

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF  
STANOLIND OIL AND GAS COMPANY FOR  
THE APPROVAL OF THE LAKEWOOD UNIT AGREE-  
MENT, EMBRACING 7521.75 ACRES, MORE OR  
LESS, LOCATED IN TOWNSHIP 19 SOUTH,  
RANGE 25 EAST, AND TOWNSHIP 20 SOUTH,  
RANGE 25 EAST, N.M.P.M., EDDY COUNTY,  
NEW MEXICO

CASE NO. 368

A P P L I C A T I O N

An application is hereby made by Stanolind Oil and Gas Company, a corporation, for approval by the Oil Conservation Commission, of a unit agreement entitled "Unit Agreement for the Development and Operation of the Lakewood Unit Area, County of Eddy, State of New Mexico", the said agreement having been entered into between the applicant herein as the Unit Operator and certain working interest owners and royalty owners as have, or may hereafter, subscribe to or consent to the agreement.

The Lakewood Unit Area embraces the following described lands located in Eddy County, New Mexico, to-wit:

Township 19 South, Range 25 East, N.M.P.M.

Sec. 25, SW $\frac{1}{4}$ ;  
Sec. 26, NW $\frac{1}{4}$ ; S $\frac{1}{2}$ ;  
Sec. 27, NE $\frac{1}{4}$ ; S $\frac{1}{2}$ ;  
Sec. 28, S $\frac{1}{2}$ ;  
Sec. 29, SE $\frac{1}{4}$ ;  
Secs. 32 to 35, inclusive, all;  
Sec. 36, W $\frac{1}{2}$ .

Township 20 South, Range 25 East, N.M.P.M.

Secs. 2 to 4, inclusive, all;  
Sec. 5, E $\frac{1}{2}$ ;  
Sec. 9, NE $\frac{1}{4}$ ;  
Sec. 10, N $\frac{1}{2}$ ;  
Sec. 11, N $\frac{1}{2}$ ;

Total Unit Area embraces 7,521.75 acres, more or less.

At the hearing hereinafter requested, the requisite number of signed copies of the unit agreement will be submitted for approval, and it is requested that the same be returned to the applicant in order that it may file the necessary counterparts thereof with the Department of the Interior of the United States for the purpose of obtaining final approval of the agreement by the Secretary of the Interior. After approval of the agreement by the Secretary of the Interior a complete and signed copy of the unit agreement will be filed in the Office of the Commissioner of Public Lands of the State of New Mexico. An unsigned copy of the unit agreement has already been filed in the office of the Commission for a temporary record pending the receipt of the final completed copy.

The form of unit agreement has previously been considered by the Commissioner of Public Lands. Geological evidence concerning the structure affected by this unitization will be submitted to the Commissioner of Public Lands and at the hearing hereinafter requested.

With reference to the lands embraced in this unit, there is attached to the unsigned copy of the unit agreement hereinafter filed a map of the unit area on which is shown the ownership of the various lands embraced in the said unit. The applicant is continuing efforts to obtain commitments to the unit agreement from those owners of interests who have not yet joined, and a full showing of the commitments will be made at the time of the hearing hereinafter requested.

Within six (6) months after the date the unit agreement becomes effective the unit operator is obligated to commence drilling operations on an adequate test well. Should commercial

production be discovered, the unitized operation will assure an orderly development program based on structural position and will enable productive operations to be conducted in accordance with the best over-all reservoir practices. Development and operation will be conducted in accordance with the plans having the joint approval of Federal and State authorities. Under this agreement the State of New Mexico will receive its fair share of the oil and gas and this will be allocated to it on an acreage basis in any and all participating areas that may be established. This unit agreement is in all respects to the best interests of the State of New Mexico and tends to eliminate waste and promote conservation of oil and gas.

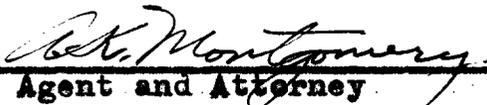
The unit agreement makes express provision that additional parties may join and subject their interests to the said agreement after its final approval.

The Commission is respectfully requested to set this matter and application down for hearing and following said hearing to give its approval to the unit agreement.

Respectfully submitted this 31st day of March, 1952.

STANOLIND OIL AND GAS COMPANY

BY

  
Its Agent and Attorney

IN THE MATTER OF THE APPLICATION OF  
STANOLIND OIL AND GAS COMPANY FOR THE  
APPROVAL OF THE LAKEWOOD UNIT AGREEMENT  
EMBRACING 7524.11 ACRES OF LAND IN TOWNSHIPS  
19 AND 20 SOUTH, RANGE 25 EAST, N. M. P. M., NEW  
MEXICO

The undersigned, Commissioner of Public Lands of the State of New Mexico, having considered the application of Stanolind Oil and Gas Company for approval of the Lakewood Unit Agreement covering lands in Eddy County, New Mexico, described in said Agreement, and the undersigned having considered the aforesaid application and the evidence offered by the Petitioner at the hearing before the Oil Conservation Commission on the 20th day of MAY, 1952,

FINDS:

1. That said Lakewood Unit Agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy.
2. That under the operation of the proposed Unit Agreement the State of New Mexico will receive its fair share of the recoverable oil or gas in place under its lands in the area affected.
3. That the Agreement is in other respects for the best interests of the State of New Mexico.

Said Agreement is hereby approved.

Dated July 11th, 1952, in Santa Fe, New Mexico.

  
Commissioner of Public Lands

CERTIFICATE - DETERMINATION

Pursuant to the authority vested in the Secretary of the Interior, under the act approved February 25, 1920, 41 Stat. 437, 30 U.S.C. secs. 181 et seq., as amended by the act of August 8, 1946, 60 Stat. 950, and delegated to the Director of the Geological Survey pursuant to Departmental Order No. 2365 of October 8, 1947, 43 CFR sec. 4.611, 12 F. R. 6784, I do hereby:

A. Approve the attached agreement for the development and operation of the Lakewood Unit Area, State of New Mexico.

B. Certify and determine that the unit plan of development and operation contemplated in the attached agreement is necessary and advisable in the public interest for the purpose of more properly conserving the natural resources.

C. Certify and determine that the drilling, producing, rental, minimum royalty, and royalty requirements of all Federal leases committed to said agreement are hereby established, altered, changed, or revoked to conform with the terms and conditions of this agreement.

Dated SEP 11 1952.

*Thomas B. Nolan*

**Acting** Director, United States Geological Survey

**GEOLOGICAL MEMORANDUM**

**concerning**

**Lakewood Area  
Townships 19 and 20 South  
Range 25 East  
Sibley County, New Mexico**

The structural contour map, based on refraction seismograph data, shows the attitude of sedimentary beds (approximate Glorieta Sand horizon) in an area northwest of Carlsbad, in Townships 19 and 20 South, Range 25 East, central Sibley County, New Mexico. To this region, we have given the name "Lakewood Area". Geologically, the Lakewood Area is located on the Carlsbad Shelf, along the northeast edge of the Delaware Basin.

Our seismic work has delineated an anticlinal anomaly approximately eight (8) miles long and four (4) miles wide, trending northeast-southwest, the highest portion of which is a dome with 200' feet of closure, centering in Sections 34 and 35, Township 19 South, Range 25 East.

The most favorable portion of the area, embracing approximately 7520 acres, we have outlined in red. Lands within this outline are predominantly Federal; hence, we believe it would be in the public interest to join them in a Unit Agreement before testing for oil or gas.

In order to test all the potentially productive horizons which have indicated good porosity development in other deep wells in this province, a hole should be drilled to a depth sufficient to test the Permian formation of Silurian age. In the following tabulation, we list the probable sequence of sediments to be expected and the approximate thickness of each formation or series:

<u>AGE</u>	<u>FORMATION</u>	<u>DEPTH</u>
Permian	Seven Rivers, Goss and	
	Grayburg	0' to 650'
	San Andres	650' to 2200'
	Glorieta	2200' to 2440'
	Yess	2440' to 5400'
Wolfcamp	Abe	5400' to 6300'
	Hess	6300' to 6710'
Pennsylvanian	Magnesian	6710' to 7715'
Mississippian	Undifferentiated Limestone	7715' to 10,200'
Silurian	Fossiliferous	10,200' to 10,500'

The above estimates are based on the formation markers encountered during the drilling of the Humble #1 Federal-Hobbs, dry hole located in the south-east corner of Section 24, Township 20 South, Range 24 East.

Porous zones are expected in the San Andres, Glorieta, Yess, Wolfcamp, and Fossiliferous.

We believe the most favorable location for the above test is in the NE/4 SE/4, Section 34, Township 19 South, Range 25 East, and this location is recommended. A depth of 10,500' should be sufficient to adequately test the Fossiliferous formation.

It is requested that the information contained herein and the seismic map attached, be kept in strict confidence.

*Russell Farmer*  
 Russell Farmer  
 Division Geologist  
 Standard Oil and Gas Company  
 Fort Worth, Texas

RUR:bb  
 Attachment

SEP 3 4 23 P. 54

SANTA FE, N. M.

In the matter of the Unit Agreement	)	Application for Approval of
for the Development and Operation	)	Termination of the Lakewood
of the Lakewood Unit Area, County of	)	Unit Agreement Pursuant to
Chaves, State of New Mexico	)	Section 20, thereof

To: The Honorable Director of the Geological Survey,  
Department of the Interior, Washington, D. C.

Commissioner of Public Lands of the State of New Mexico  
State of New Mexico Oil Conservation Commission

Stanolind Oil and Gas Company in its own behalf and as Unit Operator and the undersigned parties, representing more than seventy-five per centum (75%), on an acreage basis of the owners of working interest signatory to the Lakewood Unit Agreement, #14-08-001-320, hereby agree to the termination of the said Lakewood Unit Agreement, pursuant to the provisions of Section 20, thereof, and respectfully request approval to this termination of the Director of the United States Geological Survey, the Commissioner of Public Lands of the State of New Mexico and the State of New Mexico Oil Conservation Commission.

In support of this application for Termination, the following is respectfully submitted:

(1) Pursuant to Section 9 of said Unit Agreement the Lakewood Unit Well #1, located 1980' from the south line and 660' from the east line of Section 34, Township 19 South, Range 25 East, Eddy County, New Mexico, was drilled to a total depth of 10,486'.

(2) The elevation of the drill site is 3543' and the following tops were recorded:

San Andres	900'
Glorietta	2470'
Drinkard	3310'
Pennsylvanian	6621'
Mississippian	9868'
Siluro-Devonian	10,341'

(3) No commercial oil or gas showings were encountered in any of the zones penetrated.

(4) The well was plugged and abandoned on January 23, 1953.

The undersigned working interest owners believe it is reasonably determined that the unitized land is incapable of production of unitized substances in paying quantities in the formations tested and therefore none of said working interest owners are willing to incur the expense and risk of drilling any additional test wells. A reliable party to drill an additional well on a farm-out basis has not been located though diligent efforts have been made to find such a party.

This application may be executed in any number of counterparts no one of which needs to be signed by all parties.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 1954.

ATTEST:

STANOLIND OIL AND GAS COMPANY

\_\_\_\_\_  
Assistant Secretary

By \_\_\_\_\_  
Vice President

Auth: [Signature]  
Law: OK  
Lend: H&H  
Acc'ty: \_\_\_\_\_

ATTEST:

E. W. Bisset

Assistant Secretary

MALCO REFINERIES, INC.

By Donald B. Anderson  
Vice President

ATTEST:

Assistant Secretary

GULF OIL CORPORATION

By \_\_\_\_\_  
Vice President

ATTEST:

Assistant Secretary

BUFFALO OIL COMPANY

By \_\_\_\_\_  
Vice President

ATTEST:

Assistant Secretary

GREAT WESTERN DRILLING COMPANY

By \_\_\_\_\_  
Vice President

STATE OF OKLAHOMA)  
COUNTY OF TULSA )

On this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_, before me appeared \_\_\_\_\_, to me personally known, who, being by me duly sworn, did say that he is the Vice President of STANOLIND OIL AND GAS COMPANY, a Delaware corporation, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said \_\_\_\_\_ acknowledged said instrument to be the free act and deed of said corporation.

Given under my hand and notarial seal this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_.

My commission expires:

Notary Public

STATE OF NEW MEXICO)  
COUNTY OF CHAVES )

On this 27<sup>th</sup> day of August, 1959, before me appeared Donald B. Anderson, to me personally known, who, being by me duly sworn, did say that he is the vice President of MALCO REFINERIES, INC., and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said Donald B. Anderson acknowledged said instrument to be the free act and deed of said corporation.

Given under my hand and notarial seal this 27<sup>th</sup> day of August, 19 \_\_.

My commission expires:

6-30-56

Notary Public

STATE OF TEXAS )  
COUNTY OF TARRANT)

On this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_, before me appeared \_\_\_\_\_, to me personally known, who, being by me duly sworn, did say that he is the Vice President of GULF OIL CORPORATION, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said \_\_\_\_\_ acknowledged said instrument to be the free act and deed of said corporation.

Given under my hand and notarial seal this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_.

My commission expires:

\_\_\_\_\_

\_\_\_\_\_  
Notary Public

STATE OF TEXAS )  
COUNTY OF \_\_\_\_\_)

On this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_, before me appeared \_\_\_\_\_, to me personally known, who, being by me duly sworn, did say that he is the \_\_\_\_\_ President of BUFFALO OIL COMPANY, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said \_\_\_\_\_ acknowledged said instrument to be the free act and deed of said corporation.

Given under my hand and notarial seal this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_.

My commission expires:

\_\_\_\_\_

\_\_\_\_\_  
Notary Public

STATE OF TEXAS )  
COUNTY OF LUBBOCK)

On this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_, before me appeared \_\_\_\_\_, to me personally known, who, being by me duly sworn, did say that he is the \_\_\_\_\_ President of GREAT WESTERN DRILLING COMPANY, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said \_\_\_\_\_ acknowledged said instrument to be the free act and deed of said corporation.

Given under my hand and notarial seal this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_.

My commission expires:

\_\_\_\_\_

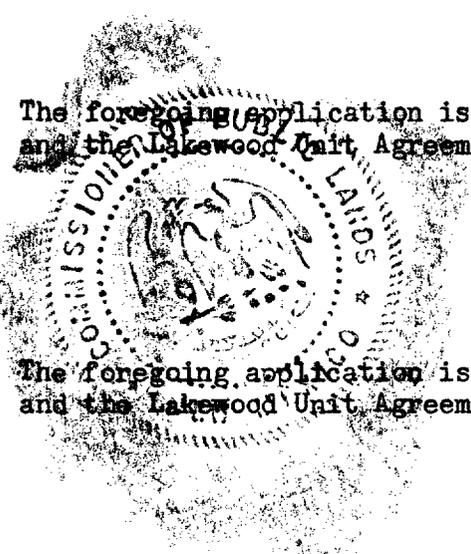
\_\_\_\_\_  
Notary Public

The foregoing application is hereby approved this \_\_\_\_\_ day of \_\_\_\_\_, 1954,  
and the Lakewood Unit Agreement is hereby terminated.

Director of the United States Geological Survey

By \_\_\_\_\_

The foregoing application is hereby approved this 3rd day of Sept., 1954,  
and the Lakewood Unit Agreement is hereby terminated.



*C. Macken*

Commissioner of Public Lands

The foregoing application is hereby approved this 20<sup>th</sup> day of Sept, 1954,  
and the Lakewood Unit Agreement is hereby terminated.

State of New Mexico  
Oil Conservation Commission

By W. B. Macey

SECRETARY DIRECTOR

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APPLICATION FOR EXTENSION OF TIME FOR COMMENCEMENT OF TEST WELL

TO: THE DIRECTOR OF THE UNITED STATES GEOLOGICAL SURVEY

Stanolind Oil and Gas Company, as Unit Operator of the Unit Agreement for the Development and Operation of the Lakewood Unit Area, County of Eddy, State of New Mexico, has heretofore completed the first test well referred to in Article 9 of said Unit Agreement, such well being a dry hole. The said Unit Operator is now obligated to commence the drilling of an additional Fusselman test well on the Unit Area on or before January 19, 1954; however, further study is being made on magnetic maps in this area and additional aerial magnetic data are being obtained and the Unit Operator believes that a reasonable extension of time for the commencement of such additional test well would be proper.

Premises considered, Stanolind Oil and Gas Company, Unit Operator under the Lakewood Unit Agreement, hereby makes application to the Director of the United States Geological Survey, pursuant to Article 9 of said Unit Agreement, for an extension of six-months for the commencement of the additional test well hereinabove referred to, so that said test well shall be commenced on or before July 19, 1954. Copies of this application have been filed with the Commissioner of Public Lands of the State of New Mexico and the Oil Conservation Commission of the State of New Mexico.

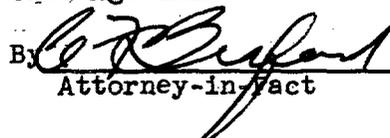
IN WITNESS WHEREOF, this application is hereby made this 16<sup>th</sup> day of

December, 1953.

ATTEST:

  
Assistant Secretary

STANOLIND OIL AND GAS COMPANY  
Unit Operator of the Lakewood  
Unit Agreement

By   
Attorney-in-fact

APPROVED K JW
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The foregoing application is hereby approved this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_ and the time for commencement of the test well referred to in the foregoing application is hereby extended to July 19, 1954.

DIRECTOR OF THE UNITED STATES  
GEOLOGICAL SURVEY

By \_\_\_\_\_

APPLICATION FOR EXTENSION OF TIME FOR COMMENCEMENT OF TEST WELL

TO THE DIRECTOR OF THE UNITED STATES GEOLOGICAL SURVEY:

Stanolind Oil and Gas Company, as Unit Operator of the Unit Agreement for the Development and Operation of the Lakewood Unit Area, County of Eddy, State of New Mexico, has heretofore completed the first test well referred to in Article 9 of said Unit Agreement, such well being a dry hole. The said Unit Operator is now obligated to commence the drilling of an additional Fusselman test well on the Unit Area on or before July 19, 1953; however, further study is being made of the seismic work in this area and Unit Operator believes that a reasonable extension of time for the commencement of such additional test well would be proper.

Premises considered, Stanolind Oil and Gas Company, Unit Operator under the Lakewood Unit Agreement, hereby makes application to the Director of the United States Geological Survey, pursuant to Article 9 of said Unit Agreement, for an extension of six months for the commencement of the additional test well hereinabove referred to, so that said test well shall be commenced on or before January 19, 1954. A similar application has been filed with the Commissioner of Public Lands of the State of New Mexico and the Oil Conservation Commission of the State of New Mexico.

IN WITNESS WHEREOF, this application is hereby made this 2<sup>nd</sup> day of

July, 1953.

WITNESSED:

Richard G. Maltz  
Assistant Secretary

STANOLIND OIL AND GAS COMPANY  
Unit Operator of the Lakewood  
Unit Agreement

BY John R. Evans  
Attorney-in-Fact

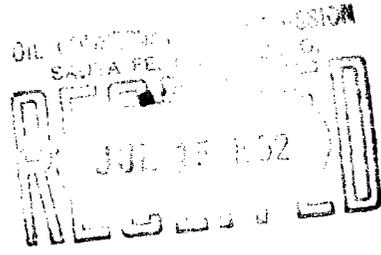
APPROVED

The foregoing application is hereby approved this \_\_\_\_\_ day of \_\_\_\_\_, 1953, and the time for the commencement of the test well referred to in the foregoing application is hereby extended to January 19, 1954.

DIRECTOR OF THE UNITED STATES  
GEOLOGICAL SURVEY

BY \_\_\_\_\_

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IN THE MATTER OF THE APPLICATION OF STANOLIND OIL AND GAS COMPANY FOR THE APPROVAL OF THE LAKEWOOD UNIT AGREEMENT EMBRACING 7524.11 ACRES OF LAND IN TOWNSHIPS 19 AND 20 SOUTH, RANGE 25 EAST, N. M. P. M., NEW MEXICO

The undersigned, Commissioner of Public Lands of the State of New Mexico, having considered the application of Stanolind Oil and Gas Company for approval of the Lakewood Unit Agreement covering lands in Eddy County, New Mexico, described in said Agreement, and the undersigned having considered the aforesaid application and the evidence offered by the Petitioner at the hearing before the Oil Conservation Commission on the 20th day of May, 1952,

FINDS:

- 1. That said Lakewood Unit Agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy.
2. That under the operation of the proposed Unit Agreement the State of New Mexico will receive its fair share of the recoverable oil or gas in place under its lands in the area affected.
3. That the Agreement is in other respects for the best interests of the State of New Mexico.

Said Agreement is hereby approved.

Dated July 11th, 1952, in Santa Fe, New Mexico.

Guy Shepard Commissioner of Public Lands