



2592

MAIN OFFICE OCC

1963 APR 5 AM 8 STATE OF NEW MEXICO

STATE ENGINEER OFFICE
SANTA FE

S. E. REYNOLDS
STATE ENGINEER

April 4, 1963

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, N. M.

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Skelly Oil Company for approval of a secondary recovery project, Lea County, New Mexico which was heard as your Case No. 2592 and was approved by Order R-2278. The Skelly Company has made a change in their plans and has notified me by letter dated April 1, 1963. No copy of this letter was indicated for you, therefore, I am enclosing a copy for your reference. In view of Mr. Aab's statement in the first paragraph of his letter "Tubing for this well will be internally plastic coated and injection will be below a packer as was planned for Unit Well No. 55." I find no reason to object to this change. Mr. Aab also states that Unit Well No. 58 will not be used because it is not feasible to enter this plugged and abandoned well at this time. I have no objection to the elimination of this well from the planned program.

Yours very truly,

S. E. Reynolds
State Engineer

By: *Frank E. Irby*
Frank E. Irby
Chief
Water Rights Division

FEI/ma
encl.
cc-H. E. Aab
F. H. Hennighausen



BEST AVAILABLE COPY

SKELLY OIL COMPANY

P.O. Box 38, Hobbs, New Mexico
April 1, 1963

Subject: Lovington San Andres Unit
Lea County, New Mexico

Mr. Frank E. Irby
Chief
Water Rights Division
State Capitol
Santa Fe, New Mexico

Dear Sir:

In our letter of November 1, 1962, we stated that Lovington San Andres Unit Well No. 55 (formerly Shell State "A" No. 1) would be equipped with internally plastic coated tubing and that produced brine water from subject unit would be injected into this well. Since this well is plugged and abandoned, we feel there is no economic justification at the present time to re-enter this well. Therefore, we are substituting Unit Well No. 32 (formerly Amerada State "IA" No. 6) in it's place. Tubing for this well will be internally plastic coated and injection will be below a packer as was planned for Unit Well No. 55.

Also in our letter of November 1, 1962, we stated fresh water from the Ogallala formation would be injected into Unit Well No. 58. This is also a plugged and abandoned well and will not be re-entered at the present time due to economic justification.

To restate our proposed plan, the following wells will be used to inject produced brine:

<u>Unit Well No.</u>	<u>Former Operator, Lease Name & Well No.</u>
L.S.A. Unit Well No. 32	Amerada State "IA" No. 6
L.S.A. Unit Well No. 34	Sunray Caylor No. 1
L.S.A. Unit Well No. 36	Skelly C. S. Caylor No. 1
L.S.A. Unit Well No. 50	Pan American Caylor No. 1

Fresh water from the Ogallala formation will be injected into the following Wells:

<u>Unit Well No.</u>	<u>Former Operator, Lease Name & Well No.</u>
L.S.A. Unit Well No. 4	Skelly State "NM" No. 1
L.S.A. Unit Well No. 6	Late Graham No. 1

STATE ENGINEER OFFICE
SANTA FE, N.M.
1963 APR -4 AM 8:17

Mr. Frank E. Irby
Page 2

Unit Well No.

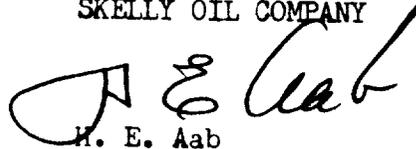
L.S.A. Unit Well No. 14
L.S.A. Unit Well No. 16
L.S.A. Unit Well No. 18
L.S.A. Unit Well No. 28
L.S.A. Unit Well No. 30
L.S.A. Unit Well No. 46
L.S.A. Unit Well No. 48
L.S.A. Unit Well No. 54

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Former Operator, Lease Name & Well No.

Skelly State "O" No. 2
Skelly State "O" No. 4
Tidewater State "P" No. 2
Pan American State "E" No. 10
Pan American State "E" No. 3
Amerada State "LA" No. 7
Mobil State "R" No. 1
Tidewater State "M"

Yours very truly,
SKELLY OIL COMPANY



H. E. Aab
District Superintendent

HEA/LDJ/pjn



12117 7 MI 02
STATE OF NEW MEXICO

**STATE ENGINEER OFFICE
SANTA FE**

**S. E. REYNOLDS
STATE ENGINEER**

November 6, 1962

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, N. M.

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Santa Fe, New Mexico

*File Case
2592*

Dear Mr. Porter:

Reference is made to your Order No. R-2278 which resulted from your hearing on OCC case 2592. I enclose a letter from Mr. H. E. Aab of Skelly Oil Company pertaining to this matter, which sets forth the new numbers applied to the wells since the hearing and their change in plan of injection equipment. This office offers no objection to the granting of this request so long as the wells receiving recycled water are equipped with plastic coated tubing as set forth in Mr. Aab's letter.

Yours very truly,

S. E. Reynolds
State Engineer

FEI/ma
cc-Skelly Oil Co.
Attn. Mr. H. E. Aab

F. H. Hennighausen

By: *Frank E. Irby*
Frank E. Irby
Chief
Water Rights Division



SKELLY OIL COMPANY

P.O. Box 38, Hobbs, New Mexico
November 1, 1962

1962 NOV -5 AM 8:25
STATE ENGINEER OFFICE
SANTA FE, N. M.

Subject: Lovington San Andres Unit
Lea County, New Mexico

Mr. Frank E. Irby
Chief
Water Rights Division
State Capitol
Santa Fe, New Mexico

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Dear Sir:

With reference to our letter of October 22, 1962, all of the produced brine water from the subject unit will be injected into the following wells:

<u>Unit Well No.</u>	<u>Former Lease Name and Well No.</u>
L.S.A. Unit Well No. 34	Sunray Caylor No. 1
L.S.A. Unit Well No. 36	Skelly C. S. Caylor No. 1
L.S.A. Unit Well No. 50	Pan American Caylor No. 1
L.S.A. Unit Well No. 55	Shell State "A" No. 1

As stated in our letter, the tubing in these wells will be internally plastic coated and injection will be below a packer.

Fresh water from the Ogallala formation will be injected down the remainder of the injection wells which are as follows:

<u>Unit Well No.</u>	<u>Former Lease Name and Well No.</u>
L.S.A. Unit Well No. 4	Skelly State "N" No. 1
L.S.A. Unit Well No. 6	Late Graham No. 1
L.S.A. Unit Well No. 14	Skelly State "O" No. 2
L.S.A. Unit Well No. 16	Skelly State "O" No. 4
L.S.A. Unit Well No. 18	Tidewater State "P" No. 2
L.S.A. Unit Well No. 28	Pan American State "E" No. 10
L.S.A. Unit Well No. 30	Pan American State "E" No. 3
L.S.A. Unit Well No. 32	Amerada State "LA" No. 6
L.S.A. Unit Well No. 46	Amerada State "LA" No. 7
L.S.A. Unit Well No. 48	Mobil State "R" No. 1
L.S.A. Unit Well No. 58	Mobil State "R" No. 4
L.S.A. Unit Well No. 54	(To be drilled) Tidewater State "M"

Injection into these wells will be thru uncoated tubing under packer. Corrosion coupons will be installed at the well head of these wells. Coupons will be changed weekly during the first few months of operation. As stated before, frequency of change after the first few months will depend on results of

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SKELLY OIL COMPANY

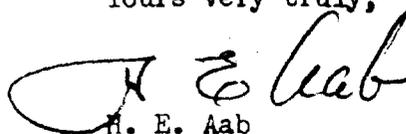
Mr. Frank E. Irby
Page 2

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coupon analysis. Absolutely no produced brine water will be injected thru uncoated tubing.

All injection wells have been drilled except unit well No. 54 which will be drilled at a location 1980' FSL and 1980' FEL, Section 36, Township 16 South, Range 36 East, Lea County, New Mexico.

Yours very truly,


H. E. Aab

HEA/LDJ/pjn

LOVINGTON - SAN ANDRES
SECONDARY RECOVERY STUDY

Index

- I. Object
- II. Conclusions
- III. Recommendations
- IV. Discussion
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 - B. General Reservoir and Fluid Properties
 - C. Secondary Recovery
 - 1. Waterflooding
 - 2. Unitization and Participation
 - 3. Plan of Waterflood
- V. Maps, Reports and Graphical Data

LOVINGTON - SAN ANDRES

I. Object:

This study was made by the Lovington-San Andres Engineering Sub-committee for the following purposes:

- A. To study economics of waterflooding the subject pool.
- B. To determine participation parameters applicable to the proposed unit.
- C. To outline a program for secondary recovery by waterflooding.

II. Conclusions:

- A. An economically successful secondary recovery project for the subject pool is expected.
- B. Ultimate primary recovery by depletion will recover approximately 9.25 million stock tank barrels of oil.
- C. Waterflood operations are expected to result in approximately 10 million barrels of secondary oil.
- D. The flood program as outlined is expected to result in top allowable unit oil production of 42 barrels per day per unitized well.
- E. Adequate water is available for operating the unit as outlined.

III. Recommendations:

- A. The subject area should be unitized to promote effective secondary recovery from the Lovington-San Andres reservoir.
- B. A full-scale water injection program as proposed should be instituted at the earliest possible date.
- C. Within the unit area, all plugged and abandoned San Andres wells should be recompleted and San Andres wells completed on those tracts where none are now present.

IV. Discussion:

A. History

The Lovington-San Andres pool is located in central Lea County, New Mexico, approximately six (6) miles south of Lovington and ten (10) miles northwest of Hobbs. Discovery of the pool was by completion of the Skelly Oil Company State "N" Well No. 1, Unit B - Section 36, T16S-R36E, in January, 1939.

Early development of the field was rapid. Within the horizontal limits of the proposed unit area (shown on Figure No. 1), 58 San Andres producers, on regular 40-acre spacing, have been completed. Of this number, 49 wells continue to produce, with 4 wells plugged and abandoned, and 5 wells shut-in or temporarily abandoned. Average production from the pool during the last half of 1961 was 7 barrels per day per producing well.

B. General Reservoir and Fluid Properties

The Lovington San Andres reservoir is contained within a small domal type anticline, shown on the Structure Map, Figure No. 2. The productive formation, a San Andres dolomite of Permian Age, is a hard, dense crystalline dolomite with intermittent streaks of gray shale, anhydrite and sand.

Production limits of the pay formation are defined by lack of permeability and porosity development on the flanks of the reservoir and bottom water in the formation. Analysis of sample logs of the San Andres wells, and electric and radioactivity logs of twin wells in the field, revealed that the pay section averages 38 feet in thickness. Study of the available data indicates several separate pay zones of fairly continuous nature throughout the field. The continuity of these zones, as exhibited on the included cross sections (Figures No. 3 and No. 4), enhance the floodability prospects of the San Andres formation.

The producing mechanism is predominantly of the solution gas drive type. Production and completion histories have yielded no evidence of either active water drive or extensive gas cap effect. Water was encountered near the bottom of the San Andres formation in some wells. Exclusion of the water by plugging back during completion was easily accomplished; no evidence of extensive water encroachment has been observed subsequent to completion.

The only core analysis available, that of the Pan American's State "E" Tract No. 18, Well No. 6, yielded the following weighted average values:

Porosity	8.6%
Permeability	6.4 Millidarcies
Connate Water Saturation	30.0%

Volumetric calculations indicate that original oil in place was 37,600,000 STBO.

C. Primary Performance

Primary performance curves are shown on Figure No. 5. Primary depletion of the reservoir is approaching the economic limit.

Ultimate primary production was determined at 9,001,334 barrels stock tank oil by the Engineering Sub-committee. This figure includes production as reported by each operator on New Mexico Oil Conservation Commission's Forms C-115, and remaining primary reserves extrapolated from lease decline curves.

On October 1, 1961, cumulative production from the Lovington-San Andres pool was 8,269,956 barrels. Remaining primary reserves were determined at 731,378 barrels.

D. Secondary Recovery

1. Waterflood

In its present depleted state, waterflooding is considered the most practical means of effecting secondary recovery from the Lovington San Andres reservoir.

Calculations indicate that 10,031,500 barrels of secondary oil may be produced during a sixteen (16) year period. Projected secondary performance curves are shown on Figure No. 6.

An inverted nine-spot flood pattern (with injection wells as shown on Figure No. 1) is planned for the unitized area. Such a pattern should adequately flood the formation; will, under present regulations allow the unit to be produced at top allowable of 42 barrels per day per unitized well; and should facilitate control of secondary production within proration limits, as defined by the New Mexico Oil Conservation Commission.

2. Unitization and Participation

When unitization becomes effective, Skelly Oil Company will become Operator of the Lovington-San Andres Unit.

The Working Interest Owners have agreed that the following parameters be used as an equitable method of determining participation percentages in the proposed unit:

(a) Primary Participation:

- (1) 70% of each tract's current production (production from 1-1-60 to 10-1-61).
- (2) 20% of each tract's remaining primary reserves, as of 10-1-61.
- (3) 10% of each tract's adjusted ultimate primary production.

(b) Secondary Participation:

Each tract's percentage of adjusted ultimate primary production.

The adjusted ultimate primary production for the pool, as used in the above formula, includes all production reported on New Mexico Oil Conservation Commission's Forms C-115 from date of discovery to October 1, 1961; remaining primary reserves as of October 1, 1961, estimated by the Engineering Sub-committee from lease decline curves; and primary estimates for the seven (7) tracts on which no San Andres wells now exist, calculated on the basis of performance of offset wells to these tracts.

The primary participation percentages will be used as the basis for allocating returns from production among the Working Interest Owners until a total of 9,001,334 barrels of stock tank oil have been produced from the San Andres reservoir; after ultimate primary recovery has been achieved, the secondary participation percentages will become effective as the basis of allocation.

3. Plan of Waterflood

The proposed unit area contains some tracts on which drilling and recompletion work will be necessary before a full scale flood can be completely installed as presently planned. Sixty-one (61) basic 40-acre tracts, a total of 2469.81 acres, are included in the unit area, with 54 useable wells. The additional tracts are described below, along with their status as to useable San Andres wells.

Tracts on which no San Andres completion exists:

Unit L - Sec. 36-T16S-R36E
Unit J - Sec. 36-T16S-R36E

Tracts on which San Andres wells were plugged and abandoned:

Unit O - Sec. 35-T16S-R36E
Unit I - Sec. 2-T17S-R36E
Unit J - Sec. 2-T17S-R36E
Unit D - Sec. 5-T17S-R37E

A Queen-gas, Paddock-oil dual completion on Unit O - Section 1-T17S-R36E, will be recompleted in the San Andres formation and contributed to the unit.

Seventeen (17) injection wells and forty-four (44) producing wells will be utilized in flooding the San Andres formation. Initially, an inverted nine-spot injection pattern will be used, injecting 500 barrels of water per day per injection well. Proposed injection wells are designated on Figure No. 1

When flooding operations reach the point where those wells directly offsetting the injection wells designated on Figure No. 1 become economically useless as producing wells, they will be converted to injection wells. At the time when all direct offset wells to the presently proposed injection wells have been converted to injection wells, the flood pattern will have become a regular 160-acre nine-spot.

In most cases, the San Andres wells in the proposed unit are producing from open hole, with 5½ casing set above the pay section. The flood program will be initiated with injection into the open hole section. Study of flood performance will dictate the necessity of providing better control of the section injected by running liners and perforating at selected intervals.

Waters from two (2) oil producing formations, in addition to the San Andres, are present in the Lovington pool, and are produced at the following approximated rates:

Lovington Abo	1300 BWP
Lovington Paddock	130 BWP
Lovington San Andres	220 BWP

These rates suggest that a considerable amount of makeup water would be required at the proposed injection rate of 8500 barrels per day in addition to produced waters from oil bearing formations in the area if these waters were used.

The unit operator proposes to use as the principle source of injection water the Ogalalla formation water present in the Lovington Pool area. As the flood progresses and produced water from the unitized San Andres formation increases, this water will be used with the fresh Ogalalla water as the injection fluid.

A water analyst's report on several water sources is included herein as Figures No. 8 and No. 8A, and indicates that the San Andres and fresh waters may be mixed compatibly for injection purposes. Slight incompatibility was noted, caused by oxygen in the fresh water sample. This effect can be eliminated, however, by use of a closed water supply system.

It is possible that filtration equipment at the injection plant will be required, but available data is not sufficient to definitely establish a necessity for filtering. This question can be more firmly resolved by conducting filter tests at selected injection wellheads after injection equipment has been installed.

On Figure No. 7 is shown the proposed location of the distribution system for the waterflood.

V. Maps, Reports and Graphical Data

- Figure No. 1 - Unit Area and Injection Pattern
- Figure No. 2 - Structure Map
- Figure No. 3 - East-West Cross Section
- Figure No. 4 - North-South Cross Section
- Figure No. 5 - Primary Performance
- Figure No. 6 - Projected Secondary Performance Curves
- Figure No. 7 - Distribution System
- Figure No. 8 - Water Analysis
- Figure No. 8A - Water Compatibility Tests

RESULT OF WATER ANALYSES

BEST AVAILABLE COPY

TO: Mr. A. R. Saugardner
P. O. Box 36, Hobbs, New Mexico

LABORATORY NO. R105958
SAMPLE RECEIVED 10-23-59
RESULTS REPORTED 10-31-59

COMPANY Skelly Oil Company LEASE Lovington
FIELD OR POOL Lovington
SECTION _____ BLOCK _____ SURVEY _____ COUNTY Lea STATE N. M.

SOURCE OF SAMPLE AND DATE TAKEN:

- NO. 1 Fresh water - taken from storage tank at gasoline plant. 10-23-59
- NO. 2 Produced (San Andres) water - taken from heater-treater on State "K". 10-23-59
- NO. 3 Produced (Paddock) water - taken from heater-treater on State "M" & "O". 10-23-59
- NO. 4 Produced (Akk) water - taken from heater-treater on State "O". 10-23-59

REMARKS: _____

CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4
SPECIFIC GRAVITY AT 80°F	1.0028	1.0529	1.1036	1.0306
PH WHEN SAMPLED	7.5	7.3	6.7	7.2
PH WHEN RECEIVED	7.4	7.0	6.8	7.2
TOTAL ALKALINITY AS CaCO ₃	172	524	168	1,052
SUPERSATURATION AS CaCO ₃	0	36	20	52
UNDERSATURATION AS CaCO ₃	-	-	-	-
TOTAL HARDNESS AS CaCO ₃	230	9,593	13,011	6,791
CALCIUM AS CaCO ₃	90	5,955	34,387	4,906
MAGNESIUM AS CaCO ₃	110	3,638	8,624	1,883
SODIUM AND/OR POTASSIUM				
SULFATE AS SO ₄	108	2,683	322	2,959
CHLORIDE AS NaCl	51	70,285	132,521	35,750
SILICA AS SiO ₂	13.6	5.0	11.9	7.8
IRON AS Fe	0.28	2.16	58.8	0
MANGANESE AS Mn				
BARIUM AS Ba	none	none	none	none
TURBIDITY ELECTRIC	0	26.7	28.4	50.0
COLOR AS Pt	0	30.8	27.4	36.3
DISSOLVED SOLIDS AT 103°C				
TOTAL SOLIDS AT 103°C				
TEMPERATURE °F	65	110	116	116
CARBON DIOXIDE CALCULATED	16.8	52.4	67.2	137
DISSOLVED OXYGEN WINKLER	2.2	none	none	none
HYDROGEN SULPHIDE	none	10	none	1,500
RESIDUAL CHLORINE	none	none	none	none
RESISTIVITY OHMS/CC	1,606	16	10	26

NOTE: All Results Reported as Parts Per Million Divide by 17.1 to Convert to Grains Per Gallon

Additional Determinations and Remarks Compatibility tests and letter of recommendation attached.

Treat-Rite Water Laboratories, Inc.
 WATER CONSULTANTS SINCE 1938
 BACTERIAL AND CHEMICAL ANALYSIS
 P. O. BOX 548 PHONE W13-4781
 MONAHANS, TEXAS

To: Mr. A. H. [unclear]
 P. O. Box 38
 Hobbs, New Mexico

Laboratory No. H205958-A
 Samples received 10-23-59
 Results reported 10-31-59

Company: Shell Oil Company
 County: Lea, New Mexico
 Field: Lovington
 Lease: Lovington

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Subject: To determine the compatibility between the waters listed and described below.

<u>Mixture of waters</u>	<u>Turbidity, pps Theoretical Computable</u>	<u>Turbidity, pps Actual</u>
1. Equal mixture of Fresh & San Andres	14.4	13.7
2. Equal mixture of Fresh / Padlock	14.2	52.4
3. Equal mixture of Fresh & Abo	25.0	5.6
4. Equal mixture of San Andres & Padlock	28.6	53.4
5. Equal mixture of San Andres & Abo	39.4	39.9
6. Equal mixture of Padlock & Abo	39.2	269.0
7. Equal mixture of Fresh, San Andres Padlock, & Abo	26.8	218.0

Remarks: Letter of recommendation attached.

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1962 JUL 2 10 30 AM '62

STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

June 29, 1962

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, N. M.

Case No. 2592
File

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Skelly Oil Company which seeks permission to institute a secondary recovery project in the Lovington-San Andres pool. This matter is numbered Case 2592 on your June 28, 1962 docket.

Mr. Jacobs of Skelly Oil Company has informed this office that each injection well will be equipped with packer placed just above the San Andres formation and injection will made through a plastic coated tubing into the San Andres formation. In view of this statement, I have concluded that there will be no threat of contamination to the fresh waters which may occur in this area. Therefore, this office offers no objection to the granting of the application.

o

Very truly yours,

S. E. Reynolds
State Engineer

By: *Frank E. Irby*
Frank E. Irby
Chief
Water Rights Division

FEI/ma
cc-Skelly Oil Co.
F. H. Hennighausen

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION

TELEGRAM

W. P. MARSHALL, PRESIDENT

1201 (4-60)

SYMBOLS

DL=Day Letter

NL=Night Letter

LT=International Letter Telegram

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination

LA132 SSH211

JUN 27 1962 1 45

L HBA059 PD=HOBBS NMEX 27 128P MST=
NEW MEXICO OIL CONSERVATION COMMISSION, DAN MEADOR=
SANTA FE NMEX=

CASE NUMBER 2592 AND CASE NUMBER 2593 SOCONY MOBIL OIL COMPANY INC AS A WORKING INTEREST OWNER IN THE LOVINGTON SAN ANDRESS UNIT RECOMMENDS THAT THE UNIT AND FIELD WIDE WATER FLOOD PROGRAM AS PROPOSED BY SKELLY BE APPROVED BY THE COMMISSION=

GLEN W BARB PRODUCING SUPERINTENDENT MOBIL OIL CO
BOX 2406 HOBBS...

JUN 27 PM 2:00
MAIL OFFICE 000

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION

TELEGRAM

W. P. MARSHALL, PRESIDENT

1201 (4-60)

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JUN 26 PM 12 04

K TUB156 NL PD=FAX TULSA OKLA 26=
OIL CONSERVATION COMMISSION=
STATE LAND OFFICE BLDG SANTA FE NMEX=
AS A WORKING INTEREST OWNER IN THE LOVINGTON SAN ANDRES UNIT AMERADA PETROLEUM CORPORATION CONCURS IN THE APPLICATION OF SKELLY OIL COMPANY FOR THE APPROVAL OF THE UNIT AGREEMENT AND SECONDARY RECOVERY PROJECT IN CASES NO 2592 AND 2593 SET FOR 9 AM JUNE 28 1962=
R S CHRISTIE AMERADA PETROLEUM CORPORATION==

2592 2593 9 28 1962...

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

CLASS OF SERVICE
This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION TELEGRAM

SYMBOLS
DL=Day Letter
NL=Night Letter
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W. P. MARSHALL, PRESIDENT

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LA138 DB293

D HSB345 PD=HOUSTON TEX 13 159P CST=
NEW MEXICO OIL CONSERVATION COMMISSION=
SANTA FE NMEX=

JUN 13 PM 1 30
Case 2593

ATTN MR PORTER UNITED PRODUCING CO., INC. AS A WORKING INTEREST OWNER OF TWO WELLS IN THE LOVINGTON SAN ANDRES FIELD FAVORS UNITIZATION PER REQUEST OF SKELLY OIL COMPANY AT HEARING SCHEDULED FOR JUNE 28, 1962=

UNITED PRODUCING CO INQ PAUL S ACHE JR==

MAIL OFFICE 000

CLASS OF SERVICE
This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION TELEGRAM

SYMBOLS
DL=Day Letter
NL=Night Letter
LT=International Letter Telegram

W. P. MARSHALL, PRESIDENT

1201 (4-60)

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LA120 SSB332

L RW 058 PD=ROSWELL NMEX 26 1155A MST=
NEW MEXICO OIL CONSERVATION COMMISSION=
SANTA FE NMEX=

BEST AVAILABLE COPY
JUN 26 PM 12 13

IN RE CASES NOS. 2592 AND 2593 DOCKET OF JUNE 28, 1962. THIS IS TO ADVISE THAT SHELL OIL COMPANY SUPPORTS THE APPLICATION OF SKELLY OIL COMPANY FOR PERMISSION TO INSTITUTE A SECONDARY RECOVERY PROJECT IN THE LOVINGTON SAN ANDRES POOL AND THEIR APPLICATION FOR APPROVAL OF THE LOVINGTON SAN ANDRES UNIT AGREEMENT=

SHELL OIL CO R L RANKIN DIVISION PRODUCTION MANAGER..

Case 2593

Sunray DX Oil Company

Tulsa 2, Oklahoma

1962 JUN 14 PM 3 06

Production Department



R. W. Griffith
Manager, Unitization
and Gas Sales Division

June 14, 1962

PG-7

New Mexico Oil Conservation Commission
State Land Office Building
College Avenue
Santa Fe, New Mexico

ATTENTION: Mr. A. L. Porter, Jr.

Re: Lovington San Andres Unit
Lea County, New Mexico

Gentlemen:

Skelly Oil Company and others have negotiated the formation of the referenced Unit. Skelly has advised us that a hearing will be held before the Commission on June 28, 1962 for approval of the Unit and a waterflood of the unitized formation.

Sunray DX Oil Company executed the Unit Agreement on May 18, 1962. Sunray supports Skelly's application and we respectfully request that the Commission approve both the Unit and the waterflood.

Very truly yours,

SUNRAY DX OIL COMPANY

William R. Loar
Superintendent of Unitization

DGP:lc

cc: Skelly Oil Company
P. O. Box 1650
Tulsa 2, Oklahoma
Attention: Mr. Robert G. Hiltz

Case 25-93

PAN AMERICAN PETROLEUM CORPORATION

RECEIVED

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FORT WORTH 1, TEXAS

KENNETH J. BARR
DIVISION ENGINEER

JUL 20 11 04

June 14, 1962

File: GHF-269-986.510.1

Subject: NMOCC Hearing
Lovington San Andres Unit
Lea County, New Mexico

Mr. A. L. Porter, Jr.
Secretary-Director
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

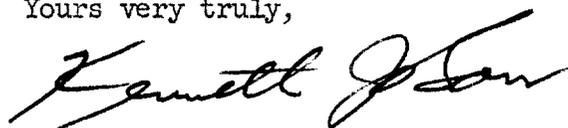
Dear Sir:

Reference is to the subject hearing which is docketed for June 28, 1962, on the application of Skelly Oil Company for approval of the proposed Lovington San Andres secondary recovery unit.

Pan American Petroleum Corporation supports Skelly in their application for approval of this project in that it is felt that the project will be in the interest of promoting conservation through increased recovery by secondary recovery methods.

Please read this letter into the record of the hearing.

Yours very truly,



cc: Skelly Oil Company
Tulsa 2, Oklahoma

KEJ/20
MR. Davis

GLENN B. CHADWICK
5011 ELMWOOD AVENUE
LOS ANGELES 4, CALIFORNIA

June 13, 1962

Conservation Commission,
State of New Mexico,
Sante Fe, N. M.

SEE AVAILABLE COPY

Re: Lovington
San Andreas Unit,
Lea County, New Mexico

Gentlemen:

This letter is to tell you that
I have signed the necessary papers approv-
ing the unitization and to express the hope
that your commission will act favorably on
the formation of the unit.

Yours truly,

Looper for
Mr. Robert G. Siltz

JUN 20 1962

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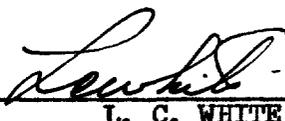
BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

IN THE MATTER OF THE APPLICATION OF)
SKELLY OIL COMPANY FOR AUTHORITY TO)
INJECT FLUID INTO THE SAN ANDRES)
FORMATION IN THE LOVINGTON SAN ANDRES)
FIELD, LEA COUNTY, NEW MEXICO.)

Case No. 2592

ENTRY OF APPEARANCE

Comes now L. C. WHITE of GILBERT, WHITE AND GILBERT, Santa Fe, New Mexico,
and herewith enters his formal appearance in the above application as resident
counsel for Skelly Oil Company.



L. C. WHITE

GILBERT, WHITE AND GILBERT
ATTORNEYS AT LAW
SANTA FE, NEW MEXICO

Secondary recovery



Case 2592

MAIN OFFICE OCG

SKELLY OIL COMPANY

P. O. Box 1650

TULSA 2, OKLAHOMA

June 1, 1962

PRODUCTION DEPARTMENT

- C. L. BLACKSHER, VICE PRESIDENT
- W. P. WHITMORE, MGR. PRODUCTION
- W. D. CARSON, MGR. TECHNICAL SERVICES
- ROBERT G. HILTZ, MGR. JOINT OPERATIONS
- GEORGE W. SELINGER, MGR. CONSERVATION

From set for 6/28 hrg.

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Attention: Mr. Richard Morris, Attorney

Gentlemen:

We are attaching an original and three copies of an application for authority to inject fluid into the San Andres formation in the Lovington San Andres Unit Area, Lea County, New Mexico. We are attaching to this application Exhibit "A" which is a Secondary Recovery Study of the Lovington San Andres Reservoir.

At the present time we do not have logs of the injection wells available for filing, but we will, however, file such logs, as are available, at the hearing. We will, also, at the hearing file an exhibit describing the proposed injection wells' casing and cementing program.

We would appreciate this matter being set for hearing on June 28, 1962, as discussed in our telephone conversation and our telegram of May 31, 1962.

Very truly yours,

George W. Selinger

RJJ:br
Attach.

cc: Mr. L. C. White
Gilbert, White and Gilbert
Bishop Building
Santa Fe, New Mexico

Hand to [unclear] 6/15/62