

EXHIBIT "B"
OWNERSHIP SCHEDULE
FIRST ENLARGEMENT GALLUP PARTICIPATING AREA
GALLEGOS CANYON UNIT
SAN JUAN COUNTY, NEW MEXICO
EFFECTIVE MAY 1, 1961

Tract No.	Description of Land	Serial No. & Date of Lease	Basic Royalty Owner	% of 8/8	Owner of Record	Overrides %	Working Interest Owner	% of Lease	Acres	Particip	Type of Acreage		
											Committed Acres	Percent Participation	
8	Lots 1 & 2, E/2 Sec. 11, Lots 3 & 4, W/2 Sec. 11, T28N, R13W	SF-078072 2-1-48	USA	12.50	Louise M. Phillips	None	Robert Mims	100.00	(115.36)	--	Federal	600	100.00
19	S/2 SE/4 Sec. 23, SW/4 SW/4 Sec. 24, NE/4 Sec. 26, T28N, R12W	SF-078904 2-1-48	USA	12.50	Pan American Petroleum Corporation George J. Darnelle	2.00	Pan American Petroleum Corporation National Drilling Company, Inc.	75.00 25.00	280.00	46.66	Federal	600	100.00
19-A	W/2 NW/4 Sec. 25, T28N, R12W	SF-078904A 2-1-48	USA	12.50	Pan American Petroleum Corporation	None	Pan American Petroleum Corporation	100.00	80.00	13.33	Federal	600	100.00
21	W/2 NW/4, SW/4 Sec. 35, T29N, R13W	SF-078926 5-1-48	USA	12.50	Pan American Petroleum Corporation George J. Darnelle	None	Pan American Petroleum Corporation National Drilling Company, Inc.	75.00 25.00	240.00	40.00	Federal	600	100.00
23	Sec. 34, T29N, R13W	SF-079065 10-1-49	USA	12.50	Aztec Oil and Gas Company	5.00	Aztec Oil and Gas Company	100.00	(640.00)		Federal	600	100.00

() Denotes acreage not committed to Unit.

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

247

December 20, 1961

C
O
P
Y

Pan American Petroleum Corporation
P. O. Box 480
Farmington, New Mexico

Attention: Mr. T. M. Curtis

Re: Third Enlargement of the
Dakota Participating Area
Gallegos Canyon Unit, San
Juan County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Third Enlargement of the Dakota Participating Area for the Gallegos Canyon Unit, San Juan County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Ten approved copies of the enlargement are being forwarded to the United States Geological Survey, Roswell, New Mexico.

Very truly yours,

A.L. PORTER, Jr.
Secretary-Director

ALP/JEK/ig

cc: USGS - Roswell, New Mexico
Commissioner of Public Lands
Santa Fe, New Mexico

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico
August 25, 1961

File: N-386-416

Subject: First Enlargement
Gallup Participating Area
Gallegos Canyon Unit

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

Attention: Mrs. Marian Rhea

Gentlemen:

Attached herewith is Pan American Petroleum Corporation's proposed First Enlargement to the Gallup Participating Area of the Gallegos Canyon Unit. If this proposal meets with your approval, please execute all copies and send them to the Oil Conservation Commission of the State of New Mexico.

By copy of this letter to the Oil Conservation Commission, we request that upon their approval they in turn execute all copies and send them to the Oil and Gas Supervisor, United States Geological Survey.

By copy of this letter to the United States Geological Survey, we request that upon approval, they return to Pan American Petroleum Corporation, Box 480, Farmington, New Mexico, four fully executed copies. We will then transmit one fully signed copy of the enlargement to the Commissioner of Public Lands and to the Oil Conservation Commission.

In this manner, the files for each Agency will be complete.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION

T. M. Curtis

T. M. Curtis
District Superintendent

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

The Oil and Gas Supervisor
United States Geological Survey
Roswell, New Mexico

COPY

PAN AMERICAN PETROLEUM CORPORATION
FORT WORTH, TEXAS

August 15, 1961

File: BAL-133-416

Subject: Gallegos Canyon Unit,
San Juan County, New Mexico

CERTIFIED MAIL -
RETURN RECEIPT REQUESTED

Mr. John A. Anderson
Regional Oil and Gas Supervisor
U. S. Geological Survey
P. O. Box 6721
Roswell, New Mexico

Dear Sir:

Furnished herewith for your files are four copies of "Ratification and Joinder of Unit Agreement and Unit Operating Agreement", Gallegos Canyon Unit, San Juan County, New Mexico, executed by Texaco Inc.

By this joinder, consented to and approved by Pan American Petroleum Corporation as Unit Operator, Texaco commits interest as to all horizons in Tract 73. This interest was formerly owned by Clarence Rupp.

It is desired to have this commitment become effective as of September 1, 1961, and we would appreciate your acknowledging receipt of this ratification instrument during the month of August, 1961. Upon your acknowledging receipt, copies will be furnished to the other Working Interest Owners in the unit.

By copy of this letter, the Commission and the Commissioner are being furnished one copy each of said ratification.

Very truly yours,

Original Signed by J. L. HOYE, JR.
BY LMA

J. L. HOYE, JR.

LLM/ek
Attachments

COPY

Page 2
BAL-133-416
August 15, 1961

CC w/att: Commissioner of Public Lands, State of New Mexico
P. O. Box 791
Santa Fe, New Mexico

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

Texaco Inc.
P. O. Box 3109
Midland, Texas
Attn: Mr. B. E. Helman

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 Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, dated the 1st. day of November, 1950, in form approved on behalf of the Secretary of the Interior, the undersigned, whether one or more, hereby expressly joins said Unit Agreement and ratifies, approves, and adopts said Agreement, its terms and any modifications thereof.

This ratification and joinder shall be effective as to the undersigned's interest in any lands and leases or interests therein, and royalties presently held or which may arise under existing option agreements or other interests in unitized substances, covering any of the following described land:

Township 29 North, Range 12 West, N. M. P. M.

**Section 36: Northwest Quarter of the Northeast Quarter
(NW/4 NE/4)**

As a part and parcel of this ratification and joinder, the undersigned to the extent of his or its interest, expressly agrees:

(1) That the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement.

(2) That the drilling, development, and producing requirements of all leases and other contracts in which undersigned's rights and interest are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement.

(3) That payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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.

This Ratification and Joinder of Unit Agreement and Unit Operating Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns, or successors in interest.

EXECUTED this 9th day of August, 1961.

Name _____

Name _____

Address _____

Address _____

Party TEXACO Inc.

XXXXX
ATTEST: ~~XXXXXXXXXXXXX~~
Assistant Secretary

By: [Signature]
Vice-President
Attorney-in-Fact

Address: P. O. Box 3109, Midland, Texas

APPROVED AS TO
Terms AS IS
Form JMB

Consented to and accepted as of the 14
day of August, 1961.

PAN AMERICAN PETROLEUM CORPORATION - Unit Operator

By: [Signature]
Attorney-in-Fact

APPROVED
[Signature]
8/24/61

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 196____, before me personally appeared _____, to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that _____ executed the same as _____ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 196____.

My commission expires:

Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 196____, before me personally appeared _____, to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that _____ executed the same as _____ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 196____.

My commission expires:

Notary Public

STATE OF TEXAS)
COUNTY OF MIDLAND)

On this 9th day of August, 1961, before me personally appeared R. M. Bischoff, to me personally known, who, being by me duly sworn, did say that he is the Attorney-in-Fact ~~President~~ of TEXACO Inc.

and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said R. M. Bischoff acknowledged said instrument to be the free act and deed of said corporation.

GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS 9th day of August, 1961.

My commission expires

6-1-63

Dorothy Langas
Notary Public Dorothy Langas

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico
August 11, 1961

347

File: N-339-416

Subject: Non-Commercial Determination
Of Gallup Formation
V. W. McManus Well No. 1
San Juan County, New Mexico
Gallegos Canyon Unit

Director
United States Geological Survey
c/o Oil and Gas Supervisor
P. O. Drawer 1857
Roswell, New Mexico

Commissioner of Public Lands
The State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

Oil Conservation Commission of
The State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

All Working Interest Owners
In Unit Area
(See Attached Addressee List)

Gentlemen:

A Non-Commercial Determination of the Gallup formation for the
V. W. McManus Well No. 1, located in the SW/4 of Section 22, T-28-N, R-12-W,
was approved by the U. S. Geological Survey on August 7, 1961.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION


T. M. Curtis
District Superintendent

CKD:en
Attach.

MAILING LIST OF WORKING INTEREST OWNERS
GALLEGOS CANYON UNIT AREA
SAN JUAN COUNTY, NEW MEXICO

American Petrofina Co. of Texas
P. O. Box 2159
Dallas 21, Texas
Attention: Mr. Wilkin, Prod. Dept.

American Petrofina Co. of Texas
P. O. Box 2159
Dallas 21, Texas
Attention: Mr. Vendig, Land Dept.

Mary Roberts Berry
208 E. Washington Street
Washington, Iowa

Tom Bolack
1010 North Dustin
Farmington, New Mexico

Brookhaven Oil Company
P. O. Box 1267
Scottsdale, Arizona

B. H. and Dyvena Crawford
Bloomfield, New Mexico

Delta Oil Company of Utah
c/o Universal Minerals, Inc.
1126 Mercantile Securities Building
Dallas 1, Texas

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas
Attention: Land Department

Mr. Olen F. Featherstone
Roswell Petroleum Building
Roswell, New Mexico

Ernest A. Hanson
P. O. Box 1515
Roswell, New Mexico

L. B. Hodges
P. O. Box 1558
Roswell, New Mexico

Mrs. James A. Anderson, Executrix of
Estate of Edward J. Johnson
372 Euclid Avenue
Oakland 10, California

Elma R. Jones
764 Twentieth Avenue
San Francisco, California

Locke-Taylor Drilling Company
801 Second Avenue
Durango, Colorado

Petro-Atlas, Inc.
2000 National Bank of Tulsa Building
Tulsa, Oklahoma

John J. Redfern, Jr.
P. O. Box 1747
Midland, Texas

H. K. Riddle
65 East 4th South
Salt Lake City, Utah

John H. Trigg
P. O. Box 6529
Roswell, New Mexico

Texas Pacific Coal & Oil Company
P. O. Box 2110
Fort Worth 1, Texas
Attention: Mr. R. W. Hines

Skelly Oil Company
Tulsa 2, Oklahoma
Attention: Mr. D. W. Smith

Wood Oil Company
Room 800 - Midstates Building
Tulsa, Oklahoma

Sunray Mid-Continent Oil Company
Fourth Floor, 101 University Building
Cherry Creek Center
Denver 6, Colorado
Attention: Mr. A. W. Wadman, Jr.

Texaco, Inc.
P. O. Box 3109
Midland, Texas
Attention: Mr. R. T. Maxwell

Aztec Oil and Gas Company
920 Mercantile Securities Building
Dallas 1, Texas
Attention: Mr. H. L. Snider, Jr.

Southern Union Production Company
Fidelity Union Tower Building
1507 Pacific Avenue
Dallas 1, Texas
Attention: Mr. A. M. Wiederkehr

Summit Oil Company
Fidelity Union Tower Building
1507 Pacific Avenue
Dallas 1, Texas

National Drilling Company, Inc.
4810 N. Kenneth Avenue
Chicago 30, Illinois

Diversa, Inc.
633 Meadows Building
Dallas 6, Texas

Case 247

Drawer 1857
Roswell, New Mexico

August 7, 1961

Pan American Petroleum Corporation
P. O. Box 480
Farmington, New Mexico

Attention: Mr. T. M. Curtis

Gentlemen:

Your letter of March 9, 1961, supplemented by letter of July 26, 1961, advises that Pan American Petroleum Corporation as unit operator of the Gallegos Canyon unit area, San Juan County, New Mexico, has determined well V. W. McManus No. 1 in the SW $\frac{1}{4}$ sec. 22, T. 28 N., R. 12 W., N.M.P.M., to be incapable of producing unitized substances in paying quantities from the Gallup formation.

The well was recompleted in February 1961 for a potential of 50 barrels of oil per day from the Gallup formation 5416-5421 feet. You advise that engineering estimates indicate that the recoverable reserves attributed to the well are insufficient to pay out the cost of the well and return a reasonable profit on the investment.

This office concurs with your determination that well V. W. McManus No. 1 is incapable of producing unitized substances in paying quantities from the Gallup formation under existing conditions.

Very truly yours,

(Orig. Sgd.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

Copy to: Wash. (w/cy of determination)
Farmington (w/cy of determination)
NMOCC, Santa Fe (ltr. only) ✓
Com. of Pub. Lands, Santa Fe (ltr. only)
Accounts

247

In reply refer to:
Legal Division

July 26, 1961

Fun American Petroleum Corporation
Fort Worth
Texas

Attention Mr. J. L. Hoyt, Jr.

Re: Your reference File Lease RGH-533-416
Gallegos Canyon Unit
E2447--3

Gentlemen:

Reference is made to your letter to Mr. John A. Anderson, of the U. S. G. S., dated June 28, 1961, containing ratification and joinder of unit agreement covering Tract No. 46 among others.

Our file shows that demand was made upon El Paso Natural Gas Company for further development of the acreage under the above lease with particular reference to the Dakota formation, and especially as it regards Section 16, 29 North, 12 West. In view of this action which was known to the Skelly Oil Company, the present record owner, objection is made to commitment of this acreage to the Gallegos Canyon Unit, especially in view of the fact that it is our position that this entire unit area has been proven to be productive in the Dakota formation and should be set up as a participating area in that formation under the terms of the unit agreement. When this is done, a satisfactory plan for orderly drilling of the participating areas should be submitted for approval.

Very truly yours,

E. S. JOHNNY WALKER
Commissioner of Public Lands

William O. Jordan
General Counsel

WOJ:mg

cc Skelly Oil Company, Mr. John A. Anderson,
Oil Conservation Commission

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PAN AMERICAN PETROLEUM CORPORATION
FORT WORTH, TEXAS

June 28, 1961

File: RGH-533-416
Subject: Gallegos Canyon Unit,
San Juan County, New Mexico

REGISTERED MAIL -
RETURN RECEIPT REQUESTED

Case # 247

Mr. John A. Anderson
Regional Oil and Gas Supervisor
U. S. Geological Survey
P. O. Box 6721
Roswell, New Mexico

Dear Sir:

Furnished herewith for your files are four copies of "Ratification and Joinder of Unit Agreement and Unit Operating Agreement" instruments relative to the subject unit, which have been separately executed by El Paso Natural Gas Company, Skelly Oil Company, and Texas Pacific Coal and Oil Company for their respective interests in the unit. These joinders serve to commit the working interests in Tracts 46, 75, 76, 80, and 81, which are more fully described on the forms attached, and have been accepted by Pan American Petroleum Corporation, as Unit Operator, subject to title examination.

The forms executed by Skelly recommit Tract 56 which was originally committed in October 1956. Skelly now has the rights in all horizons in Tract 46 as a result of El Paso reassigning its rights above the base of the Mesa Verde to Skelly in April 1961. El Paso has the rights above the base of the Mesa Verde in Tract 76, and Skelly has the deeper rights, but all horizons in Tract 76 are now committed. Texas Pacific has the rights in all horizons in Tracts 75, 80 and 81.

Upon your acknowledging receipt of these instruments, copies will be furnished to the other working interest owners in the unit. It is our desire to have these commitments become effective as of July 1, 1961, and we would appreciate your acknowledgment letter stating that the forms were received during June 1961. By copy of this letter, the Commissioner and the Commission are being furnished one copy each of said ratifications for each working interest owner.

Very truly yours,

ORANGE COUNTY, TEXAS
SECRETARY

J. L. HOYE, JR.

JWA/ek
Attachments

COPY

Page 2
RGH-533-416
June 28, 1961

Carbon Copies Sent Registered Mail - Return Receipt Requested to:

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

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

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 Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, dated the 1st. day of November, 1950, in form approved on behalf of the Secretary of the Interior, the undersigned, whether one or more, hereby expressly joins said Unit Agreement and ratifies, approves, and adopts said Agreement, its terms and any modifications thereof.

This ratification and joinder shall be effective as to the undersigned's interest in any lands and leases or interests therein, and royalties presently held or which may arise under existing option agreements or other interests in unitized substances, covering any of the following described land: **State of New Mexico Lease No. E-5462, only insofar as it covers the following tracts of land:**

Township 29 North, Range 12 West
Unit Tract No. 75 - Section 36: ~~SW 1/4~~ containing 40 acres
Unit Tract No. 80 - Section 36: ~~NE 1/4~~ containing 40 acres
Unit Tract No. 81 - Section 36: ~~SE 1/4~~ containing 40 acres

As a part and parcel of this ratification and joinder, the undersigned to the extent of his or its interest, expressly agrees:

(1) That the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement.

(2) That the drilling, development, and producing requirements of all leases and other contracts in which undersigned's rights and interest are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement.

(3) That payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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.

This Ratification and Joinder of Unit Agreement and Unit Operating Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns, or successors in interest.

EXECUTED this 13th day of June, 1961.

Name _____

Name _____

Address _____

Address _____

ATTEST: [Signature]
Assistant Secretary J. I. NORMAN

Party Texas Pacific Coal and Oil Company

By: [Signature]
Vice-President J. I. DICKAY

Address: P. O. Box 2110, Fort Worth, Texas

Consented to and accepted as of
the 16 day of June, 1961.

PAN AMERICAN PETROLEUM CORPORATION
Unit Operator

BY: [Signature]
Attorney-in-Fact

APPROVED
[Signature]

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 196____, before me personally appeared _____, to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that _____ executed the same as _____ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 196____.

My commission expires:

Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 196____, before me personally appeared _____, to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that _____ executed the same as _____ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 196____.

My commission expires:

Notary Public

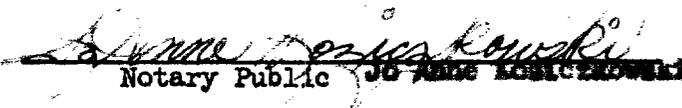
STATE OF Texas)
COUNTY OF Tarrant)

On this 13th day of June, 1961, before me personally appeared A. I. Dickey, to me personally known, who, being by me duly sworn, did say that he is the Vice President of Texas Pacific Coal and Oil Company and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said A. I. Dickey acknowledged said instrument to be the free act and deed of said corporation.

GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS 13th day of June, 1961.

My commission expires

June 1, 1962


Notary Public

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 Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, dated the 1st. day of November, 1950, in form approved on behalf of the Secretary of the Interior, the undersigned, whether one or more, hereby expressly joins said Unit Agreement and ratifies, approves, and adopts said Agreement, its terms and any modifications thereof.

This ratification and joinder shall be effective as to the undersigned's interest in any lands and leases or interests therein, and royalties presently held or which may arise under existing option agreements or other interests in unitized substances, covering any of the following described land:

Township 20 North, Range 12 West, N.M.P.M.
Section 36: SE/4 NW/4

As a part and parcel of this ratification and joinder, the undersigned to the extent of his or its interest, expressly agrees:

(1) That the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement.

(2) That the drilling, development, and producing requirements of all leases and other contracts in which undersigned's rights and interest are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement.

(3) That payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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.

This Ratification and Joinder of Unit Agreement and Unit Operating Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns, or successors in interest.

EXECUTED this 12 day of June, 1961.

Name _____

Name _____

Address _____

Address _____

Party EL PASO NATURAL GAS COMPANY

~~ATTEST:~~
~~Assistant Secretary~~

By: [Signature]
Vice-President ATTORNEY-IN-FACT

Address: P.O. Box 1482, El Paso, Texas

Consented to and accepted as of
the 12 day of June, 1961.

PAN AMERICAN PETROLEUM CORPORATION
Unit Operator

By: [Signature]
Attorney-in-Fact

APPROVED
[Signature]

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 196____, before me personally appeared _____, to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that _____ executed the same as _____ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 196____.

My commission expires:

Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 196____, before me personally appeared _____, to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that _____ executed the same as _____ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 196____.

My commission expires:

Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 196____, before me personally appeared _____, to me personally known, who, being by me duly sworn, did say that he is the ATTORNEY IN FACT President of EL PASO NATURAL 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 Sam Smith acknowledged said instrument to be the free act and deed of said corporation.

GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS _____ day of _____, 196____.

My commission expires

Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 196____, before me personally appeared _____, to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that _____ executed the same as _____ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 196____.

My commission expires:

Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 196____, before me personally appeared _____, to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that _____ executed the same as _____ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 196____.

My commission expires:

Notary Public

STATE OF OKLAHOMA)
COUNTY OF TULSA)

On this 31st day of May, 1961, before me personally appeared E. W. SIMPSON, to me personally known, who, being by me duly sworn, did say that he is the Attorney in Fact ~~President~~ of SKELLY OIL COMPANY

and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said E. W. SIMPSON acknowledged said instrument to be the free act and deed of said corporation.

GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS 31st day of May, 1961.

My commission expires

Notary Public

May 23, 1961

Pan American Petroleum Corporation
Oil & Gas Building
Fort Worth, Texas

Re: Proposed Third Expansion
of Gallegos Canyon Unit
Area, San Juan County,
New Mexico

Attention: Mr. J. L. Hoyt, Jr.

Gentlemen:

This office received copies of application dated April 25, 1961 for preliminary approval for the Third Expansion of the Gallegos Canyon Unit Area, San Juan County, New Mexico.

The State Land Office does not believe the Unit Operator has diligently developed all the acreage within the unit boundaries. Therefore, we object to the proposed expansion of the unit at the present time.

Very truly yours,
E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

BY:
Marian M. Rhea, Supervisor
Unit Division

ESW/mwr/s

cc: US Geological Survey
Roswell, New Mexico

Oil Conservation Commission
Santa Fe, New Mexico

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico
April 3, 1961

File: E-300-416

Subject: Approval Second
Dakota Enlargement
Gallegos Canyon Unit

APR 11 1961
MAIL ROOM
101
#247

Director
United States Geological Survey
c/o Oil and Gas Supervisor
P. O. Box 6721
Roswell, New Mexico

Commissioner of Public Lands
The State of New Mexico
Land Office Building
Santa Fe, New Mexico

✓ Oil Conservation Commission of
The State of New Mexico
Land Office Building
Santa Fe, New Mexico

All Working Interest Owners
In Unit Area
(See Attached Addressee List)

Gentlemen:

Application for approval of the Second Enlargement to the Dakota Participating Area of the Gallegos Canyon Unit, dated September 9, 1960, has been approved by the Director, Commissioner, and Commission on the following dates:

Director
United States Geological Survey March 21, 1961

Commissioner of Public Lands
State of New Mexico November 22, 1960

Oil Conservation Commission
State of New Mexico November 22, 1960

Effective date of this enlargement is April 1, 1960.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION



T. M. Curtis
District Superintendent

CKD:en
Attach.

Blind Note: Attached is a fully executed copy of the enlargement for your file.

MAILING LIST OF WORKING INTEREST OWNERS
GALLEGOS CANYON UNIT AREA
SAN JUAN COUNTY, NEW MEXICO

American Petrofina Co. of Texas P. O. Box 2159 Dallas 21, Texas Attention: Mr. Wilkin, Prod. Dept.	Mrs. James A. Anderson, Executrix of Estate of Edward J. Johnson 372 Euclid Avenue Oakland 10, California
American Petrofina Co. of Texas P. O. Box 2159 Dallas 21, Texas Attention: Mr. Vendig, Land Dept.	Elma R. Jones 764 Twentieth Avenue San Francisco, California
Mary Roberts Berry 208 E. Washington Street Washington, Iowa	George H. Krause, et al P. O. Box 1107 Colorado Springs, Colorado
Tom Bolack 1010 N. Dustin Farmington, New Mexico	Locke-Taylor Drilling Company 801 Second Avenue Durango, Colorado
Brookhaven Oil Company P. O. Box 1267 Scottsdale, Arizona	Petro-Atlas, Inc. 2000 National Bank of Tulsa Building Tulsa, Oklahoma
Lester F. Colby Route No. 1 Crystal Lake, Illinois	John J. Redfern, Jr. P. O. Box 1747 Midland, Texas
B. H. and Dyvena Crawford Bloomfield, New Mexico	H. K. Riddle 65 East 4th South Salt Lake City, Utah
Delta Oil Company of Utah 2606 Oak Lawn Avenue Dallas 19, Texas	Skelly Oil Company Tulsa 2, Oklahoma Attention: Mr. D. E. Smith
El Paso Natural Gas Company P. O. Box 1492 El Paso, Texas Attention: Land Department	Texas Pacific Coal & Oil Company P. O. Box 2110 Fort Worth 1, Texas Attention: Mr. R. W. Hines
Mr. Olen F. Featherstone Roswell Petroleum Building Roswell, New Mexico	John H. Trigg P. O. Box 6529 Roswell, New Mexico
Ernest A. Hanson P. O. Box 852 Roswell, New Mexico	Wood Oil Company Room 800 - Midstates Building Tulsa, Oklahoma
L. B. Hodges P. O. Box 671 Roswell, New Mexico	

Miss Doris Woods
5 Lewis Center
Newark, California

National Drilling Company, Inc.
4810 N. Kenneth Avenue
Chicago 30, Illinois

Mrs. Sarah G. Fredrick
308 E. Clinton
Clinton, Missouri

Mrs. Inez Glasscock
303 S. Water
Clinton, Missouri

Mr. Robert W. Woods
Appleton City, Missouri

Mrs. Prudence Davis
6591 N. Tennyson Street
Arvada, Colorado

Sunray Mid-Continent Oil Company
P. O. Box 2692
Denver 1, Colorado
Attention: Mr. A. W. Wadman, Jr.

Texaco, Inc.
P. O. Box 3109
Midland, Texas
Attention: Mr. R. T. Maxwell

Aztec Oil and Gas Company
920 Mercantile Securities Building
Dallas 1, Texas
Attention: Mr. H. L. Snider, Jr.

Southern Union Gas Company
Fidelity Union Tower Building
1507 Pacific Avenue
Dallas 1, Texas
Attention: Mr. D. W. Whitlow

Summit Oil Company
Fidelity Union Tower Building
1507 Pacific Avenue
Dallas 1, Texas

May 19, 1961

**Pan American Petroleum Corporation
P. O. Box 480
Farmington, New Mexico**

**Re: 1961 Plan of Development
Gallegos Canyon Unit
San Juan County, New Mexico**

Attention: Mr. T. M. Curtis

Gentlemen:

In reply to your letter dated May 3, 1961 in regard to your Plan of Development for Gallegos Canyon Unit Area for the calendar year 1961.

Your letter of April 4, 1961 listed proposed locations for six wells, one of which was on State land. This location if drilled and a producing well had been obtained, would have resulted in some royalty for the state, however, out of the six proposed locations this location was changed eliminating any well on State acreage.

Therefore, we are not willing to approve a plan of development, unless it contains plans for a well on State acreage.

In lieu of such we will approve the 1961 Plan of Development as presented if a third revision of the Dakota Participating Area is submitted, which includes the entire Gallegos Canyon Unit Area.

C
O
P
Y

**Pan American Petroleum Corporation
P. O. Box 480
Farmington, New Mexico**

**May 19, 1961
Page (2).**

Very truly yours,

**E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS**

ESW/mmr/s

cc:

R

**Mr. John A. Anderson
Regional Oil & Gas Supervisor
US Geological Survey
Roswell, New Mexico**

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

C
O
P
Y

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico
April 4, 1961

File: E-301-416

Subject: 1961 Plan of Development
Gallegos Canyon Unit
San Juan County, New Mexico

Oil Conservation Commission of
The State of New Mexico
State Land Office Building
Santa Fe, New Mexico

Commissioner of Public Lands
The State of New Mexico
State Land Office Building
Santa Fe, New Mexico

Gentlemen:

On December 20, 1960, Pan American, as Unit Operator, submitted the 1961 Plan of Development for the Gallegos Canyon Unit, San Juan County, New Mexico, with a proposal to drill six Dakota wells during the year. This Plan was submitted without definite locations for the six wells.

Specific locations for the 1961 Plan of Development were given to the United States Geological Survey on February 20, 1961, to satisfy their request for more supporting data for the proposed Second Enlargement to the Dakota Participating Area dated September 9, 1960. These locations were not furnished to either of you at that time since some changes may have been made if United States Geological Survey approval of the Second Enlarged Dakota Participating Area was not obtained. On March 21, 1961, the United States Geological Survey approved the Second Enlargement to the Dakota Participating Area and Pan American is now in a position to detail the proposed location for the six Plan wells as submitted to the United States Geological Survey on February 20, 1961.

Well No. 89	NE/4	Section 31,	T-28-N,	R-12-W
Well No. 90	NE/4	Section 32,	T-29-N,	R-12-W
Well No. 93	NW/4	Section 36,	T-29-N,	R-12-W
Well No. 94	NE/4	Section 23,	T-29-N,	R-13-W
Well No. 95	NE/4	Section 36,	T-28-N,	R-12-W
Well No. 96	SE/4	Section 18,	T-29-N,	R-12-W

The United States Geological Survey approved the 1961 Plan of Development on March 6, 1961, and we would appreciate your consideration of the above

COPY

Oil Conservation Commission
Commissioner of Public Lands

-2-

April 4, 1961
E-301-416

six locations, which are already approved by the United States Geological Survey, as constituting our 1961 Plan of Development for this unit.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION



T. M. Curtis
District Superintendent

CKD:en

Note: Supervisor, United States Geological Survey - Two of the above locations (Wells 89 and 93) differ from those listed in your letter of March 6, 1961, which approved this Plan. These differences are apparently due to typographical errors. The locations listed above are correct, and your records should be modified accordingly.



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P.O. Box 6721
Roswell, New Mexico

March 6, 1961

Pan American Petroleum Corporation
P. O. Box 480
Farmington, New Mexico

Attention: Mr. L. O. Speer, Jr.

Gentlemen:

Your 1961 plan of development for the Gallegos Canyon unit, San Juan County, New Mexico, has been approved on this date subject to like approval by the appropriate State officials.

The 1961 plan of development, dated December 20, 1960, proposes the drilling of six Dakota wells at undesignated locations around the perimeter of the Gallegos Canyon unit area. By letter of February 20, 1961, you advise that the location of these six Dakota wells, subject to the approval of the working interest owners, will be as follows:

Well No. 89	NE $\frac{1}{4}$ Section 31, T-28-N, R-13-W
Well No. 90	NE $\frac{1}{4}$ Section 32, T-29-N, R-12-W
Well No. 93	NE $\frac{1}{4}$ Section 26, T-29-N, R-12-W
Well No. 94	NE $\frac{1}{4}$ Section 25, T-29-N, R-13-W
Well No. 95	NE $\frac{1}{4}$ Section 36, T-28-N, R-12-W
Well No. 96	NE $\frac{1}{4}$ Section 18, T-29-N, R-12 W

The Gallegos Canyon unit area is subject to drainage by certain offending Dakota wells. You will be advised by separate letter of the protective wells required to prevent drainage of unitized substances from the Gallegos Canyon unit area, pursuant to the offset obligation clause of your plan of development and the appropriate provisions of the Gallegos Canyon unit agreement.

Three approved copies of the plan are attached.

Very truly yours,

Edwin M. Thomasson
EDWIN M. THOMASSON
Acting Regional Oil and Gas Supervisor

Copy to: Washington (w/cy of plan)
Farmington (w/cy of plan)
NMOCC, Santa Fe (ltr. only)

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico
March 6, 1961

File: E-197-416

Subject: Gallegos Canyon Unit
1961 Plan of Development

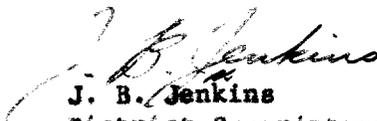
Commissioner of Public Lands
State of New Mexico
P. O. Box 791
Santa Fe, New Mexico

Dear Sir:

Please refer to your letter of February 28, 1961, which advised that you would not be able to consider the 1961 Plan of Development for the Gallegos Canyon Unit until you knew the outcome of the proposed Second Enlargement to the Dakota Participating Area dated September 9, 1960. The United States Geological Survey has not yet approved the proposed Second Enlargement to the Dakota Participating Area, but we will advise you immediately once United States Geological Survey approval has been obtained.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION


J. B. Jenkins
District Superintendent

GWE:en

cc: New Mexico Oil Conservation Commission
Santa Fe, New Mexico

COPY

February 28, 1961

C
O
P
Y

Pan American Petroleum Corporation
P. O. Box 480
Farmington, New Mexico

Re: Gallegos Canyon Unit
1961 Plan of Development
San Juan County, New Mexico

Attention: Mr. L. O. Speer

Gentlemen:

Your application dated September 9, 1960 for the Second Enlargement to the Dakota Participating Area, Gallegos Canyon Unit, San Juan County, New Mexico, was approved by the Commissioner of Public Lands, November 22, 1960. As of this date we have not heard what action, if any, has been taken by the US Geological Survey.

We will not be able to consider a 1961 Plan of Development until we know the out come of this proposed enlargement.

This office is now of the opinion due to the fact that Pan American has stated at various times that the entire Gallegos Unit Area is considered to be productive in the Dakota Formation, therefore, the entire unit area should be set up as a participating area for production from the Dakota Formation.

Pan American Petroleum Corporation
P. O. Box 480
Farmington, New Mexico

February 28, 1961
(Page 2.)

Very truly yours,
E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

BY:
Ted Bilberry, Supervisor
Oil and Gas Division

C ESW/mmz/s
cc:

United States Geological Survey
P. O. Box 6721
Roswell, New Mexico

Oil Conservation Commission
Santa Fe, New Mexico

O

P

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PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico

September 9, 1960

File: E-591-416

Subject: Request for Approval
 Second Enlargement of the
 Dakota Participating Area
 Gallegos Canyon Unit
 San Juan County, New Mexico

Director (6)
 United States Geological Survey
 c/o Oil and Gas Supervisor
 P. O. Box 6721
 Roswell, New Mexico

Commissioner of Public Lands (3)
 The State of New Mexico
 Capitol Annex Building
 Santa Fe, New Mexico

RECEIVED

NOV 23 1960

Oil Conservation Commission of (3)
 The State of New Mexico
 Capitol Annex Building
 Santa Fe, New Mexico

All Working Interest Owners
 In Unit Area
 (See Attached Addressee List)

U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

Gentlemen:

Pursuant to Section 10 of the Gallegos Canyon Unit Agreement, which was approved November 1, 1951, Pan American Petroleum Corporation, as Unit Operator, has determined, subject to approval of the Director, Commissioner, and Commission, that Gallegos Canyon Unit No. 85, Gallegos Canyon Unit No. 86, and V. W. McManus No. 1 are capable of producing unitized substances in paying quantities from the Dakota formation and that a Second Enlargement of the Dakota Participating Area in Gallegos Canyon Unit should be made. These three wells are described in detail in the attached Engineering and Geological Report. Aztec Oil & Gas Company's Hagood No. 3 and Hagood No. 4, located in the SE/4 and NW/4, respectively, of Section 34, T-29-N, R-13-W, also were completed as commercial Dakota wells within the Gallegos Canyon Unit Area but on acreage not committed to the Unit Agreement. Acreage on which these wells are located is also proposed for inclusion in the Second Enlargement of the Dakota Participating Area.

The Second Enlargement of the Dakota Participating Area contains 10,947 acres and is described as follows:

Sections 7, 17, 18, 19,	
20, 21, 22, 27, and 28	T-28-N, R-12-W
Sections 11, 12, 13, 14, and 24	T-28-N, R-13-W
Sections 25, 26, 34, 35, and 36	T-29-N, R-13-W

Total acreage in the Dakota Participating Area after this Second Enlargement is 14,787 acres as shown on the attached schedule, Exhibit "B", which

Director - U. S. Geological Survey -2-
Oil Conservation Commission
Commissioner of Public Lands
All Working Interest Owners

September 9, 1960
File: E-591-416
Subject: Request for Approval
Second Enlargement of
Dakota Participating
Area; Gallegos Canyon
Unit, San Juan County,
New Mexico.

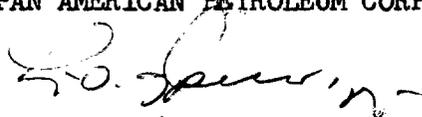
describes and shows the ownership of acreage in the Dakota Participating Area after the Second Enlargement. It is proposed that the effective date for the Second Enlargement of the Dakota Participating Area be April 1, 1960. Section 10 of the Unit Agreement provides that the effective date of any revision shall be the first of the month following the date of first authentic knowledge or information on which such revision is predicated, unless a more appropriate effective date is specified in the schedule. While the several wells upon which this Second Enlargement is predicated were completed during different months in early 1960, only one well, V. W. McManus No. 1, is being produced from the Dakota formation. This well was reworked with the result that it was reclassified from non-commercial to capable of producing in paying quantities, the completion of the work-over operation being March 23, 1960. Under these circumstances, Unit Operator proposes that an effective date of April 1, 1960, is a more appropriate effective date for the Second Enlargement.

The attached map, Exhibit "A", shows the proposed Second Enlargement of the Dakota Participating Area as well as the Initial Participating Area and the First Enlargement. An Engineering and Geological Report is attached to support the proposed Second Enlargement of the Dakota Participating Area.

Your approval of the proposed Second Enlargement of the Dakota Participating Area in the Gallegos Canyon Unit is respectfully requested.

Very truly yours,

PAN AMERICAN PETROLEUM CORPORATION


L. O. Speer, Jr.
Area Superintendent

RBB:en

Attachments

Director - U. S. Geological Survey -3-
Oil Conservation Commission
Commissioner of Public Lands
All Working Interest Owners

September 9, 1960
File: E-591-416
Subject: Request for Approval
Second Enlargement of
Dakota Participating
Area; Gallegos Canyon
Unit, San Juan County,
New Mexico

Approved *Arthur A. Baker*
Acting Director, United States Geological Survey
(Subject to like approval by appropriate
State Officials)

Date MAR 21 1961

Approved *W. H. Meyer*
Commissioner of Public Lands
(Subject to like approval by U.S.G.S.
and Oil Conservation Commission)

Date Nov. 22, 1960

Approved *A. L. Porter, Jr.*
Oil Conservation Commission
(Subject to like approval by U.S.G.S.
and Commissioner of Public Lands)

Date 11-22-60



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1827
Roswell, New Mexico

March 30, 1961

Pan American Petroleum Corporation
P.O. Box 480
Farmington, New Mexico

Attention: Mr. L. O. Speer, Jr.

Gentlemen:

Your application of September 9, 1960, for the second revision of the Dakota participating area for the Gallegos Canyon unit agreement, San Juan County, New Mexico, was approved March 21, 1961, by the Acting Director of the Geological Survey, effective as of April 1, 1960.

Enclosed are five copies of the approved application. It is assumed that you will furnish the State of New Mexico and any other interested party with appropriate evidence of this approval.

Very truly yours,

(Orig. Sgd.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

Copy to: Washington (ltr. only)

Farmington (w/cy of approved appln.)
BLM, Santa Fe (w/cy of approved appln.)
Com. of Pub. Lands, Santa Fe (ltr. only)
NMOCC, Santa Fe (ltr. only)

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico
January 13, 1961

33

File: E-40-416 X 993.1

Handwritten signature/initials

Subject: Revision of Participation
Pictured Cliffs Participating
Area, Gallegos Canyon Unit

Director

United States Geological Survey (6)
c/o Oil and Gas Supervisor
P. O. Box 6721
Roswell, New Mexico

Commissioner of Public Lands (3)
The State of New Mexico
State Land Office Building
Santa Fe, New Mexico

✓ Oil Conservation Commission of (3)
The State of New Mexico
State Land Office Building
Santa Fe, New Mexico

All Pictured Cliffs Participating
Area Owners
(See Attached Addressee List)

Gentlemen:

Attached is a revised ownership schedule for the Pictured Cliffs Participating Area to be effective October 1, 1960. It is presumed in accordance with the Unit Agreement that this revised schedule will be effective unless we are otherwise notified by your respective offices.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION

J. B. Jenkins
J. B. Jenkins
District Superintendent

CKD:en
Attachment

MAILING LIST PICTURED CLIFFS OWNERS
GALLEGOS CANYON UNIT AREA
SAN JUAN COUNTY, NEW MEXICO

Aztec Oil and Gas Company
920 Mercantile Securities Building
Dallas 1, Texas

Brookhaven Oil Company
P. O. Box 396
Scottsdale, Arizona

Lester F. Colby
Route 1,
Crystal Lake, Illinois

George J. Darneille
5521 Bordley
Houston, Texas

L. B. Hodges
P. O. Box 671
Roswell, New Mexico

Edward J. Johnson
223 Greenbank Avenue
Piedmont 10, California

Elman R. Jones
764 Twentieth Avenue
San Francisco, California

Delta Oil Company of Utah
2606 Oaklawn Avenue
Dallas 19, Texas

E. A. Hanson
P. O. Box 852
Roswell, New Mexico

Olen F. Featherstone
Roswell Petroleum Building
Roswell, New Mexico

Wood Oil Company
Room 800, Midstates Building
Tulsa, Oklahoma

Southern Union Gas Company
Fidelity Union Tower Building
1507 Pacific Avenue
Dallas, Texas
Attention: D. W. Whitlow

Sunray Mid-Continent Oil Company
P. O. Box 2692
Denver 1, Colorado
Attention: Mr. A. W. Wadman

Texaco, Inc.
P. O. Box 3109
Midland, Texas

Texas Pacific Coal and Oil Company
P. O. Box 2110
Fort Worth 1, Texas

American Petrofina Company of Texas
P. O. Box 2159
Dallas 21, Texas
Attention: Mr. Wilkins
Production Department

American Petrofina Company of Texas
P. O. Box 2159
Dallas 21, Texas
Attention: Mr. Vendig
Land Department

PAN AMERICAN PETROLEUM CORPORATION

Post Office Box 480
 Farmington, New Mexico
 January 9, 1961

247

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re: AFE - 8939
 Lease No. 200354
 San Juan County,
 New Mexico

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

Gentlemen:

On October 27, 1960 Earl A. Rogers purchased an oil, gas and mineral lease from Kenneth S. Washburn et ux, as joint tenants, Russell Foutz et ux, as joint tenants, and A. L. Foutz, which covers the rights below the base of the Pictured Cliffs formation under Lots 1 and 2, and the S/2 NW/4 of Section 5, T-27N, R-12W, San Juan County, New Mexico.

Kenneth S. Washburn et ux owns 1/3rd; Russell Foutz et ux owns 1/3rd; and A. L. Foutz owns 1/3rd of the minerals under this tract which is described as Tract No. 164 of the Gallegos Canyon Unit Agreement. The lease is for the primary term of five years.

On January 5, 1961 Pan American Petroleum Corporation purchased an Assignment of Oil and Gas Lease, dated November 30, 1960, from Earl A. Rogers and wife, Nina Jo Rogers, which covers the lease dated October 27, 1960 that embraces the rights below the base of the Pictured Cliffs formation under Lots 3 and 4 and the S/2 NW/4 of Section 5, T-27N, R-12W, San Juan County, New Mexico.

Enclosed are one copy each of the following described Ratifications which cover the rights below the base of the Pictured Cliffs formation under Tract No. 164 of the Gallegos Canyon Unit:

- (1) Ratification and Joinder of Unit Agreement executed by A. L. Foutz, Kenneth S. Washburn et ux, Russell Foutz et ux, which was consented to and accepted by Pan American, as Unit Operator, as of November 30, 1960.
- (2) Ratification and Joinder of Unit Agreement executed by Earl A. Rogers and wife, Nina Jo Rogers. This Ratification was consented to and accepted as of November 30, 1960 by Pan American, as Unit Operator.
- (3) Ratification and Joinder of Unit Operating Agreement executed by Earl A. Rogers et ux. This Ratification was consented to and

January 9, 1961

accepted as of November 30, 1960 by Pan American, as Unit
Operator.

The enclosed copies of the Ratifications are furnished to you for your information and please do not hesitate to contact us if you should have any questions in connection with these instruments. We are submitting six copies of each of the Ratifications to the U.S.G.S. for its approval in order that Tract No. 164 will be effectively committed to the Gallegos Canyon Unit Agreement and to the Gallegos Canyon Unit Operating Agreement.

We are also forwarding one copy of each of the Ratifications to the Commissioner of Public Lands, for its files.

Very truly yours,

PAN AMERICAN PETROLEUM CORPORATION



Ben R. Kee
District Landman

RKR:eh
Enclosures

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, briefly described opposite his signature, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

SIGNATURES AND ADDRESSES

DESCRIPTION

A. L. Fouts
A. L. Fouts
Kirtland, New Mexico

Township 37 North, Range 12 West, N.M.P.M.
Section 5: Lots 3 and 4 and 5/2 NW/4

Containing 139.94 acres, more or less, as to all rights and depths below the base of the Pictured Cliffs Formation.

Kenneth S. Washburn
Kenneth S. Washburn
104 West Animo - Farmington, N.M.

Rose Washburn
Rose Washburn
104 West Animo - Farmington, N.M.

Consented to and accepted as of the 30th day of November, 1960.

PAN AMERICAN PETROLEUM CORPORATION
 Unit Operator

By *[Signature]*
 Attorney In Fact



Suzell Fouts
Suzell Fouts
408 Gladview Drive - Farmington, N.M.

Helon Fouts
Helon Fouts
408 Gladview Drive - Farmington, N.M.

STATE OF NEW MEXICO
 COUNTY OF SAN JUAN

On this 21st day of November, 1960, before me personally appeared A. L. Fouts, a single man 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 his free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 21st day of Nov, 1960
 My Commission expires:
12-31-60

Robert V. Fouts
 Notary Public

NOTARY PUBLIC STATE OF NEW MEXICO

I, the undersigned, a Notary Public in and for the State of New Mexico, do hereby certify that the foregoing instrument is a true and correct copy of the original instrument as the same appears from the records of my office.

In testimony whereof, I have hereunto set my hand and seal of office at the City of Albuquerque, New Mexico, this 21st day of November, 1960.

Notary Public

STATE OF NEW MEXICO)

COUNTY OF SAN JUAN)

On this 21st day of November, 1960, before me personally appeared Kenneth S. Washburn and Rose Washburn, his wife to me known to be the persons described in and who executed and delivered the foregoing instrument, and acknowledged to me that they executed the same as their free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 21st day of November, 1960.

My Commission expires:

12-31-60

Robert B. Smith
Notary Public

STATE OF NEW MEXICO)

COUNTY OF SAN JUAN)

On this 21st day of November, 1960, before me personally appeared Russell Foutz and Helen Foutz, his wife to me known to be the persons described in and who executed and delivered the foregoing instrument, and acknowledged to me that they executed the same as their free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 21st day of Nov, 1960.

My Commission expires:

12-31-60

Robert B. Smith
Notary Public

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, briefly described opposite his signature, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

SIGNATURES AND ADDRESSES

DESCRIPTION

Earl A. Rogers
4024 Douglas Street
Farmington, New Mexico

Township 27 North, Range 12 West, N.M.P.M.
Section 5: Lots 3 and 4 and 1/2 NW/4

Containing 159.94 acres, more or less, as to all rights and depths below the base of the Pictured Cliffs Formation.

Miss Jo Rogers
4024 Douglas Street
Farmington, New Mexico

Consented to and accepted as of the 30th day of November, 1960.

PAN AMERICAN PETROLEUM CORPORATION
 Unit Operator

By [Signature]
 Attorney in Fact



STATE OF NEW MEXICO
 COUNTY OF SAN JUAN

On this 28th day of October, 1960, before me personally appeared

~~Earl A. Rogers and Miss Jo Rogers, his~~ ^{wife} to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that ~~they~~ executed the same as ~~their~~ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 9 day of November, 1960

My Commission expires:

6-17-62

[Signature]
 Notary Public

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico

January 4, 1961

100-111-1-1-1

File: E-8-416

10/4/7

Subject: Approval of Amended
1960 Plan of Development
Gallegos Canyon Unit
San Juan County, New Mexico

The Oil and Gas Supervisor (6)
United States 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

All Working Interest Owners
Gallegos Canyon Unit
(See Attached Addressee List)

Gentlemen:

Application for an Amended 1960 Plan of Development for the Gallegos Canyon Unit, dated December 20, 1960, has been executed by the United States Geological Survey, Commissioner of Public Lands and Oil Conservation Commission on the following dates:

Director, United States Geological Survey:	December 27, 1960
Commissioner of Public Lands State of New Mexico:	December 28, 1960
New Mexico Oil Conservation Commission:	December 29, 1960

The Amended 1960 Plan of Development was effective January 1, 1960.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION

J. B. Jenkins
J. B. Jenkins
District Superintendent

CKD:ep

MAILING LIST OF WORKING INTEREST OWNERS
GALLEGOS CANYON UNIT AREA
SAN JUAN COUNTY, NEW MEXICO

American Petrofina Co. of Texas
P. O. Box 2159
Dallas 21, Texas

Aztec Oil and Gas Company
920 Mercantile Securities Building
Dallas 1, Texas

Mary Roberts Berry
208 E. Washington Street
Washington, Iowa

Brookhaven Oil Company
P. O. Box 396
Scottsdale, Arizona

Lester F. Colby, Trustee
Route 1
Crystal Lake, Illinois

B. H. and Dyvena Crawford
Bloomfield, New Mexico

George J. Darneille
5521 Bordley
Houston, Texas

Ernest A. Hanson
P. O. Box 852
Roswell, New Mexico

L. B. Hodges
P. O. Box 671
Roswell, New Mexico

Edward J. Johnson
223 Greenbank Avenue
Piedmont 10, California

Southern Union Gas Company
Fidelity Union Tower Building
1507 Pacific Avenue
Dallas, Texas
Attn: Mr. D. W. Whitlow

Elma R. Jones
764 Twentieth Avenue
San Francisco, California

Nathan Kessler
5900 States Drive
Oakland, California

George H. Krause, et al
P. O. Box 1107
Colorado Springs, Colorado

Delta Oil Company of Utah
120 Arno NE
Albuquerque, New Mexico

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

M. H. and Eula Stark
Route 3
Farmington, New Mexico

Petro-Atlas Inc.
2000 National Bank of Tulsa Building
Tulsa 3, Oklahoma

John J. Redfern, Jr.
P. O. Box 1747
Midland, Texas

H. K. Riddle
65 East 4th South
Salt Lake City, Utah

Robb Woods
501 W. Grand River Street
Clinton, Missouri

Skelly Oil Company
Tulsa 2, Oklahoma
Attn: Mr. D. E. Smith

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY LABORATORY
CHICAGO, ILLINOIS 60637

1. Introduction
2. Experimental
3. Results
4. Discussion
5. Conclusions
6. Acknowledgments
7. References
8. Appendix
9. Figures
10. Tables

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Fidelity Union Tower Building
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Attn: Mr. A. W. Wadman

Olen F. Featherstone
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801 Second Avenue
Durango, Colorado

Texaco, Inc.
P. O. Box 3109
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Texas Pacific Coal and Oil Company
P. O. Box 2110
Fort Worth 1, Texas

John H. Trigg
P. O. Box 6529
Roswell, New Mexico

Wood Oil Company
Room 800, Midstates Building
Tulsa, Oklahoma

Tom Bolack
1010 N. Dustin
Farmington, New Mexico

In reply refer to:
Unit Division

RECEIVED
DEC 29 1960

247

December 29, 1960

C

Pan American Petroleum Corporation
P. O. Box 480
Farmington, New Mexico

O

Attention: Mr. L. O. Speer

Re: Amended 1960 Plan of Development
Gallegos Canyon Unit,
San Juan County, New Mexico

P

Gentlemen:

Your Amended Plan of Development for the calendar year 1960 has been approved by the Commissioner of Public Lands as of December 28, 1960, and one copy is enclosed herewith.

Y

This amended plan consists of the drilling and completion of Gallegos Canyon Unit Well No. 87 and Gallegos Canyon Unit Well No. 88, also the reworking and the dual completion of the V. W. McManus No. 1.

The Commissioner's approval being subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

Very truly yours,
MURRAY E. MORGAN
Commissioner of Public Lands
BY:
Marion M. Rhea, Supervisor
Unit Division

MEM/nmr/s
cc: U.S. Geological Survey
Roswell, New Mexico

OCC- Santa Fe ✓



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

703 001 005 000

P. O. Box 6721
Roswell, New Mexico

December 27, 1960

Fan American Petroleum Corporation
P. O. Box 480
Farmington, New Mexico

Attention: Mr. L. O. Spear, Jr.

Gentlemen:

Your amended 1960 plan of development dated December 20, 1960, for the Gallegos Canyon unit agreement, San Juan County, New Mexico, has been approved on this date subject to like approval by the appropriate State officials.

Three approved copies of the amended plan are enclosed.

Very truly yours,

CS CARL G. TRAYWICK
Acting Regional Oil and Gas Supervisor

Copy to: Washington (w/cy of plan)
Farmington (w/cy of plan)
Com. of Pub. Lands, Santa Fe (ltr only)
NMOCC, Santa Fe (ltr only)

DEPARTMENT OF THE TREASURY
INTERNAL SECURITY
CONFIDENTIAL



1041-10/99

CONFIDENTIAL

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CONFIDENTIAL

CONFIDENTIAL

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico
December 20, 1960

RECEIVED
DEC 23 1960

File: E-917-416

Subject: 1961 Plan of Development
Gallegos Canyon Unit
San Juan County, New Mexico

The Oil and Gas Supervisor (6)
United States Geological Survey
Roswell, New Mexico

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

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

All Working Interest Owners
Gallegos Canyon Unit
(See Attached Addressee List)

Gentlemen:

In compliance with Section 9 of the Gallegos Canyon Unit Agreement dated November 1, 1950, designated I-Sec. No. 844, Pan American Petroleum Corporation, as Unit Operator, respectfully submits for your approval a Plan of Development for the calendar year 1961. The recommended 1961 Plan of Development has been approved by a majority of the Working Interest Owners as provided by the Unit Operating Agreement.

History of Past Development - There has been, to date, a total of 86 wells drilled in the Gallegos Canyon Unit. Of these, 67 are Pictured Cliffs producers, 4 are Gallup-Dakota duals, 1 a single Dakota completion well, 2 Gallup wells, 1 Fruitland completion, and 11 wells that are either dry holes or abandoned Pictured Cliffs wells.

An initial Gallup Participating Area has been established for the commercial production from Gallegos Canyon Unit No. 83. The performance of other Gallup completions are being carefully observed inasmuch as information now available indicates that the Gallup may prove to be non-commercial in these completions. One Gallup completion has already been classified non-commercial (Gallegos Canyon Unit No. 84), and application has been made for the non-commercial determination of the Gallup in the Gallegos Canyon Units No. 86 and 87, and in all probability, applications will also be made for the non-commercial determination for the two remaining Gallup completions.

A non-commercial determination application has also been made for the Fruitland formation in Gallegos Canyon Unit No. 77.

An initial Dakota Participating Area has been approved as well as a First Enlargement thereof, and application has been filed for a Second Enlargement of the Gallegos Canyon Unit Dakota Participating Area.

The Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
All Working Interest Owners

-2-

December 20, 1960
File: E-917-416
Subject: 1961 Plan of Development
Gallegos Canyon Unit
San Juan County, New
Mexico

Attached is a tabulation showing wells by producing formation, production data, etc., for the Gallegos Canyon Unit.

Proposed Additional Wells - It is planned to drill six additional Dakota wells during 1961, the location of which will be around the perimeter of the Gallegos Canyon Unit Area. We propose to drill no additional Pictured Cliffs wells during 1961 in view of the high risk involved insofar as further development of this zone is concerned. Prospects for further Gallup development in the Unit Area will be determined from information derived from the drilling of Dakota wells, inasmuch as the Gallup overlies the Dakota and log analysis will be the basis for future Gallup development and/or exploration.

Well Casing Program - The well casing program will generally follow the program currently used in similar 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 on top, partially through or completely through the producing zone.

Off-Set Obligations - Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands subject to the Gallegos Canyon Unit Agreement, or, pursuant to applicable regulations, fair and reasonable compensatory royalty will be paid as provided in Section 15 of said Agreement.

Further Development - This plan of development shall constitute the drilling obligations of the Unit Operator under the terms of the Gallegos Canyon Unit Agreement for the period ending December 31, 1961. Before this plan expires, another plan for further development of the unit area will be submitted.

Modifications - It is understood that this plan of development is dependent upon certain information to be obtained prior to and subsequent to drilling, and upon other contingencies, such as availability of well casing; therefore, this plan of development may be modified from time to time to meet changing conditions.

Effective Date - This plan of development shall be effective January 1, 1961.

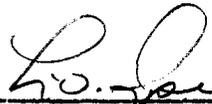
The Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
All Working Interest Owners

-3-

December 20, 1960
File: E-917-416
Subject: 1961 Plan of Development
Gallegos Canyon Unit
San Juan County, New
Mexico

Dated: December 19, 1960.

PAN AMERICAN PETROLEUM CORPORATION
Unit Operator

By: 
Area Superintendent

FUF:
Attach.

Approved: _____ Date: _____
Regional Oil & Gas Supervisor
United States Geological Survey

Approved: _____ Date: _____
Commissioner of Public Lands
State of New Mexico

Approved:  Date: 3/21/62
Oil Conservation Commission
State of New Mexico

STATISTICAL REVIEW OF OPERATIONS
GALLEGOS CANYON UNIT
DECEMBER 1, 1960

Total Wells Drilled In Unit	86
Unit Area	43,146.82 acres

Pictured Cliffs Statistics

Pictured Cliffs Participating Area	27,456.46 acres
Total Wells Drilled	78
Dry Holes	10
Producing Wells as of 12-1-60	67
Temporarily Abandoned Wells	1
Current Production	
October, 1960	161,901 MCF
November, 1960	92,365 MCF
Cumulative Production to 12-1-60	26,878,991 MCF

Dakota Statistics

Dakota Participating Area	3,840 acres
Proposed Second Enlargement	11,027.02 acres
Total Wells Drilled	5
Producing Wells	1
Current Production	
October, 1960	13,265 MCF
November, 1960	12,927 MCF
Cumulative Production to 12-1-60	200,076 MCF

Gallup Statistics

Gallup Participating Area	360 acres
Total Wells Drilled	6
Producing Wells	6
Current Production	
October, 1960	6,036 bbls./oil
November, 1960	5,575 bbls./oil
Cumulative Production to 12-1-60	77,963 bbls./oil

Fruitland Statistics

Total Wells Drilled	1 (Non-Commercial)
Current Production	
October, 1960	5,854 MCF
November, 1960	3,356 MCF
Cumulative Production to 12-1-60	32,792 MCF

MAILING LIST OF WORKING INTEREST OWNERS
GALLEGOS CANYON UNIT AREA
SAN JUAN COUNTY, NEW MEXICO

American Petrofina Co. of Texas P. O. Box 2159 Dallas 21, Texas	Elma R. Jones 764 Twentieth Avenue San Francisco, California
Aztec Oil and Gas Company 920 Mercantile Securities Building Dallas 1, Texas	Nathan Kessler 5900 States Drive Oakland, California
Mary Roberts Berry 208 E. Washington Street Washington, Iowa	George H. Krause, et al P. O. Box 1107 Colorado Springs, Colorado
Brookhaven Oil Company P. O. Box 396 Scottsdale, Arizona	Delta Oil Company of Utah 2606 Oak Lawn Avenue Dallas 19, Texas
Lester F. Colby, Trustee Route 1 Crystal Lake, Illinois	El Paso Natural Gas Company P. O. Box 1492 El Paso, Texas
B. H. and Dyvena Crawford Bloomfield, New Mexico	M. H. and Eula Stark Route 3 Farmington, New Mexico
George J. Darneille 5521 Bordley Houston, Texas	Petro-Atlas Inc. 2000 National Bank of Tulsa Building Tulsa 3, Oklahoma
Ernest A. Hanson P. O. Box 852 Roswell, New Mexico	John J. Redfern, Jr. P. O. Box 1747 Midland, Texas
L. B. Hodges P. O. Box 671 Roswell, New Mexico	H. K. Riddle 65 East 4th South Salt Lake City, Utah
Edward J. Johnson 223 Greenbank Avenue Piedmont 10, California	Robb Woods 501 W. Grand River Street Clinton, Missouri
Southern Union Gas Company Fidelity Union Tower Building 1507 Pacific Avenue Dallas, Texas Attn: D. W. Whitlow	Skelly Oil Company Tulsa 2, Oklahoma Attn: Mr. D. E. Smith

1. The first part of the report...

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23. The twenty-third part of the report...

24. The twenty-fourth part of the report...

Summit Oil Company
Fidelity Union Tower Building
1507 Pacific Avenue
Dallas, Texas

Sunray Mid-Continent Oil Company
P. O. Box 2692
Denver 1, Colorado
Attn: Mr. A. W. Wadman

Olen F. Featherstone
Roswell Petroleum Building
Roswell, New Mexico

Locke-Taylor Drilling Co.
801 Second Avenue
Durango, Colorado

Texaco, Inc.
P. O. Box 3109
Midland, Texas

Texas Pacific Coal and Oil Company
P. O. Box 2110
Fort Worth 1, Texas

John H. Trigg
P. O. Box 6529
Roswell, New Mexico

Wood Oil Company
Room 800, Midstates Building
Tulsa, Oklahoma

Tom Bolack
1010 N. Dustin
Farmington, New Mexico

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PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico
December 15, 1960

File: E-900-416

Case #247

Subject: Gallegos Canyon Unit
San Juan County, New Mexico

Director
United States Geological Survey
c/o Oil and Gas Supervisor
P. O. Box 6721
Roswell, New Mexico

Commissioner of Public Lands
The State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

Oil Conservation Commission of
The State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

All Working Interest Owners
In Unit Area
(See Attached Addressee List)

Gentlemen:

Pan American Petroleum Corporation, as Unit Operator, respectfully submits that due to a title failure under the east $16\frac{1}{2}$ feet of the NE/4 NW/4 Section 24, T-29-N, R-13-W, San Juan County, New Mexico, the total committed acres within the Pictured Cliffs Participating Area of the Gallegos Canyon Unit must be reduced from 27,456.96 to 27,456.46 acres. This acreage is carried under the Patented Land Section of the Ownership Schedule, Exhibit "B" as Tract No. 107.

Pan American Petroleum Corporation pursuant to Article 5(h) of the Unit Operating Agreement received approval from a majority of the working interest owners within the Pictured Cliffs Participating Area to adjust the ownership percentages. The effective date of the revision will be October 1, 1960.

Copies of this letter are being sent to the working interest owners shown on the attached list.

Very truly yours,

PAN AMERICAN PETROLEUM CORPORATION

L. O. Speer, Jr.
L. O. Speer, Jr.
Area Superintendent

CKD:en
Attach.

MAILING LIST OF WORKING INTEREST OWNERS
GALLEGOS CANYON UNIT AREA
SAN JUAN COUNTY, NEW MEXICO

American Petrofina Co, of Texas
P. O. Box 2159
Dallas 21, Texas

Elma R. Jones
764 Twentieth Avenue
San Francisco, California

Aztec Oil and Gas Company
920 Mercantile Securities Building
Dallas 1, Texas

Nathan Kessler
5900 States Drive
Oakland, California

Mary Roberts Berry
208 E. Washington Street
Washington, Iowa

George H. Krause, et al
P. O. Box 1107
Colorado Springs, Colorado

Brookhaven Oil Company
P. O. Box 396
Scottsdale, Arizona

Delta Oil Company of Utah
2606 Oak Lawn Avenue
Dallas 19, Texas

Lester F. Colby, Trustee
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Crystal Lake, Illinois

El Paso Natural Gas Company
P. O. Box 1492
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B. H. and Dyvena Crawford
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M. H. and Eula Stark
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George J. Darneille
5521 Bordley
Houston, Texas

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2000 National Bank of Tulsa Building
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P. O. Box 852
Roswell, New Mexico

John J. Redfern, Jr.
P. O. Box 1747
Midland, Texas

L. B. Hodges
P. O. Box 671
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H. K. Riddle
65 East 4th South
Salt Lake City, Utah

Edward J. Johnson
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501 W. Grand River Street
Clinton, Missouri

Southern Union Gas Company
Fidelity Union Tower Building
1507 Pacific Avenue
Dallas, Texas
Attn: D. W. Whitlow

Skelly Oil Company
Tulsa 2, Oklahoma
Attn: Mr. D. E. Smith

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico
December 8, 1960

File: E-872-416

Subject: Revised Exhibit "B"
Second Enlarged Dakota
Participating Area
Gallegos Canyon Unit
San Juan County, New Mexico

RECEIVED
DEC 11 11 51 AM '60

✓ Oil Conservation Commission of
The State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

Commissioner of Public Lands
The State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

All Working Interest Owners
In Unit Area
(See Attached Addressee List)

Case # 47

Gentlemen:

Attached is a corrected copy of the Exhibit "B" for the proposed Second Enlarged Dakota Participating Area of the Gallegos Canyon Unit. This revision was necessitated by an error in Tracts No. 8, 9, and 10. At such time as all regulatory bodies have approved this enlargement, a notification of such will be forwarded. Please destroy the Exhibit "B" attached with our letter of September 9, 1960, File: E-591-416.

Very truly yours,

PAN AMERICAN PETROLEUM CORPORATION



L. O. Speer, Jr.
Area Superintendent

CKD:en

Attachment

MAILING LIST OF WORKING INTEREST OWNERS
GALLEGOS CANYON UNIT AREA
SAN JUAN COUNTY, NEW MEXICO

American Petrofina Co. of Texas
P. O. Box 2159
Dallas 21, Texas

Aztec Oil and Gas Company
920 Mercantile Securities Building
Dallas 1, Texas

Mary Roberts Berry
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Washington, Iowa

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Roswell, New Mexico

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Roswell, New Mexico

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Piedmont 10, California

Southern Union Gas Company
Fidelity Union Tower Building
1507 Pacific Avenue
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Attn: Mr. D. W. Whitlow

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San Francisco, California

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Olen F. Featherstone
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Wood Oil Company
Room 800, Midstates Building
Tulsa, Oklahoma

Tom Bolack
1010 N. Dustin
Farmington, New Mexico

The first part of the document
 discusses the general principles
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 basic concepts and the
 objectives of the project.

The second part of the document
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The third part of the document
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C . CONSERVATION COMMISSIC

P. O. BOX 871

SANTA FE, NEW MEXICO

November 22, 1960

Case #247

C Pan American Petroleum Corporation
P. O. Box 480
Farmington, New Mexico

O ATTENTION: MR. L. O. SPEER, Jr.

RE: Second Enlargement to
Dakota Participating Area
Gallegos Canyon Unit
San Juan County, New Mexico.

P Gentlemen:

Y This is to advise that the New Mexico Oil Conservation Commis-
sion has this date approved the Second Enlargement to the Dakota
Participating Area for the Gallegos Canyon Unit San Juan County,
New Mexico, subject to like approval by the United States Geological
Survey and the Commissioner of Public Lands of the State of New
Mexico.

Nine approved copies of the application are being forwarded
to the United States Geological Survey, Roswell, as requested.

Very truly yours,

A. L. PORTER, Jr.,
Secretary-Director

ALP/JEK/ig

cc: US Geological Survey - Roswell, New Mexico
Commissioner of Public Lands - Santa Fe

Handwritten text at the top of the page, possibly a title or header, which is mostly illegible due to fading and bleed-through.

Main body of handwritten text, consisting of several lines of cursive script. The text is significantly faded and difficult to read, but appears to be a continuous paragraph or list of items.

In reply refer to:
Unit Division

November 22, 1960

C Pan American Petroleum Corporation
P. O. Box 480
Farmington, New Mexico

O Re: Application for Second
Enlargement to Dakota
Participating Area
Gallegos Canyon, San Juan
County, New Mexico

Attention: Mr. L. O. Speer, Jr.

P Gentlemen:

The Commissioner of Public Lands has of this date approved your application for the Second Enlargement to the Dakota Participating Area for the Gallegos Canyon Unit Area.

Y We are handing to the Oil Conservation Commission ten approved copies for their consideration and requesting that they transmit same to the United States Geological Survey, Roswell, New Mexico, as requested in your letter dated September 12, 1960.

Very truly yours,
MURRAY E. MORGAN
Commissioner of Public Lands

BY:
Marian M. Rhea, Supervisor
Unit Division

MEM/nmr/s
cc: Oil Conservation Commission
Santa Fe, New Mexico

United States Geological Survey
Roswell, New Mexico

PAN AMERICAN PETROLEUM CORPORATION

MAIL ROOM OFFICE 000
1960 SEP 14 PM 1:31

P. O. Box 480, Farmington, New Mexico
September 12, 1960

File: E-595-416

Case # 247

Subject: Approval of 1960
Plan of Development
Gallegos Canyon Unit
San Juan County, New Mexico

Director
United States Geological Survey
c/o Oil and Gas Supervisor
P. O. Box 6721
Roswell, New Mexico

Commissioner of Public Lands
The State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

✓ Oil Conservation Commission of
The State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

All Working Interest Owners
in Unit Area
(See Attached Addressee List)

Gentlemen:

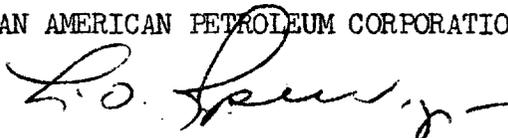
The approval was requested for the 1960 Plan of Development in the Gallegos Canyon Unit, San Juan County, New Mexico, by our letter of December 28, 1959, and has been executed by the Director of the U. S. Geological Survey, Commissioner and Commission on the following dates:

Director United States Geological Survey:	August 2, 1960
Commissioner of Public Lands State of New Mexico:	August 22, 1960
New Mexico Oil Conservation Commission:	September 1, 1960

This Plan of Development was effective January 1, 1960.

Very truly yours,

PAN AMERICAN PETROLEUM CORPORATION



L. O. Speer, Jr.
Area Superintendent

CKD:en
Attachment

MAILING LIST OF WORKING INTEREST OWNERS
GALLEGOS CANYON UNIT AREA
SAN JUAN COUNTY, NEW MEXICO

American Petrofina Co. of Texas
P. O. Box 2159
Dallas 21, Texas

Aztec Oil and Gas Company
920 Mercantile Securities Building
Dallas 1, Texas

Mary Roberts Berry
208 E. Washington Street
Washington, Iowa

Brookhaven Oil Company
P. O. Box 396
Scottsdale, Arizona

Lester F. Colby, Trustee
Route 1
Crystal Lake, Illinois

B. H. and Dyvena Crawford
Bloomfield, New Mexico

George J. Darneille
5521 Bordley
Houston, Texas

Ernest A. Hanson
P. O. Box 852
Roswell, New Mexico

L. B. Hodges
P. O. Box 671
Roswell, New Mexico

Edward J. Johnson
223 Greenbank Avenue
Piedmont 10, California

Southern Union Gas Company
Fidelity Union Tower Building
1507 Pacific Avenue
Dallas, Texas
Attn: D. W. Whitlow

Elma R. Jones
764 Twentieth Avenue
San Francisco, California

Nathan Kessler
5900 States Drive
Oakland, California

George H. Krause, et al
P. O. Box 1107
Colorado Springs, Colorado

Delta Oil Company of Utah
120 Arno NE
Albuquerque, New Mexico

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

M. H. and Eula Stark
Route 3
Farmington, New Mexico

Petro-Atlas Inc.
2000 National Bank of Tulsa Building
Tulsa 3, Oklahoma

John J. Redfern, Jr.
P. O. Box 1747
Midland, Texas

H. K. Riddle
65 East 4th South
Salt Lake City, Utah

Robb Woods
501 W. Grand River Street
Clinton, Missouri

Skelly Oil Company
Tulsa 2, Oklahoma
Attn: Mr. D. E. Smith

Summit Oil Company
Fidelity Union Tower Building
1507 Pacific Avenue
Dallas, Texas

Sunray Mid-Continent Oil Company
P. O. Box 2692
Denver 1, Colorado
Attn: A. W. Wadman

Olen F. Featherstone
Roswell Petroleum Building
Roswell, New Mexico

Locke-Taylor Drilling Co.
801 Second Avenue
Durango, Colorado

Texaco, Inc.
P. O. Box 3109
Midland, Texas

Texas Pacific Coal and Oil Company
P. O. Box 2110
Fort Worth 1, Texas

John H. Trigg
P. O. Box 6529
Roswell, New Mexico

Wood Oil Company
Room 800, Midstates Building
Tulsa, Oklahoma

Tom Bolack
1010 N. Dustin
Farmington, New Mexico

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico
September 12, 1960

File: 596-416

Subject: Application for Approval of
Second Enlargement to the
Dakota Participating Area
Gallegos Canyon Unit
San Juan County, New Mexico

Commissioner of Public Lands
State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

Handwritten initials

Attention: Mrs. Marion Rhea

Dear Sir:

Attached are 12 copies of Pan American's application for the Second Enlargement to the Dakota Participating Area, Gallegos Canyon Unit, San Juan County, New Mexico. We would appreciate your processing this application through the State Land Office and after obtaining the Commissioner's approval, to forward all copies to the New Mexico Oil Conservation Commission for their review and approval. By copy of this letter to the New Mexico Oil Conservation Commission, we ask that following their approval that they forward all copies to the United States Geological Survey in Roswell for their processing. When the U. S. Geological Survey's approval has been obtained, we will furnish both you and the Oil Conservation Commission with fully executed copies of the application.

In order that we may keep current on the progress of obtaining approval of this application, it would be appreciated if you would furnish us a copy of your letter transmitting the application to the Oil Conservation Commission and if the Oil Conservation Commission would furnish us a copy of their letter transmitting it to the U. S. Geological Survey. We would also appreciate the U. S. Geological Survey furnishing us with information regarding the date they transmit the application to their Washington Office.

Very truly yours,

PAN AMERICAN PETROLEUM CORPORATION

ORIGINAL SIGNED BY
L. O. Speer, Jr.

L. O. Speer, Jr.
Area Superintendent

cc: ten

Attachments

cc: Mr. A. L. Porter, Jr.
12010
Santa Fe, New Mexico

Mr. John A. Anderson
U.S.G.S.
Roswell, New Mexico

COPY

RECEIVED
U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO
SEP 15 1960

PAN AMERICAN PETROLEUM CORPORATION

MAIN OFFICE OCC

P. O. Box 480, Farmington, New Mexico

1960 AUG 1 AM 6 25 August 31, 1960

File: E-565-416

Subject: 1960 Plan of Development
Gallegos Canyon Unit
San Juan County, New Mexico

Case # 247

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

Gentlemen:

On December 28, 1959, a 1960 Plan of Development for the Gallegos Canyon Unit was forwarded to your office for approval. Executed approved copies have been returned from the United States Geological Survey and the Commissioner of Public Lands and to complete our files, we would appreciate your executing the above Plan of Development and returning it to this office. Upon receipt of your approval, notices will be sent to all interested parties in the Unit Area advising them of the dates of such approvals.

Very truly yours,

PAN AMERICAN PETROLEUM CORPORATION



L. O. Speer, Jr.
Area Superintendent

CKD:en

Case # 247

PAN AMERICAN PETROLEUM CORPORATION

MAILED
1960 AUG 11 PM 1:18
DCC

P. O. Box 480, Farmington, New Mexico
August 9, 1960

File: E-509-416

Subject: Approval of Initial Participating Area
For The Gallup Formation
Gallegos Canyon Unit, San Juan County,
New Mexico

Director
United States Geological Survey
c/o Oil and Gas Supervisor
P. O. Box 6721
Roswell, New Mexico

Commissioner of Public Lands
The State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

✓ Oil Conservation Commission of
The State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

All Working Interest Owners
in Unit Area
(See Attached Addressee List)

Gentlemen:

Application for Approval of the Initial Participating Area for the Gallup Formation, Gallegos Canyon Unit, dated May 26, 1960, has been executed by the U. S. Geological Survey, Commissioner and Commission on the following dates:

Director United States Geological Survey:	July 22, 1960
Commissioner of Public Lands State of New Mexico:	June 7, 1960
New Mexico Oil Conservation Commission:	June 7, 1960

The Initial Gallup Participating Area becomes effective February 6, 1959.

Very truly yours,

PAN AMERICAN PETROLEUM CORPORATION



L. O. Speer, Jr.
Area Superintendent

NOTE: Attached is a fully executed copy of the Application for your files.

MAILING LIST OF WORKING INTEREST OWNERS
GALLEGOS CANYON UNIT AREA
SAN JUAN COUNTY, NEW MEXICO

American Petrofina Co. of Texas
P. O. Box 2159
Dallas 21, Texas

Aztec Oil and Gas Company
920 Mercantile Securities Building
Dallas 1, Texas

Mary Roberts Berry
208 E. Washington Street
Washington, Iowa

Brookhaven Oil Company
P. O. Box 396
Scottsdale, Arizona

Lester F. Colby, Trustee
Route 1
Crystal Lake, Illinois

B. H. and Dyvena Crawford
Bloomfield, New Mexico

George J. Darneille
5521 Bordley
Houston, Texas

Devonian Gas and Oil Company
2003 Commonwealth Building
Pittsburg 22, Pennsylvania

Ernest A. Hanson
P. O. Box 852
Roswell, New Mexico

L. B. Hodges
P. O. Box 671
Roswell, New Mexico

Edward J. Johnson
223 Greenbank Avenue
Piedmont 10, California

Elma R. Jones
764 Twentieth Avenue
San Francisco, California

Nathan Kessler
5900 States Drive
Oakland, California

George H. Krause, et al
P. O. Box 1107
Colorado Springs, Colorado

Delta Oil Company of Utah
120 Arno NE
Albuquerque, New Mexico

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

M. H. and Eula Stark
Route 3
Farmington, New Mexico

Petro-Atlas Inc.
2000 National Bank of Tulsa Building
Tulsa 3, Oklahoma

John J. Redfern, Jr.
P. O. Box 1747
Midland, Texas

H. K. Riddle
65 East 4th South
Salt Lake City, Utah

Robb Woods
501 W. Grand River Street
Clinton, Missouri

Skelly Oil Company
Tulsa 2, Oklahoma
Att: Mr. D. E. Smith

Southern Union Gas Company
Fidelity Union Tower Building
1507 Pacific Avenue
Dallas, Texas

Attn: D. W. Whitlow

Summit Oil Company
Fidelity Union Tower Building
1507 Pacific Avenue
Dallas, Texas

Sunray Mid-Continent Oil Company
1101 Wilco Building
Midland, Texas

Attn: V. M. Williams

Olen F. Featherstone
Roswell Petroleum Building
Roswell, New Mexico

Locke-Taylor Drilling Co.
801 Second Avenue
Durango, Colorado

Texaco, Inc.
P. O. Box 3109
Midland, Texas

Texas Pacific Coal and Oil Company
P. O. Box 2110
Fort Worth 1, Texas

John H. Trigg
P. O. Box 6529
Roswell, New Mexico

Wood Oil Company
Room 800, Midstates Building
Tulsa, Oklahoma

Tom Bolack
1010 N. Dustin
Farmington, New Mexico

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 487, Farmington, New Mexico
May 26, 1960

File: E-296-416

Subject: Request for Approval of Proposed
Initial Gallup Participating Area
Gallegos Canyon Unit
San Juan County, New Mexico

Director (6)
United States Geological Survey
c/o Oil and Gas Supervisor
P. O. Box 6721
Roswell, New Mexico

Commissioner of Public Lands (3)
The State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

Oil Conservation Commission of (3)
The State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

All Working Interest Owners
In Unit Area
(See Attached Addressee List)

Gentlemen:

Pursuant to Section 10 of the Gallegos Canyon Unit Agreement, which was approved November 1, 1951, Pan American Petroleum Corporation, as Unit Operator, has determined, subject to approval of the Director, Commissioner, and Commission, that the Gallup formation is capable of producing unitized substances in paying quantities from the Gallegos Canyon Unit No. 83 and that an Initial Gallup Participating Area should be established in the Gallegos Canyon Unit. The proposed Initial Gallup Participating Area contains 360 acres and consists of the 40 acres on which Gallegos Canyon Unit No. 83 is located, plus the direct and diagonal offsetting quarter-quarter sections as shown on the attached map, Exhibit "A", and is described as follows:

S/2 SE/4 Section 23	T-28-N, R-12-W
SW/4 SW/4 Section 24	T-28-N, R-12-W
W/2 NW/4 Section 25	T-28-N, R-12-W
NE/4 Section 26	T-28-N, R-12-W

Attached as Exhibit "B" is a schedule which describes and shows the ownership of the acreage in the proposed Initial Gallup Participating Area in Gallegos Canyon Unit. February 6, 1959, is proposed as the effective date of the Initial Gallup Participating Area since this is the date on which the Gallegos Canyon Unit No. 83 was completed. Also attached for your information is an Engineering and Geological Report which was written to support the proposed Initial Gallup Participating Area.

JUN 13 1960

U. S. GEOLOGICAL SURVEY
ROSWELL, N. M.

MAILING LIST OF WORKING INTEREST OWNERS
GALLEGOS CANYON UNIT AREA
SAN JUAN COUNTY, NEW MEXICO

American Petrofina Co. of Texas
P. O. Box 2159
Dallas 21, Texas

Elman R. Jones
764 Twentieth Avenue
San Francisco, California

Aztec Oil and Gas Company
920 Mercantile Securities Building
Dallas 1, Texas

Nathan Kessler
5900 States Drive
Oakland, California

Mary Roberts Berry
208 E. Washington Street
Washington, Iowa

George H. Krause, et al
P. O. Box 1107
Colorado Springs, Colorado

Brookhaven Oil Company
P. O. Box 396
Scottsdale, Arizona

Delta Oil Company of Utah
120 Arno NE
Albuquerque, New Mexico

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Route 1
Crystal Lake, Illinois

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

B. H. and Dyvena Crawford
Bloomfield, New Mexico

M. H. and Eula Stark
Route 3
Farmington, New Mexico

George J. Darneille
5521 Bordley
Houston, Texas

Petro-Atlas Corporation
First National Building
Tulsa 3, Oklahoma

Devonian Gas and Oil Company
2003 Commonwealth Building
Pittsburg 22, Pennsylvania

John J. Redfern, Jr.
P. O. Box 1747
Midland, Texas

Phillip Gates
802 N. LaBrea Avenue
Englewood, California

H. K. Riddle
65 East 4th South
Salt Lake City, Utah

Ernest A. Hanson
P. O. Box 852
Roswell, New Mexico

Robb Woods
501 W. Grand River Street
Clinton, Missouri

L. B. Hodges
P. O. Box 671
Roswell, New Mexico

Skelly Oil Company
Tulsa 2, Oklahoma
Attn: Mr. D. E. Smith

Edward J. Johnson
223 Greenbank Avenue
Piedmont 10, California

Southern Union Gas Company
Fidelity Union Tower Building
1507 Pacific Avenue
Dallas, Texas
Attn: D. W. Whitlow

Summit Oil Company
Fidelity Union Tower Building
1507 Pacific Avenue
Dallas, Texas

Sunray Mid-Continent Oil Company
1101 Wilco Building
Midland, Texas
Attn: V. M. Williams

Arthur W. Sunter
2210 Tenth Street
Berkeley, California

Texaco, Inc.
P. O. Box 3109
Midland, Texas

Texas Pacific Coal and Oil Company
P. O. Box 2110
Fort Worth 1, Texas

John H. Trigg
P. O. Box 6529
Roswell, New Mexico

Wood Oil Company
Room 800, Midstates Building
Tulsa, Oklahoma

"ENGINEERING AND GEOLOGICAL REPORT
FOR INITIAL GALLUP PARTICIPATING AREA"
GALLEGOS CANYON UNIT
SAN JUAN COUNTY, NEW MEXICO

Gallegos Canyon Unit No. 83 was completed on February 6, 1959, as a dual completion in the Gallup and Dakota formations. A determination of the commercial productivity of the Gallup was not made pending collection of performance data, and no initial participating area has been set up for that formation. Since completion, Gallegos Canyon Unit No. 83 has demonstrated its ability to produce oil from the Gallup formation in paying quantities; consequently, an Initial Gallup Participating Area to encompass the 360 acres around Gallegos Canyon Unit No. 83 is being recommended. The outline of this proposed Initial Gallup Participating Area is shown in yellow on the attached map, Exhibit "A".

Gallegos Canyon Unit No. 83 is located 990 feet from the North and East lines of Section 26, T-28-N, R-12-W. The Gallup zone was perforated 5548-5620 and stimulated by sand-oil fracturing with 50,000 gallons of oil and 75,000 pounds of sand. This well produced 89 barrels of oil in eight hours for a calculated initial potential of 267 barrels of oil per day. Currently, it is capable of producing 100 barrels of oil per day pumping with a GOR of 2322.

In the Gallegos Canyon Unit Area the oil producing Gallup is a fine-grained, shaly sandstone member of the Mancos shale of Cretaceous Age. Commercial oil production from the Gallup is controlled by stratigraphy or sand cleanliness rather than by structure. It is believed that commercial production at well No. 83 proves all the directly and diagonally offsetting quarter-quarter sections to be reasonably proven productive of unitized substances in paying quantities.

RECEIVED
JUN 13 1960

