

GEOTHERMAL HOT LINE

Published by the
Division of Oil and Gas
STATE OF CALIFORNIA

Issue No. 7

October 20, 1971

"I DO NOT KNOW WHAT I MAY APPEAR TO THE WORLD, BUT TO MYSELF I SEEM TO HAVE BEEN ONLY LIKE A BOY PLAYING ON THE SEA-SHORE, AND DIVERTING MYSELF IN NOW AND THEN FINDING A SMOOTHER PEBBLE OR A PRETTIER SHELL THAN ORDINARY, WHILST THE GREAT OCEAN OF TRUTH LAY ALL UNDISCOVERED BEFORE ME."

--SIR ISAAC NEWTON

WASHINGTON, D. C.

Following is an October 8, 1971, news release from the Office of the Secretary of Interior:

INTERIOR DEPARTMENT SETS HEARINGS ON DRAFT ENVIRONMENTAL
IMPACT STATEMENT FOR THE GEOTHERMAL LEASING PROGRAM

The Interior Department has scheduled a series of public hearings November 9-12 to receive comments on the environmental effects that could result from the implementation of proposed regulations for the leasing and development of federally owned geothermal resources.

Secretary of the Interior Rogers C. B. Morton said the hearings, to be conducted in Reno, Nevada; Sacramento, California; and Portland, Oregon, have been planned to enable organizations, public officials and the general public to express their views fully in the spirit of the National Environmental Policy Act of 1969.

The hearings also will give interested parties an opportunity to comment on the proposed leasing and operating regulations to implement the Geothermal Steam Act of 1970, Secretary Morton said. The Interior Department published the proposed regulations in the Federal Register on July 23, 1971.

The Interior Department on October 6 made public its draft environmental impact statement for the geothermal leasing program in a major step toward carrying out provisions of President Nixon's Clean Energy Message of June 4, 1971. In that message the President called for the development of geothermal resources to help meet the Nation's growing needs for clean energy.

The statement to be considered at the hearings contains environmental evaluations for geothermal leasing in three areas, the Clear Lake-Geyers in northern California; Mono Lake-Long Valley in central California, and the Imperial Valley in southern California.

All hearings will begin at 9:30 a.m. on the following days and locations: November 9: Federal Building, Bankruptcy Court Room, Room 4040, 300 Booth St., Reno, Nevada; November 10 and 11: Caravan Inn, Solarium Room, 2300 Auburn Blvd., Sacramento, California; November 12: Bonneville Auditorium, 1002 Northeast Holladay, Portland, Oregon.

Persons wishing to appear at the hearings should contact the Director, Office of Hearings and Appeals, Department of the Interior, 4015 Wilson Blvd., Arlington, Virginia 22203, phone 703-557-1500, no later than November 6. Written comments from persons unable to attend, or from those wishing to supplement their oral presentations which will be limited to 10 minutes, will be included in the hearing record if they are received by the Director by November 22.

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The Department of Interior also announced that the deadline for accepting written comments on the proposed geothermal leasing and operating regulations has been extended to November 12. Copies of these documents are available for review at all State Division of Oil and Gas and Division of Mines and Geology offices.

The draft of the "Environmental Impact Statement for Geothermal Leasing Program" is available for inspection or purchase (price: \$2) at the following:

Public Inspection Locations

Office of the Geothermal Coordinator
Room 7000, Interior Building
19th and E Streets, N. W.
Washington, D. C.

Bureau of Land Management Public Rooms at the following locations:

State Office
555 Cordova Street
Anchorage, Alaska

District Office
Lathrop Building
516 2nd Avenue
Fairbanks, Alaska

State Office
Room 3022, Federal Building
Phoenix, Arizona

State Office
Federal Office Building
2800 Cottage Way
Sacramento, California

District Office
1414 University Avenue
Riverside, California

State Office
Room 700, Colorado State Bank Bldg.
1600 Broadway
Denver, Colorado

Outer Continental Shelf Office
Room T-9003, Federal Office Bldg.
701 Loyola Avenue
New Orleans, Louisiana

Eastern States Land Office
7981 Eastern Avenue
Silver Spring, Maryland

State Office
Room 334, Federal Building
550 West Fort Street
Boise, Idaho

State Office
Federal Building and
U. S. Court House
316 N. 26th Street
Billings, Montana

State Office
Room 3008, Federal Building
300 Booth Street
Reno, Nevada

State Office
U. S. Post Office and
Federal Building
South Federal Place
Santa Fe, New Mexico

State Office
729 N. E. Oregon Street
Portland, Oregon

State Office
Federal Building
125 South State
Salt Lake City, Utah

State Office
U. S. Post Office and
Court House Building
2120 Capital Avenue
Cheyenne, Wyoming

Sale Locations

U. S. Geological Survey Map Information Office
Room 1028, General Services Building
18th and F Streets, N. W.
Washington, D. C. 20242

(Immediate over-the-counter
and mail order sales)

U. S. Geological Survey Public Inquiries offices at the following locations for over the counter sales only beginning October 11, 1971:

508 Second Avenue
Anchorage, Alaska

7638 Federal Building
300 N. Los Angeles Street
Los Angeles, California

504 Custom House
555 Battery Street
San Francisco, California

1012 Federal Building
1961 Stout Street
Denver, Colorado

Room 1C-45
1100 Commerce Street
Dallas, Texas

8102 Federal Building
125 South State Street
Salt Lake City, Utah

678 U. S. Court House
West 920 Riverside Avenue
Spokane, Washington

SACRAMENTO, CALIFORNIA

AB 2162, Seeley: This bill, which will change several sections of the Public Resources Code dealing with the regulation of geothermal operations, has passed the Assembly 71-0, the Senate 35-0, and is now awaiting the Governor's signature.

SB 834, Alquist: This bill, to appropriate \$100,000 to finance a study of geothermal power production, has apparently died in the Assembly Ways and Means Committee.

EL MONTE, CALIFORNIA

The Envirogenics Company has announced the receipt of a \$145,000 contract from the Department of the Interior's Office of Saline Water to design, build, and operate a pilot desalination unit that will run on geothermal fluids. Tests will be made on simulated brines at the O.S.W. facility at Wrights Beach, North Carolina. Field tests will subsequently be conducted on an actual geothermal well in the Imperial Valley of California.

WOODLAND, CALIFORNIA

The Northern California Chapter of the American Petroleum Institute has announced the fourth printing of "The Geysers Geothermal Field Guidebook." This publication was printed as a reference book for a field trip held in June, 1970. The guidebook contains articles on the history, geology, infra-red studies, geochemistry, drilling, reservoir engineering, and power plant construction at The Geysers and in other areas.

It is the first time that a comprehensive selection of articles on The Geysers has been published under a single cover. A revised map of the area is also included. The price of the guidebook, including postage, is \$3.50. To obtain a copy write: Northern California Chapter of the American Petroleum Institute, Box 541, Woodland, California 95695.

THE GEYSERS GEOTHERMAL FIELD

Magma Power Company, Thermal Power Company, and Union Oil Company of California have completed the world's largest known geothermal steam well at The Geysers Geothermal field, 80 miles north of San Francisco. The well, which reached a total depth of 4,400 feet, can produce 386,000 pounds of superheated steam per hour, equivalent to 18,000 kilowatts of electrical energy.

CHINA LAKE, CALIFORNIA

Carl F. Austin has announced the availability of a new geothermal publication entitled: "Geothermal Science and Technology, a National Program." The document outlines a national program studying the various types of geothermal systems. Included are aerial photos, aerial mosaics, maps, cross sections, and block diagrams of the various geothermal cells. To obtain a free copy, write: Naval Weapons Center, China Lake, California 93555.

BOULDER CITY, NEVADA

Robert T. Littleton, Regional Geologist, Region 3, U. S. Bureau of Reclamation, will present a co-authored paper at the national meeting of the Association of Engineering Geologists in Portland, Oregon, on October 21, 1971. The paper is entitled: "Hydrogeology and Heat Flow in the East Mesa Area of the Imperial Valley, California," by Dr. James Combs and R. T. Littleton.

MONO LAKE

Geothermal Resources International, Inc., spudded their exploratory well, "State PRC 4397.1" 1, Section 17, T. 1 N., R. 27 E., M.D.B. & M., on September 13. A total depth of 4,110 feet was reached on September 25, and a comprehensive set of logs was run. Temperatures and gradient recorded were disappointing, and the well was plugged and abandoned. G.R.I. made a commendable contribution to science by donating 5 hours of rig time to the U.S.G.S. for the running of an additional temperature survey.

Getty Oil Company still plans to spud an exploratory well, "State PRC 4572.1" 23-1, Section 23, T. 2 N., R. 26 E., M.D.B. & M., on the north shore of the lake near the southeast side of Black Point. The company has received the approval of all the concerned agencies, including the Mono County Planning Commission, and is proceeding with the grading of the location and access roads.

LAKE COUNTY

Eureka Magma Explorers spudded their first wildcat well, "Eureka-Magma" 1, Section 28, T. 13 N., R. 8 W., M.D.B. & M., on October 2 and are now drilling ahead below 3,500 feet.

Dr. Hamilton Hess, Professor of Theology at the University of San Francisco and a part-time resident of Cobb Valley, has accepted the appointment of the Sierra Club to the Geothermal Resources Council. Dr. Hess has been an active member of the Lake County Geothermal Control Council, and his membership should be a real asset to the G.R.C.

IMPERIAL VALLEY

The Imperial Valley Subsidence Detection Program will be officially under way with the commencement of surveying on first- and second-order nets about November 1, 1971. Robert Estes of the County of Imperial--phone (714) 352-2851--is the field coordinator. Following is a list of participants and the nets they are responsible for:

- | | |
|---------------------------------|--------------------------|
| 1. National Geodetic Survey* | 130+ miles - first order |
| 2. County of Imperial | 70+ miles - second order |
| 3. Imperial Irrigation District | 70+ miles - second order |
| 4. Bureau of Reclamation | 70+ miles - second order |

*Cooperatively funded by the County of Imperial, California Department of Water Resources, California Division of Mines and Geology, and California Division of Highways.

EAST MESA KNOWN GEOTHERMAL RESOURCES AREA (K.G.R.A.)

The U.S.G.S. has delineated the East Mesa K.G.R.A., which is located in the Imperial Valley of California. Sections, townships, and ranges of this area were published in the "Federal Register" on October 5, 1971. An addendum page for the "Special K.G.R.A. Issue" of the "Hot Line" is included with this issue.

MEXICALI, MEXICO

It has been reported that the Mexican government is planning to hold a geothermal symposium in Mexicali sometime after the first of the year. The symposium will probably include the presentation of papers and a field trip to the Mexican geothermal field at Cerro Prieto.

GEOTHERMAL RESOURCES COUNCIL

The Steering Committee of the Geothermal Resources Council met for the second time on September 24, 1971, in Olympia, Washington. Richard Bowen of the Oregon Department of Geology and Mineral Industry was elected as the first G.R.C. General Chairman. The Steering Committee was converted into the Executive Committee with all officers retaining their positions.

The council will hold its first general meeting in El Centro, California, on February 16, 17 and 18, 1972. The meeting will be held at the Imperial Valley College which is located just east of town. On the first day, a general meeting will be held which will include speakers from government and private groups. Papers of a more technical nature will be presented on the second day. Either a field trip or the Mexican symposium, if it takes place (see MEXICALI, MEXICO - this issue), is on the agenda for the third day.

The Chairman for the February meeting is: Robert Bates, State of Washington, Department of Natural Resources, P. O. Box 168, Olympia, Washington 98504, phone (206) 753-5330.

Preregistration is being handled by: Sam Dermengian, Citrus College, Business Education Department, Azusa, California 91702, phone (213) 335-0521. The registration fee is \$10.

Watch the "Hot Line" for additional information concerning the Geothermal Resources Council and the El Centro meeting.

HELICAL SCREW EXPANDER

The Hydrothermal Power Company of Pasadena, California, has announced a new system for the utilization of geothermal fluids to generate power. This system includes the use of a helical screw expander which functions as a turbine but operates on fluids that are not dry steam.

The noted advantages of a helical screw expander are as follows:

1. Operates on any fluid under pressure.
2. Accepts large amounts of particulate matter and dissolved solids.
3. Holds mineral deposition to a minimum because the meshing screws are self cleaning.
4. Operates at a low speed, thus reducing high radial load and balance problems.
5. Operates efficiently over a wide range of power loads at a constant speed.
6. May be applied to a wide range of geothermal fluid inlet conditions.
7. Produces typical efficiencies with a range of 70 percent.

This system has reportedly been tested for 24 hours at the Cerro Prieto steam field in Mexico. An extended test is being planned for the near future.

For additional information, contact: Roger S. Sprankle, Hydrothermal Power Company, Ltd., 2051 Woodlyn Road, Pasadena, California 91104.

GEOHERMAL RESOURCES BOARD - SACRAMENTO

The State Geothermal Resources Board met on September 17, 1971, in Sacramento. The board was briefed on the present status of geothermal activity in California by representatives of several agencies. The board also requested that a Technical Advisory Committee be formed.

The Technical Advisory Committee met for the first time on October 13, 1971. Jim Koenig, Division of Mines and Geology, was elected Chairman; Larry James, Department of Water Resources, Vice Chairman; and David Anderson, Division of Oil and Gas, Secretary. The boundaries of the first state Geothermal Resources Area, Honey Lake, were discussed at length. It was decided that the Division of Oil and Gas, the State Lands Division, the Department of Water Resources, and the Division of Mines and Geology would study the matter further and report at the next meeting.

WASHINGTON, D. C.

Senate Bill 564, introduced by Senator Packwood of Oregon (et al), is now in the Senate Interior Committee with no hearing scheduled (see issue No. 3 of the "Hot Line" for a description of the bill).

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NON-COMPETITIVE GEOTHERMAL OFFERS "REJECTED" IN MASS BY B.L.M.

The Director, B.L.M. has instructed the various land offices to return All non-competitive geothermal offers to the respective applicants together with an explanation to these applicants that their offers may be refiled during the simultaneous filing period that will be provided for when the final version of the proposed regulations are published. This order does NOT affect those preference rights applications filed pursuant to the grandfathers clause in the Act itself (Cullen's Oil Lease Information Service).

Direct all correspondence to:

Geothermal Hot Line
Division of Oil and Gas
1416 - 9th Street, Room 1316
Sacramento, CA 95814

If you wish to submit a newsworthy item, please make it as concise and complete as possible and include your name, address, and phone number.

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East Mesa K.G.R.A.

T. 15 S., R. 16 E., Sec. 13, E $\frac{1}{2}$; Sec. 23, SE $\frac{1}{4}$; Secs. 24 through 26, 35, and 36, all.

T. 16 S., R. 16 E., Secs. 1, 2, and 11 through 13, all; Sec. 14, E $\frac{1}{2}$; Sec. 24, N $\frac{1}{2}$.

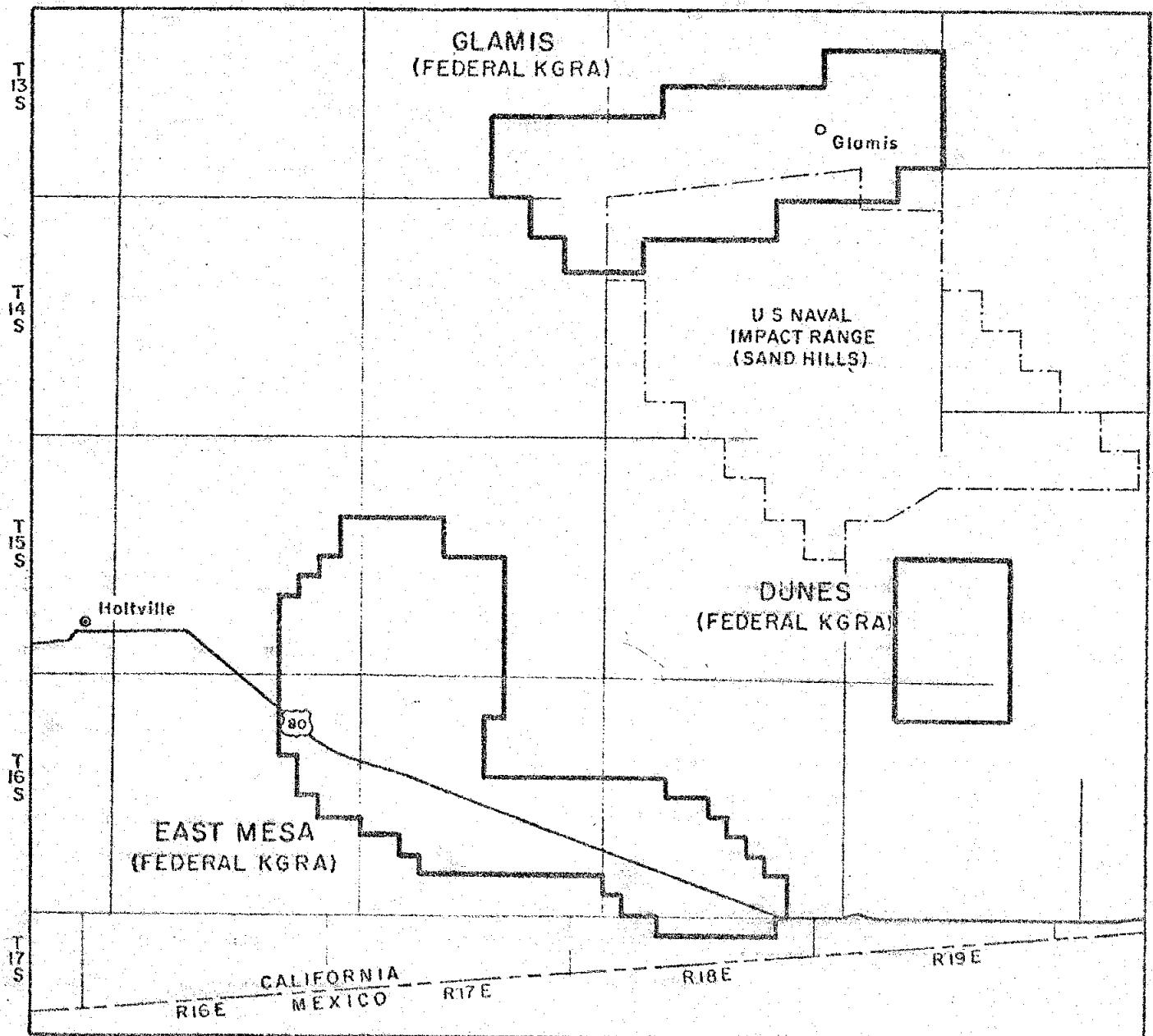
T. 15 S., R. 17 E., Secs. 17 through 21, all; Sec. 22, W $\frac{1}{2}$; Sec. 27, W $\frac{1}{2}$; Secs. 28 through 33, all; Sec. 34, W $\frac{1}{2}$.

T. 16 S., R. 17 E., Sec. 3, W $\frac{1}{2}$; Secs. 4 through 9, all; Sec. 13, S $\frac{1}{2}$; Sec. 14, S $\frac{1}{2}$; Sec. 15, S $\frac{1}{2}$; Secs. 16 through 28, all; Sec. 29, E $\frac{1}{2}$, NW $\frac{1}{4}$.

T. 16 S., R. 18 E., Sec. 17, SW $\frac{1}{4}$; Sec. 18, S $\frac{1}{2}$; Secs. 19 and 20, all; Sec. 21, W $\frac{1}{2}$, SE $\frac{1}{4}$; Sec. 27, W $\frac{1}{2}$, SE $\frac{1}{4}$; Secs. 28 through 30, all; Sec. 31, E $\frac{1}{2}$, NW $\frac{1}{4}$; Secs. 32 through 34, all; Sec. 35, W $\frac{1}{2}$.

T. 17 S., R. 18 E., Sec. 2, N $\frac{1}{2}$; Sec. 3, N $\frac{1}{2}$; Sec. 4, N $\frac{1}{2}$.

The area described aggregates 38,365 acres, more or less.



GEO THERMAL COURSE

The Division of Oil and Gas is organizing a short course entitled, "Introduction to the Study of Geothermal Resources," to be held in the Sacramento area. The course is tentatively scheduled for the week of December 6, 1971.

During the program, both known and probable geothermal resource distribution throughout the world will be examined. Geological, geochemical, and geophysical methods in mapping out probable geothermal areas will be considered. Case histories of various exploratory techniques illustrating procedures necessary for evaluating, developing, and using geothermal resources will also be studied.

The course instructor, Dr. Jim Combs, is an Assistant Research Geophysicist at the University of California, Riverside. He received his Ph.D. in geophysics from the Massachusetts Institute of Technology in 1970 and is co-author of two works on terrestrial heat flow.

Course meetings are tentatively scheduled for 9:30 - 11:30 a.m. and 1:30 - 4:30 p.m. on December 7, 8, 9, and 10. Exact location will be announced at a later date.

Cost will depend on the number of participants but will probably not exceed \$60 per person.

The total number of attendees may be limited and reservations will be accepted on a first-come, first-serve basis. Reservations must be received by the Division no later than November 19, 1971.

not send any money now; course fees will be announced on or about November 26 and will be collected at the first meeting.

Send your requests for reservations to:

Geothermal Operations
Division of Oil and Gas
1416 - 9th Street, Room 1316
Sacramento, California 95814

or call: Dave Anderson or Larry Axtell at (916) 445-4738.

**GEOHERMAL RESOURCES COUNCIL
EL CENTRO MEETING
FEBRUARY 16, 17, & 18, 1972**

LIST OF MEETING DIRECTORS

LODGING, FOOD FACILITIES, AND AUDIO VISUAL

Mike O'Donnell
Geothermal - Kinetics
301 W. Indian School Road
Phoenix, Arizona 85013
(602) 248-0202

MEMBERSHIP

Bob Greider
Standard Oil Co. of California
225 Bush Street
San Francisco, California 94104
(415) 434-7700

PUBLIC RELATIONS

Bob Bates
Washington Department of Natural Resources
P. O. Box 168
Olympia, Washington 98504
(206) 753-5330

FIELD TRIP TO MEXICO

David N. Anderson
Division of Oil and Gas
1416 - 9th Street
Sacramento, California 95814
(916) 445-9686

REGISTRATION AND EXHIBITS

Sam Dermengian
Business Education Department
Citrus College
Azusa, California 91702
(213) 335-0521

GROUND TRANSPORT - EL CENTRO

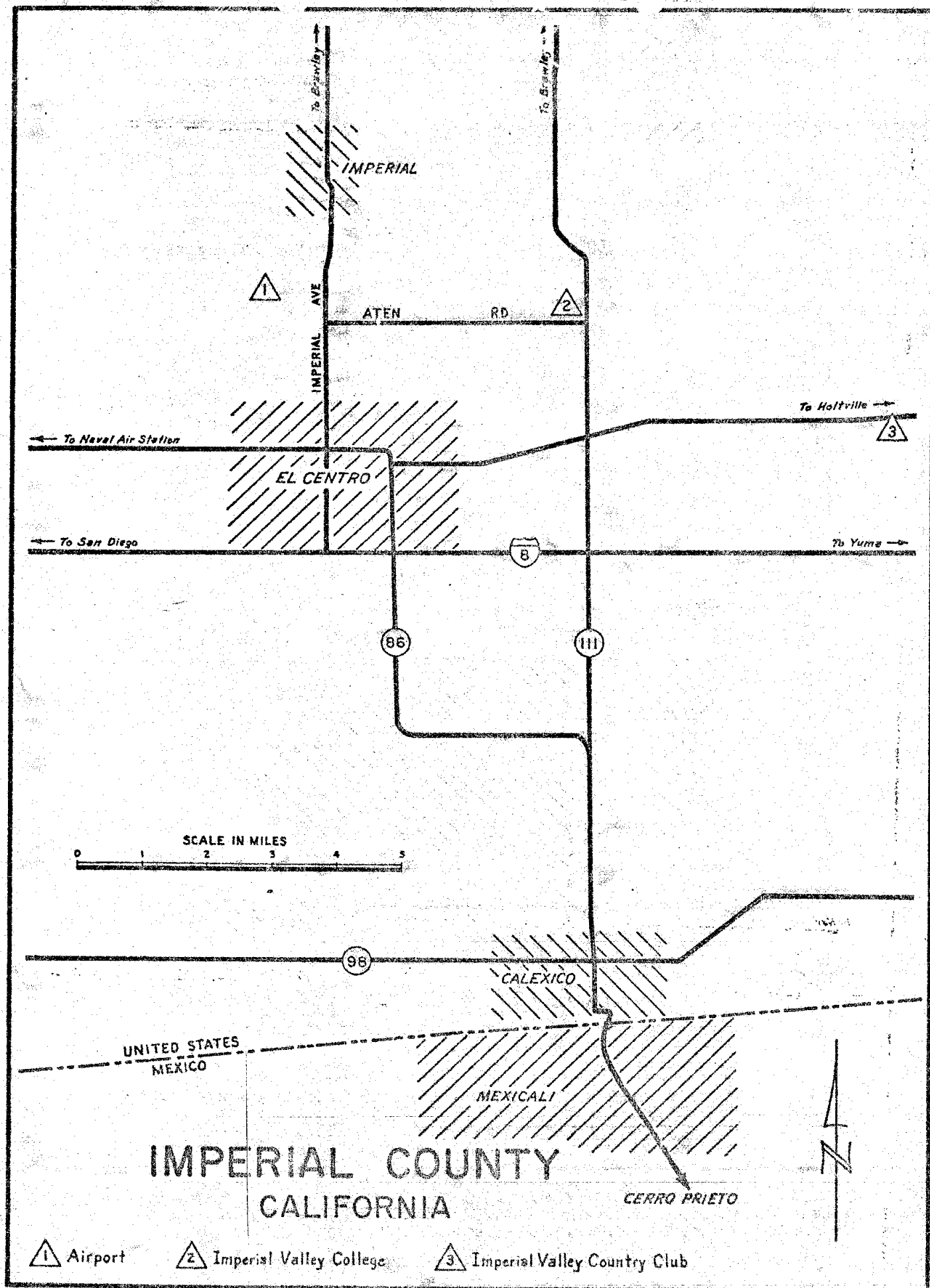
John Kilkenny
Union Oil Co. of California
P. O. Box 7600, Terminal Annex
Los Angeles, California 90054
(213) 482-7600

GENERAL PROGRAM

Dick Bowen
Oregon Department of Geology and
Mineral Industries
1069 State Office Building
Portland, Oregon 97201
(503) 229-5580

EL CENTRO AREA MOTELS

	Single	Double 1 bed	Double 2 beds	V.I.P. Suite	Hospitality Suite	
Airporter Inn (714) 355-2411	\$8.00	\$11.00	\$11.00		Yes	Room Deposit - \$8.32 required
Astro Motel (714) 352-0321	\$9.00	\$11.00	\$13.00		\$11.00	Room Deposit - \$9.45 required
Fabulous Inns of America (714) 352-6431	\$9.00	\$11.00	\$13.00			Room Deposit - \$9.45 required
Holiday Inn of El Centro (714) 352-5152	\$11.00	\$14.00	\$16.00	\$20.00	\$30.00	Room Deposit - \$10.00 required. Queen size bed, \$2.00 extra
Imperial Valley Country Club and Motel (714) 356-2806	\$14.00	\$16.00	\$18.00		Yes	Room Deposit - \$10.00 required. Nonresident green fees, \$4.00



PROGRAM OF EVENTS
GEOTHERMAL RESOURCES COUNCIL
EL CENTRO CONFERENCE
FEBRUARY 16, 17, AND 18, 1972

TUESDAY, FEBRUARY 15

3:00 p.m. Registration, Room 202, Holiday Inn, El Centro

8:00 Geothermal Resources Council, Executive Committee Meeting
Speakers invited. Imperial Irrigation District, Board of Directors
Building, El Centro - Robert Bates presiding

WEDNESDAY, FEBRUARY 16

Morning Session

7:00 a.m. Registration in the foyer, Imperial Valley Country Club

General Session

Richard Bowen Presiding
Imperial Valley Country Club, Assembly Room

8:00 - 9:15 Opening Statement and Welcoming Addresses

Richard Bowen, Chairman, Geothermal Resources Council
Economic Geologist, Oregon Department of Geology and Mineral Industries

James G. Stearns
Director of the Department of Conservation, State of California

Bert L. Cole
Commissioner of Public Lands, State of Washington

9:20 - 10:05 Worldwide Review of Geothermal Exploration and Development

James Koenig
Executive Officer, Division of Mines and Geology, State of California

10:05 - 10:25 Complimentary coffee in the lounge

10:25 - 11:05 Federal Geothermal Leasing and Operating Regulations and Environmental
Impact Statements

Reid Stone
Geothermal Coordinator, Department of the Interior

11:10 - 11:55 U.S.G.S. Research in Geothermal Resources

Dr. Patrick Muffler
Coordinator U.S.G.S. Geothermal Resources Program

12:00 - 12:30 p.m. Preparation for lunch

12:30 - 2:00 Lunch

Luncheon Speaker

Environmental Priorities, Human Needs, and Geothermal Power

Dr. Hamilton Hess
Sierra Club Representative

2:00 - 2:15 Travel to Imperial Valley College

Afternoon Session

2:20 - 2:30 Welcome to Imperial Valley College

Buck Paoli
Dean of Instruction, Imperial Valley College

2:35 - 3:15 Review and Discussion of Geothermal Exploration Techniques

Dr. Jim Combs
University of California, Riverside

3:20 - 4:00 Flashed Steam Power Plants

Jorge Guiza L.
Jefe del Departamento de Recursos Geotermicos, Comision Federal de Electricidad, Mexico

4:05 - 4:45 Dry Steam Power Plants

John Finney
Pacific Gas and Electric Company

5:00 - Exhibits

Evening Activities

7:30 p.m. Icebreaker cocktail party, no host

8:30 - 9:45 Banquet at the Holiday Inn

Banquet Speaker

Review of Some of the Legal Problems in Geothermal Development

Joseph Aidlin
Aidlin, Martin, and Mamakos

THURSDAY, FEBRUARY 17

Morning Session

Imperial Valley Country Club

7:00 a.m. Late registration

OVERVIEWS OF THE WESTERN UNITED STATES IN RESPECT TO GEOTHERMAL
EXPLORATION AND DEVELOPMENT

7:30 - 7:50	<u>California</u> Lawrence Axtell State Division of Oil and Gas
7:55 - 8:15	<u>Bureau of Reclamation - Imperial Valley Project</u> R. T. Littleton Regional Geologist, et al.
8:20 - 8:40	<u>Arizona</u> Dr. John Harshbarger University of Arizona
8:45 - 9:05	<u>Oregon</u> Richard Bowen Oregon Department of Geology and Mineral Industries
9:10 - 9:30	<u>Washington</u> Vaughn Livingston Washington Division of Mines and Geology
9:30 - 9:50	Coffee in the lounge, compliments of the Geothermal Resources Council
9:50 - 10:10	<u>New Mexico</u> Kelly Summers New Mexico Bureau of Mines and Mineral Resources
10:15 - 10:35	<u>Wyoming</u> Dr. Edward Decker University of Wyoming
10:40 - 11:00	<u>Idaho</u> Dr. Mont Warner Boise State College
11:00 - 11:25	<u>Utah</u> William Hewitt Utah Geological and Mineral Survey
11:30 - 12:00	Preparation for lunch
12:00 - 1:20 p.m.	Lunch

Afternoon Session

- 1:20 - 1:45 Travel to Imperial Valley College
- 2:30 - 2:50 Nevada
Larry Garside
Nevada Bureau of Mines and Geology
- 2:55 - 3:15 Montana
Cliff Balster
Montana Bureau of Mines
- 3:20 - 3:40 Colorado
Richard Pearl
Colorado Geological Survey
- 3:45 - 4:00 Summary of state overviews
- 4:00 - 4:15 Break
- 4:15 - 5:15 Subcommittee meetings

Evening Activities

- 8:00 p.m. Geothermal Resources Council, Executive Committee Meeting
Speakers invited. Room 202, Holiday Inn.

FRIDAY, FEBRUARY 18

Field Trip to Cerro Prieto, Mexico

- 7:30 a.m. Assemble and travel to Cerro Prieto steam field. The means of transportation to the border will be announced at the conference. Transportation from the border to the geothermal field will be provided. Our host, the Comision Federal de Electricidad, Division Baja California, will be providing tour guides and lunch.

Arrival back to the border should be between 3:30 and 4:00 p.m. Approximate arrival time in El Centro will be about 4:45 p.m.

MAY WE REMIND YOU:

Checkout time at most motels is 1:00 p.m. Baggage storage will be provided at the motels for those who wish to check out before the trip. All luggage must be tagged. Wear good, sturdy shoes on the field trip as the ground at Cerro Prieto is soft and uneven.

GEOTHERMAL RESOURCES COUNCIL
EL CENTRO CONFERENCE
FEBRUARY 16, 17, AND 18, 1972

REGISTRATION FORM

Please print or type:

Name _____

Firm or School _____

Address _____

City _____

Title _____

Phone Number _____

1. Registration fee (\$10.00)

Make check payable to "Geothermal Resources Council." _____

2. Banquet featuring prime rib at the Holiday Inn in El Centro,
February 16, 1972. (\$7.00 per person - limit 250 persons)

Yes _____ No _____

3. Cerro Prieto field trip (\$5.00 per person)

I will attend: Yes _____ No _____

The trip includes transportation to and from the field and a guidebook.
Lunch will be provided by the Mexican Government.

4. We have reserved blocks of rooms at several local motels (see list)
until the 10th of January. You must make your reservations directly
with the motels prior to this date or accommodations cannot be assured.

5. Please indicate if you plan to arrive: by plane _____ by car _____
Number in party _____

NOTE: We expect between 250 to 300 attendees at this conference. Do not
delay! Register now.

If you have already preregistered, please indicate whether you will attend
the banquet and field trip and mail this form together with a check or money
order. You may attend one or all of the functions. Women are welcome.

Send your registration form and remittance to:

Sam Dermengian
Citrus College
Azusa, CA 91702