This Calendar item No. 50 was approved as Minute Item No. 50 by the State Lands Commission by a vate of 3 O at its 9/22/89 meeting.

CALENDAR ITEM

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APPROVAL OF CONSENT BY THE CITY OF LONG BEACH FOR AMENDED AND RESTATED COOPERATIVE AGREEMENT FOR WATER INJECTION OPERATIONS BETWEEN THE LONG BEACH UNIT AND TERMO COMPANY (FORMERLY CONTINENTAL PRODUCTION COMPANY)

BACKGROUND INFORMATION

A Cooperative Agreement for water injection operations between the Long Beach Unit and Continental Production was entered into on November 15, 1958. The Agreement was entered into to protect the common interests of the two offset operators with respect to water injection and oil productions. The Co-op area lies along the western boundary of the Long Beach Unit (Townlot Area) adjoining privately owned lands as shown on attached location map, Exhibit "C". The Co-op area includes a portion of the Ranger zone from the "F" Electric Log Marker to the "G" Electric Log Marker bounded by parallel, vertical surfaces located on either side of and four hundred (400) feet from the common boundary of unitized formations. This area is the "Restricted Section" and is indicated by the cross-hatched section on the map marked Exhibit "D".

The Agreement required Continental to inject 700 barrels per day into each of two wells on its property adjacent to the "Kestricted Zone". The Unit Operator was to reimburse Continental at a rate of \$0.016 per barrel for one half of the injection. The Unit Operator had the right, but not the obligation, to operate two producing wells. The Agreement states that no portion of the producing interval locations of such wells shall be closer than one hundred fifty (150) feet from the common boundary of the Continental properties or

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(ADDED pgs. 352-376)

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unitized formations. The Continental Production Company property has been sold to the Termo Company. Termo is having difficulty maintaining the required injection rates and would like to revise the contract and reduce the requirements.

PROPOSED AUTHORIZATION:

The attached Cooperative Agreement (Exhibit "A") has been amended and restated and specifies an injection rate of 500 barrels per day for each of Termo's wells. The Unit will not reimburse Termo for any part of Thermo's injection cost. The Unit Operator shall operate injection Well A-765 and a second injection Well A-763 when deemed appropriate.

AB 884:

N/A.

OTHER PERTINENT INFORMATION:

Staff concurs that additional injection is needed along the Long Beach Unit and Termo boundary, specifically the conversion to injection of Wells B-765 and B-763 (see Exhibit "D") to maintain current reservoir performance.

EXHIBITS:

- A. Cooperative Agreement (Contract).
- B. Legal Description of Co-op Area.
- C. Location Map.
- d. Co-op Area Map.

IT IS RECOMMENDED THAT THE COMMISSION:

1. APPROVE THE CONSENT BY THE CITY OF LONG BEACH FOR AMENDED AND RESTATED COOPERATIVE AGREEMENT FOR WATER INJECTION OPERATIONS BETWEEN THE LONG BEACH UNIT AND TERMO COMPANY (FORMER CONTINENTAL PRODUCTION COMPANY).

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AMENDED AND RESTRED COOPERATIVE AGREEMENT FOR WATER INJECTION OPERATIONS (LONG BEACE UNIT AND TERMO COMPANY, FORMERLY CONTINENTAL PRODUCTION CORPANY)

1. PARTIES. This Agreement is made and entered into
as of the day of, 1989, pursuant to a Minute
Order adopted by the City Council of the City of Long Beach on
the day of, 1989 by and between CITY OF LONG
BEACH, a municipal corporation, acting in its capacity as Unit
Operator of the Long Beach Unit, Wilmington Oil Field, County of
Los Angeles, hereinafter referred to as "Unit operator" and the
TERMO COMPANY, a California corporation, hereinafter referred to
as "Termo", successor in interest of certain interests of
Continental Production Company, a Nevada corporation.

- 2. <u>RECITALS</u>. This Amended and Restated Cooperative Agreement is made with regard to the following facts and objectives:
- entered into a Cooperative Agreement for water injection operations (Long Beach Unit and Continental Production Company)
 "Cooperative Agreement" on November 15, 1968.
- B. Termo purchased certain interests of Continental Production Company in the Wilmington Oil Field effective January 1, 1989, and is the successor in interest to Continental in the Cooperative Agreement.
- c. The Cooper tive Agreement for water injection operations provides in part in paragraph 3: "The Unit Operator shall have the right but not the obligation to drill and to operate as many as two (2) producing wells within the restricted

John R. Caleston Attorney of LANd Beach 333 West Ocean Boulevard Long Basch, California 90802 Tstephona (213) 590 6031

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EXHIBIT

portions of the producing-interval locations of such wells shall be closer than one hundred fifty (150) feet from the common boundary of the Continental properties and unitized formations. No other wells either producing wells or injection wells, shall be open for production or for water injection in said restricted section, nor shall there be any change in the production interval of any producing well or injection interval of any injection well in said restricted section, without the written consent of all parties hereto and the prior approval of the State Lands Commission."

The parties to this agreement now desire to share equally the cost of water injection and therefore have determined to enter into this Amended and Restated Cooperative Agreement for Water Injection Operations (Long Beach Unit and Termo Company formerly Continental Production Company) "Amended and Restated Contract", to reflect that current understanding.

-E---Oil-- gas and/or other hydrocarbon substances are now being produced from the Ranger Zone underlying certain 15. 👍 in the Wilmington Field in Los Angeles County, California, under oil and gas leases beld by Cortinental Production Company, predecessor in interest to Tarmo, which lands are described in Exhibit "A" attached hereto, are sometimes known as Continental Northern Community Oil and Gas Lease No. 3, and are herein after referred to as Termo/Continental Properties.

F. Oil, gas and/or other hydrocarbon substances are now being produced in the Wilmington Field from the Ranger Zone underlying certain lands having a common boundary along Pine Avenue with Termo/Continental Properties an@A&&&b&&Aav

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rield, Los Angeles County, California, and to the Unit Operating Agreement, Long Beach Unit, Wilmington Oil Field, Los Angeles County, California, hereinafter referred to as "Unit Agreements", a copy of each has been recorded in the official records in the office of the County Recorder of Los Angeles County under the terms of which the City of Long Beach is the Unit Operator.

G. Water injection operations are being carried on in portions of the Ranger Zone, and based upon the results of water injection operation and engineering studies made to date, it would appear that conditions, insofar as they can presently be determined, definitely indicated that water injection into the Ranger Zone underlying lands committed to the Long Beach Unit, hereinafter referred to as "Unitized Formations", and into the Ranger Zone underlying Termo/Continental Properties, will result in the ongoing conservation of reservoir pressures in said zone, and has been and will continue to be of mutual benefit to all parties hereto in that it has and will continue to substantially increase the otherwise maximum ultimate amount of oil economically recoverable therefrom under primary and secondary operations.

H. Unit Operator and Termo proposed to proceed with water injection operations in the Ranger Zone underlying the unitized formations and Termo/Continental Properties and to continue to conduct their respective water injection operations upon a cooperative basis as hereinafter provided.

I. In order that such water injection program may be ongoing, it is the desire of the parties hereto to enter into

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this Amended and Restated Agreement and give the releases therein contained.

- 3. The definitions of the Unit Agreement are adopted for purposes of this agreement.
- 4. The portion of the Ranger Zone from the "F" Electric Log Marker bounded by parallel, vertical surfaces located on either side of and four hundred (400) feet from the common boundary of the unitized formations and Termo/Continental Properties is designated and hereinafter referred to as the "Restricted Section" and is appropriately indicated by cross-hatched section on the map attached hereto incorporated herein and marked Exhibit "B".
- b. The producing interval locations of all producing wells and the injection-interval locations of all water injection wells heretofore drilled and presently operable are shown on Exhibit "B" attached hereto and incorporated herein. Termo shall operate two (2) injection wells, WI-4 and WI-5 shown on Exhibit "B". Unit Operator shall have a duty to operate one injection well A-765 and at such time as the Director of the Department of Oil Properties deems appropriate to operate a second injection well A-763. No other wells, either producing or injection wells shall be open for production or for water injection into said restricted section, nor shall there be any change in the production interval of any producing well or injection interval of any injection well in said restricted section, without the written consent of all parties hereto and the prior approval of the State Lands Commission.
 - 6. The water injection rate for leach water

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well in the restricted section is shown on Exhibit "B" and Termo agrees to make every reasonable effort to inject water into each water injection well at the rate so indicated during the full term of this agreement; provided, however, that Tormo shall not be required to inject water at rates exceeding the capacities of such injection wells and related facilities. The water injection rates for any water injection well may be changed by agreement between the Unit Operator and Termo.

- It is the purpose and intent of the parties to 7. continue to conduct their respective water injection operations along the common boundary along Pine Avenue between the Unitized Formations and the Termo/Continental Properties so as to maintain reservoir pressures in the Ranger Zone on the two sides of the common boundary and to prevent oil or gas, water or other fluids from migrating insofar as is practicable in order that there will be no net gain or loss to any party hereto by reason of-any-such-migration of fluids.
- Termo and the Unit Operator shall each provide a supply of water and injection facilities for injecting the water as may be required of each to carry out the provisions of this agreement. Each party shall pay its own costs of operating, repairing and maintaining the injection facilities and each shall pay the cost of the supply of water for its respective Each party shall continue injecting water until Termo and the Unit Operator mutually agree that water injection is no longer necessary along the common boundary. Present and future redrilling costs, if any, of such injection wells are to be paid by the party operating, controlling or respensible for-

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9. Unit Operator, in its capacity as such and acting on behalf of the Participants, the State and the City under the Unit Agreements, and upon the understanding that it shall not be obligated hereunder in its individual capacity, except proportionately as a Participant, hereby forever releases and discharges Termo, its successors and assigns, and any officer, agent, independent contractor or suployee of Termo, from and covenants to, and does hereby waive any and all claims, demands or causes of action arising out of or resulting or accruing from movement of, damage to or destruction of subsurface minerals and mineral rights, including oil, gas and water in the United Formations and Unit Wells and Unit Facilities therein used for the production of such minerals, caused in whole or in part by the injection of water into the Termo/Continental properties. Termo hereby forever releases and discharges Unit Operator and the Pasticipants, the State and the City under said Unit Agreements, their successors and assigns, and any officer, agent, independent contractor or employee of any of them, from, and covenants to, and does hereby waive any and all claims, demands or causes of action arising out of or resulting or accruing from movement of, damage to or destruction of subsurface minerals and mineral rights, including oil, gas and water, and wells and equipment therein used for the production of such minerals, hereafter occurring, caused in whole or in part by the injection of water by or on behalf of any of said persons into the Unitized Formations.

10. Termo grees to indemnify and note harmless unit calendar page 368

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hereof, no party hereto assumes hereby any responsibility for damages to any third party arising out of or resulting from the operations, acts or omissions of any other party hereto.

operation of its own properties, and for its wells in the Restricted Zone, and, subject to the other provisions of this agreement, each party shall have the right to commence, discontinue or make changes in the water injection operations thereon outside the Restricted Section without the consent of the other. Nothing herein contained shall be construed to convey to any one or more of the parties hereto any right or title to the

right or title to the 9

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properties of the other or to any oil, gas or other hydrocarbons produced therefrom, nor to transfer title to any leases or drilling or operating contracts, nor as pooling or unitizing any interest owned by any party; and each party shall, in its sole discretion, develop, operate, manage and produce its own properties except as herein expressly provided to the contrary.

- 13. The parties hereto agree that a full exchange of data will be made periodically with respect to the respective water injection operations conducted under the terms of this agreement.
- . 14. Each party hereto shall appoint in writing a representative who shall represent its principal on a committee which shall be available to make such studies and recommendations as are requested by the parties hereto.
- properties has reached its economic limit, and Termo is ready to abandon Termo/Continental properties, Termo to the extent it has the right so to do, shall offer to turn over to the City of Long Beach, but not in its capacity as Unit Operator, Termo's interest in all wells and facilities then located on the Termo properties which the City determines are required to maintain reservoir pressure, and, in that event, the City shall pay Termo the fair salvage value of Termo's undivided one-half (1/2) interest in such salvable equipment and facilities as are left on Termo properties by Termo at the request of the City. The City shall give Termo reasonable indemnities that it will properly plug and abandon such wells which Termo may turn over to the City at the City's cost and expense.

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It is expressly understood and agreed that all Januis state of teagrand for the clanar be operations hereunder on tide and consistent with the trust upon which the City holds such tide and submerged lands from the State of California. It is expressly provided in this regard that any impairment of the public trust for commerce, navigation or fisheries to which said tide and submerged lands are subject is prohibited.

> This agreement shall be subject to approval by the State Lands Commission of the State of California and the Supervisor of Oil and Gas of the State of California, and, if so approved, shall be desmen effective us of the date of execution hereof by the last party signatory hereto, and shall continue in force for so long thereafter as said Unit Agreements and Termo's right to operate the Termo properties continue in effect. Notwithstanding the termination of this agreement, the releases and discharges provided in Section 9 hereof shall thereafter remain-in-full-force-and_effect until such time as they are specifically abrogated or modified in writing by all parties hereto whose rights are governed by such releases and discharges, their successors or assigns.

The terms and provisions of this agreement shall Inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF, the parties bereto have caused these presents to be duly executed, in triplicate originals, with all the formalities required by law on the respective dates

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Continental Northern Community oil lease 10. 3

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