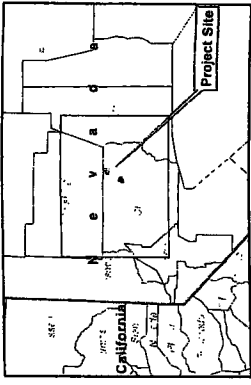


**Docket No. 11-06014**

**Application**

**Volume 2 of 2**

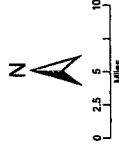
Figures



**LEGEND**

- Dixie Meadows Lease Area
- Coyote Canyon Lease Area
- Lamb Mineral Interest (see Note)
- Overland Travel Routes
- Limited Access Highway
- Highway
- Local Road

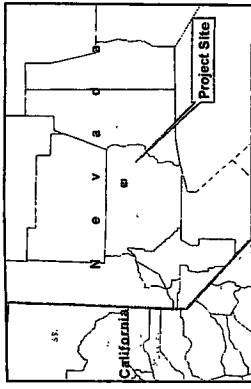
Note: TGP owns the mineral rights for this land, along with the right to surface use in exercise of mineral rights. The U.S. Navy owns the land surface.



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 Bureau of Land Management  
 Stillwater Field Office  
 Carson City District Office  
 5665 Morgan Mill Road  
 Carson City, NV 89701

**Figure 1**  
 Project Location  
 Coyote Canyon and Dixie Meadows  
 Geothermal Exploration EA

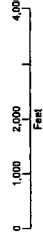




**Legend**

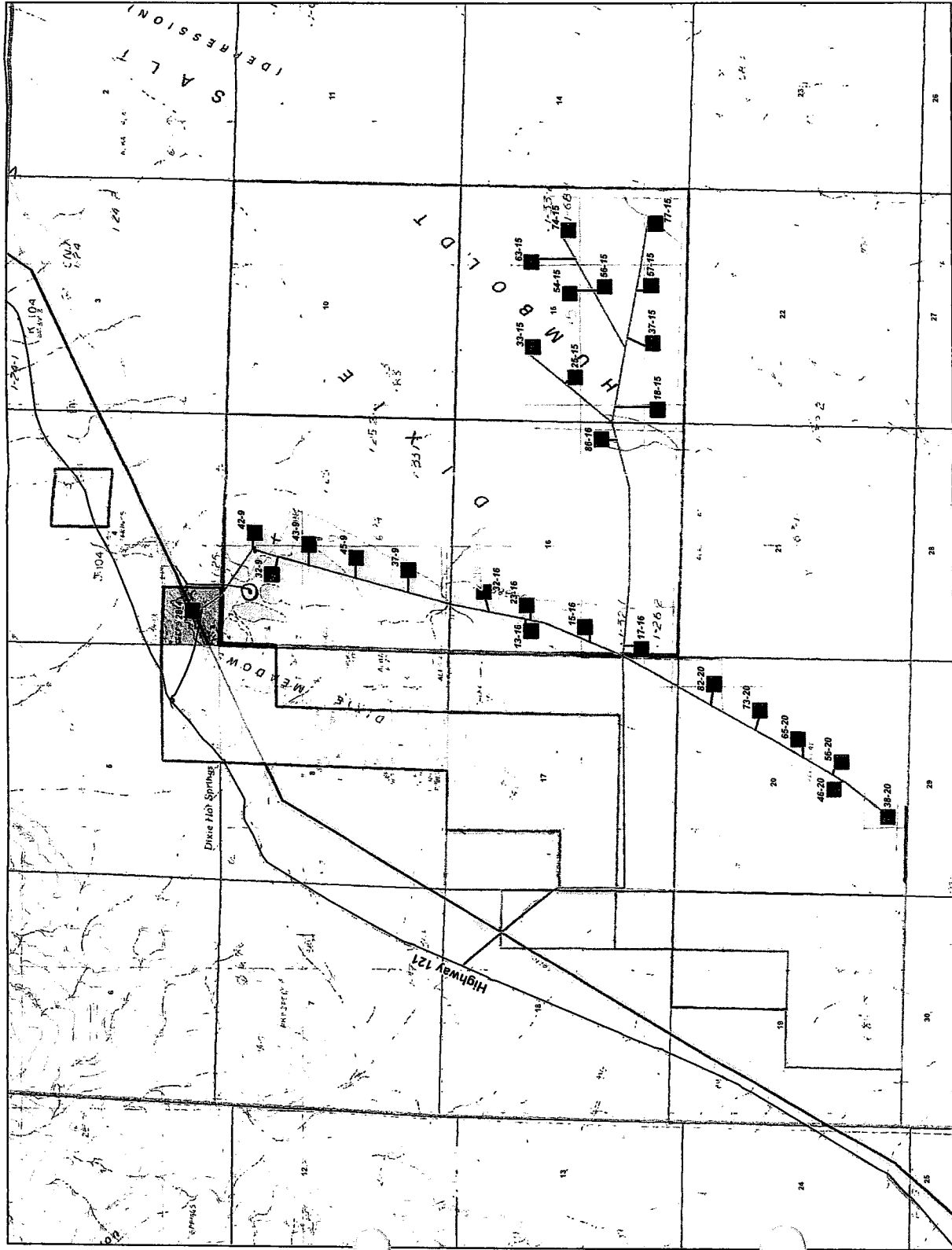
- Proposed Well Sites
- Potential Branch Access Road
- Potential Access Road
- Within Geothermal Lease
- Potential Access Road
- Outside Geothermal Lease
- Project Area
- Lamb Mineral Interest (see Note)
- N-60685
- N-60686
- Existing Transmission Line
- Existing 200' ROW
- Township/Range Boundary
- Section Boundary
- Bureau of Land Management
- Navy (See Note)
- Private

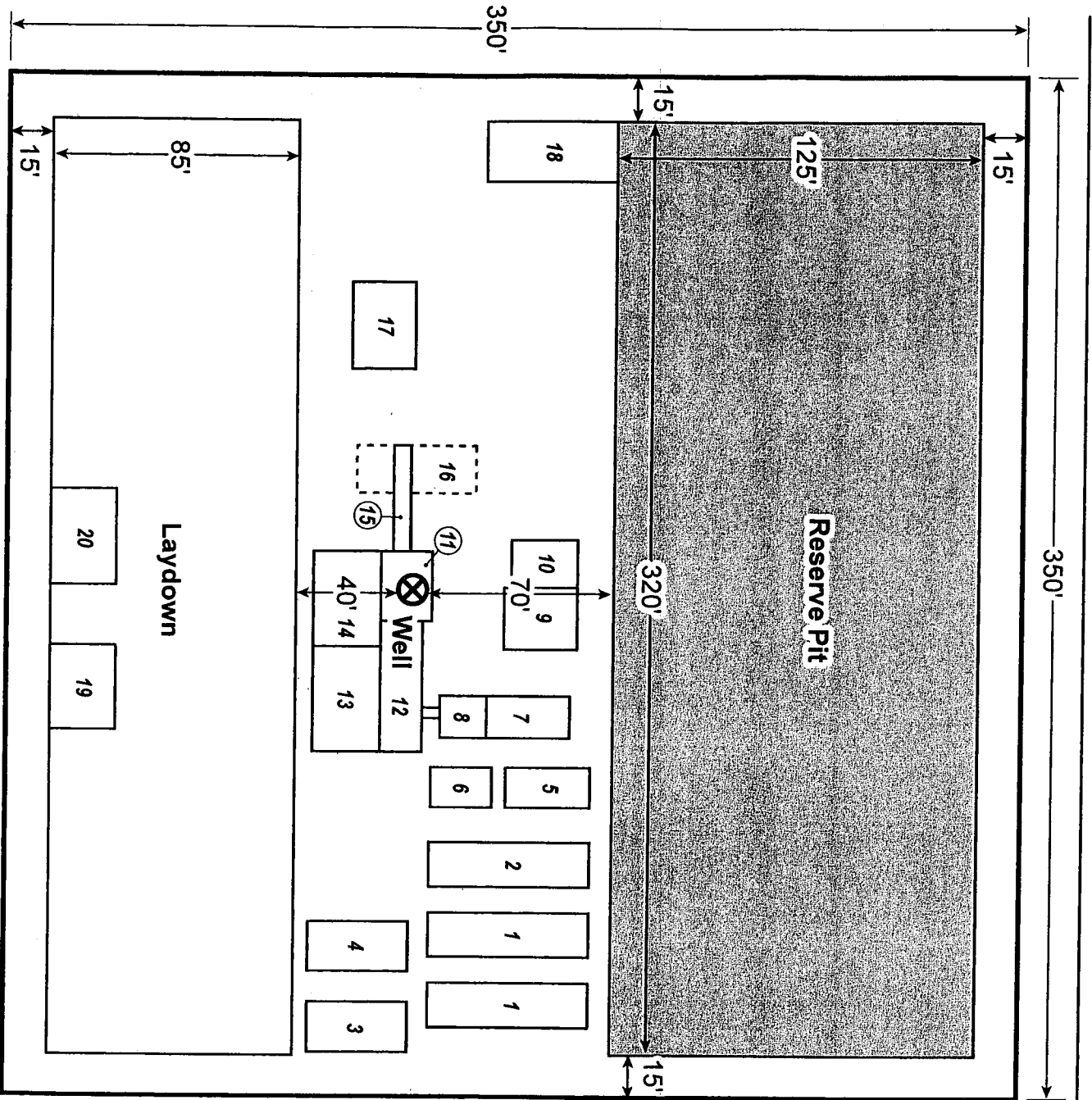
Note: TGP owns the mineral rights for this land, along with the right to surface use in exercise of mineral rights. The U.S. Navy owns the land surface.



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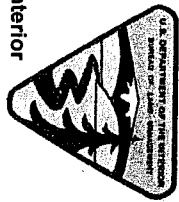
**Figure 3**  
 Dixie Meadows Proposed Action Lease Areas  
 Coyote Canyon and Dixie Meadows  
 Geothermal/Exploration EA





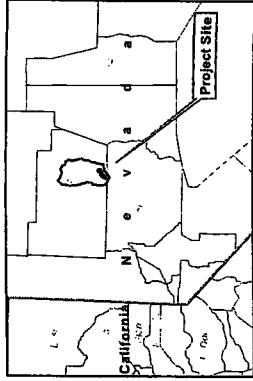
**LEGEND**

- 1 Air Compressors
- 2 Mud Tank
- 3 Fuel Tank
- 4 Water Tank
- 5 Mud Storage
- 6 Generator
- 7 Change House
- 8 Accumulator
- 9 Mud Pit
- 10 Shale Shaker
- 11 Rig Floor
- 12 Draw Works
- 13 Storage
- 14 Dog House
- 15 Catwalk
- 16 Pipe Rack
- 17 Electric Logger
- 18 Mud Logger
- 19 Trailer House
- 20 Trailer Office



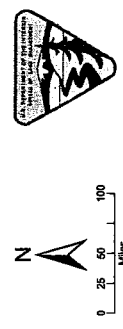
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**Figure 4**  
 Typical Well Pad Layout  
 Coyote Canyon and Dixie Meadows  
 Geothermal Exploration EA



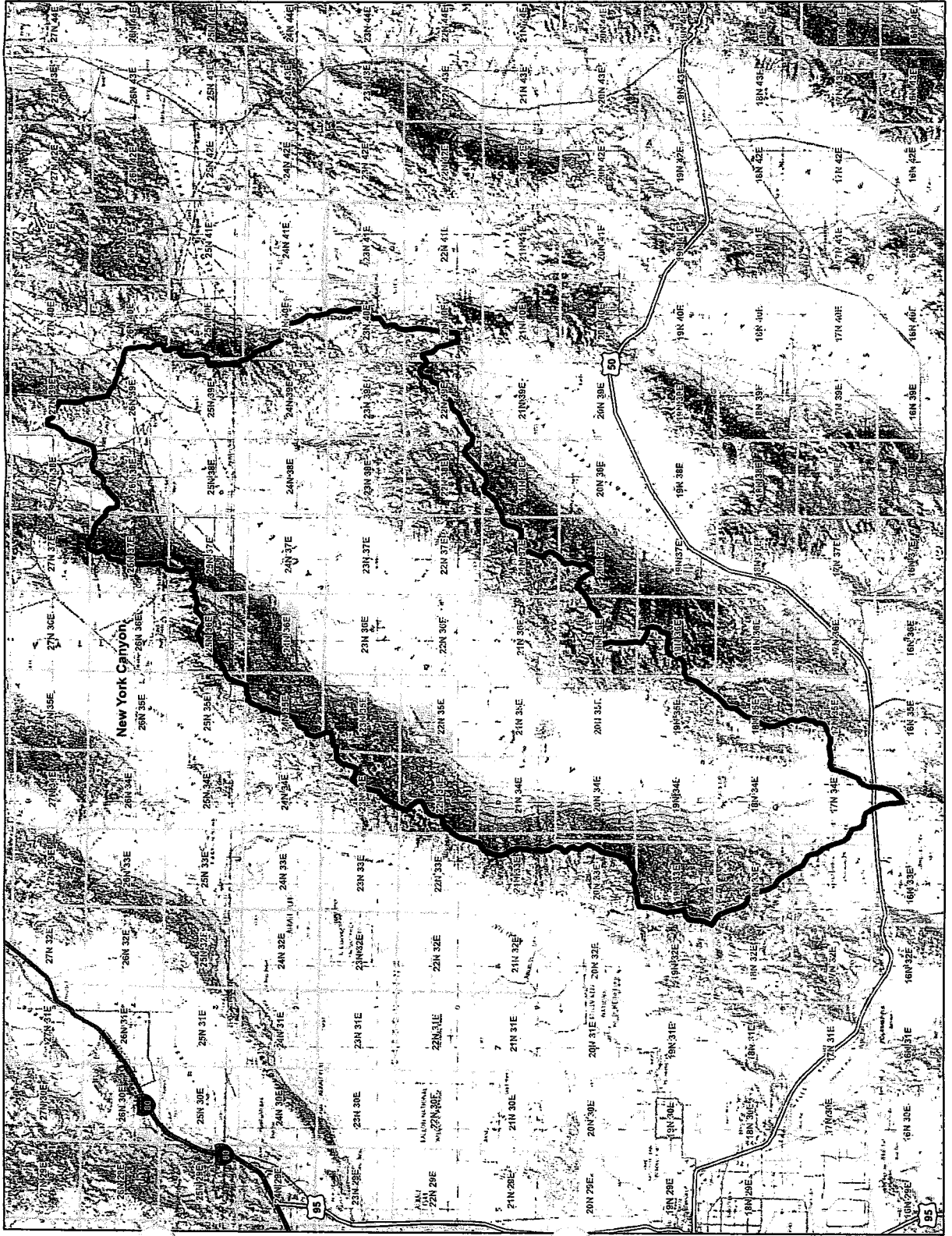
- LEGEND**
- TGP Coyote Canyon
  - Geothermal Lease Areas
  - TGP Dixie Meadows
  - Geothermal Lease Areas
  - Dixie Valley Groundwater Basin (Basin 128)\*
  - Township/Range Boundary

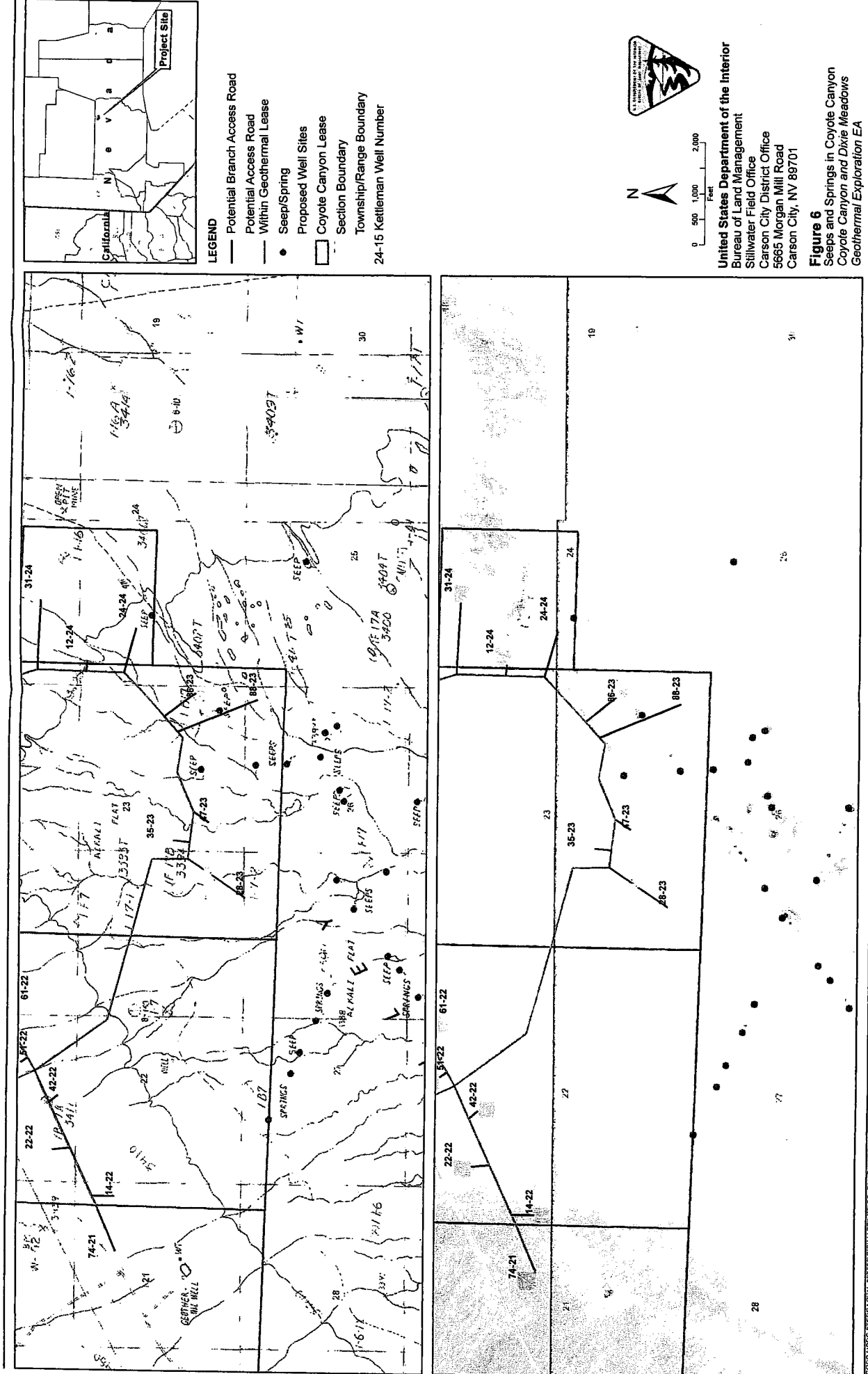
\*Source: Department of Conservation and Natural Resources  
Office of the State Engineer  
Division of Water Resources



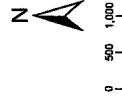
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**Figure 5**  
Groundwater Basin 128 (Dixie Valley)  
Coyote Canyon and Dixie Meadows  
Geothermal Exploration EA





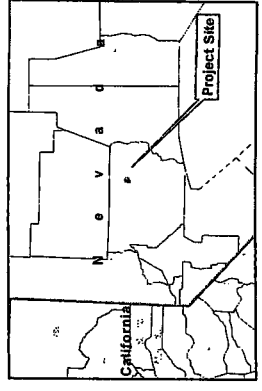
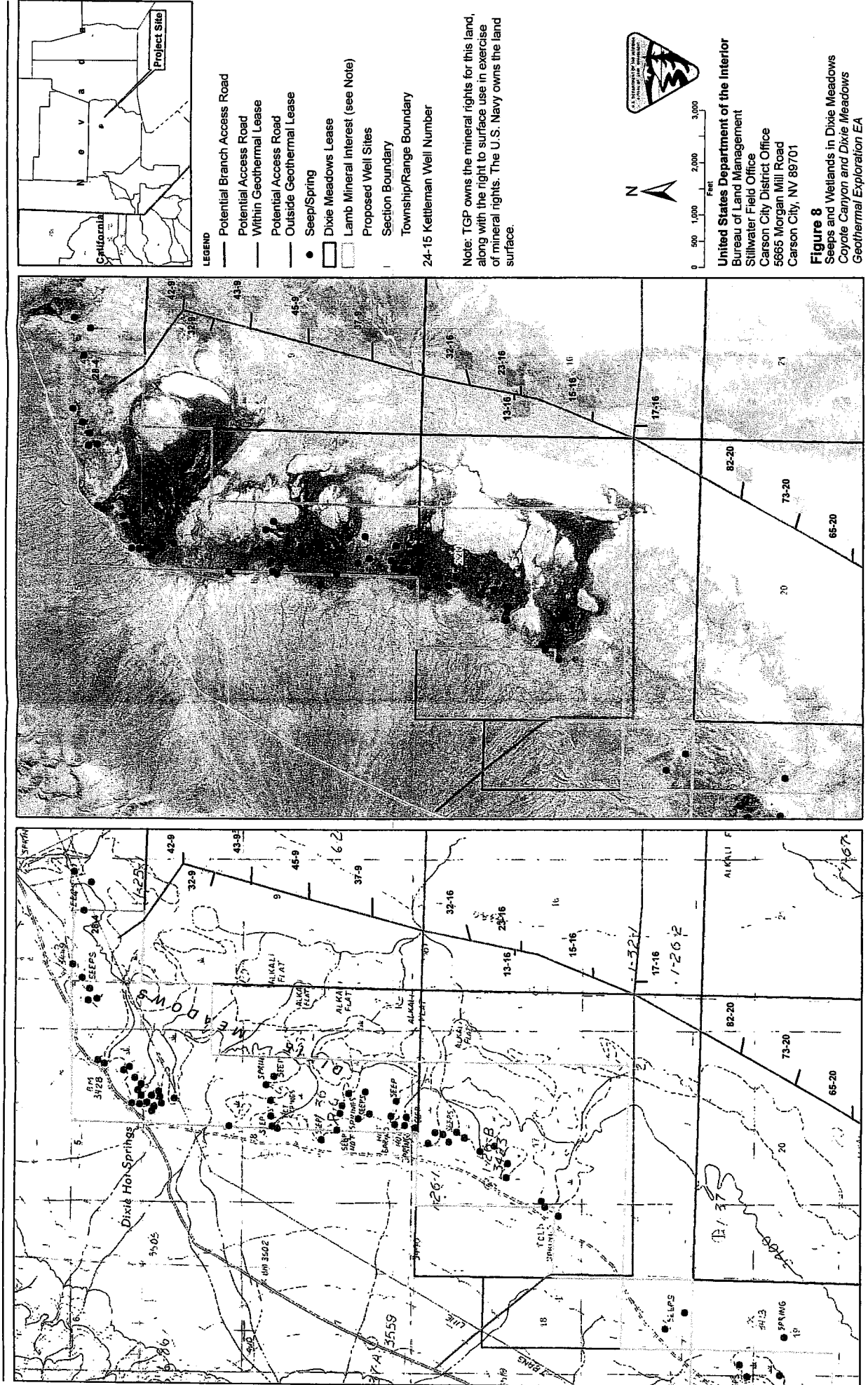
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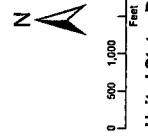






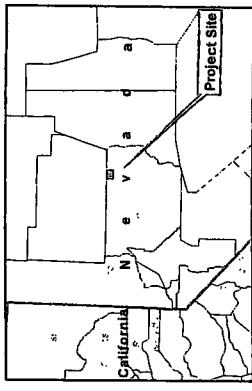
- LEGEND**
- Potential Branch Access Road
  - Potential Access Road
  - Within Geothermal Lease
  - Potential Access Road
  - Outside Geothermal Lease
  - Seep/Spring
  - Dixie Meadows Lease
  - Lamb Mineral Interest (see Note)
  - Proposed Well Sites
  - Section Boundary
  - Township/Range Boundary
  - 24-15 Kettleman Well Number

Note: TGP owns the mineral rights for this land, along with the right to surface use in exercise of mineral rights. The U.S. Navy owns the land surface.



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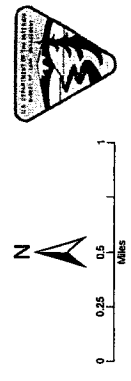
**Figure 8**  
 Seeps and Wetlands in Dixie Meadows  
 Coyote Canyon and Dixie Meadows  
 Geothermal Exploration EA



**LEGEND**

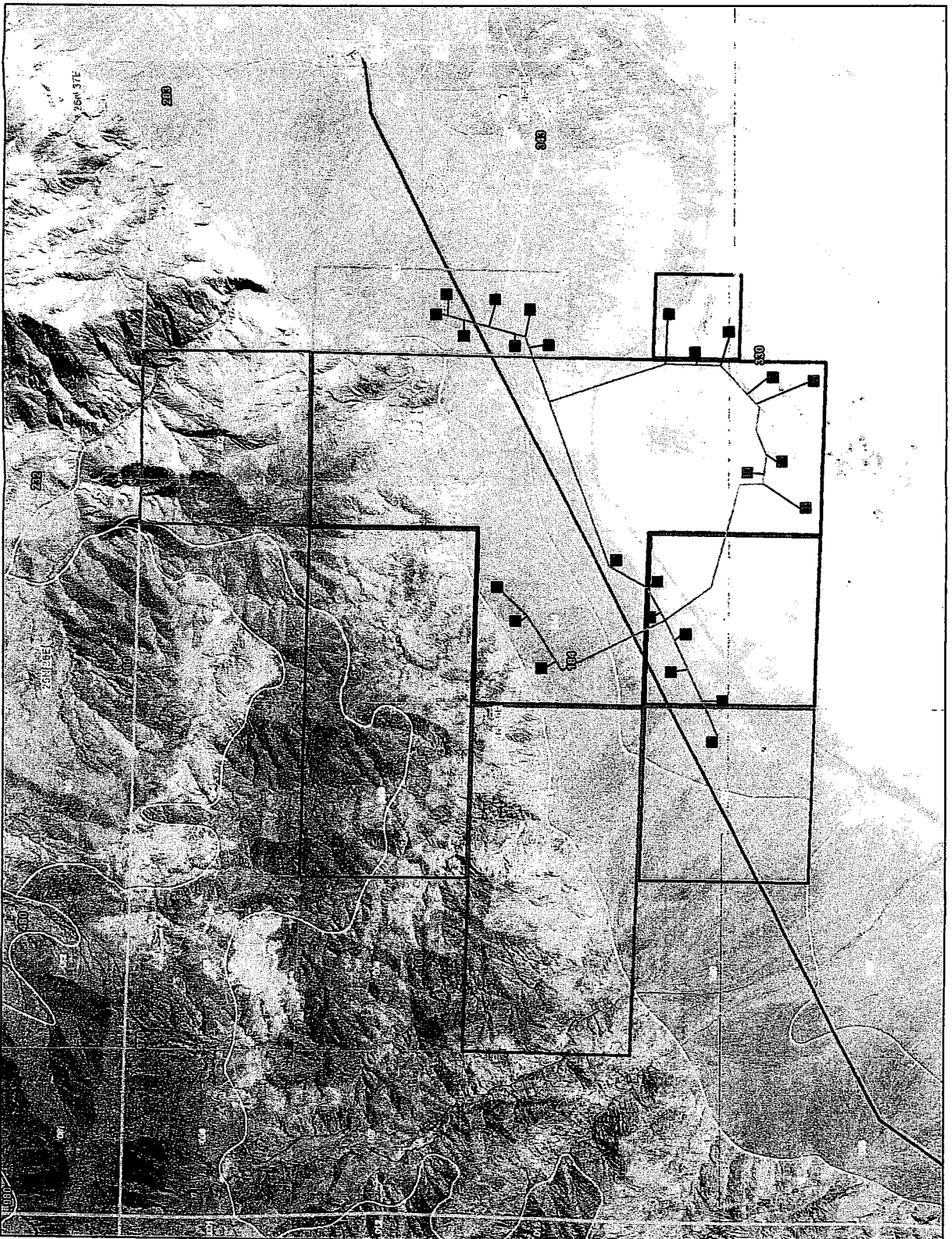
- Potential Branch Access Road
- Potential Access Road
- Inside Geothermal Lease
- Proposed Well Sites
- Existing Transmission Line
- Existing 200' ROW
- Soil Unit Boundary
- N-17282
- N-17283A
- N-60687
- N-60688
- N-17282
- N-61705
- N-61707
- N-62956
- N-86892
- Township/Range Boundary
- Section Boundary

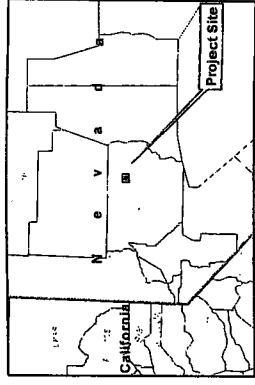
- Soils Code Descriptions:**
- 160 - Singaise-Rock outcrop association
  - 184 - Bluewing-Pineval association
  - 330 - Settlement-Louderback-Rustigate associatio
  - 343 - Slaw-Trocken-Chuckles association
  - 970 - Jobpeak-Teguro-Rock outcrop association



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**Figure 9**  
 Soil Map-Coyote Canyon  
 Coyote Canyon and Dixie Meadows  
 Geothermal Exploration EA





**LEGEND**

- Potential Branch Access Road
- Potential Access Road
- Within Geothermal Lease
- Potential Access Road
- Outside Geothermal Lease
- Proposed Well Sites
- Existing Transmission Line
- Existing 200' ROW
- Lamb Mineral Interest (see Note)
- N-60685
- N-60686
- Township/Range Boundary
- Section Boundary

Note: TGP owns the mineral rights for this land, along with the right to surface use in exercise of mineral rights. The U.S. Navy owns the land surface.

**Soil Code Descriptions:**

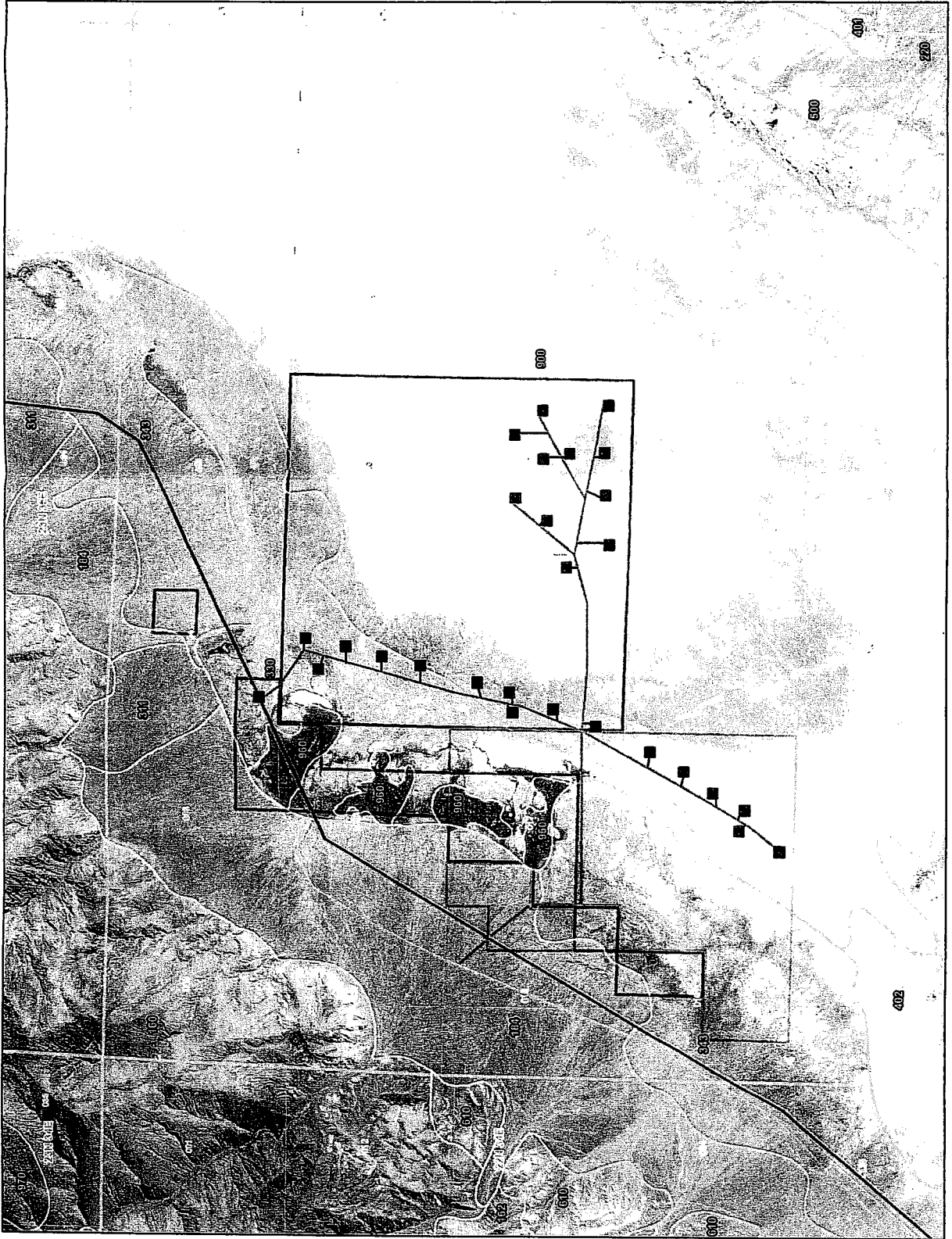
- 900 - Playa
- 330 - Settlement-Louderback-Rustigate associatio
- 184 - Bluewing-Pineval associatio
- 343 - Slaw-Trocken-Chuckles associatio
- 960 - Kolda-Umberland associatio



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**Figure 10**

Soil Map-Dixie Meadows  
 Coyote Canyon and Dixie Meadows  
 Geothermal Exploration EA



**Appendix A**  
**Geothermal Leases and Stipulations**

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Serial Number N-17282

USGS - KGRA Determination:

**GEOHERMAL RESOURCES LEASE**  
 Competitive  Noncompetitive

4-1-74

In consideration of the terms and conditions contained herein, and the grant made hereby, this lease is entered into by the UNITED STATES OF AMERICA (hereinafter called the "Lessor"), acting through the Bureau of Land Management (hereinafter called the "Bureau") of the Department of the Interior (hereinafter called the "Department"), and  
**Republic Geothermal, Inc., 11823 East Slauson Ave., Suite One, Santa Fe Springs, California 90670**

(hereinafter called the "Lessee").  
This lease is made pursuant to the Geothermal Steam Act of 1970 (84 Stat. 1566; 30 U.S.C. 1001-1025) (hereinafter called "the Act") to be effective on **NOV 01 1977** (hereinafter called the "effective date").

It is subject to all the provisions of the Act and to all the terms, conditions, and requirements of (a) all regulations promulgated by the Secretary of the Interior (hereinafter called "the Secretary") in existence upon the effective date, specifically including, but not limited to, 43 CFR Parts 3000 and 3200 and 30 CFR Parts 270 and 271, (b) all geothermal resources operational orders (hereinafter called "GRO orders") issued pursuant thereto, all of which are incorporated herein and by reference made a part hereof, and (c) any regulations hereafter issued by the Secretary (except those inconsistent with any specific provisions of this lease other than regulations incorporated herein by reference) all of which shall be, upon their effective date, incorporated herein and, by reference, made a part hereof.

Sec. 1. GRANT - The Lessor hereby grants and leases to the Lessee the exclusive right and privilege to drill for, extract, produce, remove, utilize, sell, and dispose of geothermal steam and associated geothermal resources, (hereinafter called "geothermal resources"), in or under the following described lands situated within the County of **Churchill** State of **Nevada**

National Resource Lands		Acquired Lands	
T. 24 N.	R. 36 E. ; Mt. Diablo Meridian	T.	R. ; Meridian
sec. 11:	A11;		
sec. 14:	A11;		
sec. 15:	A11;		
sec. 23:	A11.		
RECEIVED Bureau of Land Management NEVADA LAND OFFICE			
10:00 A.M. SEP 28 1977			
NEVADA STATE OFFICE RENO, NEVADA			
Total Area <b>2,560.00</b>		Total Area	

Containing **2,560.00** acres (hereinafter called the "leased area" or "leased lands"), together with:  
(a) The nonexclusive right to conduct within the leased area geological and geophysical exploration in accordance with applicable regulations; and

(b) The right to construct or erect and to use, operate, and maintain within the leased area, together with ingress and egress thereupon all wells, pumps, pipes, pipelines, buildings, plants, sumps, brine pits, reservoirs, tanks, waterworks, pumping stations, roads, electric power generating plants, transmission lines, industrial facilities, electric, telegraph or telephone lines, and such other works and structures and to use so much of the surface of the land as may be necessary or reasonably convenient for the production, utilization, and processing of geothermal resources or to the full enjoyment of the rights granted by this lease, subject to compliance with applicable laws and regulations; *Provided that*, although the use of the leased area for an electric power generating plant or transmission facilities or a commercial or industrial facility is authorized hereunder, the location of such facilities and the terms of occupancy therefor shall be under separate instruments issued under any applicable laws and regulations; and

(c) The nonexclusive right to drill potable water wells in accordance with state water laws within the leased area and to use the water produced therefrom for operations on the leased lands free of cost, provided that such drilling and development are conducted in accordance with procedures approved by the Supervisor of the Geological Survey (hereinafter called "Supervisor"); and

(d) The right to convert this lease to a mineral lease under the Mineral Leasing Act of February 25, 1920, as amended, and supplemented (30 U.S.C. 181-287) or under the Mineral Leasing Act for Acquired Lands (30 U.S.C. 351-359), whichever is appropriate, if the leasehold is primarily valuable for the production of one or more valuable by-products which are leasable under those statutes, and the lease is incapable of commercial production or utilization of geothermal steam: *Provided that*, an application is made therefor prior to the expiration of the lease extension by reason of by-product production as hereinafter provided, and subject to all the terms and conditions of said appropriate Acts. The Lessee is also granted the right to locate mineral deposits under the mining laws (30 U.S.C. 21-54), which would constitute by-products if commercial production or utilization of geothermal steam continued, but such a location to be valid must be completed within ninety (90) days after the termination of this lease. Any conversion of this lease to a mineral lease or a mining claim is contingent on the availability of such lands for this purpose at the time of the conversion. If the lands are withdrawn or acquired in aid of a function of any Federal Department or agency, the mineral lease or mining claim shall be subject to such additional terms and conditions as may be prescribed by such



### Sec. 3. RENTALS AND ROYALTIES

(a) *Annual Rental* - For each lease year prior to the commencement of production of geothermal resources in commercial quantities on the leased lands, the Lessee shall pay the Lessor on or before the anniversary date of the lease a rental of \$ 2.00 for each

or fraction thereof.

(b) *Escalating Rental* - Beginning with the sixth lease year and for each year thereafter until the lease year beginning on or after the commencement of production of geothermal resources in commercial quantities, the Lessee shall pay on or before the anniversary date of the lease an escalated rental in an amount per acre or fraction thereof equal to the rental per acre for the preceding year and an additional sum of one (1) dollar per acre or fraction thereof. If the lease is extended beyond ten (10) years for reasons other than the commencement of production of geothermal resources in commercial quantities, the rental for the eleventh year and for each lease year thereafter until the lease year beginning on or after the commencement of such production will be the amount of rental for the tenth lease year. If any expenditures are made in any lease year for diligent exploration on the leased lands in excess of the minimum required expenditures for that year, the excess may be credited against any rentals

in excess of \$ 2.00 per acre or fraction thereof due the Lessor for that or any future year.

(c) *Royalty* - On or before the last day of the calendar month after the month of commencement of production in commercial quantities of geothermal resources and thereafter on a monthly basis, the Lessee shall pay to the Lessor:

(1) A royalty of 10 percent on the amount or value of steam, or any other form of heat or other associated energy produced, processed, removed, sold, or utilized from this lease or reasonably susceptible to sale or utilization by the Lessee.

(2) A royalty of 5 percent of the value of any by-product derived from production under this lease, produced, processed, removed, sold, or utilized from this lease or reasonably susceptible of sale or utilization by the Lessee, except that as to any by-product which is a mineral named in Sec. 1 of the Mineral Leasing Act of February 25, 1920, as amended, (30 U.S.C. 181), the rate of royalty for such mineral shall be the same as that provided in that statute the maximum rate of royalty for such mineral shall not exceed the maximum royalty applicable under that statute.

(3) A royalty of 5 percent of the value of commercially demineralized water which has been produced from the leased lands, and has been sold or utilized by the Lessee or is reasonably susceptible of sale or utilization by the Lessee. In no event shall the Lessee pay to the Lessor, for the lease year beginning on or after the commencement of production in commercial quantities on the leased lands or any subsequent lease year, a royalty of less than two (2) dollars per acre or fraction thereof. If royalty paid on production during the lease year has not satisfied this requirement, the Lessee shall pay the difference on or before the expiration date of the lease year for which it is paid.

(d) *Waiver and Suspension of Rental and Royalties* - Rentals or royalties may be waived, suspended, or reduced pursuant to the applicable regulations on the entire leasehold or any portion thereof in the interest of conservation or for the purpose of encouraging the greatest ultimate recovery of geothermal resources if the Lessor determines that it is necessary to do so to promote such development, or because the lease cannot be successfully operated under the terms fixed herein.

(e) *Undivided Fractional Interests* - Where the interest of the Lessor in the geothermal resources underlying any tract or tracts described in Sec. 1 is an undivided fractional interest, the rentals and royalties payable on account of each such tract shall be in the same proportion to the rentals and royalties provided in this lease as the individual fractional interest of the Lessor in the geothermal resources underlying such tract is to the full fee interest.

(f) *Readjustments* - Rentals and royalties hereunder may be readjusted in accordance with the Act and regulations to rates not in excess of the rates provided therein, and at not less than twenty (20) year intervals beginning thirty-five (35) years after the date geothermal steam is produced from the lease as determined by the Supervisor.

4. *PAYMENTS* - It is expressly understood that the Lessor may establish the values and minimum values of geothermal resources to compute royalties in accordance with the applicable regulations. Unless otherwise directed by the Secretary, all payments to the Lessor will be made as required by the regulations. If there is no well on the leased lands capable of producing geothermal resources in commercial quantities, the failure to pay rental on or before the anniversary date shall cause the lease to terminate by operation of law except as provided by Sec. 3244.2 of the regulations. If the time for payment falls on a day on which the

N-17282

into which royalties under this lease are paid. However, in lieu of any part of such drilling and production, with the consent of the Supervisor, the Lessee may compensate the Lessor in full each month for the estimated loss of royalty through drainage in the amount determined by said Supervisor.

(b) At the Lessee's election, and with the approval of the Supervisor, the Lessee shall drill and produce other wells in conformity with any system of well spacing or production allotments affecting the field or area in which the leased lands are situated, which is authorized by applicable law.

(c) After due notice in writing, the Lessee shall diligently drill and produce such wells as the Supervisor shall require so that the leased lands may be properly and timely developed and for the production of geothermal steam and its by-products, including commercially demineralized water for beneficial uses in accordance with applicable state laws. However, the Supervisor may waive or modify the requirements of this subparagraph (c) in the interest of conservation of natural resources or for economic feasibility or other reasons satisfactory to him. If the products or by-products of geothermal production from wells drilled on this lease are susceptible of producing commercially demineralized water for beneficial uses, and a program therefor is not initiated with due diligence, the Lessor may at its option elect to take such products or by-products and the Lessee shall deliver all or any portion thereof to the Lessor at any point in the Lessee's geothermal gathering or disposal system without cost to the Lessee, if the Lessee's activities, under the lease, would not be impaired and such delivery would otherwise be consistent with field and operational requirements. The retention of this option by the Lessor shall in no way relieve the Lessee from the duty of producing commercially demineralized water where required to do so by the Lessor, except when the option is being exercised and then only with respect to wells where it is being exercised, or limit the Lessor's right to take any action under Sec. 25 to enforce that requirement.

Sec. 7. *INSPECTION* - The Lessee shall keep open at all reasonable times for the inspection of any duly authorized representative of the Lessor the leased lands and all wells, improvements, machinery, and fixtures thereon and all production reports, maps, records, books, and accounts relative to operations under the lease, and well logs, surveys, or investigations of the leased lands.

Sec. 8. *CONDUCT OF OPERATIONS* - The Lessee shall conduct all operations under this lease in a workmanlike manner and in accordance with all applicable statutes, regulations, and GRO orders, and all other appropriate directives of the Lessor to prevent bodily injury, danger to life or health, or property damage, and to avoid the waste of resources, and shall comply with all requirements which are set forth in 43 CFR Group 3200, including, but not limited to, Subpart 3204, or which may be prescribed by the Lessor pursuant to the regulations, and with the special stipulations which are attached to the lease, all of which are specifically incorporated into this lease. A breach of any term of this lease, including the stipulations attached hereto, will be subject to all the provisions of this lease with respect to remedies in case of default. Where any stipulation is inconsistent with a regular provision of this lease, the stipulation shall govern.

### Sec. 9. INDEMNIFICATION

(a) The Lessee shall be liable to the Lessor for any damage suffered by the Lessor in any way arising from or connected with the Lessee's activities and operations conducted pursuant to this lease, except where damage is caused by employees of the Lessor acting within the scope of their authority.

(b) The Lessee shall indemnify and hold harmless the Lessor from all claims arising from or connected with the Lessee's activities and operations under this lease.

(c) In any case where liability without fault is imposed on the Lessee pursuant to this section, and the damages involved were caused by the action of a third party, the rules of subrogation shall apply in accordance with the law of the jurisdiction where the damage occurred.

Sec. 10. *CONTRACTS FOR SALE OR DISPOSAL OF PRODUCTS* - The Lessee shall file with the Supervisor not later than thirty (30) days after the effective date thereof any contract, or evidence of other arrangement for the sale or disposal of geothermal resources.

Sec. 11. *ASSIGNMENT OF LEASE OR INTEREST THEREIN* - Within ninety (90) days from the date of execution thereof, the Lessee shall file for approval by the Authorized Officer any instruments of transfer made of this lease or of any interest therein, including assignments of record title and working or other interests.

Sec. 12. *REPORTS AND OTHER INFORMATION* - At such

the minimum expenditures required to qualify the operations on the leased lands as diligent exploration under the regulations.

**Sec. 14. PROTECTION OF THE ENVIRONMENT (LAND, AIR AND WATER) AND IMPROVEMENTS** - The Lessee shall take all mitigating actions required by the Lessor to prevent: (a) soil erosion or damage to crops or other vegetative cover on Federal or non-Federal lands in the vicinity; (b) the pollution of land, air, or water; (c) land subsidence, seismic activity, or noise emissions; (d) damage to aesthetic and recreational values; (e) damage to fish or wildlife or their habitats; (f) damage to or removal of improvements owned by the United States or other parties; or (g) damage to or destruction or loss of fossils, historic or prehistoric ruins, or artifacts. Prior to the termination of bond liability or at any other time when required and to the extent deemed necessary by the Lessor, the Lessee shall reclaim all surface disturbances as required, remove or cover all debris or solid waste, and, so far as possible, repair the offsite and onsite damage caused by his activity or activities incidental thereto, and return access roads or trails and the leased lands to an acceptable condition including the removal of structures, if required. The Supervisor or the Authorized Officer shall prescribe the steps to be taken by Lessee to protect the surface and the environment and for the restoration of the leased lands and other lands affected by operations on the leased lands and improvements thereon, whether or not the improvements are owned by the United States. Timber or mineral materials may be obtained only on terms and conditions imposed by the Authorized Officer.

**Sec. 15. WASTE** - The Lessee shall use all reasonable precautions to prevent waste of natural resources and energy, including geothermal resources, or of any minerals, and to prevent the communication of water or brine zones with any oil, gas, fresh water, or other gas or water bearing formations or zones which would threaten destruction or damage to such deposits. The Lessee shall monitor noise, air, and water quality conditions in accordance with any orders of the Supervisor.

**Sec. 16. MEASUREMENTS** - The Lessee shall gauge or otherwise measure all production, sales, or utilization of geothermal resources and shall record the same accurately in records as required by the Supervisor. Reports on production, sales, or utilization of geothermal resources shall be submitted in accordance with the terms of this lease and the regulations.

**Sec. 17. RESERVATIONS TO LESSOR** - All rights in the leased area not granted to the Lessee by this lease are hereby reserved to the Lessor. Without limiting the generality of the foregoing such reserved rights include:

(a) *Disposal* - The right to sell or otherwise dispose of the surface of the leased lands or any resource in the leased lands under existing laws, or laws hereafter enacted, subject to the rights of the Lessee under this lease;

(b) *Rights-of-way* - The right to authorize geological and geophysical explorations on the leased lands which do not interfere with or endanger actual operations under this lease, and the right to grant such easements or rights-of-way for joint or several use upon, through or in the leased area for steam lines and other public or private purposes which do not interfere with or endanger actual operations or facilities constructed under this lease;

(c) *Mineral Rights* - The ownership of and the right to extract oil, hydrocarbon gas, and helium from all geothermal steam and associated geothermal resources produced from the leased lands;

(d) *Casing* - The right to acquire the well and casing at the fair market value of the casing where the Lessee finds only potable water, and such water is not required in lease operations; and

(e) *Measurements* - The right to measure geothermal resources and to sample any production thereof.

**Sec. 18. ANTIQUITIES AND OBJECTS OF HISTORIC VALUE** - The Lessee shall immediately bring to the attention of the Authorized Officer any antiquities or other objects of historic or scientific interest, including but not limited to historic or prehistoric ruins, fossils, or artifacts discovered as a result of operations under this lease, and shall leave such discoveries intact. Failure to comply with any of the terms and conditions imposed by the Authorized Officer with regard to the preservation of antiquities may constitute a violation of the Antiquities Act (16 U.S.C. 431-433). Prior to operations, the Lessee shall furnish to the Authorized Officer a certified statement that either no archaeological values exist or that they may exist on the leased lands to the best of the of the Lessee's knowledge and belief and that they might be impaired by geothermal operations. If the Lessee furnishes a statement that archaeological values exist on the leased

granting to the Lessee any right in any land outside the leased area.

**Sec. 20. OVERRIDING ROYALTIES** - The Lessee shall not create overriding royalties of less than one-quarter (1/4) of one percent of the value of output nor in excess of 50 percent of the rate of royalty due to the Lessor specified in Sec. 3 of this lease except as otherwise authorized by the regulations. The Lessee expressly agrees that the creation of any overriding royalty which does not provide for a prorated reduction of all overriding royalties so that the aggregate rate of royalties does not exceed the maximum rate permissible under this section, or the failure to suspend an overriding royalty during any period when the royalties due to the Lessor have been suspended pursuant to the terms of this lease, shall constitute a violation of the lease terms.

**Sec. 21. READJUSTMENT OF TERMS AND CONDITIONS** - The terms and conditions of this lease other than those related to rentals and royalties may be readjusted in accordance with the Act at not less than ten-year intervals beginning ten (10) years after the date geothermal steam is produced from the leased premises as determined by the Supervisor.

**Sec. 22. COOPERATIVE OR UNIT PLAN** - The Lessee agrees that it will on its own, or at the request of the Lessor where it is determined to be necessary for the conservation of the resource or to prevent the waste of the resource, subscribe to and operate under any reasonable cooperative or unit plan for the development and operation of the area, field, or pool, or part thereof embracing the lands subject to this lease as the Secretary may determine to be practicable and necessary or advisable in the interest of conservation. In the event the leased lands are included within a unit, the terms of this lease shall be deemed to be modified to conform to such unit agreement. Where any provision of a cooperative or unit plan of development which has been approved by the Secretary, and which by its terms affects the leased area or any part thereof, is inconsistent with a provision of this lease, the provisions of such cooperative or unit plan shall govern.

**Sec. 23. RELINQUISHMENT OF LEASE** - The Lessee may relinquish this entire lease or any officially designated subdivision of the leased area in accordance with the regulations by filing in the proper BLM office a written relinquishment, in triplicate, which shall be effective as of the date of filing. No relinquishment of this lease or any portion of the leased area shall relieve the Lessee or its surety from any liability for breach of any obligation of this lease, including the obligation to make payment of all accrued rentals and royalties and to place all wells in the leased lands to be relinquished in condition for suspension or abandonment, and to protect or restore substantially the surface or subsurface resources in a manner satisfactory to the Lessor.

**Sec. 24. REMOVAL OF PROPERTY ON TERMINATION OR EXPIRATION OF LEASE**

(a) Upon the termination or expiration of this lease in whole or in part, or the relinquishment of the lease in whole or in part, as herein provided, the Lessee shall within a period of ninety (90) days (or such longer period as the Supervisor may authorize because of adverse climatic conditions) thereafter remove from the leased lands, no longer subject to the lease all structures, machinery, equipment, tools, and materials in accordance with applicable regulations and orders of the Supervisor. However, the Lessee shall, for a period of not more than six (6) months, continue to maintain any such property needed in the relinquished area, as determined by the Supervisor, for producing wells or for drilling or producing geothermal resources on other leases.

(b) Any structures, machinery, equipment, tools, appliances, and materials, subject to removal by the Lessee, as provided above, which are allowed to remain on the leased lands shall become the property of the Lessor on expiration of the 90-day period or any extension of that period which may be granted by the Supervisor. If the Supervisor directs the Lessee to remove such property, the Lessee shall do so at its own expense, or if it fails to do so within a reasonable period, the Lessor may do so at the Lessee's expense.

**Sec. 25. REMEDIES IN CASE OF DEFAULT**

(a) Whenever the Lessee fails to comply with any of the provisions of the Act, or the terms and stipulations of this lease, or of the regulations issued under the Act, or of any order issued pursuant to those regulations, and that default shall continue for a period of thirty (30) days after service of notice by the Lessor, the Lessor may (1) suspend operations until the requested action is taken to correct the noncompliance, or (2) cancel the lease in accordance with Sec. 12 of the Act (30 U.S.C. 1011). However, the 30-day notice provision applicable to this lease under Sec. 12 of the Act shall



Act and in the regulations promulgated thereunder.

(e) Upon cancellation, the Lessee shall remove all property in accordance with Sec. 24 hereof, and shall restore the leased lands in a manner acceptable to the Lessor or as may be otherwise required by the Lessor.

**Sec. 26. HEIRS AND SUCCESSORS IN INTEREST** - Each obligation hereunder shall extend to and be binding upon, and every benefit hereof shall inure to, the heirs, executors, administrators, successors, or assigns, of the respective parties hereto.

**Sec. 27. UNLAWFUL INTEREST** - No Member of, or Delegate to Congress, or Resident Commissioner, after his election or appointment, either before or after he has qualified, and during his continuance in office, and no officer, agent, or employee of the Department shall be admitted to any share or part in this lease or derive any benefit that may arise therefrom; and the provisions of Sec. 3741 of the Revised Statutes (41 U.S.C. Sec. 22), as amended, and Sections 431, 432, and 433 of Title 18 of the United States Code, relating to contracts made or entered into, or accepted by or on behalf of the United States, form a part of this lease so far as the same may be applicable.

**Sec. 28. MONOPOLY AND FAIR PRICES** - The Lessor reserves full power and authority to protect the public interest by promulgating and enforcing all orders necessary to insure the sale of the production from the leased lands at reasonable prices, to prevent monopoly, and to safeguard the public interest.

**Sec. 29. EQUAL OPPORTUNITY CLAUSE** - The Lessee agrees that, during the performance of this contract:

(1) The Lessee will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Lessee will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Lessee agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Lessor setting forth the provisions of this Equal Opportunity clause.

(2) The Lessee will, in all solicitations or advertisements for employees placed by or on behalf of the Lessee, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(3) The Lessee will send to each labor union or representative of workers with which Lessee has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Lessor, advising the labor union or workers' representative of the Lessee's commitments under this Equal Opportunity clause, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The Lessee will comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The Lessee will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, as amended, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the Secretary

of the Interior and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the Lessee's noncompliance with the Equal Opportunity clause of this lease or with any of said rules, regulations, or orders, this lease may be canceled, terminated or suspended in whole or in part and the Lessee may be declared ineligible for further Federal Government contracts or leases in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, as amended, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, as amended, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Lessee will include the provisions of Paragraphs (1) through (7) of this Section (29) in every contract, subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, as amended, so that such provisions will be binding upon each contractor, subcontractor, or subcontract, or purchase order as the Secretary may direct as a means of enforcing such provisions including sanctions for noncompliance; *provided, however*, that in the event the Lessee becomes involved in, or is threatened with, litigation with a contractor, subcontractor, or vendor as a result of such direction by the Secretary, the Lessee may request the Lessor to enter into such litigation to protect the interests of the Lessor.

**Sec. 30. CERTIFICATION OF NONSEGREGATED FACILITIES** - By entering into this lease, the Lessee certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The Lessee agrees that a breach of this certification is a violation of the Equal Opportunity clause of this lease. As used in this certification, the term "segregated facilities" means, but is not limited to, any waiting rooms, work areas, rest rooms and wash rooms, or restaurants or other eating areas, time clocks, or locker rooms, and other storage or dressing rooms, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or otherwise. Lessee further agrees that (except where it has obtained identical certifications from proposed contractors and subcontractors for specific time periods) it will obtain identical certifications from proposed contractors and subcontractors prior to the award of contracts or subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause; that it will retain such certifications in its files; and that it will forward the following certification to such proposed contractors and subcontractors (except where the proposed contractor or subcontractor has submitted identical certifications for specific time periods); it will notify prospective contractors and subcontractors of requirement for certification of nonsegregated facilities. A Certification of Nonsegregated Facilities, as required by the May 9, 1967 Order (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a contract or subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each contract and subcontract or for all contracts and subcontracts during a period (i.e., quarterly, semiannually, or annually).

**Sec. 31. SPECIAL STIPULATIONS** - (*stipulations, if any, are attached hereto and made a part hereof*)

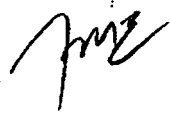
The attached Fort Churchill-Clan Alpine Special Stipulations apply to all lands within this lease.

*JMS*

FORT CHURCHILL-CLAN ALPINE  
SPECIAL STIPULATIONS

The Lessee shall comply with the following special conditions and stipulations unless they are modified by mutual agreement of the Lessee, the Supervisor and the Authorized Officer:

1. Surface occupancy within 500 feet (horizontal measurement) of any canal, ditch, slough, pond, lake, spring, or open body of water may be restricted or denied where deemed necessary by the appropriate surface management agency to protect wildlife and other resources. Other buffer zones and areas of restricted surface occupancy may be required to protect other resource values, including but not limited to, critical or rare or endangered species habitat.
2. The certified statement required by Section 18 of the lease form must be completed by a qualified archaeologist, acceptable to the Authorized Officer.
3. The use of wide or balloon-tired vehicles and/or helicopters may be required for any activities in off-road areas where deemed necessary to protect the soil and other resources.
4. Springs and water developments on Federal lands may be used only with the prior written approval of the Authorized Officer.





United States Department of the Interior  
BUREAU OF LAND MANAGEMENT



Nevada State Office  
P.O. Box 12000 (1340 Financial Blvd.)  
Reno, Nevada 89520-0006  
<http://www.nv.blm.gov>

SEP 12 2007

In Reply Refer To:  
N-43282X et al  
3280/3282  
3210/3220  
NV923.d

CERTIFIED MAIL - RETURN RECEIPT REQUESTED  
7005 2570 0001 8534 6261

DECISION

Caithness Dixie Valley, LLC :  
9590 Prototype Ct., Suite 200 : Geothermal  
Reno, NV 89521 :

Unit and Participating Area Boundaries Expanded  
Leases Consolidated Segregated and Expired

The geothermal leases listed below have been partially committed to the following Unit Agreement (UA) and or Participating Area (PA):

Dixie Valley Unit Agreement and Participating Area, N-43282X, N-4328201  
(Unit Name)

May 1, 2007  
(Commitment Date)

Caithness Dixie Valley, LLC  
(Operator)

Departmental regulations 43 CFR 3210.10(1) provide for the segregation of leases committed in part to a unit agreement. Due to the unit expansion, the unitized lands are retained in the original lease; the non-unitized lands are segregated and assigned new serial numbers. The terms of leases included in the expansion of the UA are extended until such time as the subject unit terminates or if the lands are eliminated from the unit agreement (43 CFR 3208.10(4)). The anniversary date for all leases remains unchanged. Rental will be due on the next anniversary date of each lease located within the unit but outside of the PA. Leases or portions of leases within the PA will be subject to royalties. After expansion, lease N-17282 is totally within the Dixie Valley UA. The segregated leases expired on their own terms effective June 30, 2007. The descriptions of the base leases and the segregated leases are as follows:

N-17283A (unitized lands)  
T. 24 N., R. 36 E., MDM, Nevada  
sec. 22, all.

Containing 640.00 acres

N-84040 (nonunitized lands)  
T. 24 N., R. 36 E., MDM, Nevada  
sec. 20, E2;  
sec. 21, all.  
Containing 960.00 acres  
Expired June 30, 2007

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0034  
Expires: August 31, 1989

RECEIVED

JUL 24 1991

OXBOW GEOTHERMAL CORP

ASSIGNMENT OF RECORD TITLE INTEREST IN A  
LEASE FOR OIL AND GAS OR GEOTHERMAL RESOURCES

Mineral Leasing Act of 1920 (30 U.S.C. 181 et seq.)  
Act for Acquired Lands of 1947 (30 U.S.C. 351-359)  
Geothermal Steam Act of 1970 (30 U.S.C. 1001-1025)  
Department of the Interior Appropriations Act, Fiscal Year 1981 (42 U.S.C. 6508)

Lease Serial No. N-17283-A
Lease Effective Date (Anniversary Date) November 1, 1977
New Serial No.

Type or print plainly in ink and sign in ink.

PART A: ASSIGNMENT

1. Assignee\* **Oxbow Geothermal Corporation**  
Street **200 South Virginia Street, Suite 450**  
City, State, ZIP Code **Reno, NV 89501**

\*If more than one assignee, check here  and list the name(s) and address(es) of all additional assignees on the reverse of this form or on a separate attached sheet of paper.

This record title assignment is for: (Check one)  Oil and Gas Lease, or  Geothermal Lease

Interest conveyed: (Check one or both, as appropriate)  Record Title,  Overriding Royalty, payment out of production or other similar interests or payments

This assignment conveys the following interest:

Land Description <small>Additional space on reverse, if needed. Do not submit documents or agreements other than this form; such documents or agreements shall only be referenced herein.</small>	Percent of Interest			Percent of Overriding Royalty or Similar Interests	
	Owned	Conveyed	Retained	Reserved	Previously reserved or conveyed
	a	b	c	d	e
Churchill County, Nevada Township 24 North, Range 36 East, MDM  Section 20: E/2 Section 21: All Section 22: All  Containing 1600.00 acres m/l	50%	50%	-0-	-0-	-0-

FOR BLM USE ONLY—DO NOT WRITE BELOW THIS LINE

UNITED STATES OF AMERICA

Assignment is approved solely for administrative purposes. Approval does not warrant that either party to this assignment holds legal or title to this lease.

Assignment approved for above described lands;

Assignment approved for attached land description

Assignment approved effective JUL 1 1991

Assignment approved for land description indicated on reverse of this form.

Chief, Branch of Lands  
& Minerals Operations

*Marla B. Bohl*

JUL 24 1991

N-17283A

**PART B: CERTIFICATION AND REQUEST FOR APPROVAL**

- The assignor certifies as owner of an interest in the above designated lease that he/she hereby assigns to the above assignee(s) the rights specified above.  
 Assignee certifies as follows: (a) Assignee is a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the law of the United States or of any State or territory thereof. For the assignment of NPR-A leases, assignee is a citizen, national, or resident alien of the United States or an association of such citizens, nationals, resident aliens or private, public or municipal corporations. (b) Assignee is not considered a minor under the laws of the State in which the lands covered by this assignment are located; (c) Assignee's chargeable interests, direct and indirect, in either public domain or acquired lands, do not exceed 200,000 acres in oil and gas options or 246,080 in oil and gas leases in the same State, or 300,000 acres in leases and 200,000 acres in options in each leasing District in Alaska, if this is an oil and gas lease issued in accordance with the Mineral Leasing Act of 1920 or 51,200 acres in any one State if this is a geothermal lease; (d) All parties holding an interest in the assignment are otherwise in compliance with the regulations (43 CFR Group 3100 or 3200) and the authorizing Acts; (e) Assignee is in compliance with reclamation requirements for all Federal oil and gas lease holdings as required by sec. 17(g) of the Mineral Leasing Act; and (f) Assignee is not in violation of sec. 41 of the Mineral Leasing Act.
- Assignee's signature to this assignment constitutes acceptance of all applicable terms, conditions, stipulations and restrictions pertaining to the lease described herein.

For geothermal assignments, an overriding royalty may not be less than one-fourth (1/4) of one percent of the value of output, nor greater than 50 percent of the rate of royalty due to the United States when this assignment is added to all previously created overriding royalties (43 CFR 3241).

I certify that the statements made herein by me are true, complete, and correct to the best of my knowledge and belief and are made in good faith.

Executed this 24<sup>th</sup> day of May, 19 91 Executed this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_

Name of Assignor as shown on current lease T.G.S. Associates - undivided 50% Interest  
Please type or print

Assignor T.G.S. Associates  
(Signature)

Assignee Oxbow Geothermal Corporation  
(Signature)

By: [Signature]  
(Signature)

By: [Signature]  
(Signature)

149 Broadway, Suite 612  
(Assignor's Address)

Oakland, CA 94612  
(City) (State) (Zip Code)

Title 18 U.S.C. Sec. 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

IN REPLY REFER TO:



United States Department of the Interior  
BUREAU OF LAND MANAGEMENT  
NEVADA STATE OFFICE

N-8488 et al  
3210/3220  
(NV-943.3)

850 Harvard Way  
P.O. Box 12000  
Reno, Nevada 89520

DEC 30 1986

RECEIVED

DEC 31 1986

Certified Mail  
Return Receipt Requested

OXBOW GEOTHERMAL CORP

DECISION

Oxbow Geothermal Corporation  
200 South Virginia No. 450  
Reno, NV 89501

:  
: Geothermal Resources  
:

LEASES EXTENDED

Washington Office Instruction Memorandum No. 85-63 provides policy for continuing geothermal leases committed to a unit containing a well capable of production committed to a bona fide sales contract.

The following geothermal leases committed to the Dixie Valley Unit meet the above criteria and are hereby extended for the duration of the unit.

Serial Number

N-8488	N-17283
N-8489	N-17283-A
N-8491	N-17284
N-8491-A	N-17285
N-14972	N-17286
N-14974	N-18398
N-14975	N-18399
N-14977	N-18400
N-14978	N-21454
N-14979	

If you have any questions, please call Joan Woodin at (702) 784-5703.

FOR Marla B. Bohl, Chief  
Branch of Lands and Minerals Operations

UNITED STATES-17283A  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0074  
Expires: April 30, 1985

Serial No.	N-17283A
New Serial No.	

ASSIGNMENT AFFECTING RECORD TITLE  
TO GEOTHERMAL RESOURCES LEASE  
PART I

Oxbow Geothermal Corporation  
200 South Virginia St.  
Suite 450  
Reno, Nevada 89501

OXBOW - RENO, NV  
FAX # (702) 322-1362  
TELEPHONE # (702) 322-1300

TO: \_\_\_\_\_  
FAX # \_\_\_\_\_  
FROM: \_\_\_\_\_

DATE: \_\_\_\_\_ PAGES: \_\_\_\_\_

The undersigned, as owner of 50% percent of record title of the above-designated geothermal resources lease issued effective (date) November 1, 1977, hereby transfers and assigns to the assignee shown above, the record title interest in and to such lease as specified below.

2. Describe the lands affected by this assignment (43 CFR 3241.2-5)

T24N R36E MDB&M  
Section 20: E½  
Section 21: All  
Section 22: All  
Containing 1600.00 acres in Churchill County, Nevada

3. What part of assignor(s) record title interest is being conveyed to assignee? (Give percentage or share) 00%

4. What part of the record title interest is being retained by assignor(s)? None

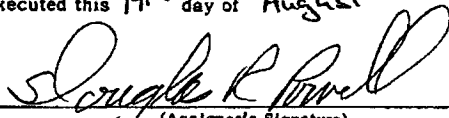
5a. What overriding royalty or production payments is the assignor reserving herein? (See Item 4 of General Instructions; specify percentage; no assignment will be approved which does not comply with 43 CFR 3241.7-2 on limitation of overriding royalties) None

b. What overriding royalties or production payments, if any, were previously reserved or conveyed? (Percentage only) See Exhibit A

It is agreed that the obligation to pay any overriding royalties or payments out of production of geothermal resources created herein, which, when added to overriding royalties or payments out of production previously created, aggregate in excess of 50 percent, of the rate of royalty due the United States, shall be suspended.

I CERTIFY That the statements made herein are true, complete, and correct to the best of my knowledge and belief and are made in good faith.

Executed this 19th day of August, 1986

  
\_\_\_\_\_  
(Assignor's Signature)  
Vice President

Oxbow Geothermal Company  
\_\_\_\_\_  
(Assignor's Address)  
200 South Virginia St., Suite 450  
Reno Nevada 89501  
\_\_\_\_\_  
(City) (State) (Zip Code)

Title 18 U.S.C., Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

THE UNITED STATES OF AMERICA

Assignment approved as to the lands described below:

SAME AS ITEM 2

Assignment approved effective SEP 01 1986

By   
\_\_\_\_\_  
(Authorized Officer)

Chief, Branch of Lands  
& Minerals Operations  
\_\_\_\_\_  
(Title)

SEP 16 1986  
\_\_\_\_\_  
(Date)



ASSIGNEE'S REQUEST FOR APPROVAL OF ASSIGNMENT

N-17283A

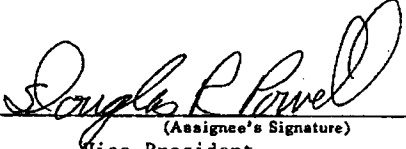
**A. ASSIGNEE CERTIFIES THAT**

1. Assignee is qualified to hold a geothermal resources lease under 43 CFR 3202.1
2. Assignee is  Individual  Municipality  Association  Corporation
3. Assignee is the sole party in interest in this assignment (*information as to interests of other parties in this assignment must be furnished as prescribed in Specific Instructions*)
4. Filing fee of \$50 is attached (*See Item 2 of General Instructions*)
5. Assignee's interests, direct and indirect, in geothermal resources leases, do not exceed 20,480 chargeable acres (43 CFR 3201.2)

**B. ASSIGNEE AGREES** to be bound by the terms and provisions of the lease described here, provided the assignment is approved by the Authorized Officer.

**C. IT IS HEREBY CERTIFIED** That the statements made herein are true, complete, and correct to the best of undersigned's knowledge and belief and are made in good faith.

Executed this 19<sup>th</sup> day of August, 1980

  
 \_\_\_\_\_  
 (Assignee's Signature)  
 Vice President

Oxbow Geothermal Corporation  
 200 South Virginia St., Suite 450  
 Reno, Nevada 89501

*(Address, include zip code)*

Title 18 U.S.C., Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

**GENERAL INSTRUCTIONS**

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. <i>Use of form</i> - Use only for assignment of record title interest in geothermal resources leases, and for assignments of working or royalty interests, operating agreements, or subleases. An assignment of record title may only cover lands in one lease. If more than one assignment is made out of a lease, file a separate instrument of transfer with each assignment.</li> <li>2. <i>Filing and number of copies</i> - File three (3) completed and manually signed copies in proper BLM office. A \$50 nonrefundable filing fee must accompany assignment. File assignment within ninety (90) days after date of final execution.</li> <li>3. <i>Effective date of assignment</i> - Assignment, if approved, takes effect on the first day of the month following the date of filing of all required papers.</li> </ol> | <ol style="list-style-type: none"> <li>4. <i>Overriding royalties or payments out of production</i> - Describe in an accompanying statement any overriding royalties or payments out of production created by assignment but not set out therein. If payments out of production are reserved by assignor, outline in detail the amount, method of payment, and other pertinent terms.</li> <li>5. <i>Effect of assignment</i> - Approval of assignment of a definitely described portion of the leased lands creates separate leases. Assignee, upon approval of assignment, becomes lessee of the Government as to the assigned interest and is responsible for complying with all lease terms and conditions, including timely payment of annual rental and maintenance of any required bond; except in the case of assignment of undivided interests, royalties, and operating agreements.</li> <li>6. A copy of the executed lease, out of which this assignment is made, should be made available to assignee by assignor.</li> </ol> |
|---|--|

**SPECIFIC INSTRUCTIONS**

*(Items not specified are self-explanatory)*

**PART I**

*Item 1* - Type or print plainly, in ink, between and below heavy dots, the assignee's full name and mailing address, including zip code.

**PART II**

**A. Certification of assignee**

3. If assignee is an association or partnership, assignee must furnish a certified copy of its articles of association or partnership, with a statement that (a) it is authorized to hold geothermal resources leases; (b) that the person executing the assignment is authorized to act on behalf of the organization in such matters; and (c) names and addresses of members controlling more than 10 percent interest.

If assignee is a corporation, it must submit a statement containing the following information: (a) State in which it was incorporated; (b) that it is authorized to hold geothermal resources leases; (c) that officer executing assignment is authorized to act on behalf of the corporation in such matters; and (d) percentage of voting stock and percentage of all stock owned by aliens or those having addresses outside the United States. If 10 percent or more of the stock of any class is

owned or controlled by or on behalf of any one stockholder, a separate showing of his citizenship and holdings must be furnished.

If evidence of qualifications and ownership has previously been furnished as required by the above, reference by serial number of record in which it was filed together with a statement as to any amendments. Qualifications of assignee must be in full compliance with the regulations (43 CFR 3241.1-2).

4. *Statement of interests* - Assignee must indicate whether or not he is the sole party in interest in the assignment; if not, assignee must submit, at time assignment is filed, a signed statement giving the names of other interested parties. If there are other parties interested in the assignment, a separate statement must be signed by each assignee, giving the nature and extent of the interest of each, the nature of agreement between them, if oral; and a copy of agreement, if written. All interested parties must furnish evidence of their qualifications to hold such lease interests. Separate statements and written agreements, if any, must be filed with the filing of the assignment.

STATE OF NEVADA )  
 ) ss  
COUNTY OF WASHOE )

On this 19th day of August, A.D. 1986, personally appeared before me, a notary public in and for Washoe County, Douglas R. Powell, known to me to be the person(s) whose name is subscribed to the within instrument.

*Jane M. Bianucci*  
Notary Public

My commission expires:

November 12, 1989



Exhibit A

N-17283A

W.M. Hughes, et al., have reserved a 5% ORRI on geothermal steam, and a 2-1/2% ORRI on dissolved minerals. (Created in assignment of 26-1/2% interest in lease).

---

Southland Royalty Company has reserved a Net Operating Profit ("NOP") interest of 5% until Oxbow recovers \$3,000,000.00 in gross profits; thereafter, NOP interest of 10% until Oxbow recovers \$6,000,000.00 in gross profits; thereafter, NOP interest of 15% until Southland recovers \$15,000,000.00.

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

N-17283A

FORM APPROVED  
OMB NO. 1004-0074  
Expires: April 30, 1985

Serial No.
N-17283-A
New Serial No.

ASSIGNMENT AFFECTING RECORD TITLE  
TO GEOTHERMAL RESOURCES LEASE  
PART I

Oxbow Geothermal Corporation  
200 South Virginia St. Suite 450  
Reno, NV 89501

1.

The undersigned, as owner of 50% percent of record title of the above-designated geothermal resources lease issued effective (date) November 1, 1977, hereby transfers and assigns to the assignee shown above, the record title interest in and to such lease as specified below.

2. Describe the lands affected by this assignment (43 CFR 3241.2-5)

Township 24N, Range 36E: MDM

Section 20: E/2  
Section 21: A11  
Section 22: A11

Containing 1,600.00 Acres, more or less, Churchill County, Nevada

3. What part of assignor(s) record title interest is being conveyed to assignee? (Give percentage or share) 100%

4. What part of the record title interest is being retained by assignor(s)? NONE

5a. What overriding royalty or production payments is the assignor reserving herein? (See Item 4 of General Instructions; specify percentage; no assignment will be approved which does not comply with 43 CFR 3241.7-2 on limitation of overriding royalties) Production Payment described on attached Exhibit "A"

b. What overriding royalties or production payments, if any, were previously reserved or conveyed? (Percentage only) See Exhibits "B" and "C" attached

It is agreed that the obligation to pay any overriding royalties or payments out of production of geothermal resources created herein, which, when added to overriding royalties or payments out of production previously created, aggregate in excess of 50 percent, of the rate of royalty due the United States, shall be suspended.

I CERTIFY That the statements made herein are true, complete, and correct to the best of my knowledge and belief and are made in good faith.

Executed this 12<sup>th</sup> day of August, 1985

TRANS-PACIFIC GEOTHERMAL INC.

*P. Meidner*  
(Assignor's Signature)

TRANS-PACIFIC GEOTHERMAL INC.

(Assignor's Address)

1419 Broadway Suite 415  
Oakland, CA 94612

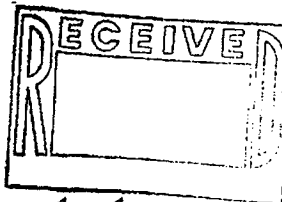
(City) (State) (Zip Code)

Title 18 U.S.C., Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

THE UNITED STATES OF AMERICA

Assignment approved as to the lands described below:

SAME AS ITEM 2



Assignment approved effective OCT 01 1985

By *Marla B. Bohl*  
(Authorized Officer)

Chief, Branch of Lands  
& Minerals Operations

OCT 30 1985

(Title) (Date)

## PART II

N-17203A

## ASSIGNEE'S REQUEST FOR APPROVAL OF ASSIGNMENT

## A. ASSIGNEE CERTIFIES THAT

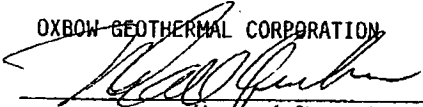
1. Assignee is qualified to hold a geothermal resources lease under 43 CFR 3202.1
2. Assignee is  Individual  Municipality  Association  Corporation
3. Assignee is the sole party in interest in this assignment (*information as to interests of other parties in this assignment must be furnished as prescribed in Specific Instructions*)
4. Filing fee of \$50 is attached (*See Item 2 of General Instructions*)
5. Assignee's interests, direct and indirect, in geothermal resources leases, do not exceed 20,480 chargeable acres (43 CFR 3201.2).

B. ASSIGNEE AGREES to be bound by the terms and provisions of the lease described here, provided the assignment is approved by the Authorized Officer.

C. IT IS HEREBY CERTIFIED That the statements made herein are true, complete, and correct to the best of undersigned's knowledge and belief and are made in good faith.

Executed this 12th day of August, 1985

OXBOW GEOTHERMAL CORPORATION

  
 (Assignee's Signature)  
 Michael Aquilina, Vice-Chairman  
 200 South Virginia St. Suite 450  
 Reno, NV 89501

(Address, include zip code)

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## GENERAL INSTRUCTIONS

1. *Use of form* - Use only for assignment of record title interest in geothermal resources leases, and for assignments of working or royalty interests, operating agreements, or subleases. An assignment of record title may only cover lands in one lease. If more than one assignment is made out of a lease, file a separate instrument of transfer with each assignment.
2. *Filing and number of copies* - File three (3) completed and manually signed copies in proper BLM office. A \$50 nonrefundable filing fee must accompany assignment. File assignment within ninety (90) days after date of final execution.
3. *Effective date of assignment* - Assignment, if approved, takes effect on the first day of the month following the date of filing of all required papers.
4. *Overriding royalties or payments out of production* - Describe in an accompanying statement any overriding royalties or payments out of production created by assignment but not set out therein. If payments out of production are reserved by assignor, outline in detail the amount, method of payment, and other pertinent terms.
5. *Effect of assignment* - Approval of assignment of a definitely described portion of the leased lands creates separate leases. Assignee, upon approval of assignment, becomes lessee of the Government as to the assigned interest and is responsible for complying with all lease terms and conditions, including timely payment of annual rental and maintenance of any required bond; except in the case of assignment of undivided interests, royalties, and operating agreements.
6. A copy of the executed lease, out of which this assignment is made, should be made available to assignee by assignor.

## SPECIFIC INSTRUCTIONS

(Items not specified are self-explanatory)

## PART I

Item 1 - Type or print plainly, in ink, between and below heavy dots, the assignee's full name and mailing address, including zip code.

## PART II

## A. Certification of assignee

3. If assignee is an association or partnership, assignee must furnish a certified copy of its articles of association or partnership, with a statement that (a) it is authorized to hold geothermal resources leases; (b) that the person executing the assignment is authorized to act on behalf of the organization in such matters; and (c) names and addresses of members controlling more than 10 percent interest.

If assignee is a corporation, it must submit a statement containing the following information: (a) State in which it was incorporated; (b) that it is authorized to hold geothermal resources leases; (c) that officer executing assignment is authorized to act on behalf of the corporation in such matters; and (d) percentage of voting stock and percentage of all stock owned by aliens or those having addresses outside the United States. If 10 percent or more of the stock of any class is

owned or controlled by or on behalf of any one stockholder, a separate showing of his citizenship and holdings must be furnished.

If evidence of qualifications and ownership has previously been furnished as required by the above, reference by serial number of record in which it was filed together with a statement as to any amendments. Qualifications of assignee must be in full compliance with the regulations (43 CFR 3241.1-2).

4. *Statement of interests* - Assignee must indicate whether or not he is the sole party in interest in the assignment; if not, assignee must submit, at time assignment is filed, a signed statement giving the names of other interested parties. If there are other parties interested in the assignment, a separate statement must be signed by each assignee, giving the nature and extent of the interest of each, the nature of agreement between them, if oral; and a copy of agreement, if written. All interested parties must furnish evidence of their qualifications to hold such lease interests. Separate statements and written agreements, if any, must be filed with the filing of the assignment.

## EXHIBIT A

Attached hereto and made a part of that certain  
Letter Agreement dated as of August 21, 1984 by and between  
Thermal Power Company and Trans-Pacific Geothermal, Inc.

Federal Lease Serial Number	Description
<u>North Block</u>	
<u>T24N-R36E, MDM</u>	
N-8392	Section 16: All
N-8392	Section 17: All
N-17283 A	Section 20: East 1/2
N-17283 A	Section 21: All
N-17283 A	Section 22: All
<u>South Block</u>	
<u>T23N-R35E, MDM</u>	
N-8498	Section 11: All
N-10706	Section 12: All
N-8498	Section 13: All
N-11583	Section 14: All

On each of the five leases listed above, TPC reserves a production payment of ten dollars (\$10.00) per net acre per year (i.e., five dollars \$5.00 per year for each acre held by TPC in each of the North and South Blocks), up to a total payment of \$1,000,000 for the North and South Blocks taken together, such payments to commence with respect to each Block at the time commercial production commences on the respective Block. Such payments shall only be made from actual revenues from production established on, therefrom, said production payments shall cease as to both the North and South Blocks, and TGI will have no further obligation to make any payments to TPC. In the event that the North Block and/or the South Block is unitized together with other lands, and production is allocated to the North Block and/or the South Block pursuant to such unitization agreement, whether or not there is actual production from the North Block or the South Block, the production payment payable hereunder shall be calculated by multiplying the production payment otherwise payable if there were actual production from such lands, by the respective percentage of unit production allocated to the North Block and/or the South Block, as the case may be.

the respective  
Block, and at  
the the TPC has  
received an  
aggregate of  
1 million

*[Handwritten signature]*

EXHIBIT "B"

- 1) 5% overriding royalty interest on the value of steam, or any other form of heat or other associated energy produced, processed, removed, sold or utilized from the lease;
- 2) 2½% overriding royalty interest on the value of any by-product derived from production from the lease or produced, processed, removed, sold or utilized from the lease; and,
- 3) 2½% overriding royalty interest on the value of commercially demineralized water which is produced from the lease.



## EXHIBIT "C"

- (1) Southland Royalty Company reserves the following:
  - (i) A net operating profit interest of 5% until TGS Associates recovers \$3,000,000 in gross profits from the sale of geothermal resources produced from assets conveyed in that certain Agreement dated September 23, 1981 by and between Southland Royalty Company and TGS Associates, (hereafter called Agreement); and thereafter
  - (ii) A net operating profit interest of 10% until TGS Associates recovers \$6,000,000 in gross profit from the sale of geothermal resources produced from assets conveyed in that certain Agreement dated September 23, 1981 by and between Southland Royalty Company and TGS Associates; and thereafter
  - (iii) A net operating profit interest of 15% until Southland Royalty Company has received a total of \$15,000,000 in proceeds from the net operating profits interest.
- (2) At such time as Southland Royalty Company has recovered a total of \$15,000,000 from the net operating profit interest described in items (i), (ii) and (iii) above, the net operating profit shall cease.
- (3) The net operating profit interest shall be subject to and calculated in accordance with the terms of the Agreement.

UNITED STATES N-17283A  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Serial No.
N-17283A
New Serial No.

ASSIGNMENT AFFECTING RECORD TITLE  
TO GEOTHERMAL RESOURCES LEASE  
PART I

RECEIVED  
Bureau of Land Management  
NEVADA LAND OFFICE

1. TRANS-PACIFIC GEOTHERMAL, INC:00  
1419 Broadway, Suite 612 A.M.  
Oakland, CA 94612

SEP 11 1984

NEVADA STATE OFFICE  
RENO, NEVADA

The undersigned, as owner of 50% percent of record title of the above-designated geothermal resources lease issued effective (date) November 1, 1977, hereby transfers and assigns to the assignee shown above, the record title interest in and to such lease as specified below.

2. Describe the lands affected by this assignment (43 CFR 3241.2-5)

TOWNSHIP 24N, RANGE 36E: MDM

Section 20: E/2  
Section 21: All  
Section 22: All

Containing 1,600.00 Acres, more or less, Churchill County, Nevada

3. What part of assignor(s) record title interest is being conveyed to assignee? (Give percentage or share) 100%

4. What part of the record title interest is being retained by assignor(s)? NONE

5a. What overriding royalty or production payments is the assignor reserving herein? (See Item 4 of General Instructions; specify percentage; no assignment will be approved which does not comply with 43 CFR 3241.7-2 on limitation of overriding royalties) Production Payment described on attached Exhibit "A"

b. What overriding royalties or production payments, if any, were previously reserved or conveyed? (Percentage only) See Exhibits "B" and "C" attached.

It is agreed that the obligation to pay any overriding royalties or payments out of production of geothermal resources created herein, which, when added to overriding royalties or payments out of production previously created, aggregate in excess of 50 percent, of the rate of royalty due the United States, shall be suspended.

I CERTIFY That the statements made herein are true, complete, and correct to the best of my knowledge and belief and are made in good faith.

Executed this 2nd day of April, 1984

THERMAL POWER COMPANY

(Assignor's Signature)

W. L. D'Olier, Vice President

THERMAL POWER COMPANY

(Assignor's Address)

601 California Street  
San Francisco, CA 94108

(City) (State) (Zip Code)

Title 18 U.S.C., Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

THE UNITED STATES OF AMERICA

Assignment approved as to the lands described below:

**SAME AS ITEM 2**

Assignment approved effective OCT 01 1984

By

(Authorized Officer)

Chief, Branch of Lands  
& Minerals Operations

(Title)

FEB 06 1985

(Date)

NOTE: This form may be reproduced provided that copies are exact reproductions on one sheet of both sides of this official form in accordance with the provisions of 43 CFR 3241.2-4.

## PART II

N-17283A  
ASSIGNEE'S REQUEST FOR APPROVAL OF ASSIGNMENT

## A. ASSIGNEE CERTIFIES THAT

1. Assignee is qualified to hold a geothermal resources lease under 43 CFR 3202.1
2. Assignee is  Individual  Municipality  Association  Corporation
3. Assignee is the sole party in interest in this assignment (*information as to interests of other parties in this assignment must be furnished as prescribed in Specific Instructions*)
4. Filing fee of \$50 is attached (*See Item 2 of General Instructions*)
5. Assignee's interests, direct and indirect, in geothermal resources leases, do not exceed 20,480 chargeable acres (43 CFR 3201.2)

B. ASSIGNEE AGREES to be bound by the terms and provisions of the lease described here, provided the assignment is approved by the Authorized Officer.

C. IT IS HEREBY CERTIFIED That the statements made herein are true, complete, and correct to the best of undersigned's knowledge and belief and are made in good faith.

Executed this 30 day of August, 1984

TRANS-PACIFIC GEOTHERMAL, INC.



(Assignee's Signature)

Tsvi Meidav, President

Trans-Pacific Geothermal, Inc.  
1419 Broadway, Suite 612  
Oakland, CA 94612

(Address, include zip code)

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## GENERAL INSTRUCTIONS

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## SPECIFIC INSTRUCTIONS

(Items not specified are self-explanatory)

## PART I

Item 1 - Type or print plainly, in ink, between and below heavy dots, the assignee's full name and mailing address, including zip code.

## PART II

## A. Certification of assignee

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owned or controlled by or on behalf of any one stockholder, a separate showing of his citizenship and holdings must be furnished.

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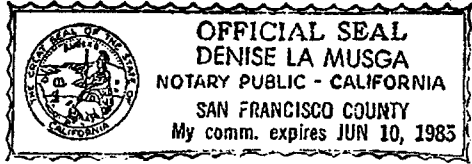
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STATE OF CALIFORNIA

)  
) SS.  
)

City and County of San Francisco

On April 2nd, 19 84, before me the undersigned, a Notary Public in and for the said State, personally appeared W. L. D'Olier personally known to me (or proved to me on the basis of satisfactory evidence) to be the person who executed the within instrument as Vice President on behalf of the corporation therein named and acknowledged to me that the corporation executed it.



*Denise La Musga*  
Notary Public in and for said State

**EXHIBIT A**

Attached hereto and made a part of that certain Letter Agreement dated as of August 21, 1984 by and between Thermal Power Company and Trans-Pacific Geothermal, Inc.

Federal Lease Serial Number	Description
<b>North Block</b>	
<u>T24N-R36E, MDM</u>	
N-8392	Section 16: All
N-8392	Section 17: All
N-17283 A	Section 20: East 1/2
N-17283 A	Section 21: All
N-17283 A	Section 22: All
<b>South Block</b>	
<u>T23N-R35E, MDM</u>	
N-8498	Section 11: All
N-10706	Section 12: All
N-8498	Section 13: All
N-11583	Section 14: All

On each of the five leases listed above, TPC reserves a production payment of ten dollars (\$10.00) per net acre per year (i.e., five dollars \$5.00 per year for each acre held by TPC in each of the North and South Blocks), up to a total payment of \$1,000,000 for the North and South Blocks taken together, such payments to commence with respect to each Block at the time commercial production commences on the respective Block. Such payments shall only be made from actual revenues from production established on, therefrom, said production payments shall cease as to both the North and South Blocks, and TGI will have no further obligation to make any payments to TPC. In the event that the North Block and/or the South Block is unitized together with other lands, and production is allocated to the North Block and/or the South Block pursuant to such unitization agreement, whether or not there is actual production from the North Block or the South Block, the production payment payable hereunder shall be calculated by multiplying the production payment otherwise payable if there were actual production from such lands, by the respective percentage of unit production allocated to the North Block and/or the South Block, as the case may be.

*the respective Block, and at the time TPC has received an aggregate of 1 million*

*[Handwritten signature]*

*[Handwritten initials]*

