

HEAT, FLUID, AND MINERAL LEASE

THIS INDENTURE, made this 18th day of January, 1964, by and between Tauno F. Karttala and wife Eima M. Karttala, Granada Hills, Calif.

and other parties, if any, executing this lease or any counterpart hereof, hereinafter called LESSOR (whether one or more), and Walter J. McAulay, Tulsa, Oklahoma hereinafter called LESSEE.

WITNESSETH:

Lessor, for TEN AND NO/100 DOLLARS (\$10.00) and other considerations, receipt of which is acknowledged, and of the covenants hereinafter contained on the part of the Lessee to be paid, kept and performed, hereby grants, lets and leases to Lessee, for the purpose of prospecting, exploring and investigating by geophysical methods or otherwise, drilling and mining for, producing, extracting, saving, caring for, treating, transporting and owning all of the heat, fluids and minerals in and on the hereinafter described lands, including but not by way of limitation, formation water, the natural heat of the earth, all fluids and gaseous and liquid state, heavy water, sulphur, sulphur gases, sulphur compounds, boron compounds, halogens and their compounds, carbonate and bicarbonate compounds, all ionic solutions and entrained solids, heat and thermal energy derived from any such heat, fluids and minerals (all called herein "such substances") and for storing, utilizing, processing and converting and otherwise treating any of such substances upon said lands during the term hereof, together with all easements, privileges, rights of ingress and egress and use of the surface as may be useful or convenient for Lessee's operations on the lands below described, or upon lands adjacent thereto, including the rights (which are illustrative rather than in any way limiting) to lay pipelines, dig canals, construct tanks, docks, pumping stations, telephone, telegraph and power lines, roads, railroads, warehouses and other structures and facilities, the following described lands in:

Eureka County, State of Nevada to-wit:

The NE/4 of the NE/4 of Section 23, Township 29 North, Range 48 East, Mount Diablo Base & Meridian

of Section Township and containing 40 acres, more or less.

It is agreed that this lease shall remain in force for ten (10) years from date hereof, herein called the primary term, and thereafter so long as any of such substances are being produced from said lands, or any part thereof, or any operations permitted hereunder are being conducted thereon, or upon any part thereof.

- 1. Lessee shall pay to Lessor as royalty: (a) On steam and thermal energy, 10% of the sales price at the well head and on gases, liquids, solutions, entrained solids, muriate of potash, minerals, elements, and compounds others than those set out in subparagraphs (b), (c), and (d) below, 2% of the sales price at the well head; or if not sold at the well head, the applicable stated percentage of the reasonable market value at the well head. (b) On sulphur and sulphur compounds, 50c per long ton. (c) On oil, 1/8 of that produced, saved and sold, to be delivered at the well into storage furnished by Lessor or to Lessor's credit into the pipeline to which the wells may be tied, Lessee having the right from time to time to purchase any royalty oil in Lessee's possession, paying the market price therefor prevailing for the field where produced on the date of purchase.

(d) On hydrocarbon gas, including casinghead gas or other gaseous substances, produced from said land and sold or used off the premises or in the manufacturing of gasoline or other products therefrom, the market value at the well head of 1/8 of the gas sold or used, provided that on gas sold at the well, the royalty shall be 1/8 of the amount realized from such sale. Lessee may, and shall if required by law, deduct the amount of taxes levied and assessed against the production from said land before computing the amounts payable to Lessor.

Lessee shall pay to Lessor on or before the 25th day of each calendar month, the royalties payable for the preceding calendar month. Lessee may commingle for the purposes of utilizing, selling or processing such substances, including, but not by way of limitation, steam and thermal energy produced from the leased land, with like production from other lands and may meter, gauge, or weigh such production and compute and pay Lessor's royalty on the basis of production as so determined.

If production so commingled exceeds market demand, Lessee may reduce production from the leased premises ratably with and in proportion to the reduction in production from other properties of Lessee included in the commingling; provided, however, that in Lessee's judgment this allocation may be varied to accord with sound engineering practices.

2. If drilling, mining or other operations permitted hereunder (hereinafter called "operations") are not commenced on said lands on or before one (1) year from the date hereof, this lease shall terminate unless Lessee, on or before said anniversary date, shall pay or tender to Lessor or to Lessor's credit in:

United California Bank at Granada Hills, California

successor thereof, herein called "depository bank," a sum equal to 10c per acre (as hereinbefore specified) which shall operate as a rental (and is so referred to herein) and cover the privilege of commencing operations on or before the expiration of said 90-day period, each party holding acreage under this lease shall pay or tender to the parties entitled to royalties an advance annual royalty (as a substitute for royalty on annual production) equal to the amount of annual delay rentals above provided, for the acreage then held under this lease by the party making such payment or tender, and so long as said advance royalty is so paid or tendered, this lease shall continue in full force and effect.

If prior to discovery of any substances covered herein, Lessee should abandon operations thereon, or if after discovery of said substances the production thereof should cease from any cause, this lease shall not terminate if Lessee commences additional or reworking operations within ninety (90) days thereafter, or if it be within the primary term, commences or resumes the payment or tender of rentals on or before the rental paying date next ensuing after the expiration of ninety (90) days from the date of abandonment of operations or cessation of production. If at the expiration of the primary term no substance covered herein is being produced from said land but Lessee is then engaged in operations of any character thereon, this lease shall remain in force so long as operations are prosecuted with no cessation of more than thirty (30) consecutive days, and if they result in the production of any of the substances covered herein named above, so long thereafter as any substance covered herein is produced from said lands.

3. If Lessee completes any operation permitted hereunder on the leased premises capable of production of any such substances but is unable to sell the production therefrom, then on or before ninety (90) days after said operations are suspended for lack of a market determined by the Lessee to be economic, and thereafter on or before the anniversary date of the expiration of said 90-day period, each party holding acreage under this lease shall pay or tender to the parties entitled to royalties an advance annual royalty (as a substitute for royalty on annual production) equal to the amount of annual delay rentals above provided, for the acreage then held under this lease by the party making such payment or tender, and so long as said advance royalty is so paid or tendered, this lease shall continue in full force and effect.

4. Payments or tenders of rental or advance royalty may be made by Lessee's check or draft mailed to Lessor at Lessor's post office address last known to Lessee, or delivered to Lessor, or mailed or delivered to the depository bank on or before the date of payment. The date of mailing of such check or draft shall be considered date of payment of such rentals or advance royalty. Should any depository bank cease to exist, suspend business, liquidate, fail, or be succeeded by another bank or for any reason fail or refuse to accept rental or advance royalty, Lessee shall not be in default for failure to make payment or tender until thirty (30) days after Lessor has delivered to Lessee a proper recordable instrument naming another bank as depository. The down cash payment is consideration for this lease according to its terms and shall not be allocated as mere rental for a period. Lessee may at any time execute and deliver to Lessor or to the depository above named or place of record a release or releases covering any portion or portions of the above described premises and thereby amend this lease as to such portion or portions and be relieved of all obligations as to the acreage surrendered, and thereafter the rentals or advance royalty payable hereunder shall be reduced in the proportion that the acreage covered hereby is reduced by said release or releases.

5. No operations permitted hereunder shall be conducted nearer than 100 feet to the house or barn now on said premises without written consent of Lessor.

6. Lessee shall not be required to account to Lessor for or to pay any royalties on substances produced from the leased premises which are not saved and sold (whether in original, treated, processed or converted form) or which are used by Lessee in its operations on or with respect to the leased premises or in connection with development, production, treating, processing and converting the substances covered herein.

7. Lessee shall have the right to use and utilize such water or water rights in, on, from or appurtenant to the leased lands, except water from Lessor's well, wells or stock tanks, as Lessee may reasonably require in connection with its operations on the leased lands for the development and production of the substances covered herein without payment to Lessor.

8. In the event Lessor at the time of making this lease owns a less interest in the leased lands or the substances in, on or under said land than the fee simple estate therein, then the rentals and royalties accruing hereunder shall be paid to Lessor in the proportion which Lessor's interest bears to the entire fee simple estate in the leased lands or the substances therein or thereon.

9. If the estate of either party hereto is assigned and the privilege of assigning in whole or in part is expressly allowed - the covenants hereof shall extend to their heirs, executors, administrators, successors or assigns, but no change in the ownership of the lands or substances or assignment of rental or advance royalties shall be binding on the Lessee until after the Lessee has been furnished with a written transfer or assignment or a true copy thereof; and it is hereby agreed that in the event this lease shall be assigned as to a part or as to parts of the above described lands and the assignee or assignees of such part or parts shall fail or make default in the payment of the proportionate part of the rental or advance royalty due from him or them, such default shall not operate to defeat or affect this lease insofar as it covers a part or parts of said lands upon which the said Lessee or any assignee thereof shall make due payment of said rental or advance royalty. If Lessee makes a good faith effort to pay a particular rental or advance royalty but fails to pay or incorrectly pays the rental or advance royalty or some portion thereof, this lease shall not terminate unless Lessee fails to correct the error and to pay the rental properly within thirty (30) days after written notice from Lessor that an error has occurred.

10. If more than one party executes this lease as Lessor, or is now or shall become entitled to share in or receive the benefits accruing to Lessor hereunder, this lease shall nevertheless be operated and developed by Lessee as an entirety, without regard to any such division in or change of interest or ownership, or right to receive payment, which shall not operate to enlarge the obligations or diminish the rights of Lessee.

11. If any operation permitted or required hereunder or performance by Lessee of any covenant, agreement or requirement hereof is delayed, interrupted or prevented directly or indirectly, in whole or in part, by strikes, lockouts, riots, actions of the elements, accidents, delays in transportation, inability to secure labor or materials in the open market, laws, orders, rules, regulations, requirements or acts of any federal, state, municipal or other governmental agent, authority or representative, inability to secure or absence of a market for the commercial or economic sale of any of the substances covered hereby or the products derived therefrom, or on account of any other cause, matter or consideration beyond the reasonable control of Lessee, whether or not similar to those above specifically enumerated, the period of such delay, interruption or prevention shall not be counted against the Lessee, and the primary term of this lease shall automatically be extended beyond the primary term set forth above so long as any such cause or causes shall continue and for a period of six (6) months thereafter, and such extended term shall for all purposes be considered a part of the primary term hereof, the provisions of Section 2 above relating to the payment of delay rentals shall in all things be applicable to the primary term as so extended. Lessee shall not be liable to Lessor in damages for failure to perform any operation permitted or required hereunder or to comply with any covenant, agreement or requirement hereof during the time that Lessee is relieved under the provisions of this paragraph.

12. Lessee shall pay damages caused by Lessee's operations to the surface of said lands. Lessee shall have the right at any time either before or after termination of this lease, to remove all machinery and fixtures placed on said lease lands, including the right to draw and remove casing.

13. If Lessor considers that Lessee has not complied with Lessee's obligations hereunder, express and implied, Lessor shall so notify Lessee in writing, setting out in what respects Lessee has breached this contract. If within sixty (60) days after receipt of such notice, Lessee shall meet or commence to meet the breaches alleged by Lessor, Lessee shall not be deemed in default hereunder. The service of said notice and the lapse of sixty (60) days without Lessee's meeting or commencing to meet the alleged breaches shall be a condition precedent to any action by Lessor for any cause hereunder.

14. The terms "well" or "mine" as used herein are in no wise limiting, but each shall include any well, mine or other method for locating, producing and recovering the substances covered by this lease. The term "well head" includes any place on the premises at which a substance is produced, recovered or delivered on the surface.

15. Lessor hereby warrants and agrees to defend the title to the lands herein described, and agrees that the Lessor shall have the right at any time to redeem for Lessor, by payment, any mortgages, taxes or other liens on the above described lands, in the event of default of payment by Lessor, and be subrogated to the rights of the holder thereof, and the undersigned Lessors, for themselves and their heirs, successors and assigns, hereby surrender and release all right of dower and homestead in the premises described herein, insofar as said right of dower and homestead may in any way affect the purposes for which this lease is made, as recited herein.

16. All provisions hereof shall be binding upon the respective heirs, successors, assigns and legal representatives of the parties hereto. This lease shall be binding upon each party who executes it without regard to whether that party is named as a lessor herein or whether the lease is executed by all those named as lessors. This lease may be executed in any number of counterparts, each having the force and effect of an original, and all such counterparts executed by one or more parties shall be construed together as one instrument.

IN WITNESS WHEREOF, this instrument is executed as of the date first above written.

Tauno F. Karttala -
Elma M. Karttala -

(X) Tauno F. Karttala
(X) Elma M. Karttala

ACKNOWLEDGMENT FOR NEVADA

STATE OF _____
COUNTY OF _____

On this _____ day of _____, A.D. 19____, personally appeared before me

_____, a Notary Public in and for _____

County, _____, known (or proven) to me to be the persons _____

and _____ described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

In Witness Whereof, I have hereunto set my hand and affixed my official seal at my office in the County of _____ the day and year in this certificate first above written.

My Commission Expires: _____ Notary Public in and for the _____ County of _____ State of _____

Recorded

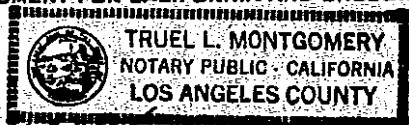
at the request of W. J. McAulay

Book 3 Page 271-272 of the
STATE OF NEVADA
County of Esmeralda
13th day of February 1964
at 1:04 o'clock P. M. and duly recorded in
Book 3 Page 271-272 of the
STATE OF NEVADA
County of Esmeralda
Recorder
When Recorded Return to _____
Fee \$8.35
Deputy

20589

ACKNOWLEDGMENT FOR CALIFORNIA AND OREGON

STATE OF California
COUNTY OF Los Angeles



On this 18 day of January, A.D. 1964, personally appeared before me

Truel L. Montgomery, a Notary Public in and for Los Angeles County,

Tauno F. Karttala, Elma M. Karttala, residing therein, duly commissioned and sworn, known (or proven) to me to be the persons _____ and _____

described in and who executed the foregoing instrument, who each acknowledged to me that they executed the same freely and voluntarily as their act and deed and for the uses and purposes therein mentioned.

In Witness Whereof, I have hereunto set my hand and affixed my official seal at my office in the County of Los Angeles the day and year in this certificate first above written.

My Commission Expires: _____
My commission expires August 14, 1965
Truel L. Montgomery, Notary Public in and for the County of Los Angeles State of California

TRUEL L. MONTGOMERY