocene age of sediments from the deep sea floor in the eastern Pacific. This species ranges from Oligocene into the Miocene in its type area (Trinidad), and it is also found in the Marshall Islands with respectable Recent assemblages. Perhaps this species lingered on longer in the Pacific Ocean like some of the corals and other larger species. Whether it did or not, it would seem precarious to place too much confidence on the slender shoulders of a single species so far removed from its type area. A second example of misplaced index fossils is seen in the exposures of Pliocene in downtown Los Angeles. Here, lower Pliocene species are probably reworked into upper Pliocene assemblages, a situation which might be readily duplicated on the flanks of any uplifted borderland.

A third pitfall which falls into a more controversial category is the confusing of biofacies with time zones. In Figure 1, curves are presented representing the bathymetric history (depth changes with time) of various areas during the Pliocene. Curve A is the typical bathymetric representation for the Los Angeles Basin in that the lower half of the Pliocene is represented by mostly a deep water facies, whereas the upper half of the Pliocene and the Pleistocene contain progressively shallower facies. It would be reasonable to assume that some of the embayments or bordering seas of the Pliocene might have exhibited a different history, as exemplified by the shallow water facies of the San Joaquin Valley Pliocene or the outer shelf facies of the San Diego Pliocene. Other possible lines of bathymetric development during the Pliocene include the possibilities represented by curves B, C, and D, in Figure 1, in which progressive shoaling occurred earlier in the Pliocene than in the case of the typical curve (A). These situations would result in middle or upper Pliocene depth facies resting on the Miocene which might appear on well logs as Miocene-Pico sequences rather than Miocene-Repetto sequences. It is suggested that correlation of the deepest points in transgressive-regressive sequences might be a useful method of correlation in some of the perimeter areas of the Los Angeles Basin.

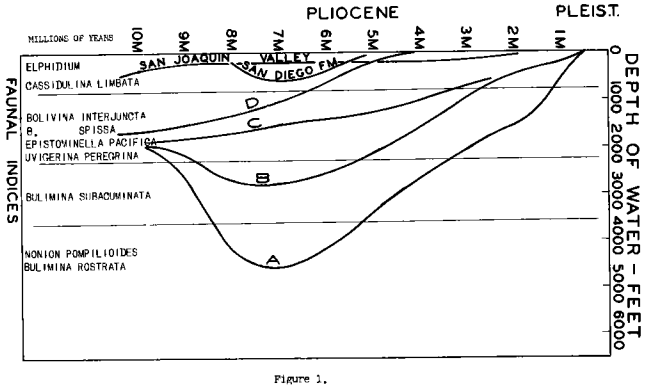

Figure 1.

PACIFIC PETROLEUM GEOLOGIST

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Editor	Dick Haines
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	Bob Patterson
Personal Items:	Bill Thomas
Selected Bibliography:	Paul Hayes
Calendar:	Dick Eckhart
Cartoonists:	Harold Sullwold
	Bob Sanem
Coast Representative	Bob Hacker
Northwest Representative	Floyd Johnson
Sacramento Representative	Bill Bauer
San Francisco Representative	Herschel Driver
San Joaquin Representative	Joe Parmenter
Nevada Representative	Ed Johnson

NEXT DEADLINE DECEMBER 1

The fourth pitfall pertains to planktonic species of Foraminifera. Coiling ratios have proved to be very useful in the Tertiary and Cretaceous strata of Trinidad and associated regions. It was thought originally that young or newly-formed species exhibited about the same percentage of left-handed as right-handed coiled specimens, and that later, they became dominantly either one or the other. The point at which they made up their minds is used as a correlation point. Recent studies reveal the existence of both right- and left-coiling groups of a modern planktonic species (Globorotalia truncatulinoides) in the Atlantic Ocean. The right-handed or dextrally coiled specimens are mostly tropical: however, some of these are enigmatically characteristic of the colder waters off the coast of England with intervening areas of left-handed or sinistrally coiled specimens. It is readily seen that shifting of the boundaries separating these groups could produce (1) a time delay in the change between different areas, (2) fluctuating conditions which would result in nearly equal mixtures of the two groups, and (3) changes in one area and not in another. Another facet to the features of planktonic correlations is found in the vertical distribution of planktonic species in the seas today. Some species occur at much shallower depths than others and are therefore incorporated into sediments in shoal water areas, whereas they occur together with deeper water planktonic species at greater depths. In the fossil record, it is possible that some of the planktonic species disappeared at different places at different times in shoaling sequences.

NEW EDITOR APPOINTED

President Frank Parker has appointed Bob Patterson new Editor of the Pacific Petroleum Geologist. Bob is Supervisor and Chief Geologist for Formation Logging Service Company and has served as Activities Editor on the newsletter during the past year. Bob takes over his new duties with the December issue.

B I O G R A P H Y

Frank S. Parker, President of the Pacific Section of A.A.P.G., is a native son, who has worked hard at it all of his life. He was born February 2, 1905, in Los Angeles. His mother is of German parentage and his father a hearty New Englander whose ancestors came over "on the second boat".

He had his grammar school education at Hoover and thereafter entered Poly High from which he was graduated in 1923. Frank says he graduated from U.C.L.A. in "1927-1/2", (the records swear it was 1928), and received his A.B. in Geology. During this period between 1923 and 1927-1/2, Frank tells us he also spent one semester at "UCLA's northern branch in Berkeley". Frank also has to his credit one and one-half years of graduate work toward a Masters at Yale.

In 1929 Frank went to work for the U.S.G.S., in the Rocky Mountain area and continued there until 1933. From 1933 to 1934 he was a Foundation Engineer for the consulting firm of LaBarre and Converse. He then went to work for the Shell Oil Company and continued with Shell until 1939. During this period he worked at various times in the Los Angeles Basin, Santa Maria district, Canada and Kentucky. During his stint for Shell in the Los Angeles Basin he found time to do the field mapping that resulted in the discovery of the Yorba Linda field. From 1940 to mid-1943 Frank worked for Wilshire Oil Company and was instrumental in the discovery of Sharktooth field. He then consulted for a few months before starting to work for the Petroleum Administration for War in October 1943. From that time until November 1945, Frank was kept busy calculating Uncle Sam's reserves and examining requests for deviations from well spacing regulations. In November, 1945, Frank went to work for Signal Oil Company.

Frank has been a member of the A.A.P.G. since 1935 and has held the offices of Convention Chairman in 1950, Vice-President in 1951, and is now Chairman of the National Business Committee. In addition to the time and energy he has devoted to the A.A.P.G., he has also found time to serve as Secretary-Treasurer of the Pccific Petroleum Chapter of the A.I.M.E. Frank is also a member of the S.E.P.M., a Fellow of the G.S.A., and a member of the American Geophysical Union.

While working for the U.S.G.S., Frank courted and won the hand of Lucille Eldridge and they were married in 1930. Frank is an avid "do-it-yourselfer" and in addition to laying cement walks and patios, it is well known that he manufactures some of the most expensive wood shavings in town. It is only fair to add that he also builds attractive furniture in the process. He is presently building a glass roof over his patio and has been doing so since June of this year. Due largely to the meticulous manner in which he works, Frank estimates it may take until the fall of 1959 to complete this project. At the last A.A.P.G. Barbeque and Golf Tournament, Frank posted a sometimes sparkling 125 to emerge as this year's A.A.P.G. low net golfing champion. This feat has several golfers looking into the weaknesses of the Callaway system of scoring.

CONSTITUTION

PACIFIC SECTION OF THE AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Adopted September 1924
Amended November 1939
Amended October 1943
Amended November 1944
Amended November 1951
Amended October 1952
Amended November 1953
Amended November 1954
Amended April 1955

ARTICLE I -- Name

This organization shall be known as "Pacific Section of the American Association of Petroleum Geologists" and is hereinafter referred to as "this Section".

ARTICLE II -- Object

The object of this Section shall be to provide for discussion of subjects and problems coming within the scope of the profession and, by such intercourse, to promote the advancement and aims of The American Association of Petroleum Geologists as set forth in its Constitution and by-laws.

ARTICLE III -- Membership

Sec. 1. Any member, associate or Junior (Amend. Nov. 1951) of the American Association of Petroleum Geologists in good standing and residing in California, Oregon or Washington, shall be eligible to membership in this section.

Sec. 2. Payment of annual dues of this Section by any person qualified as in Section 1 above, shall be deemed to be a declaration of membership in this Section.

ARTICLE IV -- Officers

Sec. 1. The officers of this Section shall be a President, a Vice-President, a Secretary and a Treasurer. During the absence of the President the Vice-President shall assume his duties. The duties of these officees shall be those customary for their respective offices. They shall assume these duties immediately following the meeting at which they are elected as hereinafter provided. Their term of office shall be for one year or until their respective successors are elected.

Sec. 2. There shall be an Executive Committee consisting of the President, Vice-President, Secretary, Treasurer, Retiring President, Editor of the Pacific Petroleum Geologist (Amended Nov. 1953), one member selected by the San Joaquin Geological Society, and one member selected by the Coast Geological Society (Amend. April 1955).

ARTICLE V -- Funds

Sec. 1. The dues of this Section shall be $2.50 (Amend. April 1955) per year, due and payable in advance.

Sec. 2. The funds of this Section shall be deposited to the credit of Pacific Section of the American Association of Petroleum Geologists in any (Amend. Nov. 1954) federally insured depository selected by the Treasurer but not to exceed the limit insured by the Federal Deposit Insurance Corporation. Whenever necessary, the President shall certify to the authority of the Treasurer in administering such account by providing the depository bank with a notice of the Treasurer's election and with a true copy of this Constitution.

The Treasurer shall have authority to issue checks against the bank account so established, on his sole signature, but in the event of his absence or incapacity to act due either to sickness or death, withdrawals or payments by check may be made on the signature of the President during the continuance of the absence or incapacity of the Treasurer, in which event the identity and authority of the President and the circumstances relating to the absence or incapacity of the Treasurer shall be certified to by the Executive Committee if so required by the depository.

ARTICLE VI -- Meetings

Sec. 1. Meetings shall be held annually and at other intervening times on call of the President.

Sec. 2. The time and place of the annual meeting shall be determined by the Executive Committee.

ARTICLE VII -- Elections

Sec. 1. The President of the Pacific Section of the American Association of Petroleum Geologists, with the approval of the Executive Committee, shall appoint a Nominating Committee not later than August 1 each year, consisting of five (5) members, two (2) of whom shall be past officers of the Pacific Section. The Nominating Committee shall select at least two (2) candidates for each of the following four offices: (1) President, (2) Vice-President, (3) Secretary, and (4) Treasurer. The slate of candidates shall be announced in the September issue of the Pacific Petroleum Geologist. Additional nominations may be made by written petition of 25 or more members of the Pacific Section in good standing and received by the Secretary on or before October 1. Voting shall be by mailed ballot and all ballots must be returned to the Secretary of the Pacific Section not later than October 15 of each year (Amend. Nov. 1954).

Sec. 2. In matters pertaining solely to the business of this Section, all members of the Section may vote. In matters pertaining to the official business and the selection of business representatives or other officers of the American Association of Petroleum Geologists only active members of the Association shall be qualified to vote.

Sec. 3. This constitution may be amended by two-thirds vote of all members present and voting at an annual meeting or by mail ballot and, in the event of the latter, two-thirds count of the ballots returned within ten days following their mailing to the membership.

NEW ORLEANS G.S.A. MEETING

Among the ones to speak at the G.S.A. meetings in New Orleans, Louisiana, on November 7, 8, and 9, 1955, are: Daniel I. Axelrod, M. N. Bramlette, Donald Carlisle, Clemens A. Nelsen, John C. Crowell, Garniss H. Curtiss, Robert H. Dott, Jr., U. S. Grant, M. Dean Kleinkopf, Melvin J. Hill. Ian Campbell will be quite active in the committee work during the meetings.

A.A.P.G. LUNCHEON

Fred Vandenberg, Kern Oil Company, gave a most interesting talk to the A.A.P.G. regular monthly luncheon meeting. Mr. Vandenberg spoke on his "Reconnaissance in Turkey" and showed many fine Kodachromes. The meeting was held at Rodger Young Auditorium on October 6, 1955.

The current interest in Turkey by the oil industry results from the enactment in March 1954 of a petroleum law designed to encourage foreign participation in the exploration for and possible development of new petroleum resources. Petroleum Law No. 6326, as it is called, was drafted by the late Max Ball on behalf of the Turkish Government and followed nearly thirty years of Government monopoly.

The land area of Turkey is 296,000 square miles of which some 15,000 square miles, included in three separate basins, is considered as prospective area. These three basins are (1) a shallow Tertiary basin in Thrace (westernmost Turkey) which includes Oligocene as the oldest rocks exposed; (2) the Adana Basin, a deep Tertiary feature on the Mediterranean Coast in south-central Turkey; and (3) the Diyarbakir Basin of southeastern Turkey in which rocks ranging in age from Miocene to Paleozoic are present. This Basin includes a considerable section of carbonate rocks in contrast to the Adana and Thrace Basins.

Sporadic drilling has taken place in all three Basins. The only success to date was obtained in the Diyarbakir Basin where two fields, Garzan and Raman, were discovered. Production is obtained from upper Cretaceous (Turonian) limestone, and in the case of Raman, is 20° gravity crude, high in asphalt and sulphur content. Production in the Garzan field has been shut in, pending completion of a 6,200 barrel-per-day refinery being built at Batman by Parsons Company of Los Angeles. Raman produced about 1,000 barrels per day in 1954, mostly for locomotive fuel.

The entrance of private companies into Turkey has led to an increased tempo of exploration, which obviously will result in a much earlier appraisal of the remaining productive possibilities of the country than would have been the case if the Turkish Government had attempted to carry the burden by itself.

PLAN ANNUAL REDLANDS LUNCHEON

The alumni and students of the Geology Department, University of Redlands, are planning to hold their annual Redlands luncheon on Friday noon, November 11th, at the Mike Lyman Restaurant located at 8th and Hill, Los Angeles. If you are planning to attend, notify Dr. S. W. Dana at the University of Redlands.

GEOLOGIC MAP OF CALIFORNIA

The Division of Mines has announced that eight sheets of the preliminary uncolored edition of the new Geologic Map of California are now available to the public. Each sheet covers an area of one degree of latitude and two degrees of longitude on a scale of 1:250,000. Geologic contacts and faults are shown in black, topography is indicated in brown and streams are shown in blue. Maps are accompanied by explanatory charts which show grouping of formational units and other pertinent data. The following sheets are available:

Bakersfield
Death Valley
Long Beach
Los Angeles
San Luis Obispo
Santa Ana
Santa Maria
Trona

These sheets, priced at $1.00 plus sales tax, may be obtained at Division of Mines offices in the State Building, Los Angeles, and Ferry Building, San Francisco. Orders for maps will be taken at the Division of Mines booth in the Exhibits Room during the AAPG-SEG-SEPM meeting at the Biltmore Hotel, November 10 and 11, but will not be available for over-the-counter purchase at the Convention.

PERSONAL ITEMS

Elko, Nevada, tranquillity was recently shattered when "Bingo" Bill Corey, Continental, won the giant blackout bingo at the Commercial. Keith Rathbun and Dick Haines, Continental, acted as "Bingo's" bodyguard for the rest of the night.

Sam Watson, The Texas Company, Bakersfield, will be one of two Texas Company representatives in their Uranium Division who will work jointly with New Jersey Zinc Company in Grand Junction, Colorado. "The Great Uranium Search" is getting some of our best talent.

Barney Barnard, Richfield's San Joaquin scout, has been sporting around the "Tall Corn State" recently. A late vacation in a late model car with a "three-tone" paint job.

Union Oil Company in Bakersfield has a new "bugman", a graduate of Rostou, Russia, with a Masters degree. Welcome to you, Michael Trapesonian. Michael recently worked for our late friend Paul Goudkoff.

Anyone wishing to know if "pet coons" are really crazy can ask Cutler Webster. He has one. Cutler is with Honolulu Oil Corp. in Bakersfield.

J. Thomas Llewellyn, geologist for Honolulu Oil Corp., formerly employed at Bakersfield until 1953 and since then at Billings, Montana, is being transferred November 1, 1955, to their San Francisco office.

T.W.A. has announced the following changes in assignment of personnel effective October 3, 1955: The office of Division Geologist in San Francisco, which has been vacant since last February when H. H. (Hank) Neel was made Manager of Exploration, is now held by A. S. (Ike) Holston. Ike was in the Los Angeles area for T.W.A. over thirty years, and was Coastal District Geologist at Ventura for a few months just prior to his new assignment. Harry Whaley is now Coastal District Geologist at Ventura. Douglas G. Andrews has been transferred from Sacramento to serve as Staff Geologist in San Francisco.

One night recently when the roughnecks emerged from the dog house at Richfield's Weyerhaeuser 1 in Washington, they found a curious young bear sniffing around the steps leading to the derrick floor while the driller, with brake set, was several feet up the derrick frantically trying to scare the bear away.

Vince Finch, Northwest Division Manager for Shell, is spending his vacation taking advantage of various hunting seasons around the country. We heard he got his buck.

Paul Day of Western Gulf, who annually migrates north and south with the birds, is vacationing at Palo Alto on his way back to Santa Maria.

Max Green, junior paleontologist, has joined the staff of Shell at Elma, Washington.

Dick Brooks is assisting Les Brockett on Richfield's well in Washington. Dick is a native of the Northwest, so he should be accustomed to rain.

Hank Charles, Humble, scouted the reported oil show in the Tia Juana River and found it to be a drainage problem. Hank talked to a service station attendant who had been dumping crank-case oil in the gravel above the 80' water well from which water with an oil showing was bailed. This oil showing received international publicity, the report was circulated widely by the Governor of Baja, California.

R. G. (Scotty) Greene, Manager of Exploration for the Union Oil Company, has resigned. It has been reported that Scotty will form his own organization to engage in Exploration and Production.

Dick Haines has been seen lately in many of our Western states. Fishing equipment, guns and maps were not observed with his baggage?

Roland Bain, Texas Company, married Sylvia Spencer recently at Westwood. Roland will be working in the new Texas Company District Office Building in Long Beach. The address of the new district offices is 1215 East San Antonio Drive, Long Beach 7, Post Office Box 7221, Phone: Garfield 3-7994.

Dick Peryam, Union, is now handling the publicity for the A.A.P.G., including the convention.

NURSERY NEWS

To Dan and Barbara Nolan, Continental, a daughter, Nancy Margaret on September 16th, weighing 7 lbs., 6 ozs. This makes a full-house: 3 queens and 2 kings.

To Howard and Nancy Kinzey, with Shell at Elma, Washington, a son, Douglas Howard, September 29, 9 lbs., 9 ozs.

Hank and Del Tomko have a daughter, Deean Jo, born October 4, at Midland, Texas. The Tomkos will spend the winter in Houston, where Hank will take the Shell Training Course. He spent the last two summers in Alaska.

Chuck and Gini Cary now have a son, Mark Wesley. They also have a 4-1/2 year old daughter.

To Frank and Della Rose, Shell, a son, Frederick, born October 17, weight: 7 lbs., 3 ozs.

To Roger and Stella Dungan, a son - James Richard, 6 lbs. 10 oz. in Houston, Texas. This is number two for the Dungans. Congratulations may be mailed to 4038 Silverwood, Houston, Texas.

BIBLIOGRAPHY OF RECENT PUBLICATIONS

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"Geologic and Airborne Radioactivity Studies in the Rock Corral Area, San Bernardino County, California", R. M. Moxham, G. W. Walker and L. H. Baumgardner, Bulletin 1021-C, 1955.

"The Central Kuskowim Region, Alaska", W. M. Cady, R. E. Wallace, J. M. Hoare and E. J. Webber, Professional Paper 268, 1955.

Division of Mines, State of California

"Geology and Mineral Resources of the San Fernando Quadrangle, California", Gordon B. Oakeshott, Bulletin 172, 1955 (Note: map only available)

TRADE JOURNALS AND MISCELLANEOUS MAGAZINES

Oil and Gas Journal

"There's Oil Under Those Shelves", Henry C. Cortes and Ronald N. Gsell, Vol. 54, No. 22, October 3, 1955, pp. 103-107.

World Oil, Vol. 141, No. 5, October 1955

"Why Geologists should Know About Mud in Rotary Drilling", George R. Gray, pp. 117-120.

"Exploration Men Must Work Hard and Well to Find Needed Oil", Harold T. Morely, pp. 121-127.

NOVEMBER 10 - 11, 1955

Biltmore Hotel

CALENDAR

November 7, 1955: Mon., 7:30 p.m., Bakersfield Paleontologist's Biostratigraphy Seminar, Harvey Auditorium Building, Bakersfield Junior College. Dr. Donald E. Savage, U.C., will speak on "Vertebrate Paleo".

November 10, 1955: Thurs., 6:30 p.m., Los Angeles Basin AIME Jr. Petroleum Group dinner meeting, Turf Club, Lakewood Blvd., and Anaheim-Telegraph Road, Los Angeles. Mr. Philip L. McLaughlin, Cardwell Manufacturing Co., will speak on "Slim Hole Drilling." $3.00 for members, $3.50 for non-members.

November 10-11, 1955: Thurs.-Fri., Pacific Sections AAPG, SEG, and SEPM Annual Meeting, Biltmore Hotel, Los Angeles. Registration 8:00 a.m., Thurs. Dues will be payable at registration. Tickets for various luncheons and dinners will be available at registration desk. Unofficial college reunion luncheons are being arranged.

November 10, 1955: Thurs.,12:15 p.m. Pacific Sections AAPG, SEG, and SEPM Joint Luncheon, Renaissance Room, Biltmore Hotel, Los Angeles. Annual meeting guest of honor, G. Moses Knebel, National AAPG President, will discuss "National Affairs of the Association". Tickets $3.00.

November 10, 1955: Thurs., 7:00 p.m., Pacific Section SEPM Annual Dinner, Galleria Room, Biltmore Hotel, Los Angeles. Nominations and election of officers follow dinner. Mr. Weldon Rau, U.S.G.S., will give a paper entitled, "Foraminiferal Zonation in the Tertiary Sequence of Southwestern Washington". Tickets $3.25.

November 11, 1955: Fri., 12:15 p.m., Pacific Section SEG Annual Luncheon, Renaissance Room, Biltmore Hotel Los Angeles. Robert Dunlap, National SEG President will speak on "Present Trends in Geophysics".

November 11, 1955: Fri., 8:30 p.m., Pacific Section AAPG Annual Semi-formal Dinner Dance, Ballroom, Biltmore Hotel, Los Angeles. Dinner at 8:30, dancing from 9:30 to 1:30. Music by the Firehouse Five plus Two. $7.50 per person.

November 15, 1955: Tues., 6:30 p.m., San Joaquin Valley Chapter API Dinner Meeting, Petroleum Club, Taft. Subject open. Barbecued steak for dinner. Cocktails at 6:30.

November 21, 1955: Mon., 7:00 p.m., Geological Forum, General Petroleum Auditorium. "Report on the Jasper Field Conference, Sept. 14 - 17, 1955" by Anthony Morris, Consultant, with Kodachrome illustrations. Dr. Ian Campbell, CalTech will talk on "Highlights of the G.S.A. Convention, New Orleans, November 7 - 9, 1955".

November 28, 1955: Mon., 5:30 p.m., AIME All-Sections Dinner Meeting, Rainbow Room, Mayfair Hotel, Los Angeles. Mr. Botha C. Heilbron, Cameraman-Explorer, will present a film entitled, "Jungle Bread". Film shows how natives in Dutch Guiana transform a poisonous root into bread. Steak dinner at 6:30 p.m., $4.80 per plate. Wives and guests invited. Contact J. I. Gates, MAdison 5-7341, for reservations.

December 1, 1955: Thurs., 12 Noon, Pacific Section AAPG luncheon meeting, Rodger Young Auditorium, Los Angeles. Dr. John McGill, Engr. Geol. Br., USGS, will speak on "Geology and the Residential Building Site".

December 5, 1955: Mon., 7:30 p.m., Bakersfield Paleontologist's Biostratigraphy Seminar, Harvey Auditorium Building, Bakersfield Jr. College. Dr. William H. Easton, U.S.C., will speak on "Why Paleontological Correlations are Possible".

December 6, 1955: Tues., 6:30 p.m., Cal. Tech. Branner Club Dinner Meeting, Athenaeum, Cal. Tech. Mr. Fred Vandenburg, Kern Oil Co., will speak on "A Geological Reconnaissance of Turkey".

PACIFIC PETROLEUM GEOLOGIST
PACIFIC SECTION, A.A.P.G.
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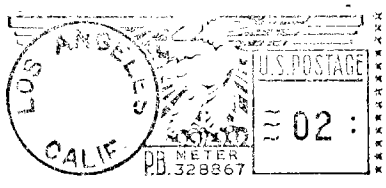
Vol. 9 No. 11



Mr. F. R. Neumann
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Chico, Calif.

Form 3547 Requested

PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 9 December 1955 No. 12

ASSOCIATION ACTIVITIES

A.A.P.G. FORUM

Dr. Ian Campbell of Cal.Tech., Mr. Mel Hill, Western Gulf, and Mr. Tony Morris,Consultant, addressed the November meeting of the Los Angeles Forum. Messers Campbell and Hill presented a talk entitled "Highlights of the G.S.A. Convention". Mr. Morris' talk was "A Report on the Jasper Field Conference". Both papers were illustrated with Kodachrome slides.

The annual convention of the Geological Society of America was held for the first time in the South at New Orleans, November 7th to 9th. The recently organized Geomorphology group formally convened for the first time and a new body--The American Chemical Society--was formed. The structure of the G.S.A. Council was changed so that there are now twelve Councilors instead of nine. Four Councilors are elected each year to serve a three year term. There is only one Vice-President now instead of four. The new President of the Society is George Hume,Director of the Geological Survey of Canada. The Vice-President is Richard J. Russell, a former Californian, who will assume the Presidency a year hence. The next annual meeting will be held at Minneapolis, November 1st to 3rd, 1956. Successive annual meetings are scheduled for Atlantic City, St. Louis, and Pittsburg.

The American Geological Institute also met in conjunction with the G.S.A. The Institute's Committee on Professional Relationships proposed the drafting of a code of professional ethics. This code should be a statement of principle rather than a set of rules. The same committee although largely opposed to licensing of geologists, is nevertheless recommending the development of a "model law" to have in reserve should anything less favorable be proposed in any of the states.

Field trips were conducted to offshore drilling operations, to salt dome oil fields and to sulphur mining operations.

The technical sessions covered a multitude of earth science subjects ranging from Paleontology to Geochemistry. From the petroleum geologist's standpoint, the talks on Structural Geology, Stratigraphy, Geophysics and parts of the general sessions were the most fruitful.

A high point of the meeting was the presidential address by Dr. Walter Bucher on "The Role of Gravity in Orogenesis". Dr. Bucher analyzed the relationship between gravity, isostatic readjustment, rock instability when over-elevated, and all related crustal movements associated with differential elevation. This paper, to be published shortly in the G.S.A. Bulletin, will be of considerable interest to oil geologists.

Because of the size and scope of the meeting individual attention cannot be given the papers. The December issue of the G.S.A. Bulletin will carry abstracts of all the papers and many will be published in full over the course of the next year. The strongest impression gained at the meeting is the breadth of geologic research being undertaken at the present time. Ideas and theories are now being formed which will be future tools of the economic geologist.

The Fifth Annual Field Conference of the Alberta Society of Petroleum Geologists was held jointly with the Western Canada Regional Meeting of the A.A.P.G. at Jasper, Alberta, September 14th through 17th, 1955. Some 460 geologists, 140 with their wives, invaded Jasper Park Lodge. The first two days of the meeting were occupied by the presentation of two symposia; one on the Jurassic and the other on the Mississippian rocks of western Canada. Both groups of strata have promise as future oil reservoirs but neither has produced appreciably to date. The last two days were devoted to field trips, one in the vicinity of Jasper, and the other from Jasper to Banff, 185 miles southeast.

Jasper is in the heart of the Canadian Rockies. They are the easternmost of the mountain ranges of Western Canada. The Rockies are a distinct geographic province. Their eastern border is indefinite as they blend into the plains. Their western border is abrupt, being a remarkable feature called the Rocky Mountain Trench. Topographically the Rockies are a series of northwest trending ridges and valleys gradually increasing in height westward. As a geographic province the Rocky Mountains can be divided into two sub-provinces, the Foothill Belt and the Main Ranges. The Foothill Belt rises out of the plains and reaches a maximum elevation of about 8000'. To the west the Main Ranges reach altitudes up to 12,000'. The boundry between the two sub-provinces is three miles east of Jasper and trends southeasterly.

The Rocky Mountain Province and sub-Provinces are geologic as well as geographically controlled. The basic northwest trending ridge and valley pattern is controlled by a series of similarly trending folds and thrust faults. The boundary between the Foothill Belt and the Main Ranges is a large fault, the Castle Mountain Thrust, traceable 140 miles southeast from Jasper. In the Foothill Belt to the east the rocks are tightly folded and intensively thrust faulted. Fifteen major thrusts are mapped in this sub-province along the Athabaska River northeast of the Castle Mountain Thrust. No major faults are present west of this point to the Rocky Mountain Trench, itself a fault controlled valley. Rocks of the Foothill Belt are largely upper Paleozoic and Mesozoic. They have an aggregate thickness of 17,000' along the Athabaska River. About one third are Paleozoic and most of the remainder are Cretaceous. Strata of the Main Ranges are folded into one large syncline and anticlinal complex. The syncline,known as the Castle Mountain Syncline,starts at Jasper and is traceable almost to Banff. The anticline, variously known as the Fraser or Bow Valley Anticline, can be followed from a point 80 miles northwest of Jasper to the latitude of Lake Louise, over 200 miles total distance. Both folds plunge gently southeast to a low about 80 miles southeast of Jasper and then rise again steadily to the southeast. Rocks of the Main Ranges are generally upper Proterozoic and lower Paleozoic. Youngest sediments present are found in the synclinal depression and are Mississippian age.

NEXT DEADLINE DECEMBER 29

ROCKY MOUNTAIN SECTION, A.A.P.G.

The Rocky Mountain Section of the American Association of Petroleum Geologists will hold its Sixth Annual Meeting in Denver, Colorado on February 27th, 28th, and 29th, 1956. The theme of the meeting will be "The Tectonic Framework of the Rocky Mountains". In addition to papers stressing the influence of tectonics on petroleum accumulation, several papers will be presented on the tectonic significance of uranium accumulation.

Further information can be had by writing to the Rocky Mountain Section, A.A.P.G., 1210 Mile High Center, Denver, Colorado.

SACRAMENTO GEOLOGICAL SOCIETY

The Sacramento Geological Society held its regular monthly meeting November 1, 1955. Mr. Melvin J. Hill, Chief Geologist of the Western Gulf Oil Company, presented a paper entitled "Wrench Fault Tectonics". This paper was written jointly by Mr. Hill and Mr. John D. Moody and was given at the G.S.A. Meeting in New Orleans in November.

The authors, extending the work of Anderson, Hubbert and Hafner, develop the hypothesis that anticlinal folds, thrust faults and wrench faults can result from movement on a large wrench fault such as the San Andreas. This concept indicates that for any tectonic area eight directions of wrench faulting and four directions of anticlinal folding and/or thrusting should accomodate the structural elements. These directions should be symmetrically disposed relative to the direction of the primary compressive stress.

The authors' interpretation of tectonics in various areas indicate that wrench fault tectonic systems exist in nature and are aligned systematically over large portions of the earths crust as indicated by Hobbs, Vening Meinesz, Sonder and others. Eight principal wrench directions are defined in terms of major crustal elements such as the Alpine fault of New Zealand. Structural elements aligned in these eight directions constitute major features of Sonder's regmatic shear pattern. This shear pattern can have resulted from stresses oriented essentially meridionally which have been acting in the same direction throughout much of crustal history.

Major wrench faults, which penetrate the earth's outer crust and which result in wholesale segmentation of the crust into polygonal blocks, may constitute the primary type of yielding in the crust.

REGISTRATION ACT FOR GEOLOGISTS

Past-President Frank Parker appointed a committee to study the "Desirability of a Registration Act for Geologists". The committee consisted of William Porter II, Chairman, Mel Hill and Robert Patterson. The committee reported at the last business meeting on November 11th and the results of their findings are summarized as follows:

1. At the present time the Registration Act for Petroleum Engineers defines Petroleum Engineering in such a way that many of the normal functions of geologists are included. At this time there are no provisions making licensing mandatory in order to practice.

2. There have been attempts made to add "teeth" to the present registration law by amending it to make licensing mandatory. Until now these amendments have been killed in committee.

3. Regarding the desirability of a registration act for geologists, "it is the findings of the Committee that it is not practical at the present time for geologists to attempt to instigate the passage of such an Act." This opinion is based on the following facts:

a) "The Committee has discovered no enthusiastic group of geologists who care to do the necessary hard work that would be required and to oversee its sponsorship in the Legislature."

b) "Protection of such an Act against adverse amendments after introduction to the Legislature is vital."

c) "It is not simple to get an Act through the Legislature and to present one without adequate sponsorship would be a mistake. A minimum of $2,000.00 would be required, probably more. The source of these finances is not presently apparent."

In the light of the above findings and facts the following recommendations were made by the Committee:

1. "Pacific Section of the AAPG make no effort at the present time to provide for a Registration Act for geologists."

2. "No such effort be made in the future until the prerequisites of an enthusiastic group to spearhead such a project has become evident, and until the finances are available for the legal and other protection of such proposed Act in its course through the Legislature, and such committees of the Legislature to which such a Bill might be referred."

3. "The Pacific Section maintain a permanent legislative committee which should consist of adequate overlapping personnel to avoid the dangers which might arise if the personnel of a committee were numerically inadequate. The Section should not allow itself to become subject to the dangers which might arise if a small committee responsible for this protection would be out of the state, or otherwise unable to act at a critical period during the session of some future Legislature."

4. "The Pacific Section, with the help of future Legislative Committees, should work continually to bring about a change in the present requirements in the registration of Petroleum Engineers so that those requirements shall be brought into coincidence realistically with the scope of the field which actually embraces the practice of Petroleum Engineering. This can probably be done in cooperation with the AIME and other interested groups, and it should be a part of the program of the AAPG because so many members of the AAPG are qualified to do-and from time to time do professional work classified by the definition of the present registration act as 'petroleum engineering'. It should, therefore, be possible for those geologists to become registered, if desirable, and they should be permitted to do so by examination and other requirements which, in fact, represents the scope of the 'Professional engineering' work which they do."

PACIFIC SECTION APPOINTMENTS

Mr. Mason Hill, President of the Pacific Section of the A.A.P.G., is pleased to announce the following appointments for the coming year:

Forum Chairman	Jim Benzley
Distinguished Lecturer Ch.	Aden Hughes
Trust Fund Chairman	Frank Carter
Classification Comm. Ch.	Irv Frazier
Publicity	Bill Thomas
Legislation Committee (Chair)	Bill Porter
	Bob Patterson
Transportation Chairman	Homer Steiny
Projectionist	Bob Knapp
Sales-Official Publications (Guide Book, Directories, X-sections)	Joan Baldwin
Picnic Chairman	Sam Tate

ANNUAL HOLIDAY DINNER DANCE

On December 3rd, the Christmas Dance was held at the Oakmont Country Club. The evening's entertainment included a cocktail party from 7:00 till 8:30, followed by a lovely prime rib dinner and dancing to the music of Manny Harmon and his orchestra. The Dance Committee would like to express its appreciation to the following companies who sponsored the cocktail party:

Baroid Well Logging
Eastman Oil Well Survey Co.
Fairchild Aerial Surveys
Formation Logging Service
Geophysical Service Inc.
Halliburton
Homco
Johnston Testers Inc.
Lane Wells
McCullough tool Co.
Robert H. Ray Co.
Schlumberger
United Geophysical Co.
Western Geophysical Co.
Core Lab, Inc.

SANTA MARIA DISTRICT

Luncheon meetings are held on the first and third Tuesday of each month at the Santa Maria Club by geologists stationed in the Santa Maria area. Also, on the first Tuesday of each month there is an evening meeting held. Anyone interested in attending these meetings are cordially invited to do so.

CENTRAL CALIFORNIA OIL SCOUTS

Bakersfield members of the Central California Oil Scouts Association will host the First Annual Meeting of the Pacific Coast Oil Scouts and Landman's Association on December 15th in the Normandy Room of the Bakersfield Inn.

A business session beginning at 10:00 AM will be followed by a Technical Discussion "Latest Developments in Production Techniques" by John R. Fraser, Superintendent, Valley Division, Union Oil Co., Bakersfield.

The afternoon session, beginning at 2:00 PM, will feature "Exploratory Thinking" by Graham Moody, Consultant, San Francisco, formerly Chief Reserves Engineer, Standard Oil Co. of California, and "Cooperation in Oil Exploration" by Mason Hill, Chief Geologist, Richfield Oil Corp., Los Angeles, and President of the Pacific Section, A.A.P.G.

SAN JOAQUIN GEOLOGICAL SOCIETY

The San Joaquin Geological Society is pleased to announce the election of the following officers for 1956:

President	Horace E. Harrington Superior Oil Co. Bakersfield, California
Vice-President	William K. Gealey Standard Oil Co. Bakersfield, California
Sec.-Treas.	Douglas Wilson Intex Oil Co. Bakersfield, California

NORTHWEST GEOLOGICAL SOCIETY

The Northwest Geological Society held its regular monthly dinner meeting in the Banquet room of the St. Helens Hotel in Chehalis, Washington on November 28th beginning at 6:00 PM. Prior to the evening meeting an open house was held by the Colorado and Wyoming Drilling Co. at the well site of the Siler and Tanner Kostick No.1 well, to which all members of the Northwest Geological Society were invited.

NORTHERN CALIFORNIA GEOLOGICAL SOCIETY

The following officers have been elected by the Northern California Geological Society for the coming year and will take take over their respective offices immediately:

President	Stanley Knouse Tide Water Associated San Francisco, California
Vice-President	Kenneth Edwards California Exploration Co. San Francisco, California
Secty-Treas.	Herschel Driver Standard Oil Company San Francisco, California

The monthly luncheon meeting of the Society was held at Gino's Resturant, San Francisco, November 14. The meeting featured a very interesting 3-D film on geological mapping by Geophoto Service Co. More than 35 Northern Area geologists attended.

COAST GEOLOGICAL SOCIETY

The Coast Geological Society is pleased to announce that the following officers have been elected to serve for the coming year:

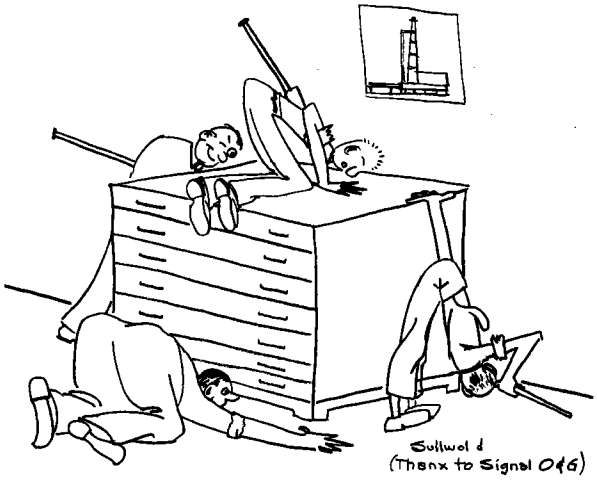
President	Otto Hackel Intex Oil Co. Ventura, California
Vice-President	Joe Ernst The Texas Co. Santa Maria,California
Secretary	Bob Nesbit M.J.M. & M. Ventura,California
Treasurer	Charles Sturz Tidewater Associated Ventura, California

BAKERSFIELD PETROLEUM WIVES

The Association of Petroleum Wives of Bakersfield held their annual Christmas Dance on the evening of December 2nd at the Bakersfield Country Club. Mesdames Stuart Smith,James Tasker,Tom Wotton,and Robert Kropschot handled the problems of tickets,decorations,refreshments, and name tags to engineer a most successful dance.

PACIFIC SECTION DUES

All members who have not yet paid their Pacific Section dues for the coming year are urged to do so immediately. Please send checks payable to the Pacific Section,A.A.P.G. to the Treasurer, Everett Pease,c/o Sunray Oil Co., 714 W. Olympic Blvd., Los Angeles,15, Calif. Payment of the yearly dues of $2.50 entitles each member to purchase one copy of the Directory for $1.00 instead of the regular price of $3.00. Please submit separate checks for your dues and the Directory if you want to pay for both as it greatly simplifies the work of the Treasurer.



YOU SURE THERE'S A QUARTER BACK HERE?

PERSONAL ITEMS

Robert E. Arnal joined Western Gulf's Ventura office as a paleontologist on November 1st. Bob attended U.S.C.

The degree of PhD. was conferred on Frank Wang, Western Gulf, Ventura, by the University of Washinton,in June, 1955.

C.F.(Mike) Adams, Western Gulf, and Ruth Williams,Shell Chemical, were married on October 29th in Los Angeles. Congratulations, Mike.

Anyone knowing of an unused aircraft hangar, please contact Bill Castle of Richfield. It seems that Castle's castle is getting too small; not enough room to bowl in his living room any more.

Jack Kappeler, Tide Water Associated in Ventura, has been taking extensive golf lessons from T.W.A.'s land man in Ventura,John Woffington. From the stories we hear, John used to spot Ben Hogan only 3 strokes for the 18 holes.

Ray Arnett was seen leaning heavily on the wailing wall. Ray says that next year he will bet lobsters or abalone on U.S.C. instead of money.

Paul Dudley, consultant, is now working for the Philippine Oil and Development Co. in the Cagayan Valley in northeastern Luzon, P.I. Paul's friends can write to him by addressing their letters: c/o P.O.D., 5th Floor, Soriano Bldg., Plaza Cervantes, Manila, P.I.

The exploratory activity of Pacific Western Oil Co. is to be considerably curtailed and as a result the geological staff of Pacific Western has been transferred to work in the geological staff of Tide Water Associated Oil Co. Mr. Stan Siegfus, who has been with P.W. for 13 years,and Mr. Clyde Cotton can now be addressed as follows: c/o T.W.A., Rm. 898, 610 So. Main St., Los Angeles. Mr. Wes Porter and Mr. Joe Dunwoody will now be in the Bakersfield office of T.W.A.

J.W. Marlette, previously with the California Dept. of Water Resources, has recently joined forces with the L.A. Basin district offices of The Texas Company.

The Texas Company has recently moved its L.A. Basin district offices from the Texas Company Building in downtown Los Angeles to:

1215 East San Antonio St.
Long Beach,7, California

Noel Street with Tide Water Associated in Bakersfield was recently promoted to Lt. Colonel in the Cavalry Reserve.

A few thursdays back, Bob Maynard,Sunray, Bakersfield, got"thonked on the noggin" by somebody's wild drive on the 4th hole of the Kern River Golf Course. Returning to consciousness after the ball had been removed from a large dent in the top of his head, Bob was heard to mutter something about golfing only on the week-ends in the future. He is currently suing the course for a free pass to continue the unplayed 14 holes.

Richfield's modern-day Marco Polo, Bill Bishop of Ojai is off again. This time to Milano, Italy, as Richfield's representative.

The Texas Company of Santa Paula's Sea and Ski Club has been reactivated; Jim Babcock and Lee Freeman officially opened the skiing season at Mammoth Basin recently. Jim Vernon is keeping the beaches open by surf boarding week-ends, and Roy Miley is avoiding any athletic endeavor.

Bob Hacker, Union Oil of Santa Paula, recently had a "perfect" vacation. One week in San Francisco which included the sight of Stanford beating California and a good burlesque show.

Tex "Sure Shot" Leverett of Union in Santa Paula, recently returned to Santa Paula with a bag of four big pheasants. He's keeping his hunting spot secret,but rumor has it that it really is the San Diego zoo.

Rex Grivetti, Texas Company in Santa Paula, has all of his packing done and is anxious to make his big move into his new home just off Telegraph Road in Ventura.

Ed Hall,Union Oil Co.,Santa Paula, is reportedly recovering from the flu at his parent's home in Sonora.

Gene Wiancko, Union's traveling troubador from Santa Paula, is off on a business(well, it will probably go on his expense account that way) trip to Arizona and Old Mexico.

Imagine the cold atmosphere that must prevail in Continental's Exploration office in Olympia, Washington. Ken Bishop--U.S.C. and Wayne Marrs--U.C.L.A.

Standard Oil geologists in the L.A. office are breathing much easier these days now that football season is nearly over. Those Monday morning payoffs to Mickey McKnight sure got tiresome.

Art Weller has recently replaced Don Gresser as district geologist for Shell in Ventura. Don has gone to Durango, Colorado to take over a similar position.

Hal Clifford,Shell,Ventura, is busily packing for his forthcoming transfer to Bakersfield, California.

Ralph Hawkins, Shell, Ventura, by perseverance,practice, and the liberal use of money,has finally become adroit enough at golf to feel sure he can beat Tom Cate. Time and place for this comedy of errors is yet to be set.

Tom Benson, Texas Company in Santa Maria, has recently become the proud owner of a sleek foreign car, known to Santa Marians as Benson's Burner or Bomb, or something like that.

Several scenes from the movie"The Spirit of St. Louis", a biography of Charles Lindberg's life, were filmed recently in Santa Maria. At about this same time, many geologists in the area are reported to have spent many hours in the field, but very few of them were hired as extras.

Glenn Prosser, Formation Logging Service Company, recently left for the sunny isle of Trinidad to relieve Jim Padick who will return to the States for a short vacation before going to the Philippines for a years stay.

Don Six,geologist for The Texas Co., and previously in the Taft office, has just returned to the Bakersfield office after two years military leave. Welcome back, Don.

Irv Schwade, Richfield Oil Corp., is currently touring Peru in the company of Jim O'Flynn. It is now springtime in Peru...an ideal time for any kind of reconnaissance.

Al Johnston, veteran Sacramento development geologist with the Standard Oil Company, is seeking new horizons to conquer. As of January 1st he will be calling Los Angeles his home where he hopes to become familiar with that black stuff called oil.

A.H. Masarin, operator and producer,has recently opened offices in the Country Club Centre,Sacramento. Mr Masarin comes to the Sacramento Valley from Texas where he attained considerable experience in gas production.

Joseph L. Harvey, graduate student from the University of Washington and a member of General Petroleum's Alaska crew, is being transferred to G.P.'s Sacramento office.

Ernie Bush, geologist with General Petroleum Corporation in Sacramento, and his wife,Lynn, recently returned from a week's vacation in Guaymas, Mexico, via Las Vegas, Nevada. (Your lucky to get home Ernie.)

Darrel Kirkpatrick and Fred Green,Bakersfield consultants, have announced the removal of their offices to 1603 California Street, Room 111. The telephone number is FA- 7-0214.

His many friends and associates in the petroleum industry were extremely saddened by the passing of Einar (Roy) Johnson, engineer for Franco-Western Oil Co., Bakersfield.

Bakersfield consultant Jack Senteur de Boue has recently startled the San Joaquin Valley by recovering a perfectly preserved Trematode parasitically enclosed in a Taxocrinus praestans from an Etchegoin core in a client's well near Red Bluff. (Paris papers please note)

Gene Poush of Western Gulf land department is leaving the Sacramento Valley area due to health problems in his family.

A well known scout was recently seen with blue prints under his arm inspecting a "no-dope" L.S.M. which is being re-converted into a drilling boat at the Craig Shipyards in Long Beach.

Scouts in the Ventura area who were tuned in on Channel 5 had an easy job of scouting due to atmospheric conditions. Radio communications between Union's Del Aliso 2-67X(New Pool Discovery) and the Santa Paula office came in loud and clear on Channel 5.

George Lutz,paleontologist,Shell Oil Co., Ventura(on temporary assignment in Elma,Washington) has been bitten hard by the outdoor activity of the Northwest. He now has so much money invested in hunting and fishing gear that he can't afford to go back to California.

M.C. Price,geologist for Shell Oil Co. in Elma, Washington, is spending the winter in Houston, Texas. He is taking the Shell training course there.

Dick Fiske and Thomas Steiny have recently joined the staff of the Union Oil Co.,Santa Maria Division and are presently mapping for Union in the Santa Cruz Mountains. Frank Noble is in charge of the mapping operations there and is getting much able assistance from both Dick and Tom.

Jim O'Flynn,Richfield Oil Corporation, is now basking in the warm sunshine in Peru. Jim's wife,Lois, and daughter,Mike, are scheduled to follow him in approximately 3 months.

Jim Moore,paleontologist,Shell Oil Co., Elma, Washington,picked the coldest week in November in the history of the Washington weather bureau for one of the weeks of his vacation. His only consolation was that he got his limit of ducks in two days. Were they frozen in the ice,Jim?

Jim Mercer, formerly with Richard Rheem in Bakersfield is now with Tide Water Associated in the Ventura office. Jim will now be working at his old love...geophysics.

The "El Camino Real" is rapidly becoming a regular vacation special in geological circles. Following the tire tracks of Art Huey, Hancock, Jim Anderson of Kern Oil and family will make the trek along the old "Royal Road" from Los Angeles down the west coast of Mexico to Mexico City on his vacation next month.

NURSERY NEWS

To Robert E. and Frances Annabelle Arnal, with Western Gulf at Ventura, a son, Michael Phillippe, September 8th. Weight 9 lbs. 5 oz.

To Marilyn and Hero Skolnick, Western Gulf, Ventura, a daughter, Tamara, November 18th. Weight 7lbs.

To Patty and Vern Crackel, Western Gulf,Ventura, a son, Kevil Cullen, on October 10th. Weight 7-1/2 lbs.

Dolores and Bob Hoffman,Tide Water in Ventura, daughter, Laurel Ann, on August 1st. Weight 7 lbs.

Gloria and Thomas Cate, Shell, Ventura, a son, on November 30th. Weight 9 lbs. 1 oz. The baby's name will be announced later as the father is still suffering from shock and cannot be reached at this time.

Vivian and Tom Hopkins, Tide Water, Ventura, a girl, Cheryl Denise, November 30th. Weight 7 lbs. 5 oz.

To John and Lola Beall, Shell, Seattle, a son, John,Jr., born October 29, weight 6 lbs 10 oz. At his present rate of growth John figures that Jr. will be the size of an elephant by the time he is ready for school.

Tide Water Associated's Bakersfield office has announced news of three major developments in the nursery line in the past month. The proud parents and the new offspring are:

To Bud and Betty Johnson, a boy, Mark.
To John and Ophelia Pujol,a boy, Marc.
To Dave and Margaret Ann Costello, a girl, Marguerite Ann.

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"Geology of a Portion of the Elsinore Fault Zone, California", John F. Mann,Jr.,Special Report No. 43, 1955

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TRADE JOURNALS AND MISCELLANEOUS MAGAZINES

The Independent, I.P.A.A. Monthly, November, 1955

"Geologists are Talking About...", Dr. A.I. Levorsen, P. 19

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"Report of Operations,1945 through 1954, Naval Petroleum Reserve No. 1, Elk Hills", F.W. Gooch,Jr. and R.H. Adams, pp 13-20.

Oil Forum, Mid-November, 1955

"California Can Still Strike It Rich", Charles W. Jennings, p.438

World Oil, Vol. 141, No.6, November, 1955

"A Microbiological Method of Prospecting for Oil", Dr. R.J. Strawinski, pp 104-115.

CALENDAR

December 6, 1955: Tues., 6:30 p.m., Branner Club Dinner Meeting, Athenaeum, Cal. Tech. Mr. Fred Vandenberg ,Kern Oil Co., will speak on " A Geological Reconnaissance of Turkey"

December 6, 1955: Tues., 6:30 p.m., AIME San Joaquin Valley Chapter Dinner Meeting, Stockdale Country Club, Bakersfield. "Drilling Offshore From a Man-Made Island" by F.E. Schoonover, Monterey Oil Co. After the featured speaker, a color sound film entitled "Off Shore" will be shown through the courtesy of the J. Ray McDermott Co.

December 6,1955: Tues., 6:30 p.m., San Joaquin Geological Society Dinner Meeting, Hotel El Tejon. "Geological Reconnaissance of Eastern California Desert Area" with illustrations, by Robert L. Johnston, Western Gulf Oil Co.

December 6, 1955: Tues., 7:30 p.m. The Santa Maria Discussion Group. Union Oil Bldg., Orcutt, California. Mr. Charles E. Monson, Schlumberger, will speak on "An Introduction to the New Schlumberger Chart Book with Practical Examples of its use".

December 8, 1955: Thurs., 6:30 p.m., Los Angeles Basin AIME Jr. Petroleum Group Dinner Meeting, Turf Club, Lakewood Blvd. and Anaheim-Telegraph Rd., Los Angeles. Mr. Charles S. Matthews,Senior Research Chemist, Shell Development Co., Houston, Texas, will speak on "Effect of Dip on Five Spot Sweep Pattern"

December 8, 1955: Thurs., 12:00 noon, SEG Noon Luncheon. The Biltmore Hotel Conference Room #1, Los Angeles, California. Mr.J.M. Cunningham, Techno-Instrument Co. will speak on "Magnetic Mirragraph Equipped with Normal Moveout Correction"

December 10, 1955: Sat., 9:00 p.m., Sacramento Petroleum Wives Annual Christmas Dinner Dance will be held at Danisio's. Smorgasbord will be served at midnight. Reservations must be made by December 6, 1955. The cost will be $6.00 per couple. Make check payable to "Petroleum Wives Club". Mail reservations to: Mrs. Joe Floyd, 1804 Eastern Ave., Sacramento,21, California

December 13, 1955: Tues., 7:30 p.m. Geological Society of Sacramento meeting in the Board Room, Public Works Building, 1120 "N" Street, Sacramento. The program will consist of short talks and discussion periods by the following speakers:

Anatole Safanov,"The River Island Sand",
W.I. Gardner,"The Trinity River Project",
Ray Tabor, "San Francisco Skyway Exploration",
R.T. Bean, "Proposed Ground Water Basin Definition",
Seymour Mack,"Water Quality in Relation to Geology in Selected Basins in Siskiyou County".

December 13, 1955: Tues., 7:30 p.m., The Coast Geological Society Dinner Meeting, Montecito Country Club,Santa Barbara,Calif. Mr. D.B. Flynn, General Petroleum Corporation, will speak on "A resume of Oil Exploration in Nevada" with accompanying color slides.

December 15, 1955: Thurs., 10:00 a.m., Pacific Coast Oil Scouts and Landman's Association 1st Annual Meeting, Normandy Room, Bakersfield Inn. Morning and afternoon sessions will be held.

December 15, 1955: Thurs., 6:30 p.m., Central California Oil Scouts Association Annual Christmas Party, Hotel El Tejon, Bakersfield.

December 19, 1955: Monday Geological Forum. Meeting originally scheduled will not be held because of the Christmas season.

January 5, 1955: Thurs., 12:00 noon, Pacific Section, AAPG, Luncheon Meeting, Rodger Young Auditorium, Los Angeles. Mr. Carl H. Savit, Chief Mathematician of Western Geophysical Co., will speak on "Italy, the Future Oil Reserve of Europe".

January 9, 1955: Mon., 7:30-9:30 p.m., Bakersfield Paleontologists Biostratigraphy Seminar, Harvey Auditorium Bldg., Visual Aids Section, Bakersfield College. "Use of Sedimentary Current Structures in Working Out a Paleographic Story" by John C. Crowell, U.C.L.A.

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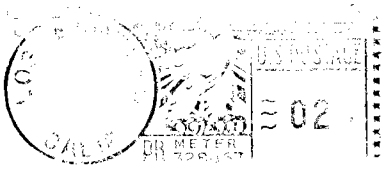

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