

NEW MEXICO WESTERN OIL AND GAS COMPANY
MAIN OFFICE 000

1501 MERCANTILE BANK BUILDING
DALLAS 1, TEXAS

October 28, 1954

Mr. C. F. Bedford
Division Production Superintendent
Stanolind Oil and Gas Company
Oil and Gas Building
Fort Worth, Texas

Re: Huerfano Unit Agreement
San Juan County, New Mexico

Dear Mr. Bedford:

Pursuant to the terms and provisions of Section 16 of the Huerfano Unit Agreement and Section 12 of the Unit Accounting Agreement relative thereto, we wish to advise that New Mexico Western Oil and Gas Company, as the owner of at least a majority of the working interest under the Oil and Gas Leases covering the following described lands situated within the Huerfano Unit Area, desires that Stanolind Oil and Gas Company, as Unit Operator under the captioned Unit Agreement, drill, or cause to be drilled, Pictured Cliffs Formation gas wells on each of the following described 160 acre locations:

Township 26 North, Range 9 West, N.M.P.M.

Section 5:	SW/4, NE/4
Section 6:	NE/4, SE/4
Section 7:	NE/4, SE/4
Section 8:	SW/4, NW/4, NE/4
Section 9:	SW/4, NE/4
Section 17:	SE/4, SW/4, NW/4, NE/4
Section 21:	SE/4, SW/4, NW/4
Section 23:	SE/4, SW/4
Section 26:	SE/4, NE/4, NW/4, SW/4
Section 27:	SE/4, NE/4, NW/4, SW/4

October 28, 1954

Township 26 North, Range 10 West, N.M.P.M.

Section 8: SW/4
Section 9: SE/4
Section 10: SW/4

Township 26 North, Range 11 West, N.M.P.M.

Section 1: NW/4, SW/4, SE/4

Township 27 North, Range 10 West, N.M.P.M.

Section 33: NW/4

Likewise pursuant to the provisions of the captioned Unit Agreement and Unit Operating Agreement relative thereto, this will advise that, in the absence of notice delivered to the undersigned within ninety (90) days from the date hereof that Stanolind, as Unit Operator, elects to drill such wells and actually has commenced operations for the drilling thereof, New Mexico Western Oil and Gas Company intends to avail itself of the prerogative granted to it, as the owner of a majority working interest under each of the above listed tracts, to drill, or cause to be drilled, Pictured Cliffs Formation gas wells on each of such 160 acre locations, and to recover, out of the production from each of such wells, one hundred and fifty percent (150%) of the cost of drilling, completing, testing and equipping the same, together with one hundred percent (100%) of the operating costs attributable thereto to the date of full reimbursement.

In the event Stanolind Oil and Gas Company elects to drill Pictured Cliffs Formation gas wells on any or all of the tracts mentioned hereinabove as Unit Operator of the Huerfano Unit Area we will greatly appreciate the courtesy if you would so inform us at your earliest convenience.

Yours very truly,

NEW MEXICO WESTERN OIL AND GAS COMPANY

By

President

JGT:mch

cc: U.S. Geological Survey
Roswell, New Mexico

Oil Conservation Commission
Santa Fe, New Mexico

Commissioner of Public Lands
Santa Fe, New Mexico

All Working Interest Owners

NEW MEXICO WESTERN OIL AND GAS COMPANY

STANOLIND OIL AND GAS COMPANY

OIL AND GAS BUILDING

FORT WORTH, TEXAS

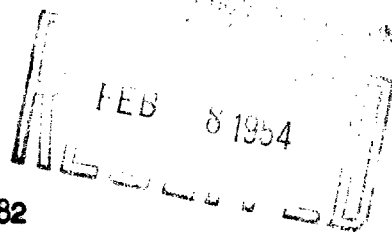
C. F. BEDFORD

DIVISION PRODUCTION SUPERINTENDENT

February 4, 1954

File: RLH-8034-216.82

Subject: Plan of Development for 1954,
Pictured Cliffs Zone,
Huerfano Unit, San Juan
County, New Mexico



REGISTERED - RETURN RECEIPT REQUESTED

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

Dear Sir:

Enclosed herewith is a Plan of Development for the Calendar Year 1954 for the Pictured Cliffs Zone, Huerfano Unit, San Juan County, New Mexico, executed by Stanolind on December 29, 1953.

In your letter of January 4, 1954, you advised that this Plan of Development had been approved; however, you inadvertently overlooked executing the instrument. We would appreciate your executing the attached instrument at your earliest convenience.

Very truly yours,

A handwritten signature in cursive script, appearing to read "C. F. Bedford".

RLH/ek
Attachment

2/5/54

STANOLIND OIL AND GAS COMPANY
FORT WORTH, TEXAS

December 24, 1954

File: RLH-8542-216.82

Subject: Huerfano Unit
San Juan County,
New Mexico,
Revised Plan of Development
for 1954

Director, U. S. Geological Survey
State of New Mexico
Roswell, New Mexico

Commissioner of Public Lands
State of New Mexico
Santa Fe, New Mexico

Oil Conservation Commission ✓
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

In our letter dated December 22, 1954, File: RLH-8530-216.82 we transmitted a revised Plan of Development for the subject unit for the remainder of 1954. Inadvertently however, the letter was placed in the mail unsigned. Transmitted herewith are additional signed copies of our revised Plan of Development for 1954.

Very truly yours,

RLH/jhl
Attachment

*file
cont 115
unsigned Plans referred
disposed of
New*

[Handwritten signature]

[Handwritten signature]

COPY

STANOLIND OIL AND GAS COMPANY

OIL AND GAS BUILDING

FORT WORTH, TEXAS

C. F. BEDFORD

DIVISION PRODUCTION SUPERINTENDENT

December 22, 1954

File: RLH-8530-216.82

Subject: Huerfano Unit, San Juan
County, New Mexico, Revised
Plan of Development for 1954

The Oil and Gas Supervisor (6)
 U. S. Geological Survey
 Roswell, New Mexico

Commissioner of Public Lands (3)
 State of New Mexico
 Santa Fe, New Mexico

Oil Conservation Commission (3)
 State of New Mexico
 Santa Fe, New Mexico

Gentlemen:

The Plan of Development for 1954 for the subject unit, as submitted by Stanolind on December 29, 1953, was approved by the USGS on January 26, 1954, by the Commissioner of Public Lands on January 12, 1954, and by the Oil Conservation Commission on January 4, 1954. The proposed additional wells listed thereon for drilling during 1954 are as follows: SW/4 Section 29-27N-10-W, SW/4 Section 33-27N-10W, SW/4 Section 3-26N-10W, NE/4 Section 4-26N-10W, NW/4 Section 36-26N-10W, SE/4 Section 36-26N-10W, NE/4 Section 4-25N-9W.

Because of the stepped-up development rate in the western portion of the unit, the drilling program for 1954 has been revised to the extent that instead of the seven wells listed above, a total of 11 wells have been completed. The locations of these 11 wells are listed below with appropriate remarks.

<u>Location</u>	<u>Remarks</u>
SW/4 Section 29, T-27-N, R-10-W	Original Plan of Development for 1954. Completed as unit well No. 24, 7-9-54, 1782' TD, IP 402 MCFPD.
SW/4 Section 33, T-27-N, R-10-W	Original Plan of Development for 1954. Completed as well No. 24 22, 7-2-54, 2164' TD, IP 589 MCFPD. <u>22</u>
NE/4 Section 4, T-26-N, R-10-W	Original Plan of Development for 1954. Presently drilling as Well No. 44, located inside participating area.

approved
1/10/54
OK

December 22, 1954

<u>Location</u>	<u>Remarks</u>
SE/4 Section 5, T-26-N, R-9-W	Completed as Well No. 26, 11-30-54, 2220' TD, Pre-potential test 100 MCFPD.
NE/4 Section 23, T-26-N, R-9-W	Completed as Well No. 27, 9-20-54. 2062 TD, IP 1808 MCFPD, forced offset.
SE/4 Section 9, T-26-N, R-9-W	Completed as Well No. 28, 9-23-54. 2122' TD, IP 3300 MCFPD, forced offset.
NW/4 Section 9, T-26-N, R-9-W	Completed as Well No. 29, 10-18-54. 2188' TD, IP 264 MCFPD.
SE/4 Section 8, T-26-N, R-9-W	Completed as Well No. 31, 11-24-54. TD 2320', dry hole.
SE/4 Section 23, T-26-N, R-9-W	Well No. 32-A, drilling at 1060' as of 12-8-54.
NE/4 Section 21, T-26-N, R-9-W	Well No. 35, drilling at 1980' as of 12-8-54.
NW/4 Section 23, T-26-N, R-9-W	Well No. 36, TD 2047', drilling plug at 2005' as of 12-8-54.

Inasmuch as the above outlined revised drilling program exceeds the program outlined in our original Plan of Development for 1954, and since the wells have either been completed or are in the process of being completed, it is presumed that no approval of the revised plan will be required. Accordingly, we are submitting the above-described revised program for your information.

Yours very truly,

RLH/jl

cc: All Working Interest Owners in
Huerfano Unit Area

APPROVED NEW MEXICO OIL CONSERVATION COMMISSION

BY W. P. YAL SECRETARY-DIRECTOR
DATE 1/10/55

WORKING INTEREST OWNERS IN HUERFANO UNIT AREA

New Mexico Western Oil and Gas Company
1501 Mercantile Bank Bldg.
Dallas, Texas

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas

Three States Natural Gas Company
Corrigan Tower
Dallas, Texas

Sunland Refining Corporation
East & Calif. Avenues
Fresno, California
Attention: Mr. G. A. Olsen

H. K. Riddle
P. O. Box 1055
Albuquerque, New Mexico

Wm. G. Johnston, Est.,
Wm. J. Payne, Exc.
2903 First National Bank Bldg.
Oklahoma City, Oklahoma

C. V. Lyman
P. O. Box 1141
Midland, Texas

Brookhaven Oil Company
P. O. Box 644
Albuquerque, New Mexico

John A. Daniel
Rutledge Pike
Knoxville, Tennessee

Harold Kogan
345 - 15th Avenue
San Francisco, California



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 6721
Roswell, New Mexico

January 28, 1954

FEB 1 1954

Stanolind Oil and Gas Company
Oil and Gas Building
Fort Worth, Texas

Gentlemen:

Reference is made to your letter of January 21, amending the 1953 plan of development for the Pictured Cliffs formation for the Huerfano unit agreement, San Juan County, New Mexico, I-Sec. No. 731. The amended plan was submitted for the reason that only eight of the twelve wells proposed in the original plan were completed during the calendar year 1953.

Inasmuch as the wells have already been completed, the amended plan does not appear subject to approval but is hereby accepted for the record.

Very truly yours,

JOHN A. ANDERSON

Regional Oil and Gas Supervisor

Copy to: Commissioner of Public Lands, Santa Fe
New Mexico Oil Conservation Commission, Santa Fe

IN REPLY REFER TO:



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 6721
Roswell, New Mexico

January 26, 1954

Stanolind Oil and Gas Company
Oil and Gas Building
Fort Worth, Texas

Gentlemen:

The plan of development dated December 29, 1953, for the Huerfano unit area, New Mexico, I-Sec. No. 731, for the calendar year 1954 has been approved on this date subject to like approval by the Commissioner of Public Lands, State of New Mexico, and the New Mexico Oil Conservation Commission.

Three approved copies of the plan are enclosed herewith.

Very truly yours,


JOHN A. ANDERSON
Regional Oil and Gas Supervisor

Enclosures

Copy to: Commissioner of Public Lands
Oil Conservation Commission ✓

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

January 4, 1954

C

Stanolind Oil and Gas Company
Oil and Gas Building
Fort Worth, Texas

O

Attention: Mr. C. F. Bedford

P

Gentlemen:

We are enclosing herewith approved copy of Plan of
Development for 1954, Huerfano Unit, San Juan County,
New Mexico.

Very truly yours,

Y

R. R. SPURRIER
Secretary and Director

RRS:vc
Encl.

STANGLIND OIL AND GAS COMPANY

OIL AND GAS BUILDING

FORT WORTH, TEXAS

C. F. BEDFORD

DIVISION PRODUCTION SUPERINTENDENT

December 29, 1953

File: JTM-7924-216.82

Subject: Plan of Development
for 1954, Huerfano Unit
San Juan County, New Mexico

JAN 2 1954

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

In compliance with the provisions of Section 9 of the Huerfano Unit Agreement, we are submitting herewith for your consideration, two (2) copies of a Plan of Development for the year 1954 for the Pictured Cliffs Zone of the Huerfano Unit in San Juan County, New Mexico.

It is requested that this plan be reviewed by your office and if it meets with approval, please return one (1) approved copy to this office as soon as practicable.

This Plan of Development is being filed simultaneously with the Oil and Gas Supervisor of the U.S.G.S. and the Commissioner of Public Lands.

Yours very truly,

JTM:ek:gp
Attach.KKB
1/2/54

PLAN OF DEVELOPMENT FOR THE CALENDAR YEAR 1954
PICTURED CLIFFS ZONE, HUERFANO UNIT, SAN JUAN COUNTY
NEW MEXICO

TO: THE OIL AND GAS SUPERVISOR
U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

In compliance with Section 9 of the Huerfano Unit Agreement approved by the Director of the U. S. Geological Survey on June 6, 1950, by the Commissioner of Public Lands of the State of New Mexico on September 26, 1949, and by the Oil Conservation Commission of the State of New Mexico on September 20, 1949, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and all other owners of oil and gas leases or of operating rights under oil and gas leases covering lands committed to the Huerfano Unit, hereby submits a plan of development for the Pictured Cliffs Zone of said Huerfano Unit as follows:

1. Description of Participating Area in Pictured Cliffs Zone:

The Participating Area for the Pictured Cliffs Zone is comprised of the following described acreage:

T-26-N, R-10-W

Section 4
Section 5
Section 6
N/2 Section 8
SE/4 Section 8
N/2 Section 9
SW/4 Section 9

T-26-N, R-11-W

NE/4 Section 1

T-27-N, R-10-W

SW/4 Section 29
Section 31
Section 32
SW/4 Section 33

T-27-N, R-11-W

E/2 Section 36

All located in San Juan County, New Mexico, comprising approximately 4,960 acres.

2. Past Development History in the Pictured Cliffs Zone:

Twenty-four wells have now been drilled to the Pictured Cliffs Zone in the Huerfano Unit. Five of these wells are non-productive and have been abandoned. One well, Huerfano Unit No. 5, has indicated an ability to produce gas in small quantities; however, the workover was not successful and the well is presently shut-in. Eighteen wells have been completed as producing wells, as follows:

Participating Area Wells: -

<u>Well</u>	<u>Location</u>	<u>Comp. Date</u>	<u>Initial Potential</u>
✓ Huerfano Unit #6	SW/4, Sec. 31, 27-N, 10-W	11/16/51	Open flow 2830 MCFPD
✓ Huerfano Unit #9	NW/4, Sec. 1, 26-N, 11-W	8/14/52	Open flow 396 MCFPD
✓ Huerfano Unit #10	NE/4, Sec. 6, 26-N, 10-W	9/9/52	Open flow 3400 MCFPD
✓ Huerfano Unit #11	SW/4, Sec. 6, 26-N, 10-W	9/22/52	Open flow 116 MCFPD
✓ Huerfano Unit #14	SW/4, Sec. 5, 26-N, 10-W	9/29/52	Open flow 971 MCFPD
✓ Huerfano Unit #16	NE/4, Sec. 36, 27-N, 11-W	10/17/52	Open flow 1981 MCFPD
✓ Huerfano Unit #17	NE/4, Sec. 31, 27-N, 10-W	9/30/52	Open flow 1540 MCFPD
✓ Huerfano Unit #18	SW/4, Sec. 32, 27-N, 10-W	10/25/52	Open flow 1408 MCFPD
✓ Huerfano Unit #19	NE/4, Sec. 5, 26-N, 10-W	11/3/52	Open flow 1700 MCFPD
✓ Huerfano Unit #13	NE/4, Sec. 8, 26-N, 10-W	12/1/52	Open flow 645 MCFPD
✓ Huerfano Unit #12	SW/4 Sec. 4, 26-N, 10-W	12/6/52	Open flow 1915 MCFPD
- Huerfano Unit #15	NE/4, Sec. 32, 27-N, 10-W	5/25/53	Open flow 742 MCFPD
- Huerfano Unit #21	NE/4, Sec. 9, 26-N, 10-W	5/11/53	Open flow 1700 MCFPD
- Huerfano Unit #25	SW/4, Sec. 9, 26-N, 10-W	6/27/53	Open flow 201 MCFPD

Four wells have been completed outside of the Participating Area, as follows:

<u>Well</u>	<u>Location</u>	<u>Comp. Date</u>	<u>Initial Potential</u>
- Huerfano Unit #23	SE/4, Sec. 19, 26-N, 9-W	9/11/53	Open flow 139 MCFPD
- Lucille Pipkin #1	NW/4, Sec. 1, 25-N, 10-W	10/30/53	Open flow 289 MCFPD
- Lucille Pipkin #2	NE/4, Sec. 1, 25-N, 10-W	10/30/53	Open flow 1738 MCFPD
Earl Ader, Jr. #1 (Formerly Huerfano Unit #2)	SW/4, Sec. 25, 26-N, 10-W	10/21/50	Open flow 425 MCFPD

If the Lucille Pipkin No. 1 and No. 2 wells are considered commercially productive, application will be made for a Participating Area surrounding these two wells. Well No. 23 and Earl Ader, Jr. No. 1, completed as non-commercial wells, will be operated in accordance with Section 10 of the Unit Agreement.

3. Proposed Additional Wells:

It is proposed that a total of seven additional wells will be drilled to the Pictured Cliffs Zone during 1954. One exploratory well will be drilled in the NE/4 Section 4, T-25-N, R-9-W, and six additional wells will be drilled at locations as follows:

SW/4, Section 29, T-27-N, R-10-W	24
SW/4, Section 33, T-27-N, R-10-W	22 22
SW/4, Section 3, T-26-N, R-10-W	
NE/4, Section 4, T-26-N, R-10-W	44
NW/4, Section 36, T-26-N, R-10-W	
SE/4, Section 36, T-26-N, R-10-W	

4. Spacing of Wells:

Sufficient data are not yet available from which to determine the ultimate desired spacing in the area; therefore, it is planned to explore the Pictured Cliffs Zone by drilling one additional well per section until more information regarding the nature of the reservoir has been obtained. The practice of exploratory drilling of one well per section will more quickly define the pool limits.

5. Well Casing Program:

The well casing program will generally follow the program currently in use in the Pictured Cliffs wells in San Juan County, including such surface casing and other casing as may be required by the Supervisor, the Commissioner, and the Commission, or as set forth in approvals of the applicable U.S.G.S. and State of New Mexico forms. The producing string of casing may be set and cemented either on top, or through, or partially through, the producing zone.

6. Offset Obligations:

The Unit Operator, on behalf of the owners of working, royalty, or other interests, in the Huerfano Unit, will take appropriate and adequate measures to prevent drainage from lands subject to the Huerfano Unit Agreement by wells on lands not subject to said agreement or pursuant to applicable regulations, will pay a fair and reasonable compensatory royalty as provided in Section 15 of the Huerfano Unit Agreement.

7. Further Development:

This plan of development for the Pictured Cliffs Zone shall constitute the future drilling obligations of the Unit Operator pursuant to the provisions of the Huerfano

Unit Agreement for the Pictured Cliffs Zone for the period ending December 31, 1954.

It is further agreed that prior to the expiration of this plan of development, another plan of development shall be submitted to the above named addressed for further development of the Unit.

8. Effective Date:

This plan of development shall be effective January 1, 1954.

9. Modifications:

It is understood that portions of the Plan of Development herein outlined are dependent upon certain information to be obtained prior and subsequent to drilling, and other contingencies, such as availability of well casing; and for these reasons, this Plan of Development may be modified from time to time with the approval of the Supervisor, the Commissioner, and the Commission to meet changing conditions.

Submitted this 29th day of December, 1953.

STANOLIND OIL AND GAS COMPANY
UNIT OPERATOR

BY: C. F. Bedford
ITS ATTORNEY-IN-FACT



Approved this 4th day of January, 1954.

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

orig signed by
BY: C. E. Spencer
Secretary and Director

STANOLIND OIL AND GAS COMPANY

Trinidad, Colorado

December 10, 1953

File: GBJ-41.295

Re: Huerfano Unit
San Juan County,
New Mexico
AFE-8649

DEC 12 1953

Mr. John Anderson
Regional Oil and Gas Supervisor
U. S. Geological Survey
Roswell, New Mexico

Dear Mr. Anderson:

Please find herewith for Departmental distribution four (4) executed counterparts of "Ratification and Joinder of Unit Agreement and Unit Operating Agreement" executed by Lucille Pipkin. This interest was originally committed to the Unit Agreement by Lucille Pipkin in 1949 when the unit was originally formed. This instrument serves to commit her interest, Tract 47, to the Unit Operating Agreement and re-affirm the commitment to the Unit Agreement.

Stanolind Oil and Gas Company, Unit Operator, has approved the joinder.

Yours very truly,

Original
Signed by G. B. JENKINSON

G. B. Jenkinson

JW/gjc
Enclosures

cc: Oil Conservation Commission
Santa Fe, New Mexico

Commissioner of State Lands
Santa Fe, New Mexico

Lucille Pipkin
P. O. Box 1174
Roswell, New Mexico

COPIES

RATIFICATION AND JOINDER OF UNIT AGREEMENT AND UNIT OPERATING AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Huerfano Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, and in consideration of the execution or ratification by other working interest owners of the contemporary Unit Operating Agreement which relates to said Unit Agreement, the undersigned owners of a certain Federal lease, viz:

USA Lease No. Santa Fe 073020, covering Lots 1, 2, 3, 4, S/2 N/2, S/2

Sec. 1 and N/2, E/2 SE/4 Sec. 12 - T25N-R10W, N.M.P.M., New Mexico

hereby consents to the inclusion of said lands within the said Unit Agreement, approves and adopts the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative, agrees that the term of said leases is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agrees that the drilling, development, and producing requirements of said leases and other contracts relating thereto shall be deemed fully performed by the performance of the provisions of said Unit Agreement, and agrees that payment for or delivery of oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the above described lands regardless of actual production therefrom shall constitute full performance of all such obligations to the undersigned existing under said leases.

For a like consideration, the undersigned does hereby expressly ratify, approve, adopt, confirm, and join in said Unit Operating Agreement to the extent of the undersigned's leasehold interest in the above described lands, and agrees to be governed by all the terms and provisions thereof as a working interest owner, as fully to all intents and purposes as though the undersigned had originally executed said Unit Operating Agreement and all counterparts thereof.

And the undersigned does especially agree to the allocation of cost as set forth in said Unit Operating Agreement and the Exhibits attached thereto.

This Agreement shall inure to the benefit of and be binding upon the successors and assigns of the undersigned.

ADDRESS:

Box 1174
Corral, New Mexico

DATE:

10/24/53

Lucille Pipkin
LUCILLE PIPKIN

STATE OF San Mexico)
COUNTY OF Chaves)

On this 24 day of October, 1953, before me personally appeared Frederick Lipkin, to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that he executed the same as a free act and deed.

Given under my hand and seal of office this 34 day of October, 1953

My commission expires:

7/5/54

Joseph Robert
Notary Public

APPROVED

ATTEST:

DATE:

STANOLIND OIL AND GAS COMPANY
UNIT OPERATOR

Ray A. McAdams
Assistant Secretary

DEC 9 1953

By Frank
Vice President

Address: P. O. Box 591, Tulsa, Oklahoma

STATE OF San Mexico)
COUNTY OF Chaves)

On this 1st day of December, 1953, before me appeared Frederick Lipkin, to me personally known, who, being by me duly sworn, did say that he is the Vice President of STANOLIND OIL AND GAS 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 Frederick Lipkin acknowledged said instrument to be the free act and deed of said corporation.

Given under my hand and seal of office this 1st day of December, 1953.

My commission expires:

My commission expires October 4, 1955

Maxine McAdams
Notary Public
Maxine McAdams

APR 24 1952

1952
Apr 1 23, 1953

Your File: AC-1197-216.62

Subject: Application for Approval
of an Initial Participating
Area Dakota Zone, Huerfano
Unit.
San Juan County, New Mexico

Stanolind Oil and Gas Company
Oil and Gas Building
Fort Worth, Texas

Attention: C. B. Bedford

Dear Sir:

Reference is made to your application for approval of an initial participating area for the Dakota Zone of the Huerfano Unit Agreement. The lands selected constituting of the Southwest Quarter (SE/4) Section 14, South Half (S/2) Section 13, East Half (E/2) Section 23, All of Section 24, All of the above acreage being in Township 26 North, Range 10 West, San Juan County, New Mexico are on federal sections. I have read the plan and approve same, subject however, to like approval being had and obtained from the United States Geological Survey and such United States Geological Survey approval being filed in this office.

Yours very truly,

GUY SHEPARD,
Commissioner of Public Lands
State of New Mexico

cc: U. S. Geological Survey
Boswell, New Mexico

Oil Conservation Commission
Santa Fe, New Mexico

March 26, 1953

File: JTM-7073-216.82-T

Subject: Initial Participating Area
Plus Nine Enlargements
Pictured Cliffs Zone
Huerfano Unit
San Juan County, New Mexico

Stanolind Oil and Gas Company
Oil and Gas Building
Fort Worth, Texas

Attention: C. F. Bedford

Dear Sir:

We are in receipt of your letter dated March 18, 1953 together with (2) copies of your Application for An Initial Participating Area Plus Nine Enlargements of the Pictured Cliffs Zone in the Huerfano Unit, San Juan County, New Mexico.

I have read your plan and approve same, subject however, to like approval being had and obtained from the United States Geological Survey and Oil Conservation Commission office and such approval being filed in this office.

Yours very truly,

E. S. WALKER
Commissioner of Public Lands
State of New Mexico

Enclosures 1

cc: U. S. Geological Survey
Roswell, New Mexico

Oil Conservation Commission
Santa Fe, New Mexico

C
O
P
Y

STANGLIND OIL AND GAS COMPANY

OIL AND GAS BUILDING

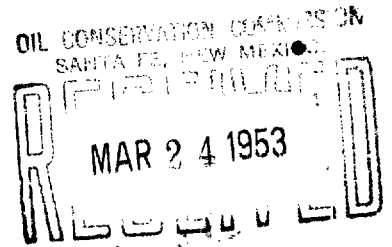
FORT WORTH, TEXAS**C. F. BEDFORD**

DIVISION PRODUCTION SUPERINTENDENT

March 18, 1953

File: JTM-7074-216.82-T

Subject: Initial Participating Area
Plus Nine Enlargements
Pictured Cliffs Zone
Huerfano Unit
San Juan County, New Mexico



Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

In accordance with the provisions in Section 10 of the Huerfano Unit Agreement, we are transmitting herewith for your consideration two (2) copies of an Application for An Initial Participating Area Plus Nine Enlargements of the Pictured Cliffs Zone in the Huerfano Unit, San Juan County, New Mexico.

If this proposed application meets with your approval, it is requested that one (1) copy be returned to this office at your convenience.

Copies of this application are being filed simultaneously with the Commissioner of Public Lands of the State of New Mexico and the United States Geological Survey.

Yours very truly,

C. F. Bedford
k

JTM/mc
Attach.

4/16
26-153

APPLICATION FOR APPROVAL OF THE INITIAL PARTICIPATING AREA AND THE
FIRST, SECOND, THIRD, FOURTH, FIFTH, SIXTH, SEVENTH, EIGHTH AND
NINTH ENLARGEMENTS
FOR THE PICTURED CLIFFS ZONE
HUERFANO UNIT
LEA COUNTY, NEW MEXICO

TO: THE DIRECTOR OF THE UNITED STATES GEOLOGICAL SURVEY
WASHINGTON, D. C.

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

Pursuant to the provisions of Section 10 of the Unit Agreement approved by the Director of the United States Geological Survey on June 6, 1950, by the Commissioner of Public Lands of the State of New Mexico on September 26, 1949, and by the Oil Conservation Commission of the State of New Mexico on September 20, 1949, affecting lands of the Huerfano Unit Area, San Juan County, New Mexico, Stanolind Oil and Gas Company, as unit operator, on behalf of itself, Slick Moorman Oil Company, R. E. Beaman and Ralph A. Johnson, all owners of oil and gas leases or of operating rights under oil and gas leases covering lands within the area hereinafter described, hereby submits for your approval a selection of lands to constitute the Initial Participating Area for the Pictured Cliffs Zone, Upper Cretaceous in Age, and the following enlargements of the Initial Participating Area, all located in San Juan County, New Mexico:

<u>Initial Participating Area</u>	<u>Proven Productive By</u>	<u>Acreage Description</u>
	Huerfano Unit No. 6 located in the SW/4 of Section 31, T-27-N, R-11-W, completed November 8, 1951. Potential 2830 MCF/Day.	SW/4, Section 31, T-27-N, R-10-W
<u>Enlargement</u>	<u>Proven Productive By</u>	<u>Acreage Description</u>
First	Huerfano Unit No. 9 located in the NE/4 of Section 1, T-26-N, R-11-W, completed August 14, 1952. Potential 396 MCF/Day.	NE/4, Section 1, T-26-N, R-11-W, W/2 of Section 6, T-26-N, R-10-W, and SE/4, Section 36, T-27-N, R-11-W.
Second	Huerfano Unit No. 10 located in the NE/4 of Section 6, T-26-N, R-10-W completed September 9, 1952. Potential 3400 MCF/Day.	W/2 Section 5, T-26-N, R-10-W, E/2 of Section 6, T-26-N, R-10-W, SE/4 Sect. 31, T-27-N, R-10-W, and SW/4 Section 32, T-27-N, R-10-W.
Third	Huerfano Unit No. 14 located in the SW/4 of Section 5, T-26-N, R-10-W, completed September 29, 1952. Potential 971 MCF/Day.	E/2 Section 5, T-26-N, R-10-W, N/2 Section 8, T-26-N, R-10-W.

<u>Enlargement</u>	<u>Proven Productive By</u>	<u>Acreage Description</u>
Fourth	Huerfano Unit No. 17 located in the NE/4 of Section 31, T-27-N, R-10-W. Completed September 30, 1952. Potential 1540 MCF/Day.	N/2 Section 31, T-27-N, R-10-W, NW/4 Section 32, T-27-N, R-10-W, SW/4 Section 29, T-27-N, R-10-W.
Fifth	Huerfano Unit No. 16 located in the NE/4 of Section 36, T-27-N, R-11-W. Completed October 17, 1952. Potential 1981 MCF/Day.	NE/4 Section 36, T-27-N, R-11-W.
Sixth	Huerfano Unit No. 18 located in the SW/4 of Section 32, T-27-N, R-10-W. Completed October 25, 1952. Potential 1408 MCF/Day.	E/2 Section 32, T-27-N, R-10-W.
Seventh	Huerfano Unit No. 19 located in the NE/4 of Section 5, T-26-N, R-10-W. Completed November 3, 1952, Potential 1700 MCF/Day.	W/2 Section 4, T-26-N, R-10-W, SW/4 Section 33, T-27-N, R-10-W.
Eighth	Huerfano Unit No. 13 located in the NE/4 of Section 8, T-26-N, R-10-W. Completed December 1, 1952. Potential 645 MCF/Day.	SE/4 Section 8, T-26-N, R-10-W, W/2 Section 9, T-26-N, R-10-W.
Ninth	Huerfano Unit No. 12 located in the SW/4 of Section 4, T-26-N, R-10-W. Completed December 6, 1952. Potential 1915 MCF/Day.	E/2 Section 4, T-26-N, R-10-W, NE/4 Section 9, T-26-N, R-10-W.

In support of this application, the applicant attaches hereto, and hereby makes a part of this application, the following:

1. A map marked Exhibit "A", showing thereon the Huerfano Unit, the participating area for the Pictured Cliffs Zone and the proposed First, Second, Third, Fourth, Fifth, Sixth, Seventh, Eighth and Ninth Enlargements for the initial participating area for the Pictured Cliffs Zone.
2. A brief geological report, together with cross-section and contour map marked Exhibit "B", to support the proposed enlargement for the initial participating area for the Pictured Cliffs Zone.
3. Schedules marked Exhibit "C", "C-1", "C-2", "C-3", "C-4", "C-5", "C-6", "C-7", "C-8", and "C-9" showing the participating percentage of each lease included or partially included in the proposed participating areas.

WHEREFORE, the Applicant respectfully requests that the Director of the United States

Geological Survey approve this selection of lands for the Initial Pictured Cliffs Participating Area and enlargements of the initial Pictured Cliffs Participating Area to be effective as follows:

Initial Participating Area effective as of December 1, 1951.

First Enlargement effective as of September 1, 1952.

Second Enlargement effective as of October 1, 1952.

Third Enlargement effective as of October 1, 1952.

Fourth Enlargement effective as of October 1, 1952.

Fifth Enlargement effective as of November 1, 1952.

Sixth Enlargement effective as of November 1, 1952.

Seventh Enlargement effective as of December 1, 1952.

Eighth Enlargement effective as of January 1, 1953.

Ninth Enlargement effective as of January 1, 1953.

Dated this 16th day of March, 1953.

STANOLIND OIL AND GAS COMPANY

By: 

Vice President



EXHIBIT "B"
GEOLOGICAL MEMORANDUM
Formation of Initial Participating Area
Plus Nine Enlargements, Pictured Cliffs
Zone, Huerfano Unit, San Juan County,
New Mexico

The necessity for the designation of a participating area within the Huerfano Unit was occasioned by the completion of Huerfano Unit No. 6, a Pictured Cliffs gas well. The initial potential of this well was officially gauged at 2,830 MCFGPD after being shot with 270 quarts of SNG from 2200' to 2095'.

Regionally the Huerfano Area is located on the southwest flank of the northwest-southeast trending San Juan Basin with very little evidence of important local structure. Low poorly defined terraces occur along the basin flanks, but appear to have only minor effect on gas accumulation. Huerfano and other nearby fields appear to be areas of increased effective porosity and permeability in wide spread sand bodies and may or may not be associated with local structural anomalies.

The attached northwest-southeast and southwest-northeast electric log cross-section, structural contour map, and initial potential map show the structural position and stratigraphic development of the Pictured Cliffs sandstone. The initial potentials of each well are also shown on the cross-section. It is apparent that structural position does not determine individual well productivity.

Electric log and core analyses indicate that the more important factor affecting or controlling the production from individual wells are the porosity, permeability, and percentage of water saturation of the sand at that place. These factors, as well as actual difference of sand thickness, cause considerable variations in effective net pay from well to well.

Due to this areal variation of effective pay, it would appear that development outward from each successful exploratory test would result in the drilling of a minimum number of poor or dry development wells.

The recommended initial participating area for the Huerfano Unit No. 6 well, shown on the attached index map together with the nine enlarged areas, includes the minimum acreage believed reasonably proven productive based on present development. This area will be subject to gradual enlargement as drilling continues.


Thomas A. Hendricks 7

SAN JUAN COUNTY, NEW MEXICO

OVERRIDING ROYALTY OWNERS & PERCENTAGE	WORKING INT.* PERCENT	LEASE PART.
None	Stanolind Slick-Moorman	9.964448
Victor B. Van Hook	1/32 of 8/8 Stanolind Slick-Moorman	23.470933
Decresa Corporation	1.69% Slick-Moorman	39.731440
Brookhaven Oil Co.	1.31%	
Ben Dansby, Jr. C. A. McAdams C. V. Lyman J. D. Hancock, whose wife is	5/8 of 1% 5/8 of 1% 5/8 of 1%	20.833179
Anna Marye Hancock	234.85/649.5 x 5/8 of 1%	
Eugene McElvaney	100 /649.5 x 5/8 of 1%	
Stephen Carlton Clark	.33333 x 449.5/649.5 x 5/8 of 1%	
Susan Vanderpoel Clark	.06666 x 449.5/649.5 x 5/8 of 1%	
Stephen Carlton Clark, Jr.	.03333 x 449.5/649.5 x 5/8 of 1%	
Alfred Corning Clark	.03334 x 449.5/649.5 x 5/8 of 1%	
Henry R. Labouisse	.03334 x 449.5/649.5 x 5/8 of 1%	
W. Beach Day	.03334 x 449.5/649.5 x 5/8 of 1%	
Paul S. Kerr	.03334 x 449.5/649.5 x 5/8 of 1%	
Charles E. Main	.03334 x 449.5/649.5 x 5/8 of 1%	
Arthur E. Palmer, Jr.	.02000 x 449.5/649.5 x 5/8 of 1%	
George Roberts	.02000 x 449.5/649.5 x 5/8 of 1%	
Charles J. Nourse	.02000 x 449.5/649.5 x 5/8 of 1%	
Raymond W. Ellis	.01666 x 449.5/649.5 x 5/8 of 1%	
Harlan M. Ellis	.01666 x 449.5/649.5 x 5/8 of 1%	
Edward D. Ellis	.00666 x 449.5/649.5 x 5/8 of 1%	

*Standlind and Slick-Moorman own 100% of 87.50% working interest (including overriding royalty).

EXHIBIT "C-2"
SECOND ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERFANO UNIT
SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS & PERCENTAGE	WORKING INT.* PERCENT	LEASE PART.		
SF-078422	S/2							
Sec. 31-27N-10W		328.18	U S A	12 $\frac{1}{2}$ %				
			Ben Dansby, Jr. C. A. McAdams C. V. Lyman J. D. Hancock, whose wife is Anna Marye Hancock Eugene McElvaney Stephen Carlton Clark Susan Vanderpoel Clark Stephen Carlton Clark, Jr. Alfred Corning Clark Henry R. Labouisse W. Beach Day Paul S. Kerr Charles E. Main Arthur E. Palmer, Jr. George Roberts Charles J. Nourse Raymond W. Ellis Harlan M. Ellis Edward D. Ellis	234.85/649.5 x 5/8 of 1% 100 /649.5 x 5/8 of 1% .33333 x 449.5/649.5 x 5/8 of 1% .06666 x 449.5/649.5 x 5/8 of 1% .03333 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .02000 x 449.5/649.5 x 5/8 of 1% .02000 x 449.5/649.5 x 5/8 of 1% .02000 x 449.5/649.5 x 5/8 of 1% .01666 x 449.5/649.5 x 5/8 of 1% .01666 x 449.5/649.5 x 5/8 of 1% .00666 x 449.5/649.5 x 5/8 of 1%	5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1%	Stanolind Slick-Moorman	33.94 66.06	18.542605
SF-077934	E/2 SW/4							
Sec. 6-26N-10W		80.44	U S A	12 $\frac{1}{2}$ %				
			None					
			Stanolind Slick-Moorman	33.94 66.06	4.544966			
SF-080425-A	Lots 3, 4, 5, 6 & 7 and SE/4 NW/4							
Sec. 6-26N-10W		237.91	U S A	12 $\frac{1}{2}$ %				
			Victor B. Van Hook	1/32 of 8/8	Stanolind Slick-Moorman	33.94 66.06	13.442230	
NM-01074	NE/4, Sec. 1-26N-11W SE/4							
Sec. 36-27N-11W		320.74	U S A	12 $\frac{1}{2}$ %				
			Dacresa Corporation Brookhaven Oil Company	1.69% 1.31%	Slick-Moorman	87.50	18.122235	

EXHIBIT "C-2"
SECOND ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERFANO UNIT
SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS & PERCENTAGE	WORKING INT. PERCENT	LEASE PART.
SF-080895	W/2 Sec. 5-26N-10W	321.32	U S A	None	Stanolind Slick-Moortman	33.94 66.06
						18.155006
SF-077936	E/2 Sec. 6-26N-10W	321.28	U S A	None	Stanolind Slick-Moortman	33.94 66.06
						18.152746
2659	SW/4 Sec. 32-27N-10W	160.00	State of New Mexico	Dan W. Johnson R. E. Beamon & Alma Beamon Ralph A. Johnson William G. Johnson	1.25% 1.875% .9375% .9375%	Wm. G. Johnson R. E. Beamon Ralph A. Johnson
						87.50
						9.040212

*Stanolind and Slick-Moortman own 100% of 87.50% working interest (including overriding royalty).

SAN JUAN COUNTY, NEW MEXICO

Ben Dansby, Jr.	234.85/649.5	x	5/8	of	19
C. A. McAdams	100	/649.5	x	5/8	of 19
C. V. Lyman				5/8	of 19
J. D. Hancock,				5/8	of 19
whose wife is,					
Anna Marye Hancock					
Eugene McElvaney					
Stephen Carlton Clark	.33333	x	449.5/649.5	x	5/8 of 19
Susan Vanderpoel Clark	.06666	x	449.5/649.5	x	5/8 of 19
Stephen Carlton Clark, Jr.	.03333	x	449.5/649.5	x	5/8 of 19
Alfred Corning Clark	.03334	x	449.5/649.5	x	5/8 of 19
Henry R. Labouisse	.03334	x	449.5/649.5	x	5/8 of 19
W. Beach Day	.03334	x	449.5/649.5	x	5/8 of 19
Paul S. Kerr	.03334	x	449.5/649.5	x	5/8 of 19
Charles F. Main	.03334	x	449.5/649.5	x	5/8 of 19
Arthur E. Palmer, Jr.	.02000	x	449.5/649.5	x	5/8 of 19
George Roberts	.02000	x	449.5/649.5	x	5/8 of 19
Charles J. Nourse	.02000	x	449.5/649.5	x	5/8 of 19
Raymond W. Ellis	.01666	x	449.5/649.5	x	5/8 of 19
Harlan M. Ellis	.01666	x	449.5/649.5	x	5/8 of 19
Edward D. Ellis	.00666	x	449.5/649.5	x	5/8 of 19

EXHIBIT "C-3"
THIRD ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERFANO UNIT
SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS & PERCENTAGE	WORKING INT. PERCENT	LEASE PART.
SF-080895	Sec. 5, T-26N-10W	642.72	U S A 12½%	None	Stanolind Slick-Moorman 33.94 66.06	26.644004
SF-077936	E/2 Sec. 6-26N-10W	321.28	U S A 12½%	None	Stanolind Slick-Moorman 33.94 66.06	13.318686
SF-078001-A	S/2 N/2 Sec. 8-26N-10W	160.49	U S A 12½%	None	Stanolind Slick-Moorman 33.94 66.06	6.653125
NM-0433	N/2 N/2 Sec. 8-26N-10W	160.49	U S A 12½%	None	Stanolind Slick-Moorman 33.94 66.06	6.653125
E-2659	SW/4 Sec. 32-27N-10W	160.00	State of New Mexico 12½%	Dan W. Johnson R. E. Beamon and Alma Beamon Ralph A. Johnson William G. Johnson 1.25 % 1.875 % .9375% .9375%	Wm. G. Johnson R. E. Beamon Ralph A. Johnson 87.50	6.632812

*Stanolind and Slick-Moorman own 100% of 87.50% working interest (including overriding royalty).

FOURTH ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERTANO UNIT

[illegible]

Standlind	33.94	2.628629
Slick-Moorman	66.06	

Stanolind	33.94	7.774455
Slick-Moorman	66.06	

Slick-Moorman 87.50 10.481186

EXHIBIT "C-4"
FOURTH ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERFANO UNIT
SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS & PERCENTAGE	WORKING INT. PERCENT	LEASE PART.	
SF-080895	Sec. 5-26N-10W	642.72	U S A	None	Stanolind Slick-Moorman	33.94 66.06	21.002892
SF-077936	E/2 Sec. 6-26N-10W	321.28	U S A	None	Stanolind Slick-Moorman	33.94 66.06	10.498832
SF-078001-A	S/2 N/2 Sec. 8-26N-10W	160.49	U S A	None	Stanolind Slick-Moorman	33.94 66.06	5.244514
NM-0433	N/2 N/2 Sec. 8-26N-10W	160.49	U S A	None	Stanolind Slick-Moorman	33.94 66.06	5.244514
SF-076566	SW/4 Sec. 29-27N-10W	160.00	U S A	None	Stanolind Slick-Moorman	33.94 66.06	5.228502
E-2659	W/2 Sec. 32-27N-10W	320.00	State of New Mexico	Dan W. Johnson R. E. Beamon and Alma Beamon Ralph A. Johnson William G. Johnson	1.25 % 1.875 % .9375% .9375%	Wm. G. Johnson 87.50 R. E. Beamon Ralph A. Johnson	10.457004

*Stanolind and Slick-Moorman own 100% of 87.50% working interest (including overriding royalty).

EXHIBIT "C-5"
FIFTH ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERFANO UNIT
SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS & PERCENTAGE	WORKING INT.* PERCENT	LEASE PART.			
SF-078422	Sec. 31-27N-10W	656.08	U S A	12½%	Ben Dansby, Jr. C. A. McAdams C. V. Lyman J. D. Hancock, whose wife is Anna Marye Hancock Eugene McElvaney Stephen Carlton Clark Susan Vanderpoel Clark Stephen Carlton Clark, Jr. Alfred Corning Clark Henry R. Labouisse W. Beach Day Paul S. Kerr Charles E. Main Arthur E. Palmer, Jr. George Roberts Charles J. Nourse Raymond W. Ellis Harlan M. Ellis Edward D. Ellis	5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1%	Stanolind Slick-Moorman	33.94 66.06	20.373573
SF-077934	E/2 SW/4 Sec. 6-26N-10W	80.44	U S A	12½%	None	Stanolind Slick-Moorman	33.94 66.06	2.497943	
SF-080425-A	Lots 3, 4, 5, 6 & 7 and SE/4 NW/4, Sec. 6-26N-10W	237.91	U S A	12½%	Victor B. Van Hook	1/32 of 8/8	Stanolind Slick-Moorman	33.94 66.06	7.387936
NM-01704	NE/4 Sec. 1-26N-11W E/2 Sec. 36-27N-11W	480.84	U S A	12½%	Decresa Corporation Brookhaven Oil Company	1.69% 1.31%	Slick-Moorman	87.50	14.931760
SF-080895	Sec. 5-26N-10W	642.72	U S A	12½%	None	Stanolind Slick-Moorman	33.94 66.06	19.958699	

EXHIBIT "C-5"
FIFTH ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERFANO UNIT
SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS & PERCENTAGE	WORKING INT. PERCENT	LEASE PART.
SF-077936	E/2 Sec. 6-26N 10W	321.23	U S A	None	Stanolind 33.94 Slick-Moorman 66.06	9.976865
SF-078001-A	S/2 N/2 Sec. 8-26N-10W	160.49	U S A	None	Stanolind 33.94 Slick-Moorman 66.06	4.983774
NM-0433	N/2 N/2 Sec. 8-26N-10W	160.49	U S A	None	Stanolind 33.94 Slick-Moorman 66.06	4.983775
SF-076566	SW/4 Sec. 29-27N-10W	160.00	U S A	None	Stanolind 33.94 Slick-Moorman 66.06	4.968558
E-2659	W/2 Sec. 32-27N-10W	320.00	State of New Mexico	Dan W. Johnson R. E. Beamon and Alma Beamon Ralph A. Johnson William G. Johnson	Wm. G. Johnson 87.50 R. E. Beamon Ralph A. Johnson	9.937117

*Stanolind and Slick-Moorman own 100% of 87.50% working interest (including overriding royalty).

EXHIBIT "C-6"
SIXTH ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERRANO UNIT
SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS AND PERCENTAGE	WORKING INT.* PERCENT	LEASE PART.				
SF-078422	Sec. 31-27N-10W	656.08	U S A	12½%	Ben Dansby, Jr. C. A. McAdams C. V. Lyman J. D. Hancock, whose wife is Anna Marye Hancock Eugene McElvaney Stephen Carlton Clark Susan Vanderpoel Clark Stephen Carlton Clark, Jr. Alfred Corning Clark Henry R. Labouisse W. Beach Day Paul S. Kerr Charles E. Main Arthur E. Palmer, Jr. George Roberts Charles J. Nourse Raymond W. Ellis Harlan M. Ellis Edward D. Ellis	234.85/649.5 x 5/8 of 1% 100 /649.5 x 5/8 of 1% .33333 x 449.5/649.5 x 5/8 of 1% .06666 x 449.5/649.5 x 5/8 of 1% .03333 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .02000 x 449.5/649.5 x 5/8 of 1% .02000 x 449.5/649.5 x 5/8 of 1% .02000 x 449.5/649.5 x 5/8 of 1% .01666 x 449.5/649.5 x 5/8 of 1% .01666 x 449.5/649.5 x 5/8 of 1% .00666 x 449.5/649.5 x 5/8 of 1%	5/8 of 1% 5/8 of 1% 5/8 of 1%	Stanolind Slick-Moorman	33.94 66.06	18.532024
SF-077934	E/2 SW/4 Sec. 6-26N-10W	80.44	U S A	12½%	None	Stanolind Slick-Moorman	33.94 66.06	2.272156		
SF-080425-A	Lots 3, 4, 5, 6 & 7 and SE/4 NW/4 Sec. 6-26N-10W	237.91	U S A	12½%	Victor B. Van Hook	1/32 of 8/8	Stanolind Slick-Moorman	33.94 66.06	6.720147	
NM-01704	NE/4 Sec. 1-26N-11W E/2 Sec. 36-27N-11W	480.84	U S A	12½%	Dacresa Corporation Brookhaven Oil Company	1.69% 1.31%	Slick-Moorman	87.50	13.582092	
SF-080895	Sec. 5-26N-10W	642.72	U S A	12½%	None	Stanolind Slick-Moorman	33.94 66.06	18.154650		

EXHIBIT "C-6"
SIXTH ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERFANO UNIT
SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS AND PERCENTAGE	WORKING INT. PERCENT	LEASE PART.	
SF-077936	E/2 Sec. 6-26N-10W	321.28	U S A 12½%	None	Stanolind Slick-Moorman	33.94 66.06	9.075065
SF-078001-A	S/2 N/2 Sec. 8-26N-10W	160.49	U S A 12½%	None	Stanolind Slick-Moorman	33.94 66.06	4.533296
NM-0433	N/2 N/2 Sec. 8-26N-10W	160.49	U S A 12½%	None	Stanolind Slick-Moorman	33.94 66.06	4.533296
SF-076566	SW/4 Sec. 29-27N-10W	160.00	U S A 12½%	None	Stanolind Slick-Moorman	33.94 66.06	4.519455
E-2659	Sec. 32-27N-10W	640.00	State of New Mexico 12½%	Dan W. Johnson R. E. Beamon and Alma Beamon Ralph A. Johnson Wm. G. Johnson	1.25 % 1.875 % .9375% .9375%	Wm. G. Johnson R. E. Beamon Ralph A. Johnson	87.50 18.077819

*Stanolind and Slick-Moorman own 100% of 87.50% working interest (including overriding royalty).

EXHIBIT "C-7"
SEVENTH ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERFANO UNIT
SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS & PERCENTAGE	WORKING INTL* PERCENT	LEASE PART.			
SF-078422	Sec. 31-27N-10W	656.08	U S A	12½%	Ben Dansby, Jr. C. A. McAdams C. V. Lyman J. D. Hancock, whose wife is Anna Marye Hancock Eugene McElvaney Stephen Carlton Clark Susan Vanderpoel Clark Stephen Carlton Clark, Jr. Alfred Corning Clark Henry R. Labouisse W. Beach Day Paul S. Kerr Charles E. Main Arthur E. Palmer, Jr. George Roberts Charles J. Nourse Raymond W. Ellis Harlan M. Ellis Edward D. Ellis	5/8 of 1% 5/8 of 1% 5/8 of 1% 5/8 of 1% 234.85/649.5 x 5/8 of 1% 100 /649.5 x 5/8 of 1% .33333 x 449.5/649.5 x 5/8 of 1% .06666 x 449.5/649.5 x 5/8 of 1% .03333 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .02000 x 449.5/649.5 x 5/8 of 1% .02000 x 449.5/649.5 x 5/8 of 1% .02000 x 449.5/649.5 x 5/8 of 1% .02000 x 449.5/649.5 x 5/8 of 1% .01666 x 449.5/649.5 x 5/8 of 1% .01666 x 449.5/649.5 x 5/8 of 1% .00666 x 449.5/649.5 x 5/8 of 1%	Stanolind Slick-Moorman	33.94 66.06	16.315122
SF-077934	E/2 SW¼ Sec. 6-26N-10W	80.44	U S A	12½%	None	Stanolind Slick-Moorman	33.94 66.06	2.000348	
SF-080425-A	Lots 3, 4, 5, 6 & 7 and SE¼ NW¼ Sec. 6-26N-10W	237.91	U S A	12½%	1/32 of 8/8	Stanolind Slick-Moorman	33.94 66.06	5.916246	
NM-01704	NE¼ Sec. 1-26N-11W E/2 Sec. 36-27N-11W	480.84	U S A	12½%	1.69% 1.31%	Slick-Moorman	87.50	11.957327	

EXHIBIT "C-7"
SEVENTH ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERFANO UNIT
SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS AND PERCENTAGE	WORKING INT. PERCENT	LEASE PART.	
SF-080895	Sec. 5-26N-10W	642.72	U S A	None	Stanolind Slick-Moortman	33.94 66.06	15.982891
SF-077936	E/2 Sec. 6-26N-10W	321.28	U S A	None	Stanolind Slick-Moortman	33.94 66.06	7.989456
SF-078001-A	S/2 N/2 Sec. 8-26N-10W	160.49	U S A	None	Stanolind Slick-Moortman	33.94 66.06	3.990998
NM-0433	N/2 N/2 Sec. 8-26N-10W	160.49	U S A	None	Stanolind Slick-Moortman	33.94 66.06	3.990998
SF-076566	SW/4 Sec. 29-27N-10W	160.00	U S A	None	Stanolind Slick-Moortman	33.94 66.06	3.978813
NM-02516	SW/4 Sec. 33-27N-10W	160.00	U S A	None	Stanolind Slick-Moortman	33.94 66.06	3.978813
NM-01366	SW/4 Sec. 4-26N-10W	160.23	U S A	None	Stanolind Slick-Moortman	33.94 66.06	3.984533
NM-0396	NW/4 Sec. 4-26N-10W	160.82	U S A	Carl R. Denoon & wife Dorothy E. Denoon	Stanolind Slick-Moortman	33.94 66.06	3.999204
E-2659	Sec. 32-27N-10W	640.00	State of New Mexico	Dan W. Johnson R. E. Beamon and Alma Beamon Ralph A. Johnson Wm. G. Johnson	1.25 % 1.875 % .9375 % .9375 %	Wm. G. Johnson R. E. Beamon Ralph A. Johnson	87.50 15.915251

*Stanolind and Slick-Moortman own 100% of 87.50% working interest (including overriding royalty).

EXHIBIT "C-8"
EIGHTH ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERFANO UNIT
SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS & PERCENTAGE	WORKING INT.* PERCENT	LEASE PART.				
SF-078422	Sec.31-27N-10W	656.08	U S A	12 $\frac{3}{8}$ %	Ben Dansby, Jr. C. A. McAdams C. V. Lyman J. D. Hancock, whose wife is Anna Marye Hancock Eugene McElvaney Stephen Carlton Clark Susan Vanderpoel Clark Stephen Carlton Clark, Jr Alfred Corning Clark Henry R. Labouisse W. Beach Day Paul S. Kerr Charles E. Main Arthur E. Palmer, Jr. George Roberts Charles J. Nourse Raymond W. Ellis Harlan M. Ellis Edward D. Ellis	234.85/649.5 x 5/8 of 1% 100 /649.5 x 5/8 of 1% .33333 x 449.5/649.5 x 5/8 of 1% .06666 x 449.5/649.5 x 5/8 of 1% .03333 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x 5/8 of 1% .02000 x 449.5/649.5 x 5/8 of 1% .02000 x 449.5/649.5 x 5/8 of 1% .02000 x 449.5/649.5 x 5/8 of 1% .01666 x 449.5/649.5 x 5/8 of 1% .01666 x 449.5/649.5 x 5/8 of 1% .00666 x 449.5/649.5 x 5/8 of 1%	5/8 of 1% 5/8 of 1% 5/8 of 1%	Stanolind Slick-Moorman	33.94 66.06	14.572852
SF-077934	E/2 SW/4 Sec.6-26N-10W	80.44	U S A	12 $\frac{1}{8}$ %	None	Stanolind Slick-Moorman	33.94 66.06	1.786734		
SF-080425-A	Lots 3,4,5,6 & 7 and SE/4 NW/4 Sec.6-26N-10W	237.91	U S A	12 $\frac{1}{8}$ %	Victor B. Van Hook	1/32 of 8/8	Stanolind Slick-Moorman	33.94 66.06	5.284458	
NM-01704	NE/4 Sec.1-26N-11W E/2 Sec.36-27N-11W	480.84	U S A	12 $\frac{1}{8}$ %	Dacresa Corporation Brookhaven Oil Company	1.69% 1.31%	Slick-Moorman	87.50	10.680420	
SF-080895	Sec.5-26N-10W	642.72	U S A	12 $\frac{1}{8}$ %	None	Stanolind Slick-Moorman	33.94 66.06	14.276100		

EXHIBIT "C-8"
EIGHTH ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERFANO UNIT
SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS & PERCENTAGE	WORKING INT. PERCENT	LEASE PART.	
SF-077936	E/2 Sec.6-26N-10W	321.28	U S A	12½% None	Stanolind Slick-Moorman	33.94 66.06	7.136273
SF-078001-A	S/2 N/2 Sec.8,26N-10W	160.49	U S A	12½% None	Stanolind Slick-Moorman	33.94 66.06	3.564805
NM-0433	N/2 N/2 Sec.8 and W/2 Sec.9-26N-10W	480.69	U S A	12½% None	Stanolind Slick-Moorman	33.94 66.06	10.677088
SF-080374	SE/4 Sec.8-26N-10W	160.57	U S A	12½% None	Stanolind Slick-Moorman	33.94 66.06	3.566581
SF-076566	SW/4 Sec.29-27N-10W	160.00	U S A	12½% None	Stanolind Slick-Moorman	33.94 66.06	3.553921
NM-02516	SW/4 Sec.33-27N-10W	160.00	U S A	12½% None	Stanolind Slick-Moorman	33.94 66.06	3.553921
NM-01366	SW/4 Sec.4-26N-10W	160.23	U S A	12½% None	Stanolind Slick-Moorman	33.94 66.06	3.559029
NM-0396	NW/4 Sec.4-26N-10W	160.82	U S A	12½% Carl R. Denoon and wife Dorothy E. Denoon	Stanolind Slick-Moorman	33.94 66.06	3.572135
E-2659	Sec.32-27N-10W	640.00	State of New Mexico	12½% Dan W. Johnson R. E. Beamon and Alma Beamon Ralph A. Johnson Wm. G. Johnson	1.25% 1.875% .9375% .9375%	Wm.G. Johnson R. E. Beamon Ralph A. Johnson	87.50 14.215683

*Stanolind and Slick-Moorman own 100% of 87.50% working interest (including overriding royalty).

*Stanolind and Slick-Moorman own 100% of 87.50% working interest (including overriding royalty).

SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS & PERCENTAGE	WORKING INT.* PERCENT	LEASE PART.
SF-078422	Sec. 31-27N-10W	656.08	U S A Ben Dansby, Jr. C. A. McAdams C. V. Lyman J. D. Hancock, whose wife is Anna Marye Hancock Eugene McElvaney Stephen Carlton Clark Susan Vanderpoel Clark Stephen Carlton Clark, Jr. Alfred Corning Clark Henry R. Labouisse W. Beach Day Paul S. Kerr Charles E. Main Arthur F. Palmer, Jr. George Roberts Charles J. Nourse Raymond W. Ellis Harlan M. Ellis Edward D. Ellis	12½% 234.85/649.5 x 5/8 of 1% 100. /649.5 x 5/8 of 1% .33333 x 449.5/649.5 x 5/8 of 1% .06666 x 449.5/649.5 x 5/8 of 1% .03333 x 449.5/649.5 x 5/8 of 1% .03334 x 449.5/649.5 x		

EXHIBIT "C-9"
NINTH ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERFANO UNIT
SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS & PERCENTAGE	WORKING INT. PERCENT	LEASE PART.
SF-080895	Sec.5-26N-10W	642.72	U S A 12 $\frac{1}{2}$ %	None	Stanolind 33.94 Slick-Moorman 66.06	12.898798
SF-077936	E/2 Sec.6-26N-10W	321.28	U S A 12 $\frac{1}{2}$ %	None	Stanolind 33.94 Slick-Moorman 66.06	6.447793
SF 378001-A	S/2 N/2 Sec.8-26N-10W	160.49	U S A 12 $\frac{1}{2}$ %	None	Stanolind 33.94 Slick-Moorman 66.06	3.220886
NM-0433	N/2 N/2 Sec.8 and W/2 Sec.9-26N-10W	480.69	U S A 12 $\frac{1}{2}$ %	None	Stanolind 33.94 Slick-Moorman 66.06	9.647005
SF-080374	SE/4 Sec.8,26N-10W	160.57	U S A 12 $\frac{1}{2}$ %	None	Stanolind 33.94 Slick-Moorman 66.06	3.222492
SF-076566	SW/4 Sec.29-27N-10W	160.00	U S A 12 $\frac{1}{2}$ %	None	Stanolind 33.94 Slick-Moorman 66.06	3.211052
NM-02516	SW/4 Sec.33-27N-10W	160.00	U S A 12 $\frac{1}{2}$ %	None	Stanolind 33.94 Slick-Moorman 66.06	3.211052
NM-01366	S/2 Sec.4-26N-10W	320.46	U S A 12 $\frac{1}{2}$ %	None	Stanolind 33.94 Slick-Moorman 66.06	6.431337

EXHIBIT "C-9"
NINTH ENLARGEMENT PICTURED CLIFFS PARTICIPATING AREA
HUERFANO UNIT
SAN JUAN COUNTY, NEW MEXICO

SERIAL NUMBER	LEASE DESCRIPTION	NUMBER ACRES	LAND OWNER & OWNER'S PERCENTAGE OF ROYALTY	OVERRIDING ROYALTY OWNERS & PERCENTAGE	WORKING INT. PERCENT	LEASE PART.
NM-0396	N/2 Sec.4-26N-10W	321.17	U S A 12 $\frac{1}{2}$ % Carl R. Denoon and wife Dorothy E. Denoon	3% Stanolind Slick-Moorman	33.94 66.06	6.445586
SF-080120-A	NE/4 Sec.9-26N-10W	160.14	U S A 12 $\frac{1}{2}$ % Roy L. Flood and Dixie D. Flood	3% Stanolind Slick-Moorman	33.94 66.06	3.213862
E-2659	Sec.32-27N-10W	640.00	State of New Mexico 12 $\frac{1}{2}$ % Dan. W. Johnson R. E. Beamon and Alma Beamon Ralph A. Johnson Wm. G. Johnson	1.25% 1.875% •9375% •9375% Wm.G.Johnson R.E. Beamon Ralph A. Johnson	87.50 12.844210	

*Stanolind and Slick-Moorman own 100% of 87.50% working interest (including overriding royalty).



IN REPLY REFER TO:

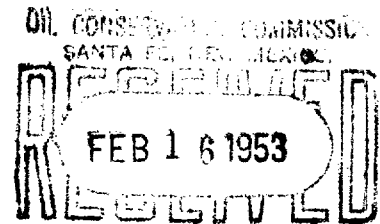
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 997
Roswell, New Mexico

February 13, 1953

Stanolind Oil and Gas Company
Oil and Gas Building
Fort Worth, Texas

Attention: Mr. C. F. Bedford
Division Production Superintendent



Gentlemen:

Reference is made to your Plan of Development for the calendar year 1953, dated December 24, 1952, covering the Pictured Cliffs zone, Huerfano Unit Area, L-Sec. No. 731, transmitted by your letter of December 24, 1952.

The Plan of Development has been approved on this date subject to like approval by the Commissioner of Public Lands of the State of New Mexico and the New Mexico Oil Conservation Commission as provided for under section 9 of the unit agreement.

Enclosed are two approved copies for your files.

Very truly yours,

(Orig. Sgd.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

Enclosures 2

Copy to: New Mexico Oil Conservation Commission
Commissioner of Public Lands, State of New Mexico

OIL CONSERVATION COMMISSION

P. O. BOX 871
SANTA FE, NEW MEXICO

February 12, 1953

Case 195

C
O
P
Y

Stanolind Oil and Gas Company
Oil and Gas Building
Fort Worth, Texas

Attention: Mr. C. F. Bedford - Div. Prod. Supt.

Re: Your file JTM-8460-216.82-T
1953 Plan of Development
Huerfano Unit, San Juan County,
New Mexico

Gentlemen:

This will acknowledge receipt of the above captioned
instrument (2 copies).

We are returning herewith, an approved copy for your
files.

Very truly yours,

R. R. Spurrier
Secretary - Director

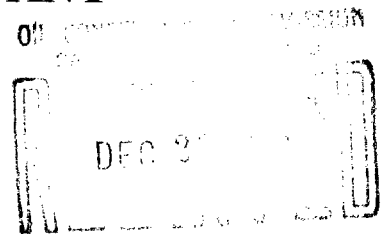
lh
encl.

STANOLIND OIL AND GAS COMPANY

OIL AND GAS BUILDING

FORT WORTH, TEXAS

C. F. BEDFORD
DIVISION PRODUCTION SUPERINTENDENT



December 24, 1952

File: JTM-8460-216.82-T

Subject: Plan of Development
for 1953, Huerfano Unit
San Juan County, New Mexico

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

In compliance with the provisions of Section 9 of the Huerfano Unit Agreement, we are submitting herewith for your consideration, two (2) copies of a Plan of Development for the year 1953 for the Pictured Cliffs Zone of the Huerfano Unit in San Juan County, New Mexico.

It is requested that this plan be reviewed by your office and if it meets with approval, please return one (1) approved copy to this office as soon as practicable.

This Plan of Development is being filed simultaneously with the Oil and Gas Supervisor of the U.S.G.S. and the Commissioner of Public Lands.

Yours very truly,

A handwritten signature in cursive script, appearing to read "C. F. Bedford".

JTM/mc

Attach.

1/1/53

PLAN OF DEVELOPMENT FOR THE CALENDAR YEAR 1953
PICTURED CLIFFS ZONE, HUERFANO UNIT, SAN JUAN COUNTY,
NEW MEXICO

TO: THE OIL AND GAS SUPERVISOR
U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

In compliance with Section 9 of the Huerfano Unit Agreement approved by the Director of the U. S. Geological Survey on June 6, 1950, by the Commissioner of Public Lands of the State of New Mexico on September 26, 1949, and by the Oil Conservation Commission of the State of New Mexico on September 20, 1949, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and all other owners of oil and gas leases or of operating rights under oil and gas leases covering lands committed to the Huerfano Unit, hereby submits a plan of development for the Pictured Cliffs Zone of said Huerfano Unit as follows:

1. Description of Participating Area in Pictured Cliffs Zone:

The initial participating area for the Pictured Cliffs Zone has not yet been established; however, application for approval of said initial participating area to comprise the following acreage is being submitted: "The Southwest Quarter (SW/4) of Section 31 in Township 27-N, Range 10-W", located in San Juan County, New Mexico, embracing 160 acres, more or less. This application is being filed on the basis of the completion of Huerfano Unit Well No. 6 located in the Southwest Quarter (SW/4) of Section 31, Township 27-N, Range 10-W. Also nine enlargements of the initial participating area are being filed simultaneously based on the completion of Wells No. 9, 10, 12, 13, 14, 16, 17, 18 and 19. The initial participating area and the subsequent enlargements constitute the following acreage comprising 4960 acres, more or less:

T-26-N, R-10-W
Section 4
Section 5
Section 6
N/2 Section 8
SE/4 Section 8
N/2 Section 9
SW/4 Section 9
T-26-N, R-11-W
NE/4 Section 1

T-27-N, R-10-W
SW/4 Section 29
Section 31
Section 32
SW/4 Section 33
T-27-N, R-11-W
E/2 Section 36

2. Past Development History in the Pictured Cliffs Zone:

Eighteen wells have now been drilled to the Pictured Cliffs Zone in the Huerfano Unit. Five of these wells were non-productive and have been abandoned. One well, the Huerfano Unit No. 5, has indicated an ability to produce gas in small quantities and a workover was performed on this well in an attempt to increase its deliverability to commercial quantities; however, the workover was not successful and the well is presently shut-in. Twelve wells have been completed as producing wells as follows:

Huerfano Unit No. 2 located in SE/4 Section 25, T-26-N, R-10-W, was completed on October 21, 1952, for an initial open flow potential of 428 MCFPD in 24 hours. An application for an initial participating area for the Pictured Cliffs was submitted on the basis of this completion; however, due to the low productivity of this well the request for this application was withdrawn.

Huerfano Unit No. 6 located in the SW/4 Section 31, T-27-N, R-10-W, was completed on November 16, 1951, for an initial open flow potential of 2830 MCFPD. A request for a participating area on the basis of this completion is being submitted as soon as practical.

Huerfano Unit No. 9 located in the NW/4 of Section 1, T-26-N, R-11-W, was completed on August 14, 1952, for an initial open flow potential of 396 MCFPD. The first enlargement of the initial participating area is based upon completion of this well.

Huerfano Unit No. 10 located in the NE/4 of Section 6, T-26-N, R-10-W, was completed on September 9, 1952, for an initial open flow potential of 3400 MCFPD. The second enlargement of the initial participating area is based on the completion of this well.

Huerfano Unit No. 11 located in the SW/4 of Section 6, T-26-N, R-10-W, was completed on September 22, 1952, for an initial open flow potential of 116 MCFPD. No enlargement of the initial participating area is to be filed on the completion of this well due to its low productive capacity.

Huerfano Unit No. 14 located in the SW/4 of Section 5, T-26-N, R-10-W was completed on September 29, 1952 for an open flow potential of 971 MCFPD. The third enlargement of the initial participating area is based on the completion of this well.

Huerfano Unit No. 16 located in the NE/4 Section 36, T-27-N, R-11-W, was completed on October 17, 1952, for an initial open flow potential of 1981 MCFPD. The fifth enlargement of the initial participating area is based on the completion of this well.

Huerfano Unit No. 17 located in the NE/4 Section 31, T-27-N, R-10-W was completed on September 30, 1952 for an initial open flow potential of 1540 MCFPD. The proposed fourth enlargement of the initial participating area is based on the completion of this well.

Huerfano Unit No. 18 located in the SW/4 of Section 32, T-27-N, R-10-W was completed on October 25, 1952 for an initial open flow potential of 1408 MCFPD. The proposed sixth enlargement of the initial participating area is based on the completion of this well.

Huerfano Unit No. 19 located in the NE/4 of Section 5, T-26-N, R-10-W was completed on November 3, 1952 for an initial open flow potential of 1700 MCFPD. The proposed seventh enlargement of the initial participating area was based on the completion of this well.

Huerfano Unit No. 13 located in the NE/4 Section 8, T-26-N, R-10-W was completed on December 1, 1952 for an initial open flow of 645 MCFPD. The proposed eighth enlargement of the initial participating area is based on the completion of this well.

Huerfano Unit 12 located in the SW/4 of Section 4, T-26-N, R-10-W was completed on December 6, 1952 for an initial open flow of 1915 MCFPD. The ninth enlargement of the initial participating area is based on the completion of this well.

3. Proposed Additional Wells:

It is proposed that a total of twelve (12) additional wells be drilled to the Pictured Cliffs Zone during 1953. One (1) exploratory well will be drilled in NE/4 of Section 17, T-26-N, R-9-W and six other additional wells will be drilled at locations as follows:

NE/4 Section 4, T-26-N, R-10-W

SW/4 Section 9, T-26-N, R-10-W 25

NE/4 Section 9, T-26-N, R-10-W 21

NE/4 Section 16, T-26-N, R-10-W

NE/4 Section 32, T-27-N, R-10-W 15

SW/4 Section 33, T-27-N, R-10-W

SE/4 Sec 19 26 9 23

NE/4 Sec 1 25 10 Lucille Pipkin # 1

NE/4 Sec 1 25 10 Lucille Pipkin # 2

Contingent Location not drilled

Contingent Location not drilled

Contingent
Locations

not
drilled

Contingent upon information provided by the above six wells in conjunction with currently available development history, the locations of the five (5) remaining wells will be selected at a later date.

4. Spacing of Wells:

Sufficient data are not yet available from which to determine the ultimate desired spacing in the area; therefore, it is planned to explore the Pictured Cliffs Zone by drilling one additional well per section until more information regarding the nature of the reservoir has been obtained. The practice of exploratory drilling of one well per section will more quickly define the pool limits.

5. Well Casing Program:

The well casing program will generally follow the program currently in use in the Pictured Cliffs wells in San Juan County, including such surface casing and other casing as may be required by the Supervisor, the Commissioner, and the Commission, or as set forth in approvals of the applicable U.S.G.S. and State of New Mexico forms. The producing string of casing may be set and cemented either on top, or through, or partially through, the producing zone.

6. Offset Obligations:

The Unit Operator, on behalf of the owners of working, royalty, or other interests, in the Huerfano Unit, will take appropriate and adequate measures to prevent drainage from lands subject to the Huerfano Unit Agreement by wells on lands not subject to said agreement or pursuant to applicable regulations, will pay a fair and reasonable compensatory royalty as provided in Section 15 of the Huerfano Unit Agreement.

7. Further Development:

This plan of development for the Pictured Cliffs Zone shall constitute the future drilling obligations of the Unit Operator pursuant to the provisions of the Huerfano Unit Agreement for the Pictured Cliffs Zone for the period ending December 31, 1953. It is further agreed that prior to the expiration of this plan of development, another plan of development shall be submitted to the above named addressed for further development of the Unit.

8. Effective Date:

This plan of development shall be effective January 1, 1953.

9. Modifications:

This plan of development may be modified from time to time with the approval of the Supervisor, the Commissioner, and the Commission to meet changing conditions.

Submitted this 24th day of Dec. 1952.

STANOLIND OIL AND GAS COMPANY
UNIT OPERATOR

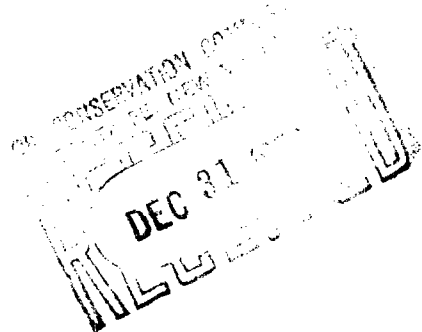
BY: C. F. L. Bedford.
ITS ATTORNEY IN FACT.



ILLEGIBLE

December 30, 1952

CASE 195



Stanolind Oil and Gas Company
Oil and Gas Building
Forth Worth, Texas

Attention: C. B. Bedford

File: JTB-6461-216.82- T

Subject: Plan of Development
for 1953, Marfano Unit,
San Juan County, New Mexico.

Gentlemen:

We have your letter and copies of your plan of development for the year 1953 for the Marfano Unit of the Marfano Unit Agreement in San Juan County, New Mexico.

I have read and checked the plan and find that it is similar to previous plans of this nature, heretofore, approved by this office. I hereby approve your application, subject however, to like approval being had and obtained from the United States Geological Survey and such approval being filed in this office.

Yours very truly,

CLYDE HENDON,
Commissioner of Public Lands

cc: U. S. Geological Survey
Socorro, New Mexico
Oil Conservation Commission ✓
Santa Fe, New Mexico

et

ILLEGIBLE

September 24, 1952

Your File:

JTM-8334-216.82

Subject:

Participating Area
Pictured Cliffs Zone,
Huerfano Unit, San Juan
County, New Mexico

Stanolind Oil and Gas Company
Oil and Gas Building
Fort Worth, Texas

Attention: Mr. C. F. Bedford
Division Production Superintendent

Gentlemen:

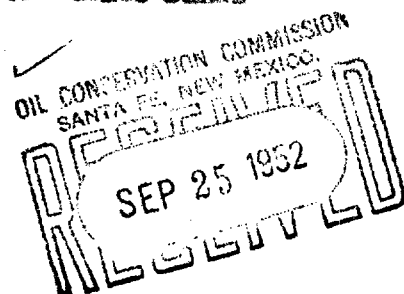
Reference is made to your letter dated April 22, 1952, File: JTM-8226-216.82, by which you transmitted an Application for Approval of a Participating Area for the Pictured Cliffs Zone, Huerfano Unit, San Juan County, New Mexico. Please be advised that your application was approved on May 19, 1952, subject to like approval being had and obtained from the United States Geological Survey. We have been notified by the Geological Survey that they have approved your request and are posting and filing our records accordingly on this date.

Very truly yours,

GUY SHEPARD
Commissioner of Public Lands

cc: New Mexico Oil Conservation Commission
U. S. Geological Survey

ot



OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

May 6, 1952

File: RGH/8227/216.82

**Subject: Participating Area for Pictured
Cliffs Zone, Huerfano Unit, San
Juan County, New Mexico**

**Mr. C. F. Bedford
Stanolind Oil and Gas Company
Fort Worth, Texas**

Dear Mr. Bedford:

**We are returning herewith one approved copy of the
application for approval of a participating area for the Pictured Cliffs
Zone, Huerfano Unit, San Juan County, New Mexico (based on
Huerfano Unit No. 6), as requested in your letter of April 22.**

Very truly yours,

W

Secretary and Director

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

July 18, 1952

Case 195

File: JTM-8273-216.82-T

**Subject: Application for Approval of the
Initial Participating Area,
Dakota Zone, Huerfano Unit,
San Juan County, New Mexico**

**Mr. C F. Bedford
Stanolind Oil and Gas Company
Fort Worth, Texas**

Dear Sir:

**We are enclosing one approved copy of Application for
Approval of the Initial Participating Area of the captioned area.**

Very truly yours,

W

Secretary and Director

Bedford C. F.

STANOLIND OIL AND GAS COMPANY

OIL AND GAS BUILDING

FORT WORTH, TEXAS

June 11, 1952

C. F. BEDFORD
DIVISION PRODUCTION SUPERINTENDENT

File: JTM-8273-216.82-T

Subject: Application for Approval of the
Initial Participating Area,
Dakota Zone, Huerfano Unit,
San Juan County, New Mexico

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

In accordance with the provisions of Section 10 of the Unit Agreement affecting lands in the Huerfano Unit Area, San Juan County, New Mexico, we are transmitting herewith for your consideration, two (2) copies of an Application for Approval of the Initial Participating Area for the Dakota Zone in this unit.

It is requested that the application be reviewed by your office, and if it meets with approval, one (1) copy be returned as soon as practicable.

Yours very truly,



RNP/mc
Attachs.

JUN 16 1952

APPLICATION FOR APPROVAL OF PARTICIPATING
AREA FOR THE DAKOTA ZONE, HUERFANO UNIT,
SAN JUAN COUNTY, NEW MEXICO

TO: THE DIRECTOR OF THE U. S. GEOLOGICAL SURVEY
WASHINGTON, D. C.

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

Pursuant to the provisions of Section 10 of the Unit Agreement approved by the Director of the U. S. Geological Survey on June 6, 1950, by the Commissioner of Public Lands of the State of New Mexico on September 26, 1949, and by the Oil Conservation Commission of the State of New Mexico on September 20, 1949, affecting lands in the Huerfano Unit Area in San Juan County, New Mexico, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and Slick-Moorman Oil Company, owners of oil and gas leases or of operating rights under oil and gas leases covering lands within the area hereinafter described, hereby submit for your approval a selection of lands to constitute the initial participating area for the Dakota Zone, found to be productive in the Huerfano Unit Well No. 4, located 1980 feet south of the north line and 1980 feet east of the west line of Section 24, Township 26 North, Range 10 West, N.M.P.M. Survey, San Juan County, New Mexico. The lands selected by the applicant to constitute the initial participating area for said producing zone are as follows:

Northwest Quarter (NW/4), North half (N/2) of the Southwest Quarter (SW/4), West half (W/2) of the Northeast Quarter (NE/4), and the Northwest Quarter (NW/4) of the Southeast Quarter (SE/4), All of the above acreage being in Section 24, Township 26 North, Range 10 West, San Juan County, New Mexico.

The working interest under leases on the above described lands is vested 33.94 per cent in Stanolind Oil and Gas Company and 66.06 per cent in Slick-Moorman Oil Company; and royalties are payable on production from these lands to the Government under the provisions of the Santa Fe Leases No. 077938, 076578, 079942, 078014, 077935, and New Mexico Leases No. 02874, 01369, 02138, all of which leases are included in the above described proposed participating area. The United States of America owns one eighth (1/8)

royalty interest in each of the above leases.

In support of this application, the applicant attaches hereto, and makes a part hereof, the following items: (1) A map, marked Exhibit "A", showing the Huerfano Unit and the proposed initial participating area for the Dakota Zone. (2) A schedule, marked Exhibit "B", showing the leases included in the proposed initial participating area. (3) A brief Geological and Engineering Memorandum marked Exhibit "C", discussing the area geology and the producing characteristics of the initial well.

The applicant respectfully requests that the Director, the Commissioner, and the Commission approve this selection of lands to constitute the initial Dakota Participating Area to be effective as of the date of the first production from said zone, August 30, 1951.



Dated this 5th day of JUNE, 1952.

STANOLIND OIL AND GAS COMPANY

By [Signature]

ATTEST:

[Signature]
Assistant Secretary

STATE OF OKLAHOMA
COUNTY OF TULSA

On this 5th day of June, 1952, before me appeared J. E. Rouse, to me personally known, who, being by me duly sworn, did say that he is the Vice President of Stanolind Oil and Gas 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 J. E. Rouse acknowledged said instrument to be the free act and deed of said corporation.

Given under my hand and notarial seal this 5th day of June, 1952.

My Commission expires:

My Commission Expires March 18, 1955

Roma M. McCormick
Notary Public

EXHIBIT "B"

HUERFANO UNIT

SAN JUAN COUNTY, NEW MEXICO

PARTICIPATING AREA
DAKOTA ZONE

LESSEE: Pauline S. McNaughton
SERIAL NUMBER: Santa Fe - 077938
LEASE DESCRIPTION: NW/4 Section 24, Township 26 North, Range 10 West.
AMOUNT OF ACREAGE: 160
PERCENTAGE OF PARTICIPATION: 44.444445

There are no overriding royalty interests involved in the
above described leases or portions of leases.

The operating rights on all of the above described leases
or portions of leases are held as follows:

Stanolind Oil and Gas Company33.94%
Slick-Moorman Oil Company66.06%

LESSEE: Anna Brown
SERIAL NUMBER: Santa Fe - 076578
LEASE DESCRIPTION: N/2 SW/4 Section 24, Township 26 North, Range 10 West
AMOUNT OF ACREAGE: 80
PERCENTAGE OF PARTICIPATION: 22.222222

There are no overriding royalty interests involved in the
above described leases or portions of leases.

The operating rights on all of the above described leases or
portions of leases are held as follows:

Stanolind Oil and Gas Company33.94%
Slick-Moorman Oil Company66.06%

LESSEE: Pauline V.. Trigg
SERIAL NUMBER: Santa Fe - 079942
LEASE DESCRIPTION: SW/4 NE/4 and NW/4 SE/4, Section 24, Township 26 North,
Range 10 West.

AMOUNT OF ACREAGE: 80

PERCENTAGE OF PARTICIPATION: 22.222222

OVERRIDING ROYALTIES

<u>Owners</u>	<u>Per Cent</u>
Pauline V. Trigg	<u>3.125</u>
Total	3.125

The operating rights on all of the above described leases
or portions of leases are held as follows:

Stanolind Oil and Gas Company	33.94%
Slick-Moorman Oil Company	66.06%

LESSEE: Tom and Earl Slick

SERIAL NUMBER: New Mexico - 01367

LEASE DESCRIPTION: NW/4 NE/4, Section 24, Township 26 North, Range 10 West.

AMOUNT OF ACREAGE: 40

PERCENTAGE OF PARTICIPATION: 11.111111

There are no overriding royalty interests involved in
the above described leases or portions of leases.

The operating rights on all of the above described leases
or portions of leases are held as follows:

Stanolind Oil and Gas Company	33.94%
Slick-Moorman Oil Company	66.06%

EXHIBIT "C"

GEOLOGICAL AND ENGINEERING MEMORANDUM

Formation of a Participating Area
For Dakota Producing Zone in Huerfano Unit
San Juan County, New Mexico

Regionally the Huerfano Area is located on the southwest flank of the northwest-southeast trending San Juan Basin. There is very little evidence of local structure. Kutz Canyon and other nearby shallow reservoirs appear to be controlled by variable porosity within their respective pay sands and cannot be definitely associated with local structural anomalies.

Since this Dakota well is an isolated test, it is impossible at this time to state definitely what type of reservoir conditions exist. Almost all other Dakota production in the basin, however, is controlled primarily by structure. This, in all probability, will be found to be the case here although this structure, if present, is not reflected in the shallow horizons.

Due to our present limited knowledge of the nature of this reservoir it would appear that development outward from each successful exploratory test would result in the drilling of a minimum number of poor or dry development wells.

Only one well has been completed in the Dakota Zone, Well No. 4 having finished drilling on January 31, 1951. After an extensive cleanout and testing period, there was considerable uncertainty as to the true productivity of this well. In an effort to facilitate a more accurate evaluation of the producing characteristics of the Huerfano Unit Well No. 4, permission was granted by the United States on August 14, 1951, to produce and sell gas from this well until January 1, 1952. On January 2, 1952, this testing period was extended until April 1, 1952.

The first gas was sold from this well on August 30, 1951, and during a 24 hour test on September 8, 1951, the well produced at the rate of 271 MCF per day against a separator pressure of 425 psig. Since that time the well has indicated an ability to produce an average of approximately 250 MCF of gas and 10 barrels of distillate (60°API) per day against similar separator pressure.

OIL CONSERVATION COMMISSION

P. O. BOX 871
SANTA FE, NEW MEXICO

May 19, 1952

File: AC-8180-216.82

Subject: Plan of Development for 1952
Huerfano Unit, San Juan County,
New Mexico

Enc 195

Mr. C. F. Bedford
Stanolind Oil and Gas Company
Fort Worth, Texas

Dear Sir:

We are enclosing one approved copy of Plan of
Development for 1952 of the captioned area.

Very truly yours,

W

Secretary and Director

cc: USGS

C

O

P

Y

OIL CONSERVATION COMMISSION

P. O. BOX 871
SANTA FE, NEW MEXICO

May 6, 1952

File: RGH/8227/216.82
Subject: Participating Area for
 Pictured Cliffs Zone, Huerfano
 Unit, San Juan County, N. M.

Mr. C. F. Bedford
Stanolind Oil and Gas Company
Fort Worth, Texas

Dear Mr. Bedford:

In accordance with your request of April 22, 1952, we are returning herewith one copy of application for approval of participating area for the Pictured Cliffs zone, Huerfano Unit, San Juan County, New Mexico. This participating area was based upon the Huerfano Unit Well no. 2.

Very truly yours,

W

Secretary and Director

OIL CONSERVATION COMMISSION

P. O. BOX 871
SANTA FE, NEW MEXICO

May 6, 1952

File: RGH-8223-216.82-T
Subject: Plan of Development for 1952
Pictured Cliffs Zone, Huerfano
Unit, San Juan County, N. M.

Mr. C. F. Bedford:
Stanolind Oil and Gas Company
Fort Worth, Texas

Dear Mr. Bedford:

We are returning herewith two approved copies of the
plan of development for the Huerfano Unit, San Juan County, New
Mexico.

Very truly yours,

W

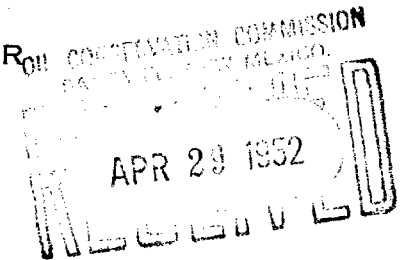
Secretary and Director



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 997
Roswell, New Mexico



April 28, 1952

Mr. C. F. Bedford
Stanolind Oil & Gas Company
Oil and Gas Building
Fort Worth, Texas

Dear Sir:

Receipt is acknowledged of your letter of April 1, enclosing five copies of an application for designation of the initial participating area for the Dakota zone in the Huerfano unit area, San Juan County, New Mexico, I-Sec. No. 731.

The application requests that approximately 1440 acres described as the SE $\frac{1}{4}$ sec. 14, S $\frac{1}{2}$ sec. 13, E $\frac{1}{2}$ sec. 23, and all sec. 24, T. 26 N., R. 10 W., N.M.P.M., be designated as the initial participating area and is based on the completion of Huerfano unit well No. 4, located in the SE $\frac{1}{4}$ sec. 24 of said township.

The application was recently discussed with Mr. T. F. Stipp, Regional Geologist and with a representative of the New Mexico Oil Conservation Commission and it was the opinion that on the basis of the small productivity of the Huerfano unit well No. 4, the 1,440 acres described in the application could not reasonably be considered as representing the area known or estimated to be productive in paying quantities as provided under section 10 of the unit agreement. Furthermore, the unit agreement does not contain any provision for contraction of the participating area and therefore, it appears that caution should be exercised to avoid if possible, inclusion of non-productive lands.

It is the opinion of this office that the circumstances do not warrant the inclusion in the initial Dakota zone participating area of more than 360 acres, embracing the 40-acre tract on which the subject well is located and the eight adjoining 40-acre tracts. If you concur, it is suggested that you amend the application which is being returned herewith.

It has been noted that the plan of development for the Dakota formation for the year 1952 which you recently submitted provides for the drilling of no wells. The approval of such plan would be difficult to justify in the event the one well heretofore drilled to the Dakota sandstone is considered sufficient, within the intent and purpose of section 10 of the unit agreement, to include the nine 160-acre tracts embracing 1440 acres in the initial participating area as requested in the application.

Your early reconsideration of this matter is requested.

Very truly yours,

(W. E. Sgd.)
R. E. CANFIELD

R. E. CANFIELD
Acting Regional Oil & Gas Supervisor

Enclosure

cc: O. C. C. ✓

STANGLIND OIL AND GAS COMPANY

OIL AND GAS BUILDING

FORT WORTH, TEXAS

C. F. BEDFORD

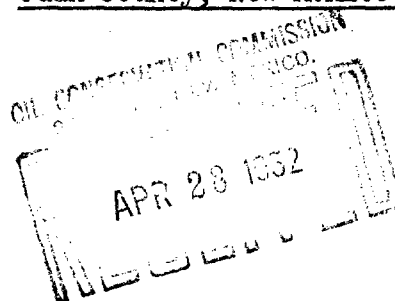
DIVISION PRODUCTION SUPERINTENDENT

April 22, 1952

File: RGH/8227/216.82

Subject: Participating Area for Pictured
Cliffs Zone, Huerfano Unit, San
Juan County, New MexicoOil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Gentlemen:



We are transmitting herewith for your consideration two (2) copies of an application for approval of a participating area for the Pictured Cliffs Zone, Huerfano Unit, San Juan County, New Mexico. If this proposed application meets with your approval, it is requested that one (1) approved copy be returned to this office at your earliest convenience.

In filing this application for a participating area based on the successful completion of the Huerfano Unit #6 well in the Pictured Cliffs Zone, we should like to point out that a similar application was filed following completion of the Huerfano Unit #2 well in the Pictured Cliffs Zone. Although gas is currently being produced and marketed from the Huerfano Unit #6 well, we have been unable to develop a suitable economic market for the gas produced from Huerfano Unit #2. It is our request, therefore, that upon receipt of this application that the application previously filed on the basis of the completion of the Huerfano Unit #2 be returned to this office without further action. When a satisfactory market has been developed for this gas, the appropriate application will be filed in accordance with existing instructions.

Copies of this instrument are being filed simultaneously with the Commissioner of Public Lands and The Director of the United States Geological Survey.

Yours very truly,

A handwritten signature in cursive script, appearing to read "C. F. Bedford".

RGH/mc
Attachs

STANOLIND OIL AND GAS COMPANY

OIL AND GAS BUILDING

FORT WORTH, TEXAS

C. F. BEDFORD

DIVISION PRODUCTION SUPERINTENDENT

April 21, 1952

File: RGH-8223-216.82-T

Subject: Plan of Development for 1952
Pictured Cliffs Zone, Huerfano
Unit, San Juan County, New Mexico

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

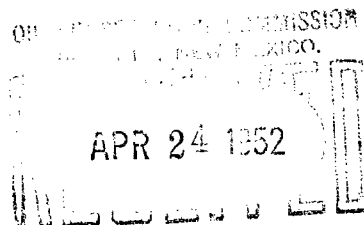
In our letter of March 28, 1952, File AC-8180-216.82, we submitted for your consideration and approval a revised Plan of Development for the calendar year 1952 for the Pictured Cliffs Zone of the Huerfano Unit, San Juan County, New Mexico.

Tentative approval of this plan of development has been received from the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico. Both of the organizations listed above have granted approval contingent upon mutual approval being granted by each of the other organizations with whom the plan was filed. In order that we may proceed with this proposed plan with the minimum of delay, it is requested that you advise as soon as practicable whether or not the revised plan meets with your approval and whether or not approval of the United States Geological Survey has been filed in your office.

Yours very truly,



RGH/mc



STANOLIND OIL AND GAS COMPANY

OIL AND GAS BUILDING

FORT WORTH, TEXAS

C. F. BEDFORD

DIVISION PRODUCTION SUPERINTENDENT

April 2, 1952

File: AC-6177-216.82

Subject: Plan of Development for 1952
Dakota Zone, Huerfano Unit
San Juan County, New Mexico

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

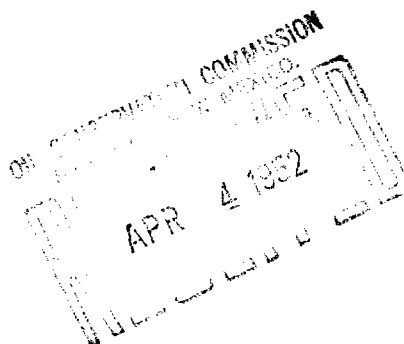
We are transmitting herewith for your consideration two (2) copies of a Plan of Development for 1952 for the Dakota Zone of the Huerfano Unit in San Juan County, New Mexico. If this proposed plan meets with your approval, please return one approved copy to this office at your earliest convenience.

Copies of this instrument are being filed simultaneously with the Oil and Gas Supervisor of the U.S.G.S. and the Commissioner of Public Lands.

Yours very truly,

RGH:lee

Enclosures (2)



PLAN OF DEVELOPMENT FOR THE CALENDAR YEAR 1952
DAKOTA ZONE, HUERFANO UNIT, SAN JUAN COUNTY, NEW MEXICO

TO: THE OIL AND GAS SUPERVISOR
U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

In compliance with Section 9 of the Huerfano Unit Agreement approved by the Director of the U. S. Geological Survey on June 6, 1950, by the Commissioner of Public Lands of the State of New Mexico on September 26, 1949, and by the Oil Conservation Commission of the State of New Mexico on September 20, 1949, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and all other owners of oil and gas leases or of operating rights under oil and gas leases covering lands committed to the Huerfano Unit, hereby submits a plan of development for the Dakota Zone of said Huerfano Unit as follows:

1. Description of Participating Area in the Dakota Zone:

The initial participating area for the Dakota Zone of the Huerfano Unit has not been established. It is anticipated, however, that an application for approval of an initial participating area for this zone will be filed immediately on the basis of commercial productivity having been established in Huerfano Unit Well No. 4.

2. Past Development History in the Dakota Zone:

Only one well has been completed in the Dakota Zone, Well No. 4 having finished drilling on January 31, 1951. After an extensive cleanout and testing period, there was considerable uncertainty as to the true productivity of this well. In an effort to facilitate a more accurate evaluation of the producing characteristics of the Huerfano Unit Well No. 4, permission was granted by the United States on August 14, 1951, to produce and sell gas from this well until January 1, 1952, at which time an

application for a participating area and a plan of development would be filed if commercial productivity were indicated. On January 2, 1952, this testing period was extended until April 1, 1952. During this period, royalties and production have been charged against lease Santa Fe 077938, subject to adjustment.

The first gas was sold from this well on August 30, 1951, and during a 24 hour test on September 8, 1951, the well produced at the rate of 271 MCF per day against a separator pressure of 425 psig. Since that time the well has indicated an ability to produce an average of 250 MCF of gas and 10 barrels of distillate (60°API) per day against a similar separator pressure.

3. Proposed Additional Wells:

Although this well has indicated that it is capable of producing gas in paying quantities sufficient to defray current operating expenses, it is believed that the relatively low deliverability of this well justifies deferring further development of the Dakota Zone until we have had sufficient time to observe the productivity of this well in relation to recoverable gas and distillate reserves and the economics associated with additional drilling. It is our plan, therefore, to drill no additional wells to the Dakota Zone during the year 1952. By acquiring additional data and studying the producing characteristics of this well during the remainder of this year, we will be in a much better position to evaluate the practicability of further development.

4. Offset Obligations:

The Unit Operator, on behalf of the owners of working, royalty, or other interests, in the Huerfano Unit, will take appropriate and adequate measures to prevent drainage from lands subject to the Huerfano Unit Agreement by wells on lands not subject to said agreement or, pursuant to applicable regulations, will pay a fair and reasonable compensatory royalty as provided in Section 15 of the Huerfano Unit Agreement.

5. Further Development:

This plan of development for the Dakota Zone shall constitute the future drilling obligations of the Unit Operator pursuant to the provisions of the Huerfano Unit Agreement for the Dakota Zone for the period ending December 31, 1952.

It is further agreed that prior to the expiration of this plan of development, another plan of development shall be submitted to the above named addressee for further development of the Unit.

6. Effective Date:

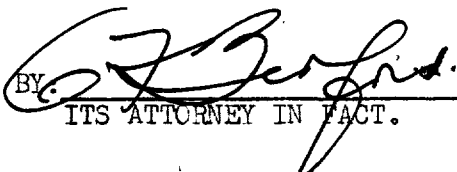
This plan of development shall be effective April 1, 1952.

7. Modifications:

This plan of development may be modified from time to time with the approval of the Supervisor, the Commissioner, and the Commission to meet changing conditions.

Submitted this 22nd day of April, 1952.

STANCLIND OIL AND GAS COMPANY
UNIT OPERATOR

BY. 
ITS ATTORNEY IN FACT.



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 997
Roswell, New Mexico

IN REPLY REFER TO:

March 31, 1952

Stanolind Oil and Gas Company
Oil and Gas Building
Fort Worth, Texas

Attention: Mr. C. F. Bedford
Division Production Superintendent

Gentlemen:

Reference is made to your Plan of Development for the calendar year 1952, dated March 25, 1952, covering the Pictured Cliffs zone, Huerfano Unit Area, I-Sec. No. 731, transmitted by your letter of March 27.

The agreement has been approved on this date subject to like approval by the Commissioner of Public Lands of the State of New Mexico and the New Mexico Oil Conservation Commission as provided for under section 9 of the unit agreement.

Enclosed are three approved copies for your files.

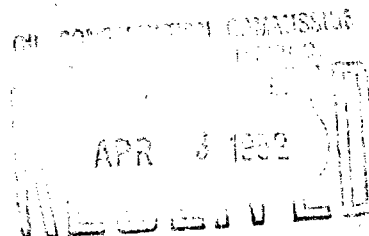
Very truly yours,

R. E. Canfield

R. E. CANFIELD
Acting Regional Oil and Gas Supervisor

Enclosures

cc: New Mexico Oil Conservation Commission
Commissioner of Public Lands, State of New Mexico



STANGLIND OIL AND GAS COMPANY

OIL AND GAS BUILDING

FORT WORTH, TEXAS

C. F. BEDFORD
DIVISION PRODUCTION SUPERINTENDENT

March 28, 1952

File: AC-8180-216.82

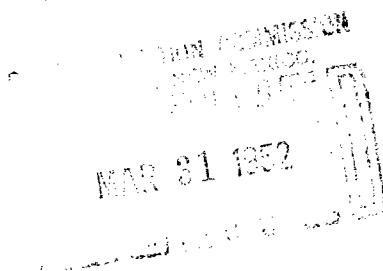
Subject: Plan of Development for 1952
Huerfano Unit, San Juan County,
New MexicoOil Conservation Commission
State of New Mexico
Santa Fe, Mexico

Gentlemen:

By our letter of December 28, 1951, File AC-9538-258.10, we transmitted a Plan of Development for 1952 for the Pictured Cliffs Zone of the Huerfano Unit in San Juan County, New Mexico. This plan provided for four development and exploratory wells to be drilled to the Pictured Cliffs during 1952. Copies were also filed simultaneously with the Commissioner of Public Lands and the Regional Oil and Gas Supervisor of the United States Geological Survey.

On January 2, 1952, this plan of development was returned without approval by the U.S.G.S. with the request that we consider a more intensified development program. Accordingly a revised plan of development has been prepared which provides for the drilling of 12 Pictured Cliffs wells during the year 1952. Two copies of this revised plan are attached for your consideration. If the plan meets with your approval, please return one approved copy at your earliest convenience.

Yours very truly,

RGH/mc
Attachs.

PLAN OF DEVELOPMENT FOR THE CALENDAR YEAR 1952
PICTURED CLIFFS ZONE, HUERFANO UNIT, SAN JUAN COUNTY
NEW MEXICO

TO: THE OIL AND GAS SUPERVISOR
U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

In compliance with Section 9 of the Huerfano Unit Agreement approved by the Director of the U. S. Geological Survey on June 6, 1950, by the Commissioner of Public Lands of the State of New Mexico on September 26, 1949, and by the Oil Conservation Commission of the State of New Mexico on September 20, 1949, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and all other owners of oil and gas leases or of operating rights under oil and gas leases covering lands committed to the Huerfano Unit, hereby submits a plan of development for the Pictured Cliffs Zone of said Huerfano Unit as follows:

1. Description of Participating Area in Pictured Cliffs Zone:

The initial participating area for the Pictured Cliffs Zone has not yet been established; however, application for approval of said initial participating area to comprise the following acreage has been submitted: "All of Section 25 in Township 26-N, Range 10-W". Located in San Juan County, New Mexico, embracing 640 acres, more or less. It is also anticipated that an application for approval of a participating area will be filed on the basis of obtaining commercial production in Huerfano Unit Well No. 6. This latter application will be filed as soon as practicable after January 1, 1952.

2. Fast Development History in the Pictured Cliffs Zone:

Seven wells have now been drilled to the Pictured Cliffs Zone in the Huerfano Unit. Four of these wells were non-productive and have been abandoned. One well, the Huerfano Unit No. 5, has indicated an ability to produce gas in small quantities and is currently being considered for a workover to attempt to increase its deliverability to commercial quantities. Two wells have been completed as producing wells. The first of these wells in the Huerfano Unit No. 2, located in the SE/4 of Section 25, T-26-N, R-10-W, which was completed on October 21, 1950, for an initial open flow potential of 428 MCFPD. A request for an initial participating area for the Pictured Cliffs has been submitted on the basis of this completion. A second producing well was obtained upon completion of the Huerfano Unit No. 6 in the SW/4 of Section 31, T-27-N, R-10-W on November 16, 1951, for an initial open flow potential of 2,830 MCFPD. A request for a participating area on the basis of this completion will be submitted as soon as practicable.

3. Proposed Additional Wells:

It is proposed that a total of twelve (12) additional wells be drilled to the Pictured Cliffs Zone during 1952. One (1) exploratory well will be drilled in Section 6, T-25-N, (10) *not drilled* R-9-W, and eleven other additional wells will be drilled at locations as follows:

NE/4 Section 31, T-27-N, R-10-W	17
SW/4 Section 32, T-27-N, R-10-W	18
NE/4 Section 36, T-27-N, R-11-W	16
NE/4 Section 1, T-26-N, R-11-W	9
NE/4 Section 5, T-26-N, R-10-W	19
SW/4 Section 5, T-26-N, R-10-W	14
NE/4 Section 6, T-26-N, R-10-W	10
SW/4 Section 6, T-26-N, R-10-W	11
NE/4 Section 7, T-26-N, R-10-W	(12)
NE/4 Section 12, T-26-N, R-11-W	(15)
NE/4 Section 8, T-26-N, R-10-W	13

not drilled

4. Spacing of Wells:

Sufficient data are not yet available from which to determine the ultimate desired spacing in the area; therefore, it is planned to explore the Pictured Cliffs Zone by drilling on one 160-acre drilling unit per section until more information regarding the nature of the reservoir has been obtained. The practice of exploratory drilling of one well per section will more quickly define the pool limits.

5. Well Casing Program:

The well casing program will generally follow the program currently in use in the Pictured Cliffs wells in San Juan County, including such surface casing and other casing as may be required by the Supervisor, the Commissioner, and the Commission, or as set forth in approvals of the applicable U.S.G.S. and State of New Mexico Forms. The producing string of casing may be set and cemented either on top, or through, or partially through, the producing zone.

6. Offset Obligations:

The Unit Operator, on behalf of the owners of working, royalty, or other interests, in the Huerfano Unit, will take appropriate and adequate measures to prevent drainage from lands subject to the Huerfano Unit Agreement by wells on lands not subject to said agreement or, pursuant to applicable regulations, will pay a fair and reasonable compensatory royalty as provided in Section 15 of the Huerfano Unit Agreement.

7. Further Development:

This plan of development for the Pictured Cliffs Zone shall constitute the future drilling obligations of the Unit Operator pursuant to the provisions of the Huerfano Unit Agreement for the Pictured Cliffs Zone for the period ending December 31, 1952.

It is further agreed that prior to the expiration of this plan of development, another plan of development shall be submitted to the above named addressed for further development of the Unit.

8. Effective Date:

This plan of development shall be effective January 1, 1952.

9. Modifications:

This plan of development may be modified from time to time with the approval of the Supervisor, the Commissioner, and the Commission to meet changing conditions.

Submitted this 25th day of March, 1952.

STANOLIND OIL AND GAS COMPANY
UNIT OPERATOR

BY: *Co. R. Shepard*
ITS ATTORNEY IN FACT.

approved: R. R. Spurrer
2 April 1952
R. R. SPURRER

STATE GEOLOGIST

Approved by me this 15th day of May, 1952, subject to like approval being had and obtained from the United States Geological Survey.

Guy Shepard
GUY SHEPARD,
Commissioner of Public Lands



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 997
Roswell, New Mexico

February 7, 1952

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

Subject: Plan of Development for
1952, Huerfano Unit, San
Juan County, New Mexico

Dear Mr. Spurrier:

Attached is a copy of my letter of January 2 to Mr. C. F. Bedford, Stanolind Oil and Gas Company, Fort Worth, Texas, rejecting the proposed Plan of Development for the Calendar Year 1952 for the Pictured Cliffs Zone, Huerfano Unit Area, San Juan County, New Mexico, submitted with his letter of December 28, 1951.

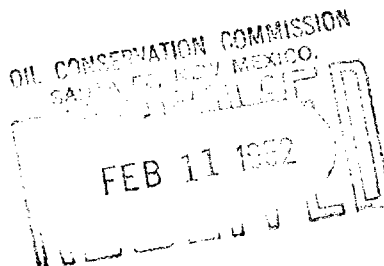
It is my understanding that Stanolind Oil and Gas Company is now preparing a revised plan of development for the calendar year 1952 to include the drilling of a minimum of twelve wells during the year as requested by this office.

This is to inform you of the action taken by this office on this subject.

Very truly yours,

FOSTER MORRELL
Regional Oil and Gas Supervisor

Attachment





IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 997
Roswell, New Mexico

C
O
P
Y

January 2, 1952

Mr. C. F. Bedford
Division Production Superintendent
Stanolind Oil and Gas Company
Fair Building
Fort Worth, Texas

Subject: Plan of Development for
1952, Huerfano Unit, San
Juan County, New Mexico
Your File: AC-9536-258.10

Dear Mr. Bedford:

The six (6) copies of the Plan of Development for the Calendar Year 1952, Pictured Cliffs Zone, Huerfano Unit, San Juan County, New Mexico, forwarded with your letter of December 28, 1951 are returned without approval for the reason that the proposed additional drilling is considered to be inadequate.

The Huerfano unit area embraces 63,120.93 acres. Although certain portions of the unit area have been demonstrated to be non-productive of gas in the Pictured Cliffs zone by reason of dry holes drilled in sections 1, 14 and 21 and a questionable productive well in section 10, all in T. 26 N., R. 10 W., and a dry hole in section 28, T. 26 N., R. 9 W., potential commercial gas production has been indicated by two successful completions in section 25, T. 26 N., R. 10 W., and section 31, T. 27 N., R. 10 W.

It is the opinion of this office that the Plan of Development for 1952 for the Pictured Cliffs zone should provide for the continuous operation of two strings of tools and the drilling of a minimum of twelve (12) wells to fulfill the development and exploration requirements of the unit agreement. Attention is called to the necessity for considering the drilling of wells in the $W\frac{1}{2}$ section 19, T. 27 N., R. 10 W., pursuant to Section 15 of the unit agreement to prevent drainage from unitized land by a well in the $SW\frac{1}{4}$ section 19 on land not subject to the agreement.

Emphasis should be placed in locating development wells in the immediate vicinity of the two areas that have been demonstrated to be productive of gas. In addition, exploratory wells should be drilled and no objection is offered to including the two locations you have designated for such purpose in section 6, T. 25 N., R. 9 W., and section 6, T. 26 N., R. 10 W.

The presentation of a plan of development as outlined above would tend to demonstrate the good faith and intention of the unit operator to proceed with early development. In this connection you are advised that the Washington office, regarding a request by British-American Oil Producing Company for permission for independent operating on its properties within the Huerfano unit area, recently stated that it may be desirable to encourage independent operation in that case in order to expedite development within the unit area and raised the question whether Stanolind may have an excessive amount of potential gas-productive land tied up in unit areas in New Mexico and may possibly be physically unable to diligently and adequately develop such vast amounts of acreage. Accordingly, it is up to Stanolind to demonstrate.

Although we suggest a definite minimum number of wells, the plan of development under the provision for modification, would permit a later reduction in the number of wells to be drilled in case development operations during the year were unsuccessful and demonstrate that further drilling was not warranted.

Early re-submission of the plan of development for 1952 for the Pictured Cliffs zone, modified as suggested herein, is requested.

Very truly yours,

FOSTER MORRELL
Regional Oil and Gas Supervisor

cc: Farmington
FMorrell:jmc

C O P Y

OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

January 14, 1952

File: AC-9538-258.10

Subject: Plan of Development for 1952,
Huerfano Unit,
San Juan County, New Mexico

Case 195

Mr. C. F. Bedford
Stanolind Oil and Gas Company
Fort Worth, Texas

Dear Sir:

We are returning herewith two approved copies of the
plan of development for Huerfano Unit, San Juan County, New Mexico.

Very truly yours,

W

Secretary and Director

yes

STANOLIND OIL AND GAS COMPANY

FAIR BUILDING

FORT WORTH, TEXAS

C. F. BEDFORD

DIVISION PRODUCTION SUPERINTENDENT

December 28, 1951

File: AC-9538-258.10

Subject: Plan of Development for 1952,
Huerfano Unit,
San Juan County, New Mexico

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

We are transmitting herewith, for your consideration, six copies of the Plan of Development for the Calendar Year 1952, Pictured Cliffs Zone, Huerfano Unit, San Juan County, New Mexico. If this Plan of Development meets with your approval, please return two approved copies to this office at your earliest convenience.

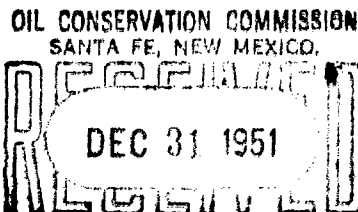
Copies of this instrument are being filed simultaneously with your office, The Oil and Gas Supervisor, and the Commissioner of Public Lands of the State of New Mexico.

Very truly yours,



RGH/ek
Attachment

CC: Slick-Moorman Oil Company
Milam Building
San Antonio, Texas



PLAN OF DEVELOPMENT FOR THE CALENDAR YEAR 1952
PICTURED CLIFFS ZONE, HUERFANO UNIT, SAN JUAN COUNTY,
NEW MEXICO

TO: THE OIL AND GAS SUPERVISOR
U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

In compliance with Section 9 of the Huerfano Unit Agreement approved by the Director of the U. S. Geological Survey on June 6, 1950, by the Commissioner of Public Lands of the State of New Mexico on September 26, 1949, and by the Oil Conservation Commission of the State of New Mexico on September 20, 1949, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and Slick-Moorman Oil Company, owners of oil and gas leases or of operating rights under oil and gas leases covering lands within the proposed initial participating area for the Pictured Cliffs Zone, hereby submits a plan of development for said Huerfano Unit as follows:

1. Description of Participating Area in Pictured Cliffs Zone:

The initial participating area for the Pictured Cliffs Zone has not yet been established; however, application for approval of said initial participating area to comprise the following acreage has been submitted: "All of Section 25 in Township 26-N, Range 10-W". Located in San Juan County, New Mexico, embracing 640.00 acres, more or less.

2. Past Development History in the Pictured Cliffs Zone:

Seven wells have now been drilled to the Pictured Cliffs Zone in the Huerfano Unit. Four of these wells were non-productive and have been abandoned. One well, the Huerfano Unit No. 5, has indicated an ability to produce gas in small quantities and is currently being considered for a workover to attempt to increase its deliverability to commercial quantities. Two wells have been completed as producing wells. The first of these wells is the Huerfano Unit No. 2, located in the SE/4 of Section 25, T-26-N, R-10-W, which was completed on October 21, 1950, for an initial open flow potential of 428 MCFPD. A request for an initial participating area for the Pictured Cliffs has been submitted on the basis of this completion. A second producing well was obtained upon completion of the Huerfano Unit No. 6 in the SW/4 of Section 31, T-27-S, R-10-W on November 16, 1951, for an initial open flow potential of 2,830 MCFPD. A request for a participating area on the basis of this completion will be submitted as soon as practicable.

3. Proposed Additional Wells:

Our present plans provide for the drilling of four additional wells to the Pictured Cliffs Zone during 1952. Locations for two of these wells have been selected to provide for drilling one well in the SE/4 of Section 6, T-25-N, R-9-W, and one well in the SE/4 of Section 6, T-26-N, R-10-W. Contingent upon the information provided by these two wells in conjunction with the currently available development history, the locations of the other two wells will be selected at a later date.

4 wells

4. Spacing of Wells:

Sufficient data are not yet available from which to determine the ultimate desired spacing in the area; therefore, it is planned to explore the Pictured Cliffs Zone by drilling on one 160-acre drilling unit per section until more information regarding the nature of the reservoir has been obtained. The practice of exploratory drilling of one well per section will more quickly define the pool limits.

5. Well Casing Program:

The well casing program will generally follow the program currently in use in the Pictured Cliffs wells in San Juan County, including such surface casing and other casing as may be required by the Supervisor, the Commissioner, and the Commission, or as set forth in approvals of the applicable U.S.G.S. and State of New Mexico forms. The producing string of casing may be set and cemented either on top, or through, or partially through, the producing zone.

6. Offset Obligations:

The Unit Operator, on behalf of the owners of working, royalty, or other interests, in the Huerfano Unit, will take appropriate and adequate measures to prevent drainage from lands subject to the Huerfano Unit Agreement by wells on lands not subject to said agreement or, pursuant to applicable regulations, will pay a fair and reasonable compensatory royalty as provided in Section 15 of the Huerfano Unit Agreement.

7. Further Development:

This plan of development for the Pictured Cliffs Zone shall constitute the future drilling obligations of the Unit Operator pursuant to the provisions of the Huerfano Unit Agreement for the Pictured Cliffs Zone for the period ending December 31, 1952.

It is further agreed that prior to the expiration of this plan of development, another plan of development shall be submitted to the above named addressed for further development of the Unit.

8. Effective Date:

This plan of development may be modified from time to time with the approval of the Supervisor, the Commissioner, and the Commission, to meet changing conditions.

Submitted this 28th day of December, 1951.

STANOLIND OIL AND GAS COMPANY
UNIT OPERATOR

BY:

John R. Evans
ITS ATTORNEY IN FACT.

PLAN OF DEVELOPMENT FOR THE CALENDAR YEAR 1951
PICTURED CLIFFS ZONE, HUERFANO UNIT, SAN JUAN COUNTY,
NEW MEXICO

TO: THE OIL AND GAS SUPERVISOR
U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

RECEIVED
STATE LAND OFFICE
AUG 2 1 45 PM '51
SANTA FE, N.M.

In compliance with Section 9 of the Huerfano Unit Agreement approved by the Director of the U. S. Geological Survey on June 6, 1950, by the Commissioner of Public Lands of the State of New Mexico on September 26, 1949, and by the Oil Conservation Commission of the State of New Mexico on September 20, 1949, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and Slick-Moorman Oil Company, owners of oil and gas leases or of operating rights under oil and gas leases covering lands within the proposed initial participating area for the Pictured Cliffs Zone, hereby submits a plan of development for said Huerfano Unit as follows:

1. Description of Participating Area in Pictured Cliffs Zone.

The initial participating area for the Pictured Cliffs Zone has not yet been established; however, application for approval of said initial participating area to comprise the following acreage has been submitted:

"All of Section 25 in Township 26-N, Range 10-W".

Located in San Juan County, New Mexico, embracing
640.00 acres, more or less.

2. Past Development History in Zones Other than the Pictured Cliffs.

No wells have been drilled on this unit to formations other than the Pictured Cliffs prior to the formation of the Unit.

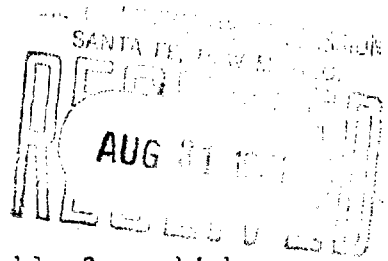
3. Past Development History in the Pictured Cliffs Zone.

One well, the Florence Drilling Company's No. 1-A J. J. Hudson (Federal), was drilled in the NW/4 NW/4 of Section 10, Township 26-N, Range 10-W, prior to the formation of the Unit. The history of this well is now being reviewed and as soon as such review is complete, recommendations for the further handling of this well will be submitted. The proposed initial Pictured Cliffs participating area is based upon the successful completion of Huerfano Unit Well No. 2, which was completed October 21, 1950, in the Pictured Cliffs Zone at a total depth of 2092 feet, for an initial potential of 428,000 CFM/D.

4. Proposed Additional Wells.

With reference to further development of the Pictured Cliffs Zone, it is proposed that a well be commenced in the SW/4 of Section 31, Township 27-N, Range 10-W, approximately 990 feet from the south and west lines of said Section 31, within 90 days from the effective date of this plan. Subsequent to the completion of the aforesaid well it is proposed that an exploratory Pictured Cliffs well will be drilled in the Southeast part of the Unit Area; and that dependent and contingent upon the results of the aforementioned two wells a Pictured Cliffs development well will be drilled. It is desired to defer selection of the location of the said development well pending completion of the wells to be drilled in Section 31 and in the Southeast part of the Unit area.

A well designated as Huerfano Unit Well No. 4 is presently being drilled in the SE/4 of the NW/4 of Section 24, Township 26-N, Range 10-W, to test the Dakota formation. It is contemplated that further plans with reference to the Dakota formation will be formulated subsequent to the completion of this well.



5. Spacing of Wells

Sufficient data are not yet available from which to determine the ultimate desired spacing in the area; therefore, it is planned to explore the Pictured Cliffs Zone by drilling on one 160-acre drilling unit per section until more information regarding the nature of the reservoir has been obtained. The practice of exploratory drilling of one well per section will more quickly define the pool limits.

6. Well Casing Program.

The well casing program will generally follow the program currently in use in the Pictured Cliffs wells in San Juan County, including such surface casing and other casing as may be required by the Supervisor, the Commissioner, and the Commission, or as set forth in approvals of the applicable U.S.G.S. and State of New Mexico forms. The producing string of casing may be set and cemented either on top, or through, or partially through the producing zone.

7. Offset Obligations.

The Unit Operator, on behalf of the owners of working, royalty or other interests in the Huerfano Unit, will take appropriate and adequate measures to prevent drainage from lands subject to the Huerfano Unit Agreement by wells on lands not subject to said agreement or, pursuant to applicable regulations, pay a fair and reasonable compensatory royalty, or as provided in Section 15 of the Huerfano Unit Agreement.

8. Further Development.

This plan of development for the Pictured Cliffs Zone shall constitute the future drilling obligations of the Unit Operator pursuant to the provisions of the Huerfano Unit Agreement for the Pictured Cliffs Zone for the period ending December 31, 1951.

5. Spacing of Wells

Sufficient data are not yet available from which to determine the ultimate desired spacing in the area; therefore, it is planned to develop the Pictured Cliffs Zone by drilling on 640-acre tracts until more information regarding the nature of the reservoir has been obtained. Also, the practice of drilling on 640-acre tracts will more quickly define the pool limits.

6. Well Casing Program.

The well casing program will generally follow the program currently in use in the Pictured Cliffs wells in San Juan County, including such surface casing and other casing as may be required by the Supervisor, the Commissioner, and the Commission, or as set forth in approvals of the applicable U.S.G.S. and State of New Mexico forms. The producing string of casing may be set and cemented either on top, or through, or partially through the producing zone.

7. Offset Obligations.

The Unit Operator, on behalf of the owners of working, royalty or other interests in the Huerfano Unit, will take appropriate and adequate measures to prevent drainage from lands subject to the Huerfano Unit Agreement by wells on lands not subject to said agreement or, pursuant to applicable regulations, pay a fair and reasonable compensatory royalty, or as provided in Section 15 of the Huerfano Unit Agreement.

8. Further Development.

This plan of development for the Pictured Cliffs Zone shall constitute the future drilling obligations of the Unit Operator pursuant to the provisions of the Huerfano Unit Agreement for the Pictured Cliffs Zone for the period ending December 31, 1951.

It is further agreed that prior to the expiration of this plan of development, another plan of development shall be submitted to the above named addressed for further development of the Unit.

9. Effective Date

This plan of development shall be effective July 1, 1951.

10. Modifications.

The plan of development may be modified from time to time with the approval of the Supervisor, the Commissioner, and the Commission to meet changing conditions.

Submitted this 31st day of July, 1951.

STANOLIND OIL AND GAS COMPANY
UNIT OPERATOR

BY: E. F. Sanford
ITS ATTORNEY IN FACT

STANOLIND OIL AND GAS COMPANY

FAIR BUILDING

FORT WORTH, TEXAS

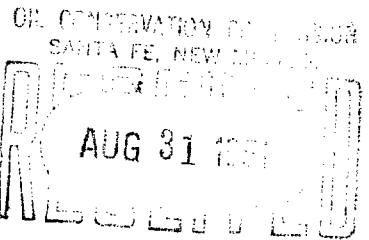
C. F. BEDFORD

DIVISION PRODUCTION SUPERINTENDENT

August 29, 1951

File: AC-9706-258.10

Subject: Plan of Development,
Pictured Cliffs Zone,
Huerfano Unit, San Juan County,
New Mexico



Case 195

Mr. R. R. Spurrier
Oil Conservation Commission
Santa Fe, New Mexico

Dear Sir:

We have received your letter of August 9, 1951, wherein you approved our plan of development for the calendar year 1951 for the Pictured Cliffs Zone, Huerfano Unit, subject to our acceptance of amendment of Paragraph 5 thereof, as proposed in your referenced letter.

This is to advise that the amendment, as proposed, is acceptable to Stanolind and we are transmitting herewith one copy of Page 3 which has been amended in accordance with your proposal.

By our acceptance of the revised paragraph, however, we do not wish to imply that we favor 160-acre drilling units for the Huerfano Unit. It is our understanding that your request is for the purpose of consistency with Statewide Rule 104, but that larger drilling units could later be established at a hearing, provided sufficient substantiating evidence is presented.

Please substitute the revised Page 3 in the copy of the Plan of Development retained in your office.

Very truly yours,

ROC/ek
Attachment - 1

* Page 3 attached to this letter attached to Plan of Development



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. Box 997
Roswell, New Mexico

August 14, 1951

Stanolind Oil and Gas Co.
Fair Building
Fort Worth, Texas

Attention: Mr. C. F. Bedford

Gentlemen:

Reference is made to your letter of August 9, requesting permission to produce and sell gas from well Huerfano Unit No. 4 for a period of approximately six months in order to observe the productive characteristics of the well. In the event commercial production is indicated, you propose to file an application for establishment of the initial participating area for the Dakota formation along with a plan for additional development.

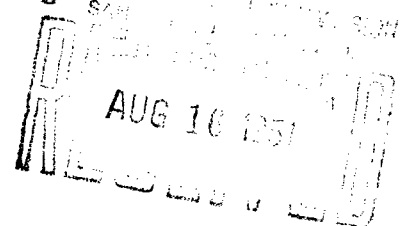
No objection is offered to your proposal, and accordingly, the filing of application for the establishment of the initial participating area and a plan of development for the Dakota formation pursuant to the terms of the Huerfano Unit Agreement may be deferred until January 1, 1952 unless prior thereto it is demonstrated that the well is capable of sustained production in paying quantities. It shall be understood that if and when the well is determined to be capable of producing in paying quantities the initial participating area shall be made effective as of the date of first production. Pending such action royalties on production shall be charged against lease Santa Fe 077938, on which the well is located, subject to adjustment.

Very truly yours,

(Original signed) _____

FOSTER MORRELL
Oil and Gas Supervisor
Southwestern Region

cc: Washington
N.M. Oil and Gas Commission ✓



OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

August 9, 1951

**Stanolind Oil and Gas Company
Stanolind Building
Tulsa, Oklahoma**

**Attention: Mr. G. B. Jenkinson, Unitization Manager, and
Mr. C. F. Bedford, Division Production Superintendent**

Re: Participating Area, Huerfano Unit, San Juan County, N. M.

Gentlemen:

This acknowledges receipt of two copies of "Application for Approval of Participating Area for the Pictured Cliffs Zone, Huerfano Unit, San Juan County, New Mexico."

Having carefully examined the same, I see no reason for not approving the same under the provision of Section 10 of said Agreement and I hereby approve the same, conditioned, however, upon like approval being had and obtained and my office notified thereof from the proper officials of the U. S. Geological Survey.

I also acknowledge receipt as of July 31 of the Plan of Development, Pictured Cliffs Zone, Huerfano Unit. Having examined the same I hereby approve said plan for the period ending December 31, 1951, as submitted, subject to the following:

- 1. In order to maintain the established spacing rules in effect in New Mexico for the area paragraph 5 of the development plan submitted should be amended to read as follows:**

"Section 5. Spacing of wells. Sufficient data are not yet available from which to determine the ultimate desired spacing of the area; therefore, it is planned to explore the Pictured Cliffs Zone by drilling on one 160-acre drilling unit per section until more information with regard to the nature

OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

Stanolind Oil and Gas Co.

Page 2

August 9, 1951

of the reservoir has been obtained. The practice of exploratory drilling of one well per section will more quickly define the pool limits."

2. This Plan of Development is approved subject to your acceptance of the amendment of Section 5 as set out above and like acceptance and approval being had of the Development Plan including the suggested amendment of Section 5 thereof by the Oil and Gas Supervisor of the United States Geological Survey as provided by the heretofore approved Huerfano Unit Agreement.

Very truly yours,

R. R. SPURRIER,
Secretary - Director

RRS:nf

cc: Seth and Montgomery
Attorneys at Law
Santa Fe, N. M.

U. S. Geological Survey
Roswell, N. M.

Land Commissioner Guy Shepard
State Capitol, Santa Fe, N. M.

Mr. C. F. Bedford
Division Production Superintendent
Fair Building
Fort Worth, Texas

C
O
P
Y

file

August 9, 1951

Stanolind Oil and Gas Company
Stanolind Building
Tulsa, Oklahoma

Attention: Mr. G. B. Jenkinson, Unitization Manager and
Mr. C. F. Bedford, Division Production Superintendent.

Re: Participating Area, Huerfano Unit, San Juan County, New Mexico

Gentlemen:

This acknowledges receipt of two copies of "Application for Approval of Participating Area for the Pictured Cliffs Zone, Huerfano Unit, San Juan County, New Mexico."

Having carefully examined the same I see no reason for not approving the same under the provision of Section 10 of said Agreement and, I hereby approve the same, conditioned however, upon like approval being had and obtained and my office notified thereof from the proper officials of the U. S. Geological Survey.

I also acknowledge receipt as of July 31st, of the Plan of Development, Pictured Cliffs Zone, Huerfano Unit. Having examined the same I hereby approve said plan for the period ending December 31, 1951, as submitted, subject to the following:

1. In order to maintain the established spacing rules in effect in New Mexico for the area, paragraph 5 of the Development Plan submitted should be amended to read as follows:

"Section 5. Spacing of Wells. Sufficient data are not yet available from which to determine the ultimate desired spacing of the area; therefore, it is planned to explore the Pictured Cliffs Zone by drilling on one, one hundred sixty acre drilling unit per section until more information with regard to

August 9, 1951

the nature of the reservoir, has been obtained.
The practice of exploratory drilling of one well
per section will more quickly define the pool
limits."

2. This Plan of Development is approved subject to your acceptance of the amendment of Section 5 as set out above and like acceptance and approval being had of the Development Plan including the suggested amendment of Section 5 thereof by the Oil and Gas Supervisor of the United States Geological Survey as provided by the heretofore approved Huerfano Unit Agreement.

Very truly yours,



GUY SHEPARD

Commissioner of Public Lands

vmc

cc: Seth and Montgomery
Attorneys at Law
Santa Fe, New Mexico

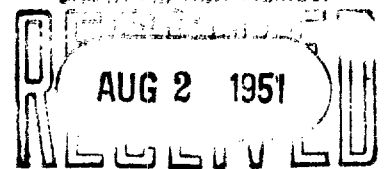
U. S. Geological Survey
Roswell, New Mexico

Oil Conservation Commission ✓
Santa Fe, New Mexico

C. F. Bedford
Division Production Superintendent
Fair Building
Fort Worth, Texas

APPLICATION FOR APPROVAL OF PARTICIPATING
AREA FOR THE PICTURED CLIFFS ZONE, HUERFANO
UNIT, SAN JUAN COUNTY, NEW MEXICO

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO.



TO: THE DIRECTOR OF THE U.S. GEOLOGICAL SURVEY
WASHINGTON, D. C.

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

Pursuant to the provisions of Section 10 of the Unit Agreement approved by the Director of the U. S. Geological Survey on June 6, 1950, by the Commissioner of Public Lands of the State of New Mexico on September 26, 1949, and by the Oil Conservation Commission of the State of New Mexico on September 20, 1949, affecting lands in the Huerfano Unit Area in San Juan County, New Mexico, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and Slick-Moorman Oil Company, owners of oil and gas leases or of operating rights under oil and gas leases covering lands within the area hereinafter described, hereby submit for your approval a selection of lands to constitute the initial participating area for the Pictured Cliffs Zone, Upper Cretaceous in age, found to be productive at depths between 2037 feet and 2092 feet in the Huerfano Unit Well No. 2, located 1980 feet north of the south line and 1980 feet west of the east line of Section 25, Township 26 North, Range 10 West, N.M.P.M. Survey, San Juan County, New Mexico. The lands selected by the applicant to constitute the initial participating area for said producing zone are as follows:

All of Section 25, in Township 26 N, Range 10 W, San Juan County, New Mexico.

The working interest under leases on the above described lands is vested 33.937 per cent in Stanolind Oil and Gas Company and 66.063 per cent in Slick-Moorman Oil Company; and royalties are payable on production from these lands to the Government under the provisions of the Santa Fe Leases Nos. 078001, 080894, 077949 and 076605, all of which leases are included in the above described proposed participating area.

In support of this application, the applicant attaches hereto and makes a part hereof a map, marked Exhibit "A", showing the Huerfano Unit and the proposed initial participating area for the Pictured Cliffs Zone. Also attached hereto and made a part hereof is a schedule, marked Exhibit "B", showing the leases included in the proposed initial participating area.

The Applicant respectfully requests that the Director, the Commissioner, and the Commission approve this selection of lands to constitute the initial Pictured Cliffs Participating Area to be effective as of the date of the first production from said zone, October 21, 1950.

Dated this 20th day of July, 1951.

STANOLIND OIL AND GAS COMPANY

By

F. J. M. 82
Vice President



ATTEST:

[Signature]
Assistant Secretary

STATE OF OKLAHOMA
COUNTY OF TULSA

On this 20th day of July, 1951, before me appeared J. S. Rouse, to me personally known, who, being by me duly sworn, did say that he is the Vice President of Stanolind Oil and Gas 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 J. S. Rouse acknowledged said instrument to be the free act and deed of said corporation.

Given under my hand and notarial seal this 20th day of July, 1951.

My Commission expires:

My Commission Expires May 11, 1955

[Signature]
Notary Public

STANOLIND OIL AND GAS COMPANY

OIL AND GAS BUILDING

FORT WORTH, TEXAS

April 3, 1952

C. F. BEDFORD

DIVISION PRODUCTION SUPERINTENDENT

File: AC-8198-216.82

Subject: Application for Approval of an
Initial Participating Area
Dakota Zone, Huerfano Unit
San Juan County, New Mexico

*Held
for revision
5-6-52*

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

In accordance with the provisions of Section 10 of the Unit Agreement affecting lands in the Huerfano Unit Area in San Juan County, New Mexico, we are transmitting herewith for your consideration two (2) copies of an application for approval of an initial participating area for the Dakota Zone of the Huerfano Unit. This application is based upon completion of Huerfano Unit Well No. 4, which, after an extensive testing program has indicated that it is capable of producing gas in paying quantities.

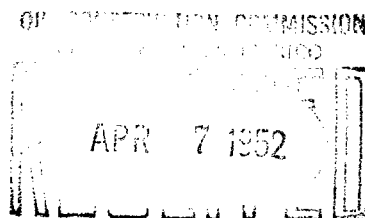
It is requested that this application be reviewed by your office; and, if it meets with approval, you are requested to return one approved copy at your earliest convenience.

Very truly yours,

C. F. Bedford

RGH:lee

Attachment (2)



STATE OF California
COUNTY OF San Francisco

On this California 12th day of September 194__, before me
personally appeared _____,

to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that he executed the same as
free act and deed. Hulda Elizabeth Evensen, a feme sole

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

~~My commission expires~~

[Signature]
Notary Public

DEPUTY CLERK, U. S. DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

STATE OF California
COUNTY OF San Francisco

On this California 12th day of September, 194__, before me
personally appeared _____,

to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that he executed the same as
free act and deed. Edward Colton Evensen, also known as Edward
C. Evensen, a single man

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

~~My commission expires:~~

[Signature]
Notary Public

DEPUTY CLERK, U. S. DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

~~STATE OF~~
~~COUNTY OF~~

~~On this California day of _____, 194__, before me~~
~~personally appeared _____,~~

~~to me known to be the person~~
~~described in and who executed the foregoing instrument, and~~
~~acknowledged that he executed the same as~~
~~free act and deed.~~

~~IN WITNESS WHEREOF, I have hereunto set my hand and~~
~~affixed my official seal the day and year in this certificate~~
~~above written.~~

~~My commission expires:~~

~~Notary Public~~

~~DEPUTY CLERK, U. S. DISTRICT COURT~~
~~NORTHERN DISTRICT OF CALIFORNIA~~

APPLICATION FOR APPROVAL OF PARTICIPATING
AREA FOR THE DAKOTA ZONE, HUERFANO UNIT,
SAN JUAN COUNTY, NEW MEXICO

TO: THE DIRECTOR OF THE U. S. GEOLOGICAL SURVEY
WASHINGTON, D. C.

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

Pursuant to the provisions of Section 10 of the Unit Agreement approved by the Director of the U. S. Geological Survey on June 6, 1950, by the Commissioner of Public Lands of the State of New Mexico on September 26, 1949, and by the Oil Conservation Commission of the State of New Mexico on September 20, 1949, affecting lands in the Huerfano Unit Area in San Juan County, New Mexico, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and Slick-Moorman Oil Company, owners of oil and gas leases or of operating rights under oil and gas leases covering lands within the area hereinafter described, hereby submit for your approval a selection of lands to constitute the initial participating area for the Dakota Zone, found to be productive in the Huerfano Unit Well No. 4, located 1980 feet south of the north line and 1980 feet east of the west line of Section 24, Township 26 North, Range 10 West, N.M.P.M. Survey, San Juan County, New Mexico. The lands selected by the applicant to constitute the initial participating area for said producing zone are as follows:

Southeast Quarter (SE/4) Section 14, South Half
(S/2) Section 13, East Half (E/2) Section 23,
All of Section 24, All of the above acreage
being in Township 26 North, Range 10 West, San
Juan County, New Mexico.

The working interest under leases on the above described lands is vested 33.94 per cent in Stanolind Oil and Gas Company and 66.06 per cent in Slick-Moorman Oil Company; and royalties are payable on production from these lands to the Government under the provisions of the Santa Fe Leases No. 077938, 076578, 079942, 078014, 077935, and New Mexico Leases No. 02874, 01369, 02138, all of which leases are included in the above described proposed participating area. The United States of America owns

one eighth (1/8) royalty interest in each of the above leases.

In support of this application, the applicant attaches hereto, and makes a part hereof, the following items: (1) A map, marked Exhibit "A", showing the Tuerfano Unit and the proposed initial participating area for the Dakota Zone. (2) A schedule, marked Exhibit "B", showing the leases included in the proposed initial participating area. (3) A brief Geological and Engineering Memorandum marked Exhibit "C", discussing the area geology and the producing characteristics of the initial well.

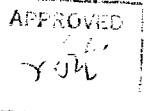
The applicant respectfully requests that the Director, the Commissioner, and the Commission approve this selection of lands to constitute the initial Dakota Participating Area to be effective as of the date of the first production from said zone, August 30, 1951.

Dated this 28th day of March, 1952.

STANOLIND OIL AND GAS COMPANY

By

[Signature]
Vice-President



ATTEST:

[Signature]
Assistant Secretary

STATE OF OKLAHOMA
COUNTY OF TULSA

On this 28th day of March, 1952, before me appeared A. L. Holliday, to me personally known, who, being by me duly sworn, did say that he is the Vice President of STANOLIND OIL AND GAS 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 A. L. Holliday acknowledged said instrument to be the free act and deed of said corporation.

Given under my hand and notarial seal this 28th day of March, 1952.

My Commission expires:

My Commission Expires October 4, 1955

Maxine M. Adams
Notary Public

EXHIBIT "C"

GEOLOGICAL AND ENGINEERING MEMORANDUM

Formation of a Participating Area
For Dakota Producing Zone in Huerfano Unit
San Juan County, New Mexico

Regionally the Huerfano Area is located on the southwest flank of the northwest-southeast trending San Juan Basin. There is very little evidence of local structure. Kutz Canyon and other nearby shallow reservoirs appear to be controlled by variable porosity within their respective pay sands and cannot be definitely associated with local structural anomalies.

Since this Dakota well is an isolated test, it is impossible at this time to state definitely what type of reservoir conditions exist. Almost all other Dakota production in the basin, however, is controlled primarily by structure. This, in all probability, will be found to be the case here although this structure, if present, is not reflected in the shallow horizons.

Due to our present limited knowledge of the nature of this reservoir it would appear that development outward from each successful exploratory test would result in the drilling of a minimum number of poor or dry development wells.

Only one well has been completed in the Dakota Zone, Well No. 4 having finished drilling on January 31, 1951. After an extensive cleanout and testing period, there was considerable uncertainty as to the true productivity of this well. In an effort to facilitate a more accurate evaluation of the producing characteristics of the Huerfano Unit Well No. 4, permission was granted by the United States on August 14, 1951, to produce and sell gas from this well until January 1, 1952. On January 2, 1952, this testing period was extended until April 1, 1952.

The first gas was sold from this well on August 30, 1951, and during a 24 hour test on September 8, 1951, the well produced at the rate of 271 MCF per day against a separator pressure of 425 psig. Since that time the well has indicated an ability to produce an average of approximately 250 MCF of gas and 10 barrels of distillate (60°API) per day against similar separator pressure.

STANOLIND OIL AND GAS COMPANY

FAIR BUILDING

FORT WORTH, TEXAS

July 31, 1951

File: AC-9623-258.10

Subject: Plan of Development,
Pictured Cliffs Zone,
Huerfano Unit, San Juan
County, New Mexico

RECEIVED
STATE LAND OFFICE

AUG 2 1 45 PM '51

SANTA FE, N. M.

C. F. BEDFORD
DIVISION PRODUCTION SUPERINTENDENT

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

We are transmitting herewith for your information and files two copies of the Plan of Development for the Calendar Year 1951, Pictured Cliffs Zone, Huerfano Unit, San Juan County, New Mexico.

Submission of this Plan is a requirement of the U.S.G.S. and we are simultaneously filing copies with the Supervisor of the U.S.G.S. at Roswell, New Mexico.

Very truly yours,



ROC/ek

Attachments

STANOLIND OIL AND GAS COMPANY

STANOLIND BUILDING

TULSA, OKLAHOMA

PRODUCING DEPARTMENT

G. B. JENKINSON

UNITIZATION MANAGER

July 24, 1951

File: GBJ-41.295-T

Re: Application for Establishment
of Initial Pictured Cliffs
Participating Area
Huerfano Unit
San Juan County, New Mexico

Commissioner of Public Lands
State of New Mexico
Santa Fe, New Mexico

Oil Conservation Commission ✓
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

In accordance with Section 10 of the Unit Agreement for the development and operation of the Huerfano Unit Area, San Juan County, New Mexico, Stanolind Oil and Gas Company, as Unit Operator, hereby submits to each of you two executed counterparts of an Application for Approval of an initial Pictured Cliffs Participating Area. Geological data in support of this application is likewise submitted to each of you.

The basis for this application is the completion of the Huerfano Unit Well No. 2 in Section 25, Township 26 North, Range 10 West. This well was completed on October 21, 1950, as a producer of gas from the Pictured Cliffs Zone.

We are simultaneously filing copies of this application with the Supervisor of the U.S.G.S. at Roswell, and it is therefore requested that this application be acted upon at your earliest convenience. If the application meets with your approval, we ask that you immediately notify the undersigned in order that we may transmit notice of your approval to the Supervisor in order that the application may be forwarded by him to Washington without delay.

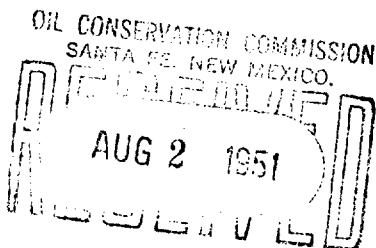
Yours very truly,

G. B. Jenkinson

By:

Lawrence E. Brock

EJJ:am
Attachment



7-27-1951 5/6/52

J. M. HERVEY
HIRAM M. DOW
CLARENCE E. HINKLE
W. E. BONDURANT, JR.
GEORGE H. HUNKER, JR.

WILLIAM C. SCHAUER

LAW OFFICES
HERVEY, DOW & HINKLE
ROSWELL, NEW MEXICO

June 12, 1950

- case 195 -

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Re: Huerfano Unit Agreement

Gentlemen:

We enclose herewith an approved copy of the above unit agreement. This agreement was approved by the Director of the U. S. Geological Survey on June 6, 1950.

Yours very truly,

HERVEY, DOW & HINKLE

By 

CEH:rh
Enc.

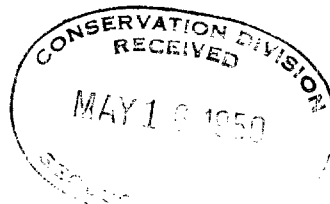
cc: Slick-Moorman Oil Company
Milam Building
San Antonio, Texas

SUNLAND REFINING CORPORATION

PETROLEUM PRODUCTS

HEAD OFFICE — EAST AND CALIFORNIA AVENUES — FRESNO, CALIFORNIA

May 12, 1950



Director,
U. S. Geological Survey,
Department of Interior,
Washington, D. C.

In re: Huerfano Unit, New Mexico

Dear Sir:

As per the request of your Mr. Pilkinton, we herewith consent to extend the date of final approval by the Department of Interior for the unitization of the Huerfano Area from April 10, 1950 - as stated in our letter of January 12 - to and including June 15, 1950.

Yours very truly,

A handwritten signature in cursive script, appearing to read "U. A. Olsen".

U. A. Olsen,
President.

GAQ/jc

GEARHART AUTOMATIC OIL BURNERS

SUNLAND REFINING CORPORATION

PETROLEUM PRODUCTS

HEAD OFFICE — EAST AND CALIFORNIA AVENUES — FRESNO, CALIFORNIA

February 20, 1950

Director,
U. S. Geological Survey,
Department of Interior,
Washington, D. C.

Re: Huerfano Unit Area, New Mexico

Dear Sir:

Notwithstanding anything to the contrary contained in the letter, dated January 12, 1950, from Sunland Refining Corporation to the unit operator and made a part of Sunland Refining Corporation's ratification and joinder of January 12, 1950, to the unit agreement for the Huerfano unit area, San Juan County, New Mexico, the Sunland Refining Corporation hereby agrees that nothing therein contained shall affect the right of the Government, acting through the Secretary of the Interior, to require its oil and gas lessees to join in and subscribe to unit agreements pursuant to the terms of the Federal Oil and Gas leases.

Yours very truly,

SUNLAND REFINING CORPORATION

BY: 

President

BY: 

Secretary

GAO/jc

GEARHART AUTOMATIC OIL BURNERS

EXHIBIT "B"

HUERFANO UNIT

SAN JUAN COUNTY, NEW MEXICO

PARTICIPATING AREA
DAKOTA ZONE

LESSEE: Pauline S. McNaughton
SERIAL NUMBER: Santa Fe - 077938
LEASE DESCRIPTION: S/2 NE/4, N/2 SE/4 Section 23 and NW/4 Section 24,
Township 26 North, Range 10 West.
AMOUNT OF ACREAGE: 320
PERCENTAGE OF PARTICIPATION: 22.222222

There are no overriding royalty interests involved in the
above described leases or portions of leases.

The operating rights on all of the above described leases
or portions of leases are held as follows:

Stanolind Oil and Gas Company 33.94%
Slick-Moorman Oil Company 66.06%

LESSEE: Anna Brown
SERIAL NUMBER: Santa Fe - 076578
LEASE DESCRIPTION: SW/4 Section 24, Township 26 North, Range 10 West
AMOUNT OF ACREAGE: 160
PERCENTAGE OF PARTICIPATION: 11.111111

There are no overriding royalty interests involved in the
above described leases or portions of leases.

The operating rights on all of the above described leases or
portions of leases are held as follows:

Stanolind Oil and Gas Company 33.94%
Slick-Moorman Oil Company 66.06%

LESSEE: Pauline V. Trigg
SERIAL NUMBER: Santa Fe - 079942
LEASE DESCRIPTION: SW/4 NE/4 and SE/4, Section 24, Township 26 North,
Range 10 West.

AMOUNT OF ACREAGE: 200

PERCENTAGE OF PARTICIPATION: 13.888889

OVERRIDING ROYALTIES

<u>Owners</u>	<u>Per Cent</u>
Pauline V. Trigg	<u>3.125</u>
Total	3.125

The operating rights on all of the above described leases or portions of leases are held as follows:

Stanolind Oil and Gas Company 33.94%
Slick-Moorman Oil Company 66.06%

LESSEE: Tom and Earl Slick
SERIAL NUMBER: New Mexico - 01367
LEASE DESCRIPTION: E/2 NE/4 and NW/4 NE/4, Section 24, Township 26 North, Range 10 West.
AMOUNT OF ACREAGE: 120
PERCENTAGE OF PARTICIPATION: 8.333333

There are no overriding royalty interests involved in the above described leases or portions of leases.

The operating rights on all of the above described leases or portions of leases are held as follows:

Stanolind Oil and Gas Company 33.94%
Slick-Moorman Oil Company 66.06%

LESSEE: Lucile Pipkin
SERIAL NUMBER: (Santa Fe - 078020) N.M. - 02874
LEASE DESCRIPTION: SE/4 Section 14, Township 26 North, Range 10 West
AMOUNT OF ACREAGE: 160
PERCENTAGE OF PARTICIPATION: 11.111111

There are no overriding royalty interests involved in the above described leases or portions of leases.

The operating rights on all of the above described leases or portions of leases are held as follows:

Stanolind Oil and Gas Company 33.94%
Slick-Moorman Oil Company 66.06%

LESSEE: Vivienne (Pike) Maunala
SERIAL NUMBER: Santa Fe - 078014
LEASE DESCRIPTION: SE/4 Section 13, Township 26 North, Range 10 West.
AMOUNT OF ACREAGE: 160
PERCENTAGE OF PARTICIPATION: 11.111111

There are no overriding royalty interests involved in the above described leases or portions of leases.

The operating rights on all of the above described leases or portions of leases are held as follows:

Stanolind Oil and Gas Company 33.94%
Slick-Moorman Oil Company 66.06%

LESSEE: Annie E. Johnson
SERIAL NUMBER: Santa Fe - 077935
LEASE DESCRIPTION: SW/4 Section 13, Township 26 North, Range 10 West
AMOUNT OF ACREAGE: 160
PERCENTAGE OF PARTICIPATION: 11.111111

There are no overriding royalty interests involved in the above described leases or portions of leases.

The operating rights on all of the above described leases or portions of leases are held as follows:

Stanolind Oil and Gas Company 33.94%
Slick-Moorman Oil Company 66.06%

LESSEE: Tom and Earl Slick
SERIAL NUMBER: New Mexico - 01369

LEASE DESCRIPTION: N/2 NE/4, Section 23, Township 26 North, Range 10 West.

AMOUNT OF ACREAGE: 80

PERCENTAGE OF PARTICIPATION: 5.555556

There are no overriding royalty interests involved in the above described leases or portions of leases.

The operating rights on all of the above described leases or portions of leases are held as follows:

Stanolind Oil and Gas Company	33.94%
Slick-Moorman Oil Company	66.06%

LESSEE: Emile Price

SERIAL NUMBER: New Mexico - 02138

LEASE DESCRIPTION: S/2 SE/4 Section 23, Township 26 North, Range 10 West.

AMOUNT OF ACREAGE: 80

PERCENTAGE OF PARTICIPATION: 5.555556

There are no overriding royalty interests involved in the above described leases or portions of leases.

The operating rights on all of the above described leases or portions of leases are held as follows:

Stanolind Oil and Gas Company	33.94%
Slick-Moorman Oil Company	66.06%

APPLICATION FOR APPROVAL OF PARTICIPATING
AREA FOR THE PICTURED CLIFFS ZONE, HUERFANO UNIT,
SAN JUAN COUNTY, NEW MEXICO

TO: THE DIRECTOR OF THE U.S. GEOLOGICAL SURVEY
WASHINGTON, D. C.

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

Pursuant to the provisions of Section 10 of the Unit Agreement approved by the Director of the U. S. Geological Survey on June 6, 1950, by the Commissioner of Public Lands of the State of New Mexico on September 26, 1949, and by the Oil Conservation Commission of the State of New Mexico on September 20, 1949, affecting lands in the Huerfano Unit Area in San Juan County, New Mexico, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and Slick-Moorman Oil Company, owners of oil and gas leases or of operating rights under oil and gas leases covering lands within the area hereinafter described, hereby submit for your approval a selection of lands to constitute the initial participating area for the Pictured Cliffs Zone, Upper Cretaceous in Age, found to be productive in the Huerfano Unit Well No. 6, located 990 feet north of the south line and 990 feet east of the west line of Section 31, Township 27 North, Range 10 West, San Juan County, New Mexico. The lands selected by the applicant to constitute the initial participating area for said producing zone are as follows:

All of Section 31, Township 27-North, Range 10-West,
East Half (E/2) Section 36, Township 27 North, Range 11 West,
North Half (N/2) Section 6, Township 26 North, Range 10 West,
Northeast Quarter (NE/4) Section 1, Township 26 North, Range 11 West,
All in San Juan County, New Mexico

The working interest under leases on the above described lands is vested 22.74 per cent in Stanolind Oil and Gas Company and 77.26 per cent in Slick-Moorman Oil Company; and royalties are payable on production from these lands to the Government under the provisions of the Santa Fe Leases Nos. 078422, 080425A, 077936, and N.M. 01074, all of which leases are included in the above described proposed participating area.

In support of this application, the applicant attached hereto and makes a part hereof the following items: (1) A map, marked Exhibit "A", showing the Huerfano Unit and the proposed initial participating area for the Pictured Cliffs Zone, (2) A schedule, marked Exhibit "B", showing the leases included in the proposed initial participating area, (3) A brief Geological Memorandum, marked Exhibit "C", discussing the geology in the area in the immediate vicinity of the Huerfano Unit.

The applicant respectfully requests that the Director, the Commissioner, and the Commission approve this selection of lands to constitute the initial Pictured Cliffs Participating Area to be effective as of the date of the first production from said zone, November 18, 1951.

Dated this 16th day of April, 1952

STANOLIND OIL AND GAS COMPANY

BY: [Signature]
Vice-President

ATTEST:

[Signature]
ASSISTANT SECRETARY

STATE OF Oklahoma

COUNTY OF LeFlore

On this 16th day of April, 1952, before me appeared J. E. Rouse, to me personally known, who, being by me duly sworn, did say that he is the Vice President of STANOLIND OIL AND GAS 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 J. E. Rouse acknowledged said instrument to be the free act and deed of said corporation.

Given under my hand and notarial seal this 16th day of April, 1952.

MY COMMISSION EXPIRES:

My Commission Expires October 4, 1955

Margie M. Adams
Notary Public

APPLICATION FOR APPROVAL OF PARTICIPATING
AREA FOR THE PICTURED CLIFFS ZONE, HUERFANO UNIT,
SAN JUAN COUNTY, NEW MEXICO

TO: THE DIRECTOR OF THE U.S. GEOLOGICAL SURVEY
WASHINGTON, D. C.

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

Pursuant to the provisions of Section 10 of the Unit Agreement approved by the Director of the U. S. Geological Survey on June 6, 1950, by the Commissioner of Public Lands of the State of New Mexico on September 26, 1949, and by the Oil Conservation Commission of the State of New Mexico on September 20, 1949, affecting lands in the Huerfano Unit Area in San Juan County, New Mexico, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and Slick-Moorman Oil Company, owners of oil and gas leases or of operating rights under oil and gas leases covering lands within the area hereinafter described, hereby submit for your approval a selection of lands to constitute the initial participating area for the Pictured Cliffs Zone, Upper Cretaceous in Age, found to be productive in the Huerfano Unit Well No. 6, located 990 feet north of the south line and 990 feet east of the west line of Section 31, Township 27 North, Range 10 West, San Juan County, New Mexico. The lands selected by the applicant to constitute the initial participating area for said producing zone are as follows:

All of Section 31, Township 27-North, Range 10-West,
East Half (E/2) Section 36, Township 27 North, Range 11 West,
North Half (N/2) Section 6, Township 26 North, Range 10 West,
Northeast Quarter (NE/4) Section 1, Township 26 North, Range 11 West,
All in San Juan County, New Mexico

The working interest under leases on the above described lands is vested 22.74 per cent in Stanolind Oil and Gas Company and 77.26 per cent in Slick-Moorman Oil Company; and royalties are payable on production from these lands to the Government under the provisions of the Santa Fe Leases Nos. 078422, 080425A, 077936, and N.M. 01074, all of which leases are included in the above described proposed participating area.

In support of this application, the applicant attached hereto and makes a part hereof the following items: (1) A map, marked Exhibit "A", showing the Huerfano Unit and the proposed initial participating area for the Pictured Cliffs Zone, (2) A schedule, marked Exhibit "B", showing the leases included in the proposed initial participating area, (3) A brief Geological Memorandum, marked Exhibit "C", discussing the geology in the area in the immediate vicinity of the Huerfano Unit.

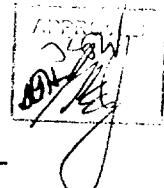
The applicant respectfully requests that the Director, the Commissioner, and the Commission approve this selection of lands to constitute the initial Pictured Cliffs Participating Area to be effective as of the date of the first production from said zone, November 18, 1951.

Dated this 16th day of April, 1952

STANOLIND OIL AND GAS COMPANY

BY: [Signature]

Vice-President



ATTEST:

[Signature]
ASSISTANT SECRETARY

STATE OF Oklahoma

COUNTY OF LeFlore

On this 16th day of April, 1952, before me appeared J. E. Rouse, to me personally known, who, being by me duly sworn, did say that he is the Vice President of STANOLIND OIL AND GAS 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 J. E. Rouse acknowledged said instrument to be the free act and deed of said corporation.

Given under my hand and notarial seal this 16th day of April, 1952.

MY COMMISSION EXPIRES:

My Commission Expires October 4, 1955

Maxine M. Adams
Notary Public

STATE OF California)

COUNTY OF San Francisco)

On this 10th day of September, 194 9, before me personally appeared Josephine Marrah Cook, and husband, Charles F. Cook, to me known to be the person s described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

~~My commission expires~~

Edward C. Evensen
~~Notary Public~~
DEPUTY CLERK, U. S. DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

STATE OF California)

COUNTY OF San Francisco)

On this 10th day of September, 194 9, before me personally appeared Harold Kogan and wife, Matilda Kogan, to me known to be the person s described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

~~My commission expires:~~

Edward C. Evensen
~~Notary Public~~
DEPUTY CLERK, U. S. DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

STATE OF California)

COUNTY OF Sacramento)

On this 8th day of September, 194 9, before me personally appeared Christian Carl Evensen and wife, Helena A. Evensen, to me known to be the person s described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

~~My commission expires~~

M. B. Braun
~~Notary Public~~
DEPUTY CLERK, U. S. DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

October 3, 1949

Oil Conservation Commission
205 Booker Building
Artesia, New Mexico

Gentlemen:

We enclose herewith, copy of transcript of record, in connection with the hearing held by the Oil Conservation Commission on September 20, 1949, which includes Cases No. 195 and No. 196.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

RRS:bw
encl.

October 3, 1949

Oil Conservation Commission
P. O. Box 1545
Hobbs, New Mexico

Gentlemen:

We enclose herewith, copy of transcript of record, in connection with the hearing held by the Oil Conservation Commission on September 20, 1949, which includes Cases No. 195 and No. 196.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

RRS:bw
encl.

October 3, 1949

Mr. Glenn Staley
Lea County Operators Committee
Drawer I
Hobbs, New Mexico

Dear Mr. Staley:

We enclose herewith, copy of transcript of record, in connection with the hearing held by the Oil Conservation Commission on September 20, 1949, which includes Cases No. 195 and No. 196.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

RRS:bw
encl.

September 1, 1949

FARMINGTON TIMES HUSBAND

Farmington, New Mexico

Gentlemen:

Re: Case 195
Notice of Publication

Please publish the enclosed notice once, immediately. Please proofread the notice carefully and send a copy of the paper carrying such notice to this office.

UPON COMPLETION OF THE PUBLICATION SEND PUBLISHER'S AFFIDAVIT IN DUPLICATE.

For payment please submit statement in duplicate, and sign and return the enclosed voucher.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

NRS:bw
encls.

September 1, 1949

Mr. Glenn Staley
Lea County Operators Committee
Drawer I
Hobbs, New Mexico

Dear Mr. Staley:

Enclosed please find copy of Notice of Publication, covering the hearing to be held on September 20, 1949 at 10:00 o'clock A.M., in Santa Fe, at the Senate Chambers.

Very truly yours,

R. R. Spurrier
Secretary-Director

RRS:bw
encl.

September 1, 1949

THE SANTA FE NEW MEXICAN

Santa Fe, New Mexico

Gentlemen:

Re: Cases 195 and 196
Notice of Publication

Please publish the enclosed notice once, immediately. Please proof read the notice carefully and send a copy of the paper carrying such notice to this office.

UPON COMPLETION OF THE PUBLICATION SEND PUBLISHER'S AFFIDAVIT IN DUPLICATE.

For payment please submit statement in duplicate, and sign and return the enclosed voucher.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

RRS:bw
encl.

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

W. P. MARSHALL, President

1201

SYMBOLS

DL = Day Letter

NL = Night Letter

LC = Deferred Cable

NLT = Cable Night Letter

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L.RWA119 PD=ROSWELL NMEX 31 235P=

GEORGE GRAHAM, ATTY STATE LAND OFFICE=

1910 MAR 31 PM 3 53

SANTA FE NMEX=

SUGGEST YOU SET HEARING HUERSANO AGREEMENT SEPTEMBER 20 IF POSSIBLE=

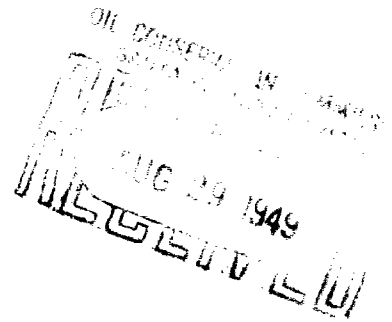
HERVEY DOW AND HINKLE=

20=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

STATE LAND OFFICE
Santa Fe, New Mexico

August 25, 1949



Mr. Clarence E. Hinkle
Hervey, Dow & Hinkle
White Building
Roswell, New Mexico

Re: Proposed HUERFANO UNIT AGREEMENT
Slick-Moorman Oil Company
San Antonio, Texas


Dear Mr. Hinkle:

I have examined the Application for Approval of the Huerfano Unit Agreement, San Juan County, New Mexico, recently filed in this office. I have also examined the copy of the proposed unit agreement, and I am pleased to advise that I have no objection to same as to form.

Pending the required hearing of such agreements before the Oil Conservation Commission, I shall give further study to the proposed agreement, and after considering the testimony adduced at the hearing before the Oil Conservation Commission, I will consider executing a formal Certificate of Approval.

Will you please deliver to the United States Geological Survey for Mr. Morrell's files at least three of the enclosed copies hereof?

Very truly yours,


GUY SHEPARD
Commissioner of Public Lands

COPY

OIL C
SA
RL

May 23, 1949

Slick Oil Company
1304 Milam Building
San Antonio, Texas

Attention of O. G. Hannum, Attorney-in-fact

Gentlemen:

I have examined preliminarily the proposed Huerfano Unit Agreement submitted to this office some time ago.

The usual practice has been for such agreements to be presented unofficially to this office before formal application for approval, by this office in order that differences, if any, may be adjusted. Under this practice, I have examined the proposed agreement and note that in Paragraph 7, near the top of Page 6, you have inserted the requirement that each working interest owner shall take in kind or individually market its respective portions of production. This provision has heretofore with few exceptions not been in unit agreements heretofore approved by this office; however, this office has no objection to its inclusion.

It is noted that Section 8 is entitled "Test Wells" whereas prior agreements have usually termed this "Drilling to Discovery." We have no objection to this change, particularly since Paragraph 8 explains the drilling plan. The change in wording of Paragraph 13 from those of previous agreements is not objectionable.

It is noted that the last paragraph of Section 16 should be reconsidered by you since it seems to limit the right of the holder of the holder to release, surrender, etc. Would not this run counter to Paragraph 26 of the proposed agreement? Also, I have been unable to reconcile it with the provisions of Section 17 "Covenants Run With Land."

Page 2.
Slick Oil Company

May 23, 194

I am taking the liberty of sending you a copy of the oil and gas lease rules and respectfully refer you to Pages 12 and 13 which relate to the unitization procedure in this office. After your formal application is filed containing the requirements set out in the rules and the objections or adjustments suggested above are complied with, you will be advised of the Commissioner's views. Thereafter, you should make application to the New Mexico Oil Conservation Commission for approval of the adjusted agreement.

Very truly yours,

GEORGE A. GRAM
Attorney, State Land Office

GAS/mih
enclosure

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