

MINUTE ITEM

This Calendar Item No. 39
was approved as Minute Item
No. 39 by the State Lands
Commission by a vote of 2
to 0 at its 2/25/82
meeting.

CALENDAR ITEM

39

2/25/82
W 40271
Hoagland
PRC 6112
PRC 6113

GEOTHERMAL PROSPECTING PERMITS

APPLICANT: Holly Energy, Inc.
2600 Diamond Shamrock Tower
717 N. Harwood Street
Dallas, Texas 75201
Attention: Mr. W. H. Boyles

AREA, TYPE LAND AND LOCATION:
Approximately 465 acres of reserve mineral
lands, Imperial County in one permit, and
approximately 1,290 acres of reserve mineral
lands, Imperial County in the second permit.

LAND USE: Geophysical, geological and geochemical
exploration to target drillsites for exploration
drilling to assess geothermal potential
of area.

TERMS OF PROPOSED PERMITS:

Initial period: Two years.

Renewal options: One period for two years.

Surety bond: \$50,000.

Special: Upon discovery of geothermal
resources in commercial
quantities on each permit
permittee will be entitled
to preferential leases
upon notice of intention
to exercise this right;
subject, however, to
the discretion of the
Commission and review
of environmental documentation
pertaining to deep exploratory
drilling and full field
development of the resources.

CONSIDERATION: Rental of \$1 per acre during the first
year; \$5 per acre during the second year;
and \$25 per acre per annum during renewal
period, unless a well has been drilled.

A 75

S 38

CALENDAR ITEM NO. 39 (CONTD)

In case a preferential lease is executed, it will provide for rental of \$1 per acre per annum, 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 fee and processing costs have been received.

STATUTORY AND OTHER REFERENCES:

A. P.R.C.: Div. 6, Parts 1 and 2; Div. 13; Div. 20.

B. Cal. Adm. Code: Title 2, Div. 3; Title 1/ Div. 6.

AB 884:

N/A.

OTHER PERTINENT INFORMATION:

1. Holly Energy, Inc. has applied for a Geothermal Prospecting Permit to explore for geothermal resources on the west side of Salton Sea in Imperial County, 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 its temperature, pressure, volume and mineral content; but the applicant is seeking a resource suitable for the generation of electricity.

Staff is recommending that Holly's application for one permit covering portions of four sections be divided into two permits with one for one section (Parcel A) and a second for three contiguous sections (Parcels B1, B2 and B3).

ENVIRONMENTAL INFORMATION:

1. A Negative Declaration (No. 293) was prepared by Commission staff pursuant to the provisions of CEQA.

Mitigation measures addressing comments received in response to the Initial

CALENDAR ITEM NO. 39 (CONTD)

Study regarding the use of existing roadways, and the potential for pollution of surface waters if a blowout should occur were included in the Negative Declaration and have been made a part of the permit.

APPROVALS REQUIRED:

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

EXHIBITS:

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

IT IS RECOMMENDED THAT THE COMMISSION:

1. CERTIFY A NEGATIVE DECLARATION (NO. 293) WAS PREPARED BY THE STATE LANDS COMMISSION PURSUANT TO THE PROVISIONS OF CEQA AND SUCH DOCUMENT WAS REVIEWED AND CONSIDERED (CALIFORNIA ADMINISTRATION CODE 15083 AND 15085).
2. FIND THAT CHANGES OR ALTERATIONS HAVE BEEN REQUIRED IN, OR INCORPORATED INTO, THE PROPOSED PROJECT WHICH MITIGATE OR AVOID THE SIGNIFICANT ENVIRONMENTAL EFFECTS THEREOF AS IDENTIFIED IN THE COMPLETED NEGATIVE DECLARATION.
3. AUTHORIZE ISSUANCE TO HOLLY ENERGY, INC. OF TWO TWO-YEAR GEOTHERMAL PROSPECTING PERMITS WITH LESSEE'S OPTION TO RENEW FOR ONE PERIOD OF TWO YEARS AND WITH THE RIGHT TO REQUEST A PREFERENTIAL LEASES IN THE EVENT GEOTHERMAL RESOURCES ARE DISCOVERED IN COMMERCIAL QUANTITIES ON EACH LEASE; IN CONSIDERATION OF ANNUAL RENTS IN THE AMOUNT OF \$1 PER ACRE FOR THE FIRST YEAR, ESCALATING TO \$5 PER ACRE FOR THE SECOND YEAR, AND \$25 PER ACRE DURING ANY RENEWAL PERIOD UNLESS A WELL HAS BEEN DRILLED, FOR THE DETERMINATION OF THE EXISTENCE, QUALITY AND QUANTITY OF GEOTHERMAL RESOURCES IN IMPERIAL COUNTY ON THE LAND DESCRIBED ON EXHIBIT "A" AS PARCELS A AND B ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF. THE PERMITS WILL AUTHORIZE GEOTHERMAL EXPLORATION INCLUDING THE DRILLING OF GEOTHERMAL WELLS. THE PERMITS WILL FURTHER PROVIDE THAT IF PREFERENTIAL LEASES ARE REQUESTED, THEY WILL PROVIDE FOR RENTAL OF \$1 PER ACRE PER ANNUM, AND 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 ANNUAL ROYALTY OF \$2 PER ACRE. THE FORM PERMIT TO BE USED IS THE FORM ON FILE IN THE OFFICE OF THE COMMISSION.

EXHIBIT "A"

LAND DESCRIPTION

W 40271

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

PARCEL A

Section 36, T10S, R9E, SBM.

EXCEPTING THEREFROM a strip of land 84.00 feet wide passing through the northwest quarter of said Section 36, as described in the Deed to the County of Imperial, dated December 5, 1967, and recorded December 6, 1967, in Book 1254, page 814, Official Records of said County.

ALSO EXCEPTING THEREFROM the west half of the southwest quarter of said Section 36 and the northwest quarter of the northeast quarter 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 recorded in Book 11, page 3 of Official County Records, in the County of Imperial, State of California.

Said parcel containing 465.20 acres, more or less.

PARCEL B-1

Section 22, T10S, R10E, SBM.

EXCEPTING THEREFROM any portion of said Section 22 lying within Tract 584 as recorded at Book 6 of Final Maps, page 76; Tract 679, recorded at Book 7 of Final Maps, page 54; Trace 585-A, recorded at Book 7 of Final Maps, page 69; Tract 742, recorded at Book 10 of Final Maps, page 1; Tract 744, recorded at Book 10 of Final Maps, page 5; and Trace 751, recorded at Book 10 of Final Maps, page 56.

ALSO EXCEPTING THEREFROM that portion of said section conveyed to the Salton Community Service District by deed dated July 9, 1962, and recorded in Book 1115, page 471 of the Official Records of Imperial County, California.

Said parcel containing 460 acres, more or less.

PARCEL B-2

W-1/2, W-1/2 of SE-1/4, SE-1/4 of SE-1/4, Section 26, T10S,
R10E, SBM.

Said parcel containing 440 acres, more or less.

PARCEL B-3

Section 28, T10S, R10E, SBM.

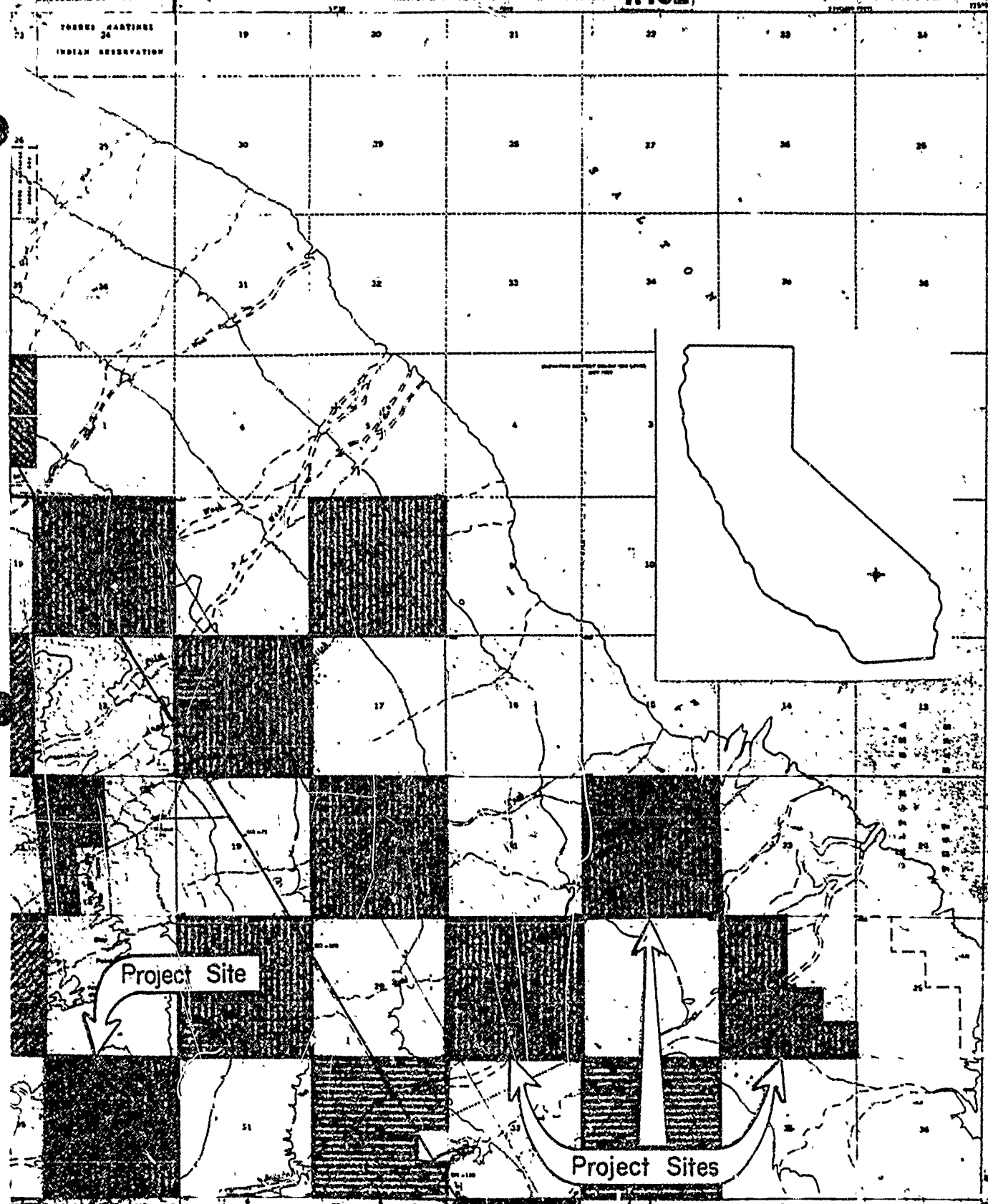
EXCEPTING THEREFROM any portion of said Section 28 lying within Tract 583, recorded at Book 6 of Final Maps, page 67; Tract 589, recorded at Book 7 of Final Maps, page 1; Tract 580, recorded at Book 7 of Final Maps; page 6; Tract 624, recorded at Book 7 of Final Maps; page 25; Tract 624-A, recorded at Book 7 of Final Maps, page 30; Tract 745, recorded at Book 10 of Final Maps, page 19.

Said parcel containing 390.20 acres, more or less.

END OF DESCRIPTION

REVISED FEBRUARY 10, 1982 BY TECHNICAL SERVICES UNIT, ROY MINNICK, SUPERVISOR.

TOBERO MARTINEZ
INDIAN RESERVATION








 Vacant (Vacant State Land)
 Vacant Minus Portion of Minerals
 Vacant with 100% Mineral Reservation
 Vacant with Portion of Mineral Reservation to State
 Vacant 1/16% Minerals Reserved to State



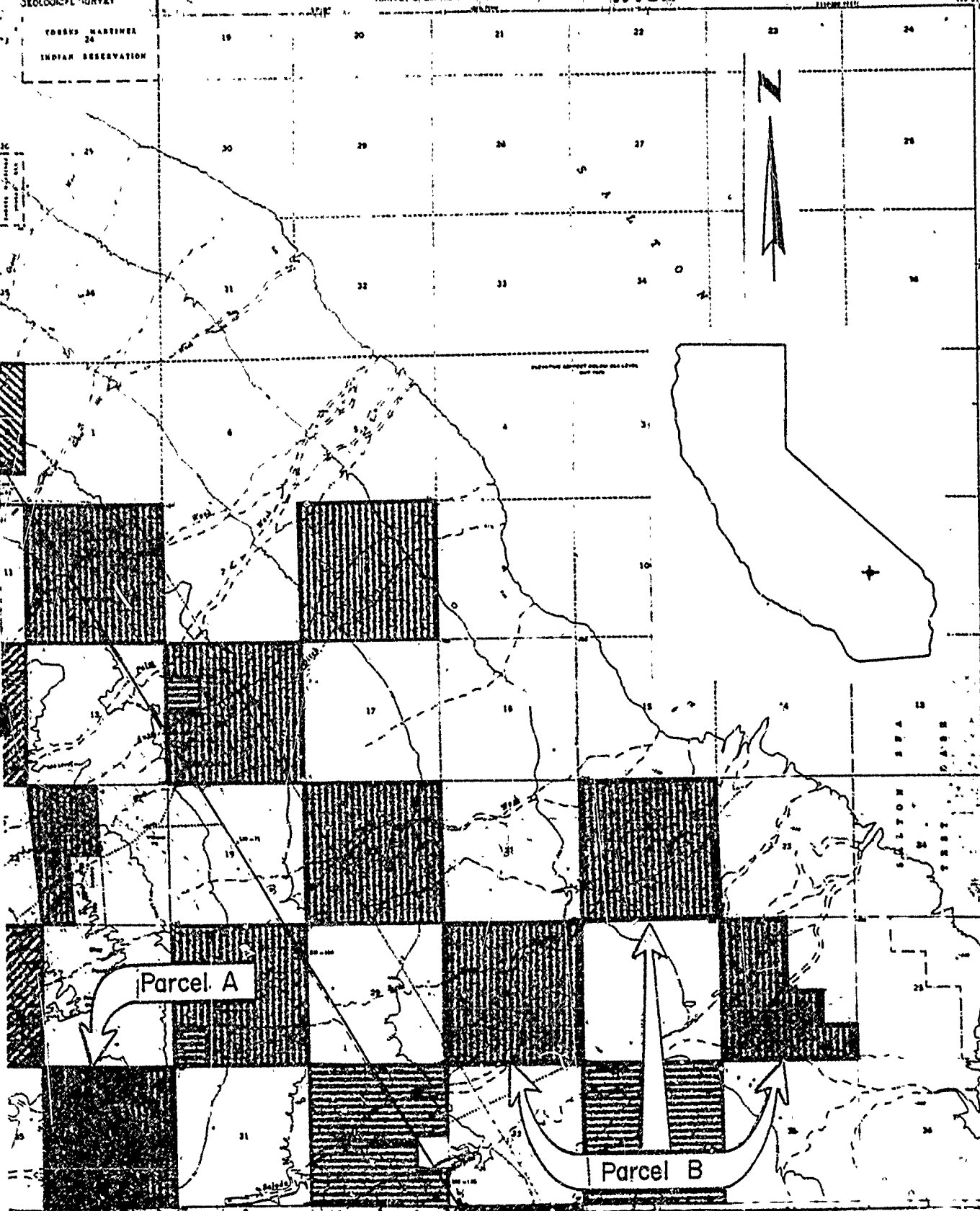
EXHIBIT "B"

GEOTHERMAL PROSPECTING
 PERMIT APPLICATION
 BY HOLLY
 ENERGY CO.
 IMPERIAL COUNTY 249
 CALENDAR PAGE W40271 566
 MINUTE PAGE 566

TOBESKI MARSHES
INDIAN RESERVATION



T9S
T10S








-  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

EXHIBIT "B"

GEOHERMAL PROSPECTING
PERMIT APPLICATION
BY HOLLY
ENERGY CO.
IMPERIAL COUNTY

CALENDAR PAGE W40271 250
MINUTE PAGE 567

T10E

STATE LANDS COMMISSION

1807 13TH STREET

SACRAMENTO, CALIFORNIA 95814



EXHIBIT "C"

 DraftNEGATIVE DECLARATION

EIR ND 293

 Final

File Ref.: W 40271

SCH#:

Project Title: GEOTHERMAL PROSPECTING PERMIT--TRUCKHAVEN PROSPECT-W 40271

Project Location: On the west side of Salton Sea about 3 miles south of Truckhaven, Imperial County.

Project Description: Issuance of a permit to prospect for geothermal resources to allow superficial exploration to target sites for deep exploration drilling to determine the existence, quality and quantity of geothermal resources for electrical generation. If and when sites are selected for deep exploration drilling the site specific impacts will be assessed in a separate study.

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

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

the project will not have a significant effect on the environment.

the attached mitigation measures will avoid potentially significant effects.

Contact Person: Ted Fukushima
1807 13th Street
Sacramento, CA 95814

(916) 322-7813

CALENDAR PAGE	251
MINUTE PAGE	568

INITIAL STUDY CHECKLIST

Form 13:20 (7/80)

File Ref.: W 40271

I. BACKGROUND INFORMATION

A. Applicant: Holly Energy
2600 Diamond Shamrock Tower
717 N. Harwood St., Dallas, TX 75201
ATTN: Mr. W.H. Boyles, Vice President Land & Legal

B. Checklist Date: / /

C. Contact Person: Donald L. Hoagland
 Telephone: (916) 322-7804

D. Purpose: Issuance of a permit to prospect for geothermal resources

E. Location: Westside of Salton Sea approximately 3 miles southeast of Truckhaven, Imperial County, state reserve mineral interests within Sec. 36, T10S, R9E, Sec. 22, T10S, R10E, and Sec 28, T10S, R10E SBBM, approximately 1875 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 electrical power generation. Under this permit, permittee could not produce, but could 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 will be assessed by the County of Imperial under application for a conditional use permit. No lease will be issued until the impact of full field development has been assessed.

G. Persons Contacted: Doug Stockton, Geothermal Officer, Division of Oil and Gas; Ronald Powell, Department of Fish & Game, Blythe; 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, mudslides, ground failure, or similar hazards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Yes Maybe No

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 crop? 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

- 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Possible interference with emergency response plan or an emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
- K. *Population.* Will the proposal result in:
- | | | | |
|---|--------------------------|--------------------------|-------------------------------------|
| 1. The alteration, distribution, density, or growth rate of the human population of the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|
- L. *Housing.* Will the proposal result in:
- | | | | |
|---|--------------------------|--------------------------|-------------------------------------|
| 1. Affecting existing housing, or create a demand for additional housing? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|
- M. *Transportation/Circulation.* Will the proposal result in:
- | | | | |
|---|--------------------------|-------------------------------------|-------------------------------------|
| 1. Generation of substantial additional vehicular movement? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Affecting existing parking facilities, or create a demand for new parking? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Substantial impact upon existing transportation systems? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Alterations to present patterns of circulation or movement of people and/or goods? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Alterations to waterborne, rail, or air traffic? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
- 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Parks and other recreational facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Maintenance of public facilities, including roads? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 6. Other governmental services? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
- O. *Energy.* Will the proposal result in:
- | | | | |
|---|--------------------------|--------------------------|-------------------------------------|
| 1. Use of substantial amounts of fuel or energy? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Substantial increase in demand upon existing sources of energy, or require the development of new sources? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
- P. *Utilities.* Will the proposal result in a need for new systems, or substantial alterations to the following utilities:
- | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|
| 1. Power or natural gas? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Communication systems? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Water? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Sewer or septic tanks? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Storm water drainage? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Solid waste and disposal? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
- Q. *Human Health.* Will the proposal result in:
- | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|
| 1. Creation of any health hazard or potential health hazard (excluding mental health)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Exposure of people to potential health hazards? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
- 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|-------------------------------------|--------------------------|
- S. *Recreation.* Will the proposal result in:
- | | | | |
|---|--------------------------|--------------------------|-------------------------------------|
| 1. An impact upon the quality or quantity of existing recreational opportunities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|

Yes Maybe No

I Cultural Resources.

- 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)

- A2,3. 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 reseeded upon conclusion of drilling.
- B2. 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. 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. Potable 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. 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.
- F1. 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 1/4 mile from the site.

(See Attachment)

IV. 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: 11 / 10 / 81

Donald L. Hoagland
For the State Lands Commission

CALENDAR PAGE 255
MINUTE PAGE 572
Form 1370 (7/80)

(Attachment)

- G1. 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.
- H1. 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 stage will end all activity and any potential for land use alteration.
- I1. 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. 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. The permit will require a blowout contingency plan to contain any hazardous materials at the drill site.
- M1. 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. 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 and 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.
- P6. Drilling wastes will be contained in the sump approved by all appropriate state and local agencies having jurisdiction over solid waste disposal. Drilling wastes will either be dried on the site and covered or removed and trucked to an approved II-1 site.
- Q1. 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. Temporary siting of a drill rig may be aesthetically offensive; however, the proposed drill sites are located in relatively remote and sparsely populated areas.
- T1. 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 drill sites are approved. During the initial exploratory phase activities will be restricted to existing roads and trails to prevent possible damage to cultural resources.

CALENDAR PAGE

256

MINUTE PAGE

573

COMMENTS RECEIVED FROM REVIEW OF INITIAL STUDY CHECKLIST AND PROPOSED MITIGATION

1. The Resources Agency
Department of Fish and Game

COMMENT:

It does not appear that there are any rare or endangered flora or fauna in the project area, with the possible exception of the flat-tailed horned lizard. Because of this possibility, and the fact that some rare and endangered plant species are often found in a sandy or dune environment, vehicular activity during initial exploration should be restricted to existing roads and trails whenever possible.

RESPONSE:

A provision for restricting vehicular activity to existing roads and trails during the initial exploratory phase will be made a part of the permit.

2. Jay Von Werlhof, Director
Imperial Valley College Museum

COMMENT:

While it does not appear archeological values are present within the project area, archeological or prehistoric sites are known to exist in the area. The extent and exact location of these sites is unknown at this time. Therefore, to avoid damage to potential sites, cross country driving during the exploratory stage should be limited.

RESPONSE:

See response to #1.

3. County of Imperial
Phillip Shafer, Geothermal Planner

COMMENT:

Will the applicant be required to obtain a use permit from the county for the drilling of temperature gradient holes and deep exploratory wells?

RESPONSE:

Once surficial exploration to target drill sites or locations for temperature gradient holes is completed, the applicant will be required to obtain a permit from the county and an assessment of site specific impacts will be made.

(2) of Comments received from Review of Initial Study Checklist

COMMENT:

The availability of water for drilling may be a problem and should be addressed in the initial study.

RESPONSE:

The applicant plans to purchase water from the Coachella Valley Water District. Water to some of the sites can probably be taken from a hydrant on Air Park Drive which is supplied from the "County Line Aquifer". Water will be piped or trucked to the other sites. Water requirements for drilling represents a small fraction of the total annual water needs for the west side of the Salton Sea.

COMMENT:

Protections for shallow groundwater and surface water contamination from possible blowouts described in the Environmental Impact Report prepared for Imperial County by Westec Services, Inc. titled "Truckhaven Prospect Geothermal Exploratory Wells" should be made a part of the study and the suggested mitigation measures made a part of the permit.

RESPONSE:

The portions of the Truckhaven EIR dealing with potential pollution of groundwater and surface water, and proposed mitigation measures contained in Sections 2.2.2.2 through 2.2.3.2. on pages 2-16 and 2-17 are, by reference, made a part of this study and the proposed mitigation measures will be made a part of the permit.

4. The Resources Agency
Maurice H. Getty, Chief
Resource Protection Division
Department of Parks and Recreation

COMMENT:

Mitigation measures for the following potential environmental impacts should be detailed.

-Rare or endangered plants and animals: Dunes and sandy areas are potential sites for rare plants (e.g., Astragalus magdalena var. poirsonii and Astragalus lentiginosus borregainis) and sensitive animals (the flat-tailed horned lizard and the Colorado Desert fringed-toed lizard). If these species are present on the property, disturbance of dunes and sandy areas by prospecting activities could be harmful to them.

(3) of Comments received from Review of Initial Study Checklist

-Prehistoric cultural resources: Prospecting activities, such as drilling temperature gradient holes, could damage or destroy evidence of prehistoric human occupation.

RESPONSE:

See response comments 1, 2 and 3 dealing with impacts on rare or endangered flora and fauna.

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CALENDAR PAGE	<u>261</u>
MINUTE PAGE	<u>578</u>