

PAN AMERICAN PETROLEUM CORPORATION

SECURITY LIFE BUILDING

DENVER, COLORADO 80202

PRODUCING DEPARTMENT
H. T. HUNTER
DIVISION PRODUCTION
MANAGER

NOV 17 1969

DISTRICT SUPERINTENDENTS
W. M. JONES
T. M. CURTIS

November 12, 1969

File: TMC-432-416

Re: Rosa Unit
Rio Arriba and San Juan
Counties, New Mexico

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico 88201

Dear Sir:

Attached are three copies of Designation of Sub-Operator between El Paso Natural Gas Company and Pan American Petroleum Corporation, designating Pan American Petroleum Corporation as Sub-Operator of three leases within the Rosa Unit as specifically described in the Designation.

Yours very truly,

T. M. Curtis

Attachment

cc: Mr. Charles Higgins w/attach (1)
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Mr. A. L. Porter, Jr. w/attach (2)
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

• Mr. Alex Armijo w/attach (1)
Commissioner of Public Lands for the State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87501

Mr. L. O. Speer, Jr. w/attach (1)

Mr. C. E. Seese w/attach (1)

NEW & REVISED

DESIGNATION OF SUB-OPERATOR

THIS DESIGNATION is made and entered into this day of , 1969, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, whose mailing address is Post Office Box 1492, El Paso, Texas 79999 (hereinafter sometimes referred to as "Operator"); and PAN AMERICAN PETROLEUM CORPORATION, a Delaware corporation, whose mailing address is Security Life Building, Denver, Colorado 80202 (hereinafter sometimes referred to as "Sub-Operator");

WHEREAS, Operator is Unit Operator for the Rosa Unit, I Sec. No. 587, located in the Counties of Rio Arriba and San Juan, New Mexico; and

WHEREAS, Sub-Operator desires to drill a Dakota well on the following-described lands situated in Rio Arriba County, New Mexico, pursuant to the provisions of Section Twelve (12) of the Rosa Unit Agreement, to wit:

- 1. USA SF 078763
Township 31 North, Range 5 West, N.M.P.M.
Section 8: NE/4
Containing 160.00 acres, more or less
- 2. USA SF 078767
Township 31 North, Range 5 West, N.M.P.M.
Section 8: NW/4
Containing 160.00 acres, more or less; and

WHEREAS, the above-described land is committed to the terms and conditions of the Rosa Unit Agreement and Rosa Unit Operating Agreement; and

WHEREAS, Sub-Operator has been furnished Notice of Operator's election not to drill said Dakota well as Unit Operator under the terms of the Unit Agreement; and

WHEREAS, the necessary concurrence has been obtained from the working interest owners in the above tracts; and

WHEREAS, Sub-Operator has requested that Operator execute this Designation in order that said Dakota well may be drilled by Sub-Operator;

NOW, THEREFORE, in order to permit Pan American Petroleum Corporation to drill the above-described Dakota well, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, hereby designates the said

Pan American Petroleum Corporation as Sub-Operator for the sole and only purpose of drilling the said Dakota well on the above-described lands pursuant to Section Twelve (12) of the Rosa Unit Agreement.

Sub-Operator indicates its acceptance of this Designation by placing its signature in the space provided below and agrees to drill, complete and/or plug and abandon said Dakota well as a reasonable and prudent operator in accordance with the terms and conditions of the Rosa Unit Agreement and the Rosa Unit Operating Agreement, and also agrees to the following conditions:

1. Unit Operator's representative shall approve all casing programs and equipment specifications prior to the drilling of the well.
2. Notify Operator when drilling operations are commenced.
3. Furnish Operator with complete daily driller's tour report, at Sub-Operator's expense.
4. Furnish Operator with daily reports by telephone call or telegram at Sub-Operator's expense, as to the formation or formations penetrated during the previous day's drilling, the depth at which each formation is encountered, and the depth at which the report is made.
5. Allow representatives of Operator access to the derrick floor at all times.
6. Notify Operator of intentions to core, drillstem test or run well surveys in sufficient time to enable Operator's representatives to be present; and also notify Operator in sufficient time in order that Operator may attend and witness any and all potential tests.
7. Adequately test and/or core all possible productive formations to the satisfaction of Operator upon request.
8. Have any core having shows of oil or gas analyzed by a competent core analysis laboratory, and have such laboratory send three (3) preliminary copies and three (3) final copies of the analysis report to Operator.
9. Furnish Operator three (3) field prints and five (5) final prints of all well surveys made during drilling or upon completion of the well.
10. Furnish Operator a representative and adequate cut of all cores and ditch samples taken during the drilling of the well.
11. Provide Operator with copies of drilling time records, hole deviation tests and all records required by the governmental agencies having jurisdiction of the well.
12. Notify Operator of any intention to plug and abandon the well and allow Operator forty-eight (48) hours in which to concur.
13. Sub-Operator shall carry and pay for and file with Operator for its approval proper and acceptable evidence of the following insurance:

- a. Workmen's Compensation and/or Employer's Liability Insurance which shall comply with the laws of the State in which this Agreement is to be performed and shall cover all of its employees engaged in the activities to be performed under this Agreement.
 - b. Automobile Public Liability Insurance with not less than \$100/300,000.00 limits covering bodily injury and death, and property damage with a limit of not less than \$50,000.00 to cover all automotive equipment used in connection with performance of this Agreement.
 - c. Public Liability Insurance covering activities performed under this Agreement with bodily injury and death limits of \$100,000.00 as to any one person and \$300,000.00 as to any one accident. Property Damage Insurance with limits of \$50,000.00.
14. Furnish the United States Geological Survey and the Oil Conservation Commission of the State of New Mexico all proper and necessary reports and well data in the required numbers and time periods as specified by the United States Geological Survey and the Oil Conservation Commission of the State of New Mexico, with a copy to Operator at the addresses hereinafter provided.
 15. Provide the Commissioner of Public Lands of the State of New Mexico with copies of all reports and other well data submitted in accordance with the preceding paragraph.

All notices, samples, or other information required to be furnished shall be sent to:

El Paso Natural Gas Company
Post Office Box 1492
El Paso, Texas 79999
Attention: Land Department

With copies to:
El Paso Natural Gas Company
Post Office Box 990
Farmington, New Mexico 87401
Attention: Regional Land Manager

Sub-Operator shall comply with all applicable laws, rules and regulations of any governmental authority having jurisdiction over operations performed under this Designation, and shall indemnify, protect and hold Operator harmless from and against any and all claims, demands or causes of action for injuries or death to persons or damage to property occurring in connection with or in any manner incident to operations conducted by the Sub-Operator hereunder.

Sub-Operator and Operator agree that Sub-Operator shall drill and complete or plug and abandon the subject Dakota well pursuant to the provisions of the Rosa Unit Operating Agreement.

The drilling of the said Dakota well is subject to approval by the Oil Conservation Commission of the State of New Mexico as to privately

DESIGNATION OF SUB-OPERATOR

THIS DESIGNATION is made and entered into this 22 day of September, 1969, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, whose mailing address is Post Office Box 1492, El Paso, Texas 79999 (hereinafter sometimes referred to as "Operator"); and PAN AMERICAN PETROLEUM CORPORATION, a Delaware corporation, whose mailing address is Security Life Building, Denver, Colorado 80202 (hereinafter sometimes referred to as "Sub-Operator");

WHEREAS, Operator is Unit Operator for the Rosa Unit, I Sec. No. 587, located in the Counties of Rio Arriba and San Juan, New Mexico; and

WHEREAS, Sub-Operator desires to drill a Dakota well on the following-described lands situated in Rio Arriba County, New Mexico, pursuant to the provisions of Section Twelve (12) of the Rosa Unit Agreement, to wit:

1. USA SF 078763
Township 31 North, Range 5 West, N.M.P.M.
Section 8: NE/4
Containing 160.00 acres, more or less

2. USA SF 078767
Township 31 North, Range 5 West, N.M.P.M.
Section 8: NW/4
Containing 160.00 acres, more or less; and

WHEREAS, the above-described land is committed to the terms and conditions of the Rosa Unit Agreement and Rosa Unit Operating Agreement; and

WHEREAS, Sub-Operator has been furnished Notice of Operator's election not to drill said Dakota well as Unit Operator under the terms of the Unit Agreement; and

WHEREAS, the necessary concurrence has been obtained from the working interest owners in the above tracts; and

WHEREAS, Sub-Operator has requested that Operator execute this Designation in order that said Dakota well may be drilled by Sub-Operator;

NOW, THEREFORE, in order to permit Pan American Petroleum Corporation to drill the above-described Dakota well, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, hereby designates the said

Pan American Petroleum Corporation as Sub-Operator for the sole and only purpose of drilling the said Dakota well on the above-described lands pursuant to Section Twelve (12) of the Rosa Unit Agreement.

Sub-Operator indicates its acceptance of this Designation by placing its signature in the space provided below and agrees to drill, complete and/or plug and abandon said Dakota well as a reasonable and prudent operator in accordance with the terms and conditions of the Rosa Unit Agreement and the Rosa Unit Operating Agreement, and also agrees to the following conditions:

1. Unit Operator's representative shall approve all casing programs and equipment specifications prior to the drilling of the well.
2. Notify Operator when drilling operations are commenced.
3. Furnish Operator with complete daily driller's tour report, at Sub-Operator's expense.
4. Furnish Operator with daily reports by telephone call or telegram at Sub-Operator's expense, as to the formation or formations penetrated during the previous day's drilling, the depth at which each formation is encountered, and the depth at which the report is made.
5. Allow representatives of Operator access to the derrick floor at all times.
6. Notify Operator of intentions to core, drillstem test or run well surveys in sufficient time to enable Operator's representatives to be present; and also notify Operator in sufficient time in order that Operator may attend and witness any and all potential tests.
7. Adequately test and/or core all possible productive formations to the satisfaction of Operator upon request.
8. Have any core having shows of oil or gas analyzed by a competent core analysis laboratory, and have such laboratory send three (3) preliminary copies and three (3) final copies of the analysis report to Operator.
9. Furnish Operator three (3) field prints and five (5) final prints of all well surveys made during drilling or upon completion of the well.
10. Furnish Operator a representative and adequate cut of all cores and ditch samples taken during the drilling of the well.
11. Provide Operator with copies of drilling time records, hole deviation tests and all records required by the governmental agencies having jurisdiction of the well.
12. Notify Operator of any intention to plug and abandon the well and allow Operator forty-eight (48) hours in which to concur.
13. Sub-Operator shall carry and pay for and file with Operator for its approval proper and acceptable evidence of the following insurance:

- a. Workmen's Compensation and/or Employer's Liability Insurance which shall comply with the laws of the State in which this Agreement is to be performed and shall cover all of its employees engaged in the activities to be performed under this Agreement.
 - b. Automobile Public Liability Insurance with not less than \$100/300,000.00 limits covering bodily injury and death, and property damage with a limit of not less than \$50,000.00 to cover all automotive equipment used in connection with performance of this Agreement.
 - c. Public Liability Insurance covering activities performed under this Agreement with bodily injury and death limits of \$100,000.00 as to any one person and \$300,000.00 as to any one accident. Property Damage Insurance with limits of \$50,000.00.
14. Furnish the United States Geological Survey and the Oil Conservation Commission of the State of New Mexico all proper and necessary reports and well data in the required numbers and time periods as specified by the United States Geological Survey and the Oil Conservation Commission of the State of New Mexico, with a copy to Operator at the addresses hereinafter provided.
 15. Provide the Commissioner of Public Lands of the State of New Mexico with copies of all reports and other well data submitted in accordance with the preceding paragraph.

All notices, samples, or other information required to be furnished shall be sent to:

El Paso Natural Gas Company
Post Office Box 1492
El Paso, Texas 79999
Attention: Land Department

With copies to:
El Paso Natural Gas Company
Post Office Box 990
Farmington, New Mexico 87401
Attention: Regional Land Manager

Sub-Operator shall comply with all applicable laws, rules and regulations of any governmental authority having jurisdiction over operations performed under this Designation, and shall indemnify, protect and hold Operator harmless from and against any and all claims, demands or causes of action for injuries or death to persons or damage to property occurring in connection with or in any manner incident to operations conducted by the Sub-Operator hereunder.

Sub-Operator and Operator agree that Sub-Operator shall drill and complete or plug and abandon the subject Dakota well pursuant to the provisions of the Rosa Unit Operating Agreement.

The drilling of the said Dakota well is subject to approval by the Oil Conservation Commission of the State of New Mexico as to privately

owned lands, the Commissioner of Public Lands of the State of New Mexico as to State lands, and the Supervisor of the United States Geological Survey, Roswell, New Mexico, as to Federal and/or Indian lands.

THIS DESIGNATION shall be effective for a period of time not to exceed one hundred twenty (120) days.

THIS DESIGNATION is personal and cannot be assigned in whole or in part by Sub-Operator without the written consent of Operating having first been obtained.

IN WITNESS WHEREOF, this Designation is executed as of the day and year first hereinabove written.

OPERATOR

EL PASO NATURAL GAS COMPANY

By: *Sam Smith*
Attorney-in-Fact

SUB-OPERATOR

PAN AMERICAN PETROLEUM CORPORATION

By: *H.T. Hunter*
Attorney-in-Fact



STATE OF TEXAS)
)
COUNTY OF EL PASO)

The foregoing instrument was acknowledged before me this day of , 1969, by SAM SMITH, Attorney-in-Fact for EL PASO NATURAL GAS COMPANY, a Delaware corporation, on behalf of said corporation.

[Signature]
Notary Public

My Commission Expires:

STATE OF COLORADO)
)
COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 11 day of November, 1969, by H.T. Hunter, Attorney-in-Fact for PAN AMERICAN PETROLEUM CORPORATION, a Delaware corporation, on behalf of said corporation.

Rose M. Corum
Notary Public

My Commission Expires:
My Commission expires June 23, 1972

El Paso Natural Gas Company

El Paso, Texas 79999

November 12, 1969

NOV 13 1969

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Mr. John A. Anderson
Regional Oil & Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87501

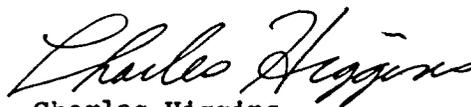
Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Rosa Unit Exhibit "B"

Gentlemen:

Enclosed are copies of the Rosa Unit Exhibit "B" which has been revised effective September 1, 1969. To the best of our knowledge, this Exhibit "B" reflects the correct ownership in the Unit as of September 1, 1969.

Yours very truly,



Charles Higgins
Supervising Landman
Land Department

CH:DI:sf
Enclosures

cc: All Working Interest Owners
in the Rosa Unit

EXHIBIT "B"
 SCHEDULE SHOWING THE PERCENTAGE AND KIND OF OWNERSHIP OF OIL AND GAS INTERESTS
 IN ALL LANDS IN THE ROSA UNIT

Tract No.	Description	No. of Acres	Lease Name or Number	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
<u>FEDERAL LANDS</u>							
1	T-31-N, R-4-W Sec. 1: A11 Sec. 2: A11 Sec. 3: A11	1,965.72	SF 078891	USA 12 $\frac{1}{2}$ %	J. Glenn Turner	21.875%	J. Glenn Turner
2	T-31-N, R-4-W Sec. 4: A11 Sec. 5: A11 Sec. 6: A11 Sec. 7: A11	2,539.56	SF 078890	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Sections 4 and 6: <u>Pan American Petroleum Corp.</u> As to Sections 5 and 7 to base of Dakota: <u>Dyna Ray Oil & Gas Co., Inc.</u> Below base of Dakota: <u>Pan American Petroleum Corp.</u>
3	T-31-N, R-4-W Sec. 8: A11 Sec. 9: A11 Sec. 10: A11 Sec. 11: A11	2,560.00	SF 078888	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Sections 8 and 10: <u>Pan American Petroleum Corp.</u> As to Sections 9 and 11 to base of Dakota: <u>Dyna Ray Oil & Gas Co., Inc.</u> Below base of Dakota: <u>Pan American Petroleum Corp.</u>
4	T-31-N, R-4-W Sec. 12: A11 Sec. 13: A11 Sec. 24: A11 Sec. 25: A11	2,559.57	SF 078887	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Sections 12 and 24: <u>Pan American Petroleum Corp.</u> As to Sections 13 and 25 to base of Dakota: <u>Dyna Ray Oil & Gas Co., Inc.</u> Below base of Dakota: <u>Pan American Petroleum Corp.</u>

Tract No.	Description	No. of Acres	Lease Name or Number	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
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FEDERAL LANDS

5	T-31-N, R-4-W Sec. 14: A11 Sec. 15: A11 Sec. 16: A11	1,920.00	SF 078892	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Sections 14 and 16: Pan American Petroleum Corp. As to Section 15 to base of Dakota: Dyna Ray Oil & Gas Co., Inc.
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Below base of Dakota:
Pan American Petroleum Corp.

6	T-31-N, R-4-W Sec. 17: A11 Sec. 18: A11 Sec. 19: A11 Sec. 20: A11	2,505.68	SF 078889	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Sections 18 and 20: Pan American Petroleum Corp. As to Sections 17 and 19 to base of Dakota: Dyna Ray Oil & Gas Co., Inc.
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Below base of Dakota:
Pan American Petroleum Corp.

7	T-31-N, R-4-W Sec. 21: A11 Sec. 22: A11 Sec. 23: A11	1,920.00	SF 078893	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Section 22: Pan American Petroleum Corp. As to Sections 21 and 23 to base of Dakota: Dyna Ray Oil & Gas Co., Inc.
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Below base of Dakota:
Pan American Petroleum Corp.

8	T-31-N, R-4-W Sec. 26: E/2 SE/4, N/2 N/2, Lots 1,2,3, 4,5,6,7,8,9, SW/4 NW/4	2,284.16	SF 078894	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Sections 26 and 28: Pan American Petroleum Corp. As to Sections 27 and 29 to base of Dakota: Dyna Ray Oil & Gas Co., Inc.
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Below base of Dakota:
Pan American Petroleum Corp.

Sec. 27: E/2 E/2,
SW/4 SE/4,
NW/4 NE/4,
NE/4 NW/4,
Lots 1,2,3,
4,5,6,7,8
Sec. 28: W/2, SE/4, W/2 NE/4, Lots 1,2
Sec. 29: A11

Tract No.	Description	No. of Acres	Lease Name or Number	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
<u>FEDERAL LANDS</u>							
11	T-31-N, R-4-W Sec. 30: E/2 Sec. 31: E/2, E/2 SW/4	720.00	SF 078777	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Section 30: Pan American Petroleum Corp. As to Section 31 to base of Dakota: Dyna Ray Oil & Gas Co., Inc. Below base of Dakota: Pan American Petroleum Corp.
12	T-31-N, R-4-W Sec. 30: E/2 W/2, Lots 1, 2,3,4 Sec. 31: E/2 NW/4, Lots 1,2,3,4	508.84	SF 078774	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Section 30: Pan American Petroleum Corp. As to Section 31 to base of Dakota: Dyna Ray Oil & Gas Co., Inc. Below base of Dakota: Pan American Petroleum Corp.
13	T-31-N, R-5-W Sec. 3: All Sec. 4: All Sec. 5: All Sec. 8: E/2, SW/4 Sec. 9: All Sec. 10: N/2	2,544.64	SF 078763	USA 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	5% on All Sec. 5 and NE/4 Sec. 8 from surface to base of Pictured Cliffs	<p>(1)</p> <p>Base of Pictured Cliffs to base of Mesaverde: El Paso Natural Gas Co. - $\frac{1}{2}$ gas Colorado Oil & Gas Co. - $\frac{1}{2}$ oil Pan American Pet. Corp. - $\frac{1}{2}$</p> <p>Below base of Mesaverde: Pan American Petroleum Corp.</p> <p>All Sections 3, 4, 9, S/2 Section 8 to base of Pictured Cliffs: El Paso Natural Gas Company</p> <p>Base of Pictured Cliffs to base of Mesaverde: El Paso Natural Gas Co. - full gas (1)(2) and $\frac{1}{2}$ oil Colorado Oil & Gas Co. - $\frac{1}{2}$ oil</p>

Tract No.	Description	No. of Acres	Lease Name or Number	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
<u>FEDERAL LANDS</u>							
13	Continued						<p>Below base of Mesaverde: Pan American Petroleum Corp.</p> <p>N/2 Section 10 to base of Pictured Cliffs: El Paso Natural Gas Co.</p> <p>Base of Pictured Cliffs to base of Mesaverde: El Paso Natural Gas Co. - $\frac{1}{2}$ gas Colorado Oil & Gas Co. - $\frac{1}{2}$ oil Dyna Ray Oil & Gas Co., Inc. - $\frac{1}{2}$</p> <p>Base of Mesaverde to base of Dakota: Dyna Ray Oil & Gas Co., Inc.</p> <p>Below base of Dakota: Pan American Petroleum Corp.</p>
14	T-31-N, R-5-W Sec. 6: All Sec. 7: All Sec. 8: NW/4	2,518.04	SF 078767	USA 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	(2) plus 5% on NW/4 Sec. 8 from sur-face to base of Pictured Cliffs	<p>Sections 12, 13 and 24, T-31-N, R-6-W and Sections 6 and 7, T-31-N, R-5-W to base of Mesaverde: El Paso Natural Gas Co. - full gas (1) (2) and $\frac{1}{2}$ oil Colorado Oil & Gas Co. - $\frac{1}{2}$ oil</p> <p>Below base of Mesaverde Pan American Petroleum Corp.</p> <p>Section 8, T-31-N, R-5-W to base of Pictured Cliffs: Neville G. Penrose</p>

Tract No.	Description	No. of Acres	Lease Name or Number	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
<u>FEDERAL LANDS</u>							
14	Continued						
15	<u>T-31-N, R-5-W</u> Sec. 11: A11 Sec. 12: A11 Sec. 13: A11 Sec. 14: A11	2,560.00	SF 078762	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Sections 12 and 14: Pan American Petroleum Corp. As to Sections 11 and 13 to base of Dakota: Dyna Ray Oil & Gas Co., Inc. Below base of Dakota: Pan American Petroleum Corp.
16	<u>T-31-N, R-5-W</u> Sec. 10: S/2 Sec. 15: A11 Sec. 22: A11 Sec. 23: N/2 Sec. 27: A11	2,560.00	SF 078770	USA 12 $\frac{1}{2}$ %	EI Paso Natural Gas Company	(2) plus 5% ORRI on Sections 10 and 15 from sur-face to base of pictured Cliffs	As to Sections 10 and 15 to base of Pictured Cliffs: EI Paso Natural Gas Company From base of Pictured Cliffs to base of Mesaverde: EI Paso Natural Gas Co. - full gas (1)(2) and $\frac{1}{2}$ oil Colorado Oil & Gas Co. - $\frac{1}{2}$ oil

Tract No.	Description	No. of Acres	Lease Name or Number	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
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16 Continued

Below base of Mesaverde:
Pan American Petroleum Corp.

As to Sections 22, 23 and 27 to base of Mesaverde:
El Paso Natural Gas Co. - full gas (1)(2)
and $\frac{1}{2}$ oil
Colorado Oil & Gas Co. - $\frac{1}{2}$ oil

Below base of Mesaverde:
Pan American Petroleum Corp.

17 T-31-N, R-5-W 2,560.00 SF 078769 USA 12 $\frac{1}{2}$ % El Paso Natural Gas Company 5% ORRI on Sections 16 and 17 from surface to base of pictured Cliffs

As to Sections 16 and 17 to base of Pictured Cliffs:
El Paso Natural Gas Company
From base of Pictured Cliffs to base of Mesaverde:
Pan American Petroleum Corp. - $\frac{1}{2}$
Colorado Oil & Gas Co. - $\frac{1}{2}$ oil
El Paso Natural Gas Co. - $\frac{1}{2}$ gas (1)

Below base of Mesaverde:
Pan American Petroleum Corp.

As to Sections 21 and 28 to base of Mesaverde:
El Paso Natural Gas Co. - $\frac{1}{2}$ gas
Colorado Oil & Gas Co. - $\frac{1}{2}$ oil
Pan American Petroleum Corp. - $\frac{1}{2}$ (1)

Below base of Mesaverde:
Pan American Petroleum Corp.

Tract No.	Description	No. of Acres	Lease Name or Number	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
18	T-31-N, R-5-W Sec. 18: All Sec. 19: E/2 E/2, NW/4 NE/4, SW/4 SE/4, Lots 1,4 Sec. 20: N/2, SE/4 Sec. 29: N/2 NE/4, W/2 SE/4, SW/4 Sec. 30: All Sec. 31: All	2,507.30	SF 078764	USA 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	(2)	All acreage except N/2 Section 20 to base of Mesaverde: Gas Rights El Paso Natural Gas Co. Oil Rights Colorado Oil & Gas Co. - $\frac{1}{2}$ El Paso Natural Gas Co. - $\frac{1}{2}$ Below base of Mesaverde: Pan American Petroleum Corp. As to N/2 Section 20 to base of Mesaverde: El Paso Natural Gas Co. - $\frac{1}{2}$ gas Colorado Oil & Gas Co. - $\frac{1}{2}$ oil Pan American Pet. Corp. - $\frac{1}{2}$ oil and gas Below base of Mesaverde: Pan American Petroleum Corp.
21	T-31-N, R-5-W Sec. 29: S/2 NE/4, E/2 SE/4	160.00	SF 079165	USA 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	(2)	To base of Mesaverde: El Paso Natural Gas Co. - full gas (1)(2) and $\frac{1}{2}$ oil Colorado Oil & Gas Co. - $\frac{1}{2}$ oil Below base of Mesaverde: Pan American Petroleum Corp.
22	T-31-N, R-5-W Sec. 23: S/2 Sec. 24: All Sec. 25: W/2, SE/4 Sec. 26: W/2, SE/4 Sec. 36: All	2,560.00	SF 078768	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Sections 24 and 36: Pan American Petroleum Corp. As to Sections 23, 25 and 26 to base of Dakota: Dyna Ray Oil & Gas Co., Inc. Below base of Dakota: Pan American Petroleum Corp.

Tract No.	Description	No. of Acres	Lease Name or Number	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
FEDERAL LANDS							
28	T-31-N, R-5-W Sec. 33: All Sec. 34: All Sec. 35: All	1,920.00	SF 078773	USA 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	None	To base of Mesaverde: El Paso Natural Gas Co. - $\frac{1}{2}$ gas Colorado Oil & Gas Co. - $\frac{1}{2}$ oil Pan American Pet. Corp. - $\frac{1}{2}$
							Below base of Mesaverde: Pan American Petroleum Corp.
29	T-31-N, R-6-W Sec. 1: All Sec. 3: Lots 5,6, 7,8,9, SE/4, E/2 SW/4, SW/4 SW/4 Sec. 4: Lots 5,6,7, 8,9, N/2 SW/4, NW/4 SE/4, SE/4 SE/4	2,561.86	SF 078772	USA 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	(2)	As to Sections 1, 3 and 4, T-31-N, R-6-W and W/2 Section 33, T-32-N, R-6-W to base of Mesaverde: Gas Rights El Paso Natural Gas Co. (1)(2)
							Oil Rights Colorado Oil & Gas Co. - $\frac{1}{2}$ El Paso Natural Gas Co. - $\frac{1}{2}$
							Below base of Mesaverde: Pan American Petroleum Corp.
	T-32-N, R-6-W Sec. 33: W/2, NE/4, W/2 SE/4 Sec. 34: E/2, E/2 W/2, SW/4 SW/4 Sec. 35: All						As to NE/4, W/2 SE/4 Section 33, Sections 34 and 35 to base of Mesaverde: El Paso Natural Gas Co. - $\frac{1}{2}$ gas (1) Colorado Oil & Gas Co. - $\frac{1}{2}$ oil Pan American Pet. Corp. - $\frac{1}{2}$ oil and gas
							Below base of Mesaverde: Pan American Petroleum Corp.
33	T-31-N, R-6-W Sec. 4: S/2 SW/4, SW/4 SE/4 Sec. 5: All Sec. 8: W/2, E/2 E/2 Sec. 9: All Sec. 10: Lots 1,2,3, E/2 E/2, NW/4 Sec. 15: Lots 1,2,E/2, E/2 SW/4	2,460.23	SF 078765	USA 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	(2)	As to Sections 4, 5, 9, 10, 15 and NW/4, E/2 NE/4 Section 8 to base of Mesaverde: Gas Rights El Paso Natural Gas Co. (1)(2)
							Oil Rights Colorado Oil & Gas Co. - $\frac{1}{2}$ El Paso Natural Gas Co. - $\frac{1}{2}$
							Below base of Mesaverde: Pan American Petroleum Corp.

Tract No.	Description	No. of Acres	Lease Name or Number	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
<u>FEDERAL LANDS</u>							
33	Continued						As to SW/4, E/2 SE/4 Section 8 to base of Mesaverde: El Paso Natural Gas Co. - $\frac{1}{2}$ gas (1) Colorado Oil & Gas Co. - $\frac{1}{2}$ oil Pan American Pet. Corp. - $\frac{1}{2}$ oil and gas Below base of Mesaverde: Pan American Petroleum Corp.
37	T-31-N, R-6-W	2,560.00	SF 078771	USA 12 $\frac{1}{2}$ %	El Paso Natural Gas Co.	None	To base of Mesaverde: El Paso Natural Gas Co. - $\frac{1}{2}$ gas (1) Colorado Oil & Gas Co. - $\frac{1}{2}$ oil Pan American Pet. Corp. - $\frac{1}{2}$ Below base of Mesaverde: Pan American Petroleum Corp.
	Sec. 11: A11						
	Sec. 14: A11						
	Sec. 23: A11						
	Sec. 26: A11						
39	T-31-N, R-6-W	2,552.71	SF 078766	USA 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	None	As to E/2 Section 22 and All Section 25 to base of Mesaverde: Gas Rights El Paso Natural Gas Co. (1)(2) Oil Rights Colorado Oil & Gas Co. - $\frac{1}{2}$ El Paso Natural Gas Co. - $\frac{1}{2}$ Below base of Mesaverde: Pan American Petroleum Corp.
	Sec. 16: Lots 1, 2, 3, N/2						
	NE/4, N/2						
	NW/4, SW/4						
	NW/4, W/2 SW/4						
	Sec. 17: A11						
	Sec. 21: Lots 1, 2, 3, W/2 NW/4, S/2						
	Sec. 22: Lot 1, S/2, NE/4, E/2 NW/4						
	Sec. 25: A11						

TOTAL FEDERAL LANDS 49,508.31 acres or 91.32% of UNIT AREA

As to Sections 16, 17, 21 and Lot 1, SW/4, E/2 NW/4 Section 22 to base of Mesaverde:
El Paso Natural Gas Co. - $\frac{1}{2}$ gas (1)
Colorado Oil & Gas Co. - $\frac{1}{2}$ oil
Pan American Pet. Corp. - $\frac{1}{2}$ oil and gas

Below base of Mesaverde:
Pan American Petroleum Corp.

Tract No.	Description	No. of Acres	Lease Name or Number	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
<u>STATE LANDS</u>							
25	T-31-N, R-5-W Sec. 32: NW/4	160.00	E-347-33	State of New Mexico 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	10.9375% that converts to a 40% working interest after payout	Gas rights to base of Mesaverde before payout: El Paso Natural Gas Co. Gas rights to base of Mesaverde after payout: El Paso Natural Gas Co. - 6/10 John R. Brennand - 2/10 Winifred K. Ponder - 2/10
26	T-31-N, R-5-W Sec. 32: NE/4	160.00	E-347-28	State of New Mexico 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	None	Gas rights below base of Mesaverde and all oil rights after payout: El Paso Natural Gas Co. - 3/10 J. Glenn Turner - 3/10 John R. Brennand - 2/10 Winifred K. Ponder - 2/10
27	T-31-N, R-5-W Sec. 32: S/2	320.00	E-347-32	State of New Mexico 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	21.875%	To base of Mesaverde: El Paso Natural Gas Co. Below base of Mesaverde: Pan American Petroleum Corp. Gas rights to base of Mesaverde: El Paso Natural Gas Co. Gas rights below base of Mesaverde: El Paso Natural Gas Co. - $\frac{1}{2}$ J. Glenn Turner - $\frac{1}{2}$ Oil rights - all depths: El Paso Natural Gas Co. - $\frac{1}{2}$ J. Glenn Turner - $\frac{1}{2}$

(2)

Tract No.	Description	No. of Acres	Lease Name or Number	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
<u>STATE LANDS</u>							
30	T-31-N, R-6-W Sec. 2: All except Lot 5	346.91	E-289-37	State of New Mexico 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	2 $\frac{1}{2}$ %	Surface to base of Mesaverde: Gas Rights El Paso Natural Gas Co. Oil Rights Colorado Oil & Gas Co. - $\frac{1}{2}$ El Paso Natural Gas Co. - $\frac{1}{2}$ Below base of Mesaverde: Pan American Petroleum Corp.
							(1)(2)
31	T-31-N, R-6-W Sec. 2: Lot 5	9.35	E-346-20	State of New Mexico 12 $\frac{1}{2}$ %	El Paso Natural Gas Company - $\frac{1}{2}$ J. Glenn Turner - $\frac{1}{2}$	21.875%	El Paso Natural Gas Co. - $\frac{1}{2}$ J. Glenn Turner - $\frac{1}{2}$
40	T-31-N, R-6-W (3) Sec. 16: N/2 NW/4	80.00	E-346-22	State of New Mexico 12 $\frac{1}{2}$ %	El Paso Natural Gas Company - $\frac{1}{2}$ J. Glenn Turner - $\frac{1}{2}$	21.875%	El Paso Natural Gas Co. - $\frac{1}{2}$ J. Glenn Turner - $\frac{1}{2}$
40-A	T-31-N, R-6-W (3) Sec. 16: SW/4 NW/4, NW/4 NE/4	80.00	E-289	State of New Mexico 12 $\frac{1}{2}$ %	Southern Petroleum Exploration, Inc.	None	Southern Petroleum Exploration, Inc.
41	T-31-N, R-6-W (3) Sec. 16: SW/4	160.00	E-289-37	State of New Mexico 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	2 $\frac{1}{2}$ %	From surface to base of Mesaverde: Gas Rights El Paso Natural Gas Co. Oil Rights Colorado Oil & Gas Co. - $\frac{1}{2}$ El Paso Natural Gas Co. - $\frac{1}{2}$ Below base of Mesaverde: Pan American Petroleum Corp.
42	T-31-N, R-6-W (3) Sec. 16: W/2 SE/4	80.00	E-289-31	State of New Mexico 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	5%	El Paso Natural Gas Company
43	T-31-N, R-6-W (3) Sec. 16: E/2 SE/4	80.00					
							(4)(5)

Tract No.	Description	No. of Acres	Lease Name or Number	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
<u>STATE LANDS</u>							
44	T-32-N, R-6-W Sec. 32: W/2	320.00	E-504-11	State of New Mexico 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	3%	El Paso Natural Gas Company (4)(5)
45	T-32-N, R-6-W Sec. 32: E/2	320.00	E-504-13	State of New Mexico 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	21.875%	From the surface to the base of Mesaverde: Gas Rights El Paso Natural Gas Company Oil Rights El Paso Natural Gas Co. - $\frac{1}{2}$ J. Glenn Turner - $\frac{1}{2}$
Below base of Mesaverde:							
Oil and Gas Rights							
J. Glenn Turner - 50%							
Frank A. Schultz - 45%							
William G. Webb - 5%							
47	T-32-N, R-6-W Sec. 36: W/2	320.00	E-346-19	State of New Mexico 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	(2)	To base of Mesaverde: Gas Rights El Paso Natural Gas Co. (1)(2)
Oil Rights							
Colorado Oil & Gas Co. - $\frac{1}{2}$							
El Paso Natural Gas Co. - $\frac{1}{2}$							
Below base of Mesaverde: Pan American Petroleum Corp.							
48	T-32-N, R-6-W Sec. 36: E/2	320.00	E-346-24	State of New Mexico 12 $\frac{1}{2}$ %	El Paso Natural Gas Company	21.875%	Gas rights to base of Mesaverde: El Paso Natural Gas Company Gas rights below base of Mesaverde and all oil rights: J. Glenn Turner - 50% William G. Webb - 5% Frank A. Schultz - 45%

TOTAL STATE LANDS 2,756.26 acres or 5.08% of UNIT AREA

Tract No.	Description	No. of Acres	Lessor and Lease Date	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
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PATENTED LANDS

9	T-31-N, R-4-W Sec. 26: H.E. #282	156.80	Lewis W. Lynch 5-20-53	Lewis W. Lynch 12 1/2%	Pan American Petroleum Corp.	None	Pan American Petroleum Corp.
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10	T-31-N, R-4-W Sec. 27: H.E. #277 Sec. 28: H.E. #277	120.63	Ruth Scammahorn et vlr 3-5-47 Horace F. McKay, Jr. et ux 5-19-47	Ruth Scammahorn et vlr 6.25% Horace F. McKay, Jr. et ux 6.25%	Pan American Petroleum Corp.	None	All of H.E. 277 lying in Section 28: Pan American Petroleum Corp. All of H.E. 277 lying in Section 27 to base of Dakota: Dyna Ray Oil & Gas Co., Inc.
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Below base of Dakota:
Pan American Petroleum Corp.

19	T-31-N, R-5-W Sec. 19: SW/4 NE/4, NW/4 SE/4, Lots 2, 3	152.22	Miguel A. Gonzales et ux 11-10-47	Consuelo B. Gonzales 12 1/2%	El Paso Natural Gas Company	(2)	To base of Mesaverde: Gas Rights El Paso Natural Gas Co. Oil Rights Colorado Oil & Gas Co. - 1/2 El Paso Natural Gas Co. - 1/2
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Below base of Mesaverde:
Pan American Petroleum Corp.

20	T-31-N, R-5-W Sec. 20: SW/4 Sec. 29: NW/4	320.00	Manuel C. Candelaria et ux 11-21-46	Manuel C. Candelaria 1.562500%	El Paso Natural Gas Company	(2)	To base of Mesaverde: Gas Rights El Paso Natural Gas Co. Oil Rights Colorado Oil & Gas Co. - 1/2 El Paso Natural Gas Co. - 1/2
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Below base of Mesaverde:
Pan American Petroleum Corp.

Manuel C. Candelaria
Nancy P. Tonkin
Opal C. Hobson
Estate of Gertie McDonald, Deceased
M. J. McDonald
Gladys McDonald
Ashley Gould

.195313%
.195312%
.195313%

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Lessor and Lease Date</u>	<u>Basic Royalty and Percentage</u>	<u>Record Owner of Lease</u>	<u>ORRI Percentage</u>	<u>Working Interest Owner</u>
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PATENTED LANDS

20 Continued

	Marie Gould			.195312%			
	Dee Forehand			.260417%			
	Robert Beamon			.217014%			
	Pattie Ann Beamon			.217014%			
	Lundell			.217014%			
	Alma Beamon Anderson			.217014%			
	Union Oil Company of California			.006510%			
	Jerry J. Andrew			.040690%			
	Glenn M. Forgan, Trustee			.319011%			
	Pan American Pet. Corp.			1.708984%			
	First Nat'l Bank of Ft. Worth, Trustee for Eula Mae Johnston			.162761%			
	James J. Johnston			.040690%			
	Orville C. Rogers			.013563%			
	Veva Jean Gibbard			.013563%			
	V. A. Johnston			.040690%			
	Lillie Leona Rogers			.013563%			
	Brookhaven Oil Co.			.683594%			
	Paul H. Umbach			.341797%			
	Dacresa Corporation			3.515625%			
				<u>12.500000%</u>			

Tract No.	Description	No. of Acres	Lessor and Lease Date	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
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PATENTED LANDS

23	T-31-N, R-5-W Sec. 25: NE/4	160.00					Not committed to Unit.
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24	T-31-N, R-5-W Sec. 26: NE/4	160.00					Not committed to Unit.
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32	T-31-N, R-6-W Sec. 3: Tract 37 Sec. 4: Tract 37	158.36					Not committed to Unit.
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T-32-N, R-6-W
Sec. 33: E/2 SE/4
Sec. 34: NW/4 SW/4

34	T-31-N, R-6-W Sec. 8: W/2 E/2	160.00	Thomas B. Miller et ux 1-26-48	George Joseph, Executor of the Estate of Thomas B. Miller, Dec'd 4.68750% D. H. Wise and Florance M. Wise 4.68750% H. F. Axtell et ux 3.12500%	El Paso Natural Gas Company	(2)	As to W/2 NE/4 to base of Mesaverde: Gas Rights El Paso Natural Gas Co. (1)(2)
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Oil Rights
Colorado Oil & Gas Co. - $\frac{1}{2}$
El Paso Natural Gas Co. - $\frac{1}{2}$

Below base of Mesaverde:
Pan American Petroleum Corp.

As to W/2 SE/4 to base of Mesaverde:
El Paso Natural Gas Co. - $\frac{1}{2}$ gas
Colorado Oil & Gas Co. - $\frac{1}{2}$ oil
Pan American Pet. Corp. - $\frac{1}{2}$ oil and gas

35	T-31-N, R-6-W Sec. 10: W/2 E/2	160.00	Ben Case 11-7-47	Dee Forehand .781250% Robert Beamon .911458% Pattie Ann Beamon Lundell .911459%	El Paso Natural Gas Company	(2)	To base of Mesaverde: Gas Rights El Paso Natural Gas Co. (1)(2)
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Below base of Mesaverde:
Pan American Petroleum Corp.

Oil Rights
Colorado Oil & Gas Co. - $\frac{1}{2}$
El Paso Natural Gas Co. - $\frac{1}{2}$

Tract No.	Description	No. of Acres	Lessor and Lease Date	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
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35 Continued

Below base of Mesaverde:
Pan American Petroleum Corp.

	Alma M. Beamon Anderson			.911458%			
	James J. Johnston			.073243%			
	Alvin C. Johnston, Trustee			.574218%			
	Union Oil Company of California			.011719%			
	First Nat'l Bank of Fort Worth, Trustee for Kula Mae Johnston			.292969%			
	V. A. Johnston			.073242%			
	Jerry J. Andrew			.073242%			
	Lillie Leona Rogers			.024414%			
	Orville C. Rogers			.024414%			
	Veva Jean Gibbard			.024414%			
	C. H. Nye			1.562500%			
	Nancy P. Tonkin			3.125000%			
	Gifford H. and Margaret Nigh			3.125000%			

36 T-31-N, R-6-W 161.52

Sec. 10: Tract 38 J. S. Covert
et al
Sec. 15: Tract 38 2-1-49

E1 Paso Natural
Gas Company

1/16 of 7/8
until \$200.00
per acre
received,
plus (2)

To base of Mesaverde:
Gas Rights

E1 Paso Natural Gas Co.

(1)(2)

Ruth Covert, as
Executrix of the
Estate of J. S.
Covert, Dec'd
6.250000%
S. P. Johnson et ux
6.250000%

Oil Rights
Colorado Oil & Gas Co. - 1/2
E1 Paso Natural Gas Co. - 1/2

Tract No.	Description	No. of Acres	Lessor and Lease Date	Basic Royalty and Percentage	Record Owner of Lease	ORRI Percentage	Working Interest Owner
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36 Continued

Below base of Mesaverde:
Pan American Petroleum Corp.

38 T-31-N, R-6-W
Sec. 15: Tract 39
Sec. 16: Tract 39

160.00
Jose M. Lopez et al
8-6-47

Albuquerque Nat'l Bank as Guardian of the Estate of Jose Lopez 2.343750%
Dacresa Corporation 3.515625%
Paul Umbach .341797%
Margarito Lopez 3.906250%
Brookhaven Oil Corp. .683594%
Pan American Pet. Corp. 1.708984%

El Paso Natural Gas Company (2)

As to that portion of acreage in Section 15 to base of Mesaverde:
Gas Rights
El Paso Natural Gas Co. (1)(2)

Oil Rights
Colorado Oil & Gas Co. - $\frac{1}{2}$
El Paso Natural Gas Co. - $\frac{1}{2}$

Below base of Mesaverde:
Pan American Petroleum Corp.

As to that portion of acreage in Section 16 to base of Mesaverde:
El Paso Natural Gas Co. - $\frac{1}{2}$ gas
Colorado Oil & Gas Co. - $\frac{1}{2}$ oil
Pan American Pet. Corp. - $\frac{1}{2}$ oil and gas

Below base of Mesaverde:
Pan American Petroleum Corp.

46 T-32-N, R-6-W
Sec. 34: W/2 NW/4

80.00
Celestino Mascarinas et ux
1-18-47

Celestino Mascarinas 12.500000%

El Paso Natural Gas Company
None

To base of Mesaverde:
El Paso Natural Gas Co. - $\frac{1}{2}$ gas
Colorado Oil & Gas Co. - $\frac{1}{2}$ oil
Pan American Pet. Corp. - $\frac{1}{2}$ oil and gas
Below base of Mesaverde:
Pan American Petroleum Corp. (1)

TOTAL FEE LANDS 1,947.94 acres or 3.60% of UNIT AREA

- (1) Subject to Sublease and Operating Agreement dated April 12, 1955 between Pacific Northwest Pipeline Corp. and Colorado Oil & Gas Co. One-half of El Paso Natural Gas Co.'s interest, acquired from Colorado Oil & Gas Co., reverts to Colorado Oil & Gas Co. after payout.
- (2) Subject to sliding scale production payment reserved in Sales Contract and Operating Agreement dated March 16, 1955 between Pan American Petroleum Corp. and Pacific Northwest Pipeline Corp.
- (3) This is not the actual location of these leases, but is the description shown on State of New Mexico records. The Resurvey Plat, dated June 30, 1919, approved August 27, 1919, places the "School Section" in Sections 15, 16, 21 and 22, T-31-N, R-6-W. The approximate actual description of these leases is as follows:
 - Tract #40 - NW/4 SE/4, NE/4 SW/4 Section 16
 - Tract #40-A - NE/4 SE/4, SE/4 SW/4 Section 16
 - Tract #41 - E/2 NW/4, W/2 NE/4 Section 21
 - Tract #42 - E/2 NE/4 Section 21
 - Tract #43 - W/2 NW/4 Section 22
- (4) El Paso Natural Gas Company's working interest above the base of the Mesaverde is subject to a sliding scale overriding royalty interest as to gas production and an ORRI of 82.5% of all oil produced and saved when average oil production is in excess of 15 barrels per day, in favor of Phillips Petroleum Co.
- (5) Working interest below the base of the Mesaverde is subject to that certain Agreement, as amended, dated April 21, 1959 by and between Phillips Petroleum Co. and El Paso Natural Gas Co.

RECAPITULATION

<u>LAND</u>	<u>ACRES IN UNIT</u>	<u>PERCENTAGE OF UNIT AREA</u>	<u>COMMITTED ACRES IN UNIT</u>	<u>PERCENTAGE OF COMMITTED ACRES IN UNIT</u>
FEDERAL	49,508.31	91.32%	49,508.31	92.15%
STATE	2,756.26	5.08%	2,746.91	5.11%
FEES	1,947.94	3.60%	1,469.58	2.74%
	<hr/>		<hr/>	
TOTAL	54,212.51	100.00%	53,724.80	100.00%

El Paso Natural Gas Company

El Paso, Texas 79999

October 31, 1969

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Mr. John A. Anderson
Regional Oil & Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Rosa Unit, I Sec. No. 587,
San Juan and Rio Arriba
Counties, New Mexico, 1969
SUPPLEMENTAL DRILLING PROGRAM

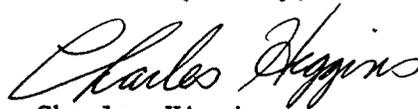
Gentlemen:

By letter dated October 15, 1969, El Paso filed a Supplemental Drilling Program providing for three (3) Dakota wells to be drilled by Pan American Petroleum Corporation. Because Pan American is unable to find a suitable drilling site in the W/2 of Section 9, T-31-N, R-5-W due to extremely rough terrain, it intends to change the well dedication for the Sarah E. Lilly No. 1 Well from the W/2 of Section 9, T-31-N, R-5-W to the N/2 of Section 8, T-31-N, R-5-W.

El Paso is preparing an additional Designation of Sub-Operator covering the N/2 of Section 8, T-31-N, R-5-W. After this Designation of Sub-Operator has been signed by both El Paso and Pan American, Pan American will file it with each of the regulatory agencies.

By a copy of this letter, we are notifying the working interest owners on the attached sheet of this change.

Yours very truly,



Charles Higgins
Supervising Landman
Land Department

CH:DI:nja
Attachment
Rosa Unit 3.0, 4.2

ROSA UNIT

Working Interest Owners

Mr. John R. Brennan

Colorado Oil & Gas Company

Dyna Ray Oil & Gas Co., Inc.

Pan American Petroleum Corporation (3)

Mr. Neville G. Penrose

Phillips Petroleum Company

Winifred K. Ponder

Mr. Frank A. Schultz

Southern Petroleum Exploration, Inc.

Mr. J. Glenn Turner

Mr. William G. Webb

El Paso Natural Gas Company

El Paso, Texas 79999

October 31, 1969

130

Mr. John A. Anderson
Regional Oil & Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Rosa Unit, I Sec. No. 587,
San Juan and Rio Arriba
Counties, New Mexico, 1969
SUPPLEMENTAL DRILLING PROGRAM

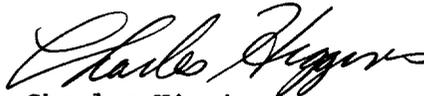
Gentlemen:

The 1969 Supplemental Drilling Program for the referenced Unit was approved by the Regulatory Bodies on the dates indicated:

United States Geological Survey	October 28, 1969
Commissioner of Public Lands	October 23, 1969
Oil Conservation Commission	October 28, 1969

Copies of this letter are being sent to the working interest owners of the above described Unit.

Yours very truly,



Charles Higgins
Supervising Landman
Land Department

CH:DI:sf
Rosa Unit 3.0, 4.2

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

October 28, 1969

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El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Attention: Mr. T. W. Bittick

Re: 1969 Supplemental Drilling
Program, Rosa Unit, San Juan
and Rio Arriba Counties,
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1969 Supplemental Drilling Program dated October 15, 1969, for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the application is returned herewith.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og

cc: United States Geological Survey - Roswell
Commissioner of Public Lands - Santa Fe

C
O
P
Y

El Paso Natural Gas Company **OCT 22 1969**

El Paso, Texas 79999

October 15, 1969

Mr. John A. Anderson
Regional Oil & Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Rosa Unit, I Sec. No. 587,
San Juan and Rio Arriba
Counties, New Mexico, 1969
SUPPLEMENTAL DRILLING PROGRAM

Gentlemen:

By letter dated January 6, 1969, El Paso Natural Gas Company, as Unit Operator, submitted a Drilling Program for the Rosa Unit for the calendar year 1969 that provided for the drilling of no wells during 1969. By letter dated August 21, 1969, El Paso submitted a Supplemental Drilling Program that provided for the drilling of five (5) Dakota wells.

Pursuant to Section 9 of the Rosa Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby submits a Supplemental Drilling Program providing for the drilling of three (3) additional Dakota wells during the 1969 calendar year. These wells, which are situated in Rio Arriba County, New Mexico, are as follows:

<u>Well Dedication</u>	<u>Drilling Party</u>
1. W/2 Sec. 9, T-31-N, R-5-W, N.M.P.M.	Pan American Petroleum Corp.
2. N/2 Sec. 33, T-31-N, R-5-W, N.M.P.M.	Pan American Petroleum Corp.
3. N/2 Sec. 23, T-31-N, R-6-W, N.M.P.M.	Pan American Petroleum Corp.

Mr. John A. Anderson
Commissioner of Public Lands
Oil Conservation Commission
Page 2

October 15, 1969

These Dakota tests will be drilled by Pan American Petroleum Corporation, as Sub-Operator, under the provisions of Section 12 of the Unit Agreement, and a Designation of Sub-Operator is being filed with the Regulatory Bodies for this drilling.

If this Supplemental Drilling Program is acceptable, please signify your approval as required under Section 9 of the Unit Agreement in the space provided on the attached sheet and return one (1) approved copy.

Copies of this Supplemental Drilling Program are being sent to the working interest owners shown on the attached sheet.

Yours very truly,



T. W. Bittick
Manager
Land Department

TWB:DI:sf
Enclosures
Rosa Unit 3.0, 4.2

APPROVED: _____
Oil & Gas Supervisor, United States Geological Survey
Subject to like approval by the appropriate State
Regulatory Bodies.

DATE: _____

APPROVED: _____
Commissioner of Public Lands
Subject to like approval by the United States
Geological Survey and the Oil Conservation Commission.

DATE: _____

APPROVED:  _____
Oil Conservation Commission
Subject to like approval by the United States
Geological Survey and the Commissioner of Public Lands.

DATE: May 28, 1969

The foregoing approvals are for the Supplemental 1969 Drilling Program for the Rosa Unit, I Sec. No. 587, San Juan and Rio Arriba Counties, New Mexico.

ROSA UNIT

Working Interest Owners

Mr. John R. Brenna nd

Colorado Oil & Gas Company

Dyna Ray Oil & Gas Co., Inc.

Pan American Petroleum Corporation (3)

Mr. Neville G. Penrose

Phillips Petroleum Company

Winifred K. Ponder

Mr. Frank A. Schultz

Southern Petroleum Exploration, Inc.

Mr. J. Glenn Turner

Mr. William G. Webb

OCT 30 1969

Drawer 1857
Roswell, New Mexico 88201

153
October 28 1969

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Attention: Mr. T. W. Bittick

Gentlemen:

Your supplemental plan of development for 1969, dated October 15 1969, for the Rosa unit area, San Juan and Rio Arriba Counties, New Mexico, proposing the drilling of three Dakota wells, has been approved on this date subject to like approval by the appropriate state officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. SGD) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

cc:
Washington (w/cy plan)
Durango (w/cy plan)
NMOCC, Santa Fe (ltr. only) ✓
Com. Pub. Lands, Santa Fe (ltr. only)

OCT 24 1969

133

October 23, 1969

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Re: Designation of Sub-Operator,
Rosa Unit, San Juan and Rio
Arriba Counties, New Mexico

ATTENTION: Mr. T. M. Curtis

Gentlemen:

We acknowledge the receipt of one copy of Designation of Sub-Operator by El Paso Natural Gas Company, unit operator of the Rosa Unit, designating Pan American Petroleum Corporation as sub-Operator for the drilling of three Dakota wells in Sec. 9, T31N, R5W, W/2, Sec. 13, T31N, R5W N/2, Sec. 23, T31N, R5W N/2, Rio Arriba County, New Mexico.

The Designation of Sub-Operator is accepted, however, such does not in any way relieve El Paso Natural of it's responsibilities as Unit Operator for the Rosa Unit.

Very truly yours,

Ted Bilberry, Director
Oil and Gas Department

TR/NL/s

cc: USGS-Roswell, New Mexico
OCC- Santa Fe, New Mexico

C
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OCT 30

155

October 23, 1969

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Re: Rosa Unit
Second Supplemental Drilling
Program for 1969
San Juan and Rio Arriba
Counties, New Mexico

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved your Second Supplemental Drilling Program for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, proposing the drilling of three (3) additional Dakota wells during the 1969 calendar year.

This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the plan is enclosed.

Very truly yours,

Ted Bilberry, Director
Oil and Gas Department

TE/ml/s
encls.

cc: USGS-Roswell, New Mexico
OCC- Santa Fe, New Mexico

C
O
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OCT 29 1969

October 1969
Roswell, New Mexico 88201

133
October 28, 1969

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

General:

Receipt is acknowledged of a Designation of Sub-Operator by which El Paso Natural Gas Company, unit operator of the Ross unit, designates Pan American Petroleum Corporation as sub-operator for the drilling of Dakota wells in the N¹/₂ sec. 9, N¹/₂ sec. 33, T. 24 N., R. 5 W., and N¹/₂ sec. 20, T. 24 N., R. 6 W., N.M.P.M., Hidalgo County, New Mexico.

This designation is hereby accepted as a Designation of Agent by El Paso Natural Gas Company. Such acceptance does not relieve El Paso of its responsibility as unit operator to assume operation of any well on the above-described land that is determined to qualify for inclusion in the BLM's participating areas.

Sincerely yours,

(ORIG. SGD.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

cc:
Pan American Petroleum Corporation
Security Life Building
Denver, Colorado 80202

Washington (w/cy designation)
BLM, Santa Fe (w/cy designation)
Durango (w/cy designation)
Com. of Pub. Lands, Santa Fe (ltr. only)
NMOCC, Santa Fe (ltr. only) ✓

ILLEGIBLE

OCT 21 1969
133

PAN AMERICAN PETROLEUM CORPORATION

SECURITY LIFE BUILDING

DENVER, COLORADO 80202

PRODUCING DEPARTMENT
H. T. HUNTER
DIVISION PRODUCTION
MANAGER

DISTRICT SUPERINTENDENTS
W. M. JONES
T. M. CURTIS

October 20, 1969

File: TMC-401-416

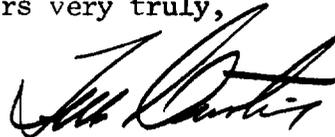
Re: Rosa Unit
Rio Arriba and San Juan
Counties, New Mexico

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico 88201

Dear Sir:

Attached are three copies of Designation of Sub-Operator between El Paso Natural Gas Company and Pan American Petroleum Corporation, designating Pan American Petroleum Corporation as Sub-Operator of three leases within the Rosa Unit as specifically described in the Designation.

Yours very truly,



cc: Mr. Charles Higgins w/attach (1)
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Mr. A. L. Porter, Jr. w/attach (2)
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Mr. Alex Armijo w/attach (1)
Commissioner of Public Lands for the State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87501

Mr. L. O. Speer, Jr. w/attach (1)

Mr. C. E. Seese w/attach (1)

DESIGNATION OF SUB-OPERATOR

THIS DESIGNATION is made and entered into this 13th day of October, 1969, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, whose mailing address is Post Office Box 1492, El Paso, Texas 79999 (hereinafter sometimes referred to as "Operator"), and PAN AMERICAN PETROLEUM CORPORATION, a Delaware corporation, whose mailing address is Security Life Building, Denver, Colorado 80202 (hereinafter sometimes referred to as "Sub-Operator");

WHEREAS, Operator is Unit Operator for the Rosa Unit, I Sec. No. 587, located in the Counties of Rio Arriba and San Juan, New Mexico; and

WHEREAS, Sub-Operator desires to drill Dakota wells on the following described lands, situated in Rio Arriba County, New Mexico, pursuant to the provisions of Section Twelve (12) of the Rosa Unit Agreement, to wit:

1. USA SF 078763

Township 31 North, Range 5 West, N.M.P.M.
Section 9: W/2
Containing 320.00 acres, more or less

2. USA SF 078773

Township 31 North, Range 5 West, N.M.P.M.
Section 33: N/2
Containing 320.00 acres, more or less

3. USA SF 078771

Township 31 North, Range 6 West, N.M.P.M.
Section 23: N/2
Containing 320.00 acres, more or less

WHEREAS, the above described land is committed to the terms and conditions of the Rosa Unit Agreement and Rosa Unit Operating Agreement; and

WHEREAS, Sub-Operator has been furnished Notice of Operator's election not to drill these said Dakota wells as Unit Operator under the terms of the Unit Agreement; and

WHEREAS, the necessary concurrence has been obtained from the working interest owners in the above tracts; and

WHEREAS, Sub-Operator has requested that Operator execute this Designation in order that said Dakota wells may be drilled by Sub-Operator;

NOW, THEREFORE, in order to permit Pan American Petroleum Corporation to drill the above described Dakota wells, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, hereby designates the said Pan American

Petroleum Corporation as Sub-Operator for the sole and only purpose of drilling the said Dakota wells on the above described lands pursuant to Section Twelve (12) of the Rosa Unit Agreement.

Sub-Operator indicates his acceptance of this Designation by placing his signature in the space provided below and agrees to drill, complete and/or plug and abandon said Dakota wells as a reasonable and prudent operator in accordance with the terms and conditions of the Rosa Unit Agreement and the Rosa Unit Operating Agreement, and also agrees to the following conditions:

1. Unit Operator's representative shall approve all casing programs and equipment specifications prior to the drilling of any well.
2. Notify Operator when drilling operations are commenced.
3. Furnish Operator with complete daily driller's tour report, at Sub-Operator's expense.
4. Furnish Operator with daily reports by telephone call or telegram at Sub-Operator's expense, as to the formation or formations penetrated during the previous day's drilling, the depth at which each formation is encountered, and the depth at which the report is made.
5. Allow representatives of Operator access to the derrick floor at all times.
6. Notify Operator of intentions to core, drill stem test or run well surveys in sufficient time to enable Operator's representatives to be present; and also notify Operator in sufficient time in order that Operator may attend and witness any and all potential tests.
7. Adequately test and/or core all possible productive formations to the satisfaction of Operator upon request.
8. Have any core having shows of oil or gas analyzed by a competent core analysis laboratory, and have such laboratory send three (3) preliminary copies and three (3) final copies of the analysis report to Operator.
9. Furnish Operator three (3) field prints and five (5) final prints of all well surveys made during drilling or upon completion of wells.
10. Furnish Operator a representative and adequate cut of all cores and ditch samples taken during the drilling of wells.
11. Provide Operator with copies of drilling time records, hole deviation tests and all records required by the governmental agencies having jurisdiction of the wells.
12. Notify Operator of any intention to plug and abandon wells and allow Operator forty-eight (48) hours in which to concur.
13. Sub-Operator shall carry and pay for and file with Operator for its approval proper and acceptable evidence of the following insurance:

- a. Workmen's Compensation and/or Employer's Liability Insurance which shall comply with the laws of the State in which this Agreement is to be performed and shall cover all of its employees engaged in the activities to be performed under this Agreement.
 - b. Automobile Public Liability Insurance with not less than \$100/300,000.00 limits covering bodily injury and death, and property damage with a limit of not less than \$50,000.00 to cover all automotive equipment used in connection with performance of this Agreement.
 - c. Public Liability Insurance covering activities performed under this Agreement with bodily injury and death limits of \$100,000.00 as to any one person and \$300,000.00 as to any one accident. Property Damage Insurance with limits of \$50,000.00.
14. Furnish the United States Geological Survey and the Oil Conservation Commission of the State of New Mexico all proper and necessary reports and well data in the required numbers and time periods as specified by the United States Geological Survey and the Oil Conservation Commission of the State of New Mexico, with a copy to Operator at the addresses hereinafter provided.
15. Provide the Commissioner of Public Lands of the State of New Mexico with copies of all reports and other well data submitted in accordance with the preceding paragraph.

All notices, samples, or other information required to be furnished shall be sent to:

El Paso Natural Gas Company
Post Office Box 1492
El Paso, Texas 79999
Attention: Land Department

With copies to:
El Paso Natural Gas Company
Post Office Box 990
Farmington, New Mexico 87401
Attention: Regional Land Manager

Sub-Operator shall comply with all applicable laws, rules and regulations of any governmental authority having jurisdiction over operations performed under this Designation, and shall indemnify, protect and hold Operator harmless from and against any and all claims, demands or causes of action for injuries or death to persons or damage to property occurring in connection with or in any manner incident to operations conducted by the Sub-Operator hereunder.

Sub-Operator and Operator agree that Sub-Operator shall drill and complete or plug and abandon the subject Dakota wells pursuant to the provisions of the Rosa Unit Operating Agreement.

The drilling of the said Dakota wells is subject to approval by the Oil Conservation Commission of the State of New Mexico as to privately owned

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

September 9, 1969

133
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Attention: Mr. T. W. Bittick

Re: Supplemental Drilling
Program, Rosa Unit, San
Juan and Rio Arriba
Counties, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Supplemental Drilling Program dated August 21, 1969, for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og

cc: United States Geological Survey - Roswell
Commissioner of Public Lands - Santa Fe

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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

1969 SEP 9 AM 8 10

IN REPLY REFER TO:

September 8, 1969

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Attention: Mr. T. W. Bittick

Gentlemen:

Your supplemental plan of development for 1969, dated August 21, 1969, for the Rosa unit area, San Juan and Rio Arriba Counties, New Mexico, proposing the drilling of five Dakota wells, has been approved on this date subject to like approval by the appropriate state officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

(SIGNED) CARL C. TRAYWICK

CARL C. TRAYWICK
Acting Oil and Gas Supervisor

cc:
Washington (w/cy plan)
Duxango (w/cy plan)
NMOCC, Santa Fe (ltr. only) ✓
Com. Pub. Lands, Santa Fe (ltr. only)

September 2, 1969

**El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999**

**Re: Rosa Unit
Supplemental Drilling Program
San Juan and Rio Arriba
Counties, New Mexico**

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved your Supplemental Drilling Program for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, proposing the drilling of five (5) Dakota Wells during the 1969 calendar year.

This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the plan is enclosed.

Very truly yours,

**Ted Bilberry, Director
Oil and Gas Department**

**TR/ML/s
encls.**

**cc: USGS-Roswell, New Mexico
OCC- Santa Fe, New Mexico ✓**

C
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El Paso Natural Gas Company

El Paso, Texas 79999

August 21, 1969

799 AUG 23 11 0 11

Mr. John A. Anderson
Regional Oil & Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Rosa Unit, I Sec. No. 587,
San Juan and Rio Arriba
Counties, New Mexico, 1969
SUPPLEMENTAL DRILLING PROGRAM

Gentlemen:

By letter dated January 6, 1969, El Paso Natural Gas Company, as Unit Operator, submitted a Drilling Program for the Rosa Unit for the calendar year 1969. This Program provided for the drilling of no wells during 1969, and was approved by the appropriate Regulatory Bodies in January of 1969.

Pursuant to Section 9 of the Rosa Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby submits a Supplemental Drilling Program providing for the drilling of five (5) Dakota wells during the 1969 calendar year. These wells, which are situated in Rio Arriba County, New Mexico, are as follows:

<u>Well Dedication</u>	<u>Drilling Party</u>
1. W/2 Sec. 13, T-31-N, R-5-W, N.M.P.M.	Dyna Ray Oil & Gas Co.
2. E/2 Sec. 13, T-31-N, R-5-W, N.M.P.M.	Dyna Ray Oil & Gas Co.
3. Lots 1,2,3,4, E/2 W/2 (W/2) Sec. 19, T-31-N, R-4-W, N.M.P.M.	Dyna Ray Oil & Gas Co.

<u>Well Dedication</u>	<u>Drilling Party</u>
4. W/2 Sec. 29, T-31-N, R-4-W, N.M.P.M.	Dyna Ray Oil & Gas Co.
5. Lots 1,2,3,4, E/2 W/2 (W/2) Sec. 7, T-31-N, R-4-W, N.M.P.M.	Dyna Ray Oil & Gas Co.

These Dakota tests will be drilled by Dyna Ray Oil and Gas Co., Inc., as Sub-Operator, under the provisions of Section 12 of the Unit Agreement, and a Designation of Sub-Operator is being filed with the Regulatory Bodies for this drilling.

If this Supplemental Drilling Program is acceptable, please signify your approval as required under Section 9 of the Unit Agreement in the space provided on the attached sheet and return one (1) approved copy.

Copies of this Supplemental Drilling Program are being sent to the working interest owners shown on the attached sheet.

Yours very truly,



T. W. Bittick
Manager
Land Department

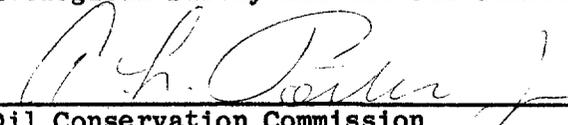
TWB:CTR:sf
Enclosures
Rosa Unit 3.0, 4.2

APPROVED: _____
Oil & Gas Supervisor, United States Geological Survey
Subject to like approval by the appropriate State
Regulatory Bodies.

DATE: _____

APPROVED: _____
Commissioner of Public Lands
Subject to like approval by the United States
Geological Survey and the Oil Conservation Commission

DATE: _____

APPROVED:  _____
Oil Conservation Commission
Subject to like approval by the United States
Geological Survey and the Commissioner of
Public Lands

DATE: _____

The foregoing approvals are for the Supplemental 1969 Drilling Program for the Rosa Unit, I Sec. No. 587, San Juan and Rio Arriba Counties, New Mexico.

ROSA UNIT

Working Interest Owners

Mr. John R. Brennan

Colorado Oil & Gas Company

Dyna Ray Oil & Gas Co., Inc.

Pan American Petroleum Corporation (3)

Mr. Neville G. Penrose

Phillips Petroleum Company

Winifred K. Ponder

Mr. Frank A. Schultz

Southern Petroleum Exploration, Inc.

Mr. J. Glenn Turner

Mr. William G. Webb

SEP 18 22
DYNA RAY 100
OIL AND GAS CO., INC.

4101 EAST LOUISIANA AVENUE / DENVER, COLORADO 80222
TELEPHONE (303) 757-8567

September 2, 1969

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Designation of Sub-Operator,
Rosa Unit, San Juan and Rio
Arriba Counties, New Mexico

Gentlemen:

Enclosed please find for your use and records two (2) executed copies of the above referred to Designation of Sub-Operator between El Paso Natural Gas Company and Dyna Ray Oil & Gas Co., Inc.

Yours very truly,



H. F. Gumz
Land Manager

encl.
HFG/mc

160 SEP 5 11 18 22

DESIGNATION OF SUB-OPERATOR

THIS DESIGNATION is made and entered into this 15th day of August, 1969, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, whose mailing address is Post Office Box 1492, El Paso, Texas 79999 (hereinafter sometimes referred to as "Operator"), and DYNA RAY OIL AND GAS CO., INC., a New Mexico corporation, whose mailing address is 4101 East Louisiana Avenue, Denver, Colorado 80222 (hereinafter sometimes referred to as "Sub-Operator");

WHEREAS, Operator is Unit Operator for the Rosa Unit, I Sec. No. 587, located in the Counties of Rio Arriba and San Juan, New Mexico; and

WHEREAS, Sub-Operator desires to drill Dakota wells on the following described lands, situated in Rio Arriba County, New Mexico, pursuant to the provisions of Section Twelve (12) of the Rosa Unit Agreement, to wit:

USA SF 078762

Township 31 North, Range 5 West, N.M.P.M.

1. Section 13: W/2
Containing 320.00 acres, more or less
2. Section 13: E/2
Containing 320.00 acres, more or less

USA SF 078889

Township 31 North, Range 4 West, N.M.P.M.

3. Section 19: Lots 1, 2, 3, 4, E/2 W/2 (W/2)
Containing 293.24 acres, more or less

USA SF 078894

Township 31 North, Range 4 West, N.M.P.M.

4. Section 29: W/2
Containing 320.00 acres, more or less

USA SF 078891

Township 31 North, Range 4 West, N.M.P.M.

5. Section 7: Lots 1, 2, 3, 4, E/2 W/2 (W/2)
Containing 291.56 acres, more or less

WHEREAS, the above described land is committed to the terms and conditions of the Rosa Unit Agreement and Rosa Unit Operating Agreement; and

WHEREAS, Sub-Operator has been furnished Notice of Operator's election not to drill these said Dakota wells as Unit Operator under the terms of the Unit Agreement; and

WHEREAS, the necessary concurrence has been obtained from the working interest owners in the above tracts; and

WHEREAS, Sub-Operator has requested that Operator execute this Designation in order that said Dakota wells may be drilled by Sub-Operator;

NOW, THEREFORE, in order to permit Dyna Ray Oil and Gas Co., Inc. to drill the above described Dakota wells, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, hereby designates the said Dyna Ray Oil and Gas Co., Inc., as Sub-Operator for the sole and only purpose of drilling the said Dakota wells on the above described lands pursuant to Section Twelve (12) of the Rosa Unit Agreement.

Sub-Operator indicates his acceptance of this Designation by placing his signature in the space provided below and agrees to drill, complete and/or plug and abandon said Dakota wells as a reasonable and prudent operator in accordance with the terms and conditions of the Rosa Unit Agreement and the Rosa Unit Operating Agreement, and also agrees to the following conditions:

1. Unit Operator's representative shall approve all casing programs and equipment specifications prior to the drilling of any well.
2. Notify Operator when drilling operations are commenced.
3. Furnish Operator with complete daily driller's tour report, at Sub-Operator's expense.
4. Furnish Operator with daily reports by telephone call or telegram at Sub-Operator's expense, as to the formation or formations penetrated during the previous day's drilling, the depth at which each formation is encountered, and the depth at which the report is made.
5. Allow representatives of Operator access to the derrick floor at all times.
6. Notify Operator of intentions to core, drill stem test or run well surveys in sufficient time to enable Operator's representatives to be present; and also notify Operator in sufficient time in order that Operator may attend and witness any and all potential tests.
7. Adequately test and/or core all possible productive formations to the satisfaction of Operator upon request.
8. Have any core having shows of oil or gas analyzed by a competent core analysis laboratory, and have such laboratory send three preliminary copies and three final copies of the analysis report to Operator.
9. Furnish Operator three field prints and five final prints of all well surveys made during drilling or upon completion of wells.
10. Furnish Operator a representative and adequate cut of all cores and ditch samples taken during the drilling of wells.
11. Provide Operator with copies of drilling time records, hole deviation tests and all records required by the governmental agencies having jurisdiction of the wells.
12. Notify Operator of any intention to plug and abandon wells and allow Operator forty-eight (48) hours in which to concur.

13. Sub-Operator shall carry and pay for and file with Operator for its approval proper and acceptable evidence of the following insurance:
 - a. Workmen's Compensation and/or Employer's Liability Insurance which shall comply with the laws of the State in which this agreement is to be performed and shall cover all of its employees engaged in the activities to be performed under this agreement.
 - b. Automobile Public Liability Insurance with not less than \$100/300,000.00 limits covering bodily injury and death, and property damage with a limit of not less than \$50,000.00 to cover all automotive equipment used in connection with performance of this agreement.
 - c. Public Liability Insurance covering activities performed under this agreement with bodily injury and death limits of \$100,000.00 as to any one person and \$300,000.00 as to any one accident. Property Damage Insurance with limits of \$50,000.00.
14. Furnish the United States Geological Survey and the Oil Conservation Commission of the State of New Mexico all proper and necessary reports and well data in the required numbers and time periods as specified by the United States Geological Survey and the Oil Conservation Commission of the State of New Mexico, with a copy to Operator at the addresses hereinafter provided.
15. Provide the Commissioner of Public Lands of the State of New Mexico with copies of all reports and other well data submitted in accordance with the preceding paragraph.

All notices, samples or other information required to be furnished shall be sent to:

El Paso Natural Gas Company
Post Office Box 1492
El Paso, Texas 79999
Attention: Land Department

With copies to:
El Paso Natural Gas Company
Post Office Box 990
Farmington, New Mexico 87401
Attention: Regional Land Manager

Sub-Operator shall comply with all applicable laws, rules and regulations of any governmental authority having jurisdiction over operations performed under this Designation, and shall indemnify, protect and hold Operator harmless from and against any and all claims, demands or causes of action for injuries or death to persons or damage to property occurring in connection with or in any manner incident to operations conducted by the Sub-Operator hereunder.

Sub-Operator and Operator agree that Sub-Operator shall drill and complete or plug and abandon the subject Dakota wells pursuant to the provisions of the Rosa Unit Operating Agreement.

El Paso Natural Gas Company

El Paso, Texas

August 18, 1969

15 AM 11 54
1969 AUG

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Dyna Ray Oil & Gas Co., Inc.
4101 East Louisiana Avenue
Denver, Colorado 80222

Attention: Mr. H. F. Gutz

Re: Designation of Sub-Operator,
Rosa Unit, San Juan and Rio
Arriba Counties, New Mexico

Gentlemen:

Enclosed in accordance with your previous request are eight (8) execution copies of a Designation of Sub-Operator whereby El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, grants you the necessary authority to drill five (5) Dakota wells on the locations specified within 120 days from the date of this Designation. This Agreement has been executed by El Paso, and when you have fully executed same you should have sufficient copies thereof to furnish one (1) copy to El Paso, three (3) copies to the United States Geological Survey, two (2) copies to the Oil Conservation Commission of the State of New Mexico, and one (1) copy to the Commissioner of Public Lands for the State of New Mexico, and to retain one (1) copy for your files.

Your prompt compliance with the requirements of this Designation relative to the furnishing of notices and reports on these wells is solicited in order that we may be fully apprised as to all the details of this matter.

Yours very truly,

Charles Higgins
Charles Higgins
Supervising Landman
Land Department

CH:CFR:sf

cc: Mr. John A. Anderson
Regional Oil & Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87501

Mr. L. G. Truby
Mr. J. P. Musick, Jr.
Mr. C. E. Matthews

6 P Y

DESIGNATION OF SUB-OPERATOR

THIS DESIGNATION is made and entered into this 15th day of August, 1969, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, whose mailing address is Post Office Box 1492, El Paso, Texas 79999 (hereinafter sometimes referred to as "Operator"), and DYNA RAY OIL AND GAS CO., INC., a New Mexico corporation, whose mailing address is 4101 East Louisiana Avenue, Denver, Colorado 80222 (hereinafter sometimes referred to as "Sub-Operator");

WHEREAS, Operator is Unit Operator for the Rosa Unit, I Sec. No. 587, located in the Counties of Rio Arriba and San Juan, New Mexico; and

WHEREAS, Sub-Operator desires to drill Dakota wells on the following described lands, situated in Rio Arriba County, New Mexico, pursuant to the provisions of Section Twelve (12) of the Rosa Unit Agreement, to wit:

USA SF 078762

Township 31 North, Range 5 West, N.M.P.M.

1. Section 13: W/2
Containing 320.00 acres, more or less
2. Section 13: E/2
Containing 320.00 acres, more or less

USA SF 078889

Township 31 North, Range 4 West, N.M.P.M.

3. Section 19: Lots 1, 2, 3, 4, E/2 W/2 (W/2)
Containing 293.24 acres, more or less

USA SF 078894

Township 31 North, Range 4 West, N.M.P.M.

4. Section 29: W/2
Containing 320.00 acres, more or less

USA SF 078891

Township 31 North, Range 4 West, N.M.P.M.

5. Section 7: Lots 1, 2, 3, 4, E/2 W/2 (W/2)
Containing 291.56 acres, more or less

WHEREAS, the above described land is committed to the terms and conditions of the Rosa Unit Agreement and Rosa Unit Operating Agreement; and

WHEREAS, Sub-Operator has been furnished Notice of Operator's election not to drill these said Dakota wells as Unit Operator under the terms of the Unit Agreement; and

WHEREAS, the necessary concurrence has been obtained from the working interest owners in the above tracts; and

WHEREAS, Sub-Operator has requested that Operator execute this Designation in order that said Dakota wells may be drilled by Sub-Operator;

NOW, THEREFORE, in order to permit Dyna Ray Oil and Gas Co., Inc. to drill the above described Dakota wells, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, hereby designates the said Dyna Ray Oil and Gas Co., Inc., as Sub-Operator for the sole and only purpose of drilling the said Dakota wells on the above described lands pursuant to Section Twelve (12) of the Rosa Unit Agreement.

Sub-Operator indicates his acceptance of this Designation by placing his signature in the space provided below and agrees to drill, complete and/or plug and abandon said Dakota wells as a reasonable and prudent operator in accordance with the terms and conditions of the Rosa Unit Agreement and the Rosa Unit Operating Agreement, and also agrees to the following conditions:

1. Unit Operator's representative shall approve all casing programs and equipment specifications prior to the drilling of any well.
2. Notify Operator when drilling operations are commenced.
3. Furnish Operator with complete daily driller's tour report, at Sub-Operator's expense.
4. Furnish Operator with daily reports by telephone call or telegram at Sub-Operator's expense, as to the formation or formations penetrated during the previous day's drilling, the depth at which each formation is encountered, and the depth at which the report is made.
5. Allow representatives of Operator access to the derrick floor at all times.
6. Notify Operator of intentions to core, drill stem test or run well surveys in sufficient time to enable Operator's representatives to be present; and also notify Operator in sufficient time in order that Operator may attend and witness any and all potential tests.
7. Adequately test and/or core all possible productive formations to the satisfaction of Operator upon request.
8. Have any core having shows of oil or gas analyzed by a competent core analysis laboratory, and have such laboratory send three preliminary copies and three final copies of the analysis report to Operator.
9. Furnish Operator three field prints and five final prints of all well surveys made during drilling or upon completion of wells.
10. Furnish Operator a representative and adequate cut of all cores and ditch samples taken during the drilling of wells.
11. Provide Operator with copies of drilling time records, hole deviation tests and all records required by the governmental agencies having jurisdiction of the wells.
12. Notify Operator of any intention to plug and abandon wells and allow Operator forty-eight (48) hours in which to concur.

13. Sub-Operator shall carry and pay for and file with Operator for its approval proper and acceptable evidence of the following insurance:
 - a. Workmen's Compensation and/or Employer's Liability Insurance which shall comply with the laws of the State in which this agreement is to be performed and shall cover all of its employees engaged in the activities to be performed under this agreement.
 - b. Automobile Public Liability Insurance with not less than \$100/300,000.00 limits covering bodily injury and death, and property damage with a limit of not less than \$50,000.00 to cover all automotive equipment used in connection with performance of this agreement.
 - c. Public Liability Insurance covering activities performed under this agreement with bodily injury and death limits of \$100,000.00 as to any one person and \$300,000.00 as to any one accident. Property Damage Insurance with limits of \$50,000.00.
14. Furnish the United States Geological Survey and the Oil Conservation Commission of the State of New Mexico all proper and necessary reports and well data in the required numbers and time periods as specified by the United States Geological Survey and the Oil Conservation Commission of the State of New Mexico, with a copy to Operator at the addresses hereinafter provided.
15. Provide the Commissioner of Public Lands of the State of New Mexico with copies of all reports and other well data submitted in accordance with the preceding paragraph.

All notices, samples or other information required to be furnished shall be sent to:

El Paso Natural Gas Company
Post Office Box 1492
El Paso, Texas 79999
Attention: Land Department

With copies to:
El Paso Natural Gas Company
Post Office Box 990
Farmington, New Mexico 87401
Attention: Regional Land Manager

Sub-Operator shall comply with all applicable laws, rules and regulations of any governmental authority having jurisdiction over operations performed under this Designation, and shall indemnify, protect and hold Operator harmless from and against any and all claims, demands or causes of action for injuries or death to persons or damage to property occurring in connection with or in any manner incident to operations conducted by the Sub-Operator hereunder.

Sub-Operator and Operator agree that Sub-Operator shall drill and complete or plug and abandon the subject Dakota wells pursuant to the provisions of the Rosa Unit Operating Agreement.

The drilling of the said Dakota wells is subject to approval by the Oil Conservation Commission of the State of New Mexico as to privately owned lands, the Commissioner of Public Lands of the State of New Mexico as to State lands, and the Supervisor of the United States Geological Survey, Roswell, New Mexico, as to Federal and/or Indian lands.

THIS DESIGNATION shall be effective for a period of time not to exceed one hundred and twenty (120) days.

THIS DESIGNATION is personal and cannot be assigned in whole or in part by Sub-Operator without the written consent of Operator having first been obtained.

IN WITNESS WHEREOF, this Designation is executed as of the day and year first hereinabove written.

OPERATOR

EL PASO NATURAL GAS COMPANY

BY: Sam Smith ^{ESL}
Attorney-in-Fact _{CR}

SUB-OPERATOR

DYNA RAY OIL AND GAS CO., INC.

ATTEST:

BY: _____

BY: _____

STATE OF TEXAS)
)
COUNTY OF EL PASO)

The foregoing instrument was acknowledged before me this 15th day of August, 1969, by SAM SMITH, Attorney-in-Fact for EL PASO NATURAL GAS COMPANY, a Delaware corporation, on behalf of said corporation.

Theresa K. Rowland
Notary Public

My Commission Expires:

June 1, 1971

STATE OF COLORADO)
)
COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this _____ day of _____, 1969, by _____ of DYNA RAY OIL AND GAS CO., INC., a New Mexico corporation, on behalf of said corporation.

Notary Public _____ County,
_____.

My Commission Expires:

El Paso Natural Gas Company

El Paso, Texas 79999

February 27, 1969

1969 FEB 28 AM 6 37

Mr. John A. Anderson
Regional Oil and Gas Supervisor
Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: 1969 DRILLING PROGRAMS
San Juan and Rio Arriba Counties,
New Mexico

Gentlemen:

The 1969 Drilling Programs for the following Units were approved by the regulatory bodies on the dates indicated:

<u>Units</u>	<u>United States Geological Survey</u>	<u>Commissioner of Public Lands for the St. of N. M.</u>	<u>Oil Conservation Commission of the St. of N. M.</u>
1. San Juan 30-4 Unit #14-08-001-1056	February 18, 1969	None Required	February 6, 1969
2. San Juan 30-5 Unit #14-08-001-346	February 14, 1969	None Required	January 23, 1969
3. San Juan 30-6 Unit #14-08-001-538	February 20, 1969	January 8, 1969	January 23, 1969
4. San Juan 31-6 Unit #14-08-001-464	February 20, 1969	January 13, 1969	January 23, 1969
5. San Juan 32-5 Unit #14-08-001-534	January 28, 1969	January 8, 1969	January 23, 1969



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

MAIN OFFICE 0-18
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IN REPLY REFER TO:

January 28, 1969

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Attention: Mr. T. W. Bittick

Gentlemen:

Your 1969 plan of development for the Rosa unit area, San Juan and Rio Arriba Counties, New Mexico, proposing the drilling of no additional wells, has been approved on this date subject to like approval of the appropriate state officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. COPY SIGNED BY JOHN A. ANDERSON)

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

cc:
Washington (w/cy plan)
Durango (w/cy plan)
NMOCC, Santa Fe (ltr. only) ✓
Com. Pub. Lands, Santa Fe (ltr. only)

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 23, 1969

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

153

Attention: Mr. T. W. Bittick

Re: 1969 Drilling Program
Rosa Unit, San Juan and
Rio Arriba Counties,
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Drilling Program for the calendar year 1969 for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og

cc: Commissioner of Public Lands - Santa Fe
United States Geological Survey - Roswell

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MAIN OFFICE

'69 JAN 13 AM 8 23

January 8, 1969

**El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999**

**Re: Rosa Unit
San Juan and Rio Arriba
Counties, New Mexico
1969 Drilling Program**

ATTENTION: Mr. T. W. Bittick

Gentlemen:

Your 1969 Drilling Program for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, proposing the drilling of no additional wells, has been approved on this date subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the plan is enclosed.

Very truly yours,

**ALEX J. ARMIJO
COMMISSIONER OF PUBLIC LANDS**

**BY:
Ted Bilberry, Director
Oil and Gas Department**

**AJA/TR/ML/s
encl.**

**cc: USGS-Roswell, New Mexico
OCC- Santa Fe, New Mexico**

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El Paso Natural Gas Company

El Paso, Texas 79999

January 6, 1969

AM 8 18
JAN 8 1969

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
Post Office Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: Rosa Unit, 1 Sec. No. 587
San Juan and Rio Arriba Counties,
New Mexico
1969 DRILLING PROGRAM

Gentlemen:

By letter dated January 5, 1968, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program on the captioned Unit for the calendar year 1968. Said Program provided for the drilling of no wells and none were drilled in subject Unit during 1968.

As of this date, the total number of wells drilled in the Rosa Unit on acreage committed to the Unit is as follows:

Mesaverde, Commercial	24
Mesaverde, Noncommercial	1
Mesaverde, Plugged & Abandoned	4
Dakota, Noncommercial	3
Dakota, Plugged & Abandoned	2
	<u>34</u>

Pursuant to Section 9 of the Rosa Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year 1969, providing for the drilling of no wells during the year.

Mr. John A. Anderson
Commissioner of Public Lands
Oil Conservation Commission
Page Two

January 6, 1969

All working interest owners have been contacted and this Drilling Program reflects their desires. El Paso Natural Gas Company, as Unit Operator, and the working interest owners believe that all current obligations have been satisfied.

El Paso Natural Gas Company, as Unit Operator, will drill any offset wells that may be required to prevent drainage of unitized substances, and any other wells subsequently deemed necessary or which are requested by the Unit Operator and the working interest owners.

If this Drilling Program is acceptable, please signify your approval as required under Section 9 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company.

Copies of this Drilling Program are being sent to the working interest owners as shown on the attached sheet.

Very truly yours,



T. W. Bittick
Manager
Land Department

TWB:CTR:ec
Enclosures
Rosa Unit 3.0

APPROVED: _____
Supervisor, United States Geological Survey
Subject to like approval by the appropriate
State Officials.

DATE: _____

APPROVED: _____
Commissioner of Public Lands
Subject to like approval by the United States
Geological Survey and the Oil Conservation
Commission.

DATE: _____

APPROVED:  _____
Oil Conservation Commission
Subject to like approval by the United States
Geological Survey and the Commissioner of
Public Lands.

DATE: January 23, 1969

The foregoing approvals are for the 1969 Drilling Program for the Rosa Unit,
1 Sec. No. 587, San Juan and Rio Arriba Counties, New Mexico.

ROSA UNIT

Working Interest Owners

Mr. John R. Brennan
Post Office Box 2184
Santa Fe, New Mexico 87501

Colorado Oil & Gas Company
Attention: Mr. Charles Titus
Denver Club Building
Denver, Colorado 80201

Pan American Petroleum Corporation (3)
Attention: Mr. T. M. Curtis
Security Life Building
Denver, Colorado 80202

Dyna Ray Oil & Gas Co., Inc.
Attention: Mr. H. F. Gumz
4101 East Louisiana Ave.
Denver, Colorado 80222

Mr. Neville G. Penrose
1813 Fair Building
Fort Worth, Texas 76101

Phillips Petroleum Company
Attention: Mr. R. A. Wolgast
1300 Security Life Building
Denver, Colorado 80202

Winifred K. Ponder
1800 North Stanton Street
El Paso, Texas 79902

Mr. Frank A. Schultz
706 Fidelity Union Tower
Dallas, Texas 75201

Southern Petroleum Exploration, Inc.
Attention: Mr. John C. Wright
Post Office Box 192
Sistersville, West Virginia 26175

Mr. J. Glenn Turner
1700 Mercantile Bank Building
Dallas, Texas 75201

Mr. William G. Webb
1700 Mercantile Bank Building
Dallas, Texas 75201

El Paso Natural Gas Company

El Paso, Texas 79999

May 2, 1968

120

Mr. John A. Anderson
Regional Oil and Gas Supervisor
Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
Post Office Box 1148
Santa Fe, New Mexico 87501

MAIL OFFICE

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Oil Conservation Commission
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: 1968 DRILLING PROGRAMS
San Juan and Rio Arriba
Counties, New Mexico

Gentlemen:

The 1968 Drilling Programs for the following Units were approved by the regulatory bodies on the dates indicated:

- | | |
|---|-------------------|
| 1. San Juan 30-4 Unit, #14-08-001-1056: | |
| United States Geological Survey | January 29, 1968 |
| Commissioner of Public Lands | None Required |
| Oil Conservation Commission | February 19, 1968 |
| 2. San Juan 32-5 Unit, #14-08-001-534: | |
| United States Geological Survey | February 2, 1968 |
| Commissioner of Public Lands | February 5, 1968 |
| Oil Conservation Commission | February 19, 1968 |
| 3. San Juan 32-7 Unit, #14-08-001-441: | |
| United States Geological Survey | February 20, 1968 |
| Commissioner of Public Lands | February 21, 1968 |
| Oil Conservation Commission | February 28, 1968 |
| 4. San Juan 32-8 Unit, #14-08-001-446: | |
| United States Geological Survey | February 19, 1968 |
| Commissioner of Public Lands | February 20, 1968 |
| Oil Conservation Commission | February 27, 1968 |

Mr. John A. Anderson
Commissioner of Public Lands
Oil Conservation Commission
Page Two

May 2, 1968

5. San Juan 32-9 Unit, #14-08-001-569:
United States Geological Survey
Commissioner of Public Lands
Oil Conservation Commission
February 20, 1968
February 23, 1968
February 28, 1968
- ✓ 6. Rosa Unit, 1 Sec. No. 587:
United States Geological Survey
Commissioner of Public Lands
Oil Conservation Commission
February 27, 1968
February 28, 1968
March 18, 1968

Copies of this letter are being sent to the working interest owners of the above described Units.

Yours very truly,



Charles Higgins
Supervising Landman
Land Department

CH:CTR:ec

San Juan 30-4, 32-5, 32-7, 32-8,
32-9, Rosa Unit 3.0

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

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March 18, 1968

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El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Attention: Mr. T. W. Bittick

Re: 1968 Drilling Program
Rosa Unit, San Juan and
Rio Arriba Counties,
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Drilling Program for the calendar year 1968 providing for the drilling of no wells for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og
Enclosure

cc: United States Geological Survey
Roswell, New Mexico

Commissioner of Public Lands
Santa Fe, New Mexico



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

February 27, 1968

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Attention: Mr. T. W. Bittick

Gentlemen:

Your 1968 plan of development for the Rosa unit agreement, San Juan and Rio Arriba Counties, New Mexico, proposing to drill no additional wells has been approved on this date subject to like approval by the appropriate State Officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

(ORIS SGD) CARL C. TRAYWICK

CARL C. TRAYWICK
Acting Oil and Gas Supervisor

cc:
Washington (w/cy. plan)
Farmington (w/cy. plan)
NMOCC, Santa Fe (ltr. only) ✓
Com. Pub. Lands, Santa Fe (ltr. only)

MAIL OFFICE

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State of New Mexico



Commissioner of Public Lands



February 20, 1968

GUYTON B. HAYS
COMMISSIONER

P. O. BOX 1148
SANTA FE, NEW MEXICO

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Re: Rosa Unit
San Juan and Rio Arriba
Counties

ATTENTION: Mr. T. W. Bittick

MAR 4 1968

68 MAR 4 AM 8 1

Gentlemen:

The Commissioner of Public Lands has this date approved your 1968 Plan of Development for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, proposing to drill no additional wells.

This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the plan is enclosed.

Very truly yours,

GUYTON B. HAYS
COMMISSIONER OF PUBLIC LANDS

BY:
Ted Bilberry, Director
Oil and Gas Department

GBH/TB/EL/v

encl: 1.

cc: USGS Roswell, New Mexico
OCC Santa Fe, New Mexico

El Paso Natural Gas Company

El Paso, Texas 79999

January 5, 1968

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
Post Office Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: Rosa Unit, 1 Sec. No. 587
San Juan and Rio Arriba Counties,
New Mexico
1968 DRILLING PROGRAM

Gentlemen:

By letter dated January 6, 1967, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program on the captioned Unit for the calendar year 1967. Said Program provided for the drilling of no wells and none were drilled in subject Unit during 1967.

As of this date, the total number of wells drilled in the Rosa Unit on acreage committed to the Unit is as follows:

Mesaverde, Commercial	24
Mesaverde, Noncommercial	1
Mesaverde, Plugged & Abandoned	4
Dakota, Noncommercial	3
Dakota, Plugged & Abandoned	2
	<hr/>
	34

Pursuant to Section 9 of the Rosa Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year 1968, providing for the drilling of no wells during the year.

All working interest owners have been contacted and this Drilling Program reflects their desires. El Paso Natural Gas Company, as Unit Operator, and the working interest owners believe that all current obligations have been satisfied.

El Paso Natural Gas Company, as Unit Operator, will drill any offset wells that may be required to prevent drainage of unitized substances, and any other wells subsequently deemed necessary or which are requested by the Unit Operator and the working interest owners.

If this Drilling Program is acceptable, please signify your approval as required under Section 9 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company.

Copies of this Drilling Program are being sent to the working interest owners as shown on the attached sheet.

Very truly yours,



T. W. Bittick
Manager
Land Department

TWB:CTR:cjt
Attachments

Rosa Unit, 3.0

APPROVED: _____
Supervisor, United States Geological Survey
Subject to like approval by the appropriate
State Officials.

DATE: _____

APPROVED: _____
Commissioner of Public Lands
Subject to like approval by the United States
Geological Survey and the Oil Conservation
Commission.

DATE: _____

APPROVED: *A. G. Pitzer*
Oil Conservation Commission
Subject to like approval by the United States
Geological Survey and the Commissioner of
Public Lands.

DATE: March 18, 1968

The foregoing approvals are for the 1968 Drilling Program for the Rosa Unit,
1 Sec. No. 587, San Juan and Rio Arriba Counties, New Mexico.

ROSA UNIT
WORKING INTEREST OWNERS

Mr. John R. Brennan
Post Office Box 2184
Santa Fe, New Mexico 87501

Colorado Oil & Gas Company
Attention: Mr. Charles Titus
Denver Club Building
Denver, Colorado 80201

Pan American Petroleum Corporation (3)
Attention: Mr. T. M. Curtis
Security Life Building
Denver, Colorado 80202

Mr. Irving Pasternak
1402 Denver U. S. National Center
Denver, Colorado 80202

Mr. Neville G. Penrose
1813 Fair Building
Fort Worth, Texas 76101

Phillips Petroleum Company
Attention: Mr. R. A. Wolgast
1300 Security Life Building
Denver, Colorado 80202

Winifred K. Ponder
1800 North Stanton Street
El Paso, Texas 79902

Mr. Frank A. Schultz
706 Fidelity Union Tower
Dallas, Texas 75201

Southern Petroleum Exploration, Inc.
Attention: Mr. John C. Wright
Post Office Box 192
Sistersville, West Virginia 26175

Mr. J. Glenn Turner
1700 Mercantile Bank Building
Dallas, Texas 75201

Mr. William G. Webb
1700 Mercantile Bank Building
Dallas, Texas 75201

El Paso Natural Gas Company

El Paso, Texas 79999

February 28, 1967

Mr. John A. Anderson
Regional Oil and Gas Supervisor
Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
Post Office Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission ✓
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: 1967 DRILLING PROGRAMS
Rio Arriba and San Juan Counties,
New Mexico

Gentlemen:

The 1967 Drilling Programs for the following Units were approved by the regulatory bodies on the dates indicated:

- ✓ 1. San Juan 30-4 Unit, #14-08-001-1056:
Commissioner of Public Lands - January 18, 1967
Oil Conservation Commission - January 26, 1967
United States Geological Survey - February 6, 1967
2. San Juan 30-5 Unit, #14-08-001-346:
United States Geological Survey - February 7, 1967
Commissioner of Public Lands - February 9, 1967
Oil Conservation Commission - February 22, 1967
3. San Juan 30-6 Unit, #14-08-001-538:
United States Geological Survey - February 14, 1967
Commissioner of Public Lands - February 16, 1967
Oil Conservation Commission - February 22, 1967
4. San Juan 32-5 Unit, #14-08-001-534:
United States Geological Survey - February 3, 1967
Commissioner of Public Lands - February 7, 1967
Oil Conservation Commission - February 9, 1967

5. San Juan 32-8 Unit, #14-08-001-446:
United States Geological Survey - January 26, 1967
Commissioner of Public Lands - February 6, 1967
Oil Conservation Commission - February 22, 1967

6. San Juan 32-9 Unit, #14-08-001-569:
United States Geological Survey - February 13, 1967
Commissioner of Public Lands - February 16, 1967
Oil Conservation Commission - February 22, 1967

- ✓ 7. Rosa Unit, 1 Sec. No. 587:
United States Geological Survey - February 6, 1967
Commissioner of Public Lands - February 9, 1967
Oil Conservation Commission - February 22, 1967

Copies of this letter are being sent to the working interest owners of the above described Units.

Yours very truly,


Harry Bevertz
Supervising Landman
Land Department

HG:CTR:jm

San Juan 30-4, 30-5, 30-6,
32-5, 32-8, 32-9 and Rosa
Units - 3.0

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

125

February 22, 1967

C

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

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Attention: Mr. T. W. Bittick

Re: 1967 Drilling Program
Rosa Unit, Rio Arriba and
San Juan Counties, New Mexico

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Gentlemen:

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This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1967 Drilling Program dated January 6, 1967, for the Rosa Unit, Rio Arriba and San Juan Counties, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

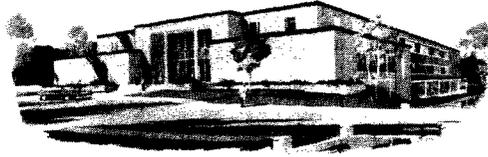
A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og
Enclosure

cc: Commissioner of Public Lands
Santa Fe, New Mexico

United States Geological Survey
Drawer 1857
Roswell, New Mexico 88201

State of New Mexico



Commissioner of Public Lands



February 9, 1967

GUYTON B. HAYS
COMMISSIONER

P. O. BOX 1148
SANTA FE, NEW MEXICO

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

Re: Rosa Unit
San Juan and Rio Arriba
Counties, New Mexico
1967 Drilling Program

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved the 1967 Drilling Program for the captioned unit, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

This Plan of Development calls for the drilling of no additional wells during 1967.

One approved copy of the plan is enclosed.

Very truly yours,

GUYTON B. HAYS
COMMISSIONER OF PUBLIC LANDS

BY:
Ted Bilberry, Director
Oil and Gas Department

GBH/MMR/s
encl. 1.

cc: United States Geological Survey
P. O. Box 1857
Roswell, New Mexico

Oil Conservation Commission
Santa Fe, New Mexico



UNITED STATES,
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

February 6, 1967

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Attention: Mr. T. W. Bittick

Gentlemen:

Your 1967 plan of development dated January 6, 1967, for the Rose unit area, San Juan and Rio Arriba Counties, New Mexico, proposing the drilling of no additional wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. SGD.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

cc:

Washington (w/cy of plan)
Farmington (w/cy of plan)
N.M.O.C.C., Santa Fe (ltr. only)✓
Com. of Pub. Lands, Santa Fe (ltr. only)

El Paso Natural Gas Company

El Paso, Texas 79999

January 6, 1967

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

Commissioner of Public Lands
State of New Mexico
Post Office Box 1148
Santa Fe, New Mexico 87501

Oil Conservation Commission
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: Rosa Unit, 1 Sec. No. 587
San Juan and Rio Arriba Counties,
New Mexico
1967 DRILLING PROGRAM

Gentlemen:

By letter dated February 24, 1966, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program for the captioned Unit for the calendar year 1966. Said program provided for the drilling of a Dakota well in Section 4, T-31-N, R-5-W, N.M.P.M., Rio Arriba County, New Mexico, by Irving Pasternak, d/b/a Shar-Alan Oil Company under a Designation of Sub-Operator. This well was not drilled, the Designation of Sub-Operator covering the well has expired, and Unit Operator is not aware of any present plans by sub-operator for the drilling of the well. Also the Shar-Alan #1 Carson Dakota Well which was commenced in 1965 by the said Irving Pasternak in the N/2 of Section 10, T-31-N, R-5-W, N.M.P.M. has never been finally completed.

As of this date, the total number of wells drilled in the Rosa Unit on acreage committed to the Unit is as follows:

Mesaverde, Commercial	24
Mesaverde, Noncommercial	1
Mesaverde, Plugged and Abandoned	4
Dakota, Noncommercial	3
Dakota, Plugged and Abandoned	2

34

Pursuant to Section 9 of the Rosa Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year 1967, providing for the drilling of no wells during the year.

All working interest owners have been contacted and this Drilling Program reflects their desires. El Paso Natural Gas Company, as Unit Operator, and the working interest owners believe that all current obligations have been satisfied.

El Paso Natural Gas Company, as Unit Operator, will drill any offset wells that may be required to prevent drainage of unitized substances, and any other wells subsequently deemed necessary or which are requested by the Unit Operator and the working interest owners.

If this Drilling Program is acceptable, please signify your approval as required under Section 9 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company.

Copies of this Drilling Program are being sent to the working interest owners as shown on the attached sheet.

Yours very truly,



T. W. Bittick
Manager
Land Department

TWB:CTR:jm

APPROVED: _____ DATE: _____
Supervisor, United States Geological Survey
Subject to like approval by the appropriate
State Officials.

APPROVED: _____ DATE: _____
Commissioner of Public Lands
Subject to like approval by the United States
Geological Survey and the Oil Conservation
Commission.

APPROVED: *A. L. Carter - h* DATE: Feb. 22, 1967
Oil Conservation Commission
Subject to like approval by the United States
Geological Survey and the Commissioner of
Public Lands.

The foregoing approvals are for the 1967 Drilling Program for the Rosa Unit, 1
Sec. No. 587, San Juan and Rio Arriba Counties, New Mexico.

ROSA UNIT
WORKING INTEREST OWNERS

Mr. John R. Brennan
Post Office Box 2184
Santa Fe, New Mexico

Colorado Oil & Gas Company
Attention: Mr. Charles Titus
Denver Club Building
Denver, Colorado

Pan American Petroleum Corporation (3)
Attention: Mr. T. M. Curtis
Security Life Building
Denver, Colorado 80202

Mr. Irving Pasternak
1402 Denver U. S. National Center
Denver, Colorado 80202

Mr. Neville G. Penrose
1813 Fair Building
Fort Worth, Texas

Phillips Petroleum Company
Attention: Mr. R. A. Wolgast
1300 Security Life Building
Denver, Colorado 80202

Winifred K. Ponder
1800 North Stanton Street
El Paso, Texas

Mr. Frank A. Schultz
706 Fidelity Union Tower
Dallas, Texas

Southern Petroleum Exploration, Inc.
Attention: Mr. John C. Wright
Post Office Box 192
Sistersville, West Virginia

Mr. J. Glenn Turner
1900 Mercantile Dallas Building
Dallas, Texas

Mr. William G. Webb
1900 Mercantile Dallas Building
Dallas, Texas

ILLEGIBLE

El Paso Natural Gas Company

El Paso, Texas 79999

April 18, 1966

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

Commissioner of Public Lands
State of New Mexico
Post Office Box 1148
Santa Fe, New Mexico

Oil Conservation Commission
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico

Re: Rosa Unit, I SEC. No. 587
San Juan and Rio Arriba Counties
New Mexico
1966 DRILLING PROGRAM

Gentlemen:

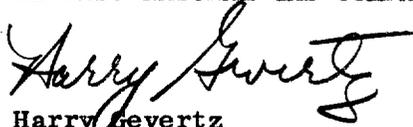
The 1966 Drilling Program for the Rosa Unit was approved by the regulatory bodies on the following dates:

1. United States Geological Survey - April 13, 1966
2. Commissioner of Public Lands, - March 22, 1966
State of New Mexico
3. Oil Conservation Commission, - April 1, 1966
State of New Mexico

Copies of this letter are being sent to the working interest owners of the Rosa Unit.

Very truly yours,

EL PASO NATURAL GAS COMPANY



Harry Gevertz
Supervising Landman
Land Department

HG:GWO:sb

Rosa Unit 3.0

133
MAIN OFFICE 000

APR 14 AM 10 17

Drawer 1857
Roswell, New Mexico 88201

April 13, 1966

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Attention: Mr. T. W. Bittick

Gentlemen:

Your 1966 plan of development dated February 24, 1966, for the Rosa unit area, San Juan and Rio Arriba Counties, New Mexico, proposing the drilling of one Bakota well, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

(W/Sgd) CARL C. TRATWICK

CARL C. TRATWICK
Acting Oil & Gas Supervisor

cc:

Washington (w/cy of plan)

Farmington (w/cy of plan)

N.M.G.E.C. - Santa Fe (ltr. only) ✓

Com. of Pub. Lands - Santa Fe (ltr. only)

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

100

April 1, 1966

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Attention: Mr. T. W. Bittick

Re: 1966 Drilling Program,
Rosa Unit, San Juan and
Rio Arriba Counties, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1966 Drilling Program for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the plan is returned herewith.

Very truly yours,

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

ALP/JEK/og

cc: U. S. Geological Survey - Roswell
Commissioner of Public Lands - Santa Fe

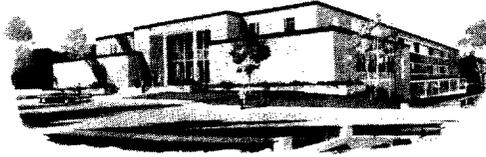
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State of New Mexico



MAR 22 1966
PM 12 00

Commissioner of Public Lands

GUYTON B. HAYS
COMMISSIONER



P. O. BOX 1148
SANTA FE, NEW MEXICO

March 22, 1966

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79999

Re: Rosa Unit
San Juan and Rio Arriba
Counties, New Mexico

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands approved the 1966 Drilling Program for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, subject to like approval by the United States Geological Survey.

This plan provides for the drilling of a Dakota Well in Section 4, Township 31 North, Range 5 West.

We are returning two approved copies of this plan.

Very truly yours,

GUYTON B. HAYS
COMMISSIONER OF PUBLIC LANDS

BY:
Ted Bilberry, Director
Oil and Gas Department

GBH/TE/MMR/s
encl. 2

cc: United States Geological Survey
Roswell, New Mexico
Oil Conservation Commission
Santa Fe, New Mexico

El Paso Natural Gas Company

El Paso, Texas 79999

MAR 11 1966

February 24, 1966

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

Commissioner of Public Lands
State of New Mexico
Post Office Box 1148
Santa Fe, New Mexico

Oil Conservation Commission
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico

Re: Rosa Unit, I Sec. No. 587
San Juan and Rio Arriba Counties,
New Mexico
1966 DRILLING PROGRAM

Gentlemen:

By letter dated March 26, 1965, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, filed a Drilling Program covering the Rosa Unit for the calendar year 1965. This Program provided for the drilling of no wells during the calendar year 1965. However, after this Program was filed, one Dakota well was commenced by Irving Pasternak, dba Shar-Alan Oil Company, who was designated sub-operator to drill a Dakota well in the N/2 Section 10, T-31-N, R-5-W, N.M.P.M. This well was fraced on December 29, 1965, but has been shut down due to weather conditions since that time.

As of this date, the total number of wells completed in the Rosa Unit is as follows:

Mesaverde, Commercial	24
Mesaverde, Noncommercial	1
Dakota, Noncommercial	3
Dakota, Not tested	1
Mesaverde, Plugged and abandoned	4
Dakota, Plugged and abandoned	<u>2</u>
	35

Pursuant to Section 9 of the Rosa Unit, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year of 1966, providing for the drilling of one well during the year by a sub-operator at the following location:

<u>Spacing Unit</u>	<u>Formation</u>
All of Section 4, T-31-N, R-5-W, N.M.P.M.	Dakota

All of the working interest owners have been contacted and this Drilling Program reflects their desires. El Paso Natural Gas Company, as Unit Operator, and the working interest owners believe that all current unit obligations have been satisfied.

El Paso Natural Gas Company, as Unit Operator, will drill any offset wells required to prevent drainage of unitized substances, and any other wells deemed necessary or desirable by the Unit Operator and the working interest owners due to changing conditions that may arise.

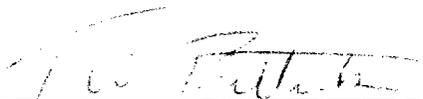
If this Drilling Program is acceptable, please signify your approval as required under Section 9 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company.

Copies of this Drilling Program are being sent to the working interest owners as shown on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By


T. W. Bittick, Manager
Land Department

TWB:GWO:sb

Attachment

APPROVED: _____
Supervisor, United States Geological Survey
Subject to like approval by the appropriate
State Officials.

DATE: _____

APPROVED: _____
Commissioner of Public Lands
Subject to like approval by the United
States Geological Survey and the
Oil Conservation Commission.

DATE: _____

APPROVED: 
Oil Conservation Commission
Subject to like approval by the United
States Geological Survey and the
Commissioner of Public Lands.

DATE:

The foregoing approvals are for the 1966 Drilling Program for the Rosa Unit,
I Sec. No. 587, San Juan and Rio Arriba Counties, New Mexico.

ROSA UNIT
Working Interest Owners

Mr. John A. Brennand
P. O. Box 1706
Santa Fe, New Mexico

Colorado Oil & Gas Company
Attention: Mr. Charles Titus
Denver Club Building
Denver, Colorado

Pan American Petroleum Corporation
Attention: Mr. T. M. Curtis
Security Life Building
Denver, Colorado

Mr. Irving Pasternak
1402 Denver U. S. National Center
Denver 2, Colorado

Mr. Neville G. Penrose
1813 Fair Building
Fort Worth, Texas

Phillips Petroleum Company
Attention: Mr. R. A. Wolgast
1300 Security Life Building
Denver, Colorado 80202

Mr. Dan R. Ponder
P. O. Box 108
El Paso, Texas

Mr. Frank A. Schultz
730 Fidelity Union Tower
Dallas, Texas

Southern Petrofina Exploration, Inc.
Attention: Mr. John C. Wright
P. O. Box 192
Sistersville, West Virginia

Mr. J. Glenn Turner
1900 Mercantile Dallas Building
Dallas, Texas

Mr. William G. Webb
1900 Mercantile Dallas Building
Dallas, Texas



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Desert 1057
Roswell, New Mexico 88201

MAIN

65 OCT 22 AM 11

IN REPLY REFER TO:

October 20, 1965

133

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

Gentlemen:

Receipt is acknowledged of a designation of Sub-operator by which El Paso Natural Gas Company, unit operator of the Rose unit, designates Irving Festernek (d/b/a Sher-Alan Oil Company) as sub-operator for the drilling of a Dakota well in the N₄ sec. 10, T. 31 N., R. 5 W., N.M.P.M., Rio Arriba County, New Mexico.

The designation is hereby accepted as a Designation of Agent from El Paso Natural Gas Company. Such acceptance does not relieve El Paso of its responsibility as unit operator to ensure operations of any well on the above described land that is determined to qualify for inclusion in the Dakota participating area.

Sincerely yours,

(ORIG. SCD) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

cc: Irving Festernek (d/b/a Sher-Alan Oil Company)
1402 Denver U. S. National Center
Denver, Colorado

Washington (w/cy designation)
ELM, Santa Fe (w/cy designation)
Farmington (ltr. only)
Con. Pub. Lands, Santa Fe (ltr. only)
NMOCC, Santa Fe (ltr. only) ✓

ILLEGIBLE

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

133

June 7, 1965

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

Attention: Mr. Sam Smith

Re: 1965 Drilling Program
Rosa Unit, San Juan and
Rio Arriba Counties, New
Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1965 Drilling Program for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

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

ALP/JEK/og

cc: Commissioner of Public Lands
Santa Fe, New Mexico

United States Geological Survey
Roswell, New Mexico

C
O
P
Y

May 11, 1965

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

Re: Rosa Unit
San Juan and Rio Arriba
Counties, New Mexico
1965 Plan of Development

Attention: Mr. Sam Smith

Gentlemen:

The Commissioner of Public Lands approved as of May 10, 1965, your 1965 Plan of Development for the Rosa Unit Area, San Juan and Rio Arriba Counties, New Mexico.

This Plan proposes the drilling of no additional wells and has previously been approved by the United States Geological Survey.

We are returning one approved copy of this Plan.

Very truly yours,

GUYTON B. HAYS
COMMISSIONER OF PUBLIC LANDS

BY:
(Mr.) Ted Bilberry, Director
Oil & Gas Department

GBH/mmr/v
cc: United States Geological Survey
Roswell, New Mexico

New Mexico Oil Conservation Commission
Santa Fe, New Mexico



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1357
Roswell, New Mexico 88201

APR 20 1965

April 20, 1965

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

Attention: Mr. Sam Smith

Gentlemen:

Your 1965 plan of development dated March 26, 1965, for the Rosa unit area, San Juan and Rio Arriba Counties, New Mexico, proposing the drilling of no additional wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. SGD.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil & Gas Supervisor

cc:

Washington (w/cy of plan)

Farmington (w/cy of plan)

N.M.O.C.C. - Santa Fe (ltr. only) ✓

Com. of Pub. Lands - Santa Fe (ltr. only)

El Paso Natural Gas Company

El Paso, Texas

March 26, 1965

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

Commissioner of Public Lands
State of New Mexico
Post Office Box 1148
Santa Fe, New Mexico

Oil Conservation Commission
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico

Re: Rosa Unit, I Sec. No. 587
San Juan & Rio Arriba Counties,
New Mexico
1965 DRILLING PROGRAM

Gentlemen:

By letter dated April 3, 1964, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, filed a Drilling Program covering the Rosa Unit for the calendar year 1964. This Program provided for the drilling of a Mesaverde Well, in the E/2 of Section 34, Township 32 North, Range 6 West, N.M.P.M. The basis for drilling was to prevent Unit drainage by the offsetting San Juan 32-5 Unit No. 15 (formerly No. 2-27) Mesaverde Well which is located in the SE/4 of Section 27, Township 32 North, Range 6 West, N.M.P.M. However, after this Program was filed, production from the San Juan 32-5 Unit No. 15 Well declined to such an extent that drainage to the Rosa Unit was not considered to be occurring. Also production data from the San Juan No. 32-5 Unit No. 15 Well indicated that the drilling of the offset location will not be economically feasible. Therefore, the proposed location was not drilled and no other wells were drilled in the Unit during 1964.

As of this date, the total number of wells in the Rosa Unit is as follows:

Mesaverde, Commercial	24
Mesaverde, Non-Commercial	1
Dakota, Non-Commercial	3
Mesaverde, Plugged and Abandoned	4
Dakota, Plugged and Abandoned	2
	<hr/>
	34

Pursuant to Section 9 of the Rosa Unit, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests the approval of a Drilling Program for the calendar year of 1965, providing for the drilling of no wells during the year.

All of the working interest owners have been contacted and this Drilling Program reflects their desires. El Paso Natural Gas Company, as Unit Operator, and the working interest owners believe that all current unit obligations have been satisfied.

El Paso Natural Gas Company, as Unit Operator, will drill any offset wells required to prevent drainage of unitized substances, and any other wells deemed necessary or desirable by the Unit Operator and the working interest owners due to changing conditions that may arise.

If this Drilling Program is acceptable, please signify your approval as required under Section 9 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company.

Copies of this Drilling Program are being sent to the working interest owners as shown on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By



Sam Smith, Manager
Land Department

SS:GWO:kf

APPROVED: _____
Supervisor, United States Geological Survey
Subject to like approval by the appropriate
State Officials.

DATE: _____

APPROVED: _____
Commissioner of Public Lands
Subject to like approval by the United
States Geological Survey and the
Oil Conservation Commission.

DATE: _____

APPROVED: A. L. Carter
Oil Conservation Commission
Subject to like approval by the United
States Geological Survey and the
Commissioner of Public Lands.

DATE: June 7, 1965

The foregoing approvals are for the 1965 Drilling Program for the Rosa Unit,
I Sec. No. 587, San Juan and Rio Arriba Counties, New Mexico.

ROSA UNIT
Working Interest Owners

Mr. John A. Brennand
P. O. Box 1706
Santa Fe, New Mexico

Colorado Oil & Gas Company
Attention: Mr. Charles Titus
Denver Club Building
Denver, Colorado

Pan American Petroleum Corporation (7)
Attention: Mr. T. M. Curtis
P. O. Box 480
Farmington, New Mexico

Mr. Irving Pasternak
1402 Denver U. S. National Center
Denver 2, Colorado

Mr. Neville G. Penrose
1813 Fair Building
Fort Worth, Texas

Phillips Petroleum Company
Attention: Mr. A. J. Hintze
623 Frank Phillips Building
Bartlesville, Oklahoma

Phillips Petroleum Company
Attention: Mr. C. W. Corbett
1200 Denver Club Building
Denver 2, Colorado

Mr. Dan R. Ponder
P. O. Box 108
El Paso, Texas

Mr. Frank A. Schultz
706 Fidelity Union Tower
Dallas, Texas

Southern Petroleum Exploration, Inc.
Attention: Mr. John C. Wright
P. O. Box 192
Sistersville, West Virginia

Mr. J. Glenn Turner
1900 Mercantile Dallas Building
Dallas 1, Texas

Mr. William G. Webb
1900 Mercantile Dallas Building
Dallas 1, Texas

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

133

May 24, 1965

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

Attention: Mr. T. W. Bittick

Re: Rosa Unit Well No. 49
Non-Commercial Determination

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the non-commercial determination of Rosa Unit Well No. 49, located in the SW/4 SW/4 of Section 27, Township 31 North, Range 4 West, NMPM, Rio Arriba County, New Mexico.

Three approved copies of the application are returned herewith.

Very truly yours,

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

ALP/JEK/og
cc: United States Geological Survey - Roswell
Commissioner of Public Lands - Santa Fe

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El Paso Natural Gas Company

El Paso, Texas

April 26, 1965

Oil Conservation Commission
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico

Re: Rosa Unit I SEC No. 587,
San Juan and Rio Arriba Counties,
New Mexico,
NOTICE OF COMPLETION OF NON-COMMERCIAL
WELL IN THE MESAVERDE FORMATION

Gentlemen:

El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, previously determined that the Rosa Unit No. 49 Mesaverde Well, located in the W/2 of Section 27, Township 27 North, Range 4 West, N.M.P.M., was not capable of producing unitized substances in paying quantities from the Mesaverde Formation. This well was drilled by Mr. Irving Pasternak d/b/a Shar-Alan Oil Company, under a Designation of Sub-Operator from El Paso as Unit Operator.

On August 12, 1964, the above-referenced Notice of Completion of Non-Commercial Well in the Mesaverde Formation was forwarded to your office for approval. However, by letter of August 19, 1964, you requested that additional data be furnished to support this non-commercial determination. In accordance with your request, we transmitted to your office on September 18, 1964, basic reservoir and other data to support our economic evaluation. You subsequently advised that you had sufficient information in your possession to act on the non-commercial determination. However, you further advised that there appeared to be communication between certain zones in the well, and that you planned to take no further action on the non-commercial determination until this communication problem was resolved.

It appears that the communication problem between different zones in the well is not related to the actual non-commerciality of the Mesaverde Formation, and El Paso, as Unit Operator, accordingly feels that you may be able to take administrative action on the non-commercial determination before the communication is remedied. A decision in this regard would, of course, effect a savings to the Unit owners, since certain accounting functions are of necessity being held in abeyance until this matter is settled.

Oil Conservation Commission
State of New Mexico
April 26, 1965
Page Two

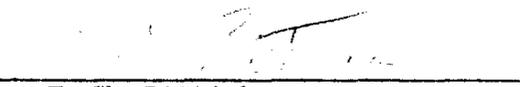
Therefore, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, respectfully requests approval of the non-commercial determination on the Rosa Unit No. 49 Well as soon as such approval can be conveniently granted.

Your consideration in this matter will be appreciated.

Yours very truly,

EL PASO NATURAL GAS COMPANY

By


T. W. Bittick
Assistant Manager
Land Department

TWB:CTR:jm

cc: United States Geological Survey
Commissioner of Public Lands, State of New Mexico

Rosa Unit MV Formation

El Paso Natural Gas Company

El Paso, Texas

April 8, 1965

Mr. John A. Anderson
Regional Oil & Gas Supervisor
United States Geological Survey
P. O. Drawer 1857
Roswell, New Mexico

Dear Sir:

Reference is made to your letter of April 1, 1965, wherein you inquired as to the status of the non-commercial determination on the Rosa Unit No. 49 Mesaverde Well, which is located in the SW/4 of Section 27, Township 31 North, Range 4 West, N. M. P. M., Rio Arriba County, New Mexico.

The New Mexico Oil Conservation Commission advises that they have sufficient information to act on this determination. However, the Commission is requiring the Sub-Operator to take certain remedial actions on this well when winter weather conditions permit such operations to be carried out, and the Commission states that they plan to take no further action on the non-commercial determination until this work is performed.

We will, of course, advise you and the other parties in interest when the Oil Conservation Commission acts on this matter.

Very truly yours,

Harry Gevertz
Harry Gevertz
Regional Landman
Land Department

HG:CTR:vkr

Rosa Unit, MV Formation

cc: Oil Conservation Commission ✓

State of New Mexico

P. O. Box 2088

Santa Fe, New Mexico

COPY

OIL CONSERVATION COMMISSION
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO

March 19, 1965

Shar-Alan Oil Company
1402 Denver U.S. National Center
Denver 2, Colorado

Attn: Mr. H. F. Gumz, Manager of Lands & Exploration

Dear Mr. Gumz:

We have your letters of February 25 and March 17, 1965 relating to remedial work to be conducted on your #49 Rosa Unit in Section 27-31N-4W.

We realize that the roads are somewhat impassable in that area at this time. However, normally the area dries out enough by May 1 each year to allow the movement of equipment without difficulty. We are, therefore, granting an extension of time to May 1, 1965 to make final decision and to comply with our original request.

In the event no action has been taken by May 1 we will proceed as originally outlined.

Yours very truly

Emery C. Arnold
Supervisor, District #3

EEA:ks

cc: Mr. James Durrett
OCC, Santa Fe, N.M.

Mr. James Kapteina
OCC, Santa Fe, N.M. ✓

El Paso Natural Gas Company

El Paso, Texas

September 18, 1964

MAIN OFFICE 0000

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Mr. A. L. Porter, Jr.
Secretary - Director
State of New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Dear Mr. Porter:

Re: Rosa Unit No. 49 Well, W/2 Section 27, T-31-N, R-4-W

Reference is to your letter of August 19, 1964, addressed to Mr. T. W. Bittick, wherein you requested the data utilized in El Paso's determination that the subject well is not capable of producing unitized substances in paying quantities. Completion forms on Unit Well No. 49 show that it was completed on April 12, 1964 as a single completion in the Blanco Mesaverde Field. An economic analysis was made on this well and, on the basis of that study, the well was determined non-commercial.

The study indicated that the future net income, discounted at six per cent interest, would amount to \$51,000 as opposed to the average Mesaverde zone completion cost in this area of \$75,000. Since the average cost is higher than the estimated net discounted income, the well was declared non-commercial.

Summarized as follows are the basic reservoir and other data utilized in our study and the results of the economic evaluation of the well.

Net pay, ft.	18
Average porosity, %	9.1
Interstitial water saturation, %	28.6
Gas specific gravity	0.600
Bottom-hole temperature, °F.	182
Estimated BHP, psia	1345 $\frac{1}{2}$

Gas compressibility, original		
Calculated original gas-in-place, M ² cf at 15.025 psia		
Estimated stabilized deliverability, Mcf/D		
Estimated average condensate recovery (Bbls./M ² cf)		
Estimated gross (8/8) 20 year condensate recovery, Bbls.		
Estimated gross (8/8) 20 year gas recovery, M ² cf		
Net interest (excluding royalty and production payments), %		
Estimated New Mexico production taxes, %		
Estimated average gas value per Mcf for 20 year period, cents		
Estimated condensate value (net after trucking expense), \$/Bbl.)		
Estimated annual operating expense, \$		
Estimated total net income for 20 year period, \$		
Average present worth factor for 20 year gas production (gas only)		
Estimated present worth of future income (discounted at 6%), \$		
Estimated average cost of Mesaverde single completion, \$		

MAIN OFFICE 000

SEP 21 AM 8 46

1/ Reported initial wellhead shut-in pressure of 2127 psia is not considered representative of Blanco Mesaverde reservoir; used 1174 psia which is average of other Mesaverde initial wellhead shut-in pressures in area.

In the event that you have further questions regarding this matter, please advise.

Yours very truly,



A. M. Derrick, Manager
Reservoir Engineering Dept.

AMD:JRW:wc
cc: Mr. T. W. Bittick

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

August 19, 1964

C
O
P
Y

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

Attention: Mr. T. W. Bittick

Gentlemen:

Approval of your determination that Rosa Unit Well No. 49 is not capable of producing unitized substances in paying quantities from the Mesaverde Formation cannot be granted without sufficient knowledge as to how such a determination was reached. Please supply this office with the data by which you reached your conclusions or give reasonable explanation of same.

Very truly yours,

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

ALP/JEK/og

El Paso Natural Gas Company

El Paso, Texas 797 45

August 12, 1964

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico

Re: Rosa Unit, I Sec. No. 587
San Juan and Rio Arriba
Counties, New Mexico
NOTICE OF COMPLETION OF
NON-COMMERCIAL WELL IN
THE MESAVERDE FORMATION

Gentlemen:

Pursuant to the provisions of Section 10 of the Rosa Unit Agreement, approved June 24, 1948, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, I Sec. No. 587, has determined that the following described well is not capable of producing unitized substances in paying quantities from the Mesaverde Formation:

The Rosa Unit No. 49 Well, located 1190' from the South line and 1190' from the West line of Section 27, Township 31 North, Range 4 West, Rio Arriba County, New Mexico, was spudded on October 9, 1963, and drilled to a total depth of 8502'. Attempts to run 4½" casing were unsuccessful on two occasions and the hole was then cleared out to 7135'. The Gallup formation in the intervals between 6895' - 6900'; 6917' - 6922'; 6948' - 6953'; 6995' - 7000'; 7020' - 7025' and the Mesaverde formation in the intervals between 6115' - 6127'; 6269' - 6275' were treated with a sand-water fracturing process on December 1, 1963. The well was shut in for gauge on April 4, 1964, and after being shut-in for eight (8) days, the well was tested on April 12, 1964, and following a three (3) hour blow-on period gauged 1704 MCFGPD through a 3/4" choke and 1847 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2127 PSIA and an SIPT of 2122 PSIA.

If this determination meets with your approval, please indicate such approval in the space provided and return an approved copy hereof for our files.

Copies of this letter are being sent to Mr. John A. Anderson, Regional Oil and Gas Supervisor, United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico, and the working interest owners shown on the attached sheet.

All Parties will be notified of the action taken by the Oil Conservation Commission of the State of New Mexico.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By T. W. Bittick
T. W. Bittick
Assistant Manager
Land Department

TWB:GWO:kp

APPROVED: A. H. Carter
Oil Conservation Commission of the State of New Mexico

DATE: May 24, 1965

ROSA UNIT
Working Interest Owners

Mr. John A. Brennand
P. O. Box 1706
Santa Fe, New Mexico

Colorado Oil & Gas Company
Attention: Mr. Charles Titus
Denver Club Building
Denver, Colorado

Pan American Petroleum Corporation
Attention: Mr. T. M. Curtis
P. O. Box 480
Farmington, New Mexico

Mr. Irving Pasternak
1402 Denver U. S. National Center
Denver 2, Colorado

Mr. Neville G. Penrose
1813 Fair Building
Fort Worth, Texas

Phillips Petroleum Company
Attention: Mr. A. J. Hintze
623 Frank Phillips Building
Bartlesville, Oklahoma

Phillips Petroleum Company
Attention: Mr. C. W. Corbett
1200 Denver Club Building
Denver 2, Colorado

Mr. Dan R. Ponder
P. O. Box 108
El Paso, Texas

Mr. Frank A. Schultz
706 Fidelity Union Tower
Dallas, Texas

Southern Petroleum Exploration, Inc.
Attention: Mr. John C. Wright
P. O. Box 192
Sistersville, West Virginia

Mr. J. Glenn Turner
1900 Mercantile Dallas Building
Dallas 1, Texas

Mr. William G. Webb
1900 Mercantile Dallas Building
Dallas 1, Texas

El Paso Natural Gas Company

El Paso, Texas

May 25, 1965

Oil Conservation Commission
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico

Re: Rosa Unit I SEC No. 587,
San Juan and Rio Arriba Counties,
New Mexico, NOTICE OF COMPLETION
OF NON-COMMERCIAL WELL IN THE
MESAVERDE FORMATION

Gentlemen:

Reference is made to our letter of April 26, 1965, and our previous correspondence requesting approval of the non-commercial determination on the Rosa Unit No. 49 Well, which is located in the W/2 of Section 27, Township 27 North, Range 4 West, N.M.P.M.

We would appreciate being advised as to any new developments that have occurred with regard to your approving this non-commercial determination.

Yours very truly,


T. W. Bittick
Assistant Manager
Land Department

TWB:CTR:jm

cc: United States Geological Survey
Commissioner of Public Lands, State of New Mexico

Rosa Unit, MV Formation

El Paso Natural Gas Company / 100

El Paso, Texas

August 12, 1964

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico

Re: Rosa Unit, I Sec. No. 587,
San Juan and Rio Arriba
Counties, New Mexico,
NOTICE OF COMPLETION OF NON-
COMMERCIAL WELL in the Dakota
Formation

Gentlemen:

This is to advise you that Mr. John A. Anderson of the United States Geological Survey on July 28, 1964, approved El Paso Natural Gas Company's determination that the Rosa Unit No. 48 Well is non-commercial for unit purposes. You were advised of El Paso Natural Gas Company's non-commercial determination in our letter of June 8, 1964.

Copies of this letter are being sent to the working interest owners of the Rosa Unit.

Very truly yours,

Charles T. Richardson
Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:js

Rosa, 4.3.1
Rosa, 5.0
Rosa, Tr. 15

El Paso Natural Gas Company

El Paso, Texas

July 6, 1964

MAIN OFFICE OCC
1964 JUL 9 AM 7:45

120

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87501

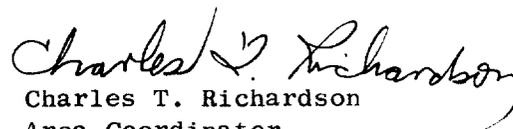
ATTENTION: Mr. A. L. Porter, Jr.

Dear Mr. Porter:

You will find enclosed for your information and files a copy of a letter dated June 8, 1964 which relates to the Rosa Unit #48 Well.

El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, advises Mr. John A. Anderson, Regional Oil and Gas Supervisor, United States Geological Survey that El Paso Natural Gas Company has made the determination that the Rosa Unit #48 Well, located in the SE/4 Section 11, Township 31 North, Range 5 West, N.M.P.M., is to be considered non-commercial for unit purposes.

Very truly yours,


Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:kp
Enclosure

El Paso Natural Gas Company **CONFIDENTIAL OCC**

El Paso, Texas 1964 JUL 9 AM 7:45

June 8, 1964

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

Re: Rosa Unit, I Sec. No. 587
San Juan and Rio Arriba
Counties, New Mexico
NOTICE OF COMPLETION OF
NON-COMMERCIAL WELL IN
THE DAKOTA FORMATION

Dear Mr. Anderson:

Pursuant to the provisions of Section 10 of the Rosa Unit Agreement, approved June 24, 1948, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, I Sec. No. 587, has determined that the following described well is not capable of producing unitized substances in paying quantities from the Dakota Formation:

The Rosa Unit No. 48 Well, located 1180' from the South line and 1850' from the East line of Section 11, Township 31 North, Range 5 West, Rio Arriba County, New Mexico, was spudded on October 25, 1962, and completed on April 11, 1964, at a total depth of 8295' in the Dakota Formation. The Dakota Formation in the intervals between 8165' - 8175', 8210' - 8219', 8244' - 8260' was treated with a sand-water fracturing process on December 10, 1962. The Dakota Formation was shut-in for gauge on April 3, 1964, and after being shut-in for eight (8) days, the Dakota Formation was tested on April 11, 1964, and following a three (3) hour blow-down period gauged 3207 MCFGPD through a 3/4" choke, and 3460 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2931 psia and an SIPT of 2931 psia.

If this determination meets with your approval, please indicate such approval in the space provided and return an approved copy hereof for our files.

MAIN OFFICE OCC

Copies of this letter are being sent to the Commissioner of Public Lands and the Oil Conservation Commission of the State of New Mexico, and the working interest owners shown on the attached sheet. 1964 JUL 9 AM 7:45

Very truly yours,

EL PASO NATURAL GAS COMPANY

By T. W. Bittick
T. W. Bittick
Assistant Manager
Land Department

TWB:GWO:js

APPROVED: _____
Supervisor, United States Geological Survey

DATE: _____

ROSA UNIT
Working Interest Owners

MAIN OFFICE OCC

1964 JUL 9 AM 7:45

Mr. John A. Brennand
P. O. Box 1706
Santa Fe, New Mexico

Colorado Oil & Gas Company
Attention: Mr. Charles Titus
Denver Club Building
Denver, Colorado

Pan American Petroleum Corporation
Attention: Mr. T. M. Curtis
P. O. Box 480
Farmington, New Mexico

Mr. Irving Pasternak
1402 Denver U. S. National Center
Denver 2, Colorado

Mr. Neville G. Penrose
1813 Fair Building
Fort Worth, Texas

Phillips Petroleum Company
Attention: Mr. A. J. Hintze
402 Bank Building
Bartlesville, Oklahoma

Phillips Petroleum Company
Attention: Mr. C. W. Corbett
1200 Denver Club Building
Denver 2, Colorado

Mr. Dan R. Ponder
P. O. Box 108
El Paso, Texas

Mr. Frank A. Schultz
706 Fidelity Union Tower
Dallas, Texas

Southern Petroleum Exploration, Inc.
Attention: Mr. John C. Wright
P. O. Box 192
Sistersville, West Virginia

Mr. J. Glenn Turner
1900 Mercantile Dallas Building
Dallas 1, Texas

Mr. William G. Webb
1900 Mercantile Dallas Building
Dallas 1, Texas

132
El Paso Natural Gas Company

El Paso, Texas

June 8, 1964

MAIN OFFICE OCC

1964 JUN 9 AM 7:34

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

Re: Rosa Unit, I Sec. No. 587
San Juan and Rio Arriba
Counties, New Mexico
NOTICE OF COMPLETION OF
NON-COMMERCIAL WELL IN
THE DAKOTA FORMATION

Dear Mr. Anderson:

Pursuant to the provisions of Section 10 of the Rosa Unit Agreement, approved June 24, 1948, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, I Sec. No. 587, has determined that the following described well is not capable of producing unitized substances in paying quantities from the Dakota Formation:

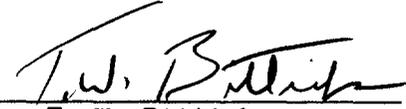
The Rosa Unit No. 48 Well, located 1180' from the South line and 1850' from the East line of Section 11, Township 31 North, Range 5 West, Rio Arriba County, New Mexico, was spudded on October 25, 1962, and completed on April 11, 1964, at a total depth of 8295' in the Dakota Formation. The Dakota Formation in the intervals between 8165' - 8175', 8210' - 8219', 8244' - 8260' was treated with a sand-water fracturing process on December 10, 1962. The Dakota Formation was shut-in for gauge on April 3, 1964, and after being shut-in for eight (8) days, the Dakota Formation was tested on April 11, 1964, and following a three (3) hour blow-down period gauged 3207 MCFGPD through a 3/4" choke, and 3460 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2931 psia and an SIPT of 2931 psia.

If this determination meets with your approval, please indicate such approval in the space provided and return an approved copy hereof for our files.

Copies of this letter are being sent to the Commissioner of Public Lands and the Oil Conservation Commission of the State of New Mexico, and the working interest owners shown on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 
T. W. Bittick
Assistant Manager
Land Department

TWB:GWO:js

APPROVED: _____
Supervisor, United States Geological Survey

DATE: _____

ROSA UNIT
Working Interest Owners

Mr. John A. Brennand
P. O. Box 1706
Santa Fe, New Mexico

Colorado Oil & Gas Company
Attention: Mr. Charles Titus
Denver Club Building
Denver, Colorado

Pan American Petroleum Corporation
Attention: Mr. T. M. Curtis
P. O. Box 480
Farmington, New Mexico

Mr. Irving Pasternak
1402 Denver U. S. National Center
Denver 2, Colorado

Mr. Neville G. Penrose
1813 Fair Building
Fort Worth, Texas

Phillips Petroleum Company
Attention: Mr. A. J. Hintze
402 Bank Building
Bartlesville, Oklahoma

Phillips Petroleum Company
Attention: Mr. C. W. Corbett
1200 Denver Club Building
Denver 2, Colorado

Mr. Dan R. Ponder
P. O. Box 108
El Paso, Texas

Mr. Frank A. Schultz
706 Fidelity Union Tower
Dallas, Texas

Southern Petroleum Exploration, Inc.
Attention: Mr. John C. Wright
P. O. Box 192
Sistersville, West Virginia

Mr. J. Glenn Turner
1900 Mercantile Dallas Building
Dallas 1, Texas

Mr. William G. Webb
1900 Mercantile Dallas Building
Dallas 1, Texas

El Paso Natural Gas Company 133

El Paso, Texas

May 20, 1964

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico

Re: Rosa Unit, I Sec. No. 587
San Juan and Rio Arriba
Counties, New Mexico
1964 DRILLING PROGRAM

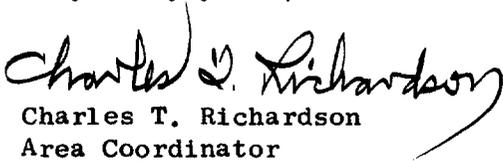
Gentlemen:

The 1964 Drilling Program for the Rosa Unit was approved by the regulatory bodies on the following dates:

1. United States Geological Survey - May 11, 1964
2. Commissioner of Public Lands,
State of New Mexico - April 22, 1964
3. Oil Conservation Commission,
State of New Mexico - April 30, 1964

Copies of this letter are being sent to the working interest owners of the Rosa Unit.

Very truly yours,


Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:js

Rosa, 3.0

132
Drawer 1857
Roswell, New Mexico 88201

May 11, 1964

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

Attention: Mr. Sam Smith

Gentlemen:

Your 1964 plan of development dated April 3, 1964, for the Rosa unit area, San Juan and Rio Arriba Counties, New Mexico, proposing the drilling of one Masaverde well, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

(Orig. Sgd.) CARL C. TRAYWICK

CARL C. TRAYWICK
Acting Oil and Gas Supervisor

cc:

Washington (w/cy of plan)

Farmington (w/cy of plan)

NMOCC-Santa Fe (ltr. only)

Com. of Pub. Lands-Santa Fe (ltr. only)

RECEIVED
MAY 13 1964

El Paso Natural Gas Company

El Paso, Texas

1964 MAY 12 AM 11 21

May 8, 1964

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico

Re: Rosa Unit, I Sec. No. 587
Determination of Non-Commercial
Wells for Unit Purposes

Gentlemen:

This is to advise you that on April 28, 1964, Mr. John A. Anderson, Regional Oil and Gas Supervisor, United States Geological Survey, approved El Paso Natural Gas Company's determinations that the following listed wells are unable to produce unitized substances in commercial quantities. These wells are as follows:

<u>Well Name and Location</u>	<u>Formation</u>
1. Rosa Unit #40-11 SW/4 NW/4 Sec. 11, T-31-N, R-5-W	Dakota
2. Rosa Unit #43 NW/4 SE/4 Sec. 19, T-31-N, R-4-W	Dakota

The foregoing determinations were made subject to review when sufficient production history becomes available to correlate with the estimated stabilized deliverability rates and supplement the volumetric calculations.

Copies of this letter are being sent to the working interest owners of the Rosa Unit.

Very truly yours,


Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:js

cc: Mr. John A. Anderson

Rosa, 4.3; 5.0

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

123

April 30, 1964

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

Attention: Mr. Sam Smith

Re: 1964 Drilling Program
Rosa Unit, San Juan and
Rio Arriba Counties,
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1964 Drilling Program for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

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

ALP/JEK/og

cc: Commissioner of Public Lands - Santa Fe
U. S. Geological Survey - Roswell

C
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P
Y

1964 APR 22 AM 9 20

April 22, 1964

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

Re: Rosa Unit
San Juan and Rio Arriba
Counties, New Mexico
1964 Drilling Program

Attention: Mr. Sam Smith

Gentlemen:

The Commissioner of Public Lands approves as of April 22, 1964, your 1964 Drilling Program for the Rosa Unit Area, San Juan and Rio Arriba Counties, New Mexico, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are returning one approved copy of this Program.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

BY:
(Mrs.) Marian M. Rhea, Supervisor
Unit Division

ESW/mmr/v

cc: United States Geological Survey
Roswell, New Mexico

Oil Conservation Commission
Santa Fe, New Mexico

El Paso Natural Gas Company

El Paso, Texas

April 3, 1964

MAIN OFFICE 000

1964 APR 7 AM 6:53

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

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

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Rosa Unit, I Sec. No. 587
San Juan and Rio Arriba
Counties, New Mexico
1964 DRILLING PROGRAM

Gentlemen:

By letters dated February 8, 1963 and December 11, 1963, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1963, providing for the drilling of the Rosa Unit No. 49 Dakota Well in the W/2 of Section 27, Township 31 North, Range 4 West, N.M.P.M., by Irving Pasternak under Designation of Sub-Operator in 1963. This well was plugged back and completed in the Mesaverde Formation and was shut-in on December 5, 1963, but has not yet been tested.

As of this date, the total number of wells in the Rosa Unit is as follows:

Commercial:	
Mesaverde	24
Non-Commercial:	
Mesaverde	1
Dakota	3
Mesaverde, Plugged and Abandoned	4
Dakota, Plugged and Abandoned	2
	<u>34</u>

Pursuant to Section 9 of the Rosa Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program which provides for the drilling of one well during the period from January 1, 1964 to December 31, 1964. This well is as follows:

<u>Well Name and Spacing Unit</u>	<u>Formation</u>
Rosa Unit No. 50 E/2 Sec. 34, T-32-N, R-6-W, N.M.P.M.	Mesaverde

The basis for drilling the Rosa Unit No. 50 Well in 1964 is to offset the San Juan 32-5 Unit No. 2-27 Well located in the SE/4 of Section 27, Township 32 North, Range 6 West, N.M.P.M., with an AOF of 2525 MCF/D.

El Paso Natural Gas Company intends to drill the Mesaverde well to the base of the Mesaverde Formation using rotary tools. Surface casing will be set to approximately 150' below the surface and an intermediate string will be set through the Pictured Cliffs Formation to a depth of approximately 3200'. A production liner will be set through the Mesaverde Formation, and the casing of the Mesaverde Formation will then be selectively perforated and the Mesaverde Formation will be subjected to a hydraulic fracturing process. Mud will be used in setting the intermediate string of casing, and the hole below the intermediate string will be drilled with gas. Due care will be taken to protect all horizons.

All of the working interest owners have been contacted and this Drilling Program reflects, insofar as possible, their desires for additional drilling and El Paso Natural Gas Company, as Unit Operator, and the working interest owners believe that all current unit obligations will be satisfied by this Program.

El Paso Natural Gas Company, as Unit Operator, will drill any offset wells required to prevent drainage of unitized substances and any other wells deemed necessary or desirable by the unit operator and the working interest owners.

If this Drilling Program is acceptable, please signify your approval as required under Section 9 of the Unit Agreement, in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company.

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 
Sam Smith, Manager
Land Department

SS:GWO:js

APPROVED: _____
Supervisor, United States Geological Survey
Subject to like approval by the appropriate
State Officials.

DATE: _____

APPROVED: _____
Commissioner of Public Lands
Subject to like approval by the United
States Geological Survey and the
Oil Conservation Commission.

DATE: _____

APPROVED:  _____
Oil Conservation Commission
Subject to like approval by the United
States Geological Survey and the
Commissioner of Public Lands.

DATE: 4-30-64

The foregoing approvals are for the Rosa Unit, I Sec. No. 587, 1964 Drilling Program, San Juan and Rio Arriba Counties, New Mexico.

ROSA UNIT

Working Interest Owners

**Mr. John A. Brenmand
P. O. Box 1706
Santa Fe, New Mexico**

**Colorado Oil & Gas Company
Attention: Mr. Charles Titus
Denver Club Building
Denver, Colorado**

**Pan American Petroleum Corporation
Attention: Mr. T. M. Curtis
P. O. Box 480
Farmington, New Mexico**

**Mr. Irving Pasternak
1402 Denver U. S. National Center
Denver 2, Colorado**

**Mr. Neville G. Penrose
1813 Fair Building
Fort Worth, Texas**

**Phillips Petroleum Company
Attention: Mr. A. J. Hintze
402 Bank Building
Bartlesville, Oklahoma**

**Phillips Petroleum Company
Attention: Mr. C. W. Corbett
1200 Denver Club Building
Denver 2, Colorado**

**Mr. Dan R. Ponder
P. O. Box 108
El Paso, Texas**

**Mr. Frank A. Schultz
706 Fidelity Union Tower
Dallas, Texas**

**Southern Petroleum Exploration, Inc.
Attention: Mr. John C. Wright
P. O. Box 192
Sistersville, West Virginia**

**Mr. J. Glenn Turner
1900 Mercantile Dallas Building
Dallas 1, Texas**

**Mr. William G. Webb
1900 Mercantile Dallas Building
Dallas 1, Texas**

152
El Paso Natural Gas Company

El Paso, Texas

April 15, 1964

1964 APR 11 PM 11 13

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico

Re: Rosa Unit, I Sec. No. 587
San Juan and Rio Arriba
Counties, New Mexico
AMENDED 1963 DRILLING PROGRAM

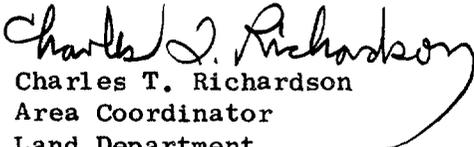
Gentlemen:

The Amended 1963 Drilling Program for the Rosa Unit was approved by the regulatory bodies on the following dates:

1. United States Geological Survey - December 18, 1963
2. Commissioner of Public Lands,
State of New Mexico - March 31, 1964
3. Oil Conservation Commission,
State of New Mexico - April 9, 1964

Copies of this letter are being sent to all the working interest owners of the Rosa Unit.

Very truly yours,


Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:js

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

133

April 9, 1964

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

Attention: Mr. T. W. Bittick

Re: Revised 1963 Drilling
Program, Rosa Unit, San
Juan and Rio Arriba
Counties, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Revised 1963 Drilling Program for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the revision is returned herewith.

Very truly yours,

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

ALP/JEK/og

cc: Commissioner of Public Lands - Santa Fe
U. S. Geological Survey - Roswell

C
O
P
Y

1964 APR 22 PM 2:19
RECEIVED

April 2, 1964

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

Re: Rosa Unit
San Juan and Rio Arriba
Counties, New Mexico
Revised 1963 Drilling Program

Attention: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands approved as of March 31, 1964, the revised 1963 Drilling Program which provides for the drilling of Rosa Unit Well No. 49, located in the W/2 Section 27, Township 31 North, Range 4 West and is to be drilled by Irving Pasternak as sub-operator.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

BY
(Mrs.) Marian M. Rhea, Supervisor
Unit Division

ESW/mm/v

cc: United States Geological Survey
P. O. Drawer 1857
Roswell, New Mexico

Oil Conservation Commission
Santa Fe, New Mexico



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

December 18, 1963

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your amended 1963 plan of development dated December 11, 1963, for the Boss unit area, San Juan and Rio Arriba Counties, New Mexico, proposing the drilling of unit well No. 49 in the W₄ sec. 27, T. 31 N., R. 4 W., N.M.P.M., to test the Dakota formation, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Sincerely yours,

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

cc:
Washington (w/cy of plan)
Farmington (w/cy of plan)
NMOCC-Santa Fe (ltr. only) ✓
Com. of Pub. Lands-Santa Fe (ltr. only)

El Paso Natural Gas Company

El Paso, Texas

December 11, 1963

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

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

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

Re: Rosa Unit, I Sec. No. 587
San Juan and Rio Arriba
Counties, New Mexico
REVISED 1963 DRILLING PROGRAM

Gentlemen:

By letter dated February 8, 1963, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1963. This program provided for the drilling of no wells during the calendar year 1963.

Pursuant to Section 9 of the Rosa Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Revised Drilling Program which provides for the drilling of one Dakota well during the 1963 calendar year. This well is as follows:

<u>WELL NAME</u>	<u>DEDICATION</u>
Rosa Unit #49	W/2 Sec. 27, T-31-N, R-4-W

This Dakota test is being drilled by Irving Pasternak under the provisions of Section 12 of the Rosa Unit Agreement. A Designation of Sub-Operator, designating Irving Pasternak as Sub-Operator of the W/2 of Section 27, Township 31 North, Range 4 West, N.M.P.M., for the purpose of drilling a Dakota test will be filed with the regulatory bodies.

Irving Pasternak, as Sub-Operator, intends to drill the Dakota well to the base of the Dakota Formation using rotary tools. Surface casing will be set to approximately 200' below the surface and an intermediate string will be set through the Pictured Cliffs Formation to a

depth of approximately 3850'. A production liner will be set through the Dakota Formation, and the Dakota Formation will then be selectively perforated and subjected to a hydraulic fracturing process. Mud will be used in setting the intermediate string of casing, and the hole below the intermediate string will be drilled with gas. Due care will be taken to protect all horizons.

All of the working interest owners have been contacted and El Paso Natural Gas Company, as Unit Operator, has received no objections to this Revised Drilling Program.

If this Revised Drilling Program is acceptable, please signify your approval, as required under Section 9 of the Unit Agreement, in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company.

Copies of this Revised Drilling Program are being sent to the working interest owners shown on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By



T. W. Bittick
Assistant Manager
Land Department

TWB:GWO:js

APPROVED: _____
United States Geological Survey
Subject to like approval by the
appropriate state officials.

DATE: _____

APPROVED: _____
Commissioner of Public Lands
Subject to like approval by the
United States Geological Survey and
the Oil Conservation Commission.

DATE: _____

APPROVED: *A. L. Porter*
Oil Conservation Commission
Subject to like approval by the
United States Geological Survey and
the Commissioner of Public Lands.

DATE: 4-9-64

The foregoing approvals are for the Revised 1963 Drilling Program for the
Rosa Unit I Sec. No. 587, San Juan and Rio Arriba Counties, New Mexico.

ROSA UNIT
Working Interest Owners

RECORDED 20 AM 15

Mr. John A. Brenmand
P. O. Box 1706
Santa Fe, New Mexico

Colorado Oil & Gas Company
Attention: Mr. Charles Titus
Denver Club Building
Denver, Colorado

Pan American Petroleum Corporation
Attention: Mr. T. M. Curtis
P. O. Box 480
Farmington, New Mexico

Mr. Irving Pasternak
1402 Denver U. S. National Center
Denver 2, Colorado

Mr. Neville G. Penrose
1813 Fair Building
Fort Worth, Texas

Phillips Petroleum Company
Attention: Mr. A. J. Hintze
402 Bank Building
Bartlesville, Oklahoma

Phillips Petroleum Company
Attention: Mr. C. W. Corbett
1200 Denver Club Building
Denver 2, Colorado

Mr. Dan R. Ponder
P. O. Box 108
El Paso, Texas

Mr. Frank A. Schultz
706 Fidelity Union Tower
Dallas, Texas

Southern Petroleum Exploration, Inc.
Attention: Mr. John C. Wright
P. O. Box 192
Sistersville, West Virginia

Mr. J. Glenn Turner
1900 Mercantile Dallas Building
Dallas 1, Texas

Mr. William G. Webb
1900 Mercantile Dallas Building
Dallas 1, Texas

152
El Paso Natural Gas Company
El Paso, Texas

RECEIVED
DEC 11 1963
03

December 3, 1963

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

Re: Designation of Sub-Operator
Rosa Unit, I Sec. 587

Gentlemen:

We are enclosing for filing with the Oil Conservation Commission two (2) copies of a Designation of Sub-Operator dated October 18, 1963, whereby El Paso Natural Gas Company designates Mr. Irving Pasternak, doing business as Shar-Alan Oil Company, sub-operator of certain oil and gas operating rights under the W/2 of Section 27, Township 31 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico, for the purpose of drilling a Dakota test well. El Paso Natural Gas Company is also filing copies of this Designation of Sub-Operator with the United States Geological Survey and furnishing copies to the Commissioner of Public Lands of the State of New Mexico.

Very truly yours,

Charles T. Richardson
Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:fsc
Attachments

cc: United States Geological Survey, Dr. 1857, Roswell, N. M.

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

Mr. Irving Pasternak (Shar-Alan Oil Company)
1402 Denver U. S. National Center, Denver 2, Colorado

Rosa Unit Tract 10
Rosa Unit 2.0

El Paso Natural Gas Company

El Paso, Texas

December 3, 1963

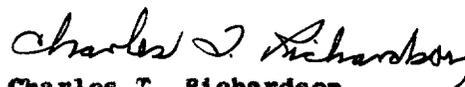
Commissioner of Public Lands
State of New Mexico
P. O. Box 791
Santa Fe, New Mexico

Re: Designation of Sub-Operator
Rosa Unit, 1 Sec. 587

Dear Sir:

You will find enclosed for your information and files one (1) executed copy of Designation of Sub-Operator dated October 18, 1963, wherein El Paso Natural Gas Company, as Rosa Unit Operator, designates Mr. Irving Pasternak, doing business as Shar-Alan Oil Company, as sub-operator of certain oil and gas operating rights under the W/2 of Section 27, Township 31 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico, for the purpose of drilling a Dakota test well.

Yours very truly,


Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:fsc
Attachment

cc: United States Geological Survey, Dr. 1857, Roswell, N. M.

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

Mr. Irving Pasternak (Shar-Alan Oil Company)
1402 Denver U. S. National Center, Denver 2, Colorado

Rosa Unit Tract 10
Rosa Unit 2.0

COPY

El Paso Natural Gas Company

El Paso, Texas

December 3, 1963

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

Re: Designation of Sub-Operator
Rosa Unit, I Sec. 587

Dear Sir:

We enclose three (3) copies of Designation of Sub-Operator dated October 18, 1963, wherein El Paso Natural Gas Company, as Rosa Unit Operator, designates Mr. Irving Pasternak, doing business as Shar-Alan Oil Company, as sub-operator of certain oil and gas operating rights under the W/2 of Section 27, Township 31 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico, for the purpose of drilling a Dakota test well. El Paso Natural Gas Company is also furnishing the Commissioner of Public Lands of the State of New Mexico and the Oil Conservation Commission of the State of New Mexico with copies of this Designation of Sub-Operator.

Yours very truly,


Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:fsc
Attachments

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

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

Mr. Irving Pasternak (Shar-Alan Oil Company)
1402 Denver U. S. National Center, Denver 2, Colorado

Rosa Unit Tract 10
Rosa Unit 2.0

COPY

RECORDED

DESIGNATION OF SUB-OPERATOR

1963 DEC 5 AM 10 03

THIS DESIGNATION is made and entered into this 18th day of October, 1963, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, whose address is P. O. Box 1492, El Paso, Texas, hereinafter sometimes referred to as "Operator", and IRVING PASTERNAK, an individual, whose address is 1402 Denver U. S. National Center, Denver 2, Colorado (doing business as Shar-Alan Oil Company), hereinafter sometimes referred to as "Sub-Operator".

WHEREAS, Operator is Unit Operator for the Rosa Unit, I Sec. No. 587, Counties of Rio Arriba and San Juan, New Mexico; and

WHEREAS, Sub-Operator has been designated Operator of the oil and gas operating rights under the following described tract of land by the owner of said rights:

Rio Arriba County, New Mexico
Township 31 North, Range 4 West, N.M.P.M.
Section 27: W/2
Containing 320.00 acres, more or less; and

WHEREAS, the above described tract of land is committed to the terms and conditions of the Rosa Unit Agreement and Rosa Unit Operating Agreement; and

WHEREAS, Sub-Operator desires to drill a Dakota well on the W/2 of Section 27, Township 31 North, Range 4 West, being the above described tract of land, pursuant to the provisions of Section twelve (12) of the Rosa Unit Agreement; and

WHEREAS, Sub-Operator has been furnished Notice of Operator's election not to drill the said Dakota well as Unit Operator under the terms of the Rosa Unit Agreement; and

WHEREAS, the necessary concurrence has been obtained from the working interest owners in the above tract; and

WHEREAS, Sub-Operator has requested that Operator execute this Designation in order that said Dakota well may be drilled by Sub-Operator.

NOW, THEREFORE, in order to permit Irving Pasternak to drill the said Dakota well, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, hereby designates Irving Pasternak, as Sub-Operator for the sole and only purpose of drilling the said Dakota well on the above described land pursuant to Section twelve (12) of the Rosa Unit Agreement.

1930 DEC 15 AM 9:03

Sub-Operator indicates its acceptance of this Designation by placing its signature in the space provided below and agrees to drill, complete and/or plug and abandon said Dakota well as a reasonable and prudent operator in accordance with the terms and conditions of the Rosa Unit Agreement and the Rosa Unit Operating Agreement and also agrees to the following conditions:

1. Notify Operator when drilling operations are commenced.
2. Furnish Operator with complete daily driller's report, at Sub-Operator's expense.
3. Furnish Operator with daily reports by telephone call or telegram at Sub-Operator's expense, as to the formation or formations penetrated during the previous day's drilling, the depth at which each formation is encountered, and the depth at which the report is made.
4. Allow representatives of Operator access to the derrick floor at all times.
5. Notify Operator of intention to core, drill stem test, run well surveys or other tests in sufficient time to enable Operator's representative to be present. Additionally it is specifically understood that El Paso Natural Gas Company will be notified in sufficient time to enable El Paso's representative to be present for the official test of the well.
6. Adequately test and/or core all possible productive formations to the satisfaction of Operator upon request.
7. Have any core having shows of oil or gas analyzed by a competent core analysis laboratory, and have such laboratory send three preliminary copies and three final copies of the analysis report to Operator.
8. Furnish Operator three field prints and five final prints of all well surveys made during drilling or upon completion of the well.
9. Permit Operator, at its cost and for its sole use, including full rig time, to make any additional surveys, including a geophysical velocity survey as it may desire.
10. Furnish Operator a representative and adequate cut of all cores and ditch samples taken during the drilling of a well.
11. Provide Operator with copies of drilling time records, hole deviation tests and all records required by the governmental agencies having jurisdiction of the well.
12. Notify Operator of any intentions to plug and abandon the well and allow Operator forty-eight (48) hours in which to concur.
13. Sub-Operator shall carry and pay for and file with Operator for its approval proper and acceptable evidence of the following described insurance:

- a. Workmen's Compensation and/or Employer's Liability Insurance which shall comply with the laws of the State in which this agreement is to be performed and shall cover all of its employees engaged in the activities to be performed under this agreement.
 - b. Automobile Public Liability Insurance with not less than \$100/300,000.00 limits covering bodily injury and death, and property damage with a limit of not less than \$50,000.00 to cover all automotive equipment used in connection with performance of this agreement.
 - c. Public Liability Insurance covering activities performed under this agreement with bodily injury and death limits of \$100,000.00 as to any one person and \$300,000.00 as to any one accident. Property Damage Insurance with limits of \$50,000.00.
15. Furnish the United States Geological Survey and the Oil Conservation Commission of the State of New Mexico all proper and necessary reports and well data in the required numbers and time periods as specified by the United States Geological Survey and the Oil Conservation Commission of the State of New Mexico, with a copy to El Paso Natural Gas Company at the addresses hereafter specified.
 16. Provide the Commissioner of Public Lands of the State of New Mexico copies of all reports and other well data submitted to the United States Geological Survey and the Oil Conservation Commission of the State of New Mexico.

All notices, samples, or other information required to be furnished shall be sent to:

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

With a copy to:
El Paso Natural Gas Company
P. O. Box 990
Farmington, New Mexico
Attention: Area Exploration Manager

Sub-Operator shall comply with all applicable laws, rules and regulations of any governmental authority having jurisdiction over operations performed under this Designation, and shall indemnify, protect and hold Operator harmless from and against any and all claims, demands or causes of action for injuries or death to persons or damage to property occurring in connection with or in any manner incident to operations conducted by the Sub-Operator hereunder.

Sub-Operator and Operator agree that Sub-Operator shall drill and complete or plug and abandon the subject Dakota well pursuant to the provisions of the Rosa Unit Operating Agreement.

STATE OF *Colorado*)

City COUNTY OF *Denver*)

TRUST OFFICE COO

1963 DEC 13 AM 6:09

The foregoing instrument was acknowledged before me this 18 day of October, 1963, by IRVING PASTERNAK, an individual.

Sherwin S. Slesinger
Notary Public

My commission expires:

6-21-67

EL PASO NATURAL GAS COMPANY

El Paso, Texas

MAIN OFFICE 000

(C O P Y)

1963 DEC 2 AM 5 39

November 26, 1963

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

Re: Rosa Unit I. Sec. No. 587
San Juan and Rio Arriba Counties,
New Mexico, NOTICE OF COMPLETION
OF NON-COMMERCIAL WELLS in the
Dakota Formation

Dear Mr. Anderson:

Pursuant to the provisions of the Rosa Unit Agreement, El Paso Natural Gas Company, as Unit Operator of said Unit, submitted a determination to your office on June 25, 1962, that the Rosa Unit No. 40-11 Dakota Well, located in the NW/4 of Section 11, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was considered non-commercial for Unit purposes. On November 6, 1962, the same type non-commercial determination was submitted on the Rosa Unit No. 43 Dakota Well, which is located in the SE/4 of Section 19, Township 31 North, Range 4 West.

On July 23, 1963, Mr. Irving Pasternak, who drilled the Rosa Unit No. 40-11 Well under a Designation of Sub-Operator, in accordance with the provisions of the agreements covering this Unit, objected to the non-commercial determination on said well. There was a great deal of correspondence and negotiation concerning this matter. However, your office finally directed that a sixty (60) day deliverability test would be conducted on said well, but due to inclement weather, breakdowns and various other reasons the proposed deliverability test has never been completed. We have also been advised by your office that no action can be taken on our non-commercial determination on the Rosa Unit No. 43 Well until the deliverability test is made on the Rosa Unit No. 40-11 Well.

The delay in acting on these non-commercial determinations has resulted in unnecessary inconvenience and expense to our Accounting Department as well as to other Departments within our Company, and has occasioned inquiries from the other Regulatory Bodies. Therefore, due to the time lapse on these matters and inasmuch as the objecting party has presented no new evidence of commerciality in such period, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, requests that

Mr. John A. Anderson
United States Geological Survey

RECORDED 22 AM 1963

November 26, 1963
Page 2.

the previously submitted non-commercial determinations on both the Rosa Unit No. 40-11 and 43 Wells be approved as expeditiously as possible. We wish to advise, however, that if subsequent information is finally obtained proving one or both of these wells commercial, we shall then, of course, take the necessary and usual steps with regard to any expansions occasioned thereby.

Any assistance you can offer in this matter will be appreciated.

Very truly yours,
ORIGINAL SIGNED BY
T.W. BITTICK
T. W. Bittick
Assistant Manager
Land Department

TWB:CTR:js

Rosa, 4.3
Rosa, 5.0

cc: Mr. Irving Pasternak

El Paso Natural Gas Company

MAIN OFFICE OCC

El Paso, Texas

1963 SEP 20 AM 8 19

September 26, 1963

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

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

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

Re: Rosa Unit Exhibit "B"

Gentlemen:

Enclosed are copies of the Rosa Unit Exhibit "B" which has been revised effective July 1, 1963.

This Exhibit "B" was mailed to the working interest owners of the Rosa Unit under date of August 19, 1963, and they were advised that if they should have any corrections or changes, to notify El Paso within ten days. As of this date, no working interest owner has notified El Paso of any corrections or changes, so this Exhibit "B" is presumed to reflect the correct interests of each working interest owner.

Since there were no changes a copy of this letter only is being sent to the working interest owners of the Rosa Unit.

Very truly yours,

Charles T. Richardson

Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:js

EXHIBIT "B"
 SCHEDULE SHOWING THE PERCENTAGE AND KIND OF OWNERSHIP OF OIL AND GAS INTERESTS
 IN ALL LANDS IN THE ROSA UNIT

Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner & Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
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FEDERAL LANDS

1	T-31-N, R-4-W Sec. 1: All Sec. 2: All Sec. 3: All	1,965.72	SF 078891	USA 12 $\frac{1}{2}$ %	Byrd-Frost	Leola Cundiff	10.9375% J. Glenn Turner All Rights
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2	Sec. 4: All Sec. 5: All Sec. 6: All Sec. 7: All	2,539.56	SF 078890 4-1-48	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Sections 4 and 6: Pan American Pet. Corp.-All Rights As to Sections 5 and 7 to base of Dakota: Irving Pasternak, et ux Below base of Dakota: Pan American Pet. Corp.
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3	Sec. 8: All Sec. 9: All Sec. 10: All Sec. 11: All	2,560.00	SF 078888 8-1-48	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Sections 8, 10, 11: Pan American Pet. Corp.-All Rights As to Section 9 to base of Dakota: Irving Pasternak, et ux Below base of Dakota: Pan American Pet. Corp.
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4	Sec. 12: All Sec. 13: All Sec. 24: All Sec. 25: All	2,559.57	SF 078887 2-1-49	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	Pan American Petroleum Corp. - All Rights
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5	Sec. 14: All Sec. 15: All Sec. 16: All	1,920.00	SF 078892 4-1-48	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	Pan American Petroleum Corp. - All Rights
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Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner & Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
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FEDERAL LANDS

6	Sec. 17: All Sec. 18: All Sec. 19: All Sec. 20: All	2,505.68	SF 078889 8-1-48	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Sections 18, 19, 20: Pan American Pet. Corp.-All Rights
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As to Section 17 to base of Dakota:
Irving Pasternak, et ux

Below base of Dakota:
Pan American Pet. Corp.

7	Sec. 21: All Sec. 22: All Sec. 23: All	1,920.00	SF 078893 4-1-48	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	Pan American Petroleum Corp. - All Rights
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As to all lands except Section 29:
Pan American Pet. Corp.-All Rights

8	Sec. 26: E/2 SE/4, N/2 N/2, Lots 1,2,3,4,5,6, 7,8,9,SW/4 NW/4 Sec. 27: E/2 E/2, SW/4 SE/4, NW/4 NE/4, NE/4 NW/4, Lots 1,2,3,4,5,6,7,8 Sec. 28: W/2, SE/4, W/2 NE/4, Lots 1,2 Sec. 29: All	2,284.16	SF 078894 8-1-48	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to Section 29 to Base of Dakota Formation: Irving Pasternak, et ux
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Below base of Dakota:
Pan American Petroleum Corp.

11	Sec. 30: E/2 Sec. 31: E/2, E/2 SW/4	716.91	SF 078777 7-1-48	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to E/2 Section 30: Pan American Pet. Corp.-All Rights
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12	Sec. 30: E/2 W/2, Lots 1,2,3,4 Sec. 31: E/2 NW/4 Lots 1,2,3,4	508.84	SF 078774 7-1-48	USA 12 $\frac{1}{2}$ %	Pan American Petroleum Corp.	None	As to E/2, E/2 SW/4 Section 31 to base of Dakota: Irving Pasternak, et ux
----	--	--------	---------------------	------------------------	------------------------------	------	--

Below base of Dakota:
Pan American Petroleum Corp.

As to Lots 1,2,3,4, E/2 W/2 Section 30:
Pan American Pet. Corp.-All Rights

Working Interest Owner Under
 Option Agreement, Operating
 Agreement or Assignment and
 Percentage of Interest

FEDERAL LANDS

12 Continued

As to E/2 NW/4, Lots 1,2,3,4
 Section 31 to base of Dakota:
 Irving Pasternak, et ux

Below Base of Dakota:
 Pan American Petroleum Corp.

13 T-31-N, R-5-W
 Sec. 3: All
 Sec. 4: All
 Sec. 5: All
 Sec. 8: E/2, SW/4
 Sec. 9: All
 Sec. 10: N/2

2,544.64 SF 078763 8-1-48

USA 12 2/3%

E1 Paso Natural Gas Co.

Pan American - 5% only on Neville Penrose Interest

To base of the Pictured Cliffs Formation:
 Gas & Oil Rights
 Neville Penrose - All

From the base of the Pictured Cliffs to base of the Mesaverde Formation:
 Gas Rights
 E1 Paso Natural Gas Co. All**

Oil Rights
 Colorado Oil & Gas 1/2
 E1 Paso Natural Gas Co. 1/2

Below base Mesaverde Formation:
 Pan American Pet. Corp.-All Rights

14 T-31-N, R-5-W
 Sec. 6: All
 Sec. 7: All
 Sec. 8: NW/4

2,518.04 SF 078767 8-1-48

USA 12 2/3%

E1 Paso Natural Gas Co.

Pan American
 5% only on Neville Penrose Interest

As to NW/4 Section 8
 To base of Pictured Cliffs Formation:
 Gas & Oil Rights-Neville Penrose

From base of the Pictured Cliffs to base of Mesaverde Formation:
 Gas Rights
 E1 Paso Natural Gas Co. All**

Oil Rights
 Colorado Oil & Gas 1/2
 E1 Paso Natural Gas Co. 1/2

Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner & Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
14	Continued						

Below base Mesaverde Formation:
Pan American Pet. Corp.-All Rights

As to all lands other than
NW/4 Section 8
From surface to base of
Mesaverde Formation:
Gas Rights
E1 Paso Natural Gas Co. All**

Oil Rights
Colorado Oil & Gas 1/2
E1 Paso Natural Gas Co. 1/2

Below Base Mesaverde Formation:
Pan American Pet. Corp.-All Rights

As to Sections 12 and 14:
Pan American Pet. Corp.-All Rights

As to Sections 11 and 13 to
Base of Dakota:
Irving Pasternak, et ux

Below base of Dakota:
Pan American Pet. Corp.

As to Section 10: S/2
Section 15: All
To base of Pictured Cliffs:
Gas & Oil Rights
Neville Penrose All

From base of Pictured Cliffs to
Base of Mesaverde Formation:
Gas Rights
E1 Paso Natural Gas Co. All**

15	T-31-N, R-5-W Sec. 11: All Sec. 12: All Sec. 13: All Sec. 14: All	2,560.00	SF 078762 7-1-48	USA 12 1/2%	Pan American Petroleum Corp.	None	
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16	Sec. 10: S/2 Sec. 15: All Sec. 22: All Sec. 23: N/2 Sec. 27: All	2,560.00	SF 078770 5-1-48	USA 12 1/2%	E1 Paso Natural Gas Co.	Pan American 5% only on Neville Penrose Interest	
----	--	----------	---------------------	-------------	----------------------------	--	--

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Serial No. and Lease Date</u>	<u>Land Owner Percentage of Royalty</u>	<u>Lessee of Record</u>	<u>Overriding Royalty Owner & Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>
16	Continued						

17	<u>T-31-N, R-5-W</u>	2,560.00	SF 078769 5-1-48	USA 12 $\frac{1}{2}$ %	El Paso Natural Gas Co.	Pan American 5% only on Neville Penrose Interest	<p>As to all other lands: <u>From surface to base Mesaverde Formation:</u> Gas Rights El Paso Natural Gas Co. All**</p> <p>Oil Rights: Colorado Oil & Gas Co. 1/2 El Paso Natural Gas Co. 1/2</p> <p><u>Below Base Mesaverde Formation:</u> Pan American Pet. Corp.-All Rights</p> <p>As to all other lands: <u>From surface to base Mesaverde Formation:</u> Gas Rights El Paso Natural Gas Co. All**</p> <p>Oil Rights: Colorado Oil & Gas Co. 1/2 El Paso Natural Gas Co. 1/2</p> <p><u>Below Base Mesaverde Formation:</u> All Rights Pan American Petroleum Corp.</p>
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From Base of Pictured Cliffs to Base of Mesaverde Formation:
 Gas Rights
 El Paso Natural Gas Co. All**

Oil Rights
 Colorado Oil & Gas Co. 1/2
 El Paso Natural Gas Co. 1/2

Below Base Mesaverde Formation:
 All Rights
 Pan American Petroleum Corp.

Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner & Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
17	Continued						As to all other lands: From surface to base of Mesaverde Formation: Gas Rights E1 Paso Natural Gas Co. All1**

18	T-31-N, R-5-W Sec. 18: A11 Sec. 19: E/2 E/2, NW/4 NE/4, SW/4 SE/4, Lots 1,4 Sec. 20: N/2, SE/4 Sec. 29: N/2 NE/4, W/2 SE/4, SW/4 Sec. 30: A11 Sec. 31: A11	2,507.30	SF 078764 8-1-48	USA 12 $\frac{1}{2}$ %	E1 Paso Natural Gas Company	None	Oil Rights Colorado Oil & Gas Co. 1/2 E1 Paso Natural Gas Co. 1/2 Below base Mesaverde Formation: All Rights Pan American Petroleum Corp.
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21	Sec. 29: S/2 NE/4, E/2 SE/4	160.00	SF 079165 5-1-48	USA 12 $\frac{1}{2}$ %	E1 Paso Natural Gas Company	None	From surface to base of Mesaverde Formation: Gas Rights E1 Paso Natural Gas Co. All1**
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							Oil Rights Colorado Oil & Gas Co. 1/2 E1 Paso Natural Gas Co. 1/2
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<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Serial No. and Lease Date</u>	<u>Land Owner Percentage of Royalty</u>	<u>Lessee of Record</u>	<u>Overriding Royalty Owner & Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>
21	Continued						
22	Sec. 23: S/2 Sec. 24: A11 Sec. 25: W/2, SE/4 Sec. 26: W/2, SE/4 Sec. 36: A11	2,560.00	SF 078768 8-1-48	USA 12 1/2%	Pan American Petroleum Corp.	None	As to Sections 24 and 36: Pan American Petroleum Corp. All Rights As to S/2 Section 23, W/2 and SE/4 Section 25, W/2 and SE/4 Section 26 to Base of Dakota Formation: Irving Pasternak, et ux Below Base of Dakota: Pan American Petroleum Corp.
28	Sec. 33: A11 Sec. 34: A11 Sec. 35: A11	1,920.00	SF 078773 8-1-48	USA 12 1/2%	El Paso Natural Gas Company	None	From surface to base of Mesaverde Formation: Gas Rights El Paso Natural Gas Co. A11** Oil Rights Colorado Oil & Gas Co. 1/2 El Paso Natural Gas Co. 1/2 Below Base Mesaverde Formation: All Rights - Pan American
29	<u>T-31-N, R-6-W</u> Sec. 1: A11 Sec. 3: Lots 5,6,7,8, 9, SE/4, E/2 SW/4, SM/4 SM/4 Sec. 4: Lots 5,6,7,8, 9, N/2 SM/4, NW/4 SE/4, SE/4 SE/4	2,561.86	SF 078772 4-1-48	USA 12 1/2%	El Paso Natural Gas Co.	None	From surface to base of Mesaverde Formation: Gas Rights El Paso Natural Gas Co. A11** Oil Rights Colorado Oil & Gas 1/2 El Paso Natural Gas Co. 1/2

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Serial No. and Lease Date</u>	<u>Land Owner Percentage of Royalty</u>	<u>Lessee of Record</u>	<u>Overriding Royalty Owner & Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>
29	Continued T-32-N, R-6-M Sec. 33: W/2, NE/4, W/2 SE/4 Sec. 34: E/2, E/2 W/2 SW/4 SW/4 Sec. 35: A11						Below Base Mesaverde Formation: All Rights Pan American Petroleum Corp.
33	T-31-N, R-6-M Sec. 4: S/2 SW/4, SW/4 SE/4 Sec. 5: A11 Sec. 8: W/2, E/2 E/2 Sec. 9: A11 Sec. 10: Lots 1,2,3, E/2 E/2, NW/4 Sec. 15: Lots 1,2, E/2, E/2 SW/4	2,460.23	SF 078765 4-1-48	USA 12 1/2%	E1 Paso Natural Gas Co.	None	From surface to base of Mesaverde Formation: Gas Rights E1 Paso Natural Gas Co. A11** Oil Rights Colorado Oil & Gas E1 Paso Natural Gas Co. 1/2 Below Base of Mesaverde Formation: All Rights Pan American Petroleum Corp.
37	Sec. 11: A11 Sec. 14: A11 Sec. 23: A11 Sec. 26: A11	2,560.00	SF 078771 4-1-48	USA 12 1/2%	E1 Paso Natural Gas Co.	None	From surface to Base of Mesaverde Formation: Gas Rights E1 Paso Natural Gas Co. A11** Oil Rights Colorado Oil & Gas 1/2 E1 Paso Natural Gas Co. 1/2 Below Base Mesaverde Formation: All Rights Pan American Petroleum Corp.

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Serial No. and Lease Date</u>	<u>Land Owner Percentage of Royalty</u>	<u>Lessee of Record</u>	<u>Overriding Royalty Owner & Percentage</u>
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FEDERAL LANDS

39	T-31-N, R-6-W Sec. 16: Lots 1,2,3, N/2 NE/4, N/2 NW/4, SW/4 NW/4 W/2 SW/4 Sec. 17: All Sec. 21: Lots 1,2,3, W/2 NW/4, S/2 Sec. 22: Lot 1, S/2 NE/4, E/2 NW/4 Sec. 25: All	2,552.71	SF 078766 4-1-48	USA 12 $\frac{1}{2}$ %	EI Paso Natural Gas Co.	None
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TOTAL FEDERAL LANDS 49,505.22 acres or 91.32% of UNIT AREA

Working Interest Owner Under
Option Agreement, Operating
Agreement or Assignment and
Percentage of Interest

From surface to base of
Mesaverde Formation:
Gas Rights
EI Paso Natural Gas Co.
All**
Oil Rights
Colorado Oil & Gas 1/2
EI Paso Natural Gas Co. 1/2
Below Base Mesaverde Formation:
All Rights
Pan American Petroleum Corp.

Working Interest Owner Under
 Option Agreement, Operating
 Agreement or Assignment and
 Percentage of Interest

STATE LANDS

25	<u>T-31-N, R-5-W</u> Sec. 32: NW/4	160.00	E-347-33 6-1-45	State of New Mexico 12/2%	E1 Paso Natural Gas Co.	Before payout John R. Brennand Dan R. Ponder	5.468750%	Gas Rights before payout To Base of Mesaverde Formation: E1 Paso Natural Gas Co. All
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Below Base Mesaverde Formation:
 E1 Paso Natural Gas Co. 1/2
 J. Glenn Turner 1/2

Gas Rights after payout
 E1 Paso Natural Gas Co. 3/10
 J. Glenn Turner 3/10
 John R. Brennand 2/10
 Dan R. Ponder 2/10

Oil Rights before payout
 E1 Paso Natural Gas Co. 1/2
 J. Glenn Turner 1/2

Oil Rights after payout
 E1 Paso Natural Gas Co. 3/10
 J. Glenn Turner 3/10
 John R. Brennand 2/10
 Dan R. Ponder 2/10

From surface to base of
 Mesaverde Formation:
 Gas and Oil Rights
 E1 Paso Natural Gas Co. All

Below Base Mesaverde Formation:
 All Rights
 Pan American Petroleum Corp.

26	<u>T-31-N, R-5W</u> Sec. 32: NE/4	160.00	E-347-28 6-1-48	State of New Mexico 12/2%	E1 Paso Natural Gas Co.	None	
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Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner & Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
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STATE LANDS

27	Sec. 32: S/2	320.00	E-347-32 6-1-45	State of New Mexico 12 1/2%	E1 Paso Natural Gas Co.	New York Life Insurance Co. in the form of a Production Payment from Delhi-Taylor Oil Corp. Squire Production Company	Gas Rights before payout To Base of Mesaverde Formation: E1 Paso Natural Gas Co. All
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						10.937500%	Below Base Mesaverde Formation: E1 Paso Natural Gas Co. 1/2
						10.937500%	E1 Paso Natural Gas Co. 1/2

							Gas Rights after payout E1 Paso Natural Gas Co. 1/2
							J. Glenn Turner 1/2

							Oil Rights - All depths E1 Paso Natural Gas Co. 1/2
							J. Glenn Turner 1/2

30	T-31-N, R-6-W Sec. 2: All except Lot 5	346.91	E-289-37 5-2-45	State of New Mexico 12 1/2%	E1 Paso Natural Gas Co.	Francis L. Harvey	From surface to base of Mesaverde Formation: Gas Rights E1 Paso Natural Gas Co. All**
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							Oil Rights Colorado Oil & Gas 1/2 E1 Paso Natural Gas Co. 1/2
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Below Base Mesaverde Formation:
All Rights
Pan American Petroleum Corp.

31	Sec. 2: Lot 5	9.35		State of New Mexico 12 1/2%	L. A. Smith	None	L. A. Smith All Rights *****
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Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner & Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
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STATE LANDS

40	Sec. 16: N/2 NW/4	80.00	E-346-20 6-1-45	State of New Mexico 12 1/2%	E1 Paso Natural Gas Company 1/2 J. Glenn Turner 1/2	New York Life Insurance Co. in the form of a Production Payment from Delhi-Taylor Oil Corp. 10.937500% Squire Production Co. 10.937500%	E1 Paso Natural Gas Co. 1/2 J. Glenn Turner 1/2
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40-A	Sec. 16: SW/4 NW/4 NW/4 NE/4	80.00	E-346-22 6-1-45	State of New Mexico 12 1/2%	E1 Paso Natural Gas Company 1/2 J. Glenn Turner 1/2	New York Life Insurance Co. in the form of a Production Payment from Delhi-Taylor Oil Corp. 10.937500% Squire Production Co. 10.937500% Charles B. Gonsales 2.000000%	E1 Paso Natural Gas Co. 1/2 J. Glenn Turner 1/2
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41	Sec. 16*	160.00		State of New Mexico 12 1/2%	Southern Petroleum Exploration, Inc.	None	Southern Petroleum Exploration, Inc. All Rights
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42	Sec. 16 and 21*	80.00	E-289-37 5-2-45	State of New Mexico 12 1/2%	E1 Paso Natural Gas Co.	Francis L. Harvey 2.5%	From surface to base of Mesaverde Formation: Gas Rights E1 Paso Natural Gas Co. All**
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Oil Rights
Colorado Oil & Gas 1/2
E1 Paso Natural Gas Co. 1/2

Below Base Mesaverde Formation:
All Rights
Pan American Petroleum Corp.

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Serial No. and Lease Date</u>	<u>Land Owner Percentage of Royalty</u>	<u>Lessee of Record</u>	<u>Overriding Royalty Owner & Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>
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STATE LANDS

43	<u>T-31-N, R-6-W</u> Sec. 15 and 22*	80.00	E-289-31 5-2-45	State of New Mexico 12 ¹ / ₂ %	E1 Paso Natural Gas Co.	Hondo Oil & Gas Co.	5.0%
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From the surface to the base of the Mesaverde Formation:
All Rights
E1 Paso Natural Gas Co. ***

Below Base Mesaverde Formation:
Before Payout and/or 90%
Depletion
All Rights
E1 Paso Natural Gas Co. ****

After Payout and/or 90%
Depletion
E1 Paso Natural Gas Co.
1/2****
Phillips Petroleum Company
1/2

44	<u>T-32-N, R-6-W</u> Sec. 32: W/2	320.00	E-504-11 8-21-45	State of New Mexico 12 ¹ / ₂ %	E1 Paso Natural Gas Co.	C. L. Collins E. H. Dellinger	2.0% 1.0%
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From the surface to the base of the Mesaverde Formation:
All Rights
E1 Paso Natural Gas Co. ***

Below Base Mesaverde Formation:
Before Payout and/or 90%
Depletion
All Rights
E1 Paso Natural Gas Co. ****

After Payout and/or 90%
Depletion
E1 Paso Natural Gas Co.
1/2****
Phillips Petroleum Company
1/2

Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner & Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
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STATE LANDS

45	T-32-N, R-6-W Sec. 32: E/2	320.00	E-504-13 8-21-45	State of New Mexico 12 1/2%	E1 Paso Natural Gas Co.	New York Life Insurance Co. in the form of a Production Payment from Delhi-Taylor Oil Corp. 10.937500% Squire Production Co. 10.937500%	From the surface to the base of the Mesaverde Formation: Gas Rights E1 Paso Natural Gas Co. All
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Oil Rights
E1 Paso Natural Gas Co. 1/2
J. Glenn Turner 1/2

Below Base Mesaverde Formation:
Oil and Gas Rights
J. Glenn Turner 50%
Frank A. Schultz 45%
William G. Webb 5%

47	Sec. 36: W/2	320.00	E-346-19 6-1-45	State of New Mexico 12 1/2%	E1 Paso Natural Gas Co.	None	From surface to base of Mesaverde Formation: Gas Rights E1 Paso Natural Gas Co. All**
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Oil Rights
Colorado Oil & Gas 1/2
E1 Paso Natural Gas Co. 1/2

Below Base Mesaverde Formation:
All Rights
Pan American Petroleum Corp.

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Serial No. and Lease Date</u>	<u>Land Owner Percentage of Royalty</u>	<u>Lessee of Record</u>	<u>Overriding Royalty Owner & Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>
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STATE LANDS

48	T-32-N, R-6-W Sec. 36: E/2	320.00	E-346-24 6-1-45	State of New Mexico 12 ¹ / ₂ %	El Paso Natural Gas Co.		
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New York Life Insurance Co. in the form of a Production Payment from Delht-Taylor Oil Corp.
10.937500%

Squire Production Co. 10.937500%

Gas Rights to base of Mesaverde Formation:
El Paso Natural Gas Co. All

Gas Rights below base of Mesaverde & All Oil Rights:

J. Glenn Turner	50%
William G. Webb	5%
Frank A. Schultz	45%

TOTAL STATE LANDS 2,756.26 acres or 5.08% of UNIT AREA

Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner & Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
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PATENTED LANDS

9	T-31-N, R-4-W Sec. 26: H.E. #282	156.80	Patented 5-20-53 5 year	Lewis W. Lynch 12 1/2%	Pan American Petroleum Corp.	None	Pan American Pet. Corp. All Rights
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10	Sec. 27 and 28: H.E. #277	120.63	Patented 3-5-47 10 year 5-19-47 10 year	Ruth Scamhorn et vir 6.25% Horace F. McKay, Jr., et ux 6.25%	Pan American Petroleum Corp.	None	Pan American Pet. Corp. All Rights
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19	T-31-N, R-5-W Sec. 19: SW/4 NE/4 NW/4 SE/4 Lots 2,3	152.22	Patented 11-10-47 10 year	Consuelo B. Consaies 12 1/2%	EI Paso Natural Gas Co.	None	From surface to base of Mesaverde Formation: Gas Rights EI Paso Natural Gas Co. All**
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Oil Rights
Colorado Oil & Gas 1/2
EI Paso Natural Gas Co. 1/2

Below Base Mesaverde Formation:
All Rights
Pan American Petroleum Corp.

20	T-31-N, R-5-W Sec. 20: SW/4 Sec. 29: NW/4	320.00	Patented 11-21-46 10 year	Manuel C. Gandelaria 1.562500% Allen M. Tonkin 1.562500% Bank of America, Executor of the Will of W. P. McDonald, Deceased 1.562500% Dee Forehand .260417% Estate of R. E. Beamon, Deceased .434028%	EI Paso Natural Gas Co.	None	From surface to base of Mesaverde Formation: Gas Rights EI Paso Natural Gas Co. All**
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Oil Rights
Colorado Oil & Gas 1/2
EI Paso Natural Gas Co. 1/2

Below Base Mesaverde Formation:
All Rights
Pan American Petroleum Corp.

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Serial No. and Lease Date</u>	<u>Land Owner Percentage of Royalty</u>	<u>Lessee of Record</u>	<u>Overriding Royalty Owner & Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>
20	Continued			Alma Beamon Anderson .217014%			
				Union Oil Company of California .006510%			
				Jerry J. Andrew .040690%			
				Glenn M. Forgan, Trustee .319011%			
				Pan American Pet. Corp. 1.708984%			
				1st Nat'l Bank of Ft. Worth (Trustee) for Eula Mae Johnston) .162761%			
				James J. Johnston .040690%			
				Orville C. Rogers .013563%			
				Veva Jean Gihbard .013563%			
				V. A. Johnston .040690%			
				Lillie Leona Rogers .013563%			
				Brookhaven Oil Co. .683594%			
				Paul H. Umbach .341797%			
				Dacresa Corporation <u>3.515625%</u> 12.500000%			
23	T-31-N, R-5-W Sec. 25: NE/4	160.00	Patented	Undivided Interest in 12.5% owned equally as follows: Mrs. Josefa A. Abeyta	Unknown	Unknown	Unknown

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Serial No. and Lease Date</u>	<u>Land Owner Percentage of Royalty</u>	<u>Lessee of Record</u>	<u>Overriding Royalty Owner & Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>
23	Continued			Mrs. Fibradita A. Rivera Mike A. Abeyta Tliva Abeyata Garcia Estifanito A. Serrano Atachita Abeyta			
24	Sec. 26: NE/4	160.00	Patented	Jose J. Sanchez, et ux 12/2%	Unknown	Unknown	***** Unknown
32	<u>T-31-N, R-6-W</u> Sec. 3 & 4: Tract 37	158.36	Fee	T. H. McElvain 5/16 John & Gladys 11/32 D. A. & Helen 11/32 Greene	Unknown	Unknown	***** Unknown
	<u>T-32-N, R-6-W</u> Sec. 33: E/2 SE/4 Sec. 34: NW/4 SW/4						
34	<u>T-31-N, R-6-W</u> Sec. 8: W/2 E/2	160.00	Fee 1-26-48	Thomas B. Miller 4.68750% D. H. Wise 4.68750% H. F. Artell 3.12500%	E1 Paso Natural Gas Co.	None	From surface to base of Mesaverde Formation: Gas Rights E1 Paso Natural Gas Co. All**
							Oil Rights Colorado Oil & Gas 1/2 E1 Paso Natural Gas Co. 1/2
							<u>Below base Mesaverde Formation:</u> All Rights Pan American Petroleum Corp.
35	<u>T-31-N, R-6-W</u> Sec. 10: W/2 E/2	160.00	Fee 11-7-47	Dee Forehand .781250% Estate of R. E. Beamon, Deceased 1.822917% Alma M. Beamon Anderson .911458% James J. Johnston .073243%	E1 Paso Natural Gas Co.	None	From surface to base of Mesaverde Formation: Gas Rights E1 Paso Natural Gas Co. All** Oil Rights Colorado Oil & Gas Co. 1/2 E1 Paso Natural Gas Co. 1/2

<u>Tract No.</u>	<u>Description</u>	<u>No. of Acres</u>	<u>Serial No. and Lease Date</u>	<u>Land Owner Percentage of Royalty</u>	<u>Lessee of Record</u>	<u>Overriding Royalty Owner & Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>	
35	Continued			Glenn M. Porigan, Trustee .574218% Union Oil Company of California .011719% First Nat'l Bank of Ft. Worth, Texas, Trustee for Eula Mae Johnston .292969% V. A. Johnston .073242% Jerry J. Andrew .073242% Mrs. Willie Johnston .073242% Lillie Leona Rogers .024414% Orville C. Rogers .024414% Veva Jean Glibbard .024414% C. H. Nye 1.562500% Allen M. Tonkin & Nancy P. Tonkin, Joint Tenants 3.125000% Gifford H. & Margaret Nigh 3.125000%				Below base Mesaverde Formation: All Rights Pan American Petroleum Corp.
36	Sec. 10 & 15; Tr. 38	161.52	Fee 2-1-49	Ruth Covert, as executrix of Estate of J. S. Covert, Deceased 6.250000% S. P. Johnson 6.250000%	E1 Paso Natural Gas Company	Covert & Johnson 1/16 of 7/8 until \$200.00 per acre received.	From surface to base of Mesaverde Formation: Gas Rights E1 Paso Natural Gas Co. Oil Rights Colorado Oil & Gas E1 Paso Natural Gas Co.	

Revised: Effective July 1, 1963

Tract No.	Description	No. of Acres	Serial No. and Lease Date	Land Owner Percentage of Royalty	Lessee of Record	Overriding Royalty Owner & Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
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PATENTED LANDS

36 Continued

Below Base Mesaverde Formation:
 All Rights
 Pan American Petroleum Corp.

38 T-31-N, R-6-W
 Sec. 15 & 16:
 Tract 39

160.00 Fee
 8-6-47

Albuquerque Nat'l Bank as Guardian of Estate of Jose Lopez
 2.343750%

E1 Paso Natural Gas Company

None

From surface to base of Mesaverde Formation:
 Gas Rights
 E1 Paso Natural Gas Co.
 All**

Dacresa Corp.
 3.515625%
 Paul Umbach
 .341797%

Oil Rights
 Colorado Oil and Gas 1/2
 E1 Paso Natural Gas Co. 1/2

Margarito Lopez
 3.906250%
 Brookhaven Oil Corp.
 .683594%
 Pan American Pet. Corp.
 1.708984%

Below Base Mesaverde Formation:
 All Rights
 Pan American Petroleum Corp.

46 T-32-N, R-6-W
 Sec. 34: W/2 NW/4

80.00 Fee
 1-18-47

Celestino Mascartinas
 12.500000%

E1 Paso Natural Gas Company

None

From surface to base of Mesaverde Formation:
 Gas Rights
 E1 Paso Natural Gas Co.
 All**

Oil Rights
 Colorado Oil & Gas 1/2
 E1 Paso Natural Gas Co. 1/2

Below Base Mesaverde Formation:
 All Rights
 Pan American Petroleum Corp.

TOTAL FEE LANDS: 1,949.53 acres or 3.60% of UNIT AREA

EXHIBIT "B"
ROSA UNIT

TOTAL LANDS 54,211.01

<u>LAND</u>	<u>ACRES IN UNIT</u>	<u>PERCENTAGE OF UNIT AREA</u>
FEDERAL	49,505.22	91.32%
STATE	2,756.26	5.08%
FEE	<u>1,949.53</u>	<u>3.60%</u>
TOTAL	54,211.01	100.00%

* Resurvey plat, dated June 30, 1919, approved August 27, 1919, shows "School Section" to be parts of Sections 15, 16, 21, and 22, T-31-N, R-6-W, but is carried on State of New Mexico records as Section 16, T-31-N, R-6-W, and is leased as follows:

N/2 NW/4	leased to J. Glenn Turner, et al - 160.00 acres - Unit Tract 40
SW/4 NW/4, NW/4 NE/4	leased to J. Glenn Turner, et al - Unit Tract 40-A
SW/4	leased to Southern Petroleum Exploration, Inc. - 160 acres - Unit Tract 41
W/2 SE/4	leased to El Paso Natural Gas Company - 80 acres - Unit Tract 42
E/2 SE/4	leased to El Paso Natural Gas Company - 80 acres - Unit Tract 43

** Subject to Colorado Oil and Gas Corporation Reversionary Interest and Pan American's scaled overriding royalty interest.

*** Subject to Sublease and Operating Agreement dated February 23, 1955, as amended, between Phillips Petroleum Company and Pacific Northwest Pipeline Corporation (now El Paso Natural Gas Company), which provided, among other things, for certain Overriding Royalties from the surface to the base of the Mesaverde Formation.

**** Subject to a Letter Agreement, dated 4-21-59, as amended, between Phillips Petroleum Company and El Paso Natural Gas Company which provided, among other things, for certain overriding royalties and a reversionary interest in favor of Phillips Petroleum Company below the base of the Mesaverde Formation.

***** Acreage not committed to Unit - Tracts 23, 24, 31, 32 are not committed to Rosa Unit.

El Paso Natural Gas Company

El Paso, Texas
June 17, 1963

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

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

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

Re: Rosa Unit, I Sec. No. 587
San Juan and Rio Arriba
Counties, New Mexico
1963 DRILLING PROGRAM

Gentlemen:

The 1963 Drilling Program for the Rosa Unit was approved by the regulatory bodies on the following dates:

1. United States Geological Survey - April 2, 1963
2. Commissioner of Public Lands - May 15, 1963
3. Oil Conservation Commission - June 6, 1963

Copies of this letter are being sent to all the working interest owners of the Rosa Unit.

Very truly yours,

Charles T. Richardson
Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:ag

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

133

June 6, 1963

C
O
P
Y

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

Attention: Mr. Sam Smith

Re: 1963 Drilling Program
Rosa Unit, San Juan and
Rio Arriba Counties,
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1963 Drilling Program for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

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

ALP/JEK/ic

cc: Commissioner Public Lands
Santa Fe, New Mexico

United States Geological Survey
Roswell, New Mexico

RECEIVED
MAY 16 1963

May 16, 1963

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

Re: Rosa Unit
San Juan and Rio Arriba
Counties, New Mexico
1963 Drilling Program

Attention: Sam Smith

Gentlemen:

The Commissioner of Public Lands has approved as of May 15, 1963, the 1963 Drilling Program for the Rosa Unit Area, San Juan and Rio Arriba Counties, New Mexico.

We are enclosing one approved copy of this Plan.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

BY:
(Mrs.) Marian M. Rhea, Supervisor
Unit Division

ESW/mmr/v

cc: Oil Conservation Commission

U. S. Department of Interior
Geological Survey
Roswell, New Mexico

MAIN OFFICE 030

1963 APR 5 AM 6:29
Drawer 1857
Roswell, New Mexico

April 2, 1963

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

Attention: Mr. Sam Smith

Gentlemen:

Your 1963 plan of development dated February 8, 1963, for the Ross unit area, San Juan and Rio Arriba Counties, New Mexico, proposing the drilling of no additional wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Vary truly yours,

(John A. Anderson)

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

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

El Paso Natural Gas Company

El Paso, Texas

February 8, 1963

1963 FEB 15 PM 1 30

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

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

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

Re: Rosa Unit, I Sec. No. 587
San Juan and Rio Arriba
Counties, New Mexico
1963 DRILLING PROGRAM

Gentlemen:

By letter dated March 9, 1962, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1962, which Program provided for the drilling of no wells during 1962. However, a step-out Mesaverde test was drilled in the NE/4 of Section 8, Township 31 North, Range 5 West, N.M.P.M. This well was plugged and abandoned. Pursuant to the provisions of Section 12 of the Rosa Unit Agreement, Irving Pasternak was designated as Operator of the E/2 of Section 11, Township 31 North, Range 5 West, N.M.P.M. for the purpose of drilling a Mesaverde-Dakota test. This well was completed in the Dakota Formation only and was shut-in for gauge on January 2, 1963.

As of this date, the total number of wells in the Rosa Unit is as follows:

Commercial:	
Mesaverde	24
Non-Commercial:	
Mesaverde	1
Dakota	2
Mesaverde, P&A	4
Dakota, P&A	1
	<u>32</u>

Pursuant to Section 9 of the Rosa Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program which provides for the drilling of no wells during the period from January 1, 1963 to December 31, 1963.

All of the working interest owners have been contacted and this Drilling Program reflects, insofar as possible, their desires for additional drilling and El Paso Natural Gas Company, as Unit Operator, and the working interest owners believe that all current unit obligations have been satisfied.

El Paso Natural Gas Company, as Unit Operator, will drill any offset wells required to prevent drainage of unitized substances and any other wells deemed necessary or desirable by the unit operator and the working interest owners.

If this Drilling Program is acceptable, please signify your approval as required under Section 9 of the Unit Agreement, in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company.

Copies of this letter are being sent to the working interest owners of the Rosa Unit.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By Sam Smith
Sam Smith, Manager
Land Department

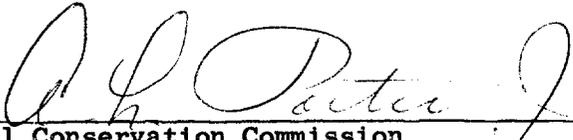
SS:GWO:ag

APPROVED: _____
Supervisor, United States Geological Survey
Subject to like approval by the appropriate
State Officials.

DATE: _____

APPROVED: _____
Commissioner of Public Lands
Subject to like approval by the United
States Geological Survey and the
Oil Conservation Commission.

DATE: _____

APPROVED:  _____
Oil Conservation Commission
Subject to like approval by the United
States Geological Survey and the
Commissioner of Public Lands.

DATE: July 1963

The foregoing approvals are for the Rosa Unit 1963 Drilling Program,
San Juan and Rio Arriba Counties, New Mexico.

ROSA UNIT

Working Interest Owners

Mr. John A. Brennand
P. O. Box 1706
Santa Fe, New Mexico

Colorado Oil & Gas Company
Attention: Mr. Charles Titus
Denver Club Building
Denver, Colorado

Pan American Petroleum Corporation (12)
Attention: Mr. T. M. Curtis
P. O. Box 480
Farmington, New Mexico

Mr. Irving Pasternak
1402 Denver U.S. National Center
Denver 2, Colorado

Mr. Neville G. Penrose
1813 Fair Building
Fort Worth, Texas

Phillips Petroleum Company
Attention: Mr. R. F. Rood
402 Bank Building
Bartlesville, Oklahoma

Phillips Petroleum Company
Attn: C. W. Corbett, Manager
Exploration & Production Dept.
1200 Denver Club Building

Mr. Dan R. Ponder
P. O. Box 108
El Paso, Texas

Mr. Frank A. Schultz
2630 Fidelity Union Tower
Dallas, Texas

Southern Petroleum Exploration, Inc.
Attention: Mr. John C. Wright
P. O. Box 192
Sistersville, West Virginia

Mr. J. Glenn Turner
1900 Mercantile Dallas Building
Dallas 1, Texas

Mr. William G. Webb
1900 Mercantile Dallas Building
Dallas 1, Texas

133
MAIN OFFICE OGC

November 1957
Roswell, New Mexico

1963 JAN 14 AM 8:24

January 10, 1963

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

Attention: Mr. Charles T. Richardson

Gentlemen:

We acknowledge receipt of three copies of a Designation of Sub-Operator dated November 1, 1962, by which El Paso Natural Gas Company, as operator of the Ross unit, designates Irving Pasternak, working interest owner to the base of the Dakota formation in the E $\frac{1}{2}$ sec. 11, T. 31 N., R. 3 W., N.M.P.M., as sub-operator for the sole purpose of drilling a Masoverde-Dakota test well on the above described land.

The designation of sub-operator is accepted as evidence that El Paso, as unit operator, elects not to drill said well. Copies of the designation are being distributed to the appropriate Federal offices.

Very truly yours,

[Orig. Sgd.] JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

Copy to: Washington (w/cy desig.)
Farmington (w/cy desig.)
MSOCC - Santa Fe (ltr. only)
Comm. Pub. Lands - Santa Fe

El Paso Natural Gas Company

El Paso, Texas

January 7, 1963

135

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

Re: Designation of Sub-Operator
Rosa Unit, I Sec. 587

Gentlemen:

You will find enclosed one (1) executed copy of a Designation of Sub-Operator dated November 1, 1962, wherein El Paso Natural Gas Company, as Unit Operator, designates Mr. Irving Pasternak as Sub-Operator of certain oil and gas operating rights under the E/2 of Section 11, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, for the purpose of drilling a Mesaverde-Dakota dual test well.

Very truly yours,


Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:ag
Enclosure

Rosa Unit 2.0
Rosa Unit Tract 15

DESIGNATION OF SUB-OPERATOR

THIS DESIGNATION is made and entered into this first day of November, 1962, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, whose address is Post Office Box 1492, El Paso, Texas, hereinafter sometimes referred to as "Operator", and IRVING PASTERNAK, whose address is 1402 Denver U. S. National Center, Denver, Colorado, hereinafter sometimes referred to as "Sub-Operator".

WHEREAS, Operator is Unit Operator for the Rosa Unit, I Sec. No. 587, Counties of Rio Arriba and San Juan, State of New Mexico; and

WHEREAS, Sub-Operator is holder of the oil and gas operating rights under the following described tract of land:

Rio Arriba County, New Mexico
Township 31 North, Range 5 West, N.M.P.M.
Section 11: E/2
Containing 320.00 acres, more or less; and

WHEREAS, the above described tract of land is committed to the terms and conditions of the Rosa Unit Agreement and Rosa Unit Operating Agreement; and

WHEREAS, Sub-Operator desires to drill a Dual, Mesaverde-Dakota test on the above described tract of land pursuant to the provisions of Section twelve (12) of the Rosa Unit Agreement; and

WHEREAS, Sub-Operator has been furnished Notice of Operator's election not to drill the said Dual, Mesaverde-Dakota test as Unit Operator under the terms of the Rosa Unit Agreement; and

WHEREAS, Sub-Operator has requested that Operator execute this Designation in order that said Dual, Mesaverde-Dakota test may be drilled by Sub-Operator.

NOW, THEREFORE, in order to permit IRVING PASTERNAK to drill the said Dual, Mesaverde-Dakota test, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, hereby designates IRVING PASTERNAK as Sub-Operator for the sole and only purpose of drilling the said Dual, Mesaverde-Dakota test on the above described land pursuant to Section twelve (12) of the Rosa Unit Agreement.

Sub-Operator indicates its acceptance of this Designation by placing its signature in the space provided below and agrees to drill, complete, and/or plug and abandon said test as a reasonable and prudent operator in accordance with the terms and conditions of the Rosa Unit Agreement and the

Rosa Unit Operating Agreement and also agrees to the following conditions:

1. Notify Operator when drilling operations are commenced.
2. Furnish Operator with complete daily driller's report, at Sub-Operator's expense.
3. Furnish Operator with daily reports by telephone call or telegram at Sub-Operator's expense, as to the formation or formations penetrated during the previous day's drilling, the depth at which each formation is encountered, and the depth at which the report is made.
4. Allow representatives of Operator access to the derrick floor at all times.
5. Notify Operator of intentions to core, drill stem test or run well surveys in sufficient time to enable Operator's representative to be present.
6. Adequately test and/or core all possible productive formations to the satisfaction of Operator upon request.
7. Have any core having shows of oil or gas analyzed by a competent core analysis laboratory, and have such laboratory send three preliminary copies and three final copies of the analysis report to Operator.
8. Furnish Operator three field prints and five final prints of all well surveys made during drilling or upon completion of the well.
9. Permit Operator, at its cost and for its sole use, including full rig time, to make any additional surveys including a geophysical velocity survey as it may desire.
10. Furnish Operator a representative and adequate cut of all cores and ditch samples taken during the drilling of a well.
11. Provide Operator with copies of drilling time records, hole deviation tests and all records required by the governmental agencies having jurisdiction of the well.
12. Notify Operator of any intentions to plug and abandon the well and allow Operator forty-eight (48) hours in which to concur.
13. Carry adequate and proper insurance of the types and in the amounts as specified in Section 6 of the Rosa Unit Operating Agreement.
14. Furnish the United States Geological Survey all necessary reports and well data in the required numbers as specified by the United States Geological Survey.
15. Provide the Commissioner of Public Lands of the State of New Mexico and the New Mexico Oil Conservation Commission copies of all reports and other well data submitted to the United States Geological Survey.

All notices, samples, or other information required to be furnished shall be sent to:

El Paso Natural Gas Company
Attn: Area Exploration Manager
Post Office Box 990
Farmington, New Mexico

El Paso Natural Gas Company
Attn: Land Department
Post Office Box 1492
El Paso, Texas

Sub-Operator shall comply with all applicable laws, rules and regulations of any governmental authority having jurisdiction over operations

performed under this Designation, and shall indemnify, protect and hold Operator harmless from and against any and all claims, demands or causes of action for injuries or death to persons or damage to property occurring in connection with or in any manner incident to operations conducted by the Sub-Operator hereunder.

Simultaneously with the execution of this agreement, Sub-Operator shall furnish to Operator a performance bond in the amount of \$10,000.00 executed by Sub-Operator and a reputable corporate surety, satisfactory to Operator, conditioned upon faithful performance of the duties and obligations of this agreement. Failure to comply with the duties and obligations of this agreement shall cause this agreement to terminate and said performance bond shall become immediately due and payable to Operator in its full amount of \$10,000.00; provided, however, that the payment of this amount shall not relieve or absolve Sub-Operator of its obligations imposed by the preceding paragraph of this agreement to indemnify, protect and hold Operator harmless from and against all claims, demands or causes of action for injuries or death to persons or damage to property occurring in connection with or in any manner incident to operations conducted by the Sub-Operator hereunder.

THE DRILLING of the said Dual, Mesaverde-Dakota test is subject to approval by the Oil and Gas Conservation Commission, the Commissioner of Public Lands of the State of New Mexico, and the Supervisor of the United States Geological Survey, Roswell, New Mexico.

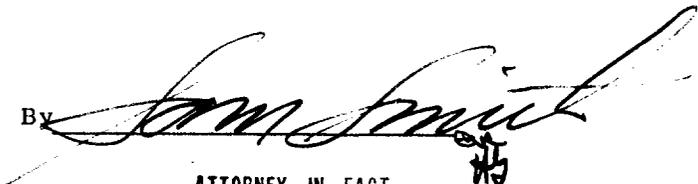
THIS DESIGNATION shall be effective for a period of time not to exceed three (3) months from the date hereof, or until said Dual, Mesaverde-Dakota test is completed and/or plugged and abandoned.

THIS DESIGNATION is personal and cannot be assigned in whole or in part by Sub-Operator without the written consent of Operator having first been obtained.

IN WITNESS WHEREOF, this Designation is executed as of the day and year first hereinabove written.

OPERATOR

EL PASO NATURAL GAS COMPANY

By 

ATTORNEY - IN - FACT

SUB-OPERATOR

ATTEST:

Shirley Ott
~~Secretary~~

By Irving Pasternak
Irving Pasternak

STATE OF TEXAS

COUNTY OF EL PASO

The foregoing instrument was acknowledged before me this 4th day of January, ~~1962~~ 1963, by Sam Smith, as Attorney in fact on behalf of EL PASO NATURAL GAS COMPANY, a Delaware corporation.

Natalie Taylor
Notary Public

My Commission expires:

NATALIE TAYLOR

Notary Public in and for El Paso County, Texas
My Commission Expires June 1, 1963

STATE OF COLORADO

COUNTY OF Arapahoe

The foregoing instrument was acknowledged before me this 2 day of November, 1962, by Irving Pasternak.

Lorraine Salishinsky
Notary Public

My Commission expires:

6-24-63

El Paso Natural Gas Company

133

El Paso, Texas

November 6, 1962

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

Re: Rosa Unit, I Sec. No. 587
San Juan and Rio Arriba
Counties, New Mexico
NOTICE OF COMPLETION OF
NON-COMMERCIAL WELL IN
THE DAKOTA FORMATION

Dear Mr. Anderson:

Pursuant to the provisions of Section 10 of the Rosa Unit Agreement, approved June 24, 1948, El Paso Natural Gas Company, as Unit Operator of the Rosa Unit, I Sec. No. 587, has determined that the following described well is not capable of producing unitized substances in paying quantities from the Dakota Formation:

The Rosa Unit No. 43 Well, located 1550' from the South line and 1590' from the East line of Section 19, Township 31 North, Range 4 West, Rio Arriba County, New Mexico, was spudded on November 28, 1961, and completed on January 16, 1962, at a total depth of 8310' in the Dakota Formation. The Dakota Formation in the intervals between 8164' - 8178', 8203' - 8220', 8242' - 8251', 8259' - 8267' was treated with a sand-water fracturing process on January 10, 1962. The Dakota Formation was shut-in for gauge on January 16, 1962, and after being shut-in for one hundred and thirteen (113) days, the Dakota Formation was tested on May 9, 1962, and following a three (3) hour blow-down period gauged 2352 MCFGPD through a 3/4" choke, and 2413 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2414 psia and an SIPT of 2414 psia.

If this determination meets with your approval, please indicate such approval in the space provided and return an approved copy hereof for our files.

Copies of this letter are being sent to the Commissioner of Public Lands and the Oil Conservation Commission of the State of New Mexico, and the Working Interest Owners shown on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 
T. W. Bittick
Assistant Manager
Land Department

TWB:GWO:ag

APPROVED: _____
Supervisor, United States Geological Survey

DATE: _____

ROSA UNIT

Working Interest Owners

**Mr. John A. Brennand
P. O. Box 1706
Santa Fe, New Mexico**

**Colorado Oil & Gas Company
Attention: Mr. Charles Titus
Denver Club Building
Denver, Colorado**

**Pan American Petroleum Corporation (12)
Attention: Mr. T. M. Curtis
P. O. Box 480
Farmington, New Mexico**

**Mr. Irving Pasternak
1402 Denver U. S. National Center
Denver 2, Colorado**

**Mr. Neville G. Penrose
1813 Fair Building
Fort Worth, Texas**

**Phillips Petroleum Company
Attention: Mr. R. F. Rood or Mr. V. H. Stone
508 Bank Building
Bartlesville, Oklahoma**

**Phillips Petroleum Company
Attention: Division Landman
Land & Geological Department
1200 Denver Club Building
Denver 2, Colorado**

**Mr. Dan R. Ponder
P. O. Box 9309
El Paso, Texas**

**Mr. Frank A. Schultz
2630 Fidelity Union Tower
Dallas, Texas**

**Southern Petroleum Exploration, Inc.
Attention: Mr. John C. Wright
P. O. Box 192
Sistersville, West Virginia**

**Mr. J. Glenn Turner
1900 Mercantile Dallas Building
Dallas 1, Texas**

**Mr. William G. Webb
1900 Mercantile Dallas Building
Dallas 1, Texas**

CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

133

May 31, 1962

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

Attention: Mr. Sam Smith

Re: 1962 Drilling Program
Rosa Unit, San Juan and
Rio Arriba Counties,
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1962 Drilling Program for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

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

ALP/JEK/ig

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

Commissioner of Public Lands
Santa Fe, New Mexico

C
O
P
Y

May 16, 1962

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

Re: Rosa Unit
San Juan and Rio Arriba
Counties, New Mexico

Attention: Mr. Sam Smith

Gentlemen:

The Commissioner of Public Lands has of this date approved the 1962 Plan of Development for the Rosa Unit Area, San Juan and Rio Arriba Counties, New Mexico, subject to like approval by the U.S. Geological Survey and the Oil Conservation Commission.

This Plan calls for the drilling of no additional wells during 1962.

We are enclosing one approved copy of this Plan.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

BY:
(Mrs.) Marian M. Rhea, Supervisor
Unit Division

ESW/mmr/v
encl:

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

Oil Conservation Commission
Santa Fe, New Mexico

C
O
P
Y



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Drawer 1857

1962 MAY 15
Sowell, New Mexico

May 10, 1962

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

Attention: Mr. Sam Smith

Gentlemen:

Your 1962 plan of development dated March 9, 1962, for the Rosa unit area, San Juan and Rio Arriba Counties, New Mexico, proposing the drilling of no additional wells, has been approved on this date subject to like approval by the appropriate State officials.

Two approved copies of the plan are enclosed.

Very truly yours,

(Orig.Sgd.) CARL C. TRAYWICK

CARL C. TRAYWICK
Acting Regional Oil & Gas Supervisor

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

El Paso Natural Gas Company

El Paso, Texas

~~February 10, 1962~~

March 9, 1962

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

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

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

Re: Rosa Unit, I Sec. No. 587
San Juan and Rio Arriba
Counties, New Mexico
1962 DRILLING PROGRAM

Gentlemen:

By letter dated February 9, 1961, El Paso Natural Gas Company, as Unit Operator, filed a Drilling Program regarding the captioned unit for the calendar year 1961. Said Program provided for the drilling of one (1) Mesaverde well. The Mesaverde well was drilled. The Mesaverde-Dakota Dual well which was drilled pursuant to Section 6 of the Unit Agreement by Irving Pasternak was squeezed off in the Mesaverde Formation and completed in the Dakota Formation. This well is presently being evaluated to determine whether or not the Dakota is commercial. In addition, Irving Pasternak is presently drilling a Mesaverde-Dakota well pursuant to Section 6 of the Unit Agreement.

As of this date, not including the well which is being evaluated and the well which is currently being drilled, the total number of wells in the Rosa Unit is as follows:

Commercial:	
Mesaverde	24
Non-commercial:	
Mesaverde	1
Mesaverde, P&A	3
Dakota, P&A	<u>1</u>
	29

El Paso Natural Gas Company proposes to drill no wells during the calendar year 1962.

El Paso Natural Gas Company, as Unit Operator, plans to drill any offset wells required to prevent drainage of unitized substances and any other wells deemed necessary or desirable by the unit operator and the working interest owners in the affected drilling blocks.

All of the working interest owners have been contacted and this Drilling Program reflects, insofar as possible, their requests for additional drilling.

If this Drilling Program is acceptable, please signify your approval as required under Section 9 of the Unit Agreement, in the space provided on the attached sheet and return an approved copy to El Paso Natural Gas Company.

Copies of this letter are being sent to the working interest owners of the Rosa Unit.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By


Sam Smith, Manager
Land Department

SS: JBB: js

APPROVED: _____

Supervisor, United States Geological Survey
Subject to like approval by the appropriate
State Officials.

DATE: _____

APPROVED: _____

Commissioner of Public Lands
Subject to like approval by the United
States Geological Survey and the
Oil Conservation Commission.

DATE: _____

APPROVED: _____

A. H. Porter, Jr.
Oil Conservation Commission
Subject to like approval by the United
States Geological Survey and the
Commissioner of Public Lands

DATE: 6-1-62

The foregoing approvals are for the Rosa Unit 1962 Drilling Program, San Juan and Rio Arriba Counties, New Mexico.

ROSA UNIT

Working Interest Owners

**Mr. John A. Brennand
P. O. Box 1706
Santa Fe, New Mexico**

**Colorado Oil & Gas Company
Attention: Mr. Charles Titus
Denver Club Building
Denver, Colorado**

**Pan American Petroleum Corporation (12)
Attention: Mr. T. M. Curtis
P. O. Box 480
Farmington, New Mexico**

**Mr. Irving Pasternak
1402 Denver U.S. National Center
Denver 2, Colorado**

**Mr. Neville G. Penrose
1813 Fair Building
Fort Worth, Texas**

**Phillips Petroleum Company
Attention: Mr. R. F. Rood or Mr. V. H. Stone
508 Bank Building
Bartlesville, Oklahoma**

**Phillips Petroleum Company
Attention: Division Landman
Land & Geological Department
1200 Denver Club Building
Denver 2, Colorado**

**Mr. Dan R. Ponder
P. O. Box 344
El Paso, Texas**

**Mr. Frank A. Schultz
2630 Fidelity Union Tower
Dallas, Texas**

**Southern Petroleum Exploration, Inc.
Attention: Mr. Paul W. Neuenschwander
P. O. Box 192
Sistersville, West Virginia**

**Mr. J. Glenn Turner
1900 Mercantile Dallas Building
Dallas 1, Texas**

**Mr. William G. Webb
1900 Mercantile Dallas Building
Dallas 1, Texas**

El Paso Natural Gas Company

El Paso, Texas

20

April 19, 1962

132

Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
Drawer 1857
Roswell, New Mexico

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

Oil Conservation Commission
Of the State of New Mexico
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to inform you that the Application for Approval of the Tenth Participating Area for the Mesaverde Formation for the Rosa Unit, I Sec. No. 587, effective October 1, 1961, was approved as follows:

Acting Director, United States Geological Survey	March 26, 1962
Commissioner of Public Lands State of New Mexico	January 18, 1962
Oil Conservation Commission State of New Mexico	January 17, 1962

Copies of this letter are being sent to the working interest owners of the Rosa Unit.

Very truly yours,

Charles T. Richardson
Charles T. Richardson
Area Coordinator
Land Department

CTR:GWO:js

Rosa 4.2



IN REPLY REFER TO:

MAIN OFFICE 806
DEPARTMENT OF THE INTERIOR

1962 APR 15 AM 8 23
Drawer 1857
Roswell, New Mexico

133

April 13, 1962

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your application of January 17 for the tenth revision of the Mesaverde participating area for the Rosa unit agreement, San Juan and Rio Arriba Counties, New Mexico, was approved on March 23, 1962, by the Acting Director, U. S. Geological Survey, effective as of October 1, 1961.

Two approved copies of the application are enclosed. 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 app. appln)
BLM-Santa Fe (w/cy of app. appln)
Com. of Pub. Lands-Santa Fe (ltr only)
NMOCC-Santa Fe (ltr only) /

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

133

C
O
P
Y

January 18, 1962

El Paso Natural Gas Company
Box 1492
El Paso, Texas

Attention: Mr. T. W. Bittick

Re: Tenth Expansion of the
Mesaverde Participating
Area, Rosa Unit, San Juan
and Rio Arriba Counties,
New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Tenth Expansion of the Mesaverde Participating Area for the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Seven approved copies of the application are handed to Mr. James B. Bexley.

Very truly yours,

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

ALP/JEK/og

cc: U. S. Geological Survey - Roswell
Commissioner of Public Lands - Santa Fe

El Paso Natural Gas Company

El Paso, Texas

JAN 17 1962

Director
United States Geological Survey
Department of the Interior
Washington 25, D. C.

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

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

Re: Rosa Unit, I Sec. No. 587
San Juan and Rio Arriba Counties, New Mexico
APPLICATION FOR APPROVAL OF THE TENTH
EXPANDED PARTICIPATING AREA for the
Mesaverde Formation
Effective October 1, 1961

Gentlemen:

Pursuant to the provisions of Section 10 of the Rosa Unit Agreement, I Sec. No. 587, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Tenth Expansion of the Participating Area for the Mesaverde Formation, to wit:

TENTH EXPANDED PARTICIPATING AREA - Effective October 1, 1961

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 31 North, Range 5 West, N.M.P.M.</u>	
Section 8: NE/4	160.00

The proposed Tenth Expanded Participating Area for the Mesaverde Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the following described well is capable of producing unitized substances in paying quantities from the Mesaverde Formation:

The Rosa Unit #41 Well is located 1500' from the South line and 1528' from the West line of Section 5, Township 31 North, Range 5 West, Rio Arriba County, New Mexico. This well was spudded on August 11, 1961, and completed on August 27, 1961,

at a total depth of 5804'. The Point Lookout Section of the Mesaverde Formation in the intervals between 5608' - 5614', 5624' - 5636', 5690' - 5702', 5720' - 5726' was treated with a sand-water fracturing process on August 26, 1961. The well was shut-in for gauge on August 27, 1961, and after being shut-in for ten (10) days, the Mesaverde Formation was tested on September 6, 1961. Following a three (3) hour blow-down period the Mesaverde Formation gauged 3516 MCFGPD through a 3/4" choke and 5390 MCFGPD by the calculated absolute open-flow method, with an SIPC of 1156 PSIA and an SIPT of 1156 PSIA.

In support of this application, the following listed Exhibits are made a part hereof:

EXHIBIT "A"

Ownership map reflecting the boundaries of the unit and the proposed Tenth Expansion of the Mesaverde Participating Area.

EXHIBIT "B"

Geological Report on the Tenth Expansion of the Mesaverde Participating Area within the Rosa Unit.

EXHIBIT "C"

Schedule of Production for the Rosa Unit.

EXHIBIT "D"

Structural Contour Map.

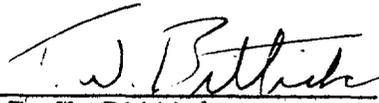
Attached hereto is Schedule X showing the proposed Tenth Expanded Participating Area for the Mesaverde Formation in the Rosa Unit Area. This Schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the percentages of ownership in each tract.

If the Tenth Expanded Participating Area of the Mesaverde Formation meets with your approval, please indicate such approval in the space provided below and return an approved copy of same for our files.

Copies of this letter and the Schedule are being sent to the working interest owners as shown on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By 
T. W. Bittick
Assistant Manager
Land Department

TWB:JBB:js
Attachments

ROSA UNIT
Working Interest Owners

Mr. John A. Brennand
P. O. Box 1706
Santa Fe, New Mexico

Colorado Oil & Gas Company
Attention: Mr. Charles Titus
Denver Club Building
Denver, Colorado

Pan American Petroleum Corporation (12)
Attention: Mr. T. M. Curtis
P. O. Box 480
Farmington, New Mexico

Mr. Irving Pasternak
Mile High Center
Denver, Colorado

Mr. Neville G. Penrose
1813 Fair Building
Fort Worth, Texas

Phillips Petroleum Company
Attention: Mr. R. F. Rood or Mr. V. H. Stone
508 Bank Building
Bartlesville, Oklahoma

Phillips Petroleum Company
Attention: Division Landman
Land & Geological Department
1200 Denver Club Building
Denver 2, Colorado

Mr. Dan R. Ponder
P. O. Box 344
El Paso, Texas

Mr. Frank A. Schultz, Jr.
2630 Fidelity Union Tower
Akard & Pacific Streets
Dallas, Texas

Southern Petroleum Exploration, Inc.
Attention: Mr. Paul W. Neuenschwander
P. O. Box 192
Sistersville, West Virginia

Mr. J. Glenn Turner
1900 Mercantile Dallas Building
Dallas 1, Texas

Mr. William G. Webb
1900 Mercantile Dallas Building
Dallas 1, Texas

APPROVED: _____
Director, United States Geological Survey
Subject to like approval by the appropriate
State Officials.

DATE: _____

APPROVED: _____
Commissioner of Public Lands
Subject to like approval by the United States
Geological Survey and the Oil Conservation
Commission.

DATE: _____

APPROVED:  _____
Oil Conservation Commission
Subject to like approval by the United States
Geological Survey and the Commissioner of
Public Lands.

DATE: 1-17-62

The foregoing approvals are for the Tenth Expansion of the Participating Area
for the Mesaverde Formation, Rosa Unit, I Sec. No. 587, San Juan and Rio Arriba
Counties, New Mexico.

SCHEDULE X
TENTH EXPANDED PARTICIPATING AREA FOR THE MESAVARDE FORMATION
ROSA UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE	
TRACT 13					
SF 078763	T-31-N, R-5-W	527.96	Royalty;	12.50%	<u>3.42188%</u>
	Sec. 5: All		Working Interest:	87.50%	
	Sec. 8: NE/4		El Paso Natural Gas Co.;	00.00%	
			ORRI;	100.00%	
			TOTAL	100.00%	
TRACT 14					
SF 078767	T-31-N, R-5-W	2518.04	Royalty;	12.50%	<u>16.32025%</u>
	Sec. 6: All		Working Interest:	87.50%	
	Sec. 7: All		El Paso Natural Gas Co.;	00.00%	
	Sec. 8: NW/4		ORRI;	100.00%	
			TOTAL	100.00%	
TRACT 18					
SF 078764	T-31-N, R-5-W	2187.30	Royalty;	12.50%	<u>14.17661%</u>
	Sec. 18: All		Working Interest:	87.50%	
	Sec. 19: E/2 E/2, NW/4 NE/4,		El Paso Natural Gas Co.;	00.00%	
	SW/4 SE/4, Lots 1, 4		ORRI;	100.00%	
	Sec. 20: SE/4		TOTAL	100.00%	
	Sec. 29: N/2 NE/4, SW/4,				
	W/2 SE/4				
	Sec. 30: E/2, Lots 1,2,3,4				
	Sec. 31: E/2, Lots 1,2,3,4				

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SCHEDULE X

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE	
TRACT 19					
Fee	<u>T-31-N, R-5-W</u> Sec. 15: Lots 2,3, SW/4 NE/4, NW/4 SE/4	152.22	Royalty; Working Interest: EI Paso Natural Gas Co.;	12.50% 87.50% 00.00%	12.50% 87.50% 00.00%
			ORRI;	100.00%	100.00%
			TOTAL		
			<u>TRACT 20</u>		
Fee	<u>T-31-N, R-5-W</u> Sec. 20: SW/4 Sec. 29: NW/4	320.00	Royalty; Working Interest: EI Paso Natural Gas Co.;	12.50% 87.50% 00.00%	12.50% 87.50% 00.00%
			ORRI;	100.00%	100.00%
			TOTAL		
			<u>TRACT 21</u>		
SF 079165	<u>T-31-N, R-5-W</u> Sec. 29: S/2 NE/4, E/2 SE/4	160.00	Royalty; Working Interest: EI Paso Natural Gas Co.;	12.50% 87.50% 00.00%	12.50% 87.50% 00.00%
			ORRI;	100.00%	100.00%
			TOTAL		
			<u>TRACT 25</u>		
E-347-33	<u>T-31-N, R-5-W</u> Sec. 32: NW/4	160.00	Royalty; Working Interest: EI Paso Natural Gas Co.;	12.5000% 76.5625% 10.9375%	12.5000% 76.5625% 10.9375%
			ORRI;	100.0000%	100.0000%
			TOTAL		

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1.03701%

2.07402%

1.03701%

SCHEDULE X

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PRESENT ACTUAL PARTICIPATION	
			OWNERSHIP	PERCENTAGE		
E-347-28	<u>T-31-N, R-5-W</u> Sec. 32: NE/4	160.00			<u>1.03701%</u>	
			Royalty;	12.50%		12.50%
			Working Interest:	87.50%		87.50%
			El Paso Natural Gas Co.;	00.00%		00.00%
	TOTAL	100.00%	100.00%			
<u>TRACT 26</u>						
E-347-32	<u>T-31-N, R-5-W</u> Sec. 32: S/2	320.00			<u>2.07403%</u>	
			Royalty;	12.500%		12.500%
			Working Interest:	66.625%		66.625%
			El Paso Natural Gas Co.;	20.875%		20.875%
	TOTAL	100.000%	100.000%			
<u>TRACT 27</u>						
SF 078772	<u>T-31-N, R-6-W</u> Sec. 1: All	1161.86			<u>7.53040%</u>	
			Royalty;	12.50%		12.50%
			Working Interest:	87.50%		87.50%
			El Paso Natural Gas Co.;	00.00%		00.00%
	TOTAL	100.00%	100.00%			
	Sec. 3: Lots 5,6,7,8,9, SE/4, E/2 SW/4, SW/4 SW/4					
			Royalty;			
			Working Interest:			
			El Paso Natural Gas Co.;			
	TOTAL					
	Sec. 4: Lots 5,6,7,8,9, N/2 SW/4, NW/4 SE/4, SE/4 SE/4					
			Royalty;			
			Working Interest:			
			El Paso Natural Gas Co.;			
	TOTAL					
<u>TRACT 29</u>						
	<u>T-32-N, R-6-W</u> Sec. 33: W/2					

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SCHEDULE X

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PRESENT ACTUAL PARTICIPATION	
			OWNERSHIP	PERCENTAGE		
E-289-37	T-31-N, R-6-W Sec. 2: Lots 6, 7, 8, S/2	346.91			<u>2.24844%</u>	
			Royalty;	12.50%		12.50%
			Working Interest: El Paso Natural Gas Co.;	85.00%		85.00%
			ORRI;	<u>2.50%</u>		<u>2.50%</u>
	TOTAL		<u>100.00%</u>	<u>100.00%</u>		
<u>TRACT 30</u>						
Unknown	T-31-N, R-6-W Sec. 2: Lot 5	9.35			<u>.00000%</u>	
			Royalty;	12.50%		00.00%
			Working Interest: L. A. Smith;	87.50%		00.00%
			ORRI;	<u>00.00%</u>		<u>00.00%</u>
	TOTAL		<u>100.00%</u>	<u>00.00%</u>		
<u>TRACT 31</u>						
Fee	T-31-N, R-6-W Sec. 3 & 4 a portion thereof designated as tract 37.	38.12			<u>.00000%</u>	
			Royalty;	12.50%		00.00%
			Working Interest: T. H. McElwain, et al;	87.50%		00.00%
			ORRI;	<u>00.00%</u>		<u>00.00%</u>
	TOTAL		<u>100.00%</u>	<u>00.00%</u>		
<u>TRACT 32</u>						
SF 078765	T-31-N, R-6-W Sec. 4: S/2 SW/4, SW/4 SE/4	2220.23			<u>14.39004%</u>	
			Royalty;	12.50%		12.50%
			Working Interest: El Paso Natural Gas Co.;	87.50%		87.50%
			ORRI;	<u>00.00%</u>		<u>00.00%</u>
	TOTAL		<u>100.00%</u>	<u>100.00%</u>		
<u>TRACT 33</u>						

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SCHEDULE X

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		
SF 078765	Continued					
	Sec. 10: Lots 1,2,3, E/2 E/2, NW/4					
	Sec. 15: Lots 1,2, E/2 SW/4, E/2					
			TRACT 33			
Fee	T-31-N, R-6-W Sec. 8: W/2 NE/4	80.00	Royalty: Working Interest: EI Paso Natural Gas Co. ; ORRI;	12.50% 87.50% 00.00% 100.00%	12.50% 87.50% 00.00% 100.00%	<u>.51851%</u>
			TRACT 34			
Fee	T-31-N, R-6-W Sec. 10: W/2 E/2	160.00	Royalty: Working Interest: EI Paso Natural Gas Co. ; ORRI;	12.50% 87.50% 00.00% 100.00%	12.50% 87.50% 00.00% 100.00%	<u>1.03701%</u>
			TRACT 35			
Fee	T-31-N, R-6-W Sec. 10: Tr. 38 Sec. 15: Tr. 38	161.52	Royalty; Working Interest: EI Paso Natural Gas Co. ; ORRI;	12.50000% 82.03125% 5.46875% 100.00000%	12.50000% 82.03125% 5.46875% 100.00000%	<u>1.04686%</u>
			TRACT 36			

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SCHEDULE X

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PRESENT ACTUAL PARTICIPATION	
			OWNERSHIP	PERCENTAGE		
TRACT 37						
SF 078771	T-31-N, R-6-W Sec. 11: A11 Sec. 14: A11 Sec. 23: A11 Sec. 26: A11	2560.00	Royalty; Working Interest; EI Paso Natural Gas Co.;	12.50% 87.50% 00.00% 100.00%	12.50% 87.50% 00.00% 100.00%	<u>16.59221%</u>
TRACT 38						
Fee	T-31-N, R-6-W Sec. 15: Tr. 39	80.00	Royalty; Working Interest; EI Paso Natural Gas Co.;	12.50% 87.50% 00.00% 100.00%	12.50% 87.50% 00.00% 100.00%	<u>.51851%</u>
TRACT 39						
SF 078766	T-31-N, R-6-W Sec. 22: E/2 Sec. 25: W/2, W/2 E/2, Lots 1,2,3,4	864.48	Royalty; Working Interest; EI Paso Natural Gas Co.;	12.50% 87.50% 00.00% 100.00%	12.50% 87.50% 00.00% 100.00%	<u>5.60298%</u>
TRACT 43						
E-289-31	T-31-N, R-6-W Sec. 15: 8.41 acres out of S/2 S/2 SW/4 SW/4	8.41	Royalty; Working Interest; EI Paso Natural Gas Co.;	12.50% 82.50% 5.00% 100.00%	12.50% 82.50% 5.00% 100.00%	<u>.05451%</u>

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SCHEDULE X

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PRESENT ACTUAL PARTICIPATION	
			OWNERSHIP	PERCENTAGE		
E-504-11	<u>T-32-N, R-6-W</u> Sec. 32: W/2	320.00	<u>TRACT 44</u>		<u>2.07403%</u>	
			Royalty;	12.50%		12.50%
			Working Interest: El Paso Natural Gas Co.;	84.50%		84.50%
			ORRI;	<u>3.00%</u>		<u>3.00%</u>
TOTAL	<u>100.00%</u>	<u>100.00%</u>				
<u>TRACT 45</u>						
E-504-13	<u>T-32-N, R-6-W</u> Sec. 32: E/2	320.00	<u>TRACT 47</u>		<u>2.07403%</u>	
			Royalty;	12.500%		12.500%
			Working Interest: El Paso Natural Gas Co.;	65.625%		65.625%
			ORRI;	<u>21.875%</u>		<u>21.875%</u>
TOTAL	<u>100.000%</u>	<u>100.000%</u>				
<u>TRACT 48</u>						
E-346-19	<u>T-32-N, R-6-W</u> Sec. 36: W/2	320.00	<u>TRACT 48</u>		<u>2.07403%</u>	
			Royalty;	12.50%		12.50%
			Working Interest: El Paso Natural Gas Co.;	87.50%		87.50%
			ORRI;	<u>00.00%</u>		<u>00.00%</u>
TOTAL	<u>100.00%</u>	<u>100.00%</u>				
<u>TRACT 49</u>						
E-346-24	<u>T-32-N, R-6-W</u> Sec. 36: E/2	320.00	<u>TRACT 49</u>		<u>2.07403%</u>	
			Royalty;	12.500%		12.500%
			Working Interest: El Paso Natural Gas Co.;	65.625%		65.625%
			ORRI;	<u>21.875%</u>		<u>21.875%</u>
TOTAL	<u>100.000%</u>	<u>100.000%</u>				

Effective October 1, 1961

SCHEDULE X

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK		PERCENTAGE COMMITTED	PRESENT ACTUAL PARTICIPATION
			OWNERSHIP	PERCENTAGE		

RECAPITULATION

Description of Lands in Participating Area:

Township 31 North, Range 5 West, NMTPM
 Sec. 8: N/2
 Sec. 20: S/2
 Sec. 5,6,7,18,19,29,30,31,32: A11

Township 31 North, Range 6 West, NMTPM
 Sec. 8: N/2
 Sec. 22: E/2
 Sec. 1,2,*3,*4,5,9,10,11,12,13,14,15,23,24,25,26: A11

Township 32 North, Range 6 West, NMTPM
 Sec. 33: W/2
 Sec. 32,36: A11

Total Number of Acres in Participating Area: 15,476.40
 Total Number of Committed Acres in Participating Area: 15,428.93

*Portion of this Acreage Not Committed to Unit.

Effective October 1, 1961