

PACIFIC PETROLEUM GEOLOGIST

1958

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

PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 12

January 1958

No. 1

ASSOCIATION ACTIVITIES

SACRAMENTO GEOLOGICAL SOCIETY MEETING

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

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

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

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

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

NOTICE

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

COAST GEOLOGICAL SOCIETY

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

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

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

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

NOTICE

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

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

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

BRANNER CLUB

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

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

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

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

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PACIFIC PETROLEUM GEOLOGIST

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

Editor	Millis H. Oakes
Assistant Editors:	
Activities	Tom O'Neill
Personal Items	Dean Laudeman
Selected Bibliography	Bob Badger
Calendar	Lucy Birdsall
Cartoonist	Bob Blaisdell
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	Mort Kline
Coast Correspondent	Don Henriksen
San Joaquin Correspondent	Dave Callaway
San Francisco Correspondent	Ken Edwards
Sacramento Correspondent	Bruce Hill
Northwest Correspondent	Ralph Rudean

NEXT DEADLINE JANUARY 30

NOTICE

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

FAMOUS LAST WORDS



NOTICE

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

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

PERSONAL ITEMS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

NURSERY ITEMS

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

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

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

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

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

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

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

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

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

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

CALENDAR

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

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

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

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

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

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

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

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

BIBLIOGRAPHY OF RECENT PUBLICATIONS

California Division of Mines

Bulletin 158

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

United States Geological Survey

Bulletin 1046-F

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

Bulletin 1056-A

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

Bulletin 1059-C

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

Bulletin 1066-C

Geophysical abstracts 170. July-Sept. 1957

Water Supply Paper
1492

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

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

Oil and Gas Map
OM 188

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

Map I-249

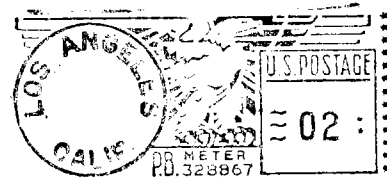
"Preliminary Geologic Map
of the Nulato and Kateel
Rivers Area, Alaska", by
R. S. Bickel and W. W.
Patton, Jr.

PACIFIC PETROLEUM GEOLOGIST
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Vol. 12

No. 1

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381 E. Fourth Street
Chico, California



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PACIFIC PETROLEUM GEOLOGIST

NEWS LETTER OF THE PACIFIC SECTION AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Vol. 12

February 1958

No. 2

ASSOCIATION ACTIVITIES

ONLY 220 OUT OF 1300 CALIFORNIA

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

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

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

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

K. L. Rathbun, Chairman,
Registration Committee.

SACRAMENTO GEOLOGICAL SOCIETY MEETING

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

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

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

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

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

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

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

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

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

A.A.P.G. LUNCHEON MEETING

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

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NEXT DEADLINE FEBRUARY 27, 1958

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

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

CONVENTION TO FEATURE AIR TRIP

GEOLOGISTS WILL VIEW SCENE BELOW FROM ABOVE

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

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

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

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

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



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

* NO RELATION TO M. KLINE.

1958 PACIFIC SECTION DIRECTORY

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

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

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

NOTICE

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

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

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

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

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

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

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

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

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

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

PRESIDENT

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

VICE PRESIDENT

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

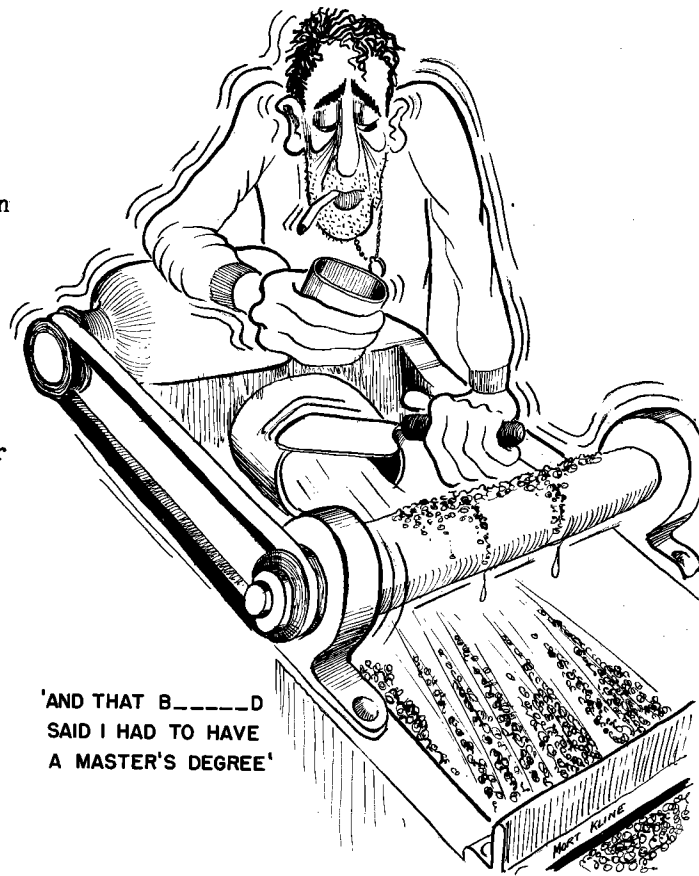
The members of the San Joaquin Geological Society enjoyed a very interesting and informative talk on "Geology of South Central Utah" by Mr. Otto Hackel of the Intex Oil Company at Bakersfield.

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

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

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

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



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

COAST GEOLOGICAL SOCIETY

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