

MINUTE ITEM

21. REQUEST FOR "AMENDMENT AND MODIFICATION OF EXCHANGE OIL AND GAS LEASE 392.1 P.R.C. (SECONDARY RECOVERY)", HUNTINGTON BEACH, ORANGE COUNTY; SIGNAL OIL AND GAS COMPANY - W.O. 4602.

Following presentation of Calendar Item 29, the Executive Officer stated that this was the first application received pursuant to the statutes of 1961, which, for the first time, would authorize secondary recovery operations under State oil and gas leases in the form proposed.

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 AMENDATORY AGREEMENT BE ENTERED INTO, AND
2. AUTHORIZES THE EXECUTIVE OFFICER TO EXECUTE AND ISSUE AN "AMENDMENT AND MODIFICATION OF EXCHANGE OIL AND GAS LEASE 392.1 P.R.C. (SECONDARY RECOVERY)" IN THE FORM REFERRED TO AS EXHIBIT "2", W.O. 4602, 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 EXCHANGE OIL AND GAS LEASE 392.1 SHALL REMAIN IN FULL FORCE AND EFFECT.

Attachment

Calendar Item 29 (2 pages)

CALENDAR ITEM

29.

REQUEST FOR "AMENDMENT AND MODIFICATION OF EXCHANGE OIL AND GAS LEASE 392.1 P.R.C. (SECONDARY RECOVERY)", HUNTINGTON BEACH, ORANGE COUNTY; SIGNAL OIL AND GAS COMPANY - W.O. 4602.

Agreement for Easement 392.1 (location map, Exhibit "1") was issued September 26, 1938, pursuant to competitive public bidding, to Southwest Exploration Company for a period of 20 years. On September 25, 1958, in accordance with the provisions of Section 6827 of the Public Resources Code, new Oil and Gas Lease 392.1 was issued in exchange for Agreement for Easement 392.1. The term of the lease now held by Signal Oil and Gas Company is for so long "as gas or oil is produced in paying quantities", as authorized by the Public Resources Code.

On May 28, 1959 (Minute Item 17, page 4860), the Commission approved a program submitted by the Signal Oil and Gas Company, providing for a pilot water-injection program, which was commenced on August 7, 1959. Pilot water-injection operations were discontinued on March 10, 1961. During the injection period, approximately 12,000,000 barrels of ocean water were injected. Evaluation of the resultant economic and engineering data indicates the desirability of expanding the pilot water-injection program into full-zone waterfloods.

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 a lessee if the calculation of graduated royalty rates were also to be applicable to augmented production resulting from a water-flood program. Chapter 979, Statutes of 1961, which added Sections 6830.1, 6830.2, and 6830.3 to the Public Resources Code authorizes lease modifications, with the 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 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 prior lease (in this instance, 12 $\frac{1}{2}$ %). Complete economic projections concurred in by lessee and staff estimate the equivalent average royalty rate on remaining "primary" production at 13.19% (if secondary recovery operations are initiated by January 1, 1964), which rate is proposed to be established for all "secondary" production.

The engineering and economic determinations required by Sections 6830.1, 6830.2, and 6830.3, Public Resources Code, have been made and incorporated in a proposed form of "Amendment and Modification of Exchange Oil and Gas Lease 392.1 P.R.C. (Secondary Recovery)" (Exhibit "2" attached). This document has been reviewed as to legality by the office of the Attorney General, who has advised by informal opinion (Exhibit "3") that the proposed amendment and modification is in compliance with the applicable statutes of the Public Resources Code.

CALENDAR ITEM 29. (CONTD.)

IT IS RECOMMENDED THAT THE COMMISSION:

1. PURSUANT TO SECTION 6830.2 OF THE PUBLIC RESOURCES CODE, DETERMINE THAT IT IS IN THE BEST INTEREST OF THE STATE THAT THE PROPOSED AMENDATORY AGREEMENT BE ENTERED INTO, AND
2. AUTHORIZE THE EXECUTIVE OFFICER TO EXECUTE AND ISSUE AN "AMENDMENT AND MODIFICATION OF EXCHANGE OIL AND GAS LEASE 392.1 P.R.C. (SECONDARY RECOVERY)" IN THE FORM REFERRED TO AS EXHIBIT "2", W.O. 4602, 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 EXCHANGE OIL AND GAS LEASE 392.1 SHALL REMAIN IN FULL FORCE AND EFFECT.