### MINUTE ITEM

8. APPROVAL OF THE AMENDMENT AND MODIFICATION FOR SECONDARY RECOVERY OPERATIONS OF CERTAIN STATE OIL AND GAS LEASES, THE 91.1 MAIN ZONE UNIT AGREEMENT, AND THE UNIT OPERATING AGREEMENT, HUNTINGTON BEACH FIELD, ORANGE COUNTY; SIGNAL OIL AND GAS COMPANY - W 9121.

After consideration of Calendar Item 6 attached, and upon motion duly made and carried, the following resolution was adopted:

#### THE COMMISSION:

- 1. FINDS THAT A COOPERATIVE PLAN FOR OPERATION OF STATE OIL AND GAS LEASES, 91.1 MAIN ZONE UNIT, AND THE ENTERING INTO AND THE PERFORMANCE OF AN OPERATING AGREEMENT COVERING OPERATIONS IN SAID UNIT, IS NECESSARY OF ADVISABLE IN THE PUBLIC INTEREST INSOFAR AS THE SAME COVERS OIL AND GAS PRODUCED FROM THE 91.1 MAIN ZONE UNIT;
- 2. 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 AGREEMENTS LISTED ON EXHIBIT "A" BE ENTERED INTO;
- 3. AUTHORIZES THE EXECUTION AND ISSUANCE OF THE AMENDMENT AND MODIFICATION FOR SECONDARY RECOVERY OPERATIONS OF STATE OIL AND GAS LEASES LISTED ON EXHIBIT "A" ATTACHED HERETO; COPTES OF SUCH AMENDMENT AND MODIFICATION ARE HEREBY MADE A PART HEREOF BY REFERENCE TO THE OFFICIAL FILES OF THE COMMISSION; AND
- 4. AUTHORIZES APPROVAL OF THE UNIT AGREEMENT AND UNIT OPERATING AGREEMENT FOR THE 91.1 MAIN ZONE UNIT, HUNTINGTON BEACH OIL AND GAS FIELD, TIDE-LAND POOL, ORANGE COUNTY, CALIFORNIA.
- 5. AUTHORIZES APPROVAL AND CONSENT OF UNIT PARTICIPATION OF THOSE STATE OIL AND GAS LEASES LISTED ON EXHIBIT "A".
- 6. AUTHORIZES APPROVAL AND CONSENT OF UNIT PARTICIPATION OF LEASE PRC 91.1.

ALL OTHER TERMS AND CONDITIONS OF THE STATE OIL AND GAS LEASES EXCEPT AS AMENDED AND MODIFIED SHALL REMAIN IN FULL FORCE AND EFFECT.

### Attachment:

Calendar Item 6 (4 pages)

6.

REQUEST FOR APPROVAL OF THE AMENDMENT AND MODIFICATION FOR SECONDARY RECOVERY OPERATIONS OF CERTAIN STATE OIL AND GAS LEASES, THE 91.1 MAIN ZONE UNIT AGREEMENT, AND THE UNIT OPERATING AGREEMENT, HUNTINGTON BEACH FIELD, ORANGE COUNTY; SIGNAL OIL AND GAS COMPANY - W 9121.

On April 28, 1966 (Minute Item 23, page 12,559), the Commission authorized the Executive Officer to execute and issue an "Amendment and Modification of State Oil and Gas Lease PRC 91.1 (Secondary Recovery)" to provide for secondary recovery operations on the lease.

Signal has now submitted for approval by the Commission copies of an agreement entitled "Unit Agreement, 91.1 Main Zone Unit, Huntington Beach Oil and Gas Field, Tidelands Pool, Orange County, California", which provides for the cooperative waterflood development of Oil and Gas Lease PRC 91.1 and certain other State oil and gas "easement well" leases, the producing portions of which are in the Main Zone within the boundaries of State Lease PRC 91.1.

Because of the unique nature of the "easement well" leases, in that such leases cover a single well bore or certain multiple well bores, it is necessary to conduct secondary recovery operations under a unit plan. However, such leases cannot be unitized until they have been modified in accordance with Sections 6830.1, 6830.2, and 6830.3 of the Public Resources Code. Accordingly, the respective lessees have submitted for Commission approval copies of an amendment and modification of the leases to provide for secondary recovery. The affected leases are listed on Exhibit "A" attached.

The leases now provide for the payment by the lessees to the State of graduated royalties, dependent upon average daily production from the wells. The required capital investment and additional operations costs for the proposed unitized secondary recovery program could not be justified by the lessees if the calculation of graduated royalty rates was also applicable to augmented production resulting from the unitized secondary recovery program. Sections 6830.1, 6830.2, and 6830.3 of the Public Resources Code authorize lease modifications, with the approval of the Commission, for calculation of royalties on "primary" oil at the same rates that would have been applicable under the unmodified lease, and for establishing a royalty rate for the "secondary" oil at not less than the minimum royalty rate provided for in the leases.

Primary oil projections for each lease have been made by the Division and concurred in by the lessees, and have been incorporated in the proposed amendment and modification of the State oil and gas leases for secondary recovery operations.

The proposed unit agreement provides for a primary and secondary period of production. During the primary period, each well will be allocated its appropriate share of the total primary oil production. State royalty on such oil will be paid based on the primary projection of each well. After recovery of the estimated primary oil, all production during the secondary period will be allocated to Lease PRC 91.1 until such time as all advanced waterflood

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costs and charges have been recovered. However, for State royalty purposes during the complete secondary period, each easement lease will be allocated one-half of one percent of the total production, with the balance assigned to Lease PRC 91.1. Royalty on the secondary production assigned to Lease PRC 91.1 will be determined in accordance with its previously approved secondary recovery royalty schedule.

The Office of the Attorney General has reviewed the proposed form of Lease Modification and Amendment to provide for secondary recovery operations and the Unit Agreement and has advised that they are in compliance with the applicable sections of the Public Resources Code.

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 unit 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.

### IT IS RECOMMENDED THAT THE COMMISSION:

- 1. FIND THAT A COOPERATIVE PLAN FOR OPERATION OF STATE OIL AND GAS LEASES, 91.1 MAIN ZONE UNIT, AND THE ENTERING INTO AND THE PERFORMANCE OF AN OPERATING AGREEMENT COVERING OPERATIONS IN SAID UNIT, IS NECESSARY OR ADVISABLE IN THE PUBLIC INTEREST INSCFAR AS THE SAME COVERS OIL AND GAS PRODUCED FROM THE 91.1 MAIN ZONE UNIT;
- 2. 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 AGREEMENTS LISTED ON EXHIBIT "A" BE ENTERED INTO;
- 3. AUTHORIZE THE EXECUTION AND ISSUANCE OF THE AMENDMENT AND MODIFICATION FOR SECONDARY RECOVERY OPERATIONS OF STATE OIL AND GAS LEASES LISTED ON EXHIBIT "A" ATTACHED HERETO; COPIES OF SUCH AMENDMENT AND MODIFICATION ARE HEREBY MADE A PART HEREOF BY REFERENCE TO THE OFFICIAL FILES OF THE COMMISSION; AND
- 4. AUTHORIZE APPROVAL OF THE UNIT AGREEMENT AND UNIT OPERATING AGREEMENT FOR THE 91.1 MAIN ZONE UNIT, HUNTINGTON BEACH OIL AND GAS FIELD, TIDELAND POOL, ORANGE COUNTY, CALIFORNIA.
- 5. AUTHORIZE APPROVAL AND CONSENT OF UNIT PARTICIPATION OF THOSE STATE OIL AND GAS LEASES LISTED ON EXHIBIT "A".
- 6. AUTHORIZE APPROVAL AND CONSENT OF UNIT PARTICIPATION OF LEASE PRC 91.1.

ALL OTHER TERMS AND CONDITIONS OF THE STATE OIL AND GAS LEASES EXCEPT AS AMENDED AND MODIFIED SHALL REMAIN IN FULL FORCE AND EFFECT.

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# EXHIBIT "A"

Oil and Gas Lease	Lessee (Majority Working Interest Owner)
E 400.1	Signal Oil and Gas Company
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PRC 919.1	Signal Oil and Gas Company
PRC 920.1	Signal Oil and Gas Company
PRC 976.1	The Termo Company
PRC 977.1	Signal Oil and Gas Company
PRC 980.1	Signal Oil and Gas Company
PRC 983.1	Signal Oil and Gas Company
PRC 985.1	Signal Cil and Gas Company
PRC 986,1	Signal Oil and Gas Company
PRC 988.1	Mar Rico Oil Co.
PRC 989.1	Signal Oil and Gas Company
PRC 991.1	Benito Huntington Oil Co.
PRC 992.1	J. H. Marion, Trust No. 2
PRC 993.1	Bee Oil Company
PRC 997.1	Signal Oil and Gas Company
PRC 998.1	West Shore Petr. Co. (Termo)
PRC 999.1	Signal Oil and Gas Company
PRC 1329.1	Signal Oil and Gas Company
PRC 1331.1	Signal Uil and Gas Company
PRC 1332.1	Signal Oil and Gas Company
PRC 1333.1	Signal Oil and Gas Company

Oil and	Leasee
Gas Lease	(Majority Working Interest Owner)
PRC 1334.1	Crown Central Petroleum Corporation
PRC 1335.1	Bee Oil Company
PRC 1336.1	Signal Oil and Gas Company
PRC 1337.1	Signal Oil and Gas Company
PRC 1338.1	J. H. Marion, Trust No. 2
PRC 1339.1	Western States Drilling Co.
PRC 1340.1	Signal Oil and Gas Company
PRC 1341.1	The W. K. Co.
PRC 1342.1	The Termo Company
PRC 1343.1	Standar'd Oil Co.
PRC 1345.1	Orco Oil Co.
PRC 1346.1	Tower Petroleum Co.
PRC 2515.1	The Termo Company
PRC 2516.1	The Termo Company
PRC 2517.1	The Termo Company