

MINUTE ITEM
18.

1/23/84
W 40200
W 40201
W 40202
Hoagland

GEOTHERMAL PROSPECTING PERMIT

During consideration of Calendar Item 18, attached, Claire Detrick, Executive Officer, asked that a memo from H. D. Carper, Director, Department of Fish and Game, dated January 19, 1984, regarding the Terms and Conditions for Geothermal Prospecting Permit on Wister Waterfowl Management Area, be incorporated into the record. Therefore, the attached memo and 12 pages of attachments are incorporated as part of Minute Item 18.

Attachment

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Memorandum

To : Claire T. Dedrick
Executive Officer
State Lands Commission
1807 13th Street
Sacramento, CA 95814

Date : January 19, 1984

From : Department of Fish and Game

Subject: Terms and Conditions for Geothermal Prospecting Permit on Wister Waterfowl Management Area

The attached are terms and conditions under which the California Department of Fish and Game will consent to the issuance of a Geothermal Prospecting Permit for the specified surface lands of the Wister Waterfowl Management Area. We request that this document be included as Exhibit B of any permit issued by the State Lands Commission.

G. D. Carper
Director

Attachments

RECEIVED

JAN 19 1984

STATE LANDS COMMISSION

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EXHIBIT B

TERMS AND CONDITIONS FOR GEOTHERMAL
PROSPECTING PERMIT ON
WISTER WATERFOWL MANAGEMENT AREA

The Wister Waterfowl Management Area was purchased and developed by the California Department of Fish and Game (Fish and Game) for the purpose of maintenance of waterfowl habitat, and is dedicated to that purpose in perpetuity. The following are included as special terms and conditions to this permit, in order to ensure compatibility of geothermal development with waterfowl habitat maintenance purposes. These terms and conditions shall also be included in any preferential lease.

1. As a condition of Fish and Game's acceding to these terms and conditions, at Fish and Game's option Bear Creek Mining Company (Bear Creek) shall agree to construct, or cause to be constructed, or assist Fish and Game in constructing, up to 500 acres of ponds (The "New Ponds") built to Fish and Game's specifications on certain lands in T10S, R13E, S33&M, provided that Bear Creek's costs in respect of such construction shall not exceed \$50,000 during the first year following the effective date of the Prospecting Permit nor \$50,000 during the second year, nor \$100,000 in the aggregate. Construction of the New Ponds shall be conducted within the "Permitted Area", as described hereinafter or within the Wister Waterfowl Management Area in T10S, R13E, S33&M.
2. Fish and Game's right to require the construction of the New Ponds, as set forth in Section 1 hereof, shall vest upon the effective date of this permit and, so long as Fish and Game requests such construction in writing within six months of said day, and shall not be divested for any reason thereafter. The following terms and conditions shall be binding on Fish and Game and Bear Creek only for so long as Bear Creek holds a valid geothermal prospecting permit or lease with rights of surface occupancy on any part of the Wister Waterfowl Management Area covered by this Prospecting Permit, subject to the exceptions expressed in section 10(i) hereunder.
3. Bear Creek's surface occupancy shall be restricted to section 1 and the north half of section 12, T11S, R13E, to the west half of section 6, T11S, R14E, and to the southern 125 feet of section 36, T10S, R13E, all being

1,295 acres M/L (these lands shall hereinafter be referred to as the "Area"). Bear Creek may slant drill into the remainder of the area covered by this Prospecting Permit, but shall have no right of surface use or occupancy thereon unless and until the State Lands Commission and Bear Creek execute, with the consent of Fish and Game, an amendment to this permit, or any preferential lease, which provides for such surface occupancy. In this event such an amendment is executed the lands referred to herein as the "Area" shall include the remainder of the area covered by this Prospecting Permit.

4. Except as otherwise limited by this Prospecting Permit, any preferential lease, statute or regulation Bear Creek may conduct operations and construct facilities as follows:
 - (a) Bear Creek may conduct operations and construct facilities only along existing roadways and/or rights-of-way within and along the boundaries of the Area (the "Roads"). The locations and extents of the Roads are more fully described in Attachment A. Bear Creek may conduct operations and construct facilities at other locations within the Area only with the consent of Fish and Game.
 - (b) Said operations and facilities may include geophysical, geochemical and geological surveys, shallow observation wells, exploratory wells, production wells, injection wells, steam gathering pipelines, reinjection pipelines and all other facilities and activities appurtenant thereto.
 - (c) Bear Creek may drill shallow observation and/or exploratory wells along the Roads without limitation on spacing, provided that no single temporary drill site will be greater than two acres in extent, and provided that any shallow observation or exploratory well not abandoned within two years of drilling will be considered to be a production or injection well as defined in subsection d hereunder. Bear Creek shall obtain the written consent of the Regional Manager of Fish and Game as to the location of any such wells prior to the submission of any drilling applications to the county or State.
 - (d) Bear Creek may drill and maintain production and/or injection wells along the Roads at a nominal drill-pad spacing of 1,320 feet, or at closer spacing if

it is necessary to do so to ensure efficient development of resources, without limitation on the number of wells which can be drilled from any one pad. Bear Creek shall obtain the written consent of the Regional Manager of Fish and Game as to the location of any such wells prior to the submission of any drilling applications to the County or State. However, the total number of permanent production and injection drill-pads in the Area shall not at any time exceed 30, and the acreage of any single permanent drill-pad shall not exceed one acre, without the written consent of Fish and Game. Subject to existing statutes and regulations, all drilling activity shall be conducted as far from ponded areas as possible, and in no event shall drill-pads encroach upon ponds existing as of the date of this Agreement, nor on levees or berms enclosing such ponds.

5. Bear Creek agrees not to construct, nor deliver directly, or indirectly through third parties, geothermal resources extracted from the permitted lands to, any geothermal power plant in, or within 1,000 feet of, the Wister Waterfowl Management Area without the written consent of Fish and Game.
6. Bear Creek agrees not to construct, nor deliver directly, or indirectly through third parties, electricity derived from geothermal resources extracted from the permitted lands to, overhead electrical transmission lines either in, or along rights of way immediately adjacent to, the Wister Waterfowl Management Area, nor within the NW1/4 and the E1/2, sec. 8, sec. 9, sec. 16, sec. 15, NW1/4 and E1/2, sec. 21, sec. 22, NE1/4, sec. 28, sec. 27, NW1/4 and E1/2, sec. 34 and sec. 35, T10S, R13E; nor within the E1/2, sec. 3, sec. 2, N1/2, sec. 11 and the S1/2, sec. 12 (excepting an easement of sufficient width for an overhead electrical transmission line along Pound Road where it passes along the south edge of sec. 12), T11S, R13E; nor within the NW1/4, sec. 7 and the E1/2, sec. 6, T11S, R14E, nor within that part of sec. 31, T10S, R14E lying west and south of Highway 111, without the written consent of Fish and Game. Such consent shall not be withheld for the delivery of electricity to overhead electrical transmission lines located along and immediately adjacent to Highway 111, if such transmission lines were authorized by the Public Utilities Commission. Fish and Game, for its part, consents to Bear Creek constructing underground power lines along the Roads, or along other similar roadways that cross the lands covered by this Prospecting Permit north of the Area. Bear Creek will consult freely with Fish and Game to minimize power line impacts on the Wister Waterfowl Management Area, and

other potentially sensitive lands adjoining the Wister Waterfowl Management Area, prior to any construction activities.

7. Exploration, drilling and construction activities shall be carried out in the Area only between March 1 and August 31st of each year inclusive. No activity shall occur prior to July 1 of each year, within one-half (1/2) mile of Yuma Clapper Rail nest sites as identified by September 1 of the previous year by Fish and Game; except that Bear Creek may prepare sites for drilling during March of each year, and may commence drilling activities prior to July 1 of each year, if Fish and Game determines that the Yuma Clapper Rail nest sites have been abandoned. However, Bear Creek will have the right to carry out routine maintenance, monitoring, and inspection of any existing facilities in the Area during the intervening period, and also over this period the right to carry out any emergency workovers or repairs to wells or equipment that may be necessary to maintain production from the Area, avoid waste or pollution or as may be required by Imperial County's Emergency Plan, or other emergencies
8. Bear Creek and Fish and Game shall consult freely to ensure that all pipelines and wellsites are located, marked and protected so as to minimize interference with present surface uses of the Area. Specifically:
 - (a) all pipelines shall be protected so as to prevent rupture resulting from the discharge of any firearm legally permitted in the Area.
 - (b) all pipelines shall have marked equipment crossings at designated locations as per Fish and Game's specifications.
 - (c) all pipeline corridors shall be planted and maintained as wildlife habitat as per Fish and Game's specifications, provided that access to the pipelines for routine maintenance or emergency situations is not disrupted thereby.
 - (d) Bear Creek shall incorporate within its Imperial County Emergency Plan, a system acceptable to Fish and Game designed to confine any pipeline or wellhead spills.

- (e) Bear Creek shall not discharge wastes potentially detrimental to fish, plant or bird life onto the Area nor into drains which pass through the Area into the Salton Sea.
- (f) Neither drill pads, pipelines, nor any other permanent facilities shall encroach on areas ponded by Fish and Game without Fish and Game consenting to such encroachment. Consent shall be obtained from the Fish and Game Regional Manager.
- (g) Bear Creek shall be responsible for construction and maintenance of any new roads necessary to perform operations in the Area, and for any restoration or relocation of existing roads that may be required. The consent of Fish and Game shall be secured in advance of any such road construction or relocation.
9. Bear Creek and Fish and Game shall consult freely in order to determine the nature, content and scheduling of such biological studies as may be necessary to assess and/or monitor the impact of geothermal development on wildlife resources in and immediately adjacent to the Area. Bear Creek shall conduct such studies at the request of Fish and Game at Bear Creek's cost.
10. Bear Creek shall waive any objections it might otherwise assert to Fish and Game constructing and/or maintaining ponds on certain Imperial Irrigation District (IID) lands on which Bear Creek presently holds geothermal leases and appurtenant rights to use the surface under an agreement with IID dated September 2, 1981 (the "Leasehold Interests"). These lands are described as follows: the N1/2 of the NW1/4, the SE1/4 of the NW1/4, the NE1/4 of the SW1/4, the W1/2 of the SE1/4, the SE1/4 of the SE1/4, sec. 9; the E1/2 of the NE1/4, sec. 16; the SW1/4 of the NW1/4, the W1/2 of the SW1/4, sec. 15, SE1/4 sec. 22, all in T10S, R13E, being 640 acres M/L, (the "Permitted Area"); and the lands covered by existing Fish and Game ponds covering an effective area of 250 acres M/L in the E1/2, sec. 22 and the E1/2, sec. 27, T10S, R13E, (the "Existing Pond Area"), subject to the following terms and conditions:
- (a) Fish and Game and Bear Creek acknowledge that the Permitted Area and the Existing Pond Area are owned by IID. Fish and Game and Bear Creek further acknowledge that the Leasehold Interests are subject

to all deficiencies of title to and encumbrances on the Permitted Area and the Existing Pond Area in existence as of the effective date of this Prospecting Permit or which may be subsequently asserted by virtue of facts or encumbrances in existence as of the effective date of this Prospecting Permit. Bear Creek expressly disclaims any power or authority to grant to Fish and Game the rights to construct and/or maintain ponds within the Permitted Area and the Existing Pond Area, and Fish and Game recognizes that, as between Fish and Game and Bear Creek, it is solely responsible for obtaining such grants, rights, waivers and consents from IID and/or any third parties as may be required to permit Fish and Game to lawfully conduct such activities. Subject to the provisions of this Exhibit B, it is intended that the waivers and consents herein given by Bear Creek be given to the full extent that Bear Creek is capable of so giving by virtue of the nature and quality of the Leasehold Interests, and such waivers and consents are further intended to be binding upon Bear Creek's successors and assigns in and to the Leasehold Interests.

- (b) Fish and Game shall not construct any ponds on the "Permitted Area" within 200 feet of the Northern and Eastern boundaries of the "Permitted Area" without the prior consent of Bear Creek.
- (c) Bear Creek shall not voluntarily surrender any of its leased lands in the Permitted Area or the Existing Pond Area before expiration of the primary term of the IID lease on September 2nd, 1991. Thereafter, Bear Creek cannot guarantee that it shall continue to hold geothermal leases on any IID lands. However, if Bear Creek is legally entitled to maintain, and chooses to maintain, IID leases, or amendments thereof, covering the Permitted Area or the Existing Pond Area, or portions thereof, in effect beyond the expiration of the primary term, then Bear Creek will not voluntarily surrender any lands from within said Areas on which ponds exist as of September 2nd, 1991, for so long as such IID leases remain in effect.
- (d) Bear Creek shall have the right to relocate, at any time while the IID lease covering the Existing Pond Area remains in effect at its own cost, ponds now existing in said area.

- (e) Bear Creek shall not have the right to relocate any ponds within the Permitted Area. However, Fish and Game shall have the option of requiring Bear Creek to relocate, at Bear Creek's cost, any ponds within the Permitted Area that may lie within one-half mile of any proposed geothermal power plant to which Bear Creek supplies geothermal resources, with the relocation to be completed before construction of the power plant commences.
- (f) Except as provided elsewhere herein, all construction, maintenance and operation of any ponds built within the "Permitted Area" and the Existing Pond Area will be at Fish and Game's cost.
- (g) Bear Creek and Fish and Game shall consult freely to establish specific terms and conditions for any pond relocations that may be required in the future. Any relocation sites must be approved by Fish and Game.
- (h) After any pond relocation, Fish and Game shall have the right to operate the old pond(s) for a period of two years following completion of construction of replacement pond(s) at the new site.
- (i) The provisions of this Section 10 shall be binding on Fish and Game and Bear Creek for so long as Bear Creek holds a preferential geothermal lease or prospecting permit with rights of surface occupancy on any part of the Wister Waterfowl Management Area covered by this Prospecting Permit, and shall remain binding on Fish and Game and Bear Creek following any voluntary surrender of such rights by Bear Creek. The expiration of such lease or prospecting permit shall not be construed as a voluntary surrender. However, said provisions shall cease to be binding if the State or its authorized agent causes such lease or prospecting permit to be terminated, or causes Bear Creek's rights of surface occupancy thereunder to be terminated as a result of any default. In the event the State, or its authorized agent, imposes conditions which render the purpose for which such prospecting permit or lease has been frustrated, then a quitclaim of the lease or prospecting permit shall not be considered a voluntary surrender. In the event Bear Creek seeks to quitclaim the prospecting permit or lease based on a frustration of purpose, Bear Creek shall specify the conditions imposed which have rendered the purpose of the prospecting permit or lease infeasible and how such conditions have frustrated the purpose of the prospecting permit or lease.

11. Bear Creek shall purchase from IID water ordered by Fish and Game for the management of waterfowl habitat within the Area and for the New Ponds subject to the following terms and conditions:

(a) Bear Creek shall purchase up to 3.71 acre-feet of water per year for each acre within the Area that Bear Creek holds under lease or prospecting permit with rights of surface occupancy, with all computations made to the nearest acre-foot and the nearest dollar, and the fractions of years prorated.

(b) Bear Creek shall purchase up to 1,200 acre-feet per year for management of waterfowl habitat in the New Ponds.

(c) Fish and Game shall diligently utilize the free surplus flows of water available to it to reduce the need for water purchases wherever possible.

(d) Bear Creek shall purchase no water for the first two years following the effective date of this Prospecting Permit. If at any time after those two years Bear Creek exercises its option to quitclaim, (per section 6804.1 of the Public Resources Code), any land within the "area", then Bear Creek's obligation to provide water on those lands quitclaimed shall continue for one year following Bear Creek's notifying Fish and Game of said quitclaim.

12. Bear Creek shall at all times conduct its activities on the Area in such a manner as to minimize interference with the purpose, function, management or use of the Wister Unit of the Imperial Waterfowl Management Area by Fish and Game, as set forth in existing statutes.

The State shall not be liable for any damage or loss suffered by Bear Creek, its officers, directors, employees, agents, successors, or assigns occurring as a result of public use of the permitted lands, whether or not such such use was authorized by the State.

13. Prior to any construction, drilling, or testing activity which may impact fish and wildlife on the Area, the permittee shall obtain the consent of the Regional Manager, Department of Fish and Game, Region 5 Office, 245 W. Broadway, Long Beach, California 90802; telephone (213) 590-5113. Bear Creek and Fish and Game will consult freely at all times for the purpose of

identifying site-specific mitigation measures for impacts which occur during project operations.

14. None of the preceding or following conditions shall be considered as prepayment of, or consideration in lieu of, royalties payable to the State of California.
15. None of the preceding or following conditions is intended to serve in lieu of any evaluation or disclosure required by the California Environmental Quality Act.
16. The applicant shall monitor all gaseous emissions in conformity with State air standards. In the event that levels of any gas sufficient to cause acute or chronic toxicity to plants or animals is found, the permittee shall install and operate the necessary abatement equipment.
17. The operation of temporary or permanent equipment, and all other operations performed, shall be done in a manner to suppress all noise and vibration to an acceptable level. Project activities shall conform with Class II open space noise standards of Imperial County (50 db(A)CNEL). During the period March 1 through August 31, noise levels will be measured at the nearest residence. During the period September 1 through the last day of February, the noise levels will be measured 150 feet from the source of noise.

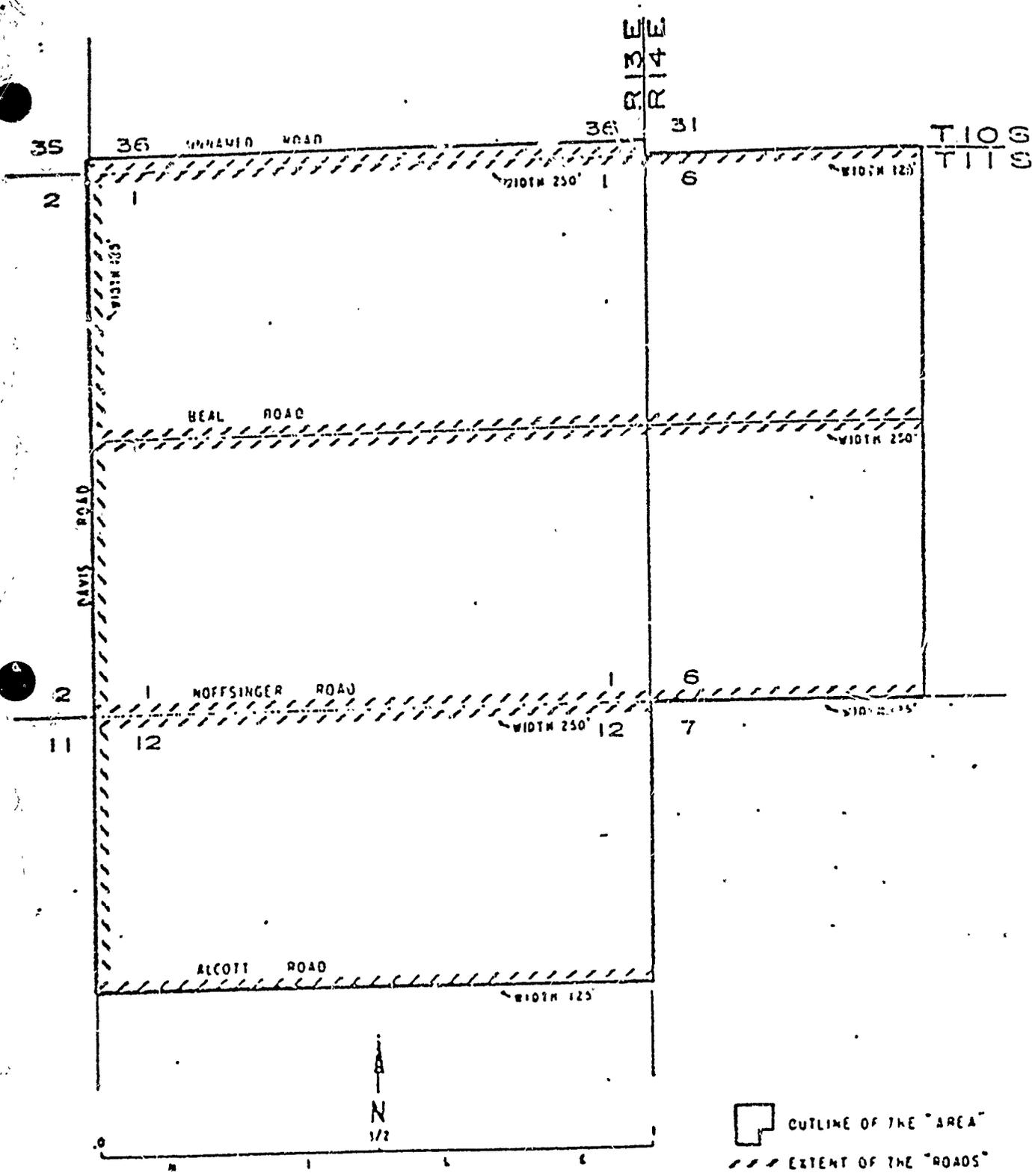
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ATTACHMENT A. TO EXHIBIT B - ROADS

The Roads shall be defined as:

1. That portion of Alcott Road lying in the north half of section 12, T11S, R13E, being 2,640 feet long and 125 feet wide M/L.
2. That portion of Noffsinger Road lying in sections 1 and 12, T11S, R1E, being 5,280 feet long and 250 feet wide M/L; and that portion of Noffsinger Road lying in the southwest quarter of section 6, T11S, R14E, being 2,640 feet long and 125 feet wide M/L.
3. That portion of Beal Road lying in section 1, T11S, R13E, and that portion lying in the west half of section 6, T11S, R14E, all being 7,920 feet long and 250 feet wide M/L.
4. That portion of the unnamed road running one-half mile north of, and parallel to, Beal Road, lying in section 1, T11S, R13E, and section 36, T10S, R13E, being 5,280 feet long and 250 feet wide M/L, and that portion of said unnamed road lying in the northwest quarter of section 6, T11S, R14E, being 2,640 feet long and 125 feet wide M/L.
5. That portion of Davis Road lying in section 1 and the north half section 12, T11S, R13E, being 7,920 feet long and 125 feet wide M/L.

It is assumed for the purposes of definition that all of the roadways listed above are centered on section lines or quarter-section lines, and that cleared areas along these roadways are 250 feet wide M/L between adjacent wildlife ponds existing as of the effective date of this Prospecting Permit. However, nothing herein shall be construed to give Bear Creek the right to encroach on or otherwise physically disturb any wildlife ponds existing as of the effective date of this Prospecting Permit without obtaining the prior consent of Fish and Game.

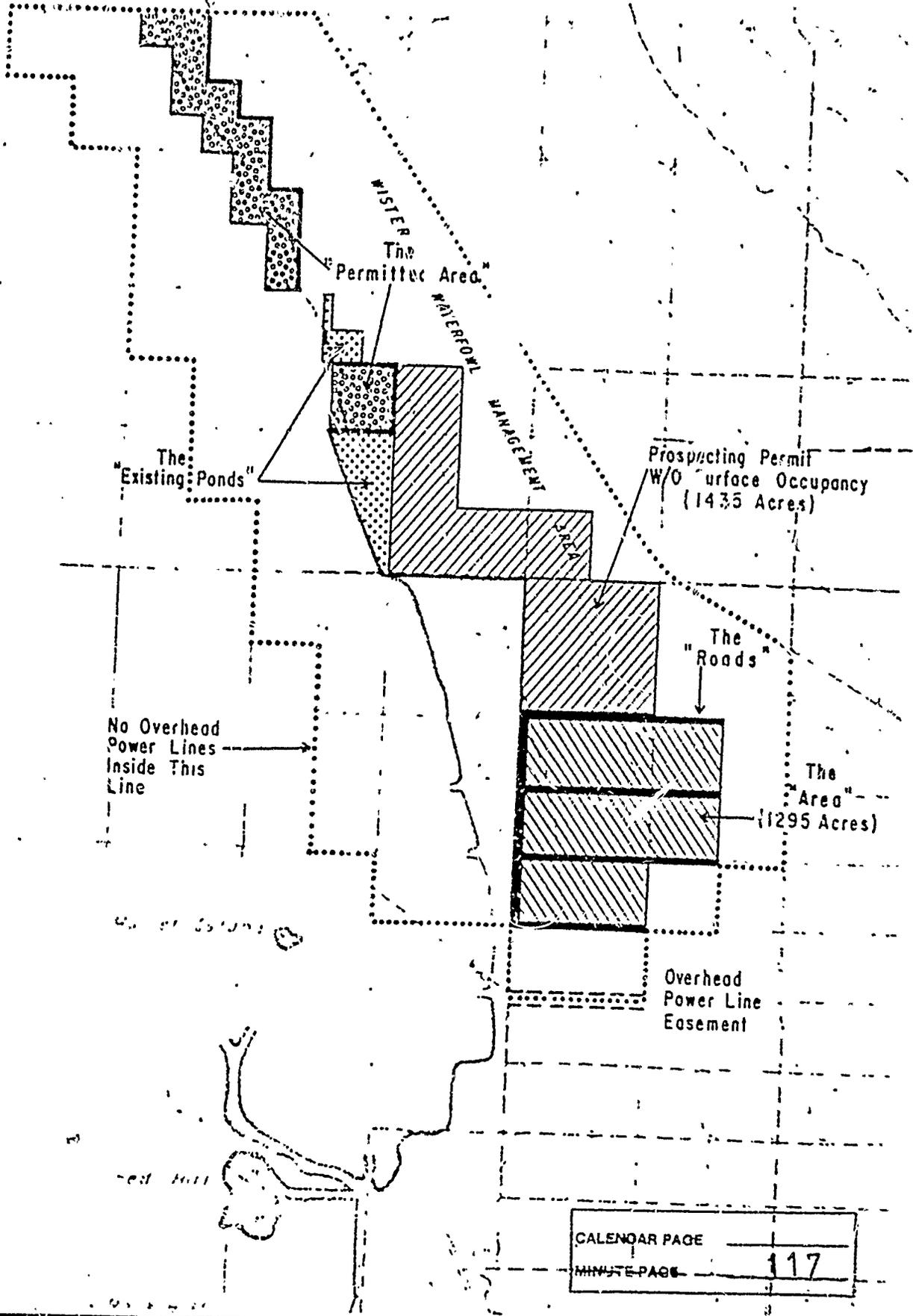


SKETCH TO ACCOMPANY
 ATTACHMENT "A"

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Attachment B
to Exhibit B

200' Wide
Setback
For Pond
Construction



MINUTE ITEM

This Calendar Item No. 18
approved as Minute Item
18 by the State Lands
Commission by a vote of 3
to 0 at its 1/23/84
meeting.

CALENDAR ITEM

18

1/23/84
W 40200 PRC 6552
W 40201
W 40202
Hoagland

GEOHERMAL PROSPECTING PERMIT

APPLICANT: Bear Creek Mining Company
2520 North Huachuca Drive
Tucson, Arizona 85745
Attn: Larry L. Grogan, Division Landman

AREA, TYPE LAND AND LOCATION:
Approximately 2,735 acres of proprietary
land owned by the Department of Fish and
Game within the Wister Unit, Imperial Wildlife
Area, along the southeast shore of Saiton
Sea, Imperial County.

LAND USE: Geophysical, geological and geochemical
exploration and the initial drilling of
four deep exploratory wells to assess the
geothermal potential of the area as covered
by Negative Declaration (SCH 83100502),
which was prepared by Imperial County,
circulated for review and comment via the
State Clearinghouse and adopted November 23,
1983, and for which a Notice of Determination
has been filed.

A 80

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S 31

Non-Substantive Revision 10/31/84

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TERMS OF THE PROPOSED PERMIT:

Initial period: The State may extend the term for an additional period not exceeding two years.

Surety bond: \$50,000.

Special: Upon discovery of geothermal resources in commercial quantities within the permit area, permittee will be entitled to a preferential lease upon notice of intention to exercise this right; subject, however, to the discretion of the Commission and review of environmental documentation pertaining to 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 annum during any period of extension, unless a well has been drilled. If a preferential lease is executed, it will provide for a rental of \$1 per acre per annum, and a royalty of ten percent of gross revenues received from the sale of steam and five 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; and Div. 20.

B. Cal. Adm. Code: Title 2, Div. 3; Title 14, Div. 6.

AB 884: 5/21/84.

CALENDAR ITEM NO. 18 (CONTD)

OTHER PERTINENT INFORMATION:

1. Bear Creek Mining Company applied, in December 1981, for a Geothermal Prospecting Permit to explore for geothermal resources beneath the entire Wister Unit of the Imperial Wildlife Unit; an area of approximately 4,943 acres.
2. P.R.C. Section 6924 provides that when the surface of State-owned lands sought for development of geothermal resources is owned by an agency other than the Commission, the Commission may issue permits or leases only with the consent of the proprietary agency subject to such reasonable terms and conditions as may be prescribed by the agency.
3. Initially, because of concerns about possible adverse effects geothermal resource development might have on their primary function of wildlife management, the Department of Fish and Game refused to grant consent for use of the surface; it was suggested that Bear Creek might obtain private leaseholds which would allow it to drill into State lands from outside the unit.
4. During negotiations over royalty rates and the permit area configuration, Bear Creek agreed to a permit covering approximately the southern half rather than the entire unit.
5. Bear Creek then reopened negotiations with the Department of Fish and Game to obtain consent for use of the surface of the Wister Unit. The Department of Fish and Game has now consented to the issuance of a prospecting permit, subject to reasonable terms and conditions which have been made a part of the permit. One of the principal conditions is that the permit area of approximately 2,735 acres has been divided into two parcels of 1,295 and 1,440 acres

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and Fish and Game will allow initial surface use of only 1,295 acres in the southern half of the permit area for exploration and development.

6. Additionally, under the terms and conditions for geothermal exploration required by the Department of Fish and Game, Bear Creek agrees to expend up to \$100,000 for the construction of up to 500 acres of new wildlife ponds and annually purchase up to 1,200 acre-feet of water for management of wildlife habitat at the new ponds. Bear Creek will also purchase 3.71 acre-feet of water for wildlife habitat management for each of the 1,295 acres of land for which it has the right of surface entry. Bear Creek also agrees to allow Fish and Game to maintain existing ponds presently constructed in lands leased by Bear Creek for geothermal exploration; if the land later is needed, Bear Creek agrees to relocate these ponds at its own cost.
7. All exploration and drilling activities will be restricted to existing roads or rights-of-way in the Wister Unit and drilling activities may only be carried out from March 1 to August 31.
8. Bear Creek has agreed that any transmission lines which may cross the Wister Unit and a specified area directly outside the unit will be put underground and construction of powerplants may not be closer than 1,000 feet of the boundary of the Wister Unit.
9. Bear Creek also agrees to fund and conduct biological studies which may be necessary to assess and/or monitor the impact of geothermal development on wildlife resources in and immediately adjacent to the Wister Area.

10. Bear Creek has approximately 16,000 acres of private land and land owned by the Imperial Irrigation District near or adjacent to the Wister Unit which it plans to develop in conjunction with the State land. Bear Creek plans a phased development of the private and State lands.

ENVIRONMENTAL INFORMATION:

This project is in the study area for the Salton Sea Master Environmental Impact Report (MEIR - 80102409) prepared by Imperial County and of the type of projects anticipated by and discussed in that document. This is the second such project for Bear Creek in the area covered by this document. The first project was a Geothermal Prospecting Permit covering a 40-acre parcel of sovereign land south of the Wister Unit which was approved by the Commission February 24, 1983 (Minute Item 25).

A Negative Declaration (SCH 83100502) has been prepared by Imperial County, circulated for review and comment via the State Clearing-house and adopted by the County on November 23, 1983. A Notice of Determination has been received.

The applicant shall abide by the regulations, restrictions, mitigation requirements, and all other measures designed to minimize the environmental impact of its operations under the proposed permit as set forth or discussed in the environmental document prepared and adopted by the County. (See Exhibit C.) The applicant shall comply with all modifications of equipment and plans deemed necessary by the State to achieve the objectives set forth in the environmental document and the Geothermal Prospecting Permit.

This project is situated on lands not identified as possessing significant environmental values. A staff review of available environmental information indicates no reason to identify the subject lands as having such values at this time.

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CALENDAR ITEM NO. 18 (CONTD)

APPROVALS REQUIRED:

Division of Oil and Gas, Regional Water Quality Control Board, County of Imperial Planning Department, Air Pollution Control District, Imperial Irrigation District, County Building Inspection Division, and others.

EXHIBITS:

- A. Land Description.
- B. Location Map.
- C. Imperial County Geothermal Exploration Permit.

IT IS RECOMMENDED THAT THE COMMISSION:

1. FIND THAT A NEGATIVE DECLARATION WAS PREPARED FOR THIS PROJECT BY IMPERIAL COUNTY AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN PRIOR TO APPROVAL OF THE PROJECT. (CAL. ADM. CODE 15096(f)).
2. DETERMINE THAT THE PROJECT AS ADOPTED BY IMPERIAL COUNTY WILL NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT.
3. AUTHORIZE THE ISSUANCE TO BEAR CREEK MINING COMPANY OF A TWO-YEAR GEOTHERMAL PROSPECTING PERMIT WITH THE RIGHT TO REQUEST A PREFERENTIAL LEASE IN THE EVENT GEOTHERMAL RESOURCES ARE DISCOVERED IN COMMERCIAL QUANTITIES ON THE PERMIT; THE COMMISSION MAY EXTEND THE PERMIT TERM FOR A PERIOD NOT TO EXCEED TWO YEARS; 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 EXTENSION UNLESS A WELL HAS BEEN DRILLED, IN THE LAND DESCRIBED ON EXHIBIT "A" ATTACHED HERETO. THE PERMIT AUTHORIZES GEOTHERMAL EXPLORATION INCLUDING THE DRILLING OF GEOTHERMAL WELLS. THE PERMIT FURTHER PROVIDES THAT ANY PREFERENTIAL LEASE WILL HAVE A RENTAL OF \$1 PER ACRE PER ANNUM, A ROYALTY OF TEN PERCENT OF GROSS REVENUES FROM THE SALE OF STEAM, FIVE PERCENT FROM THE SALE OF MINERAL PRODUCTS OR CHEMICAL COMPOUNDS, WITH A MINIMUM ANNUAL ROYALTY OF \$2 PER ACRE PER ANNUM. THE PERMIT FURTHER PROVIDES THAT BEFORE ISSUANCE OF ANY PREFERENTIAL LEASE A STUDY OF THE ENVIRONMENTAL IMPACTS OF DEVELOPMENT OF THE PERMITTED AREA MUST BE PREPARED AND CERTIFIED. THE PERMIT SHALL NOT AFFECT THE DISCRETION OF THE COMMISSION TO APPROVE OR DENY THE ISSUANCE OF SUCH A LEASE BASED UPON ITS

CALENDAR ITEM NO. 18 (CONTD)

REVIEW OF THIS ENVIRONMENTAL STUDY. THE PERMIT TO BE
USED IS THE FORM ON FILE IN THE OFFICE OF THE COMMISSION,
AND INCLUDES THE TERMS AND CONDITIONS REQUESTED BY
THE DEPARTMENT OF FISH AND GAME AS A CONDITION TO ITS
CONSENT.

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EXHIBIT "A"

LAND DESCRIPTION

W 40200
W 40201
W 40202

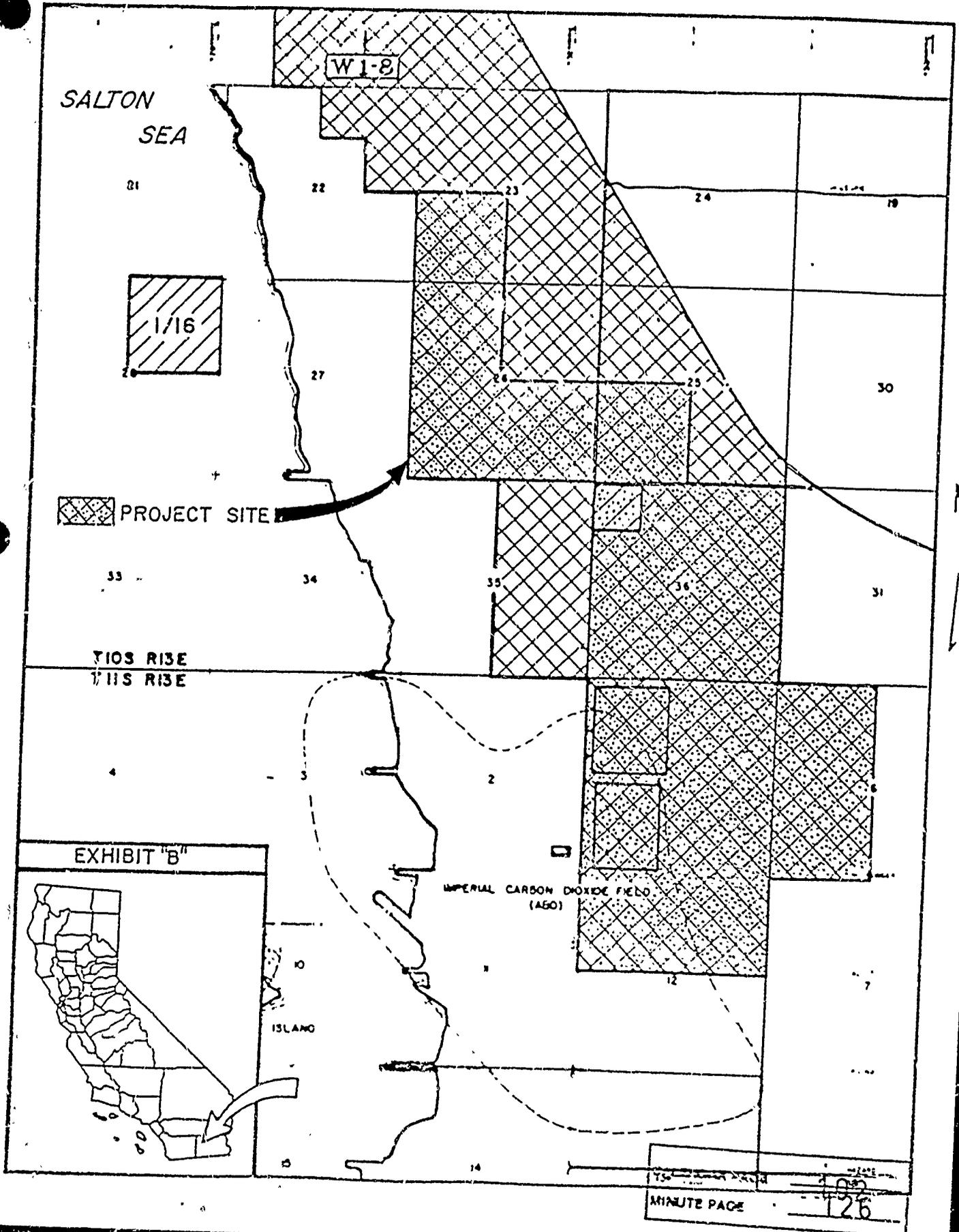
A parcel of California State proprietary lands in Imperial County,
California described as follows:

- SW $\frac{1}{2}$ of Section 23, T10S, R13E, SBM
- SW $\frac{1}{2}$ of Section 25, T10S, R13E, SBM
- NW $\frac{1}{2}$ and the S $\frac{1}{2}$ of Section 26, T10S, R13E, SBM
- Section 36, T10S, R13E, SBM
- Section 1, T11S, R13E, SBM
- N $\frac{1}{2}$ of Section 12, T11S, R13E, SBM
- W $\frac{1}{2}$ of Section 6, T11S, R14E, SBM

END OF DESCRIPTION

PREPARED MAY 10, 1983 BY BOUNDARY AND TITLE UNIT, LEROY WEED, SUPERVISOR.

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W1-8

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PROJECT SITE

EXHIBIT "B"

IMPERIAL CARBON DIOXIDE FIELD (AGO)

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EXHIBIT "C"

BEAR CREEK MINING COMPANY

PROGRAM #3

GEOTHERMAL EXPLORATION PERMIT

November 23, 1983

An application dated September 8, 1983 for a Conditional Use Permit to drill and test four geothermal exploratory wells in the Niland/Wister area on the north half of Section 12, Township 11 South, Range 13 East, and the west half of Section 6, Township 11 South, Range 14 East, S.B. & M., and shown on the attached map, has been submitted by Bear Creek Mining Company.

The Imperial County Planning Commission, having considered the information contained in the application for the project described herein, the Environmental Documentation and other relevant evidence, both verbal and written, hereby grants authority for the drilling and testing of four geothermal exploratory wells with all necessary appurtenances, in compliance with the application and subject to the following conditions and exceptions:

1. Conformity - The project shall be designed, constructed and operated in substantial conformance with the application, and the project description portion thereof.
2. Compliance With Laws and Permits - The project's development and operations shall comply with all applicable laws and regulations, and all necessary permits, including, but not limited to those required by the Regional Water Quality Control Board, Division of Oil and Gas, Air Pollution Control District, Imperial Irrigation District, Health Department, and the County Building Inspection Division shall be secured, as necessary.
3. Precedence of Requirements - Where inconsistencies might appear, the following order shall apply in determining which requirements are controlling: law, these conditions, adopted county policies and plans, the application.
4. Standards - The "Class I" Standards set forth in the County's "Terms, Conditions, and Standards for Initial Geothermal Development" shall be complied with except as may be modified by more specific or restrictive conditions of this permit.
5. General Welfare - All well drilling, testing and operations shall be conducted so as to be in harmony with the area and not conflict with the public health, safety, comfort, convenience, and general welfare.
6. Minimum Land Use - The site development plan and land use shall provide for minimum surface land usage including preservation of productive farm land and shall be in accordance with the Standards.

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7. Drainage and Erosion - The entire site shall be designed and constructed to prevent spills from endangering adjacent properties and waterways, and to prevent run-off from any source being channeled or directed in unnatural ways so as to cause erosion, siltation, or other detriments.
8. Spills - Drill sites shall be graded such that spills will be contained or directed into the site. An emergency plan in the event of a large spill (greater than the storage tank's capacity) shall be prepared for each well site so that such a spill shall not contaminate surface or groundwater or constitute a hazard to people, wildlife, or property. The plan shall be prepared in consultation with and receive the approval of the California Department of Fish and Game (CDF&G) prior to submission to the County. The Imperial Irrigation District (IID) shall be consulted and, with the concurrence of the IID, the Plan may include use of sections of drainage ditches for spill containment. The Plan shall be in compliance with the requirements of the California Regional Water Quality Control Board. The Plan shall include monitoring (following any spill) of affected waters and soils, and provisions for removing and replacing any materials if such techniques as flushing and leaching do not reduce toxic materials to acceptable levels. The operator shall demonstrate to the Planning Director the ability to implement the Plan.
- A set of plans showing structures, materials, pressure and drain lines, valves, and other information useful in combating a blowout or other accident, shall be available on site, and shall be provided to the Imperial County Fire Department, if requested.
9. Noise - The operation of temporary or permanent equipment and all other operations performed on the premises shall be done in a manner to suppress all noise and vibration to an acceptable level. Project activities shall conform with Class II open space noise standards or a measured maximum of 50 dbA, with noise levels being measured at the nearest occupied residence (from March 1 to August 31) and at 150 feet from the noise source at other times.
10. Electronic Interference - No operator shall operate electrical equipment or transmission facilities that will have a detrimental effect on the transmission of radio or television signals.
11. Air Pollution - All operations shall be conducted in compliance with the requirements of the Imperial County Air Pollution Control Officer.
12. Dust - Fugitive dust emissions shall be controlled by applying dust control measures (such as watering, clean gravel, soil stabilizers, or oil) to access roads and well pads, enforcing reduced speed travel on unpaved roadways, and limiting public access to well sites.

13. Noxious Odors - All operators shall take steps to insure that no harmful or obnoxious gases be released as a result of their operations.
14. Brine Tests - The project sponsor shall conduct brine chemistry tests which shall include but not be limited to analyses for hydrogen sulfide, mercury, arsenic, boron, ammonia, strontium, iron, zinc, barium, lithium, lead, copper, chromium, and radon-222. Results of such tests shall be provided to the County on request, but will be held proprietary.
15. Waste Disposal - All waste, whether liquid or solid, shall be disposed of in compliance with existing County, State, and Federal rules and regulations.
16. First Aid - A member of each working crew shall be trained in basic first aid and supplied with necessary medical equipment to respond to emergencies.
17. Aircraft Clearance - Marking and lighting of drill rigs shall be maintained in a manner satisfactory to the Federal Aviation Administration. A battery equipped emergency lighting system shall be provided.
18. Glare - All lights shall be directed or shielded so as to confine direct rays to the site and shall be muted to the maximum extent consistent with safety and operational necessity.
19. Traffic Safety - When the drill rig and other heavy equipment are being brought to and taken from the site, temporary signs warning motorists, and flagmen, as necessary, shall be used.
20. Seismic Zone - No structures for human habitation shall be built, maintained, or occupied within any special Seismic Study Zone unless a geologic report satisfactory to the State Geologist is prepared.
21. Archaeology - An archaeological survey of each site shall be conducted prior to any activities under this permit. If any unusual specimens of bone, stone or ceramic are discovered during construction, work shall cease and a qualified archaeologist shall be contacted for consultation.
22. Pipelines and Corridors - All pipelines leading to and from wells shall follow corridors agreed to by CDF&G. All such pipelines shall be clearly marked so that their location is visible at all points along their route. Such workings shall be provided in a manner not to interfere with surface uses of land by CDF&G and/or the public. All pipes will be covered with material which will prevent damage or rupture resulting from the discharge of any legal firearm permitted on the site. All pipelines will have marked equipment crossings at designated locations as may be

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required by CDF&G. All pipeline corridors will be planted and maintained into wildlife habitat as may be required by CDF&G. All well sites and pipeline corridors will be incorporated with, or installed adjacent to, existing drains, levees or roadways as agreed to by CDF&G.

23. Bird Season - Drilling or well development will be permitted only between March 1 and August 31.
24. Non-Interference - Operator shall conduct all of its activities at all times in such a manner as to minimize interference with the purpose, function, and use of the Water or the Imperial Waterfowl Management Area by the CDF&G. Operator shall discharge no wastes detrimental to fish, plant life, or bird life where such waste may enter water on the Imperial Waterfowl Management Area or the Salton Sea. Unless specifically permitted by the CDF&G, drilling operations may not be conducted that will encroach on areas ponded by the CDF&G.
25. Biological Studies - Operator shall conduct biological studies in consultation with and as may be required by CDF&G.
26. Responsible Agent - All development operations shall be conducted under the direction of a responsible and qualified engineer or agent whose name shall be provided to the Planning and Public Works Department. The responsible agent shall notify the appropriate County departments prior to operations under this permit. The operator shall insure that a maintenance crew is immediately available to insure compliance with the conditions and standards required. Further, the operator shall notify the CDF&G Regional Manager prior to any operations under this permit.
27. Right of Entry - The County reserves the right to enter the premises under the control of the operator to make appropriate inspections to determine if the conditions of this permit are being fulfilled.
28. Fees - The County may establish reasonable fees in accordance with law designed to reimburse County for actual costs in inspecting, supervising and monitoring project operations.
29. Clean Up and Restoration - Within one year after construction or operational activity at the project site ceases or upon completion of distinct phases, each well site shall be returned as closely as possible to its natural condition. Wells shall be capped or abandoned in accordance with regulations of the State Division of Oil and Gas. All waste and equipment shall be removed and properly disposed of and the land returned to its natural condition. The cleanup procedure shall be in compliance with the requirements of the Regional Water Quality Control Board. Well callars shall be fenced to prevent unauthorized entry and wildlife entrapment and in no event shall residual well sites

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exceed one acre without approval of CDF&G. Clean up and restoration shall be conducted in consultation with CDF&G and shall be performed to their satisfaction.

30. Bonds - Each operator under this permit shall file and furnish with County an Indemnity bond in the sum of \$50,000 for each well drilled or abandoned well reentered or a blanket bond in the sum of \$150,000 for any number (up to six) of wells drilled or reentered. The bond will indemnify the County for any costs incurred by the County in repairing any drill or test site, to as near as possible to its original state and in abating any public nuisance caused by the principal's exploratory or testing operations.
31. Insurance - Before commencing or continuing any Geothermal operations, the owner or operator shall show continuing evidence of insurance from the activities or operations incidental hereto conducted or carried on under, or by virtue of any law or ordinance. Such insurance shall be kept in full force and effect during the period of such operations.
32. Subsidence Monitoring - Permittee shall participate in a geothermal subsidence detection program and in connection therewith submit a plan for Public Works Department approval showing proposed locations of benchmark monuments. Monuments shall connect with the County's geothermal subsidence detection network. Benchmarks installed shall conform to County Standards. An initial survey shall be performed prior to any flowing of a well and shall meet National Geodetic Survey Standards. All field surveying procedures shall conform with such Standards. Permittee shall consult with CDF&G prior to any field work or installation. All field surveying data (such as forms and instrument checks), along with an adjustment of said data and analysis, all in conformity with the National Geodetic Survey Standards, shall be submitted for review and approval to the Department of Public Works within two months after completion of field work. Annual resurveying shall be performed unless satisfactory evidence is presented to the Department of Public Works showing that a well has not been flowed significantly during a given calendar year.
33. Future Permits Not Inferred - The granting of this permit to drill exploratory geothermal wells shall not be construed to commit the Planning Commission or the Board of Supervisors to approve any future geothermal production project.
34. Conditions Run with Land - The terms and conditions of this permit shall "run with the land" and bind any successor or assignee of this permit.
35. Non-Compliance - Should permittee violate any condition herein, County shall give notice of the violation. If permittee does not provide a plan to cure the violation, given reasonable notice and opportunity, the County may commence proceedings to revoke the permit.

36. Expiration - This permit shall expire and become null and void if substantial activity in pursuit of the purpose of this permit has not commenced within 18 months after being granted or if not pursued diligently thereafter. Subsequent lack of activity at any well site for a 12 month period shall be deemed failure to diligently pursue.
37. Severability - Should any condition of this permit be determined by a Court, or other agency with proper jurisdiction, to be invalid for any reason, such determination shall not invalidate remaining provisions of the permit.
38. Acceptance - Acceptance of this permit shall be deemed to constitute agreement by permittee with terms and conditions contained herein.
39. This permit shall not become effective until the prospecting permit/or lease between the State Lands Commission and the applicant has been granted. If the lease has not been obtained within eighteen (18) months, an extension may be granted by the Planning Director.

IN SUPPORT THEREOF, based upon the contents of the application, environmental documentation and oral and written testimony presented during the public hearing, the Planning Commission finds:

1. The project is desirable for the public welfare in that it may result in a determination of whether the development of geothermal resources at this location is feasible.
2. The project lies within an area determined to be suitable for geothermal development and which is so designated in the General Plan. Further, the project is consistent with the policy contained in the Geothermal, Open Space, Conservation and Ultimate Land Use Elements of the General Plan to encourage exploration and development projects.
3. The project is temporary in nature, with drilling operations expected to last no more than six weeks per well. Upon completion of the project, the developer shall return the project site as closely as possible to its natural condition; therefore, no significant environmental impacts are anticipated from the project.

APPROVED BY THE
IMPERIAL COUNTY PLANNING COMMISSION
November 23, 1983

Phil Styer

Appeal period ends 12-5-83
will be permit # 123-83

no appeal filed *PKS* 12-6-83

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