

STATE LANDS COMMISSION  
State of California  
FIRST AMENDMENT AND MODIFICATION OF  
STATE OIL AND GAS LEASE P.R.C. 3120.1, and  
STATE OIL AND GAS LEASE P.R.C. 3242.1  
(SECONDARY RECOVERY)

THIS AGREEMENT, entered into on October 28, 1971, by and between THE STATE OF CALIFORNIA, ACTING BY AND THROUGH THE STATE LANDS COMMISSION OF THE STATE OF CALIFORNIA, sometimes herein called "State" or "Lessor", and ATLANTIC RICHFIELD COMPANY, a Pennsylvania corporation, and MOBIL OIL CORPORATION, a New York corporation, both herein called "Lessee", is made with respect to the following agreed facts:

R E C I T A L S:

A. Lessee heretofore acquired and is now the owner and holder of the leasehold and the rights of the Lessee under Oil and Gas Lease P.R.C. 3120.1, made and entered into the 29th day of April, 1964, by and between State and Richfield Oil Corporation and Socony Mobil Oil Company, Inc.

B. Lessee heretofore acquired and is now the owner and holder of the leasehold and the rights of the Lessee under Oil and Gas Lease P.R.C. 3242.1, made and entered into the 8th day of April, 1965, by and between State and Richfield Oil Corporation and Socony Mobil Oil Company, Inc.

C. Said leases cover State tide and submerged lands located within the South Elwood Offshore Oil and Gas Field, Santa Barbara County, California, as such field is delineated and defined by the State Oil and Gas Supervisor.

D. The lands under said leases have been developed to such extent that it is desirable that secondary recovery operations be undertaken within said lands in an effort to obtain the maximum economic ultimate recovery of oil and gas therefrom and Lessee has so advised State.

E. Said leases now provide for the payment by Lessee to State of graduated royalties, dependent upon average daily production.

F. State and Lessee mutually agree to modifications of said leases as hereinafter set forth, pursuant to and in accordance with applicable provisions of the California Public Resources Code, particularly Sections 6830.1, 6830.2 and 6830.3 of said Code, and other applicable provisions of California law.

G. State has made a determination which it hereby affirms that it is in the best interests of State that State enter into the within agreement, and that before making said determination and as a basis for the making thereof, and before authorizing the execution of this instrument, and in determining the mutually agreed royalty rates on production as hereinafter set forth, State, acting through the State Lands Commission, has agreeably with Section 6830.2 of the Public Resources Code made a calculated projection of the volume of primary oil to which State would be entitled under the existing royalty provisions of said leases without any secondary recovery operations. State has compared its determinations thus made with those made by Lessee and the parties have arrived at the mutual agreement herein contained.

WHEREFORE, in consideration of the premises, and of the covenants herein contained, it is hereby mutually agreed that the provisions of this instrument shall supersede and be in lieu of the provisions of said leases to the extent, in the manner, and subject to the conditions, limitations and restrictions as herein set forth:

1. The two aforesaid leases and the lands covered thereby and described therein, to the extent hereafter stated, are hereby combined, consolidated, pooled and unitized insofar only as the same cover the oil produced (as distinguished from "non-oil production"--see paragraph 6 hereof) from the Rincon Sand Formation as typified on the electrical log (attached hereto and designated Exhibit "B") of the Ames 3242 number 4 well between the measured depths of 5,174 feet and 5,327 feet on Exhibit "B" or the equivalent thereof, in and under that portion of the lands described in the aforementioned two leases that are shown to be within the productive limit as depicted on Exhibit "C" which is attached hereto and made a part hereof. Such pooling and unitization as to the oil produced from the formation and area herein described to be as if a single lessor had executed one lease to a single

lessee covering all of the herein described lands that are covered by the two aforesaid leases. There shall be no duty on the part of the lessee to offset wells completed in the Rincon Sand Formation within the hereby pooled or unitized area, as between these lands formerly covered separately by the said two leases, and there shall be no duty on the part of lessee to maintain separate measuring tanks nor to maintain separate records with respect to the oil produced from said Rincon Sand Formation in and under the hereby pooled or unitized lands.

2. Lessee shall undertake and commence secondary recovery operations within the lands covered by this agreement, subject to approval as hereinafter provided in Paragraph 9. Such operations are to be conducted by the injection of water, provided that such operations may be conducted or such methods may be supplemented by other secondary recovery methods which shall be first approved in writing by State.

3. Once it has commenced such operations as hereinabove provided, Lessee shall diligently and in conformance with good engineering practices carry on the conduct thereof throughout the term of the lease, provided that if Lessee determines in its best judgment, exercised in conformance with good engineering and oil field practices and based upon reasons which shall be conveyed in adequate detail to the State in writing, that the production response from such operations is not sufficient to economically justify the continuance thereof, Lessee may cease such operations, and further provided that if Lessee ceases operations it will be in conformance with Sections 6830.1, 6830.2 and 6830.3 and other applicable sections of the Public Resources Code. Nothing contained in this agreement shall require that Lessee continue to maintain, operate and produce the leasehold or the leased lands, and it shall be free to quitclaim at any time all or any part of the leased lands pursuant to the existing provisions of the lease and in compliance with Section 6804.1 of the Public Resources Code.

4. Lessee shall make and carry out the determinations and decisions required in connection with such operations including but not limited to the selection of the locations for any new wells to be drilled and completed, whether intended for

production purposes or for the injection of water and the conversion of presently existing wells to injection functions, whether now producing or idle; provided that Lessee shall, in accordance with the lease terms, submit for approval by State the surface location and proposed course of any new wells to be drilled and completed, shall comply with the provisions of Section 6830 of the Public Resources Code, and shall continue to file with State such notices of intention, reports, proposed drilling programs, logs, surveys and all other engineering data and material which matters, or their counterparts with reference to such secondary operations, have heretofore been required to be filed with State by Lessee under the terms of said leases, applicable laws or regulations.

5. State and Lessee agree that neither can predict with certainty that secondary recovery operations, however conducted, will result in given volumes of production, although both verify that the determinations made herein and in connection herewith in accordance with Section 6830.2 of said Public Resources Code represent and contain their best efforts to project the volumes of oil production which would result from the exercise of production efforts on a diligent and workmanlike basis. Therefore, it is further agreed that nothing contained herein shall be construed to mean that Lessee must account to State for any guaranteed quantity of either primary or secondary royalty production.

6. For purposes of future royalty accounting under said leases, as hereby modified and amended, the parties hereby agree that under successful secondary recovery operations, the projected remaining primary reserves determined as provided in Paragraph 7 (a) will be produced sooner than such reserves would have been produced under primary recovery operations; and further agree that the total future royalty production accruing to the State may be greater than would be the case if secondary recovery operations were not undertaken. The parties further agree that the royalty accounting procedures contained herein shall apply to oil produced from the Rincon sand only, and that royalty accounting for such dry gas, natural gasoline and other products (referred to as "non-oil production" in Paragraph 3 of the original of said lease) as may be produced by such operations shall continue to be as provided for in the aforesaid original leases.

7. In arriving at the determinations mentioned in Recital Paragraph G above, and in concluding that it is mutually desirable that this agreement be entered into, the parties have made the following determinations and agree that:

(a) The expected remaining primary reserves, attributable to both of the aforesaid original leases from the Rincon sand are as set forth on Exhibit "A" (hereinafter referred to as the "Schedule").

(b) The royalty payable to State for oil production from the Rincon sand shall continue to be in accordance with the provisions of the aforesaid leases until the following time (hereinafter referred to as the "effective date" of the Schedule):

(i) If water injection begins on the first day of a month, at 12:01 a.m. on that day;

(ii) If water injection begins on any day other than the first day of a month, at 12:01 a.m. on the first day of the following month.

(c) From and after the effective date determined in accordance with (b) above, until the remaining primary reserves have been produced, the royalty payable to State for oil produced from the Rincon sand shall (in lieu of the provisions set forth in the aforesaid original leases) be calculated as follows:

(i) The remaining primary reserves as of the effective date shall be determined from the Schedule by subtracting from the grand total, as shown on the Schedule, the actual cumulative primary production as of the effective date since July 1, 1971.

(ii) If the actual oil production since July 1, 1971 is as projected on the Schedule, the royalty production

shall be as set forth on the Schedule, it being the intention of the parties that the royalty rates shall be paid as set forth on the Schedule, regardless of the actual time of production.

(iii) If the actual oil production since July 1, 1971 is greater than the amount projected on the Schedule, the royalty production shall consist of the balance of the projected royalty for that month, plus royalty on the oil produced in excess of that amount projected on the Schedule at the royalty rate for the following month (and so forth until there is no excess production, i.e., all overages would be carried forward from month to month until there was no further overage).

(iv) If the actual oil production since July 1, 1971 is less than the amount projected on the Schedule, the royalty production would be based on the actual production at the royalty rate set forth on the Schedule for that month, and the underproduced amount would be carried forward to the succeeding month's production for payment at the rate which would have been applicable had such oil been produced as projected on the Schedule (and such underages shall be carried forward from month to month until no further underage exists).

(d) After the remaining primary reserves (as determined above) have been produced, the royalty rate for all production thereafter shall be the average of the royalty paid during the period covered in (c) above.

8. It is recognized by the parties hereto that Lessee may hereafter discover or produce oil from a zone, pool, or separate underground reservoir other

than the hereby pooled or unitized Rincon sand, and the oil accumulations within such zone, pool or reservoir were not included by the parties in making the agreed determinations under Paragraph 6 and Exhibit "A" hereof, and which zone, pool or reservoir is not being affected by secondary recovery operations being carried on at the time of such discovery or such production. In the event that production should occur under the foregoing circumstances, it is agreed that the royalty provisions set out in the aforesaid leases shall control. State agrees that in the event Lessee proposed to apply secondary recovery operations and methods to any such zone, pool or reservoir, Lessee will endeavor to arrive at a mutual agreement with State on further amendment of said lease to cover such proposed additional secondary recovery operations pursuant to the provisions of Public Resources Code Sections 6830.1, et seq.

9. Lessee hereby agrees to indemnify and hold harmless State and any officer, agency, commission, agent or employee thereof from and against any and all claims, demands or causes of action made or presented by any third party on account of the injection by Lessee of water or any other substance into the lands included in this agreement.

10. Lessee shall seek and obtain the approval of the Executive Officer of the State Lands Commission and of the California Oil and Gas Supervisor to any secondary recovery program which Lessee proposes to undertake pursuant to the terms of this agreement prior to undertaking any such program. If requested by Lessee, State agrees to join with Lessee in making any such request for approval, provided that such program has been approved by the Executive Officer of the State Lands Commission.

11. As heretofore and herein amended, said leases shall remain in full force and effect.

IN WITNESS WHEREOF, State and Lessee have caused this instrument to be executed the day and year first above written.

ATLANTIC RICHFIELD COMPANY

By [Signature]  
Its Attorney in Fact

STATE LANDS COMMISSION OF THE STATE OF CALIFORNIA

By [Signature]  
LESSOR

MOBIL OIL CORPORATION

By [Signature]

By \_\_\_\_\_  
LESSEE

FILE COPY	
APPROVED:	
Section Head	<u>[Signature]</u>
Legal	<u>[Signature]</u>
A.E.O.	<u>[Signature]</u>

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State of California,  
COUNTY OF LOS ANGELES } ss.

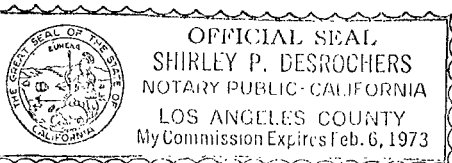
CO 5323-1(5-66)

On OCT 5 1971, 19.....,

before me, the undersigned, a Notary Public in and for said County and State, per-

sonally appeared B. O. SIMS, JR. known to me to be the person whose name is subscribed to the within instrument as an attorney in fact of MOBIL OIL CORPORATION, and acknowledged to me that he subscribed the name of MOBIL OIL CORPORATION, thereto as principal and his own name as attorney in fact.

In Witness Whereof, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.



Shirley P. Desrochers  
Notary Public in and for said County and State

My Commission Expires .....

612 South Flower St., Los Angeles, Calif. 90054



STATE LANDS DIVISION  
 PROJECTION OF PRIMARY PRODUCTION AND REVENUE  
 SOUTH ELWOOD OFFSH

08/11/71 PAGE 1

MO	YEAR	PROJECTED PRIMARY PROD. B/M	PROJ. CUM PRIMARY PROD. BBL	PROJECTED ROYALTY RATE, PCT	PROJECTED ROYALTY PROD. S/M	PROJ. CUM ROYALTY PROD. BSL	PROJ. ROY \$	PROJ. CUM ROYALTY \$
7	1971	56545.	56545.	26.7331	15116.	15116.	51663.	51663.
8	1971	54838.	111384.	26.1401	14334.	29451.	48989.	100652.
9	1971	51474.	162859.	25.5595	13156.	42608.	44961.	145614.
10	1971	51599.	214458.	24.9913	12895.	55503.	44066.	189680.
11	1971	48448.	262906.	24.4351	11838.	67341.	40452.	230133.
12	1971	48579.	311485.	23.8909	11606.	78947.	39656.	269790.
YEAR TOTAL		311485.		25.3456	78947.		269790.	
1	1972	47145.	358631.	23.3584	11012.	89960.	37627.	307417.
2	1972	41331.	399963.	22.8376	9439.	99399.	32250.	339667.
3	1972	44421.	444385.	22.3282	9918.	109318.	33886.	373554.
4	1972	41736.	486121.	21.8301	9111.	118429.	31126.	404681.
5	1972	41876.	527998.	21.3430	8937.	127367.	30533.	435214.
6	1972	39355.	567353.	20.8667	8212.	135579.	28053.	463267.
7	1972	39496.	606850.	20.4011	8057.	143637.	27524.	490792.
8	1972	38365.	645215.	19.9459	7652.	151289.	26138.	516931.
9	1972	36067.	681282.	19.5010	7033.	158322.	24024.	540955.
10	1972	36210.	717492.	19.0661	6903.	165226.	23580.	564535.
11	1972	34049.	751542.	18.7053	6369.	171595.	21753.	586288.
12	1972	34191.	785733.	18.4588	6311.	177907.	21556.	607843.
YEAR TOTAL		474248.		20.8666	95939.		338055.	
1	1973	33230.	818963.	18.2146	6052.	183959.	20673.	628516.
2	1973	29173.	848137.	17.9727	5243.	189203.	17906.	646427.
3	1973	31397.	879534.	17.7331	5567.	194770.	19017.	665444.
4	1973	29539.	909073.	17.4959	5163.	199933.	17653.	683097.
5	1973	29677.	938751.	17.2612	5122.	205061.	17493.	700595.
6	1973	27926.	966678.	17.0288	4755.	209817.	16244.	716840.
7	1973	28062.	994741.	16.7939	4714.	214531.	16105.	732943.
8	1973	27292.	1022033.	16.6666	4548.	219080.	15538.	748481.
9	1973	25689.	1047722.	16.6666	4281.	223361.	14625.	763106.
10	1973	25321.	1073044.	16.6666	4303.	227665.	14700.	777806.
11	1973	24308.	1097353.	16.6666	4051.	231716.	13828.	791645.
12	1973	24438.	1122291.	16.6666	4073.	235789.	13911.	805556.
YEAR TOTAL		336558.		17.1985	57832.		197712.	
1	1974	23777.	1146068.	16.6666	3962.	239752.	13535.	819092.
2	1974	20897.	1166965.	16.6666	3482.	243235.	11895.	830988.
3	1974	22514.	1189480.	16.6666	3752.	246988.	12816.	843804.
4	1974	21204.	1210684.	16.6666	3534.	250522.	12070.	855874.
5	1974	21325.	1232009.	16.6666	3554.	254076.	12133.	868013.
6	1974	20087.	1252096.	16.6666	3347.	257424.	11432.	879446.
7	1974	20204.	1272301.	16.6666	3367.	260791.	11500.	890947.
8	1974	13795.	1286096.	16.6666	2299.	263091.	7832.	898779.
GRAND TOTAL		1286096.		20.4565	263091.		896779.	

STATE OF CALIFORNIA )  
COUNTY OF LOS ANGELES ) ss.

On this \_\_\_\_\_ day of \_\_\_\_\_, A.D., 1971, before me, the undersigned, a Notary Public in and for the State of California, with principal office in the County of Los Angeles, personally appeared F. J. HORTIG, known to me to be the Executive Officer of the STATE LANDS COMMISSION, STATE OF CALIFORNIA, the Commission that executed the within Instrument, known to me to be the person who executed the within Instrument, on behalf of the Commission therein named, and acknowledged to me that such Commission executed the within Instrument pursuant to a resolution of its Commissioners.

WITNESS my hand and official seal.

\_\_\_\_\_  
Notary Public in and for said County  
and State

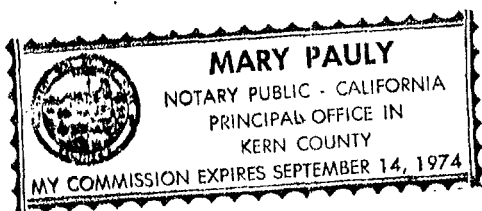
My Commission Expires:

\_\_\_\_\_, 19\_\_\_\_

STATE OF CALIFORNIA, )  
COUNTY OF KERN ) ss.

ON September 21, 1971, before me, the undersigned, a Notary Public in and for said State, personally appeared Peter K. Bacon known to me to be the person whose name is subscribed to the within Instrument, as the Attorney-in-Fact of ATLANTIC RICHFIELD COMPANY and acknowledged to me that he subscribed the name of ATLANTIC RICHFIELD COMPANY thereto as principal and his own name as Attorney-in-Fact.

WITNESS my hand and official seal.



*Mary Pauly*  
\_\_\_\_\_  
Notary Public in and for said County  
and State