



Department of State.

**CERTIFICATE OF AUTHORITY
OF**

AMERICAN GEOTHERMAL DRILLING CO.

I, PETE T. CENARRUSA, Secretary of State of the State of Idaho, hereby certify that duplicate originals of an Application of AMERICAN GEOTHERMAL DRILLING CO. for a Certificate of Authority to transact business in this State, duly signed and verified pursuant to the provisions of the Idaho Business Corporation Act, have been received in this office and are found to conform to law.

ACCORDINGLY and by virtue of the authority vested in me by law, I issue this Certificate of Authority to AMERICAN GEOTHERMAL DRILLING CO. to transact business in this State under the name AMERICAN GEOTHERMAL DRILLING CO. and attach hereto a duplicate original of the Application for such Certificate.

Dated June 20, 1980.



Pete T. Cenarrusa

SECRETARY OF STATE

Corporation Clerk

APPLICATION FOR CERTIFICATE OF AUTHORITY

To the Secretary of State of Idaho.

Pursuant to Section 30-1-110, Idaho Code, the undersigned Corporation hereby applies for a Certificate of Authority to transact business in your State, and for that purpose submits the following statement:

1. The name of the corporation is AMERICAN GEOTHERMAL DRILLING CO.
2. *The name which it shall use in Idaho is AMERICAN GEOTHERMAL DRILLING CO.
3. It is incorporated under the laws of Oklahoma
4. The date of its incorporation is May 5, 1979 and the period of its duration is Fifty (50) years
5. The address of its principal office in the state or country under the laws of which it is incorporated is 522 South Boston, Tulsa, OK 74103
6. The address of its proposed registered office in Idaho is 300 North 6th Street
Boise, Idaho 83701, and the name of its proposed registered agent in Idaho at that address is CT CORPORATION SYSTEM
7. The purpose or purposes which it proposes to pursue in the transaction of business in Idaho are:
SEE ATTACHED

8. The names and respective addresses of its directors and officers are:

Name	Office	Address
<u>Ronald C. Barr</u>	<u>Pres. Treas. & Dir.</u>	<u>2534 E. 53rd Street, Tulsa, OK</u>
<u>Edward J. Mysock, Jr.</u>	<u>V.P. & Secy.</u>	<u>119 E. 31st Place, Tulsa, OK</u>
<u>Wayne E. Swearingen</u>	<u>Director</u>	<u>3205 S. Boston, Tulsa, OK</u>
<u>H. O. Rayburn</u>	<u>Director</u>	<u>2949 S. Delaware, Tulsa, OK</u>

9. The aggregate number of shares which it has authority to issue, itemized by classes, par value of shares, and shares without par value, is:

Number of Shares	Class	Par Value Per Share or Statement That Shares Are Without Par Value
<u>150,000</u>	<u>Common</u>	<u>\$.01</u>

(continued on reverse)

10. The aggregate number of its issued shares, itemized by classes, par value of shares, and shares without par value, is:

Number of Shares	Class	Par Value Per Share or Statement That Shares Are Without Par Value
<u>100,000</u>	<u>Common</u>	<u>\$.01</u>

11. The corporation accepts and shall comply with the provisions of the Constitution and the laws of the State of Idaho,

12. This Application is accompanied by a copy of its articles of incorporation and amendments thereto, duly authenticated by the proper officer of the state or country under the laws of which it is incorporated.

Dated June 6, 19 80

AMERICAN GEOTHERMAL DRILLING CO.

By Ronald C. Barr
Ronald C. Barr

Its _____ President

and Edward J. Mysock, Jr.
Edward J. Mysock, Jr.

Its _____ Secretary

STATE OF OKLAHOMA)

COUNTY OF TULSA) ss:

I, Manda Dyer, a notary public, do hereby certify that on this 6th day of June, 19 80, personally appeared before me Ronald C. Barr, who being by me first duly sworn, declared that he is the President of AMERICAN GEOTHERMAL DRILLING CO.

that he signed the foregoing document as President of the corporation and that the statements therein contained are true.

Commission Expires:

Jan. 28, 1983

Manda Dyer
Notary Public

*Pursuant to section 30-1-108(b)(1), Idaho Code, if the corporation assumes a name other than its true name, this application must be accompanied by a resolution of the Board of Directors to that effect.

To own and operate drilling apparatus for the purpose of exploring, developing and drilling geothermal reservoir deposits on lands owned or leased by this company or on a contractual basis on lands owned or leased by others; to engage in the business of the leasing of lands believed to contain geothermal reservoir deposits; the improving, mortgaging, leasing, assigning and otherwise depositing of same; the construction of any and all buildings and facilities required in carrying on the business of the company; and the doing of any and every act or thing proper, necessary or incidental to the general purpose of the company.

OFFICE OF THE SECRETARY OF STATE



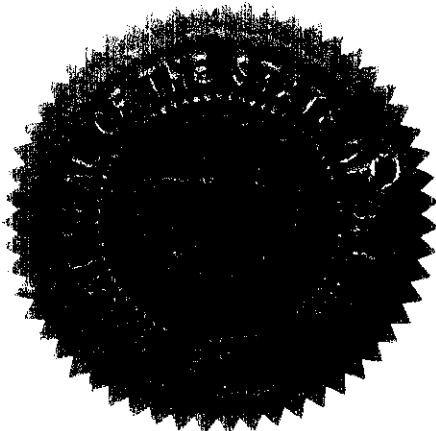
CERTIFICATE OF TRANSCRIPT

I, the undersigned Secretary of State of the State of Oklahoma, do hereby certify that the annexed transcript has been compared with the record on file in my office of which it purports to be a copy, and that the same is a full, true and correct copy of:

ARTICLES OF INCORPORATION

OF

AMERICAN GEOTHERMAL DRILLING CO.



In testimony whereof, I have hereunto set my hand and affixed the Great Seal of the State of Oklahoma at the City of Oklahoma City this 6th. *day of* June, 1980

Jeannette B. Edmondson
Secretary of State
By: *Harf James*

OFFICE OF THE SECRETARY OF STATE



CERTIFICATE OF INCORPORATION

To all to Whom these Presents shall Come, Greetings:

WHEREAS, Articles of Incorporation duly signed and verified of

AMERICAN GEOTHERMAL DRILLING CO.

have been filed in the office of the Secretary of State as provided by the Laws of the State of Oklahoma.

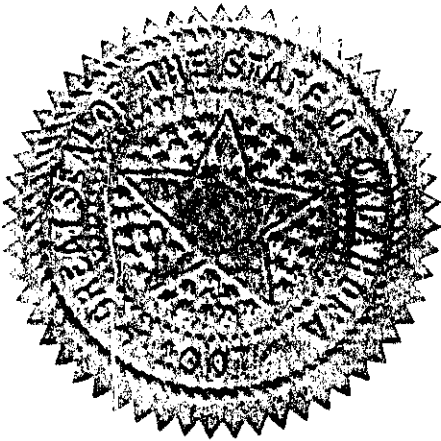
NOW THEREFORE, I, the undersigned, Secretary of State of the State of Oklahoma by virtue of the powers vested in me by law, do hereby issue this Certificate of Incorporation.

IN TESTIMONY WHEREOF, I hereunto set my hand and cause to be affixed the Great Seal of the State of Oklahoma.

Filed at the City of Oklahoma City, this 5th
day of March, A.D. 19 79

Jeannette F. Edmondson
Secretary of State

By: *Gary Ann Smedley*



ARTICLES OF INCORPORATION

STATE OF OKLAHOMA)
) ss
 COUNTY OF TULSA)

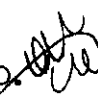
TO SECRETARY OF STATE OF THE STATE OF OKLAHOMA

We, the undersigned incorporators,

Ronald C. Barr	522 S. Boston	Tulsa, Oklahoma	74103
Edward J. Mysock, Jr.	507 S. Main Street	Tulsa, Oklahoma	74103
Joseph W. Martin	507 S. Main Street	Tulsa, Oklahoma	74103

being persons legally competent to enter into contracts, for the purpose of forming a corporation under "The Business Corporation Act" of the State of Oklahoma, do hereby adopt the following Articles of Incorporation:

ARTICLE ONE

The name of this corporation is: AMERICAN GEOTHERMAL DRILLING CO. 

ARTICLE TWO

The address of its registered office in the State of Oklahoma is 522 S. Boston, City of Tulsa, County of Tulsa, and the name of its registered agent is Ronald C. Barr; his address is 522 S. Boston, Tulsa, Oklahoma 74103.

ARTICLE THREE

The duration of the corporation is: 50 years.

ARTICLE FOUR

The purposes for which this corporation is formed are:

- (a) To own and operate drilling apparatus for the purpose of exploring, developing and drilling geothermal reservoir deposits on lands owned or leased by this company or on a contractual basis on lands owned or leased by others; to engage in the business of the leasing of lands believed to contain geothermal reservoir deposits; the improving, mortgaging, leasing, assigning and otherwise disposing of same; the construction of any and all buildings and facilities required in carrying on the business of the company; and the doing of any and every act or thing proper, necessary or incidental to the general purpose of the company.
- (b) To manufacture, fabricate, assemble, to take, purchase and otherwise acquire, own, hold, use, sell, assign, transfer, exchange, lease and otherwise dispose of, and to invest, trade, deal in and deal with goods, wares and merchandise and supplies and all other personal property of every class and description.

RECEIVED

MAR 5 1979

OKLAHOMA SECRETARY
OF STATE

- (c) To purchase, acquire, own, hold, use, lease (either as lessor or lessee), grant, sell, exchange, subdivide, mortgage, convey in trust, manage, improve, construct, operate and generally deal in any and all real estate, improved or unimproved, stores, office buildings, dwelling houses, apartment houses, hotels, manufacturing plants and other buildings, and any and all other property of every kind or description, real personal and mixed, and wheresoever situated, either in Oklahoma, other states of the United States, the District of Columbia, territories and colonies of the United States, or foreign countries.
- (d) To acquire, by purchase or otherwise, the goodwill, business, property rights, franchises and assets of every kind, with or without undertaking, either wholly or in part, the liabilities of any person, firm, association or corporation; and to acquire any property or business as a going concern or otherwise (i) by purchase of the assets thereof wholly or in part, (ii) by acquisition of the shares or any part thereof, or (iii) in any other manner, and to pay for same in cash or in shares or bonds or other evidences of indebtedness of this corporation, or otherwise; to hold, maintain and operate, or in any manner dispose of, the whole or any part of the goodwill, business, rights and property so acquired; and to exercise all the powers necessary or convenient in and about the management of such business.
- (e) To take, purchase and otherwise acquire, own, hold, use, sell, assign, transfer, exchange, lease, mortgage, convey in trust, pledge, hypothecate, grant licenses in respect of and otherwise dispose of letters patent of the United States or any foreign country, patent rights, licenses and privileges, inventions, improvements and processes, copyrights, trademarks and trade names, and governmental, state, territorial, county and municipal grants and concessions of every character which this corporation may deem advantageous on the prosecution of its business or in the maintenance, operation, development or extension of its properties.
- (f) To enter into, make, perform and carry out contracts of every kind for any lawful purpose without limit as to amount, with any person firm, association or corporation, municipality, county, parish, state, territory, government or other municipal or governmental subdivision.
- (g) To become a partner (either general or limited or both) and to enter into agreements or partnership, with one or more other persons or corporations, for the purpose of carrying on any business whatsoever which this corporation may deem proper or convenient in connection with any of the purposes herein set forth or otherwise, or which may be calculated, directly or indirectly, to promote the interests of this corporation or to enhance the value of its property or business.
- (h) From time to time to apply for, purchase, acquire by assignment,

transfer or otherwise, exercise, carry out and enjoy any benefit, right, privilege, prerogative or power conferred by, acquired under or granted by any statutes, ordinance, order, license, power, authority, franchise, commission, right or privilege which any government or authority or governmental agency or corporation or other public body may be empowered to enact, make or grant; to pay for, aid in, and contribute toward carrying the same into effect and to appropriate any of this corporation's shares, bonds and/or assets to defray the costs, charges and expenses thereof.

- (i) To subscribe or cause to be subscribed for, and to take, purchase and otherwise dispose of, the whole or any part of the shares of the capital stock, bonds, coupons, mortgages, deeds of trust, debentures, securities, obligations, evidences of indebtedness, notes, goodwill, rights, assets and property of any and every kind, or any part thereof, of any other corporation or corporations, association or associations, firm or firms, person or persons, together with shares, rights, units or interest in, or in respect of, any trust estate, now or hereafter existing, and whether created by the laws of the State of Oklahoma or any other state, territory or country; and to operate, manage and control such properties, or any of them, either in the name of such or other corporation or corporations or in the name of this corporation, and while the owners of any of said shares of capital stock, to exercise all the rights, powers and privileges of ownership of every kind and description, including the right to vote thereon, with power to designate some person or persons for that purpose from time to time, and to the same extent as natural persons might or could do.
- (j) To promote or to aid in any manner, financially or otherwise, any person, firm, corporation or association of which any shares of stock, bonds, notes, debentures or other securities or evidences of indebtedness are held directly or indirectly by this corporation; and for this purpose to guarantee the contracts, dividends, shares, bonds, debentures, notes and other obligations of such other persons, firms, corporations or associations; and to do any other acts or things designed to protect, preserve, improve or enhance the value of such shares, bonds, notes, debentures or other such securities or evidences of indebtedness.
- (k) To borrow and lend money, but nothing herein contained shall be construed as authorizing the business of banking, or as including the business purposes of a commercial bank, savings bank or trust company.
- (l) To issue bonds, notes, debentures, or other obligations of this corporation from time to time for any of the objects or purposes of this corporation, and to secure the same by mortgage, deed of trust, pledge or otherwise, or to issue the same unsecured; to purchase or otherwise acquire its own bonds, debentures or other evidences of its indebtedness or obligations; to purchase, hold, sell and transfer the shares of its own capital stock to the

extent and manner provided by the laws of the State of Oklahoma as the same are now in force or may be hereafter amended.

- (m) To purchase, acquire, take, hold, own, use and enjoy, and to sell, lease, transfer, pledge, mortgage, convey, grant, assign or otherwise dispose of and generally invest, trade, deal in and with oil royalties, mineral rights of all kinds, mineral bearing lands and hydrocarbon products of all kinds, oil, gas and mineral leases, and all rights and interests therein, and in general products of the earth and deposits, both subsoil and surface, of every nature and description.
- (n) To carry on any business whatsoever, either as principal or as agent or both or as a partnership, which this corporation may deem proper or convenient in connection with any of the foregoing purposes or otherwise, or which may be calculated directly or indirectly to promote the interests of this corporation or to enhance the value of its property or business; to conduct its business in this state, and other states; in the District of Columbia, in the territories and colonies of the United States, and in foreign countries.
- (o) To have and to exercise all the powers conferred by the laws of Oklahoma upon corporations formed under laws pursuant to and under which this corporation is formed, as such laws are now in effect or may at any time hereafter be amended.

The foregoing statement of purposes shall be construed as a statement of both purposes and powers, and the purposes and powers stated in each clause shall, except where otherwise expressed, be in nowise limited or restricted by reference to or inference from the terms or provisions of any other clause, but shall be regarded as independent purposes and powers, and the enumerations of specific purposes and powers shall not be construed to restrict in any manner the general terms and powers of this corporation, nor shall the expression of one thing be deemed to exclude another, although it be of like nature. Nothing in the foregoing statement of purposes and powers, however, shall be construed to authorize the corporation to engage in any activity which, under the laws of the State of Oklahoma in effect at the time, is not a permissible business for a corporation organized for profit.

ARTICLE FIVE

The aggregate number of shares which the corporation shall have authority to allot is 150,000 shares divided into one class. The designation of each class, the number of shares of each class, and the par value of the shares of each class are as follows:

<u>CLASS</u>	<u>NUMBER OF SHARES</u>	<u>PAR VALUE</u>
Common	150,000	\$.01

ARTICLE SIX

The amount of stated capital with which it will begin business is \$500.00, which has been fully paid in.

ARTICLE SEVEN

The number of class of shares to be allotted by the corporation before it shall begin business and the consideration to be received by the corporation therefor, are:

<u>CLASS OF SHARES</u>	<u>NUMBER OF SHARES</u>	<u>CONSIDERATION TO BE RECEIVED THEREFOR</u>
Common	50,000	\$500.00

ARTICLE EIGHT

The number of directors to be elected at the first meeting of the shareholders is three

Ronald C. Barr
Ronald C. Barr

Joseph W. Martin
Joseph W. Martin

Edward J. Mysock, Jr.
Edward J. Mysock, Jr.

STATE OF OKLAHOMA)
) ss
COUNTY OF TULSA)

Before me, a Notary Public in and for said County and State on this 2 day of March, 1979, personally appeared Ronald C. Barr, Edward J. Mysock, Jr. and Joseph W. Martin, to me known to be the identical persons who executed the foregoing Articles of Incorporation and acknowledged to me that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year above written.

David Ann Thompson
Notary Public

My commission expires:

December 5, 1981

AFFIDAVIT AS TO PAID IN CAPITAL

STATE OF OKLAHOMA)
) SS
 COUNTY OF TULSA)

Ronald C. Barr, Edward J. Mysock, Jr. and Joseph W. Martin, of lawful age being first duly sworn, each for himself deposes and says that the above-named affiants constitute a majority of the incorporators of American Geothermal Drilling Co., a proposed corporation, and that the amount of stated capital with which said corporation will begin business, as set out in its attached Articles of Incorporation, has been fully paid in.

Ronald C. Barr
 Ronald C. Barr

Joseph W. Martin
 Joseph W. Martin

Edward J. Mysock, Jr.
 Edward J. Mysock, Jr.

Subscribed and sworn to before me this 2 day of March, 1979.

Diana Lee Simpson
 Notary Public

My commission expires:

December 5, 1981