

MINUTE ITEM

This Calendar Item No. 26
was approved as Minute Item
No. 26 by the State Lands
Commission by a vote of 2
to 0 at its 5/23/85
meeting.

CALENDAR ITEM

26

A 80

S 37

05/23/85
W 23353 PRC 6837
Grabner

APPROVAL OF ONE GEOTHERMAL LEASE ON
STATE SCHOOL LANDS, IMPERIAL COUNTY, CALIFORNIA
FOR GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL
EXPLORATION, AND DRILLING

APPLICANT: Union Oil Company of California
451 West Main Street
Brawley, California 92227

AREA, TYPE, LAND AND LOCATION:

Six parcels of California State school lands
comprising approximately 3,681 acres total in
Imperial County; T11S, R9E, Section 36; T10S,
R9E, Section 34 and 36; T11S, R10E, Sections 4,
10 and 11.

LAND USE:

An initial exploration project consisting of
geophysical, geological and geochemical
exploration to target drillsites and
exploration drilling to assess geothermal
potential of the area. Development of the
lease area will be allowed, thereafter only
upon completion of additional environmental
documentation.

TERMS OF PROPOSED LEASE:

Drilling Term: Five (5) years, primary term of
five years, and for so long thereafter as
geothermal resources are being produced or
utilized or are capable of being produced or
utilized in commercial quantities from the
leased land unless sooner terminated as
provided in this lease.

SPECIAL:

Upon discovery of geothermal resources in
commercial quantities, lessee will be required

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to contact the County of Imperial, Planning Department for preparation of any environmental documentation which will be required to cover the effects of deep exploratory drilling and full field development of the geothermal resources. Lessee will be required to implement any mitigation measures adopted by the County whether under the control of the County or any responsible agency.

CONSIDERATION: Rental of \$25.00 per acre and a royalty of 12.5 percent of gross revenues received from the sale of steam and ten percent from the sale of mineral products or chemical compounds, with a minimum royalty of \$2 per acre per annum.

PREREQUISITE TERMS, FEES AND EXPENSES: Filing fees and processing costs have been received.

STATUTORY AND OTHER REFERENCES:

- A. PRC Div. 6 Parts 1 and 2; Div. 13, Div. 20.
- B. Cal. Adm. Code Title 2, Div. 3, Title 14, Div. 6.

AB 884:

06/11/85.

OTHER PERTINENT INFORMATION:

1. Union Oil Company of California has applied for a Geothermal Lease to explore for geothermal resources on lands at the west side of the Salton Sea in Imperial County, California, to determine the availability, quantity and quality of geothermal resources underlying the State lands. The use to be made of any resources discovered will depend upon their temperature, pressure, volume and mineral content. The applicant is seeking a resource suitable for the generation of electricity in commercial quantities.

Prior to any exploratory work, the Lessee will supply the State Lands Commission with a site specific plan identifying proposed drillsites and access roads. With the drillsites identified, a site-specific biological survey will be conducted at each

(ADDED-05/21/85.)

proposed site with representative staff from the Commission in consultation with the Department of Fish and Game. The surveys will determine if any habitat or any unique, rare or endangered species of animals or plants exist at or near the vicinity of the proposed drillsites or access routes. If any rare, unique or endangered species of animals or plants are determined to exist at or in the near vicinity of any proposed drillsite or access route, those areas will be deleted from the specific plan and no activities will be conducted in those identified areas. The lessee will remove all drilling wastes from the area to be disposed at an approved Class II-1 disposal site. Drillsites will be located to avoid all water sources and washes. Sides of washes will be left intact with no vegetation removed. If any washes are inadvertently disturbed corrective action approved by Commission staff shall be promptly undertaken. Prior to any disturbance of the soil by construction or drilling, site specific surveys will be conducted to determine if there are archaeologic or paleontologic resources of value. Lessee will contact the Commission staff if any Native American artifacts or remains or objects of paleontologic significance are uncovered during the project. A representative of the Native American Heritage Commission shall be consulted at this time.

2. Pursuant to the Commission delegation of authority and the State CEQA Guidelines (14 Cal. Adm. Code 15025), the staff has prepared and circulated for public review a Proposed Negative Declaration identified as EIR ND 377, State Clearinghouse 84102402 pursuant to the provisions of the CEQA. Based upon the Initial Study, the Proposed Negative Declaration, and the comments received in response thereto, there is no substantial evidence that the project will have a significant effect on the environment (14 Cal. Adm. Code 15074(b)).

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3. Pursuant to Div. 6, Part 2, Ch. 3 Section 6919(d) of the Public Resources Code staff has determined leasing of the State-owned lands in the Truckhaven area would be in the best interest of the State. Union Geothermal has remained the only viable entity interested in developing the area. Union, Phillips and Southern Pacific Land Company are the dominant holders of lands surrounding the State parcels comprising the lease area. Only Union has expressed a desire to offer sufficient terms for the proposed lease. It is anticipated that Union's activity in the area will contribute in proving the resource within the Truckhaven area, and lead to development of State's geothermal resource and to the generation of significant revenues.

4. On May 7, 1982 Union Oil Company, Phillips Petroleum and Southern Pacific Land Co. entered into a Geothermal Unit Agreement unitizing their federal and private leases in the Truckhaven Area. These leases comprise 32,749.91 acres more or less. Phillip has a 50 percent interest in the unit; and Union and Southern Pacific each have 25 percent. Union also has a farmout to acquire 25 percent of Phillips' and Southern Pacific's interest.

In it Union's proposal that this lease of 3681 acres of State land be added to the Truckhaven Unit. If this lease is approved, paragraph 13 of the lease will give the Commission's consent to joinder of the Unit.

APPROVALS REQUIRED:

Division of Oil and Gas, Regional Water Quality Control Board, County of Imperial Planning Department.

EXHIBITS:

- A. Land Description.
- B. Location Map.
- C. Negative Declaration.

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IT IS RECOMMENDED THAT THE COMMISSION:

1. CERTIFY THAT A NEGATIVE DECLARATION, EIR NO 377, STATE CLEARINGHOUSE 84102402, WAS PREPARED FOR THIS PROJECT PURSUANT TO THE PROVISIONS OF THE CEQA AND THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.
2. DETERMINE THAT THE PROJECT, AS AMENDED, WILL NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT.
3. AUTHORIZE ISSUANCE TO UNION OIL COMPANY OF CALIFORNIA OF A GEOTHERMAL LEASE WITH A FIVE-YEAR DRILLING TERM, AND A FIVE-YEAR PRIMARY TERM AND TO REMAIN IN EFFECT FOR SO LONG THEREAFTER AS GEOTHERMAL RESOURCES ARE BEING PRODUCED OR UTILIZED, OR ARE CAPABLE OF BEING PRODUCED OR UTILIZED, IN COMMERCIAL QUANTITIES FROM THE LEASED LAND UNLESS SOONER TERMINATED AS PROVIDED IN THIS LEASE, IN THE EVENT GEOTHERMAL RESOURCES ARE DISCOVERED IN COMMERCIAL QUANTITIES ON THE LEASE: IN CONSIDERATION OF ANNUAL RENTS IN THE AMOUNT OF \$25.00 PER ACRE ON THE LAND DESCRIBED IN EXHIBITS "A" AND "B" ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF. THE LEASES WILL AUTHORIZE GEOTHERMAL EXPLORATION INCLUDING THE DRILLING OF GEOTHERMAL WELLS. THE LEASES WILL PROVIDE FOR A ROYALTY OF 12.5 PERCENT OF GROSS REVENUES FROM THE SALE OF STEAM, TEN PERCENT FROM THE SALE OF MINERAL PRODUCTS OR CHEMICAL COMPOUNDS, WITH A MINIMUM ROYALTY OF \$2 PER ACRE PER ANNUM. THE FORM LEASE TO BE USED IS THE FORM ON FILE IN THE OFFICES OF THE COMMISSION.
4. AUTHORIZE UNION OIL COMPANY OF CALIFORNIA TO SUBMIT THE JOINDER AGREEMENT TO COMMIT THIS LEASE TO THE TRUCKHAVEN GEOTHERMAL UNIT BY NO LATER THAN JUNE 30, 1985.

(ADDED 05/21/85)

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EXHIBIT "A"

LAND DESCRIPTION

W 23353

Six parcels of California State school and lieu lands in Imperial County, California, described as follows:

PARCEL 1

Section 36, T10S, R9E, SBM.

EXCEPTING THEREFROM a strip of land 84.00 feet wide passing through the NW $\frac{1}{4}$ of said Section 36, as described in the Deed to Imperial County, dated December 5, 1967 and recorded December 6, 1967 in Book 1254, Page 814, Official Records of said County.

ALSO EXCEPTING THEREFROM the W $\frac{1}{4}$ of the SW $\frac{1}{4}$ and the NW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of said Section 36.

ALSO EXCEPTING THEREFROM any portion of said Section 36 lying north or east of the southerly and westerly boundary lines of Tract 779 as filed for record in Book 11, Page 3, Official Records of said County.

PARCEL 2

Section 34, T10S, R9E, SBM.

PARCEL 3

Section 36, T11S, R9E, SBM.

EXCEPTING THEREFROM the SE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of said Section 36.

PARCEL 4

Section 4, T11S, R10E, SBM.

PARCEL 5

Section 10, T11S, R10E, SBM.

PARCEL 6

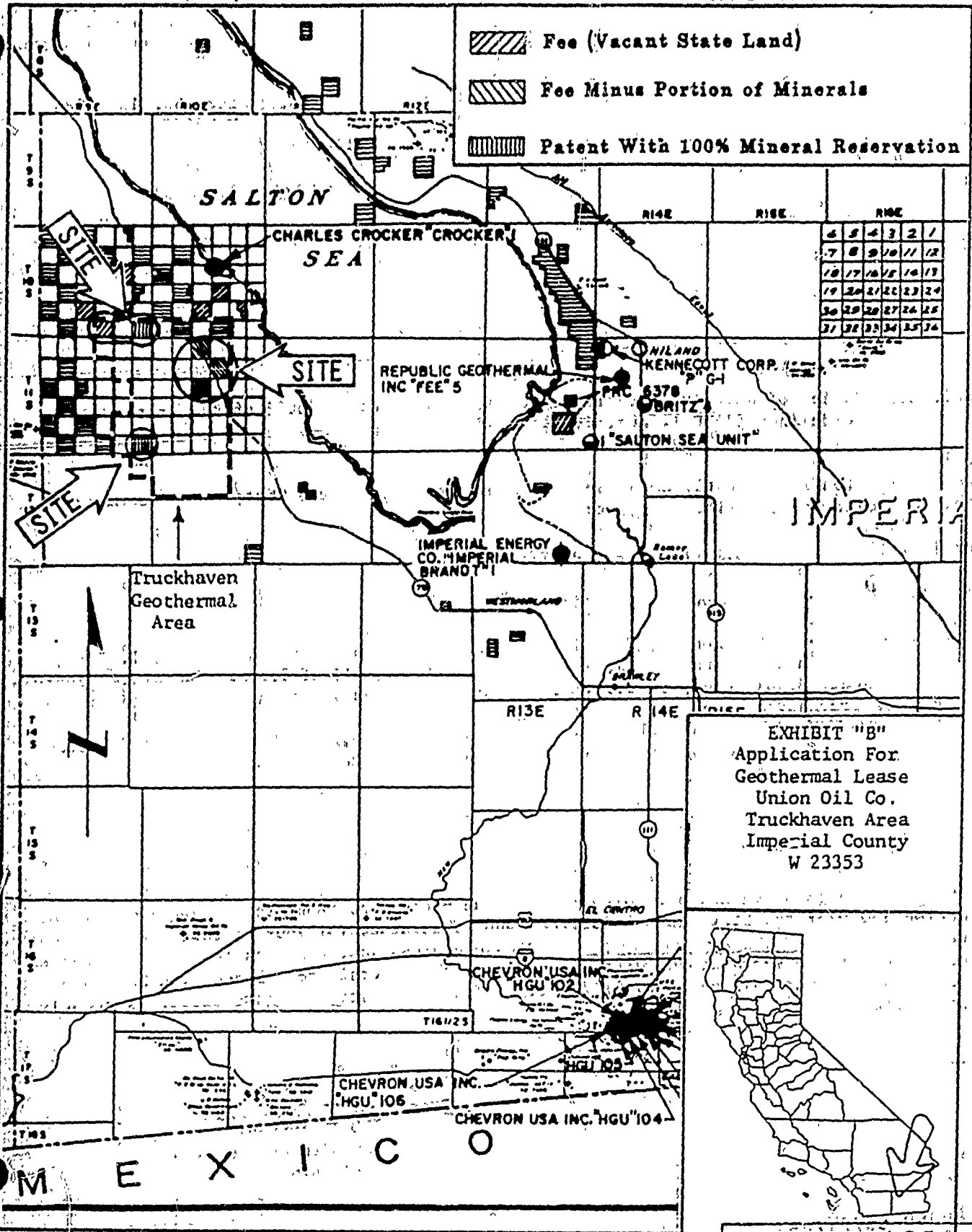
Section 16, T11S, R10E, SBM.

END OF DESCRIPTION

REVISED APRIL 5, 1985, BY BOUNDARY SERVICES UNIT, M. L. SHAFER, SUPERVISOR.

(ADDED 05/21/85)

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(ADDED) 05/21/85)

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STATE OF CALIFORNIA

STATE LANDS COMMISSION

EXECUTIVE OFFICE
1807 - 13th Street
Sacramento, California 95814

Date: December 18, 1984

W 23353

File Ref.: W 23354

W 23355

SCH No.: 84102402

TO: Don Hoagland

SUBJECT: Review of Negative Declaration Pursuant to Section 15073 of the State CEQA Guidelines (14 Cal. Adm. Code)

An application is currently being processed by the staff of the State Lands Commission for the following described project:

Project Title: TRUCKHAVEN PROSPECT/LEASE

Project Proponent: Union Oil Company

Project Location: Section 36, T.11 S., R.9 E., Portions of Sections 34 & 36, T.10 S., R.9 E., and Sections 4, 10, 16, T.11 S., R.10 E., all of S.B.M., containing approximately 3,681 acres, on the west side of Salton Sea approximately 10 miles south of Truckhaven, Imperial County.

Project Description: To explore for and, if commercial quantities are found, develop geothermal resources for electrical power generation.

A Negative Declaration has been prepared for the project pursuant to the requirements of Section 15070 of the State CEQA Guidelines and is attached for your review. Your comments are requested by January 21, 1985. Please address your comments to the State Lands Commission office shown above, with attention to the undersigned. Should you have any questions, you may call me at (916)322-7813. Your cooperation in this matter is greatly appreciated.

ATTACHMENT

Ted T. Fukushima
TED T. FUKUSHIMA
Division of Research &
Planning

(ADDED 05/21/85)

EXHIBIT "C"

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PROPOSED NEGATIVE DECLARATION

EIR ND 377

File Ref.: W 23353
W 23354
W 23355
SCH#: 84102402

Project Title: TRUCKHAVEN PROSPECT/LEASE

Project Proponent: Union Oil Company

Project Location: Section 36, T.11 S., R.9 E., Portions of Section 34 & 36, T.10 S., and Sections 4, 10, & 16, T.11 S., R.10 E., all of S.B.M., containing approximately 3,681 acres, on the west side of Salton Sea approximately 10 miles south of Truckhaven, Imperial County.

Project Description: To explore for and, if commercial quantities are found, develop geothermal resources for electrical power generation.

Contact Person: Ted T. Fukushima

Telephone: (916) 322-7813

This document is prepared pursuant to the requirements of the California Environmental Quality Act (Section 21000 et seq., Public Resources Code), the State CEQA Guidelines (Section 15000 et seq., Title 14, California Administrative Code), and the State Lands Commission regulations (Section 2901 et seq., Title 2, California Administrative Code).

Based upon the attached Initial Study, it has been found that:

☐ the project will not have a significant effect on the environment.☒ mitigation measures included in the project will avoid potentially significant effects.

(ADDED 05/21/85)

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MITIGATION MEASURES

1. Prior to any exploratory work, Lessee must supply to the State Lands Commission a site-specific plan designating the proposed drillsites and access roads.
2. A site-specific biological survey must be conducted by Commission staff in consultation with staff of the Department of Fish and Game to determine if any wildlife habitat of any unique, rare or endangered species of animals or plants exist at or in the near vicinity of the proposed drillsites and access routes. Lessee shall assist in site-specific surveys by staking out the proposed drillsites and access routes and by providing a responsible representative to walk over the specific plan area with State staff members.

If any unique, rare or endangered species of animals or plants are determined to exist at or in the immediate vicinity of any proposed drillsites or access routes such drillsites or access routes shall be deleted from the specific plan and no activities will be conducted in identified areas.

3. All drilling wastes will be removed and trucked to an approved Class II-1 disposal site. No material will be drilled on site.
4. All water sources and drainage washes shall be avoided. Sides of washes shall be left intact and no vegetation removed. If any washes are inadvertently disturbed, corrective action approved by Commission staff shall be promptly undertaken.
4. Lessee shall conduct a site-specific survey at proposed drillsites and access routes prior to any disturbance of the soil by construction or drilling to determine if any archaeologic or paleontologic resources exist. Lessee shall contact the staff of the State Lands Commission if any Native American remains or artifacts, or objects of paleontologic significance are uncovered during the project.

(ADDED 05/21/85)

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COMMENTS IN RESPONSE TO INITIAL STUDY
AND RESPONSES TO COMMENTS

A) Department of Fish and Game:

1. Comment: A thorough biological survey should be carried out and a biological report prepared to identify potential biological impacts and to recommend appropriate compensation measures for the impacts.

Response:

The Department of Fish and Game requested a biological survey be performed in order to determine if any wildlife habitat or unique rare or endangered species of plants or animals exist in the permit area. In order to meet this concern the lease requires the lessee, prior to any exploratory work, to provide the State Lands Commission with a detailed site specific plan designating the proposed drillsites and access routes. The Commission staff, in consultation with the staff of the Department of Fish and Game shall analyze the proposed plan and perform a site specific biological survey to determine if any wildlife habitat or any unique, rare or endangered species of animals or plants exist at or in the near vicinity of the proposed drillsites and access routes. Lessee shall assist in this analysis and survey by staking out the proposed drillsites and access routes and by providing a responsible individual to walk over the specific plan area with the State staff members. If any unique, rare or endangered species of animals or plants are determined to exist at or in the immediate vicinity of any proposed drillsites or access routes, such drillsites or access routes shall be deleted from the specific plan and the lessee shall not conduct any activities in such areas.

2. Comment: The number of drill holes should be identified rather than the use of a "limited number".

Response:

Union will drill a minimum of three wells at the Truckhave prospect. The number of additional wells drilled will depend upon the data gathered from the preceeding wells. Prior to drilling the lessee will be required to conduct the procedures outlined in item A-1.

3. Comment: It is requested the drilling wastes are removed and trucked to an approved hazardous waste disposal site with no option to dry them on-site.

Response:

All drilling wastes will be removed and trucked to an approved Class II-1 disposal site; no material will be dried on-site.

4. Comment: Water sources and drainage washes are to be avoided and any alteration of stream flows or channels will require notification of the Department of Fish and Game.

(ADDED 05/21/85)

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Response:

All water sources and drainage washes shall be avoided. No drillsites are to be located in drainage washes. Sides of washes shall be left intact and no vegetation removed. If any of the wash sites are inadvertently disturbed corrective action approved by the Commission staff shall be promptly undertaken by the Lessee.

- B) 1. Comment: Imperial Valley College Museum requests that a full field Archaeologic survey be conducted.

Response:

To satisfy the comment posed by the IVC Museum, the Lessee shall conduct a site specific survey to determine if any Archaeologic or Paleontologic resources exist at each proposed drillsite prior to any disturbance of the soil by construction or drilling. The lessee shall contact the staff of the State Lands Commission if any Native American remains or artifacts or objects of Paleontologic importance are uncovered during the project. Lessee shall not further disturb areas where such remains and/or artifacts are discovered. The Museum will be contacted to determine proper collection or disposal of such findings.

- C) Department of Parks and Recreation.

1. Comment: Requests that a full field Archaeologic survey be conducted in the whole of Section 36, T11S, R9E.

Response:

To satisfy the comment posed by the Department of Parks and Recreation the lessee shall conduct a site specific survey to determine if any Archaeologic or Paleontologic resources exist at each proposed drillsite prior to any disturbance of the soil by construction or drilling. The lessee shall contact the Staff of the State Lands Commission if any Native American remains or artifacts, or objects of Paleontologic importance are uncovered during the project. Lessee shall not further disturb areas where such remains and/or artifacts are discovered. The Department of Parks and Recreation will be contacted to determine proper collection or disposal of such findings.

- D) County of Imperial

1. Comment: County of Imperial was concerned the lease would allow development without proper environmental processing.

Response:

Prior to any production or development action the Lessee will be required to contact the County of Imperial Planning Department to comply with the proper environmental review and documentation as stipulated by the County.

(ADDED 05/21/85)

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ENVIRONMENTAL IMPACT ASSESSMENT FORM - Part I
(To be completed by applicant)
FORM 69.3(11/82)**A. GENERAL INFORMATION****1. Name, address, and telephone number:****a. Applicant**Union Oil Company of California461 South Boylston StreetLos Angeles, CA 90017(213) 1977-7600**b. Contact person if other than applicant:****2. (a) Project location: (Please reference to nearest town or community and include county)**East and South of Salton City with a radius of approximately 0 to 8 miles,Imperial County.**b. Assessor's parcel number:** 17-34-3, 4, 10, 11, 18**3. Existing zoning of project site:** See Truckhaven Prospect Geothermal Exploratory Wells Final Environmental Impact Report Attached.**4. Existing land use of project site:** " "**5. Proposed use of site:** To explore, discover, test, produce and market the geothermal resources, if any, in the vicinity of Salton City.**6. Other permits required:** County of Imperial, Planning and Building, APCD, California Division of Oil and Gas, California Regional Water Quality Board.**B. PROJECT DESCRIPTION****1. For building construction projects, complete "ATTACHMENT A".****2. For non-building construction projects: Describe fully, the proposed activity, its purpose and intended use, e.g. for proposed mineral prospecting permits, include the number of test holes, size of holes, amount of material to be excavated, maximum surface area of disturbance, hole locations, depth of holes, etc. Attach plans or other drawings, as necessary.**

(ADDED 05/21/85)

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C. ENVIRONMENTAL SETTING

1. Describe the project site as it exists before the project, including information on topography, soil stability, plants and animals, and any cultural, historical, or scenic aspects. Describe any existing structures on the site, and the use of the structures.
2. Describe the surrounding properties, including information on plants and animals and any cultural, historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc.), intensity of land use (one-family, apartment houses, shops, department stores, etc.), and scale of development (height, frontage, set-back, rear yard, etc.).

D. ENVIRONMENTAL IMPACT ASSESSMENT

Answer the following questions by placing a check in the appropriate box. Discuss all items checked "yes" or "maybe"
(Attach additional sheets as necessary)

YES MAYBE NO

Will the project involve:

1. a change in existing features of any bays, wetlands, beaches, lakes, or hills, or substantial alteration of ground contours? ☐ ☐ ☒
2. a change in scenic views or vistas from existing residential areas or public lands or roads? ☐ ☐ ☒
3. a change in pattern, scale, or character of the general area of project? ☐ ☐ ☒
4. a significant effect on plant or animal life? ☒ ☐ ☐
5. significant amounts of solid waste or litter? ☒ ☐ ☐
6. a change in dust, ash, smoke, fumes, or odors in the vicinity? ☐ ☐ ☒
7. a change in ocean, bay, lake, stream, or ground water quality or quantity, or alteration of existing drainage patterns? ☐ ☐ ☒
8. a change in existing noise or vibration levels in the vicinity? ☐ ☐ ☒
9. construction on filled land or on slope of 10 percent or more? ☐ ☐ ☒
10. use or disposal of potentially hazardous materials, such as toxic or radioactive substances, flammables, or explosives? ☐ ☐ ☒
11. a change in demand for municipal services (police, fire, water, sewage, etc.)? ☐ ☐ ☒
12. an increase in fossil fuel consumption (electricity, oil, natural gas, etc.)? ☐ ☒ ☐
13. a larger project or a series of projects? ☐ ☒ ☐

E. CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: April 4, 1984

Signed:

Joseph L. Wilson
JOSEPH L. WILSON, Attorney-In-Fact

(ADDED 05/21/85)

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INITIAL STUDY INTRODUCTION

Union Oil Company of California has applied to the State Lands Commission for three Geothermal Leases on State-owned lands to the west of the Salton Sea approximately three miles southwest of Truckhaven, Imperial County, California.

This Initial Study is intended to review the project, which, with minor differences, was originally proposed by the Phillips Petroleum Company under State Lands Commission Initial Study/N.D's SCH No 8111552, for PRC 6095 6097 and PRC 6098.

The proposed project consists of exploratory drilling of several geothermal temperature gradient wells to target drillsites for exploration drilling to determine the existence, quality and quantity of geothermal resources for electrical power generation. The lessee may test the wells to establish the existence of a commercial resource. During the initial exploratory phase, activities will be restricted to existing roads and trails. Before exploratory drilling and full field development are allowed the county of Imperial, pursuant its to CEQA authority, will assess the potential impacts.

The differences between the original Phillips Petroleum Project and the current application submitted by Union Oil Company involve changes from a Geothermal Prospecting Permit to a proposed negotiated lease. The area covered in the Geothermal lease is a different area from the previous Prospecting Permit. The lease covers sections 34 and 36 T10S R9E and omits sections 28 and 22 which were in the original prospecting permit (see map Exhibit C) The Geothermal prospecting permit allowed for a two-year drilling term whereas the lease will provide five-year initial drilling term.

As with the geothermal prospecting permits issued to Phillips the leases will allow Union to drill exploratory wells and to collect geophysical and geologic data. Prior to any field development, drilling and installation of power facilities, the applicant will be required to make application to the County of Imperial for field development.

A well, Truckhaven No. 1, has been drilled by Phillips and has been covered by an E.I.R. prepared and circulated by Imperial County under State Clearinghouse No. 81050106. The document was adopted September 9, 1981 and Notice of Determination prepared on October 6, 1981. The well is covered under County Permit No. 116-81.

(ADDED 05/21/85)

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ENVIRONMENTAL IMPACT ASSESSMENT CHECKLIST - PART II

Form 13.20 (7/82)

W 23353

W 23354

File Ref: W 23355

SCH 84102402

I. BACKGROUND INFORMATION

- A. Applicant: Union Oil Company of California
451 West Main Street
Brawley, California 92227
- B. Checklist Date: 10 / 10 / 84
- C. Contact Person: Ted Fukushima
 Telephone: (916) 322-7813
- D. Purpose: Issuance of a Geothermal Lease to allow initial exploratory drilling for potential geothermal resources.
- E. Location: West side of Salton Sea approximately 10 miles south of Truckhaven, Imperial County Sec. 36, T11S, R9E; Sec. 34 & 36, T10S, R9E excepting portions thereof and Sec. 4, 10, 16 T11S, R10E SBM approx. 3,681 acres.
- F. Description: Applicant proposes to perform geological and geophysical exploration including the drilling of a limited number of temperature gradient holes to target drillsites for deep exploration drilling to determine the existence, quality and quantity of geothermal resources for electric power generation. Under this lease the lessee may conduct exploratory drilling and test wells to establish the existence of a commercial resource. During the initial exploration phase activities will be restricted to existing roads and trails. Site specific impacts of deep exploration drilling and possible future development phases will be assessed by the County of Imperial.
- G. Persons Contacted: 1. Doug Stockton, Division of Oil & Gas.
 2. Ronald Powell, Dept. of Fish & Game, Blythe.
 3. Jay Von Werlhof, Director, Imperial Valley College Museum, El Centro.

II. ENVIRONMENTAL IMPACTS. (Explain all "yes" and "maybe" answers)

A. Earth. Will the proposal result in:

- | | Yes | Maybe | No |
|--|-------------------------------------|--------------------------|-------------------------------------|
| 1. Unstable earth conditions or changes in geologic substructures? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Disruptions, displacements, compaction, or overcovering of the soil? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Change in topography or ground surface relief features? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. The destruction, covering, or modification of any unique geologic or physical features? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Any increase in wind or water erosion of soils, either on or off the site? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet, or lake? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7. Exposure of all people or property to geologic hazards such as earthquakes, landslides, mud | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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B. Air. Will the proposal result in:

1. Substantial air emissions or deterioration of ambient air quality? ☐ Yes ☒ Maybe ☒ No
2. The creation of objectionable odors? ☐ Yes ☒ Maybe ☒ No
3. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally? ☐ Yes ☒ Maybe ☒ No

C. Water. Will the proposal result in:

1. Changes in the currents, or the course or direction of water movements, in either marine or fresh waters? ☐ Yes ☒ Maybe ☒ No
2. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff? ☐ Yes ☒ Maybe ☒ No
3. Alterations to the course or flow of flood waters? ☐ Yes ☒ Maybe ☒ No
4. Change in the amount of surface water in any water body? ☐ Yes ☒ Maybe ☒ No
5. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity? ☐ Yes ☒ Maybe ☒ No
6. Alteration of the direction or rate of flow of ground waters? ☐ Yes ☒ Maybe ☒ No
7. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations? ☐ Yes ☒ Maybe ☒ No
8. Substantial reduction in the amount of water otherwise available for public water supplies? ☐ Yes ☒ Maybe ☒ No
9. Exposure of people or property to water-related hazards such as flooding or tidal waves? ☐ Yes ☒ Maybe ☒ No
10. Significant changes in the temperature, flow or chemical content of surface thermal springs? ☐ Yes ☒ Maybe ☒ No

D. Plant Life. Will the proposal result in:

1. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)? ☐ Yes ☒ Maybe ☒ No
2. Reduction of the numbers of any unique, rare or endangered species of plants? ☐ Yes ☒ Maybe ☒ No
3. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species? ☐ Yes ☒ Maybe ☒ No
4. Reduction in acreage of any agricultural crops? ☐ Yes ☒ Maybe ☒ No

E. Animal Life. Will the proposal result in:

1. Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, or insects)? ☐ Yes ☒ Maybe ☒ No
2. Reduction of the numbers of any unique, rare or endangered species of animals? ☐ Yes ☒ Maybe ☒ No
3. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals? ☐ Yes ☒ Maybe ☒ No
4. Deterioration to existing fish or wildlife habitat? ☐ Yes ☒ Maybe ☒ No

F. Noise. Will the proposal result in:

1. Increase in existing noise levels? ☐ Yes ☒ Maybe ☒ No
2. Exposure of people to severe noise levels? ☐ Yes ☒ Maybe ☒ No

G. Light and Glare. Will the proposal result in:

1. The production of new light or glare? ☐ Yes ☒ Maybe ☒ No

H. Land Use. Will the proposal result in:

1. A substantial alteration of the present or planned land use of an area? ☐ Yes ☒ Maybe ☒ No

I. Natural Resources. Will the proposal result in:

1. Increase in the rate of use of any natural resources? ☐ Yes ☒ Maybe ☒ No
2. Substantial depletion of any nonrenewable resources? ☐ Yes ☒ Maybe ☒ No

(ADDED: 05/21/85)

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J. Risk of Upset. Does the proposal result in:

Yes Maybe No

1. A risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals, or radiation) in the event of an accident or upset conditions? ☐ ☒ ☐

2. Possible interference with emergency response plan or an emergency evacuation plan? ☐ ☐ ☒

K. Population. Will the proposal result in:

1. The alteration, distribution, density, or growth rate of the human population of the area? ☐ ☐ ☒

L. Housing. Will the proposal result in:

1. Affecting existing housing, or create a demand for additional housing? ☐ ☐ ☒

M. Transportation/Circulation. Will the proposal result in:

1. Generation of substantial additional vehicular movement? ☐ ☒ ☐

2. Affecting existing parking facilities, or create a demand for new parking? ☐ ☐ ☒

3. Substantial impact upon existing transportation systems? ☐ ☐ ☒

4. Alterations to present patterns of circulation or movement of people and/or goods? ☐ ☐ ☒

5. Alterations to waterborne, rail, or air traffic? ☐ ☐ ☒

6. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians? ☐ ☐ ☒

N. Public Services. Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:

1. Fire protection? ☐ ☐ ☒

2. Police protection? ☐ ☐ ☒

3. Schools? ☐ ☐ ☒

4. Parks and other recreational facilities? ☐ ☐ ☒

5. Maintenance of public facilities, including roads? ☐ ☒ ☐

6. Other governmental services? ☐ ☐ ☒

O. Energy. Will the proposal result in:

1. Use of substantial amounts of fuel or energy? ☐ ☐ ☒

2. Substantial increase in demand upon existing sources of energy, or require the development of new sources? ☐ ☐ ☒

P. Utilities. Will the proposal result in a need for new systems, or substantial alterations to the following utilities:

1. Power or natural gas? ☐ ☐ ☒

2. Communication systems? ☐ ☐ ☒

3. Water? ☐ ☐ ☒

4. Sewer or septic tanks? ☐ ☐ ☒

5. Stormwater drainage? ☐ ☐ ☒

6. Solid waste and disposal? ☐ ☒ ☐

Q. Human Health. Will the proposal result in:

1. Creation of any health hazard or potential health hazard (excluding mental health)? ☐ ☒ ☐

2. Exposure of people to potential health hazards? ☐ ☐ ☒

R. Aesthetics. Will the proposal result in:

1. The obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view? ☐ ☒ ☐

Recreation. Will the proposal result in:

1. An impact upon the quality or quantity of existing recreational opportunities? ☐ ☒ ☐

(ADDED: 05/21/85)

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T. Cultural Resources.

Yes Maybe No

1. Will the proposal result in the alteration of or the destruction of a prehistoric or historic archeological site? ☐ ☒ ☐
2. Will the proposal result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object? ☐ ☐ ☒
3. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values? ☐ ☐ ☒
4. Will the proposal restrict existing religious or sacred uses within the potential impact area? ☐ ☐ ☒

U. Mandatory Findings of Significance.

1. Does the project have the potential to degrade the quality of the environment, reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? ☐ ☐ ☒
2. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? ☐ ☐ ☒
3. Does the project have impacts which are individually limited, but cumulatively considerable? ☐ ☐ ☒
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ☐ ☐ ☒

III. DISCUSSION OF ENVIRONMENTAL EVALUATION (See Comments Attached):

PRELIMINARY DETERMINATION

On the basis of this initial evaluation:

- ☐ I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION will be prepared.
- ☐ I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Date: / /

(ADDED 05/21/85)

For the State Lands Commission

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EXHIBIT "A"

LAND DESCRIPTION

W 23353

Two parcels of California State school lands in Imperial County, California, described as follows:

PARCEL 1

Section 36, T10S, R9E, S8M.

EXCEPTING THEREFROM a strip of land 84.00 feet wide passing through the NW $\frac{1}{4}$ of said Section 36, as described in the Deed to Imperial County dated December 5, 1967 and recorded December 6, 1967 in Book 1254, Page 814, Official Records of said County.

ALSO EXCEPTING THEREFROM the W $\frac{1}{2}$ of the SW $\frac{1}{4}$ and the NW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of said Section 36.

ALSO EXCEPTING THEREFROM any portion of said Section 36 lying north or east of the southerly and westerly boundary lines of Tract 779 as filed for record in Book 11, Page 3 Official Records of said County.

PARCEL 2

Section 34, T10S, R9E, S8M.

END OF DESCRIPTION

PREPARED MAY 10, 1984, BY BOUNDARY AND TITLE UNIT, LEROY WHEEL, SUPERVISOR.

(ADDED 05/21/85)

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EXHIBIT "A"
LAND DESCRIPTION

W 23355

Three parcels of California State school lands in Imperial County, California, described as follows:

PARCEL 1

Section 4, T11S, R10E, SBM.

PARCEL 2

Section 10, T11S, R10E, SBM.

PARCEL 3

Section 16, T11S, R10E, SBM.

END OF DESCRIPTION

PREPARED MAY 10, 1984, BY BOUNDARY AND TITLE UNIT, LEROY WEED, SUPERVISOR.

EXHIBIT "A"

LAND DESCRIPTION

W 23354

A parcel of California State school lands in Imperial County, California, described as follows:

Section 36, T11S, R9E, SBM.

EXCEPTING THEREFROM the SE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of said Section 36.

END OF DESCRIPTION

PREPARED MAY 10, 1984 BY BOUNDARY AND TITLE UNIT, LEROY WEED, SUPERVISOR.

EV (ADDED 05/21/85)

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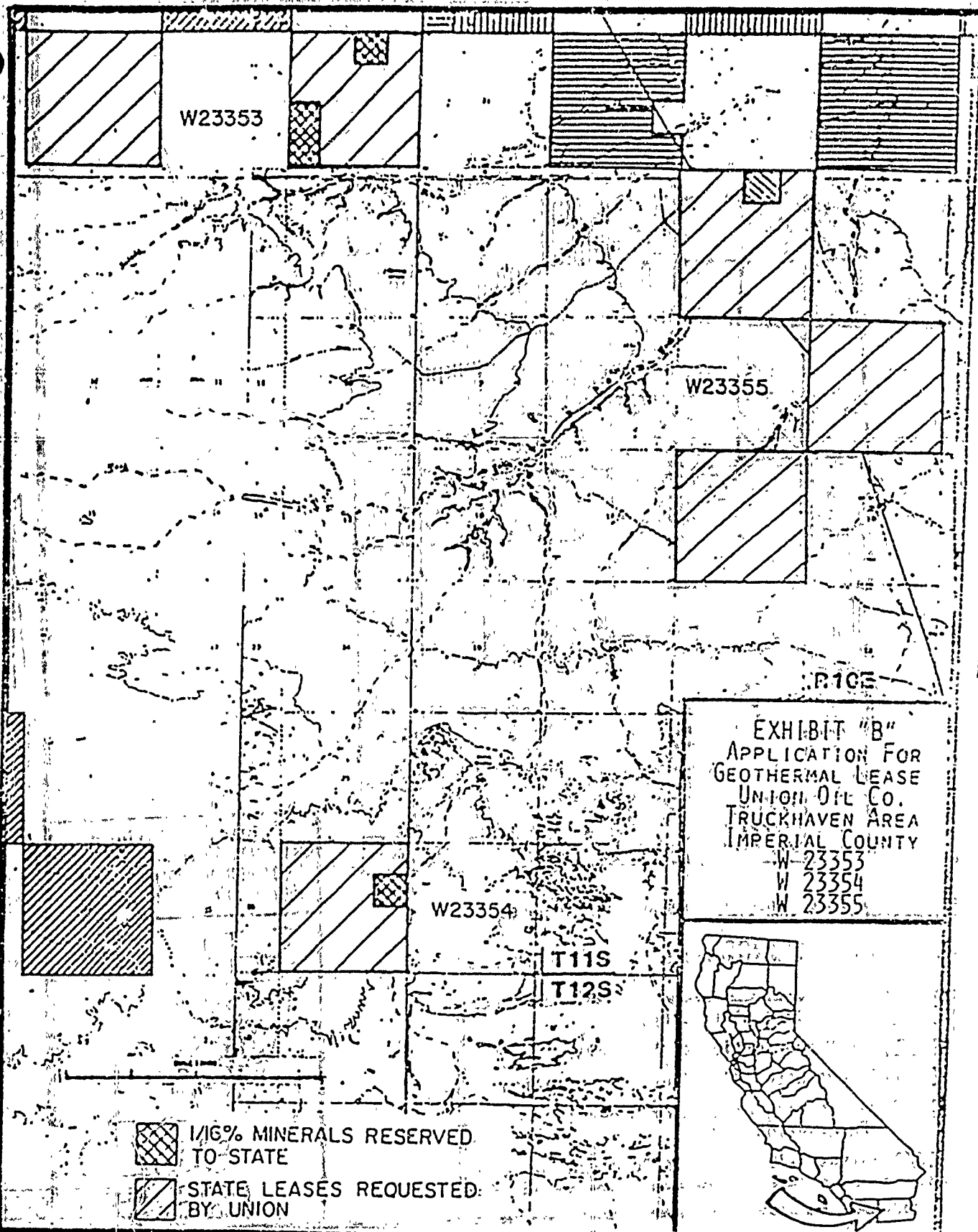
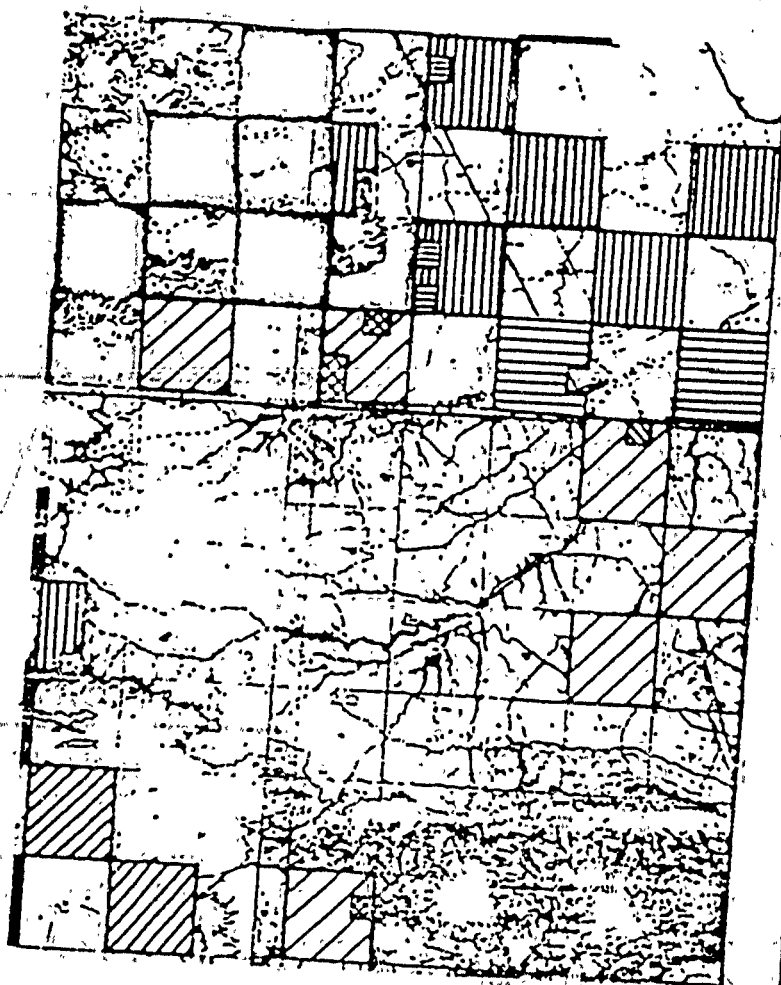







EXHIBIT "B"
 APPLICATION FOR
 GEOTHERMAL LEASE
 UNION OIL CO.
 TRUCKHAVEN AREA
 IMPERIAL COUNTY
 W-23353
 W-23354
 W-23355

(ADDED 05/21/85)



LANDS ORIGINALLY UNDER PHILLIPS REQUEST, NOT UNDER PRESENT UNION APPLICATION

STATE LEASES REQUESTED BY UNION (W23353, W23354, W23355)

-  Fee (Vacant State Land)
-  Fee Minus Portion of Minerals
-  Patent with 100% Mineral Reservation
-  Patent with Portion of Mineral Reservation to U.S.
-  Patent; 1/16% Minerals Reserved to State

STATE LANDS UNDER ORIGINAL PHILLIPS HOLLY GEOTHERMAL PROSPECTING PERMIT PRC 6098 & 6099



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(ADDED 05/21/85)

DISCUSSION OF ENVIRONMENTAL IMPACTS

A2.3. Disruptions or Changes of Topography

Each drill site may require some leveling and construction of a 100 x 175 foot sump for drilling mud. The sites will not exceed 3.7 acres and the proposed permit will require restoration and reseedling upon conclusion of drilling.

B2. Objectionable Odors

There is a possibility of temporary venting of H₂S during drilling. The permit will require an H₂S contingency plan, continuous monitoring of effluent gases at the wellhead, reporting gas analyses, and compliance with regulations and orders of all governmental agencies having jurisdiction.

C7. Change in Quantity of Ground Waters

The proposal, if a commercial resource is discovered, contemplates the removal of geothermal ground waters. Depending on the nature of the resource, such waters may be reinjected after the extraction of heat. Portable ground waters will be protected by casing and cementing, as required by the permit as well as requirements of the Division of Oil and Gas.

C10. Changes in Thermal Springs

Although there has been no direct correlation drawn between the drilling of deep geothermal wells and a reduction in temperature, flow or chemical content of surface thermal springs, this is a remote possibility and therefore a spring monitoring program would be required if exploratory wells are proposed for drilling near springs.

FF. Increase in Noise

There will be an increase in noise levels during drilling, which is expected to take no more than 4-5 weeks per well; the permit will allow a maximum noise level of 65 dba at 1/2 mile from the site.

G1. New Light

If night drilling is permitted, there will be a localized temporary increase in light and glare; however, the area is sparsely populated and this will be a short term problem.

(ADDED 05/21/85)

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H1. Alteration of Planned Land Use

While the exploratory phase will create minor alteration of the present or planned land use, which is currently desert recreation, a commercial discovery could lead to drilling of additional wells, construction of pipelines and sites of a powerplant and transmission lines. Failure to make a discovery during the initial exploratory state will end all activity and any potential for land use alteration.

I1. Use of Natural Resources

The purpose of the proposal is to explore for and utilize geothermal brines and/or steam for generation of electricity. During the initial exploratory phase there would be no increase in use of natural resources, but a commercial discovery could lead to a substantial use of geothermal resources for electrical generation as a replacement for fossil fuels presently being used for that purpose.

I2. Depletion of Resource

Geothermal resources are considered a depletable resource, but because of the geologic conditions within the project area, all or most of the geothermal fluids withdrawn would have to be reinjected to prevent subsidence. A properly engineered and managed injection program should assist in extending the life of the reservoir thus reducing rate of depletion.

J1. Risk of Explosion

The permit will require a blowout contingency plan to contain any hazardous material at the drill site.

M1. New Vehicular Movement

While the increase in traffic during the initial exploration phase will be slight and caused by crew and equipment traffic for brief periods, the area is sparsely inhabited thus any increase in traffic might be considered a substantial increase when measured against the normal traffic count.

N5. Maintenance of Public Facilities

The initial exploratory phase will generate only light service truck and crew traffic and should cause little road maintenance problems. Movement of deep drilling rigs and equipment over local roads has potential for creating some road maintenance problems. This potential will increase if a discovery, leading to full field development, is made. Lack of a discovery during the initial exploratory phase will eliminate all possibilities of road maintenance problems because the exploration activity will terminate.

(ADDED 05/21/85)

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P6. Waste Disposal

Drilling wastes will be contained in the sump approved by all appropriate state and local agencies having jurisdiction over waste disposal. Drilling wastes will either be dried on the site and covered or removed and trucked to an approved II-1 site.

Q1. Health Hazard

There may be some emissions of hydrogen sulfide gas H_2S during exploratory drilling and testing but the permit will require H_2S monitoring, a reporting system and the applicant will be required to meet all local and state air standards which will keep H_2S emissions well below the level where they would become health hazards.

R1. Obstruction of Views

Temporary siting of a drill rig may be aesthetically offensive; however, the proposed drill sites are located in relatively remote and sparsely populated areas.

S1. Impact on Recreation Quality

A portion of the proposed permit area is located in an area being contemplated as an addition to the Octillito Wells Vehicle recreation area and some of the area contemplated for ORV use could be restricted for safety reasons during the short time exploratory drilling is occurring.

T1. Alteration of Historic Sites

There will be little or no surface disturbance during the initial exploration phase but earth movement for site and sump preparation would occur at the exploratory drilling phase and possible impacts to prehistoric archeological sites would have to be assessed during the county's use permit hearings before specific drillsites are approved. During the initial exploratory phase, activities will be restricted to existing roads and trails to prevent possible damage to cultural resources.

0210A

(ADDED 05/21/85)

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(ADDED 05/21/85)

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