

STATE OF NEW MEXICO

COUNTY OF LEA

COOPERATIVE WATERFLOOD AGREEMENT

THIS AGREEMENT, entered into and effective as of 15th September
1971, between Union Texas Petroleum, a Division of Allied Chemical Corporation, hereinafter sometimes referred to as "Union Texas"; and Reserve Oil and Gas Company, hereinafter sometimes referred to as "Reserve".

W I T N E S S E T H:

Union Texas is the Operator of the Langlie-Jal Unit which covers among other lands, the east half of Section 17, the east half and northwest quarter of Section 8, Township 25 South, Range 37 East, Lea County, New Mexico.

Reserve is the Operator of the South Langlie-Jal Unit which covers among other lands, the west half of Section 17 and the southwest quarter of Section 8, Township 25 South, Range 37 East, Lea County, New Mexico.

Union Texas and Reserve each in their indicated capacity as Operator wish to operate their respective properties above described but desire to cooperate with one another in a waterflood operation to the extent and in the manner hereinafter provided, it being the opinion of the parties hereto that by so doing each of said properties will be benefited by an increase in the production of crude oil from the Langlie Mattix oil pool and a portion of the Jalmat oil pool hereinafter referred to as the "Unitized Formation" (as described by the New Mexico Oil Conservation Commission) underlying said properties, and the correlative rights of all of the owners of said properties will be protected:

NOW, THEREFORE, it is agreed as follows:

1. Union Texas agrees to drill, equip, maintain, and operate a well for water injection in the Unitized Formation at an approximate total depth of 3,750' in the manner hereinafter provided, such well to be located as follows:

BEFORE EXAMINER NUTTER

IN CONTEST

C. J. Nutter E

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Langlie-Jal Unit Well No. 79 located in the southeast quarter of the northwest quarter (SE/4 NW/4) of Section 8, 1,980' FNL and 2,310' FWL of Section 8 Township 25 South, Range 37 East, Lea County, New Mexico.

Union Texas further agrees to convert, equip, maintain, and operate a well for water injection in the Unitized Formation in the manner hereinafter provided, the well to be located as follows:

Langlie-Jal Unit Well No. 81 located in the northwest quarter of the southeast quarter (NW/4 SE/4) of Section 8, Township 25 South, Range 37 East, Lea County, New Mexico.

and said wells being shown circled in red on the plat attached hereto as Exhibit "A". Said wells will be completed with all oil bearing porous intervals in the lower 100' of the Seven Rivers and Queen zones open to injection.

2. Reserve agrees to convert, equip, maintain and operate two (2) wells for water injection in the Unitized Formation in the manner hereinafter provided, such wells being located as follows:

(1) South Langlie-Jal Unit Well No. 15 located in the northeast quarter of the northwest quarter (NE/4 NW/4) of Section 17, Township 25 South, Range 37 East, Lea County, New Mexico.

(2) South Langlie-Jal Unit Well No. 23 in the northeast quarter of the southwest quarter (NE/4 SW/4) of Section 17, Township 25 South, Range 37 East, Lea County, New Mexico;

such wells being shown circled in green on the plat attached hereto as Exhibit "A". Said wells will be completed in all oil bearing porous formations at an approximate total depth of 3,380' as to Well No. 15 3,405' as to Well No. 23.

3. Each party hereto agrees, at its sole risk and expense, to convert, equip, maintain, and operate its water input wells so that water may be injected into the Unitized Formation in the manner hereinafter provided and to perform any workover or remedial work on such wells necessary to take water at the rate and volume and under the pressure limitation herein prescribed.

4. Each party hereto agrees to commence the injection of water into its water input wells not later than sixty (60) days after the effective date of this agreement, or as soon thereafter as it is agreed it is practical, and thereafter to inject water through its water input wells into the Unitized Formation at rates mutually agreed upon, it being agreed that the parties hereto will endeavor to control their respective operations in such manner that water will be injected into each water input well at a uniform rate, so that the volume injected into each well in any month will be equal to that injected into each other well covered hereby, as nearly as it is possible to do so; provided, however, in no event shall either party inject water into its respective water input wells at wellhead pressures in excess of the formation fracture pressure determined by rate-pressure tests without the mutual agreement of both parties. In the event that mutual agreement on injection rates is not reached, then each party agrees to inject a minimum daily volume of water into each lease line input well of 100 barrels of water per day provided that the formation fracture pressure is not exceeded at this rate. In order that the volumes of water injected into the input wells covered hereby shall be equal at all times, insofar as practicable, each party agrees to furnish monthly reports to the other party showing the volumes and pressures of water injected into its water input wells. Also, it is understood that oil and water production information on the properties covered hereby will be exchanged between the parties, as may be mutually agreed upon from time to time. The parties hereto, at their sole risk, shall have access to the premises subject to this agreement at all reasonable hours and the right to inspect pertinent records in connection therewith at all such times.

It is further agreed that each party hereto shall carry on waterflood operations in the manner herein provided, until the property it operates no longer derives any reasonable benefit from same. It is the intention of the parties hereto that nothing herein contained shall be construed to require either party hereto to continue to operate any

water input well if such operation is no longer economically profitable to it.

5. At any time either of the parties hereto shall determine that water injection into any of its water input wells is no longer economically profitable to it, then said party shall have the right to cease injection into said well or wells upon giving thirty (30) days written notice to the other party of such intention. The other party hereto may, at its sole risk and expense, take over and operate said well or wells. In such event, the party taking over the said well or wells is hereby granted, without warranty expressed or implied, the right of ingress and egress and all rights-of-way and easements necessary for continued operation of said well or wells, insofar as it is possible for the party electing not to continue operation of said well or wells to make such a grant. The parties further agree to execute and deliver such additional instruments as may be required to accomplish the foregoing. The party taking over said well or wells shall pay for the equipment taken over on the basis of its current salvage value in place, and when said party wishes to discontinue its waterflood operation, said party shall plug and abandon said well or wells at its sole risk and expense and salvage all equipment in and on said well or wells for its sole account. The party taking over said well or wells hereby agrees to indemnify and hold the other party hereto harmless from all damages and any liability to any third party, caused as a result of its subsequent operations.

6. Subject to the limitations of time expressed in Section 4 hereinabove, the term of this agreement shall commence as of the date hereto and extend for ninety (90) days from said date and as long thereafter as the properties covered hereby derive any reasonable benefit from the waterflood operations provided for herein.

7. Under no circumstances shall this agreement be construed as creating a partnership, agency, or any other type of association

between the parties hereto. The liability of the parties hereto shall be several and not joint or collective.

8. Each party hereto agrees that this agreement shall not constitute a partnership, as defined in the Internal Revenue Code, and specifically elects to be excluded from the application of all of Subchapter K of the Internal Revenue Code of 1954 pursuant to Section 761 thereof.

9. Any sale, assignment, unitization or transfer of any interest of any party hereto in the leases and lands covered hereby shall be made expressly subject to this agreement, and any party acquiring any such interest shall assume the obligations hereof and be entitled to the benefits accruing hereunder. In the event any party not a signatory party to this contract thereafter shall acquire any interest subject to this contract by assignment, operation of law, or otherwise, such party shall forthwith furnish to all other parties having an interest subject to this contract evidence of the acquisition of such interest. Failure to comply herewith shall constitute a waiver by such party as to any notice required or permitted hereunder, and said party shall be deemed to have received any such notice where such notice was given to such party's predecessor in title and any action taken or any notice received by such party's predecessor in title shall be binding upon any such party.

10. All terms and provisions herein shall be subject to all valid orders, rules and regulations of the New Mexico Oil Conservation Commission and all other applicable State and Federal laws, rules and regulations.

11. If any party to this agreement is rendered unable, in whole or in part, by force majeure to carry out its obligations under this agreement, then such obligations, so far as they are affected by the force majeure, shall be suspended during, but no longer than, the continuance of the force majeure; provided, however, all reasonable efforts shall be made to remove the force majeure as quickly as possible. The term "force majeure", as employed herein, shall mean an act of God, strike, lockout,

or other industrial disturbance, act of the public enemy, war, blockade, public riot, lightning, earthquake, storm, flood, explosions, governmental restraint, unavailability of equipment, failure of water supply, and any other cause, whether or not of the character above enumerated, which is not reasonably within the control of the party claiming suspension. It is understood that the settlement of strikes or lockouts shall be entirely within the discretion of the party concerned, and the requirement that all reasonable efforts shall be made to remedy the force majeure promptly, shall not require the settlement of strikes or lockouts contrary to its wishes.

12. This agreement and all terms, covenants, and conditions hereof shall extend to and be binding upon the parties hereto, their successors and assigns, respectively, and shall constitute covenants running with the lands and leasehold estates affected hereby.

THIS AGREEMENT, executed as of the day and year first above

written.

ATTEST:


Barry A. Ren-
ASSISTANT SECRETARY

UNION TEXAS PETROLEUM, a DIVISION
of ALLIED CHEMICAL CORPORATION

By:

John M. Collins
Vice-President

ATTEST:

RESERVE OIL AND GAS COMPANY

John M. Pearson
Attorney-in-Fact

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R - 37 - E

- LEGEND -

- Existing Well
- ⊙ Well To Be Drilled
- △ Proposed Injection Well
- ◻ Existing Injection Well

----- Langlie-Jal Unit Outline
///////// South Langlie-Jal Unit Outline.



UNION TEXAS PETROLEUM	
A DIVISION OF ALLIED CHEMICAL CORPORATION	
LANGLIE-JAL AREA	
LEA COUNTY, NEW MEXICO	
EXHIBIT "A"	
SCALE IN FEET	
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D W	MIDLAND DISTRICT

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 4641
Order No. R-4240

APPLICATION OF RESERVE OIL AND
GAS COMPANY FOR A WATERFLOOD
EXPANSION, LEA COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 5, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 12th day of January, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Reserve Oil and Gas Company, seeks authority to expand its South Langlie Jal Unit Jalmat Waterflood Project in the Jalmat Oil Pool by the conversion to water injection of its Unit Well No. 23 located 2310 feet from the South line and 2310 feet from the West line of Section 17, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.
- (3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (4) That the proposed expansion of the subject waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

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CASE NO. 4641
Order No. R-4240

(5) That the subject application should be approved and the expanded project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Reserve Oil and Gas Company, is hereby authorized to expand its South Langlie Jal Unit Jalmat Waterflood Project in the Jalmat Oil Pool by the injection of water into the Seven Rivers and Queen formations through its Unit Well No. 23 located 2310 feet from the South line and 2310 feet from the West line of Section 17, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) That the expanded waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

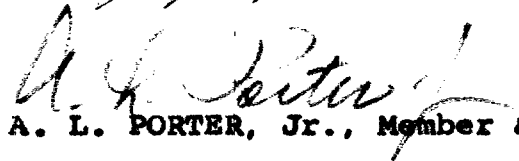
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



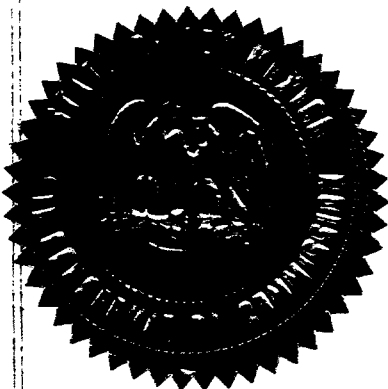
BRUCE KING, Chairman



ALEX J. ARMIJO, Member



A. L. PORTER, Jr., Member & Secretary



S E A L

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