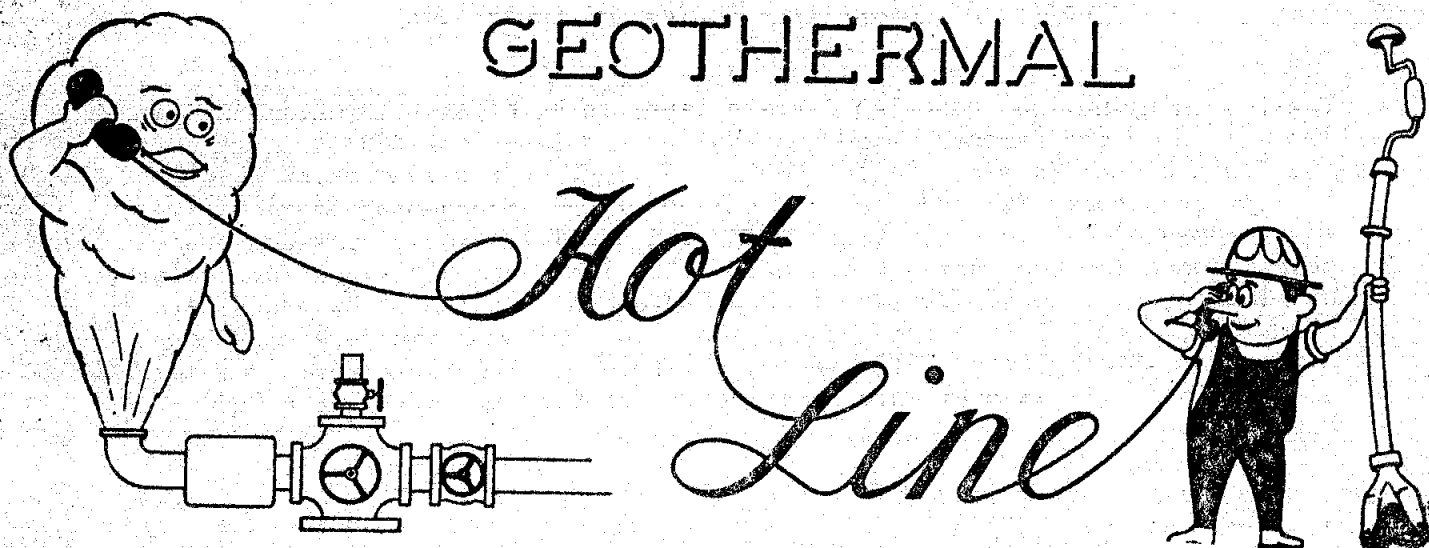


# GEOHERMAL



*A publication of the State of California - Division of Oil and Gas*

## SPECIAL REPORT

Volume 3, No. 7

December 1973

### FEDERAL LANDS AVAILABLE SOON

In a news release issued on December 18, 1973 by Secretary Morton of the Department of Interior, the following items concerning geothermal leasing on Federal Land were covered:

1. The geothermal leasing and operating regulations will be issued on December 24, 1973, and will become effective on January 1, 1974.
2. All Federal land not within a KGRA will be open to simultaneous filing beginning January 1, 1974, for a period of one month. A new simultaneous filing period will start on the first of February.
3. Operators can now file on an unlimited amount of acreage without accountability and are able to withdraw filing applications when desired.
4. The first Federal lease sale on KGRA lands is scheduled for January 22, 1974 in Sacramento at the Bureau of Land Management Office on 2800 Cottage Way. This first lease sale will only involve lands in The Geysers, Mono-Long Valley, and Imperial Valley KGRA's, totaling some 50,000 acres. The lands to be leased in Mono-Long Valley do not include the U. S. Forest Service Land which is withheld pending the completion of a development plan (Mono Plan) and evaluation by the U. S. Forest Service.
5. Applications for non-competitive leases and nominations for KGRA land will be accepted as of January 1, 1974. Lease, Bid, and Lease Offer forms will be available soon after the first of the year. For additional information contact George Nielsen, Bureau of Land Management, 2800 Cottage Way, Sacramento, California 95825, (916) 481-6100.

Following is a list of the lands to be leased and special stipulations:

## BUREAU OF LAND MANAGEMENT

### Notice of Competitive Geothermal Lease Sale

The following notices describe certain lands to be offered for competitive lease sale in the Geysers, Mono-Long Valley and East Mesa KGRA's located in the State of California. Sealed bonus bids must be received on or before 10 A.M. on January 22, 1974, at the Bureau of Land Management State Office in Sacramento, California. Lease forms and special stipulations are available through the Geothermal Coordinator's Office, Room 5623 Interior Building, Washington, D.C. 20240, Bureau of Land Management, Office of Upland Minerals, Room 7000, Interior Building, Washington, D.C. 20240 or the Bureau of Land Management, State Office, Sacramento, California. The lease forms and special stipulations will be published on or before January 1, 1974 in the Federal Register.

#### GEYSERS KGRA

### Notice of Geothermal Lease Sale

U.S. DEPARTMENT OF THE INTERIOR, Bureau of Land Management, State Office, Sacramento, California. Notice is hereby given that leasing units of land, totaling some 8900 acres, within the Geysers Known Geothermal Resources Area, principally in the Sonoma and Lake Counties, California, are offered for geothermal leasing through SEALED BIDS on the terms hereinafter specified to the responsible qualified bidders of the highest cash bonus for the privilege of leasing units 1 to 12 inclusive, pursuant to the Geothermal Steam Act of December 24, 1970 (84 Stat. 1566; U.S.C. 1001-1025) and the regulations promulgated thereunder (43 CFR Group 3200). All bids must be submitted to the State Director, Bureau of Land Management, Room E-2841, Federal Office Building, 2800 Cottage Way, Sacramento, California 95825, on or before 10 A.M., January 22, 1974, at which time bids will be opened and read. Sealed bids may not be modified or withdrawn unless the modification or withdrawal is received prior to the time fixed for opening bids. No bids received after the hour specified herein will be considered. Separate bids must be submitted on each lease unit.

Each bidder must submit with each bid a certified or cashier's check, bank draft, or money order made payable to the Bureau of Land Management, or cash, in the amount of one-half the amount of the bid, and proof of qualifications as required by the regulations 43 CFR Group 3200. The envelope in which the bid is submitted must be plainly marked that it is not to be opened before the date and hour set out therein; and must show the lease unit number and identify the Geysers Known Geothermal Resources Area. The remainder of the bonus, plus the first year's annual rental, must be paid; and an acceptable lease compliance surety bond, in the sum of not less than \$10,000, together with proposed plan of operation as required by 43 CFR 3210-2-1(d), must be furnished by the successful bidder before issuance of a lease. Because of the lease compliance bond for each lease, a successful bidder may furnish a bond in the amount of not less than \$150,000 for full nationwide coverage for all geothermal leases, or not less than \$50,000

for coverage of all geothermal leases in the State of California.

The deposits of the other bidders will be returned upon acceptance of the successful bid. Bidders are warned against violation of Section 1860, Title 18, U.S. Code, prohibiting unlawful combination or intimidation of bidders. The right is reserved to reject any and all bids. Any bonus bid considered as inadequate on the basis of the estimated value of the lease unit will be rejected. Royalties payable to the United States will be at the rate of: (a)  $12\frac{1}{2}$  percent of the amount or value of steam or any other form of heat or energy derived from production; (b) 5 percent of the value of any by-product derived from production under the lease; except that, as to any by-product which is a mineral named in Sec. 1 of the Mineral Leasing Act of February 25, 1920, as amended (30 USC 181), the royalty for such mineral shall be the same as provided in that Act; (c) 5 percent of the value of demineralized water sold or utilized by the lease except that no payment of a royalty will be required on such water used in plant operation for cooling or in the generation of electric energy or otherwise. Annual rental for the first through the fifth lease years will be at the rate of \$2 per acre, or fraction thereof; for the sixth lease year, and for each year thereafter prior to production, the rental will be the amount of the rental for the preceding year, plus an additional \$1 per acre. The lands are offered in leasing units as follows:

#### GEYSERS KGRA

##### Lease Unit #1                      2340 acres, more or less

T. 10 N., R. 7 W., M.D.M.

Section 6, Lots 7, 16, 47;

Section 7, Lots 6, 7, 8, 9, 12, 39, 45A, 45B, 46,  $W\frac{1}{2}NE\frac{1}{4}$ ,  $E\frac{1}{2}SE\frac{1}{4}$ ,  $SW\frac{1}{4}SE\frac{1}{4}$ ,  $NE\frac{1}{4}NW\frac{1}{4}$

T. 10 N., R. 8 W., M.D.M.

Section 1, Lots 1-6, 8, 12, 14-21, 39 (MS 1067), 52, 54 57

Areas A and B of unsurveyed  $N\frac{1}{2}N\frac{1}{2}$  (protracted);

Section 2, unsurveyed  $N\frac{1}{2}$  (protracted),  $N\frac{1}{2}SE\frac{1}{4}$ , MS 1067;

Section 10, Lot 59

Section 11, Lots 3, 4, 8, 9, 58A, 59, 60A, 61B,  $W\frac{1}{2}SW\frac{1}{4}$ ,  $W\frac{1}{2}NE\frac{1}{4}SW\frac{1}{4}$ ,  $W\frac{1}{2}SE\frac{1}{4}SW\frac{1}{4}$ ,  $SE\frac{1}{4}SE\frac{1}{4}SW\frac{1}{4}$ ,  $W\frac{1}{2}NE\frac{1}{4}SE\frac{1}{4}SW\frac{1}{4}$ ,  $SE\frac{1}{4}NE\frac{1}{4}SE\frac{1}{4}SW\frac{1}{4}$ ,  $SW\frac{1}{4}SE\frac{1}{4}$ ;

Section 12, Lots 6, 10, 20, 22-32, 46;

T. 11 N., R. 8 W., M.D.M.

Section 36,  $S\frac{1}{2}SW\frac{1}{4}NW\frac{1}{4}$

##### Lease Unit #2                      1534 acres, more or less

T. 10 N., R. 8 W., M.D.M.

Section 3, Lots 1, 2, 3, 4, 5, unsurveyed  $NW\frac{1}{4}$  (protracted),  $N\frac{1}{2}S\frac{1}{2}$ ,  $SE\frac{1}{4}SE\frac{1}{4}$ , unpatented portion of  $SW\frac{1}{4}SE\frac{1}{4}$ ,  $SW\frac{1}{4}SW\frac{1}{4}$ ,  $E\frac{1}{2}SE\frac{1}{4}SE\frac{1}{4}SW\frac{1}{4}$ ;

Section 4, Lots 1, 2, 8, 9, unsurveyed  $NE\frac{1}{4}$  (protracted), M.S. 4060, M.S. 6092;

Section 5, M.S. 4161

T. 11 N., R. 8 W., M.D.M.

Section 31, Lot 40, M.S. 4161

Section 32, Unpatented portion of Lot 38, unpatented portion of Lot 39, Lot 40 M.S. 4161

Section 33, Lots 10, 11, 14, 16.

Lease Unit #3 175 acres, more or less

T. 11 N., R. 9 W., M.D.M.  
Sections 14 and 23, Black Bear Lodge;  
Section 24, Lots 6, 8, 9-10.

Lease Unit #4 101 acres, more or less

T. 11 N., R. 9 W., M.D.M.  
Section 2, Unpatented portions of Lots 7 and 10, Lot 9;  
Sections 3, 4, 9, 10, Lots 37, 45-48;  
Section 10, Unpatented portion of M.S. 6403

Lease Unit #5 169 acres, more or less

T. 11 N., R. 8 W., M.D.M.  
Section 4, Lot 4;  
Section 6, Lots 5-8;

T. 12 N., R. 8 W., M.D.M.  
Section 31, Lot 3.

Lease Unit #6 2396 acres, more or less

T. 12 N., R. 8 W., M.D.M.  
Section 19, Lots 1, 2, SE $\frac{1}{4}$ SW $\frac{1}{4}$ ;

T. 12 N., R. 9 W., M.D.M.  
Section 2, Lots 1-4, 8, 10-12, NE $\frac{1}{4}$ NW $\frac{1}{4}$ ;  
Section 3, NE $\frac{1}{4}$ SE $\frac{1}{4}$ ;  
Section 11, Lot 1, E $\frac{1}{2}$ ;  
Section 12, S $\frac{1}{2}$ SW $\frac{1}{4}$ , N $\frac{1}{2}$ SE $\frac{1}{4}$ , SW $\frac{1}{4}$ SE $\frac{1}{4}$ ;  
Section 13, W $\frac{1}{2}$ NE $\frac{1}{4}$ , N $\frac{1}{2}$ NW $\frac{1}{4}$ , S $\frac{1}{2}$ ;  
Section 14, N $\frac{1}{2}$ NE $\frac{1}{4}$ , SW $\frac{1}{4}$ NW $\frac{1}{4}$ , SW $\frac{1}{4}$ SW $\frac{1}{4}$ , N $\frac{1}{2}$ SE $\frac{1}{4}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$ ;  
Section 15, E $\frac{1}{2}$ NE $\frac{1}{4}$ , SW $\frac{1}{4}$ NE $\frac{1}{4}$ , NE $\frac{1}{4}$ SE $\frac{1}{4}$ ;  
Section 23, N $\frac{1}{2}$ NE $\frac{1}{4}$ , NE $\frac{1}{4}$ NW $\frac{1}{4}$ ;  
Section 24, N $\frac{1}{2}$ N $\frac{1}{2}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$ .

Lease Unit #7 626 acres, more or less

T. 11 N., R. 8 W., M.D.M.  
Section 21, Lots 7-10;  
Section 27, Lots 2, 6-7, N $\frac{1}{2}$ SW $\frac{1}{4}$ , NW $\frac{1}{4}$ SE $\frac{1}{4}$ ;  
Section 28, Lots 1-4;  
Section 29, N $\frac{1}{2}$ NE $\frac{1}{4}$ .

Lease Unit #8 250 acres, more or less

T. 11 N., R. 8 W., M.D.M.  
Section 32, Lots 12, 16, 19-20;  
Section 33, Lots 5, 15;  
Section 34, Lots 5-6, NW $\frac{1}{4}$ SE $\frac{1}{4}$ , N $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ ;  
Section 35, Lot 4.

Lease Unit #9 160 acres, more or less

T. 11 N., R. 8 W., M.D.M.  
Section 18, Lots 15-16, SW $\frac{1}{4}$ SE $\frac{1}{4}$ ;  
Section 19, Lot 2.

Lease Unit #10 222 acres, more or less

T. 11 N., R. 8 W., M.D.M.  
Section 34, Lots 2-3, Lot 7, S $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$   
Section 35, Lot 1, Unpatented portion of Lots 2 and 3, Unpatented portion of  
SE $\frac{1}{4}$ NW $\frac{1}{4}$ .

Lease Unit #11 45 acres, more or less

T. 11 N., R. 8 W., M.D.M.  
Section 29, NW $\frac{1}{4}$ SW $\frac{1}{4}$ ;  
Section 33, Lot 9, Lot 13.

Lease Unit #12 737 acres, more or less

T. 12 N., R. 8 W., M.D.M.  
Section 30, Lots 2-4, E $\frac{1}{2}$ SW $\frac{1}{4}$   
Section 31, Lot 1, NE $\frac{1}{4}$ NW $\frac{1}{4}$

T. 12 N., R. 9 W.  
Section 25, SE $\frac{1}{4}$ NW $\frac{1}{4}$ , S $\frac{1}{2}$   
Section 26, N $\frac{1}{2}$ SE $\frac{1}{4}$ .

Attention is directed to the following Leasing Units, which are subject to applications for conversion rights (Grandfather rights) under 43 CFR 3230

Leasing Unit 7	Applicant:	Signal Oil and Gas Company 1010 Wilshire Blvd. Los Angeles, CA 90017
Leasing Unit 8	"	"
Leasing Unit 9	Applicant:	Occidental Petroleum Corp. 5000 Stockdale Highway Bakersfield, CA 93309
Leasing Unit 10	"	"
Leasing Unit 11	Applicant:	Union Oil Company of California, et. al. 461 So. Boylston Street Los Angeles, CA 90051
Leasing Unit 12	"	" " " "

Copies of lease and bond forms, special stipulations, regulations and optional bid forms may be obtained from the office of the State Director, Bureau of Land Management, Sacramento, California.

#### SPECIAL STIPULATIONS AND CONDITIONS

##### GEYSERS KGRA

The Leasee shall contact the Supervisor prior to the development of a plan of operation to be apprised of practices which shall be followed or avoided in field

development, including but not limited to road standards, road crossings, gates, cattleguards, fencing, erosion controls, and surface rehabilitation.

The lessee shall comply with the following special conditions and stipulations unless they are modified by the Lessee, the Supervisor, and the authorized officer.

1. Upon notification by the authorized officer that archeological values exist or are believed to exist in the leased lands, the Lessee will engage a qualified archeologist, acceptable to the BLM, to survey and salvage items of archeological value in advance of any surface disturbance. The responsibility and cost of this survey and salvage will be that of the Lessee.
2. The Lessee shall participate in earthquake and land subsidence prevention and detection programs applicable to the leased area where determined to be necessary.
3. Mud pits and sumps containing any additives toxic to wildlife will be protected from entry by birds and other wildlife.
4. Noise levels shall at all times be kept to a minimum and will never exceed 65 decibels at a distance of 1,500 feet from its source.
5. No clearing of ground cover for power transmission lines, except for tower or pole pads, shall be allowed.
6. All power and transmission lines will be designed to minimize loss of raptors and other large birds by electrocution. Nonspecular conductors may be required.
7. The use of wide-tired or balloon-tired, vehicles and helicopters may be required in offroad areas where necessary, to protect the soil and other resources.
8. Disturbance of soils, within the leased lands which are susceptible to slides, slumps, excessive settlement, soil creep, and severe erosion shall be avoided wherever possible. If it is not possible for the Lessee to avoid these areas, the Lessee shall comply with special stabilization and prevention of soil movement practices required by the Supervisor.

All soil disturbances shall be stabilized by mulching and seeding.

a. No vegetation or soil shall be disturbed within 300 feet (horizontal measurement) of Bear Canyon Creek, Dry Creek, Gunning Creek, Anderson Creek, Big Sulphur Creek, Little Sulphur Creek, Hot Springs Creek, Squaw Creek, Hummingbird Creek, Cobb Creek, or Ana Blecher Creek except at approved crossings and other areas approved by the Supervisor.

b. No vegetation or soil shall be disturbed within 700 feet (horizontal measurement) of Kelsey Creek, High Valley Creek, Sweetwater Creek, and Adobe Creek except at approved crossings and other areas approved by the Supervisor.

## EAST MESA KGRA

### Notice of Geothermal Lease Sale

U.S. DEPARTMENT OF THE INTERIOR, Bureau of Land Management, State Office, Sacramento, California. Notice is herein given that leasing units of land totaling 30,168.53 acres, within the East Mesa Known Geothermal Resources Area, in Imperial County, California, are offered for geothermal leasing through SEALED BIDS on the terms hereinafter specified to the responsible qualified bidders of the highest cash bonus for the privilege of leasing units 1 to 14 inclusive, pursuant to the Geothermal Steam Act of December 24, 1970 (84 Stat. 1566; 30 U.S.C. 1001-1025) and the regulations promulgated thereunder (43 CFR Group 3200). All bids must be submitted to the State Director, Bureau of Land Management, 2800 Cottage Way, Sacramento, California 95825 on or before 10:00 AM January 22, 1974; if by mail to Room E-2841 and in person to Room E-2811. Bids will be opened and read at that time in Room W-1140.

Sealed bids may not be modified or withdrawn unless the modification or withdrawal is received prior to the time fixed for opening of bids. No bids received after the hour specified herein will be considered. Separate bids must be submitted on each lease unit.

Each bidder must submit with each bid a certified or cashier's check, bank draft, or money order made payable to the Bureau of Land Management, or cash, in the amount of one-half the amount of bid, and proof of qualifications as required by the regulations 43 CFR 3200. The envelope in which the bid is submitted must be plainly marked that it is not to be opened before the date and hour set out therein; and must show the lease unit number and identify the East Mesa Known Geothermal Resources Area. The remainder of the bonus, plus the first year's annual rental, must be paid, and an acceptable lease compliance surety bond, in the sum of not less than \$10,000, together with a proposed plan of operation as required by 43 CFR 3210.2-1(d), must be furnished by the successful bidder before issuance of a lease. Because of the lease compliance bond for each lease, a successful bidder may furnish a bond in the amount of not less than \$150,000 for full nationwide coverage for all geothermal leases, or not less than \$50,000 for coverage of all geothermal leases in the State of California.

The deposits of the other bidders will be returned upon acceptance of the successful bid. Bidders are warned against violation of Section 1860, Title 18, U.S. Code, prohibiting unlawful combination or intimidation of bidders. The right is reserved to reject any and all bids. Any bonus bid considered as inadequate on the basis of the estimated value of the lease unit will be rejected. Royalties payable to the United States will be at the rate of: (a) 10 percent of the amount or value of steam or any other form of heat or energy derived from production; (b) 5 percent of the value of any by-product derived from production under the lease; except that as to any by-product which is a mineral named in Sec. 1 of the Mineral Leasing Act of Feb. 25, 1920, as amended (30 USC 181); the royalty for such mineral shall be the same as provided in that Act; (c) 5 percent of the value of demineralized water sold or utilized by the lessee, except that no payment of a royalty will be required on such water used in plant operation for cooling or in the generation of electric energy or otherwise. Annual rental for the first through the fifth lease years will be at the rate of \$2 per acre, or fraction thereof; for the sixth lease year, and for each year thereafter prior to production, the rental for the preceding year, plus an additional \$1 per acre. The lands are offered in leasing units as follows:

EAST MESA KGRA

Lease Unit 1 2239.84 acres

T. 16 S., R. 16 E., SB Mer.,  
Sec. 1: Lots 1-8, Lot 11, S $\frac{1}{2}$ NE $\frac{1}{4}$ ,  
SE $\frac{1}{4}$ NW $\frac{1}{4}$ , E $\frac{1}{2}$ SW $\frac{1}{4}$ , SE $\frac{1}{4}$

T. 15 S., R. 17 E., SBM  
Secs. 31 and 32: All

T. 16 S., R. 17 E., SBM  
Sec. 6: All

Lease Unit 2 2559.21 acres

T. 15 S., R. 17 E. SBM  
Sec. 33: All  
Sec. 34: W $\frac{1}{2}$

T. 16 S., R. 17 E. SBM  
Sec. 3: W $\frac{1}{2}$   
Secs. 4, 5: All

Lease Unit 3 1867.60 Acres

T. 16 S., R. 16 E. SBM  
Sec. 12: E $\frac{1}{2}$ , E $\frac{1}{2}$ NW $\frac{1}{4}$   
Sec. 13: Lots 1, 2, 11-14, E $\frac{1}{2}$ NE $\frac{1}{4}$

T. 16 S., R. 17 E. SBM  
Sec. 7: All  
Sec. 18: All

Lease Unit 4 1920.00 acres

T. 16 S., R. 17 E. SBM  
Secs. 8, 9, and 17: All

Lease Unit 5 2240.00 acres

T. 16 S., R. 18 E. SBM  
Sec. 27: W $\frac{1}{2}$ , SE $\frac{1}{4}$   
Sec. 28: All  
Sec. 33: All  
Sec. 34: N $\frac{1}{2}$   
Sec. 35: NW $\frac{1}{4}$

Lease Unit 6 2239.91 acres

T. 16 S., R. 18 E. SBM  
Sec. 17: SW $\frac{1}{4}$   
Sec. 18: S $\frac{1}{2}$   
Sec. 19: All  
Sec. 20: All  
Sec. 21: W $\frac{1}{2}$ , SE $\frac{1}{4}$

Lease Unit 7 2399.57 acres

T. 16 S., R. 18 E. SBM  
Secs. 29 & 30: All  
Sec. 31: N $\frac{1}{2}$ , SE $\frac{1}{4}$   
Sec. 32: All

Lease Unit 8 1437.12 acres

T. 16 S., R. 16 E., SBM  
Sec. 24: NE $\frac{1}{4}$

T. 16 S., R. 17 E. SBM  
Sec. 19 and 20: All

Lease Unit 9 2549.09 acres

T. 15 S., R. 16 E. SBM  
Sec. 23: E $\frac{1}{2}$ SE $\frac{1}{4}$   
Sec. 24: S $\frac{1}{2}$   
Sec. 25: All  
Sec. 26: E $\frac{1}{2}$ NE $\frac{1}{4}$

T. 15 S., R. 17 E. SBM  
Sec. 19: S $\frac{1}{2}$   
Sec. 20: SW $\frac{1}{4}$   
Sec. 29: W $\frac{1}{2}$   
Sec. 30: All

Lease Unit 10 2560.00 acres

T. 15 S., R. 17 E. SBM  
Sec. 20: E $\frac{1}{2}$   
Sec. 21: All  
Sec. 22: W $\frac{1}{2}$   
Sec. 27: W $\frac{1}{2}$   
Sec. 28: All  
Sec. 29: E $\frac{1}{2}$

Lease Unit 11 1596.19 acres

T. 15 S., R. 16 E. SBM  
Sec. 13: NE $\frac{1}{4}$

T. 15 S., R. 17 E.  
Sec. 17: All  
Sec. 18: N $\frac{1}{2}$  and SE $\frac{1}{4}$   
Sec. 19: NE $\frac{1}{4}$   
Sec. 20: NW $\frac{1}{4}$

Lease Unit 12 1760.00 acres

T. 16 S., R. 17 E. SBM  
Sec. 21 and 28: All  
Sec. 29: N $\frac{1}{2}$  and SE $\frac{1}{4}$



Lease Unit 13 2240.00 acres

T. 16 S., R. 17 E. SBM  
Sec. 15: S $\frac{1}{2}$   
Secs. 22, 26 & 27: All

Lease Unit 14 2560.00 acres

T. 16 S., R. 17 E. SBM  
Sec. 13: S $\frac{1}{2}$   
Sec. 14: S $\frac{1}{2}$   
Sec. 23-25: All

The described lands in the above lease sale notices include public domain lands, part of which are subject to conversion rights (Grandfather rights) under 43 CFR 3230. In the case of those lands where the conversion rights have been approved, the holder of the conversion right shall have the right to meet the high bid and, if otherwise qualified, shall upon meeting that high bid, be deemed the high bidder. Copies of lease and bond forms, special stipulations, regulations, and optional bid forms may be obtained from the office of the State Director, Bureau of Land Management, Sacramento, California.

### SPECIAL STIPULATIONS AND CONDITIONS

#### EAST MESA KGRA

The Lessee shall contact the Supervisor prior to the development of a plan of operation to be apprised of practices which shall be followed or avoided in field development, including but not limited to road standards, road crossings, gates, cattleguards, fencing, erosion control, and surface rehabilitation.

The Lessee shall comply with the following special conditions and stipulations unless they are modified by the Lessee, the Supervisor, and the authorized officer:

1. Upon notification by the authorized officer that archeological values exist or are believed to exist in the leased lands, the Lessee will engage a qualified archeologist, acceptable to the BLM, to survey and salvage items of archeological value in advance of any surface disturbance. The responsibility and cost of this survey and salvage will be that of the Lessee.
2. The Lessee shall participate in earthquake and land subsidence prevention and detection programs applicable to the leased area unless determined by the Supervisor to be unnecessary.
3. Mud pits and sumps containing any additives toxic to wildlife will be protected from entry by birds and other wildlife.
4. Noise levels shall at all times be kept to a minimum and shall never exceed 65 decibels at a distance of 1,500 feet from its source.
5. No clearing of ground cover for power transmission lines, except for tower or pole pads, shall be allowed.
6. All power and transmission lines will be designed to minimize loss of raptors and other large birds by electrocution. Nonspecular conductors may be required by the Supervisor for lines crossing Federal lands.
7. Directional drilling for development operations shall be required where determined to be reasonable.

8. The use of wide-tired, or balloon-tired, vehicles and helicopters may be required by the Supervisor in offroad areas where necessary to protect the soil and other resources.

9. No well sites shall be located within 1/4 mile of the center line of the All American and East Highline Canals and Interstate Highway 8.

10. The Lessor reserves the ownership of brines and condensates and the right to receive or take possession of all or any part thereof following the extraction or utilization by Lessee of the heat energy associated therewith subject to such rules and regulations as shall be prescribed by the Secretary of the Interior. If the Lessor elects to take the brines and condensates, the Lessee shall deliver all or any portion thereof to the Lessor at any point in the Lessee's geothermal gathering system after separation of the steam and brine products or from the disposal system as specified by the Lessor for the extraction of said brines and condensates by such means as the Lessor may provide and without cost to the Lessee. There is no obligation on the part of the Lessor to exercise its reserved rights. The Lessor shall not be liable in any manner if those rights are not exercised, and, in that event, the Lessee shall dispose of the brines and condensates in accordance with applicable laws, rules, and regulations.

11. The Lessor reserves the right to conduct on the leased lands, testing and evaluation of geothermal resources which the Lessor determines are required for its desalinization research programs for utilization of geothermal fluids. These programs may include underground explorations, if they are conducted in a manner compatible with lease operations and the production by Lessee of geothermal steam and associated geothermal resources. Lessor reserves the right to erect, maintain, and operate any and all facilities, pipelines, transmission lines, access roads, and appurtenances necessary for desalinization research on the leased premises. Any geophysical data collected by either the Bureau of Reclamation or the Lessee will be made available upon request to the other party. Any brines and condensates removed by the Lessor shall be replaced without cost to the Lessee with fluids as compatible with reservoir fluids as the brines or condensates that the Lessor removed and where the Lessor and Lessee determine they are needed by the Lessee for his operations or for reinjection into the geothermal anomalies. Any desalting plants, piping, wells, or other equipment installed by the Lessor on the leased premises shall remain the property of the Lessor; and the Lessee shall conduct his operations in a manner compatible with the operation and maintenance of any desalting plants, piping, wells, or other equipment installed by the Lessor.

12. The Lessor and the Lessee, if authorized by law, may enter into cooperative agreements for joint development and production of geothermal resources from the leased premises consistent with applicable laws and regulations.

13. To be included on lease units #1, #2, #3, and #4 on the East Mesa KGRA:

The Lessee shall not interfere with the Lessor's installations on this lease or operations being conducted by the Lessor. No well shall be drilled within 750' of well sites drilled by the Lessor without its approval. The Lessor reserves the right to conduct further power generation research, using steam or brine, not in excess of 10 megawatts capacity on the East Mesa KGRA, and related mineral separation research as desired by the Lessor to complete the Lessor's total research program.

MONO-LONG VALLEY KGRA

Notice of Geothermal Lease Sale

U.S. DEPARTMENT OF THE INTERIOR, Bureau of Land Management, State Office, Sacramento, California. Notice is hereby given that leasing units of land totaling 13,714.03 acres within the Mono-Long Valley Known Geothermal Resources Area, in Mono County, California, are offered for geothermal leasing through SEALED BIDS on the terms hereinafter specified to the responsible qualified bidders, of the highest cash bonus for the privilege of leasing units 1, 2, 3, 4, 5, 6, and 7, pursuant to the Geothermal Steam Act of December 24, 1970 (84 Stat. 1566; 30 U.S.C. 1001-1025), and the regulations promulgated thereunder (43 CFR Group 3200). All bids must be submitted to the State Director, Bureau of Land Management, 2800 Cottage Way, Sacramento, California 95825 on or before 10:00 AM January 22, 1974; if by mail to Room E-2841 and in person to Room E-2811. Bids will be opened and read at that time in Room W-1140.

Sealed bids may not be modified or withdrawn unless the modification or withdrawal is received prior to the time fixed for opening of bids. No bids received after the hour specified herein will be considered. Separate bids must be submitted on each lease unit. The government reserves the right to reject any and all bids. Each bidder must submit with each bid a certified or cashier's check, bank draft, or money order made payable to the Bureau of Land Management, or cash, in the amount of one-half of the amount bid, and proof of qualifications, as required by the regulations 43 CFR Group 3200. The envelope in which the bid is submitted must be plainly marked that it is not to be opened before the date and hour set out therein; and must show the lease unit number and identify the Mono-Long Valley Known Geothermal Resources Area. The remainder of the bonus, plus the first year's annual rental, must be paid; and an acceptable lease compliance surety bond in the sum of not less than \$10,000, together with a proposed plan of operation, as required by 43 CFR 3210.2-1 (d), must be furnished by the successful bidder before issuance of a lease. Because of the lease compliance bond for each lease, a successful bidder may furnish a bond in the amount not less than \$150,000, for full nationwide coverage for all geothermal leases, or not less than \$50,000, for coverage of all geothermal leases in the state of California. The deposits of the other bidders will be returned upon acceptance of the successful bid. Bidders are warned against violation of Section 1860, Title 18, U.S. Code, prohibiting unlawful combination or intimidation of bidders. Any bonus bid considered as inadequate on the basis of the estimated value of the lease unit will be rejected. Royalties payable to the United States will be at the rate of: (a) 10 percent of the amount or value of steam or any other form of heat or energy derived from production; (b) 5 percent of the value of any by-product derived from production under the lease; except that as to any by-product which is a mineral named in Sec. 1 of the Mineral Leasing Act of February 25, 1920, as amended (30 USC 181), the royalty for such minerals shall be the same as provided in that Act; (c) 5 percent of the value of demineralized water sold or utilized by the lessee, except that no payment of a royalty will be required on such water used in plant operation for cooling or in the generation of electric energy or otherwise. Annual rental for the first through the fifth lease years will be at the rate of \$2 per acre or fraction thereof; for the sixth lease year and for each year thereafter prior to production, the rental will be the amount of the rental for the preceding year, plus an additional \$1 per acre. The lands are offered in leasing units as follows:

### Crowley Lake (Long Valley) Leasing Units

Lse Unit 1, 1615.08 acres; Lse Unit 2, 1895.21 acres; Lse Unit 3, 1772.70 acres

T. 3 S., R. 29 E., MDM

Sec. 5, SW $\frac{1}{4}$ ;

Sec. 6, S $\frac{1}{2}$ ;

Sec. 7, N $\frac{1}{2}$ , SW $\frac{1}{4}$ ;

Sec. 17, SE $\frac{1}{4}$ SW $\frac{1}{4}$ , SW $\frac{1}{4}$ SE $\frac{1}{4}$ ;

Sec. 18, W $\frac{1}{2}$ , W $\frac{1}{2}$ SE $\frac{1}{4}$ ;

Sec. 19, NW $\frac{1}{4}$ NE $\frac{1}{4}$ , NW $\frac{1}{4}$ ;

Sec. 20, W $\frac{1}{2}$ NE $\frac{1}{4}$ , E $\frac{1}{2}$ NW $\frac{1}{4}$ .

T. 3 S., R. 29 E., MDM

Sec. 19, SW $\frac{1}{4}$ , E $\frac{1}{2}$ SE $\frac{1}{4}$ ,  
SW $\frac{1}{4}$ SE $\frac{1}{4}$ ;

Sec. 20, SW $\frac{1}{4}$ ;

Sec. 29, SW $\frac{1}{4}$ ;

Sec. 30, All;

Sec. 31, E $\frac{1}{2}$ ;

Sec. 32, W $\frac{1}{2}$ .

T. 3 S., R. 29 E., MDM

Sec. 28, S $\frac{1}{2}$ ;

Sec. 29, SE $\frac{1}{4}$ ;

Sec. 31, W $\frac{1}{2}$ ;

Sec. 32, E $\frac{1}{2}$ ;

Sec. 33, All.

### Mono Lake Lease Units

Lse Unit 4, 1883.07 acres;

T. 2 N., R. 26 E., MDM

Sec. 10, SE $\frac{1}{4}$ NE $\frac{1}{4}$ , NE $\frac{1}{4}$ SE $\frac{1}{4}$ ;

Sec. 11, Fract'l., All (except NW $\frac{1}{4}$ NW $\frac{1}{4}$ );

Sec. 14, Fract'l., All;

Sec. 15, All;

Sec. 20, N $\frac{1}{2}$ NE $\frac{1}{4}$ ;

Sec. 21, Fract'l., All;

Sec. 22, Fract'l., All.

Lse Unit 5, 2308.55 acres;

T. 1 N., R. 26 E., MDM

Sec. 13, Fract'l., SE $\frac{1}{4}$ NW $\frac{1}{4}$ , E $\frac{1}{2}$ SE $\frac{1}{4}$ ;

T. 1 N., R. 27 E.

Sec. 17, Fract'l., All;

Sec. 18, Fract'l., S $\frac{1}{2}$ ;

Sec. 19, All;

Sec. 20, All;

Sec. 21, All.

Lease Unit 6, 1762.83 acres;

T. 1 N., R. 27 E., MDM

Sec. 14, Fract'l., W $\frac{1}{2}$ ;

Sec. 15, Fract'l., All;

Sec. 22, All;

Sec. 23, NW $\frac{1}{4}$ .

Lease Unit 7, 2276.59 acres;

T. 1 N., R. 27 E., MDM

Sec. 11, Fract'l., All;

Sec. 12, Fract'l., W $\frac{1}{2}$ ;

Sec. 13, W $\frac{1}{2}$ ;

Sec. 14, E $\frac{1}{2}$ ;

Sec. 23, NE $\frac{1}{4}$ ;

Sec. 24, W $\frac{1}{2}$ , S $\frac{1}{2}$ SE $\frac{1}{4}$ ;

Sec. 25, All;

Sec. 26, NE $\frac{1}{4}$ .

Attention is directed to the following lands of the Crowley Lake (Long Valley) Leasing Units, which are subject to conversion rights (Grandfather rights), under 43 CFR 3230.

### Crowley Lake (Long Valley)

Leasing units 1 and 2, Geothermal Resources International, Inc. 1234 Chester Ave. Bakersfield, California 93301

### Mono Lake

Leasing Units 2, 4, and 5, George D. Rowan, 458 South Spring Street, Los Angeles, California 90013

Leasing Unit 4, Franciscan Land and Cattle Co. c/o Tweedy and Pinhey, Attorneys at Law, 16661 Ventura Boulevard, Suite 224, Encino, California 91316.

Copies of lease and bond forms, special stipulations, regulations, and optional bid forms may be obtained from the office of the State Director, Bureau of Land Management, Sacramento, California.

SPECIAL STIPULATIONS AND CONDITIONS

MONO-LONG VALLEY KGRA

The Lessee shall contact the Supervisor prior to the development of a plan of operation to be apprised of practices which shall be followed or avoided in field development, including but not limited to road standards, road crossings, gates, cattleguards, fencing, eroision control and surface rehabilitation.

The Lessee shall comply with the following special conditions and stipulations, unless they are modified by the Lessee, the Supervisor, and the authorized officer:

1. Upon notification by the authorized officer that archeological value exist or are believed to exis in the leased lands, the Lessee will engage a qualified archeologist, acceptable to the BLM, to survey and salvage items of archeological value in advance of any surface disturbance. The responsibility and cost of this survey and salvage will be that of the Lessee.
2. The Lessee shall participate in earthquake and land subsidence prevention and detection programs applicable to the leased area where determined to be necessary by the Supervisor.
3. Mud pits and sumps containing any additives toxic to wildlife will be protected from entry by birds and other wildlife.
4. Noise levels shall at all times be kept to a minimum and will never exceed 65 decibels at a distance of 1,500 feet from its source.
5. No clearing of ground cover for power transmission lines, except for tower or pole pads, shall be allowed.
6. All power and transmission lines will be designed to minimize loss of raptors and other large birds by electrocution. Nonspecular conductors may be required by the Supervisor for llines crossing Federal lands.
7. The use of wide-tired or balloon-tired vehicles and of helicopters may be required by the Lessor in offroad areas where such use is necessary to protect the soil and resources.
8. Directional drilling for development operations shall be required where determined to be reasonable.
9. At any time where there is an actual or threatened temperature inversion or other weather phenomenon as determined by the Supervisor, he may take such actions as he deems necessary, including requiring that operations be stopped, to prevent the temporary concentration of toxic materials in the atmosphere in excess of the Federal or State air quality standards in existence at the time of the inversion.
10. The following described lands shall be subject to seasonal restrictions on exploration and development in order to protect existing wildlife resources and recreational uses:

Leasing Unit 1:

T. 3 S., R. 29 E., MDM  
Sec. 17, SE $\frac{1}{4}$ SW $\frac{1}{4}$ , SW $\frac{1}{4}$ SE $\frac{1}{4}$ ;  
Sec. 18, S $\frac{1}{2}$ NW $\frac{1}{4}$ , W $\frac{1}{2}$ SE $\frac{1}{4}$ , SW $\frac{1}{4}$ ;  
Sec. 19, NW $\frac{1}{4}$ NE $\frac{1}{4}$ , NW $\frac{1}{4}$ ;  
Sec. 20, W $\frac{1}{2}$ NE $\frac{1}{4}$ , E $\frac{1}{2}$ NW $\frac{1}{4}$ .

Leasing Unit 2

T. 3 S., R. 29 E., MDM  
Sec. 19, S $\frac{1}{2}$ SE $\frac{1}{4}$ , NE $\frac{1}{4}$ SE $\frac{1}{4}$ ;  
Sec. 20, SW $\frac{1}{4}$ ;  
Sec. 29, S $\frac{1}{2}$ SW $\frac{1}{4}$ ;  
Sec. 30, NE $\frac{1}{4}$ NE $\frac{1}{4}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$ ;  
Sec. 31, NE $\frac{1}{4}$ , N $\frac{1}{2}$ SE $\frac{1}{4}$ ;  
Sec. 32, NW $\frac{1}{4}$ , N $\frac{1}{2}$ SW $\frac{1}{4}$ .

11. There will be no surface disturbance within 100 feet of either rim of Hot Creek Canyon, without prior approval of the Lessor.

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*Geothermal Hot Line*

*A periodic publication of the California Division of Oil and Gas. Subscription price, January through December, \$3.*

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