



# United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

540  
January 28, 1974

El Paso Natural Gas Company  
Attention: Mr. D. N. Canfield  
P.O. Box 1492  
El Paso, Texas 79978

Gentlemen:

Three approved copies of your 1974 plan of development for the San Juan 27-5 unit area, Rio Arriba County, New Mexico, proposing the drilling of 17 Pictured Cliffs wells and two Dakota wells, are enclosed. Such plan was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

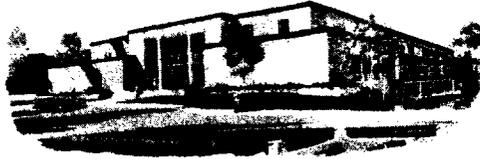
CARL C. TRAYWICK  
Acting Area Oil and Gas Supervisor

cc:  
NMOCC, Santa Fe (1tr only)  
Com. Pub. Lands, Santa Fe (1tr only)  
Durango (w/cy plan)

JAGillham:ds

State of New Mexico

TELEPHONE  
505-827-2748



540

Commissioner of Public Lands

January 22, 1974

ALEX J. ARMIJO  
COMMISSIONER

P. O. BOX 9148  
SANTA FE, NEW MEXICO

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

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
1974 DRILLING PROGRAM

ATTENTION: Mr. D. H. Canfield

Gentlemen:

The Commissioner of Public Lands has this date approved your 1974 Drilling Program for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, this program proposes the drilling of seventeen Pictured Cliffs and two Dakota 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.

Please remit a three (\$3.00) Dollar filing fee.

Very truly yours,

RAY D. GRAHAM, Director  
Oil and Gas Division

AJA/RDG/s

encls.

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

ILLEGIBLE

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
P. O. BOX 2088 - SANTA FE  
87501

January 16, 1974

I. R. TRUJILLO  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER

STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

El Paso Natural Gas Company  
P. O. Box 1492  
El Paso, Texas 79978

Attention: Mr. D. N. Canfield

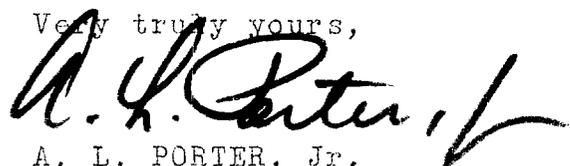
Re: 1974 Drilling Program  
San Juan 27-5 Unit,  
Rio Arriba County,  
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Drilling Program providing for the drilling of seventeen Pictured Cliffs and two Dakota wells during the calendar year 1974 for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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  
Box 1857  
Roswell, New Mexico

# El Paso Natural Gas Company

El Paso, Texas 79978

January 9, 1974

Regional Oil & 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1974 DRILLING PROGRAM

Gentlemen:

By letter dated March 28, 1973, El Paso Natural Gas Company, as Unit Operator of the San Juan 27-5 Unit, filed a Drilling Program covering the subject Unit for the calendar year 1973. This Program provided for the drilling of eight (8) Dakota wells and seventeen (17) Pictured Cliffs wells. Each of these wells was timely drilled.

Pictured Cliffs wells #81 and #148 through #160 were drilled within the existing Pictured Cliffs Participating Area; therefore, an Expansion of the Participating Area was not necessary. Dakota wells #147, #163, #164 and #165 were drilled within the Dakota Participating Area; consequently, they also did not cause an expansion of the Dakota Participating Area. The Twenty-third Expansion of the Dakota Participating Area was occasioned by completion of the #166 well, and the Twenty-fourth Expansion was occasioned by the completion of the #167, #169 and #170 wells. The Twenty-second Expansion of the Pictured Cliffs Participating Area was occasioned by the completion of the #161 well. Pictured Cliffs wells #162 and #171 have been completed, but determination has not yet been made as to whether or not they are commercial and will cause an expansion of the Pictured Cliffs Participating Area.

With the completion of the above-described wells, the total number of wells in the San Juan 27-5 Unit is as follows:

January 9, 1974

Pictured Cliffs	33
Mesaverde	23
Dual, Pictured Cliffs- Mesaverde	39
Dual, Mesaverde-Dakota	3
Dakota	66
Mesaverde, Non-commercial	1
Dakota, Non-commercial	1
	<u>166</u>

Pursuant to Section 10 of the San Juan 27-5 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program providing for the drilling of the following-described wells during the calendar year 1974:

<u>Well No.</u>	<u>Drilling Block or Spacing Unit</u>	<u>Formation</u>
172	E/2 Sec. 34, T-27-N, R-5-W	Pictured Cliffs
173	E/2 Sec. 9, T-27-N, R-5-W	Pictured Cliffs
174	W/2 Sec. 7, T-27-N, R-5-W	Pictured Cliffs
175	E/2 Sec. 7 T-27-N, R-5-W	Pictured Cliffs
176	E/2 Sec. 8, T-27-N, R-5-W	Pictured Cliffs
177	W/2 Sec. 9, T-27-N, R-5-W	Pictured Cliffs
178	W/2 Sec. 15, T-27-N, R-5-W	Pictured Cliffs
179	E/2 Sec. 17; T-27-N, R-5-W	Pictured Cliffs
180	W/2 Sec. 17, T-27-N, R-5-W	Pictured Cliffs

January 9, 1974

<u>Well No.</u>	<u>Drilling Block or Spacing Unit</u>	<u>Formation</u>
181	W/2 Sec. 23, T-27-N, R-5-W	Pictured Cliffs
182	E/2 Sec. 23, T-27-N, R-5-W	Pictured Cliffs
183	W/2 Sec. 24, T-27-N, R-5-W	Pictured Cliffs
184	W/2 Sec. 25, T-27-N, R-5-W	Pictured Cliffs
185	E/2 Sec. 27, T-27-N, R-5-W	Pictured Cliffs
186	W/2 Sec. 18, T-27-N, R-5-W	Pictured Cliffs
187	W/2 Sec. 19, T-27-N, R-5-W	Pictured Cliffs
188	W/2 Sec. 30, T-27-N, R-5-W	Pictured Cliffs
189	E/2 Sec. 32, T-27-N, R-5-W	Dakota
190	E/2 Sec. 25, T-27-N, R-5-W	Dakota

Pictured Cliffs wells #172, #174 through #184, #186, #187 and #188 will be drilled as development wells within the existing Pictured Cliffs Participating Area. Pictured Cliffs wells #173 and #185 will be drilled on drilling blocks presently not within the existing Pictured Cliffs Participating Area, in order to extend the limits of the Participating Area. Dakota well #190 will be drilled as a development well within the existing Dakota Participating Area. Dakota well #189 will be drilled on a spacing unit presently not within the existing Dakota Participating Area, in order to extend the Participating Area.

In addition to the above wells, 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 desirable by the Unit Operator and the working interest owners.

Regional Oil and Gas Supervisor  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Four

January 9, 1974

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

If this Drilling Program is acceptable, please signify your approval as required under Section 10 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 shown on the attached sheet.

Yours very truly,



D. N. Canfield  
Manager  
Land Department  
Energy Resource Development

DNC:DM:lj  
Enclosures  
SJ 27-5 Unit 3.0

APPROVED: \_\_\_\_\_  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Commissioner of Public Lands and  
the Oil Conservation Commission

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 16, 1974

The foregoing approvals are for the proposed 1974 Drilling Program for the San Juan 27-5 Unit #140-08-001-950, Rio Arriba County, New Mexico.

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)  
Denver, Colorado

Amoco Production Company  
Farmington, New Mexico

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian of  
Nickie G. Candelaria, a minor

Paul M. Candelaria

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually  
& as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N.B.S. Corporation

Northwest Pipeline Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

PWG Partnership

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N. A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace & Mrs. James  
A. Brown, Trustees under the Last  
Will & Testament of A. W. Brown

The Wiser Oil Company

# *El Paso Natural Gas Company*

*El Paso, Texas 79978*

January 4, 1974

Regional Oil & 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
NOTICE OF COMPLETION OF  
ADDITIONAL WELLS,  
Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement #14-08-001-950 approved on August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the dates set out below that two (2) additional wells capable of producing unitized substances in commercial quantities from the Dakota Formation have been completed upon acreage committed to the subject Unit. These wells are as follows:

The San Juan 27-5 Unit #147 well, located 1025' from the North line and 800' from the East line of Section 36, Township 27 North, Range 5 West, N.M.P.M. was spudded on September 9, 1973, and completed on October 31, 1973, in the Dakota Formation at a total depth of 8541'. The Dakota Formation in the intervals of 8300', 8322', 8324', 8340', 8436', 8478', 8480' and 8510' was treated with a sand-water fracturing process on October 5, 1973. The well was shut-in on October 6, 1973, and after being shut-in

January 4, 1974

for twenty-five (25) days the well was tested on October 31, 1973, and following a three (3) hour blow-down period, the Dakota Formation gauged 3305 MCF/D through a 3/4" choke and 4618 MCF/D by the calculated absolute open-flow method, with an SIPC of 2427 psia and an SIPT of 1497 psia. The spacing unit for this well is described as the E/2 of Section 36, Township 27 North, Range 5 West, containing 320.00 acres.

The spacing unit for this well was included in the San Juan 27-5 Unit, Twenty-second Expanded Dakota Participating Area effective May 1, 1972 and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-5 Unit #163 well, located 1650' from the South line and 1190' from the West line of Section 18, Township 27 North, Range 5 West, N.M.P.M., was spudded on August 15, 1973, and completed on November 14, 1973, in the Dakota Formation at a total depth of 7677'. The Dakota Formation in the intervals of 7430', 7532', 7534', 7570', 7581', 7608', 7624' and 7646' was treated with a sand-water fracturing process on October 23, 1973. The well was shut-in on October 25, 1973, and after being shut-in for twenty (20) days the well was tested on November 14, 1973, and following a three (3) hour blow-down period, the Dakota Formation gauged 3415 MCF/D through a 3/4" choke and 3535 MCF/D by the calculated absolute open-flow method, with an SIPC of 2660 psia and an SIPT of 1267 psia. The spacing unit for this well is described as the (W/2) Lots 1, 2, 3, 4, E/2 W/2 of Section 18, Township 27 North, Range 5 West, containing 321.08 acres for Unit purposes.

The spacing unit for this well was included in the San Juan 27-5 Unit, Nineteenth Expanded Dakota Participating Area effective August 1, 1971, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

Regional Oil & Gas Supervisor  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Three

January 4, 1974

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

Yours very truly,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:DW:sn  
S.J. 27-5 Unit 4.3.1  
NM-2106, Tr. #13, #16

cc: Mr. Antonio Martinez, Executive Director  
New Mexico Oil & Gas Accounting Commission  
Post Office Box 2308  
Santa Fe, New Mexico 87501

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)  
Denver, Colorado

Amoco Production Company  
Farmington, New Mexico

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mr. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Paul M. Candelaria

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

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Colorado Oil & Gas Corporation

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General American Oil Company of Texas

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Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain,  
Individually & as Executrix of the  
Estate of T. H. McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N.B.S. Corporation

Northwest Pipeline Corporation

Northwest Production Corporation

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Mr. H. O. Pool

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Mr. M. A. Romero

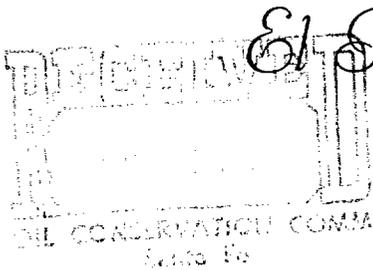
Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N.A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace & Mr. James A.  
Brown, Trustees under the Last Will  
& Testament of A. W. Brown

The Wiser Oil Company



# El Paso Natural Gas Company

El Paso, Texas 79978

November 9, 1973

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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
NOTICE OF COMPLETION OF ADDITIONAL  
WELL, Pictured Cliffs Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one (1) additional well capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation has been completed upon acreage committed to the Unit. This well is as follows:

The San Juan 27-5 Unit #157 well, located 1090' from the South line and 1600' from the East line of Section 24, Township 27 North, Range 5 West, N.M.P.M., was spudded on June 27, 1973, and completed on October 19, 1973, in the Pictured Cliffs Formation in the intervals between 3428'-3448' and 3478'-3494' was treated with a sand-water fracturing process on September 7, 1973. The well was shut-in on September 18, 1973. After being shut-in for 30 days, the well was tested on October 19, 1973, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 1485 MCF/D through a 3/4" choke and 1501 MCF/D by the calculated absolute open-flow method, with an SIPC OF 1065 psia. The spacing unit for this well is described as the E/2 of Section 24, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres.

Regional Oil and Gas Supervisor  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Two

November 9, 1973

The foregoing drilling block was included in the San Juan 27-5 Unit Sixth Expanded Participating Area of the Pictured Cliffs Formation, effective August 1, 1958 as a result of the completion of the San Juan 27-5 Unit #31 (PM) well. Therefore, the Participating Area is not enlarged.

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

Yours very truly,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:DW:sv  
S.J. 27-5 Unit 4.1.1

cc: Mr. Antonio Martinez  
Executive Director  
New Mexico Oil & Gas Accounting Commission  
Post Office Box 2308  
Santa Fe, New Mexico 87501

SAN JUAN 27-5 UN1.  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)  
Denver, Colorado

Amoco Production Company  
Farmington, New Mexico

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

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Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

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as Executrix of the Estate of T. H.  
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Mr. Forrest B. Miller

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N.B.S. Corporation

Northwest Production Corporation

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Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under  
the Last Will & Testament of A. W.  
Brown

The Wiser Oil Company

# El Paso Natural Gas Company

El Paso, Texas 79978

October 2, 1973

Regional Oil & 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
NOTICE OF COMPLETION OF ADDITIONAL  
WELLS, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement #14-08-001-950 approved on August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the dates set out below that two (2) additional wells capable of producing unitized substances in commercial quantities from the Dakota Formation have been completed upon acreage committed to the subject Unit. These wells are as follows:

The San Juan 27-5 Unit #164 well, located 840' from the North line and 1000' from the East line of Section 30, Township 27 North, Range 5 West, N.M.P.M. was spudded on June 19, 1973, and completed on September 7, 1973, in the Dakota Formation at a total depth of 7759'. The Dakota Formation in the intervals between 7542', 7610', 7642', 7648', 7681', 7700', and 7734' was treated with a sand-water fracturing process on August 22, 1973. The well was shut-in on August 24, 1973, and after being shut-in for twenty (20) days the well was tested on September 7, 1973, and following a three (3) hour blow-down period, the Dakota Formation gauged 3886 MCF/D through a 3/4" choke and 4069 MCF/D by the calculated absolute open-flow method, with an SIPC of

United States Geological Survey  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Two

2662 psia and an SIPT of 2666 psia. The spacing unit for this well is described as the E/2 of Section 30, Township 27 North, Range 5 West, containing 320.00 acres.

The spacing unit for this well was included in the San Juan 27-5 Unit, Twenty-First Expanded Dakota Participating Area effective April 1, 1972 and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-5 Unit #165 well, located 835' from the South line and 810' from the West line of Section 29, Township 27 North, Range 5 West, N.M.P.M., was spudded on July 28, 1973, and completed on September 7, 1973, in the Dakota Formation at a total depth of 7564'. The Dakota Formation in the intervals between 7330', 7430', 7436', 7488', 7512', 7528', and 7532' was treated with a sand-water fracturing process on August 25, 1973. The well was shut-in on August 27, 1973, and after being shut-in for seventeen (17) days the well was tested on September 7, 1973, and following a three (3) hour blow-down period, the Dakota Formation gauged 2396 MCF/D through a 3/4" choke and 2402 MCF/D by the calculated absolute open-flow method, with an SIPC of 2665 psia and an SIPT of 1389 psia. The spacing unit for this well is described as the W/2 of Section 29, Township 27 North, Range 5 West, containing 320.00 acres for Unit purposes.

The spacing unit for this well was included in the San Juan 27-5 Unit, Twenty-First Expanded Dakota Participating Area effective April 1, 1972, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

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

Yours very truly,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:DW:sn  
SJ 27-5 Unit 4.3.1  
NM-2102, NM-2101

cc: Mrs. Pepita O. Jeffus, Executive Director  
New Mexico Oil & Gas Accounting Commission  
Post Office Box 2308  
Santa Fe, New Mexico 87501

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)  
Denver, Colorado

Amoco Production Company  
Farmington, New Mexico

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
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Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain,  
Individually & as Executrix of the  
Estate of T. H. McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation.

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N. A., Ancillary  
Guardian of the Estate of John L.  
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The Wiser Oil Company

# El Paso Natural Gas Company

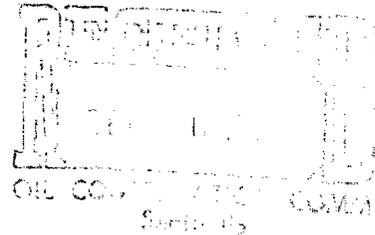
El Paso, Texas 79978

September 24, 1973

Regional Oil and 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
TWENTY-SECOND EXPANDED PARTICIPATING  
AREA, Pictured Cliffs Formation,  
Effective September 1, 1973

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one (1) additional well capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation has been completed upon acreage committed to the said San Juan 27-5 Unit. This well is as follows:

The San Juan 27-5 Unit #161 (PC) Well, located 800' from the North line and 1500' from the West line of Section 35, Township 27 North, Range 5 West, Rio Arriba County, New Mexico was spudded on June 20, 1973 and completed on August 24, 1973 as a tubingless completion in the Pictured Cliffs Formation at a total depth of 3472'. The Pictured Cliffs Formation in the intervals between 3360'-3390' was treated with a sand-water fracturing process on July 18, 1973. The well was shut-in for gauge on August 7, 1973 and after being shut-in for sixteen (16) days, the Pictured Cliffs Formation was tested on August 24, 1973 and following a three (3) hour blow-down period gauged 2150 MCF/D through a 3/4" choke and 3234 MCF/D by the calculated absolute open flow method, with an SIPC of 374 psia. The committed drilling block upon which this

September 24, 1973

well is located is described as the W/2 of Section 35,  
Township 27 North, Range 5 West, N.M.P.M., containing  
320.00 acres, more or less.

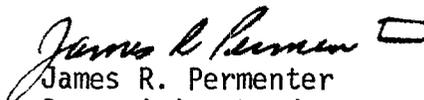
The foregoing drilling block is included in the San Juan 27-5 Unit Twenty-second Expanded Participating Area of the Pictured Cliffs Formation, effective September 1, 1973.

The completion of the San Juan 27-5 Unit #161 Well in the Pictured Cliffs Formation creates one (1) intervening drilling block described as the E/2 of Section 34, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres. Under the terms of the Unit Agreement, this intervening drilling block is admitted to the Pictured Cliffs Participating Area effective September 1, 1973 and a well must be commenced on said intervening drilling block by September 1, 1974.

Attached hereto is Schedule XXIII showing the Twenty-second Expanded Participating Area for the Pictured Cliffs Formation in the San Juan 27-5 Unit Area. This Schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the exact breakdown of percentages allocated to each tract according to the various ownerships in said tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Expanded Participating Area will become effective as of September 1, 1973.

Copies of this letter are being sent to the Working Interest Owners shown on the attached sheet.

Yours very truly,

  
James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:DW:sv  
Attachments  
S.J. 27-5, 4.1

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company  
Denver, Colorado

Amoco Production Company  
Farmington, New Mexico

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo L. Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the will of  
Gerald F. Harrington, Deceased

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison,  
Trustee

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually  
and as Executrix of the Estate of  
T. H. McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N.B.S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N.A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mrs. Evelyn Ellen Wallace & Mr. James A.  
Brown, Trustees under the last will and  
Testament of A. W. Brown

The Wiser Oil Company

# El Paso Natural Gas Company

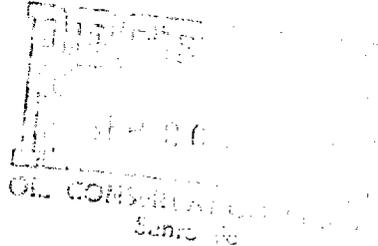
El Paso, Texas 79975

September 21, 1973

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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
NOTICE OF COMPLETION OF ADDITIONAL  
WELL, Pictured Cliffs Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one (1) additional well capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation has been completed upon acreage committed to the Unit. This well is as follows:

The San Juan 27-5 Unit #81 well, located 1000' from the North line and 1650' from the West line of Section 27, Township 27 North, Range 5 West, N.M.P.M., was spudded on June 8, 1973, and completed on August 24, 1973 in the Pictured Cliffs Formation at a total depth of 3376'. The Pictured Cliffs Formation in the intervals between 3222'-3232', 3260'-3270', 3288'-3298', 3310'-3320' was treated with a sand-water fracturing process on July 18, 1973. The well was shut-in on August 7, 1973, and after being shut-in for sixteen (16) days the well was tested on August 24, 1973, and following a three (3) hour blow down period, the Pictured Cliffs Formation gauged 714 MCF/D through a 3/4" choke and 718 MCF/D by the calculated absolute open-flow method, with an SIPC of 1006 psia. The spacing unit for this well is described as the W/2 of Section 27, Township 27 North, Range 5 West, containing 320.00 acres, for Unit purposes.

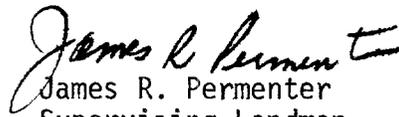
Regional Oil and Gas Supervisor  
Commissioner of Public Lands  
Oil Conservation  
Page Two

September 21, 1973

The foregoing drilling block was included in the San Juan 27-5 Unit Fourteenth Expanded Participating Area of the Pictured Cliffs Formation, effective September 1, 1960 as a result of the completion of the San Juan 27-5 Unit #56 (PM) well. Therefore, the Participating Area is not enlarged.

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

Yours very truly,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:DW:lj  
SJ 27-5 Unit 4.1.1

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission  
Post Office Box 2308  
Santa Fe, New Mexico 87501

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)  
Denver, Colorado

Amoco Production Company  
Farmington, New Mexico

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Ind. &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N.B.S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N.A., Ancillary  
Guardian of the Estate of  
John L. Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under  
the Last Will & Testament of A. W.  
Brown

The Wiser Oil Company

# El Paso Natural Gas Company

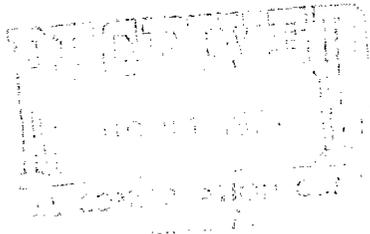
El Paso, Texas 79978

August 29, 1973

Regional Oil and 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
NOTICE OF COMPLETION OF ADDITIONAL  
WELLS, Pictured Cliffs Formation

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the dates set out below that nine (9) additional wells capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation have been completed upon acreage committed to the Unit. These wells are as follows:

The San Juan 27-5 #153 well, located 1460' from the North line and 1680' from the West line of Section 21, Township 27 North, Range 5 West, N.M.P.M., was spudded on May 17, 1973, and completed on July 6, 1973, in the Pictured Cliffs Formation at a total depth of 3480'. The Pictured Cliffs Formation in the intervals between 3354'-3374' was treated with a sand-water fracturing process on June 22, 1973. The well was shut-in on June 27, 1973, and after being shut-in for eight (8) days the well was tested on July 6, 1973, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 1000 MCF/D through a 3/4" choke and 1019 MCF/D by the calculated absolute open-flow method, with an SIPC of 724 psia. The spacing unit for this well is described as the NW/4 of Section 21, Township 27 North, Range 5 West, containing 160.00 acres, for Unit purposes.

United States Geological Survey  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Two

The San Juan 27-5 #154 well, located 1750' from the South line and 1025' from the East line of Section 21, Township 27 North, Range 5 West, N.M.P.M., was spudded on May 20, 1973, and completed on July 17, 1973, in the Pictured Cliffs Formation at a total depth of 3398'. The Pictured Cliffs Formation in the intervals between 3268-3284' was treated with a sand-water fracturing process on July 3, 1973. The well was shut-in on July 5, 1973, and after being shut-in for twelve (12) days the well was tested on July 17, 1973, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 943 MCF/D through a 3/4" choke and 961 MCF/D by the calculated absolute open-flow method, with an SIPC of 679 psia. The spacing unit for this well is described as the SE/4 of Section 21, Township 27 North, Range 5 West, containing 160.00 acres, for Unit purposes.

The foregoing drilling blocks were included in the San Juan 27-5 Unit Fifth Expanded Participating Area of the Pictured Cliffs Formation, effective July 1, 1958, as a result of the completion of the San Juan 27-5 Unit #30 (PM) Well. Therefore, the Participating Area is not enlarged.

The San Juan 27-5 #151 well, located 990' from the South line and 1550' from the East line of Section 16, Township 27 North, Range 5 West, N.M.P.M., was spudded on May 14, 1973, and completed on July 6, 1973, in the Pictured Cliffs Formation at a total depth of 3500'. The Pictured Cliffs Formation in the intervals between 3410-3430' and 3440-3455' was treated with a sand-water fracturing process on July 22, 1973. The well was shut-in on June 27, 1973, and after being shut-in for eight (8) days the well was tested on July 6, 1973, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 2946 MCF/D through a 3/4" choke and 3540 MCF/D by the calculated absolute open-flow method, with an SIPC of 721 psia. The spacing unit for this well is described as the SE/4 of Section 16, Township 27 North, Range 5 West, containing 160.00 acres, for Unit purposes.

The San Juan 27-5 #152 well, located 1500' from the North line and 1000' from the West line of Section 16, Township 27 North, Range 5 West, N.M.P.M., was spudded on May 8, 1973, and completed on July 6, 1973, in the Pictured Cliffs Formation at a total depth of 3508'. The Pictured Cliffs Formation in the intervals between 3368-3388' and 3398-3408' was treated with a sand-water fracturing process on June 22, 1973. The well was shut-in on June 26, 1973, and after being shut-in for nine (9) days the well was tested on July 6, 1973, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged

2647 MCF/D through a 3/4" choke and 2964 MCF/D by the calculated absolute open-flow method, with an SIPC of 807 psia. The spacing unit for this well is described as the NW/4 of Section 16, Township 27 North, Range 5 West, containing 160.00 acres, for Unit purposes.

The foregoing drilling blocks were included in the San Juan 27-5 Unit Sixth Expanded Participating Area of the Pictured Cliffs Formation, effective August 1, 1958, as a result of the completion of the San Juan 27-5 Unit #38-16 (PM) Well. Therefore, the Participating Area is not enlarged.

The San Juan 27-5 #148 well, located 1800' from the North line and 850' from the West line of Section 6, Township 27 North, Range 5 West, N.M.P.M., was spudded on April 27, 1973, and completed on July 2, 1973, in the Pictured Cliffs Formation at a total depth of 3415'. The Pictured Cliffs Formation in the intervals between 3268'-3300', and 3308'-3328' was treated with a sand-water fracturing process on June 15, 1973. The well was shut-in on June 20, 1973, and after being shut-in for twelve (12) days the well was tested on July 2, 1973, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 2658 MCF/D through a 3/4" choke and 2822 MCF/D by the calculated absolute open-flow method, with an SIPC of 1086 psia. The spacing unit for this well is described as Lots 3, 4, 5, SW/4 of the NW/4 of Section 6, Township 27 North, Range 5 West, containing 160.66 acres, for Unit purposes.

The foregoing drilling block was included in the San Juan 27-5 Unit Ninth Expanded Participating Area of the Pictured Cliffs Formation, effective April 1, 1959, as a result of the completion of the San Juan 27-5 Unit #45 (PM) Well. Therefore, the Participating Area is not enlarged.

The San Juan 27-5 #155 well, located 1550' from the North line and 800' from the West line of Section 22, Township 27 North, Range 5 West, N.M.P.M., was spudded on May 21, 1973, and completed on July 17, 1973, in the Pictured Cliffs Formation at a total depth of 3447'. The Pictured Cliffs Formation in the intervals between 3330'-3346' and 3356'-3372' was treated with a sand-water fracturing process on July 7, 1973. The well was shut-in on July 5, 1973, and after being shut-in for twelve (12) days the well was tested on July 17, 1973, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 3917 MCF/D through a 3/4" choke and 6069 MCF/D by the calculated absolute open-flow method, with an SIPC of 654 psia. The spacing unit for this well is described as the NW/4 of Section 22, Township 27 North, Range 5 West, containing 160.00 acres, for Unit purposes.

United States Geological Survey  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Four

The foregoing drilling block was included in the San Juan 27-5 Unit Eleventh Expanded Participating Area of the Pictured Cliffs Formation, effective August 1, 1959, as a result of the completion of the San Juan 27-5 Unit #42 (PM) Well. Therefore, the Participating Area is not enlarged.

The San Juan 27-5 #149 well, located 1840' from the South line and 1550' from the East line of Section 6, Township 27 North, Range 5 West, N.M.P.M., was spudded on May 1, 1973, and completed on July 2, 1973, in the Pictured Cliffs Formation at a total depth of 3458'. The Pictured Cliffs Formation in the intervals between 3340'-3350' and 3361'-3381' was treated with a sand-water fracturing process on June 15, 1973. The well was shut-in on June 21, 1973, and after being shut-in for eleven (11) days the well was tested on July 2, 1973, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 2511 MCF/D through a 3/4" choke and 2650 MCF/D by the calculated absolute open-flow method, with an SIPC of 1082 psia. The spacing unit for this well is described as the SE/4 of Section 6, Township 27 North, Range 5 West, containing 160.00 acres, for Unit purposes.

The foregoing drilling block was included in the San Juan 27-5 Unit Seventeenth Expanded Participating Area of the Pictured Cliffs Formation, effective January 1, 1961, as a result of the completion of the San Juan 27-5 Unit #53 (PM) Well. Therefore, the Participating Area is not enlarged.

The San Juan 27-5 #150 well, located 1725' from the North line and 1170' from the West line of Section 8, Township 27 North, Range 5 West, N.M.P.M., was spudded on May 5, 1973, and completed on July 6, 1973, in the Pictured Cliffs Formation at a total depth of 3504'. The Pictured Cliffs Formation in the intervals between 3420'-3450' was treated with a sand-water fracturing process on June 22, 1973. The well was shut-in on June 28, 1973, and after being shut-in for seven (7) days the well was tested on July 6, 1973, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 2883 MCF/D through a 3/4" choke and 3116 MCF/D by the calculated absolute open-flow method, with an SIPC of 1044 psia. The spacing unit for this well is described as the NW/4 of Section 8, Township 27 North, Range 5 West, containing 160.00 acres, for Unit purposes.

The foregoing drilling block was included in the San Juan 27-5 Unit Eighteenth Expanded Participating Area of the Pictured Cliffs Formation, effective October 1, 1961, as a result of the completion of the San Juan 27-5 Unit #65 Well. Therefore, the Participating Area is not enlarged.

United States Geological Survey  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Five

The San Juan 27-5 #156 well, located 1840' from the North line and 1600' from the East line of Section 22, Township 27 North, Range 5 West, N.M.P.M., was spudded on May 22, 1973, and completed on July 17, 1973, in the Pictured Cliffs Formation at a total depth of 3481'. The Pictured Cliffs Formation in the intervals between 3360'-3386' was treated with a sand-water fracturing process on July 3, 1973. The well was shut-in on July 9, 1973, and after being shut-in for 16 days the well was tested on July 17, 1973, and following a three (3) hour blow-down period, the Pictured Cliffs Formation gauged 2400 MCF/D through a 3/4" choke and 2589 MCF/D by the calculated absolute open-flow method, with an SIPC of 879 psia. The spacing unit for this well is described as the NE/4 of Section 22, Township 27 North, Range 5 West, containing 160.00 acres, for Unit purposes.

The foregoing drilling block was included in the San Juan 27-5 Unit Twentieth Expanded Participating Area of the Pictured Cliffs Formation, effective July 1, 1962. Therefore, the Participating Area is not enlarged.

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

Yours very truly,

  
James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:DW:sn  
S.J. 27-5 Unit 4.1.1

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas  
Accounting Commission

San Juan 27-5 Unit  
WORKING INTEREST OWNERS

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)  
Denver, Colorado

Amoco Production Company  
Farmington, New Mexico

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul Mr. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

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Central National Bank & Trust Co. of  
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Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain,  
Individually & as Executrix of  
the Estate of T. H. McElvain,  
Deceased

Mr. Forrest B. Miller

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Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N. A., Ancillary  
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Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace & Mr. James  
A. Brown, Trustees under the Last Will  
& Testament of A. W. Brown

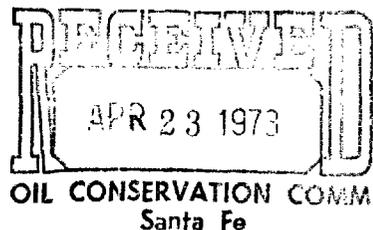
The Wiser Oil Company

# El Paso Natural Gas Company

El Paso, Texas 79978

April 18, 1973

Regional Oil & 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1973 DRILLING PROGRAM

Gentlemen:

The 1973 Drilling Program for the San Juan 27-5 Unit dated March 28, 1973, was approved by the regulatory bodies on the following dates:

United States Geological Survey	-	April 3, 1973
Commissioner of Public Lands	-	April 2, 1973
Oil Conservation Commission	-	April 5, 1973

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

Yours very truly,

*Larry A. Pridgeon*  
Larry A. Pridgeon  
Landman, Land Department  
Energy Resource Development

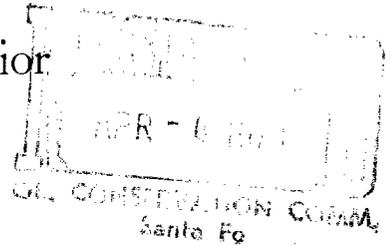
LAP:dkc  
S.J. 27-5, 3.0



United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201



In Reply Refer To:  
JAGillham/Engr.

April 3, 1973

El Paso Natural Gas Company  
Attention: Mr. D. N. Canfield  
P. O. Box 1492  
El Paso, Texas 79978

Gentlemen:

Two approved copies of your 1973 plan of development for the San Juan 27-5 unit area, Rio Arriba County, New Mexico, proposing the drilling of 17 Pictured Cliffs wells and eight Dakota wells, are enclosed. Such plan was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

(ORIG. SGD.) CARL C.

CARL C. TRAYWICK  
Acting Area Oil and Gas Supervisor

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

JAGillham:lh

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

April 5, 1973

El Paso Natural Gas Company  
Box 1492  
El Paso, Texas 79978

Attention: Mr. D. N. Canfield

Re: 1973 Drilling Program  
San Juan 27-5 Unit,  
Rio Arriba County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Drilling Program providing for the drilling of 25 wells during the calendar year 1973 for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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, New Mexico

Commissioner of Public Lands  
Santa Fe, New Mexico

State of New Mexico

340

505-827-2748



Commissioner of Public Lands

April 2, 1973

ALEX J. ARMIJO  
COMMISSIONER

P. O. BOX 1148  
SANTA FE, NEW MEXICO

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

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
1973 DRILLING PROGRAM

ATTENTION: Mr. D. N. Canfield

Gentlemen:

The Commissioner of Public Lands has this date approved your 1973 Drilling Program for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, this program proposes the drilling of seventeen Pictured Cliffs and eight Dakota 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.

Please remit a three (\$3.00) Dollar filing fee.

Very truly yours,

RAY D. GRAHAM, Director  
Oil and Gas Department

AJA/RDG/s

encls.

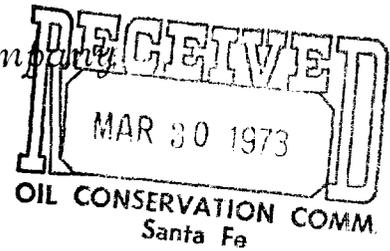
cc: USGS-Roswell, New Mexico  
OCC- Santa Fe, New Mexico

ILLEGIBLE

*El Paso Natural Gas Company*

*El Paso, Texas 79978*

March 28, 1973



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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1973 DRILLING PROGRAM

Gentlemen:

By letter dated March 20, 1972, El Paso Natural Gas Company, as Unit Operator of the San Juan 27-5 Unit, filed a Drilling Program covering the subject Unit for the calendar year 1972. This Program provided for the drilling of ten (10) Dakota wells and three (3) Pictured Cliffs wells. Each of these wells was timely drilled.

Pictured Cliffs wells #134, #135, and #136 were drilled within the existing Pictured Cliffs Participating Area; therefore, an Expansion of the Participating Area was not necessary. Dakota wells #137, #138, and #139 were drilled within the Dakota Participating Area; consequently, they also did not cause an Expansion of the existing Participating Area. The Twenty-First Expansion of the Dakota Participating Area was occasioned by completion of the #140 and #141 wells; and the Twenty-Second Expansion was occasioned by the completion of the #142, #143, #144, #145, and #146 wells.

With the completion of the above-described wells, the total number of wells in the San Juan 27-5 Unit is as follows:

March 28, 1973

Pictured Cliffs	16
Mesaverde	23
Dual, Pictured Cliffs-Mesaverde	39
Dual, Mesaverde-Dakota	3
Dakota	58
Mesaverde, Non-commercial	1
Dakota, Non-commercial	1
	<u>141</u>

Pursuant to Section 10 of the San Juan 27-5 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program providing for the drilling of the following-described wells during the calendar year 1973:

	<u>Well No.</u>	<u>Location</u>	<u>Formation</u>
1.	81	NW/4 Sec. 27, T-27-N, R-5-W	Pictured Cliffs
2.	148	NW/4 Sec. 6, T-27-N, R-5-W	Pictured Cliffs
3.	149	SE/4 Sec. 6, T-27-N, R-5-W	Pictured Cliffs
4.	150	NW/4 Sec. 8, T-27-N, R-5-W	Pictured Cliffs
5.	151	SE/4 Sec. 16, T-27-N, R-5-W	Pictured Cliffs
6.	152	NW/4 Sec. 16, T-27-N, R-5-W	Pictured Cliffs
7.	153	NW/4 Sec. 21, T-27-N, R-5-W	Pictured Cliffs
8.	154	SE/4 Sec. 21, T-27-N, R-5-W	Pictured Cliffs
9.	155	NW/4 Sec. 22, T-27-N, R-5-W	Pictured Cliffs
10.	156	NE/4 Sec. 22, T-27-N, R-5-W	Pictured Cliffs

United States Geological Survey  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Three

March 28, 1973

<u>Well No.</u>	<u>Location</u>	<u>Formation</u>
11. 157	SE/4 Sec. 24, T-27-N, R-5-W	Pictured Cliffs
12. 158	SE/4 Sec. 25, T-27-N, R-5-W	Pictured Cliffs
13. 159	SE/4 Sec. 35, T-27-N, R-5-W	Pictured Cliffs
14. 160	NW/4 Sec. 31, T-27-N, R-5-W	Pictured Cliffs
15. 161	NW/4 Sec. 35, T-27-N, R-5-W	Pictured Cliffs
16. 162	SE/4 Sec. 27, T-27-N, R-5-W	Pictured Cliffs
17. 171	SW/4 Sec. 10, T-27-N, R-5-W	Pictured Cliffs
18. 147	E/2 Sec. 36, T-27-N, R-5-W	Dakota
19. 163	W/2 Sec. 18, T-27-N, R-5-W	Dakota
20. 164	E/2 Sec. 30, T-27-N, R-5-W	Dakota
21. 165	W/2 Sec. 29, T-27-N, R-5-W	Dakota
22. 166	E/2 Sec. 31, T-27-N, R-5-W	Dakota
23. 167	W/2 Sec. 32, T-27-N, R-5-W	Dakota
24. 169	S/2 Sec. 33, T-27-N, R-5-W	Dakota
25. 170	S/2 Sec. 34, T-27-N, R-5-W	Dakota

March 28, 1973

Pictured Cliffs wells #81, #148, #149, #150, #151, #152, #153, #154, #155, #156, #157, #158, #159, and #160 will be drilled as development wells within the existing Pictured Cliffs Participating Area. Pictured Cliffs wells #161, #162, and #171 will be drilled on drilling blocks presently not within the existing Pictured Cliffs Participating Area, in order to extend the limits of the Participating Area. Dakota wells #147, #163, #164, and #165 will be drilled as development wells within the existing Dakota Participating Area. Dakota wells #166, #167, #169, and #170 will be drilled on spacing units presently not within the existing Dakota Participating Area, in order to extend the Participating Area.

In addition to the above wells, 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 desirable by the Unit Operator and the working interest owners.

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

If this Drilling Program is acceptable, please signify your approval as required under Section 10 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 shown on the attached sheet.

Yours very truly,

*D N Canfield*

D. N. Canfield  
Manager  
Land Department  
Energy Resource Development

DNC:LAP:nja  
Enclosures  
S.J. 27-5 Unit 3.0

APPROVED: \_\_\_\_\_  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Commissioner of Public Lands and  
the Oil Conservation Commission

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

DATE: August 5, 1973

The foregoing approvals are for the proposed 1973 Drilling Program for the San Juan 27-5 Unit #14-08-001-950, Rio Arriba County, New Mexico.

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)  
Denver, Colorado

Amoco Production Company  
Farmington, New Mexico

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N. A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace & Mr. James A.  
Brown, Trustees under the Last Will &  
Testament of A. W. Brown

The Wiser Oil Company

El Paso Natural Gas Company

54

El Paso, Texas 79978

March 14, 1973



Regional Oil & 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
TWENTY-SECOND EXPANDED PARTICIPATING  
AREA, Dakota Formation, Effective  
May 1, 1972

Gentlemen:

The captioned Expansion was approved by the Regulatory Agencies on the dates indicated:

United States Geological Survey - February 16, 1973  
Commissioner of Public Lands - February 1, 1973  
Oil Conservation Commission - February 5, 1973

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

Yours very truly,

*Larry A. Pridgeon*

Larry A. Pridgeon  
Landman  
Land Department  
Energy Resource Development

LAP:lj  
SJ 27-5 Unit 4.3

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission



# United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

February 16, 1973

El Paso Natural Gas Company  
Attention: Mr. James R. Fermenter  
P.O. Box 1492  
El Paso, Texas 79999

Gentlemen:

Your application of January 29, 1973, requesting approval of the twenty-second revision of the Dakota participating area for the San Juan 27-5 unit agreement, Rio Arriba County, New Mexico, No. 14-08-001-950, was approved on February 16, 1973, by the Acting Oil and Gas Supervisor, U. S. Geological Survey, effective as of May 1, 1972.

The twenty-second revision adds 1,920 acres described as the N $\frac{1}{2}$  sec. 33, the N $\frac{1}{2}$  sec. 34, all of secs. 35 and 36, all in T. 27 N., R. 5 W., N.M.P.M., which enlarges the Dakota participating area to 21,403.99 acres. Such revision is based on the information obtained by the completion of the following unit wells:

<u>Well No.</u>	<u>Location</u> <u>T. 27 N., R. 5 W.</u>	<u>Dakota Interval</u>	<u>Completion Date</u>	<u>Calculated Potential, MCFD</u>
142	NE $\frac{1}{2}$ sec. 33	7,480-7,650	5-4-72	2,710
143	NE $\frac{1}{2}$ sec. 34	7,514-7,702	5-5-72	2,185
144	SW $\frac{1}{2}$ sec. 35	7,586-7,792	5-15-72	1,891
145	NE $\frac{1}{2}$ sec. 35	7,622-7,846	5-15-72	1,849
146	SW $\frac{1}{2}$ sec. 36	8,200-8,416	5-15-72	2,092

Copies of the approved application are being distributed to the appropriate Federal offices and two approved copies are returned herewith. You are requested to furnish the State of New Mexico and all other interested parties with appropriate evidence of this approval.

Sincerely yours,

CARL C. TRAYNICK  
Acting Area Oil and Gas Supervisor

cc:  
Regional Mgr., Denver (ltr only)  
Washington (w/cy appln)  
Durango (w/cy appln)  
BLM, Santa Fe (ltr only)  
NMOCC, Santa Fe (ltr only)  
Com. Pub. Lands, Santa Fe (ltr only)

**ILLEGIBLE**

JGillham:ds

**OIL CONSERVATION COMMISSION**

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

February 3, 1973

El Paso Natural Gas Company  
Box 1492  
El Paso, Texas 79999

Attention: Mr. James R. Permenter

Re: Twenty-Second Expanded Dakota  
Participating Area, San Juan  
27-5 Unit, Rio Arriba County,  
New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Twenty-Second Expanded Participating Area, Dakota Formation, for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Five approved copies of the expansion are being forwarded to the United States Geological Survey, Roswell, and two copies are being returned to the Commissioner of Public Lands.

Very truly yours,

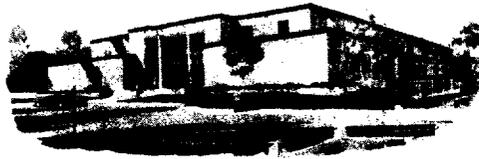
A. L. PORTER, Jr.  
Secretary-Director

ALP/JEL/og

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

# State of New Mexico

TELEPHONE  
505-827-2748



## Commissioner of Public Lands

February 1, 1973

ALEX J. ARMIJO  
COMMISSIONER

P. O. BOX 1148  
SANTA FE, NEW MEXICO

El Paso Natural Gas Company  
P. O. Box 1492  
El Paso, Texas 79970

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico,  
APPLICATION FOR APPROVAL OF THE  
TWENTY-SECOND EXPANDED PARTICIPATING  
AREA, Dakota Formation, Effective  
May 1, 1972

ATTENTION: Mr. James R. Permenter

Gentlemen:

The Commissioner of Public Lands has this date approved the Twenty-Second Participating Area, Dakota Formation, for the San Juan 27-5 Unit, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are handing all eight (8) copies to the Oil Conservation Commission for their approval. After they approve two copies should be returned to the Commissioner of Public Lands, one copy should be retained by them and five (5) copies should be forwarded to the United States Geological Survey at Roswell for their consideration. After approval by the United States Geological Survey, two (2) copies should be returned to El Paso.

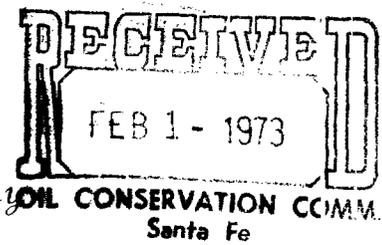
Very truly yours,

JACK PIERCE, Assistant Director  
Oil and Gas Department

AJA/JP/s

cc:

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



El Paso Natural Gas Company

El Paso, Texas 79999

January 30, 1973

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

Re: San Juan 27-5 Unit #14-08-001-950,  
Rio Arriba County, New Mexico,  
APPLICATION FOR APPROVAL OF THE  
TWENTY-SECOND EXPANDED PARTICIPATING  
AREA, Dakota Formation, Effective  
May 1, 1972

Gentlemen:

We are enclosing for your approval eight (8) copies of an Application for Approval of the Twenty-second Expanded Participating Area of the Dakota Formation for the referenced Unit.

If this Application meets with your approval, please execute all copies and forward them to the Oil Conservation Commission for its approval and execution. After this Application has been signed by the Commissioner of Public Lands and the Oil Conservation Commission, the Commissioner of Public Lands should retain two (2) copies for his file and the Oil Conservation Commission should retain one (1) copy for its file, and five (5) copies should be forwarded to the United States Geological Survey in Roswell, New Mexico, for its approval and further handling. After this Application has been approved and signed by the United States Geological Survey, two (2) copies should be returned to El Paso.

Yours very truly,

*James R. Permenter*

James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:CTR:lj  
Enclosures

cc: Regional Oil & Gas Supervisor  
United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 88201

✓  
Oil Conservation Commission  
State of New Mexico  
Post Office Box 2088  
Santa Fe, New Mexico 37501

# El Paso Natural Gas Company

El Paso, Texas 79999

January 29, 1973

Regional Oil & 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: San Juan 27-5 Unit #14-08-001-950,  
Rio Arriba County, New Mexico,  
APPLICATION FOR APPROVAL OF THE  
TWENTY-SECOND EXPANDED PARTICIPATING  
AREA, Dakota Formation, Effective  
May 1, 1972

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement #14-08-001-950, approved on August 31, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Twenty-second Expanded Participating Area for the Dakota formation, to wit:

TWENTY-SECOND EXPANDED PARTICIPATING AREA - Effective May 1, 1972

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 27 North, Range 5 West, N.M.P.M.</u>	
Section 33: N/2	320.00
Section 34: N/2	320.00
Section 35: All	640.00
Section 36: All	640.00
TOTAL	<u>1,920.00</u>

This proposed Twenty-second Revision of the Participating Area for the Dakota formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the following Dakota wells, which

JAN 31 1973  
RECEIVED

January 29, 1973

were completed outside the limits of the existing Dakota Participating Area, prove these lands to be capable of producing unitized substances in paying quantities from the Dakota formation, and brings such lands into participation on an inference basis. Production from these wells was also observed for a number of months, which further served to substantiate the commerciality thereof. These wells are as follows:

The San Juan 27-5 Unit #142 Well is located 990' from the North line and 1460' from the East line of Section 33, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on March 10, 1972, and completed on April 24, 1972, in the Dakota formation at a total depth of 7676'. The Dakota formation in the intervals between 7480'-7486', 7580'-7586', 7644'-7650' was treated with a sand-water fracturing process on April 19 and 21, 1972. The Dakota formation was shut-in on April 24, 1972, and after being shut-in for eleven (11) days the Dakota formation was tested on May 4, 1972, and following a three (3) hour blow-down period, gauged 2618 MCFGPD through a 3/4" choke and 2710 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2564 psia and an SIPT of 2054 psia.

The San Juan 27-5 Unit #143 Well is located 1460' from the North line and 1460' from the East line of Section 34, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on February 27, 1972, and completed on April 26, 1972, in the Dakota formation at a total depth of 7722'. The Dakota formation in the intervals between 7514'-7526', 7622'-7632', 7660'-7668', 7692'-7702' was treated with a sand-water fracturing process on April 24, 1972. The Dakota formation was shut-in on April 27, 1972, and after being shut-in for nine (9) days the Dakota formation was tested on May 5, 1972, and following a three (3) hour blow-down period, gauged 2130 MCFGPD through a 3/4" choke and 2185 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2587 psia and an SIPT of 1732 psia.

The San Juan 27-5 Unit #144 Well is located 1650' from the South line and 1840' from the West line of Section 35, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on February 17, 1972, and completed on April 29, 1972, in the Dakota formation at a total depth of 7814'. The Dakota formation in the intervals between 7586'-7592',

January 29, 1973

7694'-7700', 7764'-7770', 7786'-7792' was treated with a sand-water fracturing process on April 28, 1972. The Dakota formation was shut-in for retest (was initially tested on May 15, 1972) on July 10, 1972, and after being shut-in for ten (10) days, the Dakota formation was tested on July 20, 1972, and following a three (3) hour blow-down period, gauged 1860 MCFGPD through a 3/4" choke and 1891 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2581 psia and an SIPT of 2155 psia.

The San Juan 27-5 Unit #145 Well is located 800' from the North line and 800' from the East line of Section 35, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on February 5, 1972, and completed on May 1, 1972, in the Dakota formation at a total depth of 7900'. The Dakota formation in the intervals between 7622'-7634', 7670'-7676', 7737'-7743', 7754'-7766', 7803'-7809', 7834'-7846' was treated with a sand-water fracturing process on April 30, 1972. The Dakota formation was shut-in on May 2, 1972, and after being shut-in for thirteen (13) days, the Dakota formation was tested on May 15, 1972, and following a three (3) hour blow-down period, gauged 1696 MCFGPD through a 3/4" choke and 1849 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2547 psia and SIPT of 1711 psia.

San Juan 27-5 Unit #146 Well is located 890' from the South line and 840' from the West line of Section 36, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on March 22, 1972, and completed on May 4, 1972, in the Dakota formation at a total depth of 8469'. The Dakota formation in the intervals between 8200'-8208', 8244'-8252', 8332'-8340', 8380'-8388', 8408'-8416' was treated with a sand-water fracturing process on May 3, 1972. The Dakota formation was shut-in on May 5, 1972, and after being shut-in for ten (10) days, the Dakota formation was tested on May 15, 1972, and following a three (3) hour blow-down period, gauged 1718 MCFGPD through a 3/4" choke and 2092 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2470 psia and an SIPT of 1262 psia.

In support of this application the following listed Exhibits are made a part hereof:

Regional Oil & Gas Supervisor  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Four

January 29, 1973

EXHIBIT "A"

Ownership map reflecting the boundaries of the Unit and the proposed Twenty-second Expanded Participating Area of the Dakota formation within the San Juan 27-5 Unit.

EXHIBIT "B"

Geological Report on the Twenty-second Expanded Participating Area of the Dakota formation within the San Juan 27-5 Unit.

EXHIBIT "C"

Plate No. 1: San Juan 27-5 Dakota Structure Map  
Plate No. 2: San Juan 27-5 Dakota Isopach Map

EXHIBIT "D"

Table 1: Schedule of San Juan 27-5 Unit Dakota production and deliverability.

Attached hereto is Schedule XXIII showing the proposed Twenty-second Expanded Participating Area for the Dakota formation in the San Juan 27-5 Unit Area. This Schedule describes the Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the percentages of ownership in the tracts.

If this Twenty-second Expanded Participating Area of the Dakota formation meets with your approval, please indicate such approval in the space provided on the attached sheet and return an approved copy hereof for our files.

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

Yours very truly,

*James R. Permenter*

James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

Secretary-Director

NEW MEXICO OIL CONSERVATION COMMISSION  
JRP:CTR:lj  
Enclosures  
SJ 27-5 Unit 4.3, TR.#14,  
NM-2100, NM-2005, NM-6850

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission

February 1, 1973  
*Al H. ...*  
SALES

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)  
Denver, Colorado

Amoco Production Company  
Farmington, New Mexico

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulgoia C. Candelaria

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of Nickie G. Candelaria, a minor

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Mr. J. Fidel Candelaria

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Central National Bank & Trust Co. of  
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Mr. Forrest B. Miller

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Mr. M. A. Romero

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Texas Commerce Bank N.A., Ancillary  
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Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under  
the Last Will & Testament of A. W.  
Brown

The Wiser Oil Company

# El Paso Natural Gas Company

El Paso, Texas 79999

September 15, 1972

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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
TWENTY-FIRST EXPANDED PARTICIPATING  
AREA, Dakota Formation, Effective  
April 1, 1972

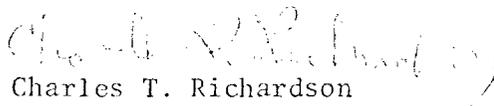
Gentlemen:

The captioned Expansion was approved by the Regulatory Bodies on the dates indicated:

United States Geological Survey	-	September 12, 1972
Commissioner of Public Lands	-	August 29, 1972
Oil Conservation Commission	-	August 31, 1972

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

Yours very truly,

  
Charles T. Richardson  
Senior Landman  
Land Department  
Energy Resource Development

CTR:lj  
SJ 27-5 Unit 4.3

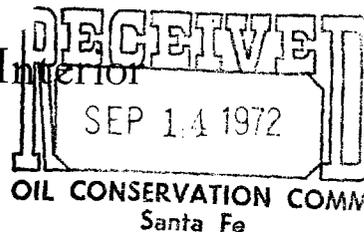
cc: Mrs. Pepita O. Jeffus, Executive  
Director, New Mexico Oil & Gas  
Accounting Commission  
P. O. Box 2308  
Santa Fe, New Mexico 87501



United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201



September 12, 1972

El Paso Natural Gas Company  
P. O. Box 1492  
El Paso, Texas 79978

Attention: Mr. James R. Permenter

Gentlemen:

Your application of August 16, 1972, requesting approval of the twenty-first revision of the Dakota participating area for the San Juan 27-5 unit agreement, Rio Arriba County, New Mexico, No. 14-08-001-950 was approved on September 12, 1972, by the Oil and Gas Supervisor, U. S. Geological Survey, effective as of April 1, 1972.

The twenty-first revision embracing all of sec. 29 and the E $\frac{1}{2}$  sec. 30 all in T. 27 N., R. 5 W., N.M.P.M., enlarges the Dakota participating area from 18,523.99 acres to 19,483.99 acres. Such revision is based on unit well Nos. 140 in the NE $\frac{1}{4}$  sec. 29 and 141 in the SW $\frac{1}{4}$  sec. 30. Well No. 140 was completed August 24, 1972, for a calculated open flow potential of 3,383 MCFGPD from the Dakota interval 7,440 to 7,648 feet and well No. 141 was completed August 26, 1972, from the Dakota interval 7,280 to 7,492 feet for a calculated open flow potential of 4,512 MCFGPD.

Copies of the approved application are being distributed to the appropriate Federal offices and two approved copies are returned herewith. You are requested to furnish the State of New Mexico and all other interested parties with appropriate evidence of this approval.

Sincerely yours,

(ORIG. SGL) N. O. FREDERICK

N. O. FREDERICK  
Area Oil and Gas Supervisor

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

JAGillham:lh

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

August 31, 1972

*540*

El Paso Natural Gas Company  
Box 1492  
El Paso, Texas 79978

Attention: Mr. James R. Permenter

Re: Twenty-First Expanded  
Dakota Participating  
Area, San Juan 27-5  
Unit, Rio Arriba County,  
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Twenty-First Revision of the Participating Area for the Dakota Formation for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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

Very truly yours,

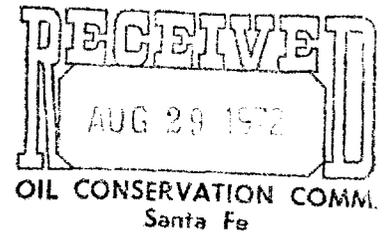
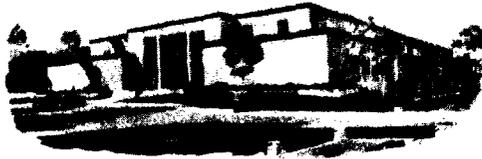
A. L. PORTER, Jr.  
Secretary-Director

ALP/JEK/og

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

C  
O  
P  
Y

State of New Mexico



Commissioner of Public Lands

August 29, 1972

ALEX J. ARMIJO  
COMMISSIONER

P. O. BOX 1148  
SANTA FE, NEW MEXICO

El Paso Natural Gas Company  
P. O. Box 1492  
El Paso, Texas 79978

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
TWENTY-FIRST EXPANDED PARTICIPATING  
AREA, Dakota Formation, effective  
April 1, 1972

ATTENTION: Mr. James R. Permenter

Gentlemen:

The Commissioner of Public Lands has this date approved the Twenty-First Expanded Participating Area, Dakota Formation, for the San Juan 27-5 Unit, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are handing all eight (8) copies to the Oil Conservation Commission for their approval. After they approve two copies should be returned to the Commissioner of Public Lands, one copy should be retained by them and five (5) copies should be forwarded to the United States Geological Survey at Roswell for their consideration. After approval by the United States Geological Survey, two (2) copies should be returned to El Paso.

We have attached a copy of the Exhibit "A" to each of the eight copies of the Twenty-First Expanded Participating Area and are returning five copies of the Exhibit surplus to our need.

Very truly yours,

RAY D. GRAHAM, Director  
Oil and Gas Department

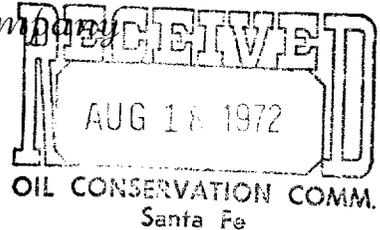
AJA/RDG/s  
encls (5cyps of Exhibit "A")

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

*El Paso Natural Gas Company*

*El Paso, Texas* 79999

August 16, 1972



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

Re: San Juan 27-5 Unit #14-08-001-950,  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
TWENTY-FIRST EXPANDED PARTICIPATING  
AREA, Dakota Formation, effective  
April 1, 1972

Gentlemen:

We are enclosing for your approval eight (8) copies of an Application for Approval of the Twenty-first Expanded Participating Area of the Dakota Formation for the referenced Unit.

If this Application meets with your approval, please execute all copies and forward them to the Oil Conservation Commission for its approval and execution. After this Application has been signed by the Commissioner of Public Lands and the Oil Conservation Commission, the Commissioner of Public Lands should retain two (2) copies for his file and the Oil Conservation Commission should retain one (1) copy for its file, and five (5) copies should be forwarded to the United States Geological Survey in Roswell, New Mexico, for its approval and further handling. After this Application has been approved and signed by the United States Geological Survey, two (2) copies should be returned to El Paso.

Yours very truly,

*James R. Permenter*

James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:CTR:lj  
Enclosures  
SJ 27-5 Unit 4.3

cc: Regional Oil & Gas Supervisor  
United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 88201

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

COPY

# El Paso Natural Gas Company

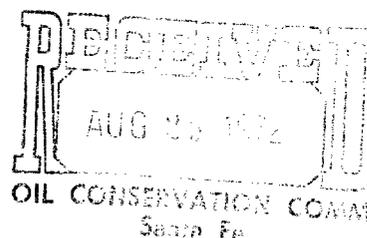
El Paso, Texas 79978

August 16, 1972

Regional Oil & 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: San Juan 27-5 Unit, #14-08-001-950,  
Rio Arriba County, New Mexico,  
APPLICATION FOR APPROVAL OF THE  
TWENTY-FIRST EXPANDED PARTICIPATING  
AREA, Dakota Formation, Effective  
April 1, 1972

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement #14-08-001-950, approved on August 31, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Twenty-first Expanded Participating Area for the Dakota formation, to wit:

TWENTY-FIRST EXPANDED PARTICIPATING AREA - Effective April 1, 1972

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 27 North, Range 5 West, N.M.P.M.</u>	
Section 29: All	640.00
Section 30: E/2	<u>320.00</u>
Total	960.00

This proposed Twenty-first Revision of the Participating Area for the Dakota formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #140 well, which was completed outside the limits of the existing Dakota Participating Area, and the #141 well, which was completed within the limits of the present

August 16, 1972

Dakota Participating Area, prove these lands to be capable of producing unitized substances in paying quantities from the Dakota formation, and brings these lands into participation on an inference basis. These wells are as follows:

The San Juan 27-5 Unit #140 Well is located 890' from the North line and 850' from the East line of Section 29, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on March 8, 1972, and completed on April 14, 1972, in the Dakota formation at a total depth of 7667'. The Dakota formation in the intervals between 7440'-7452', 7546'-7556', 7580'-7586', 7598'-7608', 7618'-7628', 7638'-7648' was treated with a sand-water fracturing process on April 14, 1972. The Dakota formation was shut-in on April 15, 1972, and after being shut-in for nine (9) days the Dakota formation was tested on April 24, 1972, and following a three (3) hour blow-down period, gauged 3280 MCFGPD through a 3/4" choke and 3383 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2604 psia and an SIPT of 2388 psia.

The San Juan 27-5 Unit #141 well is located 1460' from the South line and 1190' from the West line of Section 30, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on March 29, 1972, and completed on April 18, 1972, in the Dakota formation at a total depth of 7578'. The Dakota formation in the intervals between 7280'-7292', 7384'-7396', 7418'-7424', 7440'-7446', 7456'-7462', 7472'-7478', 7486'-7492' was treated with a sand-water fracturing process on April 18, 1972. The Dakota formation was shut-in on April 19, 1972 and after being shut-in for seven (7) days, the Dakota formation was tested on April 26, 1972, and following a three (3) hour blow-down period, gauged 4311 MCFGPD through a 3/4" choke and 4512 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2712 psia and an SIPT of 1999 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 Twenty-first Expanded Participating Area of the Dakota formation within the San Juan 27-5 Unit.

EXHIBIT "B"

Geological Report on the Twenty-first Expanded Participating Area of the Dakota formation within the San Juan 27-5 Unit.

Regional Oil & Gas Supervisor  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Three

August 16, 1972

EXHIBIT "C"

Plate No. 1: San Juan 27-5 Dakota Structure Map  
Plate No. 2: San Juan 27-5 Dakota Isopach Map

EXHIBIT "D"

Table 1: Schedule of San Juan 27-5 Unit Dakota production  
and deliverability.

Attached hereto is Schedule XXII showing the proposed Twenty-first Expanded Participating Area for the Dakota formation in the San Juan 27-5 Unit Area. This Schedule describes the Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the percentages of ownership in the tracts.

If the Twenty-first Expanded Participating Area of the Dakota formation meets with your approval, please indicate such approval in the space provided on the attached sheet and return an approved copy hereof for our files.

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

Yours very truly,

  
James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:CTR:lj  
Enclosures  
SJ 27-5 Unit 4.3

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission  
Post Office Box 2308  
Santa Fe, New Mexico 87501

APPROVED: \_\_\_\_\_  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Commissioner of Public Lands and  
the Oil Conservation Commission

DATE: \_\_\_\_\_

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

DATE: 8-29-72

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

DATE: August 31, 1972

The foregoing approvals are for the Twenty-first Expanded Participating Areas of the Dakota formation, San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico.

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)  
Denver, Colorado

Amoco Production Company  
Farmington, New Mexico

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually  
& as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N.B.S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N.A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

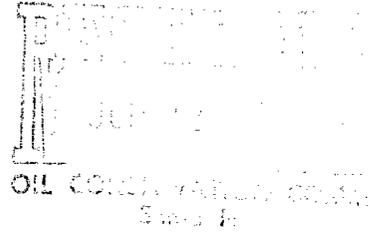
Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under  
the Last Will & Testament of  
A. W. Brown

The Wiser Oil Company

El Paso Natural Gas Company 540

El Paso, Texas 79978

June 20, 1972



Regional Oil and 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
NOTICE OF COMPLETION OF ADDITIONAL  
WELLS, Pictured Cliffs Formation

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the dates set out below that three (3) additional wells capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation have been completed upon acreage committed to the Unit. These wells are as follows:

The San Juan 27-5 Unit #134 Well, located 1600' from the North line and 1090' from the West line of Section 26, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on April 27, 1972, and completed on May 2, 1972, in the Pictured Cliffs Formation at a total depth of 3432'. The Pictured Cliffs Formation in the intervals between 3294'-3300', 3326'-3332', 3354'-3360' was treated with a sand-water fracturing process on

June 20, 1972

May 10, 1972. The well was completed as a tubingless completion on May 2, 1972, and the Pictured Cliffs Formation was shut-in on May 17, 1972. After being shut-in for eight (8) days, the well was tested on May 25, 1972, and following a three-hour blow-down period gauged 642 MCFGPD through a 3/4" choke and 646 MCFGPD by the calculated absolute open-flow method, with an SPIC of 782 psia. The committed drilling block upon which this well is located is described as the NW/4 of Section 26, Township 27 North, Range 5 West, N.M.P.M., containing 160.00 acres, for Unit purposes.

The foregoing drilling block was included in the San Juan 27-5 Unit Fourth Expanded Participating Area of the Pictured Cliffs Formation, effective August 1, 1957, as a result of the completion of the San Juan 27-5 Unit #27 (PM) Well. Therefore, the Participating Area is not enlarged.

The San Juan 27-5 Unit #135 Well, located 850' from the South line and 1500' from the East line of Section 26, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on April 20, 1972, and completed on April 27, 1972, in the Pictured Cliffs Formation at a total depth of 3523'. The Pictured Cliffs Formation in the intervals between 3390'-3400', 3410'-3420' was treated with a sand-water fracturing process on April 28, 1972. The well was completed as a tubingless completion on April 27, 1972, and the Pictured Cliffs Formation was shut-in on May 2, 1972. After being shut-in for thirteen (13) days, the Pictured Cliffs Formation was tested on May 15, 1972, and following a three-hour blow-down period gauged 2194 MCFGPD through a 3/4" choke and 2732 MCFGPD by the calculated absolute open-flow method, with an SPIC of 495 psia. The committed drilling block upon which this well is located is described as the SE/4 of Section 26, Township 27 North, Range 5 West, N.M.P.M., containing 160.00 acres, for Unit purposes.

The foregoing drilling block was included in the San Juan 27-5 Unit Sixth Expanded Participating Area of the Pictured Cliffs Formation, effective August 1, 1958, as a result of the completion of the San Juan 27-5 Unit #33 (PM) Well. Therefore, the Participating Area is not enlarged.

United States Geological Survey  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Three

June 20, 1972

The San Juan 27-5 Unit #136 Well, located 1175' from the North line and 1490' from the West line of Section 36, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on April 12, 1972, and completed on April 20, 1972, in the Pictured Cliffs Formation at a total depth of 3617'. The Pictured Cliffs Formation in the intervals between 3494'-3504', 3512'-3520' was treated with a sand-water fracturing process on April 28, 1972. The well was completed as a tubingless completion on April 20, 1972, and the Pictured Cliffs Formation was shut-in on May 2, 1972. After being shut-in for thirteen (13) days, the Pictured Cliffs Formation was tested on May 15, 1972, and following a three-hour blow-down period gauged 2496 MCFGPD through a 3/4" choke and 3466 MCFGPD by the calculated absolute open-flow method, with an SIPC of 477 psia. The committed drilling block upon which this well is located is described as the NW/4 of Section 36, Township 27 North, Range 5 West, N.M.P.M., containing 160.00 acres, for Unit purposes.

The foregoing drilling block was included in the San Juan 27-5 Unit Initial Expanded Participating Area of the Pictured Cliffs Formation, effective October 26, 1956, as a result of the completion of the San Juan 27-5 Unit #18 (PM) Well. Therefore, the Participating Area is not enlarged.

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

Yours very truly,

  
James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:CTR:nja  
S.J. 27-5 Unit 4.1.1, TR 14  
NM-2005  
NM-4940  
NM-6850

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas  
Accounting Commission

Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)  
Denver, Colorado

Amoco Production Company  
Farmington, New Mexico

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N. A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

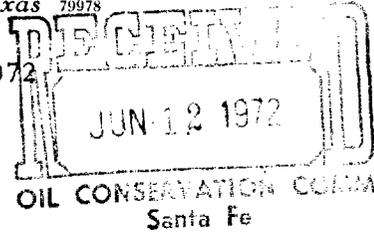
Mrs. Evelyn Ellen Wallace & Mr. James A.  
Brown, Trustees under the Last Will &  
Testament of A. W. Brown

The Wiser Oil Company

# El Paso Natural Gas Company

El Paso, Texas 79978

June 8, 1972



Regional Oil & Gas Supervisor  
United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 88201

540

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: San Juan 27-5 Unit #14-08-001-950,  
Rio Arriba County, New Mexico  
NOTICE OF COMPLETION OF ADDITIONAL  
WELLS, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement #14-08-001-950 approved on August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the dates set out below that three (3) additional wells capable of producing unitized substances in commercial quantities from the Dakota Formation have been completed upon acreage committed to the subject Unit. These wells are as follows:

The San Juan 27-5 Unit #137 Well, located 1750' from the North line and 1500' from the East line of Section 18, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on February 4, 1972 and completed on April 9, 1972, in the Dakota Formation at a total depth of 7753'. The Dakota Formation in the intervals between 7496'-7502', 7522'-7534', 7636'-7648', 7668'-7684', 7686'-7692', 7714'-7730' was treated with a sand-water fracturing process on April 8, 1972. The well was shut-in on April 9, 1972, and after being shut-in for eight (8) days, the well was tested on April 17, 1972, and following a three (3) hour blow-down period, the Dakota Formation gauged 3964 MCFGPD through a 3/4" choke, and 4123 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2623 psia and an SIPT of

June 8, 1972

# Oil Conservation Commission

Page 2

2618 psia. The committed spacing unit upon which this well is located is described as the E/2 of Section 18, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres, for Unit purposes.

The spacing unit for this well was included in the San Juan 27-5 Unit Nineteenth Expanded Dakota Participating Area effective August 1, 1971, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-5 Unit #138 Well, located 1800' from the North line and 1600' from the East line of Section 19, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on February 17, 1972 and completed on April 11, 1972, in the Dakota Formation at a total depth of 7622'. The Dakota Formation in the intervals between 7386'-7398', 7494'-7510', 7528'-7536', 7548'-7560', 7578'-7590', was treated with a sand-water fracturing process on April 9, 1972. The well was shut-in on April 11, 1972, and after being shut-in for ten (10) days, the well was tested on April 21, 1972, and following a three (3) hour blow-down period, the Dakota Formation gauged 2025 MCFGPD through a 3/4" choke, and 2082 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2697 psia and an SIPT of 2227 psia. The committed spacing unit upon which this well is located is described as the E/2 of Section 19, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres, for Unit purposes.

The spacing unit for this well was included in the San Juan 27-5 Unit, Twentieth Expanded Dakota Participating Area effective September 1, 1971, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-5 Unit #139 Well, located 1840' from the South line and 1840' from the West line of Section 20, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on February 27, 1972 and completed on March 7, 1972, in the Dakota Formation at a total depth of 7871'. The Dakota Formation in the intervals between 7624'-7632', 7722'-7734', 7760'-7768', 7778'-7790', 7802'-7814', 7822'-7830', was treated with a sand-water fracturing process on April 12, 1972. The well was shut-in on April 13, 1972, and after being shut-in for seven (7) days, the well was tested on April 20, 1972, and following a three (3) hour blow-down period, the Dakota Formation gauged 2151 MCFGPD through a 3/4" choke, and 2229 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2574 psia and an SIPT of 2562 psia. The committed spacing unit upon which this well is located is

Regional Oil & Gas Supervisor  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Three

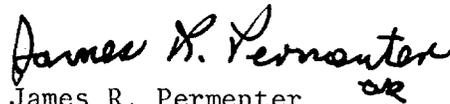
June 8, 1972

described as the W/2 of Section 20, Township 27 North,  
Range 5 West, N.M.P.M., containing 320.00 acres, for  
Unit purposes.

The spacing unit for this well was included in the San Juan 27-5  
Unit Nineteenth Expanded Dakota Participating Area effective August 1,  
1971, and the completion of this well does not warrant any further  
expansion of the Dakota Participating Area.

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

Yours very truly,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:CTR:lj  
SJ 27-5 Unit 4.3.1  
NM-2106  
NM-697

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission  
Post Office Box 2308  
Santa Fe, New Mexico 87501

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie	Mrs. Curzelia C. Montoya
Dr. W. E. Alsup	Mrs. Ophelia C. Montoya
Amoco Production Company Farmington, New Mexico	N. B. S. Corporation
Amoco Production Company (3) Denver, Colorado	Northwest Production Corporation
Mrs. Lela L. Barkley	Mr. H. O. Pool
Mrs. Evelyn G. Brown	Mr. Joe Quinn
Mr. James A. Brown	Rincon Oil & Gas Corporation
Mr. Donald R. Candelaria	Mr. M. A. Romero
Mrs. Eulogia C. Candelaria	Mrs. Mercedes Candelaria Skidmore
Mrs. Eulogia C. Candelaria, Guardian of Nickie G. Candelaria, a minor	Texas Commerce Bank N.A., Ancillary Guardian of the Estate of John L. Abercrombie
Mrs. Eulogia C. Candelaria, Guardian of Paul M. Candelaria, a minor	Mr. Robert P. Tinnin
Mr. J. Fidel Candelaria	Mrs. Evelyn Ellen Wallace & Mr. James A. Brown, Trustees under the Last Will and Testament of A. W. Brown
Mr. Orlando Candelaria	The Wiser Oil Company
Mr. Pablo Leopoldo Candelaria	
Central National Bank & Trust Co. of Des Moines, Trueesee under the Will of Gerald F. Harrington, Dec'd.	
Colorado Oil & Gas Corporation	
Mr. Sam Dazzo & Frances Joy Dazzo	
General American Oil Company of Texas	
Mr. Thomas H. Harrington	
Lt. Col. Langdon Dewey Harrison	
Mr. Ralph H. McCullough	
Mrs. Catherine B. McElvain, Individually and as Executrix of the Estate of T. H. McElvain, Deceased	
Mr. Forrest Miller	

# El Paso Natural Gas Company



Regional Oil & 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: San Juan 27-5 Unit #14-08-001-950,  
Rio Arriba County, New Mexico  
NINETEENTH AND TWENTIETH EXPANDED  
PARTICIPATING AREAS, Dakota Formation,  
Effective August 1, 1971 and  
September 1, 1971, Respectively

Gentlemen:

The captioned Expansions were approved by the Regulatory Bodies on the dates indicated:

United States Geological Survey	-	May 12, 1972
Commissioner of Public Lands	-	April 24, 1972
Oil Conservation Commission	-	April 28, 1972

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

Yours very truly,

Charles T. Richardson  
Senior Landman  
Land Department  
Energy Resource Development

CTR:lj  
SJ 27-5 Unit 4.3

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission



# United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

540  
May 12, 1972

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

Attention: Mr. James R. Fermenter

Gentlemen:

Your application of April 18, 1972, requesting approval of the nineteenth and twentieth revisions of the Dakota participating area for the San Juan 27-5 unit agreement, Rio Arriba County, New Mexico, No. 14-08-001-950, was approved on May 12, 1972, by the Regional Oil and Gas Supervisor, U. S. Geological Survey, effective as of August 1, 1971, and September 1, 1971, respectively.

The nineteenth revision adds 961.08 acres described as all of sec. 18 and the  $W\frac{1}{2}$  of sec. 20 all in T. 27 N., R. 5 W., N.M.P.M., which enlarges the Dakota participating area to 17,361.95 acres. Such revision is based on unit well Nos. 123, 126, and 131 located in the  $SW\frac{1}{4}$  of secs. 17 and 7 and the  $NE\frac{1}{4}$  sec. 20, respectively. Well No. 123 was completed August 17, 1971, for a calculated open flow potential of 3,509 MCFGPD from the Dakota interval 7,366 to 7,581 feet. Well No. 126 was completed August 20, 1971, for a calculated open flow potential of 4,937 MCFGPD from the Dakota interval 7,526 to 7,758 feet and well No. 131 was also completed August 17, 1971, for a calculated open flow potential of 3,258 MCFGPD from the Dakota interval 7,433 to 7,666.

The twentieth revision adds 962.04 acres described as all of sec. 19 and Lots 1, 2, 3, 4, and  $E\frac{1}{2}$  sec. 30 all in T. 27 N., R. 5 W., N.M.P.M., thereby enlarging the Dakota participating area to 18,523.99 acres and is based on the completion of unit well No. 133 located in the  $SW\frac{1}{4}$  of sec. 19. Such well was completed September 1, 1971, for a calculated open flow potential of 5,438 MCFGPD from the Dakota interval 7,274 to 7,474 feet.

ILLEGIBLE

Copies of the approved application are being distributed to the appropriate Federal offices and two approved copies are being returned herewith. You are requested to furnish the State of New Mexico and all other interested parties with appropriate evidence of this approval.

Sincerely yours,

(ORIG. SGD.) N. O. FREDERICK

N. O. FREDERICK  
Regional Oil and Gas Supervisor

cc:

Washington (w/cy appln.)

Durango (w/cy appln.)

BLM, Santa Fe (ltr. only)

NMOCC, Santa Fe (ltr. only)✓

Com. Pub. Lands, Santa Fe (ltr. only)

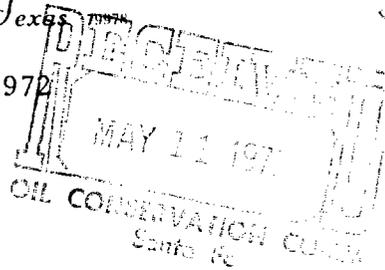
JAG:ilham:lh

ILLEGIBLE

# El Paso Natural Gas Company

El Paso, Texas

May 9, 1972



Regional Oil & 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
SEVENTEENTH AND REVISED EIGHTEENTH  
EXPANDED PARTICIPATING AREAS, Dakota  
Formation, Effective May 1, 1971 and  
June 1, 1971, Respectively

Gentlemen:

The captioned Expansions were approved by the Regulatory Bodies on the dates indicated:

United States Geological Survey	-	May 4, 1972
Commissioner of Public Lands	-	April 24, 1972
Oil Conservation Commission	-	April 28, 1972

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

Yours very truly,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:lj

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission



# United States Department of the Interior

GEOLOGICAL SURVEY

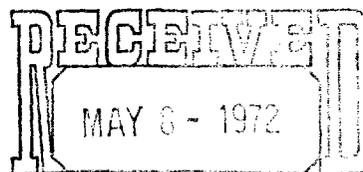
Drawer 1857  
Roswell, New Mexico 88201

540

May 4, 1972

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

Attention: Mr. James R. Permenter



OIL CONSERVATION COMM.  
Santa Fe

Gentlemen:

Your application of April 18, 1972, requesting approval of the seventeenth and eighteenth revisions of the Dakota participating area for the San Juan 27-5 unit agreement, Rio Arriba County, New Mexico, No. 14-08-001-950, was approved on May 4, 1972, by the Regional Oil and Gas Supervisor, U. S. Geological Survey, effective as of May 1, and June 1, 1971, respectively.

The seventeenth revision adds 960 acres described as all of sec. 26 and the  $3\frac{1}{4}$  sec. 27 all in T. 27 N., R. 5 W., N.M.P.M., which enlarges the Dakota participating area to 15,960.87 acres and is based on the completion of unit well Nos. 128 and 129 located in the  $SW\frac{1}{4}$  of sec. 27 and sec. 26, respectively. Unit well No. 128 was completed May 28, 1971, for a calculated open flow potential of 3,321 MCFGPD from the Dakota interval 7,444 to 7,670 feet. Unit well No. 129 was also completed May 28, 1971, for a calculated open flow potential of 3,756 MCFGPD from the Dakota interval 7,474 to 7,732 feet.

The eighteenth revision adds 640 acres described as all of sec. 25, T. 27 N., R. 5 W., N.M.P.M., which enlarges the Dakota participating area to 16,600.87 acres and is based on the completion of unit well No. 127 located in the  $SW\frac{1}{4}$  of sec. 25. Such well was completed June 29, 1971, for a calculated open flow potential of 3,678 MCFGPD from the Dakota interval 7,641 to 7,856 feet.

Copies of the approved application are being distributed to the appropriate Federal offices and two approved copies are being returned

herewith. You are requested to furnish the State of New Mexico and all other interested parties with appropriate evidence of this approval.

Sincerely yours,

(OR)

N. O. FREDERICK  
Regional Oil and Gas Supervisor

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

JAG111ham:ds

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

April 28, 1972

540

El Paso Natural Gas Company  
Box 1492  
El Paso, Texas 79999

Attention: Mr. James R. Permenter

Re: Nineteenth and Twentieth  
Expanded Dakota Participating  
Areas, San Juan 27-5 Unit,  
Rio Arriba County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Nineteenth and Twentieth Participating Areas for the Dakota Formation for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/JEK/og

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

COPY

**OIL CONSERVATION COMMISSION**

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

April 28, 1972

540

El Paso Natural Gas Company  
Box 1492  
El Paso, Texas 79978

Attention: Mr. James R. Permenter

Re: Seventeenth and Revised  
Eighteenth Expanded Dakota  
Participating Areas, San Juan  
27-5 Unit, Rio Arriba County,  
New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Seventeenth and Revised Eighteenth Expanded Participating Areas for the Dakota Formation for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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

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

April 24, 1972

El Paso Natural Gas Company  
P. O. Box 1492  
El Paso, Texas 79978

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
SEVENTEENTH, REVISED EIGHTEENTH,  
NINETEENTH AND TWENTIETH EXPANDED  
PARTICIPATING AREAS, Dakota Formation  
Effective May 1, 1971, June 1, 1971,  
August 1, 1971 and September 1, 1971,  
Respectively

ATTENTION: Mr. James R. Parmenter

Gentlemen:

The Commissioner of Public Lands has this date approved the Seventeenth and the Revised Eighteenth Expanded Participating areas, also the Nineteenth and Twentieth Expanded Participating Areas, Dakota formation, for the captioned unit, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are retaining two copies and handing (6) copies to the Oil Conservation Commission for their approval and requesting that they forward five (5) copies to the United States Geological Survey at Roswell for their consideration.

Very truly yours,

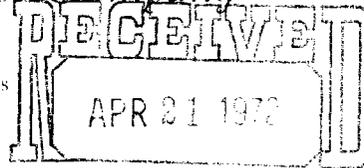
RAY D. GRAHAM, Director  
Oil and Gas Department

AJA/RDC/s

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

El Paso Natural Gas Company

El Paso, Texas 79978



April 20, 1972

OIL CONSERVATION COMM  
Santa Fe

54

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

Re: San Juan 27-5 Unit #14-08-001-950,  
Rio Arriba County, New Mexico,  
APPLICATION FOR APPROVAL OF THE  
SEVENTEENTH, REVISED EIGHTEENTH,  
NINETEENTH AND TWENTIETH EXPANDED  
PARTICIPATING AREAS, Dakota Formation  
Effective May 1, 1971, June 1, 1971,  
August 1, 1971 and September 1, 1971,  
Respectively

Gentlemen:

Enclosed are eight (8) copies of an Application for Approval of the Seventeenth and Revised Eighteenth Expanded Participating Areas for the Dakota Formation of the subject Unit. These Expansions were initially submitted on January 10, 1972, and you approved same January 19, 1972, with the Oil Conservation Commission joining in such approval on January 20, 1972. The United States Geological Survey in Roswell, New Mexico, however, returned both Expansions on March 1, 1972, and requested that the Eighteenth Expansion be revised to additionally include the E/2 of Sec. 25, T-27-N, R-5-W, N.M.P.M. This revision in the Eighteenth Expansion has been effected (the Seventeenth Expansion remains as originally submitted), and both Expansions are hereby resubmitted for approval.

We are also enclosing eight (8) copies of an Application for Approval of the Nineteenth and Twentieth Expanded Participating Areas for the Dakota Formation in the Unit for your further action.

If these Applications meet with your approval, please execute all copies and forward them to the Oil Conservation Commission for approval and execution. After these Applications have been

Commissioner of Public Lands  
Page Two

April 20, 1972

signed by the Commissioner of Public Lands and the Oil Conservation Commission, the Commissioner of Public Lands should retain two (2) copies of each Application for its files and the Oil Conservation Commission should retain one (1) copy each for its files, and five (5) copies of each Application should then be forwarded to the United States Geological Survey in Roswell, New Mexico, for approval and further handling. After the Applications have been approved and signed by the United States Geological Survey, two (2) copies should be returned to El Paso.

Yours very truly,

Original [unclear]  
JAMES R. PERMENTER

James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

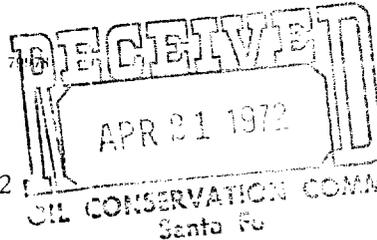
JRP:CTR:1j  
S.J. 27-5 Unit 4.3

cc: Regional Oil & Gas Supervisor  
United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 88201

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

# El Paso Natural Gas Company

El Paso, Texas



April 19, 1972

54

Regional Oil & 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: San Juan 27-5 Unit #130 Dakota Well,  
NE/4 Sec. 26, T-27-N, R-5-W, N.M.P.M.,  
Rio Arriba County, New Mexico

Gentlemen:

Enclosed is a Notice of Completion of Additional Well covering the captioned.

This Completion Notice was originally submitted on January 12, 1972, but was returned by the United States Geological Survey, Roswell, New Mexico, without action, when the Seventeenth and Eighteenth Dakota Expansions were sent back for a revision in the Eighteenth Expansion. The Eighteenth Expansion has now been revised and resubmitted for approval with the Seventeenth Expansion, and the enclosed Notice is therefore furnished as a matter pertaining to the Seventeenth Expansion.

Yours very truly,

*Charles T. Richardson*

Charles T. Richardson  
Senior Landman  
Land Department  
Energy Resource Development

CTR:lj  
S.J. 27-5 Unit 4.3.1

El Paso Natural Gas Company

El Paso, Texas 79999

APR 21 1972

April 18, 1972



Regional Oil & 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: San Juan 27-5 Unit, #14-08-001-950,  
Rio Arriba County, New Mexico,  
APPLICATION FOR APPROVAL OF THE NINETEENTH  
AND TWENTIETH EXPANDED PARTICIPATING AREAS,  
Dakota Formation, Effective August 1, 1971,  
and September 1, 1971, Respectively.

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement #14-08-001-950 approved on August 31, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Nineteenth and Twentieth Expanded Participating Areas for the Dakota formation, to wit:

NINETEENTH EXPANDED PARTICIPATING AREA - Effective August 1, 1971

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 5 West, N.M.P.M.	
Section 18: Lots 1,2,3,4, E/2 W/2, E/2 (All)	641.08
Section 20: W/2	320.00
Total	<u>961.08</u>

This proposed Nineteenth Revision of the Participating Area for the Dakota formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #123, #126 and #131 Wells,

which were completed within the limits of the existing Dakota Participating Area, prove these lands to be capable of producing unitized substances in paying quantities from the Dakota formation, and brings these lands into participation on an inference basis. These wells are as follows:

The San Juan 27-5 Unit #123 Well is located 1180' from the South line and 1465' from the West line of Section 17, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on July 25, 1971, and completed on August 6, 1971, in the Dakota formation at a total depth of 7625'. The Dakota formation in the intervals between 7366'-7372', 7388'-7400', 7492'-7504', 7532'-7538', 7548'-7560' was treated with a sand-water fracturing process on August 5, 1971. The Dakota formation was shut-in on August 6, 1971, and after being shut-in for eleven (11) days the Dakota formation was tested on August 17, 1971, and following a three (3) hour blow-down period, gauged 3393 MCFGPD through a 3/4" choke and 3509 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2647 psia and an SIPT of 2309 psia.

The San Juan 27-5 Unit #126 Well is located 1650' from the South line and 1550' from the West line of Section 7, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on July 30, 1971, and completed on August 10, 1971, in the Dakota formation at a total depth of 7776'. The Dakota formation in the intervals between 7526'-7532', 7550'-7562', 7652'-7664', 7694'-7700', 7710'-7722', 7746'-7758' was treated with a sand-water fracturing process on August 9, 1971. The Dakota formation was shut-in on August 11, 1971 and after being shut-in for nine (9) days, the Dakota formation was tested on August 20, 1971, and following a three (3) hour blow-down period gauged 4754 MCFGPD through a 3/4" choke and 4937 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2642 psia and an SIPT of 2450 psia.

The San Juan 27-5 Unit #131 Well is located 810' from the North line and 1460' from the East line of Section 20, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on July 16, 1971, and completed on July 30, 1971, in the Dakota formation at a total depth of 7700'. The Dakota formation in the intervals between 7433'-7439', 7460'-7466', 7560'-7572', 7601'-7605', 7618'-7626', 7634'-7644', 7654'-7666' was treated with a sand-water fracturing process on July 29, 1971. The Dakota formation was shut-in on July 31, 1971, and after being shut-in for seventeen (17) days, the Dakota formation was tested on August 17, 1971, and following a three (3) hour blow-down period gauged 3184 MCFGPD through a 3/4" choke and 3258 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2634 psia and an SIPT of 2371 psia.

TWENTIETH EXPANDED PARTICIPATING AREA - Effective September 1, 1971

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 5 West, N.M.P.M.	
Section 19: Lots 1,2,3,4, E/2 W/2, E/2 (A11)	641.76
Section 30: Lots 1,2,3,4, E/2 W/2 (W/2)	<u>320.28</u>
Total	962.04

April 18, 1972

This proposed Twentieth Expanded Participating Area of the Dakota formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #133 Well is capable of producing unitized substances in paying quantities from the Dakota formation. This well is as follows:

The San Juan 27-5 Unit #133 Well is located 1150' from the South line and 1150' from the West line of Section 19, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on August 8, 1971, and completed on August 18, 1971, in the Dakota formation at a total depth of 7552'. The Dakota formation in the intervals between 7274'-7280', 7344'-7350', 7372'-7384', 7412'-7418', 7432'-7438', 7450'-7456', 7468'-7474' was treated with a sand-water fracturing process on August 17, 1971. The Dakota formation was shut-in on August 18, 1971, and after being shut-in for thirteen (13) days, the Dakota formation was tested on September 1, 1971, and following a three (3) hour blow-down period gauged 5220 MCFGPD through a 3/4" choke and 5438 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2727 psia and an SIPT of 2727 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 Nineteenth and Twentieth Expanded Participating Areas of the Dakota formation within the San Juan 27-5 Unit.

EXHIBIT "B"

Geological Report on the Nineteenth and Twentieth Expanded Participating Areas of the Dakota formation within the San Juan 27-5 Unit.

EXHIBIT "C"

Plate No. 1: San Juan 27-5 Dakota Structure Map  
Plate No. 2: San Juan 27-5 Dakota Isopach Map

EXHIBIT "D"

Table 1: Schedule of San Juan 27-5 Unit Dakota production and deliverability.

Attached hereto are Schedules XX and XXI showing the proposed Nineteenth and Twentieth Expanded Participating Areas for the Dakota formation in the San Juan 27-5 Unit Area. These Schedules describe the Participating Area, show the percentage of unitized substances allocated to each unitized tract, and the percentages of ownership in the tracts.

If the Nineteenth and Twentieth Expanded Participating Areas of the Dakota formation meet with your approval, please indicate such approval

April 18, 1972

in the space provided on the attached sheet and return an approved copy hereof for our files.

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

Yours very truly,

*James R. Permenter*  
ox

James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:CTR:khs  
Enclosures  
San Juan 27-5, 4.3

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission  
Post Office Box 2308  
Santa Fe, New Mexico 87501

APPROVED: \_\_\_\_\_  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Commissioner of Public Lands and  
the Oil Conservation Commission

DATE: \_\_\_\_\_

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

DATE: April 24, 1972

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: \_\_\_\_\_

The foregoing approvals are for the Nineteenth and Twentieth Expanded Participating Areas of the Dakota formation, San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico.

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)  
Denver, Colorado

Amoco Production Company  
Farmington, New Mexico

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N. A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace & Mr. James A.  
Brown, Trustees under the Last Will &  
Testament of A. W. Brown

The Wiser Oil Company

# El Paso Natural Gas Company

El Paso, Texas 79978

APR 21 1 55 PM '72

April 18, 1972

Regional Oil & 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: San Juan 27-5 Unit #14-08-001-950,  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
SEVENTEENTH AND REVISED EIGHTEENTH  
EXPANDED PARTICIPATING AREAS, Dakota  
Formation, Effective May 1, 1971,  
and June 1, 1971, respectively

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement #14-08-001-950 approved on August 31, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Seventeenth and Revised Eighteenth Expanded Participating Areas for the Dakota formation, to wit:

SEVENTEENTH EXPANDED PARTICIPATING AREA - Effective May 1, 1971

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 27 North, Range 5 West, N.M.P.M.</u>	
Section 26: All	640.00*
Section 27: S/2	320.00*
Total	<u>960.00</u>

\*Per GLO Plat of February 18, 1884, since the Dakota Participating Area was established prior to the August 23, 1960 Resurvey.

This proposed Seventeenth Expanded Participating Area of the Dakota formation is predicated upon the determination by El Paso Natural Gas

Company, as Unit Operator, that the San Juan 27-5 Unit #128 and #129 Wells are capable of producing unitized substances in paying quantities from the Dakota formation. These wells are as follows:

The San Juan 27-5 Unit #128 Well is located 1700' from the South line and 1840' from the West line of Section 27, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on April 9, 1971, and completed on April 22, 1971, in the Dakota formation at a total depth of 7699'. The Dakota formation in the intervals between 7444'-7450', 7476'-7482', 7572'-7584', and 7658'-7670' was treated with a sand-water fracturing process on April 21, 1971. The Dakota formation was shut-in on May 17, 1971, and after being shut-in for eleven (11) days the Dakota formation was tested on May 28, 1971, and following a three (3) hour blow-down period, gauged 3199 MCFGPD through a 3/4" choke and 3321 MCFGPD by the calculated absolute open-flow method, with an SIPC of 1734 psia and an SIPT of 2029 psia.

The San Juan 27-5 Unit #129 Well is located 1550' from the South line and 810' from the West line of Section 26, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on May 7, 1971, and completed on May 20, 1971, in the Dakota formation at a total depth of 7798'. The Dakota formation in the intervals between 7474'-7486', 7510'-7526', 7600'-7616', 7649'-7657', 7680'-7688' and 7724'-7732' was treated with a sand-water fracturing process on May 19, 1971. The Dakota formation was shut-in on May 20, 1971 and after being shut-in for eight (8) days, the Dakota formation was tested on May 28, 1971, and following a three (3) hour blow-down period gauged 3620 MCFGPD through a 3/4" choke and 3756 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2659 psia and an SIPT of 2325 psia.

REVISED EIGHTEENTH EXPANDED PARTICIPATING AREA - Effective June 1, 1971

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 27 North, Range 5 West, N.M.P.M.</u>	
Section 25: All	640.00

This proposed Revised Eighteenth Expanded Participating Area of the Dakota formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #129 Well is capable of producing unitized substances in paying quantities from the Dakota formation, and has been revised in accordance with the United States Geological Survey's letter of March 1, 1972. This well is as follows:

The San Juan 27-5 Unit #127 Well is located 1750' from the South line and 900' from the West line of Section 25, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. Said well was spudded on June 3, 1971, and completed on June 14, 1971, in the Dakota formation at a total depth of 7906'. The Dakota formation in the intervals between 7641'-7649', 7659'-7667', 7768'-7780', 7816'-7824' and 7844'-7856'

was treated with a sand-water fracturing process on June 13, 1971. The Dakota formation was shut-in on June 15, 1971, and after being shut-in for fourteen (14) days, the Dakota formation was tested on June 29, 1971, and following a three (3) hour blow-down period gauged 3544 MCFGPD through a 3/4" choke and 3678 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2583 psia and an SIPT of 2582 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 Seventeenth and Revised Eighteenth Expanded Participating Areas of the Dakota formation within the San Juan 27-5 Unit.

EXHIBIT "B"

Geological Report on the Seventeenth and Revised Eighteenth Expanded Participating Areas of the Dakota formation within the San Juan 27-5 Unit.

EXHIBIT "C"

Plate No. 1: San Juan 27-5 Unit Dakota Structure Map  
Plate No. 2: San Juan 27-5 Unit Isopach Map

EXHIBIT "D"

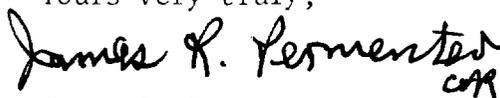
Table 1: Schedule of San Juan 27-5 Unit Dakota production and deliverability.

Attached hereto are Schedules XVIII and XIX showing the proposed Seventeenth and Revised Eighteenth Expanded Participating Areas for the Dakota formation in the San Juan 27-5 Unit Area. These Schedules describe the Participating Area, show the percentage of unitized substances allocated to each unitized tract, and the percentages of ownership in the tracts.

If the Seventeenth and Revised Eighteenth Expanded Participating Areas of the Dakota formation meet with your approval, please indicate such approval in the space provided on the attached sheet and return an approved copy hereof for our files.

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

Yours very truly,

The signature is handwritten in black ink, reading "James R. Permenter" with the initials "CAR" written below it.

James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:CTR:lj  
Enclosures  
S.J. 27-5, 4.3

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission

APPROVED: \_\_\_\_\_  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Commissioner of Public Lands and  
the Oil Conservation Commission

DATE: \_\_\_\_\_

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

DATE: April 24, 1972

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

DATE: April 28, 1972

The foregoing approvals are for the Seventeenth and Revised Eighteenth Expanded Participating Areas of the Dakota formation, San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)  
Denver, Colorado

Amoco Production Company  
Farmington, New Mexico

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N. A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

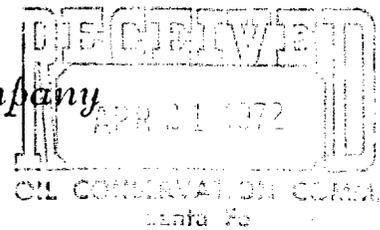
Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace & Mr. James A.  
Brown, Trustees under the Last Will &  
Testament of A. W. Brown

The Wiser Oil Company

# El Paso Natural Gas Company

El Paso, Texas 79999



April 17, 1972

Regional Oil & 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: San Juan 27-5 Unit #14-08-001-950,  
Rio Arriba County, New Mexico,  
NOTICE OF COMPLETION OF ADDITIONAL  
WELL, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement #14-08-001-950 approved on August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one (1) additional well capable of producing unitized substances in commercial quantities from the Dakota Formation has been completed upon acreage committed to the Unit. This well is as follows:

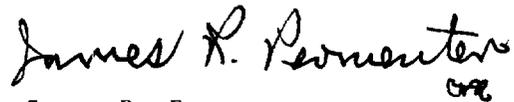
The San Juan 27-5 Unit #130 Well, located 1090' from the North line and 1840' from the East line of Section 26, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on May 20, 1971 and completed on June 1, 1971, in the Dakota Formation at a total depth of 7822'. The Dakota Formation in the intervals between 7518' - 7528', 7538' - 7544', 7642' - 7650', 7692' - 7698', 7722' - 7734', 7764' - 7770', was treated with a sand-water fracturing process on May 31, 1971. The well was shut-in on June 2, 1971, and after being shut-in for fifteen (15) days, the well was tested on June 17, 1971, and following a three (3) hour blow-down period, the Dakota Formation gauged 5431 MCFGPD through a 3/4" choke, and 5720 MCFGPD by the calculated absolute openflow method, with an SIPC of 2504 psia and an SIPT of 2439 psia. The committed

spacing unit upon which this well is located is described, as the N/2 of Section 26, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres, for Unit purposes.

The spacing unit for this well was included in the San Juan 27-5 Unit Seventeenth Expanded Dakota Participating Area effective May 1, 1971, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

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

Yours very truly,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:CTR:lj  
S.J. 27-5 Unit - 4.3.1  
NM-2005,  
NM-4940

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas  
Accounting Commission  
Post Office Box 2308  
Santa Fe, New Mexico 87501

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)  
Denver, Colorado

Amoco Production Company  
Farmington, New Mexico

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N. A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

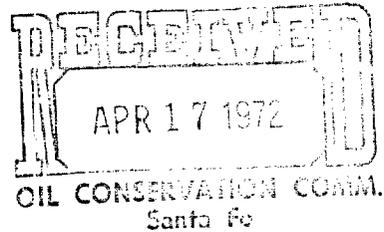
Mrs. Evelyn Ellen Wallace & Mr. James A.  
Brown, Trustees under the Last Will &  
Testament of A. W. Brown

The Wiser Oil Company

# El Paso Natural Gas Company

El Paso, Texas 79978

April 14, 1972



Regional Oil & 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1972 DRILLING PROGRAM

Gentlemen:

The 1972 Drilling Program for the San Juan 27-5 Unit dated March 20, 1972, was approved by the regulatory bodies on the following dates:

United States Geological Survey	-	April 11, 1972
Commissioner of Public Lands	-	March 23, 1972
Oil Conservation Commission	-	March 27, 1972

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

Yours very truly,

A handwritten signature in cursive script that reads "James R. Permenter".

James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:nja  
S.J. 27-5, 3.0,  
4.1, 4.3



United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

RECEIVED  
APR 13 1972  
OIL CONSERVATION COMM.  
Santa Fe

April 11, 1972

El Paso Natural Gas Company  
P.O. Box 1492  
El Paso, Texas 79978

540

Attention: Mr. D. N. Canfield

Gentlemen:

Your 1972 plan of development for the San Juan 27-5 unit area, Rio Arriba County, New Mexico, proposing the drilling of three Pictured Cliffs wells and ten 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. SENT)

N. O. FREDERICK  
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)

JWillock:ds

**OIL CONSERVATION COMMISSION**

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

540

March 27, 1972

C  
O  
P  
Y

**El Paso Natural Gas Company  
Box 1492  
El Paso, Texas 79978**

**Attention: Mr. D. N. Canfield**

**Re: 1972 Drilling Program  
San Juan 27-5 Unit,  
Rio Arriba County,  
New Mexico**

**Gentlemen:**

**This is to advise that the New Mexico Oil Conservation Commission has this date approved the Drilling Program providing for the drilling of thirteen wells during the calendar year 1972 for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.**

**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  
Box 1857  
Roswell, New Mexico**

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

**RECEIVED**

MAR 27 1972

CONSERVATION COMMISSION

March 23, 1972

540

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

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
1972 DRILLING PROGRAM

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved your 1972 Drilling Program for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, this program proposes the drilling of thirteen wells. Our 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.

Please remit a three (\$3.00) Dollar filing fee.

Very truly yours,

RAY D. GRAHAM, Director  
Oil and Gas Department

AJA/RDG/s  
encls.

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

**ILLEGIBLE**

# El Paso Natural Gas Company

El Paso, Texas 79978

March 20, 1972

RECEIVED  
MAR 23 1972  
CONSERVATION COMM.  
SANTA FE

Regional Oil & 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1972 DRILLING PROGRAM

Gentlemen:

By letter dated January 19, 1971, El Paso Natural Gas Company, as Unit Operator of the San Juan 27-5 Unit, filed a Drilling Program covering the subject Unit for the calendar year 1971. This Program provided for the drilling of eleven (11) Dakota wells during the year, however, a Supplemental Drilling Program was submitted on March 26, 1971, providing for the drilling of one (1) additional Dakota well in 1971. All of these wells were timely drilled.

Dakota wells #128 and #129 occasioned the Seventeenth Dakota Expansion, the #127 occasioned the Eighteenth Expansion, the #123, #126 and #131 occasioned the Nineteenth Expansion and the #133 occasioned the Twentieth Expansion. These Expansions are either pending final approval by the United States Geological Survey, or are being submitted to the regulatory agencies for approval. Dakota wells #79, #122, #124, #125 and #130 were drilled within the limits of the existing or proposed Dakota Participating Area and did not cause Expansions.

With the completion of the above-described wells, the total number of

March 20, 1972

wells in the San Juan 27-5 Unit is as follows:

Pictured Cliffs	13
Mesaverde	23
Dual, Pictured Cliffs-Mesaverde	39
Dual, Mesaverde-Dakota	3
Dakota	48
Mesaverde, Non-Commercial	1
Dakota, Non-Commercial	1
	<u>128</u>

Pursuant to Section 10 of the San Juan 27-5 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program providing for the drilling of the following-described wells during the calendar year 1972:

<u>Location</u>	<u>Formation</u>
1. San Juan 27-5 Unit #134 Well NW/4 Sec. 26, T-27-N, R-5-W	Pictured Cliffs
2. San Juan 27-5 Unit #135 Well SE/4 Sec. 26, T-27-N, R-5-W	Pictured Cliffs
3. San Juan 27-5 Unit #136 Well NW/4 Sec. 36, T-27-N, R-5-W	Pictured Cliffs
4. San Juan 27-5 Unit #137 Well E/2 Sec. 18, T-27-N, R-5-W	Dakota
5. San Juan 27-5 Unit #138 Well E/2 Sec. 19, T-27-N, R-5-W	Dakota
6. San Juan 27-5 Unit #139 Well W/2 Sec. 20, T-27-N, R-5-W	Dakota
7. San Juan 27-5 Unit #140 Well E/2 Sec. 29, T-27-N, R-5-W	Dakota
8. San Juan 27-5 Unit #141 Well W/2 Sec. 30, T-27-N, R-5-W	Dakota
9. San Juan 27-5 Unit #142 Well N/2 Sec. 33, T-27-N, R-5-W	Dakota
10. San Juan 27-5 Unit #143 Well N/2 Sec. 34, T-27-N, R-5-W	Dakota
11. San Juan 27-5 Unit #144 Well S/2 Sec. 35, T-27-N, R-5-W	Dakota
12. San Juan 27-5 Unit #145 Well N/2 Sec. 35, T-27-N, R-5-W	Dakota
13. San Juan 27-5 Unit #146 Well W/2 Sec. 36, T-27-N, T-5-W	Dakota

March 20, 1972

Pictured Cliffs wells #134, #135 and #136 are being drilled as development wells within the existing Pictured Cliffs Participating Area. Dakota wells #137, #138, #139 and #141 are also being drilled as development wells inside the limits of the presently proposed Dakota Participating Area. However, Dakota wells #140, #142, #143, #144, #145 and #146 will be drilled on spacing units not presently within, or currently proposed for inclusion in, the existing Dakota Participating Area, in order to extend the limits of the Participating Area.

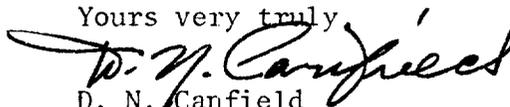
All of the working interest owners have been contacted, and this Drilling Program reflects the desires of a majority of the working interest owners. El Paso Natural Gas Company, as Unit Operator, and the working interest owners believe that all current obligations have been satisfied.

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 desirable by the Unit Operator and the working interest owners.

If this Drilling Program is acceptable, please signify your approval as required under Section 10 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 shown on the attached sheet.

Yours very truly,



D. N. Canfield  
Manager  
Land Department  
Energy Resource Development

DNC:CTR:khs  
Enclosures  
S.J. 27-5, 3.0, 4.1, 4.3

APPROVED: \_\_\_\_\_  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Commissioner of Public Lands and  
the Oil Conservation Commission

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

DATE: March 27, 1972

The foregoing approvals are for the proposed 1972 Drilling Program for the San Juan 27-5 Unit #14-08-001-950, Rio Arriba County, New Mexico.

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
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Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N. A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace & Mr. James A.  
Brown, Trustees under the Last Will &  
Testament of A. W. Brown

The Wiser Oil Company



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
Drawer 1857  
Roswell, New Mexico 88201

RECEIVED  
MARCH 1 1972  
OIL CONSERVATION COMMISSION  
SALTINE

March 1, 1972

540

El Paso Natural Gas Company  
P.O. Box 1492  
El Paso, Texas 79978

Attention: Mr. James R. Fermenter

Gentlemen:

Your application for the 17th and 18th Dakota participating area revisions for the San Juan 27-5 unit, Rio Arriba County, New Mexico, are herewith returned unapproved. Upon consideration and evaluation of the geologic and engineering data upon which the 18th revision is based, we believe that the NE $\frac{1}{4}$  sec. 25, T. 27 N., R. 5 W., is reasonably proved productive by the completion of unit well No. 127 in the SW $\frac{1}{4}$  of sec. 25 and is qualified for participation in unitized substances by the 18th revision of the participating area, for the following reasons:

1. The NE $\frac{1}{4}$  of sec. 25 is offset to the northwest by San Juan 27-5 well No. 119 which had 26 feet of net pay, directly to the east by San Juan 27-4 unit well No. 53 which had 30 feet of net pay and caused the inclusion of sec. 30, T. 27 N., R. 4 W., in the 27-4 Dakota participating area, and directly to the west by well No. 127 the 18th revision control well in the SW $\frac{1}{4}$  sec. 25 which you interpret to have 32 feet of net pay. Thus, the NE $\frac{1}{4}$  of sec. 25 is offset to the north, east, and west by participating land and will be subject to drainage from both the San Juan 27-5 unit and the San Juan 27-4 unit operations, if not included in the participating area at this time.

2. Examination of the electric logs for the San Juan 27-4 unit well No. 53 in the NE $\frac{1}{4}$  sec. 30 and the San Juan 27-5 unit well No. 127 in the SW $\frac{1}{4}$  of sec. 25 indicates that the Dakota porosity between these two points could be reasonably inferred as a continuous gas productive porosity interval with a net pay thickness of approximately 30 feet.

Please consider this matter and advise us of your decision as to the inclusion of the NE $\frac{1}{4}$  of sec. 25, T. 27 N., R. 5 W., in the 18th revision. We believe that the above described reasons for our position, and the

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production data causing your reservations as to whether such acreage is reasonably proved productive have been adequately covered by telephone, and our opinion remains firm as to the inclusion of this acreage. We have no objection to the lands proposed for inclusion by the 17th revision.

Sincerely yours,

H. O. FREDERICK  
Regional Oil and Gas Supervisor

cc:  
Mr. R. F. Lemon (ltr only)  
El Paso Natural Gas Co.

Washington  
BMC, Roswell  
Accounts  
Com. Pub. Lands, Santa Fe  
✓ NEGCC, Santa Fe

ILLEGIBLE

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 20, 1972

540

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

Attention: Mr. James R. Permenter

Re: Seventeenth and Eighteenth  
Expansions of the Dakota  
Participating Area, San  
Juan 27-5 Unit, Rio Arriba  
County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conserva-  
tion Commission has this date approved the Seventeenth and  
Eighteenth Expansions to the Dakota Participating Area for  
the San Juan 27-5 Unit, Rio Arriba County, New Mexico,  
subject to like approval by the United States Geological  
Survey and the Commissioner of Public Lands of the State of  
New Mexico.

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

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/JEK/og

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

**RECEIVED**

JAN 19 1972

January 19, 1972

OIL CONSERVATION COMM.

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

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
SEVENTEENTH & EIGHTEENTH EXPANDED  
PARTICIPATING AREAS, DAKOTA  
FORMATION, Effective May 1, 1971,  
and June 1, 1971,

ATTENTION: Mr. James R. Permenter

Gentlemen:

The Commissioner of Public Lands has this date approved the Seventeenth and Eighteenth Expanded Participating Areas, Dakota Formation, for the captioned unit, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are retaining two copies and handing (6) copies to the Oil Conservation Commission for their approval and requesting that they forward five (5) copies to the United States Geological Survey at Roswell for their consideration.

Very truly yours,

RAY D. GRAHAM, Director  
Oil and Gas Department

AJA/RDG/s

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

# El Paso Natural Gas Company

El Paso, Texas 79999

January 12, 1972

RECEIVED

JAN 17 1972

OIL CONSERVATION COMM

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

Re: San Juan 27-5 Unit, #14-08-001-950,  
Rio Arriba County, New Mexico,  
APPLICATION FOR APPROVAL OF THE SEVENTEENTH  
AND EIGHTEENTH EXPANDED PARTICIPATING AREAS,  
Dakota Formation, Effective May 1, 1971,  
and June 1, 1971, Respectively.

Gentlemen:

We are enclosing for your approval eight (8) copies of an Application for Approval of the Seventeenth and Eighteenth Expanded Participating Areas for the Dakota Formation.

If this Application meets with your approval, please execute all copies and forward them to the Oil Conservation Commission for its approval and execution. After this Application has been signed by the Commissioner of Public Lands and the Oil Conservation Commission, the Commissioner of Public Lands should retain two (2) copies for his file and the Oil Conservation Commission should retain one (1) copy for its file, and five (5) copies should be forwarded to the United States Geological Survey in Roswell, New Mexico, for its approval and further handling. After this Application has been approved and signed by the United States Geological Survey, two (2) copies should be returned to El Paso.

Yours very truly,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:CTR:khs  
Enclosures  
S.J. 27-5, 4.3

cc: Regional Oil & Gas Supervisor  
United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 88201

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

# El Paso Natural Gas Company

El Paso, Texas 79999

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JAN 18 1972

January 12, 1972

OIL CONSERVATION COMM.  
SANTA FE

Regional Oil & Gas Supervisor  
United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 88201

540

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: San Juan 27-5 Unit #14-08-001-950,  
Rio Arriba County, New Mexico,  
NOTICE OF COMPLETION OF ADDITIONAL  
WELL, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement #14-08-001-950 approved on August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one (1) additional well capable of producing unitized substances in commercial quantities from the Dakota Formation has been completed upon acreage committed to the Unit. This well is as follows:

The San Juan 27-5 Unit #130 Well, located 1090' from the North line and 1840' from the East line of Section 26, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on May 20, 1971 and completed on June 1, 1971, in the Dakota Formation at a total depth of 7822'. The Dakota Formation in the intervals between 7518' - 7528', 7538' - 7544', 7642' - 7650', 7692' - 7698', 7722' - 7734', 7764' - 7770', was treated with a sand-water fracturing process on May 31, 1971. The well was shut-in on June 2, 1971, and after being shut-in for fifteen (15) days, the well was tested on June 17, 1971, and following a three (3) hour blow-down period, the Dakota Formation gauged 5431 MCFGPD through a 3/4" choke, and 5720 MCFGPD by the calculated absolute openflow method, with an SIPC of 2504 psia and an SIPT of 2439 psia. The committed

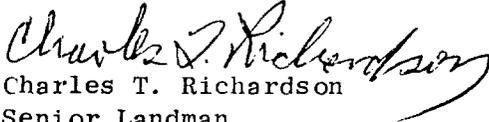
January 12, 1972

spacing unit upon which this well is located is described, as the N/2 of Section 26, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres, for Unit purposes.

The spacing unit for this well was included in the San Juan 27-5 Unit Seventeenth Expanded Dakota Participating Area effective May 1, 1971, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

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

Yours very truly,

  
Charles T. Richardson  
Senior Landman  
Land Department  
Energy Resource Development

CTR: ra  
S.J. 27-5 Unit - 4.3.1  
NM-2005,  
NM-4940

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas  
Accounting Commission  
Post Office Box 2308  
Santa Fe, New Mexico 87501

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N. A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace & Mr. James A.  
Brown, Trustees under the Last Will &  
Testament of A. W. Brown

The Wiser Oil Company

# El Paso Natural Gas Company

El Paso, Texas 79978

January 10, 1972

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JAN 18 1972  
OIL CONSERVATION COMM.

Regional Oil & 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

RECEIVED

JAN 19 1972

OIL CONSERVATION COMM.

Re: San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico, APPLICATION FOR APPROVAL OF THE SEVENTEENTH AND EIGHTEENTH EXPANDED PARTICIPATING AREAS, Dakota Formation, Effective May 1, 1971, and June 1, 1971, Respectively.

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement #14-08-001-950 approved on August 31, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Seventeenth and Eighteenth Expanded Participating Areas for the Dakota formation, to wit:

SEVENTEENTH EXPANDED PARTICIPATING AREA - Effective May 1, 1971

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 27 North, Range 5 West, N.M.P.M.</u>	
Section 26: All	640.00*
Section 27: S/2	320.00*
Total	960.00

\*Per GLO Plat of February 18, 1884, since the Dakota Participating Area was established prior to the August 23, 1960 Resurvey.

January 10, 1972

This proposed Seventeenth Expanded Participating Area of the Dakota formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #128 and #129 Wells are capable of producing unitized substances in paying quantities from the Dakota formation. These wells are as follows:

The San Juan 27-5 Unit #128 Well is located 1700' from the South line and 1840' from the West line of Section 27, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on April 9, 1971, and completed on April 22, 1971, in the Dakota formation at a total depth of 7699'. The Dakota formation in the intervals between 7444'-7450', 7476'-7482', 7572'-7584' and 7658'-7670' was treated with a sand-water fracturing process on April 21, 1971. The Dakota formation was shut-in on May 17, 1971, and after being shut-in for eleven (11) days the Dakota formation was tested on May 28, 1971, and following a three (3) hour blow-down period, gauged 3199 MCFGPD through a 3/4" choke and 3321 MCFGPD by the calculated absolute open-flow method, with an SIPC of 1734 psia and an SIPT of 2029 psia.

The San Juan 27-5 Unit #129 Well is located 1550' from the South line and 810' from the West line of Section 26, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on May 7, 1971, and completed on May 20, 1971, in the Dakota formation at a total depth of 7798'. The Dakota formation in the intervals between 7474'-7486', 7510'-7526', 7600'-7616', 7649'-7657', 7680'-7688' and 7724'-7732' was treated with a sand-water fracturing process on May 19, 1971. The Dakota formation was shut-in on May 20, 1971 and after being shut-in for eight (8) days, the Dakota formation was tested on May 28, 1971, and following a three (3) hour blow-down period gauged 3620 MCFGPD through a 3/4" choke and 3756 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2569 psia and an SIPT of 2325 psia.

EIGHTEENTH EXPANDED PARTICIPATING AREA - Effective June 1, 1971

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 27 North, Range 5 West, N.M.P.M.</u> <u>Section 25: W/2</u>	320.00

This proposed Eighteenth Expanded Participating Area of the Dakota formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #129 Well is capable of producing unitized substances in paying quantities from the Dakota formation. This well is as follows:

The San Juan 27-5 Unit #127 Well is located 1750' from the South line and 900' from the West line of Section 25, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. Said well was spudded on June 3, 1971, and completed on June 14, 1971, in the Dakota formation at a total depth of 7906'. The Dakota formation in the intervals between 7641'-7649', 7659'-7667', 7768'-7780'-7816'-7824' and 7844'-7856' was treated with a sand-water fracturing

January 10, 1972

process on June 13, 1971. The Dakota formation was shut-in on June 15, 1971, and after being shut-in for fourteen (14) days, the Dakota formation was tested on June 29, 1971, and following a three (3) hour blow-down period gauged 3544 MCFGPD through a 3/4" choke and 3678 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2583 psia and an SIPT of 2582 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 Seventeenth and Eighteenth Expanded Participating Areas of the Dakota formation within the San Juan 27-5 Unit.

EXHIBIT "B"

Geological Report on the Seventeenth and Eighteenth Expanded Participating Areas of the Dakota formation within the San Juan 27-5 Unit.

EXHIBIT "C"

Plate No. 1: San Juan 27-5 Dakota Structure Map  
Plate No. 2: San Juan 27-5 Dakota Isopach Map

EXHIBIT "D"

Table 1: Schedule of San Juan 27-5 Unit Dakota production and deliverability.

Attached hereto are Schedules XVIII and XIX showing the proposed Seventeenth and Eighteenth Expanded Participating Areas for the Dakota formation in the San Juan 27-5 Unit Area. These Schedules describe the Participating Area, show the percentage of unitized substances allocated to each unitized tract, and the percentages of ownership in the tracts.

If the Seventeenth and Eighteenth Expanded Participating Areas of the Dakota formation meet with your approval, please indicate such approval in the space provided on the attached sheet and return an approved copy hereof for our files.

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

Yours very truly,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:CTR:khs  
Enclosures  
San Juan 27-5, 4.3

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission

APPROVED: \_\_\_\_\_  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Commissioner of Public Lands and  
the Oil Conservation Commission

DATE: \_\_\_\_\_

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

DATE: 1-19-72

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

DATE: January 20, 1972

The foregoing approvals are for the Seventeenth and Eighteenth Expanded Participating Areas of the Dakota formation, San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico.

SAN JUAN 27-5 UNIT  
Working Interest Owne.

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N. A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace & Mr. James A.  
Brown, Trustees under the Last Will &  
Testament of A. W. Brown

The Wiser Oil Company

# El Paso Natural Gas Company

El Paso, Texas 79978

September 23, 1971

540

Regional Oil & Gas Supervisor  
United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 88201

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SEP 24 1971

**OIL CONSERVATION COMM.**  
**SANTA FE**

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: San Juan 27-5 Unit #14-08-001-950,  
Rio Arriba County, New Mexico  
NOTICE OF COMPLETION OF ADDITIONAL  
WELL, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement #14-08-001-950 approved on August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one (1) additional well capable of producing unitized substances in commercial quantities from the Dakota Formation has been completed upon acreage committed to the Unit. This well is as follows:

The San Juan 27-5 Unit #122 Well, located 800' from the North line and 900' from the East line of Section 21, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on June 29, 1971 and completed on July 15, 1971, in the Dakota Formation at a total depth of 7852'. The Dakota Formation in the intervals between 7542'-7554', 7574'-7586', 7648'-7654', 7667'-7679', 7722'-7734', 7754'-7766' was treated with a sand-water fracturing process on July 14, 1971. The well was shut-in on July 15, 1971, and after being shut-in for eight (8) days, the well was tested on July 23, 1971, and following a three (3) hour blow-down period, the Dakota Formation gauged 6958 MCFGPD through a 3/4" choke, and 7585 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2391 psia and a SIPT of

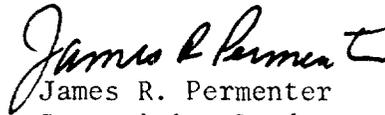
September 23, 1971

2551 psia. The committed spacing unit upon which this well is located is described as the N/2 of Section 21, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres, for Unit purposes.

The spacing unit for this well was included in the San Juan 27-5 Unit Fourteenth Expanded Dakota Participating Area effective July 1, 1969, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

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

Yours very truly,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:CTR:lj  
S.J. 27-5 Unit - 4.3.1  
NM-2100  
NM-697

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas  
Accounting Commission  
Post Office Box 2308  
Santa Fe, New Mexico 87501

SAN JUAN 27-5 UNIT  
Working Interest Owners

Amoco Production Company (2)

Dr. W. E. Alsup

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will  
of Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N. A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace & Mr.  
James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown

The Wiser Oil Company

El Paso Natural Gas Company

El Paso, Texas 79978

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AUG 9 1971  
OIL CONSERVATION COMM

August 5, 1971

Regional Oil & Gas Supervisor  
United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 88201

540

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: San Juan 27-5 Unit #14-08-001-950,  
Rio Arriba County, New Mexico,  
NOTICE OF COMPLETION OF ADDITIONAL  
WELL, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement #14-08-001-950 approved on August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one (1) additional well capable of producing unitized substances in commercial quantities from the Dakota Formation has been completed upon acreage committed to the Unit. This well is as follows:

The San Juan 27-5 Unit #125 Well, located 1450' from the South line and 1500' from the West line of Section 21, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on June 15, 1971 and completed on June 27, 1971, in the Dakota Formation at a total depth of 7728'. The Dakota Formation in the intervals between 7460'-7466', 7488'-7496', 7590'-7602', 7628'-7634', 7642'-7648', 7664'-7670', 7684'-7692' was treated with a sand-water fracturing process on June 26, 1971. The well was shut-in on June 28, 1971, and after being shut-in for seventeen (17) days, the well was tested on July 15, 1971, and following a three (3) hour blow-down period, the Dakota Formation gauged 4527 MCFGPD through a 3/4" choke, and 4966 MCFGPD by the calculated absolute open-flow method, with an SIPC of 1712 psia and an SIPT of

August 5, 1971

1772 psia. The committed spacing unit upon which this well is located is described as the S/2 of Section 21, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres, for Unit purposes.

The spacing unit for this well was included in the San Juan 27-5 Unit Sixteenth Expanded Dakota Participating Area effective June 1, 1970, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

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

Yours very truly,



J. P. Musick, Jr.  
Manager  
Special Land Activities  
Land Department  
Energy Resource Development

JPM:CTR:lj  
S.J. 27-5 Unit - 4.3.1  
NM-697  
NM-2100

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission  
Post Office Box 2308  
Santa Fe, New Mexico

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie	Mr. Catherine B. McElvain, Individually & as Executrix of the Estate of T. H. McElvain, Deceased
Dr. W. E. Alsup	
Mrs. Lela L. Barkley	Mr. Forrest B. Miller
Mrs. Evelyn G. Brown	Mrs. Curzelia C. Montoya
Mr. James A. Brown	Mrs. Ophelia C. Montoya
Mr. Donald R. Candelaria	N.B.S. Corporation
Mrs. Eulogia C. Candelaria	Northwest Production Corporation
Mrs. Eulogia C. Candelaria, Guardian of Nickie G. Candelaria, a minor	Pan American Petroleum Corporation (2)
Mrs. Eulogia C. Candelaria, Guardian of Paul M. Candelaria, a minor	Mr. H. O. Pool
Mr. J. Fidel Candelaria	Mr. Joe Quinn
Mr. Orlando Candelaria	Rincon Oil & Gas Corporation
Mr. Pablo Leopoldo Candelaria	Mr. M. A. Romero
Central National Bank & Trust Co. of Des Moines, Trustee under the Will of Gerald F. Harrington, Deceased	Mrs. Mercedes Candelaria Skidmore
Colorado Oil & Gas Corporation	Texas Commerce Bank N. A., Ancillary Guardian of the Estate of John L. Abercrombie
Mr. Sam Dazzo & Frances Joy Dazzo	Mr. Robert P. Tinnin
General American Oil Company of Texas	Mrs. Evelyn Ellen Wallace & Mr. James A Brown, Trustees under the Last Will & Testament of A. W. Brown
Mr. Thomas H. Harrington	The Wiser Oil Company
Lt. Col. Langdon Dewey Harrison	
Mr. Ralph H. McCullough	

# El Paso Natural Gas Company

El Paso, Texas 79978

240

Regional Oil & 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

71 JUN 17 AM 9 27

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

Re: San Juan 27-5 Unit #14-08-001-950,  
Rio Arriba County, New Mexico,  
NOTICE OF COMPLETION OF ADDITIONAL  
WELL, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement #14-08-001-950 approved on August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one (1) additional well capable of producing unitized substances in commercial quantities from the Dakota Formation has been completed upon acreage committed to the Unit. This well is as follows:

The San Juan 27-5 Unit #79 Well, located 850' from the North line and 1500' from the East line of Section 27, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on April 23, 1971 and completed on May 6, 1971, in the Dakota Formation at a total depth of 7741'. The Dakota Formation in the intervals between 7454'-7466', 7488'-7500', 7581'-7589', 7642'-7646', 7656'-7662', 7672'-7676' was treated with a sand-water fracturing process on May 5, 1971. The well was shut-in on May 7, 1971, and after being shut-in for eleven (11) days, the well was tested on May 18, 1971, and following a three (3) hour blow-down period, the Dakota Formation gauged 3851 MCFGPD through a 3/4" choke, and 4003 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2547 psia and an SIPT of

Regional Oil & Gas Supervisor  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Two

2616 psia. The committed spacing unit upon which this well is located is described as the N/2 of Section 27, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres, for Unit purposes.

The spacing unit for this well was included in the San Juan 27-5 Unit Sixteenth Expanded Dakota Participating Area effective June 1, 1970, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

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

Yours very truly,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:CTR:1j  
S. J. 27-5 Unit - 4.3.1

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas  
Accounting Commission  
Post Office Box 2308  
Santa Fe, New Mexico 87501

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie	Mrs. Curzelia C. Montoya
Dr. W. E. Alsup	Mrs. Ophelia C. Montoya
Mrs. Lela L. Barkley	N.B.S. Corporation
Mrs. Evelyn G. Brown	Northwest Production Corporation
Mr. James A. Brown	Pan American Petroleum Corporation (2)
Mr. Donald R. Candelaria	Mr. H. O. Pool
Mrs. Eulogia C. Candelaria	Mr. Joe Quinn
Mrs. Eulogia C. Candelaria, Guardian of Nickie G. Candelaria, a minor	Rincon Oil & Gas Corporation
Mrs. Eulogia C. Candelaria, Guardian of Paul M. Candelaria, a minor	Mr. M. A. Romero
Mr. J. Fidel Candelaria	Mrs. Mercedes Candelaria Skidmore
Mr. Orlando Candelaria	Texas Commerce Bank N. A., Ancillary Guardian of the Estate of John L. Abercrombie
Mr. Pablo Leopoldo Candelaria	Mr. Robert P. Tinnin
Central National Bank & Trust Co. of Des Moines, Trustee under the Will of Gerald F. Harrington, Deceased	Mrs. Evelyn Ellen Wallace & Mr. James A Brown, Trustees under the Last Will & Testament of A. W. Brown
Colorado Oil & Gas Corporation	The Wiser Oil Company
Mr. Sam Dazzo & Frances Joy Dazzo	
General American Oil Company of Texas	
Mr. Thomas H. Harrington	
Lt. Col. Langdon Dewey Harrison	
Mr. Ralph H. McCullough	
Mrs. Catherine B. McElvain, Individually & as Executrix of the Estate of T. H. McElvain, Deceased	
Mr. Forrest B. Miller	

# El Paso Natural Gas Company

El Paso, Texas 79978

**RECEIVED**

JUN 1 1971

June 7, 1971

CONSERVATION

540

Regional Oil & 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: San Juan 27-5 Unit #14-08-001-950,  
Rio Arriba County, New Mexico,  
NOTICE OF COMPLETION OF ADDITIONAL  
WELL, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement #14-08-001-950 approved on August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one (1) additional well capable of producing unitized substances in commercial quantities from the Dakota Formation has been completed upon acreage committed to the Unit. This well is as follows:

The San Juan 27-5 Unit #124 Well, located 1550' from the North line and 850' from the East line of Section 28, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on March 26, 1971 and completed on April 9, 1971, in the Dakota Formation at a total depth of 7660'. The Dakota Formation in the intervals between 7437'-7445', 7538'-7550', 7592'-7604', 7620'-7632' was treated with a sand-water fracturing process on April 8, 1971. The well was shut-in on April 9, 1971, and after being shut-in for ten (10) days, the well was tested on April 19, 1971, and following a three (3) hour blow-down period, the Dakota Formation gauged 3881 MCFGPD through a 3/4" choke, and 4272 MCFGPD by the calculated absolute open-flow method, with an SIPC of 1457 psia and an SIPT of 1277 psia. The committed spacing unit upon which this well

June 7, 1971

is located is described as the E/2 of Section 28, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres, for Unit purposes.

The spacing unit for this well was included in the San Juan 27-5 Unit Sixteenth Expanded Dakota Participating Area effective June 1, 1970, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

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

Yours very truly,



James R. Permenter  
Supervising Landman  
Land Department  
Energy Resource Development

JRP:CTR:khs  
S.J. 27-5 Unit - 4.3.1

cc: Mrs. Pepita O. Jeffus, Executive Director  
New Mexico Oil & Gas Accounting Commission  
Post Office Box 2308  
Santa Fe, New Mexico 87501

Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison, Trustee  
for Omega E. Quinn

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N. A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace & Mr. James A.  
Brown, Trustees under the Last Will &  
Testament of A. W. Brown

The Wiser Oil Company

# El Paso Natural Gas Company

El Paso, Texas 79978

May 17, 1971

Regional Oil & 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: 1971 SUPPLEMENTAL DRILLING  
PROGRAMS, Rio Arriba County,  
New Mexico

Gentlemen:

The 1971 Supplemental Drilling Programs for the following units were approved by the Regulatory Bodies on the dates indicated.

<u>Unit</u>	<u>USGS</u>	<u>CPL</u>	<u>OCC</u>
San Juan 27-5 Unit #14-08-001-950	4-12-71	3-30-71	5-14-71
San Juan 29-5 Unit #14-08-001-437	4-12-71	4-5-71	5-14-71

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

Yours very truly,

*Charles T. Richardson*  
Charles T. Richardson  
Senior Landman  
Land Department  
Energy Resource Development

CTR:lj  
S.J. 27-5 and 29-5 Units - 3.0



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

IN REPLY REFER TO:

APR 13 AM 8 04 '71

540

April 12, 1971

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your supplemental 1971 plan of development, dated March 26, 1971, for the San Juan 27-5 unit area, Rio Arriba County, New Mexico, proposing the drilling of one Dakota 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,

10

N. O. FREDERICK  
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

May 14, 1971

540

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

Attention: Mr. T. W. Bittick

Re: 1971 Supplemental Drilling  
Program, San Juan 27-5  
Unit, Rio Arriba County,  
New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1971 Supplemental Drilling Program dated March 26, 1971, for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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  
Drawer 1857, Roswell, New Mexico 88201

Commissioner of Public Lands  
Santa Fe, New Mexico

C  
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P  
Y

71 MAR 31 AM 0 13

540

March 30, 1971

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

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
1971 SUPPLEMENTAL DRILLING PROGRAM

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved your Supplemental Drilling Program for the San Juan 27-5 Unit, Rio Arriba County, New Mexico. The amendment to the 1971 program provides for the drilling of one (1) additional unit Dakota well during 1971. This twelfth (12) Dakota well will be designated the San Juan 27-5 Unit # 133 Well. 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.

Please remit a Three (\$3.00) Dollar filing fee.

sincerely yours,

GORDON G. MARCUM, II, Director  
Oil and Gas

AJA/GGM/s  
encl.

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

C  
O  
P  
ILLEGIBLE

# El Paso Natural Gas Company

El Paso, Texas 79999

March 26, 1971

Regional Oil & 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1971 SUPPLEMENTAL DRILLING PROGRAM

Gentlemen:

By letter dated January 19, 1971, El Paso Natural Gas Company, as Unit Operator, submitted a Drilling Program on the captioned Unit for the calendar year 1971, providing for the drilling of eleven (11) Dakota Wells during 1971. The Commissioner of Public Lands and the Oil Conservation Commission approved this Program on January 22, 1971, and the United States Geological Survey approved same on March 19, 1971.

However, El Paso, as Unit Operator, now desires, with the concurrence of a majority of the Unit working interest owners, to amend this 1971 Program and provide for the drilling of one (1) additional Unit Dakota Well during 1971. This twelfth (12) Dakota Well will be designated the San Juan 27-5 Unit #133 Well, and the spacing unit thereof will cover the W/2 of Section 19, T-27-N, R-5-W, N.M.P.M.

The #133 Well shall be drilled in the same manner as is set out in our January 9, 1971, letter, and Unit Operator will also drill any offset wells required to prevent drainage of unitized substances and any other wells deemed necessary or desirable by the Unit Operator or the working interest owners.

March 26, 1971

If this 1971 Supplemental Drilling Program is acceptable, please signify your approval as required under Section 10 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to this office.

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

Yours very truly,



T. W. Bittick  
Director  
Lands and Administration  
Energy Resource Development

TWB:CTR:khs  
San Juan 27-5 Unit - 3.0, 4.3

APPROVED: \_\_\_\_\_  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Commissioner of Public Lands and  
the Oil Conservation Commission

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

DATE: May 14, 1977

The foregoing approvals are for the 1971 Supplemental Drilling Program for the San Juan 27-5 Unit #14-08-001-950, Rio Arriba County, New Mexico.

WORKING Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Amoco Production Company (3)

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N. A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace & Mr. James A.  
Brown, Trustees under the Last Will &  
Testament of A. W. Brown

The Wiser Oil Company

El Paso Natural Gas Company

El Paso, Texas 79999

March 24, 1971

545

Regional Oil & 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: 1971 DRILLING PROGRAM  
San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico

Gentlemen:

The 1971 Drilling Program for the captioned Unit was approved by you on the dates indicated:

United States Geological Survey - March 19, 1971  
Commissioner of Public Lands - January 22, 1971  
Oil Conservation Commission - January 22, 1971

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

Yours very truly,

  
Charles T. Richardson  
Senior Landman  
Land Department

CTR:khs  
San Juan 27-5 Unit 3.0



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

IN REPLY REFER TO:

71 MAR 22 AM 10 20

March 19, 1971

540

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

Attention: Mr. T. W. Bittick

Gentlemen:

Your 1971 plan of development for the San Juan 27-5 unit area, Rio Arriba County, New Mexico, proposing the drilling of 11 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.) N. O. FREDERICK

**N. O. FREDERICK**  
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)

MAILED  
71 JAN 25 11 00 AM '71

January 22, 1971

540

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

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
1971 DRILLING PROGRAM

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved your 1971 Drilling Program for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, this program proposes the drilling of eleven Dakota wells. Our 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.

Please remit a Three (\$3.00) Dollar filing fee.

Sincerely yours,

GORDON G. MARCUM, II, Director  
Oil and Gas Department

AJA/GSM/s

encl.

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

ILLEGIBLE

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 22, 1971

540

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

Attention: Mr. T. W. Bittick

Re: 1971 Drilling Program  
San Juan 27-5 Unit,  
Rio Arriba County, 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 1971 providing for the drilling of eleven Dakota wells in the San Juan 27-5 Unit Area, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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  
Drawer 1857  
Roswell, New Mexico 88201

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

COPY

El Paso Natural Gas Company

El Paso, Texas 79999

January 20, 1971

90  
25  
JAN 25  
1971

Regional Oil & Gas Manager  
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: San Juan 27-5 Unit, #14-08-001-950  
Rio Arriba County, New Mexico  
FIFTEENTH AND SIXTEENTH EXPANDED  
PARTICIPATING AREAS, Dakota Forma-  
tion, Effective April 1, 1970 and  
June 1, 1970, Respectively

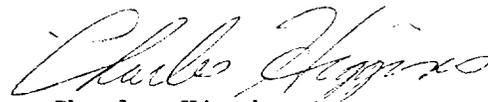
Gentlemen:

The captioned Expansions were approved by the Regulatory Bodies on the dates indicated:

United States Geological Survey	January 14, 1971
Commissioner of Public Lands	January 4, 1971
Oil Conservation Commission	January 5, 1971

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

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

CH:CTR:nja  
SJ 27-5, 4.3

cc: Mrs. Pepita O. Jeffus  
Executive Director, New Mexico  
Oil & Gas Accounting Commission

# El Paso Natural Gas Company

El Paso, Texas 79999

January 19, 1971

REC-18  
JAN 22 1971

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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1971 DRILLING PROGRAM

Gentlemen:

By letter dated February 25, 1970, El Paso Natural Gas Company, as Unit Operator of the San Juan 27-5 Unit, filed a Drilling Program covering said Unit for the calendar year 1970. This Program provided for the drilling of four (4) Dakota wells by the Unit Operator during the year.

All of these wells were drilled during 1970, and the San Juan 27-5 Unit Nos. 121 and 118 wells occasioned the Fifteenth and Sixteenth Expansions, respectively, of the Dakota Participating Area. The remaining two (2) wells were completed in the existing Dakota Participating Area and did not cause an expansion.

With the completion of the above-described wells, the total number of wells in the San Juan 27-5 Unit is as follows:

January 19, 1970

Pictured Cliffs	13
Mesaverde	23
Dual, Pictured Cliffs-Mesaverde	39
Dual, Mesaverde-Dakota	3
Dakota	36
Mesaverde, Non-Commercial	1
Dakota, Non-Commercial	1
	<u>116</u>

Pursuant to Section 10 of the San Juan 27-5 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program providing for the drilling of the following-described wells during the calendar year 1971:

<u>Location</u>	<u>Formation</u>
1. San Juan 27-5 Unit #79 Well N/2 Sec. 27, T-27-N, R-5-W	Dakota
2. San Juan 27-5 Unit #122 Well N/2 Sec. 21, T-27-N, R-5-W	Dakota
3. San Juan 27-5 Unit #123 Well S/2 Sec. 17, T-27-N, R-5-W	Dakota
4. San Juan 27-5 Unit #124 Well E/2 Sec. 28, T-27-N, R-5-W	Dakota
5. San Juan 27-5 Unit #125 Well S/2 Sec. 21, T-27-N, R-5-W	Dakota
6. San Juan 27-5 Unit #126 Well W/2 Sec. 7, T-27-N, R-5-W	Dakota
7. San Juan 27-5 Unit #127 Well W/2 Sec. 25, T-27-N, R-5-W	Dakota
8. San Juan 27-5 Unit #128 Well S/2 Sec. 27, T-27-N, R-5-W	Dakota
9. San Juan 27-5 Unit #129 Well S/2 Sec. 26, T-27-N, R-5-W	Dakota

# Regional Oil & Gas Supervisor

Commissioner of Public Lands  
Oil Conservation Commission  
Page Three

January 19, 1971

<u>Location</u>	<u>Formation</u>
10. San Juan 27-5 Unit #130 Well N/2 Sec. 26, T-27-N, R-5-W	Dakota
11. San Juan 27-5 Unit #131 Well E/2 Sec. 20, T-27-N, R-5-W	Dakota

El Paso Natural Gas Company intends to drill wells to the base of the Dakota Formation using rotary tools. Surface casing will be set to the depth of approximately 200 feet and an intermediate string will be run through the Pictured Cliffs Formation to a depth of approximately 3,700 feet and then a production casing string will be run to the base of the Dakota Formation. The casing in the Dakota Formation will then be perforated and the Dakota Formation subjected to a hydraulic fracturing process. Mud will be used in setting the intermediate string of casing when said casing is run and the hole below the intermediate string of casing will be drilled with gas. Due care will be taken to protect all horizons.

In addition to the above wells, 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 later deemed necessary or desirable by the Unit Operator and the working interest owners.

All of the working interest owners have been contacted and this Drilling Program reflects, insofar as possible, their desires for additional drilling.

If this Drilling Program is acceptable, please signify your approval as required under Section 10 of the Unit Agreement in the spaces 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 shown on the attached sheet.

Yours very truly,



T. W. Bittick  
Director  
Lands and Administration  
Energy Resource Development

TWB:CTR:nja  
Enclosures

APPROVED: \_\_\_\_\_  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Commissioner of Public Lands and  
the Oil Conservation Commission

DATE: \_\_\_\_\_

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

DATE: \_\_\_\_\_

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

DATE: *January 22, 1971*

The foregoing approvals are for the proposed 1971 Drilling Program for the San Juan 27-5 Unit #14-08-001-950, Rio Arriba County, New Mexico.

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually  
and as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N.B.S. Corporation

Northwest Production Corporation

Pan American Petroleum Corporation (3)

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Texas Commerce Bank N.A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace & Mr. James  
A. Brown, Trustees under the Last Will  
and Testament of A. W. Brown

The Wiser Oil Company



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
Drawer 1857  
Roswell, New Mexico 88201

January 14, 1971

IN REPLY REFER TO:  
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18  
1971  
JAN 18

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

540

Attention: Mr. Charles Higgins

Gentlemen:

The 15th and 16th revisions of the Dakota participating area for the San Juan 27-5 unit agreement, Rio Arriba County, New Mexico, No. 14-08-001-950, were approved on January 14, 1971, by the Acting Oil and Gas Supervisor, U. S. Geological Survey, effective as of April 1, and June 1, 1970, respectively. By such revisions the Dakota participating area is enlarged from 13,400.87 acres to 15,000.87 acres.

The 15th revision of the Dakota participating area adds 320 acres described as the  $W\frac{1}{2}$  sec. 28, T. 27 N., R. 5 W., N.M.P.M., and is based on the completion of unit well No. 121 in the ~~NE~~ sec. 28 as a paying well pursuant to the terms of the unit agreement. Unit well No. 121 was completed on April 23, 1970, for a calculated absolute open flow potential of 3,089 MCFGPD from the Dakota 7,400 to 7,598 feet.

The 16th revision of the Dakota participating area adds 1,280 acres described as the  $E\frac{1}{2}$  sec. 20,  $S\frac{1}{2}$  sec. 21,  $N\frac{1}{2}$  sec. 27, and  $E\frac{1}{2}$  sec. 28, T. 27 N., R. 5 W., N.M.P.M., and is based on the completion of unit well No. 118 in the ~~NE~~ sec. 22, as a paying well pursuant to the terms of the unit agreement and geological information contributed by unit well No. 40 in the ~~NW~~ sec. 16, which had been previously completed. Unit well No. 118 was completed on June 26, 1970, for a calculated absolute open flow potential of 3,943 MCFGPD from the Dakota 7,533 to 7,756 feet.

Copies of the approved application are being distributed to the Federal offices involved, and two approved copies are returned herewith. You are requested to furnish the State of New Mexico and all interested parties with appropriate evidence of this approval.

Sincerely yours,

(ORIG. SGN) BILLY J. SHOGER

BILLY J. SHOGER  
Acting Oil and Gas Supervisor

cc:  
Washington (w/cy of appln)  
Durango (w/cy of appln)  
NMOCC, Santa Fe (ltr only) ✓  
Bureau of Land Management, Santa Fe (ltr only)

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 11, 1971

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

Attention: Mr. Charles Higgins

Re: Resubmission of Fifteen  
and Sixteenth Expanded  
Dakota Participating Area  
San Juan 27-5 Unit  
Rio Arriba County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Fifteenth and Sixteenth Expanded Dakota Participating Area as resubmitted by application dated December 31, 1970, for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/JEK/og

cc: United States Geological - Roswell

Commissioner of Public Lands - Santa Fe

C  
O  
P  
Y

January 4, 1971

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

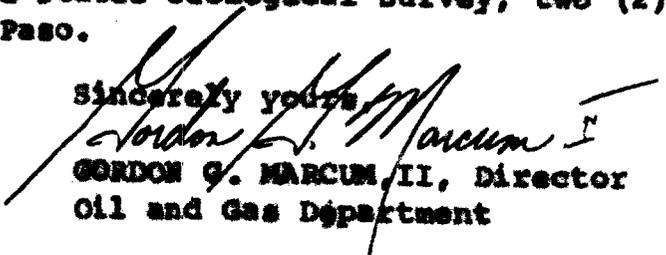
Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
RESUBMISSION OF APPLICATION FOR  
APPROVAL OF THE FIFTEENTH AND  
SIXTEENTH EXPANDED PARTICIPATING  
AREAS, Dakota Formation

ATTENTION: Mr. Charles Higgins

Gentlemen:

The Commissioner of Public Lands has this date approved the Resubmission of Application for approval of the Fifteenth and Sixteenth Expanded Participating Areas, Dakota Formation, for the captioned unit. This resubmission includes the E/2 of Section 20 in the 16th revision of the Dakota Participating area. This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are retaining two copies and handing (6) copies to the Oil Conservation Commission for their approval and requesting that they forward five (5) copies to the United States Geological Survey at Roswell for their consideration. After this application has been approved and signed by the United States Geological Survey, two (2) copies should be returned to El Paso.

Sincerely yours,  
  
GORDON G. MARCUM, II, Director  
Oil and Gas Department

AJA/GGM/s

cc: USGS-Roswell, New Mexico (ltr only)  
OCC-Santa Fe, New Mexico (6 copies of appl)

ILLEGIBLE

# El Paso Natural Gas Company

El Paso, Texas 79999

December 31, 1970

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

RECEIVED  
JAN 4 9 12 AM '71  
STATE LAND OFFICE  
SANTA FE, N.M.

Re: San Juan 27-5 Unit, #14-08-001-950,  
Rio Arriba County, New Mexico,  
RESUBMISSION OF APPLICATION FOR  
APPROVAL OF THE FIFTEENTH AND  
SIXTEENTH EXPANDED PARTICIPATING  
AREAS, Dakota Formation, Effective  
April 1, 1970 and June 1, 1970,  
Respectively

Gentlemen:

The captioned Expansions were initially submitted for approval on September 25, 1970, but were returned by the United States Geological Survey November 23, 1970, for the inclusion of additional acreage under the Sixteenth Expansion. In the opinion of the United States Geological Survey, the E/2 of Section 20, Township 27 North, Range 5 West, N.M.P.M. was also proven capable of producing unitized substances in paying quantities, and they requested that these lands be included within the Sixteenth Expansion. The requested revision has been approved by the working interest owners and El Paso Natural Gas Company, as Unit Operator, hereby resubmits the Fifteenth and Sixteenth Expanded Participating Areas for the Dakota Formation, to wit:

FIFTEENTH EXPANDED PARTICIPATING AREA - Effective April 1, 1970

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 27 North, Range 5 West, N.M.P.M.</u>	
Section 28: W/2	320.00*

\*Per GLO Survey of February 18, 1884, since the Dakota Participating Area was established prior to the August 23, 1960 Resurvey.

This proposed Fifteenth Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #121 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

The San Juan 27-5 Unit #121 Well is located 1460' from the South line and 1840' from the West line of Section 28, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on March 28, 1970, and completed on April 10, 1970, at a total depth of 7630'. The Dakota Formation in the intervals between 7400'-7410', 7504'-7514', 7552'-7572' and 7588'-7598' was treated with a sand-water fracturing process on April 9, 1970. The Dakota Formation was shut-in on April 11, 1970, and after being shut-in for twelve (12) days, the Dakota Formation was tested on April 23, 1970, and following a three (3) hour blow-down period gauged 3001 MCFGPD through a 3/4" choke and 3089 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2607 psia and an SIPT of 1232 psia.

SIXTEENTH EXPANDED PARTICIPATING AREA - Effective June 1, 1970

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 27 North, Range 5 West, N.M.P.M.</u>	
Section 20: E/2	320.00
Section 21: S/2	320.00
Section 27: N/2	320.00*
Section 28: E/2	320.00*
Total	1,280.00

\*Per GLO Survey of February 18, 1884, since the Dakota Participating Area was established prior to the August 23, 1960 Resurvey.

This proposed Sixteenth Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #118 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

RECEIVED  
 JAN 4 9 12 AM '71  
 STATE DEPT OF REVENUE, N.M.

December 31, 1970

The San Juan 27-5 Unit #118 Well is located 1600' from the South line and 1815' from the West line of Section 22, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on May 12, 1970, and completed on May 24, 1970, at a total depth of 7822'. The Dakota Formation in the intervals between 7533'-7545', 7568'-7580', 7641'-7647', 7662'-7674', 7721'-7727', and 7744'-7756' was treated with a sand-water fracturing process on May 24, 1970. The Dakota Formation was shut-in on May 25, 1970, and after being shut-in for thirty-two (32) days the Dakota Formation was tested on June 26, 1970, and following a three (3) hour blow-down period, gauged 3751 MCFGPD through a 3/4" choke and 3943 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2587 psia and an SIPT of 2232 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 Fifteenth and Sixteenth Expansions of the Participating Area for the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "B"

Geological Report concerning the Fifteenth and Sixteenth Expansions of the Participating Area for the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "C"

Plate No. 1: San Juan 27-5 Unit Dakota Structure Map  
Plate No. 2: San Juan 27-5 Unit Dakota Isopach Map

EXHIBIT "D"

Table 1: Schedule of San Juan 27-5 Unit Dakota production and deliverability

Attached hereto are Schedules XVI and XVII showing the proposed Fifteenth and Sixteenth Expanded Participating Areas for the Dakota Formation in the San Juan 27-5 Unit Area. These Schedules describe the Expanded Participating Areas, show the percentage of unitized substances allocated to each unitized tract and the percentage of ownership in each tract.

RECEIVED  
JAN 4 9 12 AM '71  
STATE LAND OFFICE  
SANTA FE, N.M.

Regional Oil & Gas Supervisor  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Four

December 31, 1970

If these Fifteenth and Sixteenth Expanded Participating Areas of the Dakota Formation meet with your approval, please indicate such approval in the space provided on the attached sheet and return an approved copy hereof for our files.

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

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

CH:CTR:ec  
Enclosures  
SJ 27-5, 4.3

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission  
P. O. Box 2308  
Santa Fe, New Mexico 87501

RECEIVED  
JAN 4 9 12 AM '71  
STATE LAND OFFICE  
SANTA FE, N.M.

APPROVED: \_\_\_\_\_  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
Commissioner of Public Lands and  
the Oil Conservation Commission

DATE: \_\_\_\_\_

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

DATE: January 4, 1971

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

DATE: January 5, 1971

The foregoing approvals are for the Fifteenth and Sixteenth Expanded Participating Areas of the Dakota Formation, San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico.

RECEIVED  
JAN 4 9 12 AM '71  
STATE LAND OFFICE  
SANTA FE, N.M.

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Pan American Petroleum Corporation (3)

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Southern Petroleum Exploration, Inc.

Texas Commerce Bank N. A., Ancillary  
Guardian of the Estate of John L.  
Abercrombie

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace & Mr. James A.  
Brown, Trustees under the Last Will &  
Testament of A. W. Brown

JAN 4 9 12 AM '71  
STATE OF NEW MEXICO  
SANTA FE, N.M.

# El Paso Natural Gas Company

El Paso, Texas 79999

December 31, 1970

LAND DEPARTMENT  
JAN 4 1971

540

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

Re: San Juan 27-5 Unit, #14-08-001-950,  
Rio Arriba County, New Mexico  
**RESUBMISSION OF APPLICATION FOR  
APPROVAL OF THE FIFTEENTH AND  
SIXTEENTH EXPANDED PARTICIPATING  
AREAS, Dakota Formation**

Gentlemen:

We are enclosing for your approval eight (8) copies of an Application for Approval of the Fifteenth and Sixteenth Expanded Participating Areas of the Dakota Formation for the referenced Unit.

If this Application meets with your approval, please execute all copies and forward them to the Oil Conservation Commission for its approval and execution. After this Application has been signed by the Commissioner of Public Lands and the Oil Conservation Commission, the Commissioner of Public Lands should retain two (2) copies for his file and the Oil Conservation Commission should retain one (1) copy for its file, and five (5) copies should be forwarded to the United States Geological Survey in Roswell, New Mexico, for its approval and further handling. After this Application has been approved and signed by the United States Geological Survey, two (2) copies should be returned to El Paso.

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

CH:JTR:ec  
Enclosures  
SJ 27-5, 4.3

cc: Regional Oil & Gas Supervisor  
United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 88201

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

COPY



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

NOV 24 AM 8  
1970

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November 23, 1970

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

Attention: Mr. Charles Higgins

Gentlemen:

All copies of your composite application of September 25, 1970, received by this office on October 2, 1970, for approval of the 15th and 16th revisions of the Dakota participating area for the San Juan 27-5 unit, Rio Arriba County, New Mexico, are returned herewith unapproved.

Upon consideration of the geologic and production information provided by your application and supplemental letter of October 28, 1970, it is our opinion that the E $\frac{1}{2}$  sec. 20, T. 27 N., R. 5 W., is reasonably proven productive of unitized substances in paying quantities by the geologic information contributed by unit wells 118 and 121 in the SW $\frac{1}{4}$  sec. 22 and the SW $\frac{1}{4}$  sec. 28, T. 27 N., R. 5 W. Such opinion is also based on the location of the E $\frac{1}{2}$  sec. 20 with respect to unit well No. 40 in the SW $\frac{1}{4}$  sec. 16. Our position in this matter has been discussed with Messrs. R. F. Lemon and D. Adams of El Paso Natural Gas Company. Accordingly, we request that the attached participating area revision be modified to the extent necessary to include the E $\frac{1}{2}$  sec. 20 in the 16th revision of the Dakota participating area.

Sincerely yours,

(ORIG. SCD.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Oil and Gas Supervisor

cc:  
Washington  
NMOCC  
Com. of Pub. Lands  
Durango  
Accounts

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

October 1, 1970

540

Gas Company

El Paso 9999  
P. O.  
El Paso Charles Higgins

Att

Re: Fifteenth and Sixteenth  
Expanded Participating  
Area, Dakota Formation  
San Juan 27-5 Unit, Rio  
Arriba County, New Mexico

C

O

advise that the New Mexico Oil Conservation Com-  
mission on this date approved the Fifteenth and Sixteenth  
Expanded Participating Area, Dakota Formation, for the San  
Juan Unit, Rio Arriba County, New Mexico, subject to  
approval by the United States Geological Survey and the  
Department of Public Lands of the State of New Mexico.

F

Approved copies of the application are being forwarded  
to the United States Geological Survey, Roswell, New Mexico.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

AP/JEK/og

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

September 30, 1970

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

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
FIFTEENTH & SIXTEENTH EXPANDED  
PARTICIPATING AREAS,  
Dakota Formation, Effective  
April 1, 1970 and June 1, 1970,  
Respectively

ATTENTION: Mr. Charles Higgins

Gentlemen:

The Commissioner of Public Lands has this date approved the Fifteenth and Sixteenth Expanded Participating Areas, Dakota Formation, for the captioned unit, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are retaining two copies and handing (6) copies to the Oil Conservation Commission for their approval and requesting that they forward five (5) copies to the United States Geological Survey at Roswell for their consideration.

Very truly yours,

GORDON G. MARCUM, II, Director  
Oil and Gas Department

GGM/s

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

ILLEGIBLE 15

# El Paso Natural Gas Company

El Paso, Texas 79999

September 25, 1970

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: San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico, APPLICATION FOR APPROVAL OF THE FIFTEENTH AND SIXTEENTH EXPANDED PARTICIPATING AREAS, DAKOTA FORMATION, Effective April 1, 1970 and June 1, 1970, Respectively

Gentlemen:

Pursuant to the provisions of Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Fifteenth and Sixteenth Expanded Participating Areas for the Dakota Formation, to wit:

FIFTEENTH EXPANDED PARTICIPATING AREA - Effective April 1, 1970

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 27 North, Range 5 West, N.M.P.M.</u> Section 28: W/2	320.00*

\*Per GLO Survey of February 18, 1884, since the Dakota Participating Area was established prior to the August 23, 1960 Resurvey.

September 25, 1970

This proposed Fifteenth Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #121 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

The San Juan 27-5 Unit #121 Well is located 1460' from the South line and 1840' from the West line of Section 28, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on March 28, 1970, and completed on April 10, 1970, at a total depth of 7630'. The Dakota Formation in the intervals between 7400'-7410', 7504'-7514', 7552'-7572' and 7588'-7598' was treated with a sand-water fracturing process on April 9, 1970. The Dakota Formation was shut-in on April 11, 1970, and after being shut-in for twelve (12) days, the Dakota Formation was tested on April 23, 1970, and following a three (3) hour blow-down period gauged 3001 MCFGPD through a 3/4" choke and 3089 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2607 psia and an SIPT of 1232 psia.

SIXTEENTH EXPANDED PARTICIPATING AREA - Effective June 1, 1970

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 27 North, Range 5 West, N.M.P.M.</u>	
Section 21: S/2	320.00
Section 27: N/2	320.00*
Section 28: E/2	320.00*
<b>Total</b>	<u>960.00</u>

\*Per GLO Survey of February 18, 1884, since the Dakota Participating Area was established prior to the August 23, 1960 Resurvey.

This proposed Sixteenth Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #118 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

The San Juan 27-5 Unit #118 Well is located 1600' from the South line and 1815' from the West line of Section 22, Township 27 North, Range 5 West, N.M.P.M. Said well

GLO Survey of February 18, 1884  
 since the Dakota Participating Area  
 was established prior to the August 23,  
 1960 Resurvey.

September 25, 1970

was spudded on May 12, 1970, and completed on May 24, 1970, at a total depth of 7822'. The Dakota Formation in the intervals between 7533'-7545', 7568'-7580', 7641'-7647', 7662'-7674', 7721'-7727' and 7744'-7756' was treated with a sand-water fracturing process on May 24, 1970. The Dakota Formation was shut-in on May 25, 1970, and after being shut-in for thirty-two (32) days the Dakota Formation was tested on June 26, 1970, and following a three (3) hour blow-down period, gauged 3751 MCFGPD through a 3/4" choke and 3943 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2587 psia and an SIPT of 2232 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 Fifteenth and Sixteenth Expansions of the Participating Area for the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "B"

Geological Report concerning the Fifteenth and Sixteenth Expansions of the Participating Area for the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "C"

Plate No. 1: San Juan 27-5 Unit Dakota Structure Map.  
Plate No. 2: San Juan 27-5 Unit Dakota Isopach Map.

EXHIBIT "D"

Table 1: Schedule of San Juan 27-5 Unit Dakota production and deliverability.

Attached hereto are Schedules XVI and XVII showing the proposed Fifteenth and Sixteenth Expanded Participating Areas for the Dakota Formation in the San Juan 27-5 Unit Area. These Schedules describe the Expanded Participating Areas, show the percentage of unitized substances allocated to each unitized tract and the percentage of ownership in each tract.

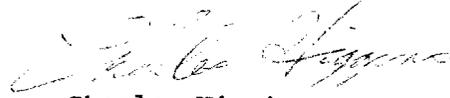
Regional Oil & Gas Supervisor  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Four

September 25, 1970

If these Fifteenth and Sixteenth Expanded Participating Areas of the Dakota Formation meet with your approval, please indicate such approval in the space provided on the attached sheet and return an approved copy hereof for our files.

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

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

CH:CTR:sf  
Enclosures  
San Juan 27-5, 4.3

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission  
P. O. Box 2308  
Santa Fe, New Mexico 87501

RECEIVED  
SEP 25 10 53 AM '70  
LAND DEPARTMENT

APPROVED: \_\_\_\_\_  
Regional Oil & Gas Supervisor  
United States Geological Survey  
Subject to like approval by the  
appropriate State officials.

DATE: \_\_\_\_\_

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

DATE: *September 30, 1970*

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

DATE: *October 1, 1970*

The foregoing approvals are for the Fifteenth and Sixteenth Expanded Participating Areas of the Dakota Formation, San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico.

RECORDED  
INDEXED  
OCT 1 1970

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. John L. Abercrombie	Mrs. Ophelia C. Montoya
Mr. J. R. Abercrombie	N.B.S. Corporation
Dr. W. E. Alsup	Northwest Production Corporation
Mrs. Lela L. Barkley	Pan American Petroleum Corporation (3)
Mrs. Evelyn G. Brown	Mr. H. O. Pool
Mr. James A. Brown	Mr. Joe Quinn
Mr. Donald R. Candelaria	Rincon Oil & Gas Corporation
Mrs. Eulogia C. Candelaria	Mr. M. A. Romero
Mrs. Eulogia C. Candelaria, Guardian of Nickie G. Candelaria, a minor	Mrs. Mercedes Candelaria Skidmore
Mrs. Eulogia C. Candelaria, Guardian of Paul M. Candelaria, a minor	Southern Petroleum Exploration, Inc.
Mr. J. Fidel Candelaria	Mr. Robert P. Tinnin
Mr. Orlando Candelaria	Mrs. Evelyn Ellen Wallace & Mr. James A. Brown, Trustees under the Last Will & Testament of A. W. Brown
Mr. Pablo Leopoldo Candelaria	
Central National Bank & Trust Co. of Des Moines, Trustee under the Will of Gerald F. Harrington, Deceased	
Colorado Oil & Gas Corporation	
Mr. Sam Dazzo and Frances Joy Dazzo	
General American Oil Company of Texas	
Mr. Thomas H. Harrington	
Lt. Col. Langdon Dewey Harrison	
Mr. Ralph H. McCullough	
Mrs. Catherine B. McElvain, Individually and as Executrix of the Estate of T. H. McElvain, Deceased	
Mr. Forrest B. Miller	
Mrs. Curzelia C. Montoya	

# El Paso Natural Gas Company

El Paso, Texas 79999

September 28, 1970

70 SEP 29 AM 9

540

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

Re: San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico, APPLICATION FOR APPROVAL OF THE FIFTEENTH AND SIXTEENTH EXPANDED PARTICIPATING AREAS, DAKOTA FORMATION, Effective April 1, 1970 and June 1, 1970, Respectively

Gentlemen:

We are enclosing for your approval eight (8) copies of an Application for Approval of the Fifteenth and Sixteenth Expanded Participating Areas of the Dakota Formation for the referenced Unit.

If this Application meets with your approval, please execute all copies and forward them to the Oil Conservation Commission for their approval and execution. After this Application has been signed by the Commissioner of Public Lands and the Oil Conservation Commission, the Commissioner of Public Lands should retain two (2) copies for his file and the Oil Conservation Commission should retain one (1) copy for its file, and five (5) copies should be forwarded to the United States Geological Survey in Roswell, New Mexico, for their approval and further handling. After this Application has been approved and signed by the United States Geological Survey, two (2) copies should be returned to El Paso.

Yours very truly,  
*Charles Higgins*  
Charles Higgins  
Supervising Landman  
Land Department

CH:CTR:sf  
Enclosures

cc: Regional Oil and Gas Supervisor  
United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 88201

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

**ILLEGIBLE**

COPY

El Paso Natural Gas Company

El Paso, Texas 79909

September 25, 1970

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: San Juan 27-5 Unit #14-08-001-  
950, Rio Arriba County, New  
Mexico, NOTICE OF COMPLETION OF  
ADDITIONAL WELLS, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, Unit Operator, determined on the dates set out below that two (2) additional wells capable of producing unitized substances in commercial quantities from the Dakota Formation have been completed upon acreage committed to the Unit. These wells are as follows:

The San Juan 27-5 Unit #119 Well, located 1840' from the South line and 1650' from the West line of Section 24, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on April 11, 1970 and completed on April 24, 1970, in the Dakota Formation at a total depth of 7789'. The Dakota Formation in the intervals between 7559'-7565', 7575'-7581', 7686'-7698', 7758'-7780' was treated with a sand-water fracturing process on April 23, 1970. The well was shut-in on April 25, 1970, and after being shut-in for sixteen (16) days, the well was tested on May 11, 1970, and following a three (3) hour blow-down period, the Dakota Formation gauged 3538 MCFGPD through a 3/4" choke, and 3687 MCFGPD by the

Regional Oil & Gas Supervisor  
Commissioner of Public Lands  
Oil Conservation Commission  
Page Two

September 25, 1970

calculated absolute open-flow method, with an SIPC of 2533 psia and an SIPT of 2657 psia. The committed spacing unit upon which this well is located is described as the S/2 of Section 24, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres.

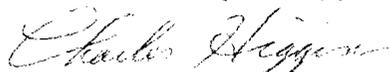
The spacing unit for this well was included in the San Juan 27-5 Unit Thirteenth Expanded Dakota Participating Area effective December 1, 1968, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-5 Unit #120 Well, located 1840' from the South line and 800' from the West line of Section 23, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on April 25, 1970, and completed on May 11, 1970, in the Dakota Formation at a total depth of 7809'. The Dakota Formation in the intervals between 7478'-7494', 7598'-7614', 7662'-7670', 7680'-7688' was treated with a sand-water fracturing process on May 10, 1970. The well was shut-in on May 20, 1970, and after being shut-in for fourteen (14) days, the well was tested on June 3, 1970, and following a three (3) hour blow-down period, the Dakota Formation gauged 2820 MCFGPD through a 3/4" choke, and 2898 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2650 psia and an SIPT of 2367 psia. The committed spacing unit upon which this well is located is described as the S/2 of Section 23, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres.

The spacing unit was included in the San Juan 27-5 Unit Fourteenth Expanded Participating Area of the Dakota Formation, effective July 1, 1969, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

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

Yours very truly,

  
Charles Higgins  
Supervising Landman  
Land Department

CH:CTR:sf

cc: Mrs. Pepita O. Jeffus, Executive Director  
New Mexico Oil & Gas Accounting Commission  
P. O. Box 2308  
Santa Fe, New Mexico 87501

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. John L. Abercrombie

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Pan American Petroleum Corporation (3)

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Southern Petroleum Exploration, Inc.

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown

# El Paso Natural Gas Company

El Paso, Texas 79999

April 2, 1970

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Regional Oil & Gas Supervisor  
United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 88201

540

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: 1970 DRILLING PROGRAM, San  
Juan 27-5 Unit, #14-08-001-950,  
Rio Arriba County, New Mexico

Gentlemen:

The 1970 Drilling Program for the referenced Unit was approved by the Regulatory Bodies on the dates indicated:

United States Geological Survey	March 27, 1970
Commissioner of Public Lands	March 2, 1970
Oil Conservation Commission	March 5, 1970

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:OTR:st  
S.J. 27-5, 3.0

Drawer 1857  
Roswell, New Mexico 88201

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'70 MAR 30 AM 8 19

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March 27, 1970

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

Attention: Mr. T. W. Blazick

Gentlemen:

Your 1970 plan of development for the San Juan 27-5 unit area, San Arriba County, New Mexico, proposing the drilling of four 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,

(CHIEF, SECRETARY J. SHOOK)

BILLY J. SHOOKER  
Acting Oil and Gas Supervisor

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

**ILLEGIBLE**

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

March 5, 1970

540

El Paso Natural Gas Company  
P. O. Box 1492  
El Paso, Texas 9999

Attention: Mr. T. W. Bittick

Re: 1970 Drilling Program  
San Juan 27-5 Unit  
Rio Arriba County,  
New Mexico

Gentleman:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Drilling Program for the calendar year 1970 providing for the drilling of four Data wells in the San Juan 27-5 Unit Area, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

The 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, New Mexico  
Commissioner of Public Lands - Santa Fe, New Mexico

COPY

MAIN OFFICE UNIT

70 MAR 6 AM 8 1

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March 2, 1970

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

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
1970 Drilling Program

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved your 1970 Drilling Program for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, this program proposes the drilling of four Dakota wells. Our 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

TB/ML/s  
encl.

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

C  
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# El Paso Natural Gas Company

El Paso, Texas 79999

February 25, 1970

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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1970 DRILLING PROGRAM

Gentlemen:

By letter dated February 20, 1969, El Paso Natural Gas Company, as Unit Operator of the San Juan 27-5 Unit, filed a Drilling Program covering said Unit for the calendar year 1969. This Program provided for the drilling of nine (9) Dakota wells by the Unit Operator during the year.

All these wells were drilled during 1969, and the San Juan 27-5 Unit #40, #115 and #117 Wells occasioned the Fourteenth Expansion of the Dakota Participating Area, which has been approved by the regulatory bodies. The remaining six (6) wells were completed in the existing Dakota Participating Area. In addition, the San Juan 27-4 Unit #50 Dakota Well in the SW/4 of Section 19, T-27-N, R-4-W, N.M.P.M., occasioned the Thirteenth Expansion of the Dakota Participating Area, which the regulatory bodies have approved.

With the completion of the above-described wells, the total number of wells in the San Juan 27-5 Unit is as follows:

Pictured Cliffs	13
Mesaverde	23
Dual, Pictured Cliffs-Mesaverde	39
Dual, Mesaverde-Dakota	3
Dakota	32
Noncommercial, Mesaverde	1
Noncommercial, Dakota	1
	<u>112</u>

February 25, 1970

Pursuant to Section 10 of the San Juan 27-5 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program providing for the drilling of the following-described wells during the calendar year of 1970:

<u>Location</u>	<u>Formation</u>
San Juan 27-5 Unit #118 Well S/2 Sec. 22, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #119 Well S/2 Sec. 24, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #120 Well S/2 Sec. 23, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #121 Well W/2 Sec. 28, T-27-N, R-5-W	Dakota

El Paso Natural Gas Company intends to drill these wells to the base of the Dakota Formation using rotary tools. Surface casing will be set to the depth of approximately 200 feet and an intermediate string will be run through the Pictured Cliffs Formation to a depth of approximately 3,700 feet, and then a production casing string will be run to the base of the Dakota Formation. The casing in the Dakota Formation will then be perforated and the Dakota Formation subjected to a hydraulic fracturing process. Mud will be used in setting the intermediate string of casing when said casing is run and the hole below the intermediate string of casing will be drilled with gas. Due care will be taken to protect all horizons.

In addition to the above wells, 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 later deemed necessary or desirable by the Unit Operator and the working interest owners.

All of the working interest owners have been contacted and this Drilling Program reflects, insofar as possible, their desires for additional drilling.

If this Drilling Program is acceptable, please signify your approval as required under Section 10 of the Unit Agreement in the space provided on the attached sheet, and return an approved copy to El Paso Natural Gas Company.

Regional Oil & Gas Supervisor  
Commissioner of Public Lands  
Oil Conservation Commission  
Page 3

February 25, 1970

Copies of this 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  
San Juan 27-5 Unit, 3.0

APPROVED: \_\_\_\_\_  
Regional Oil and Gas 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: March 5, 1970

The foregoing approvals are for the proposed 1970 Drilling Program for the  
San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico.

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. John L. Abercrombie

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

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Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Pan American Petroleum Corporation (3)

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Southern Petroleum Exploration, Inc.

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown

# El Paso Natural Gas Company

El Paso, Texas 79999

October 22, 1969

540

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: San Juan 27-5 Unit #14-08-001-950,  
Rio Arriba County, New Mexico,  
**APPLICATION FOR APPROVAL OF THE  
FOURTEENTH EXPANDED PARTICIPATING  
AREA, Dakota Formation, Effective  
July 1, 1969**

Gentlemen:

The Fourteenth Expanded Participating Area for the referenced Unit was approved by the Regulatory Bodies on the dates indicated:

United States Geological Survey	October 15, 1969
Commissioner of Public Lands	September 29, 1969
Oil Conservation Commission	October 7, 1969

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

Yours very truly,

*Charles Higgins*

Charles Higgins  
Supervising Landman  
Land Department

CH:CTR:sf  
SJ 27-5, 4.3

cc: Mrs. Pepita O. Jeffus  
New Mexico Oil & Gas Accounting Commission  
P. O. Box 2308  
Santa Fe, New Mexico 87501

Drawer 1857  
Roswell, New Mexico 88201

October 15, 1969

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

Attention: Mr. T. W. Sittick

Gentlemen:

The fourteenth revision of the Dakota participating area for the San Juan 27-5 unit agreement, Pio Arriba County, New Mexico, No. 14-08-001-950 was approved on October 15, 1969, by the Regional Oil and Gas Supervisor, Geological Survey, effective as of July 1, 1969.

By such revision the Dakota participating area is enlarged from 12,120.87 acres to 13,400.87 acres, based upon the completion of San Juan 27-5 unit wells Nos. 40, 115, and 117, located respectively in the NW<sup>1</sup>/<sub>4</sub> sec. 16, NE<sup>1</sup>/<sub>4</sub> sec. 23, and the NE<sup>1</sup>/<sub>4</sub> sec. 22, T. 27 N., R. 5 W., N.M.P.M. Well No. 40 was completed on July 31, 1969, for an absolute open flow potential of 5,110 MCFOPD from the Dakota formation in the interval from 7,464 feet to 7,699 feet. Well No. 115 was completed on July 1, 1969, for an absolute open flow potential of 3,319 MCFOPD from the Dakota formation in the interval from 7,556 feet to 7,768 feet. Well No. 117 was completed on July 31, 1969, for an absolute open flow potential of 7,214 MCFOPD from the Dakota formation in the interval from 7,582 feet to 7,852 feet.

Copies of the approved application are being distributed to the appropriate Federal offices and two approved copies are returned herewith. You are requested to furnish all interested parties with appropriate evidence of this approval.

Sincerely yours,

cc:  
Washington (w/cy. appln.)  
Durango (w/cy. appln.)  
NMOCC, Santa Fe (ltr only) ✓  
Comm. Pub. Lands, ~~etc~~  
Santa Fe (ltr. only)

(ORIG. SEC.) JOHN A. ANDERSON

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

October 7, 1969

540

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

Attention: Mr. T. W. Bittick

Re: Fourteenth Expanded  
Dakota Participating Area,  
San Juan 27-5 Unit, Rio  
Arriba County, New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Fourteenth Expanded Participating Area, Dakota Formation, for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/JEK/og

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

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OCT 2 1969

September 30, 1969

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

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
FOURTEENTH EXPANDED PARTICIPATING  
AREA, Dakota Formation

ATTENTION: Mr. Charles Higgins

Gentlemen:

The Commissioner of Public Lands has this date approved the Fourteenth Expanded Participating Area, Dakota Formation, for the captioned unit, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are retaining two copies and handing (6) copies to the Oil Conservation Commission for their approval and requesting that they forward five (5) copies to the United States Geological Survey at Roswell for their consideration.

Very truly yours,

Ted Bilberry, Director  
Oil and Gas Department

TB/ML/s

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

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El Paso Natural Gas Company

El Paso, Texas 79999

September 29, 1969

3CT-1 1969

540

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

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
**APPLICATION FOR APPROVAL OF THE  
FOURTEENTH EXPANDED PARTICIPATING  
AREA, Dakota Formation,  
Effective July 1, 1969**

Gentlemen:

We are enclosing for your approval eight (8) copies of an Application for Approval of the Fourteenth Expanded Participating Area of the Dakota Formation for the referenced Unit.

If this Application meets with your approval, please execute all copies and forward them to the Oil Conservation Commission for their approval and execution. After this Application has been signed by the Commissioner of Public Lands and the Oil Conservation Commission, the Commissioner of Public Lands should retain two (2) copies for his file and the Oil Conservation Commission should retain one (1) copy for its file, and five (5) copies should be forwarded to the United States Geological Survey in Roswell, New Mexico, for their approval and further handling. After this Application has been approved and signed by the United States Geological Survey, two (2) copies should be returned to El Paso.

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

CH:CTR:sf  
Enclosures

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

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

COPY

# El Paso Natural Gas Company

El Paso, Texas 79999

September 26, 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

RECEIVED  
SEP 30 11 02 AM '69  
STATE LAND OFFICE  
SANTA FE, N.M.

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
FOURTEENTH EXPANDED PARTICIPATING  
AREA, Dakota Formation, Effective  
July 1, 1969

Gentlemen:

Pursuant to the provisions of Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Fourteenth Expanded Participating Area for the Dakota Formation, to wit:

FOURTEENTH EXPANDED PARTICIPATING AREA - Effective July 1, 1969

<u>Description of Lands</u>	<u>Acres</u>
<u>Township 27 North, Range 5 West, N.M.P.M.</u>	
Section 17: S/2	320.00
Section 21: N/2	320.00
Section 22: S/2	320.00
Section 23: S/2	320.00
TOTAL	1,280.00

The proposed Fourteenth Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company,

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

September 26, 1969

as Unit Operator, that the San Juan 27-5 Unit #40, #115 and #117 Wells are capable of producing unitized substances in paying quantities from the Dakota Formation. These wells are as follows:

The San Juan 27-5 Unit #40 Well is located 1840' from the South line and 800' from the West line of Section 16, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on June 29, 1969, and completed on July 14, 1969, at a total depth of 7741'. The Dakota Formation in the intervals between 7464' - 7474', 7490' - 7505', 7596' - 7604', 7650' - 7660', 7679' - 7684', 7694' - 7699' was treated with a sand-water fracturing process on July 14, 1969. The Dakota Formation was shut-in on July 15, 1969, and after being shut-in for sixteen (16) days, the Dakota Formation was tested on July 31, 1969, and following a three (3) hour blow-down period gauged 4810 MCFGPD through a 3/4" choke and 5110 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2599 psia and an SIPT of 2624 psia.

The San Juan 27-5 Unit #115 Well is located 1060' from the North line and 1175' from the East line of Section 23, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on June 3, 1969, and completed on June 16, 1969, at a total depth of 7801'. The Dakota Formation in the intervals between 7556' - 7560', 7570' - 7578', 7678' - 7686', 7740' - 7748', 7760' - 7768' was treated with a sand-water fracturing process on June 15, 1969. The Dakota Formation was shut-in on June 17, 1969, and after being shut-in for eighteen (18) days, the Dakota Formation was tested on July 1, 1969, and following a three (3) hour blow-down period gauged 3181 MCFGPD through a 3/4" choke and 3319 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2584 psia and an SIPT of 2639 psia.

69. 44-2-11 OF 48  
RECORDED  
INDEXED  
The San Juan 27-5 Unit #117 Well is located 800' from the North line and 800' from the East line of Section 22, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on June 16, 1969, and completed on June 29, 1969, at a total depth of 7895'. The Dakota Formation in the intervals

Mr. John A. Anderson  
Commissioner of Public Lands  
Oil Conservation Commission  
Page 3

September 26, 1969

between 7582' - 7598', 7700' - 7716', 7764' - 7772', 7784' - 7792', 7836' - 7852' was treated with a sand-water fracturing process on June 28, 1969. The Dakota Formation was shut-in on June 30, 1969, and after being shut-in for thirty-one (31) days, the Dakota Formation was tested on July 31, 1969, and following a three (3) hour blow-down period gauged 6659 MCFGPD through a 3/4" choke and 7214 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2683 psia and an SIPT of 2667 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 Fourteenth Expanded Participating Area of the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "B"

Geological Report on the Fourteenth Expanded Participating Area of the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "C"

Plate No. 1: San Juan 27-5 Dakota Structure Map.  
Plate No. 2: San Juan 27-5 Dakota Isopach Map.

EXHIBIT "D"

Table 1: Dakota production and deliverability.

Attached hereto is Schedule XV that shows the proposed Fourteenth Expanded Participating Area for the Dakota Formation in the San Juan 27-5 Unit Area. This Schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the percentage of ownership in each tract.

If this Fourteenth Expanded Participating Area of the Dakota Formation meets with your approval, please indicate such approval in the space provided below and return an approved copy hereof for our files.

SEP 30 11 00 AM '69  
STATE ENGINEERING  
SANTA FE, N.M.  
RECEIVED

Mr. John A. Anderson  
Commissioner of Public Lands  
Oil Conservation Commission  
Page 4

September 26, 1969

Copies of this letter 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  
S.J. 27-5, 4.3

RECEIVED  
SEP 30 11 00 AM '69  
STATE LAND OFFICE  
SANTA FE, N.M.

APPROVED: \_\_\_\_\_  
Oil and Gas Supervisor  
United States Geological Survey  
Subject to like approval by the appropriate  
State officials.

DATE: \_\_\_\_\_

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

DATE: September 29, 1969

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: October 7, 1969

The foregoing approvals are for the Fourteenth Expanded Participating Area of the  
Dakota Formation, San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico.

RECEIVED  
SEP 30 11 08 AM '69  
STATE LAND OFFICE  
SANTA FE, N.M.

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. John L. Abercrombie

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Pan American Petroleum Corporation (3)

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Southern Petroleum Exploration, Inc.

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace  
and Mr. James A. Brown,  
Trustees under the Last Will &  
Testament of A. W. Brown

RECEIVED  
SEP 30 11 08 AM '69  
SANTA FE, N. M.  
COUNTY OFFICE

# El Paso Natural Gas Company

El Paso, Texas 79999

September 26, 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  
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: San Juan 27-5 Unit #14-08-001-950  
NOTICE OF COMPLETION OF ADDITIONAL  
WELLS, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that two (2) additional wells capable of producing unitized substances in commercial quantities from the Dakota Formation have been completed upon acreage committed to the Unit. These wells are as follows:

The San Juan 27-5 Unit #114 Well, located 990' from the North line and 800' from the East line of Section 17, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on July 15, 1969, and completed on July 26, 1969, in the Dakota Formation at a total depth of 7768'. The Dakota Formation in the intervals between 7496'-7504', 7521'-7537', 7624'-7640', 7670'-7676', 7697'-7713', was treated with a sand-water fracturing process on July 25, 1969. The well was shut-in on July 26, 1969, and after being shut-in for eleven (11) days, the well was tested on August 6, 1969, and following a three (3) hour blow-down period, the Dakota Formation gauged 4121 MCFGPD through a 3/4" choke, and 6718 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2636 psia and an SIPT of

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

September 26, 1969

1446 psia. The committed spacing unit upon which this well is located is described as the N/2 of Section 17, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres.

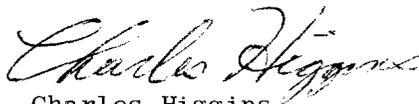
The spacing unit for this well was included in the San Juan 27-5 Unit Third Expanded Dakota Participating Area effective December 1, 1962, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-5 Unit #112 Well, located 1840' from the South line and 960' from the West line of Section 8, Township 27 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, was spudded on July 27, 1969, and completed on August 8, 1969, in the Dakota Formation at a total depth of 7830'. The Dakota Formation in the intervals between 7572'-7584', 7595'-7607', 7698'-7710', 7747'-7759', 7778'-7790', was treated with a sand-water fracturing process on August 8, 1969. The well was shut-in on August 8, 1969, and after being shut-in for twelve (12) days, the well was tested on August 20, 1969, and following a three (3) hour blow-down period, the Dakota Formation gauged 4073 MCFGPD through a 3/4" choke, and 4299 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2649 psia and an SIPT of 2481 psia. The committed spacing unit upon which this well is located is described as the W/2 of Section 8, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres.

The spacing unit was included in the San Juan 27-5 Unit Second Expanded Participating Area of the Dakota Formation, effective July 1, 1962, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

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

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

CH:CTR:nja  
Attachment  
San Juan 27-5 Unit, 4.3.1

cc: Mrs. Pepita O. Jeffus, Executive Director  
New Mexico Oil & Gas Accounting Commission  
P. O. Box 2308  
Santa Fe, New Mexico 87501

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. John L. Abercrombie  
Mr. J. R. Abercrombie  
Dr. W. E. Alsup  
Mrs. Lela L. Barkley  
Mrs. Evelyn G. Brown  
Mr. James A. Brown  
Mr. Donald R. Candelaria  
Mrs. Eulogia C. Candelaria  
Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor  
Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor  
Mr. J. Fidel Candelaria  
Mr. Orlando Candelaria  
Mr. Pablo Leopoldo Candelaria  
Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased  
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Mr. Sam Dazzo & Frances Joy Dazzo  
General American Oil Company of Texas  
Mr. Thomas H. Harrington  
Lt. Col. Langdon Dewey Harrison  
Mr. Ralph H. McCullough  
Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased  
Mr. Forrest B. Miller  
Mrs. Curzelia C. Montoya  
Mrs. Ophelia C. Montoya  
N. B. S. Corporation  
Northwest Production Corporation  
Pan American Petroleum Corporation (3)  
Mr. H. O. Pool  
Mr. Joe Quinn  
Rincon Oil & Gas Corporation  
Mr. M. A. Romero  
Mrs. Mercedes Candelaria Skidmore  
Southern Petroleum Exploration, Inc.  
Mr. Robert P. Tinnin  
Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown

El Paso Natural Gas Company

El Paso, Texas 79999

August 14, 1969

RECEIVED  
AUG 15 1969

540

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  
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: San Juan 27-5 Unit #14-08-001-950  
NOTICE OF COMPLETION OF ADDITIONAL  
WELLS, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that four (4) additional wells capable of producing unitized substances in commercial quantities from the Dakota Formation have been completed upon acreage committed to the Unit. These wells are as follows:

The San Juan 27-5 Unit #83 Well, located 790' from the North line and 1560' from the East line of Section 9, Township 27 North, Range 5 West, Rio Arriba County, New Mexico, was spudded on May 21, 1969, and completed on June 5, 1969, in the Dakota Formation at a total depth of 8042'. The Dakota Formation in the intervals between 7810'-7820', 7920'-7932', 7963'-7969', 7980'-7986', 8013'-8021', was treated with a sand-water fracturing process. The well was shut-in on June 8, 1969, and after being shut-in for twenty-three (23) days, the well was tested on July 1, 1969, and following a three (3) hour blow-down period, the Dakota Formation gauged 4056 MCFGPD through a 3/4" choke, and 4880 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2437 psia and

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

August 14, 1969

an SIPT of 1732 psia. The committed spacing unit upon which this well is located is described as the N/2 of Section 9, Township 27 North, Range 5 West, containing 320.00 acres.

The N/2 of the NE/4 of the spacing unit for this well was included in the San Juan 27-5 Unit Initial Dakota Participating Area effective August 31, 1953, and the balance of the spacing unit was included in the San Juan 27-5 Unit Second Expanded Participating Area for the Dakota Formation effective July 1, 1962, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-5 Unit #111 Well, located 1830' from the South line and 1090' from the West line of Section 2, Township 27 North, Range 5 West, Rio Arriba County, New Mexico, was spudded on June 8, 1969, and completed on June 20, 1969, in the Dakota Formation at a total depth of 7952'. The Dakota Formation in the intervals between 7730'-7740', 7836'-7846', 7890'-7900', 7916'-7926' was treated with a sand-water fracturing process. The well was shut-in on June 25, 1969, and after being shut-in for seven (7) days, the well was tested on July 2, 1969, and following a three (3) hour blow-down period, the Dakota Formation gauged 3574 MCFGPD through a 3/4" choke, and 4092 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2601 psia and an SIPT of 2634 psia. The committed spacing unit upon which this well is located is described as the S/2 of Section 2, Township 27 North, Range 5 West, containing 320.00 acres.

This spacing unit was included in the San Juan 27-5 Unit Eighth Expanded Participating Area of the Dakota Formation, effective November 1, 1965, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-5 Unit #113 Well, located 1150' from the North line and 950' from the East line of Section 10, Township 27 North, Range 5 West, Rio Arriba County, New Mexico was spudded on May 12, 1969, and completed on May 31, 1969, in the Dakota Formation at a total depth of 8642'. The Dakota Formation in the intervals between 8368'-8380', 8435'-8441', 8482'-8492', 8536'-8544',

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

August 14, 1969

8554'-8564', 8575'-8585' was treated with a sand-water fracturing process. The well was shut-in on June 3, 1969, and after being shut-in for twenty-eight (28) days, the well was tested on July 1, 1969, and following a three (3) hour blow-down period, the Dakota Formation gauged 2732 MCFGPD through a 3/4" choke, and 2793 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2516 psia and an SIPT of 2519 psia. The committed spacing unit upon which this well is located is described as the N/2 of Section 10, Township 27 North, Range 5 West, containing 320.00 acres.

The NW/4 NW/4 of the spacing unit for this well was included in the San Juan 27-5 Unit Initial Dakota Participating Area effective August 31, 1953, and the balance of the spacing unit was included in the San Juan 27-5 Unit Ninth Expanded Participating Area for the Dakota Formation, effective November 1, 1966, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

The San Juan 27-5 Unit #116 Well, located 1170' from the North line and 1170' from the East line of Section 24, Township 27 North, Range 5 West, Rio Arriba County, New Mexico, was spudded on May 20, 1969, and completed on May 31, 1969, in the Dakota Formation at a total depth of 7945'. The Dakota Formation in the intervals between 7618'-7628', 7734'-7746', 7782'-7787', 7797'-7802', 7812'-7822' was treated with a sand-water fracturing process. The well was shut-in on June 3, 1969, and after being shut-in for twenty-eight (28) days, the well was tested on July 1, 1969, and following a three (3) hour blow-down period, the Dakota Formation gauged 3665 MCFGPD through a 3/4" choke, and 3794 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2515 psia and an SIPT of 2334 psia. The committed spacing unit upon which this well is located is described as the N/2 of Section 24, Township 27 North, Range 5 West, containing 320.00 acres.

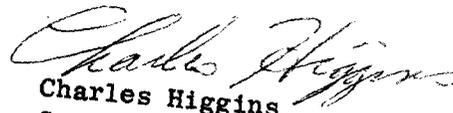
This spacing unit was included in the San Juan 27-5 Unit Tenth Expanded Participating Area of the Dakota Formation, effective June 1, 1967, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

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

August 14, 1969

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

Very truly yours,



Charles Higgins  
Supervising Landman  
Land Department

CH:JS:nja  
Attachment  
San Juan 27-5 Unit 4.3.1

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission  
P. O. Box 2308  
Santa Fe, New Mexico 87501

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. John L. Abercrombie

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

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Northwest Production Corporation

Pan American Petroleum Corporation (3)

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Southern Petroleum Exploration, Inc.

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown

# El Paso Natural Gas Company

El Paso, Texas 79999

May 7, 1969

ST 1 M 1 19  
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MAY 9 PM 1 19

540

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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
THIRTEENTH EXPANDED PARTICIPATING  
AREA, Dakota Formation, Effective  
December 1, 1968

Gentlemen:

The Thirteenth Expanded Participating Area for the referenced Unit was approved by the Regulatory Bodies on the dates indicated:

United States Geological Survey	May 2, 1969
Commissioner of Public Lands	April 23, 1969
Oil Conservation Commission	April 25, 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:JS:sf  
SJ 27-5, 4.3

cc: Mrs. Pepita O. Jeffus  
New Mexico Oil & Gas Accounting Commission  
P. O. Box 2308  
Santa Fe, New Mexico 87501



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

MAY 2, 1969

MAY 6 AM 8 15

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

Attention: Mr. Charles Higgins

Gentlemen:

The thirteenth revision of the Dakota participating area for the San Juan 27-5 unit agreement, Rio Arriba County, New Mexico, No. 14-08-001-950, was approved on May 2, 1969, by the Regional Oil and Gas Supervisor, Geological Survey, effective as of December 1, 1968.

By such revision the Dakota participating area is enlarged from 11,300.87 acres to 12,120.87 acres, based upon the completion of San Juan 27-4 unit well No. 50 in the ~~NE 1/4~~ sec. 19, T. 27 N., R. 4 W. N.M.P.M. This well was completed on December 17, 1968, for a calculated absolute open flow potential of 5,804 MCFGPD from the Dakota formation in the interval from 7,688 feet to 7,900 feet.

Copies of the approved application are being distributed to the appropriate Federal offices and one approved copy is returned herewith. You are requested to furnish all interested parties with appropriate evidence of this approval.

Sincerely yours,

(ORIG. SCD) JOHN A. ANDERSON

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

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

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

April 25, 1969

540

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

Attention: Mr. Charles Higgins

Re: Thirteenth Expanded Dakota  
Participating Area - San  
Juan 27-5 Unit, Rio Arriba  
County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Thirteenth Expanded Participating Area, Dakota Formation, for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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

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  
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Y

April 23, 1969

C  
O  
Y  
The Natural Gas Company  
P.O. Box 1492  
Paso, Texas 79999

MAIL ROOM

'69 APR 23 PM 1 4

Re: San Juan 27-5  
Rio Arriba County, New Mexico  
Thirteenth Expanded Participating  
Area, Dakota Formation

ATTENTION: Mr. Charles Higgins

Gentlemen:

The Commissioner of Public Lands has this date approved the Thirteenth Expanded Participating Area, Dakota Formation, for the captioned unit, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are retaining two copies and handing (6) copies to the Oil Conservation Commission for their approval and requesting that they forward five (5) copies to the United States Geological Survey at Roswell for their consideration.

Very truly yours,

ALEX J. ARMIJO  
COMMISSIONER OF PUBLIC LANDS

BY:  
Ted Bilberry, Director  
Oil and Gas Department

AJA/TE/ML/s  
cc: USGS-Roswell, New Mexico  
OCC- Santa Fe, New Mexico

El Paso Natural Gas Company

El Paso, Texas 79999

April 22, 1969

MAIN OFFICE  
APR 23 11 08 21 '69

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

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
**APPLICATION FOR APPROVAL OF THE  
THIRTEENTH EXPANDED PARTICIPATING  
AREA, Dakota Formation, Effective  
December 1, 1968**

Gentlemen:

We are enclosing for your approval eight (8) copies of an Application for Approval of the Thirteenth Expanded Participating Area of the Dakota Formation for the referenced Unit.

If this Application meets with your approval, please execute all copies and forward them to the Oil Conservation Commission for their approval and execution. After this Application has been signed by the Commissioner of Public Lands and the Oil Conservation Commission, the Commissioner of Public Lands should retain two (2) copies for his file and the Oil Conservation Commission should retain one (1) copy for its file, and five (5) copies should be forwarded to the United States Geological Survey in Roswell, New Mexico, for their approval and further handling. After this Application has been approved and signed by the United States Geological Survey, two (2) copies should be returned to El Paso.

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

CH:JS:sf  
Enclosure

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

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

COPY

# El Paso Natural Gas Company

El Paso, Texas 79909

April 21, 1969

RECEIVED

APR 23 11 11 AM '69

STATE LAND OFFICE  
SANTA FE, N.M.

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

'69 APR 23 PM 1 40

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
THIRTEENTH EXPANDED PARTICIPATING  
AREA, Dakota Formation, Effective  
December 1, 1968

Gentlemen:

Pursuant to the provisions of Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Thirteenth Expanded Participating Area for the Dakota Formation, to wit:

THIRTEENTH EXPANDED PARTICIPATING AREA - Effective December 1, 1968

Description of Lands

Acres

Township 27 North, Range 5 West, N.M.P.M.  
Section 24: S/2

320.00

TOTAL

320.00

The proposed Thirteenth Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-4 Unit #50 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

The San Juan 27-4 Unit #50 Well is located 1,500' from the South line and 1,575' from the West line of Section 19, Township 27 North, Range 4 West, N.M.P.M. Said well was spudded on October 17, 1968, and completed on November 9, 1968, at a total depth of 7,910'. The Dakota Formation in the intervals between 7,688' - 7,694', 7,704' - 7,716', 7,816' - 7,826', 7,862' - 7,868', 7,890' - 7,900' was treated with a sand-water fracturing process on November 7, 1968. The Dakota Formation was shut-in on December 11, 1968, and after being shut-in for six (6) days, the Dakota Formation was tested on December 17, 1968, and following a three (3) hour blow-down period gauged 4,976 MCFGPD through a 3/4" choke and 5,804 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2,457 psia and an SIPT of 2,439 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 Thirteenth Expanded Participating Area of the Dakota Formation within the San Juan 27-5 Unit.

RECEIVED  
 APR 23 11 11 AM '69  
 SERRAVALLO FIELD OFFICE

EXHIBIT "B"

Geological Report on the Thirteenth Expanded Participating Area of the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "C"

- Plate No. 1: San Juan 27-5 Dakota Structure Map.
- Plate No. 2: San Juan 27-5 Dakota Isopach Map.

EXHIBIT "D"

Table 1: Dakota production and deliverability.

Attached hereto is Schedule XIV that shows the proposed Thirteenth Expanded Participating Area for the Dakota Formation in the San Juan 27-5 Unit Area. This Schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the percentage of ownership in each tract.

If this Thirteenth Expanded Participating Area of the Dakota Formation meets with your approval, please indicate such approval in the space provided below and return an approved copy hereof for our files.

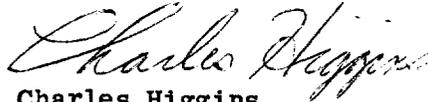
Mr. John A. Anderson et al

-3-

April 21, 1969

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

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

CH:JS:sf  
Enclosures

San Juan 27-5 Unit, 4.3

RECEIVED  
APR 23 11 11 AM '69  
LAND DEPARTMENT  
SAN JUAN, P.R.

APPROVED: \_\_\_\_\_  
Oil & Gas Supervisor, United States Geological  
Survey Subject to like approval by the appropriate  
State Officials.

DATE: \_\_\_\_\_

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

DATE: 4-23-69

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

DATE: 4-25-69

The foregoing approvals are for the Thirteenth Expanded Participating Area of the  
Dakota Formation, San Juan 27-5 Unit #14-08-001-950, Rio Arriba County, New Mexico.

RECEIVED  
APR 23 11 12 AM '69  
STATE DEPARTMENT OF  
SAN JUAN COUNTY, N.M.

SAN JUAN 27-5 UNIT  
Working Interest Owners - Page 1

Mr. John L. Abercrombie  
Texas National Bank of Commerce  
c/o Trust Dept., #1450  
P. O. Box 2558  
Houston, Texas 77001

Mr. J. R. Abercrombie  
P. O. Box 224  
Bellaire, Texas 77401

Mr. W. E. Alsup, M. D.  
Box 926  
Taos, New Mexico 87571

Mrs. Lela L. Barkley  
5322 Institute Lane  
Houston, Texas 77005

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown  
Park Drive South  
Rye, New York 10580

Mrs. Evelyn G. Brown  
Park Drive South  
Rye, New York 10580

Mr. James A. Brown  
Park Drive South  
Rye, New York 10580

Colorado Oil & Gas Corporation  
P. O. Box 1819  
Colorado Springs, Colorado 80901

Mr. Sam Dazzo & Frances Joy Dazzo  
615 Simms Building  
Albuquerque, New Mexico 87101

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased  
5th and Locust Streets  
Des Moines, Iowa 50309

Mr. Thomas H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. Ralph H. McCullough  
2001 Gulf Building  
Houston, Texas 77002

Mrs. Catherine B. McElvain  
Individually and as Executrix of the  
Estate of T. H. McElvain, Deceased  
Box 2148  
Santa Fe, New Mexico 87501

Mr. Forrest B. Miller  
1224 Lois Street  
P. O. Box 1445  
Kerrville, Texas 78028

N. B. S. Corporation  
c/o Mr. Robert E. Fox, Attorney at Law  
P. O. Box 1769  
Santa Fe, New Mexico 87501

Northwest Production Corporation  
P. O. Box 1796  
El Paso, Texas 79949

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

Mr. H. O. Pool  
P. O. Box 1585  
Scottsdale, Arizona 85251

Mr. Joe Quinn  
908 Longwood Loop  
Mesa, Arizona 85201

Lt. Col. Langdon Dewey Harrison  
Trustee for Omega E. Quinn  
Consolidated Mail Room  
Box 4075  
Holloman AFB, New Mexico 87723

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Building  
Dallas, Texas 75201

APR 23 11 11 AM '69  
SAN JUAN OIL FIELD  
E.N.M.

SAN JUAN 27-5 UNIT  
Working Interest Owners - Page 2

Mr. M. A. Romero  
P. O. Box 11585, Station "E"  
Albuquerque, New Mexico 87112

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

Mr. Robert P. Tinnin  
P. O. Box 1854  
Albuquerque, New Mexico 87108

Mrs. Ophelia C. Montoya  
4306 Sunningdale N. E.  
Albuquerque, New Mexico 87110

Mr. Orlando Candelaria  
229 Lily Avenue S. E.  
Albuquerque, New Mexico 87102

Mrs. Mercedes Candelaria Skidmore  
564 Central Avenue, Apt. 312  
Alameda, California 94501

Mr. Pablo Leopoldo Candelaria  
Blanco, New Mexico 87412

Mrs. Curzelia C. Montoya  
Blanco, New Mexico 87412

Mr. J. Fidel Candelaria  
Aztec, New Mexico 87410

Mr. Donald R. Candelaria  
Aztec, New Mexico 87410

Mrs. Eulogia C. Candelaria  
517 East Zia  
Aztec, New Mexico 87410

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico 87410

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico 87410

RECEIVED  
APR 23 11 11 AM '69  
STATE DEPT. OFFICE  
SANTA FE, N.M.

# El Paso Natural Gas Company

El Paso, Texas 79999

APR 16  
MAR 20 1969

540

March 24, 1969

Mr. John A. Anderson  
Regional Oil & 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: **San Juan 27-5 Unit #14-08-001-950**  
**Rio Arriba County, New Mexico**  
**1969 DRILLING PROGRAM**

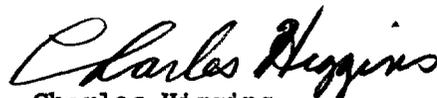
Gentlemen:

The 1969 Drilling Program dated February 20, 1969 for the referenced Unit was approved by the Regulatory Bodies on the dates indicated below:

United States Geological Survey	-	March 18, 1969
Commissioner of Public Lands	-	February 25, 1969
Oil Conservation Commission	-	March 3, 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:JS:nja  
SJ 27-5, 3.0



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

IN REPLY REFER TO:

March 18, 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 San Juan 27-5 unit area, Rio Arriba County, New Mexico, proposing the drilling of nine 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. SENT TO THE DIRECTOR)

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

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

OIL CONSERVATION  
P. O. BOX 2  
SANTA FE, NEW MEX

March 3, 1969

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

Attention: Mr. T. W. Bittick

Re: 1969 Drilling Program  
San Juan 27-5 Unit,  
Rio Arriba County,  
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the drilling program providing for the drilling of nine Dakota wells during the calendar year 1969 for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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

C  
O  
P  
Y

MAIN OFFICE  
'69 FEB 26 AM 8 33

February 25, 1969

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

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
1969 Drilling Program

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved your 1969 Drilling Program for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, this program proposes the drilling of nine dakota wells. Our 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,

ALEX J. ARMILJO  
COMMISSIONER OF PUBLIC LANDS

BY:  
Ted Bilberry, Director  
Oil and Gas Department

AJA/TE/ML/s  
encl. 1.

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

ILLEGIBLE

# El Paso Natural Gas Company

El Paso, Texas 79999

February 20, 1969

69 FEB 25 10 10 19

Mr. John A. Anderson  
Regional Oil & Gas Supervisor  
United States Geological Survey  
Post Office 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1969 DRILLING PROGRAM

Gentlemen:

By letter dated January 12, 1968, El Paso Natural Gas Company, as Unit Operator of the San Juan 27-5 Unit, filed a Drilling Program covering said Unit for the calendar year 1968. This Program provided for the drilling of two Dakota wells by the Unit Operator during the year. These wells were drilled with one being completed within the existing limits of the Dakota Participating Area and the other completed on acreage outside the limits of the Dakota Participating Area. The completion of Well #110 did not cause an expansion to the Dakota Participating Area; however, the completion of Well #109 necessitated the Twelfth Expansion to the Dakota Participating Area. The Twelfth Expansion of the Dakota Participating Area was filed for approval with the appropriate regulatory bodies on October 8, 1968, and has since received their necessary approval.

With the completion of the above described wells, the total number of wells in the San Juan 27-5 Unit is as follows:

Pictured Cliffs	13
Mesaverde	23
Dual, Pictured Cliffs-Mesaverde	39
Dual, Mesaverde-Dakota	3
Dakota	23
Noncommercial, Mesaverde	1
Noncommercial, Dakota	1
	<u>103</u>

Pursuant to Section 10 of the San Juan 27-5 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program providing for the drilling of the following described wells during the calendar year of 1969.

<u>Location</u>	<u>Formation</u>
San Juan 27-5 Unit #40 Well SW/4 Sec. 16, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #83 Well NE/4 Sec. 9, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #111 Well SW/4 Sec. 2, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #112 Well SW/4 Sec. 8, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #113 Well NE/4 Sec. 10, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #114 Well NE/4 Sec. 17, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #115 Well NE/4 Sec. 23, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #116 Well NE/4 Sec. 24, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #117 Well NE/4 Sec. 22, T-27-N, R-5-W	Dakota

El Paso Natural Gas Company intends to drill these wells to the base of the Dakota Formation using rotary tools. Surface casing will be set to the depth of approximately 200' and an intermediate string will be run through the Pictured Cliffs Formation to a depth of approximately 3,700', and then a production casing string will be run to the base of the Dakota Formation. The casing in the Dakota Formation will then be perforated and the Dakota Formation subjected to a hydraulic fracturing process. Mud will be used in setting the intermediate string of casing when said casing is run and the hole below the intermediate string of casing will be drilled with gas. Due care will be taken to protect all horizons.

In addition to the above wells, 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 later deemed necessary or desirable by the Unit Operator and the working interest owners.

All of the working interest owners have been contacted and this Drilling Program reflects, insofar as possible, their desires for additional drilling.

If this Drilling Program is acceptable, please signify your approval as required under Section 10 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 shown on the attached sheet.

Yours very truly,



T. W. Bittick  
Manager  
Land Department

TWB:JS:sf

San Juan 27-5 Unit 3.0

APPROVED: \_\_\_\_\_  
Oil & Gas 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: March 3, 1969

The foregoing approvals are for the proposed 1969 Drilling Program for the San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico.

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. John L. Abercrombie

Mr. J. R. Abercrombie

Dr. W. E. Alsup

Mrs. Lela L. Barkley

Mrs. Evelyn G. Brown

Mr. James A. Brown

Mr. Donald R. Candelaria

Mrs. Eulogia C. Candelaria

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor

Mr. J. Fidel Candelaria

Mr. Orlando Candelaria

Mr. Pablo Leopoldo Candelaria

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased

Colorado Oil & Gas Corporation

Mr. Sam Dazzo & Frances Joy Dazzo

General American Oil Company of Texas

Mr. Thomas H. Harrington

Lt. Col. Langdon Dewey Harrison

Mr. Ralph H. McCullough

Mrs. Catherine B. McElvain, Individually &  
as Executrix of the Estate of T. H.  
McElvain, Deceased

Mr. Forrest B. Miller

Mrs. Curzelia C. Montoya

Mrs. Ophelia C. Montoya

N. B. S. Corporation

Northwest Production Corporation

Pan American Petroleum Corporation (3)

Mr. H. O. Pool

Mr. Joe Quinn

Rincon Oil & Gas Corporation

Mr. M. A. Romero

Mrs. Mercedes Candelaria Skidmore

Southern Petroleum Exploration, Inc.

Mr. Robert P. Tinnin

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown

El Paso Natural Gas Company

El Paso, Texas 79999

November 4, 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  
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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
Approval of the Twelfth Expanded  
Participating Area, Dakota Forma-  
tion, Effective July 1, 1968.

Gentlemen:

The Twelfth Expanded Participating Area, Dakota Formation, San Juan 27-5 Unit, was approved by the regulatory bodies on the dates set out below:

1. United States Geological Survey: October 29, 1968
2. Commissioner of Public Lands: October 10, 1968
3. Oil Conservation Commission: October 11, 1968

Copies of this letter are being sent to all the working interest owners of the San Juan 27-5 Unit.

Yours very truly,

*Charles Higgins*

Charles Higgins  
Supervising Landman  
Land Department

CH:JS:mb  
San Juan 27-5, 4.3, 5.0

cc: Mrs. Pepita O. Jeffus, Executive Director  
New Mexico Oil & Gas Accounting Commission  
P. O. Box 2308  
Santa Fe, New Mexico 87501



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
Drawer 1857  
Roswell, New Mexico 88201

540

October 29, 1968

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

MAIN OFFICE

'68 Oct 31 AM 8 32

Attention: Mr. Charles Higgins

Gentlemen:

The twelfth revision of the Dakota participating area for the San Juan 27-5 unit agreement, Rio Arriba County, New Mexico, No. 14-06-001-950, was approved on October 29, 1968, by the Regional Oil and Gas Supervisor, Geological Survey, effective as of July 1, 1968.

By such revision, the Dakota participating area is enlarged from 11,441.71 acres to 11,809.87 acres, based upon the completion of unit well 109 in the NW1/4 sec. 3, T. 27 N., R. 5 W., N.M.P.M., as a paying well pursuant to the applicable terms of the unit agreement. This well was completed on July 3, 1968, for a calculated absolute open flow of 2,509 MCF/CD from the Dakota formation 7,660 - 7,860 feet.

Copies of the approved application are being distributed to the Federal offices involved and one copy is returned herewith. You are requested to furnish the State of New Mexico and all interested parties with appropriate evidence of this approval.

Sincerely yours,

(ORIG. SGD.) JOHN A. ANDERSON

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

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

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

540

October 11, 1968

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

Attention: Mr. Charles Higgins

Re: Twelfth Expanded  
Participating Area,  
Dakota Formation  
San Juan 27-5 Unit,  
Rio Arriba County,  
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Twelfth Expanded Participating Area, Dakota Formation, for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Five approved copies of the application for approval of the expansion are being forwarded to the United States Geological Survey, Roswell, New Mexico.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/JEK/og

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

C  
O  
P  
Y

# El Paso Natural Gas Company

El Paso, Texas 79999

October 8, 1968

OCT 13 8 09 AM '68  
SANTA FE, N.M.

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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
TWELFTH EXPANDED PARTICIPATING  
AREA, Dakota Formation,  
Effective July 1, 1968

Gentlemen:

Pursuant to the provisions of Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Twelfth Expanded Participating Area for the Dakota Formation, to wit:

TWELFTH EXPANDED PARTICIPATING AREA - Effective July 1, 1968

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 5 West, N.M.P.M. Section 3: E/2, NE/4 SW/4	359.16
TOTAL	<u>359.16</u>

The proposed Twelfth Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #109 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

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

-2-

October 8, 1968

The San Juan 27-5 Unit #109 Well is located 1190' from the North line and 1850' from the East line of Section 3, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on May 29, 1968, and completed on June 13, 1968, at a total depth of 7890'. The Dakota Formation in the intervals between 7660'-7672', 7720'-7726', 7762'-7774', 7820'-7832', 7848'-7860', was treated with a sand-water fracturing process on June 13, 1968. The Dakota Formation was shut-in on June 14, 1968, and after being shut-in for nineteen (19) days, the Dakota Formation was tested on July 3, 1968, and following a three (3) hour blow-down period gauged 3138 MCFGPD through a 3/4" choke and 3509 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2691 psia and an SIPT of 2731 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 Twelfth Expanded Participating Area of the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "B"

Geological Report on the Twelfth Expanded Participating Area of the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "C"

Plate No. 1: San Juan 27-5 Dakota Structure Map.  
Plate No. 2: San Juan 27-5 Dakota Isopach Map.

EXHIBIT "D"

Table 1: Dakota production and deliverability.

Attached hereto is Schedule XIII that shows the proposed Twelfth Expanded Participating Area for the Dakota Formation in the San Juan 27-5 Unit Area. This schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the percentage of ownership in each tract.

If this Twelfth Expanded Participating Area of the Dakota Formation meets with your approval, please indicate such approval in the space provided below and return an approved copy hereof for our files.

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

-3-

October 8, 1968

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

Very truly yours,



Charles Higgins  
Supervising Landman  
Land Department

CH:JS:vjh  
Enclosures

San Juan 27-5 Unit, 4.3

APPROVED: \_\_\_\_\_  
Director, United States Geological Survey  
Subject to like approval by the appropriate  
State Officials.

DATE: \_\_\_\_\_

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

DATE: *October 10, 1968*

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

DATE: *October 11, 1968*

The foregoing approvals are for the Twelfth Expanded Participating Area  
of the Dakota Formation, San Juan 27-5 Unit #14-08-001-950, Rio Arriba County,  
New Mexico.

Mr. John L. Abercrombie  
Texas National Bank of Commerce  
c/o Trust Dept., #1450  
P. O. Box 2558  
Houston, Texas 77001

Mr. J. R. Abercrombie  
P. O. Box 224  
Bellaire, Texas 77401

Mr. W. E. Alsup, M.D.  
Box 926  
Taos, New Mexico 87571

Mrs. Lela L. Barkley  
5322 Institute Lane  
Houston, Texas 77005

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown  
Park Drive South  
Rye, New York 10580

Mrs. Evelyn G. Brown  
Park Drive South  
Rye, New York 10580

Mr. James A. Brown  
Park Drive South  
Rye, New York 10580

Colorado Oil & Gas Corporation  
P. O. Box 1819  
Colorado Springs, Colorado 80901

Mr. Sam Dazzo & Frances Dazzo  
615 Simms Building  
Albuquerque, New Mexico 87101

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased  
5th and Locust Streets  
Des Moines, Iowa 50309

Mr. Thomas H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. Ralph H. McCullough  
2001 Gulf Building  
Houston, Texas 77002

Mrs. Catherine B. McElvain  
Individually and as Executrix of  
the Estate of T. H. McElvain,  
Deceased  
Box 2148  
Santa Fe, New Mexico 87501

Mr. Forrest B. Miller  
1224 Lois Street  
P. O. Box 1445  
Kerrville, Texas 78028

N. B. S. Corporation  
c/o Mr. Robert E. Fox,  
Attorney at Law  
P. O. Box 1769  
Santa Fe, New Mexico 87501

Northwest Production Corporation  
P. O. Box 1796  
El Paso, Texas 79949

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

Mr. H. O. Pool  
P. O. Box 1585  
Scottsdale, Arizona 85251

Mr. Joe Quinn  
908 Longwood Loop  
Mesa, Arizona 85201

Lt. Col. Langdon Dewey Harrison  
Trustee for Omega E. Quinn  
Consolidated Mail Room  
Box 4075  
Holloman AFB, New Mexico 87723

San Juan 27-5 Unit  
Working Interest Owners - Page 2

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Building  
Dallas, Texas 75201

Mr. M. A. Romero  
P. O. Box 11585, Station "E"  
Albuquerque, New Mexico 87112

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

Mr. Robert P. Tinnin  
P. O. Box 1854  
Albuquerque, New Mexico 87108

Mrs. Ophelia C. Montoya  
4306 Sunningdale N. E.  
Albuquerque, New Mexico 87110

Mr. Orlando Candelaria  
229 Lily Avenue S. E.  
Albuquerque, New Mexico 87102

Mrs. Mercedes Candelaria Skidmore  
564 Central Avenue, Apt. 312  
Alameda, California 94501

Mr. Pablo Leopoldo Candelaria  
Blanco, New Mexico 87412

Mrs. Curzelia C. Montoya  
Blanco, New Mexico 87412

Mr. J. Fidel Candelaria  
Aztec, New Mexico 87410

Mr. Donald R. Candelaria  
Aztec, New Mexico 87410

Mrs. Eulogia C. Candelaria  
517 East Zia  
Aztec, New Mexico 87410

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico 87410

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico 87410

OCT 9 9 07 AM '88  
SANTA FE, N.M.

# El Paso Natural Gas Company

El Paso, Texas 79999

October 8, 1968

540  
68 Oct 15

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

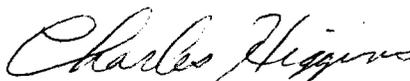
Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
TWELFTH EXPANDED PARTICIPATING AREA,  
Dakota Formation, Effective July 1, 1968

Gentlemen:

We are enclosing for your approval eight (8) copies of an Application for Approval of the Twelfth Expanded Participating Area of the Dakota Formation for the referenced unit.

If this Application meets with your approval, please execute all copies and forward them to the Oil Conservation Commission for their approval and execution. After this Application has been signed by the Commissioner of Public Lands and the Oil Conservation Commission, the Commissioner of Public Lands should retain two (2) copies for his file and the Oil Conservation Commission should retain one (1) copy for its file, and five (5) copies should be forwarded to the United States Geological Survey in Roswell, New Mexico, for their approval and further handling. After this Application has been approved and signed by the United States Geological Survey, two (2) copies should be returned to El Paso.

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

CH:JS:vjh

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

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

COPY

# El Paso Natural Gas Company

El Paso, Texas 79999

August 29, 1968

540

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  
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: San Juan 27-5 Unit #14-08-001-950  
NOTICE OF COMPLETION OF ADDITIONAL  
WELL, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one additional well capable of producing unitized substances in commercial quantities from the Dakota Formation has been completed upon acreage committed to the unit. This well is as follows:

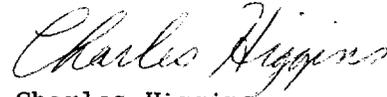
The San Juan 27-5 Unit #110 Well, located 655' from the North line and 2105' from the East line of Section 2, Township 27 North, Range 5 West, Rio Arriba County, New Mexico, was spudded on June 4, 1968, and completed on June 28, 1968, in the Dakota Formation at a total depth of 8004'. The Dakota Formation in the intervals between 7784'-7796', 7844'-7850', 7884'-7896', 7938'-7950', 7960'-7984', was treated with a sand-water fracturing process. The well was shut-in on June 29, 1968, and after being shut-in for forty-six (46) days, the well was tested on August 14, 1968, and following a three (3) hour blow-down period the Dakota Formation gauged 3763 MCFGPD through a 3/4" choke, and 4386 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2685 psia and an SIPT of 2672 psia. The committed spacing unit upon which this well is located is described as the N/2 of Section 2, Township 27 North, Range 5 West, containing 319.44 acres.

August 29, 1968

This spacing unit was included in the San Juan 27-5 Unit Tenth Expanded Participating Area of the Dakota Formation, effective June 1, 1967, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

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

Very truly yours,



Charles Higgins  
Supervising Landman  
Land Department

CH:JS:vjh

Attachment

San Juan 27-5 Unit 4.3.1

cc: Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission  
P. O. Box 2308  
Santa Fe, New Mexico 87501

SAN JUAN 27-5 UNIT

Working Interest Owners - Page 1

Mr. John L. Abercrombie  
Texas National Bank of Commerce  
c/o Trust Dept., #1450  
P. O. Box 2558  
Houston, Texas 77001

Mr. J. R. Abercrombie  
P. O. Box 224  
Bellaire, Texas 77401

Mr. W. E. Alsup, M.D.  
Box 926  
Taos, New Mexico 87571

Mrs. Lela L. Barkley  
5322 Institute Lane  
Houston, Texas 77005

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown  
Park Drive South  
Rye, New York 10580

Mrs. Evelyn G. Brown  
Park Drive South  
Rye, New York 10580

Mr. James A. Brown  
Park Drive South  
Rye, New York 10580

Colorado Oil & Gas Corporation  
P. O. Box 1819  
Colorado Springs, Colorado 80901

Mr. Sam Dazzo & Frances Joy Dazzo  
615 Simms Building  
Albuquerque, New Mexico 87101

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

Central National Bank & Trust Co. of  
Des Moines, Trustee under the Will of  
Gerald F. Harrington, Deceased  
5th and Locust Streets  
Des Moines, Iowa 50309

Mr. Thomas H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. Ralph H. McCullough  
2001 Gulf Building  
Houston, Texas 77002

Mrs. Catherine B. McElvain  
Individually and as Executrix of the  
Estate of T. H. McElvain, Deceased  
Box 2148  
Santa Fe, New Mexico 87501

Mr. Forrest B. Miller  
1224 Lois Street  
P. O. Box 1445  
Kerrville, Texas 78028

N. B. S. Corporation  
c/o Mr. Robert E. Fox, Attorney at Law  
P. O. Box 1769  
Santa Fe, New Mexico 87501

Northwest Production Corporation  
P. O. Box 1796  
El Paso, Texas 79949

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

Mr. H. O. Pool  
P. O. Box 1585  
Scottsdale, Arizona 85251

Mr. Joe Quinn  
908 Longwood Loop  
Mesa, Arizona 85201

Lt. Col. Langdon Dewey Harrison  
Trustee for Omega E. Quinn  
Consolidated Mail Room  
Box 4075  
Holloman AFB, New Mexico 87723

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Building  
Dallas, Texas 75201

Mr. M. A. Romero  
P. O. Box 11585, Station "E"  
Albuquerque, New Mexico 87112

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

Mr. Robert P. Tinnin  
P. O. Box 1854  
Albuquerque, New Mexico 87108

Mrs. Ophelia C. Montoya  
4306 Sunningdale N. E.  
Albuquerque, New Mexico 87110

Mr. Orlando Candelaria  
229 Lily Avenue S. E.  
Albuquerque, New Mexico 87102

Mrs. Mercedes Candelaria Skidmore  
564 Central Avenue, Apt. 312  
Alameda, California 94501

Mr. Pablo Leopoldo Candelaria  
Blanco, New Mexico 87412

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Mrs. Eulogia C. Candelaria  
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Aztec, New Mexico 87410

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico 87410

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico 87410

El Paso Natural Gas Company

El Paso, Texas 79999

March 6, 1968

540

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

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

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

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
Approval of the Tenth and Eleventh  
Expanded Participating Areas, Dakota  
Formation, Effective June 1, 1967,  
and August 1, 1967.

Gentlemen:

The Tenth and Eleventh Expanded Participating Areas, Dakota Formation, San Juan 27-5 Unit, were approved by the regulatory bodies on the dates set out below:

1. United States Geological Survey - February 27, 1968
2. Commissioner of Public Lands - December 5, 1967
3. Oil Conservation Commission - December 7, 1967

Copies of this letter are being sent to all the working interest owners of the San Juan 27-5 Unit.

Yours very truly,



Charles Higgins  
Supervising Landman  
Land Department

CH:JS:jlw  
San Juan 27-5 - 4.3, 5.0

cc Mrs. Pepita O. Jeffus  
Executive Director  
New Mexico Oil & Gas Accounting Commission  
P. O. Box 2308  
Santa Fe, New Mexico 87501

# El Paso Natural Gas Company

El Paso, Texas 79999

March 1, 1968

540

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

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

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

Re: 1968 DRILLING PROGRAM  
San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico

Gentlemen:

The 1968 Drilling Program for the referenced Unit was approved by the regulatory bodies on the dates indicated:

United States Geological Survey	February 26, 1968
Oil Conservation Commission	January 19, 1968
Commissioner of Public Lands	January 22, 1968

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:JS:vb

San Juan 27-5 Unit - 3.0

68 MAR 4 AM 8 05



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
Drawer 1857  
Roswell, New Mexico 88201

540  
February 26, 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 San Juan 27-5 unit area, Rio Arriba County, New Mexico, proposing the drilling of two 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.) CARL C. TRAYWICK

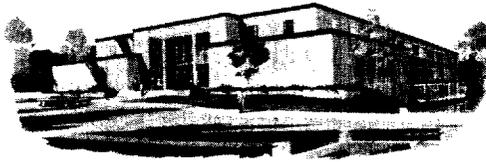
CARL C. TRAYWICK  
Acting Oil and Gas Supervisor

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

MAIN OFFICE

'68 FEB 28 AM 8 37

State of New Mexico



Commissioner of Public Lands



January 22, 1968

GUYTON B. HAYS  
COMMISSIONER

P. O. BOX 1148  
SANTA FE, NEW MEXICO

El Paso Natural Gas Company  
Post Office Box 1492  
El Paso, Texas 79999

Re: San Juan 27-5 Unit  
Rio Arriba County,  
New Mexico  
1968 DRILLING PROGRAM

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands has this date approved your 1968 Drilling Program for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, proposing the drilling of two (2) Dakota Wells.

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

We are retaining two copies of the plan and returning one copy surplus to our need.

Very truly yours,

GUYTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS

MAIN OFFICE

BY:  
Eddie Lopez, Supervisor  
Unit Division

'68 JAN 23 AM 8 43

GBH/TB/EL/s  
encl.

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

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

540

January 19, 1968

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

Attention: Mr. T. W. Bittick

Re: 1968 Drilling Program  
San Juan 27-5 Unit, Rio  
Arriba County, 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 two Dakota wells for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALFJEK/og

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

El Paso Natural Gas Company

El Paso, Texas 79999

January 12, 1968

RECEIVED  
JAN 15 1968  
AM 6 b

Mr. John A. Anderson  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Post Office 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1968 DRILLING PROGRAM

Gentlemen:

By letter dated April 12, 1967, El Paso Natural Gas Company, as Unit Operator of the San Juan 27-5 Unit, filed a Drilling Program covering said Unit for the calendar year 1967. This Program provided for the drilling of seven Dakota wells by the Unit Operator during the year. These wells were drilled with six being completed within the present limits of the Dakota Participating Area and the seventh completed on acreage outside the present limits of the Dakota Participating Area. The completion of Wells No. 102, 103, 104 and 105 did not cause an expansion to the Dakota Participating Area, however the completion of Wells No. 106 and 107 will necessitate the Tenth Expansion to the Dakota Participating Area, and the completion of Well No. 108 will necessitate the Eleventh Expansion to the Dakota Participating Area. The proposed expansions of the Dakota Participating Area were filed for approval with the appropriate regulatory bodies on November 28, 1967.

With the completion of the above described wells, the total number of wells in the San Juan 27-5 Unit is as follows:

Pictured Cliffs	13
Mesaverde	23
Dual, Pictured Cliffs- Mesaverde	39
Dual, Mesaverde-Dakota	3
Dakota	21
Noncommercial, Mesaverde	1
Noncommercial, Dakota	1
	<u>101</u>

Pursuant to Section 10 of the San Juan 27-5 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program providing for the drilling of the following described wells during the calendar year of 1968.

<u>Location</u>	<u>Formation</u>
San Juan 27-5 Unit #109 Well NE/4 Sec. 3, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #110 Well NE/4 Sec. 2, T-27-N, R-5-W	Dakota

El Paso Natural Gas Company intends to drill these wells to the base of the Dakota Formation using rotary tools. Surface casing will be set to the depth of approximately 200' and an intermediate string will be run through the Pictured Cliffs Formation to a depth of approximately 3,700', and then a production casing string will be run to the base of the Dakota Formation. The casing in the Dakota Formation will then be perforated and the Dakota Formation subjected to a hydraulic fracturing process. Mud will be used in setting the intermediate string of casing when said casing is run and the hole below the intermediate string of casing will be drilled with gas. Due care will be taken to protect all horizons.

In addition to the above wells, 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 later deemed necessary or desirable by the Unit Operator and the working interest owners.

All of the working interest owners have been contacted and this Drilling Program reflects, insofar as possible, their desires for additional drilling.

If this Drilling Program is acceptable, please signify your approval as required under Section 10 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 shown on the attached sheet.

Very truly yours,



T. W. Bittick  
Manager  
Land Department

TWB:JS:cjt  
Attachments

San Juan 27-5, 3.0

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

DATE: *Jan 19, 1968*

The foregoing approvals are for the proposed 1968 Drilling Program for the  
San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico.

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. John L. Abercrombie  
Texas National Bank of Commerce  
c/o Trust Dept., #1450  
P. O. Box 2558  
Houston, Texas 77001

Mr. J. R. Abercrombie  
P. O. Box 224  
Bellaire, Texas 77401

Mr. W. E. Alsup, M.D.  
P. O. Box 1394  
Las Vegas, Nevada 89101

Mrs. Lela L. Barkley  
5322 Institute Lane  
Houston, Texas 77005

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown  
Park Drive South  
Rye, New York 10580

Mrs. Evelyn G. Brown  
Park Drive South  
Rye, New York 10580

Mr. James A. Brown  
Park Drive South  
Rye, New York 10580

Colorado Oil & Gas Corporation  
P. O. Box 1819  
Colorado Springs, Colorado 80901

Mr. Sam Dazzo & Frances Joy Dazzo  
615 Simms Building  
Albuquerque, New Mexico 87101

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

Estate of G. F. Harrington  
Central National Bank & Trust Co.  
Trustee and Executor  
5th and Locust Streets  
Des Moines, Iowa 50309

Bank of New Mexico for the Account of  
Thomas H. Harrington & Nancy Lee Harrington  
P. O. Box 1830  
Albuquerque, New Mexico 87103

Mr. T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. Ralph H. McCullough  
2001 Gulf Building  
Houston, Texas 77002

Mrs. Catherine B. McElvain  
Individually and as Executrix of the  
Estate of T. H. McElvain, Deceased  
Box 2148  
Santa Fe, New Mexico 87501

Mr. Forrest B. Miller  
1224 Lois Street  
P. O. Box 1445  
Kerrville, Texas 78028

N.B.S. Corporation  
c/o Mr. Robert E. Fox, Attorney at Law  
P. O. Box 1769  
Santa Fe, New Mexico 87501

Northwest Production Corporation  
P. O. Box 1796  
El Paso, Texas 79949

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

Mr. H. O. Pool  
P. O. Box 1585  
Scottsdale, Arizona 85251

Mr. Joe Quinn  
908 Longwood Loop  
Mesa, Arizona 85201

(Cont'd...)

SAN JUAN 27-5 UNIT

Working Interest Owners - Page 2

Lt. Col. Langdon Dewey Harrison  
Trustee for Omega E. Quinn  
Consolidated Mail Room  
Box 4075  
Holloman AFB, New Mexico 87723

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Building  
Dallas, Texas 75201

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico 87501

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

Mr. Robert P. Tinnin  
P. O. Box 1854  
Albuquerque, New Mexico 87108

Mrs. Ophelia C. Montoya  
4306 Sunningdale N.E.  
Albuquerque, New Mexico 87110

Mr. Orlando Candelaria  
229 Lily Avenue S.E.  
Albuquerque, New Mexico 87102

Mrs. Mercedes Candelaria Skidmore  
564 Central Ave., Apt. 312  
Alameda, California 94501

Mr. Pablo Leopoldo Candelaria  
Blanco, New Mexico 87412

Mrs. Cruzelia C. Montoya  
Blanco, New Mexico 87412

Mr. J. Fidel Candelaria  
Aztec, New Mexico 87410

Mr. Donald R. Candelaria  
Aztec, New Mexico 87410

Mrs. Eulogia C. Candelaria  
517 East Zia  
Aztec, New Mexico 87410

Mrs. Eulogia C. Candelaria, Guardian of  
Paul M. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico 87410

Mrs. Eulogia C. Candelaria, Guardian of  
Nickie G. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico 87410

Riasan Company  
Thomas H. Harrington, Title Agent  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

OIL CONSERVATION COMMISSION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

540

December 7, 1967

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

50

Attention: Mr. Charles Higgins

Re: Tenth and Eleventh Expanded  
Participating Areas, Dakota  
Formation, San Juan 27-5 Unit,  
Rio Arriba County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Tenth and Eleventh Expanded Participating Areas for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/JEK/esr

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



December 5, 1967

GUYTON B. HAYS  
COMMISSIONER

P. O. BOX 1148  
SANTA FE, NEW MEXICO

MAIN OFFICE

'67 DEC 5 PM 2 50

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

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
Tenth and Eleventh Expanded  
Participating Areas, Dakota  
Formation.

ATTENTION: Mr. Charles Higgins

Gentlemen:

The Commissioner of Public Lands has this date approved the Tenth and Eleventh Expanded Participating Areas, Dakota Formation, for the captioned unit, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are retaining two copies and handing six (6) copies to the Oil Conservation Commission for their approval and requesting that they forward five (5) copies to the United States Geological Survey at Roswell for their consideration.

Very truly yours,

GUYTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS  
BY:  
Ted Bilberry, Director  
Oil and Gas Department

GBH/TB/EL/s

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

# El Paso Natural Gas Company

El Paso, Texas 79999

November 29, 1967

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

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
TENTH AND ELEVENTH EXPANDED PARTI-  
CIPATING AREAS, Dakota Formation,  
Effective June 1, 1967 and August 1,  
1967

---

Gentlemen:

We are enclosing for your approval eight (8) copies of an Application for Approval of the Tenth and Eleventh Expanded Participating Area of the Dakota Formation for the referenced unit.

If this Application meets with your approval, please execute all copies and forward them to the Oil Conservation Commission for their approval and execution. After this Application has been signed by the Commissioner of Public Lands and the Oil Conservation Commission, the Commissioner of Public Lands should retain two (2) copies for his file and the Oil Conservation Commission should retain one (1) copy for its file, and five (5) copies should be forwarded to the United States Geological Survey in Roswell, New Mexico, for their approval and further handling. After this Application has been approved and signed by the United States Geological Survey, two (2) copies should be returned to El Paso.

Yours very truly,

*Charles Higgins*

Charles Higgins  
Assistant Supervising Landman  
Land Department

'67 Nov 30 AM 8 5

CH:JS:psr

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

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

COPY

# El Paso Natural Gas Company

El Paso, Texas 79999

November 28, 1967

Director  
United States Geological Survey  
Department of the Interior  
Washington 25, D. C.

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

NOV 30 9 12 AM '67  
RECEIVED  
STATE LAND OFFICE  
SANTA FE, N.M.  
DEC 5 PM 2 52

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
TENTH AND ELEVENTH EXPANDED PARTI-  
CIPATING AREAS, Dakota Formation,  
Effective June 1, 1967 and August  
1, 1967

Gentlemen:

Pursuant to the provisions of Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Tenth and Eleventh Expanded Participating Areas for the Dakota Formation, to wit:

TENTH EXPANDED PARTICIPATING AREA - Effective June 1, 1967

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 5 West, N.M.P.M.	
Section 1: N/2	320.36
Section 2: N/2	319.44
Section 23: N/2	320.00
Section 24: N/2	320.00
TOTAL	<u>1279.80</u>

The proposed Tenth Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #106 Well and the San Juan 27-5 Unit

#107 Well are capable of producing unitized substances in paying quantities from the Dakota Formation. These wells are as follows:

The San Juan 27-5 Unit #106 Well is located 1650' from the North line and 1550' from the East line of Section 1, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on May 7, 1967, and completed on May 28, 1967, at a total depth of 8700'. The Dakota Formation in the intervals between 8430'-8434', 8448'-8452', 8514'-8518', 8536'-8544', 8598'-8606', 8620'-8628' was treated with a sand-water fracturing process on May 27, 1967. The Dakota Formation was shut-in on May 29, 1967, and after being shut-in for seven (7) days, the Dakota Formation was tested on June 5, 1967, and following a three (3) hour blow-down period gauged 3904 MCFGPD through a 3/4" choke and 4714 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2448 psia and an SIPT of 2448 psia.

The San Juan 27-5 Unit #107 Well is located 1500' from the South line and 890' from the West line of Section 13, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on May 7, 1967, and completed on June 6, 1967, at a total depth of 7876'. The Dakota Formation in the intervals between 7630'-7638', 7650'-7658', 7754'-7762', 7806'-7824', was treated with a sand-water fracturing process on June 5, 1967. The Dakota Formation was shut-in on June 7, 1967, and after being shut-in for twenty (20) days, the Dakota Formation was tested on June 27, 1967, and following a three (3) hour blow-down period gauged 2922 MCFGPD through a 3/4" choke and 3183 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2618 psia and an SIPT of 2607 psia.

ELEVENTH EXPANDED PARTICIPATING AREA - Effective August 1, 1967

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 5 West, N.M.P.M.	
Section 22: N/2	320.00
TOTAL	320.00

The proposed Eleventh Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #108 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

The San Juan 27-5 Unit #108 Well is located 1460' from the South line and 1160' from the East line of Section 15, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on July 1, 1967, and completed on July 26, 1967, at a total depth of 7880'. The Dakota Formation in the intervals between 7612'-7632', 7730'-7750', 7784'-7794', 7808'-7828' was treated with a sand-water fracturing process on July 26, 1967. The Dakota Formation was shut-in on July 27, 1967, and after being shut-in for twenty (20) days, the Dakota Formation was tested on August 16, 1967, and following a three (3) hour blow-down period gauged 5199 MCFGPD through a 3/4" choke and 6457 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2099 psia and an SIPT of 2504 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 Tenth and Eleventh Expanded Participating Areas of the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "B"

Geological Report on the Tenth and Eleventh Expanded Participating Areas of the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "C"

Plate No. 1: San Juan 27-5 Dakota Structure Map.  
Plate No. 2: San Juan 27-5 Dakota Isopach Map.

EXHIBIT "D"

Table 1: Dakota production and deliverability.

Attached hereto are Schedules XI and XII that show the proposed Tenth and Eleventh Expanded Participating Areas for the Dakota Formation in the San Juan 27-5 Unit Area. These schedules describe the Expanded Participating Areas, show the percentage of unitized substances allocated to each unitized tract, and the percentage of ownership in each tract.

If these Tenth and Eleventh Expanded Participating Areas of the Dakota Formation meet with your approval, please indicate such approval in the space provided below and return an approved copy hereof for our files.

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By *Charles Higgins*  
Charles Higgins  
Assistant Supervising Landman  
Land Department

CH:JS:psr

Enclosures

APPROVED: \_\_\_\_\_  
Director, United States Geological Survey  
Subject to like approval by the appropriate  
State Officials.

DATE: \_\_\_\_\_

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

DATE: 12-5-67

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

DATE: December 7, 1967

The foregoing approvals are for the Tenth and Eleventh Expanded  
Participating Areas of the Dakota Formation, San Juan 27-5 Unit  
#14-08-001-950, Rio Arriba County, New Mexico.

# El Paso Natural Gas Company

El Paso, Texas 79999

November 27, 1967

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  
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

MAIN OFFICE

1967 Nov 29 AM 8 55

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
Approval of the Ninth Expanded  
Participating Area, Dakota  
Formation, Effective November 1, 1966

Gentlemen:

The Ninth Expanded Participating Area, Dakota Formation, San Juan 27-5 Unit, was approved by the regulatory bodies on the dates set out below:

1. United States Geological Survey - November 17, 1967
2. Commissioner of Public Lands - March 24, 1967
3. Oil Conservation Commission - March 27, 1967

Copies of this letter are being sent to all the working interest owners of the San Juan 27-5 Unit.

Very truly yours,



Charles Higgins  
Assistant Supervising Landman  
Land Department

CH:JS:vjh

San Juan 27-5, 4.3, 5.0



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

November 22, 1967

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

Attention: Mr. Harry Geverts

Gentlemen:

The ninth revision of the Dakota participating area for the San Juan 27-5 unit agreement, Rio Arriba County, New Mexico was approved by the Acting Director, Geological Survey, on November 17, 1967, effective as of November 1, 1966.

Two copies of the approved application are enclosed. You are requested to furnish the State of New Mexico and any other interested party with appropriate evidence of this approval.

Sincerely yours,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Oil & Gas Supervisor

cc:  
Washington (ltr. only)  
Farmington (w/cy application)  
Comm. of Pub. Lands, Santa Fe (ltr. only)  
NMOCC, Santa Fe (ltr. only) ✓

ILLEGIBLE



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
Drawer 1857  
Roswell, New Mexico 88201

540  
October 23, 1967

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

Attention: Mr. Charles Higgins

Gentlemen:

Your notice of October 6 advises that El Paso Natural Gas Company as unit operator of the San Juan 27-5 unit agreement, Rio Arriba County, New Mexico, has determined unit well No. 84 in the SW $\frac{1}{4}$  sec. 3, T. 27 N., R. 5 W., Federal lease Santa Fe 079303, to be incapable of producing unitized substances in paying quantities from the Dakota formation. The well was completed on November 15, 1962, for an absolute open flow potential of 1,394 MCF of gas per day from the Dakota. The well's cumulative production as of September 1, 1967, was 218,199 MCF of gas.

We concur with your determination that unit well No. 84 is incapable of producing unitized substances in paying quantities under existing conditions.

Sincerely yours,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Oil and Gas Supervisor

cc:  
Washington  
Farmington  
Comm. of Pub. Lands - Santa Fe  
NMOCC - Santa Fe ✓

OCT 25 1967

# El Paso Natural Gas Company

El Paso, Texas 79999

October 6, 1967

1967 Oct 10 11 11

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

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
NOTICE OF COMPLETION OF A NON-  
COMMERCIAL WELL, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement Number 14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, has determined that the following described well, completed on lands committed to the San Juan 27-5 Unit, is not capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

The San Juan 27-5 Unit #84 Well, located 790' from the South line and 1825' from the West line of Section 3, Township 27 North, Range 5 West, Rio Arriba County, New Mexico, was spudded on September 6, 1962, and completed on October 7, 1962, in the Dakota Formation at a total depth of 7919'. The Dakota Formation in the intervals between 7644'-7650', 7700'-7706', 7746'-7752', 7830'-7836', was treated with a sand-water fracturing process on October 1, 1962. The well was shut-in for gauge on November 6, 1962, and after being shut-in for nine (9) days the well was tested on November 15, 1962, and following a three (3) hour blow-down period, gauged 1334 MCFGPD through a 3/4" choke and 1394 MCFGPD by the calculated absolute open-flow method, with an SIPC of 1743 psia and an SIPT of 2029 psia. The committed drilling block upon which this well is located is described as the W/2 of Section 3, Township 27 North, Range 5 West, N.M.P.M., containing 319.36 acres.

Therefore, based on the initial potential of this well, related geological data, and by observing the well's producing capabilities, the Unit Operator has determined that the well is noncommercial.

If this determination meets with your approval, please indicate such approval in the space provided and return one 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, as well as the

Mr. John A. Anderson

-2-

working interest owners shown on the attached sheet.

Yours very truly,

EL PASO NATURAL GAS COMPANY

By Charles Higgins  
Charles Higgins  
Assistant Supervising Landman  
Land Department

CH:JS:psr

San Juan 27-5 Unit, 4.3, 5.0

APPROVED: \_\_\_\_\_  
United States Geological Survey

DATE: \_\_\_\_\_

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

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

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. John L. Abercrombie  
Texas National Bank of Commerce  
c/o Trust Dept., #1450  
P. O. Box 2558  
Houston, Texas 77001

Mr. J. R. Abercrombie  
P. O. Box 224  
Bellaire, Texas 77401

Mr. W. E. Alsup, M. D.  
Box 820  
Española, New Mexico 87532

Mrs. Lela L. Barkley  
5322 Institute Lane  
Houston, Texas 77005

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown  
Park Drive South  
Rye, New York 10580

Mrs. Evelyn G. Brown  
Park Drive South  
Rye, New York 10580

Mr. James A. Brown  
Park Drive South  
Rye, New York 10580

Colorado Oil & Gas Corporation  
Denver Club Building  
Denver, Colorado 80201

Mr. Sam Dazzo & Frances Joy Dazzo  
615 Simms Building  
Albuquerque, New Mexico 87101

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

Estate of G. F. Harrington  
Central National Bank & Trust Co.  
Trustee and Executor  
5th and Locust Streets  
Des Moines, Iowa 50309

Mr. Thomas F. Harrington  
c/o T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. Ralph H. McCullough  
2001 Gulf Building  
Houston, Texas 77002

Mrs. Catherine B. McElvain  
Individually and as Executrix of  
the Estate of T. H. McElvain, Deceased  
Box 2148  
Santa Fe, New Mexico 87501

Mr. Forrest B. Miller  
1224 Lois Street  
P. O. Box 1445  
Kerrville, Texas 78028

N.B.S. Corporation  
c/o Mr. Robert E. Fox, Attorney at Law  
P. O. Box 1769  
Santa Fe, New Mexico 87501

Northwest Production Corporation  
P. O. Box 1796  
El Paso, Texas 79949

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

Mr. H. O. Pool  
P. O. Box 1585  
Scottsdale, Arizona 85251

Mr. Joe Quinn  
908 Longwood Loop  
Mesa, Arizona 85201

Lt. Col. Langdon Dewey Harrison  
Trustee for Omega E. Quinn  
Consolidated Mail Room  
Box 4075  
Holloman AFB, New Mexico 87723

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Building  
Dallas, Texas 75201

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico 87501

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

Mr. Robert P. Tinnin  
P. O. Box 1854  
Albuquerque, New Mexico 87108

Mrs. Ophelia C. Montoya  
4306 Sunningdale N. E.  
Albuquerque, New Mexico 87110

Mr. Orlando Candelaria  
229 Lily Ave. S. E.  
Albuquerque, New Mexico 87102

Mrs. Mercedes Candelaria Skidmore  
564 Central Ave., Apt. 312  
Alameda, California 94501

Mr. Pablo Leopoldo Candelaria  
Blanco, New Mexico 87412

Mrs. Cruzelia C. Montoya  
Blanco, New Mexico 87412

Mr. J. Fidel Candelaria  
Aztec, New Mexico 87410

Mr. Donald R. Candelaria  
Aztec, New Mexico 87410

Mrs. Eulogia C. Candelaria  
517 East Zia  
Aztec, New Mexico 87410

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico 87410

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico 87410

Riasan Company  
Thomas H. Harrington, Title Agent  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

# El Paso Natural Gas Company

El Paso, Texas 79999

September 13, 1967

240

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  
P. O. Box 1148  
Santa Fe, New Mexico 87501

57 SEP 15 1967

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

Re: San Juan 27-5 Unit #14-08-001-950  
NOTICE OF COMPLETION OF ADDITIONAL WELL  
Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one additional well capable of producing unitized substances in commercial quantities from the Dakota Formation has been completed upon acreage committed to the unit. This well is as follows:

The San Juan 27-5 Unit #102 Well, located 1145' from the South line and 1715' from the West line of Section 12, Township 27 North, Range 5 West, Rio Arriba County, New Mexico, was spudded on August 2, 1967, and completed on August 17, 1967, in the Dakota Formation at a total depth of 8264'. The Dakota Formation in the intervals between 8010'-8020', 8124'-8134', 8174'-8184', 8210'-8220', was treated with a sand-water fracturing process. The well was shut-in on August 20, 1967, and after being shut-in for eight (8) days, the well was tested on August 28, 1967, and following a three (3) hour blow-down period the Dakota Formation gauged 4105 MCFGPD through a 3/4" choke, and 4849 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2482 psia and an SIPT of 2540 psia. The committed spacing unit upon which this well is located is described as the S/2 of Section 12, Township 27 North, Range 5 West, containing 320.00 acres.

September 13, 1967

This spacing unit was included in the San Juan 27-5 Unit Sixth Expanded Participating Area of the Dakota Formation, effective July 1, 1965, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By Charles Higgins  
Charles Higgins  
Assistant Supervising Landman  
Land Department

CH:JS:psr

Attachment

San Juan 27-5 Unit 4.3.1

**SAN JUAN 27-5 UNIT**  
**Working Interest Owners**

Mr. John L. Abercrombie  
Texas National Bank of Commerce  
c/o Trust Dept., #1450  
P. O. Box 2558  
Houston, Texas 77001

Mr. J. R. Abercrombie  
P. O. Box 224  
Bellaire, Texas 77401

Mr. W. E. Alsup, M. D.  
Box 820  
Española, New Mexico 87532

Mrs. Lela L. Barkley  
5322 Institute Lane  
Houston, Texas 77005

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown  
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Rye, New York 10580

Mrs. Evelyn G. Brown  
Park Drive South  
Rye, New York 10580

Mr. James A. Brown  
Park Drive South  
Rye, New York 10580

Colorado Oil & Gas Corporation  
Denver Club Building  
Denver, Colorado 80201

Mr. Sam Dazzo & Frances Joy Dazzo  
615 Simms Building  
Albuquerque, New Mexico 87101

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

Estate of G. F. Harrington  
Central National Bank & Trust Co.  
Trustee and Executor  
5th and Locust Streets  
Des Moines, Iowa 50309

Mr. Thomas F. Harrington  
c/o T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

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P. O. Box 1445  
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Santa Fe, New Mexico 87501

Northwest Production Corporation  
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El Paso, Texas 79949

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Santa Fe, New Mexico 87501

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of Nickie G. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico 87410

Riasan Company  
Thomas H. Harrington, Title Agent  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

# El Paso Natural Gas Company

El Paso, Texas 79999

September 1, 1967

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  
P. O. Box 791  
Santa Fe, New Mexico 87501

Oil Conservation Commission  
State of New Mexico  
P. O. Box 871  
Santa Fe, New Mexico 87501

Re: San Juan 27-5 Unit #14-08-001-950  
NOTICE OF COMPLETION OF ADDITIONAL WELL  
Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one additional well capable of producing unitized substances in commercial quantities from the Dakota Formation has been completed upon acreage committed to the unit. This well is as follows:

The San Juan 27-5 Unit #104 Well, located 996' from the North line and 1160' from the East line of Section 12, Township 27 North, Range 5 West, Rio Arriba County, New Mexico, was spudded on July 14, 1967, and completed on July 28, 1967, in the Dakota Formation at a total depth of 8130'. The Dakota Formation in the intervals between 7890'-7910', 8002'-8012', 8054'-8064', 8084'-8094', was treated with a sand-water fracturing process. The well was shut-in on August 2, 1967, and after being shut-in for fourteen (14) days, the well was tested on August 16, 1967, and following a three (3) hour blow-down period the Dakota Formation gauged 4173 MCFGPD through a 3/4" choke, and 4991 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2,577 psia and an SIPT of 2,601 psia. The committed spacing unit upon which this well is located is described as the N/2 of Section 12, Township 27 North, Range 5 West, containing 320.00 acres.

September 1, 1967

This spacing unit was included in the San Juan 27-5 Unit Eighth Expanded Participating Area of the Dakota Formation, effective November 1, 1965, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By *Charles Higgins*  
Charles Higgins  
Assistant Supervising Landman  
Land Department

CH:JS:sb

Attachment

San Juan 27-5 Unit 4.3.1

SAN JUAN 27-5 UNIT

Working Interest Owners

Mr. John L. Abercrombie  
Texas National Bank of Commerce  
c/o Trust Dept., #1450  
P. O. Box 2558  
Houston, Texas 77001

Mr. J. R. Abercrombie  
P. O. Box 224  
Bellaire, Texas 77401

Mr. W. E. Alsup, M. D.  
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Espanola, New Mexico 87532

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5322 Institute Lane  
Houston, Texas 77005

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
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Rye, New York 10580

Mrs. Evelyn G. Brown  
Park Drive South  
Rye, New York 10580

Mr. James A. Brown  
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Rye, New York 10580

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Denver Club Building  
Denver, Colorado 80201

Mr. Sam Dazzo & Frances Joy Dazzo  
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Albuquerque, New Mexico 87101

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

Estate of G. F. Harrington  
Central National Bank & Trust Co.  
Trustee and Executor  
5th and Locust Streets  
Des Moines, Iowa 50309

Mr. Thomas F. Harrington  
c/o T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. Ralph H. McCullough  
2001 Gulf Building  
Houston, Texas 77002

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Santa Fe, New Mexico 87501

Mr. Forrest B. Miller  
1224 Lois Street  
P. O. Box 1445  
Kerrville, Texas 78028

N.B.S. Corporation  
c/o Mr. Robert E. Fox, Attorney at Law  
P. O. Box 1769  
Santa Fe, New Mexico 87501

Northwest Production Corporation  
P. O. Box 1796  
El Paso, Texas 79949

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

Mr. H. O. Pool  
P. O. Box 1585  
Scottsdale, Arizona 85251

Mr. Joe Quinn  
908 Longwood Loop  
Mesa, Arizona 85201

SAN JUAN 27-5 UNIT

Working Interest Owners - Page 2

Lt. Col. Langdon Dewey Harrison  
Trustee for Omega E. Quinn  
Consolidated Mail Room  
Box 4075  
Holloman AFB, New Mexico 87723

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Building  
Dallas, Texas 75201

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico 87501

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

Mr. Robert P. Tinnin  
P. O. Box 1854  
Albuquerque, New Mexico 87108

Mrs. Ophelia C. Montoya  
4306 Sunningdale N. E.  
Albuquerque, New Mexico 87110

Mr. Orlando Candelaria  
229 Lily Ave. S. E.  
Albuquerque, New Mexico 87102

Mrs. Mercedes Candelaria Skidmore  
564 Central Avenue, Apt. 312  
Alameda, California 94501

Mr. Pablo Leopoldo Candelaria  
Blanco, New Mexico 87412

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Aztec, New Mexico 87410

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of Paul M. Candelaria, a minor  
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Aztec, New Mexico 87410

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of Nickie G. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico 87410

Riasan Company  
Thomas H. Harrington, Title Agent  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

# El Paso Natural Gas Company

El Paso, Texas 79999

August 21, 1967

67 Aug 23 PM 11 30

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  
P. O. Box 791  
Santa Fe, New Mexico 87501

Oil Conservation Commission  
State of New Mexico  
P. O. Box 871  
Santa Fe, New Mexico 87501

Re: San Juan 27-5 Unit #14-08-001-950  
NOTICE OF COMPLETION OF ADDITIONAL  
WELL, Dakota Formation

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one additional well capable of producing unitized substances in commercial quantities from the Dakota Formation has been completed upon acreage committed to the unit. This well is as follows:

The San Juan 27-5 Unit #103 Well, located 1850' from the North line and 1190' from the East line of Section 14, Township 27 North, Range 5 West, Rio Arriba County, New Mexico, was spudded on June 10, 1967, and completed on June 30, 1967, in the Dakota Formation at a total depth of 7970'. The Dakota Formation in the intervals between 7698'-7704', 7714'-7720', 7816'-7828', 7874'-7880', 7896'-7908' was treated with a sand-water fracturing process. The well was shut-in on July 1, 1967, and after being shut-in for nineteen (19) days, the well was tested on July 20, 1967, and following a three (3) hour blow-down period the Dakota Formation gauged 4187 MCFGPD through a 3/4" choke, and 4775 MCFGPD by the calculated absolute open-flow method, with an SIPC of 2,479 psia and an SIPT of 2,569 psia. The committed spacing unit upon which this well is located is described as the E/2 of Section 14, Township 27 North, Range 5 West, containing 320.00 acres.

August 21, 1967

This spacing unit was included in the San Juan 27-5 Unit Fifth Expanded Participating Area of the Dakota Formation, effective June 1, 1965, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By *Charles Higgins*  
Charles Higgins  
Assistant Supervising Landman  
Land Department

CH:JS:sb

Attachment

San Juan 27-5 Unit 4.3.1  
NM-6835

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. John L. Abercrombie  
Texas National Bank of Commerce  
c/o Trust Dept., #1450  
P. O. Box 2558  
Houston, Texas 77001

Mr. J. R. Abercrombie  
P. O. Box 224  
Bellaire, Texas 77401

Mr. W. E. Alsup, M. D.  
Box 820  
Española, New Mexico 87532

Mrs. Lela L. Barkley  
5322 Institute Lane  
Houston, Texas 77005

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown  
Park Drive South  
Rye, New York 10580

Mrs. Evelyn G. Brown  
Park Drive South  
Rye, New York 10580

Mr. James A. Brown  
Park Drive South  
Rye, New York 10580

Colorado Oil & Gas Corporation  
Denver Club Building  
Denver, Colorado 80201

Mr. Sam Dazzo & Frances Joy Dazzo  
615 Simms Building  
Albuquerque, New Mexico 87101

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

Estate of G. F. Harrington  
Central National Bank & Trust Co.  
Trustee and Executor  
5th and Locust Streets  
Des Moines, Iowa 50309

Mr. Thomas F. Harrington  
c/o T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. Ralph H. McCullough  
2001 Gulf Building  
Houston, Texas 77002

Mrs. Catherine B. McElvain  
Individually and as Executrix of  
the Estate of T. H. McElvain, Deceased  
Box 2148  
Santa Fe, New Mexico 87501

Mr. Forrest B. Miller  
1224 Lois Street  
P. O. Box 1445  
Kerrville, Texas 78028

N.B.S. Corporation  
c/o Mr. Robert E. Fox, Attorney at Law  
P. O. Box 1769  
Santa Fe, New Mexico 87501

Northwest Production Corporation  
P. O. Box 1796  
El Paso, Texas 79949

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

Mr. H. O. Pool  
P. O. Box 1585  
Scottsdale, Arizona 85251

Mr. Joe Quinn  
908 Longwood Loop  
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Holloman AFB, New Mexico 87723

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Building  
Dallas, Texas 75201

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico 87501

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

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P. O. Box 1854  
Albuquerque, New Mexico 87108

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517 East Zia  
Aztec, New Mexico 87410

Riasan Company  
Thomas H. Harrington, Title Agent  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

# El Paso Natural Gas Company

El Paso, Texas 79999

August 1, 1967

Director  
United States Geological Survey  
Department of the Interior  
Washington 25, D. C.

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

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

Re: San Juan 27-5 Unit, #14-08-001-950  
Rio Arriba County, New Mexico  
**NOTICE OF COMPLETION OF ADDITIONAL  
WELL**

Gentlemen:

Pursuant to Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that one (1) additional well capable of producing unitized substances in paying quantities from the Dakota Formation has been completed upon acreage committed to this Unit. This well is as follows:

The San Juan 27-5 Unit #105 Well, located 820' from the South line and 1500' from the West line of Section 11, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on May 29, 1967, and completed on June 18, 1967, at a total depth of 8741'. The Dakota Formation in the intervals between 8484'-8500', 8600'-8614', 8656'-8666', 8680'-8686' and 8698'-8706' was treated with a sand-water fracturing process. This well was shut-in on June 19, 1967, and after being shut-in for eight (8) days, the Dakota Formation was tested on June 27, 1967, and following a three (3) hour blow-down period gauged 3,844 MCFGPD through a 3/4" choke and 4,443 MCFGPD by the calculated absolute open-flow method, with an SIPT of 2,366 psia and an SIPC of 2,357 psia. The committed spacing unit upon which this well is located is described as the S/2 of Section 11, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres.

August 1, 1967

The spacing unit for the #105 Well was included within the area of the Fifth Dakota Expansion effective June 1, 1965, and the completion of this well does not warrant any further expansion of the Dakota Participating Area.

Copies of this letter are being sent to the Working Interest Owners shown on the attached sheet.

Yours very truly,

EL PASO NATURAL GAS COMPANY

By *Charles Higgins*  
Charles Higgins  
Assistant Supervising Landman  
Land Department

CH:JS:sb

San Juan 27-5 Unit 4.3.1  
NM-6834

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. John L. Abercrombie  
Texas National Bank of Commerce  
c/o Trust Dept., #1450  
P. O. Box 2558  
Houston, Texas 77001

Mr. J. R. Abercrombie  
P. O. Box 224  
Bellaire, Texas 77401

Mr. W. E. Alsup, M. D.  
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Espanola, New Mexico 87532

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Mr. James A. Brown, Trustees under the  
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Denver Club Building  
Denver, Colorado 80201

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615 Simms Building  
Albuquerque, New Mexico 87101

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

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5th and Locust Streets  
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Attention: Mr. T. M. Curtis  
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Mr. H. O. Pool  
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Mr. Joe Quinn  
908 Longwood Loop  
Mesa, Arizona 85201

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Building  
Dallas, Texas 75201

SAN JUAN 27-5 UNIT

Working Interest Owners - Page 2

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Trustee for Omega E. Quinn  
Consolidated Mail Room  
Box 4075  
Holloman AFB, New Mexico 87723

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico 87501

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

Mr. Robert P. Tinnin  
P. O. Box 1854  
Albuquerque, New Mexico 87108

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Aztec, New Mexico 87410

Riasan Company  
Thomas H. Harrington, Title Agent  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

# El Paso Natural Gas Company

El Paso, Texas 79999

May 24, 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 County, New Mexico

Gentlemen:

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

- |  |                |
|--|----------------|
| 1. San Juan 27-5 Unit, #14-08-001-950: |                |
| United States Geological Survey        | May 17, 1967   |
| Commissioner of Public Lands           | April 28, 1967 |
| Oil Conservation Commission            | April 27, 1967 |
| 2. San Juan 28-5 Unit, #14-08-001-949: |                |
| United States Geological Survey        | May 18, 1967   |
| Commissioner of Public Lands           | April 26, 1967 |
| Oil Conservation Commission            | April 17, 1967 |
| 3. San Juan 28-7 Unit, #14-08-001-459: |                |
| United States Geological Survey        | April 19, 1967 |
| Commissioner of Public Lands           | April 20, 1967 |
| Oil Conservation Commission            | April 26, 1967 |
| 4. San Juan 29-6 Unit, #14-08-001-439: |                |
| United States Geological Survey        | March 30, 1967 |
| Commissioner of Public Lands           | March 31, 1967 |
| Oil Conservation Commission            | April 11, 1967 |

May 24, 1967

- |   |  |
|---|--|
| 5. San Juan 29-7 Unit, #14-08-001-1650:<br>United States Geological Survey<br>Commissioner of Public Lands<br>Oil Conservation Commission | January 30, 1967<br>February 3, 1967<br>April 26, 1967 |
| 6. San Juan 31-6 Unit, #14-08-001-464:<br>United States Geological Survey<br>Commissioner of Public Lands<br>Oil Conservation Commission  | January 26, 1967<br>February 3, 1967<br>April 27, 1967 |

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

Yours very truly,



Charles Higgins  
Assistant Supervising Landman  
Land Department

CH:CTR:sb

San Juan 27-5, 28-5, 28-7,  
29-6, 29-7, and 31-6 Units - 3.0



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
Drawer 1857  
Roswell, New Mexico 88201

REGIONAL OFFICE  
67 MAY 18 AM 8 48

IN REPLY REFER TO:

543

May 17, 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 for the San Juan 27-5 unit area, Rio Arriba County, New Mexico, proposing the drilling of seven 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.

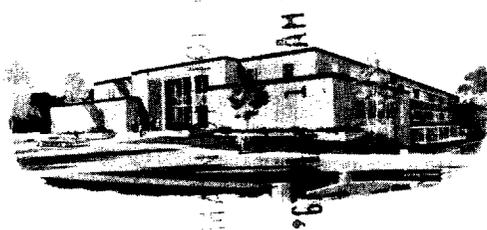
Sincerely yours,

(ORIG. SGD.) JOHN A. ANDERSON

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

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

State of New Mexico



Commissioner of Public Lands



April 28, 1967

GUYTON B. HAYS  
COMMISSIONER

P. O. BOX 1148  
SANTA FE, NEW MEXICO

El Paso Natural Gas Company  
Post Office Box 1492  
El Paso, Texas, 79999

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
1967 Drilling Program

ATTENTION: Mr. T. W. Bittick

Gentlemen:

The Commissioner of Public Lands Has this date approved your 1967 Drilling Program for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, proposing the drilling of Seven (7) Dakota Wells.

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

We are retaining two copies of the plan and returning one copy surplus to our need.

Very truly yours,

GUYTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS

BY:

(Mr.) Eddie Lopez, Supervisor  
Unit Division

GBH/TB/EL/s  
encl. 1.

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

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

544

April 27, 1967

C

El Paso Natural Gas Company  
Post Office Box 1492  
El Paso, Texas 79999

O

Attention: Mr. T. W. Bittick

Re: 1967 Drilling Program  
San Juan 27-5 Unit  
Rio Arriba County, New Mexico

P

Gentlemen:

Y

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1967 Drilling Program dated April 12, 1967, for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/JEK/ir  
Enclosures

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

# El Paso Natural Gas Company

El Paso, Texas 79999

April 12, 1967

RECEIVED  
APR 12 1967  
AM 7 59

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

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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1967 DRILLING PROGRAM

Gentlemen:

By letter dated July 19, 1966, El Paso Natural Gas Company, as Unit Operator of the San Juan 27-5 Unit, filed a Drilling Program covering said Unit for the calendar year 1966. This Program provided for the drilling of two Dakota Wells by the Unit Operator during the year. These wells were drilled and both were completed within the present limits of the Dakota Participating Area. The completion of Well No. 100 did not cause an expansion to the Dakota Participating Area, however, the completion of Well No. 101 will necessitate the Ninth Expansion to the Dakota Participating Area, and the approval of the expanded area is presently being obtained from the working interest owners.

With the completion of the above-described wells, the total number of wells in the San Juan 27-5 Unit is as follows:

Pictured Cliffs	13
Mesaverde	23
Dual, Pictured Cliffs- Mesaverde	39
Dual, Mesaverde-Dakota	3
Dakota	14
Non-commercial, Mesaverde	1
Non-commercial, Dakota	1
	<hr/>
	94

Pursuant to Section 10 of the San Juan 27-5 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program providing for the drilling of the following described wells during the calendar year of 1967.

<u>Location</u>	<u>Formation</u>
San Juan 27-5 Unit #102 Well SW/4 Sec. 12, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #103 Well NE/4 Sec. 14, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #104 Well NE/4 Sec. 12, T-27-N, R-5-W	Dakota
San Juan 27-5, Unit #105 Well SW/4 Sec. 11, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #106 Well NE/4 Sec. 1, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #107 Well SW/4 Sec. 13, T-27-N, R-5-W	Dakota
San Juan 27-5 Unit #108 Well SE/4 Sec. 15, T-27-N, R-5-W	Dakota

El Paso Natural Gas Company intends to drill these wells to the base of the Dakota Formation using rotary tools. Surface casing will be set to the depth of approximately 300' and an intermediate string will be run through the Pictured Cliffs Formation to a depth of approximately 3,700', and then a production casing string will be run to the top of the Dakota Formation. A production liner will be hung in the production casing and set through the Dakota. The production liner in the Dakota Formation will then be perforated and the Dakota Formation subjected to a hydraulic fracturing process. Mud will be used in setting the intermediate string of casing when said casing is run and the hole below the intermediate string of casing will be drilled with either mud or gas. Due care will be taken to protect all horizons.

In addition to the above wells, 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 later deemed necessary or desirable by the Unit Operator and the working interest owners.

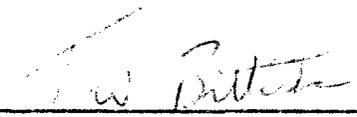
All of the working interest owners have been contacted and this Drilling Program reflects, insofar as possible, their desires for additional drilling.

If this Drilling Program is acceptable, please signify your approval as required under Section 10 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 shown on the attached sheet.

Yours very truly,

EL PASO NATURAL GAS COMPANY

By: 

T. W. Bittick, Manager  
Land Department

TWB:JS:ct  
Attachments

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

DATE: April 27, 1967

The foregoing approvals are for the proposed 1967 Drilling Program for  
the San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico.

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. John L. Abercrombie  
c/o Trust Dept. 1450  
P. O. Box 2558  
Houston, Texas

Mr. J. R. Abercrombie  
P. O. Box 224  
Bellaire, Texas

Mr. W. E. Alsup  
Box 820  
Española, New Mexico

Mrs. Lela L. Barkley  
5322 Institute Lane  
Houston, Texas

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Mr. James A. Brown, Trustees under the  
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Attention: Mr. James W. Goss, Jr.  
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5th and Locust Streets  
Des Moines, Iowa

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c/o T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. Ralph H. McCullough  
2001 Gulf Building  
Houston, Texas

Mrs. Catherine B. McElvain  
Individually and as Executrix of  
the Estate of T.H. McElvain, Deceased  
Box 2148  
Santa Fe, New Mexico

Mr. Forrest B. Miller  
220 Shelby Street  
Santa Fe, New Mexico

N.B.S. Corporation  
c/o Mr. Robert E. Fox, Attorney at Law  
P. O. Box 1769  
Santa Fe, New Mexico 87501

Northwest Production Corporation  
P. O. Box 1796  
El Paso, Texas 79949

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

Mr. H. O. Pool  
P. O. Box 1585  
Scottsdale, Arizona

Mr. Joe Quinn  
908 Longwood Loop  
Mesa, Arizona 85201

Lt. Col. Langdon Dewey Harrison  
Trustee for Omega E. Quinn  
Consolidated Mail Room  
Box 4075  
Holloman AFB, New Mexico

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Building  
Dallas, Texas 75201

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico

SAN JUAN 27-5 UNIT  
Working Interest Owners

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

Mr. Robert P. Tinnin  
P. O. Box 1854  
Albuquerque, New Mexico

Mrs. Ophelia C. Montoya  
4306 Sunningdale N.E.  
Albuquerque, New Mexico

Mr. Orlando Candelaria  
229 Lily Avenue S.E.  
Albuquerque, New Mexico

Mrs. Mercedes Candelaria Skidmore  
1018 Ponder  
Corpus Christi, Texas

Mr. Pablo Leopoldo Candelaria  
Blanco, New Mexico

Mrs. Cruzelia C. Montoya  
Blanco, New Mexico

Mr. J. Fidel Candelaria  
Aztec, New Mexico

Mr. Donald R. Candelaria  
Aztec, New Mexico

Mrs. Eulogia C. Candelaria  
517 East Zia  
Aztec, New Mexico

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico

Riasan Company  
Thomas H. Harrington, Title Agent  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

March 27, 1967

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

Attention: Mr. Harry Gevertz

Re: Ninth Expanded Dakota  
Participating Area, San  
Juan 27-5 Unit, Rio Arriba  
County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Ninth Expanded Participating Area, Dakota Formation for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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

Very truly yours,

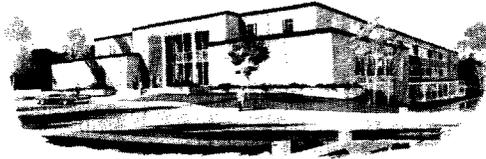
A. L. PORTER, Jr.  
Secretary-Director

ALP/JEK/og

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

COPY

State of New Mexico



Commissioner of Public Lands



March 24, 1967

P. O. BOX 1148  
SANTA FE, NEW MEXICO

RECEIVED

MAR 23 1967

MAIN OFFICE

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67 MAR 30 AM 8

GUYTON B. HAYS  
COMMISSIONER

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

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
Application for Approval of the  
Ninth Expanded Participating Area,  
Dakota Formation.

ATTENTION: Mr. Harry Gevertz

Gentlemen:

The Commissioner of Public Lands has this date approved the Ninth Expanded Participating Area, Dakota Formation, for the captioned unit, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are retaining two copies and handing six (6) copies to the Oil Conservation Commission for their approval and requesting that they forward five (5) copies to the United States Geological Survey at Roswell for their consideration.

Very truly yours,

GUYTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS

BY:  
Ted Bilberry, Director  
Oil and Gas Department

GBH/RG/s  
cc: USGS-Roswell, New Mexico  
OCC- Santa Fe, New Mexico

NOTED  
MAR 23 1967  
ANDERSON

# El Paso Natural Gas Company

El Paso, Texas 79999

FEB 20 1967

STATE LAND OFFICE  
SANTA FE, N.M.

February 27, 1967

Director  
United States Geological Survey  
Department of the Interior  
Washington 25, D. C.

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

RECEIVED  
MAR 28 1967  
U. S. GEOLOGICAL SURVEY  
FOSWELL, NEW MEXICO

RECEIVED  
MAR 23 1967

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
NINTH EXPANDED PARTICIPATING AREA,  
Dakota Formation, Effective  
November 1, 1966

Gentlemen:

Pursuant to the provisions of Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Ninth Expanded Participating Area for the Dakota Formation, to wit:

NINTH EXPANDED PARTICIPATING AREA - Effective November 1, 1966

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 5 West, N.M.P.M. Section 10: S/2 N/2, NE/4 NW/4, N/2 NE/4	280.00

The proposed Ninth Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #101 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

The San Juan 27-5 Unit #101 Well is located 1550' from the South line and 990' from the West line of Section 10, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on October 2, 1966, and completed on October 28, 1966, at a total depth of 8670'. The Dakota Formation in the intervals between 8340'-8348', 8353'-8361', 8508'-8516' 8544'-8552', was treated with a sand-water fracturing process on October 26, 1966. The Dakota Formation was shut-in on October 28, 1966, and after being shut-in for seven (7) days, the Dakota Formation was tested on November 4, 1966, and following a three (3) hour blow-down period gauged 3332 MCFGPD through a 3/4" choke and 3617 MCFGPD by the calculated absolute open-flow method, with a SIPC of 2315 psia and a SIPT of 2379 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 Ninth Expanded Participating Area of the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "B"

Geological Report on the Ninth Expanded Participating Area of the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "C"

Plate No. 1: San Juan 27-5 Dakota Structure Map.  
Plate No. 2: San Juan 27-5 Dakota Isopach Map.

EXHIBIT "D"

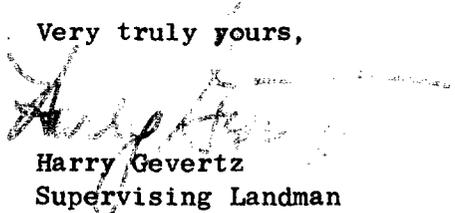
Table 1: Dakota production and deliverability.

Attached hereto is Schedule X that shows the proposed Ninth Expanded Participating Area for the Dakota Formation in the San Juan 27-5 Unit Area. This schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the percentage of ownership in each tract.

If this Ninth Expanded Participating Area of the Dakota Formation meets with your approval, please indicate such approval in the space provided below and return an approved copy hereof for our files.

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

Very truly yours,



Harry Gevertz  
Supervising Landman  
Land Department

HG:JS:cjt  
Attachments  
Enclosures

APPROVED: \_\_\_\_\_  
Director, United States Geological Survey  
Subject to like approval by the appropriate  
State Officials.

DATE: \_\_\_\_\_

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

DATE: 3-24-67

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

DATE: March 27, 1967

The foregoing approvals are for the Ninth Expanded Participating Area of the  
Dakota Formation, San Juan 27-5 Unit #14-08-001-950, Rio Arriba County, New Mexico.

SAN JUAN 27-5 UNIT  
Dakota Formation  
Working Interest Owners

Mr. Pablo L. Candelaria, Executor of the  
Estate of Pablo Candelaria, Deceased  
Aztec, New Mexico

Colorado Oil & Gas Corporation  
Denver Club Building  
Denver, Colorado 80202

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

Estate of G. F. Harrington  
Central National Bank & Trust Co.  
Trustee and Executor  
5th and Locust Streets  
Des Moines, Iowa

Mr. Thomas F. Harrington  
c/o T. H. Harrington  
P. O. Box 4026, Station A  
Albuquerque, New Mexico 87106

Mr. T. H. Harrington  
P. O. Box 4026, Station A  
Albuquerque, New Mexico 87106

Northwest Production Corporation  
P. O. Box 1796  
El Paso, Texas 79949

Pan American Petroleum Corporation (7)  
Attention: Mr. T. M. Curtis  
Security Life Building  
Denver, Colorado 80202

Riasan Company - Thomas H. Harrington, Title Agent  
P. O. Box 4026, Station A  
Albuquerque, New Mexico 87106

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Building  
Dallas, Texas 75201

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

El Paso Natural Gas Company

El Paso, Texas 79999

January 13, 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

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

Re: NOTICE OF COMPLETION OF  
ADDITIONAL WELL  
San Juan 27-5 Unit Drilling Program  
Rio Arriba County, New Mexico

Gentlemen:

El Paso Natural Gas Company, as operator of the San Juan 27-5 Unit, has recently completed the following well on the date indicated:

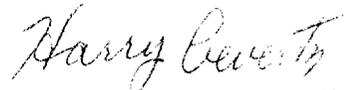
San Juan 27-5 Unit #100 (Dakota)  
SW/4 Section 1, T-27-N, R-5-W  
Rio Arriba County, New Mexico

The Dakota Formation of this well was tested on December 8, 1966, and gauged 3,369 MCF/D on a 3/4" choke, with a calculated absolute open flow of 3,753 MCF/D with a SIPC of 2514 PSIA and SIPT of 2537 PSIA.

This well was completed within the area of the Eighth Dakota Expansion, and the completion of this well does not warrant a further expansion of the Dakota Participating Area because of its location.

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

Very truly yours,



Harry Gevertz *HG*  
Supervising Landman  
Land Department

HG:JS:md

San Juan 27-5 - 5.0

San Juan 27-5 - 4.3

# El Paso Natural Gas Company

El Paso, Texas 79999

August 25, 1966

540

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

1966 Aug 30 PM 2:00

Re: San Juan 27-5 Unit, #14-08-001-950  
Rio Arriba County, New Mexico  
1966 DRILLING PROGRAM

Gentlemen:

The 1966 Drilling Program for the San Juan 27-5 Unit was approved by the regulatory bodies on the following dates:

1. United States Geological Survey - August 23, 1966.
2. Commissioner of Public Lands - July 22, 1966.  
State of New Mexico
3. Oil Conservation Commission - July 29, 1966.  
State of New Mexico

Copies of this letter are being sent to all working interest owners of the San Juan 27-5 Unit.

Yours very truly,



Harry Gevertz  
Supervising Landman  
Land Department

HG:JS:je

San Juan 27-5, 3.0



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Draw: 1857  
Roswell, New Mexico 88201

340

August 23, 1966

El Paso Natural Gas Company  
P. O. Box 1492  
El Paso, Texas 79909

Attention: Mr. T. W. Bittick

Gentlemen:

Your 1966 plan of development dated July 9, 1966, for the San Juan 27-5 unit area, Rio Arriba County, New Mexico, proposing the drilling of two 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

MAIN OFFICE

'66 AUG 25 AM 7 47

cc:

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

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

540

July 29, 1966

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

Attention: Mr. T. W. Bittick

Re: 1966 Drilling Program  
San Juan 27-5 Unit, Rio  
Arriba County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1966 Drilling Program for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Two approved copies of the program are 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

C  
O  
P  
Y

MAIL OF

'66 JUL 25

July 22, 1966

El Paso Natural Gas Company  
Post Office Box 1492  
El Paso, Texas 79999

In Re: San Juan 27-5 Unit  
Rio Arriba County,  
New Mexico  
1966 Drilling Program

Attention: T. W. Bittick

Gentlemen:

The Commissioner of Public Lands approves as of the date the 1966 Drilling for the San Juan 27-5 Unit Area, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

The Plan provides for the drilling of two (2) additional Dakota wells during the remainder of 1966 Calendar Year.

We are returning one approved copy of this Plan.

Very truly yours,

GUYTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS

BY:  
Ted Bilberry, Director  
Oil & Gas Department

GBH/MMR/e

cc: United States Geological Survey  
Post Office Drawer 1857  
Roswell, New Mexico

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

C  
O  
P  
Y

# El Paso Natural Gas Company

El Paso, Texas 79999

July 19, 1966

Mr. John A. Anderson  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Post Office 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

MAIL ACCEPTED  
1966 JUL 21 AM 7 40

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1966 DRILLING PROGRAM

Gentlemen:

By letter dated May 10, 1965, El Paso Natural Gas Company, as Unit Operator of the San Juan 27-5 Unit, filed a Drilling Program covering said Unit for the calendar year 1965. This Program provided for the drilling of three Dakota Wells, one by the Unit Operator, and two by Pan American, as Sub-Operator, during the year. These wells were drilled and have occasioned the Fifth, Sixth, and Seventh Expansions of the Dakota Participating Area. In addition to the two wells drilled by Pan American that were described in the 1965 Drilling Program, Pan American also drilled the San Juan 27-5 Unit #99 Well, located in the NE/4 of Section 11, T-27-N, R-5-W, N.M.P.M. This Dakota Wells has occasioned the Eighth Expansion of the Dakota Participating Area.

With the completion of the above-described wells, the total number of wells in the San Juan 27-5 Unit is as follows:

Pictured Cliffs	13
Mesaverde	23
Dual, Pictured Cliffs-Mesaverde	39
Dual, Mesaverde-Dakota	3
Dakota	12
Non-commercial, Mesaverde	1
Non-commercial, Dakota	1
	<hr/>
	92

Pursuant to Section 10 of the San Juan 27-5 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program providing for the drilling of the following described wells during the calendar year of 1966.

<u>Location</u>	<u>Formation</u>
San Juan 27-5 Unit #100 Well S/2 Sec. 1, T-27-N, R-5-W, N.M.P.M.	Dakota
San Juan 27-5 Unit #101 Well S/2 Sec. 10, T-27-N, R-5-W, N.M.P.M.	Dakota

El Paso Natural Gas Company intends to drill these wells to the base of the Dakota Formation using rotary tools. Surface casing will be set to the depth of approximately 300' and an intermediate string will be run, if necessary, through the Pictured Cliffs Formation to a depth of approximately 3,700', and then a production casing string will be run to the base of the Dakota Formation. The casing in the Dakota Formation will then be perforated and the Dakota Formation subjected to a hydraulic fracturing process. Mud will be used in setting the intermediate string of casing when said casing is run and the hole below the intermediate string of casing will be drilled with either mud or gas. Due care will be taken to protect all horizons.

In addition to the above wells, 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 later deemed necessary or desirable by the Unit Operator and the working interest owners.

All of the working interest owners have been contacted and this Drilling Program reflects, insofar as possible, their desires for additional drilling.

If this Drilling Program is acceptable, please signify your approval as required under Section 10 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 shown on the attached sheet.

Yours very truly,

EL PASO NATURAL GAS COMPANY

BY:



T. W. Bittick, Manager  
Land Department

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:

  
\_\_\_\_\_  
Oil Conservation Commission  
Subject to like approval by the  
United States Geological Survey and the  
Commissioner of Public Lands

DATE:

7-29-66

The foregoing approvals are for the proposed 1966 Drilling Program for the San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico.

**SAN JUAN 27-5 UNIT**  
**Working Interest Owners**

Mr. John L. Abercrombie  
The Spur Building  
1947 West Gray Avenue

Mr. J. R. Abercrombie  
P. O. Box 224  
Bellaire, Texas

Mr. W. E. Alsup  
Box 820  
Espanola, New Mexico

Mrs. Lela L. Barkley  
5322 Institute Lane  
Houston, Texas

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown  
Park Drive South  
Rye, New York

Mrs. Evelyn G. Brown  
Park Drive South  
Rye, New York

Mr. James A. Brown  
Park Drive South  
Rye, New York

Colorado Oil & Gas Corporation  
Denver Club Building  
Denver, Colorado

Mr. Sam Dazzo & Frances Joy Dazzo  
615 Simms Building  
Albuquerque, New Mexico

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

Estate of G. F. Harrington  
Central National Bank & Trust Co.  
Trustee and Executor  
5th and Locust Streets  
Des Moines, Iowa

Mr. Thomas F. Harrington  
c/o T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico

Mr. T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico

Mr. Ralph H. McCullough  
2001 Gulf Building  
Houston, Texas

Mrs. Catherine B. McElvain  
Individually and as Executrix of  
the Estate of T. H. McElvain, Deceased  
Box 2148  
Santa Fe, New Mexico

Mr. Forrest B. Miller  
220 Shelby Street  
Santa Fe, New Mexico

N.B.S. Corporation  
c/o Mr. Robert E. Fox, Attorney at Law  
P. O. Box 1769  
Santa Fe, New Mexico

Northwest Production Corporation  
P. O. Box 1796  
El Paso, Texas 79949

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

Mr. H. O. Pool  
P. O. Box 1585  
Scottsdale, Arizona

Mr. Joe Quinn  
908 Longwood Loop  
Mesa, Arizona

Mrs. Omega E. Quinn  
c/o Langdon Dewey Harrison  
Trustee for Omega E. Quinn  
Consolidated Mail Room  
Box 4075  
Holloman AFB, New Mexico

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Building  
Dallas 1, Texas

Mr. M. A. Romero  
P. O. Box 1906  
Santa Fe, New Mexico

SAN JUAN 27-5 UNIT  
Working Interest Owners

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

Mr. Robert P. Tinnin  
P. O. Box 896  
Albuquerque, New Mexico

Mrs. Ophelia C. Montoya  
4306 Sunningdale N. E.  
Albuquerque, New Mexico

Mr. Orlando Candelaria  
229 Lily Ave. S. E.  
Albuquerque, New Mexico

Mrs. Mercedes Candelaria Skidmore  
1018 Ponder  
Corpus Christi, Texas

Mr. Pablo Leopoldo Candelaria  
Blanco, New Mexico

Mrs. Cruzelia C. Montoya  
Blanco, New Mexico

Mr. J. Fidel Candelaria  
Aztec, New Mexico

Mr. Donald R. Candelaria  
Aztec, New Mexico

Mrs. Eulogia C. Candelaria  
517 East Zia  
Aztec, New Mexico

Mrs. Eulogia C. Candelaria, Guardian  
of Paul M. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico

Mrs. Eulogia C. Candelaria, Guardian  
of Nickie G. Candelaria, a minor  
517 East Zia  
Aztec, New Mexico

# El Paso Natural Gas Company

El Paso, Texas 79999

June 24, 1966

*40*

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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
Approval of the FIFTH, SIXTH, SEVENTH,  
AND EIGHTH EXPANDED PARTICIPATING  
AREAS, DAKOTA FORMATION, Effective  
June 1, 1965, July 1, 1965, August 1,  
1965, and November 1, 1965

---

Gentlemen:

The Fifth, Sixth, Seventh, and Eighth Expanded Participating Areas, Dakota Formation, San Juan 27-5 Unit, were approved by the regulatory bodies on the dates set out below:

1. United States Geological Survey - June 13, 1966
2. Commissioner of Public Lands - April 18, 1966
3. Oil Conservation Commission - April 25, 1966

Copies of this letter are being sent to all the working interest owners of the San Juan 27-5 Unit.

Very truly yours,

EL PASO NATURAL GAS COMPANY

*Harry Gevertz*

Harry Gevertz  
Supervising Landman  
Land Department

HG:GWO:sb

San Juan 27-5, 4.3, 5.0



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
Drawer 1857  
Roswell, New Mexico 88201

IN REPLY REFER

POST OFFICE BOX

66 JUN 22 PM 10 33

540  
June 20, 1966

El Paso Natural Gas Company  
P. O. Box 1492  
El Paso, Texas 79990

Attention: Mr. T. W. Bittick

Gentlemen:

The fifth, sixth, seventh, and eighth revisions of the Dakota participating area for the San Juan 27-5 unit agreement, Rio Arriba County, New Mexico, were approved by the Acting Director, Geological Survey, on June 13, 1966, effective as of June 1, July 1, August 1, and November 1, 1965, respectively.

Four approved copies of the application are enclosed. You are requested to furnish the State of New Mexico and any other interested party with appropriate evidence of this approval.

Sincerely yours,

~~1012~~ (S) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Oil and Gas Supervisor

cc:  
Washington (ltr. only)  
Farmington (w/copy appl.)  
NMOCC - Santa Fe (ltr. only)  
Comr. of Pub. Lands - Santa Fe (ltr. only)

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

540

April 25, 1966

C

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

O

Attention: Mr. Harry Gevertz

Re: Fifth, Sixth, Seventh and Eighth  
Expansions, Dakota Participating  
Area, San Juan 27-5 Unit, Rio  
Arriba County, New Mexico

P

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Fifth, Sixth, Seventh and Eighth Expanded Participating Areas for the Dakota Formation for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Y

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

Very truly yours,

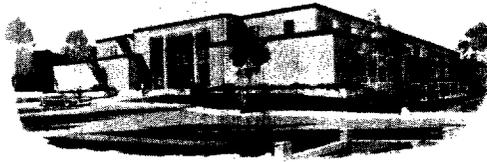
A. L. PORTER, Jr.,  
Secretary-Director

ALP/JEK/og

cc: U. S. G. S. - Roswell

Commissioner of Public Lands  
Santa Fe, New Mexico

State of New Mexico



Commissioner of Public Lands

GUYTON B. HAYS  
COMMISSIONER



P. O. BOX 1148  
SANTA FE, NEW MEXICO

April 18, 1966

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

Re: San Juan 27-5 Unit  
Rio Arriba County,  
New Mexico

ATTENTION: Mr. Harry Geverts

Gentlemen:

The Commissioner of Public Lands approved as of this date the Fifth, Sixth, Seventh and Eighth Expanded Participating Areas for the Dakota Formation, San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey, and the Oil Conservation Commission

We are handing eight approved copies to the Oil Conservation Commission requesting them to forward to the United States Geological Survey for consideration.

Very truly yours,

GUYTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS

BY:  
Ted Bilberry, Director  
Oil and Gas Department

GBH/MMR/s

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

ILLEGIBLE

540  
El Paso Natural Gas Company

El Paso, Texas 79999

April 12, 1966

APR 14 AM 11

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

Re: San Juan 27-5 Unit, #14-08-001-950  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
FIFTH, SIXTH, SEVENTH AND EIGHTH  
EXPANDED PARTICIPATING AREAS,  
Dakota Formation, Effective  
June 1, 1965, July 1, 1965,  
August 1, 1965, and November 1, 1965

Gentlemen:

You will find enclosed ten copies of the Fifth, Sixth, Seventh and Eighth Expanded Participating Areas for the Dakota Formation, San Juan 27-5 Unit, together with appropriate exhibits and geological information. If these Fifth, Sixth, Seventh and Eighth Expansions meet with your approval, please execute all copies in the space provided.

Upon such approval we request that you retain two copies for your files and forward the remaining copies to the Oil Conservation Commission for approval. It is then requested that the Oil Conservation Commission forward five copies to the United States Geological Survey for approval.

Very truly yours,

EL PASO NATURAL GAS COMPANY

Original Signature

HARRY GEVERTZ

Harry Gevertz  
Supervising Landman  
Land Department

HG:GWO:sb  
Enclosures

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

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

COPY

# El Paso Natural Gas Company

El Paso, Texas 79999

March 31, 1966

Director  
United States Geological Survey  
Department of the Interior  
Washington 25, D. C.

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

APR 11 9 56 AM '66  
STATE OF NEW MEXICO  
SANTA FE, N.M.

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
FIFTH, SIXTH, SEVENTH AND EIGHTH  
EXPANDED PARTICIPATING AREAS,  
Dakota Formation, Effective  
June 1, 1965, July 1, 1965,  
August 1, 1965 and November 1, 1965

Gentlemen:

Pursuant to the provisions of Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Fifth, Sixth, Seventh and Eighth Expanded Participating Areas for the Dakota Formation, to wit:

FIFTH EXPANDED PARTICIPATING AREA - Effective June 1, 1965

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 5 West, N.M.P.M.	
Section 11: S/2	320.00
Section 14: All	640.00
	<u>960.00</u>

The proposed Fifth Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #98 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

The San Juan 27-5 Unit #98 Well is located 1850' from the North line and 1070' from the West line of Section 14, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on May 25, 1965, and completed on June 20, 1965, at a total depth of 7970'. The Dakota Formation in the intervals between 7692'-7710', 7811'-7819', 7863' - 7869', 7884'-7890', 7908'-7914' was treated with a sand-water fracturing process on June 6, 1965. The Dakota Formation was shut-in on June 20, 1965, and after being shut-in for eight (8) days, the Dakota Formation was tested on June 28, 1965, and following a three (3) hour blow-down period gauged 3489 MCFGPD through a 3/4" choke and 4011 MCFGPD by the calculated absolute open-flow method, with a SIPC of 2268 psia and a SIPT of 2406 psia.

SIXTH EXPANDED PARTICIPATING AREA - Effective July 1, 1965

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 5 West, N.M.P.M.	
Section 12: S/2	320.00
Section 13: All	<u>640.00</u>
	960.00

The proposed Sixth Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #57 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

The San Juan 27-5 Unit #57 Well is located 1450' from the North line and 2510' from the West line of Section 13, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on June 14, 1965, and completed on July 12, 1965, at a total depth of 8152'. The Dakota Formation in the intervals between 7873'-7899', 7997'-8007', 8051'-8061', 8073'-8093' was treated with a sand-water fracturing process on June 29 and June 30, 1965. The Dakota Formation was shut-in on July 12, 1965, and after being shut-in for seven (7) days, the Dakota Formation was tested on July 19, 1965, and following a three (3) hour blow-down period gauged 4147 MCFGPD through a 3/4" choke and 5092 MCFGPD by the calculated absolute open-flow method, with a SIPC of 2324 psia and a SIPT of 2409 psia.

SEVENTH EXPANDED PARTICIPATING AREA - Effective August 1, 1965

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 5 West, N.M.P.M.	
Section 31: W/2	<u>319.08</u>
	319.08

The proposed Seventh Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #97 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

The San Juan 27-5 Unit #97 Well is located 1000' from the South line and 1000' from the West line of Section 31, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on July 9, 1965, and completed on July 31, 1965, at a total depth of 7628'. The Dakota Formation in the intervals between 7316'-7320', 7438'-7446', 7498'-7502', 7533'-7537' was treated with a sand-water fracturing process on July 30, 1965. The Dakota Formation was shut-in on August 1, 1965, and after being shut-in for ten (10) days, the Dakota Formation was tested on August 11, 1965, and following a three (3) hour blow-down period gauged 2546 MCFGPD through a 3/4" choke and 2753 MCFGPD by the calculated absolute open-flow method, with a SIPC of 2503 psia and a SIPT of 1117 psia.

EIGHTH EXPANDED PARTICIPATING AREA - Effective November 1, 1965

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 5 West, N.M.P.M.	
Section 1: S/2	320.00
Section 2: S/2	320.00
Section 11: N/2	320.00
Section 12: N/2	320.00
	<u>1,280.00</u>

The proposed Eighth Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #99 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

The San Juan 27-5 Unit #99 Well is located 1150' from the North line and 790' from the East line of Section 11, Township 27 North, Range 5 West, N.M.P.M. This well was spudded on October 17, 1965, and completed on November 5, 1965, at a total depth of 8838'. The Dakota Formation in the intervals between 8553'-8585', 8664'-8678', 8716'-8724', 8737'-8754' was treated with a sand-water fracturing process on November 4, 1965. The Dakota Formation was shut-in on November 15, 1965, and after being shut-in for fifteen (15) days, the Dakota Formation was tested on November 30, 1965, and following a three (3) hour blow-down period gauged 3589 MCFGPD through a 3/4" choke and 4174 MCFGPD by the calculated absolute open-flow method, with a SIPC of 2511 psia and a SIPT of 2505 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 Fifth, Sixth, Seventh and Eighth Expanded Participating Areas of the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "B"

Geological Report on the Fifth, Sixth, Seventh and Eighth Expanded Participating Areas of the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "C"

Plate No. 1: San Juan 27-5 Dakota Structure Map.  
Plate No. 2: San Juan 27-5 Dakota Isopach Map.

EXHIBIT "D"

Table 1: Dakota production and deliverability.

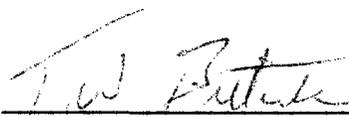
Attached hereto are Schedules VI, VII, VIII and IX that show the proposed Fifth, Sixth, Seventh and Eighth Expanded Participating Areas for the Dakota Formation in the San Juan 27-5 Unit Area. These schedules describe the Expanded Participating Areas, show the percentage of unitized substances allocated to each unitized tract, and the percentage of ownership in each tract.

If these Fifth, Sixth, Seventh and Eighth Expanded Participating Areas of the Dakota Formation meet with your approval, please indicate such approval in the space provided below and return an approved copy hereof for our files.

Copies of this letter 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  
Manager  
Land Department

TWB:GWO:sb

Enclosures

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: April 25, 1966

The foregoing approvals are for the Fifth, Sixth, Seventh and Eighth Expanded Participating Areas of the Dakota Formation, San Juan 27-5 Unit #14-08-001-950, Rio Arriba County, New Mexico.

540

October 13, 1965

Pan American Petroleum Corporation  
Security Life Building  
Denver, Colorado

Re: San Juan 27-5 Unit  
Rio Arriba County,  
New Mexico

Attention: Mr. T. M. Curtis

Gentlemen:

Reference is made to your letter of October 1, 1965, which transmitted one copy of a Designation of Sub-Operator.

El Paso Natural Gas Company as Unit Operator of the San Juan 27-5 Unit, designates Pan American Petroleum Corporation as Sub-Operator for the N/2 of Section 11, Township 27 North, Range 5 West.

This designation is limited to a period of three months (3) from September 14, 1965 and is for the sole purpose of drilling a Dakota well designated as Well No. 99.

This designation and acceptance of Agent from El Paso Natural Gas Company in no way relieves El Paso Natural Gas Company of its responsibility as Unit Operator of the San Juan 27-5 Unit, Rio Arriba County, New Mexico.

C  
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P  
Y

**Pan American Petroleum Corporation  
Security Life Building  
Denver, Colorado  
October 13, 1965**

**Very truly yours,**

**GUYTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS**

**BY:**

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

**KMR/e**

**cc:**

**United States Geological Survey  
Post Office Drawer 1857  
Roswell, New Mexico**

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

C  
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P  
Y

# PAN AMERICAN PETROLEUM CORPORATION

SECURITY LIFE BUILDING  
DENVER, COLORADO 80202

MAILED  
65 OCT 6 1965

PRODUCING DEPARTMENT  
H. T. HUNTER  
DIVISION PRODUCTION  
MANAGER

DISTRICT SUPERINTENDENTS  
W. M. JONES  
A. E. PIPER  
T. M. CURTIS

October 1, 1965

File: SGB-1328-416

Re: Designation of Sub-Operator  
San Juan 27-5 Unit Well No. 99

United States Geological Survey (3)  
P. O. Drawer 1857  
Roswell, New Mexico

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

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

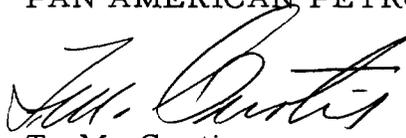
El Paso Natural Gas Company  
P. O. Box 1492  
El Paso, Texas

Gentlemen:

Attached are the indicated number of copies of a fully executed instrument entitled "Designation of Sub-Operator" by which El Paso Natural Gas Company designates Pan American Petroleum Corporation as sub-operator to drill a Dakota well in the NE/4 of Section 11 -T27N - R5W, Rio Arriba County, New Mexico. This well is located on land committed to the San Juan 27-5 Unit agreement under which El Paso Natural Gas Company is operator.

Yours very truly,

PAN AMERICAN PETROLEUM CORP.



T. M. Curtis  
District Production Superintendent

DESIGNATION OF SUB-OPERATOR

THIS DESIGNATION is made and entered into this 14<sup>th</sup> day of September 1965, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, whose 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 address is Oil and Gas Building, Post Office Box 1410, Fort Worth, Texas, hereinafter sometimes referred to as "Sub-Operator";

WHEREAS, Operator is Unit Operator for the San Juan 27-5 Unit, No. 14-08-001-950, Rio Arriba County, New Mexico; and

WHEREAS, Sub-Operator desires to drill a Dakota well on the following-described land pursuant to the provisions of Section thirteen (13) of the San Juan 27-5 Unit Agreement:

San Juan 27-5 Unit No. 99 Dakota Well  
N/2 Sec. 11, T-27-N, R-5-W, N.M.P.M.

WHEREAS, the above-described land is committed to the terms and conditions of the San Juan 27-5 Unit Agreement and San Juan 27-5 Unit Operating 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 San Juan 27-5 Unit Agreement; and

WHEREAS, Sub-Operator has requested the 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 San Juan 27-5 Unit, hereby designates Pan American Petroleum Corporation as Sub-Operator for the sole and only purpose of drilling the said Dakota well on the above-described land pursuant to Section thirteen (13) of the San Juan 27-5 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 San Juan 27-5 Unit Agreement and the San Juan 27-5 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, 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.
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 the well.
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 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 period 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  
Attention: Land Department

With copies to:  
El Paso Natural Gas Company  
Post Office 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 San Juan 27-5 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 three (3) months from the date hereof, or until said Dakota test is completed and/or plugged and abandoned, whichever is the sooner.

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*  
Attorney in Fact

SUB-OPERATOR

PAN AMERICAN PETROLEUM CORPORATION

By *A. B. Hunter*  
Attorney in Fact



~~ATTEST~~

Assistant Secretary

STATE OF TEXAS )  
                          )  
COUNTY OF EL PASO )

The foregoing instrument was acknowledged before me this 14<sup>th</sup> day of September, 1965, by SAM SMITH, Attorney in Fact for EL PASO NATURAL GAS COMPANY, a Delaware corporation, on behalf of said corporation.

ELOISE BUSSE  
Notary Public in and for El Paso County, Texas  
My Commission Expires June 1, 1967

*Eloise Busse*  
Notary Public

My commission expires June 1, 1967.

STATE OF TEXAS *El Paso* )  
                          )  
COUNTY OF *El Paso* )

The foregoing instrument was acknowledged before me this 1 day of Sept, 1965, by *A. B. Hunter*, Attorney in Fact for PAN AMERICAN PETROLEUM CORPORATION, a Delaware corporation, on behalf of said corporation.

*William M. ...*  
Notary Public

My commission expires *9-1-66*.

# El Paso Natural Gas Company

El Paso, Texas

August 17, 1965

HAND DELIVERED  
AUG 23 AM '65

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: San Juan 27-5 Unit, #14-08-001-950  
Rio Arriba County, New Mexico  
1965 DRILLING PROGRAM

Gentlemen:

The 1965 Drilling Program for the San Juan 27-5 Unit was approved by the regulatory bodies on the following dates:

1. United States Geological Survey - June 15, 1965
2. Commissioner of Public Lands,  
State of New Mexico - May 24, 1965
3. Oil Conservation Commission,  
State of New Mexico - August 11, 1965

Copies of this letter are being sent to all working interest owners of the San Juan 27-5 Unit.

Very truly yours,

*Harry Gevertz*  
Harry Gevertz  
Regional Landman  
Land Department

HG:GWO:rr

SJ 27-5, 3.0

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

54

August 11, 1965

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

Attention: Mr. Sam Smith

Re: 1965 Drilling Program  
San Juan 27-5 Unit,  
Rio Arriba County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1965 Drilling Program for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the program is returned herewith.

Very truly yours,

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

ALP/IRT/eg

cc: United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 8801

Commissioner of Public Lands  
Santa Fe, New Mexico

**ILLEGIBLE**

# El Paso Natural Gas Company

El Paso, Texas 79999

August 3, 1965

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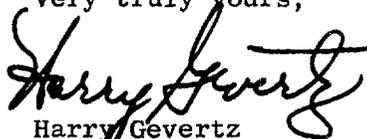
Oil Conservation Commission  
State of New Mexico  
Post Office Box 2088  
Santa Fe, New Mexico

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1965 DRILLING PROGRAM

Gentlemen:

It does not appear that we have received your approval of the 1965 Drilling Program for the San Juan 27-5 Unit. If this Program meets with your approval, we would appreciate your returning an approved copy of this Drilling Program for our files.

Very truly yours,



Harry Gevertz  
Regional Landman  
Land Department

HG:GWO:rr

SJ 27-5, 5.0 & 3.0



El Paso Natural Gas Company  
El Paso, Texas

MAILED  
AUG 7 1965

540

July 30, 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  
P. O. Box 1148  
Santa Fe, New Mexico

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

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
Approval of the FOURTH EXPANDED  
PARTICIPATING AREA, DAKOTA FORMATION  
Effective January 1, 1965

Gentlemen:

The Fourth Expanded Participating Area, Dakota Formation, San Juan 27-5 Unit was approved by the regulatory bodies on the dates set out below:

1. United States Geological Survey - July 21, 1965
2. Commissioner of Public Lands - May 24, 1965
3. Oil Conservation Commission - May 25, 1965

Copies of this letter are being sent to all the working interest owners of the San Juan 27-5 Unit.

Very truly yours,



Harry Gevertz  
Regional Landman  
Land Department

HG:GWO:kf

SJ 28-5, 4.3



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

IN REPLY REFER TO:

MAIN OFFICE (001)

'65 JUL 28 PH 12  
July 27, 1965

54

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

Attention: Mr. T. W. Bittick

Gentlemen:

The fourth revision of the Dakota participating area for the San Juan 27-5 unit agreement, Rio Arriba County, New Mexico, was approved on July 21, 1965, by the Acting Director, Geological Survey, effective as of January 1, 1965.

One approved copy of the application is enclosed. You are requested to furnish the State of New Mexico and any other interested party with appropriate evidence of this approval.

Sincerely yours,

(Orig. Sgd.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Oil and Gas Supervisor

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



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

June 22, 1965

540

Pan American Petroleum Corporation  
P. O. Box 490  
Farmington, New Mexico

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

Gentlemen:

Your letter of June 9 transmits three copies of an instrument entitled, "Designation of Sub-Operator" by which El Paso Natural Gas Company, as unit operator of the San Juan 27-3 unit, Rio Arriba County, New Mexico, designates Pan American Petroleum Corporation as sub-operator for the sole purpose of drilling unit well No. 57 as a Dakota test in the NE 1/4 sec. 13, T. 27 N., R. 3 W., N.M.P.M.

The "Designation of Sub-Operator" is 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 assume operation of any well on the above-described land that is determined to be qualified for inclusion in a participating area.

Sincerely yours,

(ORIG. SGD) BILLY J SHOGER

BILLY J. SHOGER  
Acting Oil and Gas Supervisor

cc:  
El Paso Natural Gas Company  
P. O. Box 1492  
El Paso, Texas  
Washington (w/cy desig.)  
BLM, Santa Fe (w/cy desig.)  
Farmington (w/cy desig.)  
Com. of Pub. Lands (ltr. only)  
BROCC, Santa Fe (ltr. only) ✓

ILLEGIBLE

Drawer 1857  
Roswell, New Mexico 88201

June 15, 1965

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

Attention: Mr. Sam Smith

Gentlemen:

Your 1965 plan of development dated May 10, 1965, for the San Juan 27-5 unit area, Rio Arriba County, New Mexico, proposing the drilling of three Dakota formation 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. SEP.) JOHN A. ANDERSON

JOHN A. ANDERSON  
Regional Oil & 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)

540

June 10, 1965

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

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
Designation of Sub-Operator

Gentlemen:

This will acknowledge receipt of designation of Pan American Petroleum Corporation as Sub-Operator for the San Juan 27-5 Unit, as applies to the No. 57 well, Basin Dakota Pool, located in the North Half of Section 13, Township 27 North, Range 5 West, Rio Arriba County, New Mexico. This instrument has been appropriately filed. Under the terms of the Unit Agreement, this designation does not relieve the Unit Operator of any of the obligations provided for in the Unit Agreement.

Very truly yours,

GUYTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS

BY:  
(Mr.) Ted Hilberry, Director  
Oil and Gas Department

GHH/MSR/d  
cc:

Pan American Petroleum Corporation  
P. O. Box 480, Farmington, New Mexico  
Attention: Mr. L. O. Spear, Jr.

United States Geological Survey  
P. O. Drawer 1857, Roswell, New Mexico  
Attention: Mr. John A. Anderson

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

ILLEGIBLE

# PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico  
June 9, 1965

File: N-385-400.1

Subject: Designation of Sub-Operator  
San Juan 27-5 Unit No. 57 Well  
Basin Dakota Pool  
Rio Arriba County, New Mexico

540

United States Geological Survey (3)  
P. O. Drawer 1857  
Roswell, New Mexico

State Land Commissioner (2)  
State of New Mexico  
Land Office Building  
Santa Fe, New Mexico

New Mexico Oil Conservation Commission (1)  
P. O. Box 2088  
Santa Fe, New Mexico

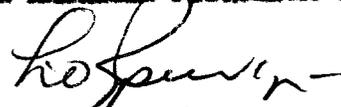
El Paso Natural Gas Company (1)  
P. O. Box 1492  
El Paso, Texas

Gentlemen:

Please find attached the indicated number of copies of an instrument entitled Designation of Sub-Operator which designates Pan American Petroleum Corporation the Sub-Operator for the purpose of drilling San Juan 27-5 Unit No. 57 well, Basin Dakota Pool, in the N/2 of Section 13, T-27-N, R-5-W, Rio Arriba County, New Mexico. This instrument has been fully executed by both El Paso Natural Gas Company as Unit Operator and by Pan American Petroleum Corporation as the designated Sub-Operator.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION



L. G. Spear, Jr.  
Area Superintendent

GNE:en  
Attach.

ILLEGIBLE

DESIGNATION OF SUB-OPERATOR

THIS DESIGNATION is made and entered into this 3<sup>rd</sup> day of May, 1965, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, whose 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 address is Oil and Gas Building, Post Office Box 1410, Fort Worth, Texas, hereinafter sometimes referred to as "Sub-Operator";

WHEREAS, Operator is Unit Operator for the San Juan 27-5 Unit, No. 14-08-001-950, Rio Arriba County, New Mexico; and

WHEREAS, Sub-Operator desires to drill a Dakota well on the following-described land pursuant to the provisions of Section thirteen (13) of the San Juan 27-5 Unit Agreement:

**San Juan 27-5 Unit No. 57 Dakota Well  
N/2 Sec. 13, T-27-N, R-8-W, N.M.P.M.**

WHEREAS, the above-described land is committed to the terms and conditions of the San Juan 27-5 Unit Agreement and San Juan 27-5 Unit Operating 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 San Juan 27-5 Unit Agreement; and

WHEREAS, Sub-Operator has requested the 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 San Juan 27-5 Unit, hereby designates Pan American Petroleum Corporation as Sub-Operator for the sole and only purpose of drilling the said Dakota well on the above-described land pursuant to Section thirteen (13) of the San Juan 27-5 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 San Juan 27-5 Unit Agreement and the San Juan 27-5 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.
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 the well.
10. 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.
11. Furnish Operator a representative and adequate cut of all cores and ditch samples taken during the drilling of a well.
12. Provide Operator with copies of drilling time records, hole deviation tests and all records required by the governmental agencies having jurisdiction of the well.
13. Notify Operator of any intention to plug and abandon the well and allow Operator forty-eight (48) hours in which to concur.
14. 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.

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 period 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.
16. 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  
Attention: Land Department

With copies to:  
El Paso Natural Gas Company  
Post Office 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 San Juan 27-5 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 three (3) months from the date hereof, or until said Dakota test is completed and/or plugged and abandoned, whichever is the sooner.

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

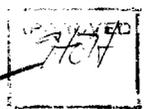
EL PASO NATURAL GAS COMPANY

By *Sam Smith*  
Attorney in Fact

SUB-OPERATOR

PAN AMERICAN PETROLEUM CORPORATION

By *J. L. Hoyt Jr.*  
Attorney in Fact



ATTEST:

*[Signature]*  
Assistant Secretary

STATE OF TEXAS )  
                          )  
COUNTY OF EL PASO )

The foregoing instrument was acknowledged before me this 3<sup>rd</sup> day of May, 1965, by SAM SMITH, Attorney in Fact for EL PASO NATURAL GAS COMPANY, a Delaware corporation, on behalf of said corporation.

*Eloise Busse*  
Notary Public

My commission expires June 1, 1965.

ELOISE BUSSE  
Notary Public in and for El Paso County, Texas  
My Commission Expires June 1, 1965

STATE OF TEXAS )  
                          )  
COUNTY OF Tarrant )

The foregoing instrument was acknowledged before me this 17<sup>th</sup> day of May, 1965, by J. L. HOYT, JR., Attorney in Fact for PAN AMERICAN PETROLEUM CORPORATION, a Delaware corporation, on behalf of said corporation.

*[Signature]*  
Notary Public

My commission expires June 1, 1965.

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

540

May 28, 1965

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

Attention: Mr. T. W. Bittick

Re: Fourth Expanded Participating  
Area, Dakota Formation, San  
Juan 27-5 Unit, Rio Arriba  
County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Fourth Expansion of the Dakota Participating Area for the San Juan 27-5 Unit, Rio Arriba County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

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

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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MAY 24 1965

May 24, 1965

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

Attention: Mr. T. W. Bittick

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
Well No. 84  
SE/4 SW/4 Sec. 3-T27N-R5W

Gentlemen:

Your letter of April 29, 1963, concerning San Juan 27-5 Unit Well No. 84 states that you believed the potential of this well was inconclusive for the purpose of making a commercial or non-commercial determination at that time and that you planned to wait for sufficient production data before making your determination.

Perhaps we have failed to receive your determination on this well as it would seem there has been sufficient time in which to come to a determination. Please advise us as to the present status of Well No. 84.

Very truly yours,

GUTTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS

BY:

(Mr.) Ted Silberry, Director  
Oil and Gas Department

GBH/KMR/d

cc:

United States Geological Survey  
P. O. Drawer 1857  
Roswell, New Mexico  
Attention: Mr. John A. Anderson

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

ILLEGIBLE

May 24, 1965

200 MAY 25 1965

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

Attention: Mr. T. W. Bittick

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
Fourth Expanded Participating Area  
Dakota Formation

Gentlemen:

The Commissioner of Public Lands approves as of May 24, 1965, your Application for the Fourth Expanded Participating Area, Dakota Formation, effective January 1, 1965. This proposed Fourth Expanded Participating Area is predicated upon the determination that San Juan 27-5 Unit Well No. 96 is capable of producing unitized substances in paying quantities from the Dakota Formation.

We are handing these applications along with a copy of this letter to the Oil Conservation Commission for their approval with the request that they forward them to the United States Geological Survey for their approval and return to you.

Very truly yours,

GUYTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS

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

GBH/MMR/d

cc: United States Geological Survey  
P. O. Drawer 1857, Roswell, New Mexico  
Attention: Mr. John A. Anderson  
Oil Conservation Commission  
P. O. Box 2088, Santa Fe, New Mexico  
(v/Enclosures)

ILLEGIBLE

May 24, 1965

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

Attention: Mr. T. W. Bittick

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
1965 Drilling Program

Gentlemen:

The Commissioner of Public Lands approves as of May 24, 1965, your 1965 Drilling Program for San Juan 27-5 Unit area, Rio Arriba County, New Mexico. This program provides for the drilling of a Dakota well in the West Half of Section 11, Township 27 North, Range 5 West, by the Operator.

In addition to this well, Operator has designated Pan American Petroleum Corporation as Sub-operator for a Dakota well to be located in the West Half of Section 14, Township 27 North, Range 5 West. We have not received a designation of Sub-operator for Pan American Petroleum Corporation for the San Juan 27-5 Unit No. 57 Well, which is to be located in the North Half of Section 13, Township 27 North, Range 5 West.

We are returning one approved copy of this drilling program.

Very truly yours,

GUTTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS

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

GBH/MMR/d  
Enclosures

cc: United States Geological Survey  
Oil Conservation Commission

**ILLEGIBLE**



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Denver 1857  
Roswell, New Mexico 88201

IN REPLY REFER TO:

MAY 25 1965

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May 21, 1965

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

Attention: Mr. T. H. Curtis

Gentlemen:

Your letter of May 18 transmits three copies of an instrument entitled, "Designation of Sub-Operator" by which El Paso Natural Gas Company, as unit operator of the San Juan 27-5 unit, Rio Arriba County, New Mexico, designates Fan American Petroleum Corporation as sub-operator for the sole purpose of drilling unit well No. 98 as a Dakota test well in the W $\frac{1}{2}$  sec. 14, T. 27 N., R. 5 W., N.M.P.M.

The "Designation of Sub-Operator" is accepted as a "Designation of Agent" from El Paso Natural Gas Company. Such acceptance does not relieve El Paso Natural Gas Company of its responsibility as unit operator to ensure operation of any well on the above-described land that is determined to be qualified for inclusion in a participating area.

Sincerely yours,

(ORIG. SCD.) JOHN A. ANDERSON

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

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

Washington (w/cy desig.)  
BLM, Santa Fe (w/cy desig.)  
Farmington (w/cy desig.)  
Com. of Pub. Lands (ltr. only)  
BMOCC, Santa Fe (ltr. only) ✓

**ILLEGIBLE**

540  
MAY 20 1965

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

Attention: Mr. T. M. Curtis

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico

Gentlemen:

This will acknowledge receipt of designation of Pan American Petroleum Corporation as Sub-operator for the San Juan 27-5 Unit, as applies to the Dakota Well located in the West Half of Section 14, Township 27 North, Range 5 West, Rio Arriba County, New Mexico. This instrument has been appropriately filed.

Very truly yours,

GUYTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS

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

GBH/MMR/d

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

United States Geological Survey  
P. O. Drawer 1857, Roswell, New Mexico  
Attention: Mr. John A. Anderson

Oil Conservation Commission  
P. O. Box 2086, Santa Fe, New Mexico

ILLEGIBLE

# PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 460, Farmington, New Mexico  
May 18, 1965

202  
540

File: N-334-400.1

Subject: Designation of Sub-Operator  
San Juan 27-5 Unit Well No. 98  
Basin Dakota Field  
Rio Arriba County, New Mexico

U. S. Geological Survey (3)  
P. O. Drawer 1857  
Roswell, New Mexico

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

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

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

Gentlemen:

Attached are the indicated number of copies of a fully executed instrument entitled "Designation of Sub-Operator" by which El Paso Natural Gas Company designates Pan American Petroleum Corporation as Sub-Operator to drill a Dakota well in the W/2 of Section 14, T-23-N, R-5-W, Rio Arriba County, New Mexico. This well is located on land committed to the San Juan 27-5 Unit Agreement under which El Paso Natural Gas Company is operator.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION



T. M. Curtis  
District Production Superintendent

GWE:en  
Attach.

**ILLEGIBLE**

DESIGNATION OF SUB-OPERATOR

THIS DESIGNATION is made and entered into this 19<sup>th</sup> day of April, 1965, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, whose 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 address is Oil and Gas Building, Post Office Box 1410, Fort Worth, Texas, hereinafter sometimes referred to as "Sub-Operator";

WHEREAS, Operator is Unit Operator for the San Juan 27-5 Unit, No. 14-08-001-950, Rio Arriba County, New Mexico; and

WHEREAS, Sub-Operator desires to drill a Dakota well on the following-described land pursuant to the provisions of Section thirteen (13) of the San Juan 27-5 Unit Agreement:

**San Juan 27-5 Unit No. 96 Dakota Well  
W/2 Sec. 14, T-27-N, R-8-W, N.M.P.M.**

WHEREAS, the above-described land is committed to the terms and conditions of the San Juan 27-5 Unit Agreement and San Juan 27-5 Unit Operating 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 San Juan 27-5 Unit Agreement; and

WHEREAS, Sub-Operator has requested the 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 San Juan 27-5 Unit, hereby designates Pan American Petroleum Corporation as Sub-Operator for the sole and only purpose of drilling the said Dakota well on the above-described land pursuant to Section thirteen (13) of the San Juan 27-5 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 San Juan 27-5 Unit Agreement and the San Juan 27-5 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.
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 the well.
10. 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.
11. Furnish Operator a representative and adequate cut of all cores and ditch samples taken during the drilling of a well.
12. Provide Operator with copies of drilling time records, hole deviation tests and all records required by the governmental agencies having jurisdiction of the well.
13. Notify Operator of any intention to plug and abandon the well and allow Operator forty-eight (48) hours in which to concur.
14. 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.

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 period 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.
16. 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  
Attention: Land Department

With copies to:  
El Paso Natural Gas Company  
Post Office 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 San Juan 27-5 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 three (3) months from the date hereof, or until said Dakota test is completed and/or plugged and abandoned, whichever is the sooner.

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

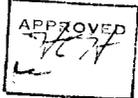
EL PASO NATURAL GAS COMPANY

By *Sam Smith*  
Attorney in Fact

SUB-OPERATOR

PAN AMERICAN PETROLEUM CORPORATION

By *J. L. Heyle Jr.*  
Attorney in Fact



ATTEST:

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

STATE OF TEXAS )  
                          )  
COUNTY OF EL PASO )

The foregoing instrument was acknowledged before me this 17<sup>th</sup> day of April, 1965, by SAM SMITH, Attorney in Fact for EL PASO NATURAL GAS COMPANY, a Delaware corporation, on behalf of said corporation.

*Eloise Busse*  
Notary Public

My commission expires June 1, 1965.

ELOISE BUSSE  
Notary Public in and for El Paso County, Texas  
My Commission Expires June 1, 1965

STATE OF TEXAS )  
                          )  
COUNTY OF Tarrant )

The foregoing instrument was acknowledged before me this 3<sup>rd</sup> day of May, 1965, by J. L. Heyle Jr., Attorney in Fact for PAN AMERICAN PETROLEUM CORPORATION, a Delaware corporation, on behalf of said corporation.

*Edwin M. Ayres*  
Notary Public

My commission expires June 1, 1965.

# El Paso Natural Gas Company

El Paso, Texas

May 18, 1965

Director  
United States Geological Survey  
Department of the Interior  
Washington 25, D. C.

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

MAY 20 1965  
STATE OF NEW MEXICO  
SANTA FE, N.M.

Re: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
FOURTH EXPANDED PARTICIPATING AREA,  
Dakota Formation, Effective  
January 1, 1965

Gentlemen:

Pursuant to the provisions of Section 11(b) of the San Juan 27-5 Unit Agreement, #14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, hereby respectfully requests approval of the Fourth Expanded Participating Area for the Dakota Formation, to wit:

FOURTH EXPANDED PARTICIPATING AREA - Effective January 1, 1965

<u>Description of Lands</u>	<u>Acres</u>
Township 27 North, Range 5 West, N.M.P.M.	
Section 10: S/2	320.00
Section 15: All	<u>640.00</u>
	960.00

The proposed Fourth Expanded Participating Area of the Dakota Formation is predicated upon the determination by El Paso Natural Gas Company, as Unit Operator, that the San Juan 27-5 Unit #96 Well is capable of producing unitized substances in paying quantities from the Dakota Formation. This well is as follows:

The San Juan 27-5 Unit #96 Well is located 1750' from the North line and 1480' from the West line of Section 15, Township 27 North, Range 5 West, N.M.P.M. Said well was spudded on December 9, 1964, and completed on January 10, 1965, at a total depth of 7955'. The Dakota Formation in the intervals between 7701' - 7705', 7710' - 7720', 7821' - 7829', 7860' - 7864', 7878' - 7884', 7900' - 7906' was treated with a sand-water fracturing process on December 29, 1964. The Dakota Formation was shut-in on January 10, 1965, and after being shut-in for ten (10) days, the Dakota Formation was tested on January 20, 1965, and following a three (3) hour blow-down period gauged 4662 MCFGPD through a 3/4" choke and 5507 MCFGPD by the calculated absolute open-flow method, with a SIPC of 2523 psia and a SIPT of 2508 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 Fourth Expanded Participating Area of the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "B"

Geological Report on the Fourth Expanded Participating Area of the Dakota Formation within the San Juan 27-5 Unit.

EXHIBIT "C"

Plate No. 1: San Juan 27-5 Dakota Structure Map.  
Plate No. 2: San Juan 27-5 Dakota Isopach Map.

EXHIBIT "D"

Table 1: Dakota production and deliverability.

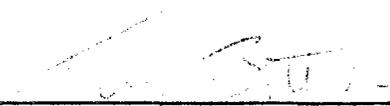
Attached hereto is schedule V which shows the proposed Fourth Expanded Participating Area for the Dakota Formation in the San Juan 27-5 Unit Area. This Schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the percentages of ownership in each tract.

If this Fourth Expanded Participating Area of the Dakota Formation meets with your approval, please indicate such approval in the space provided below and return an approved copy hereof for our files.

Copies of this letter 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:jm

APPROVED: \_\_\_\_\_  
Director, United States Geological Survey  
Subject to like approval by the appropriate  
State Officials.

DATE: \_\_\_\_\_

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

DATE: May 24, 1965

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

DATE: 5-28-65

The foregoing approvals are for the Fourth Expanded Participating Area of the  
Dakota Formation, San Juan 27-5 Unit #14-08-001-950, Rio Arriba County, New Mexico.

*El Paso Natural Gas Company*

*El Paso, Texas*

May 18, 1965

965 MAY 20 1965

Registered Mail

Commissioner of Public Lands  
State of New Mexico  
Post Office Box 781148  
Santa Fe, New Mexico

Re: San Juan 27-5 Unit #14-02-001-950  
Rio Arriba County, New Mexico  
APPLICATION FOR APPROVAL OF THE  
FOURTH EXPANDED PARTICIPATING AREA,  
Dakota Formation, Effective  
January 1, 1965

Gentlemen:

Attached are eight (8) copies of the subject Fourth Expanded Participating Area for the Dakota Formation for the San Juan 27-5 Unit, together with the appropriate exhibits and geological information.

If this Fourth Expansion meets with your approval, please execute all copies in the space provided and secure the approval of the Oil Conservation Commission on all copies thereof. Upon approval of the Oil Conservation Commission and your office, will you please retain two copies for your files and have the Oil Conservation Commission retain one copy for their files, and forward the remaining five copies to the United States Geological Survey for approval.

Very truly yours,

Original Signed by  
HARRY GEVERTZ  
Harry Gevertz  
Regional Landman  
Land Department

EG:CTR:jm  
Attachments

cc: United States Geological Survey  
Oil Conservation Commission, State of New Mexico ✓

ILLEGIBLE

COPY

# El Paso Natural Gas Company

El Paso, Texas

May 10, 1965

Mr. John A. Anderson  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Post Office 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1965 DRILLING PROGRAM

Gentlemen:

By letter dated May 4, 1964, El Paso Natural Gas Company, as Unit Operator of subject Unit, filed a Drilling Program covering captioned Unit for the calendar year of 1964. This program provided for the drilling of two Pictured Cliffs Wells by Unit Operator during the year. These wells were drilled and occasioned the Twenty-first Expansion of the Pictured Cliffs Participating Area which has been submitted to the regulatory bodies. After this program was approved, Pan American Petroleum Corporation, under a Designation of Sub-Operator, drilled the San Juan 27-5 Unit No. 96 Dakota Well in the SW/4 of Section 15, Township 27 North, Range 5 West, N.M.P.M., and completed said well in the first part of 1965. This Dakota Well has been determined commercial for Unit purposes, and the Fourth Expansion of the Dakota Participating Area, which it will occasion, is presently being prepared for submission to the regulatory bodies for approval.

With the completion of the above-described wells, the total number of wells in the San Juan 27-5 Unit is as follows:

Pictured Cliffs	13
Mesaverde	23
Dual, Pictured Cliffs-Mesaverde	39
Dual, Mesaverde-Dakota	3
Dakota	9
Non-commercial, Mesaverde	<u>1</u>
	88

Pursuant to Section 10 of the San Juan 27-5 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, is submitting this Drilling Program providing for the drilling of the following described well during the calendar year of 1965:

<u>Location</u>	<u>Formation</u>
San Juan 27-5 Unit No. 97 Well W/2 Sec. 31, T-27-N, R-5-W, N.M.P.M.	Dakota

This well will be drilled by El Paso Natural Gas Company, as Unit Operator, and the basis for drilling same is to offset the Dakota portions of the Occidental No. 1-6 Mesaverde-Dakota dual Well in the NE/4 of Section 6, Township 26 North, Range 5 West, which had an initial potential of 1.5 M<sup>2</sup>CF, and a deliverability of 616 MCF/D in the Dakota Formation; the Occidental No. 4-6 Mesaverde-Dakota dual Well in the SW/4 of Section 6, Township 26 North, Range 5 West, which had an initial potential of 2.4 M<sup>2</sup>CF and a deliverability of 894 MCF/D in the Dakota; and the Caulkins Breech No. 64 Mesaverde-Dakota dual Well in the NE/4 of Section 1, Township 26 North, Range 6 West, which had an initial potential of 5.0 M<sup>2</sup>CF and a deliverability of 1,205 MCF/D in the Dakota.

In addition to the above well, El Paso Natural Gas Company, as Unit Operator, plans to designate Pan American Petroleum Corporation as Sub-Operator in order that Dakota development wells may be drilled during 1965 at the following locations pursuant to the terms of Section 13 of the Unit Agreement:

<u>Location</u>	<u>Formation</u>
San Juan 27-5 Unit No. 98 Well W/2 Sec. 14, T-27-N, R-5-W, N.M.P.M.	Dakota
San Juan 27-5 Unit No. 57 Well N/2 Sec. 13, T-27-N, R-5-W, N.M.P.M.	Dakota

El Paso Natural Gas Company intends to drill its well to the base of the Dakota Formation using rotary tools. Surface casing will be set to the depth of approximately 300' and an intermediate string will be run, if necessary, through the Pictured Cliffs Formation to a depth of approximately 3,200', and then a production casing string will be run to the base of the Dakota Formation. The casing in the Dakota Formation will then be perforated and the Dakota Formation subjected to a hydraulic fracturing process. Mud will be used in setting the intermediate string of casing when said casing is run and the hole below the intermediate string of casing will be drilled with either mud or gas. Due care will be taken to protect all horizons.

In addition to the above well, 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 later deemed necessary or desirable by the Unit Operator and the working interest owners.

All of the working interest owners have been contacted and this Drilling Program reflects, insofar as possible, their desires for additional drilling.

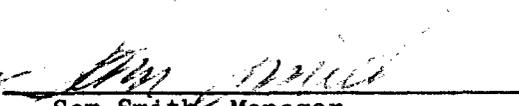
If this Drilling Program is acceptable, please signify your approval as required under Section 10 of the Unit Agreement in the space provided on the attached sheet, and return an approved copy to El Paso Natural Gas Company.

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

Very truly yours,

EL PASO NATURAL GAS COMPANY

By

  
\_\_\_\_\_  
Sam Smith, Manager  
Land Department

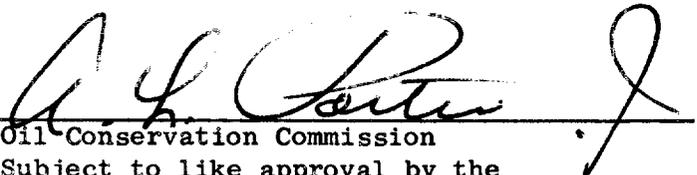
SS:CTR:jm

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

DATE: 8-21-65

The foregoing approvals are for the proposed 1965 Drilling Program for the  
San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico.

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. John L. Abercrombie  
The Spur Building  
1947 West Gray Avenue  
Houston 19, Texas

Mr. J. R. Abercrombie  
Post Office Box 224  
Bellaire, Texas

Mr. W. E. Alsup  
Box 820  
Española, New Mexico

Mrs. Lela L. Barkley  
5322 Institute Lane  
Houston, Texas

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown  
Park Drive South  
Rye, New York

Mrs. Evelyn G. Brown  
Park Drive South  
Rye, New York

Mr. James A. Brown  
Park Drive South  
Rye, New York

Mr. Pablo L. Candelaria, Executor of the  
Estate of Pablo Candelaria, Deceased  
Aztec, New Mexico

Colorado Oil & Gas Corporation  
Denver Club Building  
Denver, Colorado

Mr. Sam Dazzo & Frances Joy Dazzo  
615 Simms Building  
Albuquerque, New Mexico

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas, Texas 75206

Estate of G. F. Harrington  
Central National Bank & Trust Co.  
Trustee and Executor  
5th and Locust Streets  
Des Moines, Iowa

Mr. Thomas F. Harrington  
c/o T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Mr. Ralph H. McCullough  
2001 Gulf Building  
Houston, Texas

Mrs. Catherine B. McElvain  
Individually and as Executrix of the  
Estate of T. H. McElvain, Deceased  
Post Office Box 2148  
Santa Fe, New Mexico

Mr. Forrest B. Miller  
220 Shelby Street  
Santa Fe, New Mexico

N. B. S. Corporation  
c/o Mr. Robert E. Fox, Attorney at Law  
Post Office Box 1713  
Santa Fe, New Mexico

Northwest Production Corporation  
Post Office Box 1796  
El Paso, Texas 79949

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

Mr. H. O. Pool  
Post Office Box 1585  
Scottsdale, Arizona

SAN JUAN 27-5 UNIT  
Working Interest Owners (Page 2)

Mr. Joe Quinn  
737 Power Road  
Mesa, Arizona

Mrs. Omega E. Quinn  
c/o Langdon Dewey Harrison  
Trustee for Omega E. Quinn  
5212 Carswell Drive  
Biggs A. F. B., Texas

Mr. Thomas Harrington, Title Agent  
Post Office Box 4026, Station "A"  
Albuquerque, New Mexico 87106

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Building  
Dallas, Texas 75201

Mr. M. A. Romero  
Post Office Box 1906  
Santa Fe, New Mexico

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

Mr. Robert P. Tinnin  
Post Office Box 896  
Albuquerque, New Mexico

*El Paso Natural Gas Company*

*El Paso, Texas*

May 5, 1965

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

Attention: Mr. T. M. Curtis

Re: Your File N-269-409,  
San Juan 27-5 Unit  
Rio Arriba County, New Mexico

Gentlemen:

Enclosed in accordance with the request contained in your letter of April 23, 1965, are eight executed copies of a Designation of Sub-Operator for the drilling of the following Dakota well:

San Juan 27-5 Unit No. 57 Well  
N/2 Section 13, T-27-N, R-5-W, N.M.P.M.

After this instrument has been executed by your Company, you must file three copies thereof with the United States Geological Survey, one copy with the Oil Conservation Commission and two copies with the Commissioner of Public Lands. We request that one fully executed copy be returned to this office and that you retain one copy for your files.

Additionally, the well to be drilled under this Designation must be completed in a manner satisfactory to the Oil Conservation Commission and the United States Geological Survey before El Paso can take over the operation thereof, if applicable, as Unit Operator.

We are furnishing copies of this transmittal letter to the proper regulatory bodies in order that they may be advised of this matter.

Very truly yours,  
Original Signed by  
HARRY GEVERTZ  
Harry Gevertz  
Regional Landman  
Land Department

HG:CTR:ki  
Enclosures

cc: United States Geological Survey  
Commissioner of Public Lands  
Oil Conservation Commission

SJ 27-5, 4.3, 5.0  
1965 D/P

COPY

# El Paso Natural Gas Company

El Paso, Texas

April 15, 1968

1968 APR 26 11:14

Pan American Petroleum Corporation  
Post Office Box 480  
Farmington, New Mexico

Attention: Mr. T. M. Curtis

Re: Your File H-224-400 X 416,  
1968 DRILLING PROGRAM  
San Juan 27-5 Unit,  
Basin Dakota Field,  
Rio Arriba County, New Mexico

Gentlemen:

Reference is made to your letter of April 7, 1968, pertaining to the Dakota wells your company desires to drill in the San Juan 27-5 Unit during 1968, under Designations of Sub-Operator.

In accordance with your letter, we are enclosing eight executed copies of a Designation of Sub-Operator for the drilling of the following Dakota well:

San Juan 27-5 Unit No. 28 Well,  
W/2 Sec. 14, T-27-N, R-3-W, N.M.P.M.

The granting of this Designation of Sub-Operator, however, is conditioned upon your furnishing the usual Well Cost Estimate for approval by El Paso. The language contained in the last paragraph of your above-referenced letter will not suffice as a substitute for an Authority for Expenditure. Additionally, we request that Authorities for Expenditure be furnished as soon as possible for the three remaining wells on your 1968 Drilling Program.

After the enclosed instrument has been executed by your company, you must file three copies thereof with the United States Geological Survey, one copy with the Oil Conservation Commission, and two copies with the Commissioner of Public Lands. We request that one fully executed copy be returned to this office, and that you retain one copy for your files.

**ILLEGIBLE**

COPY

Also, we wish to point out that the well to be drilled under the attached Designation must be completed in a manner satisfactory to the Oil Conservation Commission and the United States Geological Survey before El Paso can take over the operation of the well as Unit Operator.

With regard to Designations of Sub-Operator covering your remaining three Dakota locations, we cannot furnish these Designations at present since your first well may occasion an expansion of the Dakota Participating Area that will include the spacing unit dedicated to one of your remaining wells. If this occurs, then the Unit Agreements require the Unit Operator to drill wells within the Participating Area. This problem will have to be considered prior to granting of each additional Designation of Sub-Operator.

You will note that we are furnishing copies of this letter to the regulatory bodies concerned in accordance with our usual policy, in order that these agencies will be fully advised as to this matter.

Very truly yours,

EL PASO NATURAL GAS COMPANY

Original Signed by  
HARRY GEVERTZ  
Harry Gevertz  
Regional Landman  
Land Department

HG:CTR:ja  
Enclosures

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

SJ 27-5, 5.0  
SJ 27-5, 4.3  
1968 B/P

# El Paso Natural Gas Company

El Paso, Texas

April 14, 1965

TO ALL WORKING INTEREST OWNERS

Re: San Juan 27-5 Unit  
Rio Arriba County, New Mexico  
1965 DRILLING PROGRAM

Gentlemen:

El Paso Natural Gas Company, as Unit Operator, submits for your approval with the proposed 1965 Drilling Program that we recommend for filing with the proper governmental authorities. This Program will be filed just as soon as the necessary majority of Unit Working Interest Owners have approved the Program.

El Paso Natural Gas Company proposes that the following well be drilled during the calendar year of 1965 by El Paso Natural Gas Company, as Unit Operator:

<u>Spacing Unit</u>	<u>Formation</u>
W/2 Sec. 31, T-27-N, R-5-W, N.M.P.M.	Dakota

The basis for drilling this well is to prevent Unit drainage of the Dakota Formation by the offsetting Occidental # 1-6 (M-D) Well, NE/4 Sec. 6; Occidental #4-6 (M-D) Well, SW/4 Sec. 6; and Caulkins Breech # 64 (M-D) Well, NE/4 Sec. 1, all in T-26-N, R-6-W, N.M.P.M.

In addition to the foregoing well, Pan American Petroleum Corporation has advised that they propose, as Sub-Operator, to drill during 1965, at their sole cost, risk and expense on their solely owned acreage the following Dakota development wells:

<u>Spacing Unit</u>	<u>Formation</u>
W/2 Sec. 14, T-27-N, R-5-W, N.M.P.M.	Dakota
N/2 Sec. 13, T-27-N, R-5-W, N.M.P.M.	Dakota
E/2 Sec. 11, T-27-N, R-5-W, N.M.P.M.	Dakota
E/2 Sec. 12, T-27-N, R-5-W, N.M.P.M.	Dakota

Should any of these proposed Dakota wells be drilled and then be determined to be commercial and occasion an Expansion of the Dakota Participating Area, the cost for drilling such wells will subsequently be adjusted in accordance with the San Juan 27-5 Unit and Unit Operating Agreements when said acreage is admitted to the Dakota Participating Area.

If you are the owner of a working interest in any drilling block and/or spacing unit to be drilled under this Program, your approval will constitute

any consent necessary under Section 8 of the Unit Operating Agreement and will be a commitment on your part to bear your proportionate part of the cost of drilling the well, your share of the cost being based on your percentage of ownership within either the drilling block or spacing unit.

All working interest owners have been contacted, and this proposed program incorporates all requests for drilling and all offset obligations.

All of the proposed wells to be drilled in accordance with the operating regulations as set out by the United States Geological Survey and due care will be taken to protect the unit from drainage.

If you approve of this proposed drilling program, please sign and return one copy of this letter to us as soon as possible in order that we may file the proposed 1965 Drilling Program with the proper regulatory bodies at an early date.

Very truly yours,



Harry Gevertz  
Regional Landman  
Land Department

HG:CTR:jm

PROPOSED 1965 DRILLING PROGRAM FOR  
THE SAN JUAN 27-5 UNIT IS APPROVED

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# El Paso Natural Gas Company

El Paso, Texas

February 23, 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  
P.O. Box 1148  
Santa Fe, New Mexico

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

Re: San Juan 27-5 Unit No. 14-08-001-950  
Rio Arriba County, New Mexico  
TWENTY-FIRST EXPANDED PARTICIPATING  
AREA, Pictured Cliffs Formation,  
Effective August 1, 1964

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-5 Unit Agreement, No. 14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the dates set out below that two (2) additional wells capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation have been completed upon acreage committed to the said San Juan 27-5 Unit. These wells are as follows:

1. The San Juan 27-5 Unit No. 94 (PC) Well, located 850' from the South line and 1600' from the East line of Section 15, Township 27 North, Range 5 West, Rio Arriba County, New Mexico, was spudded on June 9, 1964, and completed on June 26, 1964, as a tubingless completion in the Pictured Cliffs Formation at a total depth of 3545'. The Pictured Cliffs Formation in the intervals between 3414' - 3420', 3444' - 3456', 3468' - 3474' was treated with a sand-water fracturing process on June 23, 1964. The well was shut-in for gauge on June 26, 1964, and after being shut-in for twelve (12) days, the Pictured Cliffs Formation was tested on July 8, 1964, and following a three (3) hour blow-down period gauged 1271 MCFGPD through a 3/4" choke and 1289 MCFGPD by the calculated absolute open flow method, with a SIPC of 1073 psia. The committed drilling block upon which this well is located is described as the E/2 of Section 15, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres, more or less.

El Paso Natural Gas Company, as Unit Operator of the San Juan 27-5 Unit, previously determined that the said San Juan 27-5 Unit No. 94 Well was not capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation. The regulatory bodies and the applicable Unit working interest owners were furnished with a Notice of Completion of a Non-Commercial Well letter dated August 24, 1964, covering such non-commercial determination.

The San Juan 27-5 Unit No. 94 Well is now determined to be capable of producing unitized substances in paying quantities. Accordingly, Unit Operator requests that the above referenced Notice of Completion of Non-Commercial Well letter of August 24, 1964, be disregarded.

2. The San Juan 27-5 Unit No. 95 (PC) Well, located 500' from the South line and 100' from the West line of Section 15, Township 27 North, Range 5 West, Rio Arriba County, New Mexico, was spudded on June 15, 1964, and completed as a tubingless completion on June 26, 1964, in the Pictured Cliffs Formation at a total depth of 3536'. The Pictured Cliffs Formation in the intervals between 3408' - 3416'; 3428' - 3436' was treated with a sand-water fracturing process on June 23, 1964. The well was shut-in for gauge on June 26, 1964, and after being shut-in for twelve (12) days, the Pictured Cliffs Formation was tested on July 8, 1964, and following a three (3) hour blow-down period gauged 4132 MCFGPD through a 3/4" choke, and 4951 MCFGPD by the calculated absolute open-flow method with a SIPC of 1000 psia. The committed drilling block upon which this well is located is described as the W/2 of Section 15, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres, more or less.

Therefore, the foregoing described drilling blocks covering the E/2 and the W/2 of Section 15, Township 27 North, Range 5 West, Rio Arriba County, New Mexico, are included in the Twenty-First Expanded Participating Area for the Pictured Cliffs Formation, effective August 1, 1964.

Attached hereto is Schedule XXII showing the Twenty-First Expanded Participating Area for the Pictured Cliffs Formation in the San Juan 27-5 Unit Area. This Schedule describes the Expanded Participating Area, shows the percentage of unitized substances allocated to each unitized tract, and the exact breakdown of percentages allocated to each tract according to the ownership in said tract. Inasmuch as this needs no official approval, no provision is made therefor, and in the absence of disapproval, this Expanded Participating Area will become effective as of August 1, 1964.

Copies of this letter and 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:GWO:kf



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

January 12, 1965

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

Attention: Mr. T. M. Curtis

Gentlemen:

Your letter of December 30, 1964, transmits three copies of an instrument entitled, "Designation of Sub-Operator," by which El Paso Natural Gas Company, as unit operator of the San Juan 27-5 unit, Rio Arriba County, New Mexico, designated Pan American Petroleum Corporation as sub-operator for the sole purpose of drilling a Dakota test well in the NE<sup>1</sup> sec. 15, T. 27 N., R. 5 W., N.M.P.M.

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

Sincerely yours,

(Orig.Sgd.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Oil and Gas Supervisor

CC:  
Washington (w/cy Desig. of Sub.-Opr.)  
EIM, Santa Fe (w/cy Design. of Sub.-Opr.)  
Farmington (w/cy Desig. of Sub.-Opr.)  
Com. of Pub. Lands, Santa Fe (ltr. only)  
BEGCC, Santa Fe (ltr. only)

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

ILLEGIBLE

# PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico  
December 30, 1964

File: N-846-400.1

Subject: Designation of Sub-Operator  
N/2 Section 15, T-27N, R-5W  
San Juan 27-5 Unit  
Rio Arriba County, New Mexico

MAILED  
4  
JAN 4  
1965

540

United States Geological Survey 3  
P. O. Box 1857  
Roswell, New Mexico

Commissioner of Public Lands 2  
State of New Mexico  
State Land Office Building  
Santa Fe, New Mexico

Oil Conservation Commission of 1  
The State of New Mexico  
P. O. Box 2088  
Santa Fe, New Mexico

El Paso Natural Gas Company 1  
P. O. Box 1492  
El Paso, Texas

Gentlemen:

Attached please find the indicated number of copies of an instrument entitled "Designation of Sub-Operator." The purpose of this instrument is to designate Pan American Petroleum Corporation sub-operator for the purpose of drilling a Dakota well in the N/2 Section 15, T-27-N, R-5-W, San Juan 27-5 Unit area, Rio Arriba County, New Mexico. The instrument has been fully executed and is being distributed to you in accordance with El Paso Natural Gas Company's instructions contained in their letter dated November 19, 1964, a copy of which you were furnished.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION

*T. M. Curtis*  
T. M. Curtis  
District Superintendent

GWE:en  
Attach.

**ILLEGIBLE**

DESIGNATION OF SUB-OPERATOR

THIS DESIGNATION is made and entered into this 20<sup>th</sup> day of April, 1964, by and between EL PASO NATURAL GAS COMPANY, a Delaware corporation, whose 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 address is Oil and Gas Building, Post Office Box 1410, Fort Worth, Texas, hereinafter sometimes referred to as "Sub-Operator";

WHEREAS, Operator is Unit Operator for the San Juan 27-5 Unit, No. 14-08-001-950, Rio Arriba County, New Mexico; and

WHEREAS, Sub-Operator desires to drill a Dakota well on the following described land pursuant to the provisions of Section thirteen (13) of the San Juan 27-5 Unit Agreement:

Township 27 North, Range 5 West, N.M.P.M.  
Section 15: N/2  
Rio Arriba County, New Mexico; and

WHEREAS, the above described land is committed to the terms and conditions of the San Juan 27-5 Unit Agreement and San Juan 27-5 Unit Operating 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 San Juan 27-5 Unit Agreement; 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 San Juan 27-5 Unit, hereby designates Pan American Petroleum Corporation as Sub-Operator for the sole and only purpose of drilling the said Dakota well on the above described land pursuant to Section thirteen (13) of the San Juan 27-5 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 San Juan 27-5 Unit Agreement and the San Juan 27-5 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.
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 the well.
10. 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.
11. Furnish Operator a representative and adequate cut of all cores and ditch samples taken during the drilling of a well.
12. Provide Operator with copies of drilling time records, hole deviation tests and all records required by the governmental agencies having jurisdiction of the well.
13. Notify Operator of any intention to plug and abandon the well and allow Operator forty-eight (48) hours in which to concur.
14. 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.

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 Operator at the addresses hereinafter provided.
16. 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  
Attention: Land Department

With copies to:  
El Paso Natural Gas Company  
Post Office 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 San Juan 27-5 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 three (3) months from the date hereof, or until said Dakota test is completed and/or plugged and abandoned, whichever is the sooner.

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 ob-



El Paso Natural Gas Company

El Paso, Texas

November 19, 1964

MAILED  
NOV 24 1964

540

Pan American Petroleum Corporation  
Post Office Box 480  
Farmington, New Mexico

Attention: Mr. T. M. Curtis

Re: Your File N-740-400.1 - Designation  
of Sub-Operator for Proposed San Juan  
27-5 Unit No. 96 (Kd) Well, N/2 Sec-  
tion 15, Township 27 North, Range 5  
West, N.M.P.M., Rio Arriba County,  
New Mexico

Gentlemen:

Enclosed in accordance with your letter of November 13, 1964, and our previous conversation, are eight executed copies of a Designation of Sub-Operator covering the drilling of the following Dakota well in the spacing unit indicated within the San Juan 27-5 Unit, Rio Arriba County, New Mexico:

N/2 Section 15, Township 27 North, Range 5 West, N.M.P.M.

Your attention is directed to the fact that though your above referenced letter called for subject well to be located in the NW/4 of said Section 15, thereby making either a W/2 or N/2 dedication applicable, we have specifically provided that the N/2 of said Section 15 will be dedicated to this well in accordance with our conversation of November 16, 1964.

After these instruments have been executed by Pan American, it will be necessary that three copies be filed with the United States Geological Survey, one copy with the Oil Conservation Commission of the State of New Mexico and two copies with the Commissioner of Public Lands of the State of New Mexico. We request that one fully executed copy be returned to this office and that you retain one such copy for your files.

We wish to point out that the wells to be drilled under this Designation of Sub-Operator must be completed in a manner satisfactory to the Oil Conservation Commission of the State of New Mexico and the United States Geological Survey before El Paso Natural Gas Company can

Pan American Petroleum Corporation  
November 19, 1964  
Page 2.

take over operations of said well as Unit Operator. Therefore, we require that you secure approval of the drilling procedure for this well from Mr. W. G. Cutler, El Paso Natural Gas Company, Post Office Box 990, Farmington, New Mexico, prior to commencing drilling operations.

Very truly yours,



Harry Gevertz  
Regional Landman  
Land Department

HG:CTR:js  
Enclosures

cc: United States Geological Survey

Commissioner of Public Lands

Oil Conservation Commission

Working Interest Owners of the  
San Juan 27-5 Unit Dakota  
Participating Area

NM 6835  
PLA-11  
1964 D/P

# El Paso Natural Gas Company

El Paso, Texas

1964 AUG 24 11 1 22

August 24, 1964

Mr. John A. Anderson  
Regional Oil and Gas Supervisor  
United States Geological Survey  
Post Office Box 6721  
Roswell, New Mexico

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

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

*Received 11/1/64  
State of New Mexico  
11/1/64*

Re: San Juan 27-5 Unit #14-08-001-950  
NOTICE OF COMPLETION OF A NON-  
COMMERCIAL WELL, Pictured Cliffs  
Formation

Gentlemen:

Pursuant to Section 11(a) of the San Juan 27-5 Unit Agreement Number 14-08-001-950, approved August 31, 1953, El Paso Natural Gas Company, as Unit Operator, determined on the date set out below that the following described well, completed on lands committed to the San Juan 27-5 Unit, is not capable of producing unitized substances in paying quantities from the Pictured Cliffs Formation:

This well is as follows:

The San Juan 27-5 Unit #94 Well, located 850' from the South line and 1600' from the East line of Section 15, Township 27 North, Range 5 West, Rio Arriba County, New Mexico, was spudded on June 9, 1964, and completed on June 26, 1964, as a tubingless completion in the Pictured Cliffs Formation at a total depth of 3545'. The Pictured Cliffs Formation in the intervals between 3414' - 3420', 3444' - 3456', 3468' - 3474' was treated with a sand-water fracturing process on June 23, 1964. The well was shut-in for gauge on June 26, 1964 and after being shut-in for twelve (12) days the well was tested on July 8, 1964 and following a three (3) hour blow-down period gauged 1271 MCFGPD through a 3/4" choke and 1289 MCFGPD by the calculated absolute open-flow

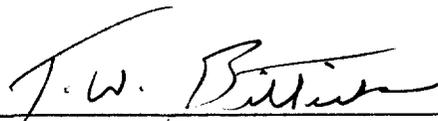
method, with an SIPC of 1073 psia. The committed drilling block upon which this well is located is described as the E/2 of Section 15, Township 27 North, Range 5 West, N.M.P.M., containing 320.00 acres.

The determination that the foregoing well is non-commercial was made on July 8, 1964.

Copies of this letter 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:kp

cc: Attached List

SAN JUAN 27-5 UNIT  
Working Interest Owners

Mr. John L. Abercombie  
The Spur Building  
1947 West Gray Avenue  
Houston 19, Texas

Mr. J. R. Abercombie  
P. O. Box 224  
Bellaire, Texas

Mr. W. E. Alsup  
Box 820  
Española, New Mexico

Mrs. Lela L. Barkley  
5322 Institute Lane  
Houston, Texas

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown  
Park Drive South  
Rye, New York

Mrs. Evelyn G. Brown  
Park Drive South  
Rye, New York

Mr. James A. Brown  
Park Drive South  
Rye, New York

Mr. Pablo L. Candelaria, Executor of the  
Estate of Pablo Candelaria, Deceased  
Aztec, New Mexico

Colorado Oil & Gas Corporation  
Denver Club Building  
Denver, Colorado

Mr. Sam Dazzo & Frances Joy Dazzo  
615 Simms Building  
Albuquerque, New Mexico

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr  
Meadows Building  
Dallas 6, Texas

Estate of G. F. Harrington  
Central National Bank & Trust Co.  
Trustee and Executor  
5th and Locust Streets  
Des Moines, Iowa

Mr. Thomas F. Harrington  
c/o T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico

Mr. T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico

Mr. Ralph H. McCullough  
2001 Gulf Building  
Houston, Texas

Mrs. Catherine B. McElvain  
Individually and as Executrix of  
the Estate of T. H. McElvain, Deceased  
Box 2148  
Santa Fe, New Mexico

Mr. Forrest B. Miller  
220 Shelby Street  
Santa Fe, New Mexico

N.B.S. Corporation  
c/o Mr. Robert E. Fox, Attorney at Law  
P. O. Box 1713  
Santa Fe, New Mexico

Northwest Production Corporation  
P. O. Box 1796  
El Paso, Texas

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

Mr. H. O. Pool  
P. O. Box 1585  
Scottsdale, Arizona

Mr. Joe Quinn  
Route 4, Box 4196  
Mesa, Arizona

Mr. Langdon Dewey Harrison,  
Trustee  
5212 Carswell Drive  
Biggs A.F.B., Texas

Riasan Company  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico

SAN JUAN 27-5 UNIT  
Working Interest Owners

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Bldg.  
Dallas 1, Texas

Mr. M. A. Romero  
P. O. Box 2011  
Santa Fe, New Mexico

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

Mr. Robert P. Tinnin  
P. O. Box 896  
Albuquerque, New Mexico

El Paso Natural Gas Company OFFICE OCC

El Paso, Texas

1964 JUN 12 PM 11:28

June 8, 1964

540

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: San Juan 27-5 Unit, #14-08-001-950  
Rio Arriba County, New Mexico  
1964 DRILLING PROGRAM

Gentlemen:

The 1964 Drilling Program for the San Juan 27-5 Unit was approved by the regulatory bodies on the following dates:

1. United States Geological Survey - May 26, 1964
2. Commissioner of Public Lands,  
State of New Mexico - May 12, 1964
3. Oil Conservation Commission,  
State of New Mexico - June 2, 1964

Copies of this letter are being sent to all the working interest owners of the San Juan 27-5 Unit.

Very truly yours,

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

CTR:GWO:kp

SJ 27-5, 3.0

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

540

June 2, 1964

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

Attention: Mr. Sam Smith

O  
Re: 1964 Drilling Program  
San Juan 27-5 Unit, Rio  
Arriba County, New Mexico

Gentlemen:

P  
This is to advise that the New Mexico Oil  
Conservation Commission has this date approved the 1964  
Drilling Program for the San Juan 27-5 Unit, Rio Arriba  
County, New Mexico, subject to like approval by the  
United States Geological Survey and the Commissioner of  
Public Lands of the State of New Mexico.

Y  
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

1964 MAY 27 PM 1 00

Drawer 1857  
Roswell, New Mexico 88201

May 26, 1964

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

Attention: Mr. Sam Smith

Gentlemen:

Your 1964 plan of development dated May 4, 1964, for the San Juan 27-5 unit area, Rio Arriba County, New Mexico, proposing the drilling of two Pictured Cliffs 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. SIG.) JOHN A. AMMERSON

JOHN A. AMMERSON  
Regional Oil & 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)

1964 MAY 12 PM 3 45

1964 MAY 12 PM 3 45

May 12, 1964

El Paso Natural Gas Company  
P. O. Box 1000  
El Paso, Texas

San Juan 47-5 Unit  
San Juan County, New Mexico  
1964 Drilling Program

Reference to Mr. San Juan.

Continued:

The Commissioner of Public Lands approved on May 12, 1964, your 1964 drilling program for the San Juan 47-5 Unit Area, San Juan County, 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,

H. J. JOHNSON  
COMMISSIONER OF PUBLIC LANDS

(Enc.) Marian A. Rice, Supervisor  
Unit Division

El Paso  
United States Geological Survey  
Albuquerque, New Mexico

Oil Conservation Commission  
Santa Fe, New Mexico

**ILLEGIBLE**

# El Paso Natural Gas Company

El Paso, Texas

May 4, 1964

RECEIVED  
MAY 10 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: San Juan 27-5 Unit #14-08-001-950  
Rio Arriba County, New Mexico  
1964 DRILLING PROGRAM

Gentlemen:

By letter dated February 7, 1963, as revised April 25, 1963, El Paso Natural Gas Company, as Unit Operator of subject Unit, filed a Drilling Program covering captioned Unit for the calendar year of 1963. This program provided for the drilling of one well during 1963. The San Juan 27-5 Unit #93 Pictured Cliffs Well located in the SE/4 of Section 31, Township 27 North, Range 5 West, N.M.P.M., was drilled and completed during the year on lands already admitted to the Pictured Cliffs Participating Area, and occasioned no expansion of said Participating Area.

With the completion of the above described well, the total number of wells in the San Juan 27-5 Unit is as follows:

Pictured Cliffs	11
Mesaverde	23
Dual, Pictured Cliffs-Mesaverde	39
Dual, Mesaverde-Dakota	3
Dakota	8
Non-commercial, Mesaverde	<u>1</u>
Total	85

Pursuant to Section 10 of the San Juan 27-5 Unit Agreement, El Paso Natural Gas Company, as Unit Operator, hereby respectfully submits a proposed Drilling Program providing for the drilling of the following wells during the calendar year of 1964. These wells are as follows:

<u>DRILLING BLOCK</u>	<u>FORMATION</u>
1. San Juan 27-5 Unit No. 94 E/2 Sec. 15, T-27-N, R-5-W, N.M.P.M.	Pictured Cliffs
2. San Juan 27-5 Unit No. 95 W/2 Sec. 15, T-27-N, R-5-W, N.M.P.M.	Pictured Cliffs

El Paso Natural Gas Company intends to drill the Pictured Cliffs wells to the base of the Pictured Cliffs Formation using rotary and cable tools. Surface casing will be set to approximately 100' from the surface and then a production string of casing will be set through the Pictured Cliffs Formation. Mud will be used in drilling through the Pictured Cliffs Formation and cable tools will be used for completion work. The entire Pictured Cliffs Formation will be subjected to a hydraulic fracturing process. Due care will be taken to protect all horizons.

In addition to the above wells El Paso Natural Gas Company, as Unit Operator, will drill any offset wells required to prevent drainage of unitized substances and any other wells requested by the working interest owners.

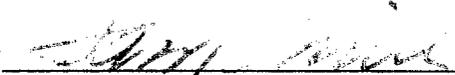
All of the working interest owners have been contacted and this proposed Drilling Program reflects, insofar as possible, their requests for additional drilling.

If this proposed Drilling Program is acceptable, please signify your approval, as required under Section 10 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 proposed Drilling Program are being sent to the working interest owners shown on the attached sheet.

Very truly yours,

EL PASO NATURAL GAS COMPANY

By   
Sam Smith, Manager  
Land Department

SS:GWO:js

SAN JUAN 27-5 UNIT

Working Interest Owners

Mr. John L. Abercrombie  
The Spur Building  
1947 West Gray Avenue  
Houston 19, Texas

Mr. J. R. Abercrombie  
P. O. Box 224  
Bellaire, Texas

Mr. W. E. Alsup  
Box 820  
Española, New Mexico

Mrs. Lela L. Barkley  
5322 Institute Lane  
Houston, Texas

Mrs. Evelyn Ellen Wallace &  
Mr. James A. Brown, Trustees under the  
Last Will & Testament of A. W. Brown  
Park Drive South  
Rye, New York

Mrs. Evelyn G. Brown  
Park Drive South  
Rye, New York

Mr. James A. Brown  
Park Drive South  
Rye, New York

Mr. Pablo L. Candelaria, Executor of the  
Estate of Pablo Candelaria, Deceased  
Aztec, New Mexico

Colorado Oil & Gas Corporation  
Denver Club Building  
Denver, Colorado

Mr. Sam Dazzo & Frances Joy Dazzo  
615 Simms Building  
Albuquerque, New Mexico

General American Oil Company of Texas  
Attention: Mr. James W. Goss, Jr.  
Meadows Building  
Dallas 6, Texas

Estate of G. F. Harrington  
Central National Bank & Trust Co.  
Trustee and Executor  
5th and Locust Streets  
Des Moines, Iowa

Mr. Thomas F. Harrington  
c/o T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico

Mr. T. H. Harrington  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico

Mr. Ralph H. McCullough  
2001 Gulf Building  
Houston, Texas

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Individually and as Executrix of  
the Estate of T. H. McElvain, Deceased  
Box 2148  
Santa Fe, New Mexico

Mr. Forrest B. Miller  
220 Shelby Street  
Santa Fe, New Mexico

N.B.S. Corporation  
c/o Mr. Robert E. Fox, Attorney at Law  
P. O. Box 1713  
Santa Fe, New Mexico

Northwest Production Corporation  
P. O. Box 1796  
El Paso, Texas

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

Mr. H. O. Pool  
P. O. Box 1585  
Scottsdale, Arizona

Mr. Joe Quinn  
Route 4, Box 4196  
Mesa, Arizona

Mrs. Omega E. Quinn  
c/o Mildred Ellis  
P. O. Box 625  
Taos, New Mexico

Riasan Company  
P. O. Box 4026, Station "A"  
Albuquerque, New Mexico

Rincon Oil & Gas Corporation  
1126 Mercantile Securities Bldg.  
Dallas 1, Texas

Mr. M. A. Romero  
P. O. Box 2011  
Santa Fe, New Mexico

SAN JUAN 27-5 UNIT  
Working Interest Owners

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

Mr. Robert P. Tinnin  
P. O. Box 896  
Albuquerque, New Mexico

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. Carter, Jr.  
Oil Conservation Commission  
Subject to like approval by the  
United States Geological Survey and the  
Commissioner of Public Lands.

DATE: June 2, 1964

The foregoing approvals are for the proposed 1964 Drilling Program for the  
San Juan 27-5 Unit, #14-08-001-950, Rio Arriba County, New Mexico.