9. APPROVAL OF COOPERATIVE LINE FLOOD AGREEMENT, PRC 91.1 - E 392.1 COMMON LINE, HUNTINGTON BEACH OIL AND GAS FIELD, ORANGE COUNTY; SIGNAL OIL AND GAS COMPANY - W 9524, PRC 91.1, E 392.1.

After consideration of Calendar Item 7 attached, and upon motion duly made and carried, the following resolution was adopted:

THE COMMISSION:

- 1. FINDS AS TO OIL AND GAS LEASES E 392.1 AND PRC 91.1 THAT:
 - A. A COOPERATIVE PLAN OF OPERATION OF THE 91.1 MAIN ZONE UNIT AND E 392.1 MAIN ZONE POOL IS NECESSARY OR ADVISABLE IN THE PUBLIC INTEREST.
 - B. THE CONSERVATION OF NATURAL PRODUCTS REQUIRES THE AGREEMENT AND THAT THE INTEREST OF THE STATE MAY BE BEST SUBSERVED BY THE ACREEMENT.
- 2. APPROVES THE "COOPERATIVE LINE FLOOD AGREEMENT (PRC 91.1 E 392.1 COMMON LINE, HUNTINGTON BEACH OIL AND GAS FIELD, TIDELAND POOL, ORANGE COUNTY, CALIFORNIA)", ON FILE IN THE OFFICE OF THE STATE LANDS COMMISSION AND BY REFERENCE MADE A PART HEREOF.

Attachment:
Calendar Item 7 (2 pages)

PRC 91.1 - E 392.1 COMMON LINE, HUNTINGTON BEACH OIL AND GAS FIELD ORANGE COUNTY, SIGNAL OIL AND GAS COMPANY

Signal Oil and Gas Company is the majority working interest owner and operator under Oil and Gas Lease issued in exchange for Easement 392.1. Signal also owns the majority working interest under State Oil and Gas Lease PRC 91.1.

On November 6, 1963 (Minute Item 21, page 9362), the Commission approved an amendment and modification of E 392.1, and on April 28, 1966 (Minute Item 23, page 12,559), the Commission approved an amendment and modification of State Oil and Gas Lease PRC 91.1, to provide for secondary recovery operations on the respective leases.

On March 30, 1972 (Minute Item 8, page 170), the Commission authorized approval of "Unit Agreement, 91.1 Main Zone Unit, Huntington Beach Oil Field, Tidelands Pool" which provides for the cooperative waterflood development of Oil and Gas Lease PRC 91.1 and certain other State Oil and Gas Leases whose wells are producing from the Main Zone within the boundaries of Lease PRC 91.1, with Signal designated as Unit Operator. The Commission also approved the amendment and modification of these State Oil and Gas Leases to provide for secondary recovery operations as required by Section 6830.2 of the Public Resources Code.

Signal Oil and Gas Company has submitted to the Commission for approval a "Cooperative Line Flood Agreement" for water-injection operations, between Signal as the majority working interest owner and operator under E 392.1, and Signal as unit operator under "Unit Agreement, 91.1 Main Zone Unit", wherein the unit operator is given the right, with the approval of the unit working interest owners and the consent of the State, to enter into cooperative agreements for the conduct of waterflood operations. The agreement will permit Signal to proceed with water-injection operations along the common boundary between E 392.1 and the unit area, 91.1 Main Zone unit, in order to balance the reservoir pressures on each side of the common boundary, to prevent the migration of oil, gas, water and other fluids in the Main Zone, and to increase reservoir pressure.

Signal is currently participating in waterflooding operations in the Main Zone in lands covered by E 392.1, and as 91.1 unit operator, is preparing to commence waterflooding operations in the Main Zone in the unit area.

Under the terms of the proposed agreement and in accordance with the program submitted, five E 392.1 wells are to be redrilled and converted into Main Zone water-injection wells. The program further provides for other injection wells if it is determined that the proper balance of reservoir pressures is not maintained across the common lease boundary. The leases provide that the State shall have the right to restrict the spacing of vells. The staff has reviewed the Agreement, and has found that initiation of such a program is desirable and will help to prevent migration of oil and gas from the State

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leases and to increase reservoir pressure, and is in the best interest of the State.

Sections 6832 and 6833 of the Public Resources Code provide for such waterflood agreements upon approval by the State Lands Commission.

The Office of the Attorney General has reviewed the proposed agreement and has advised that the Commission may approve the proposed Agreement if it finds that:

- a. the Agreement is necessary or advisable in the public interest; and
- b. the conservation of natural products or the public convenience and necessity require the Agreement, and that the interests of the State may be best subserved by the Agreement.

There will be no impact on the offshore environment, as any new wells that may be required under the proposed waterflood operations will be drilled from currently existing onshore locations. Total drilling operations will be minimized as a result of the proposed cooperative or unit plan of secondary development. The number of individual townlot drillsites and associated production facilities will be reduced through the utilization of a compact it drilling and production location. Such location will be enclosed and hidden behind a masonry wall with appropriate landscaping. All onshore operations will conform to the recently adopted regulations of the City of Huntington Beach.

EXHIBIT:

A. Location Map.

IT IS RECOMMENDED THAT THE COMMISSION:

- 1. FIND AS TO OIL AND GAS LEASES E 392.1 AND PRC 91.1 THAT:
 - A COOPERATIVE PLAN OF OPERATION OF THE 91.1 MAIN ZONE UNIT AND E 392.1 MAIN ZONE POOL IS NECESSARY OR ADVISABLE IN THE PUBLIC INTEREST.
 - B. THE CONSERVATION OF NATURAL PRODUCTS REQUIRES THE AGREEMENT AND THAT THE INTEREST OF THE STATE MAY BE BEST SUBSERVED BY THE AGREEMENT.
- 2. APPROVE THE "COOPERATIVE LINE FLOOD AGREEMENT (PRC 91.1 E 392.1 COMMON LINE, HUNTINGTON BEACH OIL AND GAS FIELD, TIDELAND POOL, ORANGE COUNTY, CALIFORNIA)", ON FILE IN THE OFFICE OF THE STATE LANDS COMMISSION AND BY REFERENCE MADE A PART HEREOF.