33. AMENDMENT AND MODIFICATION OF STATE OIL AND GAS LEASE P.R.C. 1466.1 (SECONDARY RECOVERY), RINCON, VENTURA COUNTY; ATLANTIC RICHFIELD COMPANY - W.O. 6277.

After consideration of Calendar Item 46 attached, and upon motion duly made and unanimously carried, the following resolution was adopted:

## THE COMMISSION:

- 1. PURSUANT TO SECTION 6830.2 OF THE PUBLIC RESOURCES CODE, DETERMINES THAT IT IS IN THE BEST INTEREST OF THE STATE THAT THE PROPOSED AGREEMENT BE ENTERED INTO, AND
- 2. AUTHORIZES THE EXECUTION AND ISSUANCE OF "AMENDMENT AND MODIFICATION OF STATE OIL AND GAS LEASE P.R.C. 1466.1 (SECONDARY RECOVERY)" IN THE FORM REFERRED TO AS EXHIBIT "2", W.O. 6277, A COPY OF WHICH IS HEREBY MADE A PART HEREOF BY REFERENCE TO THE OFFICIAL FILES OF THE COMMISSION.

ALL OTHER TERMS AND CONDITIONS OF STATE OIL AND GAS LEASE P.R.C. 1466.1 SHALL REMAIN IN FULL FORCE AND EFFECT.

Attachment Calendar Item 46 (2 pages) 46.

REQUEST FOR "AMENDMENT AND MODIFICATION OF STATE OIL AND GAS LEASE P.R.C. 1466.1 (SECONDARY RECOVERY)", RINCON, VENTURA COUNTY; ATLANTIC RICHFIELD COMPANY - W.O. 6277.

State Oil and Gas Lease P.R.C. 1466.1 (location map, Exhibit "l") was issued August 29, 1955, pursuant to competitive bidding, to Richfield Oil Corporation for a period of twenty (20) years, and for so long thereafter as oil and gas is produced in paying quantities from the leased lands. The present lease holder is the Atlantic Richfield Company, which resulted from the merger of Richfield Oil Corporation into Atlantic Refining Company, January 3, 1966.

A pilot water-injection program was commenced on June 25, 1965. Water-injection operations were discontinued on August 14, 1966. During that period, approximately 413,850 bbls. of salt water were injected. Evaluation of the resultant economic and engineering data indicates the desirability of expanding the pilot water-injection program into full-zone water floods.

The existent lease requires oil royalty payments to the State based on the calculation of graduated royalty rates determined by formula from the rates of production of the wells. The required capital investment and additional operating costs for a water-flood program could not be justified by the lessee if the calculation of graduated revalty rates were also to be applicable to augmented production resulting from a water-flood program. Chapter 979/1961, which added Sections 6830.1, 6830.2 and 6830.3 of the Public Resources Code (Ch. 979/1961, as amended by Ch. 7/1966, 2nd E.S., effective October 7, 1966), authorizes lease modifications, with approval of the Commission, for calculation of royalties on "primary" oil (i.e. that which would have been produced without a water-flood program) at the same rates which would have been applicable under the unmodified lease, and for the establishment of the royalty rate for the "secondary" oil (i.e. production resulting from the water-flood operation) at not less than the minimum royalty provided by the present lease (in this instance, 30%). Complete economic projections, concurred in by lessee and staff, estimate the equivalent average royalty rate on the remaining "primary" production at 32.28% (if secondary recovery operations are initiated by May 1, 1968), which rate is proposed to be established for all "secondary" production.

The engineering and economic determinations required by Sections 6830.1, 6850.2, and 6830.3, Public Resources Code, have been made and incorporated in a proposed form of "Amendment and Modification of State Oil and Gas Lease P.R.C. 1466.1 (Secondary Recovery)" (Exhibit "2" attached). This document has been reviewed by the Office of the Attorney General, which has advised by informal opinion (Exhibit "3") that the proposed amendment and modification is in compliance with the applicable statutes.

IT IS RECOMMENDED THAT THE COMMISSION:

1. FURSUANT TO SECTION 6830.2 OF THE PUBLIC RESOURCES CODE, DETERMINE THAT IT IS IN THE BEST INTEREST OF THE STATE THAT THE PROPOSED AGREEMENT BE ENTERED INTO, AND

## CALENDAR ITEM 46. (CONTD.)

2. AUTHORIZE THE EXECUTION AND ISSUANCE OF "AMENDMENT AND MODIFICATION OF STATE CIL AND GAS LEASE P.R.C. 1466.1 (SECONDARY RECOMPTRY)" IN THE FORM REFERRED TO AS EXHIBIT "2", W.O. 6277, A COPY OF WHICH IS HEREBY MADE A PART HEREOF BY REFERENCE TO THE OFFICIAL FILES OF THE COMMISSION.

ALL OTHER TERMS AND CONDITIONS OF STATE OIL AND GAS LEASE P.R.C. 1466.1 SHALL REMAIN IN FULL FORCE AND EFFECT.