

APPLICATION FOR PERMIT
TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

APR 16 1981

Date of filing in State Engineer's Office.....

Returned to applicant for correction.....

Corrected application filed.....

APR 16 1981

Map filed.....

The applicant Sunoco Engery Development Company

12700 Park Central Pl., Box 9, Suite 1500 Dallas
Street and No. or P.O. Box No. City or Town

Texas, hereby make application for permission to appropriate the public
State and Zip Code No.

waters of the State of Nevada, as hereinafter stated. (If applicant is a corporation, give date and place of incorporation; if a copartnership or association, give names of members.) Incorporated January 2, 1975
in the State of Delaware

1. The source of the proposed appropriation is Underground Well No. 45-5
Name of stream, lake or other source.

2. The amount of water applied for is 3.25 second-foot
One second-foot equals 448.83 gals. per min.

(a) If stored in reservoir give number of acre-feet..... acre-foot

3. The water to be used for Industrial
Irrigation, power, mining, manufacturing, domestic, or other use. Must limit to one use.

4. If use is for:

(a) Irrigation (state number of acres to be irrigated).....

(b) Stockwater (state number and kinds of animals to be watered).....

(c) Other use (describe fully under "No. 12. Remarks").....

(d) Power:

(1) Horsepower developed.....

(2) Point of return of water to stream.....

5. The water is to be diverted from its source at the following point NE 1/4 SW 1/4 Section 5, T24N, R37E,
M.D.B. & M., or at a point from which the Northwest corner of Section
Describe as being within a 40-acre subdivision of public survey, and by course and distance to a section corner. If on unsurveyed land,
5, T24N, R37E, M.D.B. & M. bears N 37° 26' 17" W a distance of 3,375.4
it should be stated. feet.

6. Place of use Section 32, T25N, R37E, MD.B. & M., Sections 4, 5, 6, 7, 8, 16, 17,
Describe by legal subdivision, if on unsurveyed land it should be so stated.
18, 19, 20, 21, T24N, R37E, M.D.B. & M., Section 12, 13, 34, T24N, R36E,
M.D.B. & M.

7. Use will begin about January 1 and end about December 31, of each year.
Month and Day Month and Day

8. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.) Drill well to approximately 6,000 feet,
install casing and cement back to surface to protect fresh water
State manner in which water is to be diverted, i.e. diversion structure, ditches and flumes, drilled well with pump and motor, etc.
zones. Hot water or steam will flow through pipeline to electric
plant.

- 9. Estimated cost of works \$500,000.....
- 10. Estimated time required to construct works Two Years
If well completed, describe works.
- 11. Estimated time required to complete the application to beneficial use Five Years.....

12. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use.

This application is for a geothermal well with a production of 2.1 million gallons per day. The withdrawal will be 2352 acre feet per year; however, the high temperature water would be flashed with the net effect of 210,000 gallons per day being beneficially used and the remaining water returned to the reservoir so only 235 acre feet per year is actually used. This

application is commingled with the other applications.
 SUNOCO ENERGY DEVELOPMENT COMPANY

By s/Richard W. Arden
 Richard W. Arden, Agent
 950 Industrial Way
 Sparks, Nevada (89431)

Compared sg/bl jm/br.....

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit is issued subject to existing rights. It is understood that the amount of geothermal fluid herein granted is only a temporary allowance and that the final right obtained under this permit will be dependent upon the amount actually placed to beneficial use. It is also understood that this right must allow for a reasonable decrease of fluid pressure and heat. The well shall be equipped and maintained to prevent any waste of the geothermal fluid. Accurate measurements must be kept of discharge of the production and the amount of fluid injected into the injection well to determine the total amount of fluid consumed for a beneficial use.

The production and injection well is to be cemented from the producing levels to the surface to protect fresh water zones. This permit is issued subject to the condition that only geothermal fluids are to be diverted and used beneficially for heating purposes and fresh, cold water aquifers are not to be diverted. The used geothermal fluids are to be returned to the source via the injection well. The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies. A detailed log on the injection well and/or other analyses of the system used for returning the used geothermal to the source must be submitted together with the Proof of Completion.

An annual report for this well must be filed under this permit

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed 3.25 cubic feet per second, but not to exceed 235.2 acre-feet per annum

Actual construction work shall begin on or before..... N/A

Proof of commencement of work shall be filed before..... N/A

Work must be prosecuted with reasonable diligence and be completed on or before..... January 13, 1985

Proof of completion of work shall be filed before..... February 13, 1985

Application of water to beneficial use shall be made on or before..... January 13, 1990

Proof of the application of water to beneficial use shall be filed on or before..... February 13, 1990

Map in support of proof of beneficial use shall be filed on or before.....

PETER G. MORROS

Commencement of work filed..... IN TESTIMONY WHEREOF, I.....
 Completion of work filed..... NOV 13 1985 State Engineer of Nevada, have hereunto set my hand and the seal of
 Proof of beneficial use filed..... my office, this 13th day of JANUARY
 Cultural map filed.....
 Certificate No. Issued..... A.D. 1984

Peter G. Morros
 State Engineer

(PERMIT TERMS CONTINUED)

describing the amount of geothermal fluid consumed to a beneficial use for the calendar year. This report must also detail the amount of fluid produced and injected.

The total withdrawal of the geothermal fluid shall be limited to 2352 acre-feet per year but the total consumptive use of the geothermal fluid is limited to 235.2 acre-feet per year.

